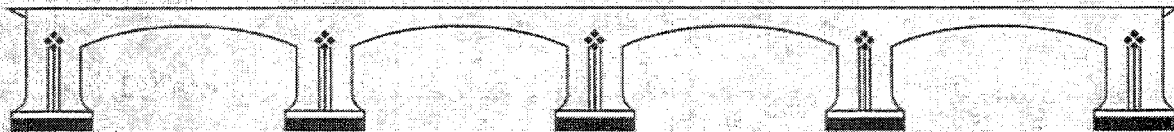


APPENDIX 3.11

COLLEGE AREA

Public Facilities Financing Plan



**October
1993**

(R-94-123)

RESOLUTION NUMBER R- 282802

ADOPTED ON OCT 12 1993

A RESOLUTION OF THE COUNCIL OF THE CITY OF
SAN DIEGO, APPROVING THE COLLEGE AREA PUBLIC
FACILITIES FINANCING PLAN.

BE IT RESOLVED, by the Council of The City of San Diego,
that the City Council hereby approves that document entitled
"College Area Public Facilities Financing Plan, June 1993," a
copy of which is on file in the office of the City Clerk as
Document No. RR- 282802.

APPROVED: JOHN W. WITT, City Attorney

By


Allisyn L. Thomas
Deputy City Attorney

(R-94-121)

RESOLUTION NUMBER R- 282803

ADOPTED ON OCT 12 1993

BE IT RESOLVED, by the Council of The City of San Diego,
that existing development impact fees for the College Area
Community are hereby rescinded.

BE IT FURTHER RESOLVED, by the Council, that new development
impact fees for all properties within the College Area Community
as described in the College Area Public Facilities Financing Plan
of June 1993, a copy of which is on file in the office of the
City Clerk as Document No. RR-282802, are hereby
established.

APPROVED: JOHN W. WITT, City Attorney

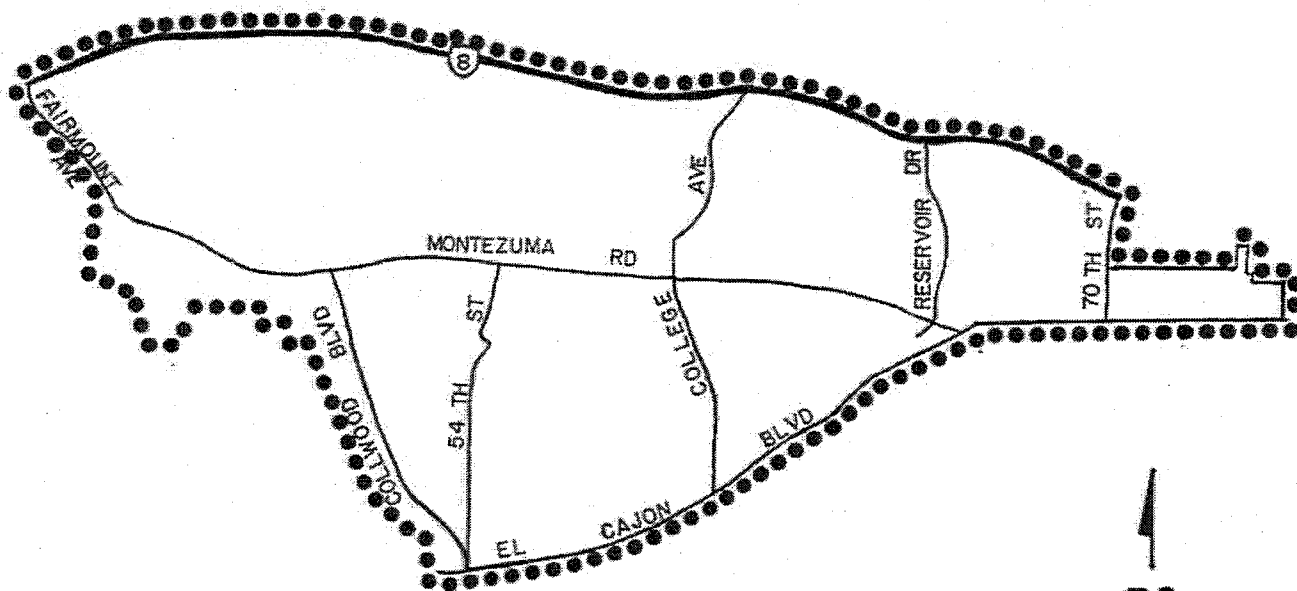
By


Allisyn L. Thomas
Deputy City Attorney

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This information will be made available in alternative formats upon request. To request a financing plan in an alternative format, call the Facilities Financing Section At (619) 533-3850.



..... COMMUNITY BOUNDARY

COLLEGE AREA

SUMMARY

This document is the first Public Facilities Financing Plan for the College Area Community Plan area and sets forth the major public facilities needs in the areas of transportation (streets, storm drains, traffic signals etc.), libraries, park and recreation and fire stations. Other public needs such as police facilities, public works yards, landfills, Central Library, etc., concern a broader area than a single community or even multiple communities. Accordingly, they are being analyzed and financing strategies will be developed separately.

The facilities included in this financing plan will be needed over the next approximately twenty years when the ultimate build-out of the community is expected. The College Area Community Plan was adopted in May 1989 and then amended in October 1993 to reflect adoption of the College Community Redevelopment Plan. This Community Plan, is a guide for future development within the community and served to determine the public facility needs reflected in this document. The City Council has previously adopted impact fees to help mitigate the cost of the public facilities necessitated by development in the community. Impact fees for residential and commercial/industrial development were adopted on August 4, 1987, by Resolution #R-269032, and by Resolution R-209274 on September 14, 1987. This document provides the basis for a revision of the impact fees for the College Area Community.

Development Forecast and Analysis

The College Area Community Plan is a comprehensive policy guide for the physical development of the Community. The College Area Community is generally bounded on the north by Interstate 8, on the east by 70th Street and the City of La Mesa, on the south by El Cajon Boulevard, and on the west by Fairmount Avenue and Collwood Boulevard.

An analysis of present and projected development and using the community plan as a guide indicates that, over the next approximate twenty year period, 2300 residential dwelling units will be constructed and an additional 850,000 square feet of commercial/industrial development will take place. Accordingly, it is estimated that combined residential and commercial/industrial development will result in an increase from 200,000 existing trip ends to approximately 238,000 trip ends at Community build-out.

Priority of Facilities as Indicated by the Community

The College Area Community Council (CACC) has given staff a priority listing of facilities included in the financing plan. These recommendations are displayed as submitted in Appendix B. Upon adoption of this plan on October 12, 1993, the City Council directed the Waring Road, I-8 Waring Road Interchange to Canyon Crest Feasibility Study (CA-18) to be Priority #1, the College Heights Branch Library (CA-33) to be Priority #2, and College Avenue: Lindo Paseo to Canyon Crest Drive (CA-1) to be last in

priority. The following list reflects these priorities but has been arranged by project category. Only those facilities included in the Community Plan and not already programmed for construction are listed. Since the following projects are complete or not in the Community Plan, they are not included:

Fairmount Avenue from Montezuma Road to I-8 Widen and
Improvement

Lindo Paseo Storm Drain

Adelphi Place Drain

Austin Drive Drain

Chaparral Way Drain

* West Campus Drive: 54th St to Remington Road Study

The CACC did not include the Mission Valley East Light Rail Transit Extension (CA-A) in its priority listing. This project was added to the plan by the City Council at the time of adoption.

* Not recommended in the Community Plan.

Community Planning Group Priority List

Transportation

<u>Priority</u>	<u>Project #</u>	<u>Description</u>
1	18	Waring Road, I-8 Waring Road Interchange to Canyon Crest: Feasibility Study
2	7	Montezuma Road and Campanile Road: Intersection Improvements
3	6	College Ave. at Montezuma Rd and at Linda Paseo Intersections: Intersection Improvements
4	10	College Ave., and Canyon Crest Dr./Alvarado Rd: Intersection Improvements and Street Alignment
5	11	Alvarado Rd. Approach to 70th St: Intersection Improvements
6	5	55th St., Montezuma Rd. to Hardy Ave: Widen
7	4	Alvarado Rd: Widen
8	9	Montezuma Rd. and 55th St: Intersection Improvements
9	17	Traffic Signal Interconnect
10	15	Lindo Paseo at Campanile: Traffic Signal
11	28	55th St.: Hardy Ave. to Remington Rd. widening
12	21	El Cajon Blvd.: Montezuma Rd. to 70th St. turn lanes
13	22	El Cajon Blvd. at Montezuma Rd: Intersection Improvements
14	8	College Ave. at El Cajon Blvd: Intersection Improvements
15	13	Montezuma Rd. at Collwood Blvd: Intersection Improvements
16	12	El Cajon Blvd. at 70th St: Intersection Improvements

Transportation (continued)

<u>Priority</u>	<u>Project #</u>	<u>Description</u>
17	2	College Ave. Bridge over I-8: Widen
18	29	55th St. at Remington Rd: Traffic Signal
19	3	70th St. at Alvarado Rd: Widen
20	16	55th St. at Lindo Paseo: Traffic Signal
21	14	Hardy Ave. at Campanile Dr: Traffic Signal
22	27	Storm Drains: Various Locations
23	20	El Cajon Blvd: 54th to 58th widening
24	26	Architectural Barrier Removal
25	1	College Ave: Lindo Paseo to Canyon Crest widening

Park & Recreation

1	31	Neighborhood Park Acquisition and Development
2	32	Muir Elementary School Site Improvements

Library

1	33	College Heights Branch Library
---	----	--------------------------------

EXISTING PUBLIC FACILITIES & FUTURE NEEDS

Transportation

The College Area is served by a transportation network which consists of automobile and public transportation systems, a bicycle system, and a pedestrian circulation system. Provision of adequate transportation facilities has been a continuing process of providing those facilities. Additional transportation improvements will be necessary to meet both existing needs and the needs of future development.

Transportation improvements in the College Area are dictated by traffic volume. Improvements will be funded through a combination of Development Impact Fees (DIF), Redevelopment Agency funding, TRANSNET, Gas Tax and other funding sources yet to be determined. Additional details on Transportation Improvements are provided in Table 1 and Appendix A.

Fire Protection

Fire protection for College Area is provided by Station #10 located on 62nd Street and Station #17 located on Chamoune Avenue.

There is no anticipated need to build additional fire stations or to enlarge the existing facilities.

Library

The College Area is served by College Heights Branch Library located at 4710 College Avenue, just north of Adams Avenue.

This facility is too small for the community at buildout. A new 10,000 square foot branch library is proposed for the community.

Park and Recreation

The College Area is currently served by a single one-acre park, Montezuma Park. In addition, the recreational facilities of San Diego State University are available for use by the community. A portion of the Hardy Elementary School Site is presently leased and developed with a turfed paying field area. Colina del Sol Community Park and Clay Neighborhood Park, both in the Mid-City Community, provide recreational facilities to the area, but there exists a significant deficiency of park facilities for community residents.

Park and Recreation needs, which are based on General Plan Standards, and are consistent with the community plan, consist of the acquisition and development of one neighborhood park and the turfing of an elementary school playing field. The projects are further described in Table 1 and Appendix A.

SUMMARY OF FACILITIES NEEDS

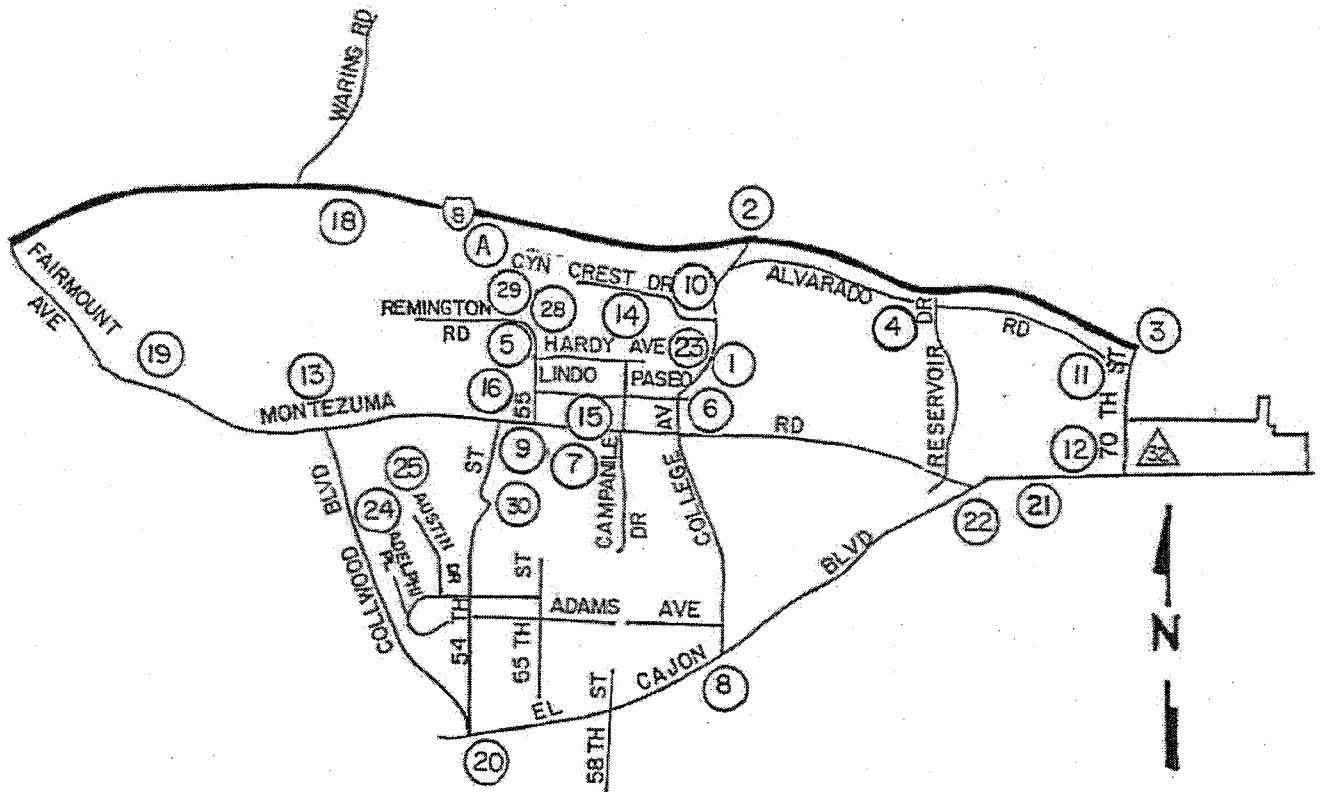
The following figure and tables summarize facilities needs of the College Area Community. Figure 1 illustrates general locations for the projects described. Table 1 reflects both long range needs and those reflected in the current Council adopted Capital Improvements Program (CIP). These projects are more fully described in Appendix A.

The near term needs listed in Table 1 are subject to annual revision in conjunction with Council adoption of the Annual Budget. Depending on priorities and availability of resources, substantial changes from year to year are possible.

In addition to the projects outlined in Table 1 and Appendix A are certain improvements programmed on a City-wide basis which may include projects in the College Area. Utilities Undergrounding (CIP 37-028.0), minor signal requirements (CIP 62-002.0), and bicycle detector loops (CIP 58-079.0) are examples of additional capital improvements more fully detailed in the City's Annual Budget. Water Utilities projects which may be located in the College Area are funded by water and sewer revenues.

