Fire Facilities Master Plan

CITY OF COLUSA, CALIFORNIA

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1. INTRODUCTION AND EXECUTIVE SUMMARY

The City of Colusa, California, retained the Matrix Consulting Group to prepare a Fire Facilities Master Plan for the Colusa Fire Department. There were a number of factors leading to the issuance of the RFP for this project including: anticipated residential and commercial development which will significantly increase the population of the City as well as Fire Department workloads; the need to renovate or reconstruct the current fire station due to lack of functional space and structural issues; the need to plan for facility needs over the next 5 to 10 years in a cost effective manner.

The scope of services included the following:

- An assessment of the performance of the current emergency response system.
- Evaluation of the current facility utilized by the Fire Department.
- Identification of gaps in service levels and / or areas of duplication of service.
- Evaluation of station needs based on growth projections.
- Evaluation of the deployment of personnel and equipment to provide efficient and effective service. Assessment of future staffing needs.
- Develop a space plan for new facilities and provide estimated costs of construction.
- Identify potential funding sources, including whether development impact fees are effectively utilized.

The study was conducted by Matrix Consulting Group using a team of public management and fire/EMS specialists between April and May of 2008. A detailed and inclusive approach was used in conducting the study and in developing our analyses and recommendations. Specific elements of the study approach included the following:

- Interviews with the City Manager and representatives of other City departments, including Planning.

- Interviews with the command staff of the Department and other personnel, including volunteer personnel.

- Extensive tours of the City to understand risks in the community and the road network. In addition, these tours were used to assess the suitability of potential fire station locations throughout the City.

- Extensive data collection focused on understanding operations and services. This included analysis of the emergency services, apparatus response patterns and the geo-coding of emergency incidents as a precursor to developing alternative station location options for the City.

- Development of interim documents for review by the Fire Department and City management.

During the course of the study the Matrix Consulting Group reviewed factual information, key assumptions, and interim documents with the Department. The overall focus of Matrix Consulting Group's approach was to maximize the opportunities for input into the process, and to ensure that major issues were identified to enhance the likelihood that recommendations were practical and will be implemented.

EXECUTIVE SUMMARY

The findings and recommendations within this report are summarized in the table, which follows.

Finding	Recommendation	Fiscal Impact / Timing
Analysis of response time data indicates that the Fire Department provides a high level of service. Initial response time data indicate that 92% of calls for service were responded to within 5 to 6 minutes of dispatch.	N/A	N/A

Finding	Recommendation	Fiscal Impact / Timing
There is limited data available to document how quickly volunteer personnel are able to provide an initial structure fire response. This makes evaluation of the Department's ability to effectively respond to large-scale incidents difficult.	The Department improve tracking when volunteer personnel respond to the scene of a structure fire. NFPA 1710 guidelines can be utilized to document when a structure fire assignment of 13 to 15 personnel arrives on scene. The City should evaluate the need for additional full-time personnel as volunteer response data becomes available and fire department workloads increase.	No fiscal impact / Immediate
The City should establish response time objectives for the Fire Department.	The City Council should adopt response time objectives based on an assessment of local risk, workloads, and the cost of operating additional stations.	Near term
While the current facility utilized by the Department is well located, the station needs significant renovations and may not be structurally sound. There may be inadequate lateral resistance in the door open elevations of the apparatus bay and along the street side elevation.	The project team recommends that a structural assessment be developed by a structural engineer prior to re-roofing the current fire station. The City should consider plans for renovation or re-building the current fire station.	Approximately $2,500. Renovation: $3.66 Million Replacement: $6.83 Million
New development will increase Fire Department workloads significantly. If the City wishes to maintain the current level of service provided by the existing fire station to current workloads, two additional stations should be added in the near to mid-term future.	A second station should be added within the next 1 to 2 years, depending on the timing of the Brookins Ranch development. This station should be located at the Brookins Ranch development. The City and the developer have already identified a suitable site within this development. A third station should be added on the east side of the City, depending on the timing of the Colusa Riverbend development. The project team has identified several site options, including sites near Bridge St. and State Highway 20.	$220,000 in personnel costs per year per station $300,000 in apparatus costs per station Station 2: Approx. $5.4 million Station 3: Approx. $3.2 million

2. PROFILE OF THE FIRE DEPARTMENT

This chapter includes information about the City of Colusa and the current organization and operation of the CFD. The information in this chapter was developed from interviews with City staff and Fire Department personnel (Fire Chief, Assistant Chief, Shift Personnel, and Volunteer Staff). In addition to the interviews, the study team toured the Fire Department's service area and facilities, reviewed various documents and records and collected data about the City and the Fire Department.

This profile is organized as follows:

- City Setting and Demographics
- Fire Department Organization
- Fire Department Expenditures
- Fire Stations and Apparatus
- Emergency Workload
- Preliminary Assessment of Response Times

The next section discusses the Department's service area.

1. CITY SETTING AND DEMOGRAPHICS.

The City of Colusa is located approximately 60 miles north of the City of Sacramento and is the County seat of Colusa County. The City of Chico, located approximately 50 miles northeast of Colusa, and Yuba City, 22 miles east, are other nearby urban areas. Unique features of the Colusa community include its location next to the Sacramento River and historic character of the downtown core.

The population of the City of Colusa in 2005 was 5,582, according to State Department of Finance population estimates. The growth rate since 1990 has averaged 0.95 percent per year, with a high of 2.56 percent between 1996 and 1997 and a low of negative 1.84 percent from the year 1999 to 2000. The State Department of Finance's 20-year projections show the City of Colusa with a population of 10,317 by 2020. However, the City is anticipating significant growth over the next 5 to 10 years due to three major developments. The points, which follow, describe each of these:

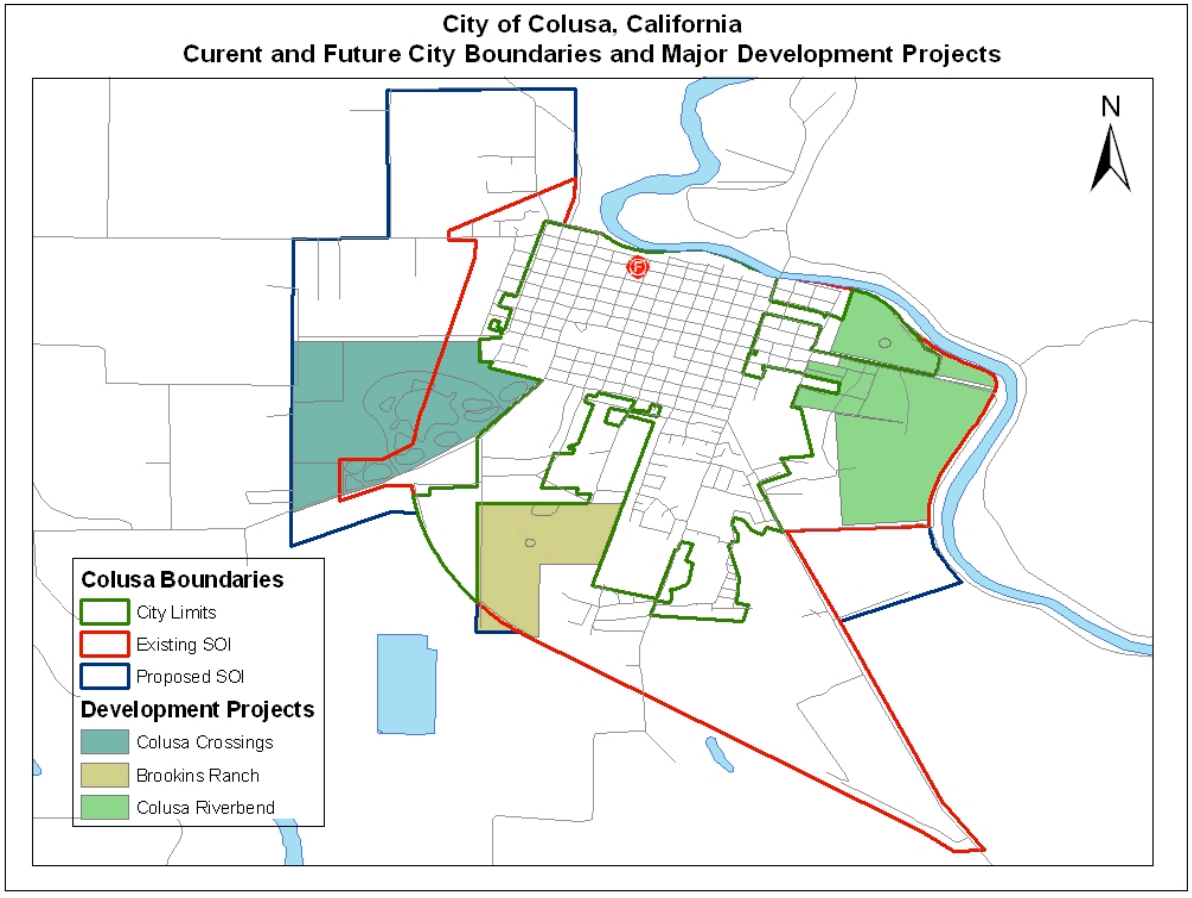
- **Colusa Riverbend** is a Specific Plan covering 442 acres. The approximate location of the project is north of Moon Bend Road and east of Bridge Street and SR 20/45, in the northeastern and eastern portions of the Planning Area. Portions of the project site are within the existing City limits, but most of it is in unincorporated area. The City's intent for this planning area is that it be annexed to the City to be developed with low and medium-density residential development. The Colusa Riverbend Specific Plan proposes a long-range plan for development of the entire 442-acre site. This Specific Plan development includes 372.5 acres for Low Density Residential and 29.5 acres for Medium Density Residential. Based on a General Plan buildout assumption of mid-range density, maximum development for Low Density Residential would be 2,235 units (4 to 8 units/acre) and the maximum for Medium Density Residential would be 295 (8 to 12 units/acre), for 2,530 total units. Based on an estimated 2.85 persons per housing unit (California Department of Finance), the maximum potential population increase associated with this project is 7,210 residents.

- The **Colusa Crossings** site is located on 310-acres of land in northwest Colusa. SR 20 forms the southern boundary of the site, while Wilson Road forms the approximate northern and western boundaries. The Colusa Crossings project is outside the existing City limits within the proposed Planning Area and would require annexation by the City. The project proposes residential, open space and parkland, an elementary school site, and commercial land uses. Approximately 180 to 210 acres (depending on the size of parks) is proposed for low density residential use, 13 acres for medium density residential use, 10 acres for high density residential use, 25 acres for commercial/professional uses, 21 to 51 acres for parks and recreation, and 21 acres for open space. At maximum build out, this development will result in 1,050 low-density residential units, 130 medium density units, and 200 high-density residential units, for a total of 1,380 housing units. Assuming 2.85 residents per housing unit, this development would increase the number of residents by 3,933.

- **Brookins Ranch** is a residential project on 161 acres just southwest of City

limits. The Brookins Ranch project is located at the southwestern corner of the City of Colusa, just outside of the City Limits and within unincorporated Colusa County (County) and would require annexation by the City. The project proposes to construct 600 low-density residential single-family detached homes on 127.5 acres. At 2.85 persons per unit, this results in an increase of 1,710 residents. The existing residence would remain on the site within a 4.3-acre parcel. Approximately 19 acres of the project site would be developed for parks, greenways, a detention basin, or would be kept as open space. Approximately one acre is proposed to be set aside for a fire station and 2.4 acres would be used to develop a public parking lot adjacent to Colusa High School. Approximately 11.8 acres at the southwest corner of the site and southwest of the old railroad right-of-way would be reserved for future residential development. A 1.5-acre site has also been proposed for a new fire station.

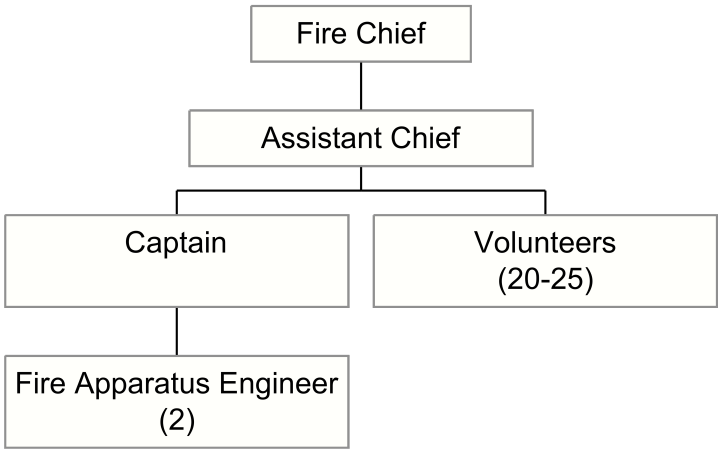
The map, which follows, shows the proposed locations of each of these projects.



2. FIRE DEPARTMENT ORGANIZATION.

This section provides information on the current organization of the Colusa Fire Department and roles and responsibilities of personnel assigned to the CFD. The organizational chart, which follows, shows the current organization of the Fire Department.

Organization of the Colusa Fire Department



The table, which follows, describes the key roles and responsibilities of each of the positions within the Colusa Fire Department:

Position	#	Roles and Responsibilities
Fire Chief	1	• Department head, reports to the City Manager. • The Fire Chief is responsible for the management and oversight of all operations and administrative functions of the Colusa Fire Department. • Responsible for the development of Department policies and procedures, budget, and other planning documents. • The Chief has direct supervisory responsibility for the Assistant Chief, Building Inspector, and shift personnel when on duty. • The Chief also responds to all calls for service during his regular shift; while off duty he is on call and responds to all calls during the week. • Regular working hours are M-F 0800-1700 and every Wednesday evening from 1800 to 2200 for mandatory training.

Assistant Chief	1	• Responsible for routine and emergency operations of CFD. • Responsible for training of department personnel. • Supports the Chief in managing the Department including development of policies and procedures, budgeting, and other responsibilities. • Reports directly to the Chief. • Serves as the Fire Marshall. • Serves on-call as needed. • Regular working hours are M-F 0800-1700.
Captain Fire Apparatus Engineer (FAE)	1 2	• These 3 employees, 1 employee per shift, are the line staff of CFD; even though they have different ranks, each of the 3 employees have the same job responsibilities on their respective shift. • All personnel are cross-trained to provide a full-range of emergency services (EMS, fire, rescue Haz-mat) as well as prevention/inspection services. • The Captain or FAE act as the incident commander for emergency incidents until the Chief or Assistant Chief or Duty Officer arrives on scene. • Captain and Engineers are responsible for driving the apparatus, as well as EMS, suppression, and prevention services. • Assists with Training and Public Education. • Captain is the Department mechanic. • Works a 24-hour shift, 0800-0800.
Volunteers		• Approximately 20-25 active volunteer firefighters supplement the paid staff for all types of calls and incidents. • Volunteer response typically is fewer people M-F 0800-1700 as the volunteers have jobs with regular work hours. • Volunteers include per diem employees, who sometimes work a partial or full shift that supplements the one professional employee on duty.

As shown above, the Fire Department consists of 5 full-time positions and approximately 25 volunteer personnel.

3. FIRE DEPARTMENT EXPENDITURES

The table, on the follow pages, shows actual and budgeted expenditures for the current and previous fiscal years:

Line Item	2006 -07 Estimated Actual	2007-08 CM Recommended
Salary and Wages	184,865	216,026
Part time wages	-	25,000
Overtime	17,000	22,000
Holiday Overtime	6,500	6,500
FLSA Overtime	6,500	9,000
Annual Leave Sellback	-	-
Retiree Benefit	-	-
Benefits	79,950	100,008
Total Salary and Benefits	**294,815**	**378,534**
Uniform Allowance	2,100	2,460
Clothing/Per Ex	5,000	5,000
Training / Travel	1,100	4,000
Supplemental Medical	900	1,000
Office Expense	4,000	4,000
Supplies	800	1,000
Strike Team Expenses	-	-
Photo Supplies	200	200
Medical Supplies	1,500	1,500
Plaques / Awards	200	300
Public Education	1,500	1,500
Patches / Badges	1,000	1,000
Office of Emergency Services	500	500
Weed Abatement	200	500
Fuel	8,000	10,000
Tires	1,500	2,500
Fire Prevention	700	1,000
Fees & Permits	-	200
Professional / Contractual Services	6,000	15,000
Laundry	1,500	1,500
Utilities	16,000	17,000
Building Maintenance	6,000	6,500
Equipment Maintenance	8,000	8,000
Insurance / Bonds	-	7,568
Dues and Memberships	1,500	1,000
Advertising	400	300
Communications	11,000	12,000
Rents and Leases	-	-
Depreciation	-	-
Transfers Out	7,000	27,570
Loan Principle	34,500	34,350
Loan Interest	8,650	7,120
Total Operating	**129,750**	**174,568**
Total Capital Outlay		**17,000**

As shown above, the Department is budgeted to spend $570,102 for the current fiscal year, an increase of $145,537 from the previous fiscal year. Salaries and Wages, which increased by $83,719 over the past fiscal year, represent the largest component of this increase. The table, below, shows the breakdown of personnel costs by salary and benefits for positions within the Fire Department:

Position	Salary	Benefits	Total	Benefit Rate
Chief	$72,120	$30,038	$102,158	42%
Asst. Chief	$52,092	$26,630	$78,722	51%
Captain	$44,208	$20,897	$65,105	47%
Fire Apparatus Engineer	$33,492	$18,161	$51,653	54%

General fund revenues primarily support Fire Department expenditures. However, the City and the Fire Department have recently updated their impact fee schedule, after the completion of an Impact Fee Study in 2005. The current fee schedule is shown below:

Capital Facilities Impact Fees	Single-Family		Multifamily	
	New Construction	Reconstruction	New Construction	Reconstruction
	Per Unit	Per Sq. Ft.	Per Unit	Per Sq. Ft.
City Hall	2,077	1.040	1,712	1.900
Police Facilities & Equipment	509	0.250	419	0.470
Fire Facilities & Equipment	1,659	0.830	1,366	1.520
Community Center	525	0.260	433	0.480
Solid Waste Equipment	914	0.460	755	0.840
Corporation Yard Relocation	1,255	0.630	1,034	1.150
Total Capital Facilities Fee	6,939	3.470	5,719	6.360

Capital Facilities Impact Fees	Retail	Office		Industrial	
	Neighbor/ Gen. Comm.	Office/Prof.	Public Fac.	Light Ind.	Heavy Ind.
	Per Sq. Ft.	Per Sq. Ft.	Per Sq. Ft.	Per Sq. Ft.	Per Sq. Ft.
City Hall	0.802	1.444	1.444	0.481	0.481
Police Facilities & Equipment	0.197	0.354	0.354	0.118	0.118
Fire Facilities & Equipment	0.640	1.153	1.153	0.384	0.384
Community Center	0.203	0.365	0.365	0.122	0.122
Solid Waste Equipment					
Corporation Yard Relocation	0.484	0.872	0.872	0.291	0.291
Total Capital Facilities Fee	2.326	4.188	4.188	1.396	1.396

As shown above, impact fees vary by land use as well as for new construction, renovations, and reconstruction.

