

APPENDIX A

Notice of Preparation

TO: State Clearinghouse
State Responsible Agencies
State Trustee Agencies
Other Public Agencies
Interested Organizations

FROM: Kim Espinosa, Planning Manager
Planning and Permitting Division
678 West 18th Street
Merced, CA 95340
(209) 385-6858

SUBJECT: Notice of Preparation – Draft Environmental Impact Report, City of Merced Vision 2030 General Plan

The City of Merced will be the Lead Agency and will prepare an environmental impact report for the project identified below. The EIR will be a Program EIR, as defined in Section 15168 of the CEQA Guidelines.

Project Title: City of Merced Vision 2030 General Plan Environmental Impact Report

Project Contact:

Kim Espinosa, Planning Manager
Planning and Permitting Division
678 West 18th Street
Merced, CA 95340
Phone: (209) 385-6858
Fax: (209)725-8775
Email: espinosak@cityofmerced.org

EIR Consultant:

Kim Hudson, Principal-in-Charge
Quad Knopf, Inc.
5110 West Cypress Avenue
Visalia, CA 93278
Phone (559) 733-0440
Fax (559) 733-7821

Pursuant to Section 15063 of the CEQA Guidelines an Initial Study has not been prepared for the plan. The EIR will consider all potential environmental effects of the plan to determine the level of significance of the environmental effect, and will analyze these potential effects to the detail necessary to make these determinations on significance. In addition, the EIR may also consider those environmental issues which are raised by responsible agencies, trustee agencies, members of the public, or related agencies during the NOP process.

We need to know the views of your agency or organization as to the scope and content of the environmental information germane to your agency's statutory responsibilities or of interest to your organization in connection with the proposed plan. Specifically, we are requesting the following:

1. If you are a public agency, state if your agency will be a responsible or trustee agency for the plan and list the permits or approvals from your agency that will be required for the project and its future actions;
2. Identify significant environmental effects and mitigation measures that you believe need to be explored in the EIR with supporting discussion of why you believe these effects may be significant;
3. Describe special studies and other information that you believe are necessary for the City to analyze the significant environmental effects, alternatives, and mitigation measures you have identified;
4. For public agencies that provide infrastructure and public services, identify any facilities that will be required to provide services;
5. Indicate whether a member(s) from your agency would like to attend a scoping workshop for public agencies to discuss the scope and content of the EIR's environmental information. A scoping workshop is scheduled for Tuesday, July 29th at 5:30 p.m. to 7:30 p.m. in the City Council Chambers of the Merced Civic Center at 678 West 18th Street, Merced.
6. Provide the name, title, and telephone number of the contract person from your agency or organization that we can contact regarding your comments;
7. Identify alternatives that you believe need to be explored in further detail in the EIR.

Due to the time limits mandated by State law, your response must be sent and received by the City of Merced by the following deadlines:

- For responsible agencies, other agencies and organizations, not later than 30 days following the publication of this Notice of Preparation (by Monday, August 18, 2008);

If we do not receive a response from your agency or organization, we will presume that your agency or organization has no response to make. A responsible agency, trustee agency, or other public agency may request a meeting with City representatives in accordance with Section 15082(c) of the CEQA Guidelines.

Please send your response to my attention to City of Merced Planning and Permitting Division, 678 West 18th Street, Merced, CA, 95340. If you have any questions, please contact me at (209) 385-6858 or espinosak@cityofmerced.org.

Date: July 14, 2008

Kim Espinosa, Planning Manager

NOTICE OF PREPARATION EXHIBIT

City of Merced Vision 2030 General Plan EIR

Project Summary

The City of Merced (City) is the Lead Agency for the preparation of this Draft Environmental Impact Report (EIR). The EIR addresses a proposal to update the City's General Plan. The Plan Update will cover the planning period from 2009 to the year 2030, and will be utilized to guide the growth and development of the area within the adopted planning boundary.

The Vision 2030 General Plan retains almost all the 2015 General Plan Goals, Objectives and Policies with minor revisions.

Project Location

Located in the Central San Joaquin Valley, the City of Merced is the seat of Merced County government as well as a major retail commercial/service center for the surrounding region. The City is located at the intersection of several state highways and is one of the primary access points to Yosemite National Park. Known as the “Gateway to Yosemite,” Merced is approximately 80 miles west of the valley floor of the Park, along Highway 140.

Merced is approximately 150 miles southeast of San Francisco and is one of a chain of cities located along State Highway 99. Highway 99 is one of the two major north-south arteries passing through the San Joaquin Valley and connecting Southern California to the Pacific Northwest region. Major cities to the north along Highway 99 include Modesto (40 miles), Stockton (65 miles), and Sacramento (100 miles). To the south is Madera (20 miles), Fresno (55 miles) and Bakersfield (165 miles). Smaller cities in the vicinity of Merced along the Hwy 99 corridor are Atwater to the immediate north and Chowchilla to the south.

The City is served by two rail lines, the Atchison-Topeka/Santa Fe (A.T.&S.F.) and the Southern Pacific Transportation Company (S.P.), which pass through the City. The Merced Municipal Airport provides air service for City residents. To the north, the former Castle Air Force Base has been converted to civilian use (Castle Airport, Aviation and Development Center) and is expected to expand regional air service.

Merced County contains about 1,031 square miles of land area. In 2008, the incorporated City of Merced included 23 square miles; the planning area of the City (SUDP) contained 54 square miles. Figure 1 shows Merced's Regional Location and Figure 2 shows Merced current City limits and Sphere of Influence (SOI). Figure 3 shows the proposed SUDP land use map.

Project Description

The proposed project includes an update of the City of Merced’s General Plan. California state law requires each city and county to adopt a general plan “for all the physical development of the county or city, and any land outside its boundaries which bears relation to its planning” (§65300). The General Plan will include Urban Expansion, Land Use, Transportation & Circulation, Public Facilities & Services, Urban Design, Open Space, Conservation & Recreation, Sustainable Development, Housing, Noise and Safety Elements. The Housing Element has been previously adopted and certified by the California Department of Housing and Community Development and has been reformatted only for the General Plan Update. Figure 2 shows the proposed Land Use for the General Plan Update. The expansion of the urban land use designations define the limits for extending City services and infrastructure so as to accommodate new development anticipated within the twenty year time-frame of the General Plan. Policies in the proposed General Plan limit leap-frog development and provide for an orderly transition from rural to urban land uses.

The Plan includes Planning Principles, developed during Community Workshops, shown below. Table 1 shows the acreage of General Plan land use designations for both the current and proposed General Plans (City limits and SUDP).

Table 1
Existing & Proposed General Plan
Land Use Comparison Within the City Limits and SUDP (Acres)

Land Use	City Limits	Existing SUDP	Total	Proposed SUDP	All Land in new SUDP
Rural Residential	15.25	280.73	295.98	2057.26	2353.24
Agriculture	92.33	21.51	113.84		113.84
Total Agriculture Res	107.58		409.82	2057.26	2467.08
Low Density	5516.2	2914.17	8430.37	321.99	8752.36
Low-Medium Density	82.05	367.01	449.06	54.87	503.93
Total Single-Family Res	5598.25		8879.43	376.86	9256.29
High-Medium Density	745.08	21.92	767	65.59	832.59
High Density	92.44		92.44	37.57	130.01
Residential Mobile Home Density	79.34	0.18	79.52		79.52
Total Multi-Family	916.86		938.96	103.16	1042.12
Public/Government	533.16	5.3	538.46	39.82	578.28
Commercial Office	341.74	349.36	691.1		691.1
Total Office	874.9		1229.56	39.82	1269.38
Industrial	1882.22	994.73	2876.95		2876.95
Industrial-Reserve		150.4	150.4	1072.34	1222.74
Total Industrial	1882.22		3027.35	1072.34	4099.69
Business Park	125.3	504.07	629.37	78.58	707.95
Business Park-Reserve	2.94	85.27	88.21		88.21
Total Business Park	128.24		717.58	78.58	796.16

Land Use	City Limits	Existing SUDP	Total	Proposed SUDP	All Land in new SUDP
General Commercial	323.97	257.57	581.54		581.54
Neighborhood Commercial	200.75	80.7	281.45	18.92	300.37
Thoroughfare Commercial	212.89	9.46	222.35		222.35
Heavy Commercial					0
Regional/Community Commercial	478.75	103.51	582.26		582.26
Total Commercial	1216.36		1667.6	18.92	1686.52
Open Space/Park	783.81	176.79	960.6	230.34	1190.94
Parkway					0
Total Open Space	783.81		960.6	230.34	1190.94
School	677.91	64.54	742.45	991.34	1733.79
Commercial-Reserve	7.15	83.18	90.33		90.33
Residential-Reserve	360.34		360.34		360.34
PARK	5.83	82.67	88.5		88.5
SCHOOL	5.83	48.61	54.44		54.44
Village Residential	239.36	286.18	525.54		525.54
Community Plan		240.4	240.4	7383.6	7624
RESERVE				2236.13	2236.13
Total Other	1296.42		2102	10611.07	12713.07
Overall Total	12804.64		19932.9	14588.35	34521.25

Source: Quad Knopf, City of Merced, 2008

Note: Acreage for the existing SUDP differs from that identified in the 1997 General Plan due to different methods of calculating acreage.

PLANNING PRINCIPLES:

- Expansion of the Sphere of Influence and city boundary with phasing of development to avoid premature conversion of agricultural land and to plan for cost-effective extension of municipal services.
- Foster compact and efficient development patterns.
- Connectivity between existing and planned urban areas. Examples include the northeast area toward UCM, the University Community, and South Merced.
- Merced as the single municipal service provider in the expanded sphere of influence.
- New development provides or pays its fair share of public services and facilities to avoid burdening existing city residents (in short, new growth pays for itself).

- Mixed-use, transit and pedestrian friendly urban villages in growth areas with direct access to commercial cores from surrounding neighborhoods.
- Commercial nodes in new growth areas to avoid the aesthetic and circulation issues associated with more common “strip commercial.”
- Circulation: Recognition of the cost and importance of the arterial street system and protect capacity with access standards. Designs that encourage all modes of transportation.
- Build community quality. High community standards for Merced’s services, infrastructure, and private development as a strategy for attracting business and industry and to benefit the City’s residents.
- Planning well in advance for industrial/business park uses and for the infrastructure needed to support such development.
- A diversity of housing types and opportunities.

MERCED SPECIFIC URBAN DEVELOPMENT PLAN BOUNDARY (SUDP)/SPHERE OF INFLUENCE (SOI)

The current SUDP contains 19,933 acres and the proposed SUDP/SOI contains 34,521 acres.

- 1) Approximately 3,995 acres will be added in Northwest Merced. The new SUDP boundary would generally move to Franklin Road on the west, north of Old Lake Road, and south to Santa Fe Drive. This area is proposed for industrial and business park uses along Highway 59 and a large mixed-use community north of Bellevue Road.

This area will be able to accommodate a significant amount of the residential growth in the City for the next 20 years.

The business park and industrial areas along the Highway 59 expressway are included in order to provide a better “jobs-housing” balance in North Merced, as well as alleviate circulation and air quality concerns. Most existing employment opportunities in Merced are located downtown and south of Highway 99.

- 2) The second area of expansion consists of approximately 3,824 acres. It would move the SUDP south of Highway 140 west of Thornton Road, ¼ to ¾ of a mile. South of the airport, a large community plan has been proposed. Although impacted by airport land use restrictions, the proposal has some significant residential and recreational potential.
- 3) The third area to be included encompasses 6,748 acres and moves the SUDP/SOI boundary to take in the property between the current city limit/SUDP, and the U.C. Merced campus and Campus Community. These will be brought within the SOI as well.

Inclusion of this area within the SUDP will form a more logical urban boundary, which will ultimately facilitate the provision of City services to the university.

These areas referenced above represent logical expansion areas for the City, primarily because they are adjacent to major road improvements (Merced-Atwater Expressway, Mission / Highway 99 Interchange, etc.). They also encompass areas needed for long-term commercial and industrial development. The residential areas included in this expansion were for the most part large tracts with significant planning efforts currently underway. Given the environmental and physical limitations elsewhere around the City, these are the most logical areas for the next phase of expansion. These areas will give the City enough land to accommodate expected growth over the next 20 to 40 years.

AREA OF INTEREST

Some of the original study areas were found to have constraints which limited their development potential within the current plan timeline. In the interest of flexibility, and to provide interested property owners with some options, certain study areas have been designated as being within the Area of Interest (AOI). This area is a concern to the City, as it is likely going to be the location of City expansion in the next general plan update, 20-40 years hence. Should it be found that some property within the AOI can be developed sooner, criteria have been developed which would allow land to be incorporated within the SUDP/SOI when appropriate, and ultimately annexed.

In addition, including these areas in the AOI would allow the City to comment on any development proposals which might occur in these areas and impact current and future City development patterns, public service provision, and circulation routes. These areas are not considered for urban development within the 20-year planning horizon.

Purpose

The purpose of the General Plan Update is to address various issues that have arisen since the adoption of the *Merced Vision 2015 General Plan* in 1997. Most of the changes have arisen due to the new location of the University of California Merced campus and its adjacent University Community. Rapid growth and increasing land costs in Merced have also led to the need to consider additional areas for expansion, thus, one major component of the General Plan Update was to expand the City's existing growth boundary known as the Specific Urban Development Plan boundary (SUDP boundary). Modifications were made to the City's Sphere of Influence to add the University Community area and to remove areas that have been identified as significant wetlands preservation areas.

General Plan Elements/Chapters

The Merced Vision 2030 General Plan contains 14 chapters, including the major chapters outlined below. The General Plan also contains an Executive Summary, an Introduction (Chapter 1), a Glossary of Terms (Chapter 12), a Bibliography (Chapter 13), and a Subject and Policy Index (Chapter 14). It is anticipated that the Executive Summary, the Introduction, and Chapters 12, 13 and 14 required very minor updates to reflect the revised General Plan chapters. The other ten chapters have more extensive revision that will be reflected in the revised General Plan. Each of the seven State-Mandated Elements needed to be updated to reflect the latest edition of

the State of California's General Plan Guidelines and changes to State General Plan law since 1997.

Issues to be Addressed in the EIR

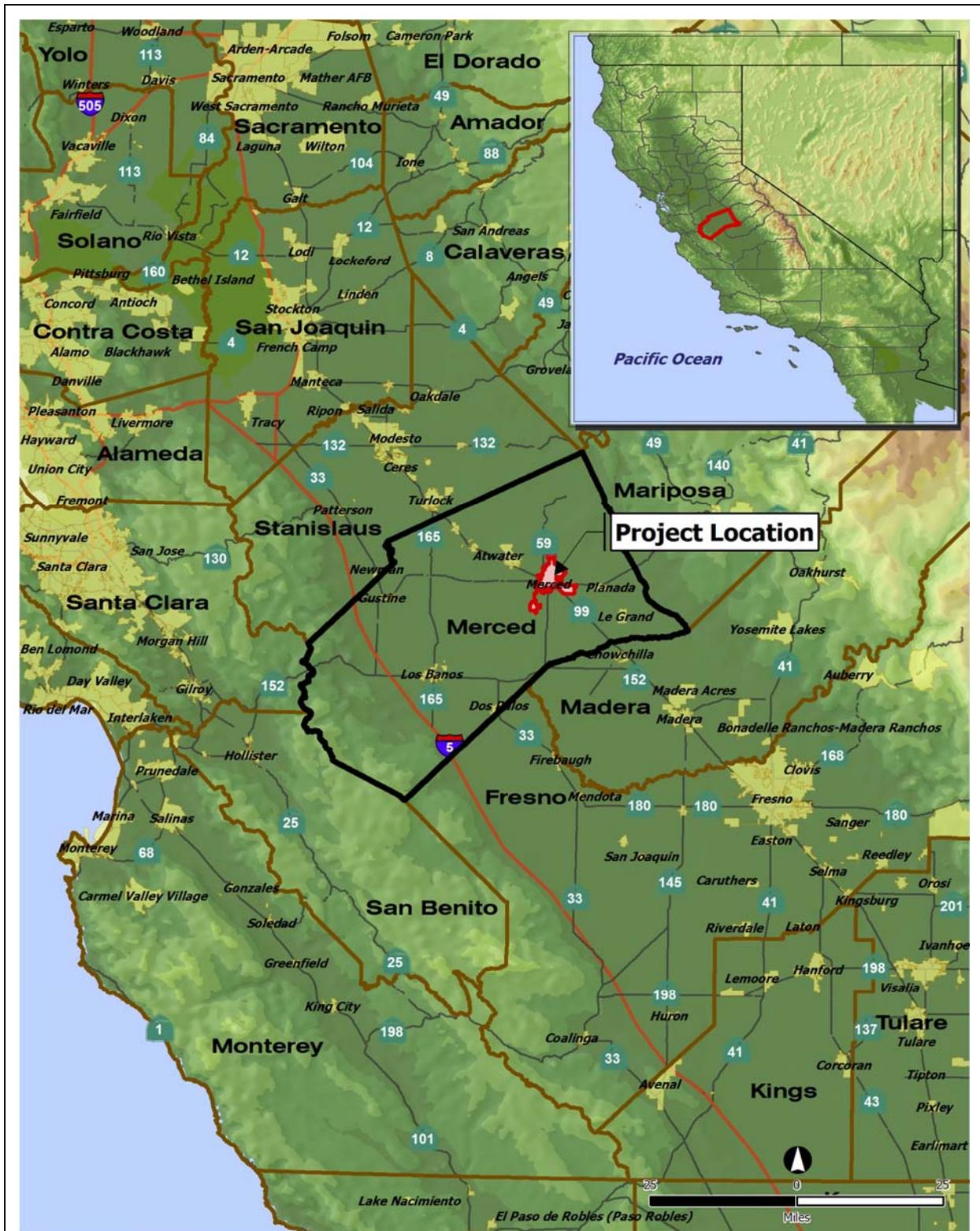
The EIR will address issues related to aesthetics, agricultural resources, air quality, biology, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, recreation, transportation and circulation, public utilities and services systems, and greenhouse gas and global climate change.

Alternatives Analysis

The alternatives analysis will contain a qualitative analysis of the land use alternatives considered during the Merced Vision 2030 General Plan Update process. This analysis will be comparative in nature, and will address the likely impacts associated with the various alternative land use patterns considered in the planning process. If one or more of the alternatives from the planning process are not sufficient to meet the legal requirements of alternatives (fail to meet project objectives or do not lessen an environmental impact), then different alternatives will be proposed for inclusion. The No Project alternative will analyze the development of the site based on existing land use and zoning designations. The City encourages suggestions and recommendations during the NOP comment period regarding the nature and content of the alternatives to be considered.

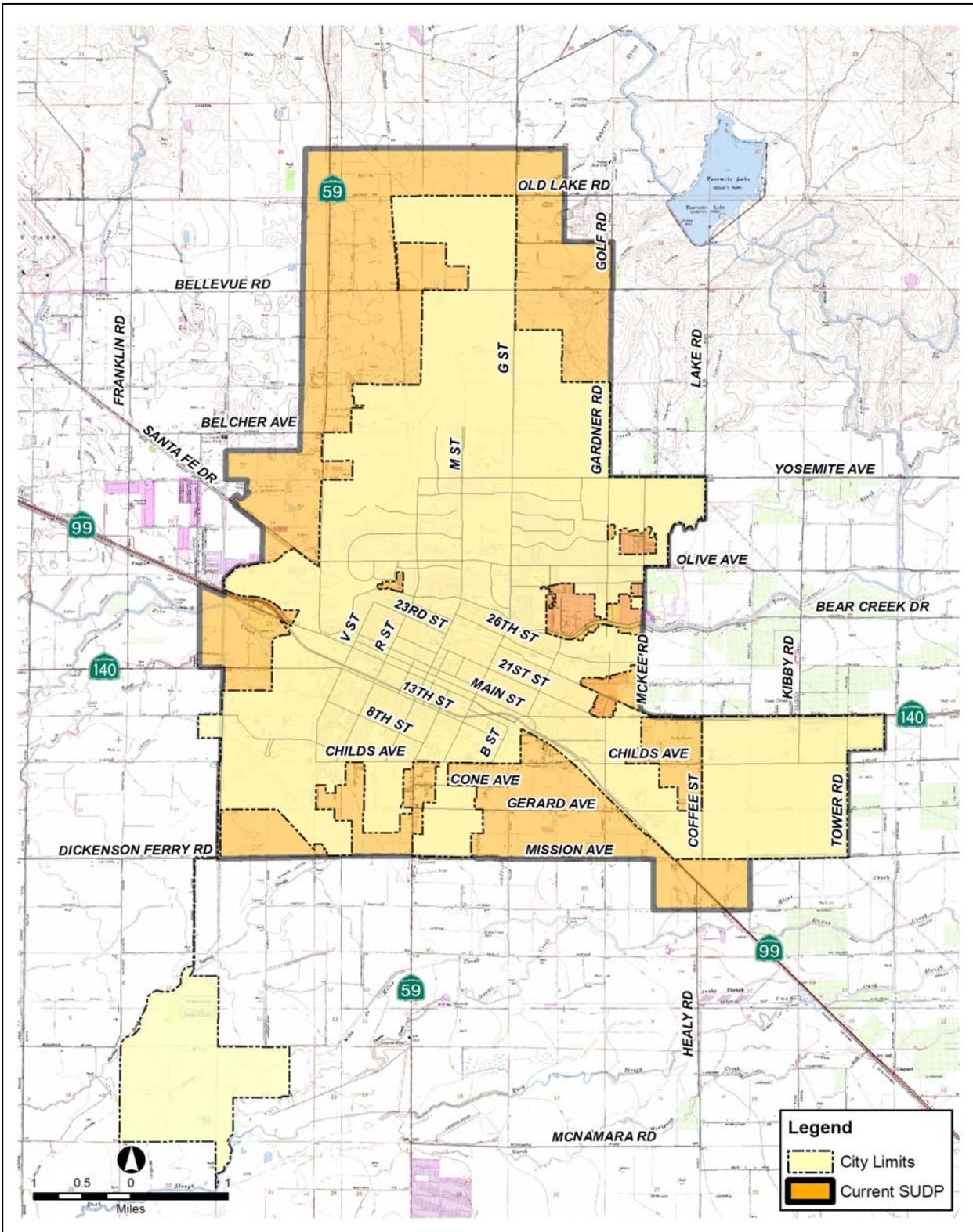
Cumulative Impacts

This section will address the impacts of the development of the plan along with other known, approved or reasonably foreseeable development activity in the City and region. The analysis will be based on a list of known and foreseeable projects in the region as well as development forecasts. The analysis will address each identified issue area and will identify appropriate mitigation measures for any identified cumulative impacts.



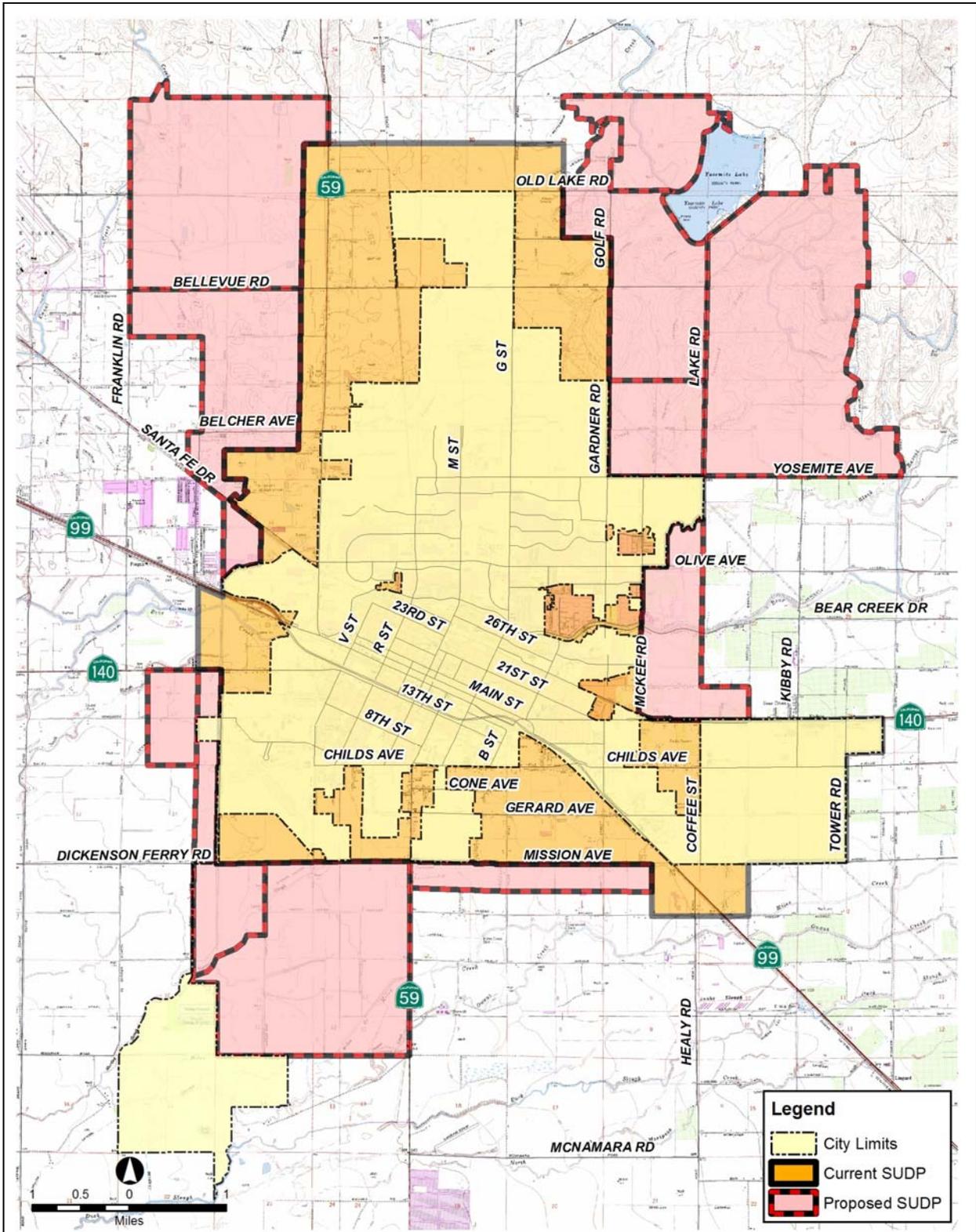
REGIONAL LOCATION MAP

Figure 1



CURRENT CITY LIMITS AND SUDP BOUNDARY

Figure 2



PROPOSED SUDP LAND USE MAP

Figure 3

**PUBLIC NOTICE FOR THE PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT FOR
CITY OF MERCED GENERAL PLAN UPDATE**

As required by the California Environmental Quality Act, the City of Merced has prepared a Notice of Preparation which announces the availability of a Notice of Preparation for public review and comment as well as the date and time of the Public Scoping Meeting for the project. The City of Merced is the lead agency and Quad-Knopf, Inc. will prepare an Environmental Impact Report on behalf of the City.

The proposed project includes an update of the City of Merced's General Plan. California state law requires each city and county to adopt a general plan for all the physical development of the county or city, and any land outside its boundaries which bears relation to its planning. The General Plan will include Urban Expansion, Land Use, Transportation & Circulation, Public Facilities & Services, Urban Design, Open Space, Conservation & Recreation, Sustainable Development, Housing, Noise and Safety Elements. The expansion of the City's growth boundary (known as the Specific Urban Development Plan or SUDP) will define the limits for extending City services and infrastructure so as to accommodate new development anticipated within the 20 year time-frame of the General Plan. The current SUDP contains 19,933 acres and the proposed SUDP/Sphere of Influence contains 34,521 acres. Policies in the proposed General Plan limit leap-frog development and provide for an orderly transition from rural to urban land uses.

Pursuant to Section 15063 of the CEQA Guidelines, an Initial Study has not been prepared for the plan. The EIR will consider all potential environmental effects of the plan to determine the level of significance of the environmental effect, and will analyze these potential effects to the detail necessary to make these determinations on significance. The EIR will address issues related to aesthetics, agricultural resources, air quality, biology, cultural resources, geology and soils, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, population and housing, public services, recreation, transportation and circulation, public utilities and services systems, and greenhouse gas and global climate change. In addition, the EIR may also consider those environmental issues which are raised by responsible agencies, trustee agencies, members of the public, or related agencies during the NOP process.

Copies of the Notice of Preparation are available for public inspection at the City of Merced Planning Division during regular business hours, at 678 West 18th Street. A copy of this document can also be purchased at the Planning Division for the price of reproduction or downloaded for free from the City's website at www.cityofmerced.org.

The public scoping meeting for this project will be held on Tuesday, July 29, 2008 starting at 5:30 p.m. in the City Council Chambers at the Merced Civic Center at 678 West 18th Street, Merced.

For further information, contact the Planning Division at (209) 385-6858. Any person interested in commenting on this proposed project should submit written comments to:

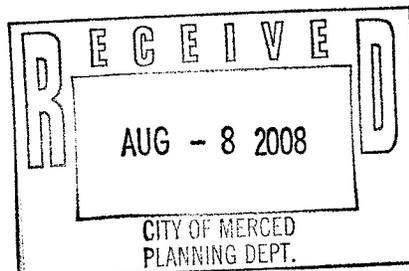
Kim Espinosa, Planning Manager
City of Merced Planning & Permitting
678 West 18th Street
Merced, CA 95340
espinosak@cityofmerced.org

All comments must be received by Monday, August 18, 2008 at 5:00 p.m.



State of California - The Resources Agency
DEPARTMENT OF FISH AND GAME

<http://www.dfg.ca.gov>
Central Region
1234 East Shaw Avenue
Fresno, California 93710
(559) 243-4005



August 7, 2008

Kim Espinosa, Planning Manager
Planning and Permitting Division
678 West 18th Street
Merced, California 95340

Subject: Notice of Preparation
General Plan Update (City of Merced Vision 2030 General Plan)
SCH No. 2008071069

Dear Ms. Espinosa:

The California Department of Fish and Game has reviewed the Notice of Preparation submitted by the County of Merced Planning Department (County) with regard to the Project title labeled above. Approval of the Project will provide direction for development in the City of Merced over the next 20 years. The proposed Project is located in central Merced County. The geographic area covered by the Project includes the city limits of Merced, which is bounded by Mission Avenue to the south, Bellevue Road to the north, Lake Road to the east, and Highway 59/Thornton Road to the west, and the Specific Urban Development Boundary, the 20-year development boundary which is bounded by Miles Creek on the south, Thornton Road/Franklin Road to the west, Lake Road, the Fairfield Canal and Kibby Road to the east, and a Section Line to the north. The Project proposes a mix of residential, commercial and land uses.

The Department has concerns about the Project-related impacts that could result in activities occurring in close proximity to Bear Creek and Fahrens Creek, the multiple laterals and canals that traverse the Project area, riparian habitat and wetlands, as well as the associated impacts to species that utilize these habitat types. In order to adequately assess any potential impacts to biological resources, a focused biological survey should be conducted by a qualified wildlife biologist/botanist, during the appropriate survey period(s), in order to determine whether or not any special status species may be present within the Project area. This information is necessary to identify any mitigation, minimization, and avoidance measures and/or the need for additional focused surveys. These issues should be evaluated and addressed in the California Environmental Quality Act (CEQA) document prepared for this Project. Our specific comments follow.

Trustee Agency Authority: The Department is a Trustee Agency with the responsibility under CEQA for commenting on projects that could impact plant and wildlife resources. Pursuant to Fish and Game Code Section 1802, the Department has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. As a Trustee Agency for fish and wildlife resources, the Department is responsible for providing, as available, biological expertise to review and comment on environmental documents and impacts arising from project activities, as those terms are used under CEQA.

Responsible Agency Authority: The Department has regulatory authority over projects that could result in the "take" of any species listed by the State as threatened or endangered, pursuant to Fish and Game Code Section 2081. If the Project could result in the "take" of any

Conserving California's Wildlife Since 1870

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species listed as threatened or endangered under the California Endangered Species Act (CESA), the Department may need to issue an Incidental Take Permit for the Project. CEQA requires a Mandatory Finding of Significance if a project is likely to substantially impact threatened or endangered species (Sections 21001{c}, 21083, Guidelines Sections 15380, 15064, 15065). Impacts must be avoided or mitigated to less than significant levels unless the CEQA Lead Agency makes and supports Findings of Overriding Consideration (FOC). The CEQA Lead Agency's FOC does not eliminate the Project proponent's obligation to comply with Fish and Game Code Section 2080.

The Project has the potential to reduce the number or restrict the range of endangered, rare, or threatened species (as defined in Section 15380 of CEQA) including State-listed species known to occur in the Project area. The Federally listed endangered State-listed threatened San Joaquin kit fox (*Vulpes macrotis nutica*) and the State-listed threatened Swainson's hawk (*Buteo swainsoni*) are known to occur within the Project area vicinity.

Other species of concern that may also be present in the Project area include tricolored blackbird (*Agelaius tricolor*) and burrowing owl (*Athene cunicularia*). Although burrowing owls are not listed under CESA, impacts to burrowing owl and their nest burrows must be avoided in order to comply with the Federal Migratory Bird Treaty Act (MBTA) and Fish and Game Code Sections 3503, 3503.5, and 3513, which are explained in more detail below.

Additional comments on the potential for Project-related "take" follow in subsequent portions of this letter.

Bird Protection: The Department has jurisdiction over actions which may result in the disturbance or destruction of active nest sites or the unauthorized "take" of birds. Sections of the Fish and Game Code that protect birds, their eggs and nests include Sections 3503 (regarding unlawful "take," possession or needless destruction of the nest or eggs of any bird), 3503.5 (regarding the "take," possession or destruction of any birds-of-prey or their nests or eggs), and 3513 (regarding unlawful "take" of any migratory nongame bird).

Water Pollution: Pursuant to Fish and Game Code Section 5650, it is unlawful to deposit in, permit to pass into, or place where it can pass into the "Waters of the State" any substance or material deleterious to fish, plant life, or bird life, including non-native species. The Regional Water Quality Control Board also has jurisdiction regarding discharge and pollution to "Waters of the State."

It is possible that without mitigation measures this Project could result in pollution of a "Waters of the State" from increased road, parking, storm water runoff, or construction-related erosion. This could impact the fish and wildlife resources associated with the drains and laterals (Doane Lateral), or other surface waters in the vicinity (Miles Creek) by causing: increased sediment input from structure and road runoff; toxic runoff from household chemicals, and impairment of wildlife movement along riparian corridors.

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Project Recommendations

Swainson's Hawk: This State-listed species is known to nest at multiple locations within 2 miles of the Project area. Due to the loss of suitable foraging and existing nesting habitat that may occur during area development, mitigation measures compensating for these potential losses of habitat should be included in the CEQA document. The Department's Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (1994) recommends that for projects that occur within 1 mile of an active nest tree, 1.5 acres of habitat be protected in perpetuity for every acre of Swainson's hawk foraging habitat impacted; for projects that occur within 5 miles of an active nest tree, 0.75 acres of habitat be protected in perpetuity for every acre foraging habitat impacted; and for projects that occur within 10 miles of an active nest tree, 0.5 acres of habitat be protected in perpetuity for every acre of foraging habitat impacted.

Funding of a sufficient long-term endowment for the management of the protected properties should be paid by the Project sponsors. In addition to fee title acquisition of grassland habitat, mitigation could occur by the purchase of conservation or suitable agricultural easements. Suitable agricultural easements would include areas limited to production of crops such as alfalfa, dryland and irrigated pasture, and cereal grain crops. Vineyards, orchards, cotton fields, and other dense vegetation do not provide adequate foraging habitat.

San Joaquin Kit Fox: San Joaquin kit fox populations are known to fluctuate over years and absence during any one survey does not necessarily exclude the potential for kit fox to occur on a site at a future time. The Department recommends that the United States Fish and Wildlife Service's (USFWS) "Standardized recommendations for protection of the San Joaquin kit fox prior to or during ground disturbance" (1999) be followed prior to any ground-disturbing activities occurring within the non-irrigated agriculture portion of the Project area. These surveys should also be conducted a maximum of 30 days prior to ground-disturbing activities. In the event that this species is detected during protocol-level surveys, consultation with the Department is warranted to discuss how to implement the Project and avoid "take." If "take" cannot be avoided, acquisition of a State Incidental Take Permit would be required prior to Project implementation.

"Take" under the Federal Endangered Species Act (FESA) is more stringently defined than CESA; "take" under FESA also includes significant habitat modification or degradation that could result in death or injury to a listed species by interfering with essential behavioral patterns such as breeding, foraging, or nesting. Consultation with the USFWS in order to comply with FESA is advised well in advance of Project implementation.

Burrowing Owl: Burrowing owls are known to occur near the Project area. If any ground-disturbing activities will occur during the burrowing owl nesting season (approximately February 1 through August 31), implementation of avoidance measures is required. The Department's Staff Report on Burrowing Owl Mitigation (CDFG 1995) recommends that impacts to occupied burrows be avoided by implementation of a no-construction buffer zone of a minimum distance of 250 feet, unless a qualified biologist approved by the Department verifies through non-invasive methods that either: 1) the birds have not begun egg laying and

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incubation; or 2) that juveniles from the occupied burrows are foraging independently and are capable of independent survival. Failure to implement this buffer zone could cause adult burrowing owls to abandon the nest, cause eggs or young to be directly impacted (crushed), and/or result in reproductive failure.

The Department's Staff Report on Burrowing Owl Mitigation also recommends that a minimum of 6.4 acres of foraging habitat per pair or unpaired resident burrowing owl should be acquired and permanently protected to offset the loss of foraging and burrowing habitat.

CEQA Compliance: CEQA Guidelines Section 15378 defines "project" to mean the whole of an action that may result in either a direct or reasonably foreseeable indirect physical change in the environment. The final CEQA document should adequately address all impacts to natural resources of the Project site.

If you have any questions regarding these comments, please contact Justin Sloan, Environmental Scientist, at the address provided on this letterhead or by telephone at (559) 243-4014, extension 216.

Sincerely,



W. E. Loudermilk
Regional Manager

cc: Maryann Owens
United States Fish and
Wildlife Service
2800 Cottage Way, W-2605
Sacramento, California 95825

State Clearinghouse
Post Office Box 3044
Sacramento, California 95812-3044

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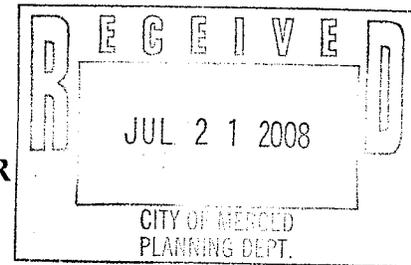
Literature Cited

DFG, 1994. Staff Report Regarding Mitigation for Impacts to Swainson's Hawks (*Buteo Swainsoni*) in the Central Valley of California. California Department of Fish and Game.



CENTRAL CALIFORNIA INFORMATION CENTER

California Historical Resources Information System
Department of Anthropology – California State University, Stanislaus
One University Circle, Turlock, California 95382
(209) 667-3307 - FAX (209) 667-3324



Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus & Tuolumne Counties

To whom it may concern:

The Central California Information Center
is a fee-for-service organization
authorized through the State Historic Resources Commission.

If your agency wishes to receive comments on proposed actions in reference to historical resources and the California Environmental Quality Act, or for a federally funded project, your office will need to submit a formal request and pay appropriate fees.

See the attached information pertaining to the
Central California Information Center and fee schedule.

If you have any questions, please call:

209-667-3307

Thank you for your inquiry.



CALIFORNIA STATE UNIVERSITY, STANISLAUS

CENTRAL CALIFORNIA INFORMATION CENTER

California Historical Resources Information System

Department of Anthropology - California State University, Stanislaus

One University Circle, Turlock, California 95382

(209) 667-3307 FAX (209) 667-3324

Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus & Tuolumne Counties, California

CENTRAL CALIFORNIA INFORMATION CENTER

Scope and Activities

Introduction

The Information Center system was established in 1979 on the California State University, Stanislaus campus by the State Office of Historic Preservation, Sacramento, in response to both Federal (National Historic Preservation Act-NHPA) and State (California Environmental Quality Act-CEQA) legislation regarding historical resource preservation activities in California. The Central California Information Center (CCIC), housed in the Department of Anthropology Geography, is one of the founding centers of the organization that has become the California Historical Resources Information System (CHRIS), comprised today of twelve centers situated throughout California to serve specific geographic areas and constituencies.

The Central California Information Center (CCIC), under the auspices of the State Office of Historic Preservation (OHP), Sacramento, functions to perform the following:

- ❖ The Central California Information Center serves Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus and Tuolumne Counties, and a wide client base consisting of local (city and county), state, federal and private agencies and companies.
- ❖ The CCIC is the official repository for all archaeological and historical information (electronic and paper) for the seven-county area. The CCIC information inventory includes prehistoric and historic archaeological resource records, archaeological and historical investigative reports, the files of the Historic Resource Inventory, and documents pertaining to the

National Register of Historic Places, the California Register of Historical Resources, the California Historical Landmarks, and the California Points of Historical Interest listings.

- ❖ The CCIC operates as part of the CSUS Anthropology and Geography Department, facilitated by the California State University, Foundation/Auxiliary and Business Services and State Financial Services Office.
- ❖ The CCIC meets the needs of clients who by state and federal law must be advised whether recorded prehistoric or historic archaeological sites may be impacted by a proposed project. Projects may vary in scope from the installation of a new cell tower on a one-acre site to miles of road or pipeline construction, or property-wide searches for companies such as the Sierra Pacific Industries lumber company, encompassing thousands of acres. A letter report of available information is provided for every client who requests a records search. Faxing and electronic transfer of data are other modes of transmitting data to the client.
- ❖ The CCIC also assists agencies in emergency disaster situations--for example, the California Department of Forestry and Fire Protection must consult with the information center when wildfires occur in order to prevent inadvertent destruction of archaeological and historical resources during fire suppression activities.
- ❖ The CCIC also maintains a *Referral List of Historical Resources Consultants* who have provided documentation that they meet the Secretary of the Interior's Standards. These consultants can assist the client requiring further archaeological or historical research or survey beyond the scope of the services that the CCIC can provide. Approval has been given by the State Historic Resources Commission for the development of a Statewide Referral List. This list is currently under development.
- ❖ Student interns are involved in every aspect of CCIC activities, from processing new information received, to helping research the client-requested information. Students also assist with the maintenance of an electronic bibliographic database (National Archaeological Data Base/NADB), GIS (computer mapping) and document imaging activities. The OHP/NRCS grant has allowed the Information Center to begin the

labor-intensive process of entering information into a GIS database. GIS activities are on-going.

- ❖ Qualified individuals also utilize the CCIC by making an appointment and coming directly to the CSUS campus to complete a records search. A workstation is available for individual client use.
- ❖ In addition to providing academic course credit, hands-on work-related experience in the Information Center has proved to be an important element in gaining employment subsequent to graduation from CSUS. Numerous graduates who have interned in the CCIC are now working in the field of historic preservation or historical resource management.
- ❖ In addition to the seven-county area client base, undergraduate and graduate students and others utilize the information housed at the center for research activities. Professors from many other disciplines have toured the Information Center with their students in order to acquaint them with the resources available.

In short, the Information Center continues to provide essential service to the campus, its students and local and region-wide community for information concerning historical resources.

Staff

Elizabeth Greathouse, M. A., Research Technician III/5, is the current Coordinator of the Information Center. CSU Stanislaus graduate Robin Hards acts as Assistant Research Technician. CSU graduate Mario de Sa Campos provides GIS technical assistance. CSU graduate Stefanie Griffin assists with record and report processing. Student interns from the Department of Anthropology/Geography earn course credits by assisting in Information Center operations.

Scope and Activities

The CCIC operates as a subconsultant to the State Office of Historic Preservation in response to Federal law (National Environmental Preservation Act and National Historic Preservation Act) and State legislation (California Environmental Quality Act; California Register of Historic Resources) enacted to provide for the preservation of historical resources. Historical resources in

California are defined as any physical evidence of human activities over 45 years old, including buildings, structures, objects, prehistoric and historic archaeological sites as well as archaeological and historical districts. The CCIC functions under the provisions of an Information Center Procedural Manual that has been approved by the State Historic Resources Commission. The major function of the CCIC is to accumulate and distribute historical resources information as discussed below.

Data Entry: Archaeological and historical data are entered on 7.5-minute USGS topographic quadrangles (Maps of Record). Separate sets of maps are maintained for prehistoric and historic data. The main resource record/report files are organized by county and quadrangle map, a procedure that ensures rapid hard-copy data retrieval and offers the potential for cost-effective entry of GIS data. Resource record and report bibliographic data are maintained and updated in hard copy and on an electronic file by the CCIC staff on a day-to-day basis. Historic data overlays for the USGS quadrangles have been prepared from available data for the seven-county area. The Historic Resource Inventory public data is housed in a separate room, allowing for direct public access.

Bibliography: The CCIC also maintains a bibliography of reports for historical resources investigations conducted within the seven-county area of responsibility. These reports consist of archaeological surveys, excavations, overviews, and environmental impact reports prepared for projects within the seven-county area, as well as historic property inventory and survey reports. The CCIC staff assigns a numerical designation to all reports as per OHP requirements. This designation appears in brackets [#] along with the author and date of the report on the CCIC Maps of Record.

Annual Federal Fiscal Year (Final) Report: This report is distributed to CSUS campus administrators, federal, state and local agencies, as well as city and county planning departments. It is available to all clients upon request.

Records Searches: The CCIC conducts records searches on a project-by-project basis for Federal, State, County, City and/or other local agencies, environmental impact firms, qualified professionals meeting minimum State standards, Registered Professional Foresters, and private landowners. Rules and regulations regarding record searches conducted for Registered Professional Foresters are authorized through a Memorandum of Agreement between the State Office of Historic Preservation and the California Department of Forestry and Fire Protection.

Archaeological information distributed by the CCIC is confidential and is not available to the general public. Qualified professionals are asked to sign and return an Agreement of Confidentiality Form when sensitive resource locational data are provided for project planning or review. Qualified professionals may request a designated radius around project area in order to define a records search boundary.

Each records search request must be accompanied by a USGS 7.5-minute (1:24000 scale) quadrangle map clearly showing the project boundary. If the records search is within an urban area, the client must provide a list of all street addresses occurring within the project. Consulting archaeologists and historians are asked to submit a copy of their resume if it is not provided with the initial records search request, or already on file at the CCIC.

When conducting a record search the CCIC staff routinely consults the following (in addition to the archaeological and historical Maps of Record):

- ❖ National Register of Historic Places
- ❖ California Register of Historical Resources
- ❖ The Directory of Properties in the Historic Property Data File (Directory of Properties and Archaeological Determinations of Eligibility, California Office of Historic Preservation quarterly update)
- ❖ *California Inventory of Historic Resources* (1976)
- ❖ *California Historical Landmarks* (1996 and updates)
- ❖ *California Points of Historical Interest* (1993 and updates)
- ❖ *Historic Spots in California* (Kyle 1990)
- ❖ *Gold Districts of California* (Clark 1970)
- ❖ *California Gold Camps* (Gudde 1975)
- ❖ *Five Views: An Ethnic Historic Site Survey for California* (Department of Parks and Recreation 1988)
- ❖ CALTRANS State and Local Bridge Survey (Snyder 1992 and updates)
- ❖ *Survey of Surveys* (Department of Parks and Recreation 1989)
- ❖ General Land Office (GLO) Survey Plats
- ❖ Primary and Secondary Historic data for the seven-county area

A copy of the *Native American Heritage Commission Professional Guide for the Preservation and Protection of Native American Remains and Associated Grave Goods* is

routinely distributed to clients to acquaint them with laws relating to the treatment of Native American remains and associated artifacts.

Record Search Reply Schedule: The CCIC completes record searches within three to five working days of receipt of the initial written request. The CCIC will transmit records search replies via Postal and Federal Express and by FAX (the requester must specifically request such transmittal and cover the costs). Requests for expedited or "rush" service are completed upon request at a 50% surcharge on the day they are received. During extremely busy times this reply schedule may be subject to revisions based on daily workload.

Qualified professionals may complete record searches in-house by making an appointment at least one week in advance. However, the CCIC receives few requests for this optional service due to the prompt regular record search response schedule.

Archaeological or historical consultants receiving record search information from the CCIC are required to file resource records and project reports at this office within 30 days of the completion of the final report for the project. Violations of this regulation, established by the Office of Historic Preservation, may result in denial of access to the CCIC records.

Historical resource investigative reports are distributed on a project-by-project basis in response to record search requests, and to qualified professionals upon request.

Pre-project Reviews: The CCIC assists City and County Planning Departments within the seven-county area of responsibility with pre-project planning and review. An initial assessment of the historical resource potential of a parcel split, subdivision application, or any acreage involved in the county permitting process is provided by this review. This does not constitute a formal record search but provides information concerning known historical resources within a specific project area. The pre-project review also helps to determine whether the project has been subject to previous survey. It also includes an assessment of the project area's potential for containing unrecorded historical resources. Recommendations regarding the need for an archaeological survey or historical study of a proposed project area are also provided. A Pre-project Review Memorandum of Agreement (for screening of discretionary or ministerial permits) is required to be in place between a city or county and the CCIC before reviews can be conducted. Please contact the Coordinator for

further information.

Fees: Pursuant to an Information Center standard fee schedule approved by the State Historic Resources Commission as of October 1, 2006, charges include the following:

Standard Records Search: a minimum fee of \$150.00. If the records search requires more than one hour to complete, a fee of \$150.00/hour or ½ hour portion thereafter is charged. Copies of pertinent resource records and reports are charged @ 15 cents per page.

Rush or Rapid Response Record Search: Cost of services plus 50%.

Emergency Response: Cost of all services plus 100%.

In-house Record Search: \$100.00 minimum, per person; a fee of \$100/hour per person or ½ hour portion thereafter; copies @ 15 cents per page.

Copy Fee: \$40.00/hour, plus 15 cents per page for copies of pertinent resource records and reports outside of the record search process.

FAX Fee: \$1.00 per page.

Cancellation Fee: A \$50.00 charge will be applied when a client who has made an appointment for an in-house records search fails to notify the Information Center within 24 hours that the appointment will not be kept.

Pre-Project Review: \$75.00 per request.

There will be no charge if students wish to use the files for research purposes. The student must provide a letter from a professor who meets the Secretary of the Interior's Standards in Archaeology or History, with a detailed description of the purpose and goals of the research activity. However, researchers will be charged the fee of 15 cents per page if numerous copies are requested. A copy of all student-generated research papers or other project products is to be filed with the Information Center.

Assignment of State Designations to Resource Records: The CCIC assigns Primary numbers and state trinomials as appropriate to historical resources recorded within the seven-county area of responsibility. Two copies of

each resource record or other appropriate forms are required in order for the CCIC to assign a primary number and/or a trinomial. The forms must be computer-generated (or typewritten), legible, and prepared to Office of Historic Preservation standards, as set forth in *the Instructions for Recording Historical Resources* (Office of Historic Preservation, March 1995). Reports should be prepared to meet minimum standards as stated in "Archaeological Resource Management Reports (ARMR): Recommended Contents and Format" (Preservation Planning Bulletin Number 4a, December 1989). Copies of the resource record and report manuals referenced above are transmitted to clients free of charge upon request.

Referral List: At the request of the Office of Historic Preservation, the CCIC maintains and distributes a Referral List for Historical Resources Consultants, a partial, alphabetically ordered, list of individuals, firms and institutions which are minimum qualifications to perform identification, evaluation, registration and treatment activities within the profession under which they are listed, in compliance with federal and state environmental laws. It is composed of all individuals who have requested listing by this Information Center and who have satisfactorily documented that they meet the Secretary of the Interior's Standards for that profession (Archaeology, Architecture, Architectural History, Historic Architecture, or History). Inclusion on this list is determined solely on this evaluation and not on a review of current work. The Information Center provides a copy of this list without charge when field inspection is recommended, or upon request. This list has been prepared in accordance with guidelines stipulated by the State. Inclusion on this list does not constitute endorsement or recommendations by the State or this Information Center.

At the request of three of the northern information centers (North Central, Northeast, and Northwest), and the South Coastal Information Center, the CCIC assists in the evaluation of prospective firms and/or individuals in reference to the Referral List for Historical Resources Consultants. Each center maintains their own lists, but the CCIC reviews the Referral List Request Forms and *resumes* for additions to the listings.

Questions regarding the Referral List may be directed to Eric Allison, Coordinator of the California Historical Resources Information System, Office of Historic Preservation, P.O. Box 942896, Sacramento, California, 94296-0001, Phone: (916) 653-7278; FAX: (916) 653-9824.

Hours of Operation: The CCIC maintains office hours Monday-Friday, for a minimum of 20 hours per week. When funds permit, the office is open additional hours (9:00 AM-5:00 PM). A telephone answering machine will take a message at any time (209-667-3307), a FAX machine operates 24 hours a day (209-667-3324), and the Information Center is on-line through electronic mail (EGreathouse@csustan.edu). The CCIC observes all University holidays including a one-week shutdown between Christmas and New Years Day.

Access Policy: In accordance with the California Information Center Procedural Manual prepared by the State Office of Historic Preservation, Sacramento, and approved by the State Historic Resources Commission, the Central California Information Center adheres to the access policy outlined below. Access to the historical resources file system data, including reports, resource records, maps, etc., is subject to the following:

- (1) Proof of proper qualifications; every individual receiving access to Confidential materials must complete a *Statement of Qualifications for Access to Confidential CHRIS Information* form.
- (2) Proof of justification when scientific research or project planning is not involved.
- (3) Signing and returning upon request the *Access Agreement* specifying the terms under which the information is to be handled.
- (4) Proper adherence to the stipulations set forth in the *Access Agreement*; misuse or inappropriate distribution of the records can result in denial of access.
- (5) Transmittal of complete resource records and survey or excavation reports resulting from field reconnaissance and investigations conducted within Alpine, Calaveras, Mariposa, Merced, San Joaquin, Stanislaus and Tuolumne counties.
- (6) Remittance of payment for services after not more than two billings and/or within 60 days of completion of the record search.

Pursuant to Office of Historic Preservation procedures, failure to abide by the above-referenced stipulations can result in denial of access to the Information Center files.

Note: The location of archaeological resources and the resource records pertaining to them are not considered public information and are specifically exempt under the Freedom of Information Act. Please address any questions regarding access policy to Eric Allison, Office of Historic Preservation, P.O. Box

942896, Sacramento, California, 94296-0001, Phone (916) 653-7278.

Funding: The Information Center is funded on a small matching grant basis through the U.S. Department of the Interior, National Park Service, via the State Office of Historic Preservation, Sacramento. The university provides no direct funding -- the **primary** funding source for the Information Center is the client fee structure authorized by the State Historic Resources Commission.

For further information please contact:

Elizabeth Greathouse, Coordinator
Central California Information Center
One University Circle
Turlock, CA 95382
(209) 667-3307
FAX (209) 667-3324
Email: EGreathouse@csustan.edu

**CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM
INFORMATION CENTER RATE SCHEDULE
Effective October 1, 2006**

Information Centers shall charge fees for access to CHRIS information and other rendered services in accordance with the following schedule unless otherwise specified in a Memorandum of Agreement. This Rate Schedule shall be posted at each Information Center. Fee payments shall be received and the funds managed by individual Information Centers or their host institutions. Payments are due within sixty (60) calendar days of receipt of billing.

- (A) Records Search conducted by Information Center staff.
 - (1) Staff Time: \$150.00 minimum plus \$75.00 per one-half hour after first hour.
 - (2) Photocopy: \$0.15 per page.
 - (3) FAX: \$1.00 per page.
- (B) Fees for services not related to record searches performed by Information Center staff.
 - (1) Staff Time: \$40.00 minimum plus \$20.00 per one-half hour after first hour.
 - (2) Photocopy: \$0.15 per page plus staff time.
 - (3) FAX: \$1.00 per page plus staff time.
 - (4) Information Center report bibliography printout: \$0.15 per page plus staff time.
- (C) In-House Records Search conducted by qualified individuals as specified in this Manual.
 - (1) Access Fee: \$100.00 minimum per person plus \$50.00 per person per one-half hour after first hour.
 - (2) Photocopy: \$0.15 per page plus staff time if staff performs photocopying.
 - (3) Information Center report bibliography printout: \$0.15 per page plus staff time.
 - (4) Cancellation Fee for failure to give twenty-four (24) hours advance notice of cancellation of scheduled In-House Records Search appointment: \$50.00 per appointment.
- (D) Priority Response: total cost of Information Center services rendered plus 50% of total cost; Information Center should be contacted to determine response time.
- (E) Emergency Response: total cost of Information Center services rendered plus 100% of total cost; fee applies to a request made by a government agency or representative in response to a specific, identified emergency incident; Information Center should be contacted to determine response time.



**DEPARTMENT OF PUBLIC WORKS
Administration Division**

Paul A. Fillebrown
Director
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Special Programs Director

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Equal Opportunity Employer

August 18, 2008

Kim Espinosa, Planning Manager
Planning and Permitting Division
City of Merced
678 West 18th Street
Merced, CA 95340

RE: Notice of Preparation – Draft Environmental Impact Report, City of Merced Vision
2030 General Plan

Dear Ms. Espinosa:

Merced County (County) has reviewed the Notice of Preparation (NOP) for the Draft Environmental Impact Report (DEIR) that will be prepared for the City of Merced Vision 2030 General Plan (Project). The County has also reviewed the project to assess its relationship to the County General Plan, Zoning, and to the Castle Airport & Development Center. We provide the following comments to assist you as you continue to develop this project and prepare the DEIR.

Proposed City Urban Expansion and Existing County Urban Zoning and General Plan Designations

The project proposes a substantial expansion of the City's Specific Urban Development Plan Area (SUDP). The proposed SUDP represents an addition of 14,588 acres to the existing SUDP of 19,933 acres or an increase of the existing SUDP of over 73%. All of this proposed expansion area is unincorporated and substantial portions of both the existing and proposed SUDP include areas that are designated or zoned for urban development by the County.

University Community SUDP This area is designated as "UC Merced" for the UC Campus area and "Multiple Use Urban Development" within the University Community area. The multi-colored land use concept illustrated on the City's February 2008 Land Use Diagram does not accurately reflect the approved plan. As the City has adopted a policy statement (City Council Resolution #2006-89) to incorporate the University Community Plan (UCP) into the City's General Plan, the proposed Project should be amended to accurately reflect the land use designations of the UCP.

Yosemite Lake Estates This is designated as an SUDP study area on the County General Plan pending the approval of a Community Plan. The Project should be amended to designate this area “Yosemite Lake Estates SUDP Study Area.”

Existing Rural Residential Centers The existing City SUDP contains several areas designated by the County General Plan as “Rural Residential.” These areas and the accompanying A-R zoning allow the development of 1 acre home sites with individual wells and septic systems. The proposed Project includes implementing actions to establish an outreach program to encourage and promote the annexation of these areas. The Project should be amended to provide County involvement in any process to allow higher residential densities within existing RRC’s. The current County A-R zoning allows up to three (3) units per acre (with a public water or sewer system). The DEIR should analyze the potential impacts for the development of remaining vacant RRC lands up to three (3) units/acre to assist and inform the development of a City/County RRC outreach program.

In various discussions with City staff, it is the County’s understanding that the City opposes any separate public or community water and sewer systems within the existing and proposed SUDP. This position affects the existing RRC’s, the University Community Plan, and the Yosemite Lake Estates SUDP’s. The Project should be amended to clearly state this if this is the policy position of the City. The Project should also be amended to describe how City water and sewer services would be extended to these areas. The DEIR should then analyze the environmental effects of the extension of these systems.

Proposed Community Plan Areas

The Project proposes three (3) new Community Plan areas (7, 8, & 12 on the February 2008 Land Use Diagram). The County understands that development concepts have been submitted for some of these areas and that these development concepts may be used to inform the DEIR. If this is the case, the Project should be amended to illustrate these development concepts to disclose the assumptions for determining the impacts identified in the DEIR. If these concepts are not going to be considered, the Project should clearly describe the development assumptions that will be used for determining the environmental impacts from the urbanization of these areas.

Bellevue Corridor

The City has conducted several community workshops with landowners along the Bellevue Corridor. These workshops were attended by County staff as well. It is the County’s understanding that the purposes of those workshops included: informing landowners of the annexation process and the effects of annexation; gauging the interest of landowners to annexation; and, to identify any development interests of landowners that would necessitate annexation. If a specific annexation program for the Bellevue Corridor is being contemplated by the City, such a program should be included as part of the Project. Also, any development concepts or plans that are being considered by the City along the Bellevue Corridor to facilitate annexation should also be part of the Project and analyzed in the DEIR.

Circulation

The large expansion of the City's SUDP proposed by this Project will induce significant growth that will have significant impacts to the local roads, State highways, and the regional transportation system in general. The County believes these regionally significant impacts will require a comprehensive approach to identify strategies to mitigate these impacts. The County therefore recommends that the DEIR include a major traffic study which includes the entire proposed SUDP. As a part of this traffic study, the County recommends a peak hour traffic model be prepared, consistent with the methodology in the Highway Capacity Manual with traffic simulations at critical locations, such as access to State Route 99.

Habitat and Agricultural Resources

The large expansion of the City's SUDP proposed by the Project will result in the conversion of agricultural land to urban development and therefore, the permanent loss of agricultural resources. The Project does not include policies to mitigate for the loss of these resources. The County has adopted such policy as part of the University Community Plan. Attached, please find the relevant portions of the University Community Plan regarding agricultural resources. The County strongly encourages the City to include similar policies as part of this Project, particularly with regards to agricultural conservation easements. The County encourages the City to collaborate on a City-County Agricultural Mitigation Strategy to address this issue on a comprehensive and consistent basis.

The County has prepared and certified three (3) EIRS within the City's proposed SUDP, which analyze potential impacts of urban development to habitat and open space resources. These EIRs, which were previously provided to the City for review and comment concerned the UCP, Yosemite Lake Estates, and the Vista del Lago Major Subdivision. The background studies prepared for the Project indicate that there are other areas within the City's existing and proposed SUDP that may contain important habitat and open space resources, including waters of the United States. The County adopted mitigation measures to address these resource issues in the Vista del Lago Subdivision and the UCP EIRs. Also, please see the attached UCP policies addressing these resources. The County believes the most efficient and cost effective means to address these issues is one that is developed in collaboration between the City and the County resulting in a consistent and comprehensive approach.

Castle Airport & Development Center

The County's Master Plan for Castle Airport is to improve and market Castle to serve as a regional facility serving the entire County and beyond. The revised SUDP proposed by the Project has the potential for urban development that encroaches into the Airport Land Use Compatibility (ALUC) zones that have been adopted for Castle Airport. The County requests that the DEIR analyze the potential impacts of the Project to Castle Airport to ensure such impacts are avoided. In addition, given Castle's importance to the region, the County requests that the Project be amended to include a policy under Goal Area T-3 specific to Castle Airport. The County will be happy to work with the City and its consultant in the development of such policies.

The County is currently updating the Castle Airport Master Plan. This new Master Plan will result in revised noise contours and a probably update of the ALUC zones for Castle. As soon as these are available, the County will provide them to the City so they may be considered in the DEIR.

Greenhouse Gas Emissions (GHG)

As you are probably aware, the State of California has recently placed a new focus on the California Environmental Quality Act (CEQA) review process as a means to address the effects of GHG emissions from proposed projects on climate change. Recent law (SB 97) amends CEQA to establish that GHG emissions are appropriate subjects for CEQA analysis.

Because the Office of Planning & Research (OPR) has not yet amended the CEQA guidelines for the effects or mitigation of GHGs, lead agencies have the opportunity to provide innovative solutions to this challenge. This is particularly important for this Project due to its regional significance and that it forms the long term foundation for the City's growth, land use, and development decisions. Merced County will look forward to working with the City to address this important issue through this EIR.

Thank you for the opportunity to respond to the NOP. We look forward to a continued cooperative participation with the City on this important project.

Sincerely,



Robert E. Smith
Special Programs Director

RES/tjt

:Attachments

cc: Merced County Board of Supervisors
Demitrios O. Tatum, County Executive Officer
James N. Fincher, County Counsel
Paul A. Fillebrown, Public Works Director
Robert Lewis, Development Services Director



Environmental Resources

The natural resources of the Community Plan area are native plants and animals, topographic character, viewsheds, geology, soils, agriculture, air quality, surface water, and ground water. These resources represent essential factors for the physical, mental, and spiritual well-being of the populace, providing a sense of beauty and support to the economic base of the community at large. The policies aim to preserve, protect, and/or mitigate the loss of resources, promote the long-term sustainability and vitality of these resources within the larger regional context. These resources will be maintained within the Community Area for as long as possible and to the extent feasible. Surface and ground water policies are located in Utility Infrastructure: Water-Related Infrastructure.

PLANT AND ANIMAL RESOURCES

STATUTORY REQUIREMENTS

State of California Law does not provide that a Biological Resources Element, per se, be prepared as a part of a County's General Plan (Government Code §65302). However, Government Code §65302(d) requires the inclusion of a Conservation Element that addresses natural resources issues, as described below:

A conservation element for the conservation, development, and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources.

CONTEXT

The eastern Merced County region is part of the largest block of relatively undisturbed, high-density vernal pool grasslands remaining in California. In addition to the high density of vernal pools, these grasslands support a diversity of wildlife and plant life including rare, threatened, and endangered species. The University Community Plan area lies on the western edge of the region.

Habitats of the University Community have been altered through agricultural practices. A majority of the University Community is currently in row crop production and provides little wildlife value. Approximately twenty percent of the University Community planning area remains in a semi-natural condition and supports annual grassland habitat interspersed with vernal pools (vernal pool grassland) and other wetland habitats. Development of the Community Plan will result in loss of annual grassland and associated wetland habitats. Habitats more compatible with the University Community Plan can be developed that will provide ecological value.

OVERVIEW

Merced County is committed to the preservation of important natural resources that occur within its boundaries. This commitment is articulated in the Conservation Element of the County General Plan. This section of the University Community Plan responds to the presence of valuable and legally protected species and habitats within and near the University Community. The following goals, objectives, and policies provide guidance to ensure that future development within the Community Plan area supports the County's commitment to resource conservation through avoidance, minimization, compensatory mitigation, and sensitive design of open spaces and edges of the Community.

The UCP focuses on preserving and sustaining the vitality of the rich and diverse natural wetlands and annual grasslands of eastern Merced County as well as maximizing the ecological value of the Community Plan. Environmentally sensitive project siting and design will seek to protect adjacent vernal pools, wetlands, and grasslands from community development. Consultation with the relevant agencies will guide the approach and define the constraints and procedures to implement this policy. This will include measures such as buffer zones, seasonal construction prohibitions in sensitive areas, signage, and monitoring. A buffer zone will be established to minimize the effects of developments on contiguous wetland resources, including barrier requirements, activity restrictions, and signage requirements. Where necessary, a wetland mitigation plan and a habitat mitigation plan will provide off-site compensation for the loss of wetlands and grasslands.

Open space corridors and open water features will be incorporated to allow movement of wildlife through the community. The use of native vegetation in local landscaping will offer wildlife value. The public will be encouraged to participate in wildlife protection through pet leash laws and environmental education programs.

GOALS, OBJECTIVES, AND POLICIES

VALUING THE COMMUNITY'S WETLANDS AND GRASSLANDS

Goal

Preservation and protection of the rich and diverse natural wetland resources of eastern Merced County.

Objective

PA 1.0

To protect the wetland resources of the eastern Merced region by ensuring that there is *no net loss of wetland functions and values* (including vernal pools and other wetland habitats for special status species) due to the development of the University Community.

Policies

PA 1.1

Require that direct and indirect effects to wetland habitats be minimized through the promotion of environmentally sensitive project siting and design, to the maximum extent practicable. (Imp 2.5, 4.10)



PA 1.2

Obtain the appropriate regulatory approvals prior to the initiation of project construction. (Imp 3.3)

PA 1.3

Ensure protection of on-site avoided, created, or restored permanent wetlands. (Imp 2.5, 2.10)

PA 1.4

Ensure the protection of off-site adjacent wetland habitats, including those with hydrological connections to off-site wetland resources, through the implementation of measures that will protect the quality and quantity of source waters and will avoid disturbance of wetland habitats by human activity including domestic pets. (Imp 2.7, 4.10)

PA 1.5

Require monitoring, cleanup, and maintenance of preserved wetland habitats within and adjacent to the University Community, as necessary. (Imp 2.10)

PA 1.6

Require the development of a habitat mitigation plan for each sub-area Specific Plan, acceptable to the USACOE, USFWS, and CDFG, that achieves *no net loss of wetland function and values* by meeting established ratios for wetland enhancement/restoration and on- and off-site compensation for the loss of wetland functions and values., (Imp 2.5, 2.7, 4.10)

Objective

PA 2.0

To protect and enhance annual grassland habitat functions and values, including habitats for special status species.