FIGURE 1 - CAPITAL IMPROVEMENTS PROGRAM

COLLEGE AREA



LEGEND

- TRANSPORTATION
- △ PARK & REC
- FIRE STA.
- ⬡ OTHER

TABLE 1

COLLEGE AREA - CAPITAL NEEDS

FISCAL YEAR 1994

PROJECT DESCRIPTION (See Appendix A for more details)		ESTIMATED COST (1994)	G.I.P. NUMBER/ YEAR OF CONSTR.	IDENTIFIED FUNDING	FUNDING SOURCE (C= CITY) (N= NON-CITY)	BASIS FOR D.I.F.
PROJECT NO.						
TRANSPORTATION PROJECTS						
NOTE: BICYCLE FACILITIES ARE NOT PROVIDED FOR UNLESS OTHERWISE NOTED.						
1	COLLEGE AVENUE; LINDO PASEO TO CANYON CREST DRIVE: WIDEN TO SIX LANE MAJOR STREET WITH CLASS II BICYCLE LANES.	\$7,800,000		\$4,836,000	REDEV. N	\$7,800,000
2	COLLEGE AVENUE OVER I-8 BRIDGE AND APPROACHES: WIDEN TO SIX LANE MAJOR STREET WITH CLASS II BICYCLE LANES.	\$3,200,000		\$1,984,000	REDEV. N	\$3,200,000
3	70TH STREET AT ALVARADO ROAD AND AT I-8 BRIDGE: WIDEN TO SIX LANES.	\$1,700,000		\$425,000	REDEV. N	\$1,700,000
4	ALVARADO ROAD: WIDEN TO THREE LANES.	\$3,200,000		\$3,200,000	REDEV. N	\$3,200,000
5	55TH STREET, MONTEZUMA ROAD TO HARDY AVENUE: WIDEN TO FOUR LANES.	\$2,400,000		\$768,000	REDEV. N	\$2,400,000
6	COLLEGE AVENUE AT MONTEZUMA ROAD AND AT LINDO PASEO INTERSECTIONS: INTERSECTION IMPROVEMENTS.	\$4,000,000		\$2,000,000	REDEV. N	\$4,000,000
7	MONTEZUMA ROAD AND CAMPANILE ROAD: INTERSECTION IMPROVEMENTS.	\$35,000		\$23,000	REDEV. N	\$35,000
8	COLLEGE AVENUE AND EL CAJON BOULEVARD: INTERSECTION IMPROVEMENTS.	\$2,700,000		\$702,000	REDEV. N	\$2,700,000
9	MONTEZUMA ROAD AND 55TH STREET: INTERSECTION IMPROVEMENTS.	\$85,000		\$43,000	REDEV. N	\$85,000
10	COLLEGE AVENUE AND CANYON CREST DR./ALVARADO ROAD: INTERSECTION IMPROVEMENTS AND STREET ALIGNMENT.	\$3,000,000		\$1,560,000	REDEV. N	\$3,000,000

TABLE 1

COLLEGE AREA — CAPITAL NEEDS

FISCAL YEAR 1994

PROJECT NO.	PROJECT DESCRIPTION (See Appendix A for more details)	ESTIMATED COST (1994)	C.I.P. NUMBER/ YEAR OF CONSTR.	IDENTIFIED FUNDING	FUNDING SOURCE (C= CITY) (N= NON-CITY)	BASIS FOR D.I.F.
TRANSPORTATION PROJECTS (continued)						
11	ALVARADO ROAD APPROACH TO 70TH STREET: INTERSECTION IMPROVEMENTS.	\$80,000		\$80,000	REDEV. N	\$80,000
12	EL CAJON BOULEVARD AT 70TH STREET INTERSECTION IMPROVEMENTS..	\$1,000,000		\$310,000	REDEV. N	\$1,000,000
13	MONTEZUMA ROAD AND COLLWOOD BOULEVARD: INTERSECTION IMPROVEMENTS.	\$350,000		\$322,000	REDEV. N	\$350,000
14	HARDY AVENUE AND CAMPANILE DRIVE: TRAFFIC SIGNAL	\$110,000		\$110,000	REDEV. N	\$110,000
15	LINDO PASEO AND CAMPANILE DRIVE: TRAFFIC SIGNAL	\$110,000		\$110,000	REDEV. N	\$110,000
16	55TH STREET AND LINDO PASEO: TRAFFIC SIGNAL	\$110,000		\$110,000	REDEV. N	\$110,000
17	TRAFFIC SIGNAL INTERCONNECT	\$800,000		\$448,000	REDEV. N	\$800,000
18	WARING ROAD, I-8 WARING ROAD INTERCHANGE TO CANYON CREST: FEASIBILITY STUDY.	\$100,000		\$100,000	REDEV. N	\$100,000
19	FAIRMOUNT AVENUE, MONTEZUMA ROAD TO I-8: WIDEN TO SIX LANES.	\$4,490,150 *	52-433.0 FY 94	\$948,240 \$50,000 \$3,059,220 \$432,690	TRANS C S/L N BONDS N GASTAX C	\$4,440,150
20	EL CAJON BOULEVARD, 54TH STREET TO 58TH STREET: WIDEN TO FOUR LANES.	\$1,125,000 *				\$1,125,000
21	EL CAJON BOULEVARD FROM MONTEZUMA ROAD TO 70TH ST: MODIFY RAISED MEDIAN TO CREATE LEFT-TURN POCKETS.	\$700,000				\$700,000
22	EL CAJON BOULEVARD AND MONTEZUMA ROAD: INTERSECTION IMPROVEMENTS.	\$150,000				\$150,000

* REFLECTS COLLEGE AREA PORTION ONLY.

TABLE 1
COLLEGE AREA – CAPITAL NEEDS
FISCAL YEAR 1994

PROJECT NO.	PROJECT DESCRIPTION (See Appendix A for more details)	ESTIMATED COST (1994)	C.I.P. NUMBER/ YEAR OF CONSTR.	IDENTIFIED FUNDING	FUNDING SOURCE (C= CITY) (N= NON-CITY)	BASIS FOR D.I.F.
TRANSPORTATION PROJECTS (continued)						
23	LINDO PASEO STORM DRAIN	\$57,000	11-285.0 FY 92	\$7,000 \$50,000	DIF C CAPOUT C	\$57,000
24	ADELPHI PLACE DRAIN	\$25,000	11-295.0 FY 92	\$25,000	DIF C	\$25,000
25	AUSTIN DRIVE DRAIN	\$80,000	11-296.0 FY 92	\$50,000 \$30,000	TRANS C DIF C	\$80,000
26	ARCHITECTURAL BARRIER REMOVAL	\$1,200,000		\$672,000	REDEV. N	\$1,200,000
27	STORM DRAINS AT VARIOUS LOCATIONS	\$2,200,000				\$2,200,000
28	55TH STREET, HARDY AVENUE TO REMINGTON ROAD: WIDEN TO FOUR LANES	\$900,000		\$900,000	SDSU N	
29	55TH STREET AND REMINGTON ROAD: TRAFFIC SIGNAL	\$110,000		\$110,000	SDSU N	
30	CHAPARRAL WAY DRAIN	\$120,000	11-251.0 FY 93	\$120,000	TRANS C	\$120,000
A	MISSION VALLEY EAST LRT EXTENSION	\$94,000,000 *	2001	\$34,320,000 \$5,060,000 \$4,620,000	FEDERAL N STATE N TRANSNET N	
TOTAL TRANSPORTATION PROJECTS		\$135,937,150		\$67,585,150		\$40,877,150

* SDSU SEGMENT COST

TABLE 1
COLLEGE AREA – CAPITAL NEEDS
 FISCAL YEAR 1994

PROJECT DESCRIPTION (See Appendix A for more details)		C.I.P.	IDENTIFIED FUNDING	FUNDING	BASIS FOR D.I.F.
PROJECT NO.	ESTIMATED COST (1994)	NUMBER/ YEAR OF CONSTR.		SOURCE (C= CITY) (N= NON-CITY)	
<u>PARK AND RECREATION PROJECTS</u>					
31	NEIGHBORHOOD PARK ACQUISITION AND DEVELOPMENT	\$7,700,000			\$7,700,000
32	MUIR ELEMENTARY SCHOOL SITE IMPROVEMENTS	\$400,000			\$400,000
TOTAL PARK AND RECREATION PROJECTS		\$8,100,000			\$8,100,000
<u>LIBRARY PROJECTS</u>					
33	COLLEGE HEIGHTS BRANCH LIBRARY	\$3,750,000	35-071.0	\$50,000	DIF C \$3,750,000
TOTAL LIBRARY PROJECTS		\$3,750,000		\$50,000	\$3,750,000
TOTAL COLLEGE AREA CAPITAL PROJECTS		\$147,787,150		\$67,635,150	\$52,727,150

COLLEGE AREA - PUBLIC FACILITIES FINANCING PLAN

General

The PROGRESS GUIDE AND GENERAL PLAN (General Plan) for the City of San Diego recommends the division of the City into planning areas which are designed as Urbanized, Planned Urbanizing and future Urbanizing areas. Urbanized areas include the central portion of San Diego as well as the remaining developed/older sections of the City. Planned Urbanizing areas consists of newly developing communities. Future Urbanizing areas include land which is presently undeveloped.

The College Area is an Urbanized area. This document constitutes the first Public Facilities Financing Plan for the College Area Community.

Development Forecast and Analysis

The College Area Community, totalling approximately 1,950 acres, is developing in accordance with the Community Plan to be amended by Council concurrently with this document. Currently, the College Area contains approximately 7,500 dwelling units with a population of approximately 19,000 persons. An analysis of projected development and using the Community Plan as a guide, indicates that over the next twenty years, additional development will take place in the following categories:

<u>Use</u>	<u>Estimated Development</u>
Residential	2300 Dwelling Units
Commercial/Industrial	21,900 Trip Ends

Periodic Revision

To ensure that this program maintains its viability, this plan will be periodically revised to include, but not necessarily be limited to, Council changes to the Capital Improvements Program and the Community Plan.

FINANCING STRATEGY

The City of San Diego has at its disposal a wide variety of potential funding sources for financing public facilities. A portion of the funding for the needed facilities will be provided as a part of the subdivision process by developers and by impact fees. Potential methods for financing public facilities are described below:

1. IMPACT FEES (DIF) - Impact fees are a method whereby the impact of new development upon the infrastructure is measured and a fee system developed and imposed on developers to mitigate the impact. The impact fees are collected at the time of issuance of individual building permits. Funds so collected are deposited in a special interest bearing account which retains all monies for use in the community in which they were collected. As sufficient funds are collected, the City proceeds with a construction program, in order of priority. This is one of the financing methods recommended for the College Area. The City Council has determined that the payment of development impact fees is not required in redevelopment project areas where redevelopment plans provide for the fair share funding of needed facilities by redevelopment.
2. TRANSNET, GAS TAX, and other programs such as a state-local partnership program may provide some funds for community transportation projects. These funds will be allocated annually and may be used to fund a portion of the long-range capital needs for transportation improvements in the College Area in the future.

3. ASSESSMENT DISTRICTS - Special assessment financing, using 1913/1915 Assessment Acts or a Mello-Roos District could be used as a supplementary or alternative method of financing some facilities. The Mello-Roos District requires a 2/3 vote for passage. Other assessment districts require the support of the community.

4. GENERAL OBLIGATION BOND ISSUES - Prior to the late 1960's, bond issues were considered the most appropriate method of funding many types of public facilities. These require 2/3 vote approval for passage.

5. ANNUAL ALLOCATION - In the years prior to the passage of Proposition 13, the City was able to respond to community facility needs by using a portion of the sales tax revenue to support the Capital Improvement Program. This has not been possible for some time. However, if other revenues were increased, annual allocations could again be used to fund some capital facilities. This is a recommended method of funding some park and recreation facilities and transportation improvements.

6. FACILITIES BENEFIT ASSESSMENT (FBA) - This method of financing, used solely in Planned Urbanizing Communities, spreads costs fairly and equally and follows the procedures specified in City Council Ordinance O-15318 dated August 25, 1980. However, this method cannot be used in Urbanized areas such as the College Area.

7. REDEVELOPMENT AGENCY FUNDING - The Redevelopment Agency will employ a variety of financing methods within the Project Area, which may include financial assistance from governmental agencies, tax increment, special assessment districts, sales and transient occupancy tax funds, donations, interest income, Agency bonds,

loans from private financial institutions, the lease of Agency-owned property, and sale of Agency-owned property.

GENERAL ASSUMPTIONS AND CONDITIONS

In connection with the application of the above methods of financing, the following general assumptions and conditions would apply:

1. Developers would be required to provide facilities normally provided within the subdivision process as a condition of subdivision approval, including traffic signals.
2. Abutting property owners are responsible for frontage improvements such as sidewalks, curbs and gutters.
3. The DEVELOPMENT IMPACT FEE would be paid by the developer at the time of building permit issuance.
4. DEVELOPMENT IMPACT FEE funds collected would be placed in a trust account providing interest earnings for the community area.
5. A developer or group of developers can propose to build or improve a specific facility identified in the Capital Improvements Program and, upon City Council approval, enter into an agreement to provide the facility for reimbursement.
6. Within the Redevelopment Project Area, the Redevelopment Agency will negotiate the provision of public facilities in lieu of payment of impact fees.

DEVELOPMENT IMPACT FEE

DETERMINATION

Background

The College Area Community Plan Area is almost fully developed. Thus, the majority of the required public improvements will have to be provided through special funding mechanisms. In late 1987, staff developed and recommended impact fees for 28 urbanized communities. The City Council adopted the recommended fees, including those for the College Area Community Plan Area, to mitigate the impact of development on public facilities. Since the community is near buildout, the fees will provide only a small portion of the financing needed for the facilities.

Outside the Redevelopment Project Area, all undeveloped or underdeveloped parcels are subject to the DIF. Monies collected are placed in City interest accruing accounts, to be used only for capital improvements in the College Area Community.

Distribution of Project Costs and Fee Determination

Development of the actual charge to be imposed by the DIF is based on the extent or degree to which each type of development generates a demand for, or receives benefit from the various public facilities involved. For example, all development generates vehicular traffic and thus, on an equitable basis, should share in

the cost of transportation projects.

Development Impact Fees were determined for the various categories of needed public facilities on the basis of total amount of development at community plan build-out and on the basis of all additional public facilities needed at community plan build-out. The impact fee base includes all project needs aside from those to be funded by the State, a subdivider or by adjacent existing residents. In addition, the fees include a 2% charge to cover City administrative costs.

Transportation

There is a clear relationship between the use of transportation facilities and the generation of traffic trips based upon land use. In the report "San Diego Traffic Generators," authored by CALTRANS and SANDAG, the traffic generated by various classes of use are detailed. This report summarizes data collected at major regional traffic generators as well as neighborhood and local traffic generators in the San Diego area. Traffic counts taken at each facility are related to various characteristics of the facility such as the size, number of employees, floor area, parking spaces, or number of persons. The report distinguishes between the average daily traffic (ADT) generated by a single-family dwelling and a multi-family dwelling. For impact fee purposes, a single type of residential development was assumed for the College Area (and all other urbanized communities). The residential portion of the impact fee reflects use of an average daily traffic factor (ADT) of

7 as a basis for determining the rate.

A considerable range has been found for traffic generation for commercial and industrial developments depending on the character and use of the property. Non-residential land-uses typically generated between 100 to 900 average daily traffic per acre. For non-residential development in the College Area Community, average daily trips were measured. The 1989 College Area Community Plan and the Transportation and Parking Analysis prepared for the College Area Redevelopment Project in 1992 were used in the development of this Financing Plan.