4. FIRE STATIONS AND APPARATUS.

The Fire Department currently has one station, located at 750 Market Street. The map at the end of this section shows the current location of the CFD station. All personnel are located here including the Chief, Assistant Chief, and on-duty personnel. The Chief and Assistant Chief both work Monday through Friday from 0800 to 1700. The Chief serves as the Duty Officer and responds to all calls during the workweek. The Assistant Chief responds to calls when available while off duty and also serves as the Duty Officer when needed. All Officers (both paid and volunteers) may serve as Duty Officer during weekends and holidays on a rotational basis. In addition, 1 career staff member is assigned each day to provide immediate emergency response capabilities. These personnel respond with either and engine or truck to the scene, where they are assisted by volunteer personnel.

The table, below, shows the current assignment of vehicles to the Colusa fire station:

Apparatus/Vehicles Assigned to Colusa Fire Station

Unit No.	Year	Description
E-552	2000	HME/Westates Type I Pumper - First out engine
E-556	1990	E-One Type I Pumper - second out engine
T-555	1990	1990 E-One Aerial Truck - first out aerial
E-558	1990	International/Westates Type I Pumper - reserve engine
T-553	1980	Crown/Pierce/Tel-Squirt Aerial - reserve aerial
C-550	2008	Ford Expedition EL- Command Unit
O-551	1998	Ford Expedition - Operations Unit
U-560	1998	Ford F-150 Pickup - Utility Unit

As shown above, the CFD currently operates with a total of 8 vehicles, including two ladder trucks, three engines, and two staff vehicles and a utility vehicle.

The next section provides information on fire department workloads.

5. FIRE DEPARTMENT WORKLOAD.

The project team utilized two sources of information in developing fire department workloads. Call for service data are captured in the CFD's Fire Programs software, which is used to report NFIRS (National Fire Incident Reporting System) data to the state. In addition, manual records are kept by staff that respond to the station during an incident to capture incident activity as well as response times. The project team used the manual records since these documents contained more detail on call types. For example, the Department pages the Water Department and Public Works Department after hours. These calls are included in both datasets, but are hard to identify in the Fire Programs version.

The first table, which follows, shows the total number of calls for service handled by the Fire Department from 2006 to 2008 (January only), by call type:

CALL TYPE	2006	2007	2008	Total
A/A - AMBULANCE	3			3
A/A - CCSO	2	2	1	5
A/A - COLUSA P.D.		1		1
A/A - CRMC		7		7
A/A - DWR	1			1
A/A - ENLOE	1			1
A/A - ENLOE AMB.	1	3		4
A/A - PG&E		1		1
A/A - PUB. WKS	1	2		3
A/A - PUB. WKS.	2			2
A/A - PUB. WORKS	3	2	16	21
A/A - PUBLIC WORKS	2	1		3
A/A - WATER	32			32
A/A - WATER/SEWER	19	42		61
ALARM	3	3		6
ALARM - SMOKE		2		2
AUTO AID - SRFD		1		1
BALCONY FIRE	1			1
CHIMNEY FIRE	1	1		2
DUMPSTER FIRE	1	1		2
ELECTRICAL FIRE	2	1		3
FALSE ALARM	2			2
FIRE ALARM		1		1
GAS LEAK	1			1
GRASS FIRE	2	4		6
H/M - NAT GAS LK	1			1
HAZMAT - BATT LEAK	1			1
HAZMAT - FUEL SP.	1			1
HAZMAT - GAS LEAK	1		1	2
HAZMAT - UNK. SPILL		1		1
HZMT - FUEL SPILL	1			1
INV - FIRE ALARM	1			1
INV - ILLEGAL BURN	1			1
INV - ODOR	1			1
INV - SMOKE ALARM	2			2
INV. - FALSE ALARM	1			1
INV. - UNK. TYP. FIRE	1			1
INV. FALSE ALARM	1			1
INV. ILLEGAL BURN	1			1
INV. SMOKE ALARM	1			1
INVEST - ALARM	2	7	1	10
INVEST - ELEC.	1			1
INVEST - ILL BURN		1	2	3
INVEST - ILL. BURN	1	1		2
INVEST - ODOR	2		1	3
INVEST - SMOKE	2	7		9
INVEST. - ALARM	6	1		7
INVEST. - GAS LEAK		1		1
INVEST. - ILL. BURN		3		3

CALL TYPE	2006	2007	2008	Total
INVEST. - LINE DOWN	1			1
INVEST. - ODOR	1	3		4
INVEST. - SMOKE	1	1		2
KITCHEN FIRE	1			1
M/A - ARBUCKLE FD	1	1		2
M/A - MAXWELL FD	3			3
M/A - SAC RIVER FD	2	5		7
M/A - WILLIAMS	3			3
M/A - WILLIAMS FD	3	2		5
MEDICAL	236	244	11	491
MEDICAL - MVA	1			1
MISSING JUVENILE	1			1
MUT AID - SAC RIVER	1			1
OES ASSIST	1	4		5
OES ASSIST - CFD	1			1
OES ASSIST - WT-31	2			2
OES ASSIST NON CFD	1			1
OES ASSIST REQ		2		2
OES ASST - CFD		1		1
OES ASST - CFD RESP		1		1
OES ASST - ST TM		1		1
OES ASST - WT 31		4		4
OES ASST WT-31		1		1
OTHER TYPE FIRE		1		1
P/A - PU/PB	2			2
P/A - ANIMAL INV.	1			1
P/A - CHILD LOCK IN	1			1
P/A - CITIZEN ASSIST		1		1
P/A - CRMC	2			2
P/A - DOWN WIRES			1	1
P/A - EMS STNDBY	1			1
P/A - FALL	3	1		4
P/A - FOOTBALL S/B		1		1
P/A - MISSING CHILD		1		1
P/A - PUBLIC WORKS	1			1
P/A - PUPB	3	10		13
P/A - SMOKE ALARM		2		2
P/A - SMOKE DET	1	8		9
P/A - SMOKE DET.	4	11	2	17
P/A - STALL VEHICLE			1	1
P/A - STUCK SUB.		1		1
PUBLIC ASSIST	3	10	8	21
RUBBISH FIRE		2		2
STOVE FIRE	2	1		3
STRUCTURE FIRE	7	7	1	15
TRAILER FIRE	2			2
TRASH CAN FIRE	1	1		2
TRASH FIRE	1			1
TREE FIRE	1			1
VEGETATION FIRE		4		4

CALL TYPE	2006	2007	2008	Total
VEHICLE ACCIDENT	17	11	1	29
VEHICLE FIRE	2	3		5
WATER HEATER FIRE	1			1
XMAS TREE FIRE	1			1
Total	**426**	**443**	**47**	**916**

As shown above, the Department responded to 426 calls for service in 2006, 443 in 2007, and 47 through January of 2008. On average, the Department responds to approximately 1.2 calls each day. The largest shares of these calls, 491 or 54% were for medical emergencies or sick calls.

The next table, below, shows the distribution of calls for service by hour of day:

Hour	% of Calls	Cumulative %
0000	2%	2%
0100	2%	5%
0200	2%	7%
0300	1%	7%
0400	1%	9%
0500	1%	10%
0600	2%	12%
0700	3%	14%
0800	4%	18%
0900	5%	23%
1000	6%	30%
1100	6%	36%
1200	6%	42%
1300	6%	48%
1400	6%	54%
1500	8%	61%
1600	5%	66%
1700	7%	73%
1800	5%	78%
1900	6%	83%
2000	6%	89%
2100	4%	94%
2200	3%	97%
2300	3%	100%

As shown above, the busiest hours of the day are from 1000 to 1900. The slowest hours are after midnight to 0700.

3. ASSESSMENT OF CURRENT RESPONSE NETWORK

This chapter presents the project team's analysis of current service levels provided by the Colusa Fire Department.

1. ESTABLISHING SERVICE LEVEL TARGETS IS A CRITICAL FIRST STEP IN EVALUATING STATION LOCATION AND DEPLOMENT.

An important starting point in evaluating fire services is the establishment of service level objectives. Service levels objectives are a benchmark by which to assess gaps in current service provision and establish goals for service level enhancements. There is a growing national debate as to what the appropriate level of fire, rescue, and emergency medical service is for a community. Several organizations have recommended service level targets for communities generally based on two concepts: fire growth behavior and cardiac arrest survivability. The table, below, summarizes some of the standards recommended by national organizations:

Source	Description	Comments
ISO	• Targets stations within 2.5 miles of every location. • Resources available to fight common types of fires. • Industrial / institutions may get their own ISO rating (independent of the local fire service). • No response time or other performance standards included.	• 2.5-mile response target is drawn from historical fire service delivery (horses could run for 2.5 miles pulling fire apparatus). • Factors such as water system, access to non-system water, etc., may be used to lower ISO ratings. • Does not impact EMS service delivery.
American Heart Association	• Initial (non-paramedic) response in less than 5 minutes from dispatch. • Paramedic response in less than 8 minutes.	• Recognizes the major impact of rapid intervention on survivability in cardiac cases. • Standard is often cited as the major planning component for EMS system, even though it does not reflect on the majority of EMS workload (non-cardiac care responses).

Source	Description	Comments
NFPA	• NFPA 1710 applies to full-time paid fire departments in urban/suburban communities. • On EMS, NFPA 1710 suggests a total response time of 6 minutes including the following elements: - 1 minute for dispatch processing 90% of the time. - 1 minute for fire department reflex time. - 4 minutes of drive time for first arriving unit. • On Fire, NFPA 1710 suggests a compliment of 15 personnel respond to the scene of a structure fire within 8 minutes of drive time and 10 minutes of total response time.	• Assumes consistent level of risk in communities. Does not account for differences in built-in fire protection, age of construction, or other risks. • Based on incidents with low probability but high-risk potential.

As shown above, there are several different standards for emergency medical and fire services. These standards are all based on different assessments of the value of various fire and emergency medical risks. The project team uses these standards as targets only and as a tool to identify current service levels and develop specific goals for each community. We believe that each community must identify the relative value or cost / benefit of providing a targeted service level. These targets should be based on a thorough inventory of risks and hazards and the cost of mitigating these risks.

Recommendation: The City of Colusa should establish service level targets for fire, rescue, and emergency medical services.

2. ANALYSIS OF RESPONSE TIME DATA INDICATES THE COLUSA FIRE DEPARTMENT PROVIDES A HIGH LEVEL OF SERVICE.

The project team utilized the response time data collected from the Department to evaluate response times achieved during 2006, 2007, and January 2008. Please note that for each of the tables presented in this section, all mutual aid responses, agency assists to the Water Department and Public Works Department, and incidents with zero response times were eliminated.

The first table, below, shows the distribution of calls by response time interval. Response time is defined as the time from dispatch to arrival on scene by the first unit.

Response Time	2006	2007	2008	Total	%	Cumulative %
1 to 2 minutes	32	20	9	61	9%	9%
2 to 3 minutes	65	59	4	128	18%	27%
3 to 4 minutes	91	102	5	198	28%	55%
4 to 5 minutes	77	103	5	185	26%	81%
5 to 6 minutes	40	33	4	77	11%	92%
6 to 7 minutes	16	15	1	32	5%	96%
7 to 8 minutes	1	12		13	2%	98%
8 to 9 minutes	1	2		3	0%	98%
9 to 10 minutes	1			1	0%	99%
10 to 11 minutes	1		1	2	0%	99%
11 to 12 minutes	1	1		2	0%	99%
12 to 13 minutes		1		1	0%	99%
13 to 14 minutes	1			1	0%	99%
14 to 15 minutes	1			1	0%	100%
16 to 17 minutes	1			1	0%	100%
20 to 21 minutes	1	1		2	0%	100%
Total	**331**	**349**	**29**	**709**	**100%**	

As shown above, approximately 92% of calls for service were responded to within 5 to 6 minutes of dispatch. In addition, 96% of calls for service were responded to within 6 to 7 minutes of dispatch.

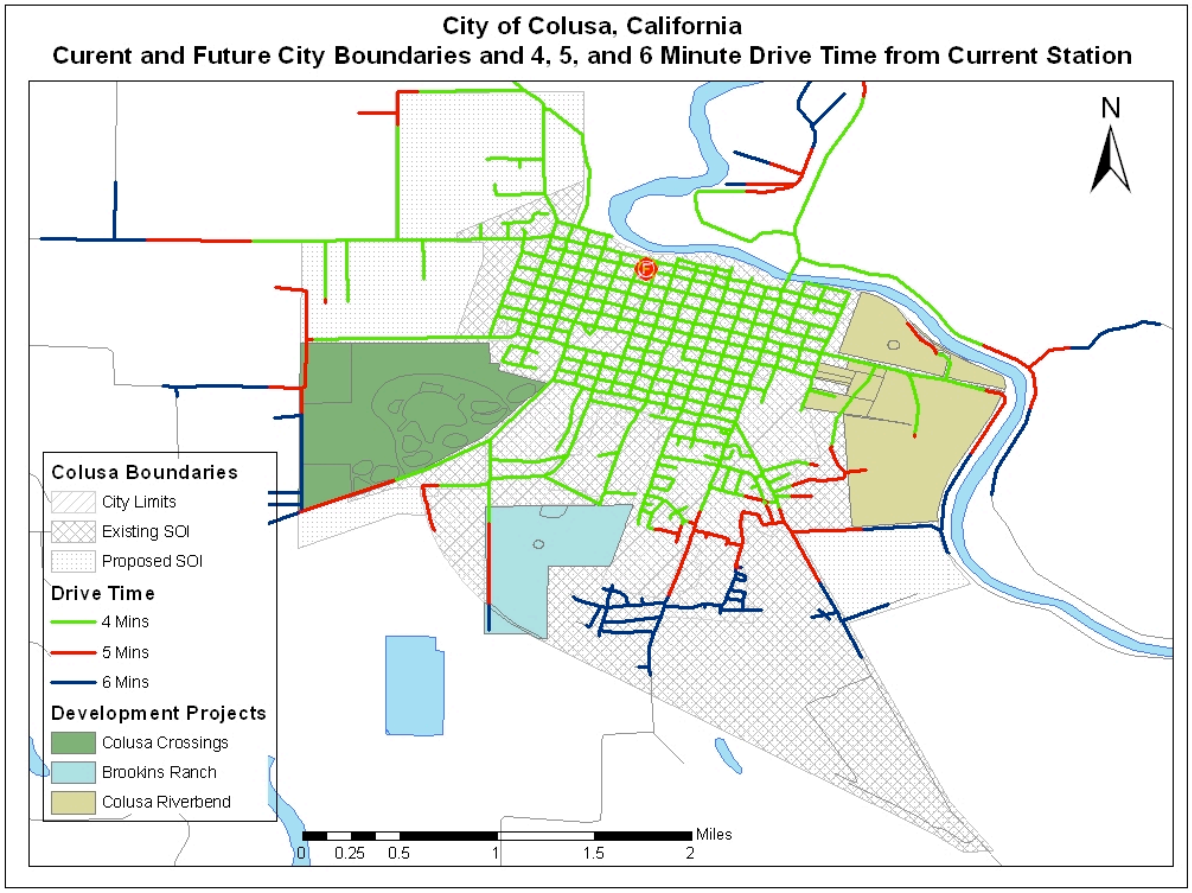
The next table, below, shows the percentage of calls responded to within various drive time intervals. Drive time is defined as the time between a unit stating it is “en route to the scene” and arrival by the first unit. This distinction is important because it is the time interval used to evaluate station location. The time taken to get dressed and get into a fire department vehicle should not be used to evaluate ideal station placement.

Drive Time	2006	2007	2008	Total	%	Cumulative %
0 to 1	14	11	2	27	4%	4%
1 to 2	72	73	10	155	22%	26%
2 to 3	106	96	4	206	29%	55%
3 to 4	84	109	7	200	28%	84%
4 to 5	42	41	3	86	12%	96%
5 to 6	10	9	1	20	3%	99%
6 to 7		4	1	5	1%	99%
7 to 8		2		2	0%	100%
8 to 9		2		2	0%	100%
9 to 10			1	1	0%	100%
Total	**328**	**347**	**29**	**704**	**100%**	

As shown above, approximately 84% of calls for service were responded to in less than 4 minutes of drive time. In addition, 96% of calls were responded to within 4 to 5 minutes of drive time. This is a high level of service and demonstrates that the current fire station is ideally placed to respond to current calls for service.

3. GIS ANALYSIS INDICATES THE CURRENT STATION LOCATION PROVIDES GOOD COVERAGE TO CURRENT CITY BOUNDARIES.

The project team utilized GIS software to estimate the areas of the City, existing Sphere of Influence (SOI), and proposed Sphere of Influence that can be reached within 4 minutes of drive time from the current CFD fire station. The GIS model uses travel time estimates based on road classifications (arterial, connector, residential, etc.) to model response times. The first map, below, shows estimate 4, 5, and 6-minute drive times from the main station.

