

CITY OF SAN RAFAEL ESSENTIAL FACILITIES

STRATEGIC ANALYSIS

AUGUST 2003



GROUP 4

ARCHITECTURE
RESEARCH +
PLANNING, INC

ACKNOWLEDGMENTS

ACKNOWLEDGMENTS

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EXECUTIVE SUMMARY

In its mission to protect the safety of both the public and the City's emergency workers, the City of San Rafael asked Group 4 Architecture, Research + Planning, Inc. to conduct an analysis of nine of the City's essential facilities: Fire Stations No. 1, 2, 4, 5, 6, and 7; City Hall, which serves as home base for the San Rafael Police Department; and Terra Linda Community Center and San Rafael Community Center, both of which are critical elements in the City's plan to provide shelter for local residents displaced from their homes by an earthquake or other emergency.

Facility Evaluations

The nine essential facilities examined in this study are an average of 38 years old, with the oldest approaching 90 years old. With the exception of Fire Station No. 6, all of the facilities show signs of wear and tear associated with decades of use. Conditions in Police and Fire Department facilities not only affect operational efficiency, but also may jeopardize personnel's health, safety, and ability to respond to emergencies. The two community centers lack sufficient shelter space and amenities to fully accommodate San Rafael residents who might seek refuge there after an earthquake or other emergency.

Eight of the nine facilities require upgrades to address problems including:

- moderate to significant risk of structural damage from strong earthquakes;
- lack of fire suppression systems, emergency generators, and appropriate areas for handling hazardous materials;
- excessive maintenance and operating costs resulting from old or malfunctioning mechanical, electrical, and lighting systems;
- worn finishes, such as paint and carpeting, which can no longer protect underlying structural materials from the deteriorating effects of weather and use;
- inefficient operations due to overcrowded facilities; and
- inability to accommodate modern staffing complements of sufficient size and diversity.

Fire Station No. 6, constructed in 1996, is in good condition structurally and is the only facility with fire sprinklers. However, like the other facilities, it suffers from a lack of appropriate space for decontamination as well as for operational needs such as apparatus, equipment, and protective clothing storage.





City Hall and Police Station



Fire Station No. 6



Fire Station No. 4



Terra Linda Community Center

Program Confirmation

Crowded conditions were observed to some extent at all nine facilities. The program confirmation phase of this study quantified the problem, revealing that some facilities currently operate at a space deficiency of up to 63%, with an average deficiency of 33%. In the case of the Police and Fire Departments, these deficiencies result from changes in operations since the facilities were constructed, including:

- the number of personnel added to handle the demands of San Rafael's growing population;
- the evolution of community needs for a wider range of emergency services; and
- the increased sizes, amounts, and types of equipment, apparatus, and protective gear required for modern police, fire, and paramedic operations.

The program confirmation phase also produced estimates of future space needs for each department. The strategic program for the Police Department provides much-needed space for work, storage, and physical training, as well as a vehicular sallyport and modernized holding facilities that will greatly improve officer safety, increase operational efficiency, and meet all applicable regulations regarding prisoner processing and detention. Fire Department Administration is provided with the space it sorely needs for its personnel, records, and public service areas. Fire stations are expanded to accommodate modern engine sizes, protective gear, and staffing complements.

Current space available, current needs, and future needs are summarized in the following table. All areas are shown in gross square feet, which includes net usable areas plus a factor to account for circulation, wall thicknesses, mechanical rooms, and other unassignable areas.

Strategic Program	Current Space (gsf)	Current Need (gsf)	Current Deficiency	2022 Need (gsf)
Police Department	15,156	24,932	39%	28,505
Fire Department Administration ¹	1,546	2,951	48%	3,991
Fire Station No. 1	7,865	11,585	32%	7,699
Fire Station No. 2	3,024	8,083	63%	13,048
Fire Station No. 4	4,120	6,585	37%	7,664
Fire Station No. 5	4,120	6,585	37%	9,164
Fire Station No. 6	6,265	7,654	18%	7,654
Fire Station No. 7	3,801	6,583	42%	7,661
San Rafael Community Center ²	10,880	11,668	7%	11,668
Terra Linda Community Center ²	3,670	7,301	50%	7,301

¹ Does not include Fire Department dispatch.

Includes only areas likely to be used for shelter purposes (e.g., program rooms/sleeping areas, kitchen, restrooms, and storage).

Development Strategies

The project management team developed priorities for improving each facility at two different levels. *Seismic and life safety* upgrades would increase the safety of the public and emergency personnel by strengthening the facilities structurally and adding sprinklers, emergency generators, and protections from hazardous materials. *Modernization* upgrades would increase operational efficiency and effectiveness through additional space and other facility improvements; seismic and life safety upgrades would also be completed. Each facility's priority for improvement is shown in the following table.

Facility/Department	Seismic + Life Safety	Moderni- zation	Total	Priority
Police Department	1	1	2	Highest
Fire Station No. 1+ Admin	1	1	2	Highest
Fire Station No. 2	1	1	2	Highest
Fire Station No. 7	1	2	3	Medium
Terra Linda Community Center	2	2	4	Medium
Fire Station No. 4	1	3	4	Medium
Fire Station No. 5	1	3	4	Medium
San Rafael Community Center	3	3	6	Lower
Fire Station No. 6	3	4	7	Lower

The two community centers and Fire Stations No. 4, 5, 6, and 7 all can be improved only on their current sites. The three highest priority facilities — the Police Station, Fire Station No. 1 (with Fire Department Administration) and Fire Station No. 2 — all were considered to be potential candidates for development on alternate sites due to the constraints of their current sites. Preferred strategies for developing these three facilities include:

Strategy I	improving them on their current sites (whether by renovation and addition or by new construction);
Strategy II	building a new Police Station and one new fire station on separate, new sites; or
Strategy III	combining the Police Department, Fire Administration, and one fire station into a new public safety facility.

Options for the new Police Station, Fire Station No. 1/Fire Department Administration, and public safety facilities were developed on four sites that had been selected based on criteria such as location, cost, capacity, and benefit to the community. The preferred sites for Strategy II and Strategy III included three City-owned sites: the current City Hall site; the "Blue House" parcel at the corner of Fifth and D Streets; and the Menzies parking lot north of the main library. For purposes of comparison, a site that is currently privately-owned also was considered.



Fire Station No. 1



San Rafael Community Center



Fire Station No. 2



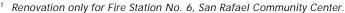
Fire Station No. 7

Implementation

The cost of each strategy will depend on a variety of factors. The level of improvements at each facility will affect the cost; full modernization will cost more than if only seismic and life safety upgrades are completed. For development on privately-owned sites, the costs associated with purchasing and preparing land must be factored into the project budget as well. Other considerations include whether parking can be developed on grade rather than under the building (which is significantly more expensive) and whether efficiencies can be realized through shared parking.

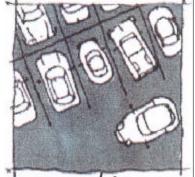
Strategy I is estimated to cost \$8.6 million for only seismic and life safety improvements, while full modernization may cost up to \$43.6 million, depending on whether existing facilities are renovated or completely rebuilt (which may be the best option for facilities in poor condition, such as Fire Stations No. 4 and 7). Strategy II's new police and fire facilities are estimated to cost approximately \$25.3 million, while the new public safety facility developed in Strategy III is estimated to cost between \$26.3 million (on the Blue House Block parcels) and \$31.5 million (on the City Hall site). For both Strategy II and Strategy III, improvements at the other seven facilities are estimated to cost between \$3.7 million (for seismic/life safety upgrades) and \$22.8 million.

	stimated Costs 003 dollars	Seismic/ Life Safety Renovation	Modernization Renovation	Modernization New Construction ¹
S	trategy I			
	Fire Station No. 1	\$1.3 million	N/A	\$4.5 million
	City Hall/Police Station	\$3.6 million	\$18.1 million	\$16.3 million
	Other Facilities	\$3.7 million	\$18.5 million	\$22.8 million
	Strategy I Total	\$8.6 million	\$41.1 million	\$43.6 million
S	trategy II New Fire Admin/FS1 New Police Station Other Facilities Strategy II Total	\$9.0 million \$16.3 million \$3.7 million \$29.0 million	\$9.0 million \$16.3 million \$18.5 million \$43.8 million	\$9.0 million \$16.3 million \$22.8 million 48.1 million
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S	trategy III	407.0 '11'	ΦΩ (Ω 'U'	407.0 ''''
	New Public Safety Facility ²	\$26.3 million	\$26.3 million	\$26.3 million
1	Other Facilities	\$3.7 million	\$18.5 million	\$22.8 million
-	Strategy III Total	\$30.0 million	\$44.8 million	\$49.1 million



² On the Blue House Block parcels. For the City Hall site, add approximately \$5.2 million.

Does not reflect program efficiencies that may be possible in a shared public safety facility.



For Strategies II and III, <u>approximately one-fourth to one-half of the total estimated project budgets are associated with the development of parking</u> on the constrained Blue House Block and the City Hall sites. These strategies may be less expensive on alternate sites, depending on the cost of the land and whether parking can be developed on grade rather than under the building.

Next Steps

This project has created a strong foundation upon which to build; guidelines have been established, existing facilities have been evaluated, and strategies have been developed. A number of "next steps" are needed to continue the implementation process.

- An advisory committee composed of San Rafael residents, businesspeople, and other stakeholders should be convened to help the City choose the development strategy that best meets the needs of the community. This committee also could provide vital input regarding funding options and avenues for building community support.
- The City should retain an economic consultant to explore funding strategies, and also a political consultant to "test the waters" of community support for the project.
- The City should launch a campaign to educate the public about the need to improve San Rafael's essential facilities. The community needs to understand that a number of its essential facilities are operating at least structurally speaking on borrowed time, and how modernizing the police, fire, and emergency shelter facilities would improve the ability of emergency personnel to provide services in times of critical need.
- This study and a concurrent feasibility study for the San Rafael Public Library both revealed a severe current shortage of parking in the civic center area that will get worse with future growth and if new police and fire facilities are developed there. Because of the significant impact that parking will have on the cost and functionality of essential facility and library projects in the downtown area, a parking and traffic study should be conducted to analyze the effects of the selected strategy. The parking study should also evaluate efficiencies that could be gained through shared parking among the various facilities in the civic center area, including City Hall, Fire Station No. 1, the Police Station, Fire Department Administration, and the Library.