Policies

PA 2.1

Encourage the retention of annual grasslands to the maximum extent feasible through the promotion of environmentally sensitive project siting and design. (Imp 2.5, 4.10)

PA 2.2

Incorporate open space corridors into the Community Plan that allow the movement of wildlife through the Community Plan Area, to the extent feasible. *(Imp 2.4, 2.5)*

PA 2.3

Ensure the development of a habitat mitigation plan to provide off-site compensation for the loss of annual grassland functions within the University Community that is acceptable to the USFWS, CDFG and other relevant agencies. *(Imp 2.5, 2.7, 4.10)*

INTEGRATING RESOURCES WITH DEVELOPMENT

Objective

PA 3.0

Well planned open spaces and landscaping that results in a high degree of ecological value in the University Community.

Policies

PA 3.1

Incorporate large interconnected open space corridors throughout the Community Plan area. *(Imp 2.4, 2.5, 4.10)*

PA 3.2

Utilize native vegetation in local landscaping to the maximum extent feasible. *(Imp 2.5)*

PA 3.3

Create open water park features, where feasible, to provide resting areas for migrating waterfowl and shorebirds. *(Imp 2.5)*

PA 3.4

Ensure the protection of wildlife through establishment of programs to control feral pet populations. *(Imp 5.1)*

PA 3.5

Provide public environmental educational programs to inform the public about the natural resources of the region, including information about cohabitation with wildlife populations that are common in urban areas. *(Imp 5.10)*

PA 3.6

Conduct botanical surveys to establish baseline conditions for Specific Plan applications consistent with the prevailing *CNPS Botanical Survey Guidelines*. *(Imp 2.5, 4.10)*

AGRICULTURE

STATUTORY REQUIREMENTS

The state of California does include Agriculture, per se, among the mandatory elements of a general plan. However, Government Code §65302 requires the preparation of an open space element that defines policy for “open space used for the managed production of resources, including...agricultural lands and areas of economic importance for the production of food or fiber...” One of the central themes of the Merced County General Plan is the conservation of important agricultural lands and the protection and enhancement of the County’s important agricultural industry. A reflection of this commitment is the presence of an Agricultural Element as a distinct element in the County General Plan. This section of the University Community Plan responds to the presence of designated prime agricultural lands and productive agricultural activities within the University Community planning area.

CONTEXT

Development of the University Community Plan (UCP) area will result in the loss of productive agricultural lands. The northern portion of the site is actively used for grazing cattle and the southern portion is used for the production of tomatoes and corn rotated with oats and wheat. Lands to the south and southeast of the University Community are rich farmland soils planted in crops such as almonds, walnuts, cotton, tomatoes, and corn. In addition to the loss of agricultural lands within the University Community, its urbanization could induce economic pressures for the premature conversion of surrounding agricultural lands for comparable uses. Given the importance and value that Merced County places on the preservation and conservation of farmland and agricultural productivity, all reasonable efforts should be taken to avoid adverse effects on nearby farmland or agricultural productivity.

OVERVIEW

Agriculture represents a vital element of the economic base and a valued way of life in Merced County. The sustainability of the agricultural sector is strengthened through County policies that protect and enhance agricultural activity. The Community represents a large area where the land use will change from agricultural to urban. Policies emphasize the transition of land uses to prolong agricultural activity within the Community area as long as possible and to protect continued agricultural uses on adjacent lands.

Nonagricultural residents of the Community will be informed of the right-to-farm ordinance and what that means in terms of local agricultural operations, practices, and the potential agriculture-related impacts (e.g., noise, odors, dust). Brochures and pamphlets will be issued upon in the signing of rental and title agreements to inform residents of the effects of agricultural activities, such as plowing, spraying and burning, and the use of chemicals (e.g., fertilizers, pesticides). An adequate buffer space will be established to minimize agricultural and urban land use conflicts.

GOALS, OBJECTIVES, AND POLICIES

The following goals, objectives, and policies provide guidance to ensure that the future development of the University Community reflects the County's commitment to farmland conservation and enhancement of agricultural productivity through phasing, compensatory mitigation, and sensitive design of the edges of the Community.



A COMMUNITY THAT VALUES CONTINUED AGRICULTURAL PRODUCTION

Goal

Continued agricultural productivity within the University Community planning area prior to development.

Objective

A 1.0

To maximize use of productive agricultural soils within the University Community planning area.

Policies

A 1.1

Encourage agricultural production to occur within the University Community planning area, for as long as possible, during development of the site. (Imp 2.5.)



A 1.2

Enforce the County of Merced’s Right-to-Farm Ordinance for the University Community that requires nonagricultural residents be made aware of local agricultural operations, their practices, and the potential agriculturally related impacts. This may be accomplished through its inclusion in the distribution of annual property tax bills, escrow papers upon sale or lease execution, Title Reports issued at the time of close of any escrow, Department of Real Estate White Papers, or similar documents. *(Imp 2.5, 5.1)*

A 1.3

Provide materials such as brochures and pamphlets to all future residents of the University Community informing them about the effects of agricultural activities that states residents within the University Community may be subject to inconveniences or discomfort arising from the use of agricultural chemicals, such as fertilizers and pesticides; and from the pursuit of agricultural operations including but not limited to, plowing, spraying, and burning which occasionally may generate dust, smoke, noise and odor. *(Imp 5.10)*

MITIGATING FOR THE LOSS OF AGRICULTURAL LANDS

Goal

Compensate for the loss of productive agricultural land due to development of the University Community area.

Objective

A 2.0

To mitigate for the loss of productive farmland within the University Community area.

Policies

A 2.1

Participate in a program, if adopted, that may be established by the County of Merced and the City of Merced for the full mitigation of the loss of agricultural lands in the north Merced area. In the event that such a program is not adopted prior to approval of any sub-area specific plan, require implementation of such measures that would achieve the equivalent protection of comparable farmland at a ratio of 1:1 for Important Farmland converted with the subject specific plan area; examples of measures include acquisition of conservation easements, payment of in-lieu fees to the County (or an appropriate third party designated by the County) that would protect such lands through fee title, easement, or other measures. *(Imp 2.5, 2.7)*

COMPATIBILITY OF AGRICULTURE AND URBAN USES

Goal

Reduce the potential for agricultural and urban land use conflicts.

Objective

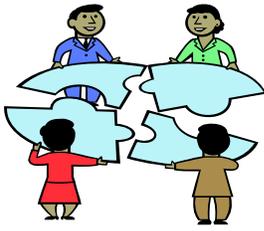
A 3.0

To minimize agricultural and urban land use conflicts.

Policies

A 3.1

Establish an adequate open space buffer along the edges of the University Community planning area abutting agricultural lands. This buffer may accommodate passive uses such as open space, parks, certified organic farming, natural preserves, or treated wastewater storage. *(Imp 2.4, 2.5)*



Constructing Connections of Merced County

Making Connections for Child Care Facility Development

1520 West Main Street * Merced, CA 95340 * (209) 722-3804 * FAX (209) 723-1068

August 18, 2008

Dear Kim:

Thank you for the opportunity to participate in the update process. I have some suggested language for the General Plan update as well as some current data related to the supply and demand of child care in the City of Merced.

The City of Merced's population is growing with a conservative estimated population of 6,035 children ages 0-5, based upon 2000 Census data. The City of Merced's current licensed capacity indicates that there space for approximately 2,338 children ages 0-5 which leaves a **shortage of over 3,600 spaces** needed for children whose families are 75% below the State Median Income (SMI). This is a very conservative estimate as the actual shortage of licensed child care spaces is greater which is why the inclusion of specific language addressing the child care needs of families is so important when updating the general plan.

Research and statistics indicate the importance of quality early childhood education and child care for the future success of our youngest citizens. As with any important community service, child care should be affirmatively included in the general plan to ensure that it is encouraged and that child care occurs in the most appropriate locations. Too often child care is omitted from the general plan, requiring providers to go through the same type of permit process as other businesses such as liquor stores or other similar businesses. Child care adds to the vitality of neighborhoods for families of all socioeconomic classes and maintains the quality of life within neighborhoods by sustaining an adequate level of community facilities, such as child care centers and municipal services.

A quality preschool/child care experience helps children become successful in the K-12 education system. Current research has shown that children who have had a quality preschool/child care experience graduate from high school, are more likely to support themselves, own homes, stay out of jail and raise their own families which supports success in life and a more stable community. By encouraging child care facility development in the City of Merced you are essentially supporting the economic growth and stability of your city. Including child care policies and goals in the General Plan will provide direction to staff in community development work and will direct programs and projects that address the community's child care needs for the future.

Recommendations For Goal Areas

Land Use & Housing

Mitigate for **child care** to be included in new developments that increase the demand for child care. Access the demand for child care in new housing developments and encourage the inclusion of space for child care, particularly in affordable housing developments.

Language taken from **Kern County's General Plan** is an excellent example, "New developments having more than 50 housing units or 50,000 square feet of commercial or industrial space shall prepare a Child Care Facilities Needs Assessment. The purpose is to assess new **child care** demand created by new residents and employees against available community resources."

Circulation Element

Transportation System and Congestion Management are the applicable strategies for the mitigation of traffic and parking congestion. Public transit, traffic management, ridesharing, parking management or worksite **child care** are to be used to the greatest extent practical to implement transportation management strategies. Encourage placement of facilities that house or serve elderly, disabled, and children needing **child care** or socio-economically disadvantaged persons in areas with existing public transportation services and pedestrian and bicycle amenities, near major transportation corridors.

Open Space/Conservation/Recreation

Community facilities of a specialized nature, including **child care centers**, may be developed to service the particular interest of the community.

The City shall encourage the development of a range of **child care** facilities and arrangements, including family child care homes, quasi-public, and private child care centers, before- and after-school programs, and recreational activities in order to provide alternatives to fulfill the needs of Merced residents and employees, or promote the development of multi-use buildings/community centers that can be utilized for youth and teen activities and child care.

The current language from the Vision 2030 states under Policy P-8.2.c: "Encourage the development of child care centers and homes in all areas, including non-residential areas. Locating child care facilities in areas with similar uses like schools and near employment centers will help reduce unnecessary vehicular trips and to facilitate parental involvement." And under 8.2.d "assess the demand for child care in new housing developments and encourage the inclusion of space for child care, particularly in affordable housing developments. Care should be taken to ensure that child care facilities are easily located in newly developing areas." This is an excellent example for other jurisdictions to follow and I hope that you will consider the additional recommended language which specifically addresses child care for other goal areas of the GPU as well.

Thank you again for the opportunity to comment on the City of Merced's Vision 2030 General Plan. Please contact me if you have any questions or if I can clarify any of the above recommendations.

Sincerely,

Christie Hendricks, M.A., CCC-SLP
Merced County Office of Education



Merced County Office of Education Lee Andersen, Superintendent
632 West 13th Street Merced, CA 95341 (209) 381-6600 www.mcoe.org





Local Agency Formation Commission
2222 M Street
Merced, CA 95340
Phone (209) 385-7671 / Fax (209) 726-1710
www.lafcomerced.org

August 18, 2008

Kim Espinosa, Planning Manager
City of Merced
678 West 18th Street
Merced, CA 95340

RE: Notice of Preparation on the Merced Vision 2030 General Plan Update Environmental Impact Report

Dear Kim:

Thank you for forwarding the Notice of Preparation (NOP) for the City's Environmental Impact Report (EIR) on the Vision 2030 General Plan, and for the earlier the presentation before the Local Agency Formation Commission (LAFCO) on December 6, 2007 concerning the City's General Plan update and future Sphere of Influence amendment request. This was an informative meeting with a good discussion on the City's future plans and issues important to the Commission.

Proposed Sphere of Influence

The NOP identifies the proposed Sphere of Influence which is approximately 14,588 acres larger than the current Sphere (Table 1). As defined in the Cortese-Knox-Hertzberg Local Governmental Reorganization Act of 2000, a sphere of influence is "... a plan for the probable physical boundaries and service area of a local agency, as determined by the commission. " (Section 56076 of the Government Code) Based on this definition, the Commission will typically consider all land within a City sphere of influence is anticipated to be provided with City infrastructure and services, and will look at the public facilities and services section of the Draft EIR to ensure that the planned growth is supported by planned infrastructure and public services.

If the City is proposing to include agricultural land or some other open space land as a buffer between the City and agricultural and natural resource areas, this should be clearly identified in the General Plan text and policies, and methods for its protection should be clearly indicated. The City also mentioned the use of an "Area of Interest" designation for areas outside the proposed Sphere of Influence that the City has an interest in joint planning with the County or in preserving (such as the area south of Mission Avenue and south of the City's industrial park. If this designation is proposed, the General Plan should include a statement of the related plan policies and the Draft EIR should evaluate any potential environmental implications from this designation.

Local LAFCO Policies

The Merced LAFCO has adopted local policies, as required by the Cortese-Knox-Hertzberg Act, that the Commission will use to review future sphere of influence revisions. A copy of these policies is attached to this letter. A brief summary of three important policies that should be addressed in the City's General Plan include the following: 1) the sphere boundary should be large enough to

accommodate 20 years of projected growth and any areas of special interest for the City; 2) areas outside the sphere boundary that reflect unique coordinated planning areas between the City and County will be recognized as "areas of interest" or "joint planning areas" as identified in the City and County General Plans (as described in the previous section of this letter); and 3) phasing policies should be included in the General Plan which identify priorities for growth and annexation based on the objectives of efficient urban service delivery and avoiding premature conversion of prime agricultural land or other open space resources.

To help evaluate these policies, Policy 5 under Objective II.B. lists a set of questions the Commission will need to answer when processing a sphere of influence amendment. The City should review these questions while preparing the General Plan to ensure the Commission will have the answers it needs when we get to the sphere amendment stage. Basically, the questions focus on the timing of future development, the avoidance for the conversion of prime soils, and the present and probable need for public facilities and community services within the proposed sphere.

As the "Implementation" measure states on Page 6 of the local LAFCO policies, if the General Plan includes the detailed information listed in the policies, there will be a more limited review of future annexations by the Commission focusing on efficient boundaries, conformance with the General Plan and any phasing policies, and the availability of public services. By preparing a detailed Master Plan for future capital improvement projects, the City will help supply the information necessary to answer the policy questions referenced above. This information will also be used in preparing the Municipal Service Review required prior to amending the City's sphere of influence.

While reviewing the enclosed LAFCO policies, note there are policies concerning agricultural land (see Objective I.A.). These policies implement State requirements for LAFCO's role in "...discouraging urban sprawl, preserving open-space and prime agricultural lands, and efficiently extending government services." (Section 56001 of the Government Code) At this time, the Commission has not adopted any policy regarding mitigation for the loss of agricultural land, and it has been left to the individual Cities and the County to address possible mitigation options in their Environmental Impact Reports for General Plans and Community Plans.

In comments made at the December 6, 2007, Commission meeting, the size of the proposed Sphere of Influence expansion area was questioned given the large amount of vacant land in the Sphere north of the City. In addition, having large areas designated for "Community Plans" without the detailed land use designations being identified will make it more difficult for the Commission to determine whether the City's public facilities plans (master plans) are adequate. Some means to identify the proposed density, intensity and service needs from the City need to be evaluated in the Draft EIR.

Municipal Service Review

As required under the Cortese-Knox-Hertzberg Act (Section 56430 of the Government Code), a "municipal service review" must be prepared prior to any update to the City's sphere of influence. The information in the City's utility master plans, also called a plan for services, for public facilities will be critical information to complete the updated municipal service review. In addition, if the City's

Kim Espinosa
August 18, 2008
Page 3

Program Environmental Impact Report (EIR) also covers the utility master plans, LAFCO can rely on the EIR for action on the future municipal service review and sphere of influence updates. We look forward to receiving a copy of the Draft EIR during the public review period.

Questions and Coordination

I hope the information in this letter and the attached local LAFCO policies are useful to the City as you finalize the Draft General Plan and related Program EIR. If you have any questions or would like to meet further to discuss policy options or the overall process, I would be happy to make the time available.

Sincerely,

Bill Nicholson,
Executive Officer

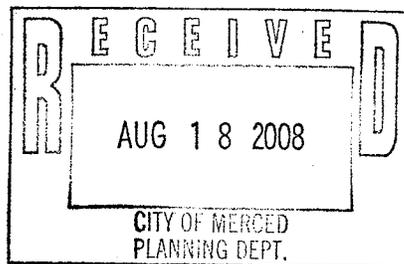
Attachment

cc: LAFCO Commissioner's
LAFCO Counsel

Lisa Kayser-Grant
1425 W.N. Bear Creek Drive
Merced CA 95348
(209) 384-1016

August 18, 2008

To:
Kim Espinosa, Planning Manager
City of Merced Planning & Permitting
678 West 18th Street
Merced, CA 95340



Re: Notice of Preparation of an Environmental Impact Report for the City of Merced General Plan Update: Issues of Climate Change, Wildlife and Habitat Protection.

The Governor and Attorney General of California, AB 32, the California Air Resources Board, science, and common sense, have all made it clear that land use planning has an important role in climate change. Land use decisions can worsen climate change or be a big part of the solution. The Attorney General in particular is following the progress of general plan updates in California to insure that they comply with CEQA and applicable climate change laws.

When preparing the draft EIR for the City of Merced General Plan Update, please address the impacts the plan will have on climate change by requiring mitigation measures and/or by adding climate change policies into the general plan itself.

In order to effectively address the climate change impacts of its land use decisions the city should, at a minimum, include in the general plan a greenhouse gas reduction program or climate action plan. Such a program would require a baseline inventory of greenhouse gas emissions, set emission reduction targets and deadlines, set and enforce emission reduction measures, and include a process for review and reporting of the progress of the plan and revision as necessary to achieve the goals.

Greenhouse gas reduction measures can be effectively included in many elements of the general plan, or they can be added as a separate element.

The California Air Resources Board and the Office of the California Attorney General offer much information and guidance for effectively dealing with this issue. I have attached documents from these two agencies, as well as the Institute for Local Government, which you should find quite useful.

Another important issue is protection of wildlife and habitat. Too often, individual projects are analyzed in terms of the impact of their own few acres of habitat conversion without considering the cumulative impact of numerous piecemeal projects. The EIR of the General Plan Update is an ideal time to honestly assess this overall cumulative impact of planned development in the entire city sphere of influence, and to institute protective land use plans and mitigation measures. I urge you to fully address this issue in the DEIR.

Sincerely,

A handwritten signature in cursive script that reads "Lisa Kayser-Grant".

Lisa Kayser-Grant



The California Environmental Quality Act
Addressing Global Warming Impacts at the Local Agency Level

Under the California Environmental Quality Act (CEQA), local agencies have a very important role to play in California's fight against global warming – one of the most serious environmental effects facing the State today. Where local agencies undertake projects directly, they can and should design sustainable projects from the start, incorporating global warming related considerations into their projects at the earliest feasible time. Further, local agencies can encourage well-designed, sustainable private projects by analyzing and disclosing to the public the environmental benefits of such projects in any required environmental documents. And where projects as proposed will have significant global warming related effects, local agencies can require feasible changes or alternatives, and impose enforceable, verifiable, feasible mitigation measures to substantially lessen those effects. By the sum of their decisions, local agencies will help to move the State away from "business as usual" and toward a low-carbon future.

This document provides information that may be helpful to local agencies in carrying out their duties under CEQA as they relate to global warming. Included in this document are various measures that may reduce the global warming related impacts of a project. As appropriate, the measures can be included as design features of a project, required as changes to the project, or imposed as mitigation (whether undertaken directly by the project proponent or funded by mitigation fees). The measures set forth in this package are examples; the list is not intended to be exhaustive. Moreover, the measures cited may not be appropriate for every project. The decision of whether to approve a project – as proposed or with required changes or mitigation – is for the local agency, exercising its informed judgment in compliance with the law and balancing a variety of public objectives.

The first section of this document lists examples of measures that could be applied to a diverse range of projects where the lead agency determines that the project under consideration will have significant global warming related effects. In general, a given measure should not be considered in isolation, but as part of a larger set of measures that, working together, will reduce greenhouse gas emissions and the effects of global warming.

The second section of this document lists examples of potential greenhouse gas reduction measures in the general plan context. This section is included both to suggest how the measures set forth in the first section could be incorporated into a general plan, as well as to identify measures that are general plan specific. The measures in the second section may also be appropriate for inclusion in larger scale plans, including regional plans (e.g., blueprint plans) and in specific plans. Including these types of measures at the larger planning level, as appropriate, will help to ensure more sustainable project-specific development.

The third section provides links to sources of information on global warming impacts and emission reduction measures. The list is not complete, but may be a helpful start for local agencies seeking more information to carry out their CEQA obligations as they relate to global warming.

The endnotes set forth just some of the many examples of exemplary emission reduction measures already being implemented by local governments and agencies, utilities, private industry, and others. As these examples evidence, California at every level of government is taking up the challenge, devising new and innovative solutions, and leading the charge in the fight against global warming.

(1) Generally Applicable Measures

Energy Efficiency¹

- Design buildings to be energy efficient. Site buildings to take advantage of shade, prevailing winds, landscaping and sun screens to reduce energy use.²
- Install efficient lighting and lighting control systems. Use daylight as an integral part of lighting systems in buildings.
- Install light colored “cool” roofs, cool pavements, and strategically placed shade trees.³
- Provide information on energy management services for large energy users.⁴
- Install energy efficient heating and cooling systems, appliances and equipment, and control systems.⁵
- Install light emitting diodes (LEDs) for traffic, street and other outdoor lighting.⁶
- Limit the hours of operation of outdoor lighting.
- Use solar heating, automatic covers, and efficient pumps and motors for pools and spas.⁷
- Provide education on energy efficiency.⁸

Renewable Energy

- Install solar and wind power systems, solar and tankless hot water heaters, and energy-efficient heating ventilation and air conditioning. Educate consumers about existing incentives.⁹
- Install solar panels on carports and over parking areas.¹⁰
- Use combined heat and power in appropriate applications.¹¹

Water Conservation and Efficiency¹²

- Create water-efficient landscapes.¹³
- Install water-efficient irrigation systems and devices, such as soil moisture-based irrigation controls.
- Use reclaimed water for landscape irrigation in new developments and on public property. Install the infrastructure to deliver and use reclaimed water.
- Design buildings to be water-efficient. Install water-efficient fixtures and appliances.
- Use graywater. (Graywater is untreated household waste water from bathtubs, showers, bathroom wash basins, and water from clothes washing machines.) For example, install dual plumbing in all new development allowing graywater to be used for landscape irrigation.¹⁴
- Restrict watering methods (*e.g.*, prohibit systems that apply water to non-vegetated surfaces) and control runoff.
- Restrict the use of water for cleaning outdoor surfaces and vehicles.
- Implement low-impact development practices that maintain the existing hydrologic character of the site to manage storm water and protect the environment. (Retaining storm water runoff on-

site can drastically reduce the need for energy-intensive imported water at the site.)¹⁵

- Devise a comprehensive water conservation strategy appropriate for the project and location. The strategy may include many of the specific items listed above, plus other innovative measures that are appropriate to the specific project.
- Provide education about water conservation and available programs and incentives.¹⁶

Solid Waste Measures

- Reuse and recycle construction and demolition waste (including, but not limited to, soil, vegetation, concrete, lumber, metal, and cardboard).
- Provide interior and exterior storage areas for recyclables and green waste and adequate recycling containers located in public areas.
- Recover by-product methane to generate electricity.¹⁷
- Provide education and publicity about reducing waste and available recycling services.¹⁸

Land Use Measures

- Include mixed-use, infill, and higher density in development projects to support the reduction of vehicle trips, promote alternatives to individual vehicle travel, and promote efficient delivery of services and goods.¹⁹
- Educate the public about the benefits of well-designed, higher density development.²⁰
- Incorporate public transit into project design.
- Preserve and create open space and parks. Preserve existing trees, and plant replacement trees at a set ratio.
- Develop "brownfields" and other underused or defunct properties near existing public transportation and jobs.
- Include pedestrian and bicycle-only streets and plazas within developments. Create travel routes that ensure that destinations may be reached conveniently by public transportation, bicycling or walking.²¹

Transportation and Motor Vehicles

- Limit idling time for commercial vehicles, including delivery and construction vehicles.
- Use low or zero-emission vehicles, including construction vehicles.
- Promote ride sharing programs *e.g.*, by designating a certain percentage of parking spaces for ride sharing vehicles, designating adequate passenger loading and unloading and waiting areas for ride sharing vehicles, and providing a web site or message board for coordinating rides.
- Create car sharing programs. Accommodations for such programs include providing parking spaces for the car share vehicles at convenient locations accessible by public transportation.²²
- Create local "light vehicle" networks, such as neighborhood electric vehicle (NEV) systems.²³
- Provide the necessary facilities and infrastructure to encourage the use of low or zero-emission vehicles (*e.g.*, electric vehicle charging facilities and conveniently located alternative fueling

stations).

- Increase the cost of driving and parking private vehicles by, *e.g.*, imposing tolls and parking fees.
- Build or fund a transportation center where various public transportation modes intersect.
- Provide shuttle service to public transit.
- Provide public transit incentives such as free or low-cost monthly transit passes.
- Promote “least polluting” ways to connect people and goods to their destinations.²⁴
- Incorporate bicycle lanes and routes into street systems, new subdivisions, and large developments.
- Incorporate bicycle-friendly intersections into street design.
- For commercial projects, provide adequate bicycle parking near building entrances to promote cyclist safety, security, and convenience. For large employers, provide facilities that encourage bicycle commuting, including, *e.g.*, locked bicycle storage or covered or indoor bicycle parking.
- Create bicycle lanes and walking paths directed to the location of schools, parks and other destination points.²⁵
- Work with the school district to restore or expand school bus services.
- Institute a telecommute work program. Provide information, training, and incentives to encourage participation. Provide incentives for equipment purchases to allow high-quality teleconferences.
- Provide information on all options for individuals and businesses to reduce transportation-related emissions. Provide education and information about public transportation.

Off-Site Mitigation

If, after analyzing and requiring all reasonable and feasible on-site mitigation measures for avoiding or reducing greenhouse gas-related impacts, the lead agency determines that additional mitigation is required, the agency may consider additional off-site mitigation. The project proponent could, for example, fund off-site mitigation projects (*e.g.*, alternative energy projects, or energy or water audits for existing projects) that will reduce carbon emissions, conduct an audit of its other existing operations and agree to retrofit, or purchase carbon “credits” from another entity that will undertake mitigation.

The topic of offsets can be complicated, and a full discussion is outside the scope of this summary document. Issues that the lead agency should consider include:

- The location of the off-site mitigation. (If the off-site mitigation is far from the project, any additional, non-climate related benefits of the mitigation will be lost to the local community.)
- Whether the emissions reductions from off-site mitigation can be quantified and verified.
- Whether the mitigation ratio should be greater than 1:1 to reflect any uncertainty about the effectiveness of the offset.

(2) **General Plan Measures**²⁶

Global warming measures may be reflected in a general plan as goals, policies, or programs; in land use designations; or as additional mitigation measures identified during the CEQA review process. Many of the measures listed above may be appropriate for inclusion in a general plan. In addition, a non-exhaustive list of measures specific to the general plan context follows. The examples are listed under required general plan elements. A given example may, however, be appropriate for inclusion in more than one element, or in a different element than listed. Global warming measures may, alternatively, be included in an optional Climate Change or Energy element.

Conservation Element²⁷

- **Climate Action Plan or Policy:** Include a comprehensive climate change action plan that requires a baseline inventory of greenhouse gas emissions from all sources by a date certain; greenhouse gas emissions reduction targets and deadlines; and enforceable greenhouse gas emissions reduction measures.²⁸ (Note: If the Climate Action Plan complies with the requirements of Section 15064(h)(3) of the CEQA Guidelines, it may allow for the streamlining of individual projects that comply with the plan's requirements.)
- **Climate Action Plan Implementation Program:** Include mechanisms to ensure regular review of progress toward the emission reduction targets established by the Climate Action Plan, report progress to the public and responsible officials, and revise the plan as appropriate, using principles of adaptive management. Allocate funding to implement the plan. Fund staff to oversee implementation of the plan.
- Strengthen local building codes for new construction and renovation to require a higher level of energy efficiency.²⁹
- Require that all new government buildings, and all major renovations and additions, meet identified green building standards.³⁰
- Adopt a "Green Building Program" to require or encourage green building practices and materials.³¹ The program could be implemented through, *e.g.*, a set of green building ordinances.
- Require orientation of buildings to maximize passive solar heating during cool seasons, avoid solar heat gain during hot periods, enhance natural ventilation, and promote effective use of daylight. Orientation should optimize opportunities for on-site solar generation.
- Provide permitting-related and other incentives for energy efficient building projects, *e.g.*, by giving green projects priority in plan review, processing and field inspection services.³²
- Conduct energy efficiency audits of existing buildings by checking, repairing, and readjusting heating, ventilation, air conditioning, lighting, water heating equipment, insulation and weatherization.³³ Offer financial incentives for adoption of identified efficiency measures.³⁴
- Partner with community services agencies to fund energy efficiency projects, including heating, ventilation, air conditioning, lighting, water heating equipment, insulation and weatherization, for low income residents.
- Target local funds, including redevelopment and Community Development Block Grant resources, to assist affordable housing developers in incorporating energy efficient designs and features.

- Provide innovative, low-interest financing for energy efficiency and alternative energy projects. For example, allow property owners to pay for energy efficiency improvements and solar system installation through long-term assessments on individual property tax bills.³⁵
- Fund incentives to encourage the use of energy efficient vehicles, equipment and lighting.³⁶ Provide financial incentives for adoption of identified efficiency measures.
- Require environmentally responsible government purchasing.³⁷ Require or give preference to products that reduce or eliminate indirect greenhouse gas emissions, *e.g.*, by giving preference to recycled products over those made from virgin materials.³⁸
- Require that government contractors take action to minimize greenhouse gas emissions, *e.g.*, by using low or zero-emission vehicles and equipment.
- Adopt a “heat island” mitigation plan that requires cool roofs, cool pavements, and strategically placed shade trees.³⁹ (Darker colored roofs, pavement, and lack of trees may cause temperatures in urban environments to increase by as much as 6-8 degrees Fahrenheit as compared to surrounding areas.⁴⁰) Adopt a program of building permit enforcement for re-roofing to ensure compliance with existing state building requirements for cool roofs on non-residential buildings.
- Adopt a comprehensive water conservation strategy. The strategy may include, but not be limited to, imposing restrictions on the time of watering, requiring water-efficient irrigation equipment, and requiring new construction to offset demand so that there is no net increase in water use.⁴¹
- Adopt water conservation pricing, *e.g.*, tiered rate structures, to encourage efficient water use.⁴²
- Adopt water-efficient landscape ordinances.⁴³
- Strengthen local building codes for new construction and implement a program to renovate existing buildings to require a higher level of water efficiency.
- Adopt energy and water efficiency retrofit ordinances that require upgrades as a condition of issuing permits for renovations or additions, and on the sale of residences and buildings.⁴⁴
- Provide individualized water audits to identify conservation opportunities.⁴⁵ Provide financial incentives for adopting identified efficiency measures.
- Provide water audits for large landscape accounts. Provide financial incentives for efficient irrigation controls and other efficiency measures.
- Require water efficiency training and certification for irrigation designers and installers, and property managers.⁴⁶
- Implement or expand city or county-wide recycling and composting programs for residents and businesses. Require commercial and industrial recycling.
- Extend the types of recycling services offered (*e.g.*, to include food and green waste recycling).
- Establish methane recovery in local landfills and wastewater treatment plants to generate electricity.⁴⁷
- Implement Community Choice Aggregation (CCA) for renewable electricity generation. (CCA allows cities and counties, or groups of them, to aggregate the electric loads of customers within

their jurisdictions for purposes of procuring electrical services. CCA allows the community to choose what resources will serve their loads and can significantly increase renewable energy.)⁴⁸

- Preserve existing conservation areas (*e.g.*, forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, and groundwater recharge areas) that provide carbon sequestration benefits.
- Establish a mitigation program for development of conservation areas. Impose mitigation fees on development of such lands and use funds generated to protect existing, or create replacement, conservation areas.
- Provide public education and information about options for reducing greenhouse gas emissions through responsible purchasing, conservation, and recycling.

Land Use Element⁴⁹

- Adopt land use designations to carry out policies designed to reduce greenhouse gas emissions, *e.g.*, policies to minimize or reduce vehicle miles traveled, encourage development near existing public transportation corridors, encourage alternative modes of transportation, and promote infill, mixed use, and higher density development.
- Identify and facilitate the development of land uses not already present in local districts – such as supermarkets, parks and recreation fields, and schools in neighborhoods; or residential uses in business districts – to reduce vehicle miles traveled and allow bicycling and walking to these destinations.
- Create neighborhood commercial districts.
- Require bike lanes and bicycle/pedestrian paths.
- Prohibit projects that impede bicycle and walking access, *e.g.*, large parking areas that cannot be crossed by non-motorized vehicles, and new residential communities that block through access on existing or potential bicycle and pedestrian routes.
- Site schools to increase the potential for students to walk and bike to school.
- Enact policies to limit or discourage low density development that segregates employment, services, and residential areas.⁵⁰
- Where there are growth boundaries, adopt policies providing certainty for infill development.⁵¹
- Require best management practices in agriculture and animal operations to reduce emissions, conserve energy and water, and utilize alternative energy sources, including biogas, wind and solar.

Circulation Element⁵²

- In conjunction with measures that encourage public transit, ride sharing, bicycling and walking, implement circulation improvements that reduce vehicle idling. For example, coordinate controlled intersections so that traffic passes more efficiently through congested areas.⁵³
- Create an interconnected transportation system that allows a shift in travel from private passenger vehicles to alternative modes, including public transit, ride sharing, car sharing, bicycling and walking. Before funding transportation improvements that increase vehicle miles

traveled, consider alternatives such as increasing public transit or improving bicycle or pedestrian travel routes.

- Give funding preference to investment in public transit over investment in infrastructure for private automobile traffic.⁵⁴
- Include safe and convenient bicycle and pedestrian access in all transportation improvement projects. Ensure that non-motorized transportation systems are connected and not interrupted by impassable barriers, such as freeways⁵⁵ and include amenities such as secure bicycle parking.
- Provide adequate and affordable public transportation choices including expanded bus routes and service and other transit choices such as shuttles, light rail, and rail where feasible.
- Assess transportation impact fees on new development in order to maintain and increase public transit service.⁵⁶
- Provide public transit incentives, including free and reduced fare areas.⁵⁷
- Adopt a comprehensive parking policy that discourages private vehicle use and encourages the use of alternative transportation.⁵⁸ For example, reduce parking for private vehicles while increasing options for alternative transportation; eliminate minimum parking requirements for new buildings; “unbundle” parking (require that parking is paid for separately and is not included in rent for residential or commercial space); and set appropriate pricing for parking.
- Develop school transit plans to substantially reduce automobile trips to, and congestion surrounding, schools. (According to some estimates, parents driving their children to school account for 20-25% of the morning commute.) Plans may address, *e.g.*, necessary infrastructure improvements and potential funding sources; replacing older diesel buses with low or zero-emission vehicles; mitigation fees to expand school bus service; and Safe Routes to School programs⁵⁹ and other formal efforts to increase walking and biking by students.
- Create financing programs for the purchase or lease of vehicles used in employer ride sharing programs.
- Enter into partnerships to create and expand polluting vehicle buy-back programs to include vehicles with high greenhouse gas emissions.
- Provide public education and information about options for reducing motor vehicle-related greenhouse gas emissions. Include information on trip reduction; trip linking; public transit; biking and walking; vehicle performance and efficiency (*e.g.*, keeping tires inflated); low or zero-emission vehicles; and car and ride sharing.

Housing Element⁶⁰

- Improve the jobs-housing balance and promote a range of affordable housing choices near jobs, services and transit.
- Concentrate mixed use, and medium to higher density residential development in areas near jobs, transit routes, schools, shopping areas and recreation.
- Increase density in single family residential areas located near transit routes or commercial areas. For example, promote duplexes in residential areas and increased height limits of multi-unit buildings on main arterial streets, under specified conditions.

- Encourage transit-oriented developments.⁶¹
- Impose minimum residential densities in areas designated for transit-oriented, mixed use development to ensure higher density in these areas.
- Designate mixed use areas where housing is one of the required uses.
- In areas designated for mixed use, adopt incentives for the concurrent development of different land uses (*e.g.*, retail with residential).
- Promote infill, mixed use, and higher density development by, for example, reducing developer fees;⁶² providing fast-track permit processing; reducing processing fees; funding infrastructure loans; and giving preference for infrastructure improvements in these areas.

Open Space Element⁶³

- Preserve forested areas, agricultural lands, wildlife habitat and corridors, wetlands, watersheds, groundwater recharge areas and other open space that provide carbon sequestration benefits.
- Establish a mitigation program for development of those types of open space that provide carbon sequestration benefits. Require like-kind replacement for, or impose mitigation fees on development of such lands. Use funds generated to protect existing, or create replacement, open space.
- Allow alternative energy projects in areas zoned for open space where consistent with other uses and values.
- Protect existing trees and encourage the planting of new trees. Adopt a tree protection and replacement ordinance, *e.g.*, requiring that trees larger than a specified diameter that are removed to accommodate development must be replaced at a set ratio.
- Connect parks and publicly accessible open space through shared pedestrian/bike paths and trails to encourage walking and bicycling.

Safety Element⁶⁴

- Address expected effects of climate change that may impact public safety, including increased risk of wildfires, flooding and sea level rise, salt water intrusion; and health effects of increased heat and ozone, through appropriate policies and programs.
- Adopt programs for the purchase, transfer or extinguishment of development rights in high risk areas.
- Monitor the impacts of climate change. Use adaptive management to develop new strategies, and modify existing strategies, to respond to the impacts of climate change.

Energy Element

Many of the goals, policies, or programs set forth above may be contained in an optional energy element. The resources set forth below may be useful to local agencies in developing an energy element or an energy conservation plan.

- The Local Government Commission produced a detailed report in 2002 entitled General Plan Policy Options for Energy Efficiency in New and Existing Development. The document sets forth energy saving policies suitable for inclusion in general plans. Policies range from

exceeding State minimum building efficiency standards, to retrofit buildings to reduce energy consumption, to implementing energy conservation strategies for roofs, pavement and landscaping. The report also contains suggested general plan language. The report is available here: http://www.redwoodenergy.org/uploads/Energy_Element_Report.pdf.

- The California Energy Commission summarizes the energy-related efforts of Humboldt County, City of Pleasanton, City of Pasadena, City and County of San Francisco, the Los Angeles area, City of Chula Vista, the San Diego region, City of San Diego, City and County of San Luis Obispo, and City of Santa Monica, in the 2006 Integrated Energy Policy Report at pp. 82-87, available here: <http://www.energy.ca.gov/2006publications/CEC-100-2006-001/CEC-100-2006-001-CMF.PDF>.
- In 2006, the Association of Monterey Bay Area Governments published a regional energy plan, available here: http://www.ambag.org/EnergyWatch/regional_plan.html. Part 1 describes the plan's goals and course of action. Part 2 describes actions that local agencies already have taken and identifies the most cost-effective measures in each sector. The appendices list existing energy programs that may provide support and funding for energy efficiency projects, suggest language for energy-related provisions to be included in general plans, and list and give brief explanations of more than one hundred energy-saving measures.
- The California Local Energy Efficiency Program (CALeep) has available on its website, <http://www.caleep.com/default.htm>, various resources and documents, including an energy "Workbook." The Workbook lays out a process for instituting local energy efficiency programs based in part on information developed in six California pilot projects (Inland Empire Utilities Agency, City of Oakland, San Joaquin Valley, Sonoma County, South Bay Cities Council of Governments, and Ventura County Regional Energy Alliance). The Workbook is designed to be used by local officials to initiate, plan, organize, implement, and assess energy efficiency activities at the local and regional level.

(3) Resources About Global Warming and Local Action

The following web sites and organizations provide general information about mitigating global warming impacts at the local level. These sites represent only a small fraction of the available resources. Local agencies are encouraged to conduct their own research in order to obtain the most current and relevant materials.

- The U.S. Conference of Mayors' Climate Protection Agreement contains valuable information for the many local agencies that are joining the fight against global warming. The Agreement is available here: http://www.coolcities.us/resources/bestPracticeGuides/USM_ClimateActionHB.pdf. Over one hundred and twenty California cities have joined the "Cool Cities" campaign, which means they have signed the U.S. Mayor's Climate Protection Agreement and are taking concrete steps toward addressing global warming. These steps include preparing a city-wide greenhouse gas emissions inventory and creating and implementing a local Climate Action Plan. Additional resources, including various cities' Climate Action Plans, are located at the Cool Cities website: <http://www.coolcities.us/resources.php>.
- In July 2007, Alameda County became one of twelve charter members of the "Cool Counties" initiative. Participating counties sign a Climate Stabilization Declaration, which is available at the website for King County (Washington State): <http://www.metrokc.gov/exec/news/2007/0716dec.aspx>. Participating counties agree to work

with local, state, and federal governments and other leaders to reduce county geographical greenhouse gas emissions to 80% below current levels by 2050 by developing a greenhouse gas emissions inventory and regional reduction plan. Current member counties are recruiting new members and are committed to sharing information. Cool Counties contact information is available at: <http://www.kingcounty.gov/exec/coolcounties/Joinus.aspx>.

- Local Governments for Sustainability, a program of International Cities for Local Environmental Initiatives (ICLEI), has initiated a campaign called Cities for Climate Protection (CCP). The membership program is designed to empower local governments worldwide to take action on climate change. Many California cities have joined ICLEI. More information is available at the organization's website: <http://www.iclei.org/>.
- The Institute for Local Government (ILG), an affiliate of the California State Association of Counties and the League of California Cities, has instituted a program called the California Climate Action Network (CaliforniaCAN!). The program provides information about the latest climate action resources and case studies. More information is available at the CaliforniaCAN! website: <http://www.cacities.org/index.jsp?displaytype=§ion=climate&zone=ilsg>.

ILG's detailed list of climate change "best practices" for local agencies is available at http://www.cacities.org/index.jsp?displaytype=§ion=climate&zone=ilsg&sub_sec=climate_local.

ILG maintains a list of local agencies that have Climate Action Plans. The list is available here: <http://www.cacities.org/index.jsp?zone=ilsg&previewStory=27035>. According to ILG, the list includes Marin County and the cities of Arcata, Berkeley, Los Angeles, Palo Alto, San Diego, and San Francisco. Many additional local governments are in the process of conducting greenhouse gas inventories.

- The non-profit group Natural Capitalism Solutions (NCS) has developed an on-line Climate Protection Manual for Cities. NCS states that its mission is "to educate senior decision-makers in business, government and civil society about the principles of sustainability." The manual is available at <http://www.climatemanual.org/Cities/index.htm>.
- The Local Government Commission provides many planning-related resources for local agencies at its website: <http://www.lgc.org/>.

In cooperation with U.S. EPA, LGC has produced a booklet discussing the benefits of density and providing case studies of well-designed, higher density projects throughout the nation. *Creating Great Neighborhoods: Density in Your Community (2003)* is available here: http://www.lgc.org/freepub/PDF/Land_Use/reports/density_manual.pdf.

- The Pew Center on Global Climate Change was established in 1998 as a non-profit, non-partisan and independent organization. The Center's mission is to provide credible information, straight answers, and innovative solutions in the effort to address global climate change. See <http://www.pewclimate.org>. The Pew Center has published a series of reports called Climate Change 101. These reports provide a reliable and understandable introduction to climate change. They cover climate science and impacts, technological solutions, business solutions, international action, recent action in the U.S. states, and action taken by local governments. The Climate Change 101 reports are available at http://www.pewclimate.org/global-warming-basics/climate_change_101.

- The Climate Group, www.theclimategroup.org, is a non-profit organization founded by a group of companies, governments and activists to “accelerate international action on global warming with a new, strong focus on practical solutions.” Its website contains a searchable database of about fifty case studies of actions that private companies, local and state governments, and the United Kingdom, have taken to reduce GHG emissions. Case studies include examples from California. The database, which can be searched by topic, is available at http://theclimategroup.org/index.php/reducing_emissions/case_studies.
- U.S. EPA maintains a list of examples of codes that support “smart growth” development, available here: <http://www.epa.gov/piedpage/codeexamples.htm>. Examples include transit-oriented development in Pleasant Hill and Palo Alto, rowhouse design guidelines from Mountain View, and street design standards from San Diego.
- In November 2007, U.S. EPA issued a report entitled “Measuring the Air Quality and Transportation Impacts of Infill Development.” This report summarizes three regional infill development scenarios in Denver, Colorado; Boston, Massachusetts; and Charlotte, North Carolina. The analysis shows how standard transportation forecasting models currently used by metropolitan planning organizations can be modified to capture at least some of the transportation and air quality benefits of brownfield and infill development. In all scenarios, more compact and transit oriented development was projected to substantially reduce vehicle miles traveled. As the agency found, “The results of this analysis suggest that strong support for infill development can be one of the most effective transportation and emission-reduction investments a region can pursue.” The report is available at http://www.epa.gov/smartgrowth/impacts_infill.htm.
- The Urban Land Institute (ULI) is a nonprofit research and education organization providing leadership in responsible land use and sustainability. In 2007, ULI produced a report entitled, “Growing Cooler: The Evidence on Urban Development and Climate Change,” which reviews existing research on the relationship between urban development, travel, and greenhouse gases emitted by motor vehicles. It further discusses the emissions reductions that can be expected from compact development and how to make compact development happen. “Growing Cooler” is available at <http://www.uli.org/growingcooler>.
- The California Department of Housing and Community Development, <http://www.hcd.ca.gov/>, has many useful resources on its website related to housing policy and housing elements and specific recommendations for creating higher density and affordable communities. See <http://www.hcd.ca.gov/hpd/hrc/plan/he/>.
- The California Transportation Commission (CTC) recently made recommendations for changes to regional transportation guidelines to address climate change issues. Among other things, the CTC recommends various policies, strategies and performance standards that a regional transportation agency should consider including in a greenhouse reduction plan. These or analogous measures could be included in other types of planning documents or local climate action plans. The recommendation document, and Attachment A, entitled Smart Growth/Land Use Regional Transportation Plan Guidelines Amendments, are located at http://www.dot.ca.gov/hq/transprog/ctcbooks/2008/0108/12_4.4.pdf.
- The California Energy Commission’s Public Interest Energy Research (PIER) Program supports energy research, development and demonstration projects designed to bring environmentally

safe, affordable and reliable energy services and products to the marketplace. On its website, <http://www.energy.ca.gov/pier/>, PIER makes available a number of reports and papers related to energy efficiency, alternative energy, and climate change.

- The Governor's Office of Planning and Research (OPR) provides valuable resources for lead agencies related to CEQA and global warming at <http://opr.ca.gov/index.php?a=ceqa/index.html>. Among the materials available are a list of environmental documents addressing climate change and greenhouse gas emissions and a list of local plans and policies addressing climate change. In addition, OPR's The California Planners' Book of Lists 2008, which includes the results of surveys of local agencies on matters related to global warming, is available at <http://www.opr.ca.gov/index.php?a=planning/publications.html#pubs-C>.
- The California Air Pollution Control Officers Association has prepared a white paper entitled "CEQA and Climate Change" (January 2008). The document includes a list of mitigation measures and information about their relative efficacy and cost. The document is available at <http://www.capcoa.org/ceqa/?docID=ceqa>.
- The Attorney General's global warming website includes a section on CEQA. See <http://ag.ca.gov/globalwarming/ceqa.php>. The site includes all of the Attorney General's public comment letters that address CEQA and global warming.

(4) **Endnotes**

1. Energy efficiency leads the mitigation list because it promises significant greenhouse gas reductions through measures that are cost-effective for the individual residential and commercial energy consumer.
2. Leadership in Energy and Environmental Design (LEED) administers a Green Building Ratings program that provides benchmarks for the design, construction, and operation of high-performance green buildings. More information about the LEED ratings system is available at <http://www.usgbc.org/DisplayPage.aspx?CategoryID=19>. Build it Green is a non-profit, membership organization that promotes green building practices in California. The organization offers a point-based, green building rating system for various types of projects. See <http://www.builditgreen.org/guidelines-rating-systems>. Lawrence Berkeley National Laboratories' Building Technologies Department is working to develop coherent and innovative building construction and design techniques. Information and publications on energy efficient buildings are available at the Department's website at <http://btech.lbl.gov>. The California Department of Housing and Community Development has created an extensive Green Building & Sustainability Resources handbook with links to green building resources, available at http://www.hcd.ca.gov/hpd/green_build.pdf.
3. For more information, see Lawrence Berkeley National Laboratories, Heat Island Group at <http://eetd.lbl.gov/HeatIsland/>.
4. See California Energy Commission, "How to Hire an Energy Services Company" (2000) at http://www.energy.ca.gov/reports/efficiency_handbooks/400-00-001D.PDF.
5. Energy Star is a joint program of the U.S. Environmental Protection Agency and the U.S. Department of Energy that certifies energy efficient products and provides guidelines for energy efficient practices for homes and businesses. More information about Energy Star-certified products is available at <http://www.energystar.gov/>. The Electronic Product Environmental Assessment Tool (EPEAT) is a system that ranks computer products based on their conformance to a set of environmental criteria, including energy efficiency. More information about EPEAT is available at <http://www.epeat.net/AboutEPEAT.aspx>.
6. LED lighting is substantially more energy efficient than conventional lighting and can save money. See http://www.energy.ca.gov/efficiency/partnership/case_studies/TechAsstCity.pdf (noting that installing LED traffic signals saved the City of Westlake about \$34,000 per year). As of 2005, only about a quarter of California's cities and counties were using 100% LEDs in traffic signals. See California Energy Commission (CEC), Light Emitting Diode Traffic Signal Survey (2005) at p. 15, available at <http://www.energy.ca.gov/2005publications/CEC-400-2005-003/CEC-400-2005-003.PDF>. The CEC's Energy Partnership Program can help local governments take advantage of energy saving technology, including, but not limited to, LED traffic signals. See <http://www.energy.ca.gov/efficiency/partnership/>.
7. See Palm Desert Energy Partnership at <http://www.sce.com/rebatesandsavings/palmdesert>. The City, in partnership with Southern California Edison, provides incentives and rebates for efficient equipment. See Southern California Edison, Pool Pump and Motor Replacement Rebate Program at <http://www.sce.com/RebatesandSavings/Residential/Pool/PoolPumpandMotor/>.

8. Many cities and counties provide energy efficiency education. See, for example, the City of Stockton's Energy Efficiency website at <http://www.stocktongov.com/energysaving/index.cfm>. See also "Green County San Bernardino," <http://www.greencountysb.com/> at pp. 4-6. Private projects may also provide education. For example, a homeowners' association could provide information and energy audits to its members on a regular basis.
9. See <http://www.gosolarcalifornia.ca.gov/documents/CEC-300-2007-008-CMF.PDF>. At the direction of Governor Schwarzenegger, the California Public Utilities Commission (CPUC) approved the California Solar Initiative on January 12, 2006. The initiative creates a \$3.3 billion, ten-year program to install solar panels on one million roofs in the State. See <http://www.gosolarcalifornia.ca.gov/nshp/index.html>.
10. For example, Alameda County has installed two solar tracking carports, each generating 250 kilowatts. By 2005, the County had installed eight photovoltaic systems totaling over 2.3 megawatts. The County is able to meet 6 percent of its electricity needs through solar power. See <http://www.acgov.org/gsa/Alameda%20County%20-%20Solar%20Case%20Study.pdf>.
11. Many commercial, industrial, and campus-type facilities (such as hospitals, universities and prisons) use fuel to produce steam and heat for their own operations and processes. Unless captured, much of this heat is wasted. Combined heat and power (CHP) captures waste heat and re-uses it, e.g., for residential or commercial space heating or to generate electricity. See U.S. EPA, Catalog of CHP Technologies at http://www.epa.gov/chp/documents/catalog_of_%20chp_tech_entire.pdf. The average efficiency of fossil-fueled power plants in the United States is 33 percent. By using waste heat recovery technology, CHP systems typically achieve total system efficiencies of 60 to 80 percent. CHP can also substantially reduce emissions of carbon dioxide. <http://www.epa.gov/chp/basic/efficiency.html>. Currently, CHP in California has a capacity of over 9 million kilowatts. See list of California CHP facilities at <http://www.eea-inc.com/chpdata/States/CA.html>.
12. The California Energy Commission has found that the State's water-related energy use – which includes the conveyance, storage, treatment, distribution, wastewater collection, treatment, and discharge – consumes about 19 percent of the State's electricity, 30 percent of its natural gas, and 88 billion gallons of diesel fuel every year. See <http://www.energy.ca.gov/2007publications/CEC-999-2007-008/CEC-999-2007-008.PDF>. Accordingly, reducing water use and improving water efficiency can help reduce energy use and associated greenhouse gas emissions.
13. The Water Conservation in Landscaping Act of 2006 (AB 1881) requires the Department of Water Resources (DWR), not later than January 1, 2009, to update the Model Water Efficient Landscape Ordinance. The draft of the entire updated Model Water Efficient Landscape Ordinance will be made available to the public. See <http://www.owue.water.ca.gov/landscape/ord/updatedOrd.cfm>.
14. See Graywater Guide, Department of Water Resources, Office of Water Use Efficiency and Transfers at http://www.owue.water.ca.gov/docs/graywater_guide_book.pdf. See also The Ahwahnee Water Principles, Principle 6, at http://www.lgc.org/ahwahnee/h2o_principles.html. The Ahwahnee Water Principles have been adopted by City of Willits, Town of Windsor, Menlo Park, Morgan Hill, Palo Alto, Petaluma, Port Hueneme, Richmond, Rohnert Park, Rolling Hills Estates, San Luis Obispo, Santa Paula, Santa Rosa, City of Sunnyvale, City of Ukiah, Ventura, Marin County, Marin Municipal Water District, and Ventura County.

15. See Office of Environmental Health Hazard Assessment and the California Water and Land Use Partnership, Low Impact Development, at <http://www.coastal.ca.gov/nps/lid-factsheet.pdf>.
16. See, for example, the City of Santa Cruz, Water Conservation Office at <http://www.ci.santa-cruz.ca.us/wt/wtcon/index.html>; Santa Clara Valley Water District, Water Conservation at <http://www.valleywater.org/conservation/index.shtm>; and Metropolitan Water District and the Family of Southern California Water Agencies, Be Water Wise at <http://www.bewaterwise.com>. Private projects may provide or fund similar education.
17. See Public Interest Energy Research Program, Dairy Power Production Program, Dairy Methane Digester System, 90-Day Evaluation Report, Eden Vale Dairy (Dec. 2006) at <http://www.energy.ca.gov/2006publications/CEC-500-2006-083/CEC-500-2006-083.PDF>. See also discussion in the general plan section, below, relating to wastewater treatment plants and landfills.
18. Many cities and counties provide information on waste reduction and recycling. See, for example, the Butte County Guide to Recycling at <http://www.recyclebutte.net>. The California Integrated Waste Management Board's website contains numerous publications on recycling and waste reduction that may be helpful in devising an education project. See <http://www.ciwmb.ca.gov/Publications/default.asp?cat=13>. Private projects may also provide education directly, or fund education.
19. See U.S. EPA, Our Built and Natural Environments, A Technical Review of the Interactions between Land Use, Transportation, and Environmental Quality (Jan. 2001) at pp. 46-48 <http://www.epa.gov/dced/pdf/built.pdf>.
20. See California Department of Housing and Community Development, Myths and Facts About Affordable and High Density Housing (2002), available at <http://www.hcd.ca.gov/hpd/mythsnfacts.pdf>.
21. Palo Alto's Green Ribbon Task Force Report on Climate Protection recommends pedestrian and bicycle-only streets under its proposed actions. See <http://www.city.palo-alto.ca.us/civica/filebank/blobdload.asp?BlobID=7478>.
22. There are a number of car sharing programs operating in California, including City CarShare <http://www.citycarshare.org/>, Zip Car <http://www.zipcar.com/> and Flexcar <http://www.flexcar.com/>.
23. The City of Lincoln has a NEV program. See <http://www.lincolnev.com/index.html>.
24. Promoting "least polluting" methods of moving people and goods is part of a larger, integrated "sustainable streets" strategy now being explored at U.C. Davis's Sustainable Transportation Center. Resources and links are available at the Center's website. See <http://stc.ucdavis.edu/outreach/ssp.php>.
25. See, for example, Marin County's Safe Routes to Schools program at <http://www.saferoutestoschools.org/>.
26. For information on the general plan process, see Governor's Office of Planning and Research, General Plan Guidelines (1998), available at <http://ceres.ca.gov/planning/genplan/gpg.pdf>.

27. The Conservation Element addresses the conservation, development, and use of natural resources including water, forests, soils, rivers, and mineral deposits. Measures proposed for the Conservation Element may alternatively be appropriate for other elements. In practice, there may be substantial overlap in the global warming mitigation measures appropriate for the Conservation and Open Space Elements.
28. See the Attorney General's settlement agreement with the County of San Bernardino, available at http://ag.ca.gov/cms_pdfs/press/2007-08-21_San_Bernardino_settlement_agreement.pdf. See also Marin County Greenhouse Gas Reduction Plan (Oct. 2006) at http://www.co.marin.ca.us/depts/CD/main/pdf/final_ghg_red_plan.pdf; Marin Countywide Plan (Nov. 6, 2007) at http://www.co.marin.ca.us/depts/CD/main/fm/cwpdocs/CWP_CD2.pdf; Draft Conservation Element, General Plan, City of San Diego at <http://www.sandiego.gov/planning/genplan/pdf/generalplan/ce070918.pdf>.
29. Public Resources Code Section 25402.1(h)2 and Section 10-106 of the Building Energy Efficiency Standards establish a process that allows local adoption of energy standards that are more stringent than the statewide Standards. More information is available at the California Energy Commission's website. See http://www.energy.ca.gov/title24/2005standards/ordinances_exceeding_2005_building_standards.html.
30. See, e.g., LEED at <http://www.usgbc.org/DisplayPage.aspx?CategoryID=19>; see also Build it Green at <http://www.builditgreen.org/guidelines-rating-systems>.
31. The City of Santa Monica, for example, has instituted a Green Building Program. See <http://www.greenbuildings.santa-monica.org/>. The City of Pasadena also has a green building ordinance that applies to public and private buildings. See <http://www.ci.pasadena.ca.us/permitcenter/greencity/building/gbprogram.asp> and http://ordlink.com/codes/pasadena/index.htm?Search_Code=Begin+Searching+Municipal+Code at Title 14. The City of San Francisco is considering adopting green building performance requirements that would apply to public and private buildings. See <http://www.sfenvironment.org/downloads/library/gbtfrreleasev1.3.pdf>.
32. See, e.g., "Green County San Bernardino," <http://www.greencountysb.com/>. As part of its program, the County is waiving permit fees for alternative energy systems and efficient heating and air conditioning systems. See <http://www.greencountysb.com/> at p. 3. For a representative list of incentives for green building offered in California and throughout the nation, see U.S. Green Building Council, Summary of Government LEED Incentives (updated quarterly) at <https://www.usgbc.org/ShowFile.aspx?DocumentID=2021>.
33. For example, Riverside Public Utilities offers free comprehensive energy audits to its business customers. See <http://www.riversideca.gov/utilities/busi-technicalassistance.asp>.
34. Under Southern California Gas Company's Energy Efficiency Program for Commercial/Industrial Large Business Customers, participants are eligible to receive an incentive based on 50% of the equipment cost, or \$0.50 per therm saved, whichever is lower, up to a maximum amount of \$1,000,000 per customer, per year. Eligible projects require an energy savings of at least 200,000 therms per year. See <http://www.socalgas.com/business/efficiency/grants/>.

35. The City of Berkeley is in the process of instituting a "Sustainable Energy Financing District." According to the City, "The financing mechanism is loosely based on existing 'underground utility districts' where the City serves as the financing agent for a neighborhood when they move utility poles and wires underground. In this case, individual property owners would contract directly with qualified private solar installers and contractors for energy efficiency and solar projects on their building. The City provides the funding for the project from a bond or loan fund that it repays through assessments on participating property owners' tax bills for 20 years." See <http://www.cityofberkeley.info/Mayor/PR/pressrelease2007-1023.htm>.
- The California Energy Commission's Public Interest Energy Research Program estimates that the technical potential for rooftop applications of photovoltaic systems in the State is about 40 gigawatts in 2006, rising to 68 gigawatts in 2016. See Public Interest Energy Research Program, California Rooftop Photovoltaic (PV) Resource Assessment and Growth Potential by County (2007), available at <http://www.energy.ca.gov/publications/displayOneReport.php?pubNum=CEC-500-2007-048>.
36. As described in its Climate Action Plan, the City of San Francisco uses a combination of incentives and technical assistance to reduce lighting energy use in small businesses such as grocery stores, small retail outlets, and restaurants. The program offers free energy audits and coordinated lighting retrofit installation. In addition, the City offers residents the opportunity to turn in their incandescent lamps for coupons to buy fluorescent units. See San Francisco's Climate Action Plan, available at <http://www.sfenvironment.org/downloads/library/climateactionplan.pdf>.
37. Among other strategies for reducing its greenhouse gas emissions, Yolo County has adopted purchasing policies for computers and electrical equipment. <http://www.yolocounty.org/docs/press/GreenhouseGas.htm>.
38. See, for example, Los Angeles County Green Purchasing Policy, June 2007 at <http://www.responsiblepurchasing.org/UserFiles/File/General/Los%20Angeles%20County.%20Green%20Purchasing%20Policy.%20June%202007.pdf>. The policy requires County agencies to purchase products that minimize environmental impacts, including greenhouse gas emissions.
39. Some local agencies have implemented a cool surfaces programs in conjunction with measures to address storm water runoff and water quality. See, for example, The City of Irvine's Sustainable Travelways/Green Streets program at http://www.cityofirvine.org/depts/redevelopment/sustainable_travelways.asp; The City of Los Angeles's Green Streets LA program at http://water.lgc.org/water-workshops/la-workshop/Green_Streets_Daniels.pdf/view; see also The Chicago Green Alley Handbook at http://egov.cityofchicago.org/webportal/COCWebPortal/COC_EDITORIAL/GreenAlleyHandbook_Jan.pdf.
40. See the website for Lawrence Berkeley National Laboratory's Urban Heat Island Group at <http://eetd.lbl.gov/HeatIsland/LEARN/> and U.S. EPA's Heat Island website at www.epa.gov/heatisland/. To learn about the effectiveness of various heat island mitigation strategies, see the Mitigation Impact Screening Tool, available at <http://www.epa.gov/heatisld/resources/tools.html>.

41. For example, the City of Lompoc has a policy to “require new development to offset new water demand with savings from existing water users, as long as savings are available.” See <http://www.ci.lompoc.ca.us/departments/comdev/pdf07/RESRCMGMT.pdf>.
42. The Irvine Ranch Water District in Southern California, for example, uses a five-tiered rate structure that rewards conservation. The water district has a baseline charge for necessary water use. Water use that exceeds the baseline amount costs incrementally more money. While “low volume” water use costs \$.082 per hundred cubic feet (ccf), “wasteful” water use costs \$7.84 per ccf. See http://www.irwd.com/AboutIRWD/rates_residential.php. Marin County has included tiered billing rates as part of its general plan program to conserve water. See Marin County Countywide Plan, page 3-204, PFS-2.q, available at http://www.co.marin.ca.us/depts/CD/main/fm/cwpdocs/CWP_CD2.pdf.
43. See the City of Fresno’s Watering Regulations and Ordinances at <http://www.fresno.gov/Government/DepartmentDirectory/PublicUtilities/Watermanagement/Conservation/WaterRegulation/WateringRegulationsandRestrictions.htm>.
44. See, e.g., the City of San Diego’s plumbing retrofit ordinance at <http://www.sandiego.gov/water/conservation/selling.shtml>.
45. The City of Roseville offers free water conservation audits through house calls and on-line surveys. See http://www.roseville.ca.us/eu/water_utility/water_conservation/for_home/programs_n_rebates.asp.
46. See Landscape Performance Certification Program, Municipal Water District of Orange County at http://waterprograms.com/wb/30_Landscapers/LC_01.htm.
47. For example, San Diego’s Metropolitan Wastewater Department (SDMWD) installed eight digesters at one of its wastewater treatment plants. Digesters use heat and bacteria to break down the organic solids removed from the wastewater to create methane, which can be captured and used for energy. The methane generated by SDMWD’s digesters runs two engines that supply enough energy for all of the plant’s needs, and the plant sells the extra energy to the local grid. See <http://www.sandiego.gov/mwwd/facilities/ptloma.shtml>. In addition, the California Air Resources Board approved the Landfill Methane Capture Strategy as an early action measure. <http://www.arb.ca.gov/cc/cea/landfills/landfills.htm>. Numerous landfills in California, such as the Puente Hills Landfill in Los Angeles County (http://www.lacsd.org/about/solid_waste_facilities/puente_hills/clean_fuels_program.asp), the Scholl Canyon Landfill in the City of Glendale (<http://www.glendalewaterandpower.com/Renewable%20Energy%20Development.asp>), and the Yolo Landfill in Yolo County, are using captured methane to generate power and reduce the need for other more carbon-intensive energy sources.
48. On April 30, 2007, the Public Utilities Commission authorized a CCA application by the Kings River Conservation District on behalf of San Joaquin Valley Power Authority (SJVPA). SJVPA’s Implementation Plan and general CCA program information are available at www.communitychoice.info. See also <http://www.co.marin.ca.us/depts/CD/main/comdev/advance/Sustainability/Energy/cca/CCA.cfm>. (County of Marin); and http://sfwater.org/mto_main.cfm/MC_ID/12/MSC_ID/138/MTO_ID/237 (San Francisco Public Utilities Commission). See also Public Interest Energy Research, Community Choice

Aggregation (fact sheet) (2007), available at
<http://www.energy.ca.gov/publications/displayOneReport.php?pubNum=CEC-500-2006-082>.

49. The Land Use Element designates the type, intensity, and general distribution of uses of land for housing, business, industry, open-space, education, public buildings and grounds, waste disposal facilities, and other categories of public and private uses.
50. Samples of local legislation to reduce sprawl are set forth in the U.S. Conference of Mayors' Climate Action Handbook. See
http://www.iclei.org/documents/USA/documents/CCP/Climate_Action_Handbook-0906.pdf.
51. For a list and maps related to urban growth boundaries in California, see Urban Growth Boundaries and Urban Line Limits, Association of Bay Area Governments (2006) at
<http://www.abag.ca.gov/jointpolicy/Urban%20Growth%20Boundaries%20and%20Urban%20Limit%20Lines.pdf>.
52. The Circulation Element works with the Land Use element and identifies the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals, and other local public utilities and facilities.
53. See Orange County Transportation Authority, Signal Synchronization at
<http://www.octa.net/signals.aspx>. Measures such as signal synchronization that improve traffic flow must be paired with other measures that encourage public transit, bicycling and walking so that improved flow does not merely encourage additional use of private vehicles.
54. San Francisco's "Transit First" Policy is listed in its Climate Action Plan, available at
<http://www.sfenvironment.org/downloads/library/climateactionplan.pdf>. The City's policy gives priority to public transit investments and provides public transit street capacity and discourages increases in automobile traffic. This policy has resulted in increased transit service to meet the needs generated by new development.
55. The City of La Mesa has a Sidewalk Master Plan and an associated map that the City uses to prioritize funding. As the City states, "The most important concept for sidewalks is connectivity. For people to want to use a sidewalk, it must conveniently connect them to their intended destination." See
<http://www.ci.la-mesa.ca.us/index.asp?NID=699>.
56. San Francisco assesses a Downtown Transportation Impact Fee on new office construction and commercial office space renovation within a designated district. The fee is discussed in the City's Climate Action plan, available at
<http://www.sfenvironment.org/downloads/library/climateactionplan.pdf>.
57. For example, Seattle, Washington maintains a public transportation "ride free" zone in its downtown from 6:00 a.m. to 7:00 p.m. daily. See
http://transit.metrokc.gov/tops/accessible/paccessible_map.html#fare.
58. See, e.g., Reforming Parking Policies to Support Smart Growth, Metropolitan Transportation Commission (June 2007) at

http://www.mtc.ca.gov/planning/smart_growth/parking_seminar/Toolbox-Handbook.pdf; see also the City of Ventura's Downtown Parking and Mobility Plan, available at http://www.cityofventura.net/depts/comm_dev/resources/mobility_parking_plan.pdf, and its Downtown Parking Management Program, available at http://www.cityofventura.net/depts/comm_dev/downtownplan/chapters/5_programs_implementation.pdf.