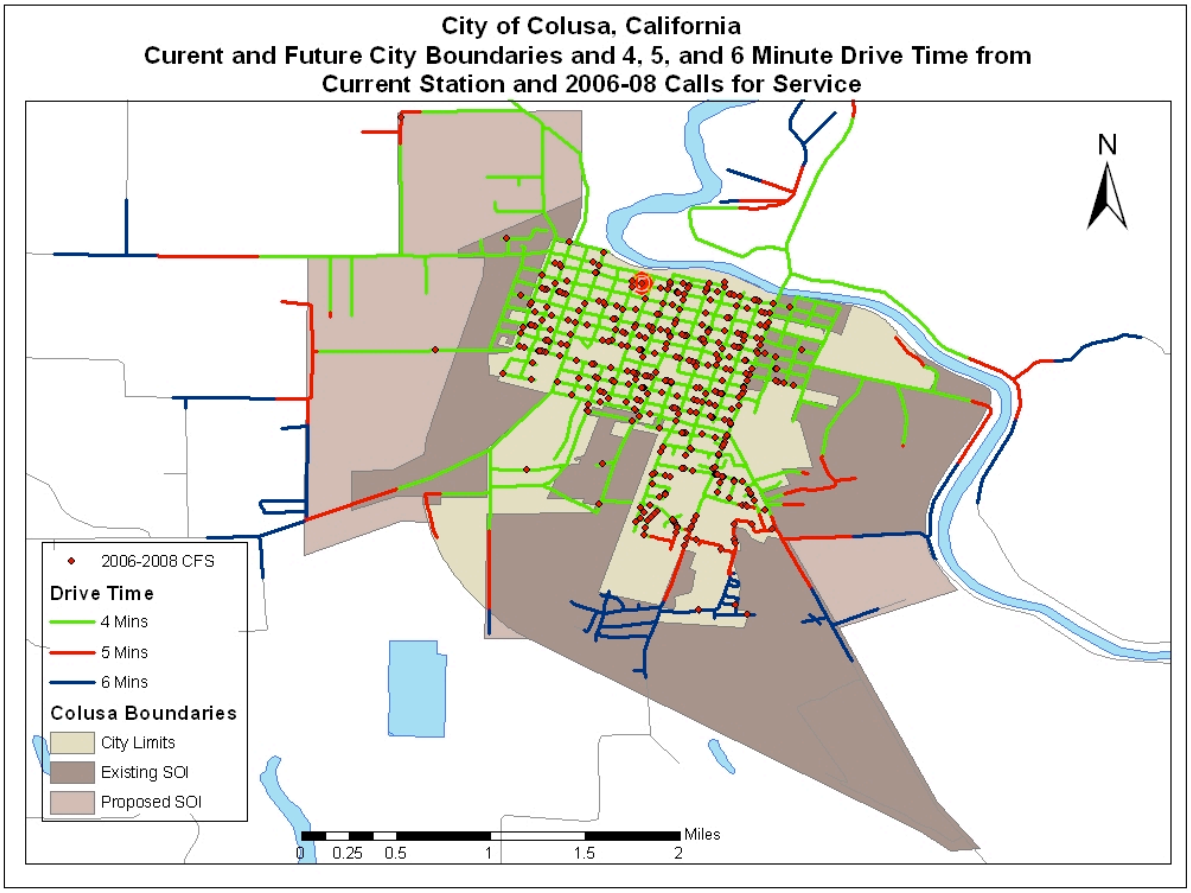


The following points describe the analysis presented in the map, above:

- As shown above, the current station location provides 4-minute coverage to the vast majority of the current City boundaries. In addition, there are portions of the existing SOI that receive 4-minute coverage, as well as areas of the proposed Colusa Riverbend development.

- There are areas within the existing SOI and proposed SOI that are outside of the 4-minute drive time. As shown above, many areas in the south central sections of the SOI are within a 5-minute or 6-minute drive time from the current station. Also note that large portions of the Colusa Crossing, Brookins Ranch, and Colusa Riverbend developments which are outside of a 4-minute drive time. Sections of all three developments are a 6-minute drive from the current station location.

The second map, below, shows the same drive time intervals but includes the location of calls for service handled during 2006, 2007, and to April of 2008.



As shown above, the vast majority of current calls for service during 2006 through 2008 are located within a four-minute drive time from the current station. This indicates that the current station is well located to handle current calls for service. However, the map above also shows that calls for service located near or within the proposed developments will extend current response times.

4. WHILE INITIAL RESPONSE TIME DATA INDICATE A HIGH LEVEL OF SERVICE, VOLUNTEER RESPONSE DATA DO NOT ALLOW THE PROJECT TEAM TO EVALUATE STRUCTURE FIRE RESPONSE CAPABILITIES.

While the preceding analysis shows that the current station is located effectively to handled current calls for service, there are other challenges that the CFD faces in providing high levels of service to fire, rescue, and EMS incidents. These challenges are

primarily related to operations staffing and the reliance on volunteer personnel to respond quickly and provide enough personnel to handle larger scale incidents such multi-vehicle accidents with extrication, structure fires, and specialized rescue incidents. The following points summarize the project team's findings and observations regarding current operations staffing:

- During the hours of 0800 to 1700 Monday through Friday, the Department has 3 full-time personnel available to respond to emergency incidents. In addition, volunteer personnel may respond to the station to drive emergency vehicles to the scene. However, interviews with Department personnel indicate that fewer volunteer personnel respond during the daytime hours of the workweek due to other employment.

- Currently 1 person drives the engine or ladder to the scene prior to the arrival of additional personnel.

- The Assistant Chief responds after hours to all major calls (multi-casualty incidents, structure fires, specialized rescues, etc.). The Chief may also respond to major incidents.

- While the majority of workload is medical in nature (EMS calls), and may only require 1 to 3 personnel to handle the incident, there are instances where multiple personnel are needed to safely and effectively handle an incident. For example, any type of structure fire call, car accident with extrication, or multi-vehicle accidents will require multiple personnel. As indicated in the previous section, NFPA 1710 recommends a minimum of 15 personnel at the scene of a structure fire. While the Department may meet this recommendation through the use of volunteers or mutual aid, it is not clear that the 10-minute total response time targets (1-minute dispatch processing, 1-minute turnout, and 8 minutes of drive time for full compliment of vehicles and personnel) recommended by NFPA 1710 are being met. While the Department keeps track of how many personnel respond to the scene, it does not keep timestamps that indicate when the full-compliment has arrived.

The current approach to operations staffing has so far worked well for the Fire Department and the City. Given the low level of workload, approximately 1 call for service each day, the current staffing plan is a cost effective approach to handling fire, rescue, and EMS risk. However, as the City grows and Fire Department workloads

increase, the City should consider the need for additional full-time personnel to handle large incidents and simultaneous calls for service.

Recommendation: The Fire Department should begin tracking when a full structure fire compliment arrives on scene at structure fire incidents.

Recommendation: The City should monitor fire department workloads and volunteer participation and consider the need for additional full-time personnel.

5. PROPOSED COMMERCIAL AND RESIDENTIAL DEVELOPMENTS WILL SIGNIFICANTLY INCREASE THE FIRE DEPARTMENT'S WORKLOADS.

As shown in the previous chapter, the City of Colusa is anticipating significant population growth resulting from three large mixed-use developments. These include: Colusa Crossing, Brookins Ranch, and Colusa Riverbend. The tables, below, describes the acreage proposed for each use, number of housing units, and projected population increases associated with each development:

Colusa Riverbend	
Total Acres	442.0
Low Density Residential Acres	372.5
Units/Acre Low Density	4 to 8
Low Density Units - mid range	2,235
Medium Density Residential Acres	29.5
Units/Acre Medium Density	8 to 12
Medium Density Units - Medium Density	295
Total Units	2,530
Projected Population (2.85 persons per Unit)	7,211
Colusa Crossings	
Total Acres	310
Low Density Residential	180 to 220
Medium Density	13
High Density	10
Commercial/Professional	25
Parks/Recreation	21 to 51
Open Space	21
Total Housing Units	1,380
Projected Population (2.85 persons per Unit)	3,933

Brookins Ranch	
Total Acres	161
Low Density Residential Acres	127.5
Existing Residence Acres	4.3
Fire Station - Acres	1.5
Public Parking Acres	2.4
Future Residential Development Acres	11.8
New Residential Units	600
Projected Population (2.85 person per Unit)	1,710

As shown above, the City has projected a total of 2,530 residential units for the Colusa Riverbend development, 1,380 residential units for the Colusa Crossing development, and 600 units for the Brookins Ranch development. Based on the current California Department of Finance estimates for persons per household, this translates to 7,211 additional residents for the Colusa Riverbend development, 3,933 residents for the Colusa Crossings development, and 1,710 new residents for the Brookins Ranch development. The total population increase is estimated at 12,854 at build out of the three developments. Based on the 2005 estimate of the City's population of 5,582, this would result in a total population of 18,436 residents, for an increase of 230%.

The project team next projected the additional fire department workload created by new development. We utilized three different growth rates to estimate the number of new residents and fire department calls for service – 0.95%, 3.5%, and 6.45%. These growth rates were taken from the City's General Plan. The table, below, shows the number of new residents from 2005 to 2025 as well as the number of total calls for service for each growth rate assumption.

	Population			Calls for Service		
Year	Current Rate	Mid-Point	Aggressive	Current Rate (0.95%)	Mid-Point (3.5%)	Aggressive (6.45%)
2005	5,582	5,582	5,582	N/A	N/A	N/A
2006	5,635	5,777	5,942	426	426	426

Year	Population			Calls for Service		
	Current Rate	Mid-Point	Aggressive	Current Rate (0.95%)	Mid-Point (3.5%)	Aggressive (6.45%)
2007	5,689	5,980	6,325	443	443	443
2008	5,743	6,189	6,733	447	482	524
2009	5,797	6,405	7,168	451	499	558
2010	5,852	6,630	7,630	456	516	594
2011	5,908	6,862	8,122	460	534	633
2012	5,964	7,102	8,646	464	553	673
2013	6,021	7,350	9,204	469	572	717
2014	6,078	7,608	9,797	473	592	763
2015	6,136	7,874	10,429	478	613	812
2016	6,194	8,150	11,102	482	635	865
2017	6,253	8,435	11,818	487	657	920
2018	6,312	8,730	12,580	492	680	980
2019	6,372	9,036	13,391	496	704	1,043
2020	6,433	9,352	14,255	501	728	1,110
2021	6,494	9,679	15,175	506	754	1,182
2022	6,555	10,018	16,153	511	780	1,258
2023	6,618	10,369	17,195	515	808	1,339
2024	6,681	10,731	18,304	520	836	1,426
2025	6,744	11,107	19,485	525	865	1,518

As shown above, the project team projects that by 2025, the Fire Department will respond to between 525 and 1,518 calls for service annually. Please note that we used the current ratio of population to calls for service to estimate calls for service for each year and each growth rate assumption. It is interesting to note that even under the City's aggressive growth rate estimate of 6.45%, the estimated population increase associated with the three major developments does not occur until 2024. The table above also indicates that from 2007 to 2012, calls for service area likely to increase at a minimum rate of 5% and a likely maximum of 52%. At the aggressive rate assumption, this results in a total of 673 calls for service in 5 years, or approximately 2 calls each day. In 10 years, by 2018, the Department is projected to handle just under 3 calls each day.

4. ASSESSMENT OF FUTURE FACILITY NEEDS

This chapter presents the project team's analysis of current and future facility needs, ideal placement of stations, and estimate costs and revenues associated with new or renovated facilities.

1. THE CURRENT FACILITY UTILIZED BY THE FIRE DEPARTMENT, WHILE WELL LOCATED, NEEDS SIGNIFICANT RENOVATIONS AND MAY NOT BE STRUCTURALLY SOUND.

The project team conducted a site assessment of the current facility utilized by the Colusa Fire Department in May of 2008. The current facility is a single story tilt-up concrete building built in 1964. The station is the headquarters for the Department and houses all administrative and operational staff, including volunteer personnel. The Matrix Consulting Group utilized Don Dommer & Associates to evaluate the current facility utilized by the Department and to develop a space plan to identify the current and future needs of the CFD. The points, which follow, describes DDA's observations and findings regarding the current CFD facility:

- The building initially housed the Police Department, and all that remains of that use is an extra unused entry.
- The Headquarters administration and house layout is inefficient and appears to be unchanged and unimproved since the building was built.
- The apparatus bays consist of three narrow 14' bays with undersized 12' x 12' doors and 8' to 10' flanking side spaces. These side spaces could provide enclosed program spaces without affecting the operations of the bays.
- The low height of apparatus doors can be increased to 14' by removing a non-structural panel increasing clearance for near 12' apparatus.
- The occupied space is serviced by a central HVAC unit that does not provide adequate temperature control.

- There appears to be limited clearance above the ceilings for duct runs.
- The existing main electrical service is 400 amps and should be adequate. An older emergency generator will need to be replaced.
- The public toilets are not ADA accessible.
- The ADA path of travel from parking appears to be accessible.
- No fuel station is anticipated.
- An Emergency Operations Center Command space is included in the plan as the station is on higher ground than most of the City and is protected from most Sacramento River catastrophic levee breaks.

The 1964 tilt-up concrete structural system has not been upgraded and, due to the major changes in the building code, will not conform to current essential facility structural code requirements. The most common shortcoming of this kind of structural system is the lack of adequate wood roof to concrete wall structural connections. There may be a lack of lateral resistance in the door open elevations of the apparatus and along the street side elevation of the administration/house. A reroofing project is slated for this summer; however, before preceding with this project a structural engineer should be hired to evaluate how structural upgrades may affect the wood roof system. The project team strongly recommends that a structural assessment be done by a structural engineer prior to reroofing. It is possible that some of the structural work may be done from above and the basic structural integrity of the building needs to be confirmed.

Recommendation: The project team recommends that a structural assessment be developed by a structural engineer prior to re-roofing the current fire station. The estimated cost of this work is $2,500.

2. THE PROJECT TEAM DEVELOPED A PROGRAMATIC SPACE PLAN FOR THE CURRENT FIRE FACILITY.

The project team developed an inventory of current space utilized by the Colusa Fire Department and compared this to recommended space allocations for each program. This plan was developed in consultation with the Fire Department. The existing building area includes 4,877 square feet for the apparatus bays and side open areas, 5,075 square feet for administrative and house areas for a total of 9,952 square feet.

The table, below, describes the recommended space allocation for each function within the Fire Department:

Renovation Headquarters Fire Station No. 1
Model Conceptual Program 5/6/08

Space	No.	Area/SF	Total/SF
Administration			
Lobby	1	80	80
Administrative	1	120	120
Copy/Mail Room	1	120	120
Chief's Office	1	150	150
Deputy Chief's Office	1	120	120
Training Officer's Office	0	120	0
Fire Marshall Office	1	130	130
Plan Check Drawing Storage	1	60	60
Battalion Chief Suite	1	290	290
Conference/Emergency Command	30	20	600
Emergency Command Storage	1	100	100
Conference	1	130	130
Break Room	1	140	140
Public Toilets	2	140	280
Hot Water Heater/Janitor Closet	1	40	40
Upper Storage	1	120	0
Corridors, Walls and Layout	18%		425
Subtotal			**2,785**

Apparatus Bays, Operations and Building Support			
Data/Telephone	1	100	100
Janitor Closet	1	40	40
Apparatus Bay	3 bays		3,024
Turnout Room	1	120	120
Shop	1	100	100
SCBA	1	100	100
Electrical Equipment	1	20	20
Medical Supplies	1	10	10
Decon	1	20	20
Excerise	1	250	250
Storage	1	100	100
Stairs	1	100	100
Mezzazine, mech., storage	1	720	720
Corridors, Walls and Layout	8%		376
Sub Total			**5,080**

Crew Quarters			
Shift Office Work Stations	2	65	130
Duty Captain's Office	1	130	130
Kitchen	1	200	200
Dining	1	200	200
Dayroom/Meeting	1	220	220
Captain's Dorm	1	260	260
Engineer/Firefighter Dorms	2	120	240
Crew Baths	2	105	210
Exercise Room	1	225	225
Electrical	1	120	120
Janitor Closet	1	30	30
Corridors, Walls and Layout	18%		354
Subtotal			**2,319**

Building Total	**10,184**

Existing Space Available			
Administration and House	1	5,075	5,075
Apparatus and Support	1	4,877	4,877
Total			**9,952**

As shown above, the house program exceeds the available space by less than 10%. However, further study may be needed to confirm that the building can meet the needs of the Fire Department and that the cost of the renovation is a better investment than replacing the building. Architectural plans will need to be developed to evaluate the exact space needs of a renovated facility for corridors, walls and layout. In addition, the

cost of renovating this facility may be such that the City would be better off constructing a new facility.

3. THE PROJECT TEAM ESTIMATED THE COSTS OF RENOVATION OF THE EXISTING FACILITY AND CONSTRUCTION OF A NEW HEADQUATERS FACILITY.

Don Dommer and Associates prepared cost estimates for design and construction of a new facility based on the space plan developed in the previous section. In addition, DDA prepared cost estimates for renovation of the current facility. The table, which follows, shows the estimated cost for renovation of the existing facility to meet the recommended space program:

RENOVATION HEADQUARTERS FIRE STATION NO 1 COST ANALYSIS
City of Colusa, CA
Don Dommer Associates, Architects and Planners

	May-08
Headquarters and Single Engine Company	
Wood Frame Construction 2 Story	
Fire Station	
Building Area	9,952
Site Area	19,200
Ratio of Lot Area / Floor Area	1.9
Construction Cost Estimate	$2,736,800
Cost of Construction per square foot	$275
Soft Costs	$930,512
Estimated Total Project Costs 2009	**$3,667,312**
Estimated Total Project Costs 2010	**$3,960,697**
Estimated Project Costs 2010 with 5% Escalation	**$4,277,553**
Estimated Project Costs 2011 with 4% Escalation	**$4,534,206**

Soft Costs	**% of Construction Cost**
Design/Program Fees	10%
Survey, Soils Investigation/ Hazardous Materials	2%
Project Management	4%
Permits/Utilities	3%
Furniture, Fixtures and Equipment	3%
Design and Construction Contingency	10%
Printing, Advertising, and Reimbursables	2%
Total Soft Costs as % of Construction	**34%**

Notes

1. The costs provided for the renovation of Headquarters Fire Station are magnitude only due to lack of renovation design drawings and a structural and hazardous materials investigation. It possible that the renovation will exceed half the cost of a replacement.
2. The items included in Soft Costs may vary from community to community.
3. Construction cost escalation is estimated to be 5% for 2010 and 4% thereafter.
4. Calculate construction cost escalation to half way through construction schedule.
5. Poor or contaminated soils may add significantly to the project cost as can demolition or other atypical project conditions.
6. Other types of construction are possible but wood frame is typically less.
7. Land Costs are not included.