Using the approved land use intensity and trip generation rates, the total number of trip ends at community plan build-out is estimated to be 238,000. An analysis of the City-funded street improvements required at community build-out (costs estimated FY 1994) totaling \$40,877,150 indicates the cost per average daily traffic for transportation facilities is \$175 per trip (and \$1251/dwelling unit) to be paid by all future development. The fee per dwelling unit was calculated using the average daily trip factor of seven, as previously explained.

Fire Facilities

The Fire Station portion of the fee relates to the cost of fire stations providing fire protection services to both residential and non-residential establishments within the community. Residential

impact fees are based on the average cost per dwelling unit.

Since the Fire Department has determined that existing fire facilities are adequate to meet the needs of existing and future development, no additional facilities are needed. Therefore, no fire fee has been calculated.

Libraries

Library needs are based on population which is derived from the number of dwelling units estimated by staff. Therefore, only residential developments are charged a DIF for library facilities.

Based upon General Plan standards and a forecast of total population in the College Area at build-out the existing branch library is adequate to meet community needs. The facility occupies a 4,430 square foot facility and expansion is not possible. Therefore, it is recommended to construct a new 10,000 square foot branch at a new location. Allocating total library requirements only to residential property results in a library impact fee of \$390 per dwelling unit. This was calculated by dividing total library requirements of \$3,750,000 by the residential dwelling units at build-out of 9,800.

Park and Recreation

Park and Recreation needs have traditionally been based on population derived from the number of dwelling units in the community. Council Policy 600-17, adopted in November of 1989, provides for the equitable contribution of funds by both residential and non-residential development to park and recreation facilities. However, since there is insufficient data currently available on which to base the allocation of park and recreation facilities costs to industrial and commercial users in the College Area, these costs are attributed only to residential users. Future revisions of this financing plan may include a different cost distribution.

The Park and Recreation Department has identified projects which will be needed in the College Area Community at build-out. These are shown in Table 1 and Appendix A in detail. Allocating total park and recreation facility costs of \$8,100,000 only to the residential development at build-out of 9,800 units results in an impact fee of \$843 per unit.

FEE SCHEDULE

The resulting impact fees for the College Area are as follows:

RESIDENTIAL PROPERTY					COMM/INDUST	
Trans	Fire	Park	Library	Total	Trans	Fire
\$ Per Unit		\$ Per Unit		Res. \$/Unit	\$/Trip	
1251	0	843	390	2484	175	0
						\$/1000 sq. ft. of GBA

Development Fees



THE CITY OF SAN DIEGO
City Planning &
Community Investment

This brochure outlines fees which the Facilities Financing Section of the City Planning & Community Investment Department collects as part of the costs of land development in the City of San Diego. Facilities Benefit Assessments (FBA) or Development Impact Fees (DIF) are charged for development in all planned urbanizing and urbanized communities within the City of San Diego. A developer usually pays one or the other (FBA or DIF), not both. This money is used by the City to provide needed public facilities such as streets, libraries, parks, and fire stations. The fees must generally be paid to the Information and Application Services Division of the Development Services Department prior to the issuance of a building permit.

The Facilities Financing Section also assesses Housing Impact Fees. These fees were adopted by Ordinance O-17454 on April 16, 1990. This fee is applicable on new construction, additions or interior remodeling to accommodate a change from the structure's current use. These fees are only applicable on non-residential development. These fees were established to meet, in part, the affordable housing needs of San Diegans.

The Facilities Financing Section also assesses the Regional Transportation Congestion Improvement Program Fees (RTCIP). These fees were adopted by Resolution #303554 on April 14, 2008. This fee is applicable only on new Residential Development. On-site Affordable (low income) units may be exempt from the RTCIP Fee. These fees were established to ensure that new Development directly invests in the Region's transportation system to offset the negative impact of growth on congestion and mobility.

If you have any questions about any of these fees, the last page of the brochure contains a list of the Facilities Financing Section personnel who will help you.

FISCAL YEAR 2011 FACILITIES BENEFIT ASSESMENT OR DEVELOPMENT IMPACT FEE

**FEES ARE SUBJECT TO CHANGE PER UPDATE PROCESS
CHECK WITH FACILITIES FINANCING PROJECT MANAGER FOR CURRENT FEES**

COMMUNITY	Single Family Unit	Multi-Family Unit	Commercial Acre	Industrial Acre	Institu- tional Acre	Commercial/Indus'l		RTCIP Single- Family	RTCIP Mult- Family
						Trans\$/ ADT	Fire\$/1000 SF GBA		
Planned Urbanizing Communities									
Black Mountain Ranch	55,891	39,124	18,501 (a)	9,627 (n) 14,061 (a)	184,989	-	-	-	-
Carmel Mountain Ranch	-	-	-	-	-	-	-	2,425	1,940
Carmel Valley	26,692	18,685	99,028	92,088	95,291	-	-	-	-
Del Mar Mesa	93,905(c)	65,734	193,444	-	-	-	-	-	-
Fairbanks Ranch	15,018	10,513	46,531	-	-	-	-	2,425	1,940
Miramar Ranch North	(d)	(d)	(d)	(d)	(d)	(d)	(d)	2,425	1,940
Mira Mesa	30,435	21,305	188,393	66,044 – 86,435	-	-	-	-	-
North University City	21,920	15,345	-	-	-	1,476 (e)	-	-	-
Otay Mesa (f)	25,616	17,932	147,297 154,753	51,232 51,068	-	-	-	-	-
Pacific Highlands Ranch	83,090 56,503 (g)	58,165	670,380	446,916	238,353	-	-	-	-
Rancho Encantada	3,064	2,144	-	-	-	-	-	2,425	1,940
Rancho Peñasquitos	25,723	18,007	154,338	-	-	-	-	-	-
Sabre Springs	4,767	3,337	833 (a)	421 (a)	-	-	-	-	-
San Pasqual	1,680	1,176	-	-	-	168	-	2,425	1,940
Scripps Miramar Ranch	32,351	22,646	126,622	76,333	43,683	-	-	2,425	1,940
Torrey Highlands (i)(m)	112,458	78,723	201,300 678,122 (i)	604,877	168,687	-	-	-	-
Via de la Valle	3,196	-	-	-	-	-	-	2,425	1,940
Urbanized Communities									
Barrio Logan	10,200	10,200	-	-	-	302	457	2,425	1,940
Centre City (o)	3,970	3,970	-	-	-	-	320	2,425	1,940
Clairemont Mesa	4,261	4,261	-	-	-	42	105	2,425	1,940
College Area	2,484	2,484	-	-	-	175	-	2,425	1,940
Golden Hill	8,124	8,124	-	-	-	115	221	2,425	1,940
Greater North Park	4,080	4,080	-	-	-	62	115	2,425	1,940
Kearny Mesa	7,536	7,536	-	-	-	61	66	2,425	1,940
La Jolla	4,794	4,794	-	-	-	171	148	2,425	1,940
Linda Vista	1,788(j)	1,788(j)	-	-	-	98	188 (q) 91(k)	2,425	1,940
Mid City	2,417	2,417	-	-	-	75	5	2,425	1,940
Midway/Pacific Highway	6,526	6,526	-	-	-	842	15	2,425	1,940
Mission Beach	1,590	1,590	-	-	-	148	-	2,425	1,940
Mission Valley	11,621	11,621	-	-	-	251	323	2,425	1,940
Navajo	6,566	6,566	-	-	-	292	279	2,425	1,940
Ocean Beach	3,063	3,063	-	-	-	188	268	2,425	1,940
Old San Diego	4,582	4,582	-	-	-	615	277	2,425	1,940
Otay Mesa-Nestor	9,957	9,957	-	-	-	89	1	2,425	1,940
Pacific Beach	2,431	2,431	-	-	-	46	120	2,425	1,940
Peninsula	3,020	3,020	-	-	-	146	114	2,425	1,940
Rancho Bernardo	2,717	2,717	-	-	-	197	12	2,425	1,940
San Ysidro	9,027	9,027	-	-	-	350	23	2,425	1,940

FISCAL YEAR 2011 FACILITIES BENEFIT ASSESMENT OR DEVELOPMENT IMPACT FEE

**FEES ARE SUBJECT TO CHANGE PER UPDATE PROCESS
CHECK WITH FACILITIES FINANCING PROJECT MANAGER FOR CURRENT FEES**

COMMUNITY	Single Family Unit	Multi-Family Unit	Commercial Acre	Industrial Acre	Institutional Acre	Commercial/Indus'l		RTCIP Single-Family	RTCIP Multi-Family
						Trans\$/ADT	Fire\$/1000 SF GBA		
Serra Mesa	6,516	6,516	-	-	-	226	587	2,425	1,940
Skyline/Paradise Hills	5,632	5,632	-	-	-	123	230	2,425	1,940
Southeastern San Diego	5,559	5,559	-	-	-	290	70	2,425	1,940
South University City	1,778	1,778	-	-	-	91	-	2,425	1,940
Subarea II (p)	19,673	13,771	77,330	-	39,016	-	-	2,425	1,940
Tijuana River Valley	9,027	9,027	-	-	-	350	23	2,425	1,940
Tierrasanta	14,525	14,525	-	-	-	1,530	628	2,425	1,940
Torrey Hills (r)	-	-	-	-	-	-	-	2,425	1,940
Torrey Pines	9,180	9,180	-	-	-	327	-	2,425	1,940
Uptown	7,665	7,665	-	-	-	119	74	2,425	1,940

Key:

ADT - Average Daily Trip SF - Square Foot GBA - Gross Building Area DIF - Development Impact Fee
FBA - Facilities Benefit Assessment RTCIP—Regional Transportation Congestion Improvement Program

Notes:

- (a) Assessment per 1,000 sq. ft. of Building Area
- (b) Hotel Rate = \$25,595/Room, Golf Course Rate = \$2,255,827/Course
- (c) AR-1-2 (New Land Use Code) Zone Single Family - \$88,271
- (d) Fee Dependent on Development Agreements. Check with Project Manager.
- (e) Applies to non-residential development in the North University City Community area.
- (f) Otay Mesa is divided into West and East Sub-Areas. FBA may be prorated for interim land use developments.
- (g) Del Mar Highlands Estates ONLY.
- (h) Vista del Lago ONLY
- (i) Local Mixed Use - \$907,536 per acre (net of residential area)
- (j) Includes \$91 per DU for the Linda Vista Community Center
- (k) An addition of \$91 per 1,500 sq. ft. of Commercial Building Area will be allocated to the Linda Vista Community Center
- (l) Credit against DIF is given for SPF.
- (m) Excludes Fairbanks Highlands.
- (n) Employment Center rate per 1,000 sq. ft.
- (o) Centre City Only: Non-residential also pays (Park & Rec) \$1,700 per 1,000 sq. ft. of GBA
- (p) Recreational - \$7,912
- (q) Assessment per 1,500 sq. ft. of Building Area
- (r) Formerly Sorrento Hills

CITYWIDE HOUSING IMPACT FEE

Rates Effective July 1, 1996

These fees are deposited into the San Diego Housing Trust Fund to meet, in part, affordable housing needs in San Diego. The fees are collected for non-residential development and must be paid to the Planning Department prior to the issuance of a building permit. Fees subject to annual adjustment.

Type of Use	Fee Per Square Foot
Office	\$1.06
Hotel.....	\$0.64
Research & Development.....	\$0.80
Retail	\$0.64
Manufacturing	\$0.64
Warehouse.....	\$0.27

Note: Some exemptions may apply for Enterprise Zone and Redevelopment Areas.

Fees can be paid at the Development Services Center (formerly City Operations Building), 3rd Floor, 1222 First Avenue, when the building permit is issued. Please contact the offices listed below for further information concerning.

Fees for Specific Projects

Facilities Financing.....(619) 533-3670
(Project Manager Community Assignments Listed on Back Page)

Copies of the Ordinance

City Clerk.....(619) 533-4000

The Housing Trust Fund / Housing Commission(619) 578-7588

**CITY PLANNING & COMMUNITY INVESTMENT DEPARTMENT
FACILITIES FINANCING SECTION**

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msheffield@sandiego.gov

Charlette Strong Williams
(619) 533-3683
cstrong@sandiego.gov

Community Responsibilities

Black Mountain Ranch, Carmel Mountain Ranch, Miramar Ranch
North, Mira Mesa, Rancho Encantada, Sabre Springs, Scripps
Miramar Ranch

Barrio Logan, Golden Hill, Greater North Park, La Jolla, Mid-City,
Navajo, Serra Mesa, Skyline/Paradise Hills, Southeastern San
Diego, South University City, Torrey Pines, Via De La Valle

Balboa Park, Clairemont Mesa, College Area, Midway/Pacific
Highway, Mission Bay Park, Mission Beach, Mission Valley,
Ocean Beach, Old San Diego, Pacific Beach, Peninsula, Rancho
Bernardo, San Pasqual, San Ysidro/Tijuana River Valley, Uptown

Fairbanks Ranch, Otay Mesa (Eastern and Western areas), Pacific
Highlands Ranch, Subarea 2

Carmel Valley, North City Future Urbanizing Area, Centre City,
East Elliott, North University City, Otay Mesa-Nestor, Tierrasanta,
Torrey Hills (formerly Sorrento Hills)

Del Mar Mesa, Kearny Mesa, Linda Vista, Rancho Peñasquitos,
Torrey Highlands

For general questions phone us at (619) 533-3670 or e-mail us at facilitiesfinancing@sandiego.gov
or visit our website at <http://www.sandiego.gov/planning/>

CITYGATE ASSOCIATES, LLC

■ FOLSOM (SACRAMENTO), CA

MANAGEMENT CONSULTANTS ■

■ ■

REGIONAL FIRE SERVICES DEPLOYMENT STUDY FOR THE COUNTY OF SAN DIEGO OFFICE OF EMERGENCY SERVICES

VOLUME 1 OF 3 – MAIN REPORT

May 5, 2010

■ ■



■ 2250 East Bidwell St., Ste #100 ■ Folsom, CA 95630
(916) 458-5100 ■ Fax: (916) 983-2090



CITYGATE ASSOCIATES, LLC
FIRE & EMERGENCY SERVICES

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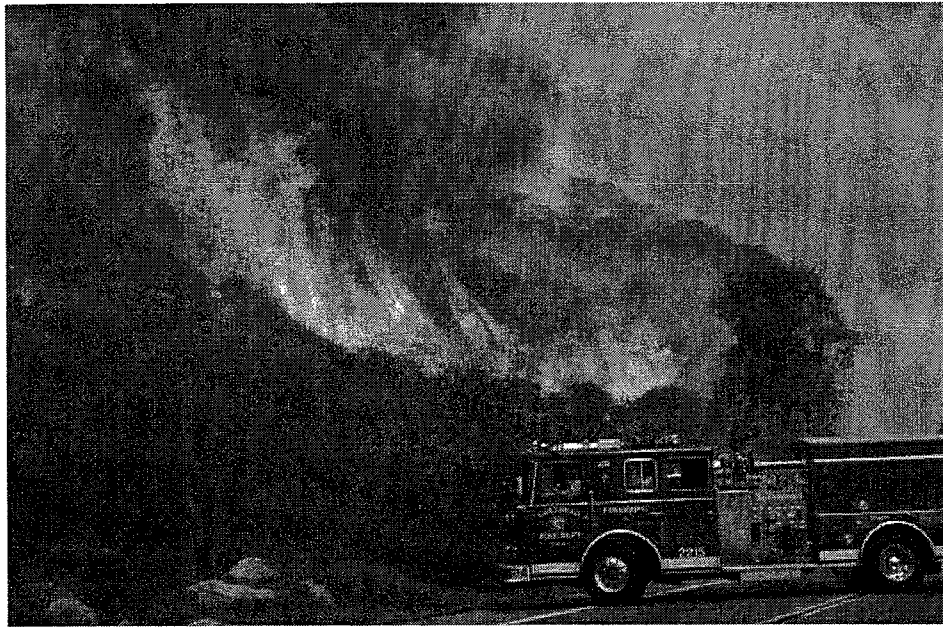
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PART ONE

Executive Summary



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i. EXECUTIVE SUMMARY

The County of San Diego retained Citygate Associates, LLC to conduct a Regional Fire Services Deployment Study to include:

- ◆ A detailed Standards of Response Cover planning analysis (fire station and crew deployment) to examine the levels of fire department service throughout the region;
- ◆ Fire station and staffing infrastructure triggers for additional resources, if needed;
- ◆ A high-level analysis of logistical support services such as training and dispatch;
- ◆ Order of magnitude costs and governance strategies going forward.