59. See Safe Routes to School Toolkit, National Highway Traffic Safety Administration (2002) at www.nhtsa.dot.gov/people/injury/pedbimot/bike/Safe-Routes-2002; see also www.saferoutestoschools.org (Marin County).
60. The Housing Element assesses current and projected housing needs. In addition, it sets policies for providing adequate housing and includes action programs for that purpose.
61. The U.S. Conference of Mayors cites Sacramento's Transit Village Redevelopment as a model of transit-oriented development. More information about this project is available at <http://www.cityofsacramento.org/planning/projects/65th-street-village/>. The Metropolitan Transportation Commission (MTC) has developed policies and funding programs to foster transit-oriented development. More information is available at MTC's website: http://www.mtc.ca.gov/planning/smart_growth/#tod. The California Department of Transportation maintains a searchable database of 21 transit-oriented developments at <http://transitorienteddevelopment.dot.ca.gov/miscellaneous/NewHome.jsp>.
62. The City of Berkeley has endorsed the strategy of reducing developer fees or granting property tax credits for mixed-use developments in its Resource Conservation and Global Warming Abatement Plan. City of Berkeley's Resource Conservation and Global Warming Abatement Plan p. 25 at <http://www.baaqmd.gov/pln/GlobalWarming/BerkeleyClimateActionPlan.pdf>.
63. The Open Space Element details plans and measures for preserving open space for natural resources, the managed production of resources, outdoor recreation, public health and safety, and the identification of agricultural land. As discussed previously in these Endnotes, there may be substantial overlap in the measures appropriate for the Conservation and Open Space Elements.
64. The Safety Element establishes policies and programs to protect the community from risks associated with seismic, geologic, flood, and wildfire hazards.

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Source: Institute for Local
Government, www.cacities.org

Locally-Adopted Climate Change Policies

“Climate change” is being discussed in city halls throughout California. A city may wish to adopt local climate change policies by either amending (1) its general plan; or (2) its CEQA Guidelines, or both. State laws, an executive order promulgated by the Governor, litigation brought by the Attorney General, and an opinion of the U.S. Supreme Court should be reviewed prior to making these amendments. After briefly reviewing each of these, this memo will describe the climate change practices of a variety of local governments for information and review.

Summary: Climate Change Strategies

1. **Local CEQA Guidelines:** The purpose of amending locally-adopted CEQA Guidelines is to explain how analysis of greenhouse gas emissions will be treated in environmental documents. The amendment could include the adoption of local thresholds of significance. The California Air Pollution Control Officers Association (CAPCOA) has developed recommendations for thresholds of significance which can be found in CAPCOA’s publication entitled *CEQA and Climate Change* at <http://www.capcoa.org>.
2. **General Plan:** There are at least two ways to incorporate climate change policies into a city’s general plan. One utilizes the EIR prepared in connection with a general plan update to analyze the impact of greenhouse gas emissions from land use and transportation sectors. The EIR finds that the impacts of the general plan’s land use and transportation policies on greenhouse gas emissions are significant and the city council adopts mitigation measures, such as a requirement to develop and adopt a greenhouse gas reduction plan as part of the general plan, to mitigate the impacts. The other simply amends the general plan by adding a greenhouse gas emissions reduction plan as a matter of policy, rather than as a CEQA mitigation measure.¹

Reasons to Consider these Strategies

It may be advisable to consider one or both of these strategies for the following reasons:

1. The United States Supreme Court decision in *Massachusetts v. NEPA*;
2. The Resources Agency is not required to adopt new CEQA Guidelines for climate change until January 2010²; and

¹ See discussion of climate change in City of Riverside’s and County of Napa’s general plans at pages .

² Public Resources Code § 21097.

3. The Attorney General's settlement with San Bernardino County in *State of California v. San Bernardino County*.

- **Massachusetts v. NEPA 127 S.Ct. 1438 (April 2007)**

In this case the United States Supreme Court held that the Clean Air Act (federal) requires the (federal) EPA to establish standards applicable to the emission of air pollutants from motor vehicles. The Act defines "air pollutant" broadly as any "any air pollution agent or combination of such agents...which is anticipated to endanger public health or welfare." The Court emphasized that although the Clean Air Act did not appreciate the possibility that burning fossil fuels could lead to global warming, regulation of pollutants leading to global warming must be read into the Act so as not to render the Act obsolete. The Court also held the broad regulatory authority given to the EPA by the Act encompassed the authority to prescribe standards applicable to the emission of air pollutant from motor vehicles.

Similarly, although CEQA does not, for example, specifically anticipate global warming as an area of concern in its significance criteria for an air pollution analysis, the broad goals of CEQA would support this type of analysis. The Appendix G (to the Guidelines) Checklist that guides an agency through an Initial Study, states with regard to "Air Quality," that the "significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make determinations." A brief review of the work being undertaken by the BAAQMD makes it clear that the District considers climate protection to be within its regulatory purpose.

- **CEQA³**

Several sections of CEQA and its Guidelines argue in favor of analyzing the impacts of a project on global warming as part of an air quality analysis in an EIR. The CEQA analysis seeks to determine how the "project" will affect climate change as well as how the "project" will be affected by climate change. Mitigation is required if a "project's" contributions to climate change are a significant impact on the environment.

1. It is the policy of the state to ensure that long-term protection of the environment consistent with the provision of a decent home and suitable living environment for every Californian is the guiding criterion in public decisions; and to create and maintain conditions under which man and nature can exist in productive harmony to fulfill the social and economic requirements of present and future generations (PRC § 21001(b).
2. Indirect or secondary effects of a project which are caused by the project and are later in time or farther removed in distance should be analyzed if they are

3. 3.4% of the EIRs submitted to OPR during the period 04/07 through 08/07 contained discussions about climate change of some type. The analysis was included in one of three sections: air quality; cumulative impacts; or a special climate change section. [cite to EPA website?]

- reasonably foreseeable. Indirect or secondary effects may include effects related to induced change in air and water and other natural systems (Guidelines § 15358)
3. If, after thorough investigation, a particular impact is too speculative for evaluation, the city should note its conclusion and terminate discussion of the impact (Guidelines § 15145). Note that this means the fact that the impacts of a project on climate change are “impossible to discern” is not an argument for refraining from CEQA review of those impacts.
 4. Although the CEQA Guidelines do not include information on “global warming,” the impact of development on greenhouse gas emissions has been evaluated as part of the air quality analysis in the EIR on a comprehensive General Plan update:

OPR is directed to prepare guidelines for the mitigation of greenhouse gas emissions or the effects of GHG emissions by July 1, 2009. The Resources Agency must certify and adopt the guidelines by January 1, 2010. The bill provides an exemption from a CEQA cause of action for failure to analyze effects of GHG emissions for certain projects funded by State bonds. It also reiterates that this is a narrow exemption for this specific purpose only (PRC § 21097). The negative implication of this bill is that a challenge under CEQA may be made to all other types of projects.

There are no California appellate cases on climate change and CEQA as of December 2007. There are several court cases pending in superior court in which the way a city or county has addressed, or failed to address, climate change in a CEQA document.

- **State of California vs. San Bernardino County**

On August 21, 2007, the Attorney General announced the settlement of the state’s global warming lawsuit against San Bernardino County.⁴ The litigation argued that the EIR being prepared on the County’s General Plan must include an analysis of the impact of development on global warming. The core of the Settlement Agreement is the County’s commitment to a thirty month process aimed at cutting greenhouse gas emissions attributable to land use decisions and County government operations. A Greenhouse Gas Emissions Reduction Plan would include an inventory of all sources of GHG in the County; an inventory of the 1990 emissions level and that projected for 2020; and a target for reduction of the emissions attributable to the county’s discretionary land use decisions and its own internal operations. First the County will amend its general plan by adding a policy that describes the County’s goal of reducing GHG attributable to discretionary land use decisions and its internal operations. Then, to implement the general plan’s goal “to ensure good air quality for the County’s residents, businesses, and visitors to reduce impacts on human health and the economy,” the County will prepare a GHG Emissions Reduction Plan. Note: This goal was included in the County’s general plan

⁴ As of August 21, 2007, the AG had submitted formal comments under CEQA to San Bernardino, San Diego, Sacramento, Orange County, Merced, Kern, Fresno, San Joaquin, Contra Costa, Yuba, Richmond, and San Jose.

before the Attorney General brought the litigation. The Attorney General argued that the EIR on the general plan must analyze GHG emissions in order to “ensure good air quality....” A similar goal might be found in many general plans.⁵

Voluntary Commitment to Reduction of GHG Emissions

- **Practices of Local Governments**

U.S. Mayors Climate Protection Agreement and Cities for Climate Protection: Many California cities have made commitments to policies to reduce global warming through either the U.S. Mayors Climate Protection Agreement or the Cities for Climate Protection (ICLEI).⁶ Signatories to the U.S. Mayors Climate Protection Agreement urge the federal and state governments to enact policies to reduce global warming; urge the U.S. Congress to pass bipartisan greenhouse gas reduction legislation; and strive to meet or exceed Kyoto Protocol targets for reducing global warming pollution by taking actions such as: inventory global warming emissions in City operations and in the community; adopt and enforce land-use policies that reduce sprawl, preserve open space, and create compact, walkable urban communities; promote transportation options such as bicycle trails, commute trip reduction programs and public transit; increase the use of clean alternative energy; increase the average fuel efficiency of municipal fleet vehicles; and increase recycling rates in City operations and in the community. Adoption of a general plan policy and/or greenhouse gas reduction plan is a logical extension of, and can be based upon, a California city’s commitment to the U.S. Mayors Climate Protection Agreement.

Local governments join the Cities for Climate Protection campaign by passing a resolution pledging to reduce greenhouse gas emissions from their local government operations and their communities. To help cities achieve their goals, ICLEI then assists the cities undertake the CCP’s five milestones: (1) Conduct a baseline emissions inventory and forecast; (2) Adopt an emissions reduction target for the forecast year; (3) Develop a Local Action Plan; (4) Implement policies and measures; and (5) Monitor and

⁵ The State ARB is charged with adopting rules and regulations “to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions from sources or categories of sources.” “Source” means any source of greenhouse gas emissions whose emissions are at a level of significance as determined by the Board. (Health & Safety Code §§ 38560 and 38505(i)). This means that the State ARB is authorized to regulate the transportation and land use sector. This conclusion is supported by the Settlement Agreement between the AG and San Bernardino County. The Agreement requires the County to adopt a Plan which includes an inventory of “all known, or reasonably discoverable, sources of greenhouse gases.” For purposes of the inventory, “source” has the same meaning as “source” in AB 32. In addition, the Agreement anticipates that the County will be regulated by the CARB and states that in the event of a conflict between the County’s Plan and the CARB’s regulations, compliance with the regulations shall be deemed to be in compliance with the Settlement Agreement.

⁶ Website?

verify results. Participation in the CCP also can be used as the foundation for the adoption of a general plan policy and or greenhouse gas reduction plan.

Participation in these two programs demonstrates that many California cities have already taken the first steps towards incorporating climate change policies into their general plans.

Greenhouse gas emissions reduction plan: All greenhouse gas emissions reduction plans begin with an emissions inventory. Many such inventories have been completed. For example, in the Bay Area, the BAAQMD completed an inventory in 2005 of all Bay Area Counties. Marin County completed an inventory in 2006. Sonoma County's inventory was completed in 2005. The State ARB recognizes the Emissions Factor Model (EMFAC) to calculate emissions rates from all motor vehicles such as passenger cars and light trucks. EMFAC 2007 is the most recent version of the model.

City of Riverside: The EIR for the City of Riverside's General Plan found that the General Plan had a significant and unavoidable impact on air quality because it conflicts with or obstructs implementation of the Air Quality Management Plan for the South Coast Air Basin. That Plan sets forth a comprehensive program that will lead SCAB into compliance with all Federal and State air quality standards. The EIR analyzed emissions from growth anticipated in the General Plan and concluded that long-term daily emissions associated with General Plan build-out would substantially exceed daily thresholds for all criteria pollutants. According to the General Plan Traffic Report, build-out of the General Plan at typical densities is expected to increase traffic by approximately 50%. Noting that the transportation sector is responsible for approximately 41% of California's GHG emissions, the EIR concludes that the impact to GHG production is considerable. Based upon these conclusions, the General Plan included two pages of policies to reduce vehicle miles traveled by concentrating development around public transportation; integrating land use with transportation; and encouraging a mixture of compatible and synergistic land uses. Notable in this analysis is that the City relied on a conflict between the General Plan build-out and the regional air quality plan to support programs which would reduce vehicle miles traveled. The discussion was not framed as "global warming" but rather as a common CEQA consideration: conflict between a local and regional air quality plan.

County of Napa: The County of Napa's Draft EIR accompanying its General Plan update includes a discussion entitled "Greenhouse Gases and Climate Change Linkages." It identifies Climate change as a global problem and GHGs as global pollutants and notes that neither Napa County, BAAQMD or ARB have established significance criteria in relation to greenhouse gas emissions associated with general plans. It then turns to the BAAQMD Clean Air Plan since inconsistency with the Plan is considered a significant impact. A local plan should be consistent with the CAP population and VMT

assumptions; and should demonstrate reasonable efforts to implement Transportation Control Measures included in the CAP. The EIR identifies the following impacts as significant and unavoidable:

Air Quality: Implementation of the General Plan would not be consistent with the Clean Air Plan since County population and employment projects would exceed regional growth projections prepared by ABAG and projected VMT would increase at a faster rate than the population. Land uses and development would result in increased emissions of ozone precursors resulting primarily from vehicles. The increased emissions would exceed the BAAQMD thresholds.

Mitigation: The County shall include a policy in the General Plan that requires the County to conduct a greenhouse gas emission inventory analysis of all major emission sources by the year 2008 in a manner consistent with Assembly Bill 32 and then seek reductions such that emissions are equivalent to year 1990 levels by the year 2020.

Cumulative: Land Uses and growth under the proposed General Plan Update would contribute to an increase in GHG emissions from vehicle transportation, building energy use and possibly agricultural operations and may contribute to increases in atmospheric GHG concentrations. Higher concentrations of GHGs have been linked to the phenomenon of climate change.

Mitigation: The County shall include policy provisions in the General Plan to provide incentives and opportunities for the use of energy-efficient forms of transportation such as public transit, carpooling, walking, and bicycling. This will include the provision or extension of transit to urban areas where development densities would support transit use.

Mitigation: The County shall include a policy in the General Plan to support intergovernmental efforts directed at stringent tailpipe emissions standards and inspection and maintenance programs for all feasible vehicle classes.

Mitigation: The County shall include a policy in the General Plan that requires the evaluation of potential project-specific air quality impacts of new development projects and will require appropriate design, construction, and operational features, to reduce emissions.

County of Sonoma and its Cities: In 2002, Sonoma became the first county in the nation where 100% of its cities (and the county) joined the Cities for Climate Protection program of the ICLEI. The County took the first step in implementing the program when, 2005 a Greenhouse Gas Emission Inventory for all sectors of Sonoma County was prepared by the Sonoma County Climate Protection Campaign with funding from the Bay

Area AQMD. Following emission accounting protocols from Cities for Climate Protection, the Inventory categorized emissions from electricity and gas; vehicular transportation; agriculture; and solid waste. The Inventory recommended that Sonoma County adopt a 20% reduction from 1990 emission levels by 2010. In partnership with each of the cities and the county, the Sonoma County Climate Protection Campaign (a non-profit organization) is developing a Community Climate Action Plan to guide the policies of the local governments.

County of Marin: In October 2006 Marin County adopted a countywide Greenhouse Gas Reduction Plan as part of the Cities for Climate Protection program of the ICLEI. The Plan recommends measures in a variety of categories including building standards, land use, transportation, which are estimated to result in a GHG reduction that is 21% below the expected 2020 level. In September 2007, Marin County completed a Re-Inventory of Greenhouse Gas Emissions to guide future actions to reduce GHG emissions.

Additional Information and Helpful Resources

Several statewide organizations have prepared papers on climate change:

1. *Planning Policy Principles for Climate Change Response* (September 2007 by California Chapter of American Planning Association);
2. *Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA* (June 2007 by Association of Environmental Professionals);
3. *CAPCOA*

These are example of inventories of Greenhouse Gas Emissions:

1. Marin County Inventory of Greenhouse Gas Emissions
<http://www.co.marin.ca.us/depts/CD/main/comdev/advance/sustainability/susinitiatives/climate/Climate.cfm>
2. Greenhouse Gas Emissions Inventory for all sectors of Sonoma County (January 2005) prepared by BAAQMD and Sonoma County Waste Management Authority as part of the Sonoma County Climate Protection Campaign.
<http://www.climateprotectioncampaign.org/sonomaccp/index.php>[sonoma county climate protection campaign]

Here are some other helpful websites

1. <http://www.ceqamap.com>: This website contains a library of each CEQA document that has addressed climate change. The library is searchable and organized by counties. All documents are available for download after a free account is created.

2. <http://www.opr.ca.gov>: The website of the Governor's Office of Planning and Research contains several links which provide helpful information.
3. A paper entitled "Addressing Climate Change in NEPA and CEQA Documents" is available for download at <http://www.climatechangeandfocusgroup.com>.
4. The work of the Governor's Climate Action Team can be found at <http://www.climatechange.ca.gov>
5. The work of the California Air Resources Board can be followed at <http://www.arb.ca.gov>

Final Note

There are a variety of climate change programs and policies being considered by California cities and counties. Excellent work has been done by a variety of professional and government organizations. The field continues to evolve.

Source: Institute for Local Government, www.cacities.org

DRAFT

**LUSCAT Submission to
CARB Scoping Plan on
Local Government,
Land Use and
Transportation**

May 5, 2008

(pages 1-48)

DRAFT FOR DISCUSSION

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1.0 Introduction

This report was prepared by the Land Use Subgroup of the California Climate Action Team (CAT). The Land Use Subgroup, LUSCAT, is one of eleven multiagency subgroups formed to provide recommendations to the California Air Resources Board (CARB) for consideration as the board develops a plan to reduce GHG emissions in California. The CARB Scoping Plan will lay out state policies and actions to meet the GHG reductions targets in AB 32, the Global Warming Solutions Act of 2006. Almost 20 state agencies comprise the LUSCAT team; agency representatives worked in collaboration to prepare the background information and recommendations contained in this report. A list of state agency LUSCAT members is found in Appendix A. A list of stakeholder organizations and representatives who graciously contributed their time and insights to LUSCAT's efforts is found in Appendix B.

How Californian communities are designed and built has large consequences on the state's greenhouse gas emission levels, and as a result, has an impact on global climate change. The majority of the State's GHG emissions are the result of infrastructure and development decisions: how we build our buildings, where we put them, and the quality and types of infrastructure that are required to serve them. The act of designing the physical footprint and form of communities is called land use planning. In California, local governments are responsible for making land use and local infrastructure decisions.

The LUSCAT focused on identifying existing programs and developing new cross-cutting land use planning strategies that could be adopted by State agencies for climate change mitigation and adaptation. The members of the LUSCAT represent agencies with broad experience and knowledge of the land use planning practices and principles in use in California. Members were drawn from the following agencies, boards and departments: CEC, Cal/EPA, ARB, BTH, Caltrans, DOC, CIWMB, OPR, SWRCB, PUC, DWR and HCD. The sub-group also worked closely with an advisory group comprised of stakeholders from local and regional governments, special districts, planning professionals and NGO's.

Land use planning plays a role in all of the CAT subgroups. It involves the identification of a land use pattern that will accommodate the residents, businesses, and attendant infrastructure needed as California grows. Decisions about where commercial, residential and civic buildings go, roads and transit systems, water supply, building design, natural resources, open space, agriculture, and energy infrastructure are all part of land use planning. Together these activities or sectors determine the level of state GHG emissions. Because of this, improving land use planning in California can assist in reducing the growth of GHG emissions.

The CARB's implementation of Assembly Bill 32 will address GHG emission reductions in a variety of these sectors. Most of these sectors have multiple activities that impact GHG emissions. Because of this, a substantial amount of GHG emissions that result from land use planning activities will be accounted for under other sectors. For example, green building practices are often considered an energy- and GHG-efficient land use planning practice. But since emissions from the production of electricity, use of natural gas and efficient use of water

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are expected to be covered under the Energy and Water Sectors, the GHG benefits of green building practices will not be attributed to land use.

Because land use planning GHG reduction strategies are found throughout the other sectors, this report will primarily focus on policies, programs, and practices that provide for reductions through the integration of transportation and land use planning. Regardless of the distribution of GHG-efficient land use planning benefits to different accounts in the ARB's inventory, it is crucial that land use planning policies are developed and implemented in an integrated fashion and support all the state's land use, economic development, transportation, housing and resource planning goals.

The GHG reduction strategies developed by all the subgroups will be approved by the CAT and submitted to ARB for incorporation into the Scoping Plan. The LUSCAT paper will provide a context for those strategies, and address an overall vision for land use planning over the long-run and actions for reducing GHG emissions that can be initiated in the near-term. It is understood that some of what is discussed here will likely change or evolve as experience is gained and new challenges unfold as we tackle the dual issues of climate change mitigation and adaptation.

1.1. Long-term Vision for Land Use Planning in California

The strategies and measures outlined in this paper are only the initial steps in the efforts needed to adequately reduce GHG emissions from this sector. The Governor's Executive Order S-3-05 established goals for 2050 which will require an integrated approach to land use planning that ties together federal, state, regional and local planning processes and tools. Following is a 'roadmap' which outlines initial thoughts on forward-looking and far-reaching planning principles that will guide the state to both meet its mandated GHG emission targets in 2020, and lay the groundwork for 2050 goals and beyond. The success of the roadmap requires both partnership and leadership, from all levels of government and each participant in the land use planning conversation.

State policy objectives for affordable housing, transportation, air quality, water supply, economic development, environmental integrity, agricultural land preservation, and wildfire issues, as well as GHG and climate change, and others involve state agencies in land use planning issues, indirectly or directly. Achieving these multiple policy objectives, requires that any policies the State adopts to reduce GHG emissions support and enhance existing economic, environmental and equity related policies.

1.1.1. Long Term Land Use Vision Principles

The vision for an Integrated Land Use Planning Process incorporates the principles described below.

- 1. Planning to Reduce GHG Emissions:** To effectively address GHG emissions, existing and potential planning strategies and processes should be identified at all levels of government. Ways to strengthen and coordinate these strategies and processes to assist in reducing GHG emissions associated with land use decision making should be articulated by the State.

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Although one of the primary goals of this planning effort will be GHG mitigation, the effort will also carefully consider adaptation to ongoing and predicted climatic changes. The planning process must strive to enhance other co-beneficial opportunities such as resource conservation, fostering better health for Californians, increasing the supply of affordable housing, and facilitating better access to services and recreation.

2. **Comprehensive Yet Flexible to Adapt to Changing Circumstances:** An integrated and comprehensive land use planning policy should be developed by the State to coordinate the goals and requirements of Federal, State, Regional and local government agencies, and be flexible enough to be responsive to the needs of each. The planning policy should be responsive enough to react appropriately to changing circumstances due to variations in climate, population, demographics, economics and technology. Due to the need for California to adapt to changing and unpredictable climate conditions, the planning policy will include decision making guidelines that are themselves adaptable. Adaptation to climate change in land use planning will need to be integrated with all efforts addressing GHG mitigation.
3. **Coordination of Planning Efforts:** A statewide planning policy will facilitate the coordination of federal, state, regional and local planning efforts to promote efficient use of existing planning resources and control costs of infrastructure extension and maintenance. A State planning policy should, facilitate information exchange, and avoid conflicting requirements or redundant processes. Training, education and outreach will need to be available for staff of all involved planning agencies. The planning process will facilitate the sharing of data between planning entities through the use of GIS and other technologies. State-level planning will include cooperative agreements with neighboring states in order to maximize the effectiveness of efforts to reduce GHG emissions or address mitigation of climate change impacts that may affect border communities.
4. **Land Use Planning Incentives:** Any successful statewide planning policy should address existing financial disincentives to GHG related local and regional planning and recommend incentives. The planning process will provide incentives for inter- and intra-regional cooperation, promote the consideration of quality of life measures, including housing and resource conservation, and will consider life cycle costs and life cycle assessment in planning evaluations. The development of an integrated and comprehensive planning policy would include consideration of tax reform efforts and the interaction of those activities with long-term efforts to reduce GHG emissions. The policy will also explore links with federal transportation funding and advocate for federal funding decision criteria which reflect California's land use goals.
5. **Builds upon Existing Models for Improved Planning Capability:** Integrated and comprehensive planning should build upon existing planning models for regional development as outlined in the *Regional Blueprint* project. These models encourage participation of a wide array of stakeholders to work on plans that start at the neighborhood level and build to a regional consensus. The models should include consideration of GHG emissions at the regional or general plan level. Regional planning would address inter- and intra-city transportation options. The process would also be designed to promote investments in transportation infrastructure to reflect the anticipated needs of future Californians, while supporting desired patterns of growth. The goals of transportation infrastructure planning criteria would also be established with the aim of facilitating the

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movement of goods and services, over short and long-distance, while reducing the overall vehicle miles traveled. Initiatives such as the high speed rail project would be promoted and local governments would be encouraged to plan new developments consistent with the location and extent of these new transportation options.

6. **Include Utilities in Infrastructure Planning:** An integrated and comprehensive planning policy will consider the distribution of water and power, including electricity generation, along with other future infrastructure needs. Consideration will be given to resource availability and lifetime resource costs in designing the process.
7. **Includes Consideration of Planning Decision Impacts on Population Growth and Distribution:** An integrated and comprehensive land use planning policy will lead to consideration of the impacts of planning decisions on efficiently accommodating population growth and distribution in future policy decisions. Restrictive land use practices that limit infill and an adequate housing supply will be discouraged or prohibited.

It will also lead to the consideration of the appropriate distribution of recreational and commercial resources and how population growth and distribution will interact with these resources. Areas that may become less suited to certain uses should be identified and alternative locations for those uses should be developed

1.1.2. GHG Land Use Policy Principals

1. To achieve the goals of AB32 and Executive Order S-3-05, the State's land use policy objectives should include GHG mitigation in addition to existing policies regarding housing availability and affordability, access to mobility, health protection, water and energy supply, resource and habitat protection, healthy economy, community and cultural resources, etc.
2. The State Constitution gives local governments the authority to make land use decisions within their municipal boundaries. However, in order to ensure State-wide policy objectives are also met the California Legislature and past Governors have vested various state agencies with influence over a number of land use decisions. Going forward the State will adopt policies to address land use decisions directed at reducing GHG emissions in a collaborative effort with local and regional governments.
3. The State must significantly reduce the GHG emissions from the transportation sector. Reductions of GHG emissions from the transportation sector will come from a combination of vehicle efficiency improvements, low-carbon fuels, and implementing transportation demand management (TDM) policies and strategies. The effectiveness of efforts to provide transportation alternatives to the automobile and TDM can be measured in terms of reductions in vehicle miles traveled (VMT) or expected growth in VMT. VMT reductions correlate directly with reductions in GHG emissions.
4. TDM and alternative mobility options, including walking, biking, and mass transit, will require improvement in land use through a combination of state, regional and local planning. The State will encourage and support integrating land use and transportation policies to maximize the efficient use of existing transportation systems and provide for the increased availability

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and use of efficient transit, walking and biking infrastructure to increase mobility, improve health, and provide other economic and environmental benefits.

5. The States development policies and financing programs for the siting of State-owned facilities should support GHG emission reduction goals. The State will lead by example and incorporate GHG emission reduction as a fundamental element of planning, design, development, and operation of state-owned facilities.
6. The State's various program's that affect land use should be encouraging growth patterns that support the State's GHG policies. The State will incorporate GHG considerations into appropriate fiscal, technical, and/or regulatory land use programs guidelines, standards, and criteria. This will help to ensure that all appropriate state-assisted infrastructure, land use planning, and development is consistent with the state's climate goals. Housing development capacity of regional and local land use plans should not be limited for the purpose of reducing or limiting the growth in vehicle trips or vehicle miles traveled
7. Reducing GHG emissions through improved land use and mobility planning and implementation requires a regional approach. Efforts such as the Regional Blueprint Planning process will be further strengthened and expanded to include GHG emissions reduction targets.
8. Government agencies from the federal through to the local level plus thousands of special districts make decisions that guide land use in California every day. The State will adopt policies and programs that reflect this shared responsibility and increase collaboration across all levels of government on how to reduce GHG emissions through improved land use decision-making.
9. The State needs to work with stakeholders to develop clear guidance and expectations for regional and local government in the form of guidelines, information, methodologies, technical resources and regional emission reduction targets. The California planning community must have the tools, resources and ability to implement new climate policies enacted by the State.
10. Through partnerships with stakeholders, the State will design policies and programs that provide legal and technical assistance to guide decision-making and build capacity at all levels of government. Local government will need financial and regulatory assistance and implementation flexibility to achieve GHG reductions.

1.2 Framework for LUSCAT strategies and measures.

The five objectives discussed below provide the framework for the strategies and measures outlined in later sections of this report.

- **Define Regional Land Use and Transportation Targets**
LUSCAT recommends that ARB define GHG emission reduction targets for land use and transportation related GHGs at both the State and regional levels. These goals should be developed to not only help meet 2020 goals, but also should lay the foundation for reaching 2050 goals set by Executive Order S-3-05. Land use policies and actions that

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reduce GHGs take time to add up to a significant level. It is critical to start making land use decisions that help reduce GHGs now to ensure an accumulation of benefits large enough to help meet our long-term carbon goals.

Major metropolitan areas in California are actively pursuing Blueprint planning and/or other comprehensive planning processes that encourage land use development and transportation infrastructure that improves air quality, reduces vehicle trips and trip lengths, and provides more transportation and housing options. Regional planning agencies must work with local governments to provide regional visions that map out what is necessary to reach regional land use-related GHG targets and then work collaboratively to reach those targets. All levels of government need to work together to ensure that the State get land use that allows for the achievement of California's various land use policy goals while ensuring that development proposals not be subject to overlapping and redundant requirements for mitigation of GHG emissions.

- **Provide Guidance on Measurement and Best Practices**

It is important that the State provide regional and local government clear guidance on how to measure and estimate future expected GHG emissions within their jurisdiction. LUSCAT recommends that ARB provide a GHG quantification protocol and guidance for local governments that allows for statewide uniform measurement and estimation of expected jurisdiction-wide GHG emissions. Any measurement tool should also allow local governments to evaluate and compare the GHG emissions of alternative land use planning decisions.

The LUSCAT recommends that the State provide guidance to regional and local governments on best practices for reducing GHG emissions, including measures to reduce GHG emissions from sources that can be directly affected by local governments such as municipal operations and discretionary land use practices; protocols for emission reduction accounting; and appropriate modeling tools to support emission quantification at the local level.

- **Create Partnerships**

LUSCAT recommends the creation of a stakeholder partnership process to analyze and prioritize the key policies necessary to provide an enabling structure that helps regional and local agencies reach the regional targets developed. The stakeholder partnership would include State, regional and local agencies and public and private stakeholders. The timing of the stakeholder partnership process should coincide with the timing of the development of the regional targets. This process should also include guidance on how to address GHG emission reduction and climate change in regional and local Climate Action Plans. The guidance should include model Plan format, language and content as well as public participation direction and be coordinated with Regional Blueprint Plans, Regional Housing Need Plans, Regional Transportation Plans, and General Plans.

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- **Promote State Leadership**

The State should provide leadership in GHG reduction efforts. Many state agencies have direct control over state-owned and operated infrastructure and facilities. Incorporation of GHG considerations into the planning, design, development, and operation of these facilities has the potential to result in considerable GHG emissions reductions and provide best practices information to local and regional government partners and the private sector.

Many state agencies do not have direct control of GHG emissions but have indirect influence over the emissions associated with broader local land use and transportation decisions. The State's indirect influence is exercised through implementation of its various fiscal, technical, and/or regulatory programs.

LUSCAT recommends incorporating GHG considerations into appropriate State program guidelines, standards, and criteria to help ensure that state-assisted infrastructure, land use planning, and development is consistent with the state's climate goals.

- **Reduce Barriers to Efficient Land Use Development**

Many barriers exist to GHG-efficient growth at all levels of government policy in the State. There are also structures and processes that have been developed that are used as tools to prevent what would otherwise be GHG-efficient growth. For example, CEQA has sometimes been used to block otherwise appropriate infill development. In addition, local regulatory barriers to infill housing and an inadequate supply of appropriately zoned land for housing can result in development being pushed to the fringe of a community, causing increased VMT.

If the State is going to be successful in reducing the impact of land use planning and development on climate goals, then these barriers must be reduced or eliminated.

The LUSCAT recommends that the OPR and BTH in coordination with the Strategic Growth Council convene a multi-stakeholder advisory group to examine ways to improve land use coordination and goal attainment and offer recommendations for inclusion in the Scoping Plan and a report for the governor and Legislature for their consideration.

- **Measure Progress**

A feedback loop is essential to successful program implementation. LUSCAT recommends that the State create and update inventories of GHG emissions. The data will allow regions to track progress towards goals and allow for assessment of the need to revise current, or implement further, measures.

The strategies and measures identified in this report fall into the above categories, and are either action items that State agencies can implement with existing authority, and are recommended to be pursued in the near-term or items that bear promise for the State but LUSCAT is recommending further analysis be done.

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The LUSCAT subgroup was presented with over 180 proposals for the reduction of GHG emissions from land use planning. The submittals were prioritized and only those that could either be shown to provide feasible reductions or set the stage for reductions in the future were included in this study. Other strategies and measures may be included after input from stakeholder groups and as more is learned about how changes in this sector can help move California forward to the goals of 2020 and beyond.

Implementation of the recommended strategies should have a net zero cost through 2020. Based on analysis put forth it is assumed that state, regional, and local agency partners will be able to redistribute and leverage existing funding revenues for land use and transportation activities to meet the state's regional GHG targets, while continuing to meet the balance of the State's other land use and transportation goals. This is not to say that significant investment will not need to be made in both the hard and soft infrastructure of our local communities. The LUSCAT recognizes the need for direct investment of State funds, flexibility in the implementation of State-administered programs and tax policy reform to enable local and regional governments to bring about a new land use pattern.

Facility siting and land use, and development and transportation infrastructure planning and siting decisions of the past have disadvantaged low income and minority communities with adverse environmental and health impacts, dislocation, and intersection. However, policies to promote sustainable multiple use communities with increased access to affordable housing, jobs, transportation options, and educational and recreation resources will provide many benefits to low income and minority communities as well as to the population of California as a whole.

Such policies must holistically consider the broad spectrum of potential impacts (beyond VMT reduction) of land use decisions, as well as their relationships to reducing cumulative environmental health risks, improving overall health and communities' abilities to adapt, and addressing disproportionate impacts in low-income and minority communities. This report recommends a series of strategies to ensure GHG emission reduction land use policies do not disproportionately affect low income and minority communities.

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2.0 Sector Background

2.1 *Role of Land Use and Local Government in Climate Change.*

The California Climate Action Team Land Use Subgroup's (LUSCAT) has undertaken an examination of how land use decisions can help reduce GHG emissions pursuant to the Governors Executive Order S-01-07 and AB 32, the Global Warming Solutions Act of 2006. Land use decisions impact many sectors responsible for GHG emissions – transportation, electricity, water, waste, etc. However, the primary impact of land use development on GHG emissions is related to vehicle use. While this paper will make recommendations on land use strategies that impact multiple sectors, it will highlight the relationship between land use and transportation and how this relationship impacts GHG emissions.

2.1.1. Emissions from Transportation and Vehicle Use

The federal and state investment in a comprehensive highway system has given Californian's increased choices in where they live and work. Homeowners can elect to reside outside urban centers. The availability and low-cost of land away from urban centers has resulted in new development becoming increasingly less dense. As a result, Californians are more dependent than ever on the automobile to connect them to jobs, services, and amenities.

This less dense, more dispersed development pattern has resulted in sharp annual increases in the distances (hence, amount) people drive as measured by vehicle miles traveled (VMT). The amount of miles traveled by California residents increased at a rate of over 3 percent a year between 1975 and 2004, outpacing population growth which grew at less than 2 percent annually over the same time period. This increase in VMT directly correlates to an increase in petroleum use and GHG production. Passenger vehicle (cars and light trucks) emissions of 136 million metric tons of CO₂ equivalent (MMT_{CO₂e}) per year represented, in 2004, about 30 percent of the state's total GHG emissions. That makes passenger vehicles the biggest GHG emitters in California. It also results in the transportation sector as whole being the largest emitters of GHGs in the State – 38 percent of the 2004 inventory. On-road vehicles emit the vast majority of California's transportation related GHG emissions – 172 MMT_{CO₂e} or 36 percent of the state's approximately 475 MMT_{CO₂e} total. Other transportation sources—mostly trains, planes, and ships—emit just 2 percent of the total.

Transportation Sector

All forms of transportation (passenger vehicles and light trucks, planes, trains and ships) make up the transportation sector. There are three interrelated components that can contribute to transportation sector emission reductions: (1) vehicle technology, (2) fuels, and (3) vehicle use.

The state is actively addressing vehicle technology and fuels through various programs and legislation. AB 1493 (Statutes of 2002, Chapter 200) directs the California Air Resources Board (CARB) to achieve the maximum feasible and cost-effective GHG reductions from light-duty

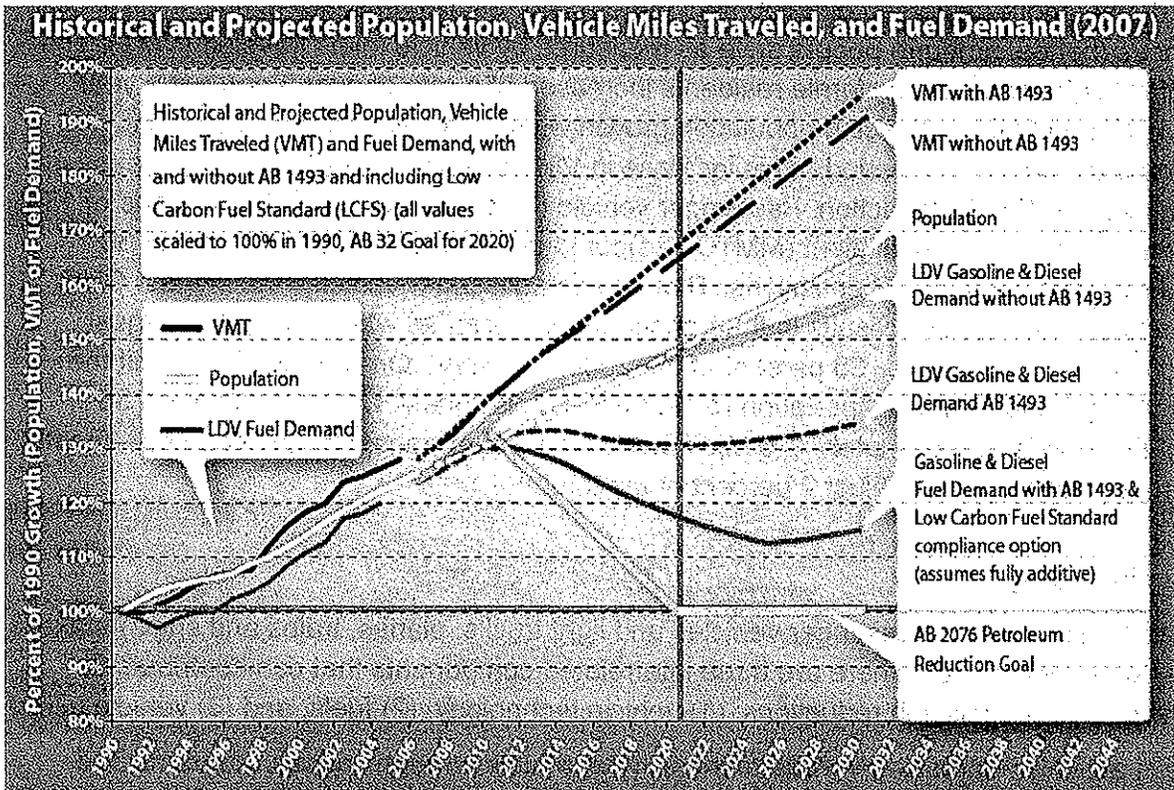
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motor vehicles. The Governor's Executive Order S-01-07, signed on January 18, 2007, calls for a reduction in the carbon intensity of fuel used on California roadways.

Vehicle use strategies are also important to reaching the State's climate change goals. Past trends and future business-as-usual projections show a significant increase in VMT.

Californians continue to drive more, because the population is growing, but also because current land use patterns increase the miles per capita people must drive to sleep, study, work, and play. There are a number of factors influencing this, e.g., suburban growth fueled by post-war baby-booms, a thriving economy, and low-priced gasoline. In the last few decades, employment has decentralized from core cities in many areas; a recent study found that "roughly 65 percent of all residents and nearly 60 percent of all jobs are now located in the suburbs"¹. Research has established a relationship between political fragmentation and the degree of job decentralization within regions of the U.S.² An inadequate supply of appropriately zoned residential land, especially proximate to employment centers, causes longer commutes as employees have to search further and further away to find affordable housing.

The chart below shows a projected steady increase of per capita driving averaging about 3 percent per decade from 1990 through 2040. Such growth will continue to erode the gains we make by tackling the other two legs of the stool to reduce GHG emissions (vehicle technology and fuels).



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2.1.2. Factors influencing current land use practices

Population

The state's current population of around 36 million is expected to increase to 42 million by 2020 and reach 60 million by 2050. About 70 percent of the population is located along the coast, but the fastest rate of population growth is occurring inland. California's senior population of about 4 million is expected to double in the next 25 years and triple in the next 50.

Development Patterns

As previously noted, VMT has been growing by 3 percent a year, and Caltrans expects a similar growth into the future. Caltrans modeling estimates assume current population growth rates and the continuation of current development and transportation practices. Research on the effect of land use practices on transportation patterns suggests that different development patterns could reduce VMT growth rate.

A 2002 U.S. Environmental Protection Agency study compared the impacts of compact and dispersed development patterns, also known as sprawl, on transportation patterns. The following land use characteristics were chosen as the key factors of sprawl based on a review of 83 of the nation's largest metropolitan areas³:

- Population dispersed in low density residential development.
- A rigid separation of homes, shops, and workplaces.
- A lack of distinct, thriving activity centers, such as strong downtowns or suburban town centers.
- A network of roads marked by very large block size and poor access from one place to another.

The EPA research suggests that counties with the least occurrences of the above characteristics had significantly less: average vehicle ownership, daily VMT per capita, annual traffic fatality rate, and maximum ozone level days. At the same time, shares of work trips by transit and walk modes increased to a significant degree.

Density, Mixed Use, and Vehicle Miles Traveled

The EPA research examined the variables that have a significant effect on the overall VMT and number of vehicle trips of individuals and households, mostly through their effect on the distance people travel and modes of travel they choose.⁴

Their research suggests that of the many factors that can be used to analyze the relationship between development and transportation, density may have the most significant relationship to travel and transportation outcomes. Controlling for other factors, the difference between the length and amount of trips in low versus high density U.S. metropolitan areas is more than 40

³ Ewing R., R. Pendall, and D. Chen, "Measuring Sprawl and Its Impact," Smart Growth America/ U.S. Environmental Protection Agency, Washington D.C., 2002.

⁴ Ewing R. and R. Cervero, "Travel and the Built Environment," *Transportation Research Record*, Vol. 1780, pp. 87-114, 2001.

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percent daily per capita VMT. EPA found that a doubling of neighborhood density can be expected to result in approximately a five percent reduction in both the number of vehicle trips and their length..

Of particular note was the difference between centrally located developments and development along the outskirts of established areas. Areas of high accessibility—such as center cities⁵—seemed to produce substantially lower VMT than dense mixed-use developments in the exurbs⁶. They found that number of trips seemed to depend mostly on socioeconomic and demographic factors, but overall VMT and vehicle trips declined as accessibility, density, and/or land-use mixing increased.

A San Francisco Bay Area study found that, all else being equal, “[e]very 10 percent increase in the number of retail and service jobs within four miles of one’s residence is associated with a 1.68 percent reduction in shopping and personal-service VMT... [Also,] a doubling of accessibility to retail and service activities was associated with a 13.7 percent decline in daily hours spent getting to and from shops and consumer-service outlets” (p. 483).⁷

Transitioning California towards more compact, transit-oriented patterns and practices poses a major challenge. It will require policies that not only discourage development on the fringes, but remove barriers to, and allows, without burdensome discretionary review, development in appropriate infill locations. But, the challenge is not insurmountable. “Nearly half of what will be the built environment in 2030 doesn’t even exist yet, giving the current generation a vital opportunity to reshape future development.” [Source: Arthur C. Nelson, “Planning for a New Era,” *Journal of the American Planning Association*, Fall 2006.]

Jobs-Housing Balance

The jobs-housing imbalance in many regions is pushing housing farther and farther away from job centers, resulting in inefficient land-use patterns—one of the greatest threats to California’s environmental quality.

It is generally agreed the root cause of this problem in California is the lack of sufficient supply of housing, including affordable housing. The housing affordability challenge is in large part an availability problem. Strong demand for an extraordinarily constrained supply in areas where people already live and jobs are being generated drives prices and rents higher. Too many local governments are not planning adequately to meet their own population increases, further exacerbating the supply problem.

Finance

Land use patterns, and the resulting VMT, are influenced by the funding available to local governments. One of the largest impediments to local governments’ embracing of energy-

⁵ A city’s downtown and adjacent neighborhoods.

⁶ Prosperous rural communities beyond the suburbs that become commuter towns for an urban area.

⁷ Cervero, Robert and Michael Duncan, 2006, Which Reduces Vehicle Travel More: Jobs-Housing Balance or Retail-Housing Mixing? *Journal of the American Planning Association*, Autumn 2006, Vol. 72, No. 4.

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efficient and climate-friendly growth patterns is the structure of local-government finance. Proposition 13 and the subsequent Proposition 218 reduced the role of property-based taxation as a local government revenue source and increased reliance on other sources, particularly local sales taxes. Before Proposition 13, property tax rates were individually levied according to the city, county, school district, and state's assessed value. Each entity could independently assess the value of a property and levy a tax based on that value. Overall tax rates were often in the range of 2 percent to 3 percent of a property's assessed value. Proposition 13 restricted the property tax rate to 1 percent of assessed value, and it prohibited reassessment of property except when it was sold. Thereafter, annual increases can amount to no more than 2 percent or the rate of inflation, whichever is less.

Proposition 13 significantly cut local tax revenue and altered the way local governments fund public services and infrastructure. In particular, it encouraged cities and counties to impose heavier exactions — sometimes known as developer fees or impact fees — to pay for roads, sewers, parks, and schools.

Local governments receive 1 percent of the state's 7 percent sales tax for sales in their local districts. So in addition to exacting fees on developers, local governments also started encouraging development that increased sales tax revenue, such as shopping malls, car dealerships and hotels. By contrast, land uses that produce only property taxes and have a high public service cost, such as moderately priced housing, became less desirable. This is believed to cause counties and cities to favor sales-tax generating retail development rather than property-tax-bound residential uses. This is commonly referred to as "the fiscalization of land use."

Other revenue demands, particularly education, have also crowded the property-tax base, making it less available for local government purposes and reducing incentives to improve the base through residential development. In 1992 and 1993, facing a \$14 billion shortfall in revenue, the Legislature shifted billions of dollars in local property tax revenues to schools to meet the state's minimum funding obligation to schools under Proposition 98. The shifted property taxes went into a fund established by the Legislature called the Educational Revenue Augmentation Fund.

As a result of these property tax policies, local land use planning and decision making commonly demonstrates a bias toward tax revenue-driven development. Such development often may pit one community against another in an effort to attract businesses that generate sales tax. Local competition for retail and auto malls rarely balances community housing needs with the benefits of non-retail business and industry, and may exacerbate transportation and associated environmental problems. The competition for the sales tax revenue can lead to local governments in the region offering escalating incentives to attract retail establishments, often through waiver of fees, favorable zoning and other means. This competition for expected sales tax revenue is commonly referred to as "the race to the bottom." These large retail establishments are often sited on large lots away from densely populated areas, requiring more vehicle travel by customers.

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2.2. Land Use Planning

2.2.1. Background

General Plan

California Planning and Zoning Law (Government Code Sec. 65300) requires every one of California's 58 counties and 478 cities to develop and adopt a general plan. General plans establish policies and goals for future actions regarding development and government operations for the next 15 to 20 years. State law requires cities and counties to include information from seven categories or elements in their general plans. The seven mandatory elements are land use, circulation, housing, conservation, open space, noise, and safety. The general plan also must include a land use map showing where residential, commercial, and industrial development should be located and where open space should be protected or new park space created. All project-level decisions must be consistent with general plan policies.

Cities and counties have the option of adopting other elements, such as an energy element, an economic element, a healthy communities element, or a climate action plan element. For example, San Diego's General Plan EIR specified the adoption of a climate action plan as an "element" of the general Plan. Some counties have also amended their general plans to recommend that the city prepare a GHG Emissions Reduction Plan.

A General Plan update must undergo CEQA analysis before adoption. Zoning ordinances are then developed and/or amended to conform with the General Plan.

California Environmental Quality Act

The California Environmental Quality Act (CEQA) requires California public agencies to identify and reduce, when feasible, any significant environmental impacts of proposed "projects". CEQA applies to both public sector activities and private sector activities (projects) that require discretionary approval actions by local governments. This will include everything from city and county land-use planning activities (general and specific plans, transportation plans, zoning ordinances, etc) to the approval of public and private development activities such as the construction and operation of government, housing, commercial, industrial, agricultural and infrastructure projects. CEQA also applies to the many approval actions taken by LAFCO's, COG's and Special Districts (School, Water, etc.) which may have impacts on local land use and development.

CEQA informs both decision makers and the public on how governmental actions may affect the environment. CEQA provides a legal framework to hold public agencies accountable for their decisions which may have an environmental impacts. A "project" is defined in CEQA as, "an activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and which is any of the following:

- (a) An activity directly undertaken by any public agency.

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(b) An activity undertaken by a person which is supported, in whole or in part, through contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.

(c) An activity that involves the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies" (PRC 21065).

To comply with CEQA, public agencies must analyze and disclose the potentially significant adverse environmental impacts of a proposed project. The agency must consider and adopt, when feasible, mitigation measures that reduce or avoid the identified significant environmental impacts. The agency must consider project alternatives that may reduce significant environmental impacts. When approving a project the public agency must make certain "findings" regarding the environmental impacts of the project and the agency's rationale for approval of a project if the project will cause a significant impact on the environment.

If the agency fails to follow the CEQA process correctly, makes erroneous or inaccurate conclusions, or fails to ensure that the mitigation measures are carried out, the public has the right to enforce CEQA's requirements by challenging the agency's action(s) in court. However, too often, even when an agency appropriately complies with the CEQA process, opponents to development may challenge a CEQA determination and delay or prevent otherwise appropriate and meritorious projects from proceeding. Such challenges are a major impediment to approving the amount of infill housing necessary to address GHG emissions in many communities and regions.

State Agency Coordination, Review, and Technical Assistance

The Governor's Office of Planning and Research's (OPR) State Clearinghouse coordinates the state level review of environmental documents pursuant to the CEQA and provides technical assistance on land use planning and CEQA. OPR and the Resources Agency are responsible for updating the *CEQA Guidelines*. OPR also publishes the *General Plan Guidelines* which provide cities and counties with advice on developing, adopting, and amending the local general plan. Several other state agencies and departments also play roles in both CEQA and planning at the local level through permit approval, general plan element review, regulatory authority and technical assistance.

Local Area Formation Commissions

Local Area Formation Commissions (LAFCo) are responsible for coordinating logical and timely changes in local governmental boundaries, conducting special studies that review ways to reorganize, simplify, and streamline governmental structure and preparing a sphere of influence for each city and special district within each county.

A sphere of influence is a planning boundary outside of an agency's legal boundary (such as the city limit line) that designates the agency's probable future boundary and service area. Factors considered in a sphere of influence review focus on the current and future land use, the current

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and future need and capacity for service, and any relevant communities of interest. Spheres for all cities and special districts are reviewed every five years.

LAFCo's efforts are directed toward seeing that services are provided efficiently and economically while agricultural and open-space lands are protected. LAFCos regulate, through approval or denial, the boundary changes proposed by other public agencies or individuals. LAFCos do not have the power to initiate boundary changes on their own, except for proposals involving the dissolution or consolidation of special districts and the merging of subsidiary districts.

LAFCos coordinate the orderly development of a community through reconciling differences between agency plans so that the most efficient urban service arrangements are created for the benefit of area residents and property owners.

2.2.2. Land Use Planning Activities Underway

Strategic Growth Council and Plan

The Strategic Growth Plan (SGP) was launched in January 2006, as a 20-year infrastructure and development investment plan for restoring and maintaining California's roads, schools, ports, and water supply. In November 2006, California voters approved the first installment of that 20-year vision to rebuild the state.

As part of the Governor's Budget Proposal for 2008-09, Governor Schwarzenegger proposed the creation of a Strategic Growth Council (Council) to aid in the continued implementation of the State's SGP. The primary purpose of the Council would be to coordinate state infrastructure and development projects to encourage sustainable land use, protect natural resources, improve air and water quality, increase the availability of affordable housing, improve transportation, and meet the goals of the Global Warming Solutions Act (AB 32).

Climate Change Guidelines for General Plans

OPR is mandated to create and publish advisory guidelines on how to address the required information in General Plans. OPR also includes information in the guidelines that is relevant to current planning practices and needs. In the next update of the General Plan Guidelines, which is currently underway, OPR will provide information about how to address climate change issues in general plans through policies, objectives and implementation measures. There is currently no established timeline for the update although OPR expects the process to last at least until the end of 2008.

GHG Guidelines for CEQA

During 2007 there was a flourish of activity dealing with GHG, climate change, CEQA and land use planning.

The Governor signed Senate Bill 97 (Chapter 185, 2007) which requires OPR to develop CEQA guidelines "for the mitigation of GHG emissions or the effects of GHG emissions." OPR is

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required to "prepare, develop, and transmit" the guidelines to the Resources Agency on or before July 1, 2009. The Resources Agency must certify and adopt the guidelines on or before January 1, 2010. Even in the absence of "guidelines" on CEQA and GHG and climate change many lead agencies have already begun to include GHG and climate change analysis in their CEQA documents.

The California Attorney General, as well as several environmental organizations filed suit and provided written comments regarding local agency actions regarding GHG, climate change, land use, and CEQA.

Many cities and counties have adopted, or begun the process of developing, policies, guiding principles and climate action plans dealing with climate change and GHG reduction.

Regional Energy Plans, Smart Growth Plans, and General Plan Energy Elements

Regional Energy Plans and General Plan Energy Elements have been produced in many areas of the state (San Diego, San Luis Obispo, Santa Barbara, Siskiyou, Mono, Butte, Modoc and other counties). These energy plans provide examples of both urban and rural energy policy that should be updated as needed and could be distributed for use by other regions and by the state.

The Energy Commission is funding a partnership with the San Diego Association of Governments to develop model general plan, Regional Comprehensive Plan, and Regional Climate Plan materials, with a focus on transferability to other regional and local bodies. It is important to understand that these plans can be developed in concert with long term growth planning by using the available Blueprint database and planning outcomes as the baseline and future growth quantification. If planning is coordinated in this way, then energy cost, emission, and alternatives information will be a meaningful component of regional and local economic and environmental policy.

Regional Community Smart Growth Planning Grants

In both San Diego and Sacramento, the regional governments are offering local communities funding support to develop projects that integrate smart growth land uses and transportation facilities described in the regional Blueprint planning and smart growth documentation. Eligible projects include: bicycle and pedestrian paths and bridges; on-street bike lanes; pedestrian plazas; pedestrian street crossings; and pedestrian bulb-outs or traffic circles. In addition, other potential projects are transit stop amenities, and streetscape enhancements such as median landscaping, street trees, lighting, and street furniture. In San Diego, beginning in 2008, a more comprehensive \$280 million smart growth incentive program will be funded through the local TransNet half-cent sales tax program.

Community Operations Toolkit

The ARB is developing a "tool kit" of voluntary measures and best practices for GHG emission reductions for local governments and small businesses (collectively called "communities"). A

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Community Operations Toolkit will assist communities in the reduction of GHG emissions through operational and behavioral changes such as increasing energy efficiency, green building, cool community practices, water conservation, waste management, renewable energy generation, climate-friendly procurement, and promoting community and individual actions. While a handful of local governments and small businesses in California have already started to plan and implement local GHG emission reduction measures, development of a Community Operations Toolkit will encourage and support greater and coordinated local action statewide. Furthermore, development of this resource will help ensure consistency and coordination between the multiple state agencies involved with implementing the Global Warming Solutions Act, with regard to supporting and advising local government and small business actions for GHG reductions.

This initiative was approved as an Early Action Item and will be presented to the Board in September 2008. The "tool kit" will include among other resources a Municipal Operations Protocol, which will assist cities and counties to establish a baseline GHG emissions inventory and provide methods to quantify GHG emission reductions. ARB staff is working closely with the California Climate Action Registry and ICLEI, Local Governments for Sustainability, to develop the Municipal Operations Protocol. This will be the first in a suite of protocols to assist cities and counties in California.

A toolkit can bring uniformity to the emission accounting, reporting, and verification process and recognition that the changes implemented result in real, verifiable, and permanent GHG emission reductions. Various stakeholders have suggested that the state require all local governments to develop climate action plans or include a climate element to their existing general plans as a mandatory measure to reduce GHG emissions. LUSCAT does not support mandatory local climate action plans. But, as an appendix to the toolkit, LUSCAT recommends that ARB develop a Climate Action Plan Template to assist local governments and small businesses to 1) conduct a baseline, 2) adopt an emissions reduction target, 3) develop a plan for reducing emissions, 4) implement policies and measures, and 5) monitor and verify results. A state provided template would provide a consistent method to ensure voluntary actions taken by communities are consistent and verifiable.

2.2.3. Improving Land Use Planning

Technical Assistance

There is a lack of guidance for local and regional governments on how to include climate change considerations into their planning activities. Success depends upon the quality of the integrated planning necessary to achieve both smart growth outcomes and GHG reduction.

The state should provide regional and local governments both 1) guidance on how to include climate change considerations into their planning activities, including removing barriers to smart housing development, and 2) education, training and mentoring for data collection and maintenance, travel and land use modeling, planning methods, public participation, Guidance also should be provided for methods of using the regional and local data and planning

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processes to adapt land use choices, policies and programs to reduce the adverse effects of expected impacts of climate change and protect resources for terrestrial sequestration.

Data Provision and Development

The state should make its GIS data available to local and regional government. The state should work with regional and local government to identify missing crucial planning data and identify strategies to obtain or develop it.

Consistent Planning and Implementation Funding

There is a lack of funding for local and regional governments to adequately engage in long range comprehensive planning efforts and their implementation. For example:

(1) City and county general plans require multiple technical studies, extensive public outreach, and CEQA review. In addition, the implementation of a community's general plan requires the production of zoning codes, the updating of all other plans so they are consistent with the general plan. There may also be additional plans or actions that are indicated in the general plan such as park plans, habitat plans, safety plans and community plans.

(2) Regional plans, such as Habitat Conservation Plans (HCPs) and Natural Communities Conservation Plans (NCCPs) are time consuming and costly. The State should invest in data and regional planning efforts.

(3) Regional Blueprint Plans provide an opportunity to coordinate multiple planning activities for more efficient and effective results; however the current funding stream limits the effectiveness of the plans by allowing them to only use funds for transportation related activities.

There is also lack of funding or alternative financing mechanisms for local governments to engage in the implementation of activities to reduce GHG emission reductions, particularly related to infrastructure and transit.

The state should work with regional and local government to develop consistent funding mechanisms to support planning activities and plan implementation that are not solely dependent on sales tax revenues, new development, or transportation funds.

State, Regional and Local Coordination

The state should use the Strategic Growth Council to better coordinate state infrastructure and development activities. The SGC should provide clear policy direction on state land use and resource goals concerning the implementation of projects using state funding. The state should continue to support ongoing urban regional blueprint plans and support the creation of rural blueprint plans.

The state should work with regional and local governments to develop planning processes that allow for effective coordination and allow all levels of government to more quickly respond to the impacts of climate change. The ability of the state to adapt to a rapidly changing environment will determine our future economic and social health.

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2.3. Transportation Planning

2.3.1. Background

Federal government agencies in transportation planning

Most federal transportation functions are consolidated under the U.S. Department of Transportation. Two agencies within the DOT are critical to the transportation programming/funding process in California: The Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA). These two agencies work together to administer ISTEA and its transportation programming and funding requirements. In this capacity, they oversee the work of state, regional and local transportation agencies.

The Federal Transportation Efficiency Act (TEA), reauthorized every six years (but with frequent delays), guaranteed spending, in its delayed 2005 reauthorization, of \$286.4 billion dollars over six years. About fifteen percent was guaranteed for transit. This was a 38 percent increase in overall funding from the prior reauthorization; however the allotment for transit did not increase much. The next reauthorization is due in about 2009. Locally, these transit dollars do not go very far to meeting defined needs. Since 2000, about 70 percent of local ballot measures to increase transit funding have passed by voters. In Denver, a very successful transit system that will add 119 miles of light rail track, 18 miles of bus rapid transit and 50 new transit stations was approved. Eighty percent of the \$4.7 billion dollar price tag was paid locally by a voter improved sales tax increase.

FHWA is responsible for all federally sponsored highways programming and funding. In this capacity it oversees the preparation of each state's State Transportation Improvement Program (STIP), which is required under federal transportation law. FHWA also oversees the distribution of ISTEA highway money.

FTA is in a parallel position with respect to transit. The agency administers all federally sponsored programming and funding for transit-related projects. FTA works directly with regional and local transportation agencies.

State government agencies in transportation planning

The two state agencies in California primarily responsible for transportation are the California Transportation Commission (CTC) and the California Department of Transportation (Caltrans). The CTC's primary job is to allocate all federal transportation funds and all state transportation funds, including gas tax and sales tax revenue. The CTC's main programming vehicle is the STIP. This document includes a five-year plan for funding of all transportation capital projects.⁸

The STIP is composed of 1) "regional projects" (that are nominated by regional entities and 2) "interregional projects" (that are nominated by Caltrans in their ITIP). Three quarters of STIP funds go to the regional entities and one quarter goes to Caltrans. Of the 75% that go to the

⁸ The STIP is funded with both federal (seventy percent) and state (thirty percent) dollars. Although the amount varies each year, about \$1.5-\$2.0 billion total is allocated annually for the projects prioritized in the STIP.

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regional entities, a formula is used that further subdivides the money into county shares, based on population and highway miles.

Caltrans is responsible for engineering and planning, and for the construction and maintenance of all state highways and major arterials and roads. Caltrans also provides funding for a variety of other transportation projects and programs ranging from intercity rail lines to transportation demand management programs to the landscaping of scenic highways.

The California Transportation Plan (CTP) is a statewide, long-range transportation policy plan that provides for the movement of people, goods, services, and information. The CTP offers a blueprint to guide future transportation decisions and investments that will ensure California's ability to compete globally, provide safe and effective mobility for all persons, better link transportation and land use decisions, improve air quality, and reduce petroleum energy consumption.

The CTP, which is the product of extensive public outreach and consultation with transportation partners and stakeholders, presents a vision for California's future transportation system, and defines goals, policies, and strategies to reach the vision. The CTP vision is one of a fully integrated, multimodal, sustainable transportation system that supports the three outcomes (3Es) that define quality of life – prosperous economy, quality environment, and social equity.

The California High Speed Rail Authority

The California High Speed Rail Authority (Authority) was created pursuant to state legislation in 1996 to develop a plan for the construction, operation, and financing of a statewide, intercity high-speed passenger train system offering intercity service. The Authority does not have responsibility for other intercity transportation systems or facilities used for intercity trips, such as highways, airports, conventional passenger rail or transit.

In June 2000, the Authority adopted the final business plan (Business Plan) (California High Speed Authority 2000) for an economically viable 700-mile-long (1,127-kilometer-long) HST system. This system would be capable of speeds in excess of 200 miles per hour (mph) (322 kilometers per hour [kph]) and would travel on a mostly dedicated system with fully grade-separated tracks with state-of-the art safety, signaling, and automated train control systems. It would connect and serve the major metropolitan areas of California, extending from Sacramento and the San Francisco Bay Area through the Central Valley to Los Angeles and San Diego. Such a system would be expected to carry a minimum of 42 million passengers annually, representing 32 million intercity trips and 10 million commuter trips, by the year 2020 and would have revenues in excess of operations and maintenance costs.

Regional Transportation Planning and RTPs, RTIPs, and RTPAs

State and federal transportation law requires local and or metropolitan agencies to engage in a wide variety of transportation activities. The metropolitan planning organization (MPO) is a regional agency designated by the U.S. Department of Transportation to carry out several

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functions specifically required under federal transportation law. Among other things, the MPO is charged with preparing a Regional Transportation Plan (RTP), the long-range plan for transportation in a particular region. Rural Transportation Planning Area (RTPAs) in California serve areas outside of the MPOs. In some cases an RTPA is embedded in a MPOs and benefits from the MPOs resources.

The federal government requires that MPOs and RTPAs prepare RTPs to address transportation needs at least 20, often 25 or more years into the future. These plans must be updated every four years if the MPO is in a non-attainment area according to the Federal Clean Air Act and every five years if in attainment. The result is that MPOs are updating and improving data, modeling capacity, planning methods and outreach on a very regular and frequent schedule. Between now and 2020 it is likely that an additional three RTP cycles will have been completed in most MPOs. By 2020, RTPs will be analyzing and planning for land use and travel at least out to 2040, and more likely 2045 or 2050.

Regional Transportation Improvement Plans (RTIPs) are also produced by MPOs and RTPAs. These are short term versions of the RTP and lay out projects determined to be ready to be built. RTIPs can affect the value of speculative land near the projects listed. In this way, they can be a tool for inducing investment into Blueprint compliant and GHG reducing action. Therefore, the state can develop funding order rules to provide an incentive for sustainable projects within a region. RTIPs are provided to Caltrans and consolidated into the State Transportation Improvement Plan.

RTPs and RTIPs integrate the transportation plans of all of the cities and counties within their jurisdictions. Once the RTIPs are funded and set into motion, transportation fuel demand is essentially set for many decades. Transportation energy consumption associated with the actions included in the RTIP can then only be affected by changes in end-use technology or regulatory intervention.

RTP Guidelines

The CTC adopts and updates RTP Guidelines, which are intended to provide direction to MPOs and RTPAs in the development of RTPs consistent with federal and State transportation planning requirements. While MPOs and RTPAs have the flexibility to be creative in selecting transportation planning options that best fit their regional needs, the Guidelines reflect both the mandates of state and federal statute and regulations, as well as the Commission's expectations for the use of best practices.

Pursuant to a request forwarded in a letter to the CTC from Senate Pro Tempore Don Perata in January 2007, the CTC undertook a review of its RTP Guidelines to determine how climate change emission reduction measures could be incorporated. As a result of this process, the Guidelines have been amended to include considerations and strategies for developing GHG-reduction strategies within RTPs. Furthermore, as part of this process, recommendations for statutes requiring RTPs to include a GHG reduction strategy were forwarded to the legislature.

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Each RTP cycle offers an opportunity to advance the GHG technology and programs. Locally elected city and county officials comprise the Board of MPOs. This provides a direct mechanism to transfer information from regional to local planning tables and back again. The relationship between RTPs and General Plans provides an opportunity to link GHG reduction assistance, mandates, and incentives with federal investment in transportation infrastructure, transit planning, land use and economic development planning, and citizen participation into one arena. It also provides access to one of the larger infrastructure planning cycles to integrate advanced 2050 goals and climate change adaptation policy as those portions of the California climate change effort evolve.

Figure 1 – California MPOs and RTPAs

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needs.⁹ More integrated, longer term plans will benefit transportation planning by coordinating multiple levels of government in rural areas, produce plans that are more consistent and comparable, and potentially contribute to rural economic development and environmental protection.

An opportunity exists to improve the land use, transportation and GHG reduction planning capacity of RTPAs by providing education, training and better on line access to planning software. If the MPOs use similar software, the integration of urban and rural plans will be simplified. Additionally, if MPOs gather and share data, analytical capacity could be improved and resources could be conserved.

MPOs are working to improve the ability to integrate rural lands into regional plans by improving rural data, land use practice knowledge, and economic strategies. This will help to promote land use practices in rural areas that are economically viable for land owners and environmentally sustainable. Issues the planning development effort will address include, but are not limited to: alternative agricultural practices, natural resources protection, infrastructure needs in rural areas (e.g., processing facilities and worker housing/schools), energy production, and methods to promote jobs-housing balance (with a specific emphasis on effective job-generating practices in appropriate areas). Because this information can be integrated with urban and suburban components, it will improve the regional planning capacity for flood control, groundwater recharge, and carbon sequestration, which all are enhanced through a comprehensive approach to urban and rural planning.