As shown above, the project team estimates that renovation of the existing Fire Department facility will cost $3.6 million if half way through the construction schedule in 2009. If construction is half complete in 2010, the costs increase to $3.9 million. In addition, the costs provided for the renovation of Headquarters Fire Station are magnitude only due to lack of renovation design drawings and a structural and hazardous materials investigation.

The next table, which follows, shows the estimated costs of replacing the existing facility with a new structure:

REPLACEMENT HEADQUARTERS FIRE STATION NO 1 COST ANALYSIS
City of Colusa, CA
Don Dommer Associates, Architects and Planners

	May-08
Headquarters and Single Engine Company	
Wood Frame Construction 2 Story	
Fire Station	
Building Area	12,000
Site Area	19,200
Ratio of Lot Area / Floor Area	1.6
Construction Cost Estimate	$5,100,000
Cost of Construction per square foot	$425
Soft Costs	$1,734,000
Estimated Total Project Costs 2009	**$6,834,000**
Estimated Total Project Costs 2010	**$7,380,720**
Estimated Project Costs 2010 with 5% Escalation	**$7,971,178**
Estimated Project Costs 2011 with 4% Escalation	**$8,449,448**

Soft Costs	% of Construction Cost
Design/Program Fees	10%
Survey, Soils Investigation/ Hazardous Materials	2%
Project Management	4%
Permits/Utilities	3%
Furniture, Fixtures and Equipment	3%
Design and Construction Contingency	10%
Printing, Advertising, and Reimbursables	2%
Total Soft Costs as % of Construction	**34%**

As shown above, the estimated cost of constructing a new facility at the site of the current Colusa Fire Station is approximately $6.8 million if half way through the construction schedule by 2009 (a 24-month to 28-month schedule is anticipated). This is significantly more than $3.67 million and $3.96 million in 2009 and 2010 for renovations. However, the exact cost savings will depend on several factors including a structural engineer's assessment, hazardous materials inspections, soil tests, and other factors. As a result, the project team recommends that the City get renovation cost estimates from a contractor based on detailed architectural plans prior to evaluating the cost / benefit trade off.

Recommendation: The City of Colusa should obtain quotes from contractors for renovations to the existing Fire Station based on detailed architectural plans before deciding to renovate or construct a new facility.

4. BASED ON FUTURE GROWTH AND PROJECTED FIRE DEPARTMENT WORKLOADS, THE CITY OF COLUSA WILL NEED TO ADD ADDITIONAL STATIONS TO MAINTAIN CURRENT RESPONSE TIMES.

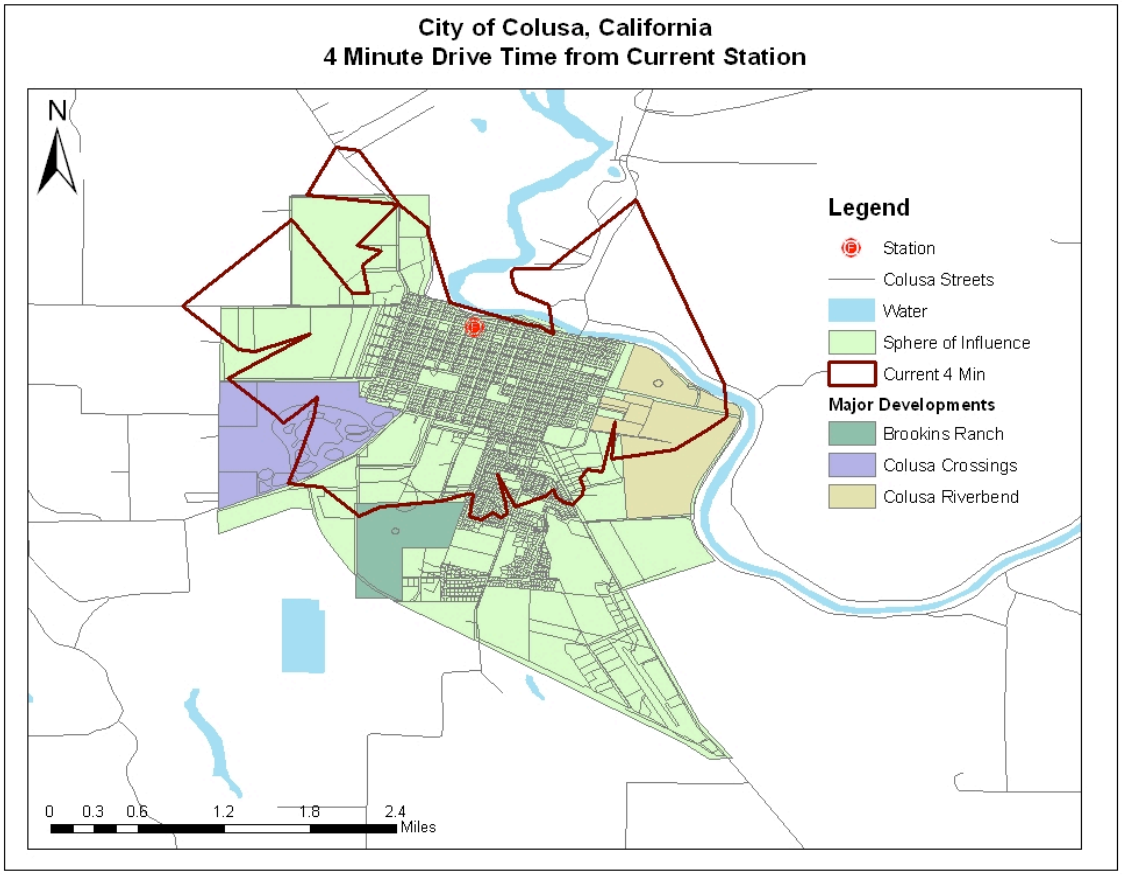
The project team evaluated the ability of the current fire station utilized by the CFD to provide targeted service levels to each of the three major developments under consideration. In developing our analysis, we utilized a number of assumptions, including the following:

- The project team assumed that the City will maintain current response times to each of the major development areas.

- Using the circulation element of the General Plan, the project team modeled future road networks in each development to estimate general response times to various areas of each development. Because it is impossible to predict the location of future calls for service, we assumed that all areas of the proposed developments could potentially generate calls for service.

Based on these assumptions, the project team developed 4-minute response time maps and statistics to evaluate future service levels provided to Colusa Crossings, Brookins Ranch, and Colusa Riverbend developments. Because of the high level of response coverage, as well as the unpredictable nature of staffing levels at any given time due to the use of volunteers, the project team did not evaluate response coverage at 8-minute of drive time. This is the recommended standard for structure fire response by NFPA 1710.

The map, below, shows the projected response coverage at 4 minutes of drive time from the current station location:



As shown in the map, the current station location covers approximately half of the Colusa Crossings and Colusa Riverbend developments at 4-minutes of drive time and almost none of the area of the Brookins Ranch development. In addition to the map, the project team developed response time statistics based on the number of potential calls for service within each development area, as shown in the table, below:

Percentage of Calls Reached Within 4 Minutes of Drive Time from Current Station

Current Calls	Colusa Crossings	Brookins Ranch	Colusa Riverbend
92.20%	42.86%	8.33%	45.95%

The following points highlight the information in the table, above:

- Our GIS model predicts that 92% of current calls for service are within 4 minutes of drive time from the existing station location. This is a high level of service. This

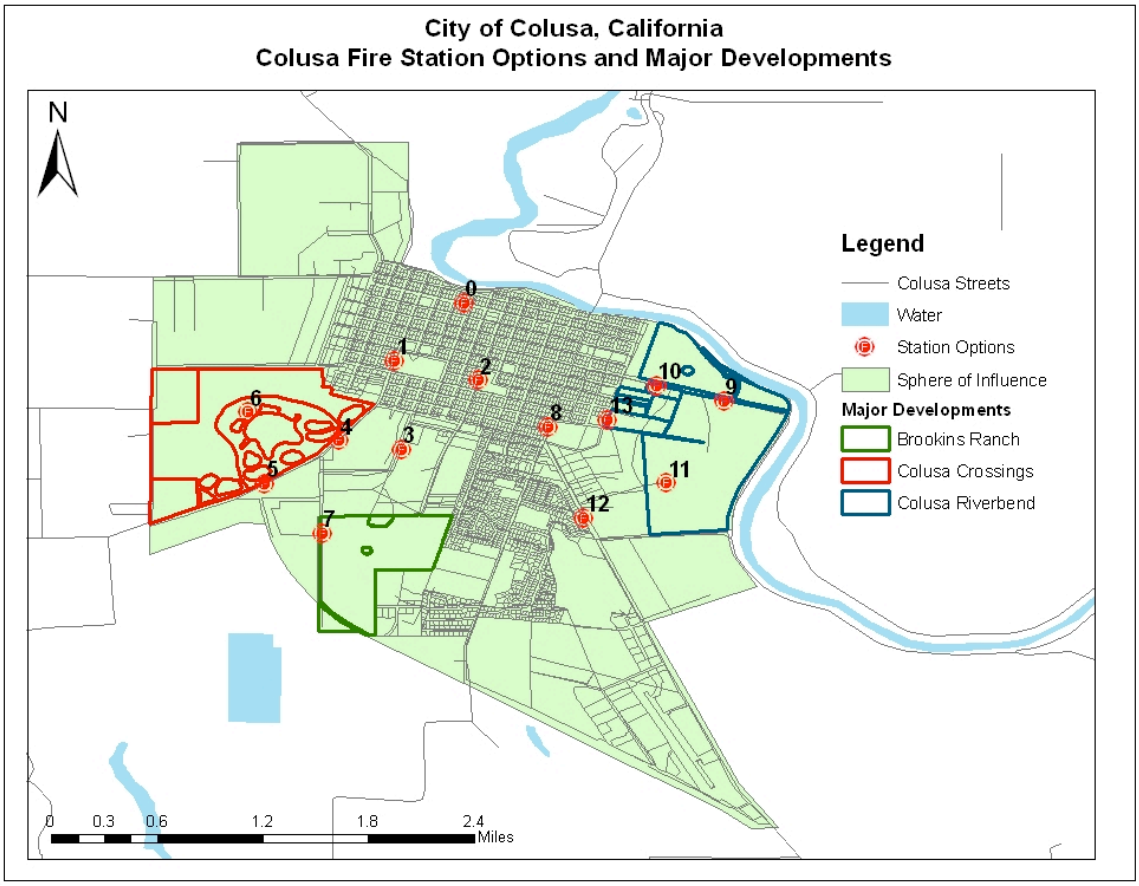
figure is also consistent with the results of our analysis of Department incident reports which indicate 96% of calls are reached within 4 to 5 minutes of drive time (from en-route to on-scene).

- The GIS model also predicts that only 43% of projected calls within the Colusa Crossings development and 46% of calls within the Riverbend development are inside of a 4-minute drive from the current station location. Moreover, only 8% of projected calls for service in the Brookins Ranch development are within 4 minutes of drive time from the existing facility.

Overall, the project team's analysis shows that the current station will not maintain existing response times to future development. The next section presents our analysis of alternative sites and deployment options.

5. ANALYSIS OF STATION LOCATION OPTIONS SHOWS THAT THE CITY HAS SERVERAL DEPLOYMENT AND STATION LOCATION OPTIONS.

The project team evaluated several potential station location sites to assess the improvement in future response times. In choosing our test sites, we focused on general areas of the City that could potentially improve response times to each of the three development areas as well as the current city boundaries. The map, below, shows the general location of these test sites. Please note that the project team did not have access to a list of available properties within and around the City. Instead, the following sites represent general locations. As a result, movements within 500 to 1000 feet would yield similar performance.



As shown above, the project team tested a total of 13 sites, including the current station location, which is labeled "0." Using this population of sites, we then tested various station configurations including 1-station options, 2-station options, and 3-station options. Therefore, we tested several combinations of stations for multiple station scenarios.

(5.1) Analysis of One-Station Options Indicates That the Department Can Improve Current and Future Response Times by Moving the Current Station South Toward the Current City Hall Location.

The project team first tested the best location for a single fire station serving the current city boundaries as well as future development sites. The tables, which follow,

shows the percentage of current and future calls for service reach at 4-, 5-, and 6-minute response time targets:

City of Colusa, California
Best 1-Station Options – Percentage of Calls Reached Within 4 Minutes Drive Time

Site	Current Calls	Colusa Crossings	Brookins Ranch	Colusa Riverbend
Current Station	92.20%	42.86%	8.33%	45.95%
1	95.32%	100.00%	87.50%	40.54%
2	96.30%	66.67%	37.50%	91.89%
3	96.30%	100.00%	100.00%	43.24%
4	94.74%	100.00%	100.00%	13.51%
5	75.24%	100.00%	100.00%	0.00%
6	45.42%	100.00%	100.00%	0.00%
7	58.48%	100.00%	100.00%	0.00%
8	97.27%	28.57%	12.50%	100.00%
9	77.00%	0.00%	0.00%	100.00%
10	94.74%	0.00%	0.00%	100.00%
11	70.18%	0.00%	0.00%	100.00%
12	88.69%	4.76%	0.00%	100.00%
13	96.30%	4.76%	0.00%	100.00%

City of Colusa, California
Best 1-Station Options – Percentage of Calls Reached Within 5 Minutes Drive Time

Site	Current Calls	Colusa Crossings	Brookins Ranch	Colusa Riverbend
Current Station	97.66%	85.71%	62.50%	91.89%
1	96.49%	100.00%	100.00%	97.30%
2	97.47%	100.00%	91.67%	100.00%
3	97.47%	100.00%	100.00%	94.59%
4	97.47%	100.00%	100.00%	78.38%
5	94.74%	100.00%	100.00%	13.51%
6	88.11%	100.00%	100.00%	5.41%
7	92.40%	100.00%	100.00%	10.81%
8	97.47%	80.95%	75.00%	100.00%
9	95.52%	4.76%	0.00%	100.00%
10	97.47%	28.57%	0.00%	100.00%
11	90.64%	4.76%	0.00%	100.00%
12	97.08%	38.10%	100.00%	100.00%
13	97.47%	33.33%	4.17%	100.00%

City of Colusa, California
Best 1-Station Options – Percentage of Calls Reached Within 6 Minutes Drive Time

Site	Current Calls	Colusa Crossings	Brookins Ranch	Colusa Riverbend
Current Station	97.66%	100.00%	100.00%	97.30%
1	97.66%	100.00%	100.00%	100.00%
2	97.66%	100.00%	100.00%	100.00%
3	97.47%	100.00%	100.00%	100.00%
4	97.66%	100.00%	100.00%	100.00%
5	96.30%	100.00%	100.00%	62.16%
6	95.91%	100.00%	100.00%	43.24%
7	97.08%	100.00%	100.00%	62.16%
8	97.47%	100.00%	100.00%	100.00%
9	97.47%	38.10%	50.00%	100.00%
10	97.47%	57.14%	20.83%	100.00%
11	97.27%	52.38%	100.00%	100.00%
12	97.47%	100.00%	100.00%	100.00%
13	97.47%	71.43%	45.83%	100.00%

The following points summarize the analysis presented above:

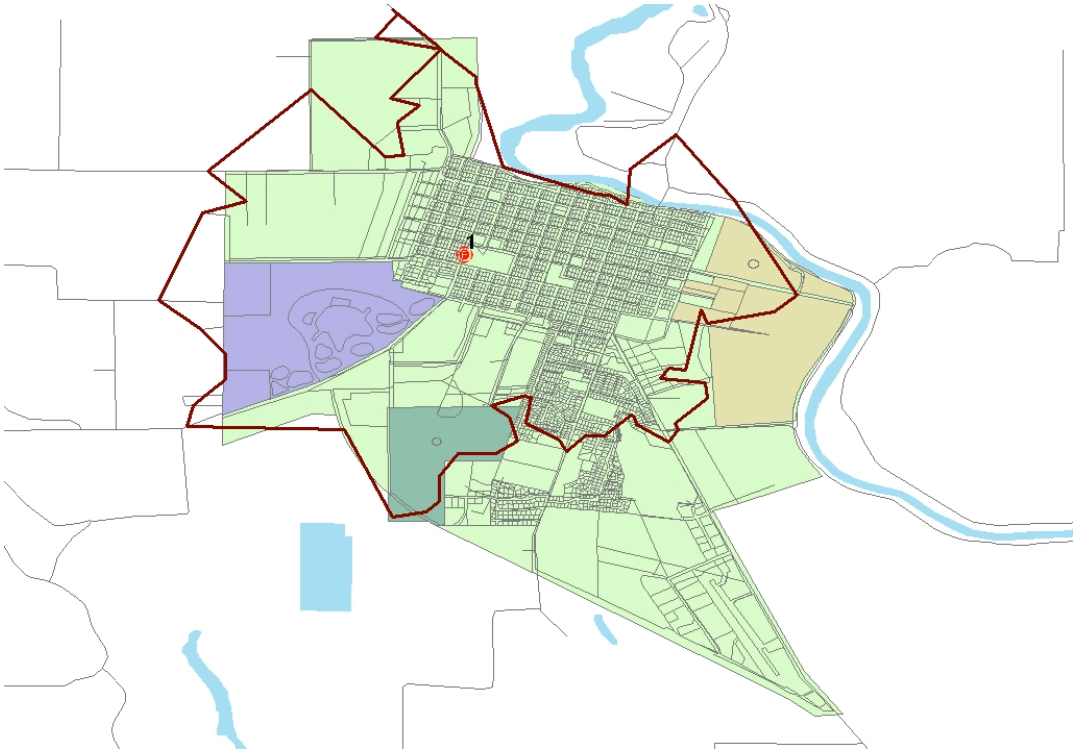
- There are several site options for a single station system which improve response times to current calls for service as well as projected calls in the development areas. The sites shaded in gray all improve response times to current calls for service as well as within new development. Of these options, however, no single site provides 4-minute response coverage to 90% of calls for service in each area.