This study does not assess the performance or needs of any individual fire agency, but instead is a deployment study for regional fire, rescue and EMS services within the County of San Diego in order to establish a blueprint for improving the County's regional fire protection and emergency medical system. As a regional study, it looks across political subdivision lines to what changes in a sub-region (for example, the Northwest County) as well as what additional resources countywide (for example, dispatching and helicopters) will provide significant improvements in fire and EMS services.

This comprehensive study is presented in six "Parts" including: (1) this Executive Summary summarizing the project followed by a complete list of findings and recommendations; (2) the introduction to the study detailing Citygate's project approach and the project background; (3) the fire station/crew deployment analysis supported by maps and response statistics; (4) the assessment of logistical support services; (5) the fiscal costs associated with fire services; and (6) system-wide governance strategies. Each of these Parts is comprised of one or more related sections that provide for logical groupings of information, findings, and recommendations.

To conduct the study, Citygate used several methods to gather, understand, and model information about fire services in the County of San Diego. We made a large document request to over 50 fire agencies via a web-based questionnaire to gain detailed information on stations, staffing, costs, current and prior service levels, and what other prior studies had to say. We received and assessed detailed electronic dispatch records of all fire service incidents countywide between 7/1/2007 - 6/30/2009. In subsequent site visits, Citygate team members followed up on this information by conducting focused interviews with various fire and governmental leaders as needed.

To analyze fire services deployment performance, Citygate programmed a geographic mapping response time over distance tool to model fire station coverage areas. We used a fire service statistics software program to model prior incident response times from over 627,547 incidents and 1,471,225 individual apparatus movements to understand actual response times, locations and types of emergencies. We developed findings and then validated our preliminary opinions by reviewing our draft technical work, findings and conclusions with County staff and representatives of the cities and fire agencies in the County.

POLICY CHOICES FRAMEWORK

As a starting point, County leadership needs to remember that there are no mandatory federal or state regulations directing the level of fire service staffing, response times and outcomes. Thus, communities have the level of fire services that they *can afford*, which is not always what they would desire. However, the body of regulations on the fire service provides that *if fire services are provided at all, they must be done so with the safety of the firefighters and citizens in mind* (see regulatory discussion in Section 2.3). Given this situation, the overall challenge for the County, the cities and the fire districts is to design fire services within the fiscal constraints that limit their ability to staff, train and equip a safe and effective fire/medical response force.

OVERALL ATTRIBUTES OF THE COUNTY OF SAN DIEGO'S FIRE SERVICES

The region does have a considerable fire services force. Currently, the region is served daily by 914 career firefighters deployed via 460 engines, ladders and specialty units based from 264 fire stations. This on-duty staffing does not include the over 700 volunteer firefighters, the military base fire crews, nor does it include year to year funding renewed under the Governor's General Executive Order to enhance helicopter and fire season staffing.¹ This force responded to 262,614 annual incidents in Fiscal Year 2008-09, which averages 30 per hour, or 1 new incident every 2 minutes countywide. The region's fire services protect the second largest California County with a 3.2 million resident population as of July 2009.

The region's spending in Fiscal Year 2008-09 on fire services totaled approximately \$517 million not including the U.S. Forest Service or law enforcement and medical contract helicopter costs. This figure does include what CAL FIRE spends in the County protecting State Responsibility Areas.

The risks to protect in the County are very diverse and represent almost every type found in the United States from building and wildland fires to urban area technical rescues, airports and waterways. About the only serious fire risk not present in the County are major petroleum refineries.

¹ After the devastating 2003 Southern California Fire Siege, the current Governor started issuing an annual state-wide Executive Order (GEO) to enhance fire protection during peak fire season months statewide. In San Diego County, it funds two important additional CAL FIRE resources in the County: 1) the annual personnel cost for two additional helicopters during fire season as part of the CAL FIRE cooperative helicopter program with the San Diego Sheriff's Office; and 2) the annual personnel cost for 75 Seasonal Firefighters to bring 26 CAL FIRE engines up to 4 person staffing during peak fire seasons months.

ACCOMPLISHMENTS TO DATE

While there has been the criticism that County of San Diego fire services are fragmented with over 50 provider agencies, recognition has not been given to the progress made over the last several decades. In fact, there has been a constantly improving multi-agency set of coordinating efforts which actually started after the 1970 Laguna Firestorm, not just after the last two firestorms of this decade in 2003 and 2007.

Today, the County and the region's fire services are benefitting from the following:

- ◆ There is increased coordination with fewer dispatch centers and most agencies responding under the concept of sending the closest unit, regardless of agency boundary lines;
- ◆ The mutual aid system is widely developed and can under common protocols amass quickly the region's resources;
- ◆ There has been a significant increase in the acquiring and use of helicopter aircraft by local agencies in addition to the long-standing CAL FIRE and U.S. Forest Service rotary and fixed wing efforts;
- ◆ The County has reengaged on fire service leadership in the unincorporated area by:
 - Creating the San Diego County Fire Authority to consolidate small agencies;
 - Funding additional CAL FIRE year-round resources;
 - Establishing a set of best practices fire safe development regulations for new construction in County responsibility areas;
 - Funding fire apparatus, firefighter equipment and stipends to the Fire Authority partners with an annual net budget of approximately \$15 million per year from the County General Fund revenues.

MAIN CHALLENGES

One can summarize the fire service challenges that face the County in four themes:

1. Providing the appropriate firefighter staffing to different risks to deliver the desired emergency outcome;
2. The need to logistically support a capable and safe multi-emergency response force;
3. The need to fiscally support over 50 fire departments across 18 cities, the County Fire Authority areas, along with the CAL FIRE and U.S. Forest Service responsibility area;
4. The need to coordinate and govern the fire and EMS services.

Challenge 1: Field Operations Deployment (Fire Stations and Staffing)

Fire department deployment, simply stated, is about the *speed* and *weight* of the attack. Speed calls for first-due, all risk intervention units (engines, ladder trucks and specialty companies) strategically located across a department. These units are tasked with controlling everyday, average emergencies without the incident escalating to second alarm or greater size, which then unnecessarily depletes the department's resources as multiple requests for service occur. Weight is about multiple-unit response for significant emergencies like a "room and contents structure fire," a multiple-patient incident, a vehicle accident with extrication required, or a complex rescue or wildland fire incident. In these situations, departments must assemble enough firefighters in a reasonable period in order to control the emergency safely without it escalating to greater alarms.

While no one city (even a metropolitan one) or fire district can stand by itself and handle every possible emergency without help, a desirable goal is for each agency within its area of responsibility to field enough of a response force to handle that community's day-to-day responses for primary single-unit response needs equitably to all neighborhoods. Also, the response force should be able to provide, using mutual aid if necessary, an effective initial response force (First Alarm) to moderately serious building and wildland fire events.

Response time goals are designed to deliver an outcome based on the values at risk. For example, an urban setting goal of confining a fire near the room of origin means more firefighters, more quickly, than a rural goal of confining a fire to the building of origin to prevent a wildfire from starting and spreading the fire to other buildings. The nationally published recommendations for building fires center around a typical detached home fire in an urban area, since this is the predominate building type in much of the United States. However, such singular formulas do not take into account the type of topography that fire units must traverse, population densities, the climate and age of the buildings, all of which can affect the incidence of fire.

The other type of risk that drives fire service deployment today is medical emergencies. For these risks, response times must serve two extremes; from the life threatening situations to those where an ill or injured person needs help but their condition is not as time sensitive. In the County of San Diego in Fiscal Year 2008-09, emergency medical calls were 78 percent of the total responses, as compared to 1.5 percent for building fires and .4 percent for wildland fires. These figures indicate the headache for the design of fire services across the County where short response times are desirable for a small quantity of serious incidents, but the response force has to be spread across a very challenging terrain and road network, which increases the cost of deploying a force in a short response time.

The published response time recommendations by the National Fire Protection Association (NFPA) to keep a building fire near the room of origin in an urban area, call for 90 percent of the incidents to receive the first-due unit within 4 minutes travel time. To the travel time must be added the steps of processing the call for help in a dispatch center, and the time it takes to notify the emergency crew, have them don the required protective clothing for the type of call and get the unit in-route. These steps of dispatch and crew turnout time are added to travel time for a **total** response time measure, which is what 911 callers perceive. While some recommendations suggest that dispatch and crew turnout time can add up to 140 seconds (60 seconds dispatch, 80 seconds turnout), in Citygate's experience with over 100 agency data sets, this is difficult if not impossible to achieve given modern safety clothing requirements which mandate what must be

donned by type of incident before the unit can begin moving. We find that a very achievable goal is 3 minutes for 90 percent of the critical incidents, combined dispatch and crew turnout time (60 seconds dispatch, 120 seconds turnout).²

Thus if 3 minutes for dispatch and crew turnout are added to 4 minutes travel, a total response time goal for 90 percent of the incidents for the first unit to a building fire would be 7 minutes. In order to deliver the goal of keeping the fire near the room of origin, an effective response force of multiple firefighters and unit types must arrive quickly enough to work as a team to simultaneously handle the tasks needed. The published NFPA recommendations for the arrival of all the needed units are 8 minutes travel time, which, when 3 minutes are added for dispatch and crew turnout, the effective response force must all arrive to 90 percent of the building fires within 11 minutes total response time. For rural area building fires in low population density areas, recommended travel time goals are 12 minutes, which means a total response time goal of 15 minutes.³

Since many agencies in the County of San Diego have not adopted response time goals, or have adopted differing ones based on local risks and desired outcomes, this study will benchmark the geographic predicted coverage using 4 minutes and 8 minutes travel time in fully developed areas. This means a **total** response times of 7 minutes for the first due unit and 11 minutes for the effective response force to building fires. Coincidentally, for serious medical emergencies, it is also desirable to have the first unit arrive within 7 minutes, 90 percent of the time. There are no published recommendations for wildfire response, other than local response planning should take into account the fuel and topography and strive to keep fires from becoming a conflagration.

Travel and Response Time Findings

In Part 3 of this study, *Standards of Response Cover Assessment*, Citygate's analysis of geographic station coverage areas in Section 4 along with a review of prior response statistics in Section 5 was performed on a quadrant basis to review performance at a sub-regional, but meaningful level. Two measures of fire crew coverage were obtained: how much of the road network was covered within different travel times, and what a review of prior response statistics said actually occurred. No geographic model can say what response times always will be due to the variances of traffic congestion, weather and/or the closest unit being already committed to a prior incident. In the western, more urbanized quadrants, here are the summary travel and response time findings for the existing fire station and staffing system:

² See Report Section 3.3.1

³ See Report Section 5.1.7

Travel and Response Times in Western San Diego County

Measures	Northwest – Urban Population Density	Southwest – Urban Population Density
Road miles covered at 4 minutes <u>Travel</u>	59.77%	67.83%
Road miles covered at 5 minutes <u>Travel</u>	82.19%	87.73%
Minute at which 100% <u>Travel</u> coverage occurs	8 minutes	8 minutes
Actual Total Response Time @ 90%, 1 st Unit, FY 08/09 EMS events	10:00 m/sec	10:15 m/sec
Actual Total Response Time @ 90%, 1 st Unit, FY 08/09 building fire events	11:30 m/sec	8:30 m/sec

This data shows how hard it is to cover the San Diego region's road network due to topography. There is a large increase in percent of road mile coverage in just adding 1 minute more for travel.

The Citygate geographic analysis identified locations in these urban settings where there were areas without a fire station the size of an entire fire station normal size area, past the 5 minutes of travel.⁴

In the Northwest Quadrant, two such locations were identified where it would take adding 3 fire stations to increase coverage. Even if the local communities chose to build these three additional stations, the road mile coverage only increases from the current 82 percent to 83 percent since there are not as many total road miles in these outer, lighter suburban population density neighborhoods. The decision to add fire stations is made at the local government level based on risk, desired outcomes and ability to afford more coverage to a greater number of neighborhoods.

In the Southwest Quadrant, there were 11 areas the size of an entire fire station normal size area that are currently past the 5 minutes of travel time from the nearest fire station.

If the responsible local governments in these areas added 11 fire stations, the percent of road miles covered at the 5th minute increases from the current 87 percent to 91 percent. This would be very good coverage given the topography challenges and is a long-term goal for the affected agencies to strive for.

In the eastern, more rural quadrants, here are the summary findings for the existing fire station and staffing system:

⁴ See Report Section 4.1.1

Travel and Response Times in Eastern San Diego County

Measures	Northeast – Urban & Suburban Population Density	Southeast – Urban & Suburban Population Density
Road miles covered at 12 minutes Travel	99%	99%
Actual Total Response Time @ 90%, 1 st Unit, FY 08/09 EMS events	13:00 m/sec	16:00 m/sec
Actual Total Response Time @ 90%, 1 st Unit, FY 08/09 building fire events	14:00 m/sec	19:15 m/sec

In the eastern areas, with a desired 12-minute (or better) travel time the developed road areas are within the existing fire station network. As the response times show, the first units are arriving on-scene better than or close to a desirable 15-minute total response time goal. This is significant given the sheer size of these areas and the long segments of rural roads between population centers, upon which traffic accidents still occur.

In the eastern quadrants for the near term, Citygate finds that more fire stations are not necessary, absent more growth beyond the 12-minute travel time coverage. However, 18 of the rural stations that depend on part-time volunteer staffing on paid stipends are not completely getting the staffing hours necessary during the Monday through Friday workweek hours when the volunteers are away to school and jobs. This study has offered several findings and suggestions to improve this situation over time.⁵

Wildfire Response Findings

For wildfire response, most local government agencies plan a multi-unit response that will keep wildfires to a few acres in size, if reported promptly on normal fire weather days. Such fires account for the vast majority of the wildfires in the County. During extreme fire weather days, the agencies collectively respond with a very heavy ground- and aerial-based force to keep conflagrations from occurring.

In State Responsibility Areas, CAL FIRE has the response goal of responding to wildfires to keep them to less than ten acres in size in less than two hours from ignition of the fire, 95 percent of the time. Over a 10-year average in the County of San Diego, CAL FIRE's performance on this goal was 95.5 percent for 5,028 fire starts.⁶ Yes, in this 10-year period, two fires, both on dangerous fire weather days, did turn into catastrophic conflagrations. Yet, without the impressive performance on the rest of the fire starts, conflagrations starting in the State Responsibility Areas could be much more frequent. As for local government fire departments, the total response time to deliver the first unit for wildfires 90 percent of the time was at 12:45 (minutes/seconds) in the urbanized Southwest Quadrant and ranged from there up to 33:30 (minutes/seconds) in the other quadrants. This is acceptable performance considering that many of these wildfire starts are in rugged areas, far from paved roads. Overall, the local government

⁵ See Report Section 3.3.6

⁶ See Report Section 5.1.4

fire departments also do an impressive job of keeping the bulk of wildfires small to manageable as countywide there are just over 1,000 wildfires per year.