2.3.2. Transportation Planning Activities Underway

CalTrans Climate Action Program

In June of 2007 CalTrans started a new interdisciplinary effort intended to promote and facilitate GHG emission reduction measures and greening within the Department. The overall objective of the Climate Action Program is to encourage innovative ways to balance progressive program delivery and responsible environmental stewardship such that:

- transportation strategies, plans, and projects as a whole contribute to the State's GHG emission reduction targets, and
- proper guidelines, procedures, and a quantifiable set of reporting protocols are in place to monitor GHG footprints and provide feedback for program development and implementation.

The Climate Action Program serves as a resource for technical assistance, training, information exchange, and partnership-building opportunities.

California Regional Blueprint Planning Program

The Regional Blueprint Planning Grants Program was initiated in 2005 by the Secretary of Business, Transportation and Housing and is currently managed by Caltrans and OPR. This

⁹ Federal Highway Administration, Planning for Rural Needs, <http://www.fhwa.dot.gov/Planning/rural/planningfortrans/appendixb.html>

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program, which has distributed nearly \$5 million annually in the last three grant cycles, funds the enhancement of linkages between land use and transportation planning by using planning scenarios to support coordinated regional and local decision-making. The program promotes the pro-active engagement of community residents, as well as critical stakeholders such as business interests, academia, builders, environmental advocates, conservationists and state entities to foster consensus on a vision and a preferred transportation land use plan. Regional Blueprint Planning is underway in 16 of 18 MPOs within California. In addition, Caltrans has recently initiated rural Blueprint grants.

Two key goals of the state Blueprint Planning Program are to:

- Foster a more efficient land use pattern that (a) supports improved mobility and reduced dependency on single-occupant vehicle trips, (b) accommodates an adequate supply of housing for all incomes, (c) reduces impacts on valuable habitat, productive farmland, and air quality, (d) increases resource use efficiency, and (e) results in safe and vibrant neighborhoods.
- Provide consumers more housing and transportation choices.

The analysis of GHG reduction is not required by the Blueprint grants but it is recommended and Blueprints that address GHGs and climate change are given extra consideration. Many of the MPOs have been independently working on GHG and energy issues in an attempt to understand the risk imposed on regional mobility from energy supply disruptions, peak oil, cost increases, and emission regulation changes, including GHG emission reduction. In addition, Blueprints analyze the VMT created or reduced in each scenario. Since VMT is roughly equivalent to GHG, all the Blueprint scenarios give some idea of the GHGs they create or reduce.

The California investment in regional blueprint planning could have tremendous benefits to both transportation and building energy savings and GHG gas emissions reduction. This program could serve as the analytical regional and local government backbone of the state's efforts to affect sustainable energy use and greenhouse reduction in multiple disciplines.

Of key importance is the fact that Blueprint Plans are the joint product of MPO and local government collaboration. MPOs hold transportation planning and funding authority. Cities and counties possess land use authority. The MPO Board of Directors is comprised of elected officials from the cities and counties of the MPO's jurisdiction. The MPO, then, is an ideal forum to build consensus and political will, deploy legal authority to take action and schedule funding to implement sustainable land use, transportation and energy plans. However, given the complexity of the challenge and diversity of stakeholders the State should provide technical assistance, resources and clearer direction to ensure more effective stakeholder engagement and actual implementation of Blueprint plans.

Blueprint Learning Network

The Business, Transportation and Housing Agency (B,T&H) established the Blueprint Learning Network (BLN) to bring together state, regional and local decision makers to support regional blueprint planning. The purpose of the BLN is to work with regional teams (MPOs and stakeholders) to establish a forum, including a series of workshops on overcoming the

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challenges and obstacles to effective regional blueprint planning, and to share experiences and advice.

2.3.3. Improving Transportation Planning

Blueprint Program Improvements

The Blueprint Program and the data, integrated planning process, and public awareness it has created, can serve as an established vehicle for integrating climate change policy into RTPs and into local government General Plans that implement the RTPs. The comprehensiveness and detail of the many Blueprint Plans developed with state grant funding should be both improved and made more consistent statewide. In addition, the State must ensure the regions move beyond planning and developing Regional Blueprint Plans and begin to effectively implement. Any additional Blueprint funding resources should be tied to demonstration of progress in implementation across all blueprint goals, including housing, transportation, and resource protection. GHG emission reduction objectives can also be more effectively achieved if existing Blueprint Plans improve their progress and focus on increasing opportunities for higher density and affordable housing.

Transportation Modeling

Transportation demand modeling (TDM) has been used for many years to predict effects of new development on roadway congestion and mass transit ridership. However, predictive models in use today by many metropolitan planning organizations are out of date resulting in many planners being unable to accurately account for the benefits of urban infill and smart growth. As a result, development strategies with recognized benefits and VMT reduction potential may be discounted.

A few of the California MPOs¹⁰ are using or developing activity based travel modeling capacity known to be better at quantifying smart growth options needed for GHG-efficient land use planning, quantification and tracking. These tools also provide co-benefits including better air quality conformity studies, policy analysis (if parcel based) and prioritizing of transportation projects for funding.

Data Development and Maintenance Opportunities

If regional data collectives are established and activity-based travel models become the standard, then GHG emission reduction quantification, planning and tracking of results should be improved within each MPO and across the state's major MPOs. As new technical data linking land use and GHG emissions is developed, it can be formatted to be more readily integrated into data bases and models if they have, over the RTP cycles, become more standardized. A central state-supported system to provide technical and policy assistance could be used to inform MPOs and local governments and to deploy new data and tools in a quality controlled manner.

¹⁰ San Francisco County Transportation Authority (SFCTA), the Metropolitan Transportation Commission (MTC) in the Bay Area, the Southern California Association of Governments (SCAG), and the Sacramento Area Council of Governments (SACOG).

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Training, Education and Resources

Local and regional governments need training and technical assistance to ensure transportation planners and engineers have a working knowledge of climate issues and ability to address these issues in the development of transportation plans and projects. State guidelines and policies should include provisions for the integration of GHG emission reduction measures.

Transportation Financing Program Criteria

Criteria for State programs that fund local transportation projects do not consider the role of projects proposed for funding in mitigating climate change. State agencies with transportation funding programs should examine their criteria and, when within their statutory authority, incorporate climate change considerations.

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2.4. Housing

2.4.1. Background

State Housing Policies and Laws

State law requires each city and county to adopt a general plan containing at least seven elements including housing. Unlike the other mandatory general plan elements, the housing element, required to be updated approximately every five years, is subject to detailed statutory requirements and mandatory review by a State agency (Department of Housing and Community Development (HCD)). Housing elements have been mandatory portions of general plans since 1969. This reflects the statutory recognition that the availability of housing is a matter of statewide importance and that cooperation between government and the private sector is critical to attainment of the State's housing goals.

Housing element law requires local governments to adequately plan to meet their existing and projected housing needs, including their share of the regional housing need. Housing element law is the State's primary market-based strategy to increase housing supply, choice, and affordability. The law recognizes that in order for the private sector to adequately address housing needs and demand, local governments must adopt land-use plans and regulatory schemes that provide opportunities for, and do not unduly constrain, housing development.

The housing element process begins with HCD, in cooperation with the COGs, allocating a region's share of the statewide housing need to COGs based on Department of Finance population projections and regional population forecasts used in preparing RTPs. The COG develops a Regional Housing Need Plan (RHNP) allocating the region's share of the statewide need to the cities and counties within the region. The RHNP is required to promote the following objectives to:

- increase the housing supply and the mix of housing types, tenure, and affordability in all cities and counties within the region in an equitable manner;
- promote infill development and socioeconomic equity, the protection of environmental and agricultural resources, and the encouragement of efficient development patterns; and
- promote an improved intraregional relationship between jobs and housing.

Housing element law recognizes the most critical decisions regarding housing development occur at the local level within the context of the periodically updated general plan. The RHNP component of the general plan requires local governments to balance the need for growth, including the need for additional housing, against other competing local interests. The RHNP process of housing element law promotes the State's interest in encouraging open markets and providing opportunities for the private sector to address the State's housing demand, while leaving the ultimate decision about how and where to plan for growth at the regional and local levels. While land-use planning is fundamentally a local issue, the availability of housing is a matter of statewide importance.

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Housing element law requires local governments to be accountable for ensuring projected housing needs can be accommodated. The process maintains local control over where and what type of development should occur in local communities while providing the opportunity for the private sector to meet market demand.

Regional Housing Need Allocation Process

As described above California's Housing Element Law mandates that COGs develop the RHNP for their service area. The Regional Housing Need Allocation (RHNA) is a minimum projection of additional housing units needed to accommodate projected household growth of all income levels by the end of the housing element's statutory planning period. The allocation period is for a short term period of 7.5 – 8.5 years.

The RHNA has two parts as required by state law. Part 1 is an allocation of the total number of housing units to each jurisdiction for which zoning capacity must be provided for a given 7 and a half year period. This part is referred to as the "overall regional allocation". Part 2 is the distribution of the same total number regional allocation of units among four income categories; the sum of the housing units within the four categories must add up to the regional total overall number of units. Part 2 is referred to as the "income category distribution," which is used to plan for a mix of housing types and affordability.

The four income categories are:

- Very Low (0-50% of AMI)
- Low (51-80% of AMI)
- Moderate (81-120% of AMI)
- Above Moderate (over 120% of AMI)

In addition to State housing element law, a number of other state statutes address housing needs and conditions and both require specific local action or act to limit arbitrary denials of affordable housing. Many of these laws are designed to both promote housing affordability and promote higher densities and maximize existing land resources. Examples of such laws include:

Least-Cost Zoning Law.

The least-cost zoning law requires local agencies to zone sufficient vacant land to meet the housing needs of all segments of the population, including low- and moderate-income households. The law also requires that the zoning standards adopted by local agencies allow for the production of housing at the lowest possible cost. There are penalties for noncompliance, including a court order to approve applications related to the zoning deficiency.

Density Bonus Law

This law requires local governments to provide density increases and regulatory incentives or concessions when a housing developer agrees to set aside a specified proportion of the units in a proposed housing project for units affordable to very low, low, or moderate income households. The law establishes a mandatory sliding scale density bonus provision based on the proposed level of affordability and also mandates limits on parking standards under specified conditions.

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No-Net Loss Law

This section of state law generally prohibits downzoning of sites identified in the housing element unless the local government can demonstrate the downzoning would result in no net loss of housing capacity and the community can still identify adequate sites to address their regional housing need.

Housing Accountability Act

This act prohibits local governments from denying approval of specified housing developments affordable to low or moderate income households unless certain findings are made.

Federal and State Fair Housing laws

State Law (Government Code Section 12900 et seq.) prohibits discrimination through land use practices and decisions that make housing opportunities unavailable. Similarly, the federal Fair Housing Act (42 U.S.C. Sec. 3601 et seq., or "Title VIII") has been held to prohibit land use practices and decisions that have a disparate impact on protected groups.

State law also forbids using planning and zoning powers in a manner that discriminates against affordable or multi-family housing development proposals, developers or potential residents.

Inclusionary Housing

Local governments may establish inclusionary zoning provisions, requiring new housing developments to include a certain percentage of affordable units. More than 100 local agencies throughout the state use this strategy. The typical inclusionary ordinance requires that between 10 and 20 percent of all new units be affordable to moderate-, low-, or very low-income families. In most cases the affordability requirements last for at least 30 years, although some are much longer. Local agencies must monitor the units while the affordability requirement is in effect to ensure that they are rented or resold at affordable rates.

2.4.2. Housing Activities Underway

Infill Infrastructure Grant Program

The Infill Infrastructure Grant Program was funded by Proposition 1C, the Housing and Emergency Shelter Trust Fund Act of 2006. Its primary objective is to promote infill housing development. The program seeks to accomplish this objective by providing financial assistance for infrastructure improvements necessary to facilitate new infill housing development.

Under the program, grants are available as gap funding for infrastructure improvements necessary for specific residential or mixed use infill development projects. Both infill projects and areas must have either been previously developed or be largely surrounded by development.

Specific eligible improvements include: development or rehabilitation of parks or open space, water, sewer or other utility service improvements, streets, roads, parking structures, transit linkages, transit shelters, traffic mitigation features, sidewalks and streetscape improvements.

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Funds will be allocated through a competitive process, based on the merits of the individual infill projects and areas. The application selection criteria include project readiness, housing affordability, housing density, proximity and access to transit, parks, employment centers, and consistency with a regional blueprint or similar regional growth plan.

Transit Oriented Development (TOD) Housing Program

The TOD Housing Program was funded by Proposition 1C, the Housing and Emergency Shelter Trust Fund Act of 2006. Its primary objectives are to increase the overall supply of housing, increase the supply of affordable housing, increase public transit ridership, and minimize automobile trips. The program seeks to accomplish these objectives by providing financial assistance for the development of housing and related infrastructure near public transit stations.

Under the program, low-interest loans are available as gap financing for rental housing developments that include affordable units, and as mortgage assistance for homeownership developments. In addition, grants are available to cities, counties, and transit agencies for infrastructure improvements necessary for the development of specified housing developments, or to facilitate connections between these developments and the transit station.

Research indicates that TOD development is most effective in minimizing automobile trips and increasing public transit ridership where there is substantial roadway congestion and convenient and reliable transit in high density areas. For this reason, assisted developments must be located in areas with these characteristics.

Numerous other State housing programs provide incentives and competitive advantage for housing projects located in infill locations and close to jobs, transit or amenities.

Brownfield Development

Brownfields are properties that are or perceived to be contaminated and are underutilized due to cleanup costs and liability concerns. When agricultural and green spaces are developed for residential, commercial or industrial uses, infrastructure such as roads and sewers must be developed. That redundant infrastructure wastes scarce tax dollars and adds to the burden on California's environment. Redeveloping urban brownfields properties optimizes the use of existing infrastructure and protects our precious resources. The Department of Toxic Substances Control, State Water Resources Control Board, and Regional Water Quality Control Boards have integrated existing programs and developed a number of new tools to facilitate reuse of brownfields properties.

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2.4.3. Improving Housing Availability

Training, Education and Resources

Local governments need technical assistance on strategies to incorporate climate change considerations into housing element updates. HCD should expand its technical assistance for housing element updates to include climate change strategies.

Housing Financing Program Criteria

State programs that fund local housing projects should consider how existing funding requirements could more effectively promote developments that contribute to mitigating against climate change. State agencies with housing funding programs should examine their criteria and, when appropriate and within their statutory authority, incorporate climate change considerations.

Removal of Barriers

Land Availability for Housing

More land must be zoned for higher density, attached single family and multifamily housing.

Infill Development Barriers Drive up Costs and Limit Development of Affordable Housing

There is distinct difficulty in developing the economies of scale necessary (small parcels, scattered sites, expensive site remediation) for infill and affordable development to be built. Strategies to address barriers to infill development must be adopted by all levels of government.

Infrastructure and Land Costs

Additional resources and strategies are needed to address the high costs of upgrading or expanding inadequate infrastructure or to develop new infrastructure and high land costs which represent significant obstacles to infill and affordable housing projects.

Neighborhood resistance

There is significant public resistance to new housing development, particularly higher density or affordable housing. Often, those impacted by new infill development or densification (neighbors) don't reap the broader public benefits from it. Public engagement and education strategies must be developed and implemented.

The entitlement process for housing, especially infill, is uncertain, lengthy, and costly.

The inappropriate use of the CEQA process thwarts more than facilitates residential infill development. Existing infill exemption provisions for infill do not work. Mitigation practices, including Level of Service standards, favor accommodating auto use. More residential development certainty and streamlining the approval process for infill and affordable housing is necessary.

Insufficient amounts of affordable housing, especially proximate to job centers, results in poorer quality of life for families and longer commutes. A reliable, permanent source of funding for affordable housing must be identified and adopted.

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Meeting housing needs will require allowing a greater mix of housing types in a variety of locations. While it is critical for more infill housing to be developed, more compact and efficient housing development is needed in locations throughout the state.

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2.5. Natural Resources Protection and Agricultural Land

2.5.1. Background

The Department of Conservation (DOC) provides information, maps, grants, funding and technical assistance to local governments, landowners, resource conservation districts, property owners and non-profit organizations through the State with the goal of conserving the state's agricultural and natural resources through the following programs:

The California Land Conservation Act, better known as the Williamson Act protects 16.9 million of the state's 29 million acres of farm and ranch lands. Cities and counties that elect to participate in the program offer 10 year contracts to landowners who agree to restrict their land to agricultural and open-space uses. In return, landowners receive property tax assessments which are 20 to 75 percent lower in tax liability, as opposed to full market value of the lands.

The Farmland Mapping and Monitoring Program (FMMP) produces maps and statistical data to assist local, state and federal governments in analyzing impacts to, and making informed land use decision about, the best utilization of California's farmlands. Maps and statistical data are provided on the amount, type and quality of farm lands and the conversion rate to non-agricultural use. Agricultural lands are mapped according to classifications such as prime and unique, along with other categories to help prioritize lands to protect. The maps are updated every two years with the use of aerial photographs, a computer mapping system, public review, and field reconnaissance.

The California Farmland Conservancy Program provides grant funding to establish agricultural conservation easements to preserve agricultural lands. Agricultural conservation elements are voluntary, legally recorded deed restrictions which keep land permanently in agriculture. The CFCP also provides planning grants to local governments and qualified non-profit organizations. The DOC provides assistance to California's 102 Resource Conservation Districts (RCDs) in their mission to develop a land stewardship ethic that promotes long-term sustainability of the state's rich and diverse natural resource heritage

2.5.2. Natural Resources and Agricultural Land Protection Activities Underway

The DOC is establishing an advisory group to help identify ecosystem services and tools to evaluate green house gas impacts from conversion of agricultural and open space lands in local land use planning decisions.

The DOC has also begun research on: 1) tax policies which may be encouraging conversion of agricultural and open space lands and 2) ways to improve transfer of development rights in California.

The DOC is currently reviewing its funding programs, including, but not limited to, watershed grants, recycling grants, farmland easements and incorporating climate change considerations, where appropriate.

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The DOC is working with the California Watershed Advisory Committee to develop a statewide watershed management approach that meets state objectives, including green house gas reduction targets.

The DOC is working with California Association Resources Conservation Districts to determine how districts can help California meet its green house gas reduction targets.

2.5.3. Improving Natural Resources and Agricultural Land Protection

Valuing Ecosystem Services

There is no market system in California that can put a value on the ecosystem services or identify the affects of GHG emissions on agricultural and open space lands so that mitigation measures and markets can be developed. Terrestrial sequestration is a service that could have significant benefit for meeting the State's climate goals if its value could be quantified.

Tax Policy

Tax and fiscal policies encourage the conversion of agricultural lands to non-agricultural uses. Cities, counties, school districts, landowners, etc. are influenced by these policies. The State should examine these perceived impacts and offer recommendations on alleviating them.

Mitigation

Currently the use of mitigation as an option to comply with natural resources protection programs does not involve the valuing of the sequestration potential of either project or mitigation land. The State should consider climate impacts in the mitigation programs that it oversees or sets guidelines for.

Natural Resource Protection and Agricultural Land Protection Financing Program Criteria

Criteria for State programs that fund land or resource protection projects do not fully consider the role of projects proposed for funding in mitigating against climate change. State agencies with land or resource protection funding programs should examine their criteria and, when within their statutory authority, incorporate climate change considerations.

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2.6. Water Planning, Distribution and Quality

2.6.1. Background

Working with stakeholders the Department of Water Resources (DWR) develops the California Water Plan, the state's strategic plan for managing water resources statewide. It is updated every five years, as required by the California Water Code. The Water Plan is a key element in the Governor's Strategic Growth Plan. The last update, released in 2005, outlined two key initiatives:

- Promote integrated regional water management through regional partnerships and diversified management strategies.
- Maintain and improve statewide water management systems.

The Water Plan helps to enable GHG-efficient growth by committing DWR to working with other state agencies to develop and help implement strategies to reduce GHG emissions, as well as by encouraging state and local government agencies to improve coordination between land use planning, water planning and management.

California Water Plan Update 2009 will track and report progress on action plan items and initiatives, and will address the potential impacts of climate change. The update will be prepared in partnership with 16 other state agencies.

The State Water Resources Control Board (SWRCB) is responsible for administering the state's storm water management program. The SWRCB oversees 9 Regional Water Resources Control Boards (Water Boards) that adopt NPDES¹¹ storm water permits for municipal separate storm sewer systems (MS4s) that serve a population of 100,000 or more in their particular regions. Municipalities and counties must comply with the requirements established by their regional boards in these permits. Many of California's municipalities have adopted storm water ordinances or other regulatory tools and implemented programs of their own to comply with the conditions of the NPDES municipal storm water permits. To date, the majority of California's municipal storm water permits require that pollutant discharges be reduced to the maximum extent practicable. Numeric treatment requirements have not been established at the state or regional level.

In early 2005, the SWRCB adopted sustainability as a core value for all California Water Boards' activities and programs, and directed Water Board staff to consider sustainability in all future policies, guidelines and regulatory actions. One of the outcomes of this is Low Impact Development (LID). Unlike traditional stormwater management, which collects and conveys storm water runoff through storm drains, pipes, or other conveyances to a centralized storm water facility, LID takes a different approach by using site design and storm water management to maintain the site's pre-development runoff rates and volumes. The goal of LID is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, store, evaporate

¹¹ National Pollution Discharge Elimination System

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and detain runoff close to the source of rainfall. LID is seen as an alternative to conventional storm water management. This can reduce the amount of stormwater needed to be treated as well as recharging groundwater supplies, which can reduce the need to import energy intensive water supplies.

The Water Boards are advancing LID in California through the following:

- Regulation through site-specific and general permits.
- Providing advocacy and outreach to local governments through the Water Board's Training Academy and regional workshops.
- Researching how to incorporate LID language in to Standard Urban Storm Water Mitigation Plan (SUSMP) requirements.
- Funding LID related projects through the consolidated grants program.

2.6.2. Water Planning, Supply and Quality Activities Underway

The State Water Board held a joint meeting with the Department of Water Resources (DWR) in August 2007, to solicit public input on how both agencies could help meet the goals of AB 32 and integrate climate change considerations into existing policies, regulatory responsibilities, and grant programs. Recommendations from the joint meeting have been evaluated by State Water Board staff, and in April 2008 the State Water Board directed staff to proceed with development of several of the measures, including the following, which have a direct or indirect link to land use:

- Consider GHG emissions that could be produced in the development of water quality standards.
- Develop partnerships (pilots) with local entities to evaluate strategies and measures at the local level before recommending for statewide consideration.
- Increase research and adopt standards that address potential (emerging) contaminants and public concerns of recycled water and storm water, such as xenobiotics, in order to ensure a safe supply and increase public confidence and acceptance.
- Address climate change in Basin Plans in order to reduce energy use and enhance local water supply. Promote water conservation, storm water reuse and recycling through state policy.
- Promote research to identify ways to reduce GHG emissions from septic tanks and increase regulation to limit those emissions accordingly.

In addition, the SWRCB and Water Boards' Draft Strategic Plan Update 2008-2012 directs staff to ensure that climate change and other Water Board priorities are appropriately balanced and integrated.

2.6.3. Improving Water Planning, Supply and Quality

State-wide water management and supply

Currently the system of water management is dependent on conveyance and export water. In order to provide more regional self sufficiency, water supply needs to be managed in a manner

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that reduces demand, reduces regional reliance on imported water, and increases a mixed portfolio of water sources and management.

Land use

Patterns of land use affect water use and water demand has a direct correlation with energy. Agricultural production should be directed toward good soils, mild climate and available water. When prime and productive farmlands are converted to urban development, agriculture may be displaced to other locations, which could impact water and other resource uses. Traditional large lot urban development produces high water demand for landscaping, oversized parks, golf courses and commercial business parks with landscaping. As urban development occurs in hotter regions of the state, this pattern of land use is projected to increase water use for landscaping to about 80% of total water demand. More compact, mixed use urban development reduces landscaping water demand.

Infrastructure

The current water supply infrastructure is energy dependent and relies on energy brought to the location of the pump or processing facility.. By using alternative energy and on-site generation for water conveyance, groundwater pumping, water treatment and waste water treatment, GHG energy sources would be reduced. Other water supply and conveyance infrastructure barriers are the lack of regional interties and other more efficient ways of transporting and supplying water.

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2.7. Electricity Generation and Transmission

2.7.1. Background

Prior to 1975 utilities were required to go through a multi-year process to obtain permits from numerous federal, state and local agencies before constructing new power facilities. The Legislature revised this process in 1975 and established a comprehensive siting process for new energy facilities at the California Energy Commission (CEC). The Legislature gave the CEC the statutory authority to license thermal power plants of 50 megawatts (MW) or greater and related transmission lines, fuel supply lines, and related facilities.

The CEC ensures that needed energy facilities are authorized according to this process in an expeditious, safe and environmentally acceptable manner. In addition, the CEC prepares all environmental documentation required by CEQA.

When new transmission lines or upgrades to the power grid are necessary to transmit power produced by a new power plant, investor-owned utilities (which own transmission lines) must obtain approval from the Public Utilities Commission (CPUC). Conversely, publicly owned utilities obtain approval to build or operate their own transmission lines from their elected boards or commission. Investor-owned utilities must apply for and obtain a certificate of public convenience and necessity (certificate) from the CPUC. The certificate may be granted if the line will provide increased reliability, is justified on economic grounds such as providing access to lower cost power, or facilitates goals related to renewable power.

The CEC is required by State law to develop and adopt a Strategic Plan for electricity transmission that identifies and recommends actions needed to ensure reliability, relieve congestion, and meet future load growth in electricity load and generation.

The CEC is directed to designate suitable transmission corridors for high-voltage electric transmission lines to ensure reliable and efficient electricity delivery. The designation of a transmission corridor could be proposed by the CEC or by application to the CEC from any person or entity planning to build an electric transmission line in California. The designation of a transmission corridor is subject to CEQA, and the CEC is the lead agency responsible for preparing an environmental assessment for all transmission corridors proposed for designation.

After receiving notice from the CEC regarding the designation or revision of a transmission corridor zone within its jurisdiction, each city or county will have to consider the designated transmission corridor zone when making a determination regarding a land use change within or adjacent to the transmission corridor zone that could affect its continuing viability to accommodate a transmission line planned within the transmission corridor zone.

Cities and counties are required to consider the Commission's comments prior to acting on the proposed development project that a city or county determines would threaten the potential to construct a high-voltage electric transmission line. If the Commission objects to the project, a city or county is required to provide a detailed written response as to why it did not accept the Commission's comments and recommendations.

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2.7.2. Energy Generation and Transmission Activities Underway

Power Plant Siting

The CEC is the Lead Agency under CEQA for thermal power plants of 50 Megawatts (MW) or greater. Through the environmental review process for power plant siting cases the CEC currently requires applicants to quantify and report the expected GHG emissions from the project. The CEC does not require these emissions to be mitigated as part of the final approval of the project.

Renewable Energy Transmission Initiative (RETI)

The Renewable Energy Transmission Initiative (RETI) is a statewide initiative to help identify the transmission projects needed to accommodate the State's renewable energy goals, support future energy policy, and facilitate transmission corridor designation and transmission and generation siting and permitting.

RETI is assessing all potential renewable energy zones in California and in neighboring states that can provide significant electricity from renewable sources to California consumers by the year 2020. RETI is also identifying those zones that can be developed in the most cost effective and environmentally benign manner and will prepare detailed transmission plans for those zones identified for development.

The RETI effort is supervised by a coordinating committee comprised of California entities responsible for ensuring the implementation of the state's renewable energy policies and development of electric infrastructure.

Programmatic Environmental Impact Statement (PEIS)

The West-wide Energy Corridor Programmatic Environmental Impact Statement (PEIS) evaluates potential impacts associated with the proposed action to designate corridors on federal land in 11 Western States (Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming) for oil, gas and hydrogen pipelines and electricity transmission and distribution facilities.

For purposes of preparing the West-wide Energy Corridor Programmatic EIS, an energy corridor is defined as a parcel of land (often linear in character) that has been identified through the land use planning process as being a preferred location for existing and future utility rights-of-way, and that is suitable to accommodate one or more rights-of-way which are similar, identical or compatible.

Based upon the information and analyses developed in the PEIS, the agencies issuing the PEIS would amend their respective land use plans by designating a series of energy corridors effective upon signing of the Record(s) of Decision.

These corridors would then have an approved environmental review, significantly streamlining the approval process of any transmission developer that would like to build lines there.

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2.7.3. Improving Energy Generation and Transmission Planning and Siting

GHG Mitigation for Power Plant Projects

Currently the CEC and CPUC do not require applicants for power plant or transmission line siting approval to mitigate the expected GHG emissions impact from the project. CPUC's environmental staff is considering GHG mitigation in some of their pending EIRs. The Resources Agency will be promulgating guidelines for the quantification and mitigation of projects by January 2010. An interim policy may be needed until such time as this guidance is adopted.

Transmission Infrastructure to Support Strategic Growth

New Jersey has issued regulations that specifically integrate smart growth principles into utility service policies. Any developer building in non-smart growth areas must pay the full cost of utility line extensions. The CPUC may want to examine policies related to the use of rate-payer funds for transmission line extension and its impact on GHG emissions.

Reporting of Energy Usage in CEQA

The CEQA Initial Study Checklist does not contain questions regarding a project's electric and gas infrastructure requirements. However, most proposed development projects require construction of new electric and gas utility infrastructure. CEQA requires evaluation of impacts associated with the "whole action" and Appendix F (Energy Conservation) of the CEQA Guidelines does describe how energy issues should be addressed in Environmental Impact Reports, including possible mitigation. Lead Agencies should include a thorough discussion of energy issues in their CEQA documents.

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2.8. Air Quality

2.8.1. Background

State Air Quality Management Plans (AQMPs) are produced by Air Quality Management Districts (AQMDs) to project future air quality and address necessary measures to attain or maintain federal and state health-based ambient air quality standards.

Federal air quality regulations also affect the transportation planning process. When a metropolitan area does not meet National Ambient Air Quality Standards (NAAQS), federal Clean Air Act Amendments (CAAA) require local AQMDs to work with MPOs to develop plans that bring RTPs and the projected air pollution emissions from projects into conformity with CAAA. The CAAA allow the US Environmental Protection Agency to impose sanctions or penalties, such as blocking federal highway funds and imposing more stringent pollution offsets, when projects do not conform.

AQMDs provide many services associated with both stationary and mobile sources of air pollution that could be amended to include GHG reduction. Within regional and local land use planning activities, AQMDs certify conformity of RTPs with the prevailing AQMP. If guidelines, rules or targets are developed for GHGs, air districts could work hand-in-hand with the MPOs and local governments to modify plans and programs as needed to achieve the desired reductions. In very many instances, the efforts that likely will be required for GHG reduction from land use and transportation sources are similar to the efforts necessary to attain RTP/AQMP conformity with established criteria pollutants:

2.8.2. Air Quality Activities Underway

General Plan Air Quality Requirements

Cities and counties within the eight counties comprising the San Joaquin Valley Air Pollution Control District will be required to include statutorily specified provisions within their general plans by late 2010.

CEQA Guidelines

The California Air Pollution Control Officers Association (CAPCOA) has released a resource guide to address GHG emissions from projects subject to the CEQA. The resource guide contains a review of available tools and models for evaluating GHG emissions, and an overview of strategies for mitigating potentially significant GHG emissions from projects. CAPCOA intends to revise the resource guide periodically to include updated tools and models, and the most current mitigation strategies.

Indirect Source Review

An Indirect Source Rule (ISR) recently was adopted in December 2005 in the nine-county San Joaquin Valleywide Air Pollution Control District (SJV APCD) and the Imperial County Air Pollution Control District. These ISRs requires developers to reduce or mitigate pollution caused by future use of their developments, impacts on traffic, and the larger land use pattern. Its intent is to advances development patterns that favor high density development and reduced VMT. To

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increase the local environmental and economic value of these ISRs the AQMDs should consider directing fees toward GHG emission-reducing infrastructure in the community, such as transit, sidewalks and bike lanes and infrastructure that supports infill development.

Interest in expanding ISRs to all air pollution management districts, resulting in a statewide ISR, has been submitted to the LUSCAT. This request asserts that any ISR should be designed to encourage that reductions occur through actual onsite measures, with allowance for offsite mitigation if needed (possibly through a fee mechanism that reflects the cost of reducing emissions offsite). Many of the same project design elements are required or recommend by various local governments, transit agencies, RTPAs, air districts and affordable housing subsidy programs. Consideration of ISRs must be reconciled with other existing and proposed emissions mitigation requirements of general or specific plans, RTPs, AQMPs, and the environmental review documents for these plans and any CEQA mitigation requirements for development applications, of all relevant agencies. Redundant mitigation for emissions reductions should be expressly precluded, including requirements that would have the effect of assessing a fee for mitigation measures already reviewed for in a local government permitting process.

2.8.3. Improving Air Quality

Indirect Source Rule

While two air pollution control districts have adopted indirect source rules, the South Coast Air Quality Management District (SCAQMD) is considering "Proposed Rule 2301- Control of Emissions from New or Redevelopment Projects,": to mitigate emissions growth from new residential commercial and industrial and institutional development and redevelopment projects. This policy may hold promise as a market mechanism to reduce GHG emissions from new development if adopted by other districts or required State-wide by the ARB. Any ISR regulations or guidelines that might impact residential development needs to ensure that affordable housing development is advanced and not impeded by overlapping and costly additional permit processing requirements.

If improved travel and land use modeling is made available to developers proposing housing projects in a region with an ISR, they would be able to preplan development proposals to meet the ISR requirements before submitting for approvals. And, like any development proposal, the city and county planning departments and AQMDs could work with the developer using the same software to assess options, assess return on investment, and facilitate resolution.¹² The outcome should net cleaner air and lower development costs.

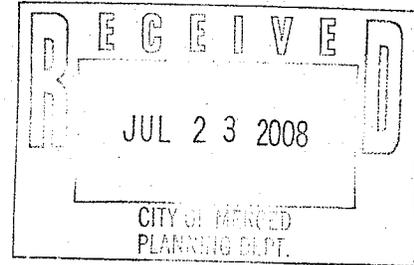
¹² An example of a similar negotiation using I-PLACE3S was conducted by the City of Sacramento, SMUD, private land owners, and developers to revise the 65th Street area development plan. The resulting plan, now built, supports existing bus and light rail access and the needs of the nearby college campus while meeting the profit needs of the development team.



MERCED IRRIGATION DISTRICT

July 22, 2008

Kim Espinosa, Planning Manager
Planning & Permitting Division, City of Merced
678 West 18th Street
Merced, CA 95340



Re: Notice of Preparation – Draft Environmental Impact Report, City of Merced Vision 2030
General Plan

Dear Ms. Espinosa:

Merced Irrigation District (MID) is in receipt of your notice dated July 14, 2008. In response to your notice, MID is providing the following:

Due to the broad nature of your project MID's facilities are not directly impacted at this time. Upon development of new and existing land covered within the scope of the 2030 General Plan, MID will provide a detailed response in regards to the proposed projects and their impacts upon MID facilities.

Should you have any questions or comments regarding this response please, don't hesitate to contact me at (209) 722-5761 Ext. 157.

Respectfully,

A handwritten signature in black ink, appearing to read 'Robert W. Lindsey'.

Robert W. Lindsey
Facilities Specialist

cc: Dan Pope, General Manager
Ted Selb, Deputy General Manager
Robert Acker, Director of Facilities & Streams
Hicham ElTal, Assistant General Manager – Water Resources Engineering
Ron Price, Associate Engineer – Water Resources

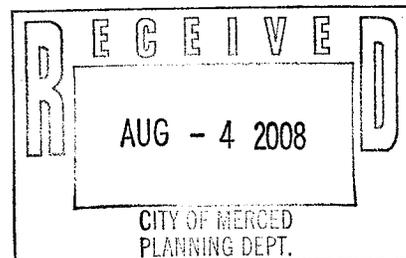


GOVERNOR'S OFFICE OF EMERGENCY SERVICES
DISASTER ASSISTANCE PROGRAMS BRANCH
3650 SCHRIEVER AVENUE
MATHER, CALIFORNIA 95655
PHONE: (916) 845-8101 FAX: (916) 845-8381



August 1, 2008

Kim Espinosa
City of Merced
678 West 18th Street
Merced, CA 95340



RE: Notice of Preparation for a Draft Environmental Impact Report for the Vision 2030 General Plan Update, SCH# 2008071069

Dear Ms. Espinosa:

Thank you for the opportunity to comment on your Notice of Preparation for a Draft Environmental Impact Report (DEIR) for the city's general plan update. In preparing the general plan and accompanying DEIR, the city should examine the sections of state planning law that involve potential hazards the city may face. For your information, I have underlined specific sections of state planning law where identification and analysis of hazards are discussed (see Attachment A).

Prior to the release of the draft general plan or within the DEIR, city staff or your consultants should examine each of the requirements in state planning law and determine if there are hazard issues within the community which the general plan should address. A table in the DEIR (or general plan) which identifies these specific issues and where they are addressed in the general plan would be helpful in demonstrating the city has complied with these requirements. If the DEIR determines that state planning law requirements have not been met, it should recommend that these issues be addressed in the general plan as a mitigation measure.

We note that state planning law includes a requirement for consultations with state agencies in regard to information related to hazards. OES would be happy to share all available information at our disposal to facilitate the city's ability to comply with state planning and environmental laws.

If you have any questions about these comments, please contact Andrew Rush at (916) 845-8269 or andrew.rush@OES.ca.gov.

Sincerely,

A handwritten signature in cursive script that reads "Dennis Castrillo".

Dennis Castrillo
Environmental Officer

cc: State Clearinghouse

Attachment A

Hazards and State Planning Law Requirements

(All citations are from the Government Code)

65302. Seven mandated elements

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. The plan shall include the following elements:

(a) A land use element which 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 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 that are subject to flooding and shall be reviewed annually with respect to those areas. The land use element shall designate, in a land use category that provides for timber production, those parcels of real property zoned for timberland production pursuant to the California Timberland Productivity Act of 1982, Chapter 6.7 (commencing with Section 51100) of Part 1 of Division 1 of Title 5.

(g) A safety element for the protection of the community from any unreasonable risks associated with the effects of seismically induced surface rupture, ground shaking, ground failure, tsunami, seiche, and dam failure; slope instability leading to mudslides and landslides; subsidence, liquefaction and other seismic hazards identified pursuant to Chapter 7.8 (commencing with Section 2690) of the Public Resources Code, and other geologic hazards known to the legislative body; flooding; and wildland and urban fires. The safety element shall include mapping of known seismic and other geologic hazards. It shall also address evacuation routes, peakload water supply requirements, and minimum road widths and clearances around structures, as those items relate to identified fire and geologic hazards. Prior to the periodic review of its general plan and prior to preparing or revising its safety element, each city and county shall consult the Division of Mines and Geology of the Department of Conservation and the Office of Emergency Services for the purpose of including information known by and available to the department and the office required by this subdivision.

(d) A conservation element for the conservation, development, and utilization of natural resources including water and its hydraulic force, forests, soils, rivers and other waters, harbors, fisheries, wildlife, minerals, and other natural resources. That portion of the conservation element including waters shall be developed in coordination with any countywide water agency and with all district and city agencies which have developed, served, controlled or conserved water for any purpose for the county or city for which the plan is prepared. Coordination shall include the discussion and evaluation of any water supply and demand information described in Section 65352.5, if that information has been submitted by the water agency to the city or county. The conservation element may also cover:

- (1) The reclamation of land and waters.
- (2) Prevention and control of the pollution of streams and other waters.
- (3) Regulation of the use of land in stream channels and other areas required for the accomplishment of the conservation plan.
- (4) Prevention, control, and correction of the erosion of soils, beaches, and shores.
- (5) Protection of watersheds.
- (6) The location, quantity and quality of the rock, sand and gravel resources.
- (7) Flood control.

65302.3. Consistency with airport land use plans

(a) The general plan, and any applicable specific plan prepared pursuant to Article 8 (commencing with Section 65450), shall be consistent with the plan adopted or amended pursuant to Section 21675 of the Public Utilities Code.

65302.6. Development of a local hazard mitigation plan

(a) A city, county, or a city and county may adopt with its safety element pursuant to subdivision (g) of Section 65302 a local hazard mitigation plan (HMP) specified in the federal Disaster Mitigation Act of 2000 (P. L. 106-390). The hazard mitigation plan shall include all of the following elements called for in the federal act requirements:

- (1) An initial earthquake performance evaluation of public facilities that provide essential services, shelter, and critical governmental functions.
- (2) An inventory of private facilities that are potentially hazardous, including, but not limited to, multiunit, soft story, concrete tilt-up, and concrete frame buildings.
- (3) A plan to reduce the potential risk from private and governmental facilities in the event of a disaster.

65560. Definitions (Open-Space Lands)

(a) "Local open-space plan" is the open-space element of a county or city general plan adopted by the board or council, either as the local open-space plan or as the interim local open-space plan adopted pursuant to Section 65563.

(b) "Open-space land" is any parcel or area of land or water which is essentially unimproved and devoted to an open-space use as defined in this section, and which is designated on a local, regional or state open-space plan as any of the following:

- (1) Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecologic and other scientific study purposes; rivers, streams, bays and estuaries; and coastal beaches, lakeshores, banks of rivers and streams, and watershed lands.

(2) Open space used for the managed production of resources, including but not limited to, forest lands, rangeland, agricultural lands and areas of economic importance for the production of food or fiber; areas required for recharge of ground water basins; bays, estuaries, marshes, rivers and streams which are important for the management of commercial fisheries; and areas containing major mineral deposits, including those in short supply.

(3) Open space for outdoor recreation, including but not limited to, areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes, including access to lakeshores, beaches, and rivers and streams; and areas which serve as links between major recreation and open-space reservations, including utility easements, banks of rivers and streams, trails, and scenic highway corridors.

(4) Open space for public health and safety, including, but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs and areas required for the protection and enhancement of air quality.

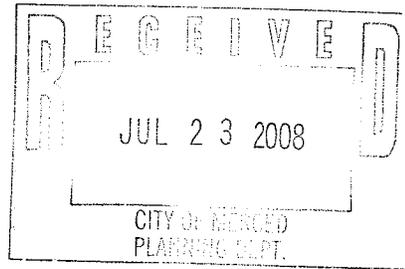
PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



July 21, 2008

Kim Espinosa
City of Merced
678 W. 18th Street
Merced, CA 95340



Re: Notice of Preparation, Draft Environmental Impact Report (DEIR)
General Plan Update
SCH# 2008071069

Dear Ms. Espinosa:

As the state agency responsible for rail safety within California, the California Public Utilities Commission (CPUC or Commission) recommends that development projects proposed near rail corridors be planned with the safety of these corridors in mind. New developments and improvements to existing facilities may increase vehicular traffic volumes, not only on streets and at intersections, but also at at-grade highway-rail crossings. In addition, projects may increase pedestrian traffic at crossings, and elsewhere along rail corridor rights-of-way. Working with CPUC staff early in project planning will help project proponents, agency staff, and other reviewers to identify potential project impacts and appropriate mitigation measures, and thereby improve the safety of motorists, pedestrians, railroad personnel, and railroad passengers.

The Commission urges your agency to include consideration of potential rail safety impacts and measures to reduce adverse impacts in the DEIR for the update to your General Plan. In general, the major types of impacts to consider are collisions between trains and vehicles, and between trains and pedestrians. Changes in land use should not be allowed that would permit housing adjacent to existing rail yards. Similarly, where a need for grade-separated crossings is identified, new development should not be placed adjacent to at-grade highway rail crossings, within the footprint of land needed for future grade-separation structures.

General categories of measures to reduce potential adverse impacts on rail safety include:

- Installation of grade separations at crossings, i.e., physically separating roads and railroad track by constructing overpasses or underpasses
- Improvements to warning devices at existing highway-rail crossings
- Installation of additional warning signage
- Improvements to traffic signaling at intersections adjacent to crossings, e.g., traffic preemption
- Installation of median separation to prevent vehicles from driving around railroad crossing gates
- Where soundwalls, landscaping, buildings, etc. would be installed near crossings, maintaining the visibility of warning devices and approaching trains

- Prohibition of parking within 100 feet of crossings to improve the visibility of warning devices and approaching trains
- Installation of pedestrian-specific warning devices and channelization
- Construction of pull-out lanes for buses and vehicles transporting hazardous materials
- Installation of vandal-resistant fencing or walls to limit the access of pedestrians onto the railroad right-of-way
- Elimination of driveways near crossings
- Increased enforcement of traffic laws at crossings
- Rail safety awareness programs to educate the public about the hazards of highway-rail grade crossings

CPUC also encourages localities to set up mechanisms whereby new developments pay a fair share of their impact costs to fund the above measures.

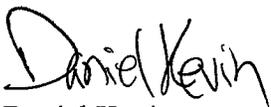
When considering school siting, the General Plan should reference the California Code of Regulations, Title 5, Section 14010(d), which mandates safety studies related to railroads for certain school sites:

If the proposed site is within 1,500 feet of a railroad track easement, a safety study shall be done by a competent professional trained in assessing cargo manifests, frequency, speed, and schedule of railroad traffic, grade, curves, type and condition of track, need for sound or safety barriers, need for pedestrian and vehicle safeguards at railroad crossing, presence of high pressure gas lines near the tracks that could rupture in the event of a derailment, preparation of an evacuation plan. In addition to the analysis, possible and reasonable mitigation measures must be identified.

Commission approval is required to modify an existing highway-rail crossing or to construct a new crossing. If the project includes a proposed new crossing, the CPUC will be a responsible party under CEQA and the impacts of the crossing must be discussed in its CEQA documentation.

Thank you for your consideration of these comments. If you have any questions in this matter, please call me at (415) 703-1306.

Sincerely,



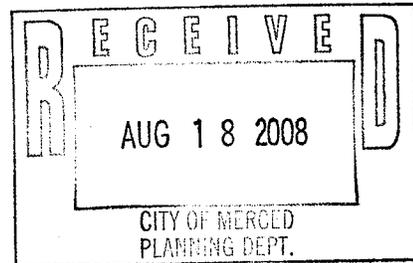
Daniel Kevin
Regulatory Analyst
Consumer Protection and Safety Division

**Law Offices of
Richard L. Harriman
191 West Shaw Avenue, Suite 205-B
Fresno, California 93704-2826
Telephone: (559) 226-1818
Facsimile: (559) 226-1870
Email: harrimanlaw1@sbcglobal.net**

August 18, 2008

VIA HAND DELIVERY

Ms. Kim Espinosa
Planning Director
City of Merced
678 West 18th Street
Merced, CA 95340



**Re: Merced Citizens for Responsible Planning and Valley Advocates/City of Merced
Re Vision 2030 General Plan Update
Comments re Notice of Preparation
Request for Special Written Notice of Availability of Public Draft EIR and
Future Public Hearings or Meetings**

Dear Ms. Espinosa and QUAD KNOPF Consultants:

This letter is hereby submitted on behalf of Merced Citizens for Responsible Planning (MCFRP), a non-profit unincorporated association, having its principal place of business located in Merced, and Valley Advocates (VA), a California non-profit incorporation, to provide written comments in response to the Notice of Preparation (NOP) of the Draft Environmental Impact Report (DEIR) for the City of Merced Vision 2030 General Plan Update and to incorporate herein by reference all oral comments presented by me on behalf of my clients at the public Scoping Meeting held on Tuesday, July 29, 2008, in the City Council Chambers. Please include these comments and attachment in the DEIR, pursuant to the California Environmental Quality Act.

Energy Analysis

As presented at the Scoping Meeting, my clients urge the City to prepare and adopt an Energy Element, which requires all new residential, commercial, and industrial development to have mandatory photo-thermal and photo-voltaic solar energy systems as a standard Condition of Approval (COA) for all new development and as a mandatory Mitigation Measure to avoid and/or reduce, and mitigate new demand for fossil fuel generated energy and to avoid, reduce, and/or mitigate the generation of adverse impacts caused by additional Greenhouse Gasses ("GHGs")

and criteria emissions caused by the approval and development of new construction and development projects in the City of Merced.

Air Quality Analysis

Similarly, due to the extreme non-attainment status of the San Joaquin Valley for Ozone, PM-10, and PM-2.5 emissions pursuant to the Federal Clean Air Act (FCAA) and the severe non-attainment status of the San Joaquin Valley for Ozone, Ozone precursors, and other criterion emissions pursuant to the California Clean Air Act (CCCA), my clients urge the City to prepare, approve, and adopt an Air Quality Element (separate and distinct from the Conservation Element), which requires all new public and private residential, commercial, and industrial development to have mandatory air quality impact mitigation measures and offsets as a standard Condition of Approval (COA) for all new development and as a mandatory Mitigation Measure to avoid and/or reduce, and mitigate the generation of adverse impacts caused by additional Greenhouse Gasses ("GHGs") and mobile source criteria emissions caused by the approval and development of new construction and development projects in the City of Merced.

Further, my clients and I request a quantified analysis of the current adverse cumulative impacts to air quality in the City of Merced and to prepare a quantified computer data base which identifies and quantifies all existing criterion and GHG emissions generated within the City at the time of the preparation of the Draft EIR as baseline background data for the City to utilize in all future project applications and environmental reviews. In other words, my clients request that the environmental review for the City Vision 2030 GPU include a template and/or program which allows the City and/or consultants to quantify and add the criterion and GHG emissions to an existing computerized baseline/data base to analyze and consider the future cumulative adverse air emissions generated by each new project as it is reviewed and considered.

In this respect, my clients and I request that, pursuant to Government Code sections 65300 and 65300.5 and CEQA, there be a careful consistency analysis prepared and included in the Draft EIR to analyze conflicts and inconsistencies between land use designations, traffic circulation, and public health and safety with respect to adverse impacts to air quality in residential land uses caused by arterials and correlating land use designations, traffic circulation, and public health and safety. [See, Government Code section 65302, subd. (a), (b), and (g); Governor's Office of Planning and Research (OP&R) General Plan Guidelines (2003), pp. 12, 51, and 98 et seq., and the San Joaquin Valley Air Pollution Control District's current "Air Quality General Plan Guidelines" (June 2005), 4-4 et seq. and the "Guide for Assessing and Mitigating Air Quality Impacts" ("GAMAQI") revised Technical Document (January 10, 2002).]

Given the fact that the City of Merced's Vision 2015 General Plan was approved and adopted in 1997, prior to the adoption of the above-referenced Guidelines, a focused and detailed analysis and revision of existing internal or horizontal inconsistencies among various policies, goals, objectives, and implementation measures will be necessary, in order to avoid importing these existing internal inconsistencies into the Vision 2030 GPU and in order properly to correlate the policies, goals, objectives, and implementation measures in the new GPU. For example, due to the removal of residential land use designations in a number of areas of the City, the Housing

Element will need to be updated and correlated with State "Fair Share" standards and the Land Use and Circulation Elements, in order to restore the dwelling units removed from the previous Housing Element's projections and commitments.

Likewise, the Merced Villages Guidelines, which were prepared for adoption by the City in October 1991, must be analyzed for internal consistency with the updated OP&R and SJVAPCD's current Guidelines with respect to Air Quality impacts and mitigation measures, in order to correlate the mandatory Elements and Components required by Government Code section 65302 and the OP&R General Plan Guidelines.

Noise Analysis

In like manner, the mandatory Noise Element, required by Government Code section 65302, subd. (f) [General Plan Guidelines, pp. 87-89] requires the Vision 2030 GPU to include noise standards, quantitative studies, and contour maps, in order to be legally adequate. Thus, my clients and I urge the City and its consultants to perform a detailed and focused analysis of the conflicts and inconsistencies between the land use designations, traffic circulation, and adverse noise impacts in the Draft EIR, toward the end that these internal or horizontal inconsistencies may be corrected in the Vision 2030 GPU. [See cases and Attorney General's Opinions cited at OP&R General Plan Guidelines, at p. 88, and Appendix B.]

For example, the City of Merced "General Plan Annual Report" (July 1, 2006 to June 30, 2007), at p. 7, refers to the 1993 Noise Element and the removal of noise contours for Castle Air Force Base. In addition, at p. 7, the report states: "One task identified for further review is the generation of updated noise contour maps based on new and expanded traffic projects. This task will be completed as part of the City's General Plan Update." Moreover, with the re-location of the new campus of the University of California having been re-located and the development of civil aviation at the CAFB civilian business park, it is clear that new traffic circulation and aircraft noise studies and contour maps will be required.

Therefore, in order to ensure the horizontal or internal consistency and correlation between ground traffic circulation and renewed air traffic routes, the City and its consultants must completely review and update the mandatory Noise Element and its components and integrate it with the Land Use, Circulation, and Safety Elements.

Economic and Water Elements

Since the most dramatic change in the City of Merced has been the presence and development of the UC Merced campus, along with its focus on bringing a "knowledge-based" economy to the City, my clients and I respectfully urge the City to prepare and include both an "Economic Element" and a "Water Element" in the Vision 2030 GPU and that the City and its consultants perform an environmental review of the potentially significant positive environmental effects that could be based upon such additional elements.

First, by carefully analyzing the type of new businesses that the City intends to attract and plan for, the City could potentially create substantial new economic development without creating unnecessary urban sprawl, specifically, if the new economic development is based upon knowledge-based businesses and intellectual driven economic development. Along with this analysis, the City and its consultants should include an alternative project analysis relative to land use and traffic circulation, based upon the concept of knowledge-based businesses with intellectual work product, which could proceed in close proximity to the University, thereby minimizing the need for urban sprawl onto productive agricultural land in the County.

Second, by requiring the preparation and inclusion of a "Water Element," the City could focus on the problems and opportunities related to the potential transition from using a ground water supply to a surface water supply, and related to analyzing the substantial opportunities for water conservation and re-use within the City limits, along with the concomitant financial savings in public and private expenditures for potable water, water treatment, sewage treatment, and storm water disposal. A comprehensive analysis of this integrated system could result in significant avoidance and/or mitigation of potentially significant adverse environmental effects from overdraft and/or misuse of the groundwater resources of the City and County.

Compact Urban Form

The re-design, re-location, and re-configuration of the UC Merced campus and the University Campus Community has resulted in a substantial change in the direction of expansion in the community from a "northern city" (as previously envisioned by the City) to a "northeasterly city," which will result in substantial new planning issues and environmental effects. Before leaving the City Council several years ago, former Councilmember George Hines noted this change when he proposed the initiation of an East Bellevue Study Corridor. Councilmember Hines' insight was perceptive, as the Land Use and Circulation Elements will necessarily reflect, especially with respect to the creation of new traffic circulation corridors, including the Campus Parkway (on the east), the Atwater-Merced Expressway (to the west), and the Bellevue Road multi-modal corridor (to the north).

When considered with the previously identified issues, regarding land use, traffic circulation, air quality and noise impacts, it is evident that the City and its consultants will need to engage in a substantial re-examination of the existing policies, goals, objectives, and implementation measures, in order to avoid significant adverse environmental impacts from air emissions and noise along the circulation corridors resulting from the change in the urban form of the City and must be analyzed and considered, accordingly.

Adverse Impacts to Agricultural Land/Agricultural Element

As identified and presented at the Scoping Meeting referred to above, my clients and I hereby request that the City adopt, as a mandatory COA and Mitigation Measure, an agricultural land impact mitigation measure of at least a 1:1 acre-for-acre offset, in order to mitigate the significant adverse effects on prime agricultural land and agricultural land of statewide importance from the Vision 2030 GPU. In addition, my clients and I request the EIR preparer to perform a

quantified and objective economic analysis of the feasibility of using organic or natural agricultural land as buffers between the new development and existing agricultural land and including a public farmers' market, or markets, in new developments approved under the Vision 2030 GPU as part of an effort to support local small farm operations, and as a means of mitigation mobile source air emissions and GHGs.

Toward this end, my clients and I urge the City and its consultants to prepare and include an Agricultural Element, separate from the Conservation and Open Space Elements, or as part of the Economic Element, so that production agriculture may remain a viable component of a balanced economic development plan and policy for Merced's future. Under CEQA, such potentially significant impacts to agricultural operations must be disclosed, analyzed, considered, and addressed.

Safety Element/Fire Protection Services

Another issue of substantial importance to my clients and me is the Safety Element and, particularly, the lack of adequate analysis of fire safety protection and the timing of the construction of public fire safety protection infrastructure to an operational level, so that the necessary fire station infrastructure, equipment, and staffing is identified and clearly stated in specific terms as implementation measures and standard Conditions of Approval for annexation and subdivision agreements and as mitigation measures. Specifically, my clients and I are requesting the City and its consultants to include fire safety protection service master plans, with specific funding mechanisms and time tables as to the date of completion of the infrastructure to an operational level, as required by Government Code section 65302(g) and the General Plan Guidelines. Toward the end that the DEIR provide good faith full disclosure of existing baseline conditions and deficiencies and provide for an adequate time table and oversight by a third party agency, other than the City, my clients have included a copy of their pending lawsuit entitled *Merced Citizens for Responsible Planning and Valley Advocates v. City of Merced, et al.* [Merced County Superior Court Case No. 150872], which will be on appeal in the Fifth District Court of Appeal during the preparation of the DEIR, including mitigation measures and the Mitigation Monitoring Plan for the Final EIR. [See true copy of Second Amended Petition for Writ of Mandamus attached hereto and incorporated by reference herein.]

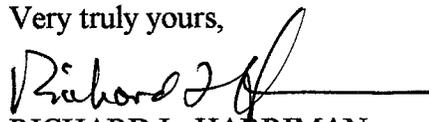
Request for Special Written Notice

Please give special written notice to the undersigned of the availability of the public Draft EIR for the Vision 2030 General Plan Update and any public hearing, meeting, or workshop at which the City Planning Commission or Council proposes to deliberate or consider any action to approve, adopt, or revise the proposed Vision 2030 GPU and/or to certify the Final EIR for the GPU. Also, this is a special request to receive a copy of the Final EIR and Response to Comments when it is made available for public review.

Please provide the above-mentioned written notice to the undersigned at the office address on the letterhead above.

Thank you for the opportunity for my clients to comment on the NOP and for your anticipated cooperation with these requests.

Very truly yours,



RICHARD L. HARRIMAN

cc: Clients

RLH/hr

FILED
MERCED COUNTY
08 MAY -5 PM 2:49
CLERK OF THE SUPERIOR COURT
PATRICIA J. PIETRO
DEPUTY

1 Richard L. Harriman, SBN 066124
2 Lanahan & Reilly LLP
3 191 West Shaw Avenue, Suite 205-B
4 Fresno, California 93704-2826
5 Telephone: (559) 226-1818
6 Facsimile: (559) 226-1870
7 Email: harrimanlaw1@sbcglobal.net

8 Attorney for Plaintiffs and Petitioners

9 IN THE SUPERIOR COURT OF THE STATE OF CALIFORNIA
10 IN AND FOR THE COUNTY OF MERCED

11 MERCED CITIZENS FOR RESPONSIBLE
12 PLANNING, a California non-profit
13 unincorporated association, and VALLEY
14 ADVOCATES, a California non-profit public
15 benefit corporation,

16 Plaintiffs and Petitioners,

17 v.

18 CITY OF MERCED, a California municipal
19 corporation, and MERCED CITY COUNCIL, a
20 body politic,

21 Defendants and Respondents.

CASE NO. 150872

**SECOND AMENDED PETITION FOR
WRIT OF MANDAMUS**

[Code of Civil Procedure Section 1085]

Date Action Filed: December 17, 2007

Hearing Date on Petition: N/A

22 BELLEVUE RANCH-MERCED, L.P., a
23 California limited partnership; CROSSWINDS
24 AT BELLEVUE RANCH NORTH, LLC, a
25 California limited liability company;
26 CROSSWINDS BRE II, LLC, a California
27 limited liability company; CROSSWINDS
28 HOMES AT BELLEVUE, LLC, a California
limited liability company; ENVISION HOMES,
LLC, a California limited liability company;
GRUPE INVESTMENT COMPANY, INC., a
California corporation; (continued on next page)

1 KB HOME CENTRAL VALLEY, INC., a
2 California corporation; KIMBALL HILL
3 BELLEVUE RANCH, LLC, a California
4 limited liability company; L.J. STEINER, LLC,
5 a California limited liability company;
6 MERCED PASEO, LLC, a California limited
7 liability company; MERCED RENAISSANCE,
8 L.P., a California limited partnership; MERCED
9 SANDCASTLE, L.P., a California limited
10 partnership; RYLAND HOMES OF
11 CALIFORNIA, INC., a Delaware corporation;
12 SUMMERTON HOMES, LLC, a California
13 limited liability company; WOODSIDE
14 PRAIRIES, INC., a California corporation;
15 WAL-MART REALTY COMPANY, an
16 Arkansas corporation; and DOES 1 through 50,
17 inclusive,

18 Real Parties in Interest.

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1 Petitioners ask the Court to order, direct, and command the City of Merced, the Merced
2 City Council, and City Staff persons to perform their mandatory duty to enforce the City's
3 standard Conditions of Approval for TSMs approved by the City Council which incorporate by
4 reference the Policies, Goals, Objectives, and Implementation Measures of the *Merced Vision*
5 *2015 General Plan* and other adopted development standards, which regulate the time and
6 distance requirements for the location of Fire Stations and compliance with performance of fire
7 safety standards in the City of Merced.

8 This action is extremely important for the protection of students, faculty, and
9 administrators who have been recruited and solicited by two (2) state funded institutions of
10 higher learning, Merced Community College (MCC) and the new University of California,
11 Merced (UCM) who may buy or rent homes or rooms in buildings constructed in areas of the
12 City which are underserved and exposed to fire safety hazards as defined in the City's *Merced*
13 *Vision 2015 General Plan*, as incorporated by reference in the City's standard TSM Conditions of
14 Approval. As such, these business invitees to the Merced community give rise to a duty of care
15 for the health and safety of these newcomers so as to create a cognizable threat to public health
16 and safety which is affected with a state interest and a substantial public interest to all residents
17 and taxpayers of the City of Merced, because of the significant potential threat of legal liability to
18 the City of Merced and to the taxpayers in the event of property damage and/or personal injury or
19 death caused by inadequate fire safety services.

20 Petitioners hereby apply to the Court for an administrative stay, pursuant to Code of Civil
21 Procedure (CCP) sections 1085 and 1094.5(g) and an Order, pursuant to CCP section 527 *et seq.*
22 enjoining and restraining the City and its elected officials, agents, and employees from approving
23 any new Tentative Subdivision Maps or Final Subdivision Maps outside of the time and distance
24 requirements for Fire Stations and from approving and/or issuing any new building permits,
25 certificates of occupancy, sewer connections, water connections, and other development
26 entitlements for lots and/or structures located in the non-conforming subdivisions set forth

27 *Merced Citizens for Responsible Planning, and Valley Advocates v. City of Merced, et al.*; Merced County Superior Court Case
28 No.150872; VERIFIED SECOND AMENDED PETITION FOR WRIT OF MANDAMUS

1 hereinbelow or any new subdivisions as described hereinbelow. Petitioners request the Court to
2 issue its Order staying all further administrative action in furtherance of the development,
3 construction, and/or occupation of such lots and/or structures located in such non-conforming
4 subdivisions, during the pendency of this action.

5 **PARTIES**

6 1. Plaintiff and Petitioner, Merced Citizens for Responsible Planning ("MCFRP"), is and,
7 at all times mentioned herein was, a California non-profit public benefit unincorporated
8 association, having its principal place of business located in the City of Merced, County of
9 Merced, State of California. MCFRP is a project of Valley Advocates. Among the members of
10 MCFRP is Richard L. Harriman, who, along with his wife, and Kamila Young are property
11 owners, tax-payers, and residents of the Fahrens Creek subdivision, City of Merced, California
12 95348, approximately one (1) mile from the City of Merced Fire Station 53, located on the south
13 side of Loughborough Drive, between M Street and R Street, which serves the Harriman
14 residence.

15 2. Plaintiff and Petitioner, Valley Advocates ("VA"), is a California non-profit public
16 benefit corporation, having its principal place of business located in the City of Fresno, State of
17 California. VA is a public interest organization which initiates and prosecutes legal actions on
18 behalf of local residents and citizens' organizations in the public interest in the Central Valley of
19 California, in order to enforce the Constitution and laws of the State of California and the United
20 States of America.

21 3. Defendant and Respondent, City of Merced ("City"), is a California chartered
22 municipal corporation and is governed by the Merced City Council ("Council"), elected by the
23 voters residing within the jurisdiction of the City; and, as such, the City has jurisdiction and the
24 legal authority to make determinations as a local government entity to approve and issue TSMs
25 and Final Subdivision Maps, pursuant to the Subdivision Map Act and the Merced Vision 2015
26 General Plan, and to approve and issue building permits, certificates of occupancy, sewer

27 *Merced Citizens for Responsible Planning, and Valley Advocates v. City of Merced, et al.*; Merced County Superior Court Case
28 No.150872; VERIFIED SECOND AMENDED PETITION FOR WRIT OF MANDAMUS

1 connections, water connections, and other administrative permits and entitlements for the
2 development, construction, and occupancy of the projects referred to herein. The current
3 members of the City Council are: Ellie Wooten (Mayor), John Carlisle (Mayor Pro Tem), Joe
4 Cortez, Michele Gabriault-Acosta, Noah Lor, James D. Sanders, and William Spriggs.

5 4. Petitioners are informed believe, and based upon such information and belief, hereon
6 allege that the following-listed Real Parties in Interest ("RPIs") and Does 1 through 50, inclusive,
7 own property in non-complying subdivisions in the City of Merced, as follow, and are in the
8 process of selling and constructing homes outside of the area specified and adopted by the City of
9 Merced in its standard Conditions of Approval for required fire safety and protection of life and
10 property; and, therefore, they are necessary or indispensable parties to this action and are named
11 as RPIs herein, accordingly:

12 BELLEVUE RANCH-MERCED, L.P., a California limited partnership
13 16133 Ventura Boulevard, Suite 1400, Encino, CA 91436
14 North of Cardella, APN Book 224, page 2

15 CROSSWINDS AT BELLEVUE RANCH NORTH, LLC, a California limited liability
16 company, 22920 Ventura Drive, Novi, MI 48375
17 North of Cardella, APN Book 170, page 3

18 CROSSWINDS BRE II, LLC, a California limited liability company
19 22920 Ventura Drive, Novi, MI 48375
20 North of Cardella, APN 224, pages 2 and 20

21 CROSSWINDS HOMES AT BELLEVUE, LLC, a California limited liability company
22 22920 Ventura Drive, MI 48375
23 North of Cardella, APN Book 224, page 13

24 ENVISION HOMES, LLC, a California limited liability company
25 360 East Yosemite Avenue, Suite 200, Merced, CA 95340
26 North of Cardella, APN Book 224, pages 17 and 18

27 GRUPE INVESTMENT COMPANY, INC., a California corporation
28 c/o Nelson E. Bahler

Merced Citizens for Responsible Planning, and Valley Advocates v. City of Merced, et al.; Merced County Superior Court Case
No.150872; VERIFIED SECOND AMENDED PETITION FOR WRIT OF MANDAMUS

1 3255 West March Lane, Suite 400, Stockton, CA 95219
2 North of Cardella, APN Book 224, page 16

3 KB HOME CENTRAL VALLEY, INC., a California corporation
4 c/o David B. Simons
5 17270 Golden Valley Parkway
6 Lathrop, CA 95330
7 South Merced, APN Book 61, page 61

8 KIMBALL HILL BELLEVUE RANCH, LLC, a California limited liability company
9 5999 New Wilke Road, Suite 504, Rolling Meadows, IL 60008
10 [9355 East Stockton Boulevard, Elk Grove, CA 95624]
11 North of Cardella, APN Book 224, page 5 and Book 224, page 14

12 L.J. STEINER, LLC, a California limited liability company
13 554 East Bellevue Avenue, Suite B
14 Merced, CA 95301
15 South Merced, APN Book 61, page 64

16 MERCED PASEO, LLC, a California limited liability company
17 c/o William Gnass, Esq.
18 767 East Yosemite Avenue, Suite A
19 Merced, CA 95340
20 El Paseo Subdivision, APN Book 170, pages 1 and 2

21 MERCED RENAISSANCE, L.P., a California limited partnership
22 c/o Patrick Matthews
23 3202 West March Lane, Stockton, CA 95219
24 South Merced, APN, Book 61, page 61

25 MERCED SANDCASTLE, L.P., a California limited partnership
26 c/o Patrick H. Matthews
27 3202 West March Lane, Stockton, CA 95219
28 Stockton, CA 95219
South Merced, Sandcastle Subdivision, APN Book 61, pages 53 and 59

RYLAND HOMES OF CALIFORNIA, INC., a Delaware corporation
24025 Park Sorrento, Suite 400, Calabasas, CA 91302
North of Cardella, APN, Book 224, pages 4 and 15

1 SUMMERTON HOMES, LLC, a California limited liability company
2 c/o Todd Bender
3 767 East Yosemite Avenue, Suite A, Merced, CA 95340
4 South Merced, APN Book 61, page 60.