- The best options are fairly consistent under each performance target. Under the 6-minute initial response time target, however, Sites 8 and 12 become feasible options.

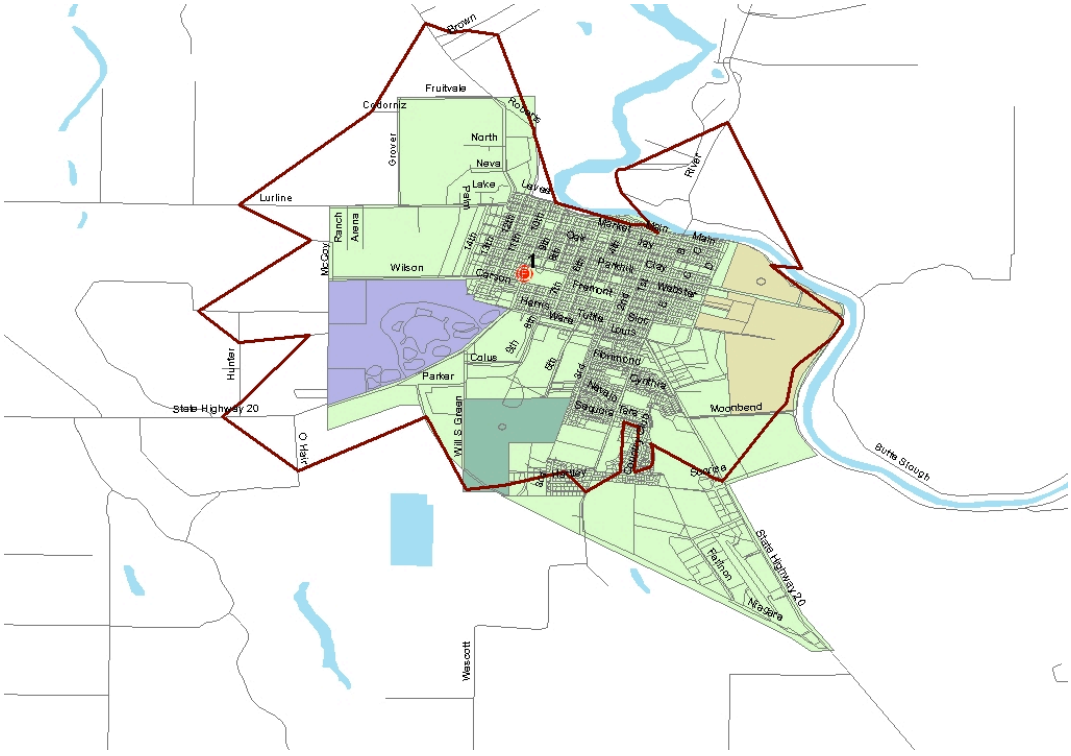
- The best single station options is Site 2 since this facility can reach Colusa Riverbend, which is projected to have the largest number of new calls for service. This site is located at or near the existing City Hall facility.

The maps, which follow, show 4-minute, 5-minute, and 6-minute response time coverage for the best single site options – Sites 1 and 2.

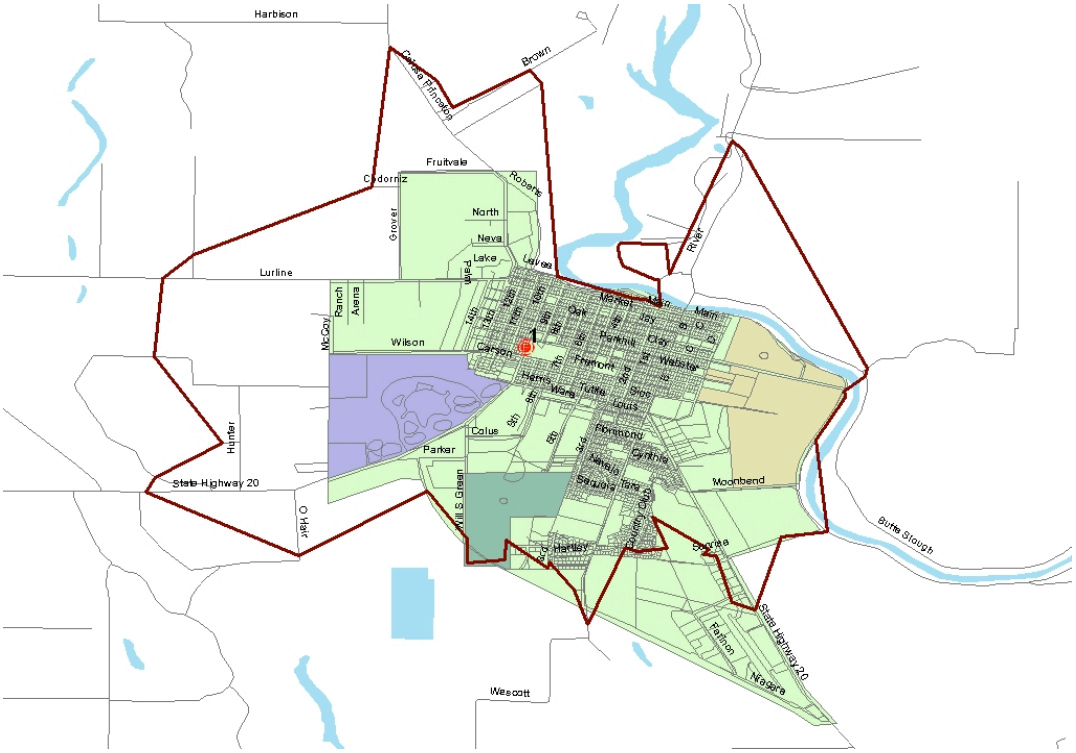
City of Colusa, California
Proposed Fire Station Site 1 – 4 Minutes Drive Time



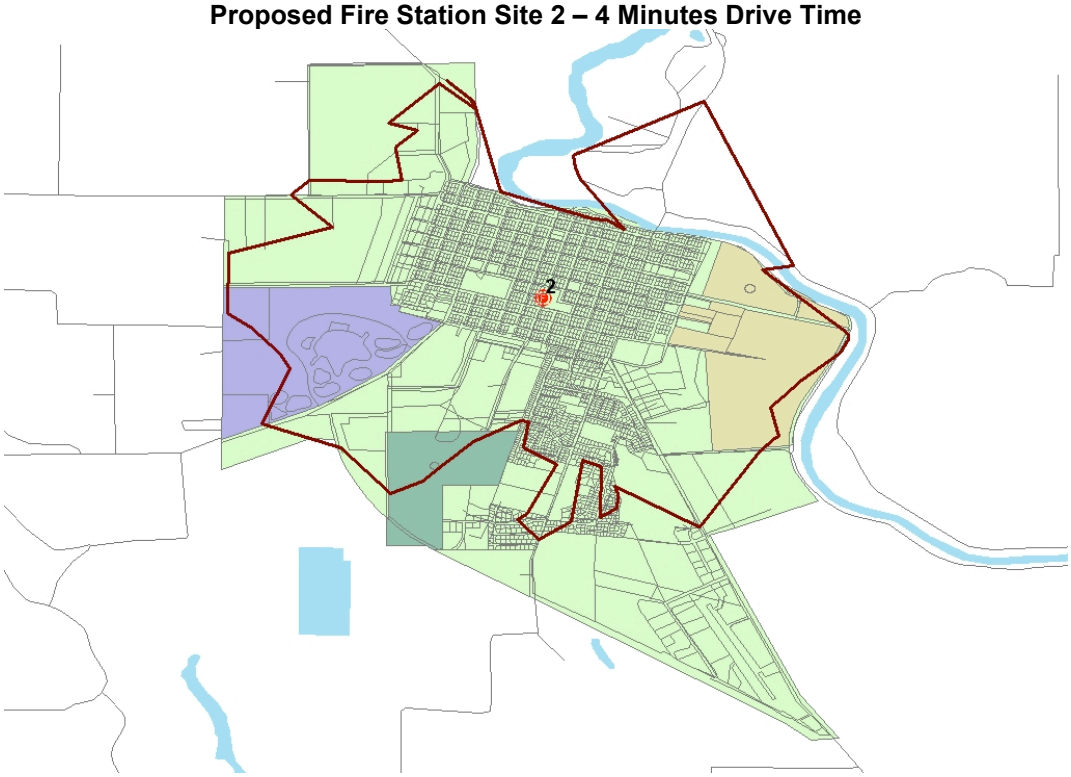
City of Colusa, California
Proposed Fire Station Site 1 – 5 Minutes Drive Time



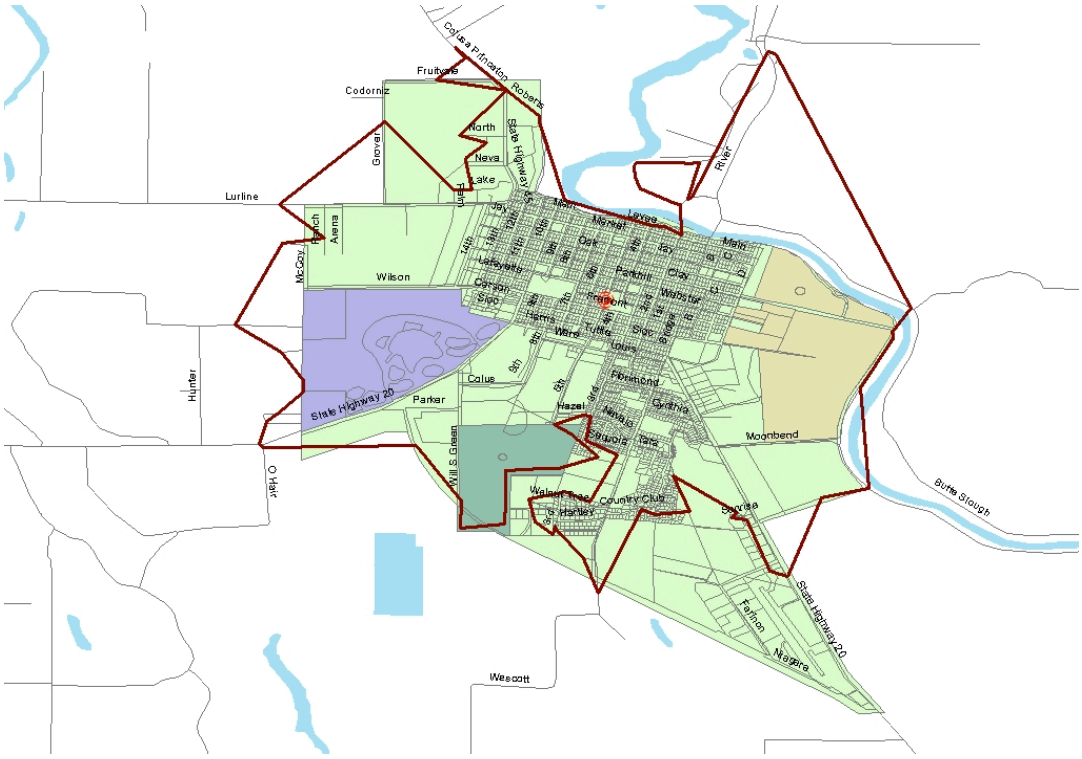
City of Colusa, California
Proposed Fire Station Site 1 – 6 Minutes Drive Time



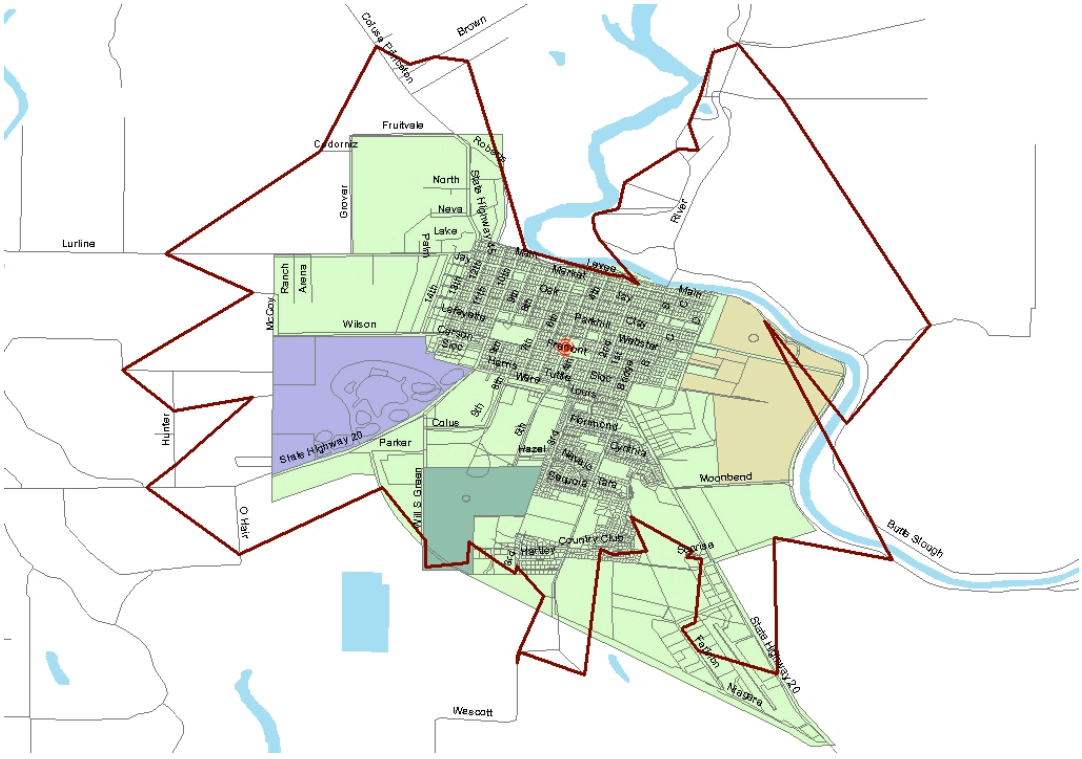
City of Colusa, California
Proposed Fire Station Site 2 – 4 Minutes Drive Time



City of Colusa, California
Proposed Fire Station Site 2 – 5 Minutes Drive Time



City of Colusa, California
Proposed Fire Station Site 2 – 6 Minutes Drive Time



(5.2) Analysis of the Best 2-Station Options Shows That the Best Scenarios Require 2 New Stations on the East and West Sides of the City.

The project team next evaluated the best 2-station options. The tables, below, shows the top 7 options under this scenario, under 4-minute, 5-minute, and 6-minute options:

City of Colusa, California
Best 2-Station Options – Percentage of Calls Reached Within 4 Minutes Drive Time

Sites	Current Calls	Colusa Crossings	Brookins Ranch	Colusa Riverbend
2 & 7	96.30%	100.00%	100.00%	91.89%
1 & 10	96.30%	100.00%	87.50%	100.00%
4 & 10	96.30%	100.00%	100.00%	100.00%
5 & 8	97.27%	100.00%	100.00%	100.00%
4 & 12	97.47%	100.00%	100.00%	100.00%
2 & 5	96.30%	100.00%	100.00%	91.89%
Current & 3	96.30%	100.00%	100.00%	70.27%

City of Colusa, California
Best 2-Station Options – Percentage of Calls Reached Within 5 Minutes Drive Time

Sites	Current Calls	Colusa Crossings	Brookins Ranch	Colusa Riverbend
2 & 7	97.47%	100.00%	100.00%	100.00%
1 & 10	97.66%	100.00%	100.00%	100.00%
4 & 10	97.47%	100.00%	100.00%	100.00%
5 & 8	97.47%	100.00%	100.00%	100.00%
4 & 12	97.47%	100.00%	100.00%	100.00%
2 & 5	97.47%	100.00%	100.00%	100.00%
Current & 3	97.47%	100.00%	100.00%	97.30%

City of Colusa, California
Best 2-Station Options – Percentage of Calls Reached Within 6 Minutes Drive Time

Sites	Current Calls	Colusa Crossings	Brookins Ranch	Colusa Riverbend
2 & 7	97.66%	100.00%	100.00%	100.00%
1 & 10	97.66%	100.00%	100.00%	100.00%
4 & 10	97.47%	100.00%	100.00%	100.00%
5 & 8	97.66%	100.00%	100.00%	100.00%
4 & 12	97.66%	100.00%	100.00%	100.00%
2 & 5	97.66%	100.00%	100.00%	97.30%
Current & 3	97.66%	100.00%	100.00%	100.00%

The following points highlight the information in the table above:

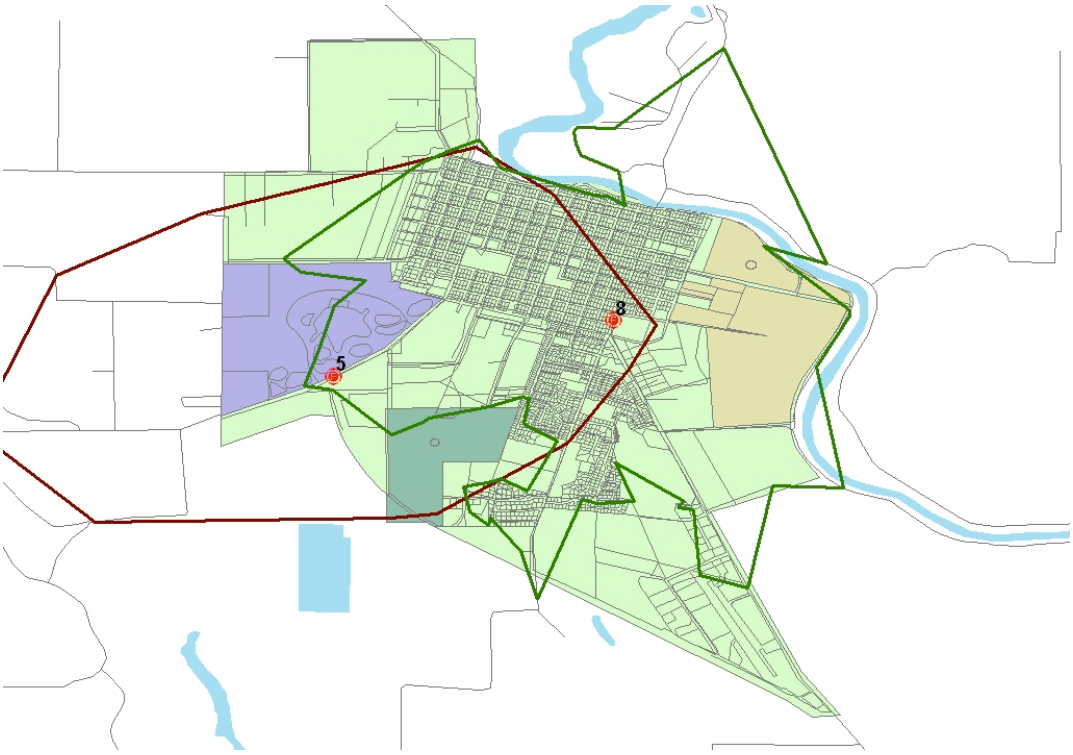
- There are several site options for a two station system which improve response times to current calls for service as well as projected calls in the development areas. The sites shaded in gray all improve response times to current calls for service and provide 100% coverage of projected calls for service within 4-minutes of drive time.