In summary for the deployment analysis, Citygate finds that adding a modest number of additional fire stations would improve travel times in some segments of the western urban developed areas. The agencies responsible for these areas can do further local study and decide if, when and how to afford improvements.

In the eastern areas, the San Diego County Fire Authority needs to improve the availability of the part-time volunteer staffing, particularly during the Monday-Friday workday. The stipend, training and equipment costs of volunteers to ensure this coverage should be compared to the cost to employ a small number of career firefighters just to cover the 40-hour workweek timeframe.

All agencies in the County can focus on improving dispatch and turnout times, which will improve total response time performance without adding more fire stations.

Planning Criteria for Future Fire Stations

For planning criteria for future fire station location, timing and crew planning size, either for infill areas or new development, Citygate recommends⁷ that jurisdictions with land use planning responsibilities adopt fire unit deployment performance measures based on population density zones in the table below. The more specific, measurable and consistent the policy is, the more it can be applied fairly to all uses and be sensitive to variations in risk and topography challenges. Citygate recommends these measures be:

Proposed Deployment Measures for the County of San Diego

By Population Density Per Square Mile

	Structure Fire Urban Area	Structure Fire Suburban Area	Structure Fire Rural Area	Structure Fire Remote Area	Wildfires Populated Areas	Wildfires Remote Areas*
	>3,000 people/sq. mi.	1,000- 3,000 people/sq. mi.	1,000 to 500 people/sq. mi.	500 to 50 people/sq. mi. **	Permanent open space areas	
1 st Due Travel Time	4	5	12	20	10	20***
Total Reflex Time	7	8	15	23	13	23
1 st Alarm Travel Time	8	10	16	24	15	24
1 st Alarm Total Reflex	11	13	19	27	18	27

* CAL FIRE or Forest Service Responsibility Lands.

** Less than 50 people per square mile there is acknowledgment that fire and EMS services are going to be substandard.

*** Includes primary attack aircraft.

⁷ See Report Section 5.1.7

Challenge 2: Fire Service Support Functions

Fire department's need to have a management team that is the proper size, adequately trained and supported. There are increasing regulations to be dealt with in operating fire services, and the proper hiring, training and supervision of line employees requires an equally serious commitment to leadership, general management, training, fire apparatus, dispatch and a host of other support functions. Citygate was asked to give a high-level review to eight different support and special issues that affect the overall operation of the region's fire services. These issues ranged from training and fire prevention to helicopter and dispatch programs. The goal of this high-level review was to identify areas where operational and/or cost efficiencies might be obtained by some or all of the agencies working even more closely together than they do today. This is more important to smaller agencies that struggle to fund expensive, quality programs in areas like dispatch, training, hazardous materials incident response and helicopters. These programs carry significant cost and specialty staffing needs and are best delivered regionally.

Overall starting in Sections 1.3 and 15.1, Citygate found a high degree of regional cooperation and best practice sharing of resources. Depending on the issue, the regionalization of some support services can further be improved over time. Structures such as Joint Powers Authorities (JPAs) are good ways to share governance, revenue and service provision. Currently, JPAs are in use by two groups of agencies for dispatching and for a countywide hazardous materials incident response team. Other sharing of resources can be done via contracts for service and there are several examples of this such as in the area of dispatching, helicopters and fire apparatus maintenance. Citygate found in some support service themes that JPAs could be expanded, or that new JPAs or contracts for service could be created for more cost-effective cooperation. In other instances, some partial sharing already underway can be expanded.

Several key issues emerged in these support service theme reviews:

Training

First is the cost and delivery of fire service training. Fire department training programs have to be developed, delivered and the results have to be tracked, all of which require staffing. Then there are the facilities, which need classroom spaces, outdoor practice areas and specialty props. Water runoff has to be caught and treated and environmental "live fire" props are expensive and environmentally sensitive to site. While some training can be delivered via video to fire stations, firefighting and emergency medical responses use a lot of equipment that has to be practiced with to retain familiarity.

Ideally, a fire company should not have to drive more than 15 minutes from its station to a training site, or at worst no longer than 30 minutes. This lessens the unit's out-of-area time for emergency response and ensures the training center can be fully used without too much time between classes for units traveling back and forth. Currently countywide, there are 15 training centers of various types, all in the western County. From these centers, 85 stations (or 38 percent) are past 15 minutes travel distance and 37 stations (or 17 percent) are past 30 minutes travel distance.

Most of the stations beyond a reasonable travel distance are in the eastern quadrants. Citygate finds that some of the existing centers need physical improvement. There is only one training JPA, where others would be very beneficial. The eastern areas will need a layered approach to training with perhaps a northeast and southeast full training center, with several smaller sub-

regional classroom and paved areas for local practice, and perhaps some mobile training props that can be trucked between the sub-regional centers.⁸

Dispatch

A second key issue is dispatching. While over the years there has been some consolidation of fire dispatching into sub-regional centers, there is more consolidation that would provide cost-effective improvement. Currently there are five primary fire dispatch centers, but ideally this should be reduced to two over time. Currently, the Heartland (El Cajon area) and the North County communication JPAs are functionally consolidating their computer technologies. Hopefully this can continue into a full physical consolidation. That leaves San Diego City, CAL FIRE (which dispatches for many of the fire districts and Fire Authority agencies) and the City of Escondido (which is the last city to internally do combined police/fire dispatching). As a comparison this study noted that the Los Angeles County Fire Department has a single state-of-the-art dispatch center, which dispatches the same annual incident volume as all of the County of San Diego.

As with other issues in the fire service, the costs of technology and dispatcher training with quality assurance oversight have risen significantly. There are economies of scale as the computer system that a suburban city would buy is nearly if not the same cost as one that will handle regional needs. Smaller centers may not be able to afford the ideal number of dispatchers on duty and a best practice level of oversight.⁹

Helicopter Programs

A third issue is the needs of the helicopter programs. While these programs have been expanded and improved significantly in the last few years and are immensely valuable, some helicopter programs are still in need. Some need permanent physical facilities, some are considering the cost of external contract maintenance versus handling it internally perhaps with other helicopter program, and there is an upcoming issue of replacement pilots as they retire or otherwise leave the program.

The most critical of these issues is the replacement of helicopter pilots. It takes considerable time to become a certified firefighting pilot. Many of the current pilots are approaching retirement and not all of the agencies, being new to this endeavor, have a succession plan in place to replace them.

Last, but not least, is the unstable funding for two of the helicopter programs. Part of the shared CAL FIRE and Sheriff program depends on supplemental state funding under a Governor's Executive Order, which could expire when this governor's term ends. Part of the San Diego City Fire Department helicopter program depends on a significant amount of annual private fund raising.

Citygate observes that the pilot succession and finding permanent funding sources are critical path items for which more planning needs to be done to ensure the on-going viability of these very important, but expensive helicopter programs.¹⁰

⁸ See Report Section 10.4

⁹ See Report Section 7.5.1

¹⁰ See Report Section 6.4.3

Fire Prevention

The fourth supporting program area that deserves both a complement and more attention is fire prevention. Since the firestorms, the County fire prevention programs have become leading edge where the County has fire prevention responsibility. The County development ordinances require wildfire resistant building construction, the use of fire safety set backs and fire resistant landscape standards. Since 1986 the County has required the mandatory use of residential fire sprinklers in outlying areas; thus currently in seven County Service Areas 50 percent of the new homes have fire sprinklers. The County also staffs fuel reduction and weed abatement programs. However, the County should *strongly consider limiting* more urban development in very rural, hard to serve areas where it may be difficult to fund urban levels of fire services.

The cities and independent fire districts all fund fire prevention at varying levels, and typically fund these programs less than they would desire. Fire Prevention codes have become very technical and advanced issues and new construction plan checking have become specialized, best handled by certified non-sworn personnel, not firefighters on limited term rotations. For many of the smaller agencies, Citygate suggests the agencies strongly consider one or more Fire Prevention JPAs to share the cost and to maintain skilled personnel across a wider area.¹¹

Challenge 3: Fiscal Support

Underlying the findings and recommendations for improving field operations and support of those operations is the ever-present issue of cost and how to not only support the current level of services, but also how to support the cost of improvements. Although there is already a substantial \$517,000,000 per year financial commitment to fire and EMS services, the reality is that expanding this financial commitment over the next several years will be very difficult because even a partial recovery of the economy is not expected until next year. Also, since the County, cities and fire districts are all so heavily reliant upon the Property Tax as a large or principal source of revenue, the tax assessment, collection and distribution cycle is not likely to reflect even a modest property tax-based revenue improvement for local government until 2013 and 2014.

In assessing the fiscal health and future of local governments in the County of San Diego, Citygate found, in summary, that most cities are struggling financially and will find it difficult to retain current fire service levels unless they make very large cuts in other service areas. In the unincorporated part of the County, for the most part, the larger fire protection districts appear to be able to retain current service levels for the next several years in spite of the economic downturn, if the statewide economy has indeed reached the bottom and is about to see economic growth. Almost all of the remaining fire agencies rely on County funding to maintain their current service levels, and the County itself is struggling financially.

Cost of Recommended Deployment Improvements

In Section 4 of this report, *Fire Station Coverage in the County*, Citygate found that there is a modest station coverage deficit in the two western quadrants. Filling these service level gaps would require at least 14 additional fire stations.

¹¹ See Report Section 9.7

Three of the fire stations would be in the Northwest Quadrant of the County. It would cost an estimated \$19.8 million to construct these new fire stations and purchase the associated fire apparatus and an annual operating expense of \$5.4 million to staff the three stations. This would provide a very small increase in the road miles traveled at the 4-minute travel time point from the current 59.77 percent to 60.95 percent and at the 5-minute travel time point the increase would only be from the current 82.19 percent to 83.08 percent.

The remaining 11 fire stations would be in the Southwest Quadrant. It would cost an estimated \$72.6 million to construct these new fire stations and an annual operating expense of \$20.1 million. This would provide a small increase in the road miles traveled at the 4-minute point from the current 67.83 percent to 72.26 percent and at the 5-minute point the increase would only be from the current 87.73 percent to 90.98 percent.

While no additional coverage gaps exist in the two eastern quadrants of the County, Citygate recommends deployment be improved through some staffing changes to supplement the very important volunteer and stipend firefighter program. With changes in demographics, work and leisure patterns, it is increasingly difficult to recruit and retain volunteers that can cost \$5,000 to \$10,000 in initial training and equipment expense. The County Fire Authority reports a turnover as high as 30 percent per year among volunteers. Stipend firefighters who work assigned shifts at a modest pay per shift also generally have other full-time employment. The most difficult "shifts" to fill are the daytime hours Monday through Friday.

The County Fire Authority, in order to provide a guaranteed minimum staffing of two firefighters per unit during the 40-hour work week period, should strongly consider staffing its 18 stations with a single career firefighter and a paid stipend firefighter on a Monday through Friday 40-hour week.

The estimated annual cost of this recommended *limited* career staffing is \$2.1 million. This is compared to the estimated annual cost of \$500,000 to fill the same shifts with stipend firefighters, if they are available. The stipend firefighter program has just gotten underway with County sponsorship; as the County evaluates the success or difficulty in filling the day time work day shifts with stipend firefighters, the County Fire Authority should conduct a cost-benefit study to determine how many more volunteers it makes sense to recruit, train and equip given annual turnover, versus staffing a few positions with career firefighters.

As the economy recovers, the question is whether there is a desire for a level of fire service beyond what can be afforded under the present fiscal structure. The public must recognize that improvements will probably take five to seven years as local government fiscal conditions slowly recover from the deep recession.

Before choosing a fiscal path, the agencies will need to address the issue of how fire services should be organized, coordinated and governed. The answers to these questions will provide the shape or boundaries within which fiscal solutions are to be fashioned.

Challenge 4: Coordination and Governance

The important fourth issue is what reorganization of fire and EMS services is both possible in the near term and cost effective. The challenge is how to procedurally affect the changes.

Current and Planned Governance Arrangements

The core of the current governance arrangement for fire and emergency medical services in the County of San Diego was described in the 2005 LAFCO report "Fire Protection and Emergency Medical Services Review," which recorded in the unincorporated portion of the County fifteen independent fire protection districts, one dependent fire protection district, five water districts that provide fire services, and seven County Service Areas (CSAs). Added to this are tribal fire agencies, nonprofit 501(c)(3) volunteer fire departments, the cities, military installations, CAL FIRE and the U.S. Forest Service. Each agency or organization has the independent authority to make policy without any mandatory requirement to coordinate that policy with their neighboring agencies.

The focus of the 2005 LAFCO report was on the unincorporated area; and, while acknowledging the presence of mutual aid agreements that appear to work well, noted that "There is no effective mechanism to comprehensively plan, fund, and administer an integrated system for regional fire protection and emergency medical services." In June 2008, the County adopted its final implementation strategy, known at the time of its adoption as the "Hybrid Plan," which recognized the practical difficulties of wholesale reorganization and instead proposed a three-step incremental approach to improve the organization of fire services within most of the territory that is within the CSA 135 boundaries.

Step I took in approximately 60 percent of the eventual 1.5 million acres of unincorporated territory and brought six volunteer fire companies under the umbrella of a newly formed County Fire Authority. In order to improve the level and coordination of fire service in the remaining portion of the unincorporated County, as part of Step I, the County also provided funding to help support other fire agencies, most of which were eventually planned to be reorganized and become a part of the CSA 135 in Steps II and III.

Step II is planned to be implemented in Fiscal Year 2010-11. It would bring five County Service Areas under the Fire Authority and expand the Fire Authority's responsibility to encompass 70 percent of the ultimate planned area.

Step III is to reorganize the Pine Valley and San Diego Rural Fire Protection Districts by merging them into CSA 135. For both agencies, CAL FIRE already provides staffing at fire stations under contract and thus has day-to-day operational coordination responsibilities.

County Fire Authority

The County Fire Authority was formed as the administrative agency to implement and operate the "Hybrid Plan". Located in the County Department of Land Use and Planning (DPLU), it was envisioned as an agency to:

- ◆ Ensure that fire perspectives were part of future County land use decisions;
- ◆ Allocate funding to fire agencies in the unincorporated area;
- ◆ Administer the funding contracts by ensuring that all policies, risk management issues and contract conditions are followed;
- ◆ Implement the County's Fire Enhancement Program (contracts for fire safety), Fire Safety and Fuels Reduction Program (dead, dying, diseased tree removal and

weed abatement) and the Fire Prevention Program (land use regulations and permits).