Members of the community should become involved to help determine which strategy is the best fit for San Rafael.



Fire Station No. 5

INTRODUCTION

II. INTRODUCTION

Like many other municipalities in California, the City of San Rafael saw explosive growth in the years following World War II, with its residential population nearly tripling between 1950 and 1970. During that time, the City responded by constructing a number of civic and emergency facilities, including five fire stations, a City Hall containing a Police Station, and a community center that is now designated for use as an emergency shelter.

Although the rate of growth slowed after 1970, the City's population continued to increase, reaching approximately 50,063 by the year 2000.² During this 30 year period, the City constructed more civic and emergency facilities, including two more fire stations (one of which replaced an earlier facility) and another community center now designated for use as an emergency shelter.

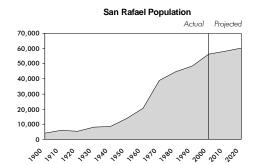
Facility	Year Built	Age
Fire Station No. 1	1917	86
Terra Linda Community Center	1954	49
Fire Station No. 2	1957	46
Fire Station No. 3 ³ (decommissioned)	1961	N/A
Fire Station No. 4	1964	39
Fire Station No. 5	1966	37
City Hall/Police Department	1966	37
San Rafael Community Center	1975	28
Fire Station No. 7	1978	25
Fire Station No. 6	1996	7
Average Age		38

As vacant parcels in San Rafael become increasingly scarce, future population growth is expected to slow. The City's Planning Department anticipates that approximately 60,400 people will call San Rafael "home" by the year 2020 - nearly three times the City's population in 1960, when most of the City's essential facilities were being planned or had already been constructed.

With the exception of Fire Station No. 3, which has been decommissioned, all of essential facilities listed above are still in daily use. At an average of 38 years old, many of them show signs of wear, from age as well as from serving larger staff complements and a greater city population than they were originally designed to accommodate. In the past few years, the City began to grow concerned that its essential facilities might not be able to stand up to the demands placed upon them by continued population growth in San Rafael's population, let alone major earthquakes or other local disasters.



Fire Station No. 1



¹ US Dept. of Commerce, Census Bureau, 2000

² Ibid.

³ Fire Station No. 3 was not analyzed as part of this study.

INTRODUCTION



In its mission to protect the safety of both the public and the City's emergency workers, the City of San Rafael asked Group 4 Architecture, Research + Planning, Inc. to conduct an analysis of nine of the City's essential facilities: Fire Stations No. 1, 2, 4, 5, 6, and 7; City Hall, which serves as home base for the San Rafael Police Department; and Terra Linda Community Center and San Rafael Community Center, both of which are critical elements in the City's plan to provide shelter for local residents displaced from their homes by an earthquake or other emergency.

Process

The project was directed by a core Project Management Team (PMT) comprising representatives from the City's Management Services, Public Works, Fire, Police, Economic Development, and Community Services Departments. Members of the core PMT met regularly to review progress and make key decisions about the work. The core PMT also participated in all project workshops, meetings, and presentations to groups such as the City Council.

Also invaluable to the project was the expanded PMT, a larger group of city department representatives that provided valuable information, insight, and feedback through periodic workshops and meetings. The expanded PMT also participated in meetings of the project's Oversight Committee, which was headed by the Mayor and a member of the City Council.

The project began with the evaluation and documentation of existing conditions at each facility. The evaluation team for all of the facilities consisted of representatives from Group 4 and Cecil H. Wells Jr. & Associates, structural consultants. Representatives from O'Mahony & Myer (electrical and lighting consultants) and Guttman & Blaevoet (mechanical engineers) also joined the team for the analysis of City Hall. The Facility Repair Supervisor of the City's Public Works Department and certain representatives of other departments, as appropriate, led the tour of each facility. Evaluations were based on visual inspection and reports of problems; invasive or destructive procedures (such as removing finishes to inspect underlying structures) were not used. A detailed summary of each consultant's evaluation findings has been furnished to the City as a separate appendix to this report.

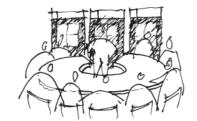


During the program confirmation phase, the expanded PMT participated in workshops focused on defining current and future space needs for each facility. For City Hall and the Police Department, this involved updating a program document previously prepared by another consultant to the City. For the fire stations, the existing program for the seven-year-old Fire Station No. 6 was updated for use as a baseline for developing the other five stations' needs. Development of strategic programs for Terra Linda Community Center and San Rafael Community Center was limited to the spaces needed for emergency shelter use only, and was based on target shelter capacity. Strategic programming methods are described in the *Program Confirmation* chapter of this report.



INTRODUCTION

Once the needed improvements at each facility had been identified, the project moved into the development strategies phase. The PMT developed general strategies for meeting the needs, identified potential sites in San Rafael where new facilities might be developed, established criteria for evaluating strategies and sites, and weighed the advantages and disadvantages of different development options on those sites. Cost information for the preferred development options was prepared by Davis Langdon Adamson, Group 4's cost estimating consultant. Methods used during the development strategies phase are described in more detail in chapters 4 and 5 of this report.



III. FACILITY EVALUATIONS

Methods of Analysis

In August, 2002, the consultant team and key city personnel toured all nine facilities. The condition of each facility was documented through notes and photographs, as appropriate. With the City's representatives, Group 4 and its consultants analyzed the performance of each of the facilities with respect to code, seismic, life safety, and modernization issues, which are described below.

Building Codes

Building codes, which provide technical performance requirements for structural, mechanical, electrical, and plumbing systems, began to be adopted by states and municipalities in the United States in the early 20th century. While different regions in the country tend to adopt different codes, all codes have the same basic purpose: to protect the health, safety, and welfare of facility occupants. California generally follows the *California Building Code* (CBC).

Structurally, each facility in this study was evaluated according to the requirements set forth in the 1998 CBC, which incorporates and expands upon the *Uniform Building Code* (UBC). The *Uniform Mechanical Code*, *Uniform Electrical Code*, and/or *Uniform Plumbing Code* were used, as applicable, in the analysis of other systems in City Hall, but not in the fire stations or the community centers. This study does not (nor was it intended to) provide an exhaustive analysis of any facility with respect to any code or accessibility guidelines. Rather, this analysis is intended to provide a general overview of conditions at each facility.

Seismic Analysis

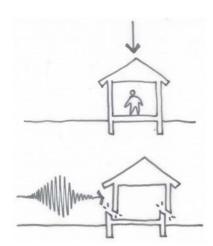
A building's structure needs to be strong enough to support its own weight (known as "dead load") as well as that of its occupants, equipment, and furnishings ("live load"). For the most part, live and dead loads are vertical, with downward forces resulting from the pull of gravity on the building and its contents. An earthquake, however, may subject a building to multidirectional forces – including sideways (or "lateral") forces, or even upward forces. If a building's structure is not designed with seismic forces in mind, it may suffer damage or even collapse in an earthquake.

Seismic analysis, then, deals with the ability of a structure to resist the complex forces associated with earthquakes. In this study, each facility's structural design and the requirements of the building code version in force at the time it was built were compared to the 1998 CBC. Special attention was paid to the strength of the connections between different elements of each building's structure and envelope, especially with respect to a "load path" that can accommodate lateral forces.



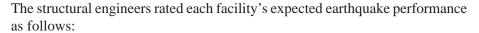
Fire Station No. 1





"Live" and "dead" loads tend to exert vertical forces. Under seismic conditions, a structure must be able to resist significant lateral forces (i.e., from many directions).





- **Good Performance** the building can resist a major earthquake at the building site without collapse and with minimal structural damage.
- **Fair Performance** the building can resist a major earthquake at the building site with minimal to moderate structural damage.
- Poor Performance the extent of structural damage in a major earthquake will be in the moderate to significant range, with the potential for collapse or partial collapse.

Life Safety Analysis

Life safety analysis considers how well a building protects its occupants from threats to their well-being, including fire and exposure to hazardous materials. Compliance with the accessibility requirements of the California Building Code (CBC) also can be considered a life safety issue, such as when the building hinders ingress or egress.

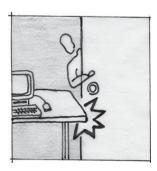
Modernization Analysis

Modernization analysis looks at how well the facility supports the operational goals of its occupants. One important factor is whether enough space is provided for various activities, or whether overcrowded conditions hinder effectiveness. Another is the relationships between spaces and how they affect operational efficiency. The efficiency and effectiveness of mechanical and electrical systems also are considered under the modernization category, as are the appearance and condition of materials and finishes.

General Findings

Every few years, codes are updated to reflect new information about performance that comes from research and testing of materials in the lab as well as observation of assemblies under real-life conditions. Structural codes are a good example: each earthquake provides a bit more data about the types of seismic forces exerted on a building, and how building components should be designed to resist damage. As such, newer codes tend to have higher requirements than older codes.

The nine essential facilities examined in this study are an average age of 38 years old. Except for Fire Station No. 6, the facilities were built at a time when code requirements were significantly less stringent than they are today. In fact, Fire Station No. 1, which will celebrate its 87th birthday this year, was built before even the earliest structural codes had been adopted. In general, most of the facilities require moderate to significant structural upgrades in order to meet the requirements of recent codes. Depending on the facility, such improvements may include replacing foundations, strengthening connections,



fortifying columns and shear walls, and reinforcing masonry walls. Such renovations are required in order to ensure that the City's essential facilities remain standing after an earthquake or other ground-shaking event.