- The best 2-station options include Sites 4 &10, 5 & 8, 4 &12, and 2 & 5. Site 4 is located on State Highway 20 just northeast of Will S. Green Avenue. Site 10 is located on Clay Street just east of D Street. Site 5 and Site 8 are located southwest of Site 4 on State Highway 20 and on Bridge Street just south of Carson Street respectively. Site 2 is located at the current City Hall facilities, while Site 12 is located on the eastern side of the City on State Highway 20 just north of Moonbend Road.

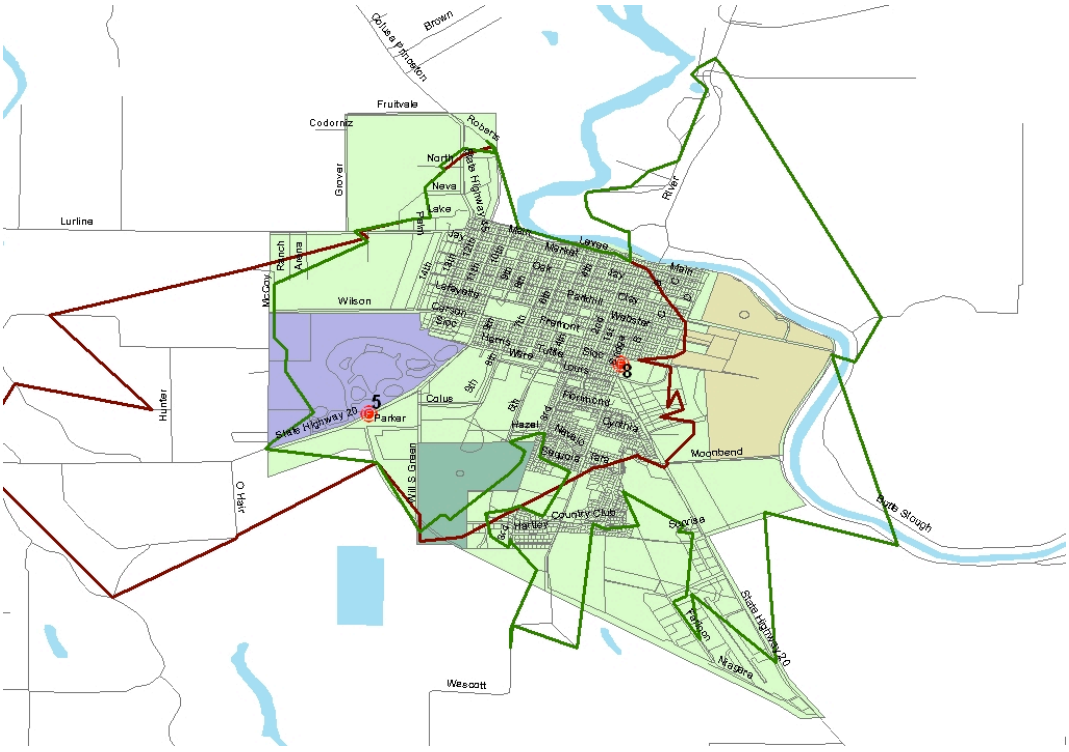
- The best 2-station option including the current facility includes an additional station at Site 3, located just north of Colusa Avenue on 8th Street. This scenario provides 90% coverage to all areas, with the exception of Colusa Riverbend which receives only 70% reliability at 4 minutes of drive time.

The maps, which follow, show 4-minute, 5-minute, and 6-minute response time coverage for the best 2-station options – Sites 5 & 8 and Sites 4 & 12.

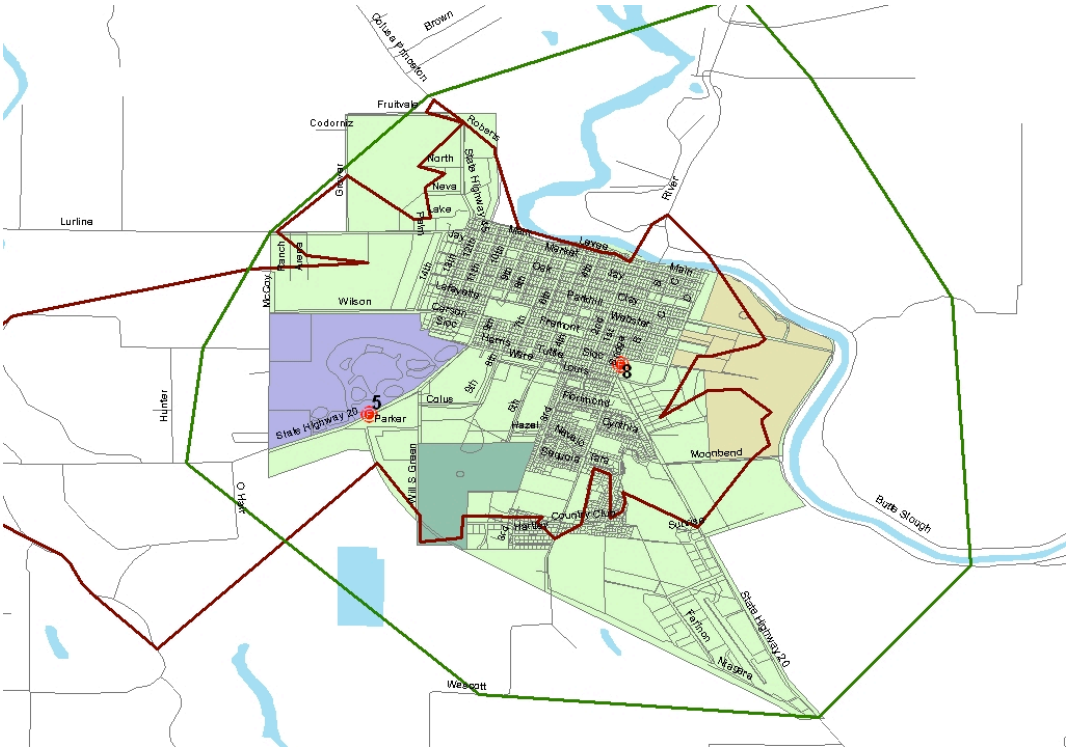
City of Colusa, California
Proposed Fire Station Sites 5 & 8 – 4 Minutes Drive Time



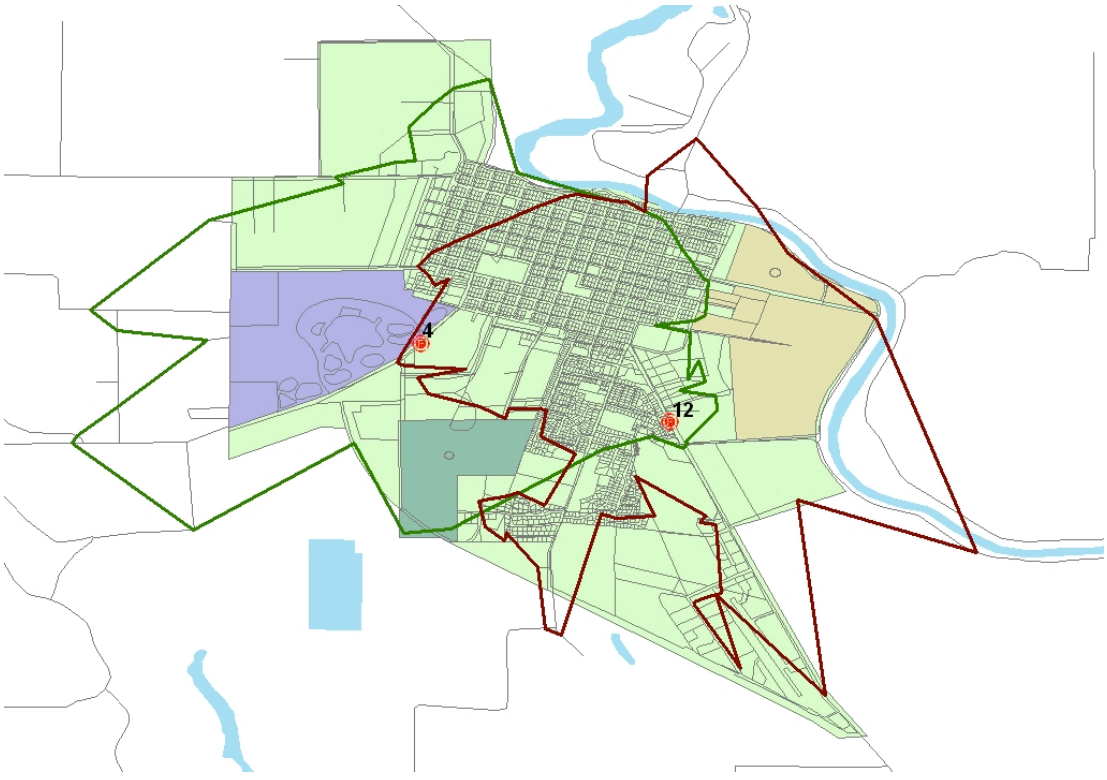
City of Colusa, California
Proposed Fire Station Sites 5 & 8 – 5 Minutes Drive Time



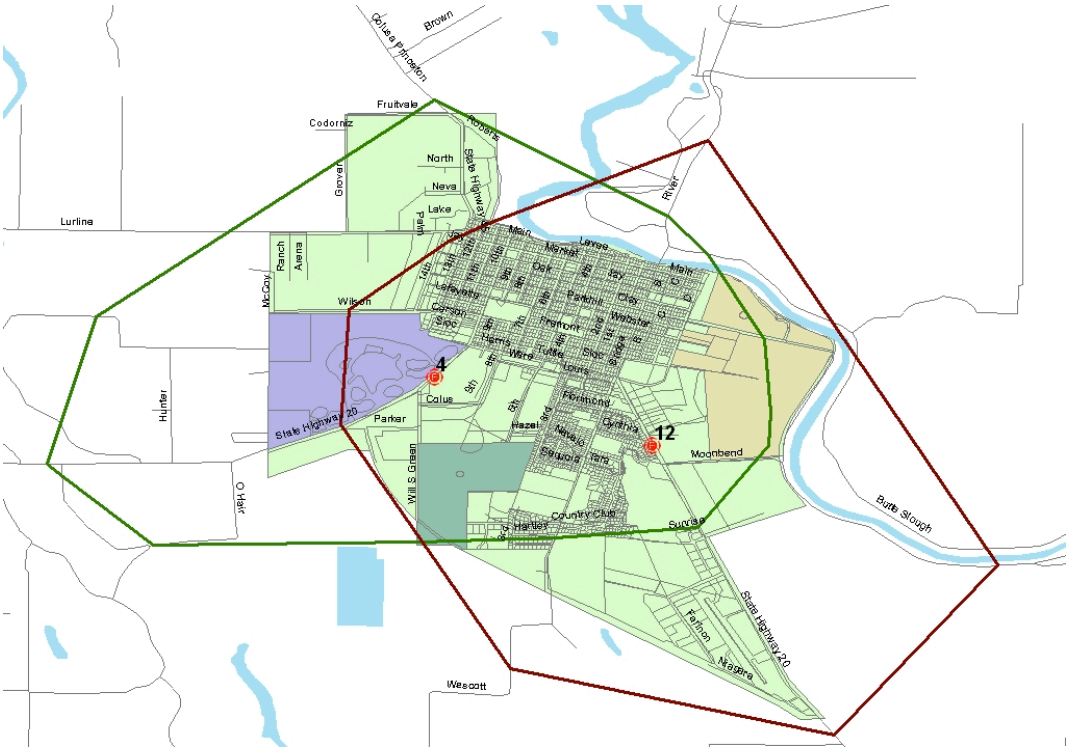
City of Colusa, California
Proposed Fire Station Sites 5 & 8 – 6 Minutes Drive Time



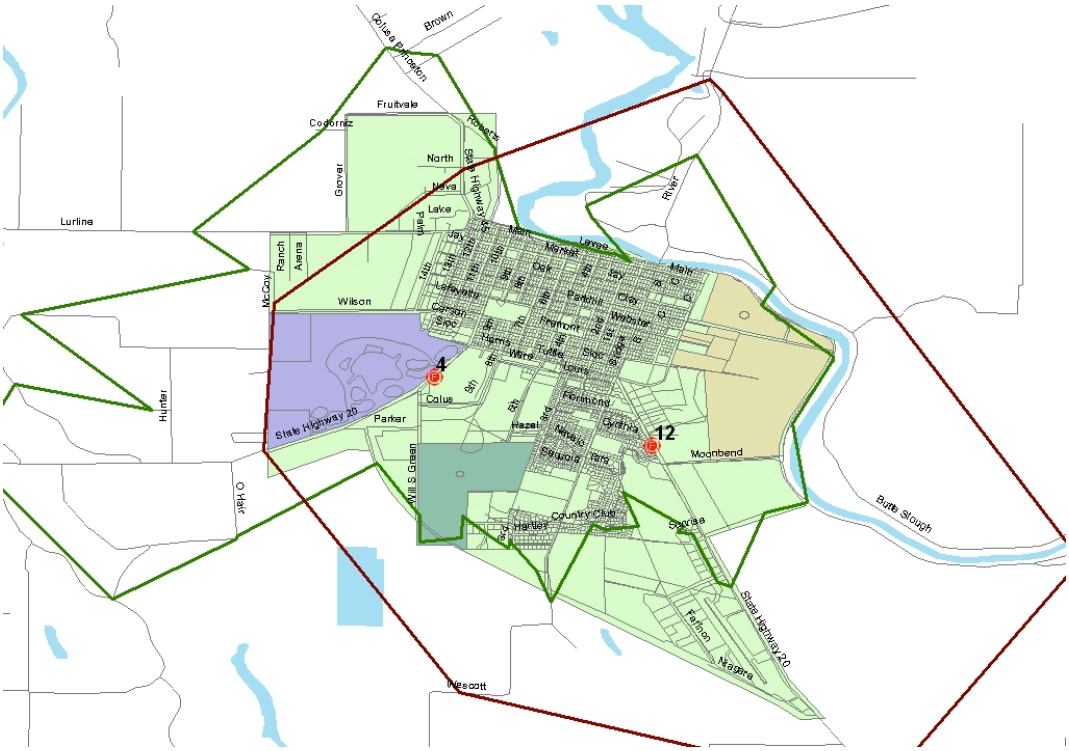
City of Colusa, California
Proposed Fire Station Sites 4 & 12 – 4 Minutes Drive Time



City of Colusa, California
Proposed Fire Station Sites 4 & 12 – 5 Minutes Drive Time



City of Colusa, California
Proposed Fire Station Sites 4 & 12 – 6 Minutes Drive Time



As shown above, there are several two-station options, which provide high levels of service based on current and future workloads. However, these options require that the current station be moved to a new location. In addition, the best 2-station options provide limited coverage to the far northern section of the proposed Sphere of Influence located near the Colusa Casino. While new development is not proposed for this area in the near future, the City may want to plan for the future by ensuring adequate response coverage in this area.

(5.3) The Most Effective Three Station Options Include the Current CFD Station and One Station East and One Southwest of the City.