The DPLU already had a Fire Division responsible for the Fire Enhancement, Fire Safety and Fuels Reduction Program and the Fire Prevention Program. Adding responsibility to coordinate the contracting of financial support to fire agencies was a logical step and assigning Fire Warden responsibility to the Deputy County Administrative Officer (DCAO) already responsible for these other DPLU areas made good organizational sense for the start-up of the Fire Authority

Evaluation and Recommended Changes in the Current Organization

CAL FIRE and County Fire Authority Roles

As with most new organizational arrangements that are phased in, there usually are issues that cause some redesign. The Hybrid Plan did not specifically address responsibility for day-to-day coordination of fire and emergency response operations by assigning that responsibility. In fact, the plan specifically said that the Fire Warden would not have operational responsibility, which would remain with the individual local fire agencies. However, as a practical matter, CAL FIRE has assumed day-to-day coordination of fire activities through its training role, the provision of CAL FIRE staffed apparatus under contract to various fire agencies and the County, through its provision of Incident Command services by its on-duty Battalion Chiefs, and through its role in dispatching many of the fire agencies in unincorporated areas.

Citygate believes that CAL FIRE's role is a very positive development. They have extensive operational and management depth and experience as a very large permanent fire response presence in and around the east County fire agencies.

Citygate complements the County on showing leadership in increasing the coordination of fire services in its area of responsibility. As the Fire Authority has grown, so have its responsibilities past just that of fire code and pre-development review services. It is now managing the support and integration of local area fire agencies. The Fire Authority is becoming responsible for an array of services, all of which are typically found in a fire department headquarters unit.

Yet, the County has split responsibilities two ways with the Fire Authority working within DPLU and using CAL FIRE under contract for some day-to-day field level services. There is no singular chain-of-command for fire issues up to the Chief Administrative Officer and the Board of Supervisors, nor is there one high-level County administrator with the fire service background and systems knowledge to fully implement the remaining phases of the Fire Authority which will involve considerable work with multiple fire departments.

For these reasons, Citygate will discuss below the option of the County more fully consolidating all fire services functions within the Fire Authority, which could then operate in many respects like a fire department headquarters unit, reporting to the Deputy Chief Administrative Officer for Public Safety.

The expanding role of the Fire Authority makes this organization a good location for organizing and coordinating all fire planning and policy activities including fire code development and fire protection systems plan review. The Fire Authority is already establishing training, Injury and Illness Prevention Program requirements, volunteer firefighter standards and requirements for coordination and cooperation, including participation in the Incident Command System, Mutual Aid response and inspection/testing of fire equipment by agencies receiving County funding.

The Fire Authority's fire services planning, fire code development and fire service operations policy responsibility should at a minimum encompass:

- ◆ Developing operating policies and procedures that unify and standardize the operational response of fire companies under the supervision of the Fire Authority;
- ◆ Ensuring formal agreements and operating guidelines for mutual aid between all fire agencies, including tribal organizations and CAL FIRE, within the unincorporated County area;
- ◆ Working with OES, CAL FIRE, the U.S. Forest Service, and other independent agencies in the unincorporated area to ensure a seamless and coordinated disaster response by all of these agencies and an appropriate interface with the cities and federal facilities;
- ◆ Developing a long-term capital improvement plan for fire related infrastructure needs in the Fire Authority area of responsibility;
- ◆ Coordinating the unincorporated areas of the Operations Committee within the Unified Disaster Council;
- ◆ Providing policy and planning advice from a fire perspective to the County Department of Planning and Land Use.

Fire Authority Location and Management

While the Fire Authority was initially established as part of the Fire Division of DPLU, very few, if any, of the Fire Division and Fire Authority responsibilities are usually found within a government planning agency like DPLU. This is because operations and the planning of specialized emergency field operations is not part of the perspective and skill set of land use planning organizations. Planning activities are mostly tailored to pre-development review and construction. The Fire Code is a maintenance code designed to keep buildings fire safe over their entire life cycle, not just when a construction permit is needed. As such, fire prevention works best when it is tightly integrated with the fire crews who can perform inspections and notice issues in the field such as vegetation fire safety zones not being kept cleared.

In Citygate's opinion, fire responsibilities need to be relocated to report to the Deputy Chief Administrative Officer/General Manager of the Public Safety Group who is currently responsible for the County Office of Emergency Services and coordination with the County Sheriff's Department. This will bring all County public safety functions together where they can be most effectively coordinated and where an operational function such as fire can be more appropriately managed by staffs who are familiar with operational public safety and more familiar with the requirements of day-to-day safety operations. Daily interface between DPLU and the Fire Authority's fire code enforcement and permitting functions can be accomplished in a manner similar to many other jurisdictions by locating the appropriate Fire Prevention Division staff offices or assigned personnel adjacent to the planning offices or in a one-stop permitting center.

Moving the fire functions will require establishing a management position to oversee the subsections of the Fire Authority. Citygate recommends that a County Fire Services Director be appointed to manage the County Fire Authority as an effective approach to providing fire services leadership in the unincorporated area and management of the County direct fire

functions. A Fire Services Director would report directly to the Deputy Chief Administrative Officer/General Manager of the Public Safety Group. Chief Officers and Volunteer Fire Chiefs would continue to be responsible for fire stations and staff within appropriate zones of CSA 135, much as the fire chiefs of the various agencies do now. They would in turn report to the County Fire Services Director who will set policy, operational standards and continue to implement the phases of the Hybrid Plan.

Completion of the County Hybrid Plan

The County has adopted a three-step approach to implementing the Hybrid Plan. As we observe in this report,¹² it is an appropriate approach to bringing most of the fire services in the unincorporated area under unified leadership.

Citygate recommends that the County continue implementing the Hybrid Plan on the most aggressive time schedule practical. Step II would fold five CSAs (CSA 111-Boulevard, CSA 112-Campo, CSA 109-Mt. Laguna, CSA 110-Palomar, CSA 113-San Pasqual) into CSA 135 in Fiscal Year 2010-11 and Step III would bring the Pine Valley FPD and the San Diego Rural FPD into CSA 135 in Fiscal Year 2011-12.

Countywide Fire and Emergency Medical Service Planning

Other than the Unified Disaster Council and the semi-formal San Diego County Fire Chiefs Association, there is no “working group” that has both the delegated responsibility *and* the resources to plan and implement a similar level of coordination between cities and the fire districts, state and federal agencies in the unincorporated area. Nor is there a real “unified command” structure to vet issues and with certainty, make decisions the stakeholders will implement.

This gap in planning and coordination does not appear to be due to lack of willingness among the fire agencies. Citygate heard repeatedly among fire personnel that the various organizations would identify problems that needed to be solved, but there was little or very delayed follow through because there was no staff to research, develop draft proposals, and coordinate consideration and adoption of problem solutions.

Citygate recommends that the County Fire Authority, through a County Fire Services Director, offer to assume the “coordination” role for a formal organization of fire agencies that would be responsible to develop plans, including implementation steps, for adoption and implementation by the County fire agencies. The roles and responsibilities of the group would largely mirror that of the State of California Firescope Board of Directors that manages the policies of the statewide fire mutual aid system.

Where individual agencies want to partner via JPAs on dispatch, training or logistics, the County could offer to facilitate the governance and financing methods for service sharing across jurisdictions.

¹² See Report Section 15.4.3

FIRE PLAN PHASING

While all of the findings and recommendations in this report are summarized below, it is not realistic to anticipate that all of them can or should be given equal importance and priority in implementation.

First, Citygate believes that the most important actions the County can and should take over the next twenty-four months are to complete the reorganization already begun with formation of the County Fire Authority, reassignment of the Fire Division and Fire Authority to the Deputy CAO responsible for Public Safety, and appointment of a County Fire Services Director to manage the Fire Division and Fire Authority.

Second, the County should perform an assessment of the current and projected success of the stipend firefighter program and determine whether it is more cost-effective to fund career firefighters to fill some of the week-day fire shifts in 18 of the fire stations in the unincorporated portion of the County.

Third, all of the agencies providing firefighting services need to strongly consider the creation of a formal, representative based authority, with the staff and funding to plan and coordinate countywide multi-agency fire services.

Not only are these actions necessary precursors to implementing other recommendations in this report, they will most likely consume the County's organizational capacity to make further fire and EMS service improvements over the next 24 to 36 months. With this organization in place, the County Fire Authority or a newly established regional coordinating group will have the administrative structure to coordinate activities such as improvement of the training, fire prevention and dispatch functions through encouraging and facilitating Joint Powers Authorities or similar cooperative structures among the fire agencies.

The three highest priority actions recommended by Citygate will only be a nominal expense to the County over the next several years. The recommended organizational realignment and the work to develop specific plans to improve logistical support for the fire and EMS services will result in specific proposals and costs. Once these costs are available, the County can consider the need for a tax measure and whether the geographic areas that will benefit from the suggested program improvements might be asked to support a tax measure. For now, Citygate does not see a rationale in the near term for a tax measure covering CSA 135 or a countywide tax measure.

Citygate's entire set of findings and recommendations are summarized in the following section. For reference purposes, the findings and recommendation numbers refer to the sequential numbers in the main body of the report.

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ii. COMPREHENSIVE LIST OF FINDINGS AND RECOMMENDATIONS

Throughout this study Citygate made findings and recommendations. They are repeated here as one listing, in the order in which they appear in the body of the report.

SECTION 3—FIREFIGHTING STAFFING NEEDS IN THE COUNTY

- Finding 3-1:** Very few agencies in the County have a complete and current best practice designed fire deployment measure adopted by their elected officials that includes a beginning time measure starting from the point of fire dispatch receiving the 911-phone call, combined with a goal statement tied to risks and outcome expectations. The deployment measure should have a second measurement statement to define multiple-unit response coverage for serious emergencies. Adopting such deployment goals will meet the best practice recommendations of the Commission on Fire Accreditation International and the National Fire Protection Association (NFPA).
- Finding 3-2:** Fire flows above 2,500 gpm are a significant amount of firefighting water to deploy and a major fire at any one of the larger buildings would outstrip the on-duty fire staffing in smaller communities or rural areas. A 2,500-gpm building could be a one-story, 26,250 square foot (150'X175') business park building, which is not unusual in the region. Using the generally accepted figure of fifty gallons per minute per firefighter on large building fires, a fire in a building requiring 2,500 gallons per minute would require 50 firefighters, or *more than the on-duty staffing in any one city except for San Diego itself*. This is why serious fires require the response of multiple fire agencies using mutual or automatic aid agreements. A building fire this serious in a rural area would need mutual aid resources from a very large area of more than 30 minutes driving time.
- Finding 3-3:** The stipend firefighter program to assist in staffing volunteer area fire stations has just started in the County Fire Authority. As the County evaluates the success or difficulty in filling the day time work day shifts with stipend firefighters, the County Fire Authority should conduct a cost-benefit study as to how many more volunteers it makes sense to recruit, train and equip given annual turnover, versus staffing a few positions with career firefighters. In order

to provide a guaranteed minimum staffing of two firefighters per unit during the 40-hour work week period, the County Fire Authority should strongly consider staffing its 18 stations with a single career firefighter and a paid stipend firefighter on a Monday through Friday 40-hour work week.

SECTION 4—FIRE STATION COVERAGE IN THE COUNTY

- Finding 4-1:** In the rural eastern quadrants, over 95 percent of the road miles in the small areas of more dense population are covered within the 12-minute travel time guideline. There is not a need for additional fire stations in these two quadrants unless the residents want an improved travel time and/or additional, much denser development leads to significant population densities beyond that of a rural area standard of response.
- Finding 4-2:** There is a modest station coverage deficit in the two western quadrants. Filling these service level gaps would require at least 14 additional fire stations. Eleven of the new stations would be in the Southwest Quadrant. However, the capital outlay and annual operating cost increase to achieve the resultant small improvement in coverage is very significant.
- Finding 4-3:** Even with three more fire stations added across two gap areas in the Northwest Quadrant, there only would be an approximately 1 percent increase in road miles covered in five minutes of travel. This is due to the difficulty in covering the hardest-to-serve non-grid street type areas, bisected by open space. It will likely be cost-prohibitive to add even more fire stations, to cover all of the urban population street areas at the 90 percent coverage point at either 4 or 5 minutes of travel, given the Northwest Quadrant's topography and historic land use decisions.
- Finding 4-4:** In the Southwest Quadrant, 87.73 percent of the road miles are covered by the 5th minute without adding any new fire stations. This is neither a poor level of performance nor unusually long in comparison to other fire agencies with similar risks and topography challenges with whom Citygate has worked. Even with eleven more fire stations added to fill in the largest gap areas in the Southwest Quadrant, there is only a 4.43 percent increase in road mile coverage at the 4th minute and a 3.25 percent increase at the 5th minute of coverage.
- Finding 4-5:** As Map series #8 shows, both the Northwest and Southwest quadrants are completely covered at 99 percent by the 8th minute of travel, thus in-fill stations will help lower travel times where new stations are added.
- Finding 4-6:** If the policy choice were to be made to cover 90 percent of the urban area road network at a 4-minute travel time, given the County's topography and road network, it will require more than the additional 14 stations identified across 13 gap areas identified in this study. Due to topography and road system design, some of the additional stations will serve relatively few road miles in outer edge

areas, with comparably lower populations and call for service densities. Unless the agencies serving these pockets find other needs such as a high simultaneous call demand creating the need for more companies in a given area, then they may find it most cost-effective to cover all of the road miles to the 90 percent point by the 5th travel minute.

- Finding 4-7:** While 90-95 percent of the urban road network in both western quadrants is covered without additional stations by about the 6th minute, when 3 more minutes are added for dispatch and turnout times, then this will reflect a 9-minute first-due unit total response time. Such a measure will not confine most fires to the room of origin, or save medical emergency patients whose hearts and breathing have ceased. Such a response measure will keep most fires from spreading and starting conflagrations and provide stabilizing treatment to medical patients still viable upon arrival of the unit.
- Finding 4-8:** Given the mapping models in the less populated eastern quadrants, a modest increase of stations even where there are not many residents, likely cannot improve the wildfire initial attack times as the undeveloped areas are just too large and fires may start anywhere. The existing stations need adequate staffing, which when combined with early detection and a simultaneous aerial response, will provide quick control to most wildfires.

SECTION 5—INCIDENT RESPONSE STATISTICS REVIEW

- Finding 5-1:** The wildfire travel time measures support the mapping findings that the fire stations are correctly placed on the rural road network. Given the rough terrain and limited roads in many areas, more fire stations are not cost-effective. Rather, the existing stations need proper staffing backed up by initial attack aerial support to keep wildfires small.
- Finding 5-2:** In the urban western quadrants for EMS incidents, the overall current station and mutual/automatic aid system is delivering the first-due unit from 9:45 to 10:30 minutes/seconds which is longer by 3 minutes than a Citygate recommended best practice Total Response Time goal point of 7 minutes, 90 percent of the time for the first-due unit.
- Finding 5-3:** In the rural eastern quadrants, the station system delivers the first-due unit for EMS incidents from 13-16 minutes, close to a best practice goal of 14 minutes for areas with less than 500 people per square mile.
- Finding 5-4:** CAL FIRE and the regional mutual aid system are meeting the state's goal in keeping the wildfires in State Responsibility Areas to under 10 acres size in less than 2 hours from ignition, meeting this goal for 95.5 percent of the SRA wildfires over the last ten years. If only the two regional catastrophic fires in the last decade are to be counted against the total fire starts in the SRA (not including all the cities) then out of 4,022 ignitions, only two became firestorms. This is an impressive result in a climate zone so conducive to wildfires.

Finding 5-5: Both the current dispatch and crew turnout times are over a Citygate recommended goal point by 3 minutes total. Focus and training on these steps can easily reduce by at least 90 seconds or one-half the combined overage and bring the western quadrants' 90 percent performance measure to 9 minutes or less without adding resources.

Finding 5-6: The response statistics assessment verifies that in the western quadrants, the fire station gap areas contribute to performance longer than that most likely desired. However, this is also due to a very hard-to-serve non-grid street system and hilly topography. Many calls are answered in 5-7 minutes total response time.