Eight of the City's nine facilities do not meet basic life safety guidelines, such as the provision of automatic fire suppression systems (i.e., sprinklers). Emergency generators are not provided at all facilities. The Police Station and all of the fire stations lack adequate facilities to protect personnel from hazardous and biohazardous materials, whether used routinely in the course of providing emergency services (as with firefighting chemicals) or encountered in the field (such as bodily fluids). Appropriate facilities for storage of these materials, as well as decontamination of clothing and equipment upon returning to the station, are required. It is important to protect emergency workers from hazards such as fire and toxic substances so that they may continue to respond to the community's need for services.

With respect to modernization, the most common finding at all facilities was the lack of space. In general, the facilities were not sized to accommodate the number of staff they now house, the range of services they now provide, the amount of equipment they now must store, or the population they now serve. As a result, they are overcrowded with people, tools, apparatus, and records. Overcrowding can cause serious operational problems that reduce efficiency, with potential negative impacts on response times and personnel effectiveness.

Layout is another challenge for some of the facilities. The Police Station's location in City Hall limits the ability to create effective security zoning; there is effectively no separation between personnel, prisoner, and public areas. The open dormitory arrangements at all fire stations except No. 6 limits the ability to include female firefighters and paramedics in regular shifts.

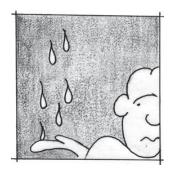
Most of the facilities show signs of wear on exterior and interior surfaces. Beyond their aesthetic appeal, finishes such as carpets and paint protect underlying materials from damage due to use and exposure to the elements. Other problems, such as leaking roofs and buckling floors, were observed at individual facilities. Many of the facilities also require mechanical, electrical, and/or plumbing system upgrades or replacement, as older systems tend to be inefficient and expensive to maintain. Facilities in poor condition can have a negative effect on the performance of personnel who work in them.

City Hall and Police Station

City Hall houses a diverse range of departments and functions. Office-type functions such as the City Manager's office, Human Resources, and Information Services are mixed in with departments visited more frequently by the public such as the Building and Safety division. The City Council chambers are used still more frequently for a host of city and public functions; the chambers also







are designated as the City's primary emergency operations center (EOC). Beneath it all, on the first floor, is the San Rafael Police Station.

City Hall is generally in good condition, but it does not meet the structural requirements of the latest CBC. Upgrading Police Station facilities to meet essential facility requirements will necessitate the improvement of the entire City Hall – even areas not intended or designated as essential facilities. Life safety issues in need of attention at City Hall include the lack of fire sprinklers and a fire alarm system; as with structural improvements, these upgrades would be required throughout the building. Appropriate space for decontamination, handling, and storage of hazardous materials is also lacking for the Police Department. Thermal comfort and air quality are frequently a problem in City Hall, especially for the Police Station.

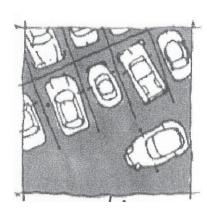
The serious space shortage on the first floor of City Hall forced the Police Department to look elsewhere for space. In the 1990s, certain police functions were moved into leased space several blocks away, reducing the efficiency of department operations. Those functions remaining in City Hall continue to suffer from space and functional area deficiencies. One major problem is with the department's evidence processing and storage functions, which operate out of a modular trailer and a steel storage container in the parking lot – hardly the most secure arrangement. Another is the lack of a vehicular sallyport, a secure vestibule with two doors that cannot be opened simultaneously; a vehicular sallyport discourages detainees from trying to attack officers and "make a break for it" when exiting the police car. The Police Station also lacks an armory as well as sufficient storage for records and all types of operational equipment.

Security zoning is also a problem at the Police Station. The two holding cells are located on a major corridor near public areas. A detainee who causes problems would encounter no barriers between the prisoner processing area and the lobby, should he or she manage to get free. The holding rooms also may be in violation of applicable state regulations such as the *Welfare and Institutions Code*.

Parking is a challenge at City Hall. While the number of spaces on site would exceed local zoning requirements for an office building of City Hall's size, actual practice results in a serious shortfall that regularly sends staff and visitors alike cruising the streets in search of parking. Modular trailers and containers have been installed in the parking lot to provide much-needed office and storage space. A number of spaces (although not enough) have been assigned for use by the Fire Department. And patrons of the San Rafael Public Library next door compete for the small number of visitor parking spots on the City Hall site. The remaining spaces are insufficient to meet parking demand, especially during shift change for the Police Department.



Evidence storage at the Police Station



Fire Stations and Fire Department Administration

San Rafael's Fire Department was founded in 1874 as an all-volunteer corps. Since that time, it has grown to an agency with over 90 personnel who, in addition to fighting fires, provide a range of public services such as medical response, Urban Search and Rescue, and hazardous material cleanup and disposal. The department also has its own in-house training and equipment maintenance programs.

The department's mission statement demonstrates its commitment to providing excellent service to the community:

The mission of the San Rafael Fire Department is to protect the people, property and environment of this community by committing the collective efforts of proficient individuals in the implementation of a comprehensive range of programs designed to control the risk and impact of fire, medical and physical emergencies.

In furtherance of its mission, the Fire Department partners with residents and community organizations in a program called Community Fire Servicing. That 75% of emergency calls to the department are medical-related rather than fire-related is a testament to the department's success in helping the community prevent fires. The department constantly strives to measure and improve its effectiveness, through methods such as collecting data on customer satisfaction following emergency incidents. Results from customer surveys in 2001 indicate that the department is doing an outstanding job, according to San Rafael residents.¹

What makes the Fire Department's record even more impressive is that department personnel are able to provide high levels of service in spite of its facilities, most of which are aged, undersized, and operationally inefficient. Five out of the City's six fire stations were constructed more than a quarter-century ago, with the oldest facility approaching 90 years old. During this time, advances in firefighting and paramedic operations, equipment, and protective gear have caused the department to outgrow most of its facilities. In fact, the fire stations are currently operating with an average of nearly 40% less space than is needed.

The lack of space in fire stations causes a host of problems. Some apparatus bays either do not permit the most efficient method of "stacking" vehicles, or cannot accommodate all of the vehicles assigned to the station. Parking expensive and sensitive equipment outside risks damage from the elements and, at worst, vandalism. All of San Rafael's fire stations lack sufficient space for the fitness equipment needed for personnel to stay in sufficient physical condition to respond to whatever emergency might arise. As a result, fitness equipment has







Fitness equipment in the apparatus bays at FS6

¹ Standard of Cover Plan, San Rafael Fire Department, August 2002



Protective gear storage at FS5

often been installed in the apparatus bays, making an already tight situation even tighter.

Storage space is generally at a premium, as modern operations demand a wider variety of specialized equipment to handle different emergency situations. Equipment maintenance operations and other activities also can be cramped by the small facilities. Five out of six of the fire stations provide insufficient space for gender separation, potentially limiting the department's access to the growing pool of qualified, dedicated female firefighters and paramedic personnel.

Last – but far from least – only one of the six fire stations can be expected to weather a major earthquake without significant damage. In fact, fully half of the City's fire stations are at risk of severe damage or even collapse. The older facilities also present various life safety hazards that could compromise emergency workers' ability to provide service to the community. These include the lack of appropriate storage for hazardous materials, such as chemicals used for firefighting purposes as well as substances cleaned up by the department and awaiting proper disposal. Another life safety risk is – perhaps ironically – that of fire, as only one of the fire facilities has an automatic fire suppression system (i.e., sprinklers).

Community Centers/Emergency Shelters

People in the Bay Area understand the risks of living and working at the intersections of major geological fault lines. History has shown that in the blink of an eye, a serious earthquake can make facilities uninhabitable and roads impassable. Current world conflicts and terrorism also may pose threats to Californians' homes and mobility. The City of San Rafael is committed to providing shelter and other emergency services to residents displaced or stranded by any such disaster.

Through an agreement with the American Red Cross, the City is responsible for providing food and shelter for 72 hours after a disaster, at which point the ARC would take over. The City has identified a number of its facilities that would be operated as shelters, including its high schools, junior high schools, and community centers. The youngest of the City's community centers, Pickleweed Park Community Center in the Canal district, is the subject of a separate renovation and expansion study, and therefore was not contemplated in this project. Two other facilities, the San Rafael Community Center (SRCC) and Terra Linda Community Center (TLCC), were analyzed as part of this study. In addition to their designation as shelters, both TLCC and SRCC have been identified as possible backup emergency operations centers (EOCs).

From structural and life safety standpoints, the two facilities have similar needs. In their current condition, both are likely to survive a major earthquake in "fair" condition (i.e., with minor to moderate damage) due to their light-frame construction, which tends to absorb seismic forces relatively well. However, both require a number of structural improvements to complete load paths and



SRCC Multipurpose Room

improve connections between roof, wall, and foundation elements. Neither SRCC nor TLCC has a sprinkler system to minimize fire damage, nor do they have emergency generators to keep the facilities up and running as shelters after a disaster. Neither facility fully complies with accessibility guidelines, and both have malfunctioning public address systems which may make it difficult for personnel to make important announcements during emergencies.

Functionally, both facilities lack dedicated shelter and EOC supply storage. The mechanical and electrical systems at SRCC and TLCC are overdue for replacement, and finishes at both show signs of wear. With its commercial-style kitchen, SRCC is fairly well-equipped to handle its rated shelter capacity of approximately 112 people; expanding the restrooms would make conditions more bearable when the shelter operates at full capacity. TLCC has a smaller rated shelter capacity (currently about 36 people), but its residential-style kitchen and tiny restrooms could complicate the provision of shelter services.





The residential-style kitchen at TLCC may not be able to handle full shelter occupancy

IV. PROGRAM CONFIRMATION

The facility evaluations identified space (and other) deficiencies in the current buildings. However, more information was needed in order to determine the amount and type of additional space that would be required to meet future needs.