The project team next evaluated 3-station alternatives and estimated the impact of each option on targeted response times. The table, below, shows the results of our analysis:

City of Colusa, California
Best 3-Station Options – Percentage of Calls Reached Within 4 Minutes Drive Time

Sites	Current Calls	Colusa Crossings	Brookins Ranch	Colusa Riverbend
0 & 13 & 7	97.47%	100.00%	100.00%	100.00%
0 & 12 & 5	97.47%	100.00%	100.00%	100.00%
0 & 7 & 12	97.47%	100.00%	100.00%	100.00%
0 & 10 & 4	96.30%	100.00%	100.00%	100.00%
0 & 9 & 5	95.13%	100.00%	100.00%	100.00%

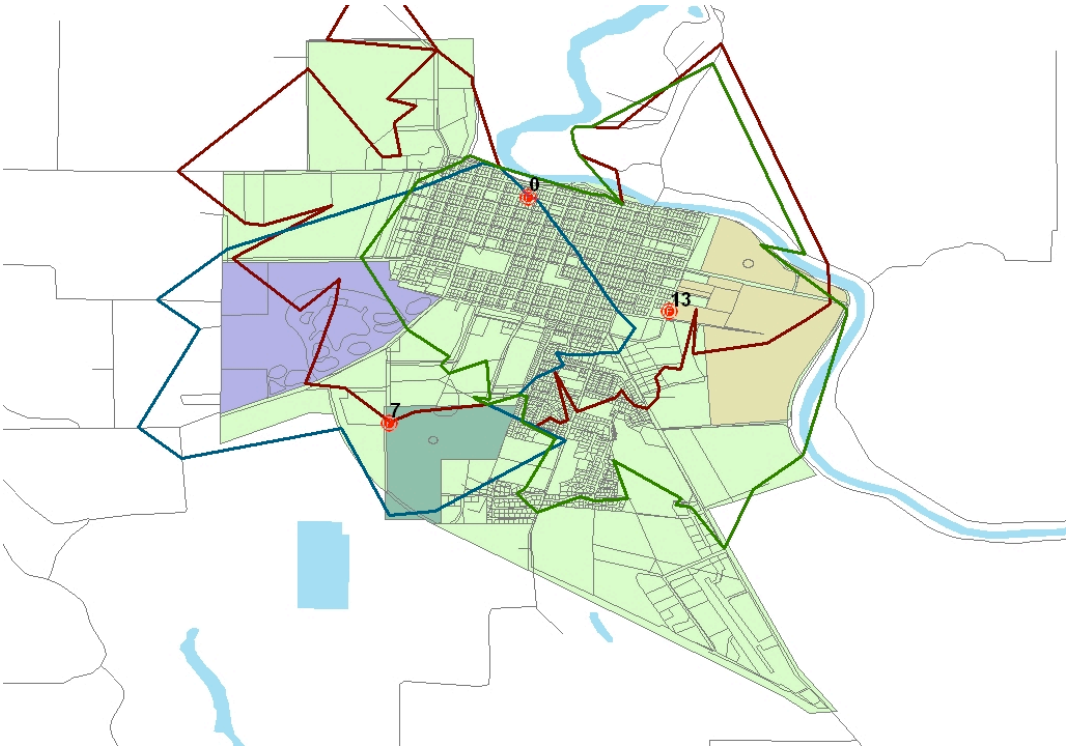
The following points summarize the information presented above:

- Each of the 5 options shown above provide targeted service levels to the current city boundaries as well as the three developments. All options provide 4-minute response time coverage to 100% of calls for service in new development areas. Because of the high level of response coverage, the project team did not calculate response time performance at 5 minutes and 6 minutes.

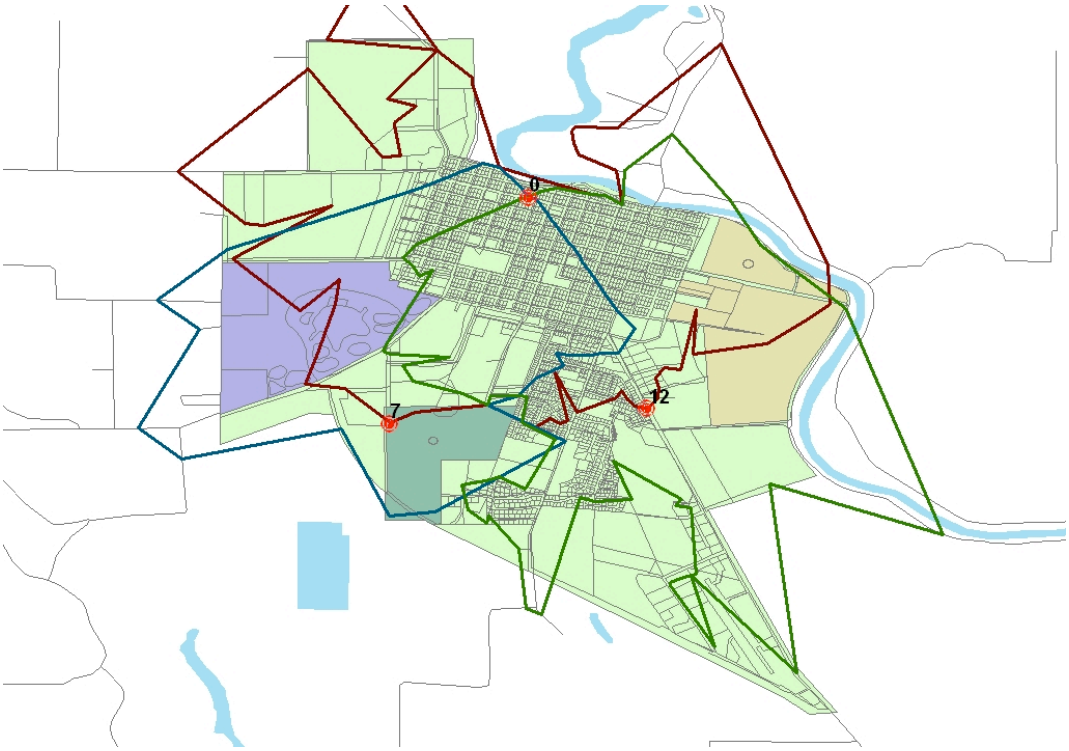
- The best performing options are: Sites 0 (current station), 13, and 7; Sites 0, 12 and 5; Sites 0, 7 and 5. Each of these options significantly enhances service levels.

The maps, which follow, shows 4-minute drive time coverage from the three best options listed above (each station is color coded to show four minutes of drive time):

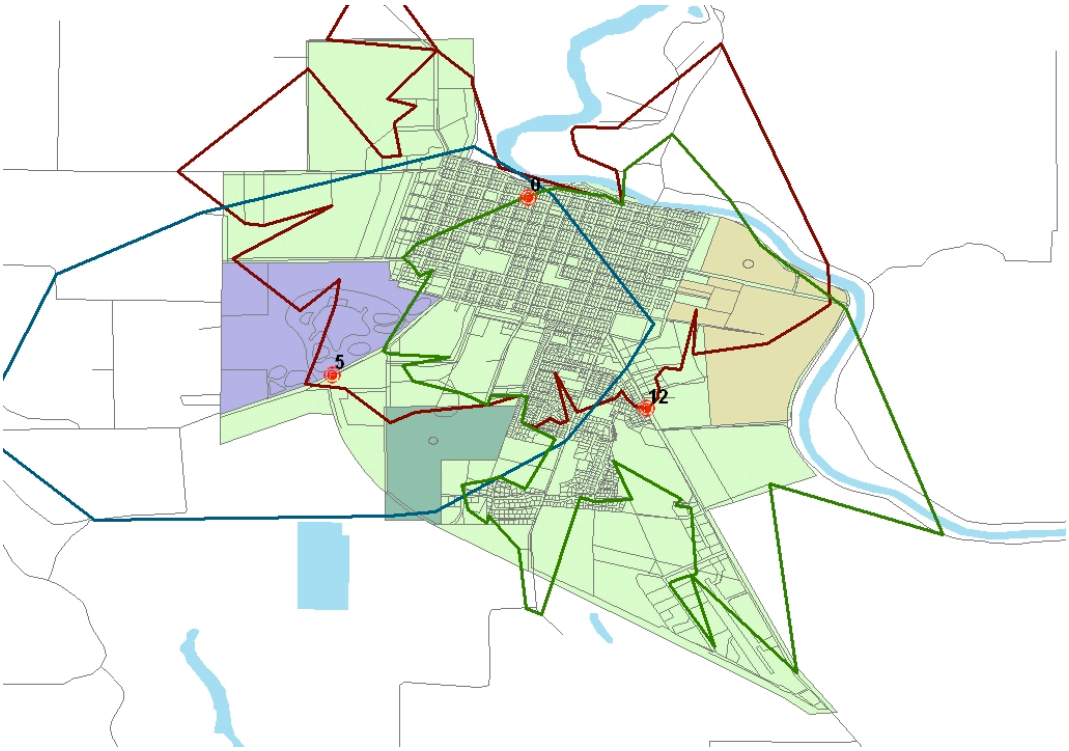
City of Colusa, California
Proposed Fire Station Sites 0, 13, and 7 – Four Minute Drive Time



City of Colusa, California
Proposed Fire Station Sites 0, 12, and 7 – Four Minute Drive Time



City of Colusa, California
Proposed Fire Station Sites 0, 13, and 7 – Four Minute Drive Time



Each of the three options provide a high level of service to the current and future boundaries of the City. From a planning perspective, however, the City should pursue the option that provides the most flexibility in dealing with future development at the extremities of the proposed Sphere of Influence. This will allow the City to provide service to developing areas such as the Industrial Park located on the City's Southeast side. The timing of construction of these two stations will depend on the anticipated construction of the three major communities. Given the recent downturn in the housing market, the City should discuss the timing of these projects with developers.

Based on the project team's interviews with Planning Department personnel, the first project to begin would be the Brookins Ranch project. The project team has also learned that a site within the Brookins development has already been identified by the City for location of a new fire station. As shown above, a location within this development would provide a high level of service of the City, the Brookins development, and the Colusa Crossing development. As a result, the City should plan for a new station at this location. In addition, once a timeframe is determined for the Colusa Riverbend project, the City should plan for the addition of a third station on the east side of the City.

The project team believes that these stations should be staffed using the same approach as the current station, where a minimum of 1 personnel is on duty at all times, supplemented with volunteers and paid on-call staff. The estimated cost of 1 position per shift, 1 Captain at each station, plus 1 extra position at each station to provide coverage for leaves at all three stations is shown below:

Cost of Staffing 2 New Stations

Position	Number	Salary	Benefits	Total Cost	Cost
Captain	1	$44,208	$20,897	$65,105	$65,105
Engineer	3	$33,492	$18,161	$51,653	$154,959
		Station Personnel Cost			**$220,064**
		Number of New Stations			**2**
		Total Cost			**$440,128**

* 1 FAE on 2 Shifts plus 1 for relief

As shown above, the project team estimates that staffing each new station will cost $220,000 in salary and benefits based on the staffing plan of 1 person per shift, 1 Station Captain, and 1 relief position (which can be used to back-fill the central station as well).

In addition to the personnel costs, the project team estimates that a new fire engine will cost approximately $300,000 for each station.

Recommendation: The City of Colusa should plan for the construction of 2 new fire stations. The first station should be built on the west side of the City at the Brookins Ranch development, this facility should be built over the next 1 to 2 years. In addition, depending on the timing of the Colusa Riverbend project, a new station on the east side of the City should be constructed. The estimated cost of staffing both of these stations with a minimum of 1 person per shift is $440,128 annually. In addition, a new fire engine for each station will cost approximately $300,000 each, or $600,000 total.

6. THE PROJECT TEAM DEVELOPED SPACE PLANS AND COST ESTIMATES FOR TWO NEW FIRE STATIONS.

Don Dommer and Associates also developed space plans for two new stations in consultation with the Fire Department. In developing a space plan for a new facility, the project team programmed a new training facility. Currently, the Department does not have adequate classroom space or grounds for a training tower. The table, below, presents a space plan for a single company station:

Colusa Fire Station No. 2

Model Conceptual Program Space	5/6/08 No.	Area/SF	Total/SF
Crew Quarters			
Lobby	1	80	60
Shift Office Work Stations	2	80	160
Duty Captain's Office	1	120	120
Public Toilets	2	120	240
Training Room	50	30	1,500
Media, Props, Storage,	2	120	240
Kitchen	1	200	200
Dining	1	200	200
Dayroom	1	220	220
Captain's Dorm	1	190	190
Engineer/Firefighter Dorms	2	120	240
Crew Baths	2	105	210
Exercise Room	1	250	250
Electrical	1	120	120
Data	1	80	80
Mechanical	1	60	60
Janitor Closet	1	30	30
Corridors, Walls and Layout	18%		742
Subtotal			**4,862**

Apparatus Bays, Operations and Building Support			
Apparatus Bay	2	1350	2,700
Radio Chargers, Map	1	20	20
Janitor Closet	1	30	30
Shop	1	60	60
Turnout Room, Extractor	1	150	150
Medical Supplies	1	20	20
Corridors, Walls and Layout	8%		238
Sub Total			**3,218**
Building Total			**8,080**

Station Site Program		
ADA/Visitor Parking	2	
30' Front Apron	1	
75' Rear Apron	1	
Patio	1	
Crew Parking	8	
Training Parking	40	
Emergency Generator	1	
Fuel Station (gas & diesel)	1	
Hose Drying Rack	1	
Trash Enclosure	1	
Monument Sign	1	
Flagpole	1	
Site Lighting	1	
Subtotal		**30,000**

Training Site		
Grounds and Tower	1	30,000
Drafting Pit	1	
Parking	10	
Storage Building		
Subtotal		**20,000 to 40,000**

As shown above, depending on the size of the training grounds and tower site, as well as the number of parking spaces, the project team estimates that a new building with training facilities would require 8,080 square feet of building space and 30,000 square feet of site space. In addition, a training site would require between 20,000 to 40,000 square feet. This station will require a fairly large piece of property, at least 1.5 acres. In addition, the City should consider the adjacent uses when locating the training tower since the use of smoke may be an issue for nearby residences.

The project team also developed a space plan for a third fire station. The table, which follows, shows the total square footage needed for each programmatic area:

Colusa Fire Station No. 3

Model Conceptual Program Space	5/6/08 No.	Area/SF	Total/SF
Crew Quarters			
Lobby	1	60	60
Shift Office Work Stations	3	65	195
Public Toilet	1	45	45
Kitchen	1	200	200
Dining	1	200	200
Dayroom	1	220	220
Captain's Dorm	1	190	190
Engineer/Firefighter Dorms	2	120	240
Crew Baths	2	105	210
Exercise Room	1	250	250
Electrical	1	100	100
Data	1	80	80
Mechanical	1	60	60
Janitor Closet	1	40	40
Corridors, Walls and Layout	18%		376
Subtotal			**2,466**

Apparatus Bays, Operations and Building Support			
Apparatus Bay	2	1,350	2,700
Radio Chargers, Map	1	20	20
Janitor Closet	1	40	40
Shop	1	40	40
Turnout Room, Extractor	1	150	150
Medical Supplies	1	20	20
Corridors, Walls and Layout	8%		238
Sub Total			**3,208**

Building Total	**5,674**

Station Site Program		
ADA/Visitor Parking	2	
Crew Parking	8	
30' Front Apron	1	
75' Rear Apron	1	
Patio	1	
Emergency Generator	1	
Trash Enclosure	1	
Monument Sign	1	
Flagpole	1	
Site Lighting	1	
Subtotal		**25,000**

As shown on the previous page, the total building space is estimated at 5,674 square feet. A total of 25,000 square feet is estimated for site space. This space plan is also based on the assumption of a single company station.

7. THE PROJECT TEAM ESTIMATED THE COSTS OF TWO NEW FACILITIES BASED ON THE PROPOSED SPACE PLANS.

The project team prepared cost estimates for design and construction of two new facilities for the Colusa Fire Department. The table, which follow, shows the cost estimates for the new stations:

NEW FIRE STATION NO 2 COST ANALYSIS
City of Colusa, CA
Don Dommer Associates, Architects and Planners

		May-08
Single Engine Company		
Wood Frame Construction		
Fire Station		
Building Area		8,080
Site Area		30,000
Ratio of Lot Area / Floor Area		3.7
Construction Cost Estimate		$3,434,000
Cost of Construction per square foot		$425
Training Grounds (note 5)		
Site Development	Allowance	360,000
Tower & Drafting Pit	Allowance	250,000
Construction Cost Estimate	Allowance	$610,000
Subtotal		$4,044,000
Soft Costs		$1,374,960
Estimated Total Project Costs 2009		**$5,418,960**
Estimated Total Project Costs 2010 5% Escalation		**$5,689,908**
Estimated Project Costs 2011 with 5% Escalation		**$5,974,403**
Estimated Project Costs 2012 with 4% Escalation		**$6,213,380**

Soft Costs	**% of Construction Cost**
Design/Program Fees	10%
Survey, Soils Investigation/ Hazardous Materials	2%
Project Management	4%
Permits/Utilities	3%
Furniture, Fixtures and Equipment	3%
Design and Construction Contingency	10%
Printing, Advertising, and Reimbursables	2%
Total Soft Costs as % of Construction	**34%**

Notes

1. Soft Costs are conservative, generalized and may be lower for the larger buildings and higher for the smaller buildings.
2. The items included in Soft Costs may vary from community to community.
3. Construction cost escalation is estimated to be 5% for 2010 and 2011, and lower thereafter.
4. Calculate construction cost escalation to half way through construction schedule.
5. Assume a simple paved training grounds of 30,000 SF, prefab training tower.
6. Poor or contaminated soils may add significantly to the project cost, as can demolition or other atypical project conditions.
7. Other types of construction are possible but wood frame is typically less.
8. Land Costs are not included.

As shown above, the project team estimates that a new fire station with training grounds would cost $5.4 million if performed in 2009 and approximately 5% higher each year thereafter.

The estimated costs for a third station, without a training site component, is shown below:

NEW FIRE STATION NO. 3 COST ANALYSIS
City of Colusa, CA
Don Dommer Associates, Architects and Planners

May-08

Single Engine Company	
Wood Frame Construction	
Fire Station	
Building Area	5,674
Site Area	25,000
Ratio of Lot Area / Floor Area	4.4
Construction Cost Estimate	$2,411,450
Cost of Construction per square foot	$425
Soft Costs	$819,893
Estimated Total Project Costs 2009	**$3,231,343**
Estimated Total Project Costs 2010	**$3,489,850**
Estimated Project Costs 2010 with 5% Escalation	**$3,769,038**
Estimated Project Costs 2011 with 4% Escalation	**$3,995,181**

Soft Costs	**% of Construction Cost**
Design/Program Fees	10%
Survey, Soils Investigation/ Hazardous Materials	2%
Project Management	4%
Permits/Utilities	3%
Furniture, Fixtures and Equipment	3%
Design and Construction Contingency	10%
Printing, Advertising, and Reimbursables	2%
Total Soft Costs as % of Construction	**34%**

Notes
1. Soft Costs are conservative, generalized and may be lower for the larger buildings and higher for the smaller buildings.
2. The items included in Soft Costs may vary from community to community.
3. Construction cost escalation is estimated to be 5% for 2010 and 2011 and lower there after.
4. Calculate construction cost escalation to half way through construction schedule.
5. Poor or contaminated soils may add significantly to the project cost as can demolition or other atypical project conditions.
6. Other types of construction are possible but wood frame is typically less.
7. Land Costs are not included.