4 WOODSIDE PRAIRIES, INC., a California corporation;
5 39 East Eagleridge Drive, Suite 102, North Salt Lake, UT 84054
6 North Merced, APN 224, pages 8 and 9

7 5. Petitioners are informed believe, and based upon such information and belief,
8 hereon allege that, due to the fact that RPI, Wal-Mart Realty Company ("WMRC") owns real
9 property in the City of Merced and is actively engaged in prosecuting an application for project
10 permits and entitlements for the Wal-Mart Distribution Center "WMDC" located in an area of
11 the City of Merced which currently is underserved in terms of the City's own fire safety
12 standards; and due to this fact, WMRC is a necessary or indispensable parties to this action and is
13 named herein as an RPIs, accordingly:

14 **FACTS COMMON TO ALL CAUSES OF ACTION**

15 6. On December 3, 1982, Kenneth W. Mitten, Fire Chief, Merced Fire Department,
16 promulgated a document, entitled "The Basic Elements of Fire and Disaster Planning for the City
17 of Merced" (1982), which is identified and characterized as a "Master Plan" and "policy guide
18 for managing the fire and emergency environment of the community through a fire protection
19 system." At pages 8-15 of the document, Chief Mitten describes "MASTER PLANNING FOR
20 FIRE PROTECTION," and at Appendix B, there is a diagram of the "HISTORY OF A FIRE,"
21 which sets forth the evolution of a fire and the benchmarks which establish the so-called
22 "REFLEX TIME" necessary to respond to a fire. [See true copies of letter to City Manager and
23 City Council, December 3, 1982, pp. 8-15, and Appendix B, marked "Exhibit A," attached hereto
24 and incorporated by reference herein.]
25
26

27 *Merced Citizens for Responsible Planning, and Valley Advocates v. City of Merced, et al.*; Merced County Superior Court Case
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1 7. Subsequently, after a 1983 review of inspections and other safety programs was
2 undertaken by the Merced Fire Department, Chief Mitten prepared a follow-up on this report for
3 the City Council referred to in paragraph 4 hereinabove with a "Master Plan," entitled "Merced
4 Fire Department Master Plan—Service Level" (no date). At pages 26-32, the "Master Plan"
5 contains a discussion of "flashover," "response time," and "reflex time." With respect to
6 "response time," the document states:

7 "At an average of 35 miles per hour, it will take an engine company approxi-
8 mately 3 minutes to cover the I.S.O. criteria of 1.5 miles. Couple this time
9 with the "turnout" time of 30 to 45 seconds and we should be able to put a
10 unit on scene within 4 minutes of dispatch. For each additional one-half mile
11 of response distance, it would be necessary to add one minute to our response
12 time. [p. 29, final paragraph]

13 Similarly, with respect to "reflex time," the document states:

14 "Response to an alarm that was detected immediately, reported and dispatched
15 within 2 minutes, and no more than 1.5 miles from the fire company's location,
16 should be within a 7-minute time period. Add to this a 3-minute set-up time,
17 and our system will reflect a "reflex time" of 10 minutes – a realistic and
18 acceptable "service level." [p. 32, final paragraph]

19 Finally, the document addresses Fire Station Location, as follows:

20 "Fire Station Location"

21 In a review of our existing facilities, response distances are in general
22 within the I.S.O.'s recommendations. However, various areas within
23 the city limits are beyond that 1-1/2 mile criteria. It is not advocated
24 that a massive relocation effort be initiated, yet the maximum time to
25 any area of the city should be established and a plan developed to bring
26 our response needs within the "time" limits as established."
27 [p. 35, middle paragraph]

28 [See true copies, marked "Exhibit B," attached hereto and incorporated by reference
herein.]

 8. In 1987, the Merced Fire Department promulgated a document entitled, "Merced Fire

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1 Department Facilities Study (1987-2002).” Included in this document is a “Reflex Time
2 Schedule”, as follows:

3 “1. Reporting and dispatch time – 1 minute: Reporting party dials 911 emergency
4 number, provides information to dispatcher, dispatcher tones out alarm and dispatches
5 appropriate units.

6 2. Response time – 3-5 minutes: Receipt of alarm information by responding units,
7 turn-out time (donning of safety gear, etc.) actual travel time to scene.

8 3. Set-up time – 4 minutes: Arrival/on-scene size-up and report, initial equipment
9 layout and initial quick attack.

10 The above reflex schedule is designed to establish a minimum acceptable reflex
11 capability *with the objective of an average response distance of approximately one and*
12 *one-half miles within 3-5 minutes maximum.* Medical emergencies within this distance
13 are responded to within the six-minute time frame and an initial fire attack (resources to
14 attack a dwelling fire with our basic manpower commitment and a fire flow of 100 gpm)
15 is achieved within a ten-minute time frame.” (emphasis added) [p. 4]

16 The “Facilities Study” continues, as follows:

17 “1. Time, rather than distance, is a more valid unit of measure for emergency response
18 criteria. The achievable speed over a given distance varies depending on street
19 conditions, street width, volume of traffic, and various other factors affecting traffic flow.
20 Because of these variables, it is possible for fire apparatus stationed two miles from an
21 incident to arrive prior to another fire company stationed only one mile from the same
22 incident. A standard response (travel) time of three to five minutes was developed, using
23 criteria of an average apparatus response speed of 30 m.p.h., or approximate distance of
24 one-half (1/2) mile per minute.” [pp. 4-5; see, also, p. 6]

25 Subsequently, the study finds:

26 “Phase III”

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1 "Phase III is keyed to acquisition of property and the development of Engine Company
2 No. Six and Seven in the North Central Merced area.

3 Current growth trends indicate a possible need to acquire property within the North "M"
4 Street/Cardella Road area within 10 to 12 years for the development of Fire Station No.
5 Six. Experienced growth may require the actual purchase of property and facilities
6 development prior to our projections. *Annual updates of this study must be developed to*
7 *project actual movement on this facility and Station No. Seven, projected further north*
8 *in the Bellevue Road area.*" (emphasis added) [p. 26]

9 Likewise, the Study delineates areas of the City which are not served by existing
10 facilities. [See Attachment B to the Study ("City-Wide Fire Station Coverage"), at pp. B2 and
11 B3] The diagram at p. B5 demonstrates the proposed coverage area projected for the "New
12 Engine #6 at Cardella & "M" St." [See true copies, marked "Exhibit C," attached hereto and
13 incorporated by reference herein.]

14 9. In 1990, Kenneth W. Mitten, Fire Chief of City of Merced, prepared a document
15 entitled "1990 Fire Department Service Level Report." Again, the "Service Level Report" finds,
16 "Therefore fire attack response "reflex time" is based upon a one and one-half mile response
17 distance with a turn-out and travel time of four to five minutes and a initial set-up time of four to
18 five minutes." [p. 2, paragraph 2, final sentence] The Report continues to state:

19 "Again, the map below (Figure 2) compares not only the areas outside of the
20 acceptable "reflex time" response standard, as identified in 1987, but also
21 shows annexations since that time (lined areas) which are now within the city
22 limits. Most of them are outside of our existing "reflex time" capabilities.

23 *After reviewing these two illustrations it is obvious that we are not*
24 *meeting the adopted emergency response standard in a portion of the city.*

25 ...
26 It is anticipated that with the addition of fire station five the City will
27 be able to adequately cover the North-Eastern section of the City for the next
28 three to five years. The exact time factor is based upon the projected build-out
of the Wathen and Bellevue Ranch projects. It is projected, however, that prior
to both of these developments being completed, the City will then need to locate

1 another fire station, somewhere in the "G" to "M" and Cardella to Bellevue Road
2 area." (emphasis added) [p. 6, paragraph 3]

3 [See true copies, marked "Exhibit D," attached hereto and incorporated by reference
4 herein.]

5 10. In 1992, the Merced City Fire Department published its "Strategic Plan" (1992). This
6 document found that the Merced Fire Department's "Master Plan" and "Fire Station Facilities
7 Study need to be reviewed annually." [p. 8, third assumption] Further, the "Administrative
8 Division Action Objectives" include the following: 1) "Update and revise the Merced Fire
9 Department Facilities Study document based upon current demographics and projections;" and
10 2) "Provide appropriate revisions within the Master Plan to facilitate updates to the city general
11 plan." [p. 11] Third, "Develop an updated emergency response "reflex time" model for the
12 city." [p. 12] Finally, the Report notes:

13 "Therefore, the fire protection system response time of four to six minutes is an
14 important aspect in policy issues when considering an adequate service level."
15 (underlining in original) [p. 23, paragraph 4, final sentence]

16 Later in the Report, in an Inter-Office Memorandum from Kenneth W. Mitten, Fire Chief,
17 to Jim Marshall, City Manager, dated June 4, 1992, the Chief writes:

18 "...Through testing and experience it has been documented that the first
19 five to ten minutes of a fire are the most critical. In a residential fire, for
20 example, if you expect to save the occupants and limit the amount of
21 damage within the building, trained personnel must be dispatched and
22 deployed prior to flashover occurring.

23 Flashover occurs when the contents and smoke within a room or building
24 have been preheated to a point that the entire area explodes into flame.
25 Once flashover occurs, survival of the occupants and containment of the
26 fire to the room or area of origin is doubtful."

27 ...

28 Fire station location and apparatus need to be strategically located within
the geographical areas that will best insure response times within
established parameters. ***The standard criteria is a maximum response
distance of one and one half miles (4-6 minutes).*** As the City of Merced
grows, it is imperative that the emergency services response times remain
within the identified parameters if our service levels are to be maintained."

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(emphasis added) [Memorandum , pp. 1-2, at p. 37 (unnumbered), in section following p. 34]

[See true copies, marked "Exhibit E," attached hereto and incorporated by reference herein.]

11. In 1997, the Merced City Fire Department published its "Strategic Plan 1997." Again, in that document, the Merced Fire Department reaffirms the necessity of maintaining a 4-6 minute response time:

"1997 Objectives

...

*To maintain 4-6 minute response times and adhere to the Facilities Master Plan by developing and acquiring Station 55.

[See true copy, marked "Exhibit F," attached hereto and incorporated by reference herein.]

12. In 1997, the City of Merced approved and adopted the Merced Vision 2015 General Plan and the Final Environmental Impact Report (FEIR) for the General Plan.

13. The Merced Vision 2015 General Plan includes, Policy UE-1.3, in relevant part, as follows:

"Policy UE-1.3

Control the Annexation, Timing, Density, and Location of New Land Uses Within the City's Urban Expansion Boundaries

Implementing Actions:

...

1.3.b The City should adequately plan for public improvements/services to support designated land uses for all areas as they become suitable for development and/or proposed for annexation.

The City should prepare master plans for providing sewer, water, fire protection, Drainage, and other services for all new growth areas after the adoption of the the General Plan. Refer to Chapter 5 -- Public Services and Facilities for specific policies regarding each of these areas.

[General Plan, p. 2-26; true copy, marked "Exhibit G," is attached hereto and is incorporated by reference herein.]

1 14. The Merced Vision 2015 General Plan includes Section 5.2 "SETTING," which
2 states, in relevant part, as follows:

3 "The City's Fire Department Master Facilities Plan is used in the planning of
4 stations that will provide protection within a primary service area. The
5 Department has a goal of maintaining a *response time of four to six minutes*
6 for the first crew to arrive at a fire or medical emergency within an assigned
7 district. *This goal was chosen on the basis of proven factors affecting property
8 damage and, more importantly, life.*

9 As the City continues to grow in population and area, the fire protection system
10 will have to change if it is to maintain this response time standard. This would
11 require three existing stations to be relocated and four new facilities with
12 personnel and equipment to be added to the system. *Figure 1* shows tentative
13 fire station locations." (emphasis added)

14 [General Plan, page 5-4; copies of pages 5-2 to 5-4, including *Figure 1*, marked
15 "Exhibit H," are attached hereto, and are incorporated by reference herein.]

16 15. City General Plan Section 5.3 "ISSUES AND INTENT" provides, in relevant part, as
17 follows:

18 **"5.3.1 Fire Protection**

19 *The location of fire facilities is a critical factor in providing adequate fire
20 protection to the citizens of Merced.* The time and distance that must be
21 traveled to the scene of an emergency can determine whether fire suppression
22 efforts will be successful. The goals, policies, and actions (Goal Area P-2) in
23 this chapter address locational criteria and distribution goals for new fire
24 facilities. Additional goals, policies, and actions relating to fire prevention
25 methods, disaster preparedness, and hazardous materials safety can be found
26 in the Safety Element (Chapter 11)." (emphasis added)

27 [General Plan, Section 5.3.1, page 5-16; true copy of this section, marked
28 "Exhibit I," is attached hereto, and is incorporated by reference herein.]

16. In addition, City General Plan Section 5.4 provides, in relevant part, as follows:

Goal Area P-1: Public Facilities and Services provides, in relevant part, as follows:

**5.4 PUBLIC SERVICES AND FACILITIES GOALS, POLICIES, AND
ACTIONS**

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1 **Goal Area P-1: Public Facilities and Services**

2 **GOALS**

3 ...

- 4 ■ New Development Which Includes a Full Complement of Infrastructure and Public Facilities

5 **POLICIES**

6 **P-1.1** Provide adequate public infrastructure and services to meet the needs of
7 future development.

8 **P-1.2** Utilize existing infrastructure and public service capacities to the maximum
9 extent possible and provide for the logical, timely and economically efficient
10 extension of infrastructure and services where necessary.

11 **Policy P-1.1**

12 ***Provide Adequate Public Infrastructure and Services to Meet the Needs
of Future Development.***

13 *One of the key elements to promoting a healthy local economy in Merced is the quality of life enjoyed
14 by the City's residents. The quality availability of urban services and infrastructure is found to be
an important measure of urban quality.*

15 ***Implementing Actions:***

16 ...

- 17 **1.1.b** Master infrastructure plans for newly developing areas may be prepared and adopted as
18 necessary.

The City may prepare master infrastructure plans for newly developing areas. Individual development
Proposals will need to develop plans and specifications for accessing planned City infrastructure.

- 19 **1.1.c** Include in Specific Plans and master plans, a phasing plan for providing access, sewer,
20 water, drainage, flood control, schools, parks, and other appropriate governmental facilities
and services.

21 A phasing plan helps ensure that adequate service facilities can be accommodated in the planning area
22 and that new facilities and services will be provided in a manner that keeps pace with population growth."
23 [General Plan, pp. 5-18 and 5-19; true copy, marked "Exhibit J," is attached hereto
and is incorporated by reference herein.]

24
25 17. In addition, City General Plan Section 5.4 provides, in relevant part, as follows:

26 **Goal Area P-2: Police and Fire Protection Services** provides:

1 **"Goal Area P-2: Police and Fire Protection Services**

2 **GOAL**

- 3 ■ A Community Reasonably Safe From Crime and Fire

4 **POLICY**

5 ***Policy P-2.1***

6 ***Maintain Sufficient Public Protection Facilities, Equipment, and***
7 ***Personnel to Serve the City's Needs.***

8 *Public protection services and facilities are to be maintained in the City of Merced*
9 *at a level that promotes the health and welfare of the city's residents. The City is*
10 *committed to assuring that facilities, equipment and staffing levels of its fire and*
11 *police service units meet the highest standard that can be accommodated within*
12 *the resource constraints of the City.*

13 ***Implementing actions:***

14 **2.1.a Periodically review existing and potential station facilities, equipment and**
15 **manpower in light of protection service needs**

16 Fire-fighting equipment and companies of personnel should be sufficient in number
17 and adequately distributed throughout the planning area in order to allow optimum
18 response time to calls within the primary service areas of a fire station and to ensure
19 prompt availability of additional companies for serious or simultaneous fires. Police
20 service districts should be sized to promote community-based policing concepts and
21 to maintain sufficient personnel to promote crime prevention and to combat criminal
22 activity.

23 **2.1.b Determine that new development is adequately served by fire and police**
24 **protection services.**

25 Fire stations should be located so that no development in the City is outside the
26 primary response areas (4 to 6 minutes) of at least one firehouse. Development
27 plans should be reviewed with respect to existing and planned future fire sites and
28 police resources."

2.1.c Fire station sites should be selected based on the distribution of land uses
 and population projected when the area is fully developed.

1 Future sites should be located within planned urban service centers based on future use.

2 **2.1.d Ease of access should be a primary consideration in selecting fire station site.**

3 The following guidelines should be considered when siting new firehouse facilities:

- 4 a) Fire stations should be located on streets close to and leading into major or secondary
5 thoroughfares.
- 6 b) Fire stations should be so located as to minimize delays caused by incomplete street
7 patterns.
- 8 c) A fire station should be near the center of its primary service area, measured in terms
9 of driving time to the periphery of this area.
- 10 d) Fire stations should be convenient to high value areas of commercial or industrial
11 Districts, but not located in them unless such a location is necessary to maintain the
12 required service radius.
- 13 e) Fire stations should be located, as much as feasible, away from other uses which may
14 be sensitive to the noise impacts of frequent alarms.
- 15 f) Fire stations and their sites should be designed to fit in with their surroundings,
16 including consideration of open spaces, off-street parking, landscaping, and general
17 appearances especially when located in residential districts.
- 18 g) In residential service areas, fire stations should be located in or near those sections
19 which have the highest density.”

20 [General Plan, pages 5-21 to 5-22; true copy of this section, marked “Exhibit K,” is
21 attached hereto and is incorporated by reference herein.]

22 18. On April 4, 2003, Kenneth W. Mitten, Fire Chief, Merced Fire Department,
23 released a document entitled, “Merced Fire/Rescue Strategic Plan 2003.” At p. 7 (unnumbered)
24 of this Plan, in Section D. “Five Plus Years,” the document states:

25 “1) Due to community growth and development, review and revise the City
26 of Merced Community Fire Protection Master Plan (CFPMP) to maintain
27 adequate and affordable service levels, as directed by the City Council.”

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1 [See true copy, marked "Exhibit L," attached hereto and incorporated by reference
2 herein.]

3 19. The Safety Element of the City General Plan also includes specific language
4 confirming the foregoing fire station response time standards:

5 "Land Use

6 Merced has a variety of land use types. Many of these require tailored fire protection
7 considerations. These land uses are included as follows:

8 ...

9 Each of these land use types requires somewhat different fire suppression resources
10 (e.g., emergency medical services, hazardous materials response, and heavy
11 rescue). Merced's current policy is to provide emergency response within 4 to 6
12 minutes and to provide adequate resources to combat fires in these occupancies.

13 The target of this response is to place a fire unit on scene in 95 percent of incidents
14 in five minutes..."

15 [General Plan, Safety Element, pp. 11-26 and 11-27; true copies, marked "Exhibit M," is
16 attached hereto and incorporated by reference herein; see Figure 11.26]

17 20. The City's typical Pre-Annexation Development Agreement used in its
18 ordinary course and practice includes boilerplate Conditions of Approval, which often includes:

19 "Section 7. If an additional Fire Station or Substation is necessary to meet the
20 adopted fire response time in the City's Community Fire Protection Master Plan,
21 Owner must contribute its proportional share to the construction of such facility."

22 "Exhibit B, Development Approvals," including compliance with the environmental
23 review document, incorporating the Mitigation Monitoring Program; and

24 "Exhibit C, Land Use Regulations," including compliance with:

25 *Merced Vision 2015 General Plan*, as amended

26 Charter of the City of Merced, as amended

27 Merced Municipal Code, as amended

28 City of Merced Design Standards, as amended

1 [See City's typical form Pre-Annexation Development Agreement, from which the
2 foregoing excerpts were cited.]

3 21. On January 2, 2007, the City Council considered the Staff Report prepared by City
4 Staff, dated December 21, 2006 and unanimously adopted a motion approving and adopting
5 Resolution 2007-11, regarding the establishment of priorities as recommended for the
6 development of fire stations; directing staff to seek proposals from architects for the design of
7 fire station 56, to be located at the Merced College site; and to conduct a joint Fire Station Study
8 Session on a temporary (interim) fire station for Bellevue Ranch North. [See Staff Report, dated
9 December 21, 2006 and the Minutes of the City Council Meeting held on January 2, 2007,
10 marked "Exhibit N;" true copies are attached hereto and incorporated herein by reference.] There
11 is no evidence that Resolution No. 2007-11 was rescinded or modified by the Council.

12
13 22. On August 22, 2007, the City Planning Commission approved and adopted
14 Amendments to Planning Commission Resolution No. 1175 (Standard Tentative Subdivision
15 Map Conditions) Provision No. 7, which applies to all Tentative Subdivision Maps in the City of
16 Merced, which is included for all subdivisions referred to hereinabove; to-wit:

17 "7. All other applicable codes, ordinances, policies, etc. adopted by the City of Merced
18 shall apply."

19 22. In the Staff Report for Agenda Item L-1-I for the City Council meeting of May 5,
20 2008, the City Manager and the Fire Chief reported to the City Council:

21 "Current balances as of March, 2008 within the Fire PFFP Account total
22 \$1,727,020.57. This includes \$645,715.87 City and \$1,081,304.70 developer.
(page 5)

23 ...
24 Fire Station 56 was designated by the City Council as the top priority. The
25 site acquisition has been completed. The schedule approved by the City
26 Council was to undertake the design work in 2008, and construct the facility
27 in 2010. It is currently projected that Fire Station 56 would be open and
28 operational by then (*sic*) end of 2010. (page 6)

29 ...
30
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1 In the calendar year of 2007 fire station No. 53 responded to 941 incidents.
2 The average response time was 4:24 minutes for the year.” (page 7)

3 [True copy of the Staff Report, marked “Exhibit O” is attached hereto and incorporated
4 by reference herein.]

5 23. The current Staff Report does not provide a report of the relevant time period, which
6 is the *longest* elapsed times for responses outside of the areas previously identified in Exhibit N
7 showing the coverage areas and those developed areas outside the circles showing purportedly
8 adequate coverage, nor does the Staff Report provide an accounting of the development impact
9 mitigation funds received during the “boom” years of 2001-2005 in the City or any funds
10 transferred into or out of the relevant funds. There is no discussion of the call volume or where it
11 was generated, with respect to new development *outside* the service rings shown in the
12 attachments to “Exhibit N.”

13 24. Petitioners contend that the Respondents have failed to discharge their mandatory
14 duty set by the Council by Planning Commission Resolution No. 1175, which requires that all
15 “applicable codes, ordinances, policies, etc. adopted by the City of Merced shall apply” and that
16 there is substantial credible evidence to support a finding that the City Council has adequate
17 funds to construct Fire Station No. 56 and that Council Resolution No. 2007-11 expressly
18 authorizes the Council to borrow from other funds to fund the construction of fire stations. [See
19 Exhibit N, which expressly states:

20 “This station is recognized in Merced College’s Campus plan as well as City
21 plans, and is ready to proceed to construction. The City owns the site, which
22 was recently purchased from Merced College. Staffing for an additional station
23 is available, due to revenues from Community Facilities Districts. The need for
24 this station is the most immediate, evidenced by both the growing call volume
25 in the area, and the amount of development to be served by the station. (see
26 Attachment 2). This station would serve Bellevue Ranch, recently annexed
27 Land (e.g. Absolute-Leeco), and Proposed annexations shown in Attachment
28 2.)”

25 25. Moreover, the City Staff Reports do not report on the number of out-of-area students

1 who are attending both Merced Community College and the University of California, Merced,
2 who have come to the City of Merced specifically because of these two state-funded educational
3 institutions, who reside in the underserved areas outside the service rings identified in the
4 attachments to "Exhibit N." Thus, the fire service standards and regulations adopted by the City
5 of Merced in their General Plan policies and other standards, which have been incorporated by
6 the City into the standard Conditions of Approval for all Tentative Subdivision Maps are affected
7 with a state interest in protecting out-of-area students, faculty, and administrators who have come
8 to the City of Merced expressly for the purpose of attending both post-secondary school
9 institutions funded and supported by the State of California.

10 26. Petitioners have no adequate remedy at law and, due to the continuing unlawful
11 decisions, actions, and omissions of the City of Merced, acting through its City Council, City
12 Manager, and other City Staff, as alleged herein. Petitioners have been compelled to retain legal
13 counsel to bring this action against the Respondents and Defendants, in order to protect and
14 defend substantial interests of the Petitioners and the general public in the public health, safety,
15 and welfare of the residents of the City of Merced and to protect the City residents and taxpayers
16 from sub-standard fire protection of life and property and from potential significant exposure to
17 liability and monetary damages from claims by residents in recently annexed areas who have not
18 been provided the fire protection system and safety mandated by the City General Plan and other
19 City goals, policies, objectives, implementing actions, memoranda to the City Council, through
20 the City Manager, and City Council Resolution No. 2007-11, as set forth hereinabove.

21 27. In addition, Respondent City has continued to issue building permits, water and
22 sewer service connections, certificates of occupancy, and other development entitlements, despite
23 the continuing violations of the standard TSM Conditions of Approval incorporating City
24 General Plan Goals, Policies, Objectives, and Implementing Actions, and other adopted
25 development standards, including the City's Fire Protection Master Plan, Subdivision Map
26 Conditions of Approval, and Development Agreement Conditions of Approval, along with the

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1 City's failure to implement the provisions of City Council Resolution No. 2007-11, including the
2 failure to proceed with either the construction and equipping of an operational permanent or
3 temporary or interim fire station at the M Street traffic circle south of Bellevue Road or
4 elsewhere in the Bellevue Ranch Master Planned Community.

5 **FIRST CAUSE OF ACTION**

6 **[Violation of City General Plan]**

7 **(Failure to Enforce Compliance, Pursuant to Gov't Code**

8 **Sections 66499.34 and 66499.36)**

9 28. Petitioners re-plead and reincorporate the allegations in paragraphs 1 through 27,
10 inclusive, as though fully set forth herein.

11 29. Despite the clear and express mandate of the City General Plan provisions cited
12 hereinabove, including the City Fire Protection Master Plan, and memoranda from the City Fire
13 Chief to the City Council, through the City Manager, and the adoption of Resolution No. 2007-
14 11, Respondent City of Merced has failed to provide the planned construction of new City Fire
15 Station 56 (Merced College) or the relocation of Fire Station 53 (Loughborough), which results
16 in numerous subdivisions being in violation of the General Plan fire protection requirements,
17 final subdivision map requirements for numerous developments, City fire protection goals,
18 policies, objectives, implementing actions, and other policies, agreements, and standards adopted
19 by the City Council, as referred to hereinabove. Specifically, all of the homes located north of
20 Cardella Road exceed the two (2) mile **maximum** distance from Fire Station 53 (Loughborough),
21 and the homes under construction north of Bellevue Road and G Street are 3.2 miles from the
22 nearest fire station that serves them, Fire Station 53 (Loughborough), and construction of Station
23 56 (Merced College) has not yet commenced.

24 30. In addition, the residences currently within in the adopted 1.5 mile fire services
25 area of Station 53 (Loughborough) are subject to substantial risk to life and property, due to the
26 fact that Station 53 (Loughborough) is currently charged with the duty to provide fire protection

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1 services to a service area far larger than the 1.5 mile radius identified in City Resolution 2007-11,
2 thereby causing an unreasonable risk of timely provision of fire services being unavailable within
3 the 4-6 minute time period within which "flashover" occurs, in the event that the Fire Station 53
4 personnel and equipment were dispatched outside the designated service area to the area north of
5 Cardella Road, when service was needed within the designated service area of Station 53
6 (Loughborough), thereby increasing the probability of damage to life and/or property within the
7 1.5 mile service area required by the fire protection service standards adopted by Respondent
8 City.

9 31. Moreover, as taxpayers and residents of the City of Merced, the MCFRP members
10 and other members of the public are exposed to both risk of monetary damages from loss of life
11 and property damages, but, also, they are exposed to increased financial risk resulting from
12 increased fees caused by lawsuits brought against the City to recover damages for the inadequate
13 fire protection services, based upon the violation of the City's own mandatory TSM Conditions
14 of Approval, which incorporate fire safety standards, as well as the nationally accepted standards
15 set forth in the exhibits attached hereto.

16 32. In the early part of 2007, prior to filing suit, Petitioners' counsel raised this issue
17 before the City Council, sitting in public session, by asking the City Manager when the City
18 would have the new fire stations constructed and fully operational, and the City Manager stated
19 that he did not know when the next new fire station would be constructed and fully operational.
20 In August, 2007, Petitioners' counsel contacted the City Attorney by telephone and asked when
21 the new fire station planned for the Bellevue Ranch Master Planned Community would be
22 constructed to serve the new development proceeding outside the City's adopted service area,
23 and the City Attorney informed Petitioners' counsel that he would be turning this matter over to
24 the developers of the projects outside the adopted service area for them to solve the problem. On
25 December 17, 2007, when this suit was filed, no permanent or temporary fire station was
26

27 *Merced Citizens for Responsible Planning, and Valley Advocates v. City of Merced, et al.*; Merced County Superior Court Case
28 No.150872; VERIFIED SECOND AMENDED PETITION FOR WRIT OF MANDAMUS

1 constructed or operational to serve the area north of Cardella Road or in the areas of south
2 Merced identified in the real property owned by the RPIs, as set forth hereinabove.

3 33. Petitioners contend that Respondent City has a mandatory duty to enforce the
4 Conditions of Approval set forth in its "Standard Conditions" for all TSM's, including Provision
5 No. 7, which Petitioners contend include all of the City General Plan provisions and to comply
6 with the State Subdivision Map Act [Gov't Code section 66473 et seq.] by enforcing the
7 Conditions of Approval adopted by the City Council expressly set forth in the City's approval of
8 each TSM and FSM, to comply with the California Environmental Quality Act (CEQA) [Public
9 Resources Code section 21000 et seq.] mitigation measures adopted with the approval of each
10 subdivision project, and to enforce the Conditions of Approval contained in the Development
11 Agreements with property owners and developers for each subdivision project.

12 34. Petitioners petition the Court to grant this Petition for Writ of Mandamus, pursuant
13 to CCP section 1085, and to grant a stay of further issuance by Respondent City of Merced of any
14 new building permits, water connections, sewer connections, certificates of occupancy, and any
15 and all other development entitlements in those areas which are not in compliance with the City's
16 General Plan fire protection standards, subdivision map Conditions of Approval, Development
17 Agreement Conditions of Approval, and the other fire protection standards, as set forth
18 hereinabove, including City Resolution 2007-11 and Planning Commission Resolution No. 1175,
19 unless and until the City has caused the necessary new fire stations to be constructed and fully
20 operational, as required by the foregoing legal mandates and authority, or to require the
21 installation of temporary or interim fire stations which are fully equipped and staffed with the
22 necessary personnel.

23 35. In addition, Petitioners respectfully seek equitable relief by requesting this Court's
24 order commanding, directing, and ordering the City to prepare an inventory list of all properties
25 which are not located within areas complying with the City's fire protection standards, as
26 approved and adopted in Resolution 2007-11 and Planning Commission Resolution No. 1175; to

27 *Merced Citizens for Responsible Planning, and Valley Advocates v. City of Merced, et al.*; Merced County Superior Court Case
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1 provide written notice to all City property owners of record and/or residents who reside in areas
2 which are not in compliance with the City's fire protection standards, as set forth hereinabove; to
3 provide notice to all title and escrow companies engaged in business in the City and County of
4 Merced of the inventory of non-compliant properties in the City of Merced, and to post notices of
5 such non-compliance on each building within the City limits that is not in compliance with the
6 City's adopted fire protection standards.

7 36. The legal bases for this relief are set forth in the Subdivision Map Act (SMA) [Gov't
8 Code sections 66474, subd. (a), (b), and (g), 66499.33, 66499.34, and 66499.36 (which regulate
9 the duty of the agency granting entitlements under the SMA)]; PRC section 21181.6 (regarding
10 compliance with the Mitigation Monitoring Program for each annexation and subdivision and
11 Development Agreement Conditions of Approval); and the State Planning and Zoning Act
12 [Gov't Code section 65300.5 (requiring internal integration and consistency among general plan
13 land uses and zoning and the Safety Element)].

14 37. Petitioners are informed believe, and based upon such information and belief,
15 hereon allege that, due to the fact that Merced Community College (MCC) and University of
16 California, Merced, is actively engaged in recruiting and soliciting students to come to their
17 respective institutions and to reside in the City of Merced; and due to the fact that these
18 institutions are on notice of the fire safety deficiencies in the underserved areas identified in this
19 action; and due to the fact that these institutions serve in the role of *in loco parentis* to, and have
20 an affirmative duty to safeguard the health and safety of their students by warning them of the
21 potential health and safety risks to, their students who rent houses, apartments, and/or rooms in
22 the areas which are underserved by the fire protection services of the City of Merced, as defined
23 by the City's own standards:

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Merced Citizens for Responsible Planning, and Valley Advocates v. City of Merced, et al.; Merced County Superior Court Case
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1 38. Petitioners represent the public interest and initiate this legal action on behalf of the
2 taxpayers of the City of Merced and the general public for the purpose of protecting and
3 defending the public health, safety, and welfare, mandated by the provisions of the SMA and
4 CEQA, as alleged herein, and to preserve the financial integrity of the City of Merced and to
5 avoid potential civil lawsuits and judgments against the City of Merced.

6 39. Petitioners have a substantial beneficial interest in ensuring that the Respondents'
7 decisions be rendered, and actions be taken, only in conformance with the policies and
8 procedures required by law, in having laws properly executed, and in having public duties
9 enforced, including the enforcement of the SMA, the City's own standard TSM Conditions of
10 Approval, Mitigation Monitoring Programs, Development Agreement Conditions of Approval,
11 City Fire Protection Master Plan, and other City policies, goals, objectives, implementing
12 actions, including the implementation of Resolution 2007-11, regarding the protection of life,
13 property, and public financial resources in the City of Merced.

14 40. Petitioners are entitled to, and hereby seek, an award of reasonable attorney's fees and
15 costs, based upon their service to the public as private attorneys general, pursuant to Code of
16 Civil Procedure Section 1021.5 and Government Code Section 800.

17 41. Wherefore, Petitioners seek this Court's order granting this petition for a writ of
18 mandamus and other relief as prayed for hereinbelow.

19 **PRAYER**

20 WHEREFORE, Plaintiffs and Petitioners pray for judgment against Respondents and
21 Defendants, as follows.

22 As to the First Cause of Action for Mandamus:

23 1. For a peremptory writ of mandamus or other appropriate writ, pursuant to Code of
24 Civil Procedure Sections 1085, commanding, directing, and ordering Respondents City of
25 Merced and the Merced City Council to enforce its own standard Tentative Subdivision Map
26 Conditions of Approval as set forth in Provision 7 of Planning Commission Resolution No. 1175

27 *Merced Citizens for Responsible Planning, and Valley Advocates v. City of Merced, et al.*; Merced County Superior Court Case
28 No.150872; VERIFIED SECOND AMENDED PETITION FOR WRIT OF MANDAMUS

1 and City Council Resolution No. 2007-11, to comply with the State Subdivision Map Act [Gov't
2 Code section 66473 et seq.] by enforcing the Conditions of Approval adopted by the City
3 Council in its approval of each TSM and FSM, to comply with the California Environmental
4 Quality Act (CEQA) [Public Resources Code section 21000 et seq.], and to enforce the
5 Conditions of Approval contained in its Development Agreements with property owners who are
6 named herein as Real Parties in Interest.

7 2. For a peremptory writ of mandamus or other appropriate writ, pursuant to Code of
8 Civil Procedure Sections 1085, commanding, directing, and ordering Respondents City of
9 Merced and the Merced City Council to enforce its General Plan provisions, to cease issuance of
10 any building permits, water and sewer connections, certificates of occupancy, and any and all
11 other development entitlements in those areas which are not in compliance with the City's
12 General Plan fire protection standards, subdivision map Conditions of Approval, Development
13 Agreement Conditions of Approval, and the other adopted fire safety standards, as set forth
14 hereinabove, including Resolution 2007-11, unless and until the City has caused the necessary
15 new fire stations to be constructed and fully operational, as required by the foregoing legal
16 mandates and authority.

17 3. For a peremptory writ of mandamus or other appropriate writ, pursuant to Code of
18 Civil Procedure Sections 1085, commanding, directing, and ordering Respondents City of
19 Merced and the Merced City Council to prepare an inventory list of all properties with
20 development entitlements which are not located within areas complying with the City's fire
21 protection standards, including City Council Resolution 2007-11 and Planning Commission
22 Resolution No. 1175; to provide written notice to all City property owners of record and
23 residents of such areas which are not in compliance with the City's fire safety standards, as set
24 forth hereinabove; to provide notice to all title and escrow companies engaged in business in the
25 City and County of Merced of the inventory of non-compliant properties in the City of Merced,
26 to publish a notice in the Merced Sun-Star and the Merced County Times including the notice of

27 *Merced Citizens for Responsible Planning, and Valley Advocates v. City of Merced, et al.*; Merced County Superior Court Case
28 No.150872; VERIFIED SECOND AMENDED PETITION FOR WRIT OF MANDAMUS

1 the locations of existing non-compliance; and to post notices of such non-compliance on each
2 building within the City limits that is not in compliance with the City's fire protection standards.

3 4. For costs of suit incurred herein;

4 5. For reasonable attorneys' fees and costs, pursuant to Code of Civil Procedure Section
5 1021.5 and Government Code Section 800;

6 6. For such other and further relief as the court deems just and proper.

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LANAHAN & REILLEY LLP

Dated: May 5, 2008

By: Richard L. Harriman
RICHARD L. HARRIMAN
Attorneys for Petitioners

EXHIBIT A

The Basic Elements of

Fire and Disaster Planning

for the

CITY OF MERCED

Prepared by

K.W. MITTEN, Fire Chief

1982



CITY OF MERCED

CITY HALL, 1730 "M" STREET, MERCED, CA. 95344-0068 - P.O. BOX 2068

(209) 722-4131



December 3, 1982

City Manager and
Honorable Mayor and
City Council Members
City of Merced

As the Fire Protection Manager (Fire Chief) for the City of Merced, I am made painfully aware on a daily basis of the tremendous losses our nation's communities suffer from fires and other disasters. This report is about fire protection "Master Planning"--a systematic and cost effective approach to fire service delivery for community fire and disaster mitigation.

Community involvement is an important element in the master planning process. Early citizen participation and support can do much to air concerns and avoid misunderstanding. The community as a whole needs to understand what fire protection master planning is, and what it is not. The people must not feel threatened, but rather they must be made to feel that they are a part of the process and have a say in what happens. Also, the political, business and civic leaders must be convinced as to the need of master planning. Fire protection planning takes a lot of work and some of the decisions will be difficult; however, the results are likely to be well worth the effort.

Last but not least, the Master Plan is a policy guide for managing the fire and emergency environment of the community through a fire protection system. Because it is future looking, the plan provides policy in advance of change; permitting control of, rather than reaction to, the fire environment.

Kenneth W. Nitten

Kenneth W. Nitten
Fire Chief
Merced Fire Department

units are dispatched/respond/arrive faster (due to early notification) to provide final fire extinguishment and salvage/overhaul. The systematic process then moves into an investigation and documentation phase and supports the system by providing data for research and development, which calls for improvements by code development and enforcement to support the fire prevention effort.

The fire protection system that is being suggested at this time was developed by the USFA and impacts upon the local community in the form of fire protection "MASTER PLANNING". (See Appendix C)

"The idea of providing a system of comprehensive emergency management for response to major threatening emergencies has evolved."

MASTER PLANNING FOR FIRE PROTECTION:

What is fire protection Master Planning and how does it impact upon the fire problems in America? Traditionally, our community's thinking is to delegate to the local fire department the sole responsibility for providing fire and disaster protection. True, the primary responsibility for fire protection and disaster planning obviously does rest with the fire department; however, with today's economics and the resulting changes in management philosophies, the need for fire protection planning as a community function has been identified. In a typical community each of the following organizations is a part of the fire protection and emergency system:

1. Fire Department: Performs rescue, fire extinguishment, arson investigation, emergency medical services, fire

prevention activities, such as inspections and code enforcement, fire and disaster planning.

2. Building Department: Administers and enforces building codes in new construction and old construction undergoing remodeling.
3. Road or Street Department: Constructs, marks and maintains traffic corridors for motor vehicle use, including fire apparatus.
4. Police Department: Crowd control and law enforcement, arson investigation for arrest and prosecution, traffic control and other police actions including evacuation.
5. Water Department: Supplies and distributes water for fire extinguishment.
6. Public and Private Schools: Sponsors public awareness programs in fire prevention and education.
7. Telephone Company: Telephone and other alarm circuits.
8. Planning Commission: Determines zoning which influences the spread of fires.

9. Ambulance Services: Emergency medical services and victim transport.

10. Citizens: A personal concern and responsibility for themselves and their neighbors.

As can be seen, the fire department is but one of the several local organizations in every community which influence fire and emergency protection. More often than not, the fire department deals with fires and other types of emergencies, resulting from factors which are the direct responsibility of some of these other local governmental organizations or individuals. It is therefore suggested that disaster planning is a community process, coordinated by the fire department.

Basically, the fire protection Master Planning process is designed to provide an organized approach to defining, obtaining, and maintaining the level of emergency protection a community desires, and the subsequent fire prevention and control system necessary. The local fire protection Master Plan should:

- Define the current and future fire/emergency environment by establishing and maintaining a comprehensive data base
- Define accepted life and property risk levels by setting goals and objectives
- Define the fire protection system which provides the level of service commensurate with the level of accepted risk
- Identify and justify the resources necessary to develop and operate the public fire protection agency

"All phases of emergency management are addressed in the comprehensive approach."

- Provide a detailed program of action to implement and maintain the fire protection system necessary

Ideally, the fire protection plan will provide a standard format to be applied to the community by establishing a policy guide for managing the local fire environment through the fire protection system.

Master Planning in itself is not a new process; however, Master Planning as applied to the fire service does differ from other standards and planning processes in that:

1. Fire protection master planning requires a commitment from the local governing body. A successful master planning process is based upon the authority being given to the local fire protection agency to develop a plan. Just as codes and ordinances provide a community with the authority to be a city or town and to regulate its own destiny, the authority for fire protection master planning enables the fire department to manage the resources for fire protection and disaster planning.
2. Fire protection master planning requires local multi-agency involvement for success. If other city or county departments are involved in the process, they are more likely to support the needs in fire protection master planning in the world of political and economic realities.

3. In the fire protection master planning process, all potential strategies are considered. By shaping fire protection goals and objectives in a proper way, certain needed alternatives for reaching the established objectives are available for consideration. These alternatives give the fire department an opportunity to direct the community toward a reasonable level of fire protection within the allocated local resources. Taking this non-traditional approach to the fire protection needs of the community provides an interesting and dynamic process that is keyed to specified levels of service.

4. Fire protection master planning is a community-based process and the local community must be involved.

FIRE PROTECTION PLANNING FOR THE CITY OF MERCED:

The City of Merced's fire department to date has not addressed the fire service delivery method as a systematic process, an item the current administration deems a priority. This is not to infer that our community's fire protection needs have not previously been addressed. To the contrary, the high service levels and our recent Insurance Services Office (ISO) survey and subsequent high Class III rating validate our city administration in its efforts to provide an adequate level of fire suppression to the citizens.

The Merced City Fire Department being under the direction of a newly appointed fire service manager (fire chief) is currently reviewing our methods of fire and emergency service delivery and has identified the need to implement a planned process for fire service protection to the citizens of Merced. It is projected that this process will take the better part of two years to formulate and implement. However, due to its development it is felt that the true fire protection needs of the community will be identified and future planning enhanced by:

"Not only with an eye to the final plan but also to how you are going to implement it!"

- Identifying an Adequate Level of Fire Protection

The fire service has tended to rely on bigger and better fire-fighting forces, resulting in a labor intensive situation with rapidly escalating costs. As property values and population densities have increased, losses have also continued relatively unabated despite increased firefighting forces. Valid alternatives usually have not been addressed. Planning is the key to adequate fire protection, but the planning must be done at the local level. Without local considerations, the planned fire protection system is likely to be poorly suited to local needs and to be slow to react to changing local requirements.

- Identifying the Cost of Fire Protection

Determining the cost and worth of fire protection has been traditionally difficult. Few communities actually try to

measure such things; consequently, few know the true costs of operating a fire protection system. The expenses of running an organized fire department are regularly calculated, but they are by no means all the costs of fire protection. Here are a few of these "other" costs:

- Water distribution and maintenance costs for pipes, hydrants, and plant capacity and operations used for fire protection
- Fire insurance costs
- Costs for in-place fire protection such as sprinkler systems and smoke and heat detectors
- Private fire brigades

Our nation's communities are being challenged to control or reduce costs but yet maintain or improve fire protection services--herein lies the challenge facing master planning.

- Determining an Acceptable Risk

A certain level of losses from fire must be accepted as tolerable simply because of the limited resources of the community. For example, many communities calculate their fire losses, but few consider such opposite factors as:

"Communities today are realizing the need for resources made readily available for response to a wide variety of emergencies."

What savings result from the existence of their fire protection system? How many buildings did not burn and how many lives were not lost? What industries exist in the area because of a favorable fire protection system and acceptable insurance rates?

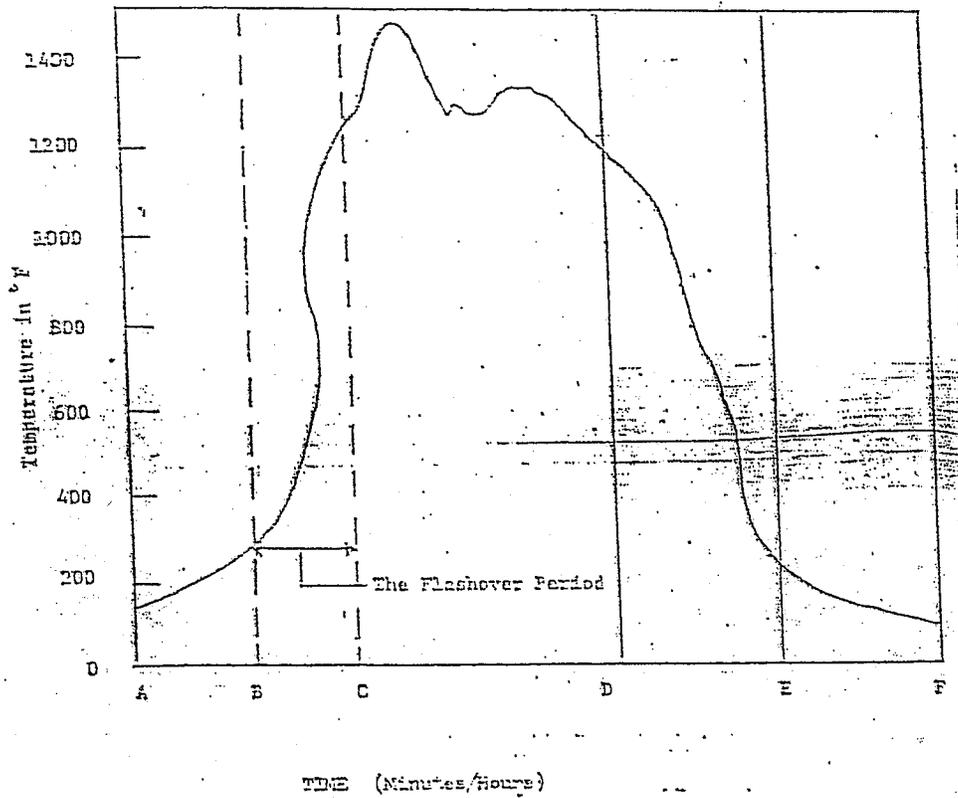
An adequate fire protection system is sure to be worth more than an inadequate system, but there are no universal criteria for evaluating adequacy. Therefore, each community must determine the "worth" of its own system. For example, to one community, adequate fire protection may mean achievement of a specified response time and water flow for 90% of the fires. However, to another community, that may not be enough. Conditions that endanger the safety of citizens and firefighters beyond the acceptable risk must be identified as targets for reduction.

WHY MUST WE PLAN?

Having read this report thus far, you may ask why, after all these years, is it necessary to go to all this effort. Don't we already know what our fire protection needs are? There are some pretty good answers to these questions. Fire protection in many cities, towns and rural areas is known to be inadequate, in most places, by urban standards. And if concepts don't change, it is likely to remain so, especially in the face of rising costs and intense competition for what funds are available. But now there are some alternatives that need to be addressed in Merced--for example, low cost and

APPENDIX B

HISTORY OF A FIRE



The amount of fire damage incurred relates to the evolution of fire and is keyed to various benchmarks as identified under the reflex time listings as it relates to the chart of the history of a fire.

REFLEX TIME

- Preheating of the fuel
- Actual ignition of the fuel
- Detection of the fire
- Notification time
- Receipt of alarm/dispatch time
- Unit notification/response time
- Operational set-up time

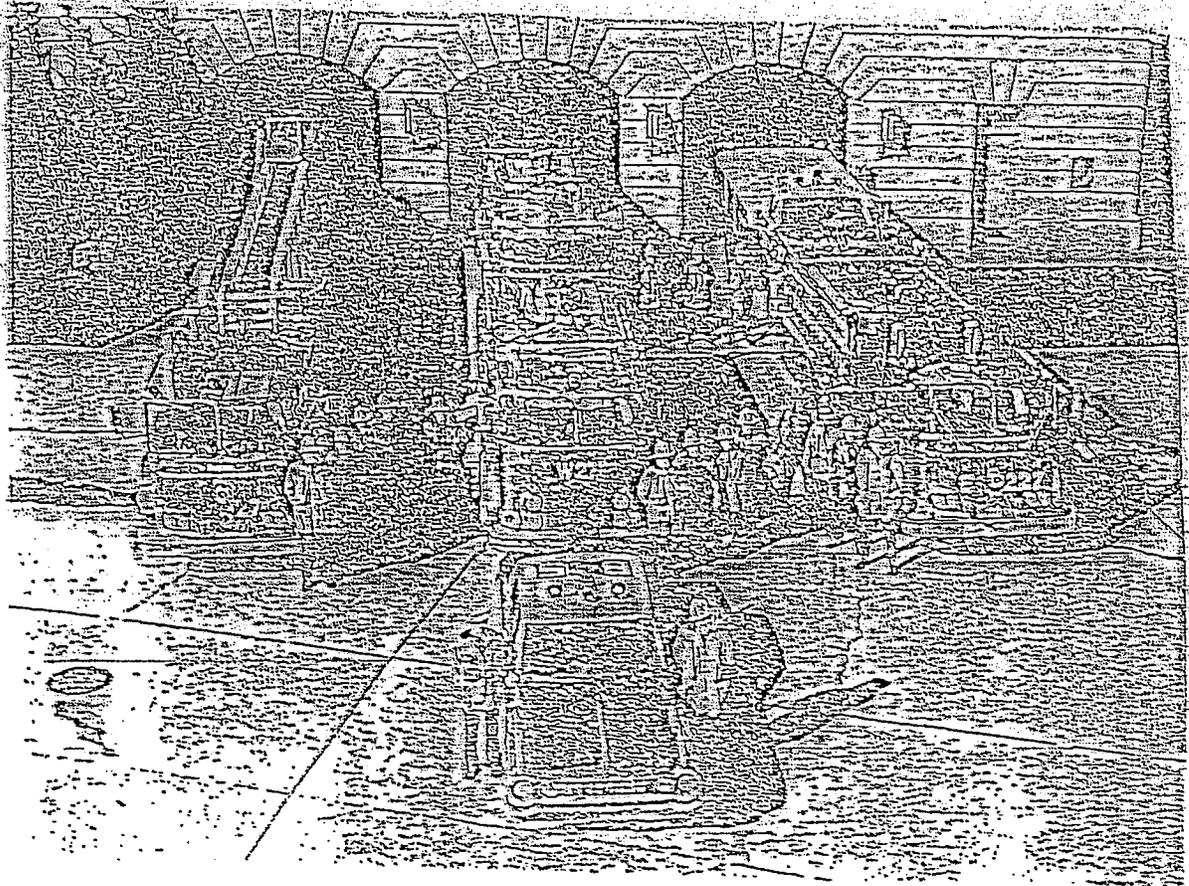


EXHIBIT B

THE GREAT BRITISH

MASTERS

SERVICE LEVEL



BY K.W. MITTEN

protection if it is supported by active fire prevention and public education programs and built-in fire protection systems and equipment in selected structures.

CONTROL OF FIRES

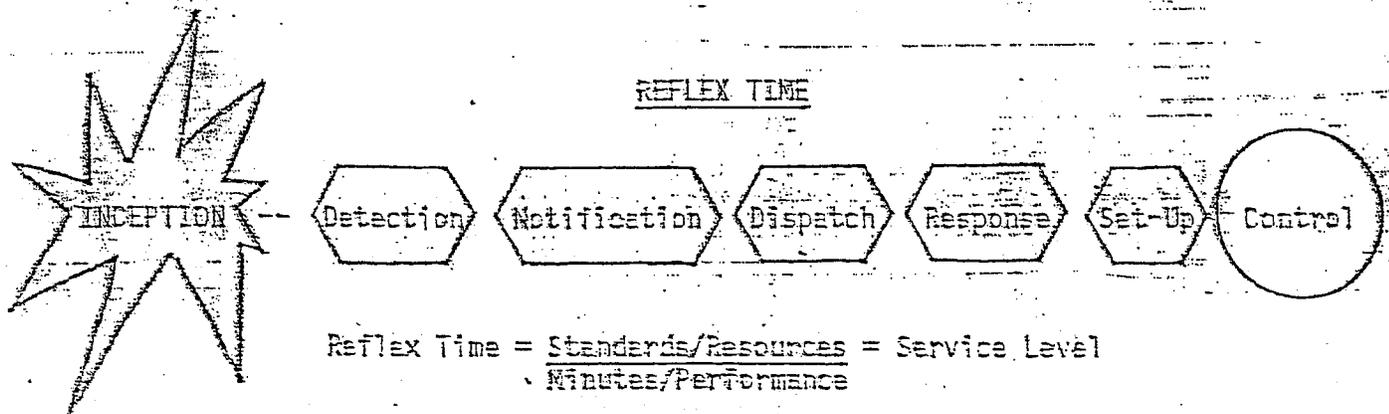
Through testing and experience, it has been documented that the first five to ten minutes of a fire, both from life safety and property protection standpoints, are of the greatest concern. Because of the physical characteristics of a fire, the temperature within a building rises extremely rapidly from the fire's incipency to a point when all of the combustible contents within a confined area will ignite in a "flashover" phenomenon. The actual amount of time required for this condition to develop will vary, depending on several factors, including the building construction and related characteristics of its contents.

If an extinguishing effort can be initiated prior to the time the fire reaches this "flashover" point, the rescue of occupants is anticipated and the difficulty of control is greatly reduced. Associated with this greater ease of extinguishment is not only the saving of a life(s) but the elimination of a financial loss to the community and the occupancy involved. Therefore, our fire protection "reflex time" is an important aspect in policy issues when considering an adequate service level.

There are five critical periods of time that must be considered in establishing the ability to attack structure fires prior to "flashover":

1. The time that elapses between the inception and the detection of the fire.
2. The amount of time required to report the fire.
3. The amount of time required to receive the alarm, determine the type of alarm, the appropriate assignment and dispatch of companies.
4. The actual response time from alarm dispatch until arrival on the scene.
5. The time required to set up at the fire scene and commence the application of sufficient extinguishing agents.

These five time periods all relate to the effectiveness of the fire protection system and are illustrated in the following figure as they relate to "reflex time" and the "flashover" phenomenon.



Lapse Time Between Inception and Detection

Through active fire prevention efforts, the frequency of the occurrence of fires in the community can be greatly reduced; however, when a fire or other emergency does occur, the period of time from the start of ignition, in the case of a fire, to the detection of same, is a most critical stage. Very often, major fires have been the result of a fire burning for a long period of time prior to detection. In fact, the greatest loss of life and property is experienced when there has been a delay in detecting the fire. This time period, unfortunately, is the most difficult period of time for the public fire protection agency to control. To address this problem through the installation of devices such as smoke detectors and built-in fire protection systems, an early warning is possible and control is usually established with a minimum amount of damage.

Time factors: With detection systems: seconds to minutes.

Without detection systems: minutes to hours.

Report of Emergency

In our sequence of an emergency, the educating of the members of the community in the proper procedures to follow in the reporting of same is important.

Many a fire has burned for several minutes without being reported strictly due to the "I thought you had already reported it" process.

Time factors: within one minute after detection.

Receipt of Alarm and Dispatch of Apparatus

Upon the notification of an emergency, the dispatch of apparatus and manpower should be completed within a 45-second to one-minute time interval. This includes the time needed to confirm the type of fire or emergency, the location and the toning of the fire department's paging system.

Time factors: 45 seconds to one minute maximum.

Response Time to the Scene of the Alarm

The response time to the scene of the alarm is influenced by a variety of factors, including the street patterns, road conditions, time of day, location of and activities of the fire company at the time of the alarm. Upon the activation of the "dispatch" tone, and with the broadcasting of the type and location of the emergency, fire company response time will include the "turnout" time (putting on of protective clothing) and the actual response or running time to the reported scene.

At an average of 35 miles per hour, it will take an engine company approximately 3 minutes to cover the I.S.O. criteria of 1.5 miles. Couple this time with the "turnout" time of 30 to 45 seconds and we should be able to put a unit on scene within 4 minutes of dispatch. For each additional one-half mile of response distance, it would be necessary to add one minute to our response time.

Set-Up Time at the Scene of the Emergency

With the arrival of the fire department units at the scene of the emergency, operational efficiency in controlling the incident is based upon the deployment of the resources as rapidly as possible in a coordinated fire/rescue attack. The plan of operation must be determined, many times without complete information, and coordinated by the incident commander to accomplish the following objectives: save lives, protect exposures, confine and control the fire.

The Merced Fire Department basic operational procedures are designed to address the typical fire scene, in the priority of sequence listed above, by providing the fire ground commander (IC) with teams of personnel assigned as companies, with standard operational expertise and specific objective:

Rescue team: Search and rescue.

Attack team: Protective lines to support search and rescue and confine the fire.

Entry team: Open the building and ventilate to support search and rescue and fire control.

Water team: Develop a continuous supply of water.

The time required for fire companies to accomplish the set-up on the emergency scene and obtain their primary objectives are directly related to the manning levels, access to the structure involved, water supply, built-in fire protection

systems, the magnitude of involvement upon arrival, number of companies required (size of building) and the training of personnel.

These considerations all impact upon our operational success. Without standard operational procedures and a constant manning policy, operational efficiency is greatly reduced, resulting in possible loss of life and higher property losses. It is recommended that all fire companies be manned at a three-member per company level and that basic set-up times of no more than three minutes be established, as our standard.

Control:- Incipient Fires (Offensive Mode)

The ability to save lives (make rescues) and control fires in their incipiency is directly related to the early detection and rapid response with a quick set-up and application of an adequate amount of extinguishing agent on a fire within a 7- to 10-minute period of time.

Control: Large Fires (Defensive Mode)

In considering fire protection service levels, the control of fires that are not stopped in their early stage and have progressed to a point where they threaten not only the building of origin but the neighboring structures as well, involves the attacking of such fires with sufficient manpower to apply the required volume of water to effect extinguishment. In addressing this problem, the amount of water that would be required to handle a large fire in a particular building and protect the exposures can be calculated through the use of the "Guide for Determination of Required Fire Flow" published by the Insurance Services Office. This volume of water, referred to as the fire flow

requirement, relates to how many gallons of water per minute (GPM) that must be applied to effect fire control.

If, upon arrival at the scene of an emergency, the building is reported to be well involved and if rescue is impossible, all efforts are directed at the confinement of the fire to the building of origin. It is due to this type of operation (defensive attack) that sufficient manpower must be responded on initial alarm to provide sufficient resources to meet the fire flow requirements of our typical building.

Time factors: three minutes

Reflex Time: "The Standard"

Response to an alarm that was detected immediately, reported and dispatched within 2 minutes, and no more than 1.5 miles from the fire company's location, should be within a 7-minute time period. Add to this a 3-minute set-up time, and our system will reflect a "reflex time" of 10 minutes -- a realistic and acceptable "service level."

department's facilities as it relates to the distance to be traveled to any point in the city and, second, the set-up time and efficiency of our fire companies to deploy resources on the emergency scene, as it relates to our fire company manning levels and standard operating procedures.

Fire Station Location

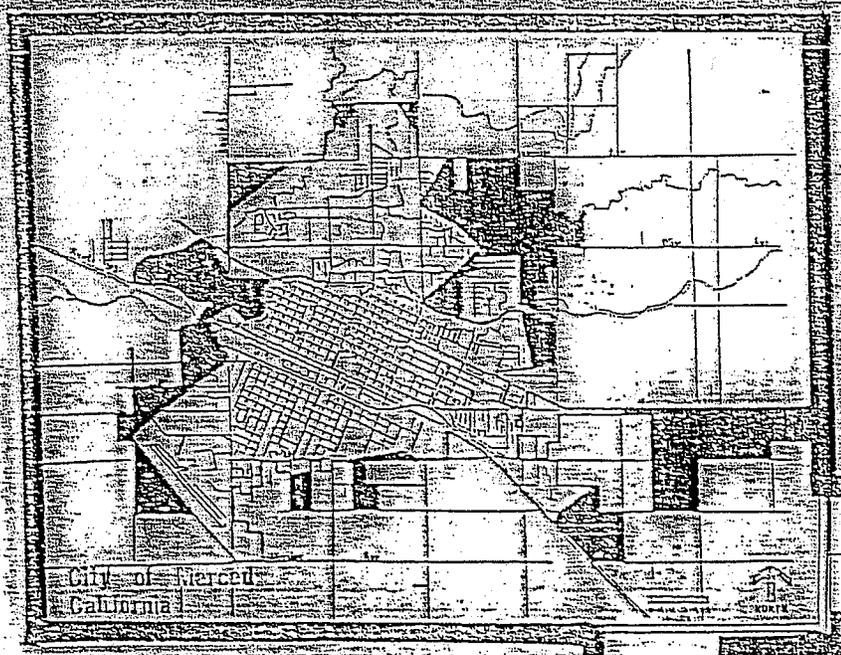
In a review of our existing facilities, response distances are in general within the I.S.O.'s recommendations. However, various areas within the city limits are beyond that 1-1/2 mile criteria. It is not advocated that a massive relocation effort be initiated, yet the maximum time to any area of the city should be established and a plan developed to bring our response needs within the "time" limits as established.

Fire Company Manning

For several years, the city has expressed an interest in the setting of fire company manning at three members per company. To establish a policy of manning our existing apparatus at a three-member per company level would require the addition of a minimum of nine new positions to the department -- a very expensive effort, at best. It is deemed, however, that our manning policies need to be addressed.

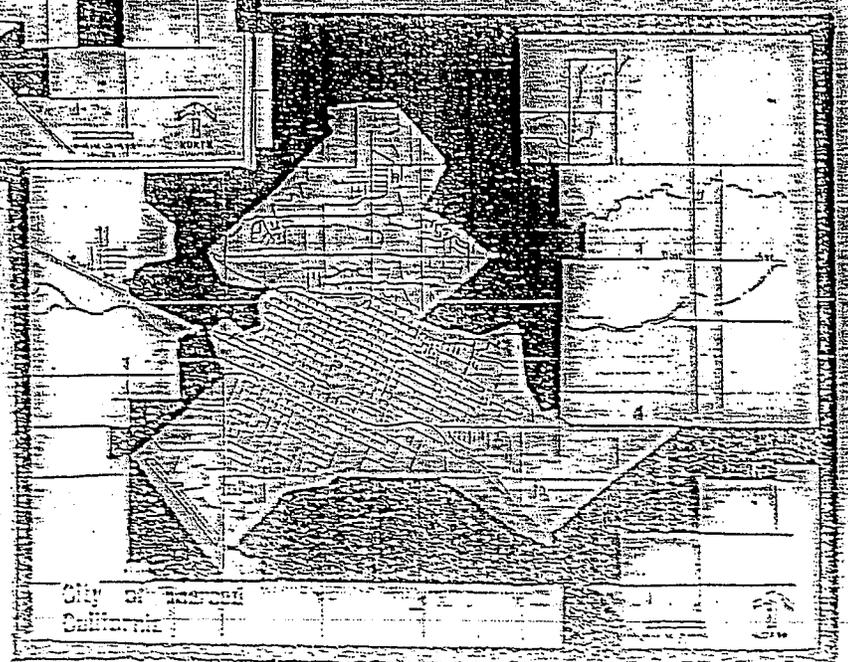
EXHIBIT C

MERCED FIRE DEPARTMENT FACILITIES STUDY



1987

2002



Reflex Time Schedule

1. Reporting and dispatch time - 1 minute: Reporting party dials 911 emergency number, provides information to dispatcher, dispatcher tones out alarm and dispatches appropriate units.
2. Response time - 3-5 minutes: Receipt of alarm information by responding units, turn-out time (donning of safety gear, etc.) actual travel time to scene.
3. Set-up time - 4 minutes: Arrival/on-scene size-up and report, initial equipment layout and initial quick attack.

The above reflex schedule is designed to establish a minimum acceptable reflex capability with the objective of an average response distance of approximately one and one-half miles within 3-5 minutes maximum. Medical emergencies within this distance are responded to within the six-minute time frame and an initial fire attack (resources to attack a dwelling fire with our basic manpower commitment and a fire flow of 100 gpm) is achieved within a ten-minute time frame.

DATA DEVELOPMENT AND PROCEDURES

In order to implement the fire location study, there were several fundamental data bases of information which needed to be established:

1. Time, rather than distance, is a more valid unit of measure for emergency response criteria. The achievable speed over a given distance varies depending on street conditions, street width, volume of traffic, and

various other factors affecting traffic flow. Because of these variables, it is possible for fire apparatus stationed two miles from an incident to arrive prior to another fire company stationed only one mile from the same incident. A standard response (travel) time of three to five minutes was developed, using the criteria of an average apparatus response speed of 30 m.p.h., or an approximate distance of one-half (1/2) mile per minute.

2. A land-use study was conducted and undertaken to establish "what" there is to burn within the City (the fire problem) . Surveys by fire company officers within their assigned first-in districts, coupled with data collected by the Planning Department, identified current and projected land uses, so that required equipment and resources could be located to respond within time requirements (based upon such factors as occupancy, construction and contents).

3. With the availability of the land-use study, it was possible to identify target hazards and define fire management zone (F.M.Z.) boundaries. The general criteria used to establish the F.M.Z. boundaries was based on four basic considerations:
 - a. What there was to burn (the fire problem);

 - b. life hazard involved;

 - c. permanent and built-in fire protection features; and

 - d. value to the community.

These considerations resulted in five priorities being established with the time required to respond from the nearest fire station (origin) to the boundary line (destination) as follows:

	<u>Time in Minutes*</u>
Maximum priority -	
High density, 3 or more story, etc.	3
High priority -	
Medium density, multi story, etc.	4
Standard priority -	
Residential	5
Low priority -	
Rural Residential	6
Minimum priority -	
Agricultural	7+

* Includes one-minute turn-out time.

4. Sites which could be used as potential station locations were to be identified next. A list of sites, including all existing station locations within the Merced urban area were identified (City and County).

In projecting the relocation of this facility to the south and east, an item deemed mandatory is the development of Engine Company Five in the northeast area of the city as discussed earlier. The development of this facility is necessary to maintain current levels of coverage of the area east of "G", south of Bear Creek, and north of the Santa Fe railroad tracks.