Strategic programs for modernizing the essential facilities were developed through two different methods. Data from a May 2001 *Strategic Programming Analysis* completed by Hannum Associates was used as the basis for the program for services provided in City Hall, including the Police Department, Administrative Services, and Community Development. For the fire stations, Fire Department administrative offices, Terra Linda Community Center, and San Rafael Community Center, existing conditions were used as a starting point for determining needs for those facilities; the specific basis for each facility is described in further detail later in this chapter.

Basic program information for the essential facilities, as well as for the offices of the City's Administration and Community Development Departments, then was presented and discussed over the course of a two-day workshop with the expanded PMT in October, 2002. As many of the facilities suffer from a current shortage of space due to increased staffing and/or operational requirements, the first task for the group was to adjust the current baseline program to reflect the amount of space required for current operations. The group then estimated how much additional space, if any, would be required to accommodate additional staff and/or operational needs through the year 2022. Comments, clarifications, and feedback regarding space and operational needs all were incorporated into a strategic program for all of the essential facilities and the functions currently housed in City Hall.

The strategic programming analysis confirmed the severity of the space shortage in San Rafael's essential facilities, which are an average of 38 years old and have had no significant improvements since they were constructed. The amount of space that the essential facilities require for 2022 is not significantly higher than the amount of space they need – but do not have – now. The amount of additional space required for the 2022 planning horizon is provided for staff that departments expect to add during the next 20 years, and/or for flexibility in service provision, such as for services that may shift between Fire Department facilities.



The following table shows the amount of space needed at each facility now and in 2022:

	Current Space (gsf)	Current Need (gsf)	Current Deficiency	2022 Need (gsf)	Increase From Current Need
Police Department	15,156	24,932	39%	28,505	13%
Fire Administration and Fire Stations	30,699	50,026	39%	56,881	14%
Emergency Shelters	14,550	18,969	23%	18,969	0%
City Administration + Community Dev.	14,288	19,986	29%	21,026	5%

Especially in the fire and police stations, the projected amount of space actually is quite modest. In fact, a comparison to police and fire facilities in other California jurisdictions shows that the amount of space projected for San Rafael's police and fire stations in 2022 falls in the low- to middle-end of the range.

California City	2000 Population	Building Area	No. Staff	Square Feet per Staff	
Fire Stations	-				
Port Hueneme	21,845	6,733	3	2,244	
San Rafael	56,063	7,661	6	1,277	Station No. 7
Encinitas #5	58,014	6,900	5	1,380	
Chino Hills #66	66,787	8,600	9	956	
Chino #62	67,168	7,840	4	1,960	
Police Stations					
Pacifica	38,390	20,320	56	363	
Murrieta	44,282	35,000	150	233	
Arcadia	53,054	42,000	117	359	
Santa Cruz	54,593	35,915	131	274	
San Rafael	56,063	28,505	108	264	
Palo Alto	58,598	52,000	175	297	(proposed)
Redondo Beach	63,261	N/A	N/A	274	
Upland	68,393	N/A	N/A	246	

Fire Department

Fire Stations

Among the Fire Department's goals is to be able to reassign truck, ladder, and paramedic companies to different fire stations in response to population and service need shifts in the community. To accommodate multiple companies means that a fire station must be able to house not only all of the apparatus and equipment associated with each service unit, but also a larger number of personnel per shift. It is unlikely that all six fire stations will simultaneously be staffed by six personnel. However, in order to ensure maximum flexibility, the Fire Department needs each fire station to be able to accommodate two three-person companies.

Other important Fire Department programmatic needs include: increasing the ability of fire stations to accommodate the number and size of engines and apparatus; providing safe working environments for personnel, such as while handling, storing and disposing of contaminants and hazardous materials; and maintaining a functional, centrally-located training facility.

The department's most modern facility, Fire Station No. 6 (FS6), constructed in 1996, was chosen as a starting point for programming a baseline for the other five fire stations. Minor revisions were made to FS6's program based on input from fire personnel about its operational efficiency. Such revisions included larger living areas to accommodate a three-person paramedic unit (instead of its current capacity of two paramedics per shift), increased storage for protective clothing and equipment, and the addition of appropriate decontamination facilities.

The revised program for FS6 was then used as the baseline program for the other five fire stations in San Rafael. Differences among the fire station programs reflect the inclusion of certain specific features at certain stations:

- The programs for Fire Stations No. 4 and 7 are similar to the modified FS6 program, and provide basic administrative, operational, and living areas for up to six personnel per shift.
- The Fire Department will move its mechanic's/SCBA maintenance shop and its vehicle service area from Fire Station No. 1 to Fire Station No. 2.
 The inclusion of these features at FS2 accounts for much of the additional needed space.
- Fire Station No. 5 will add a classroom to enhance the department's ability to train personnel without interruption of services. The classroom will serve as a resource for the neighboring community when not in use by the Fire Department.

A more detailed program for each fire station can be found in the *Facility Summaries* section.

Fire Administration

San Rafael's Fire Department Administration currently occupies approximately 1,500 square feet of space in Fire Station No. 1 that was renovated for administrative use in the early 1980s. Its current staffing is 13.5 FTE. The Fire Department expects that by 2022, its administrative staff will grow to approximately 20 FTE through the addition of new clerical personnel as well as positions in Community Fire Services and Paramedic Services. These positions will not be added as a result of future population growth. Rather, the need for these personnel already exists, but there is no place to put them. The lack of space available to Administration has been a limiting factor in current staffing.



Fire Station No. 6



Fire Administration

Another of the department's goals for its strategic program is to increase San Rafael residents' access to the personnel, information, and services that Fire Administration offers, such as inspection and Community Fire Servicing.

Fire Department Administration does not necessarily need to be located at Fire Station No. 1 (or any other fire station); therefore, its program was developed independently. Development of the program for Administration began with a review of the current space available, with adjustments for current inadequacies and future additions based on what the Fire Department believed would be required to meet its operational needs through 2022.

Fire Department Program Summary

The following table summarizes the programs for the Fire Department's six fire stations and Administration. All areas are shown in gross square feet, which includes an allowance for circulation, wall thicknesses, mechanical/electrical closets, and other non-assignable space.

The first column shows the amount of space currently available at each station and for Administration. The second column shows the amount of space now needed at each location, based on the current operational model. The final column, "2022 Need," lists the amount of space required after certain functions have moved (such as the mechanic's operation) and for the new operational model in which each station has adequate capacity for six personnel per shift.

Fire Department	Current Space (gsf)	Current Need (gsf)	2022 Need (gsf)
	(931)	(931)	
Administration	1,546	2,951	3,991
Fire Station No. 1	7,865	11,585	7,699
Fire Station No. 2	3,024	8,083	13,048
Fire Station No. 4	4,120	6,585	7,664
Fire Station No. 5	4,120	6,585	9,164
Fire Station No. 6	6,265	7,654	7,654
Fire Station No. 7	3,801	6,583	7,661

It should be noted that the 2022 program for Fire Department Administration does not include space for dispatch, which will move into leased space in a building next to the existing Fire Station No. 1. This project, which predates this study, is scheduled for construction in 2003. The City has determined that this arrangement should be sufficient to meet the Fire Department's dispatch needs for the next 20 years.

Police Department

Severe space constraints forced the Police Department's Investigations and Support Services divisions to move into leased space in a nearby Citibank facility several years ago. While the move relieved some of the overcrowding in the City Hall Police Station, it has somewhat isolated Investigations and Support Services from the rest of the department. One major goal for an improved facility,

therefore, is to increase the operational efficiency of the Police Department by bringing all of its divisions back under a common roof.

The Police Department expects that by 2020, staffing will grow from its current level of 108 FTE to a total of approximately 140 FTE. This growth primarily comprises an increase in patrol, investigative, and street crime officers in order to continue to protect the safety of San Rafael's residents.

To further improve staff efficiency and engage the community in police operations, the department wishes to expand its volunteer program. Currently, nearly 40 volunteers help out in all divisions of the Police Department during a typical week. While there is still the need for even more volunteers, there is simply no place in the current Police Station for them to work. If its facilities are improved, the Police Department would like to have sufficient workspace for a volunteer corps of approximately 60 people (who will not all be present at once), distributed throughout the facility so as to be close to their assigned divisions: Administration, Operations, Investigations, and Support Services.

Police Department Program Summary

The following table summarizes the program for the Police Department.

Police Department	Current Space (gsf)	Current Need (gsf)	2022 Need (gsf)
Administration	1,174	1,807	1,807
Operations	2,312	5,717	6,712
Investigations/			
Support Svcs	3,842	7,900	9,304
Common Areas	2,535	8,548	9,614
Enclosed Parking/			
Vehicular Access	-	960	1,068
Citibank (Leased)	5,294	-	-
Total	15,156	24,932	28,505

As the first two columns show, the Police Department is operating with a serious space deficiency (almost 40%), compared to the amount of space that it currently needs. The "current need" program provides offices for supervisors (captains, corporals, lieutenants, and sergeants); a vastly expanded evidence processing and storage area; a larger records unit; a prisoner processing area in compliance with applicable codes and regulations; workspace for volunteers; and improved support areas such as an armory, training spaces, and locker rooms.

As the table also shows, the 2022 need for space is not significantly larger than the current need. The additional space needed for 2022 is to support the expected increases in staffing over the next two decades.





SRCC

Community Centers/Emergency Shelters

Based on information from the Association of Bay Area Governments (ABAG) and other sources, the City of San Rafael estimates that it will be charged with housing approximately 650 displaced people in the event of a major earthquake or other significant disaster. Of these, the City estimates that approximately 500 can be accommodated at various junior high and high schools within City limits, leaving a remainder of about 150 people to be housed between the San Rafael Community Center (SRCC) and the Terra Linda Community Center (TLCC).