As shown above, the project team estimates that a new third station will cost between $3.2 million and $3.9 million depending on the timing of construction. DDA estimates a 24 to 28 month construction schedule. Costs are estimated at one-half the construction schedule. For example, if a project is halfway complete in 2009, the estimated cost will be $3,231,343.

5. ANALYSIS OF FINANCING ALTERANATIVES

This chapter provides the project team's assessment of financing options for the City of Colusa.

1. BACKGROUND

In 1978, nearly two-thirds of California's voters passed Proposition 13, reducing property tax rates on homes, businesses, and farms by about 57%. According to the amended State constitution, property tax rates could not exceed 1% of the property's market value and valuations could not grow by more than 2% per annum unless the property was sold. In addition, Proposition 13 required that all State tax rate increases be approved by a two-thirds vote of the legislature and that local tax rates also have to be approved by a vote of the people.[1]

Since Proposition 13, many local governments have relied increasingly upon other revenue tools to finance local services (which will be defined later) such as: assessments, property-related fees, and a variety of small general-purpose taxes (such as hotel, business license, and utility user taxes).

In 1996, Proposition 218 was passed. A constitutional initiative, it applies to each of California's nearly 7,000 cities, counties, special districts, schools, community college districts, redevelopment agencies, and regional organizations. In general, the intent of Proposition 218 is to ensure that all taxes and most charges on property owners are subject to voter approval. In addition, Proposition 218 sought to curb some perceived abuses in the use of assessments and property-related fees, specifically the use of the

[1] Proposition 13: A Look Back by Joel Fox

following revenue-raising tools to pay for general governmental services rather than property-related services.[2] The following table gives a general summary of which local revenues that are affected by Proposition 218:

AFFECTED	NOT DIRECTLY AFFECTED
TAXES	
New and some recently imposed "general" taxes	Property taxes
	Bradley-Burns sales taxes
	Special taxes
	Vehicle license taxes
	Redevelopment Revenues
	Mello-Roos taxes
	Timber taxes
ASSESSMENTS	
All new or increased assessments	Most existing assessments
Some existing assessments	
FEES	
Property-related fees. (Fees imposed as an "incident of property ownership," not including gas, electric, or developer fees.)	Fees that are not property-related

2. REVENUE TERMS AND DEFINITIONS.

The extended table, which starts below, describes and defines all available revenue sources and identifies their potential for use in support of the fire service.[3]

[2] Understanding Proposition 218: CA LAO December '96
[3] A Primer on California City Finance by Michael Coleman November '02

TERM	DEFINITION
Assessments	These are charges levied to pay for public improvements or services within a predetermined district or area, according to the benefit the parcel receives from the improvement or services. The rules and procedures for assessments are provided by the California Constitution, Article XIII, section C & D (Prop. 218). Assessments are usually collected on the regular property tax bill. They are different, however, from the regular 1 percent property tax and property tax debt overrides in that assessment rates are not based on the value of the property. Assessments are also different from another charge that sometimes is placed on the property tax bill, parcel taxes. Unlike parcel taxes, assessments typically were not voter approved prior to Proposition 218. In addition, assessment rates were linked to the cost of providing a service or improvement, whereas parcel taxes could be set at any amount. Typical assessments include those for flood control improvements, streets, and lighting and landscaping. **Use: Cities, counties and special districts.**
Business License Tax	Most cities in California levy a business license tax. Tax rates are determined by each city, which collects the taxes. In all cases, cities have adopted their tax as a general tax. On average, the business license tax provides about 3 percent of city general revenue, and often 10 percent or more. **Use: Cities and counties**
Development Impact Fee[4]	One time charges applied to new developments to raise revenue for the construction or expansion of capital facilities located outside the boundaries of the new development that benefit the contributing development. Impact fees, for example, are assessed and dedicated principally for the provision of additional water and sewer systems, roads, schools, libraries and parks and recreation facilities made necessary by the presence of new residents in the area. The funds collected cannot be used for operation, maintenance, repair, or replacement of capital facilities. **Use: Cities, counties and special districts.**
Enterprise Service Charges and Fees	Service-fee-supported city utilities and enterprises constitute a substantial portion of most city budgets. These include water, sewer, electric, solid waste, harbor/marina and airport services. In some cities, a public or private agency other than the city provides and funds these services. **Use: Cities, counties and special districts**

[4] Development Impact Fees: A Primer by Carrion and Libby

TERM	DEFINITION
Fees	A voluntary charge imposed on an individual for a service provided to that person. A fee may not exceed the estimated reasonable cost of providing the particular service or facility for which the fee is charged, plus overhead. Cities have the general authority to impose fees (charges and rates) under the cities' police powers granted by the state Constitution (Article XI, section 7; Proposition 218). There are specific procedures in State law for fee and rate adoption. Prop. 218 provides special rules for property-related fees used to fund property-related services. Examples of city fees include water service, sewer service connection, building permits, recreation classes and development impact fees. **Use: Cities, counties and special districts**
Intergovernmental Revenue	Local governments also receive a substantial amount of revenue from other government agencies, principally the state and federal governments. These revenues include general or categorical support monies called "subventions," as well as grants for specific projects, and reimbursements for the costs of some state mandates. Intergovernmental revenues provide 13 percent of city revenues statewide. In the early 1990s, the State experienced a recession and budget deficit. To offset its fiscal shortfall, the state shifted property tax revenues from cities to local schools. This ERAF shift continues today and is discussed later. **Use: Cities, counties and special districts**
Mello Roos[5]	This is an area where a special tax is imposed on those real property owners within a Community Facilities District. This district has chosen to seek public financing through the sale of bonds for the purpose of financing certain public improvements and services. These services may include streets, water, sewage and drainage, electricity, infrastructure, schools, parks, fire protection and police protection to newly developing areas. The services may be financed only to the extent of new growth, and may include both services and facilities. The tax paid is used to make the payments of principal and interest on the bonds. **Use: Cities and counties.**

[5] About Mello-Roos by Cal Land '01

TERM	DEFINITION
Property Tax	The property tax is an ad valorem (value-based) tax imposed on real property and tangible personal property. (State law provides a variety of exemptions to the property tax, including most government-owned property; nonprofit, educational, religious, hospital, charitable and cemetery properties; the first $7,000 of an owner-occupied home; business inventories; household furnishings and personal effects; timber; motor vehicles, freight and passenger vessels; and crops and orchards for the first four years). California Constitution Article XIIIA (Prop. 13) limits the property tax to a maximum 1 percent of assessed value, not including voter-approved rates to fund debt. The assessed value of property is capped at the 1975–76 base year rate plus inflation— or 2 percent per year. Property that declines in value may be reassessed at the lower market value. Property is reassessed to current full value upon a change in ownership (with certain exemptions). Property tax revenue is collected by counties and allocated according to state law among cities, counties, school districts and special districts. The share of property tax revenue allocated depends on a variety of factors, including historical allocation of tax dollars, the number of taxing entities in a tax rate area, etc. **Use: Cities, counties and special districts.**
Sales Tax	The sales tax that an individual pays on a purchase is collected by the State Board of Equalization and includes a State sales tax, the locally levied “Bradley Burns” sales tax and several other components. The sales tax is imposed on the total retail price of any tangible personal property. (State law provides a variety of exemptions to the sales and use tax, including resale, interstate sales, intangibles, food for home consumption, candy, bottled water, natural gas, electricity and water delivered through pipes, prescription medicines, agricultural feeds, seeds, fertilizers and sales to the federal government). **Use: Cities and counties.**
Transient Occupancy Tax	Like the business license tax, TOT may be levied by a city under the police powers granted cities in the State constitution. More than 380 cities in California impose TOT on people staying for no more than 30 days in a hotel, inn or other lodging facility. Rates range from 4 to 15 percent of the cost of the lodging. In nearly all cases, cities have adopted these as general taxes, but some cities make a point of budgeting the funds for tourism or business-development-related programs. The TOT provides 7 percent of a city’s general revenues on average, and often as much as 17 percent. **Use; Cities and counties.**
Use Tax	A use tax is imposed on the purchaser for transactions in which the sales tax is not collected. Sales and use tax revenue received by cities is general-purpose revenue and is deposited into a city’s general fund. Although cities vary widely, on average, sales and use tax revenue provides 30 percent of city general purpose revenue, and often as much as 45 percent. **Use: Cities and counties.**

TERM	DEFINITION
Vehicle License Fee	The VLF is a tax on the ownership of a registered vehicle in place of taxing vehicles as personal property. (Vehicles that are exempt from VLF include government-owned, diplomatic, civil air patrol and farm vehicles; privately owned school buses; and vehicles owned by blind or amputee veterans. Various classes of specialized vehicles are exempt but are instead subject to the property tax. These include farm trailers, privately owned firefighting vehicles and forklifts.) Since 1948, the VLF tax rate had been 2 percent. In 1998, the Legislature and governor began cutting the tax, backfilling the loss to local governments with a like amount of State general fund money. The VLF is collected by the State Department of Motor Vehicles and allocated to cities and counties according to law (after retaining several hundred million dollars for the administrative costs of state agencies). Most of the allocation to cities is based on population and provides 16 percent of general revenues to the average city budget, and often as much as 24 percent. **Use: Cities and counties**
Utility User Tax	More than 150 cities, collectively representing a majority of the state's population, impose a utility user tax. UUT rates vary from 1 to 11 percent and are levied on the users of various utilities, depending on the local ordinance and including telephone, electric, gas, water and cable television. For those that impose the UUT, it provides an average of 15 percent of general revenue, and often as much as 22 percent. **Use: Cities and counties.**

3. FUND DESCRIPTION.

The following provides a brief description of where funds are accounted.

- **Special revenue funds** are used to account for activities paid for by taxes or other designated revenue sources that have specific limitations on use according to law. For example, the State levies gas taxes and subvenes some of these funds to cities and counties. A local government deposits gas tax revenue in a special fund and spends the money for streets and road-related programs, according to law.

- **Enterprise funds** are used to account for self-supporting activities that provide services on a user-charge basis. For example, many cities provide water treatment and distribution services to their residents. Users of these services pay utility fees, which the city deposits in a water enterprise fund. Expenditures for water services are charged to this fund.

- **General fund** is used to account for money that is not required legally or by sound financial management to be accounted for in another fund. Major sources of city general fund revenue include sales and use tax, property tax, the vehicle license fee subvention from the state, and local taxes, including business license tax, hotel tax and utility user taxes.

The next section describes how various taxes can be implemented in the State.

4. REQUIREMENTS FOR IMPLEMENTATION[6].

In order to raise a new tax, assessment, or property-related fee, or to increase an existing one, local governments must comply with many provisions. In general, these requirements are that local governments may use assessments and property-related fees only to finance projects and services that directly benefit property – and that most revenue-raising measures be approved in an election. The table below summarizes the vote requirements for each type of revenue enhancement:

TYPE	VOTE NEEDED	WHO VOTES	VOTE REQUIREMENT
TAXES			
General	Yes	All voters in community or affected area	Majority
Special	Yes	All voters in community or affected area	Two-thirds
ASSESSMENTS			
All	Yes	Property owners (and renters responsible for paying assessments) in affected area.	Majority, weighed in proportion to assessment liability.
FEES			
General, not property related	No	N/A	N/A
Property related	Yes, for any service other than water, sewer, or refuse collection.	Local government may choose: Property owners in affected area, or electorate in the affected area.	Majority of property owners or two-thirds of electorate. Local governments may weight ballots in proportion to fee liability.

[6] Understanding Proposition 218: CA LAO December '96

(1) Requirements for New Fees

To impose a new or increased property-related fee, local government must comply with the certain fee restriction and fee rate calculation requirements. Local governments must also:

- Mail information regarding the proposed fee to every property owner.
- Hold a hearing at least 45 days after the mailing.
- Reject the proposed fee if written protests are presented by a majority of the affected property owners.
- Hold an election on any property-related fee, other than a fee for water, sewer, or refuse collection.

As a practical matter, local governments will find it much more difficult to impose or increase property-related fees. As a result, many local governments are more likely to try to raise revenues through non property-related fees or taxes. However, many cities throughout the Country that have attempted to utilize fees related to fire services have faced difficulty in implementing these measures. For example, fees for emergency response, first responder EMS services, Haz-Mat response, etc., are difficult to collect unless agreed to by insurance carriers, who have not historically accepted these charges for services. Fees for fire prevention inspections, plan review, and life safety inspections however are very common and are a good source of revenue for many fire departments.

(2) Requirements for New Taxes

In order to impose or increase a tax, local government must comply with the following provisions:

- All general taxes must be approved by a majority vote of the people. A 1986 statutory initiative, Proposition 62, previously imposed this vote requirement on

general law cities and counties. Proposition 218 expands this requirement to include charter cities, such as Los Angeles, Oakland, and San Francisco.

- Elections for general taxes must be consolidated with a regularly scheduled election for members of the local governing body. In an emergency, this provision may be waived by a unanimous vote of the governing body.

- Any tax imposed for a specific purpose is a "special tax," even if its funds are placed into the community's general fund. Prior to Proposition 218, all taxes placed into a community's general fund were commonly considered general taxes, requiring only a majority vote.

  As indicated earlier, this approach is difficult for most local governments.

(3) Requirements for New Assessments

All new or increased assessments must follow certain assessment calculation and election requirements. This requirement will mean that programs that benefit people, rather than specific properties, such as libraries, mosquito abatement, recreation programs, police protection, and some business improvement programs, must be financed by general or special taxes or other non-assessment revenues.

5. THE CITY OF COLUSA HAS DEVELOPED AN IMPACT FEE PROGRAM WHICH WILL RECOUP A SIGNIFICANT PORTION OF NEW COSTS RELATED TO CAPITAL FACILITIES.

The preceding sections indicate that the City of Colusa has few options for additional revenue without voter approval. However, the City has taken advantage of opportunities to fund new capital facilities through the use of impact fees. In 2005, the City contracted with Economic and Planning Systems to develop an impact fee study. This document establishes the following fee schedule for new development in the City of Colusa:

Capital Facilities Impact Fees	Single-Family		Multifamily	
	New Construction	Reconstruction	New Construction	Reconstruction
	Per Unit	Per Sq. Ft.	Per Unit	Per Sq. Ft.
City Hall	2,077	1.04	1,712	1.9
Police Facilities & Equipment	509	0.25	419	0.47
Fire Facilities & Equipment	1,659	0.83	1,366	1.52
Community Center	525	0.26	433	0.48
Solid Waste Equipment	914	0.46	755	0.84
Corporation Yard Relocation	1,255	0.63	1,034	1.15
Total Capital Facilities Fee	6,939	3.47	5,719	6.36

Capital Facilities Impact Fees	Retail	Office		Industrial	
	Neighbor/ Gen. Comm.	Office/Prof.	Public Fac.	Light Ind.	Heavy Ind.
	Per Sq. Ft.	Per Sq. Ft.	Per Sq. Ft.	Per Sq. Ft.	Per Sq. Ft.
City Hall	0.802	1.444	1.444	0.481	0.481
Police Facilities & Equipment	0.197	0.354	0.354	0.118	0.118
Fire Facilities & Equipment	0.64	1.153	1.153	0.384	0.384
Community Center	0.203	0.365	0.365	0.122	0.122
Solid Waste Equipment					
Corporation Yard Relocation	0.484	0.872	0.872	0.291	0.291
Total Capital Facilities Fee	2.326	4.188	4.188	1.396	1.396

As shown, above, the City has adopted a per-unit and per square foot schedule for new construction and renovations by use type. Because the project team, and the City, doe not have square footage estimates for commercial or industrial space, we calculated the anticipated revenues from new residential development resulting from the Colusa Crossing, Brookins Ranch, and Colusa Riverbend projects and then compared these revenues to the capital costs associated with the new stations recommended in this report. The results of this analysis are shown below:

Colusa Riverbend	
Single Familty Units	2,530
Impact Fee	$1,659
New Revenue	$4,197,270
Colusa Crossings	
Single Family Units	1,180
Impact Fee	$1,659
Multi-Family Units	200
Impact Fee	$1,366
New Revenue	$2,230,820
Brookins Ranch	
Single Family Units	600
Impact Fee	$1,659
New Revenue	$995,400
Total Revenue from Development	$7,423,490
New Station 1	Excluded
New Station 2 (with Training)	$5,418,000
New Station 3	$3,231,343
New Apparatus	$600,000
Total Cost	$9,249,343
Recovery Rate	80%

As shown above, the project team estimates that the three major development projects will generate approximately $7.4 million in impact fees. Please note that this does not include fees associated with commercial or industrial development. Based on our estimates, the total cost of new stations and apparatus (not including renovations or replacement of the existing fire station) will cost approximately $9.25 million. Based on the current fee schedule, the project team estimates that more than 80% of the costs of new capital will be recovered. This is a very good recovery rate. It should be noted that the costs above do not include the cost of land. The City should try to utilize any land donated by developers to offset these costs unless these locations are inconsistent with the results of the station location analysis.

Overall, the project team believes the current fee schedule is effective and recovers a large share of capital costs associated with fire services. The City should consider if changes should be made to the current schedule to increase the cost recovery rate.

Recommendation: The current impact fee schedule for fire facilities and capital equipment is effective. However, the City should evaluate whether a higher cost recovery rate is desired.