Finding 5-7: In the southwestern quadrant, the multiple-unit coverage to serious incidents (first alarm), delivers close to acceptable performance by delivering four stations at 12:45 min/sec 90 percent of the time.

While this is past a usual Citygate recommended goal point of 11 minutes at 90 percent, if a 90-second reduction in combined dispatch/turnout time reduction is achieved, the time falls to 11:15 minutes/seconds before any fire station gaps are closed.

Finding 5-8: The region benefits from the mutual aid regional response system. While this system cannot replace additional fire stations in the gap areas, all the agencies should continue to participate in this valuable support system for simultaneous calls for service and multiple-unit serious emergencies.

Finding 5-9: While the region has a strong mutual aid, automatic aid and somewhat centralized dispatch system, with the exception of San Diego City and CAL FIRE the fire protection system is made up of a large number of small to medium-sized fire departments, each with its own training, culture and distinct way of doing business. Despite everyone's best efforts this will always be reflected in incident response and performance. Some jurisdictions are addressing this issue and consolidating.

Recommendation 5-1: Jurisdictions with land use planning responsibilities may adopt fire unit deployment performance measures based on population density zones in the table below, to direct fire station location timing and crew size planning. The more specific, measurable and consistent the policy is, the more it can be applied fairly to all uses and easily understood by a non-fire service reader. The measures should take into account a realistic crew turnout time of 2 minutes and be designed to deliver outcomes that will save patients medically salvageable upon arrival; and to keep small, but serious fires from becoming greater alarm fires. Citygate recommends these measures be:

Proposed Deployment Measures for the County of San Diego

By Population Density Per Square Mile

	Structure Fire Urban Area	Structure Fire Suburban Area	Structure Fire Rural Area	Structure Fire Remote Area	Wildfires Populated Areas	Wildfires Remote Areas*
	>3,000 people/sq. mi.	1,000- 3,000 people/sq. mi.	1,000 to 500 people/sq. mi.	500 to 50 people/sq. mi. **	Permanent open space areas	
1 st Due Travel Time	4	5	12	20	10	20***
Total Reflex Time	7	8	15	23	13	23
1st Alarm Travel Time	8	10	16	24	15	24
1st Alarm Total Reflex	11	13	19	27	18	27

* CAL FIRE or Forest Service Responsibility Lands.

** Less than 50 people per square mile there is acknowledgment that fire and EMS services are going to be substandard.

*** Includes primary attack aircraft.

5-1.1 Distribution of Fire Stations for Initial Response to Built-up Suburban Areas of Greater than 3,000 People per Square Mile:

To treat and transport medical patients and confine small fires *to* the room of origin, the first-due unit staffed with a minimum of 2 firefighters should arrive within 7 minutes, 90 percent of the time from the receipt of the 911 call. This equates to 1-minute dispatch time, 2 minutes crew turnout time and 4 minutes travel time spacing for single units.

5-1.2 Effective Response Force (First Alarm) for Built-up Suburban Areas of Greater than 3,000 People per Square Mile:

To treat and transport medical patients and to confine fires *near* the room of origin, a multiple-unit response of at least 15 firefighters should arrive within 11 minutes from the time of 911-call receipt, 90 percent of the time. This equates to 1-minute dispatch time, 2 minutes crew turnout time and 8 minutes travel time spacing for multiple units.

5-1.3 Suburban Areas of 1,000 to 3,000 people per square mile should have first-due fire unit travel time coverage of 5 minutes, 90 percent of the time; and the effective response force of at least 10 firefighters should have a travel time of 10 minutes with a resultant 13-minute total response time, 90 percent of the time. Fires will be contained to the building of origin to prevent a wildland fire. Medical patients salvageable upon arrival will receive appropriate care for their condition.

- 5-1.4 Rural Areas of less than 1,000 to 500 people per square mile should have first-due unit *travel* times of 12 minutes, 90 percent of the time. Rural areas should receive the effective response force of at least 6 firefighters within 16 minutes *travel* time with a resultant 19-minute total response time, 90 percent of the time. Fires will be contained to the building of origin to prevent a wildland fire from escaping assuming adequate defensible space and built-in construction features are provided. Medical patients salvageable upon arrival will receive appropriate care for their condition.
- 5-1.5 Structure Fire Remote Area of 500 to 50 people per square mile should have first-due unit *travel* times of 20 minutes, 90% of the time. Remote areas should receive the effective response force of at least 6-firefighters within 24 minutes *travel* time with a resultant 27-minute total response time, 90% of the time. Fires will be contained to the property of origin to prevent a wildland fire from escaping assuming adequate defensible space and built-in construction features are provided. Medical patients salvageable upon arrival will receive appropriate care for their condition.
- 5-1.6 Extreme Remote Area of less than 50 people per square mile may have travel times over 20 minutes. Because these areas are extremely remote with very little development potential, it becomes cost prohibitive to provide adequate fire and emergency medical protection services. Individuals choosing to live in these areas acknowledge that deficiencies in services exist.
- 5-1.7 Wildland Fires in or near populated areas should have first-due unit *travel* times of 10 minutes, 90 percent of the time; and the effective response force of at least 10 firefighters should have a *travel* time of 15 minutes with a resultant 18-minute total response time, 90 percent of the time. Fires will be contained to less than 5 acres to prevent a more serious wildfire.
- 5-1.8 Wildland Fires in remote areas should have first-due unit *travel* times of 20 minutes, 90 percent of the time; and the effective response force of at least 6 firefighters should have a *travel* time of 24 minutes with a resultant 27-minute total response time, 90 percent of the time; Fires will be contained to less than 10 acres to prevent a more serious wildfire.
- 5-1.9 Aggregate Population Definitions: Where more than one square mile is significantly populated, and/or a contiguous area with multiple zoning types, aggregates into a population "cluster," these measures from the Commission on Fire Accreditation can guide the determination of response time measures and the need for fire stations:

Area	Aggregate Population	First-Due unit Travel Time Goal
Metropolitan	> 200,000 people	4 minutes
Urban	> 30,000 people	4 minutes
Suburban	>10,000 to 30,000 people	5 minutes
Rural	1,000 to 10,000 people	12 minutes
Remote	500 -1,000 people	20 minutes
Extreme Remote	<500	> 20 minutes

Recommendation 5-2: The County Fire Authority, in order to provide a guaranteed minimum staffing of two firefighters per unit during the 40-hour work week period, should strongly consider staffing its 18 stations with a single career firefighter on a Monday through Friday 40-hour week. This position can maintain the apparatus and station, assist with volunteer training and lessen the need to hire two volunteers for this coverage.

5-2.1 The County Fire Authority should conduct a cost-benefit study as to how many more volunteers it makes sense to recruit, train and equip given annual turnover, versus staffing a few positions with career firefighters as Recommendation 2 stated.

Recommendation 5-3: The agencies in the western County areas that could benefit from closing the fire station gaps identified in this study can complete their own internal analysis of cost-benefit and as appropriate over time, find the funding to add fire stations.

Recommendation 5-4: All of the fire department agencies in the County need to focus on reducing to the extent possible dispatch center processing times to 1 minute for 90 percent of the calls for service, and to 2 minutes, 90 percent of the time for crew turnout activities. In some cases this will take computer system work to accurately track these time segments and to provide periodic reporting back to the personnel. A “shot clock” in each apparatus bay, activated by the dispatch alert system would help crews improve their turnout times.

Recommendation 5-5: All the fire agencies in the County need to continue and improve where needed, the dispatching of the closest available resource, regardless of political jurisdiction lines. As this study shows, when dispatch centers always send the closest available unit, good regional coverage exists in most areas. However, this is dependent on the dispatch centers sending the closest unit every time and the political boundaries not acting as barriers. Further, catastrophic emergencies absolutely require a multiple regional response that does not occur without pre-design and the policy direction to ensure it.

Recommendation 5-6: Citygate recommends that the on-going sub-regional consolidation efforts under way continue, both in the cities and unincorporated areas. Further consolidations for both dispatching and field operations will improve response times by standardizing operations where multiple fire departments have to operate together.

Recommendation 5-7: To maintain and improve wildfire initial ignition suppression, the current CAL FIRE enhanced staffing levels and aerial response capabilities have to be maintained, and a permanent funding source secured, rather than continuing under a situational Governor's order.

SECTION 6—AERIAL FIREFIGHTING PROGRAMS REVIEW

Finding 6-1: Citygate believes that while aircraft are complex, expensive tools to operate, the Achilles Heel of all three programs – CAL FIRE, Sheriff and San Diego Fire – is the ability to provide trained pilots. The aircraft are worthless without pilots trained in Southern California wildfire conditions. All three programs expressed this concern to Citygate. It is most immediate in the Sheriff's Department, but the others also will face it.

Finding 6-2: Citygate sees aircraft program management overlap and logistical expense duplication due to differing approaches by multiple aircraft operators. Some have inadequate physical facilities. Some have to outsource maintenance, which is likely more expensive. As in ground-based fire services in the County of San Diego, there is program fragmentation. However, in the case of aircraft, there are so few that it fails the common sense test to have so many individual fire helicopter programs for so few ships and pilots.

Recommendation 6-1: The County of San Diego should support the San Diego CAL FIRE Unit request to place a new helicopter in the County of San Diego that would result in an additional "twin engine" helicopter with staff in the County. This would accomplish the County's goal of adding a helicopter module to the County without the need for local government funding. The new "twin engine" helicopter also meets the CAL FIRE requirement for night firefighting capabilities under the FIREScope and CAL FIRE guidelines. The County would benefit by having the state purchase the helicopter (\$12 million), provide required maintenance, provide a relief fire helicopter, and fund the annual CAL FIRE staffing cost (\$1.5 million per year).

Recommendation 6-2: The County of San Diego also should work with the state to continue the partnership between the County Sheriffs Department Aviation Unit and CAL FIRE San Diego. The loss of the Governor's Executive Order annual 2 million dollar firefighter staffing for Copter 10 and 12, would seriously compromise the program. Alternative funding sources should be explored to provide permanent funding for

the program. Options include County-funded CAL FIRE staffing [Schedule "A"] for the helicopter program with the County receiving reimbursement for fire response from the agency with jurisdiction. This would include reimbursement for the Schedule "A" staffing on the County helicopters. An Advanced Life Support or paramedic component of this program should be considered as an augmentation to the current helicopter rescue program. CAL FIRE Paramedics would enhance this already outstanding program.

An alternative to the above State-funded suggestions could be a long-term partnership between the County of San Diego and CAL FIRE. A partnership where the County funds the helicopter and pilot and CAL FIRE permanently funds the firefighter positions could allow the current program to continue. The County purchase of an additional "twin engine" Type Two helicopter for the Sheriff's Department could also increase the surge capacity with three firefighting helicopters plus having a helicopter available for night operations.

Recommendation 6-3: At a minimum, the helicopter agencies should establish a joint working group or formal Joint Powers Authority (JPA) to solve the issues of:

- a. Training replacement pilots;
- b. Providing certified helicopter mechanics at a joint price;
- c. Secure the funds to maintain the CAL FIRE aerial assets now dependent on the Governor's order for funding;
- d. Secure the funding to continue the training and radio equipment capability programs to integrate military assets.

Recommendation 6-4: Long-term, the helicopter agencies need to seriously consider, via contracting or through a JPA, establishing a singular, fire department managed aerial operations unit.

SECTION 7—FIRE DISPATCH CENTER REVIEW

Finding 7-1: Even given this report's abbreviated review, there are clearly too many fire dispatch centers in the County of San Diego. Ideally, there would be one or at most two. The most likely two would be the City of San Diego, given its size and call volume, and one for the rest of the County, including CAL FIRE.

Finding 7-2: Citygate broadly endorses the eight (8) recommendations of the 2009 dispatch center study to ask the parties to work through the issues in the direction of merger, and in the short-term, using technology links to eliminate lag time when requesting resources between centers.

Finding 7-3: Citygate compliments the Heartland and North County JPAs on making progress towards at least a dispatch technology merger. These efforts should be supported and encouraged to proceed to talks about a full merger of the JPAs.

Recommendation 7-1: Citygate recommends that the County and City and Fire District leadership groups empanel a task force to identify and overcome the barriers to dispatch center consolidation.

Recommendation 7-2: Citygate recommends that in the near term, at least Escondido obtain pricing from one or more centers and select one with which to consolidate its fire dispatching. If this and a full Heartland and North County merger were to occur, the centers would consolidate from five down to three large ones – CAL FIRE, San Diego City and North Comm/Heartland, whose centers are already technology interlinked.

SECTION 8—LOGISTICAL SUPPORT REVIEW

Finding 8-1: While logistical support might appear to be an area where considerable savings could be made through joint purchasing of small equipment and supplies, the general consensus is that the “just-in-time” availability of most items from vendors is more cost effective than agencies creating and operating a central warehousing and delivery operation. This outsourcing of warehousing and delivery to the vendors is a practice that is now very common among fire agencies in California, as they have measured the cost effectiveness of continuing to operate their own local “stores” operation.

Finding 8-2: As discussed in Section 14 on volunteers, development of common apparatus specifications, joint apparatus purchasing and sub-regional apparatus maintenance at maintenance centers and/or through mobile mechanics is an issue that the County needs to address aggressively. With leadership in this area it is likely that other agencies in the County of San Diego would join in on purchasing and maintenance with a cost savings and improved service for everyone involved.

Recommendation 8-1: Following current best practices from NFPA, the County and CAL FIRE need to jointly develop an apparatus procurement and maintenance plan. Part of that plan needs to include a fire apparatus maintenance training and certification program for the technicians and operators.

Recommendation 8-2: The larger agencies in the County should consider establishing a logistical support Joint Powers Authority (JPA) to publish supply specifications, issue bids and decide what goods to store locally versus direct delivery from the source to each fire station.

SECTION 9—FIRE PREVENTION REVIEW

- Recommendation 9-1:** The agencies should align as much as possible the fire prevention supplemental fire code provisions across the County. Since all agencies do adopt the basic statewide building and fire codes, they can strive for countywide common regulations on supplemental fire prevention requirements. A limited term task force with one-time, shared funding should be developed to do the integration of these requirements.
- Recommendation 9-2:** To assist with the burden of providing certified and experienced fire prevention staff in all disciplines in the smaller agencies, some of the agencies and/or the County should take the lead in researching the formation of a sub-regional or countywide fire prevention Joint Powers Authority (JPA) similar to the dispatch JPAs. This JPA could jointly fund and operate centralized technical prevention activities such as plan checking, fire code violation enforcement, wildland fuel reduction and arson investigation programs to name a few.

SECTION 10—FIREFIGHTER TRAINING REVIEW

- Finding 10-1: Training Centers** – There are not enough regional training towers in terms of location or in sufficient number to satisfy the countywide training needs if all agencies were training to standards frequently found in suburban fire departments. Manipulative skills are the primary basis of a firefighter's job. While classrooms provide an environment where didactic training can occur, without the follow-up of manipulative training and practice the muscle memory required to function correctly during an emergency will not develop. This is why it is so critical that firefighters have ready access to training facilities. In terms of travel distance, 15 minutes from station to facility should be the goal with 30 minutes being the maximum limit in the urban areas to avoid deployment gaps and to maximize training center utilization.
- Finding 10-2: Training Records** – There are a number of areas in the training field that can be streamlined. For example, training records tracking is done using a number of different systems, each of which has its champions and detractors. Another area is in standardizing specifications for many items so that firefighters train on similar equipment. Finally, there is a need to develop a common field operations manual similar to that used by North County and El Cajon area agencies.
- Finding 10-3: Multi-Agency Cooperation** – The Heartland JPA Training business model has a lot to recommend itself for local agencies to combine their resources for the best blend of cost and quality service delivery. Only the very largest agencies can justify sole proprietorship of a very expensive training facility. Most of the fire agencies in the County of San Diego have less than eight stations. Consider

that San Diego City has one training facility, albeit very large, that supports 43 stations. Based on the current locations of existing or planned facilities, it appears that in the western County the current number of existing and planned facilities is adequate.