The American Red Cross recommends providing 70 square feet per person for sleeping areas in emergency shelters. Using this factor, SRCC can accommodate approximately 112 people in its various activity rooms. However, SRCC is designated as a backup emergency operations center (EOC) in the event that the council chambers in City Hall is damaged or otherwise cannot be used (the EOC program is discussed in the following section). Using SRCC for an EOC as well as a shelter reduces its rated shelter capacity to approximately 89. The City believes that a rated capacity of 89 to 112 people at SRCC represents sufficient capacity.

A shelter capacity of 89 at SRCC means that TLCC must provide adequate facilities for the remaining 61 people (out of 150). However, at 70 sf per person, TLCC's current shelter capacity is 36. Therefore, TLCC must be expanded to accommodate an additional 25 people.

Improving seismic performance and life safety protections are among the main goals of renovating SRCC and TLCC. Also essential is to improve support areas in order to accommodate shelter residents for three days following a disaster, after which the American Red Cross will take over responsibility for providing shelter. Such shelter support areas include kitchens, restrooms, and supply storage.

Emergency Shelters Program Summary

The following table summarizes the program for the emergency shelter areas of SRCC and TLCC. The square footage growth at SRCC reflects increases in restroom size and the addition of dedicated storage for shelter supplies. At TLCC, the program increases comprise an additional sleeping area as well as larger restrooms, an upgraded kitchen, and dedicated shelter storage. Except for the shelter storage, all of these spaces would benefit the community center's use when not in use as a shelter. Note that areas unrelated to shelter uses, such as administrative offices, are not included in the programs.

The first column shows the amount of shelter space currently available at each facility. The second column shows the amount of space currently needed to accommodate the planned maximum shelter capacity, which is the same as the amount required for the year 2022 in the third column.



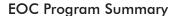
TLCC

Emergency Shelters	Current Shelter Space (gsf)	Current Shelter Space Need (gsf)	
San Rafael Comm. Ctr.	10,880	11,668	11,668
Terra Linda Comm. Ctr.	3,670	7,301	7,301

Emergency Operations Center

In the event of an emergency, the Fire Department sets up an Emergency Operations Center (EOC) to receive all information and requests for information related to the emergency, and dispatch personnel to respond. The council chambers at City Hall are currently designated as the primary site for the EOC, which was last set into motion in preparation for any problems that might have occurred as a result of Y2K. SRCC is designated as a backup EOC. However, both SRCC and the council chambers require seismic upgrades to meet current essential facility building code requirements for EOCs.

The Fire Department also has prepared a "mobile EOC" that can be activated if the identified facilities are too damaged to be used. However, the light tents out of which it operates might make the mobile EOC difficult to use during inclement weather. As such, it is in the City's best interests to ensure that a facility is available – and in useable condition – to house the EOC in the event of a disaster.



The following table summarizes the program for the EOC. The first column is based on the current EOC, the council chambers and lobby of City Hall. As the second and third columns show, this is more space than is needed for the EOC.

Emergency Operations	Current Space	Current Need	2022 Need (gsf)
Center (EOC)	(gsf)	(gsf)	
EOC	3,782	3,042	3,042

The City feels that providing a dedicated EOC space (other than storage) in new or renovated facilities would be an inefficient use of resources. This strategic program assumes that conference rooms or other spaces can be used for an EOC. Therefore, the only dedicated EOC space in this strategic program is a 200 square foot storage area in the Police Station.





City Hall



City Hall

City Hall

In addition to the Police Department, City Hall houses San Rafael's Administration and certain divisions of the Community Development Department. City Administration functions at City Hall include the City Manager's office, Information Services, the City Clerk, Human Resources, Finance, and the City Attorney. The Building & Safety and Planning divisions of the Community Development Department are located on the third floor of City Hall.

Although Administration and Community Development do not provide emergency services directly to the public, they were considered in this study to the extent that their program and parking needs might affect the location and amount of space provided for the Police and Fire Departments.

Staffing growth in these two departments is projected to be minimal over the next 20 years. One major programmatic goal of Administration and the Community Development Department is to improve its support infrastructure, such as conference rooms for public and departmental use, and to increase the efficiency with which the public can gain access to services, such as through the provision of an inter-departmental, "one-stop" public counter with crosstrained staff.

City Hall Program Summary

The following table summarizes the program for the divisions of the Administration and Community Development Departments that are likely to remain in City Hall.

Department	Current Space (gsf)	Current Need (gsf)	2022 Need (gsf)
Administration	5,885	11,583	12,623
Community			
Development Dept.	5,734	5,734	5,734
Council Chambers			
and Lobby	2,669	2,669	2,669
Total	14,288	19,986	21,026

It should be noted that the current and future needs of the Community Development Department will be taken care of as the Building & Safety and Planning divisions take over the third floor space recently vacated by Public Works. This project is currently underway. It should also be noted that the space programmed for Administration does not include the Parking Services division, which along with Fire Department dispatch will soon be housed in leased space adjacent to the current Fire Station No. 1.

Improvement Types

The programmed improvements for San Rafael's essential facilities fall into three basic categories: seismic, life safety, and modernization.

Seismic

Seismic improvements are those which increase the ability of a facility to survive the forces resulting from an earthquake or other such disaster. In the event of a serious ground-shaking event, the City's essential facilities must remain standing and operational so that emergency personnel can respond to the needs of the community.

In general, seismic work comprises renovation of existing structures, without adding any space, and as such is limited to the square footage of the existing facilities. Depending on the facility, seismic renovations may include:

- strengthening connections between foundations, walls, and roofs;
- replacing foundations to prevent overturning;
- increasing the ability of walls and columns to resist lateral forces as well as vertical; and
- bracing masonry walls.

Life Safety

Life safety improvements help protect building occupants from hazards such as fire, power outages, and exposure to hazardous materials. Fire and paramedic personnel in the field, for example, often encounter hazardous substances, including hydrocarbons, bodily fluids, and toxic chemical spills, and require a sufficiently-sized and -equipped space in which to decontaminate upon returning to the station.

Proposed life safety improvements to the City's essential facilities include:

- fire suppression and alarm systems;
- dedicated emergency generators; and
- adequately-sized and -equipped areas for decontamination as well as the handling, storage, and disposal of hazardous materials.

Life safety improvements can be further separated into two sub-categories based on whether they require the construction of additional space. Existing structures typically can be renovated to include fire suppression systems (sprinklers), fire alarm systems, and emergency generators without the need to add on to the building. In the case of the decontamination areas, however, each of the fire and police buildings requires the construction of additional space, as the existing buildings are simply too small to accommodate the required area.



City Hall



Police Station



Fire Station No. 1

Modernization

Modernization improvements address the functionality of facilities on a day-to-day basis as well as in times of emergency. Facilities that are sized to accommodate modern operations and current staffing levels increase effectiveness by enabling personnel to spend time providing service to the community rather than trying to work around the obstacles presented by a lack of space.

Projects to modernize the City's facilities include:

- increasing storage to accommodate the emergency apparatus, clothing, and equipment used in modern fire and police operations;
- adding dedicated storage for emergency shelter supplies at the community centers;
- expanding functional and support areas to increase operational flexibility and accommodate a more diverse workforce; and
- upgrading facilities' infrastructures, including mechanical, electrical, plumbing, and telecommunications systems as well as fixtures and finishes.

The following table summarizes the levels of proposed improvements to San Rafael's facilities:

Facility	Seismic + Life Safety Renovation (gsf)	Life Safety Addition (gsf)	Modernization Addition (gsf)	Total Area (gsf)
City Hall + Police Station	27,150	_	19,343	28,505
Fire Station 1	9,411	_	2,279	11,690
Fire Station 2	2,982	260	9,806	13,048
Fire Station 4	4,120	260	3,284	7,664
Fire Station 5	4,120	260	4,784	9,164
Fire Station 6	6,265	260	1,129	7,654
Fire Station 7	3,801	260	3,600	7,661
SRCC	13,748	_	788	14,536
TLCC	5,499	_	4,183	7,629

Parking Needs

Current Conditions

Two parking lots at City Hall currently contain 144 spaces. This is enough to serve the needs of the Administration and Community Development departments, with the leftover spaces filling much of the demand from patrons of the adjacent City Library. However, the high demand for parking for the Police and Fire departments, coupled with the presence of mobile units, storage containers, and trash areas on the City Hall lot, has created a parking deficit that has visitors and staff alike cruising the streets in search of places to leave their cars.

Currently, 60 of the 144 spaces at City Hall are assigned for police use, with 10 taken up by the building's trash area and a container used for police evidence processing and storage. The remaining 50 police spaces represent a 46% deficiency compared to the department's current need for approximately 111 parking spaces, which would provide sufficient capacity for patrol shift overlap as well as for other vehicles used by department personnel.

The Fire Department currently parks its nine department-owned vehicles either at City Hall or in two spaces cut into the curb along Fifth Street adjacent to Fire Station No. 1. No dedicated parking is available for the department's administrative personnel, let alone for the firefighters and paramedics assigned to Fire Station No. 1.

Of the other fire stations, only Fire Station No. 2 provides sufficient parking to handle operational needs, although the presence of cars in certain areas of that site can make vehicular circulation difficult, especially for emergency response vehicles. Fire Station No. 2 lacks sufficient parking to support its training classroom, however, forcing many classroom users to find off-site parking. Some of the fire stations have nearby street parking, which mitigates, to an extent, the need for on-site parking.

Existing parking at the community centers was considered sufficient to meet emergency shelter needs.

Projecting Parking Needs

The methods used to determine parking needs varied depending on the facility in question. Police and Fire personnel were asked to estimate the amount of parking that required to accommodate current operations as well as what would be needed for the year 2022. As the table on the next page shows, the Fire and Police departments each expect their parking needs to increase by just four spaces over their current need. The Fire Department projects a need for 21 parking spaces for Administration by the year 2022, while the Police Department expects that it will need 115 parking spaces.