Phase III

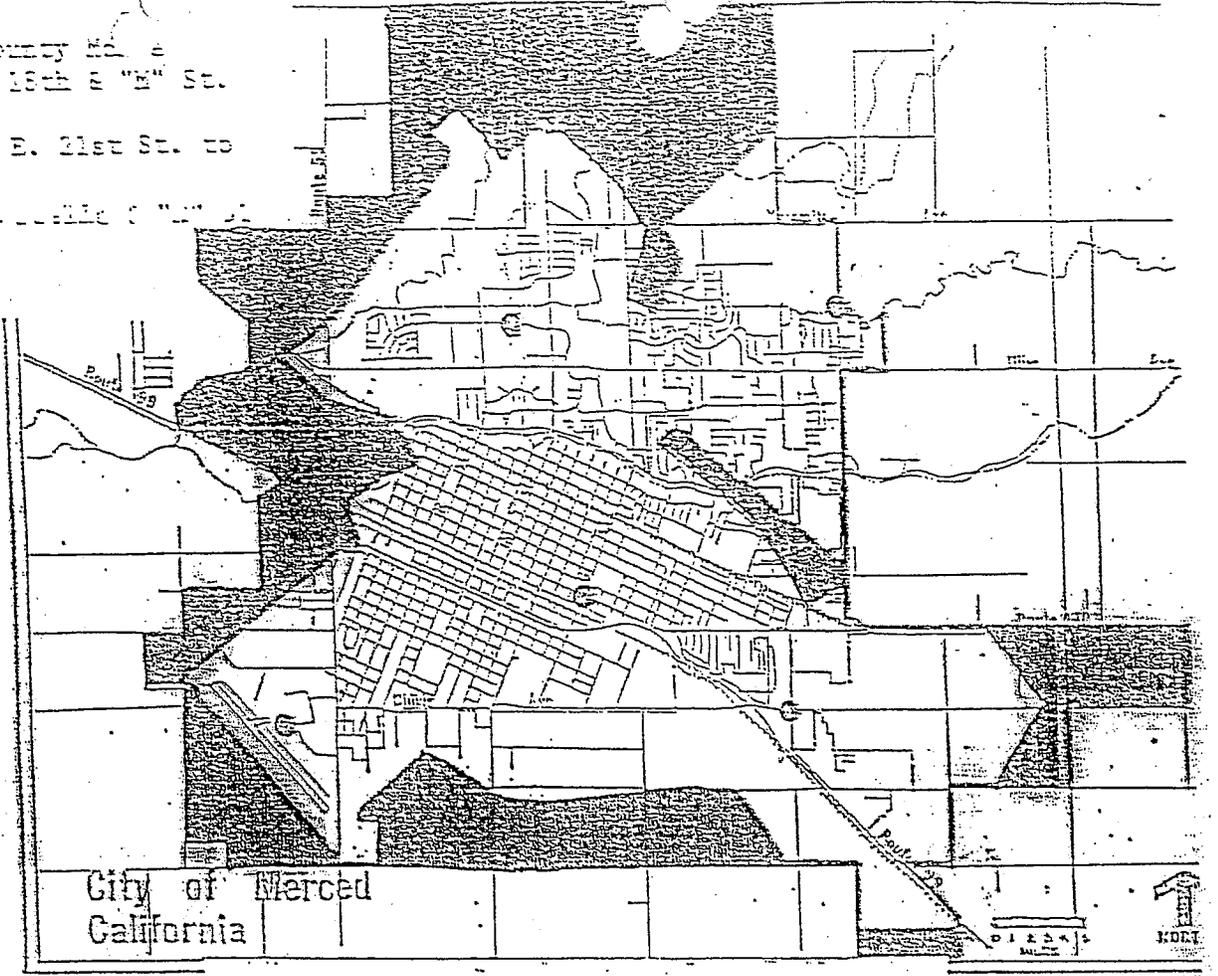
Phase III is keyed to acquisition of property and the development of Engine Company No. Six and Seven in the North Central Merced area.

Current growth trends indicate a possible need to acquire property within the North "M" Street/Cardella Road area within 10 to 12 years for the development of Fire Station No. Six. Experienced growth may require the actual purchase of property and facilities development prior to our projections. Annual updates of this study must be developed to project actual movement on this facility and Station No. Seven, projected further north in the Bellevue Road area.

SUMMARY

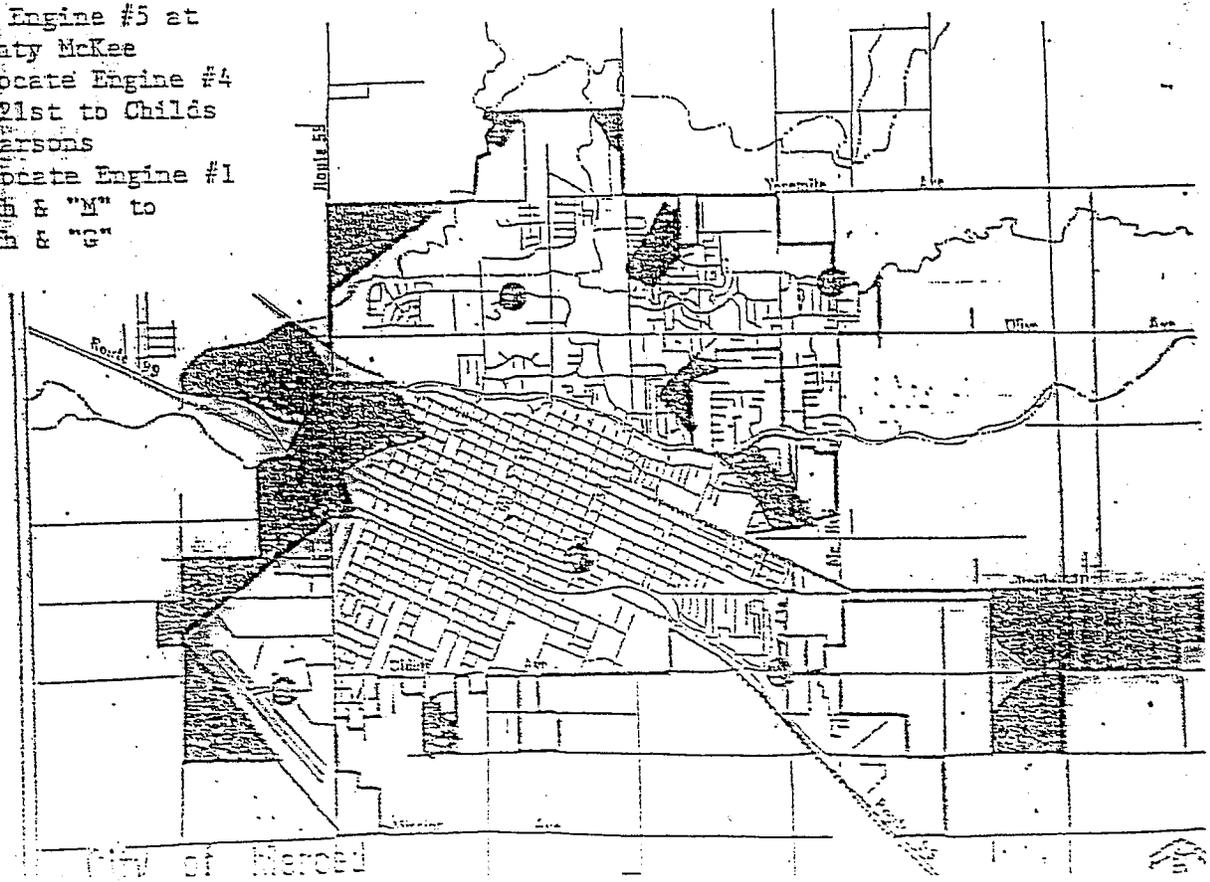
The results of this study indicate that there is a need to initiate a fire station capital improvement and relocation program, using the data as submitted within the Recommendations as a guideline. It is due to the complexities associated with projected growth and development and the major expenditures associated within such a program that the time frames be considered as general in nature, and that annual reviews be undertaken to insure timely facilities

*New Engine #5 at County McKee
 *Relocate Engine #4
 to 16th & "G"
 *Relocate Engine #3
 to Childs & Parsons

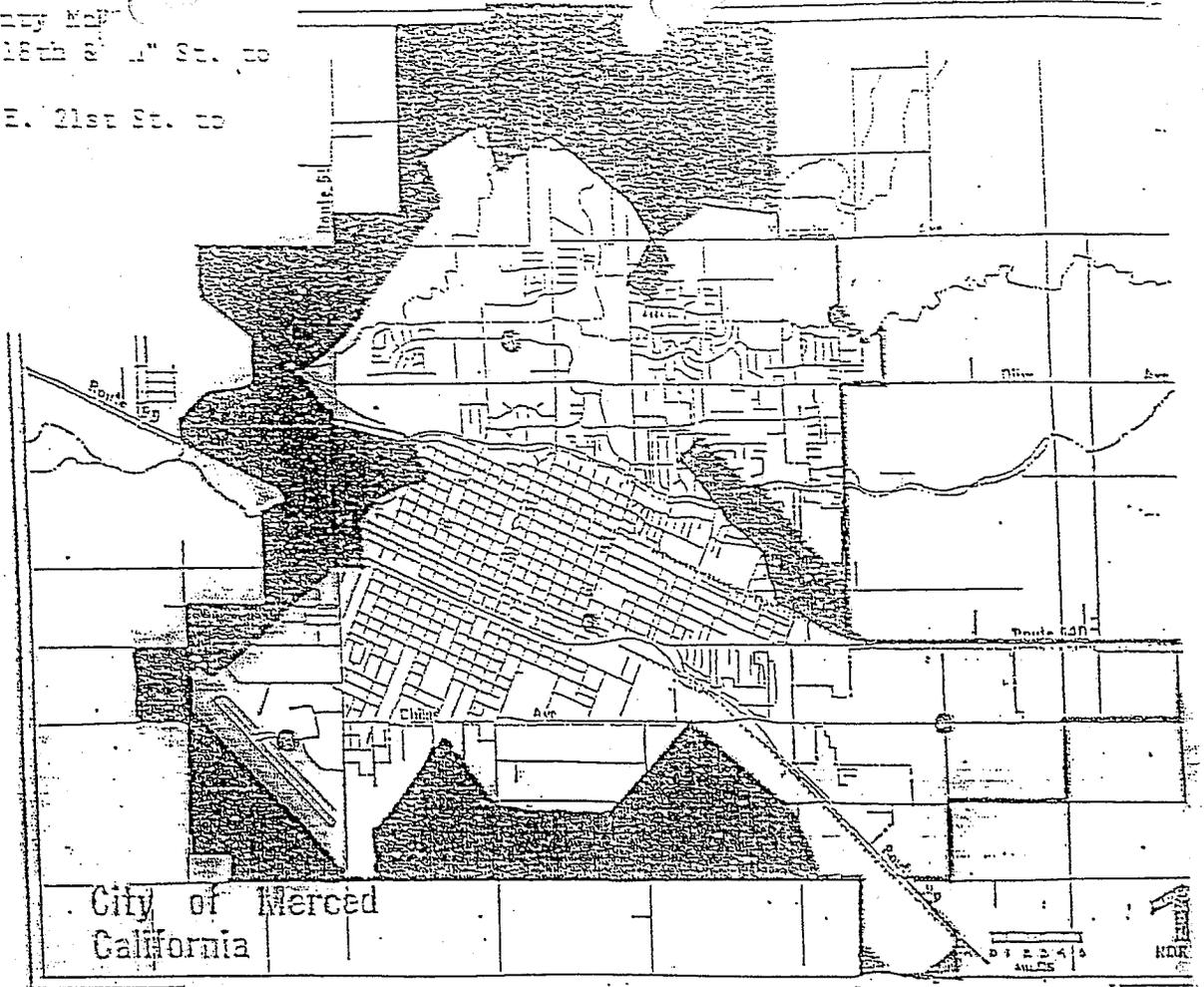


GENERAL PLAN CITY LIMITS

*New Engine #5 at
 County McKee
 *Relocate Engine #4
 to 21st to Childs
 & Parsons
 *Relocate Engine #1
 to 18th & "M" to
 16th & "G"

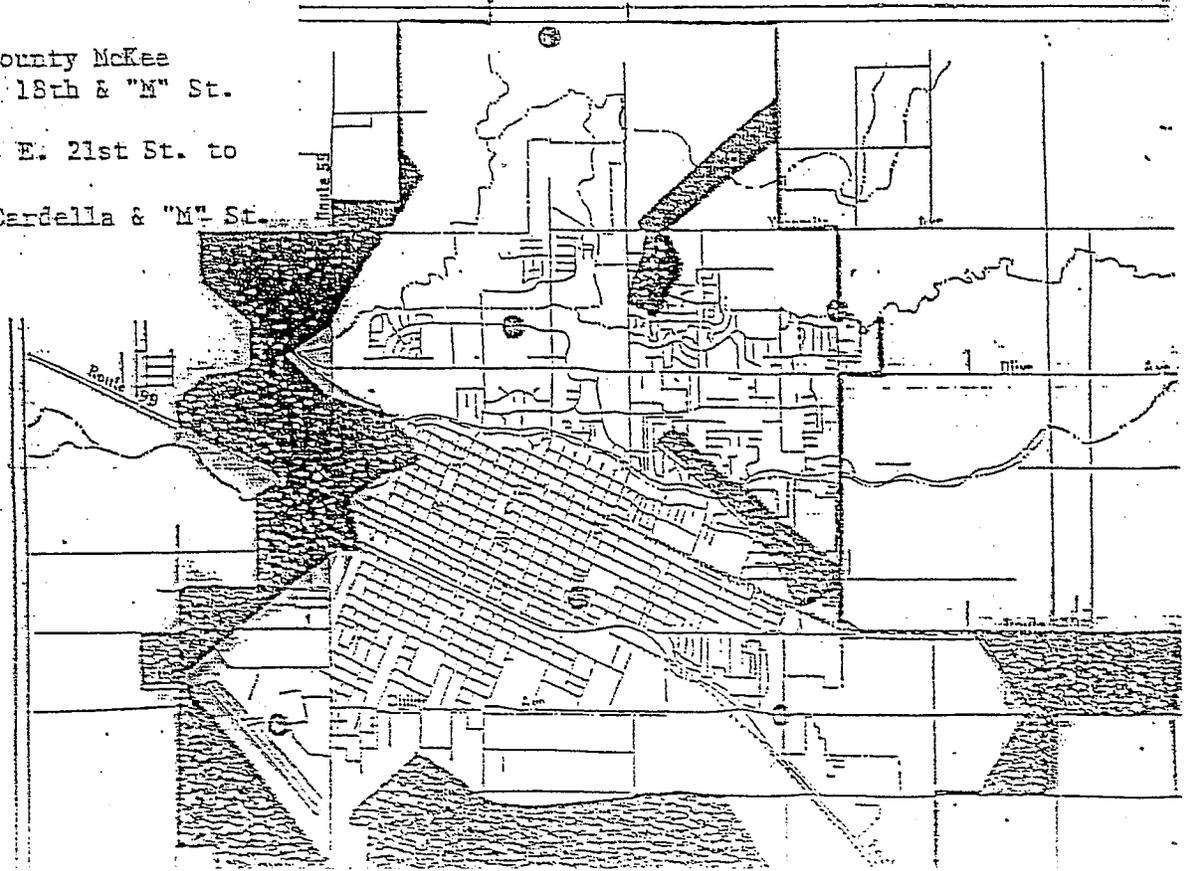


*New Engine #5 at County McKee
 *Relocate Engine #1, 18th & "M" St. to
 16th & "G" St.
 *Relocate Engine #4, E. 21st St. to
 E. Charles & Coffee

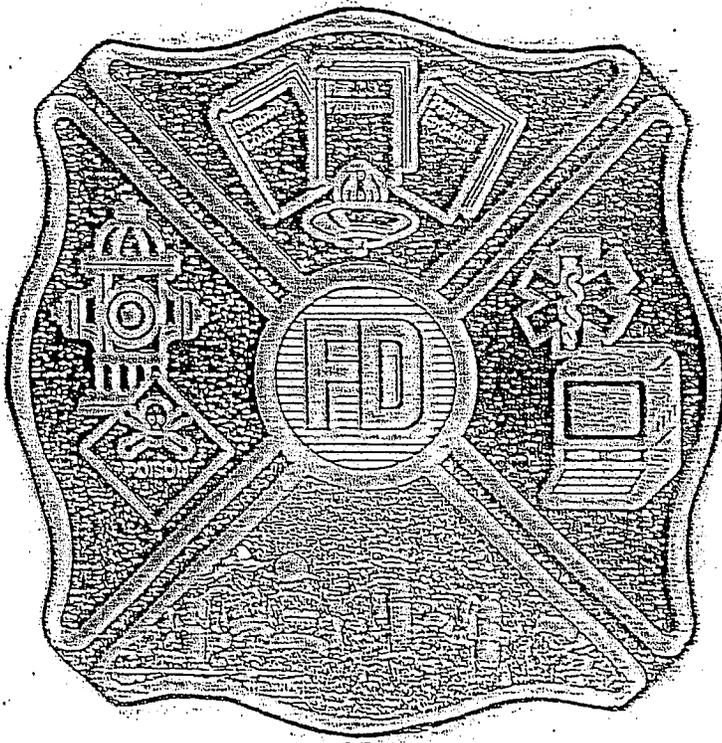


GENERAL PLAN CITY LIMITS

*New Engine #5 at County McKee
 *Relocate Engine #1 18th & "M" St.
 to 16th & "G" St.
 *Relocate Engine #4 E. 21st St. to
 Charles & Parsons
 *New Engine #6 at Cardella & "M" St.



CITY OF MERCED



1990

FIRE DEPARTMENT

SERVICE LEVEL REPORT

HERBERT W. MITCHELL, FIRE CHIEF

A typical example of an emergency medical "reflex time" to a heart attack victim would be four to six minutes. This medical "reflex time" standard, as established by the American Red Cross and Heart Associations, is based upon the fact that if basic life support, cardiopulmonary resuscitation (CPR), can be provided to a heart attack victim within four to six minutes after the heart ceases to beat, the victims chances of survival are better than 50 to 70 percent. However, if CPR cannot be provided within this four to six minute time frame, the victims chances of surviving are greatly reduced. Therefore, an accepted medical "reflex time" for a heart attack victim has been established at four to six minutes maximum.

Again, in fire combat situations the acceptable response "reflex time" for providing initial fire attack at the typical building fire, as established by the National Fire Protection Association and United States Fire Administration, is five to ten minutes. Fire response "reflex time" is based upon the fact that if fire control operations are not underway within the first five to ten minutes of a building fire, the fire will most likely spread from the area or room of origin and threaten the entire building. Therefore fire attack response "reflex time" is based upon a one and one-half mile response distance with a turn-out and travel time of four to five minutes and a initial set-up time of four to five minutes.

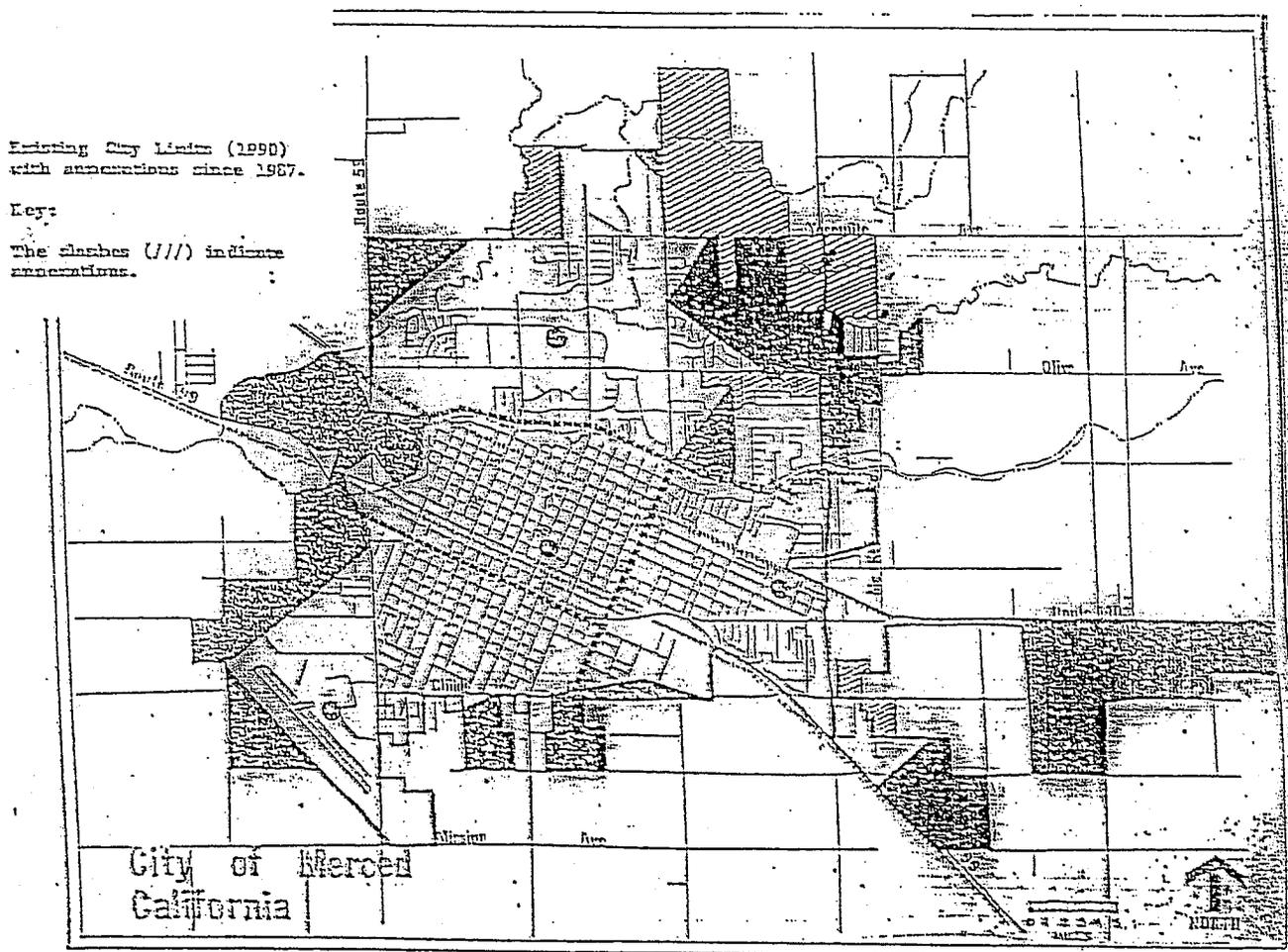
Within the 1982 report it was recommended that an acceptable maximum fire department "reflex time" response standard for the City of Merced fire protection system should be the ability to put at least one fire department unit on the scene of an emergency incident, anywhere in the city limits, within four to five minutes. This would allow the MFD to maintain an acceptable fire/emergency and medical service level to our community, as per the standards cited.

After this report was presented to and approved by the city council in 1983, efforts within the MFD were then directed towards meeting the identified goal of developing a Fire Department emergency response system for the City of Merced that would meet and maintain the four to five minute response standard.

With our basic response standards established, a second fire service report was developed and presented to the council, to provide an analysis of the existing fire department facilities and to project our ability to maintain the desired service level from these facilities, for the next 12 to 15 years.

Again, the map below (Figure 2) compares not only the areas outside of the acceptable "reflex time" response standard, as identified in 1987, but also shows annexations since that time (lined areas) which are not within the city limits. Most of which are outside of our existing response "reflex time" capabilities.

Figure 2:



After reviewing these two illustrations it is obvious that we are not meeting the adopted emergency response standard in a portion of the city. A fact that has been commented on frequently during the last several years, as each annexation was being considered. If the City is going to attempt to maintain the desired response standard, and retain our Class II fire insurance rating, several activities (recommendations) need to be considered in our fire protection systems facilities, apparatus and equipment.

Fire station number five would not only address the existing response deficiency in the Northeastern section of the city, but also would increase the daily fire department manning, an area in which the City received only 5.75 points, out of a possible 15, during the last ISO evaluations (see attachment "A").

The cost associated with the development and first year manning of this facility is projected at approximately \$1,188,885 as follows: (1) 1990-91 budget \$400,000 for land acquisition and station design, (2) 1991-92 budget \$250,000 for construction, and (3) 1992-93 budget \$358,885 for the first year manning and station operating cost.

It is anticipated that with the addition of fire station five the City will be able to adequately cover the North-Eastern section of the City for the next three to five years. The exact time factor is based upon the projected build-out of the Wetheran and Bellevue Ranch projects. It is projected, however, that prior to both of these developments being completed, the City will then need to locate another fire station, somewhere in the "G" to "H" and Cardella to Bellevue Road area.

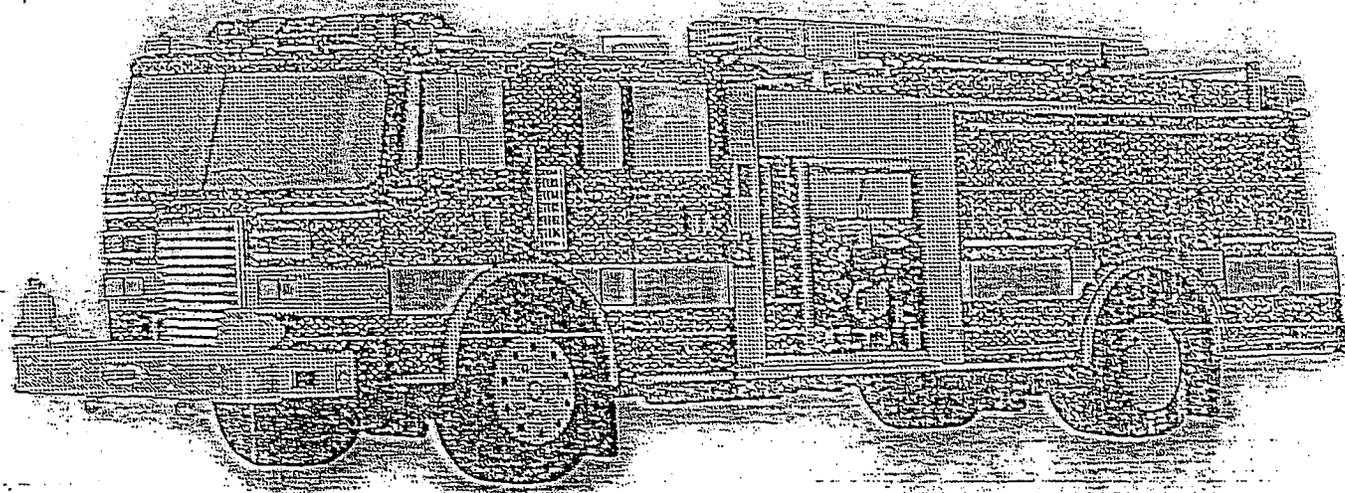
Another response issue that was discussed in the 1987 facilities report was the coverage of the South-Eastern section of the City. To adequately cover this area it is recommended that both the central and East 21st street fire stations be relocated. The central station would move from 18th and "M" streets, to 16th and "G", while the 21st street station would need to be relocated somewhere in the Parsons/Childs Avenue area. These two relocations projects are recommended not only due to the growth of this area, but as the Parson Avenue project moves along and in-fill occurs, operationally the fire department will need these two facilities relocated to adequately maintain City coverage.

APPARATUS AND EQUIPMENT:

The second recommendation has to do with the rapid growth of our city and the increase in service demands being placed on the fire department. As can be seen in attachment "B", the fire department responded to 990 service calls in 1983. In 1989 the fire department responded to 1291 incidents. A 91% increase in call volume in only six years. This increase in service demand plus the fact that the city is divided into three separate response areas by the rail roads, has on many occasions put the fire department in the position of not being able to cover the city within the 1983 adopted response time standards.

EXHIBIT E

STRATEGIC PLAN



MERCED CITY
FIRE DEPARTMENT

ASSUMPTION FOR PLANNING

- * Merced currently consists of over 16.7 square miles, with a population of 60,000 people.
- * Merced's General Plan and "How Should We Grow" study projects a 40-year population growth to 250,000 plus by the year 2030.
- * Merced Fire Department's "Master Plan" and "Fire Station Facilities Study" need to be reviewed annually.
- * Existing services delivered by the fire department meet expectations, when viewed by the majority of Merced's residents.
- * Steady improvements in the fire-related provisions of the Uniform Building and fire codes will have a positive impact on new construction.
- * The department's positive relationship with other city/county department/agencies will be maintained and enhanced in an effort to provide highly effective emergency services to Merced residents.
- * The development of the California State University at Merced will present unique challenges for the community and the Merced Fire Department.
- * Demand for delivery of emergency medical care will continue to increase in relation to population growth and progressive and national health care standards.
- * Fire and emergency response will increase proportionally to growth, degradation, hazardous materials production and transportation, and environmental regulations.
- * Improvements in technology and tightened budgets mandate that we must plan ahead if we are going to maintain an adequate yet affordable fire protection system for the community.

ADMINISTRATIVE DIVISION ACTION OBJECTIVES

1992-93

- * Continue to fine tune the department-wide customer service strategy in support of the City Customer Service Program.
- * Update and revise the Merced Fire Department Facilities Study document based upon current demographics and projections.
- * Pursue the development and staffing of Merced Fire Department Station Five to service the north/east sector of the city limits.
- * Develop a plan and provide upgrades to fire department facilities which will comply with all current and projected requirements of the American Disabilities Act (ADA). Incorporate same into new facilities planning.
- * Provide for the complete computer automation of all administrative functions department-wide in order to maximize work production and efficiency.
- * Provide appropriate revisions within the Master Plan to facilitate updates to the city general plan.
- * Study the potential of developing a joint training center in conjunction with Merced Community College.
- * Develop a plan with Merced County Fire authorities to efficiently meet increasing service demands without duplicating efforts.
- * Review and update our mutual aid agreements with Castle, Arwater and Conary Fire Departments.
- * Review and update the MFD Strategic Plan for the 1993-94 budget year.

1994-97

- * Study and prepare an updated planning document that identifies the most efficient manning levels, including support staff, needed to provide comprehensively for the efficient delivery of protection and prevention services to a rapidly changing and growing community.
- * Pursue the relocation and the development of a new combination administrative offices and fire station facility.

* Provide a continual updating of the department's Official Action Guide to address updates in technology and mandates.

* Develop a very specific "pro-active" plan for remodeling facilities which have been ear-marked for long term use. Development of the plan will emphasize maximum long-term use and overall cost-efficiency.

* Develop an updated emergency response "reflex time" model for the city.



OPERATIONS DIVISION

HISTORY/DISCUSSION:

The current Merced Fire Department emergency response system is composed of six first-line units and four reserve pieces of apparatus housed in four fire stations located in the northern, southern, eastern and central sections of the city. The first line units are staffed by 13 officers and members of the department on a 24-hour basis and are coordinated by an assigned fire division chief (duty officer).

Upon notification of an alarm (emergency), a pre-determined assignment of apparatus and manpower is dispatched/responds to and operates at the emergency scene under a fire/emergency incident command system (ICS). Additional assistance can be obtained by the sounding of "extra" alarm assignments which will bring additional manpower and equipment to the scene by recalling off-duty personnel and/or mutual aid from Castle, Atwater or the County Fire Department.

EMERGENCY OPERATIONS

Historically, the general public has been impressed, and particularly in recent years through such media as television, that the organization to call in the case of an emergency is the fire department. As the primary "emergency first responder" for the city, the fire service has generally utilized the Insurance Services Office (I.S.O.) and response time criteria for the locating of facilities, the purchasing of apparatus and equipment, and the setting of manpower levels.

Because of the physical characteristics of a fire, the temperature within a building rises extremely rapidly from the fire's incipency to a point when all of the combustible contents within a confined area will ignite in a "flashover" phenomenon. Through testing and experience, flashover usually occurs within the first five to ten minutes of a fire. If an extinguishing effort can be initiated prior to the time the fire reaches this "flashover" point, the rescue of occupants is anticipated and the difficulty of control is greatly reduced. In addition to fire response capability, the accepted emergency response time for life threatening medical emergencies, i.e., bleeding and cardiac arrest, has been identified as four to six minutes. Therefore, the fire protection system response time of four to six minutes is an important aspect in policy issues when considering an adequate service level.

Currently the MFD average emergency response is less than four to six minutes. Once the fire crews are on scene it takes an additional two to three minutes of set-up time before they are operational. Emergency "reflex time" is identified as the total time from dispatch of fire companies until they arrive on scene and are operational. Fire station

CITY OF MERCED

INTER-OFFICE MEMORANDUM

TO: Jim Marshall, City Manager

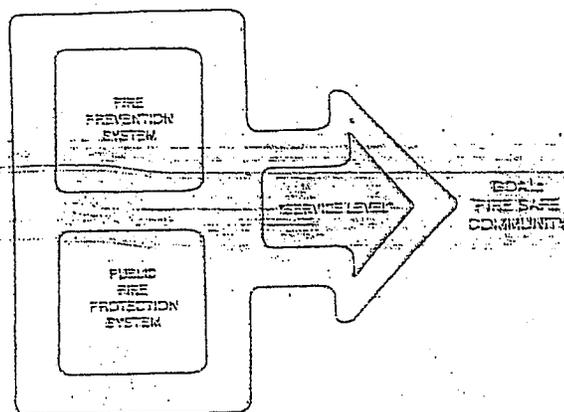
DATE: June 4, 1982

FROM: Kenneth W. Mitten, Fire Chief

FILE:

SUBJECT: Fire Protection Service Level - Response Times

As presented in the last report, when the fire prevention (pro-active) side of our system fails, the fire protection (re-active) part of the system is activated. Due to the emergency nature of fires, medical and other life/property threatening incidents, the amount of time it takes to respond to the incident becomes one of many very critical elements.



As an example, in heart related medical emergencies, a 4 to 6 minute time frame is identified as the critical period in which basic medical aid can save a life. The use of CPR on the victim during the clinical death period (no pulse or respiration), has proven to be effective; a fact that has been well published by the American Red Cross and Heart Associations. However, after 4 to 6 minutes bio-logical death occurs with the chances for survival rapidly deteriorating. Therefore, in these emergency medical incidents our ability to respond consistently and instantly render life support activities prior to six minutes is mandatory, if the system is to be viewed as effective.

Unlike heart related medical emergencies, most American households are unaware of the critical time frames associated with effective fire fighting operations. Through testing and experience it has been documented that the first five to ten minutes of a fire are the most critical. This is due to a condition called flashover. In a residential fire, for example, it is not expected to save the occupants and limit the amount of damage until the building, trained personnel and the extinguisher and deployed prior to flashover occurring.

Flashover occurs when the contents and smoke within a room or building have been heated to a point that the entire area explodes into flame. Once flashover occurs, survival of the occupants and containment of the fire to the room or area of origin is doubtful.

Fire Protection Service Level - Response Times

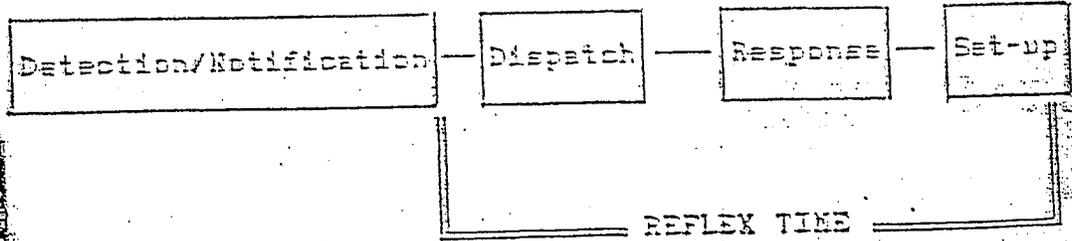
June 4, 1992

Page 2

An effective response capability is based upon rapid detection and notification reporting of the emergency to the dispatch center, dispatch time (1 minute), response time (4-6 minutes) and set up time (2-3 minutes), once the emergency response personnel are on scene.

Key facts include:

- (1) Detection Time: Critical, i.e. witnessed arrest or smoke detector activities
- (2) Report Time: Public education and 911 calling
- (3) Dispatch Time: Less than 1 minute to get necessary information and determine/notify responders
- (4) Response Time: Receipt of alarm, putting on protective clothing, and driving time
- (5) Arrival and Attack Time: Size-up and plan of attack includes coordination and deployment of equipment.

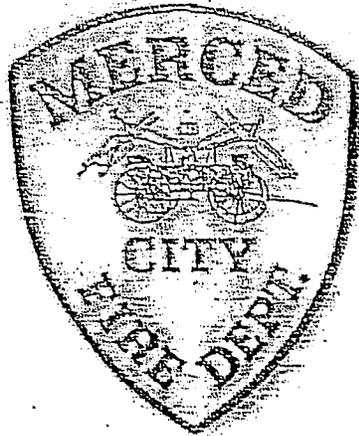


Reflex Time = $\frac{\text{Standards/Resources} \times \text{Service Level}}{\text{Minutes/Performance}}$

Currently the MSD average emergency response time is less than four to six minutes. Once the fire crews are on scene, they are an additional two to three minutes of set-up time before they are operational. Emergency "reflex time" is considered as the total time from dispatch of the companies until they arrive on scene and are operational. The station location and response time to be strategically located within the geographic area that will best insure response time within established parameters. The standard response to a building fire is 4-6 minutes. It is to the MSD (MSD standard). As the City of Kent, WA, it is important that the emergency services response time be kept within the established parameters to the service levels to be maintained.

EXHIBIT F

MERCED
FIRE
DEPARTMENT



STRATEGIC
PLAN

1997

Administration Division

The goal of the Administration Division is to coordinate the efforts of the Fire Department to meet the expectations of the "Merced Master Plan" and to effectively manage goals and objectives so that they meet the current and projected needs of the residents.

1992-1996

Goals reached by the Administration Division include:

- * Upgraded the computerized incident reporting system and delivered training to all members.
- * Provided Standard Emergency Management System (SEMS) training to the city management team.
- * Developed and awarded construction for a new combination administrative offices and fire station and Emergency Operations Center (EOC).
- * Adopted the Fire/Emergency Radio Master Plan.
- * Updated the Facilities Master Plan.
- * Revised the Merced City Emergency Plan into a Multi-Functional Hazard Plan in accordance with state and federal guidelines.

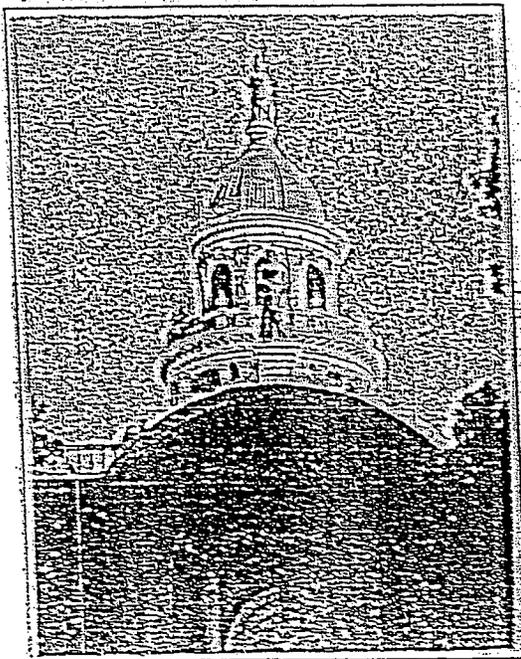
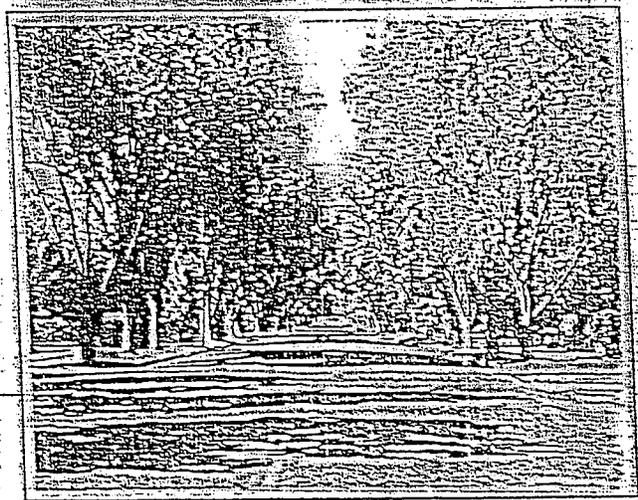
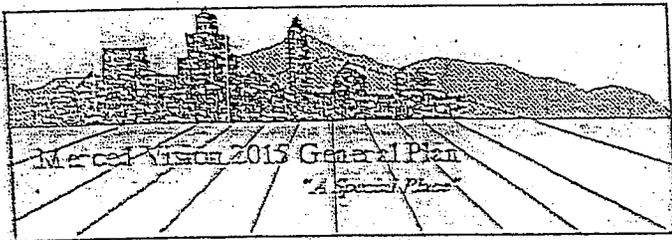
1997 Objectives

- * To increase the awareness of the citizenry for self preparation during disaster situations through mailings and classes.
- * To maintain and progress in computer technology to remain efficient and in line with city direction.
- * To maintain the standards necessary for classification at the current ISO rating and maintain career development by appointing a full time training officer.
- * Maintain and upgrade the city's ability to effectively manage large scale incidents by establishing an Emergency Operations Center at the new fire/administration complex.
- * To maintain 4-5 minute response times and adhere to the Facilities Master Plan by developing and acquiring Station 55.

EXHIBIT G

Merced Vision 2015

General Plan



Policy UE-1.3

Control the Annexation, Timing, Density, and Location of New Land Uses Within the City's Urban Expansion Boundaries

Implementing Actions:

- 1.3.a The City should require that all new urban development and annexations be contiguous to existing urban areas and have reasonable access to public services and facilities.

"Leap-frog development" tends to be cost-prohibitive in these times due to the high up-front costs of extending utility lines, streets, etc., across undeveloped properties to outlying areas. Such development should be discouraged in most cases because of the service inefficiencies it creates. Exceptions can be made for industrial areas which for business recruitment reasons often need to provide infrastructure and services prior to development. Other exceptions may be made, with strong justification on a case-by-case basis, for other areas which may serve the public interest through early development.

- 1.3.b The City should adequately plan for public improvements/services to support designated land uses for all areas as they become suitable for development and/or proposed for annexation.

The City should prepare master plans for providing sewer, water, fire protection, police protection, drainage, and other services for all new growth areas after the adoption of the General Plan. Refer to Chapter 5—Public Services and Facilities for specific policies regarding each of these areas.

- 1.3.c The City should develop systems to evaluate the cost of providing various services to new development and/or areas proposed for annexation and establish clear policy for meeting those costs.

The City needs to develop appropriate tools and techniques for evaluating the fiscal impacts of new development, including the costs of providing services and needed infrastructure. Policies (such as those contained in the Public Services and Facilities Chapter of this plan) need to be established to insure that new development pays for the impacts it causes, so that the burden does not fall on current City residents.

- 1.3.d The planning for land uses in newly developing areas should reflect a mix of land uses which will support a neighborhood, including a variety of residential densities and price ranges, neighborhood and convenience shopping facilities, and public facilities such as schools and parks.

The City will promote the use of the mixed-use, pedestrian- and transit-friendly neighborhoods ("Urban Villages") in all new growth areas of the City as much as feasible.

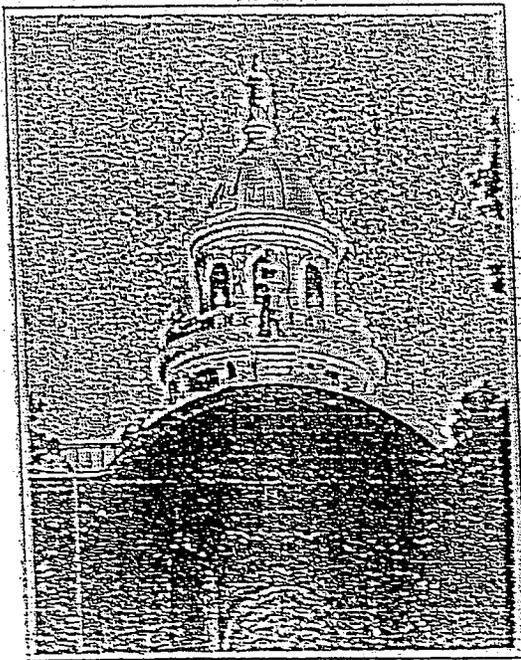
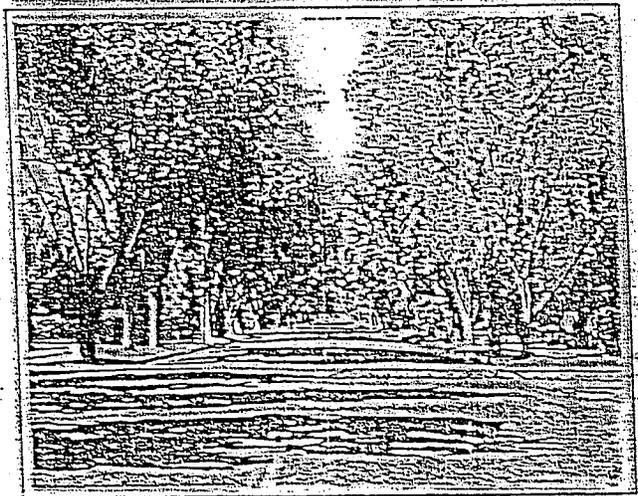
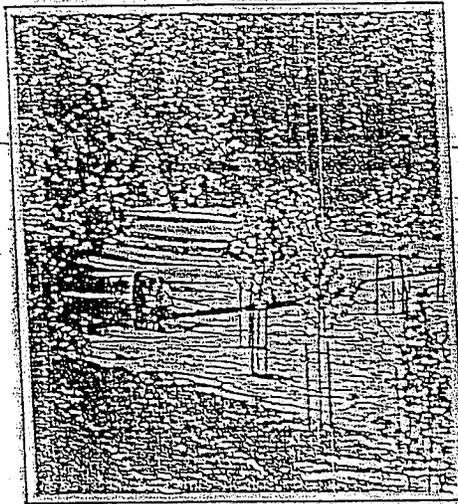
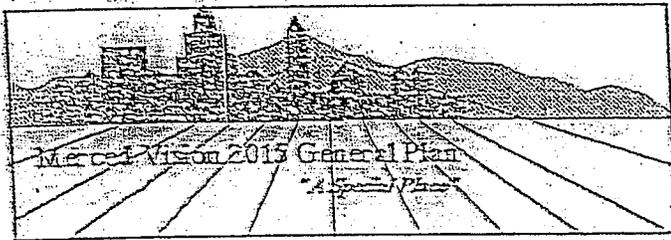
- 1.3.e Work with the County to implement the land use provisions of the "Property Tax Sharing Agreement between the City of Merced and the County of Merced" (Section 2.3.4).

The City will work closely with the County to implement the land use provisions of the agreement, which include a) maintenance of existing agricultural zoning within the SUDP; b) requirements and procedures for areas currently zoned for urban development; c) agreement by the County not to expand the existing Rural Residential Centers in the Sphere of Influence outside the University SUDP; and, d) cooperative planning and referral of projects within the University Community SUDP.

EXHIBIT H

Merced Vision 2015

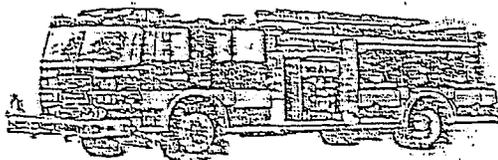
General Plan



- Fire and Police Protection
- Water
- Wastewater
- Storm Drainage/Flood Control
- Solid Waste Disposal
- Schools
- Library and Cultural Services
- Health and Justice Services

Transportation and transit services are addressed in the Transportation and Circulation Element (Chapter 4), and recreational facilities are addressed in the Open Space, Conservation, and Recreation Element (Chapter 7).

5.2 SETTING



5.2.1 Fire Protection

History of the Merced Fire Department

The concern for fire protection in the City of Merced can be traced back to 1873 when the first fire department, "Bureka Engine Company No. 1," was formed. A used fire engine was obtained in 1874 and christened "Old Betsy." The first engine house wasn't built until 1885 on 18th and Canal Streets. In 1889, the second floor of this engine house was converted into the city hall and council chambers for the newly-incorporated City of Merced. In 1891, the original engine company was replaced by "El Capitan Hose Company No. 1," a volunteer group which served until 1952 when it opted to disband.



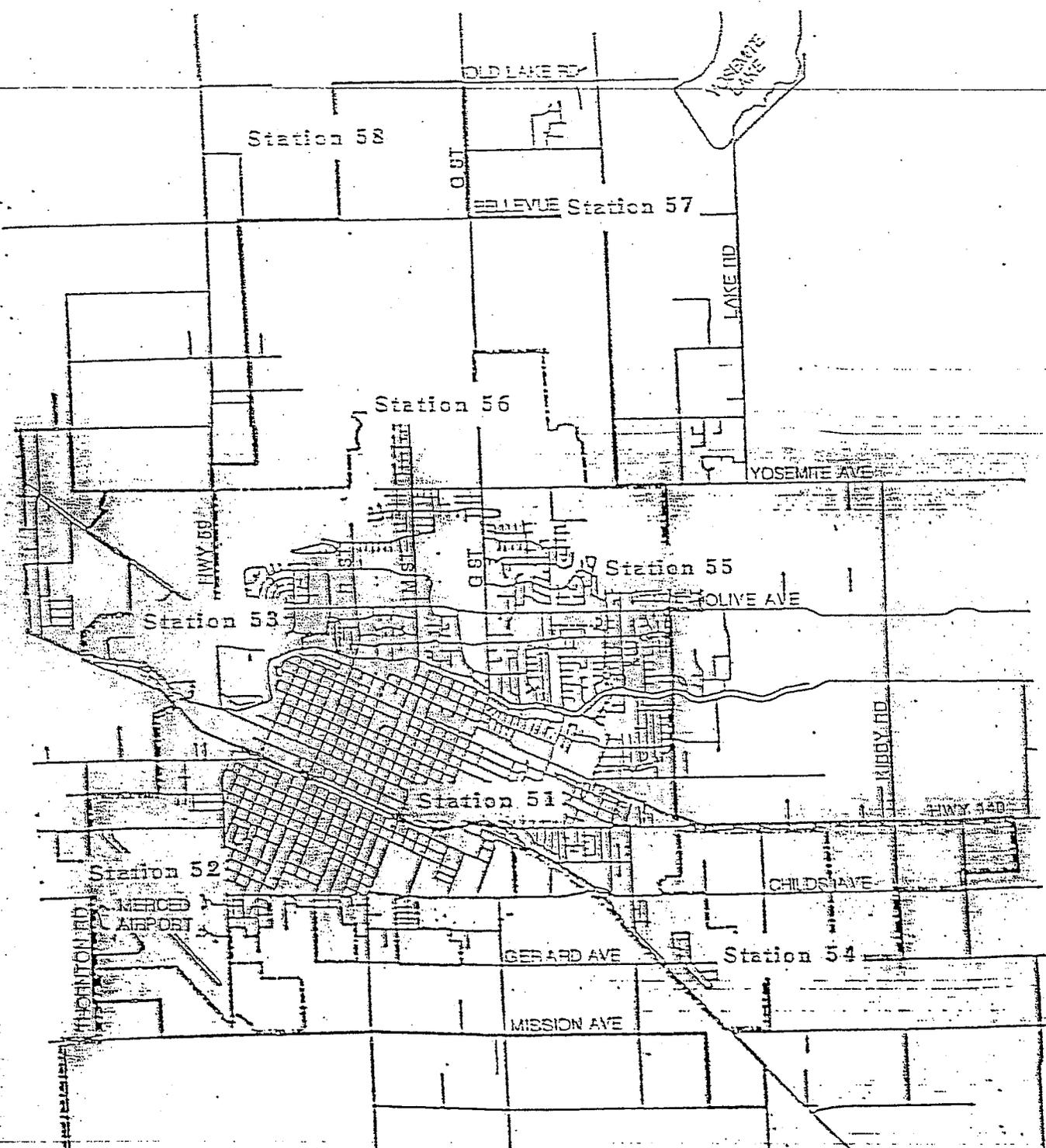
City Hall and Fire House (1925)

Merced Fire Department

The City of Merced Fire Department provides fire protection, rescue, and emergency medical services from four fire stations throughout the urban area. The City central fire station is located in the downtown area. (This facility is scheduled to be moved to 16th and G Streets by 1997.) A station on East 21st Street near Yosemite Park Way, a station north of the Merced Mall on Loughborough Drive, and another at the Municipal Airport are the other three stations.

Fire Department personnel are typically assigned on a three-platoon work schedule, which provides the City coverage 24 hours a day, seven days a week. The Department equipment includes first-line engine companies (carry and pump water), ladder companies, reserve engines and ladder trucks, and other miscellaneous vehicles.

Merced's fire protection system operates according to a central station concept. Under this concept, a central station can respond to calls from within its own service area or district, and can provide back-up response to other districts as well. From 1990 to 1995, response capacity doubled.



Fire Station Locations are Approximate

SOURCE: Merced City Fire Department

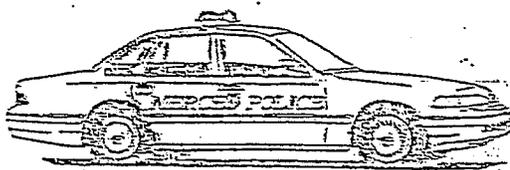
Merced Vision 2015 General Plan

Chapter 5 Public Services and Facilities

The Department is rated under the auspices of the Insurance Services Office (ISO) which defines protection services on a scale of 1 to 10—1 representing the best level of protection and 10 indicating no protection at all. The Department's 1995 rating is Class 2, which is considered to be well above average, despite manning levels well below national averages. This rating helps keep the costs of fire insurance premiums low for City businesses.

The City's Fire Department Master Facilities Plan is used in the planning of stations that will provide protection within a primary service area. The Department has a goal of maintaining a response time of four to six minutes for the first crew to arrive at a fire or medical emergency within an assigned district. This goal was chosen on the basis of proven factors affecting property damage and, more importantly, life.

As the City continues to grow in population and area, the fire protection system will have to change if it is to maintain this response time standard. This would require three existing stations to be relocated and four new facilities with personnel and equipment to be added to the system. Figure 5.1 shows tentative fire station locations.



5.2.3 Police Protection

Police protection for the entire City is provided by the City of Merced Police

employs a mixture of sworn officers, non-sworn officer positions (clerical, etc.), and unpaid volunteers (VIP's). The 1995 service standard used for planning future police facilities is approximately 1.32 sworn officers per 1,000 population.

Merced is divided into three police districts (Figure 5.2), each with its own police facility and officers. District One serves the area north of Bear Creek from the North Station on Loughborough Drive. District Two serves the area between Highway 99 to the south and Bear Creek to the north from the Central Station at M and 22nd Streets. District Three serves the area south of Highway 99 from the South Station in McNamara Park.

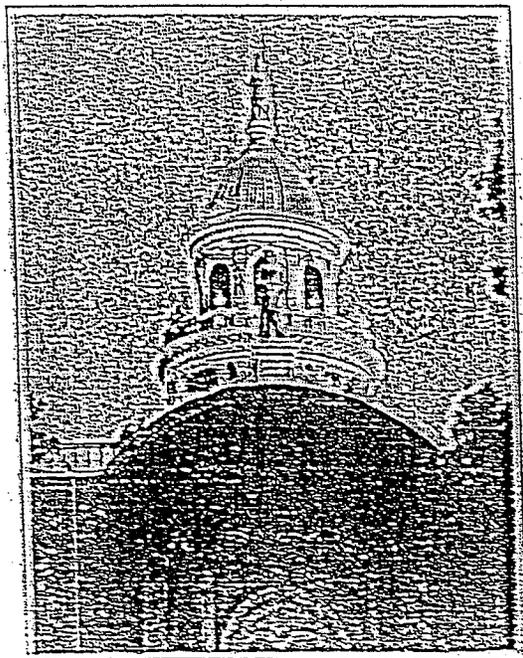
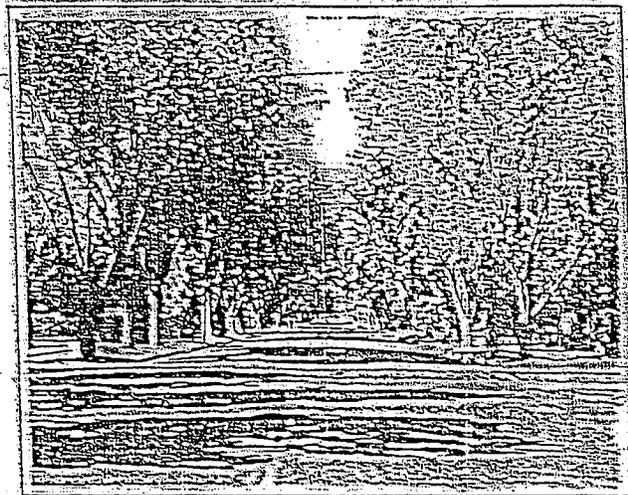
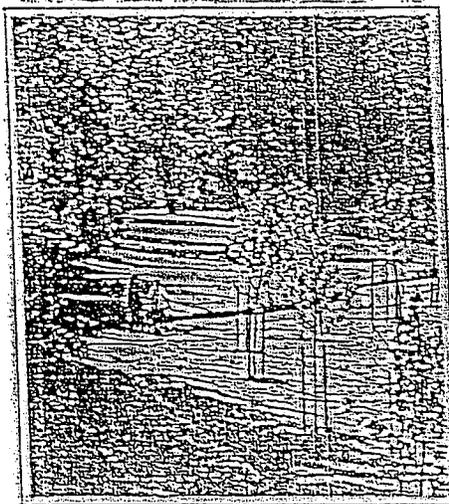
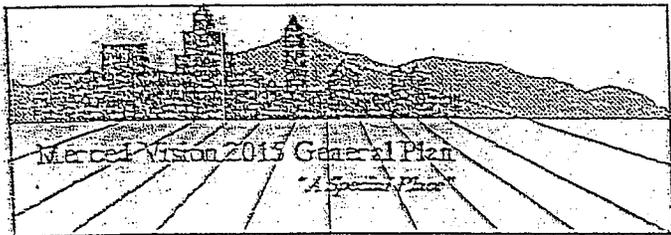
The primary reason for the three districts is to place police officers closer to the neighborhoods and citizens they serve. The Police Department feels that this "community policing" concept will be successful in combating a growing incidence of crime as the City grows. Citizen councils have been established in each district to meet with area commanders and develop strategies for combating crime in their neighborhoods. Neighborhood Watch programs are located throughout the City and have been highly successful.

Criminal activity and calls for police service will increase due to population growth alone. By 2015, officer responses to incidents could increase from 45,000 in 1994 to over 100,000 annually if current population trends hold true. To cope with this anticipated workload, additional officers, equipment, and facilities will need to be added.

EXHIBIT I

Merced Vision 2015

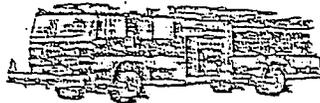
General Plan



5.3 ISSUES AND INTENT

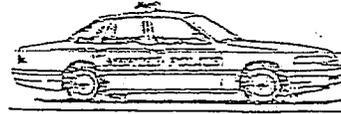
In order to ensure the provision of high-quality, cost-effective public facilities and services for the City of Merced as it grows, several issues needed to be addressed in the Goals, Policies, and Actions (Section 5.4) of this chapter. A brief summary of the issues covered under each of the goal areas follows.

General public facilities and service issues are addressed under Goal Area P-1. Master planning of major facilities and infrastructure, the cost-effective delivery of existing services, and the requirement for new development to provide its fair share of public improvements are some of the issues covered.



5.3.1 Fire Protection

The location of fire facilities is a critical factor in providing adequate fire protection to the citizens of Merced. The time and distance that must be traveled to the scene of an emergency can determine whether fire suppression efforts will be successful. The goals, policies, and actions (Goal Area P-2) in this chapter address locational criteria and distribution goals for new fire facilities. Additional goals, policies, and actions relating to fire prevention methods, disaster preparedness, and hazardous materials safety can be found in the Safety Element (Chapter 11).



5.3.2 Police Protection

Community-based policing aims to bring police officers into the neighborhoods they serve to try to deter criminal activity before it starts. This chapter includes goals, policies, and actions (Goal Area P-2) designed to implement these concepts. Additional goals, policies, and actions relating to community-based policing concepts and crime prevention can be found in the Safety Element (Chapter 11).



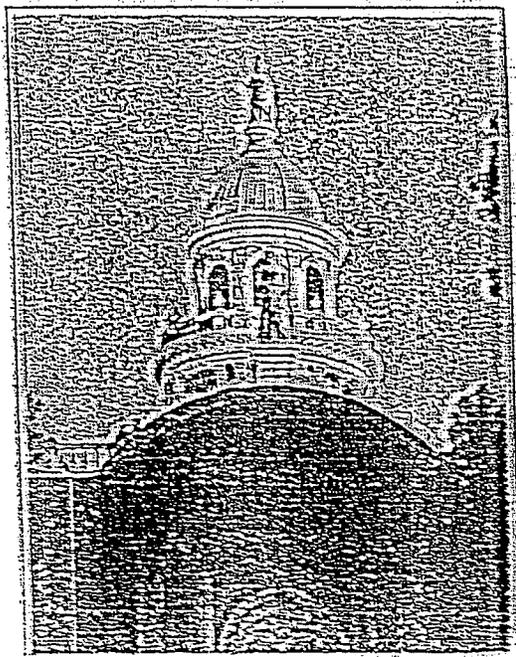
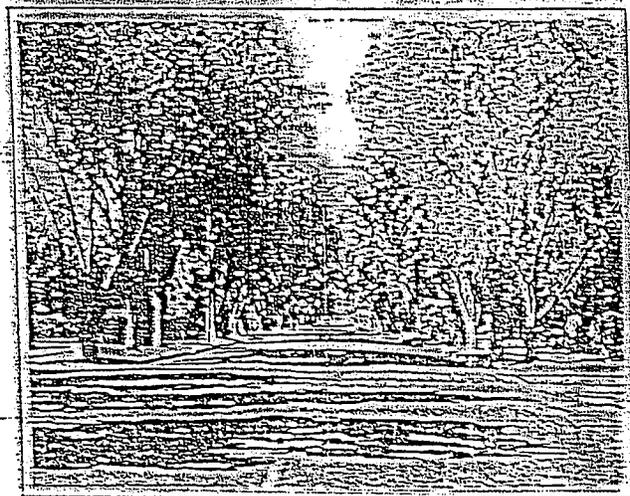
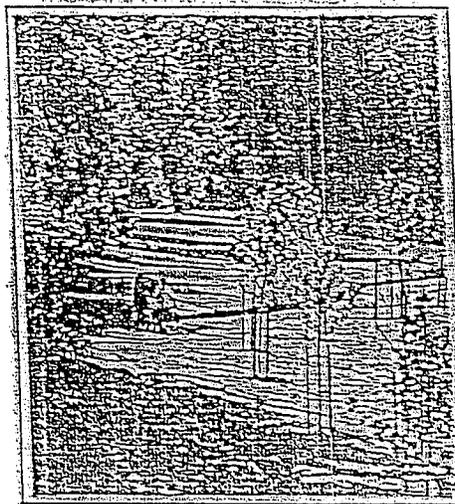
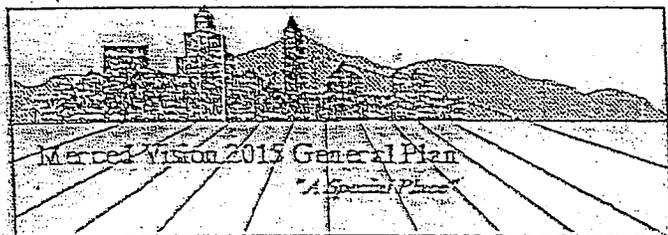
5.3.3 Water

The Merced Water Supply Plan has evaluated the City's water needs through 2030 and suggested strategies for meeting those needs. In cooperation with the County and MID, the City will develop conservation and recharge efforts to stabilize the region's aquifer. The goals, policies, and actions (Goal Area P-3) in this chapter address those efforts. Additional policies regarding water quality and water conservation are contained in Chapter 7, Open Space, Conservation, and Recreation, and a discussion of water resources can be found in the Sustainable Development Chapter (8).

EXHIBIT J

Merced Vision 2015

General Plan



5.4 PUBLIC SERVICES AND FACILITIES GOALS, POLICIES, AND ACTIONS

GOALS FOR PUBLIC UTILITIES AND SERVICES

GOALS

- E Maintenance and Improvement of Merced's Existing Infrastructure
- E New Development Which Includes a Full Complement of Infrastructure and Public Facilities
- E Efficient and Cost-Effective Public Service Delivery

POLICIES

- P-1.1 Provide adequate public infrastructure and services to meet the needs of future development.
- P-1.2 Utilize existing infrastructure and public service capacities to the maximum extent possible and provide for the logical, timely and economically efficient extension of infrastructure and services where necessary.
- P-1.3 Require new development to provide or pay for its fair share of public facility and infrastructure improvements.

Policy P-1.1

Provide Adequate Public Infrastructure and Services to Meet the Needs of Future Development

One of the key elements to promoting a healthy local economy in Merced is the quality of life enjoyed by the City's residents. The quality and availability of urban services and infrastructure is found to be an important measure of urban quality.

Implementing Actions:

- 1.1.a Through development review, ensure that utilities are adequately sized to accommodate the proposed development and, if applicable, allow for extensions for future developments, consistent with master plans.

Improvement standards applied through the development review process should be based upon existing and potential utility needs to a site. The review process will consider both municipal utility services and utility services provided by quasi-public or private utility service providers as much as feasible.

- 1.1.b Master infrastructure plans for newly developing areas may be prepared and adopted as necessary.

The City may prepare master infrastructure plans for newly developing areas. Individual development proposals will need to develop plans and specifications for accessing planned City infrastructure.

1.1.c Include in Specific Plans and master plans, a phasing plan for providing access, sewer, water, drainage, flood control, schools, parks and other appropriate governmental facilities and services.

A phasing plan helps ensure that adequate service facilities can be accommodated in the planning area and that new facilities and services will be provided in a manner that keeps pace with population growth.

1.1.d Construct a stormwater drainage system, water system and sewer system in accordance with master plans.

Master plans which identify needed infrastructure improvements and extensions, phasing options, cost estimates and potential funding alternatives may be prepared.

1.1.e Apply for Federal, State and regional funding sources set aside to finance infrastructure costs to the maximum extent feasible.

Use of public funding sources to help off-set infrastructure costs could benefit the entire community by increasing housing and employment opportunities.

Policy P-17

Utilize Existing Infrastructure and Public Service Capacities to the Maximum Extent Possible and Provide For the Logical, Timely and Economically Efficient Extension of Infrastructure and Services.

It is in the community's interest to maintain an efficient and cost effective public service delivery system. To this end, the City supports development that utilizes and improves existing infrastructure and service delivery systems as much as possible.

Implementing Actions:

1.2.a Develop plans which establish priorities to address existing inadequacies in the City's infrastructure system.

Present sewer, water, drainage and circulation plans need to be periodically reviewed and updated to reflect existing circumstances and to note system deficiencies and possible corrective measures.

1.2.b Expand existing facilities to the extent possible at present locations.

As long as it remains cost-effective, existing facilities (such as the Wastewater Treatment Plant) should be expanded at their present locations to save the cost of obtaining and constructing new facilities. Long term facility development plans should include adequate area for future expansion. Shared or regional facilities are also encouraged where appropriate to avoid duplication of services.

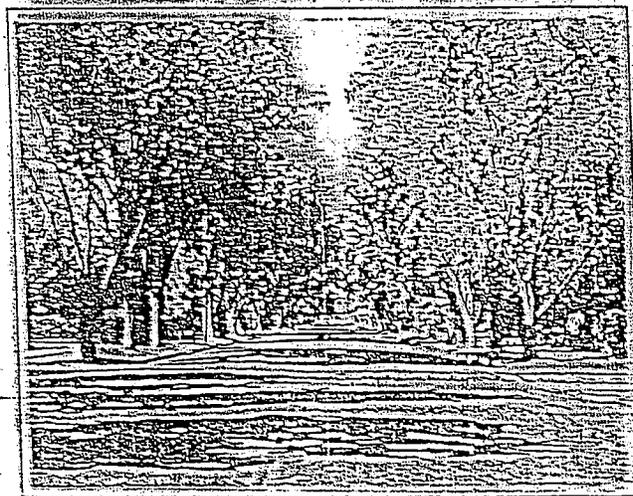
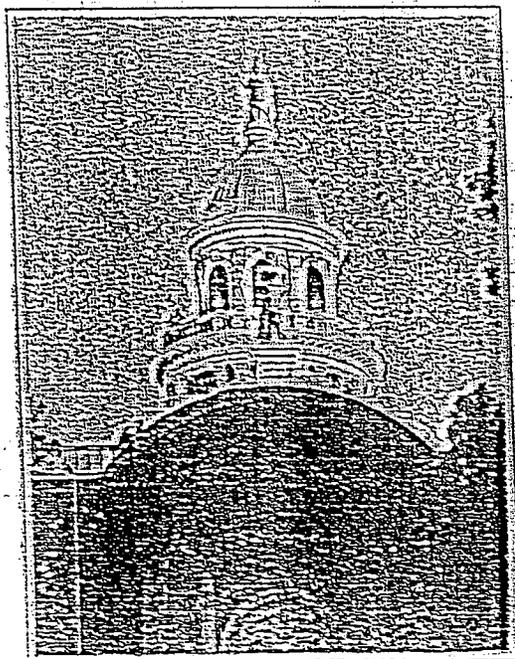
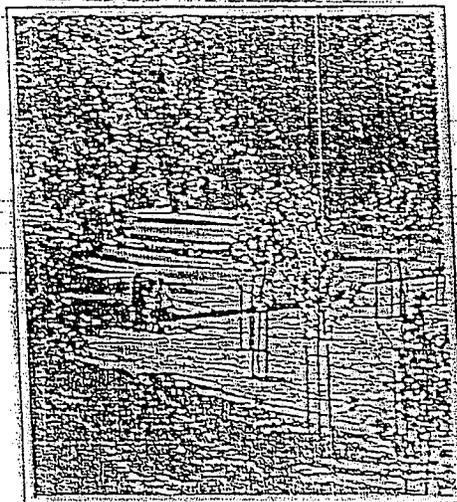
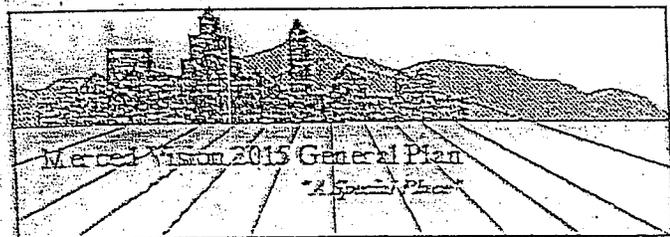
1.2.c Periodically evaluate the City's service delivery system and identify policies and programs which may improve operating efficiency and/or reduce service delivery costs.