Finding 10-4: Eastern County Training Facilities – Departments on the east side of the County of San Diego have no ready access to any training facilities, with the possible exception of classrooms in fire stations or a few mobile props towed in on trailers. This does not mean that no manipulative training or practice occurs, but there are many skills that are simply better taught and learned where the correct amenities and props are located. Because these stations are so widely dispersed, it would be economically hard to justify erecting enough facilities to meet even the 30-minute travel standard. The rural agencies will have to develop a system that employs large fixed, smaller satellite and mobile facilities to balance need versus travel time to remote centers.

Recommendation 10-1: Commit to Regional Operational Standards and Training Programs – All of the fire agencies have to commit to operating within regional operational standards from which training and other standardization can flow.

Recommendation 10-2: Expand the Informal Training Cooperation to Formal Structures – Existing and new Joint Powers Authorities (JPAs) have to be operated to provide administrative oversight, cost sharing ability and revenue sources for regional training.

Recommendation 10-3: Needs Assessment – Once the regional commitments and JPAs are in place, conduct a training needs analysis. The analysis should cover what common training exists and what common training needs have to be developed. The results of this analysis will drive the resultant need for facilities, and the shared training staff to design, deliver and monitor programs.

Recommendation 10-4: Training Facilities – Develop at least two full-fledged training facilities on the east side of the County. Given that there are a number of tribal departments along the I-8 corridor, perhaps the one on the south end could be a cooperative venture between the County and the tribal departments in that area.

SECTION 11—TRIBAL FIRE DEPARTMENTS REVIEW

Finding 11-1: In many cases, the tribal fire departments have capabilities that could be more fully integrated into the regional firefighting delivery system.

Finding 11-2: Tribal sovereignty creates issues in how to develop more formal working cooperation with other departments; however, this can be overcome through appropriately written agreements.

Finding 11-3: The tribal fire departments are trying to fulfill all of the training and education requirements that their neighboring jurisdictions are also trying to fulfill.

Recommendation 11-1: The San Diego County Fire Chiefs Association and the Indigenous Fire Chiefs Association of San Diego Tribes need to further enhance their understanding of each other and each group's role. Initially this could best be done through facilitated meetings with the short-term goal of integrating operations where appropriate through automatic and mutual aid agreements. Eventually the Indigenous Fire Chiefs should be a section of the County Chiefs.

Recommendation 11-2: A small ad hoc task group consisting of attorneys and fire chiefs with appropriate backgrounds needs to research and ultimately develop a model mutual aid/automatic aid agreement that can be used between the tribal departments and the other departments in the County of San Diego.

SECTION 12—SPECIALTY INCIDENT RESPONSE NEEDS REVIEW

Finding 12-1: Overall, the region's fire departments have been leaders in developing specialty response teams, sharing them, obtaining grants and using the mutual aid system to dispatch them. While any one team may need more funds from time to time for training or updated equipment, these are modest issues the regional agencies can determine how to cost share. The Hazardous Materials JPA is an excellent example of shared governance and cost sharing for the common good. It or another new JPA could operate other regional specialty teams.

Finding 12-2: Given this brief overview of specialty response systems, only two deficits stand out that warrant further review. First, is that while the regional airports may meet FAA minimums, the local fire departments are not really equipped for small and business aircraft crashes.

Second, the Port of San Diego has no significant firefighting or special operations fireboat other than limited capability on commercial tugs. The Port has grown in commercial cargo volumes and types, and in tourism cruise vessels. While incidents in these vessels are infrequent worldwide, they do occur, as do earthquakes, where water-based firefighting and pumping would be very useful.

Recommendation 12-1: Citygate recommends the Unified Port of San Diego conduct a risk and response systems review of its marine firefighting and special response needs.

Recommendation 12-2: Citygate recommends the County of San Diego, which operates the suburban airports, work with other appropriate local government agencies, the tenants and carriers to develop a revenue stream that will provide for enhanced on and off airport firefighting and EMS patient rescue.

SECTION 13—VOLUNTEER PROGRAM REVIEW

Finding 13-1: The volunteer fire service has to contend with unparalleled changes in the requirements to be volunteers, including: simultaneous growth in call volume; “urban service” expectations in rural areas; cultural changes in rural communities; and an increasingly aging population. All of these forces, any one of which would be difficult to absorb, have all converged simultaneously. While these changes are difficult on the volunteers, the phased integration of the volunteers into a County support and regulatory structure is necessary and should be completed.

Finding 13-2: The concern about apparatus maintenance travel time is significant and requires action. The ownership issue should be worked to closure.

Finding 13-3: It appears that consolidating the CAL FIRE Management Group and the Julian Cuyamaca Management Group into one Management Group would create efficiencies.

Recommendation 13-1: While the concept of using mobile mechanics traveling to each fire station has merit, the safety considerations of having mechanics work under vehicles on any issue more significant than a brake adjustment also should be a concern. Citygate recommends that the County explore placing a “running repair” shop in the eastern County at a suitable location.

Recommendation 13-2: It is not in Citygate’s scope to ascertain the implied liability to the County of the volunteers operating apparatus that may not be properly maintained, but logically it would seem that there is some. With that in mind, the County should consider taking over the maintenance of volunteer-owned apparatus under the following conditions: (1) the apparatus maintenance be brought up to date and current for a reasonable period, say six months; (2) the apparatus meet the conditions of NFPA 1901 Standard for Automotive Fire Apparatus 1991 Edition and NFPA 1912 Standard for Fire Apparatus Refurbishing; and (3) the title be deeded to the County for a term with the proviso that at the end of its useful life the apparatus will be returned to the company for sale.

Recommendation 13-3: The County Counsel should investigate the implied liability issue of the volunteers operating apparatus that may not be properly maintained. If the County has a liability with volunteers or reserves operating apparatus that it has no control over, then either proper maintenance of it needs to be ensured or that apparatus should not be used.

SECTION 14—FISCAL ASSESSMENT

- Finding 14-1:** In summary, most cities are financially struggling. If the economy does not recover fast enough to start a substantial flow of revenue to cities within the next 24 months, most cities will find it difficult to retain current fire service levels. In the unincorporated part of the County, most fire protection districts appear to be able to retain current service levels in spite of the economic downturn, if the state has indeed reached the bottom and is about to see economic growth. Almost all of the remaining fire agencies rely on County funding to maintain their current service levels, and the County itself is struggling financially.
- Finding 14-2:** However, as the fire districts use some or all of their reserves, they will not have the ability to increase staffing. As the deployment sections of this study identified, many of the rural fire stations have difficulty scheduling volunteer per diem firefighters during the Monday through Friday 40-hour workweek. One way to help this would be to staff these stations with one firefighter on a 40-hour week. However, most of the smaller agencies do not currently have the revenue to do this.

SECTION 15—GOVERNANCE APPROACHES TO IMPROVING FIRE SERVICES

- Finding 15-1:** Citygate believes that CAL FIRE's role in day-to-day operational coordination is a very positive development. They have extensive operational and management depth and experience as a very large, permanent fire response presence in and around the east County fire agencies. However, their explicit authority is acknowledged informally and not as a formal County policy. Providing CAL FIRE with an acknowledged role will help address the 2005 LAFCO report concern that there needs to be an effective mechanism to administer an integrated system for regional fire protection and emergency medical services.
- Finding 15-2:** The expanding role of the Fire Authority makes this organization a good location for organizing and coordinating planning and policy activities.
- Finding 15-3:** Most of the Fire Division and Fire Authority responsibilities are not traditionally found within a government planning department like DPLU because fire service field operations and the planning for specialized emergency field operations or the fire service response to disasters are not part of the perspective and skill set of land use planning organizations.
- Finding 15-4:** Now that the initial organizational steps have been taken to establish the Fire Authority, fire responsibilities need to be relocated to report to the Deputy Chief Administrative Officer/General Manager of the Public Safety Group where it is more appropriately aligned with other public safety activities and has the organizational position to exercise the public safety policy, coordination and implementation responsibility that Citygate recommends be assigned to the Fire Authority.

Recommendation 15-1: In addition to its current responsibilities, the Fire Authority should have operations committee membership within the Unified Disaster Council to work with other unincorporated area emergency agencies to ensure a coordinated disaster response, develop a long-term capital plan for fire infrastructure needs in its responsibility area, develop standard operating policies and procedures, ensure formal mutual aid agreements, and provide a fire perspective to DPLU.

Recommendation 15-2: The Fire Authority and most, if not all, of the Fire Division functions should be moved under the Deputy Chief Administrative Officer/General Manager of the Public Safety who is currently responsible for the County Office of Emergency Services and coordination with the County Sheriff's Department. This organization realignment will bring all County public safety functions together where they can be most effectively coordinated and where an operational function such as fire can be more appropriately managed by staff who are familiar with operational public safety and more familiar with the requirements of day-to-day safety operations. To the extent that there needs to be a daily interface between DPLU and Fire Division planning, code enforcement and permitting activities, this can be accomplished like many agencies do, by locating the appropriate Fire Prevention Division staff offices adjacent to the planning offices or in a one-stop permitting center.

Recommendation 15-3: Citygate recommends that a County Fire Services Director as manager of the County Fire Authority is an effective approach to providing leadership in the unincorporated area and management of the County direct fire functions. A County Fire Services Director would report directly to the Deputy Chief Administrative Officer/General Manager of the Public Safety Group, supervise the Fire Authority and other Fire Division employees, and through them have operational responsibility for the fire stations and staff that are merged into CSA 135.

Recommendation 15-4: Citygate recommends that the County continue implementing the Hybrid Plan on the most aggressive time schedule practical. Step II would fold five CSAs (CSA 111-Boulevard, CSA 112-Campo, CSA 109-Mt Laguna, CSA 110-Palomar, CSA 113-San Pasqual) into CSA 135 in Fiscal Year 2010-11 and Step III would bring the Pine Valley FPD and the San Diego Rural FPD into CSA 135 in Fiscal Year 2011-12.

Recommendation 15-5: Citygate recommends that the County Fire Authority, through a County Fire Services Director, offer to assume the "coordination" role for a formal organization of fire agencies that would be responsible to develop plans, including implementation steps, for adoption and implementation by the County fire agencies. This organization could

San Diego County SOC Urban Coverage Gaps SW Quadrant

Legend

- F Future Station Location
- F Existing Fire Stations
- Jurisdiction
- Coverage Gap

Existing Coverage

- 4 Min
- 5 Min

Future Coverage

- 4
- 5

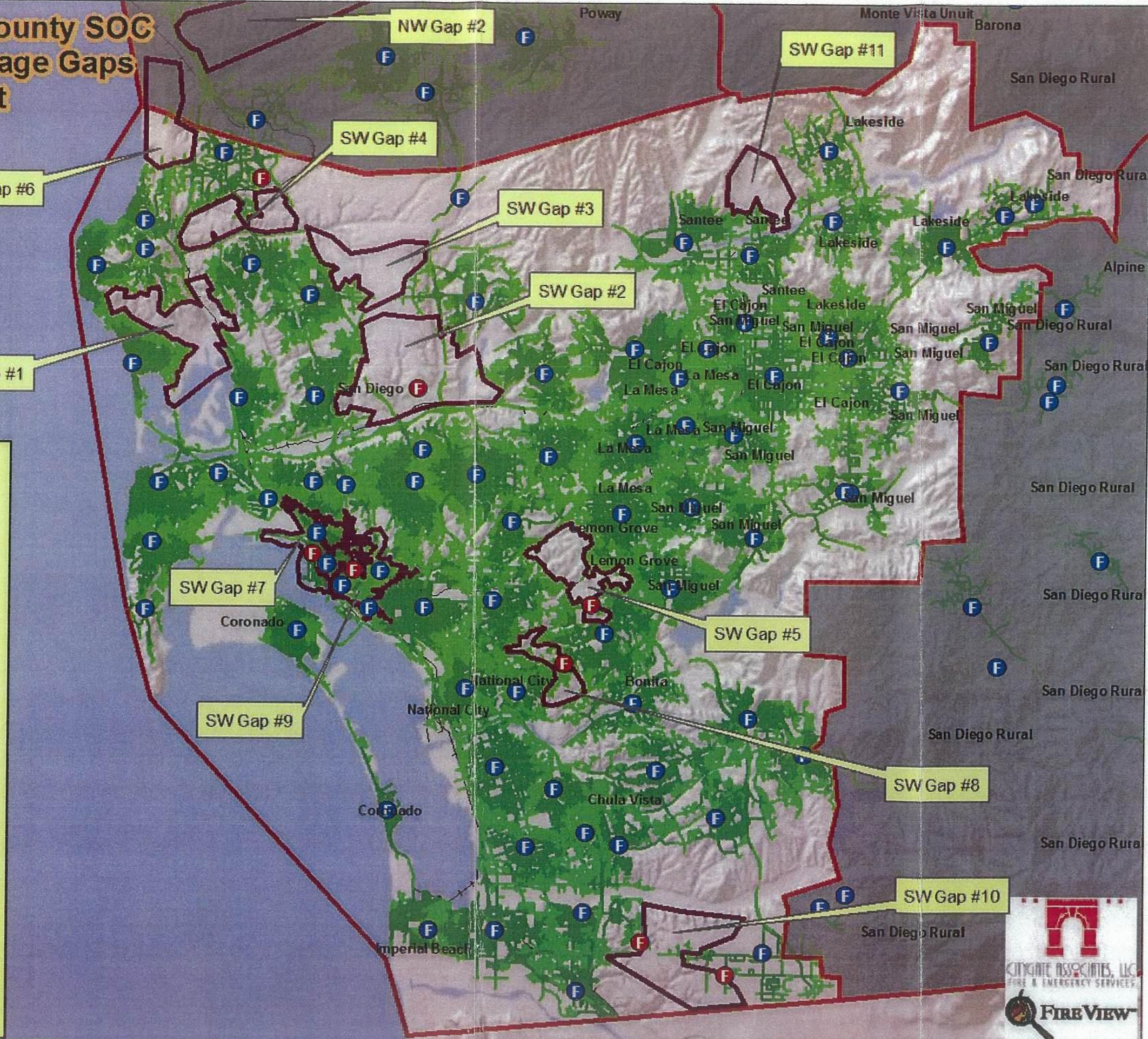
Infrastructure

- +— Railroad
- Freeways
- Ramps
- Major Arterials
- Residential

Hot Spots













Concentration of Incidents

- Very High
- High
- Moderate
- Low
- None



San Diego County SOC
Map 18
SW Gap 2

Legend

-  Future Station Location
-  Existing Fire Stations
-  Jurisdiction
-  Coverage Gap
- Existing Coverage**
 -  4 Min
 -  5 Min
- Future Coverage**
 -  4
 -  5
-  Railroad
-  Freeways
-  Ramps
-  Major Arterials
-  Residential
- Hot Spots**
Concentration of Incidents
 -  Very High
 -  High
 -  Moderate
 -  Low
 -  None