A different approach was used to determine parking needs for City Hall. According to City zoning ordinances, privately-developed offices within the City of San Rafael must provide parking according to either a parking study or the City's planning requirement of one parking space per 250 gross square feet of building area. For typical offices, this planning ratio generally provides adequate parking for staff and visitors. For the office functions in City Hall (i.e., all departments except the Police), this parking requirement was used to calculate the baseline need. Spaces were then added to accommodate the Cityowned pool vehicles that are not accounted for in the standard planning ratio.

The fire stations generally require enough parking spaces to accommodate the number of personnel that will be on-site during shift changes. The City wants each fire station to be able to accommodate up to six personnel, depending on



Fire Station No. 6



Police parking area at City Hall

the particular requirements of the neighborhood. With six people per shift, 12 spaces would be required to handle parking during shift change. If shifts for each three-person company were staggered (i.e., only one three-person shift changed at a time), the number of required spaces would be reduced to nine.

The following table summarizes current and projected parking needs.

It should be noted that the severity of the existing parking problem for the civic center complex – City Hall, the Police Station, Fire Station No. 1/Fire Department Administration, and the San Rafael Public Library – creates a huge burden on the development of strategies to meet the parking program. A more detailed traffic and parking study should be undertaken in order to explore options for meeting parking needs in the civic center area, such as by sharing parking among the various departments.

	Current Spaces Available	Current Spaces Needed	
Police Department	60	111	115
Fire Dept. Admin.	9	17	21
Typical Fire Station	Varies	6-12	12
Admin + Comm. Dev.	42	69	73
City pool vehicles	14	21	21

DEVELOPMENT STRATEGIES

V. DEVELOPMENT STRATEGIES

The information from the facility evaluations and the strategic program defined the needs for the essential facilities. The development strategies phase of the project explored options for meeting those needs.

Improvement Prioritization

Programmed improvements for the facilities were separated into three categories: seismic, life safety, and modernization. Seismic improvements increase a facility's resistance to the lateral forces typically associated with earthquakes. Life safety upgrades help protect facility occupants with features such as fire sprinklers, emergency generators, and appropriate facilities for decontamination and the handling and storage of hazardous materials. Modernization projects improve facility functionality and operational efficiency, allowing personnel to spend more time providing services. These three categories of improvements are described in more detail in the *Program Confirmation* chapter.

While each of the facilities were identified as needing certain seismic, life safety, and modernization upgrades, some upgrades were considered more critical than others. Using information from the facility evaluation and program confirmation phases of the project, the expanded PMT undertook the task of prioritizing the improvement projects at each facility.

On a scale from 1 to 4, the expanded PMT rated the importance of upgrading each facility for seismic and life safety considerations, with "1" representing the highest priority and "4" being the lowest priority. Seismic and life safety improvements were grouped together for this prioritization, as the expanded PMT felt it would be counterproductive to spend money on one without the other. After all, a seismically-sound police station that burns down due to a lack of sprinklers does not support the City's goal of continuous, effective service; neither does a brand-new generator at an emergency shelter that falls into flinders during an earthquake.

Using the same four-point scale, the expanded PMT then rated the importance of modernizing each facility. The group recommended that no facility should be modernized unless the project also addresses seismic and life safety needs.

Totaling the rating numbers for seismic/life safety and modernization improvements resulted in an expression of the relative priority for upgrading each facility.



Fire Station No. 6

DEVELOPMENT STRATEGIES



Fire Station No. 2

Facility/Department	Seismic + Life Safety	Moderni- zation	Total	Priority
Police Department	1	1	2	Highest
Fire Station No. 1+ Admin	1	1	2	Highest
Fire Station No. 2	1	1	2	Highest
Fire Station No. 7	1	2	3	Medium
Terra Linda Community Center	2	2	4	Medium
Fire Station No. 4	1	3	4	Medium
Fire Station No. 5	1	3	4	Medium
San Rafael Community Center	3	3	6	Lower
Fire Station No. 6	3	4	7	Lower

The expanded PMT gave the Police Department and all fire stations except Fire Station No. 6 the highest priority for seismic and life safety improvements. With respect to modernization improvements, the expanded PMT assigned the highest priority to the Police Department, Fire Station No. 1 (with Fire Department Administration), and Fire Station No. 2. The community centers were given a lower priority for seismic/life safety improvements due to their construction type, but Terra Linda Community Center received a moderately high ranking for modernization because of the need to expand its shelter capacity. Fire Station No. 6 was given the lowest priority for both seismic/life safety and modernization improvements because it was constructed less than 10 years ago, in accordance with more modern structural codes and operational requirements than were used at the other facilities.

Overall, the highest priority candidates for improvement were the Police Department, Fire Station No. 1 (including Fire Department Administration), and Fire Station No. 2. Medium priority was given to Fire Stations No. 4, 5 and 7 as well as to the Terra Linda Community Center. Because the proposed modernization at San Rafael Community Center and Fire Station No. 6 is relatively minor, these facilities received the lowest priority scoring for improvements.

Strategies

In addition to receiving the highest priority for improvements, the Police Station, Fire Station No. 1, and Fire Station No. 2 are also the most constricted in terms of their current sites and facilities. Therefore, these three facilities are the most eligible for moving to new locations, should appropriate alternate sites be available.

With the possibility of new facilities for these three functions, the expanded PMT wanted to explore the feasibility of developing a joint facility. The expanded PMT proposed a public safety building that would be shared by the Police Department, Fire Department Administration, the Emergency Operations Center (EOC), and at least one fire station – Fire Station No. 1 and/or Fire Station No. 2. Fire and police personnel felt that sharing facilities could have positive effects on operational efficiency and improve the services both departments provide to the community.



Fire Station No. 4

DEVELOPMENT STRATEGIES

With these goals in mind, the PMT identified the following three viable strategies for improving facilities and meeting system needs:

Strategy I "As Is"

Each of the nine facilities would be improved on its current site. Improvements at individual facilities could be limited to seismic and life safety upgrades only, or could include some degree of modernization (through either renovation or demolition/new construction) as well, depending on the specific needs and priority of improvements for each facility.

Strategy II New Freestanding Police Station and New Freestanding Fire Station + Administration, on Separate Sites

A new Police Station would be constructed on one site, and a new Fire Administration facility with one fire station (either Fire Station No. 1 or Fire Station No. 2) would be rebuilt separately. Other essential facilities would be improved on their existing sites according to priority.

Strategy III New Public Safety Building with One Fire Station

A new facility would be shared by the Police Department, Fire Administration, either Fire Station No. 1 or Fire Station No. 2, and an EOC. In addition to the operational benefits of co-location, this option might provide efficiencies through a reduced building size, made possible through space sharing by the departments. Other facilities would be renovated or rebuilt at their current locations according to priority.

Eliminated Strategies

Several other strategies were considered but eliminated by the expanded PMT. A public safety building with a combined Fire Station No. 1 and Fire Station No. 2 was quickly eliminated because of the difficulty of finding an affordable site with low travel times to the response areas of both fire stations. Options that provided only a new standalone Police Station or only a new standalone Fire Station also were eliminated, as neither option adequately addressed the needs of both the Police Department and the Fire Department.

Sites

The identification and analysis of potential new sites for the three highest-priority facilities was an important component of the development strategies process. In a "brainstorming" session, the expanded PMT came up with a list of 14 sites in San Rafael's downtown corridor and surrounding areas that could be considered for development of the strategies. The sites were primarily west of US 101, although a few on the east side were identified as well. The group identified City-owned parcels as well as privately-owned sites, including some with operating businesses.



Fire Station No. 1

DEVELOPMENT STRATEGIES

Site Capacity

- Are the size, shape and slope sufficient to accommodate the building, parking and other site amenities?
- Does the site allow for future expansion?

Location

- Are travel times from the site within acceptable levels?
- Is the site centrally located within the service area?
- Is there easy vehicular access to the freeway and/or major traffic arterials?
- Are there significant site safety and/or security issues?
- Are there neighboring uses which enhance (or hinder) the function of the facility?
- Is the site located near other city services?
- Will new traffic patterns, noise or other operational characteristics place undue burden on surrounding property owners?
- Are there environmental or economic liabilities associated with the site?
- Is the site located within a redevelopment area?
- Is the proposed use compatible with the city's General Plan?
- Does the site have adequate utilities and infrastructure?

Cost and Availability

- Does the city own the site?
- Is the site affordable?
- Is the site available, or will it become available?
- Do any conditions require costly mitigation measures?
- Are there relocation or other costs associated with acquiring the site?

Community Perception and Interest

- Has the community shown any interest in having services provided at this site?
- Has the community offered any objection to this site?

Once the preliminary list of sites was developed, the expanded PMT created a list of criteria to use to evaluate the feasibility and desirability of the proposed sites. The criteria, which fell into four general categories, appear in the box to the right.

In addition to basic considerations such as whether each site could accommodate the proposed facilities, important criteria included travel times for emergency personnel, the proximity of Fire and Police department administrative personnel to City Hall, and the impact that development of each site as an essential facility would have as compared to commercial uses.

Once the evaluation criteria were established, the PMT set about evaluating each site. Each site was assigned a positive, negative, or neutral rating for each of the four major criteria categories: site capacity; location; cost and availability; and community perception and interest. The following chart shows how each site was scored:

		Site Capacity (sf)	Location	Cost	Community Perception
1.	City Hall	+/- 48,000	+	++	++
2.	Blue House Block	41,268	+	+	+
3.	Menzies Lot	33,433	+	+	0
4.	Glass & Sash Marin Co. Roof'g	52,849	+ service - adj./econ. dev.		+
5.	PG&E		+ service - econ. dev.	includes St. Vincent's	+
6.	Cineplex		0 service - econ. dev.	replace pkg	+
7.	Andersen/ Du Bois Area		overall: +/- Fire: - service Police: + service - adjacencies	-	0
8.	Fire Station 2		+ fire station only	+	+
9.	Corporate Center		0		+
10.	Brandon Tire		+ service - adjacencies		+
11.	4th & E. St.		+ econ. dev.		0
12.	United Market		-		-
13.	Ritter House Block		+ 0 adjacencies		+
14.	519 4th St.		h = 1		_

Site Zoning and Capacity Analysis

The following table contains size, zoning, building capacity, and other pertinent information about the preferred sites for this study. The Floor Area Ratio, or "FAR" is a multiplier used with the parcel size to calculate the allowable building size. The FAR, setbacks, maximum building height and minimum landscaping requirements all are tied to a parcel's zoning. Some of the parcels not currently zoned as "Public/Quasi-Public" may benefit from rezoning in order to achieve a greater allowable building area.