The City will on a continuing basis evaluate its service delivery systems to search for ways of improving efficiency and service, reducing costs, etc.

EXHIBIT K

Merced Vision 2015

General Plan



Goal 12 - Police and Fire Protection Services

GOAL

■ A Community Reasonably Safe From Crime and Fire

POLICY

P-2.1 Maintain sufficient public protection facilities, equipment, and personnel to serve the City's needs.

Policy P-2.1

Maintain Sufficient Public Protection Facilities, Equipment, and Personnel to Serve the City's Needs

Public protection services and facilities are to be maintained in the City of Merced at a level that promotes the health and welfare of the city's residents. The City is committed to assuring that facilities, equipment and staffing levels of its fire and police service units meet the highest standard that can be accommodated within the resource constraints of the City.

Implementing Actions:

2.1.a Periodically review existing and potential station facilities, equipment and manpower in light of protection service needs.

Fire-fighting equipment and companies of personnel should be sufficient in number and adequately distributed throughout the planning area in order to allow optimum response time to calls within the primary service areas of a fire station and to ensure prompt availability of additional companies for serious or simultaneous fires. Police service districts should be sized to promote community-based policing concepts and to maintain sufficient personnel to promote crime prevention and to combat criminal activity.

2.1.b Determine that new development is adequately served by fire and police protection services.

Fire stations should be located so that no development in the City is outside the primary response areas (4 to 6 minutes) of at least one firehouse. Development plans should be reviewed with respect to existing and planned future fire station sites and police resources.

2.1.c Fire station sites should be selected based on the distribution of land uses and population projected when the area is fully developed.

Fire sites should be located within planned urban service centers based on future use.

2.1.d Ease of access should be a primary consideration in selecting a fire station site.

The following guidelines should be considered when siting new firehouse facilities:

- a) Fire stations should be located on streets close to and leading into major or secondary thoroughfares.
- b) Fire stations should be so located as to minimize delays caused by incomplete street patterns.

- c) A fire station should be near the center of its primary service area, measured in terms of driving time to the periphery of this area.
- d) Fire stations should be convenient to high value areas of commercial or industrial districts, but not located in them unless such a location is necessary to maintain the required service radius.
- e) Fire stations should be located, as much as feasible, away from other uses which may be sensitive to the noise impacts of frequent alarms.
- f) Fire stations and their sites should be designed to fit in with their surroundings, including consideration of open spaces, off-street parking, landscaping, and general appearances, especially when located in residential districts.
- g) In residential service areas, fire stations should be located in or near those sections which have the highest density.

2.1.e Maintain an adequate and reliable water system to serve fire protection needs.

An adequate and reliable water system is a key element in maintaining adequate fire protection to the community. In fact, the adequacy of the water system is one of the criteria used for determining the City's fire protection rating from the Insurance Services Office (refer to Section 5.2.1).

2.1.f Provide fire facilities and related resources to support the "central station concept."

In order to maintain above-average fire insurance ratings, fire facilities should be provided and sited to support the "central station concept" described in Section 5.2.1 of this chapter.

2.1.g Utilize existing community resources, to the maximum extent feasible, in the provision of public protection services.

The City should continue participation in and support in community level crime prevention programs such as the Neighborhood Watch and VIP (Volunteer In Police) programs.

2.1.h Assure that new development utilizes modern public protection concepts in their design and development.

Development review processes should involve public protection service providers in the city. Public protection planning concepts such as "defensible space", security lighting, access, visibility, etc., may be applied to new development to reduce policing problems and improve police effectiveness.

(Notes: Additional policies and implementing actions regarding police and fire protection services can be found in the Safety Element, Chapter 11.)

EXHIBIT L

MERCED FIRE / RESCUE STRATEGIC PLAN 2003



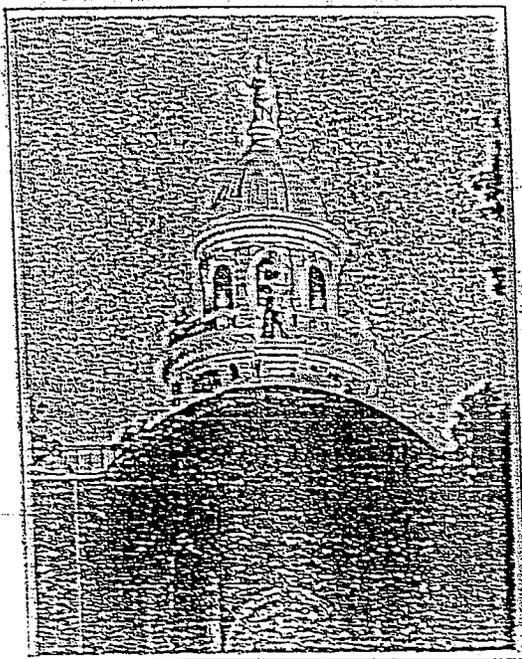
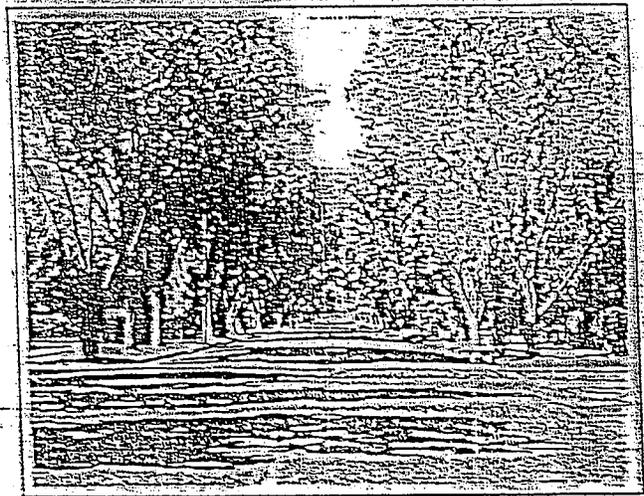
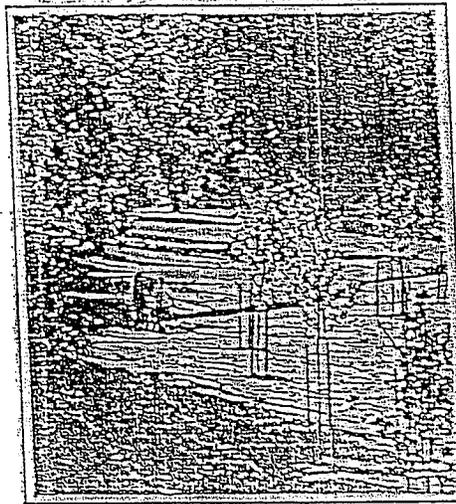
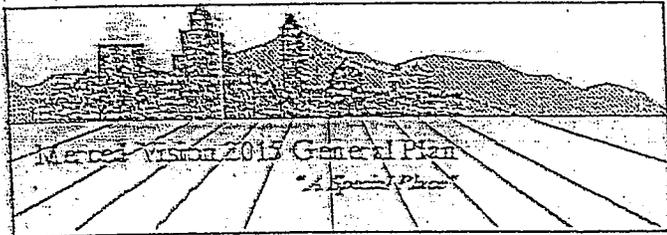
DIVERSIFIED SERVICES

- 1) Due to community growth and development, review and revise the City of Merced Community Fire Protection Master Plan (CFPMP) to maintain adequate and affordable service levels, as directed by the City Council.
 - contained space, trench rescue, hazardous materials, burn facilities, simulations, and satellite Federal FETN training (dubbing/digital AV).
- 2) Develop a training complex, which includes props and resources for
- 3) Establish a level "A" Hazardous Materials Response Team.

EXHIBIT M

Merced Vision 2015

General Plan



abatement during the year. Each property within the City is served annually each spring with notice sent for removal of weeds, etc. The City Fire, Police, and Public Works Departments also pick up abandoned vehicles, and a "Spring Clean-up" conducted annually allows people to have bulky refuse picked up without charge.

Naturally, the use of built-in protection such as fire resistant materials and automatic sprinklers in all structures above that required by the Uniform Building and Fire Codes significantly reduces the risk of urban fires and may reduce the City's reliance upon fire suppression crews.

Land Use

Merced has a variety of land use types. Many of these require tailored fire protection considerations. These land uses are included as follows:

High-Hazard Occupancies

(schools, hospitals, nursing homes, and other high life hazard or large fire potential occupancies)

Medium-Hazard Occupancies

(apartments, offices, mercantile and industrial occupancies)

Low-Hazard Occupancies

(one-, two-, or three-family dwellings and scattered small businesses)

Rural Operations

(scattered dwellings, outbuildings, vacant lots)

Each of these land use types requires somewhat different fire suppression resources (e.g., emergency medical services, hazardous materials response,

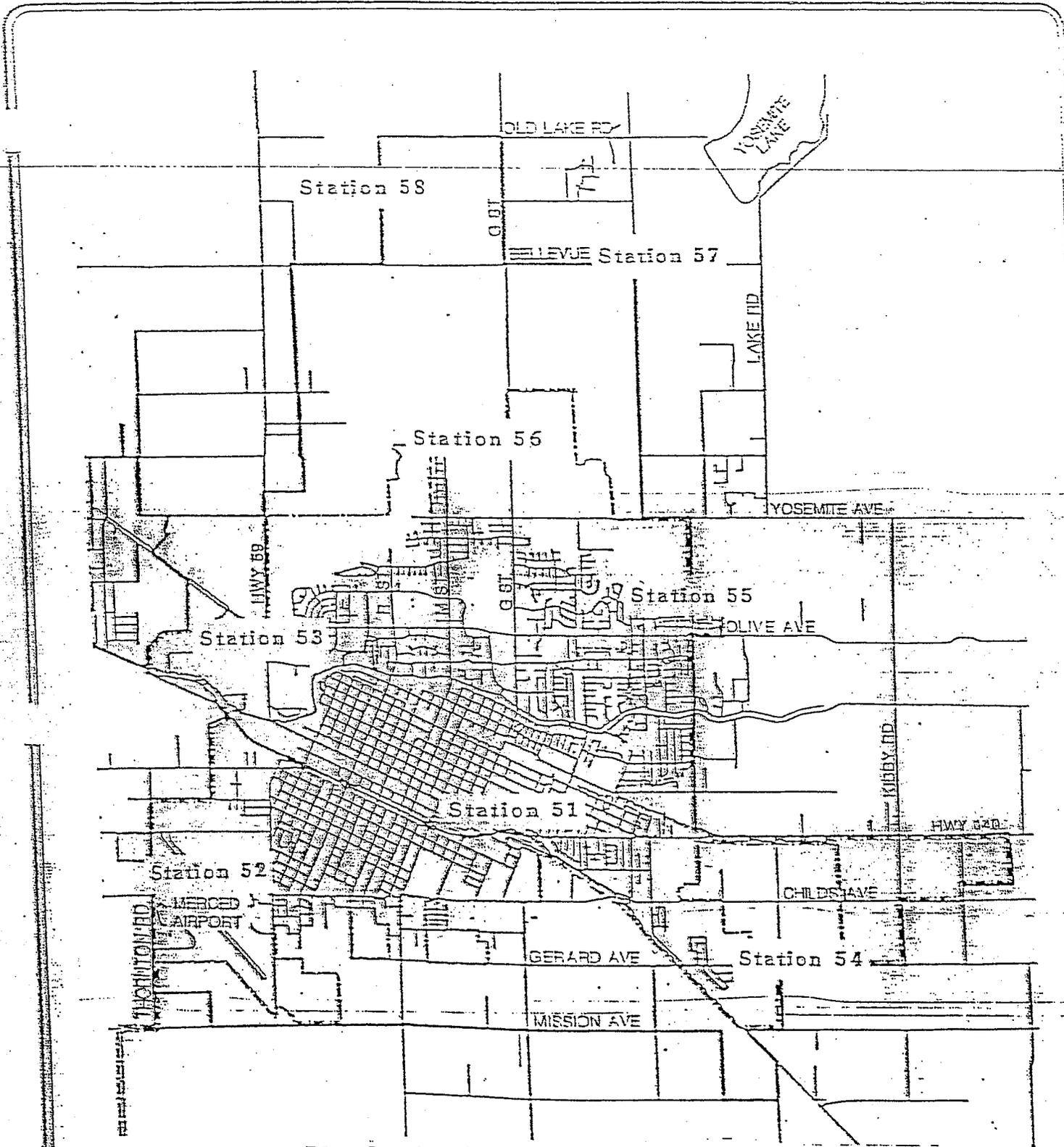
and heavy rescue). Merced's current policy is to provide emergency response within 4 to 6 minutes and to provide adequate resources to combat fires in these occupancies. The target of this response is to place a fire unit on scene at 95 percent of incidents in five minutes. Therefore, it is important that those industries using hazardous materials, large facilities, or requiring special fire hazard considerations going into new areas of the City not currently occupied by these types of businesses be accompanied by additional fire department equipment and/or personnel.

The current response practice provides for a first-alarm assignment of two pumps, one ladder truck, one mini-pumper, and a chief officer for all structure fires. The increased awareness and use of hazardous materials, and the need for heavy rescue services as illustrated during the Loma Prieta Earthquake, however, have led the Fire Department to develop programs to provide expanded services.

Wildland Fires

Wildland fire hazards exist in varying degrees over approximately 90 percent of Merced County, mostly outside urban areas. The Valley's long, dry summers and extensive vegetation makes for a fire season that extends from late spring to early fall. Approximately fifty to one hundred wildland fires can occur in Merced County in any one year. Irrigated agricultural land, however, is less susceptible to wildland fires than grazing areas.

As the City has increasingly annexed large blocks of undeveloped land, the potential for wildland fires (mainly



Fire Station Locations are Approximate

SOURCE: Merced City Fire Department



Figure 11.6

EXHIBIT N

CITY COUNCIL/REDEVELOPMENT AGENCY PUBLIC HEARINGS
CONTINUED

STAFF'S RECOMMENDATION: Adopt a motion denying the applicant's requested modification of Condition No. 2, but approving Vesting Tentative Subdivision Map No. 1292, subject to the conditions as recommended by staff to the Planning Commission on November 8, 2006, and modification of Condition No. 21, plus Findings A through S of Planning Commission Staff Report No. 06-42 - 4th Addendum.

L. CITY COUNCIL AND AGENCY REPORTS

1. ESTABLISHING PRIORITIES FOR DEVELOPMENT OF FIRE STATIONS *(At its December 18, 2006 meeting, the City Council directed staff to prepare an agenda item for City Council review concerning the priorities for development of fire stations within the City.)*

RECOMMENDATION: Adopt a motion:

- A. Establishing priorities as recommended for the development of fire stations; and
- B. Directing staff to seek proposals from architects for the design of Fire Station 56, to be located at the Merced College site.
-

ADMINISTRATIVE REPORT

AGENDA

ITEM: _____

MTG

DATE: _____

TO: James G. Marshall, City Manager
FROM: Jack D. Lesch, Director of Development Services
Ken Mitten, Fire Chief
Brad Grant, Finance Officer
William D. Cahill, Assistant City Manager
DATE: December 21, 2006
SUBJECT: Establishing Priorities for Development of Fire Stations

RECOMMENDATION: Adopt a motion:

- A. Establishing priorities as recommended for the development of fire stations;
and
- B. Directing staff to seek proposals from architects for the design of Fire Station 56, to be located at the Merced College site.

POSSIBLE ACTIONS:

1. Adopt the motion as recommended.
2. Modify the action.
3. Direct further staff work (specify in motion).
4. Deny the action.

AUTHORITY: Charter of the City of Merced, Section 200; Merced Municipal Code Section 2.36.20.

DISCUSSION: At its December 18, 2006 meeting, the City Council directed staff to prepare an agenda item for City Council review concerning the priorities for development of fire stations in the City of Merced. This item was prompted by discussion of a development proposal in northeast Merced, but has broader implications for the community as a whole.

Past Fire Station Planning and Response Standards: The City has had an adopted Fire Station Master Plan since the middle 1980s. This Plan addresses future locations of fire stations to serve the existing Specific Urban Development Plan area, and is further incorporated into the City's General Plan. Fire station master planning is a process designed to provide adequate, yet affordable fire protection.

Pursuant to this longstanding plan, the City developed and opened Fire Station #55 on Parsons Avenue at Carpenter Park in early 2006. The City also followed the Plan in recently purchasing a site from Merced College for the planned Station #56. See Attachment 1 for map of existing coverage area and Attachment 2 for expanded area with Merced College and Southeast stations.

The Plan is based on accepted national fire response standards, especially those prescribed by the Insurance Service Office (ISO) for fire company distribution "standards of coverage" response areas. These include:

- Engine Company within 1.5 miles (circles)
- Response criteria of 4 to 6 minutes
 - 1 minute - alarm receipt
 - 1 minute - turn-out time for crews
 - 4 minute - road time average of 30 mph (2 miles max)

Accreditation criteria within the ISO grading process allows for an average of 90% of calls to be responded to within 5 minutes.

Setting Priorities: The City's Fire Master Plan and Public Facilities Financing Plan (PFFP) provide for six additional stations in the 20-year time horizon of the PFFP (two relocations and four new stations):

- Station 53 (replace Loughborough, move to near Hwy 59 & Olive)
- Station 54 (Southeast: replace 21st Street, move to near Gerard and Coffee)
- Station 55 (on Parsons Avenue, at Carpenter Park – already completed)
- Station 56 (Merced College)
- Station 57 (Bellevue between G and Lake)
- Station 58 (near Bellevue and R)

These stations are to be constructed as growth occurs, to serve expanded areas of the community. With Station 55 completed and opened, the question is prioritizing remaining stations.

In considering priorities and scheduling of construction, the following factors should be considered:

- Need for the station, as evidenced by call volume and the build-out of development within the service area of the station (see Attachment 2 which illustrates the degree of development within the service areas of each of the planned stations). Approximately 40% of calls in Merced are experienced north of Bear Creek.
- Readiness to build the station (in terms of ownership of the site and other factors)
- Vehicular circulation allowing adequate response times (any special limitations in the road network of the service area, creating difficulties in access). For example, in the case of the Absolute-Leeco annexation area, the lack of completion of Gardner and Cardella Roads prolongs response. In southeast Merced, the lack of completion of the road network generally also prolongs response.
- Availability of staffing for the stations. Funding is available to support staffing for one new station. Relocations of Stations 53 and 54 do not require additional funding for operations. However, new Stations 57 and 58 would require more operating funding than is currently available.

After considering these factors, staff recommends the following priority/scheduling list:

1. Station 56 (Merced College)
2. Station 54 (Southeast: replace 21st Street, move to near Gerard and Coffee)
3. Station 53 (replace Loughborough, move to near Hwy 59 & Olive)
4. Station 58 (near Bellevue and R)
5. Station 57 (Bellevue between G and Lake)

Station 56. Merced College: This station location is recognized in Merced College's Campus plan as well as City plans, and is ready to proceed to construction. The City owns the site, which was recently purchased from Merced College. Staffing for an additional station is available, due to revenues from Community Facilities Districts. The need for this station is the most immediate, evidenced by both growing call volume in the area, and the amount of development in the area to be served by the station (see Attachment 2). This station would serve Bellevue Ranch, recently annexed land (e.g. Absolute-Leeco), and proposed annexations shown in Attachment 2.

Crosswinds is also proposing phases to the north of Bellevue Road, which would rely on Station 56 and additional measures to provide adequate service, yet to be

determined by further City staff evaluation. While the developer may wish to advance this development north of Bellevue and west of "R" Street (extended), it will need to be evaluated in terms of adequate safety services.

Station 54. Southeast: This station is less ready to proceed to construction than the Merced College site. Although a site has been identified, the City does not own it, and precise location and acquisition are dependent upon negotiations with developers intending a large-scale commercial development. If put in line before the Merced College station, the result is likely to be lengthier development times for both. While the service area is developing, it is far less developed than the service area for the College station, and call volumes in the southeast Merced area are less. However, as development progresses in the southeast area, additional fee income will be generated which will help support the station's construction. This includes proposed large commercial and industrial projects starting in 2009-2010. No new staffing is needed, because this station is a relocation of the 21st Street station, not a net new addition.

Station 53. Olive/59: While the relocation of the Loughborough station has been long anticipated, there is no specific site identified for it. It is not near construction readiness. The station in its present location is adequately located, but as development progresses to the north and west, there will be increasing need to move. No new staffing is needed, because this station is relocation, not a net new addition.

Stations 58 and 57: These are both seen as much longer-term for development. Neither location has any significant urbanized development around it, so there is no current need for either. Neither has a firmly identified site. Staffing costs for these stations are not yet affordable. However, it should be recognized that Crosswinds, the developers of Bellevue Ranch, would like to proceed with development of an area in the far northwest of Bellevue Ranch – north of Bellevue Road and west of R Street. Aside from this request, the City has no other reason to build this station in the near future.

Finances for Construction: Each of the future stations would be built for the purpose of serving newly-developed areas. Because new stations serve new growth, the capital costs of building new stations is provided for in impact fees charged to new development, as established in the City's adopted Public Facilities Financing Plan (PFFP). Fee levels are adjusted annually to assure adequate collection of funds. Although impact fees are deposited into separate accounts for various purposes (fire, police, roads, parks, etc.), the City Council may transfer money between the accounts as needed for construction of a particular project.

Existing balances and expected revenues in fire-related impact fee funds are not sufficient to build a new fire station in the coming three fiscal years. If a station is to be constructed in that time, it is likely that the Council would need to authorize transfers from other impact fee funds, provided that the other funds have money available.

Stations 53 and 54 are relocations. Their current locations may be sold, raising revenues to support the replacements for these stations. Alternate uses for these location may be City operations – Station 54 has been discussed for recreation center use, and Station 53 for police use. Whatever the use, the sales revenues are already included in the City's adopted PFFP, for a combined total of \$750,000. Even if market conditions increase the sale prices, the basic conclusion is still that the Council would need to transfer revenues among PFFP funds in order to obtain funding for multiple fire stations in the short term.

Development Process: The development process for fire stations can be summarized as four steps: (1) site acquisition (by purchase or dedication), (2) design, (3) construction, and (4) opening and operation.

The chart below summarizes recommended steps in the development process for the three stations which should be planned for now. Given the financial projections for fee income, the schedule shows construction and opening of the next station (#56) three years from now at the earliest, in FY 2010. This scheduling is likely to require some transfers by the City Council between impact fee funds, if the other funds have sufficient money available. If fee income is greater than expected, it may be possible to achieve construction earlier.

	Site Acquisition	Design	Construction	Opening/Operation
Station 56 (College)	2007 **	2008	2010	2010
Station 54 (Southeast)	2008	2010	future	future
Station 53 (Olive/59)	2011	future	future	future

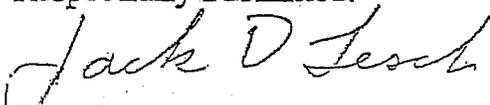
* All years are fiscal years and are for the completion of that step. For example, "2007" means the fiscal year ending June 30, 2007.

** Acquisition of Station 56 site is complete.

It is advisable to commence the design process for Station 56 now by seeking architectural proposals. While some of the design concept from the recently-completed Station 55 can be used, new construction drawings are needed because Station 56 will have a ladder truck (Station 55 does not), requiring additional space in the equipment bays.

RECOMMENDATION: Staff recommends the approval of Fire Station priorities, with the Merced College site (#56) being ranked first, the Southeast site (#54) second, and the relocation of the Loughborough Station (#53) third. Staff also seeks approval for requesting architectural proposals for the development of Station 56 at Merced College. Proposals and costs will be returned to the Council at a later date for consideration.

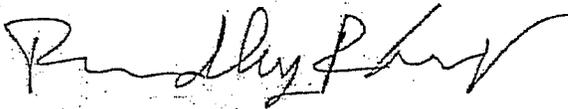
Respectfully Submitted:



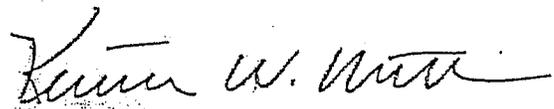
Jack D. Lesch
Development Services Director



William D. Cahill
Assistant City Manager



Bradley Grant
Finance Officer



Ken Mitten
Fire Chief

Reviewed and Approved:

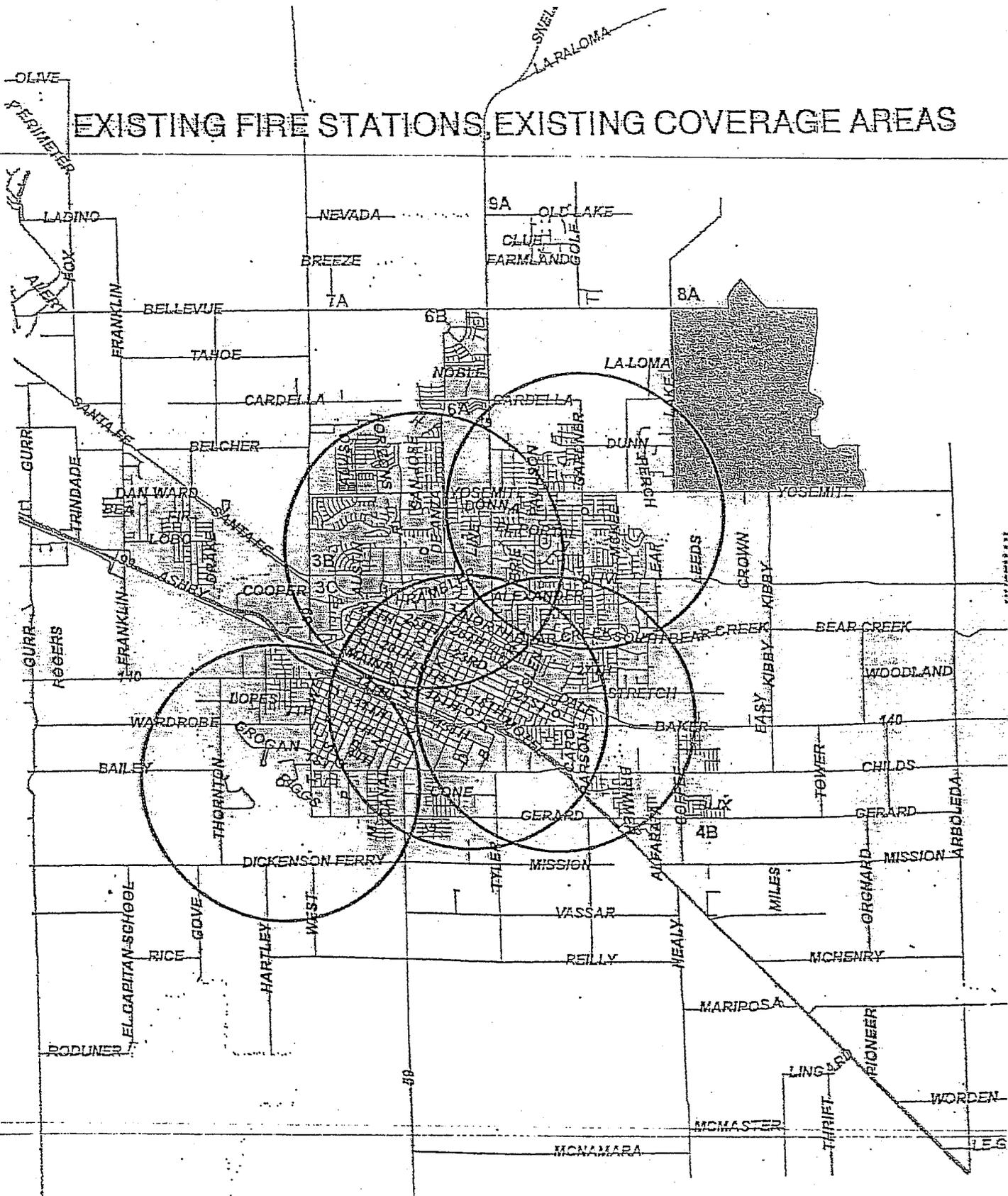


James G. Marshall
City Manager

Attachments:

1. Existing Fire Stations, Existing Coverage Areas
2. Proposed Fire Stations, Proposed Coverage Areas

EXISTING FIRE STATIONS, EXISTING COVERAGE AREAS

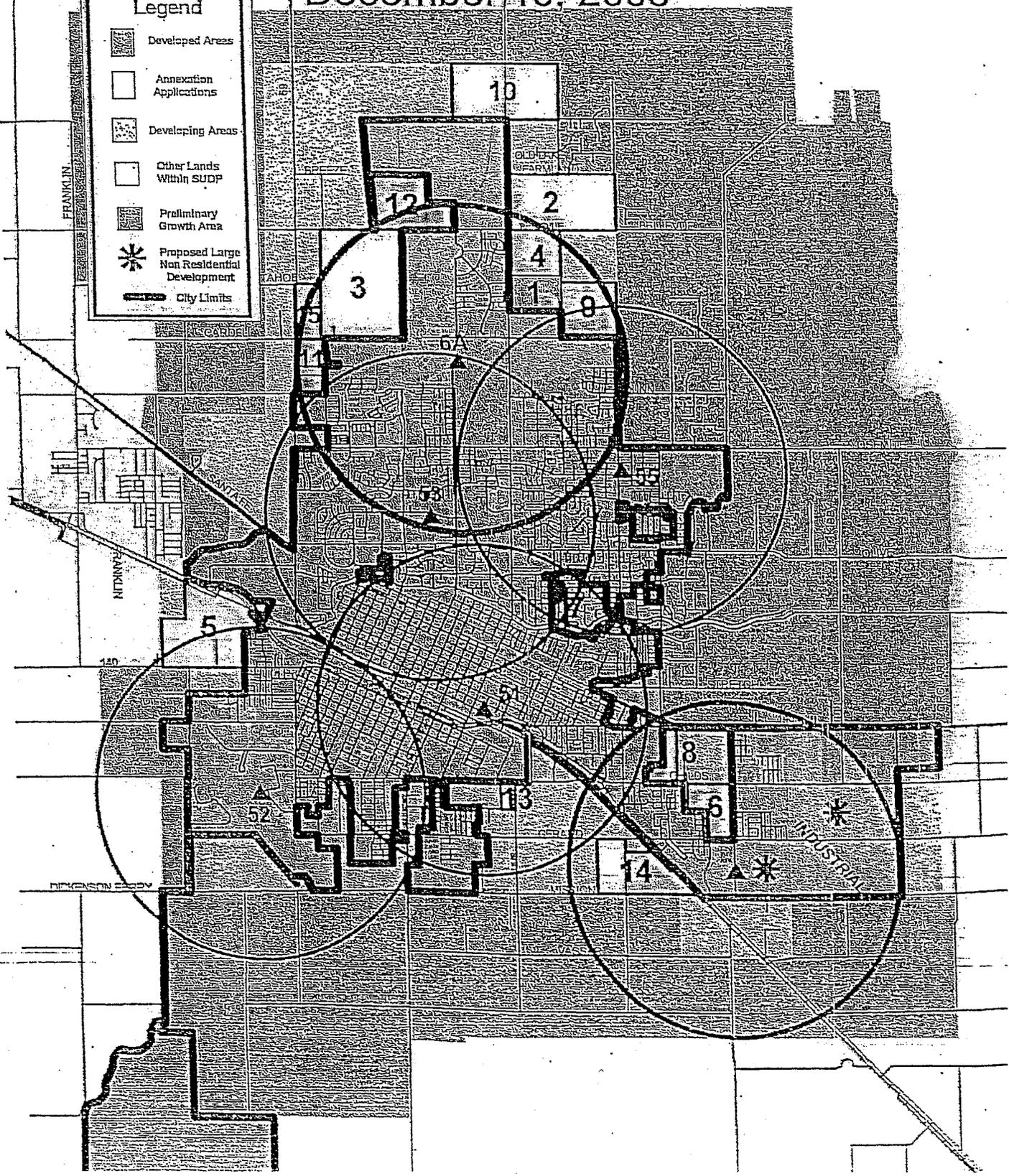


City of Merced Growth Activity Map

December 18, 2006

Legend

-  Developed Areas
-  Annexation Applications
-  Developing Areas
-  Other Lands Within SUDP
-  Preliminary Growth Area
-  Proposed Large Non Residential Development
-  City Limits



BY THE FOLLOWING VOTE:

AYES: COUNCIL MEMBERS: OSORIO, SPRIGGS, CORTEZ,
GABRIALT-ACOSTA, POLLARD, SANDERS, WOOTEN
NOES: COUNCIL MEMBERS: NONE
ABSTAIN: COUNCIL MEMBERS: NONE
ABSENT: COUNCIL MEMBERS: NONE

(L-1) Establishing Priorities For Development Of Fire Stations

Fire Chief KEN MITTEN reviewed the administrative staff report.

Council Member SPRIGGS stated geography and access could make the relocation of Station 54 to the Gerard and Coffee area a prudent choice.

Council Member GABRIALT-ACOSTA suggested using the Loughborough station as a youth recreation center if the Police Department does not re-use.

Speakers from the Audience in Favor:

CHARLIE HUDDLESTON, Merced

ROBERT HADEN, representing Crosswinds Communities – in favor of utilizing developer funding and construction to locate an interim facility located at the M Street traffic circle south of Bellevue Road. Council Member SPRIGGS stated he was in favor of the interim station idea.

DAVID HAHN, representing Crosswinds Communities

ON MOTION OF COUNCIL MEMBER OSORIO, SECONDED BY COUNCIL MEMBER POLLARD, DULY CARRIED, RESOLVED, TO ESTABLISH PRIORITIES AS RECOMMENDED FOR THE DEVELOPMENT OF FIRE STATIONS; DIRECT STAFF TO SEEK PROPOSALS FROM ARCHITECTS FOR THE DESIGN OF FIRE STATION 56, TO BE LOCATED AT THE MERCED COLLEGE SITE; AND TO CONDUCT A JOINT FIRE STATION STUDY SESSION ON TEMPORARY A (INTERIM) FIRE STATION FOR BELLEVUE RANCH NORTH

2007-12

(Merced City Council Meeting January 2, 2007)

BY THE FOLLOWING VOTE:

AYES: COUNCIL MEMBERS: OSORIO, SPRIGGS, CORTEZ,
GABRIALT-ACOSTA, POLLARD, SANDERS, WOOTEN
NOES: COUNCIL MEMBERS: NONE
ABSTAIN: COUNCIL MEMBERS: NONE
ABSENT: COUNCIL MEMBERS: NONE

(K-4) Continued Public Hearing – Appeal for Planning Commission Denial
of Tentative Subdivision Map No. 1292-Palisades Park

Director of Community Development JACK LESCH reviewed the
administrative staff report.

Speakers from the Audience: RICK TELEGAN, representing Absolute/Leeco
LLC - in favor of recommendation with modifications of condition number
twenty-one, plus Findings A through S of Planning Commission Staff Report.

The public hearing was closed at 9:20 p.m.

ON MOTION OF COUNCIL MEMBER OSORIO, SECONDED BY
COUNCIL MEMBER SANDERS, DULY CARRIED, RESOLVED, TO
DENY THE APPLICANT'S REQUESTED MODIFICATION OF
CONDITION NO. 2, BUT APPROVE VESTING TENTATIVE
SUBDIVISION MAP NO. 1292, SUBJECT TO THE AMENDED
CONDITIONS AS RECOMMENDED BY STAFF TO THE PLANNING
COMMISSION AND MODIFICATION OF CONDITION NO. 21, PLUS
FINDINGS A THROUGH S OF PLANNING COMMISSION STAFF
REPORT NO. 06-42 - 4TH ADDENDUM.

BY THE FOLLOWING VOTE:

AYES: COUNCIL MEMBERS: OSORIO, SPRIGGS, CORTEZ,
GABRIALT-ACOSTA, POLLARD, SANDERS, WOOTEN
NOES: COUNCIL MEMBERS: NONE
ABSTAIN: COUNCIL MEMBERS: NONE
ABSENT: COUNCIL MEMBERS: NONE

Merced Citizens for Responsible Planning and Valley Advocates v.
City of Merced
[Merced County Superior Court Case No. 150872]

PROOF OF SERVICE

STATE OF CALIFORNIA, COUNTY OF FRESNO

I am a citizen of the United States and a resident of the County of Merced; I am over the age of 18 years and not a party to the within action; my business address is 191 West Shaw Avenue, Suite 205B, Fresno, California, 93704-2826.

On February 21, 2002 I served the within

VERIFIED AMENDED PETITION AND COMPLAINT FOR WRIT OF MANDAMUS
AND COMPLAINT FOR DECLARATORY RELIEF and PROOF OF SERVICE

by placing a true copies thereof, and delivering them as follows:

Gregory G. Diaz, Esq.
City Attorney
City of Merced
678 West 18th Street
Merced, CA 95340
[Fax No. (209) 723-1780]

M. Katherine Jenson, Esq.
Rutan & Tucker, LLP
611 Anton Boulevard, Fourteenth Floor
Costa Mesa, CA 92626-1931
[Fax No. (714) 546-9035]

_____ (By overnight courier) I caused such envelope with postage fully prepaid to be sent by _____.

X (By Mail) I placed the envelope for collection and processing for mailing following the ordinary practice of this business which I am already familiar. On the same day correspondence is placed for collection and mailing, it is deposited in the ordinary course of business with the United States Postal Service with the postage fully paid. Addressed with the addresses above.

X (By Hand) I caused each envelope to be delivered by hand.
Gregory G. Diaz, Esq., only

_____ (By Facsimile) I caused each document to be sent by telecopier to the following number(s):

The foregoing declaration is true and correct and is executed under penalty of perjury under the laws of the State of California on February 21, 2008, at Merced, California.

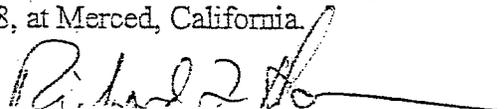

RICHARD L. HARRIMAN

EXHIBIT O



ADMINISTRATIVE REPORT

AGENDA

ITEM:

L-1-I

MTG.

DATE:

5/5/08

TO: James G. Marshall, City Manager

FROM: Kenneth W. Mitten, Fire Chief

DATE: May 1, 2008

SUBJECT: Report on the Progress of Fire Station Development

RECOMMENDATION:

For Information Only, no City Council action is necessary.

AUTHORITY:

Article II, Section 200 of the Merced Municipal Code, the power make legislative decisions in respect to municipal affairs.

DISCUSSION:

The purpose of this Administrative Report is to provide the Merced City Council with an update in regards to the development and relocation of City fire stations. This Report shall address the history, the current needs, status of current station development projects, and provide a response to information which was requested at the April 7th, 2008 City Council meeting.

Merced Fire Department ("MFD") facilities locations have been generally planned and are documented in Figure 5.1 of the Merced Vision 2015 General Plan. In April 1997, when the General Plan was adopted, it was projected that the Department would grow to total of eight stations at the build out of the Plan. The projected number of fire stations and their locations are based on the trends of population and area growth. Accordingly, an increase in population and development is directly proportionate to an increase in demands for service.

City of Merced

Report on the Progress of Fire Station Development

Page 2

The Insurance Services Organization ("ISO") Public Protection Classification ("PPC") system has been developed to rate the level of fire protection that is delivered within a specific geographic area. The PPC is used to determine fire insurance premium rates for the area. The PPC is expressed on a scale of one to ten, with Class 1 being exemplary where Class 10 fails to meet any of the ISO requirements. The City of Merced has been assigned and rated as an ISO PPC Class 2 since the mid 80's, which is considered to be outstanding and is one of the highest ratings of any city in the Valley. The ISO rating system considers a number of factors including how well an agency receives and dispatches fire alarms to the fire department (10% of the rating); the fire department including distribution of fire companies and equipment, training, response time, and equipment maintenance (50% of the rating); and water supply focusing on the ability of the community to meet fire suppression needs beyond maximum daily consumption—including the rate of flow for firefighting purposes at various locations throughout the community as well as the distribution of fire hydrants through the community (40% of the rating). To receive the ISO PPC Class 2 rating, the City had to rate near the top in each of these categories.

Specific fire station locations are to be based upon the complete build-out of an area, as projected within the adopted General Plan, as it relates to the ability to provide an acceptable level of service. Travel distance, population, and response routes are considered during the planning phase so as to maintain an acceptable emergency response time.

The City has taken several actions to meet the projected fire protection needs of the City of Merced, since the adoption of the current General Plan. By way of example, the City has completed the relocation of Station 51 from West 18th Street to 99 East 16th Street. The City has also completed the design and fabrication of Station 55, which has been fully functional since 2006.

Additionally, the current MFD fire station development plans are as follows:

Station 53 - Relocate the facility to the area of West Olive Avenue and Highway 59.

Station 54 - Relocate the facility further to the East and South of its current location to an area within the East Mission Avenue and Highway 99 Interchange commercial development project.

City of Merced

Report on the Progress of Fire Station Development

Page 3

Station 56 - Develop a combination fire station and college fire training facility, contiguous to Merced Community College.

Station 57 - Develop a facility in the area of Bellevue and Lake Roads.

Station 58 - Develop a facility in the area of Bellevue Road East of Highway 59.

Two fire station Capital Improvement Program Projects ("CIP") are currently in different stages for development. These CIP funds come primarily through the payment of development impact fees by developers into the City's Public Facilities Financing Plan ("PFFP") fund. These projects include: relocation of Fire Station 54 and development of Fire Station 56. Station 53 is not currently in the CIP process because Station 56 needs to be completed and functional before relocation of Station 53 is practical. However, staff continues to look at opportunities to acquire property for this purpose and to monitor growth in the part of the City to be served by a relocated Station 53. The status of these two current Fire Station CIP projects is as follows:

Station 54 - Relocation

Over the past few years, negotiations have been underway between the City and commercial developers to relocate Station 54 from East 21st Street to the East Mission Avenue at Highway 99 Interchange area. Approximately one-year ago, the consortium that was leading the development of a major retail complex disbanded and the project was dropped. Since the beginning of the year, talks with developers have resurfaced. Currently, there are four projects being negotiated in the Mission Interchange area; the fabrication of a fire station is being included in these discussions.

CIP funds are currently being requested in the FY2008-09 budget to start the design process.

Station 56 - M Street at Ironstone Drive

The City has purchased 2.83 acres from Merced College for the purpose of developing a fire station, a fire department training facility, and a City fuel island. The planned fire station will be large enough to accommodate two fully staffed fire companies: one engine and one truck. To date, both Phase I and Phase II Environmental Assessment Reports have been completed and no further actions are required for clearance. These reports help determine if the real property has

any existing contamination which would be hazardous to humans or preclude the proposed use.

CIP funds are currently being requested in the FY2008-09 budget to re-start the design phase of this project. A

On January 2, 2007, the City Council approved a motion directing staff to seek proposals from architects for the design of this fire station. The time frame to hire an architect to design any fire department facility is projected at one year to 18 months. Upon completion of the selection process, but before the architect was hired, the project was put on hold for two reasons: the slowdown in building resulting in the slower than anticipated generation of PFFP fees for capital and CFD taxes for personnel, and the proposal to develop a temporary fire station. A

Developer-Funded Temporary Fire Station – M Street Circle at Mandeville Lane.

J.B. Anderson Land Use Planning is the primary contact for the Crosswinds Project Team who has requested permission from the City to build out-of-phase in the northwestern corner of the City. The change in Bellevue Ranch North phasing poses concerns for the ability of the Fire Department to provide adequate levels of service to the citizens who will live in this area upon build-out. Therefore, it was proposed to have the developer design and build a temporary fire station to meet the Fire Department's response requirements while at the same time having a facility that is reusable by the community when a permanent fire station is built.

Generally, the City has avoided temporary facilities, especially temporary fire facilities. One of the reasons for this is that temporary facilities have the tendency to become permanent facilities. Moreover, as representatives of the school districts have stated to the City Council, the maintenance and operations costs for temporary facilities are significantly higher than for permanent facilities. In addition, one factor in making fire stations expensive is that they are designed and constructed to higher standards so that they can withstand most natural disasters. In the event of a natural disaster, the City would not want to have its front-line first responders or their equipment lost to the disaster and thus unavailable to meet the City's emergency needs. Finally, the investment in temporary facilities simply postpones from a financial perspective when permanent facilities designed to meet the City's long-term needs can be built.

In addition, given the current restrictions on the use of the funds in the Fire PFFP Account (e.g., by law, they can only be used for the identified facilities), the City

would not be in a position to use its Fire PFFP funding for such temporary facilities because temporary facilities are not an identified project within the program.

The proposed facility would be located on M Street Circle at Mandeville Lane. This location will meet all current response needs of north Merced. Further, the proposed facility will also have dedicated office space for the Merced Police Department. With a design that meets both short-term and long-term reuse needs, such a facility in this location would make sense. However, it only makes sense at this time if the developer's "out of phase" request is approved by the City.

On Monday April 7th, 2008, Mr. Richard Harriman appeared before the City Council regarding the status of fire station planning and development. He specifically asked for the following:

Question: The account balance in the PFFP Fire Account and any transactions involving loans to or from the PFFP Fire Account:

Answer: No loans have been made to or from the Fire PFFP Account.

Current balances as of March, 2008 within the Fire PFFP Account total \$1,727,020.57. This includes \$645,715.87 City and \$1,081,304.70 developer. Under the PFFP program, funds collected are separated into two areas within each category. The first category is for projects determined by the City Council to be a City-wide priority. The second category, the "developer reimbursement" category is designed to reimburse developers for eligible improvements which they construct that are beyond their "fair share" of the need for the improvement created by their project. The City Council specifically divided the PFFP funds between the City category and the developer reimbursement category so that the community's needs and priorities are addressed rather than having infrastructure addressed on a piecemeal basis as individual projects develop.

Question: An indication of when the design for Fire Station 56 will be completed:

Answer: At the January 2, 2007 City Council meeting, the City Council voted to establish the priority of fire station development and

construction. Fire Station 56 was designated by the City Council as the top priority. The site acquisition has been completed. The schedule approved by the City Council was to undertake the design work in 2008, and construct the facility in 2010. It is currently projected that Fire Station 56 would be open and operational by the end of 2010. Design funds are being requested in the 2008-09 budget CIP program. The estimated time to hire an architect and have the architect design a fire station is 12 to 18 months.

Question: An explanation of why the land proposed to be dedicated for Fire Station purposes by Crosswinds was never accepted:

Answer: The Developer was required to dedicate a fire station site (Lot "O") unless an alternative, off-site location became available and was acceptable to the City. The site dedicated by the Developer was described as Lot "O." When the Lot "O" property was designated for a fire station it was contemplated that the City would continue to grow to the north. Subsequently, habitat and endangered species have been determined to be prevalent, making further growth to the north unlikely. Consequently, it is not practical to build and staff a fire station where its service area is only 180 degrees and not a complete 360-degree area. An alternative site has been identified and is acceptable to the City. This alternative site is the City property on "M" Street and Ironstone Drive, which had been discussed with Merced College for a number of years prior to purchase. Pursuant to the Subdivision Map Act, because the City no longer intends to use the originally identified site as a fire station, the City is obligated to return it to the developer. Specifically, Government Code Section 66477.5 requires the return of property dedicated to the City if it is not used for its intended purpose. For this reason, Crosswinds requested a quit claim of the City's interest in 2007. Crosswinds did so because in re-subdividing the area their engineer failed to note the relinquishment of Lot "O" as a fire station site on their final map. The Planning and Permitting Division of the Development Services Department of the City is preparing an initial study to determine any environmental issues prior to a

City Council decision on the return of Lot "O" as required by Government Code Section 66477.5.

Question: A "date certain" when fire service will meet General Plan policies and goals in North Merced:

Answer: Fire services responses currently meet the policies and goal of the City of Merced General Plan - "The department has a goal of maintaining a response time of four to six minutes for the first crew to arrive at a fire or medical emergency within an assigned district." In particular, General Plan Policy P-2.1 provides that:

"Public protection services and facilities are to be maintained in the City of Merced at a level that promotes the health and welfare of the City's residents. The City is committed to assuring that facilities, equipment and staff levels of its fire and police service units meet the highest standard that can be accommodated within the resource constraints of the City."

During the 2007 calendar year the fire department maintained a district average response time of less than six minutes. Accordingly, fire department facilities planning is a high priority, which is validated by the department's active involvement in the current General Plan update process.

Question: An analysis of how often Fire Station 53 responses meet current goals and policies of General Plan:

Answer: In the calendar year of 2007 fire station No. 53 responded to 941 incidents. The average response time was 4:24 minutes for the year. Accordingly, in order to maintain an acceptable level of fire service, fire department's facilities planning continues to be addressed. As the City progresses through the current General Plan update process, the information contained in current Vision 2015 document is being reviewed to revalidate that it remains current and accurate.

City of Merced
Report on the Progress of Fire Station Development
Page 8

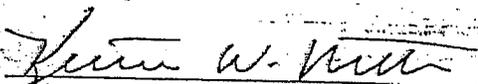
In conclusion, the Merced Fire Department is working closely with the community and developers to be able to continue to maintain exceptional levels of emergency response and fire protection to carry out the City Council's decision regarding the priority of the fire station construction. The Vision of the Merced Fire Department is to make our community fire and life safe for all who live here and visit us. Through effective planning and implementation we will continue to proximate the Department with its Vision.

RECOMMENDATION:

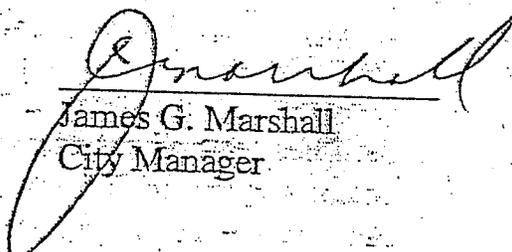
For Information Only, no City Council action is necessary.

Submitted:

Approved:



Kenneth W. Mitten
Fire Chief.



James G. Marshall
City Manager

Merced Citizens for Responsible Planning and Valley Advocates v.
City of Merced
[Merced County Superior Court Case No. 150872]

PROOF OF SERVICE

STATE OF CALIFORNIA, COUNTY OF FRESNO

I am a citizen of the United States and a resident of the County of Merced; I am over the age of 18 years and not a party to the within action; my business address is 191 West Shaw Avenue, Suite 205B, Fresno, California, 93704-2826.

On May 5, 2008 I served the within

**VERIFIED SECOND AMENDED PETITION FOR MANDAMUS AND
COMPLAINT FOR DECLARATORY RELIEF**

by placing a true copies thereof, and delivering them as follows:

Gregory G. Diaz, Esq.
City Attorney
City of Merced
678 West 18th Street
Merced, CA 95340
[Fax No. (209) 723-1780]

M. Katherine Jenson, Esq.
Rutan & Tucker, LLP
611 Anton Boulevard, Fourteenth Floor
Costa Mesa, CA 92626-1931
[Fax No. (714) 546-9035]

_____ **(By overnight courier)** I caused such envelope with postage fully prepaid to be sent by _____.

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 X **(By Hand)** I caused each envelope to be delivered by hand.
Gregory G. Diaz, Esq., only

_____ **(By Facsimile)** I caused each document to be sent by telecopier to the following number(s):

The foregoing declaration is true and correct and is executed under penalty of perjury under the laws of the State of California on May 5, 2008, at Merced, California.


RICHARD L. HARRIMAN



BRAD SAMUELSON
DIRECTOR OF ENVIRONMENTAL AFFAIRS

UNIVERSITY OF CALIFORNIA, MERCED
PHYSICAL PLANNING, DESIGN & CONSTRUCTION
P O BOX 2039
MERCED, CALIFORNIA 95344
(209) 228-4333

August 18, 2008

VIA FACSIMILE AND E-MAIL

Kim Espinosa, Planning Manager
Planning and Permitting Division
678 West 18th Street
Merced, CA 95340

Kim Hudson, Principal-in-Charge
Quad Knopf, Inc.
5110 West Cypress Avenue
Visalia, CA 93278

Re: **UC Merced's Comments on Notice of Preparation – Draft
Environmental Impact Report, City of Merced Vision 2030 General
Plan**

Dear Ms. Espinosa and Ms. Hudson:

On behalf of the University of California, Merced ("UC Merced" or the "University"), we appreciate the opportunity to provide comments on the Notice of Preparation (NOP) for the City of Merced Vision 2030 General Plan Environmental Impact Report ("General Plan EIR").

BACKGROUND

The lands upon which the UC Merced campus and community will be built presently are located in unincorporated Merced County. The County therefore is currently the local land use agency with planning authority over those portions of the project that are not subject to the University of California's constitutional exemption from local planning requirements (*i.e.*, the campus community proposed for development directly south of the campus). Consistent with its authority, the County has adopted a general plan-level document, known as the "University Community Plan," to govern the development of the campus community. Development of the campus is governed by a Long Range Development Plan (LRDP) adopted by the University of California Regents.

In late 2007, representatives of UC Merced consulted with representatives of the federal environmental permitting agencies and environmental groups on potential revisions to the footprint of the campus and community. Following these discussions, the campus submitted a revised Clean Water Act Section 404 permit application to the U.S. Army Corps of Engineers (the "Corps") for a reconfigured campus and community. Enclosed are materials depicting these revised footprints and proposed land uses. As the materials show, the revised footprint for the UC Merced campus is now approximately 810 acres, which is 100 acres less than the originally proposed UC Merced campus footprint. In addition, the revised footprint for the University Community is now approximately 1,957 acres, which is 176 acres less than the originally proposed University Community footprint.

The proposed land uses for the campus and those portions of the revised campus community owned by the University Community Land Company, LLC (commonly referred to as "Community North") consist of five conceptual land use districts. These districts include Academic Core (AC), Gateway District (G), Student Neighborhoods (SN), University Community Town Center (TC), and University Community Neighborhood (NHD). Each district is comprised of certain "block" types that establish more specific land use. These land use designations include, for example, "Academic/Laboratory," "Research + Development," "Student Services," "Campus Services," and a variety of residential-use densities.

The University is now undertaking an effort to revise the LRDP, and to request the County to modify the UCP, to reflect the revised footprint. This effort involves the preparation of an EIR/EIS by UC Merced and the Corps to satisfy the requirements of CEQA (relative to the revised LRDP) and NEPA (relative to the Corps' permitting process), respectively. It also involves preparation of a separate Merced County General Plan Amendment and EIR, to be certified by the County, to satisfy its regulatory obligations for the proposed UCP revisions. This effort is scheduled for completion in 2009.

Although the lands included in the revised footprint are currently located within the County, the City provides extra-territorial water and sewer service to 104 acres of already-developed property within the campus in accordance with a 2003 "Services Contract" between the City and UC Merced. Section 11 of the Services Contract requires UC Merced to enter into an "Agreement to Annex" this already-served property to the City upon specified terms and conditions. This arrangement is consistent with the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000, which allows these kinds of extra-territorial service arrangements "in anticipation of a later change in organization" such as an annexation. Gov't Code § 56133(b). This property has not yet been annexed to the City.

The University believes that annexation of the campus (including the already-served portion) and Community North (collectively referred to as the "Project Site") is in UC Merced's best interests for a number of reasons – one of which is UC Merced's ability to access City services rather than having to develop its own stand-alone service facilities. As evidenced by the NOP, the City appears to acknowledge the sensibility of annexation and the extension of its services. For example, the NOP notes that the

inclusion of the Project Site within the City's Specific Urban Development Plan ("SUDP") boundary "will form a more logical urban boundary, which will ultimately facilitate the provision of City services to the university." NOP at p. 6

Moreover, the proposed General Plan revisions suggest the City believes annexation is desirable. As the proposed revisions to Policy UE-1.4 of the City's General Plan indicate, the City anticipates the "incorporation" of the Project Site into the City. As revised, Implementing Action 1.4.a states: "Incorporate the UC Merced campus area as part of the City's Sphere of Influence. This designation would facilitate the incorporation of the Campus into the City." City Staff Report, *Joint Planning Commission/City Council Study Session on General Plan Update and Sphere of Influence*, Attachment 7 at p. 6 (Feb. 19, 2008) ("Staff Report"). Further, revisions to Implementing Action 1.4.b require the City to implement Merced City Council Resolution #2006-89, which specifies that the "University community should be incorporated into the City of Merced, and should not be part of the unincorporated County, or a separate City." *Id.* at p. 6-7. Moreover, this stance is consistent with other City Council resolutions and planning directions, as well as with the current Sphere of Influence boundary which was drawn to include the University of California, Merced, campus and the University Community when the two entities were originally slated for location to the northeast of the current proposed sites.

COMMENTS ON THE NOP

In light of the above, the University's overarching comment on the NOP is that the General Plan EIR should anticipate the annexation of the Project Site to the City of Merced, and that the General Plan EIR should evaluate, as aspects of the City's updated General Plan, the land use plans proposed for the Project Site as described Exhibits A and B and in the February 2008 Section 404 permit application. Our more specific comments follow below.

1. The General Plan EIR Should Discuss the City's Revision to Its Sphere of Influence Boundary and Annexation of the Project Site.

Although the NOP indicates the Project Site will be brought within the City's revised Sphere of Influence ("SOI") boundary, it refers only indirectly to the City's possible annexation of the Project Site. The General Plan EIR should include discussion of the potential for annexation of the Project Site to the City and LAFCO's role in that annexation.

a. The General Plan EIR Should Cover the Requirements of the Cortese-Knox-Hertzberg Act.

The discussion of the City's revision of the SOI boundary and the possible annexation of the Project Site should include an analysis of this annexation in light of the legal requirements of the Cortese-Knox-Hertzberg Act. The Act contains several requirements, but for purposes of this comment letter, we wish to underscore two of those requirements in particular.

First, the General Plan EIR should reflect the fact that every boundary change determination made by LAFCO must be consistent with the SOI established for the local agency affected by such determination. Gov't Code § 56375.5. Annexation of the Project Site therefore must be consistent with the City's SOI boundary. Accordingly, the General Plan EIR should evaluate the annexation of the Project Site, in addition to the revision to the City's SOI boundary to include the Project Site. The EIR's discussion regarding revisions to the SOI boundary should also cover LAFCO's requirement to conduct a "service review of the municipal services provided in the county or other appropriate area designated by [LAFCO]." *Id.* § 56430(a).

Second, the General Plan EIR should reflect the fact that the Cortese-Knox-Hertzberg Act requires, as a condition to any annexation, that a city "prezone" the territory to be annexed. Gov't Code § 56375(a). The Act further specifies that "[t]he decision of a [LAFCO] with regard to a proposal to annex territory to a city shall be based upon the general plan and rezoning of the city." *Id.* We believe this rezoning requirement would be satisfied if the City incorporated UC Merced's illustrative land uses for the Project Site, as shown in the enclosed materials, into the City's updated General Plan.

Both of these requirements, in addition to the other requirements of the Cortese-Knox-Hertzberg Act, should be fully discussed in the General Plan EIR

b. The General Plan EIR Should Cover the General Plan's Annexation Conditions.

The General Plan EIR's discussion of the Project Site's potential for annexation should also include a consideration of the Policies and Implementing Actions identified in Implementing Action 1.3.f of the City's existing General Plan and proposed General Plan update for future annexation requests.¹ See Staff Report, Attachment 7 at p. 5. In addition, this discussion should confirm that annexation of the campus and community areas satisfies the "conditions" identified in Implementing Action 1.3.f for annexation requests. These conditions include:

- (a) Is the area contiguous to the current City limits and within the City's SUDP/SOI?
- (b) Is the proposed development consistent with the land use classification on the General Plan Land Use Diagram (Figure 3.1)?
- (c) Can the proposed development be served by the City water, sewer, storm drainage, fire and police protection, parks, and street systems to meet acceptable standards and service levels without requiring improvements beyond which the developer will consent to provide?

¹ These Policies and Implementing Actions include but are not limited to the following: (a) Urban Expansion Policies UE-1.1, UE-1.2, UE-1.3, and UE-1.7; (b) Land Use Policies L-1.1, L-2.1, L-2.7, L-3.1, and L-3.2; (c) Transportation and Circulation Policies T-1.1, T-1.3, T-1.8, T.2.2, and T.2.4; (d) Public Facilities and Services Policies P-1.1, P-1.2, P-1.3, P-2.1, P-3.1, P-4.1, P-5.1, and P-7.1; and (e) Open Space and Conservation Policies OS-1.1, OS-1.2, OS-2.1, OS-2.2, OS-3.1, and OS-4.1. Staff Report, Attachment 7 at p.5.

- (d) Will this annexation result in the premature conversion of prime agricultural land as defined on the Important Farmland Map of the State Mapping and Monitoring Program? If so, are there alternative locations where this development could take place without converting prime soils?
- (e) Will a non-agricultural use create conflict with adjacent or nearby agricultural uses? If so, how can these conflicts be mitigated?

The General Plan should evaluate whether annexation of the Project Site satisfies each of these conditions. With respect to condition (a) in particular, we note the Cortese-Knox-Hertzberg Act also requires that an area to be annexed must be “contiguous to the city at the time the [annexation] proposal is initiated.” Gov’t Code § 56741. As you may know, the Project Site is separated from the City’s existing boundaries by an approximately one-mile-wide strip of land running down and extending westerly of Lake Avenue from Yosemite Lake to Yosemite Avenue. The General Plan EIR’s evaluation of the annexation of the Project Site therefore should consider what steps might be taken to create the necessary contiguity between the City and the Project Site.

c. The General Plan EIR Should Identify LAFCO as a Responsible Agency.

As a general rule, LAFCOs must comply with CEQA before approving an annexation. *Bozung v. Local Agency Formation Comm’n* (1975) 13 Cal.3d 263. In our experience, a city, county, or special district involved in an annexation generally assumes the role of lead agency, while the LAFCO functions as a responsible agency, for the purposes of CEQA review. A “responsible agency” is defined as a “public agency which proposes to carry out or approve a project, for which [a] lead agency is preparing or has prepared an EIR.” 14 Cal. Code Regs. § 15381. The term also includes “all public agencies other than the lead agency which have discretionary approval power over the project.” *Id.* Because LAFCO will rely upon the General Plan EIR for its annexation determination, LAFCO should be identified in the General Plan EIR as a “responsible agency,” and it should be given the opportunity to provide input to the City regarding potential environmental impacts resulting from annexation of the Project Site to the City.

2. The City’s Updated General Plan and the General Plan EIR Should Include the University’s Illustrative Land Uses for the Project Site.

Given its potential for annexation to the City, the City’s updated General Plan should include the University’s illustrative land uses as revised for the Project Site. As the Staff Report indicates, the “project boundaries will be modified when the information is made available by UC Merced staff to reflect recent proposed shifts in the Campus and Community boundaries.” Staff Report at p. 6. The most recent set of proposed land uses are described in the University’s Section 404 permit application and shown further in the Exhibits A and B. These materials are enclosed with this letter. Assuming the updated General Plan includes the land uses proposed for the Project Site, the General Plan EIR

should evaluate the environmental impacts associated with these illustrative land uses. Currently, these land plans are for illustrative purposes only, but they are a good approximation of what the University believes is necessary to accommodate its development program on the Project Site, and thus, they can still be evaluated from an environmental analysis perspective.

The NOP identifies key sections for inclusion in the General Plan EIR. Each of those sections should reflect the fact that the updated General Plan will include the Project Site's illustrative land uses. With respect to some of those sections as set forth in the NOP, we have the following specific comments:

Project Description. The General Plan EIR's Project Description should discuss the City's proposed annexation of the Project Site, as described above, and the fact that the updated General Plan will include the illustrative land uses proposed for the Project Site. The EIR should depict the Project Site's revised footprint and its illustrative land uses on all relevant maps and drawings. Notably, the Proposed SUDP Land Use Map attached to the NOP as Figure 3 depicts the earlier version of the Project Site's footprint. The land use plans in the attached materials show the revised boundaries of the Project Site.

Table 1 in the NOP titled "Existing & Proposed General Plan Land Use Comparison Within the City Limits and SUDP (Acres)" sets forth land uses and their acreages within the city limits of Merced. NOP at pp. 4-5. According to Item #3 in the Section titled "Merced Specific Urban Development Plan Boundary (SUDP)/Sphere of Influence (SOI)", the proposed SUDP/SOI includes a "third area" that "encompasses 6,748 acres and moves the SUDP/SOI boundary to take in the property between the current city limit/SUDP, and the U.C. Merced campus and Campus Community. These will be brought within the SOI as well." NOP at p. 6. The City should recalculate these acreages in light of the Project Site's revised boundaries, as shown in the attached materials. In addition, Table 1 should break out the Project Site's proposed land uses and their acreages. For example, as shown in Exhibits A and B the proposed Project Site includes a variety of land use designations, such as "Academic Core," "Campus Services," "Student Neighborhoods," and "Athletics and Recreation." Assuming the updated General Plan includes the Project Site, the General Plan EIR should evaluate these and all other UC Merced and UCLC land uses as part of the City's updated General Plan.

The NOP also sets forth several "Planning Principles," one of which mentions the UC Merced project: "Connectivity between existing and planned urban areas. Examples include the northeast area toward UCM, the University Community, and South Merced." NOP at pp. 5-6. This Planning Principle should be clarified for purposes of the General Plan EIR so that it refers to connectivity between existing urban areas and the proposed Project Site. In addition, the City should consider other Planning Principles that specifically bear on the potential annexation of the Project Site. For example:

- Commit to annexation of the UC Merced Project Site as revised to ensure logical development of eastern Merced.

- Continue planning efforts to integrate UC Merced Project Site into Merced.
- Evaluate feasibility of extending City services to UC Merced Project Site.

Purpose. The NOP states that “most of the changes” to the City’s General Plan are “due to the new location of the University of California Merced campus and its adjacent University Community.” NOP at p. 7. The NOP also states that “[m]odifications where [sic] made to the City’s Sphere of Influence to add the University Community area and to remove areas that have been identified as significant wetlands preservation areas.” As noted above, the updated General Plan should use the illustrative land use plans within the University’s Section 404 permit application and Exhibits A and B. These materials are enclosed with this letter. These land use plans should be evaluated in the General Plan EIR as included within the updated General Plan.

Issues to Be Addressed in the EIR. The NOP lists the topical areas to be discussed in the EIR. NOP at p. 8. Of course, each of these topical areas should evaluate the environmental impacts associated with included the Project Site and its illustrative land use plans within the City’s updated General Plan. The enclosed materials should assist the City and Quad Knopf with that analysis, and the University would be happy to provide the City or Quad Knopf with any additional materials, as needed.

Alternatives Analysis. As the NOP explains, the General Plan EIR’s alternative analysis “will contain a qualitative analysis of the land use alternatives considered” during the General Plan update process. NOP at p. 8. Under CEQA, an EIR must describe a reasonable range of alternatives to the project, or to the location of the project, that could feasibly attain most of the basic objectives of the project while avoiding or substantially lessening any of the significant effects of the project. 14 Cal. Code Regs. § 15126.6(a), (f). The City’s General Plan EIR should include project objectives that reflect the City’s desire to incorporate the Project Site into the City.

Cumulative Impacts. The NOP indicates that this section of the General Plan EIR will address the impacts of the General Plan’s development, “along with other known, approved or reasonably foreseeable development activity in the City and region.” NOP at p. 8. Assuming it evaluates the annexation and illustrative land uses of the Project Site, the General Plan EIR should consider the Project Site’s annexation and proposed land uses as within the baseline of the General Plan update for purposes of cumulative impacts analysis. As such, the cumulative impacts section of the EIR should evaluate whether the impacts of the updated General Plan, which will include the Project Site’s illustrative land use plans, in combination with other projects causing related impacts, result in cumulative impacts. See 14 Cal. Code Regs. § 15130(a)

We anticipate providing additional comments when we review the Draft General Plan EIR, and we look forward to having the opportunity to do so.