	Parcel			May Plala	Min. Land-	Eleon Area	Allowable
Facility	Size (sf)	Zoning Allocation	Setbacks	мах ыад. Height	min. Lana- scaping	Ratio	Bldg. Area (sf)
City Hall/ Police Station	99,148	Public/ Quasi Public	Not required	36'	10%	1	99,148
Blue House and Annex (corner of 5 th and D Streets)	21,763	Fifth & Mission Residential/Office	Not required	42'	10%	1.5	32,645
Blue House + private residence	29,173	Fifth & Mission Residential/Office	Not required	42'	10%	1.5	43,760
Menzies Lot	28,900	Public/ Quasi Public	Not required	36'	10%	1	28,900
Typical Private Site	Depends on site/program	Would be rezoned P/QP	Not required for P/QP	36' for P/QP	10% for P/QP	1 for P/QP	Depends on site
Fire Station 1	7,750	Public/ Quasi Public	Not required	36'	10%	1	7,750
Fire Station 2	33,282	Public/ Quasi Public	Not required	36'	10%	1	33,282
Fire Station 4	13,321	Light Industrial/ Office	20' front; 10' each side or 20'/0'; 10' rear	36'	10%	0.32	4,263
Fire Station 5	19,482	Public/ Quasi Public	Not required	36'	10%	1	19,482
Fire Station 6	27,950 (shared with TLCC)	Public/ Quasi Public	Not required	36'	10%	1	27,950 (shared with TLCC)
Fire Station 7	35,000	Public/ Quasi Public	Not required	36'	10%	1	35,000
San Rafael Community Center	581,090	Public/ Quasi Public	Not required	36'	10%	1	581,090
Terra Linda Community Center	27,950 (shared with FS6)	Public/ Quasi Public	Not required	36'	10%	1	27,950 (shared with FS6)

DEVELOPMENT STRATEGIES



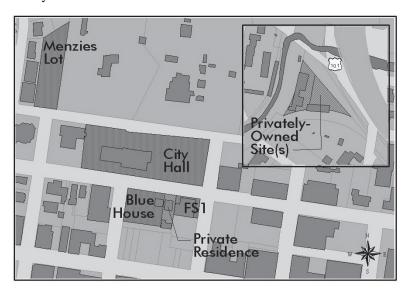
The current Police parking area at City Hall is one of the preferred sites.



The "Blue House," currently occupied by the City's Redevelopment Agency, sits atop one of the preferred sites.

Preferred Sites

The three highest rated sites from the preliminary list emerged as the expanded PMT's preferred sites for developing options for the Police Station, Fire Station No. 1, and Fire Station No. 2. These sites are: the east end of the City Hall site; the parcels along Fifth Street between C and D Streets (dubbed the "Blue House Block" by the expanded PMT); and the Menzies lot. Except for a privately-owned residence on the Blue House Block, all of these preferred sites are currently City-owned. For comparison, the PMT also decided to include a privately-owned site, such as the parcels on West Francisco Boulevard currently occupied by Glass & Sash and Marin County Roofing. It was assumed that all other facilities — City Hall, the remaining four fire stations, and the two community centers — would remain on their current sites.



Parking Considerations on Preferred Sites

The three City-owned sites under consideration all currently provide some level of much-needed staff and/or public parking.

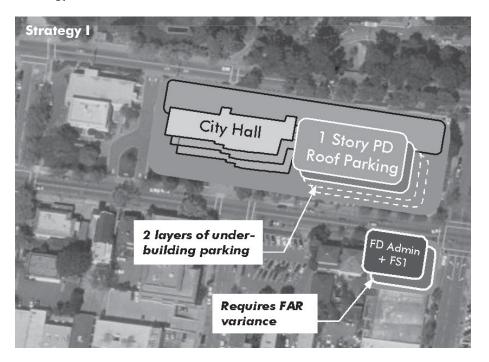
- All parking in the lower lot on the east side of the City Hall parcel is currently
 assigned for use by the Police Department. These spaces are always in use,
 reflecting the current deficiency in police parking.
- The lot on the Blue House parcel at the corner of 5th and D provides the public with approximately 33 metered parking spaces. This lot is heavily used, and is regularly filled during business hours.
- The Menzies lot, located across Mission Avenue north of the San Rafael Public Library, provides approximately 55 unmetered parking spaces for City staff as well as members of the public, such as patrons library.

As these parking lots already experience high daily demand, it will be a challenge for any new development on these sites just to avoid worsening the parking situation, let alone improve it.

Preferred Strategies

The strategies described below fully meet the programmatic need for space and strive to meet the need for parking as established in the program confirmation phase of the project. It would be appropriate for the next level of development to include further program refinement, such as to reflect the space and parking efficiencies gained with a shared public safety building (Strategy III).

Strategy I - "As Is"



With Strategy I, all facilities would remain on their existing sites, with the level of improvements at each facility dependent on priority.

The Police Department component would entail an approximately 19,083 square foot, one-story addition to City Hall. Parking would need to be on two levels under the new addition as well as on its roof, which would be at the same level as and accessible from the existing upper parking lot. City Hall would be required to be structurally upgraded to meet the requirements for a modern essential facility.

Fire Station No. 1's tight urban site and current building plan layout would make renovation and addition difficult. Therefore, from an operational standpoint, demolishing and rebuilding Fire Station No. 1 would be preferable to renovation. The facility would house the Fire Department's Administrative offices as well as up to six firefighters and/or paramedics.

Strategy I

	Need	Provides
PD Area	28,245 sf	28,245 sf
PD Parking	115 spaces	115 spaces
FD Area	11,690 sf	11,690 sf
FD Parking	33 spaces	0 spaces

Advantages

- No land acquisition required
- Good inter-departmental access

Disadvantages

- Two layers of parking required under Police Station
- City Hall must be seismically upgraded
- Temporary facilities will be needed for Fire Station No. 1 and City Hall functions, including the Police Department
- Insufficient Fire Station and Fire Dept. Administration parking
- Zoning variance required for Fire Station No. 1

DEVELOPMENT STRATEGIES

Advantages of this option include that facilities would all be developed on their existing sites, maintaining current inter-departmental operational relationships and negating the need to purchase additional land.

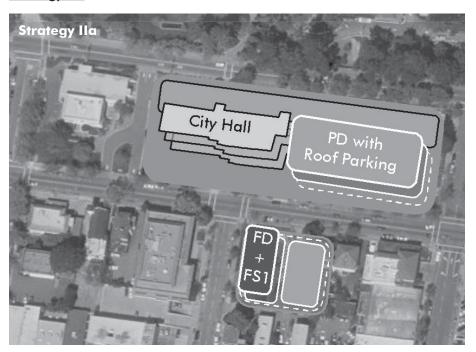
Disadvantages include the need to replace valuable parking on the City Hall site; two layers of parking under the new Police Station would be required, an expensive proposition. Because certain police functions would remain in City Hall, that facility would need to be structurally upgraded to meet essential facility requirements. The City would also need to provide temporary facilities for personnel assigned to Fire Station No. 1 until the new facility is completed, as well as for various departments in City Hall during its seismic upgrade. The amount of parking needed for Fire Station No. 1 and Fire Department Administration could not be accommodated on-site, and the amount of parking available on the redeveloped City Hall site would be insufficient to compensate. A variance would be required to build the new fire station, as the programmed area exceeds the maximum building area allowed according to its zoning (the current facility also exceeds this maximum).

An alternative might be to disregard Fire Station No. 1's parking needs, build only one underbuilding parking level, and assign part or all of the lot at 5th and D Streets for Fire Department use.

Strategy II - New Freestanding Fire Department + Fire Station No. 1, New Freestanding Police Station

Strategy II would develop a new Police Station and a new Fire Station No. 1 with Administrative offices. There are two workable permutations of Strategy II.

Strategy IIa



A new two-story Fire Station No. 1, with Fire Department Administrative offices, would be developed on the Blue House site. A one-story Police Station, with one layer of parking underneath the building and another on its roof, would be located on the City Hall site.

Advantages of this option include that the parcels are already owned by the City, eliminating the need to spend money to acquire private sites. Moving the Police Department to a new facility also removes the essential facility designation from City Hall, along with the need to upgrade it structurally. The new facilities would provide sufficient parking for both police and fire needs, and could increase the amount of parking available to City Hall staff and the public.

Disadvantages of this option would be the need to demolish the Blue House and the Annex, and relocate the departments currently housed in each. However, these functions may be able to move into the first floor of City Hall once the Police Department moves into its new facility. Another disadvantage of this option would be that the parking on each site would be temporarily unavailable during construction there. Disposition of Fire Station No. 1 would also need to be addressed.