CONCLUSION

Thank you for your consideration of these comments. As noted in the City's proposed revisions to Policy UE-1.4, the City anticipates continued "joint planning efforts on the UC Merced campus and University Community plans." Staff Report, Attachment 7 at p.6. The University looks forward to these joint efforts and to working with the City during its General Plan update process. Please do not hesitate to call if you have any questions or would like to discuss our comments in more detail.

Sincerely,

A handwritten signature in black ink, appearing to read "Brad Samuelson", with a long horizontal flourish extending to the right.

Brad Samuelson

enclosures:

Exhibits A and B

UC Merced Section 404 Permit Application, February 2008

cc:

R. Clark Morrison

Mary Miller

Tom Lollini

Janet Young

Elisabeth Gunther

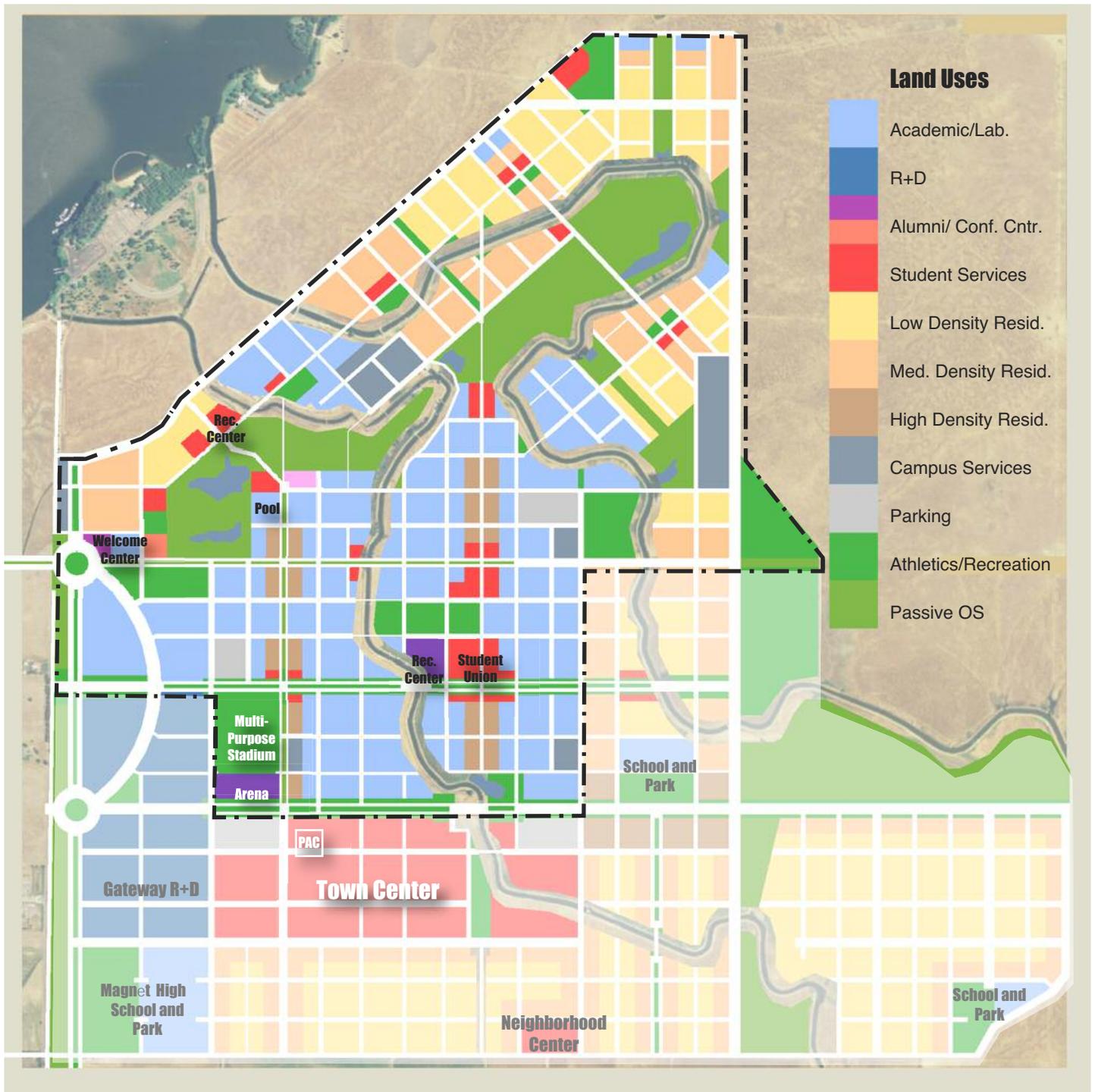


Exhibit A:
UC Merced Planning Framework

8/18/2008

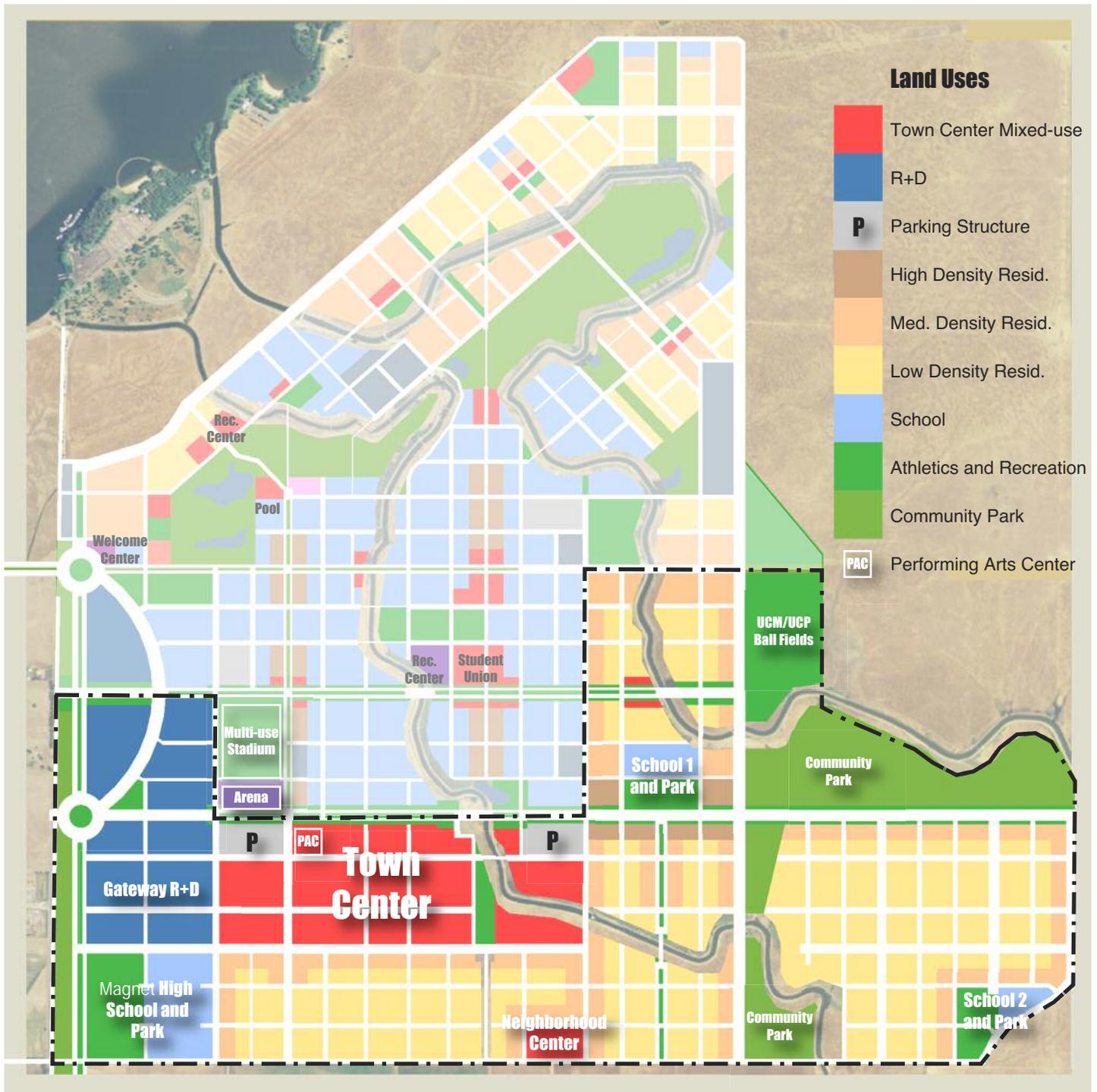


Exhibit B:
UCLC Planning Framework

8/18/2008

**UNIVERSITY OF CALIFORNIA AT MERCED
REVISED D.A. PERMIT APPLICATION
SUPPLEMENT TO ENG FORM 4345**

Applicant: Regents of the University of California
Contact: Brad Samuelson
Physical Planning, Design and Construction
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Merced, California 95344
Phone: (209) 724-4428
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Name of Waterbodies: Cottonwood Creek, Le Grand Canal, Fairfield Canal, and unnamed wetlands, ponds, and creeks.

Location of Project: The proposed project is located in eastern Merced County, approximately two miles northeast of the corporate limits of the City of Merced, California. The project area is situated east of Lake Yosemite and Lake Road. The project area occupies portions of Sections 26, 27, 34, and 35, Township 6 South, Range 14 East and Sections 3 and 2, Township 7 South, Range 14 East. The attached application drawings include a vicinity map showing the location of the proposed project.

Project Purpose: The overall project purpose is to establish a major research university in Merced County that will ultimately support 25,000 full-time equivalent students with an associated community needed to support the university.

Project Need: The California Department of Finance (DOF) and the University's internal projections both project a dramatic increase in the number of qualified California students seeking admission to the UC system over the next decade. DOF projections predict a growth in enrollment of over 30 percent between 2000 and 2010, and the

University of California (the “University”) estimates the need to accommodate 63,000 additional students (full time equivalent) for the period 1998-1999 through 2010-2011. These projections indicate that a new UC Campus needed to be opened by 2004 to accommodate near-term enrollment demand and long-term enrollment of 25,000 students at campus buildout. A 25,000 student campus was determined to be best suited to offering the full range of academic programs planned for UC Merced .

Background: In 1988, the University initiated planning for an additional campus to accommodate the significant projected growth in student enrollment by focusing on the San Joaquin Valley. Beginning with a list of over 85 potential sites, the University narrowed the list to 20 candidate sites, and then to eight preferred sites. Of these eight sites, three finalist sites were selected for further analysis and environmental review.

In 1995, the University selected the Lake Yosemite Site in eastern Merced County as its preferred location for the UC Merced Campus. Following site selection, the University initiated discussions with state and federal regulatory agencies regarding the need for a Clean Water Act Section 404 permit and related federal and state approvals for project construction.

In response to agency input and public concerns, the University shifted the proposed UC Merced Campus site from its original location near the center of the Virginia Smith Trust property southwest to a location adjacent to Lake Yosemite.

Construction of the first phase of the UC Merced Campus began in 2002 on approximately 104 acres of the existing Merced Hills Golf Course located at what was then the proposed southern end of the Campus. Phase I is sized to accommodate up to 5,000 students within 5 major academic buildings, a recreation building, housing and dining complexes and circulation, space conditioning, and utility infrastructure. Construction of Phase I of the Campus did not involve any placement of dredged or fill material into any waters of the United States, including wetlands. Consequently, a Department of the Army permit pursuant to Section 404 of the Clean Water Act was not required for Phase I.

UC Merced formally opened to undergraduate enrollment in the Fall of 2005. UC Merced has a current enrollment of almost 2,000 undergraduate and graduate students and anticipates reaching 5,000 students in 2012–13.

Also in 2002, UC Merced and the County of Merced submitted applications for Department of the Army permits to fill approximately 86 acres of wetlands on a portion of the 910-acre Lake Yosemite site and 4.5 acres of wetlands for a project to build the infrastructure for the campus and University Community between the proposed campus and Yosemite Avenue.

Following the public notice, public hearings and completion of administrative drafts of the Draft EIS prepared for the Campus and the infrastructure projects, the University and County of Merced re-examined and assessed possible alternative designs for the Campus

and the University Community to determine whether impacts to wetlands and threatened and endangered species could be further reduced while still accomplishing the overall project purpose. Once that initial re-examination was completed, the University initiated discussions with the Corps of Engineers, U.S. Fish and Wildlife Service, U. S. Environmental Protection Agency and various interested individuals and organizations to obtain their views. Through a series of meetings, a practicable, less-damaging alternative was identified and subsequently refined. This alternative appeared to have the potential to be considered the environmentally least-damaging alternative. As a result of these discussions, the University has elected to revise the permit application to propose this newly-developed plan for the UC Merced Campus and University Community as its preferred alternative.

As stated above, the overall project purpose provides for the establishment of a major research university supported by an associated University Community. Because the overall project purpose requires the UC Merced Campus to be developed with a supporting community, the 404(b)(1) analysis being prepared for the Campus, will include an analysis of alternative means by which certain off-site infrastructure and development may occur in the Community North which also is under the University's control. Although the University is not submitting a Department of the Army permit application for the Community South, because the project purpose statement calls for an associated supporting community of sufficient size to accommodate the induced growth of the campus, information regarding the Community South accompanies this application to enable an evaluation of the effects associated with the development of the Community South. These evaluations of alternative community configurations or locations will be considered along with alternative Campus and infrastructure configurations. Moreover, because of the relationship of the proposed UC Merced Campus and supporting University Community, the impacts of both the Campus and the University Community will be analyzed together in an environmental impact statement (EIS) prepared in accordance with the National Environmental Policy Act (NEPA).

In addition to the foregoing, a Supplemental Alternatives Analysis is being prepared to examine the practicability and relative environmental impacts of at least the alternatives identified below. This alternatives analysis will supplement the alternatives analysis prepared by the University in 2004 and reviewed by the Corps as part of the prior permit review and NEPA processes.

In addition to the original proposed 910-acre Campus and 2,133-acre University Community project, the February 2004 Alternatives Analysis prepared by the University considered 17 off-site alternatives. The Corps previously evaluated five alternatives including: the no action alternative, the proposed project, and three other alternatives as part of its own review. Two of the alternatives would be located south of the proposed Campus project site and include the revised Campus and University Community footprints. A third alternative was located near the City of Livingston. These alternatives will be summarized in the Supplemental Alternatives Analysis.

The Supplemental Alternatives Analysis also will consider two additional off-site alternatives to the Campus and University Community footprint:

- Downtown Merced
- Bellevue (which is a modification of the North Merced/Bellevue Ranch Alternative A evaluated in the February 2004 Alternatives Analysis (Off-site Alternative 2)).

With respect to on-site alternatives, in addition to the originally proposed 910-acre Campus and 2,133-acre University Community plan project, the Alternatives Analysis considered eight on-site alternatives. The Supplemental Alternatives Analysis will consider additional information in support of the following alternatives to the Campus and University Community footprint:

- The new Proposed Project (Campus and University Community North) which is a modified version of Alternative 19 previously considered by the Corps.
- No Fill Alternative
- Alternative 20 which was previously identified by the Corps as an on-site alternative to the original project.

Project Description: The revised proposed project consists of three major components: the Campus (810 acres); the Community North (870 acres); and, the Community South (1,245 acres). The lands comprising the Campus are owned by the University. The lands comprising the Community North are owned by the University Community Land Company, LLC (UCLC), a not-for-profit corporation. The Community South is owned by LWH Farms, LLC.

The revised application for a Department of the Army permit seeks authorization for those portions of the proposed project controlled by the University (the UC Merced Campus and the Community North). A Department of the Army permit is not being requested at this time for the Community South because that area is not under the control of the University. Nonetheless, because the Community South is an interdependent and interrelated activity to the UC Merced Campus and Community North, it is considered part of the proposed project, not for purposes of the permit, but for purposes of NEPA review. The additional project description provided below, as well as the description of the impacts, applies to all three major components of the proposed project.

In 2008 UC Merced has already become internationally recognized as a leader in environmentally sustainable development. It uses 50% of the energy and 40% of the water used by comparable facilities, and is a LEED pilot project, with innovative credits for storm water management and resource conservation. The campus has spurred the conservation of over 25,000 acres of rangelands north and east of the campus. This revised plan continues the path of innovation.

The initial application proposed a campus of 910 acres with a 340 acre development reserve (Campus Land Reserve). It was a compact plan, 50% smaller than UC Irvine, a 25,000 student campus of similar size and scope. The earlier campus footprint was based on other UC campus plans done in the early 1990's. Since then, nearly every UC campus has updated its LRDP to expand the amount of space for academic research, and student housing and services. UC Merced's footprint is shrinking, yet the University-wide program standards are expanding.

The new plan will consolidate the campus and its reserve development capacity onto 810 acres, buffered on the north and east from the natural landscape by a series of perimeter road and canals. UC Merced continues to employ best practices in sustainable development through on-site storm water management. Passive and active recreation areas are located to receive upland flows, along drainage pathways and at the western and eastern edges of development.

The application drawings show the locations of the five districts described below and provide conceptual descriptions of the block types within the districts. The following is a general description of each district and the corresponding block type(s).

- **Academic Core (AC):** The Academic Core is the heart of the Campus. The academic core (345 acres) of the campus is a mixed-use concentration of instruction, research, administration student services, parking, recreation and other services available within a ten minute walk from the student neighborhoods, which ring this core. A main street of on-campus student, staff and faculty services, is mixed with housing to link these neighborhoods to the Town Center, just south of the academic core. There would be approximately 7.5 million gross square feet of academic, research, student services, campus services and student housing built in the academic core.

Academic Core (AC-1), and Academic Main Street (AC-2) Blocks Types:

The typical AC-1 block type would be approximately 3 acres (130,680 ft²), would contain one to three buildings ranging from three to four stories with a cumulative building area of 125,450 ft², a floor to area ratio (FAR) of 0.96. The FAR is the ratio of total building floor area to total land area. The typical AC-2 block would be approximately 3 acres with 1.5 acres devoted to academic uses and 1.5 acres devoted to residential uses. The academic buildings would have a cumulative building area of 98,010 ft² for a FAR of 1.50. There would be a total of 90 dwelling units (DUs) for a net residential density of 60 dwelling units per acres (du/ac), with an average of four students per dwelling.

- **Gateway District (G):** A gateway district (150 acres), comprised of private and public research, visitor serving facilities, sports venues, parking (in early phases) and other regional attractors, lies west of the Town Center and the Academic Core. At the nexus of these three districts is the transit hub, which will enable people to come and go without driving, make connections to the local transit system, or walk to most sections of each of the central districts within 10 minutes.

The Gateway District is located within the Campus and the University Community North.

Gateway District Academic Lab (G-1) and Industrial-Research (G-2) Blocks

Types: The typical G-1 block type would be three acres, contain two research buildings ranging from three to four stories with a cumulative building area of 125,450 ft², a FAR of 0.96. The typical G-2 block type would be three acres, contain three commercial-style research buildings ranging from one to three stories with a cumulative building area of 58,800 ft², a FAR of 0.45.

- **Student Neighborhoods (SN):** The Student Neighborhoods District (395 acres) wraps the academic core and is intended to provide walkable access to the heart of the Campus. The District will include residence halls and apartments supported by student services (food and recreation), park space and shared parking. The student neighborhoods will ultimately house 12,500 students.

Student Neighborhood Walk-Up Apartments (SN-1) and Residence Hall/Dorm

(SN-2) Block Types: The composition of typical SN-1 and SN-2 block types would vary to include a variety of building types along with recreational facilities, open space, parking, and student services. A typical 3-acre SN-1 block would have two-story, 16-apartment buildings with open space commons and student services. There would be a total of 105 DUs for a net residential density of 35 du/ac. A typical SN-2 block would have three-story residence halls with on-site dining and open space commons. There would be a total of 240 DUs for a net residential density of 80 du/ac.

- **University Community Town Center (TC):** The Town Center District is located in the Community North and will serve as the “downtown” for the Campus and the University Community. It will support the campus through features that include mixed-use commercial and residential activities, cultural facilities and support parking. The District would be 100 acres.

Town Center Commercial Mixed Use (TC-1), Residential Mixed-Use (TC2) and Residential Townhouse/Rowhouse (TC-3) Block Types:

The typical TC-1 block would be 3 acres and contain a mix of office and commercial structures and services with approximately half the site initially devoted to parking. Building heights would range from two to four stories. There would be approximately 196,000 ft² building area for a 1.50 FAR. The typical TC-2 block would be 3 acres and contain a mix of housing and commercial services with approximately half devoted to parking. Building heights would range from two to four stories. There would be a total of 180 DUs for a net residential density of 60 du/ac. There would be approximately 26,200 ft² commercial building area, a FAR of 0.20. The typical TC-3 block would be 3 acres and have urban-style three-story town houses with open space commons. There would be a total of 90 DUs for a net residential density of 30 du/ac.

- **University Community Neighborhood (NHD):** The University Community Neighborhood District (690 acres) located within the University Community North would be a multiple mixed-use neighborhood district with an extensive network of transit, bike and pedestrian paths. The density and intended circulation plan will significantly reduce energy consumption by significantly reducing automobile trips.

Community North Neighborhood Center (NHD-1), Residential Townhouse (NHD-2), Small Lot Single-Family (NHD-3) and Large Lot Single-Family Block Types (NHD-4): The NHD-1 blocks will be located in the center of each neighborhood along transit routes servicing the University Community's residential areas. This is a multi-block area that will include institutional uses (schools, parks and quasi-public), commercial services and residential blocks as master planned centers for neighborhoods. Typically, each neighborhood center will be 64 acres (16, three-acre blocks plus streets) with approximately 16 acres of commercial uses, 16 acres of joint school and community park uses (8-acre school and 8-acre park), and 24 acres of residential uses (12 acres small-lot single family residential at 16 du/ac and 12 acres of townhouse residential at 24 du/ac). The typical NHD-2 block will be 3 acres, consist of three-story residential townhouses/rowhouses and open space commons with a total of 75 DUs for a net residential density of 25 du/ac. The typical NHD-3 block will be 3 acres and consist of small lot, single family two story houses. The density will range from 10 du/ac (30 DUs) up to 20 du/ac (60 DUs). The typical NHD-4 block would feature traditional single family houses with a net density of approximately 5 du/a (15 DUs) up to 9 du/a (27 DUs).

Community South: As described above, the University does not control the Community South portion of the University Community and a Department of the Army Permit application is not being submitted at this time. The Community South portion of the University Community may be subject to a future permit and environmental review process at such time as the LWH Farms LLC may decide to submit an application. It is anticipated that the Community South will be developed in accordance with the adopted University Community Plan which designates the Community South property for Multiple Use Urban Development and agricultural uses and establishes planning principles and policies consistent with planned development of the Community-North.

The revised application no longer proposes the 340-acre Campus Land Reserve that was included in the original application as a contingency against long-term future needs. The 340-acre Campus Land Reserve as well as the previously proposed 750-acre Campus Natural Reserve have been incorporated into the overall Virginia Smith Trust mitigation lands along with additional lands owned by the University that were included within the originally proposed Campus footprint. It is expected that future long term land needs of the campus and community will be accommodated through increases in development density, rather than expansion of development areas.

Development of the University Community includes certain infrastructure necessary to serve the Campus. This infrastructure includes construction of a major north-south arterial north of Yosemite Drive, portions of two additional minor arterial roadways and collector streets, and construction of utility lines (storm drainage, sewer, potable water, fire and irrigation water, telecommunications, electric and gas) within the rights-of-way secured for those roadways. Although this infrastructure is required for the Campus alone, it is proposed to be located and configured in a manner as to allow expansion to serve the proposed University Community. The proposed backbone infrastructure, and alternatives to its proposed size and location, will be considered in the Section 404(b)(1) analysis prepared for the UC Merced Campus and University Community North application.

Impacts to Waters of the United States: The following table lists the area of waters of the United States that would be directly impacted. There are a total of 76.70 acres of waters of the United States, excluding canals, within the Campus and Community North project areas. All waters of the United States within the footprint of the project area, except for the canals, are assumed to be eliminated.

SUMMARY OF IMPACTS TO WATERS OF THE UNITED STATES*

<i>Wetland/Water Category</i>	<i>Campus (ac)</i>	<i>Community North (ac)</i>	<i>Community South (ac)</i>	<i>Total (ac)</i>
Vernal Pools	10.25	4.62	1.35	16.21
Swale Wetlands	15.91	9.23	0.00	25.15
Clay Slope Wetlands	0.11	0.00	0.00	0.11
Irrigation Wetlands	4.10	7.74	0.00	11.84
Canal Wetlands	21.14	3.60	0.27	25.01
Intermittent Channels	0.00	0.00	1.03	1.03
Total	51.51	25.19	2.65	79.35

*The categories of waters of the United States used in this table are per the HGM classification set forth in the UC Merced Functional Assessment Methodology.

Impacts to Threatened and Endangered Species: A revised Biological Assessment (the “BA”) is being prepared. The BA evaluates impacts to threatened and endangered species which would result from the construction of the revised Campus, the University Community and the infrastructure and proposes appropriate minimization and compensation measures. In brief, a total of 19 federally listed threatened and endangered species have some potential of occurring within the project area. Of these, six are known to occur within the project area, four have moderate potential of occurring within the project area and nine have low potential for occurring within the project area. For those species with a low potential of occurring, there is not habitat within the project area, they have not been observed during focused surveys, and/or the project area is outside their known distribution. For those species with a moderate potential of occurring, habitat is present but the species have not been observed within the project area.

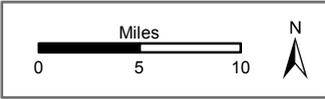
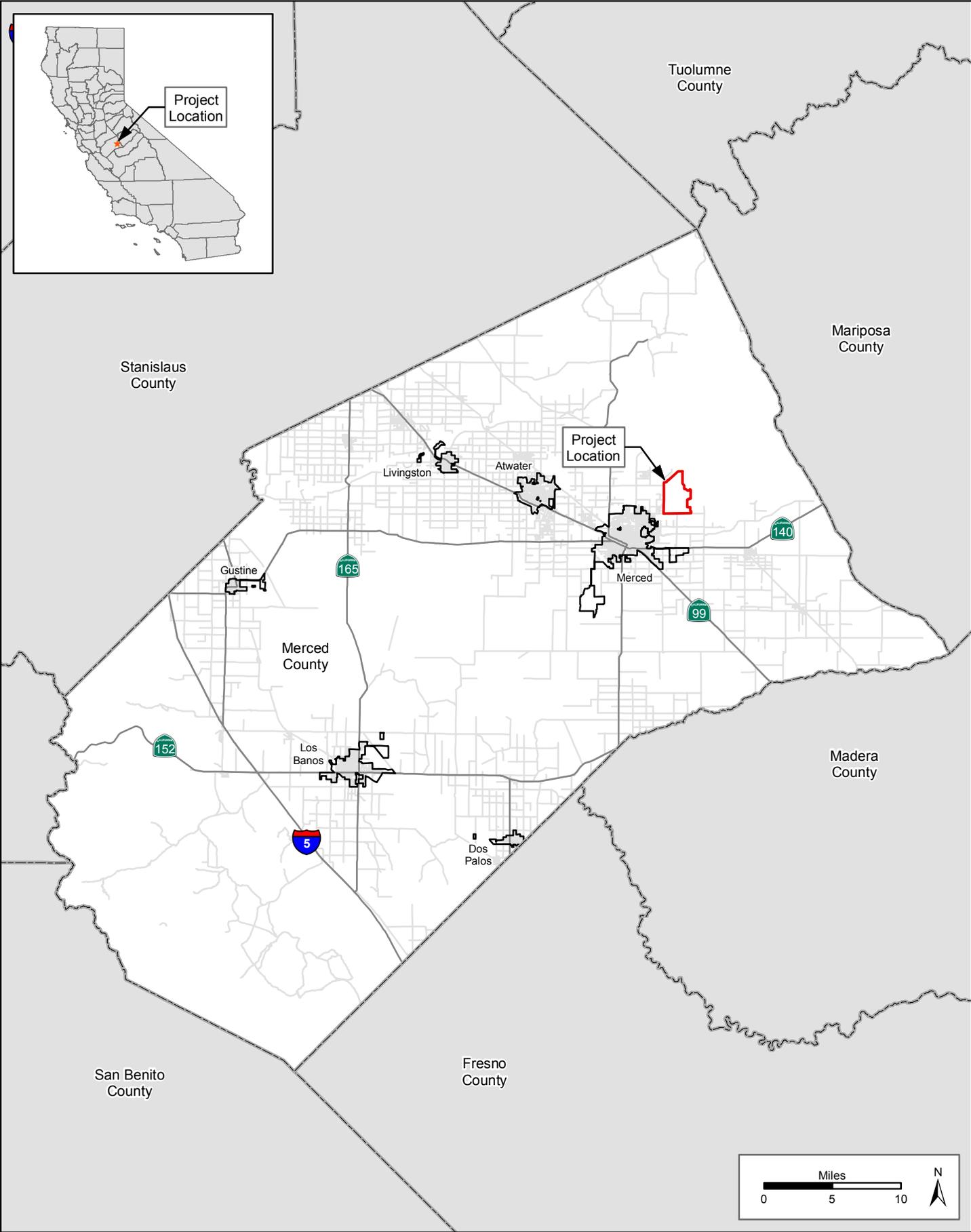
Species known to occur within the project area include bald eagle (*Haliaeetus leucocephala*), conservancy fairy shrimp (*Branchinecta conservatio*), vernal pool fairy shrimp (*Branchinecta lynchi*), succulent owl's clover (*Castilleja campestris succulenta*), Colusa grass (*Neostapfa colusa*), and San Joaquin Valley orcutt grass (*Orcuttia inequalis*). Species with a moderate potential of occurring within the project area include vernal pool tadpole shrimp (*Lepidurus packardi*), hairy orcutt grass (*Orcuttia pilosa*), Hartweg's golden sunburst (*Pseudobahia bahiifolia*) and Green's tuctoria (*Tuctoria greenii*).

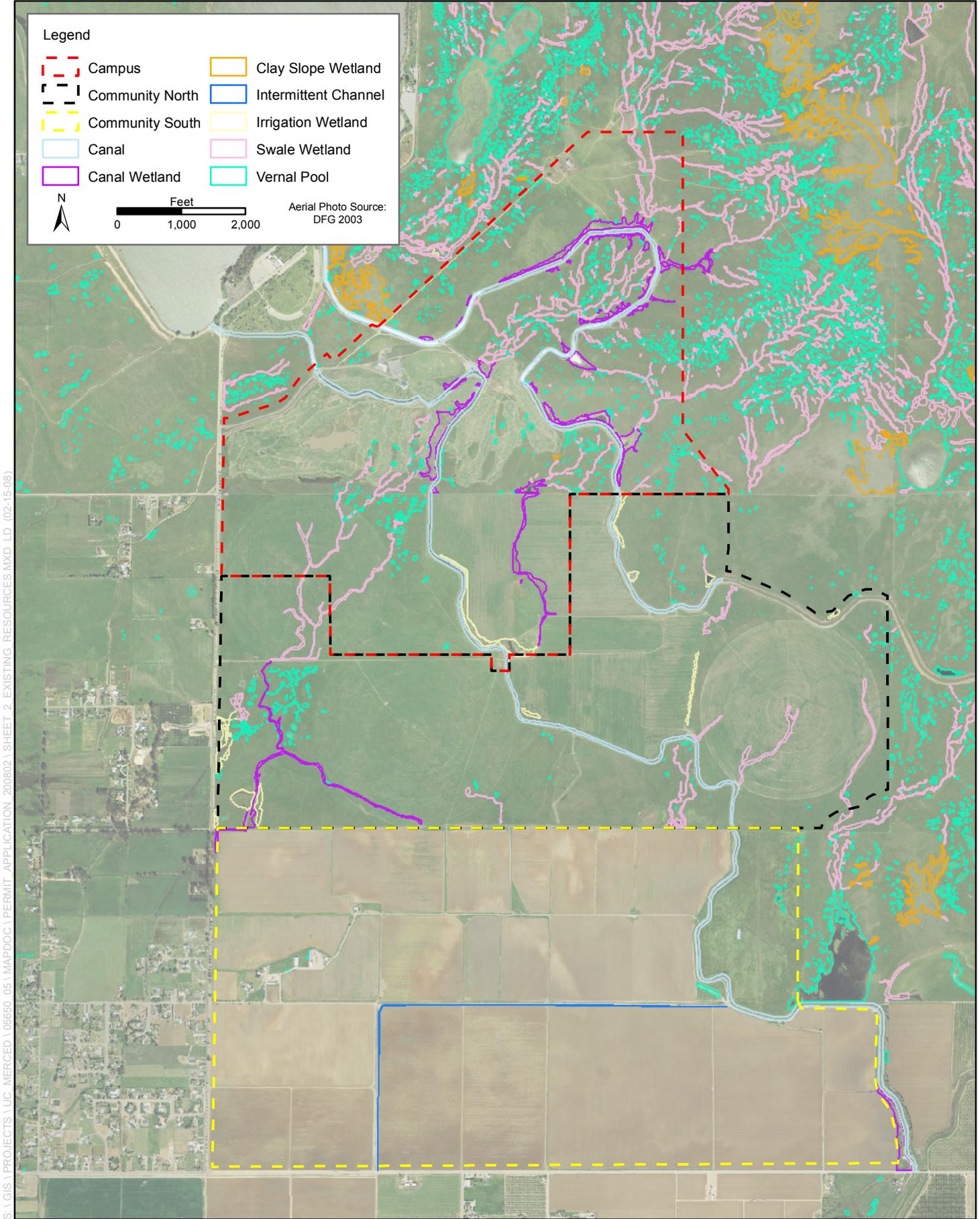
Mitigation Measures: The University proposes to compensate for the loss of wetlands and other waters of the United States resulting from construction of the Campus and University Community North (76.70 ac) through a combination of measures including preservation of existing habitats, management of some of the preserved habitats to prevent future degradation, management of some of the preserved habitats to maximize their habitat for threatened and endangered species and wetland function, and restoration and/or creation of wetland habitats. UC Merced and the UCLC will provide 2,318 acres of in-kind wetland habitat as preservation, resulting in a ratio of approximately 30 acres of wetlands preserved for each acre of wetlands impacted. This ratio far exceeds normal permitting requirements. A minimum of one acre of wetland habitat will be restored or created for each acre of wetlands impacted. Naturally occurring wetland habitats (vernal pools, swale wetlands and clay slope wetlands) will be compensated through restoring vernal pools and wetland swales and non-naturally occurring wetlands (canal wetlands and irrigation wetlands) will be compensated through creation of seasonal wetlands and riparian marshes). The preservation and restoration/creation lands will include lands over which protective conservation easements have been obtained as well as lands owned in fee title by the University.

The conceptual mitigation plan is being revised to reflect the impacts that would result from the revised Campus and Community North. The mitigation plan is a conceptual strategy subject and it is anticipated that the mitigation measures will be modified in response to agency concerns during the processing of this application.

A detailed mitigation plan will be prepared and submitted to the Corps of Engineers and the U.S. Fish and Wildlife Service for approval. The detailed mitigation plan will clearly identify all mitigation lands and wetlands being preserved, enhanced, restored and created. It will clearly describe all restoration and construction techniques. It will describe monitoring protocols and performance criteria. It will establish a long-term maintenance and monitoring plan designed to assure that the preserved, restored and created wetlands as well as their preserved uplands are maintained in their natural state in perpetuity.

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AC-1 Academic Core Block



The **Academic Core Block** is within the UC Merced Campus, Academic Core District. These blocks are dedicated to teaching and research. The Academic Core also includes supporting uses such as open space, student services, campus services and parking.

Illustrated Example

This example illustrates the character and site coverage of blocks reflecting a more compact campus. There are three buildings ranging from three to four stories within each block.

Block Size: 3 acres

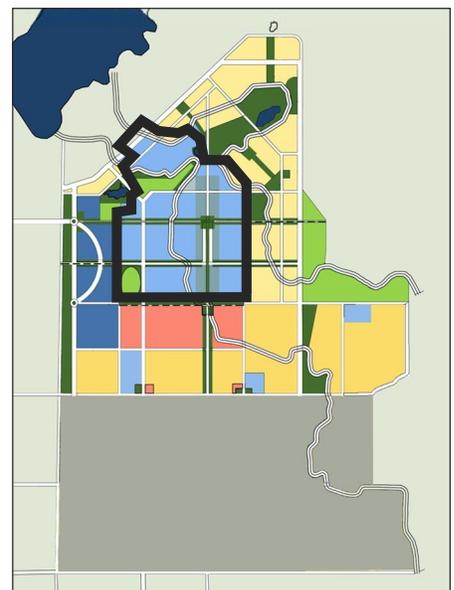
Land Use: Academic Buildings (3L-4L)

Net Density (on 3 acre block):

$0.96 \text{ FAR} \times 130,680 \text{ SF site area} = 125,450 \text{ SF building area}$

Gross Density (assumes 75% efficiency for streets):

$0.72 \text{ FAR} \times 130,680 \text{ SF site area} / .75 = 94,090 \text{ SF}$



AC-2 Academic Main Street Block



The **Academic Core Main Street Block** is a mixed-use street located within the UC Merced Campus, Academic Core District. Main Street blocks include a mix of academic, research, housing and student services at densities over 1.5 FAR. This area has an urban character with buildings located along the street edge, courtyard spaces and parking structures (in later phases).

Illustrated Example

This example illustrates the character and site coverage of blocks reflecting a more compact campus. Building heights range from three to four stories.

Block Size: 3 acres (1.5 acre academic, 1.5 acre residential)

Land Use: Academic Buildings/Student Services (3L-4L), Student Apartments (3L-4L)

Academic Net Density (on 1.5 acre half block):

$$1.50 \text{ FAR} \times 65,340 \text{ SF site area} = 98,010 \text{ SF building area}$$

Gross Density (assumes 75% efficiency for streets)

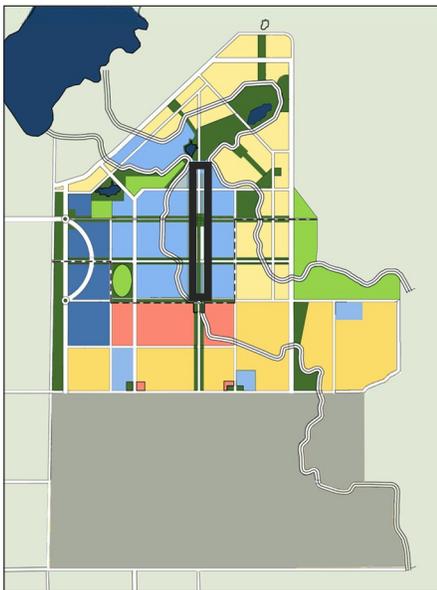
$$1.12 \text{ FAR} \times 65,340 \text{ SF site area} = 73,510 \text{ SF building area}$$

Residential Net Density (on 1.5 acre half block):

$$60 \text{ du/a} \times 1.5 \text{ acres} = 90 \text{ du}$$

Residential Gross Density (assumes 75% efficiency for streets):

$$45 \text{ du/a} \times 1.5 \text{ acres} = 67 \text{ du}$$



G-1 Academic Lab Block



The **Academic Lab Block** is to be located within the UC Merced Campus, Gateway District (and in some cases, in the Academic Core District). These blocks are dedicated to life sciences and engineering research activities and also includes supporting uses such as recreation, open space and parking.

Illustrated Example

This example illustrates the character and site coverage of blocks reflecting a more compact campus. There are three buildings ranging from three to four stories.

Block Size: 3 acres

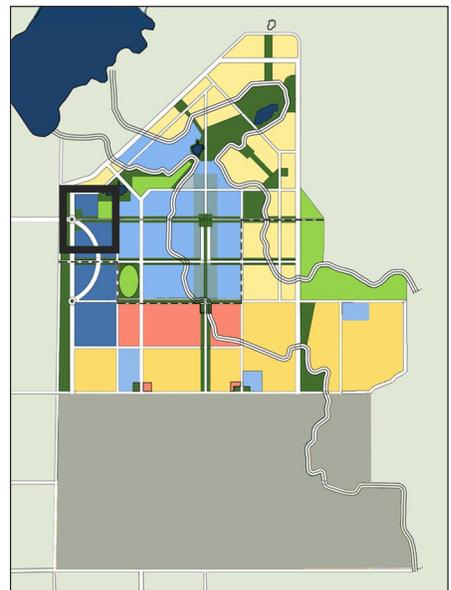
Land Use: Research Buildings (3L-4L)

Net Density (on 3 acre block):

$0.96 \text{ FAR} \times 130,680 \text{ SF site area} = 125,450 \text{ SF building area}$

Gross Density (assumes 75% efficiency for streets):

$0.72 \text{ FAR} \times 130,680 \text{ SF site area} / .75 = 94,090 \text{ SF}$



G-2 Industrial Research Block



The **Industrial Research Block** is to be located within the Community North, Gateway District. These blocks are dedicated to joint development with industry. As commercial ventures, these blocks require on-site parking. Other supporting uses in the district would include parking, transit facilities, research-related office and administrative activities.

Illustrated Example

This example illustrates commercial-style research park with surface parking, but with higher density and less parking found in most suburban developments. There are three buildings illustrated ranging from one to two stories.

Block Size: 3 acres

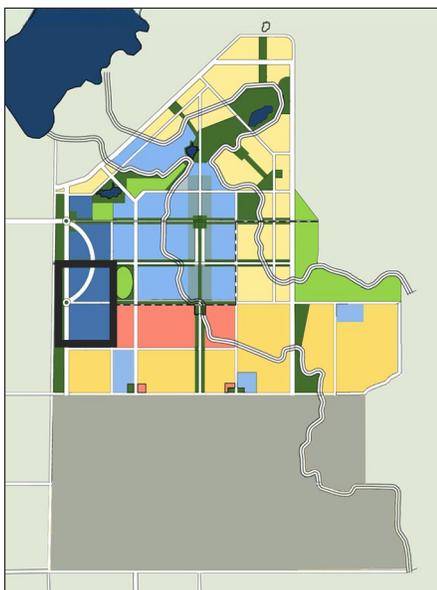
Land Use: Industrial Research Buildings (1L-3L)

Net Density (on 3 acre block):

$$0.45 \text{ FAR} \times 130,680 \text{ SF site area} = 58,800 \text{ SF building area}$$

Gross Density (assumes 75% efficiency for streets):

$$0.34 \text{ FAR} \times 130,680 \text{ SF site area} / .75 = 44,100 \text{ SF}$$



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SN-1 Walk-up Apartments Block



The **Walk-up Apartments Block** is located within the UC Merced Campus and Community North, Student Neighborhoods District. These areas will have a variety of building types, of which, these 16-apartment unit buildings are included. Recreational facilities, open space, parking, student services and campus services will be located in the neighborhoods as supporting uses.

Illustrated Example

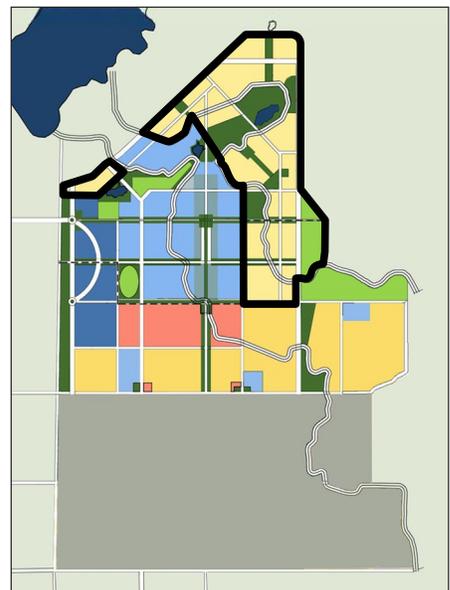
This example illustrates the character and site coverage of blocks with up to 35 apartments per net acre serving the walking and biking student community. These two-story buildings have eight apartments connected by a common core and stair for a total of 16 apartments. This three-acre block would include an open space commons and student services.

Block Size: 3 acres

Land Use: Residential Apartments (2L), Open Space and Student Services (1L)

Residential Net Density:
 $35 \text{ du/a} \times 3 \text{ acres} = 105 \text{ du}$

Residential Gross Density (assumes 75% efficiency for streets):
 $27 \text{ du/a} \times 3 \text{ acres} = 87 \text{ du}$



SN-2 Residence Hall Block



The **Residence Hall Block** is located within the UC Merced Campus and Community North, Student Neighborhood District. These areas will have a variety of building types, of which, these three-story corridor buildings are included. Recreational facilities, open space, parking, student services and campus services will be located in the neighborhoods as supporting uses.

Illustrated Example

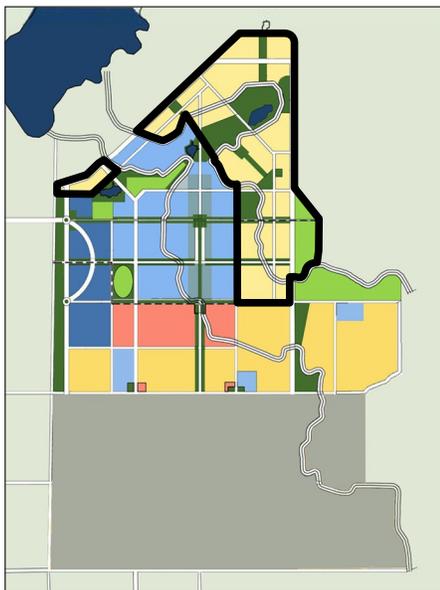
This example illustrates the character and site coverage of blocks with up to 80 apartments per net acre. These three-story buildings have corridors and elevators and common spaces on the ground floor. This three-acre block would include an open space commons.

Block Size: 3 acres

Land Use: Residential Apartments (2L-4L) and Open Space

Residential Net Density:
 $80 \text{ du/a} \times 3 \text{ acres} = 240 \text{ du}$

Residential Gross Density (assumes 75% efficiency for streets):
 $60 \text{ du/a} \times 3 \text{ acres} = 180 \text{ du}$



TC-1 CMU Town Center Block



The **Commercial Mixed-Use Town Center Block** would be located along mixed-use streets located within the Community North, Town Center District. This block includes a mix of office and commercial services. They have an urban character with buildings located along the street edge, courtyard spaces and shared parking structures (in later phases — see diagram in lower left).

Illustrated Example

This example illustrates the character and site coverage of blocks reflecting a more compact community center. Building heights range from two to four stories. The diagram shows half the block as surface parking (as it could look in early phases). Parking facilities would be shared on a district basis in the Town Center.



Block Size: 3 acres (3 acres CMU, 1.5 acres parking in phase 1)

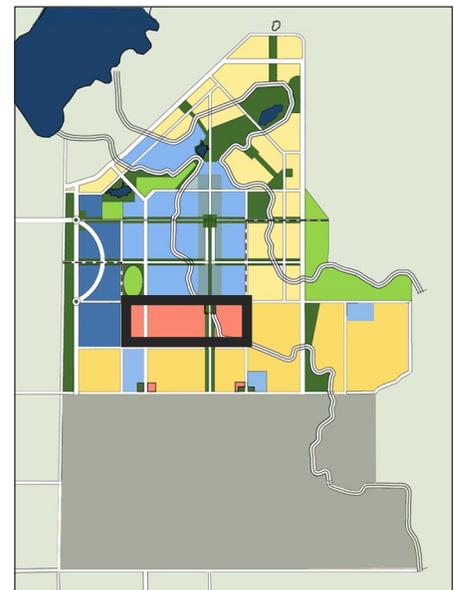
Land Use: Commercial Mixed-use (2L-4L), Ground Floor Commercial

Commercial Net Density:

1.50 FAR x 130,680 SF site area = 196,000 SF building area



Commercial Gross Density (assumes 75% efficiency for streets):
 1.12 FAR x 130,680 SF site area =
 147,000 SF building area



TC-2 RMU Town Center Block



The **Residential Mixed-Use Town Center Block** would be located along mixed-use streets located within the Community North, Town Center District. This block includes a mix of housing (over 50 du/a) and commercial services. These blocks have an urban character with buildings located along the street edge, courtyard spaces and parking structures (in later phases - see diagram in lower right).

Illustrated Example

This example illustrates the character and site coverage of blocks reflecting a more compact community center. Building heights range from two to four stories. The diagram shows half the block as surface parking (as it could look in early phases). Parking facilities would be shared on a district basis in the Town Center.

Block Size: 3 acres (3 acres RMU, 1.5 acres parking in phase 1)

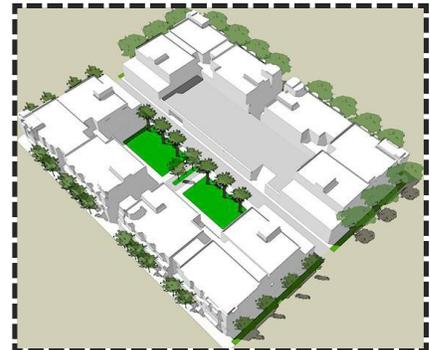
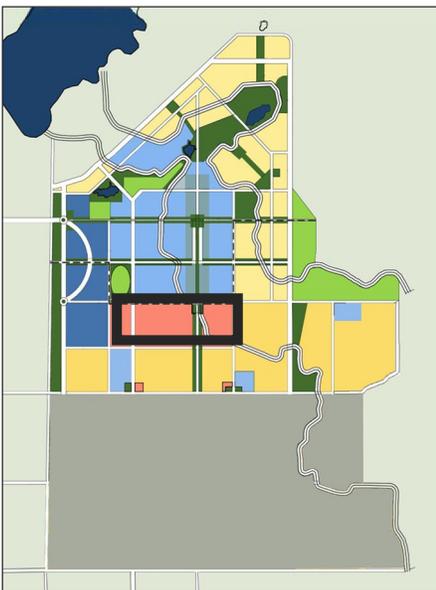
Land Use: Residential Mixed-use (2L-4L), Ground Floor Commercial

Residential Net Density:
60 du/a x 3 acres = 180 du

Residential Gross Density (assumes 75% efficiency for streets):
45 du/a x 3 acres = 135 du

Commercial Net Density:
0.20 FAR x 130,680 SF site area =
26,100 SF building area

Commercial Gross Density (assumes 75% efficiency for streets)
0.15 FAR x 130,680 SF site area =
19,600 SF building area



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TC-3 Townhouse Town Center Block



The **Townhouse Town Center Block** is located within the Community North, Town Center District. These urban-style townhouses share common open space, have parking courts and maintain a street-oriented design. They are designed to include live-work units.

Illustrated Example

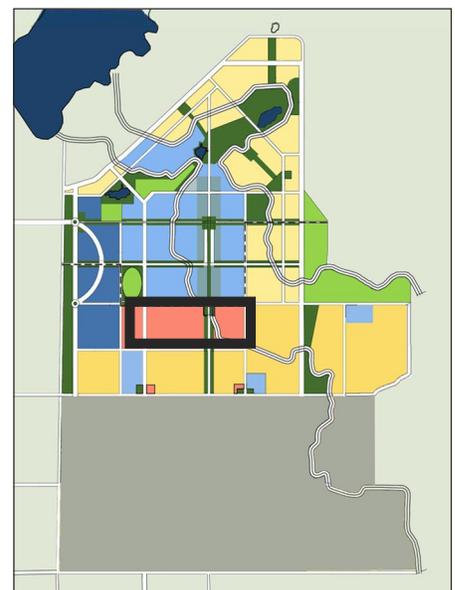
This example illustrates the character and site coverage of urban townhouse/rowhouse blocks with up to 30 units per net acre. These three-story buildings have tuck-under parking accessed by parking courts. This three-acre block would include an open space commons.

Block Size: 3 acres

Land Use: Residential Townhouses/Rowhouses (2L-3L), Common Open Space

Residential Net Density:
 $30 \text{ du/a} \times 3 \text{ acres} = 90 \text{ du}$

Residential Gross Density (assumes 75% efficiency for streets):
 $22.5 \text{ du/a} \times 3 \text{ acres} = 67 \text{ du}$



NHD-1 Neighborhood Center Blocks



Neighborhood Center Blocks would be located at the center of neighborhoods and along transit routes within the Community North and Community South, Neighborhood District. This multi-block area includes institutional uses (schools, parks and quasi-public), commercial services and residential blocks as master planned centers for neighborhoods.

Illustrated Example

This example illustrates the character and site coverage of a master planned neighborhood center. This illustration shows a 64-acre center that includes shopping, a community park that is shared with a school and townhouse and small-lot single family uses. Each neighborhood center would likely include different combinations of these uses reflecting the needs and market support of the community. For example, this illustration shows the largest community-serving commercial center that would require market support of the entire community and therefore not be located in each neighborhood center area. It also includes a combined 16-acre school and park site that would need to be viewed in context of overall community requirements.

Size: 64 acres (16, 3-acre blocks plus streets)

Land Uses:

Commercial

16 acres (696,960 SF) x 0.30 FAR = 209,100 SF

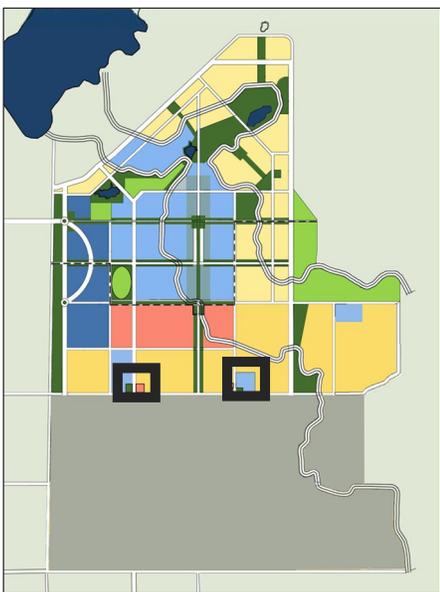
Joint-use School Site and Community Park Site (16-acres)

8-acre school site and a 8-acre park site

Residential

12 net acres of small-lot single family at 16 du/a = 192 du

12 net acres of townhouse residential at 24 du/a = 288 du



NHD-2 Neighborhood Townhouse Block



The **Neighborhood Townhouse Block** is located within the Community North and Community South, Neighborhood District. These garden-style townhouses share common open space, have parking courts and maintain a street-oriented design. They are designed to co-exist with single family blocks and interface with commercial and institutional uses.

Illustrated Example

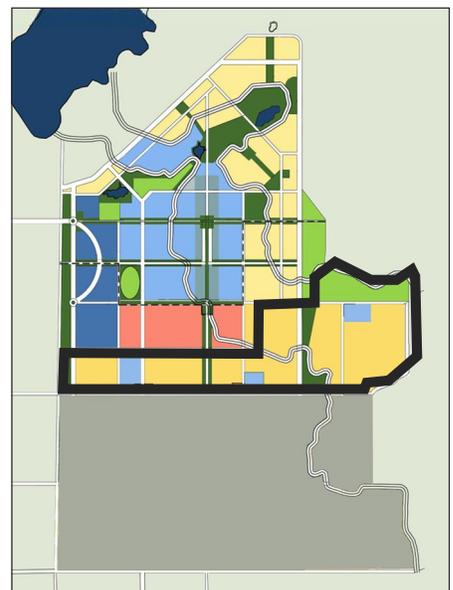
This example illustrates the character and site coverage of urban townhouse/rowhouse blocks with up to 25 units per net acre. These three-story buildings have tuck-under parking accessed by parking courts. This three-acre block would include a common open space.

Block Size: 3 acres

Land Use: Residential Townhouses/Rowhouses (2L-3L), Common Open Space

Residential Net Density:
 $25 \text{ du/a} \times 3 \text{ acres} = 75 \text{ du}$

Residential Gross Density (assumes 75% efficiency for streets):
 $19 \text{ du/a} \times 3 \text{ acres} = 57 \text{ du}$



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NHD-3 Single Family Block–Small Lot



The **Single Family Small Lot Block** is located within the Community North and Community South, Neighborhood District. These small-lot single family houses provide an opportunity for traditional home ownership within a land-efficient approach. They assume a net density of 10 to 20 du/a compared to a more typical 4 to 6 du/a San Joaquin Valley suburban density.

Illustrated Example

This example illustrates the character and site coverage of small-lot single family blocks with up to 20 units per net acre (16 du/a is illustrated). This three-acre block is divided into quadrants with narrow internal streets. The the larger 3 acre block could also be organized with a system of alleys.

Block Size: 3 acres

Land Use: Residential Single family (1L-3L)

Residential Net Density (high end):

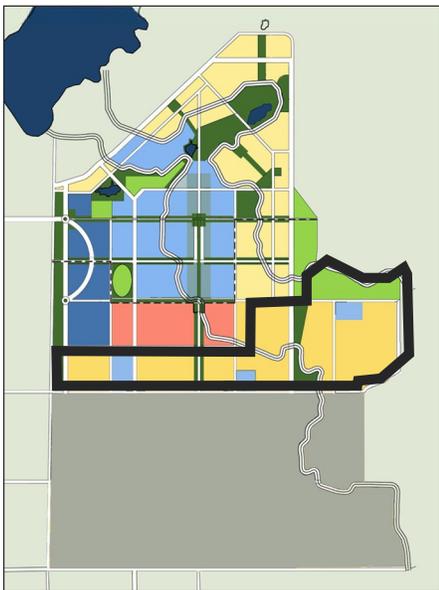
High End–20 du/a x 3 acres = 60 du

Low End–10 du/a x 3 acres = 30 du

Residential Gross Density (assumes 75% efficiency for streets):

High End–15 du/a x 3 acres = 45 du

Low End–7.5 du/a x 3 acres = 22 du



NHD-4 Single Family Block—Large Lot



The **Single Family Large Lot Block** is located within the Community North and Community South, Neighborhood District. These traditional single family houses provide a lower density block type. They assume a net density of 5 to 9 du/a compared to a more typical 3 to 5 du/a San Joaquin Valley suburban density.

Illustrated Example

This example illustrates the character and site coverage of large-lot single family blocks with up to 9 units per net acre (5+ du/a is illustrated). This three-acre block is divided into halves with an internal street. The larger 3 acre block could also be organized with a system of alleys with second accessory dwelling units.

Block Size: 3 acres

Land Use: Residential Single family (1L-2L)

Residential Net Density (high end):

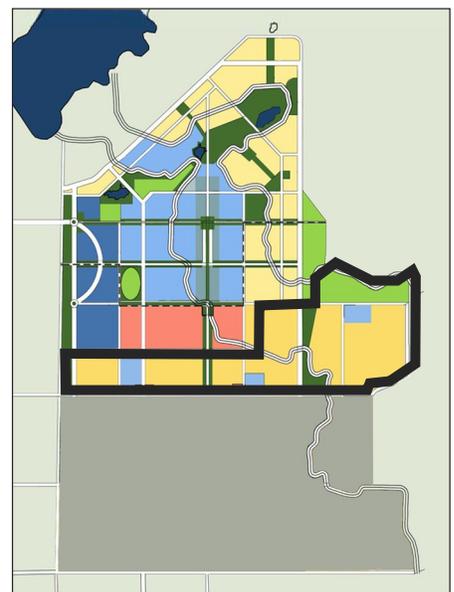
High End—9 du/a x 3 acres = 27 du

Low End—5 du/a x 3 acres = 15 du

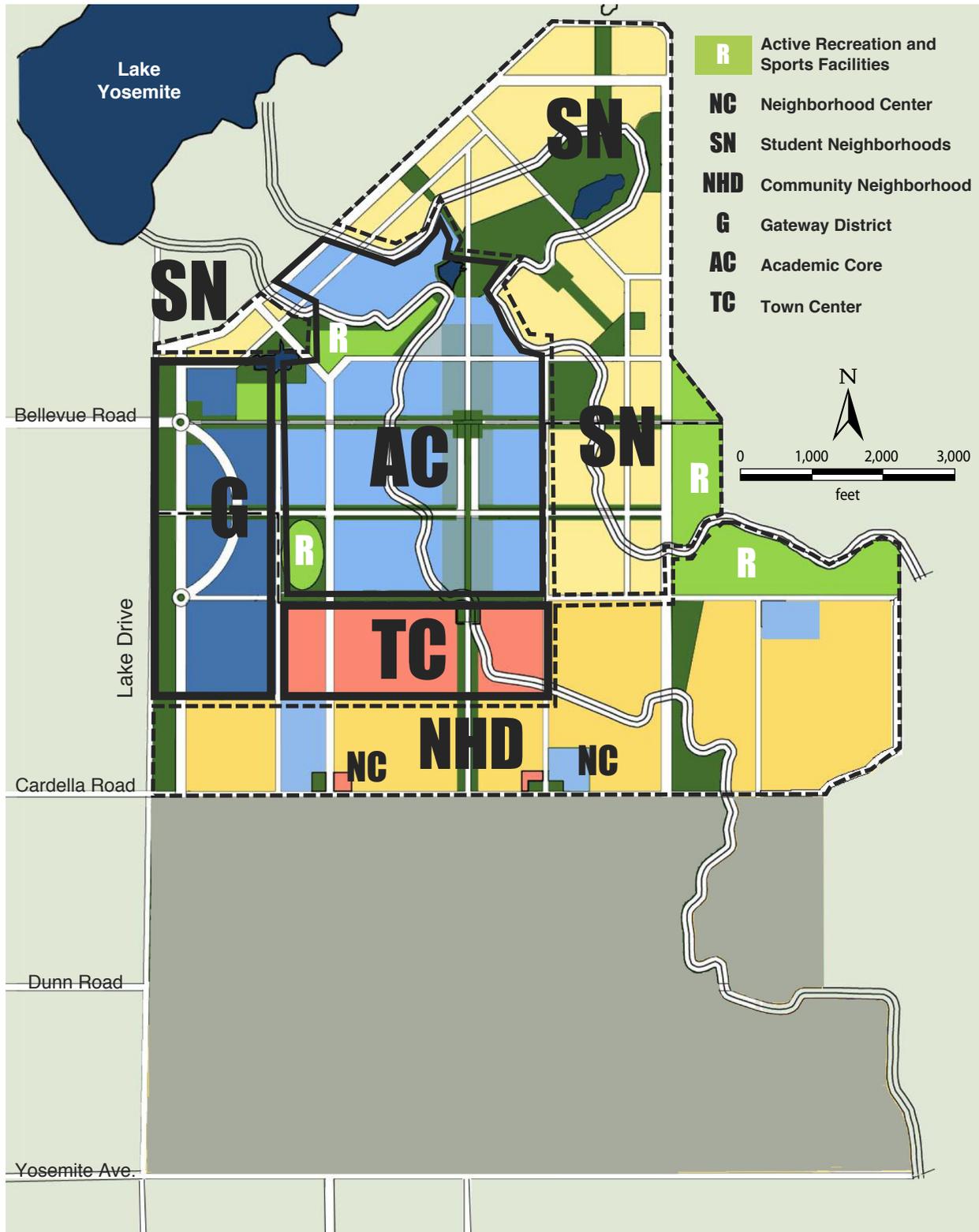
Residential Gross Density (assumes 80% efficiency for streets):

High End—7 du/a x 3 acres = 21 du

Low End—4 du/a x 3 acres = 12 du



Land Use Districts Key Map



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District and Block Types

Glossary

District—An area with similar or supporting land uses

Planning areas—Related to land ownership

FAR—Floor Area Ratio, ratio of building area to site area

Net FAR—FAR for blocks, does not include streets and open spaces

Gross FAR—Average FAR for district, including streets and open spaces (assumes 25% of the total area is used for roads)

du—Dwelling Units

du/a—Dwelling Units per Acre

SF—Square Feet

L—Building level or story



Purpose

These District and Block Types were prepared to support the Corp of Engineers 404 Permit process. The following pages illustrate the potential building types, scale, site coverage, and density of blocks located in the UC Merced Campus and Community areas. There are five districts and 13 block types included.

Academic Core (AC)

The Academic Core is the heart of the UC Merced campus. This district includes teaching, research, housing, student services, campus services, parking, recreation and open space activities.

There are two block types illustrated:

Block AC-1	Typical academic block
Block AC-2	Main Street block

Gateway District (G)

The Gateway District would primarily include academic and industrial joint-development research activities. This area could also include sports venues, parking (in early phases) and other uses that can take advantage of easy parkway and transit access. There are two block types illustrated:

Block G-1	Academic lab block
Block G-2	Industrial-research block

Student Neighborhoods (SN)

The student neighborhoods wrap the academic core and are intended to provide walkable access to the heart of the campus. They include residence halls and apartments supported by student services (food and recreation) parks space, and shared parking.

There are two block types illustrated:

Block SN-1	Walk-up apartments
Block SN-2	Residence hall buildings

Town Center (TC)

The Town Center District acts as the “downtown” for the campus and community. It includes mixed-use commercial and residential activities, cultural and recreational facilities and supporting parking. There are three block types illustrated:

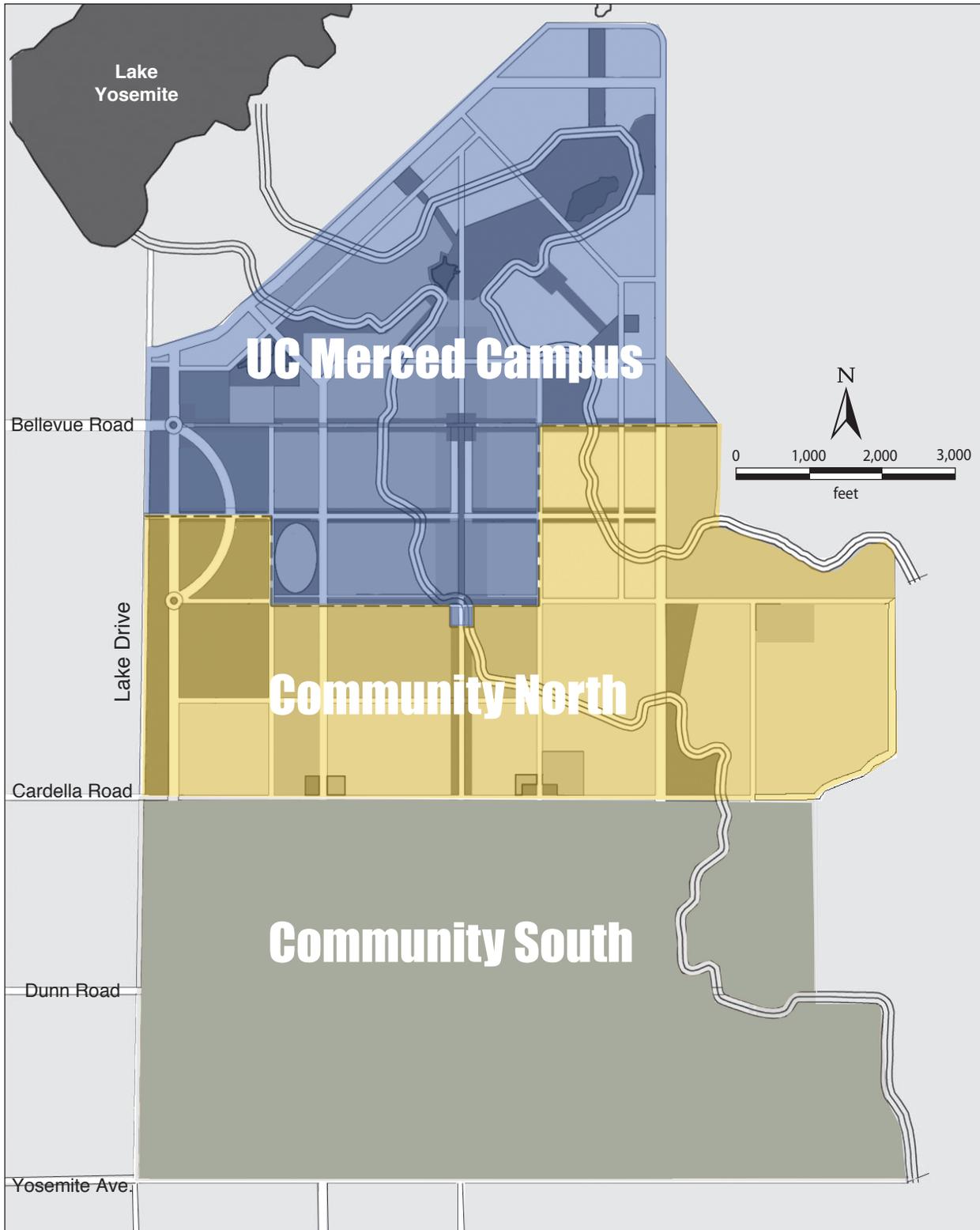
Block TC-1	Commercial mixed-use (CMU)
Block TC-2	Residential mixed-use (RMU)
Block TC-3	Residential townhouse/rowhouse

Community Neighborhood (NHD)

The community has four neighborhoods with a mix of housing types. Each neighborhood has a unique center that contains commercial and institutional services that support both the neighborhood and larger community. There are four block types illustrated:

Block NHD-1	Neighborhood center blocks
Block NHD-2	Neighborhood townhouse block
Block NHD-3	Single-family block, small lot
Block NHD-4	Single-family block, large lot

Campus and Community Planning Areas



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