Strategy IIa

	Need	Provides
PD Area	28,245 sf	28,245 sf
PD Parking	115 spaces	115 spaces
FD Area	11,690 sf	11,690 sf
FD Parking	33 spaces	33 spaces

Advantages

- No need to upgrade City Hall
- Parking needs met
- Existing Fire Station No. 1 becomes an asset

Disadvantages

- Redevelopment and the Print Shop will need to be moved
- Parking may be unavailable during construction

DEVELOPMENT STRATEGIES

Strategy IIb

	Need	Provides
PD Area	28,245 sf	28,245 sf
PD Parking	115 spaces	115 spaces
FD Area	11,690 sf	11,690 sf
FD Parking	33 spaces	33 spaces

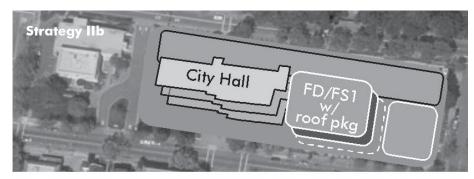
Advantages

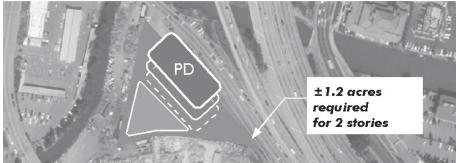
- Existing Fire Station No. 1 becomes an asset
- Parking needs met

Disadvantages

- Land acquisition may significantly increase cost
- Finding a suitable, affordable site may be difficult

Strategy IIb





Fire Station No. 1 and Fire Department Administration would be housed in a new one-story structure with under-building and rooftop parking on the City Hall site. A private site would be purchased for a new Police Station, which would require a minimum of 1.2 to 1.6 acres of land depending on whether it the building is to be two stories or only one.

Strategy IIb would provide sufficient parking on the City Hall site for the Fire Department's needs. It could also increase the amount of parking available to City Hall staff and the public, such as patrons of the public library.

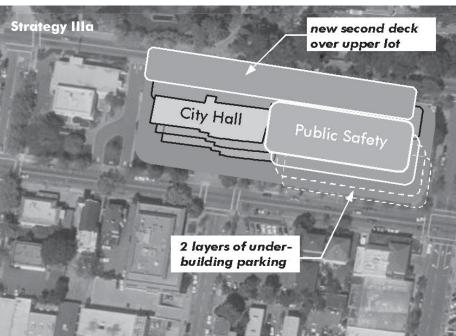
Disadvantages of Strategy IIb would be the identification and acquisition of a site for the Police Station. Depending on factors such as the location and current use, the price for a suitable site could be fairly expensive. San Rafael is approaching total build-out, and the few vacant parcels in the downtown are currently slated for commercial redevelopment. While it may be possible to find a site outside the downtown area, this would be less efficient in terms of the Police Department's close working relationship with other departments at City Hall. One way to offset or reduce the net cost of a new site for the Police Station might be to sell or lease Fire Station No. 1 after the new fire facility is completed on the City Hall site.

Strategy III - New Public Safety Facility

Strategy III would develop a facility that would house the Police Department, Fire Department Administration, and either Fire Station No. 1 or Fire Station No. 2, depending on the location. The public safety facility strategy takes advantage of the efficiencies that a shared building can offer. Sharing certain spaces such as the lobby, meeting and conference rooms, training areas, and support spaces could reduce the overall square footage needed by police and fire functions. A single building can also be more efficient to operate, with fewer air handling units (AHUs), generators, etc. than would be required for two separate facilities. Parking space reductions might also be accomplished with a shared parking approach.

This strategy could be developed on the City Hall site, the "Blue House Block" parcels, or privately-owned land purchased by the City.

Strategy IIIa



Option IIIa places the public safety facility on the City Hall site. One advantage of this location would be its close proximity to City Hall, allowing the Police and Fire Departments to maintain their close ties with other city functions. This option also would not require the City to purchase any additional land on which to build. And once the Fire Department moved out of Fire Station No. 1, that parcel would become an asset that the City could sell, lease, or use for other purposes.

Disadvantages of the City Hall site include the challenge of providing sufficient parking onsite. Each layer of under-building parking, which is expensive to

41,324 sf	41,324 sf				
148 spaces	130 spaces				
129 spaces	98 spaces				
* with Fire Station No. 1 Advantages					
•					
 No need to upgrade City Hall 					
 Existing Fire Station No. 1 					
	ion No. 1 s t to upgrade				

Requires two layers of underbuilding parking, plus provisions for an additional 49

Disadvantages

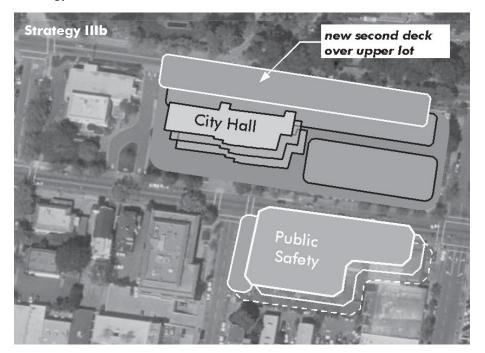
spaces elsewhere

DEVELOPMENT STRATEGIES

build, would provide approximately 65 spaces, making even two layers insufficient to meet the Fire and Police Departments' combined need for almost 150 spaces. The City would need to provide nearly 50 parking spaces elsewhere in the civic center area in order to meet the remaining police, fire, and City Hall demand for parking. One way to meet this demand would be to construct a second parking deck, accessible from Mission Street, over City Hall's upper parking lot.

Strategy IIIb

Strategy IIIb Need Provides Area* 41.324 sf 41.324 sf **Parking** 148 spaces 78 spaces CH Parking 129 spaces 144 spaces * with Fire Station No. 1 **Advantages** No need to upgrade City Hall Good proximity to City Hall **Disadvantages** Requires the purchase of the private parcel Not all parking needs can be accommodated on-site



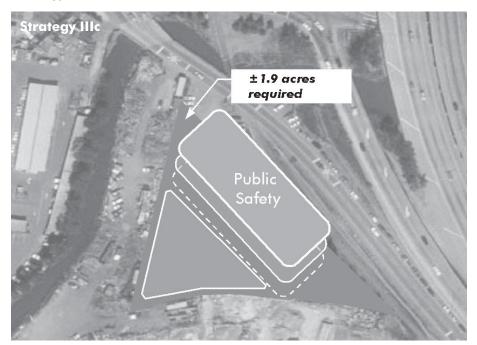
In Option IIIb, the public safety facility occupies the "Blue House Block" across the street from City Hall. This proximity will allow the Police and Fire Departments to continue to work closely with other functions in City Hall.

Disadvantages include the need to acquire the privately-owned residential parcel between the Blue House site and the parcel on which Fire Station No. 1 currently sits.

Also, the Blue House Block site would not be able to accommodate all of the parking required by the Fire and Police Departments on-site. A parking surplus of about 15 spaces at City Hall could be pressed into service for fire and police use, leaving the City with a net parking need for approximately 55 spaces, which could be accommodated by adding a second deck over the upper lot on the City Hall site.

DEVELOPMENT STRATEGIES

Strategy IIIc



Strategy IIIc					
	Need	Provides			
Area w/FS1	41,324 sf	41,324 sf			
Area w/FS2	46,467 sf	46,467 sf			
Parking	148 spaces	148 spaces			

Advantages

- No need to upgrade City Hall
- Existing Fire Station No. 1 or No. 2 becomes an asset

Disadvantages

- The cost of the site is unknown; may be several million dollars
- Depending on the location of the site, Police and Fire Department functions may be distant from the civic center

Option IIIc would place the public safety facility on a site to be acquired by the City. The new site would be located within the response area of either Fire Station No. 1 or No. 2, and would determine which of these stations would be included in the public safety facility.

Depending on its size, the new parcel might allow much of the required parking to be provided at street level, which is much less expensive than going underground. A public safety facility with one layer of under-building parking would require almost two acres in order to accommodate all of the required parking on-site.

The main *disadvantage* to Option IIIc is in the identification and acquisition of a suitable site. In addition to sufficient capacity for the facility and all required parking, the ideal site would provide close freeway access for the Police Department and good access to one or more major traffic arterials for the Fire Department. Reasonably good access to City Hall and the downtown corridor also is desirable for both the Police and Fire Departments. As discussed in an earlier section, such a site could be expensive and difficult to find.

Whether Fire Station No. 1 or No. 2 ended up moving into the new public safety building, the vacated station would become an asset that the City could sell or lease. In the case of Fire Station No. 2, moving its operations to the new facility would free up the existing site on Third Street, perhaps enabling the Fire Department to modernize its training facilities there.

IMPLEMENTATION



Project budgets for individual facilities vary according to several factors. One is the extent of improvements – whether a facility will be upgraded to meet structural and life safety requirements only, or whether it will be fully modernized according to the strategic program. Another consideration is the particular development strategy for the "first priority" facilities: the Police Station, Fire Station No. 1, and Fire Station No. 2. It should be noted that the sites under consideration require very efficient land use. In most cases, parking must be provided either under-building or in a structure to meet the need, both of which have a significant impact on construction costs.

Budget for Strategy I - "As Is"

Strategy I improves each facility on its current site. This "as is" strategy is preferred for Fire Stations No. 4, 5, 6, and 7, as well as Terra Linda Community Center and San Rafael Community Center. It would be both impractical and of no benefit to relocate any of these facilities, as they are currently well-situated within their service areas. New construction might be preferable for Fire Stations No. 4 and 7, given their poor structural condition. For Fire Stations 5 and 6 and the two community centers, renovation and addition may be the most practical approach.

The following chart shows the estimated capital costs associated with the projects in Strategy I. The first two columns shows the size and estimated budget for completing the proposed structural and life safety improvements at each facility. The next two columns show the size and budget for full modernization, including seismic and life safety renovations as well as expansion to meet strategic program requirements. The last two columns display the size and cost associated with developing new facilities on the existing sites, including a budget for complete demolition of the existing structures.

	Seismic + Life Safety (Renovation Only)			dernization on + Addition)	New Construction	
STRATEGY I	Size	Budget	Size	Budget	Size	Budget
Fire Station 4	4,380 sf	\$ 611,800	7,664 sf	\$ 2,321,427	7,664 sf	\$ 3,169,080
Fire Station 5	4,380 sf	\$ 473,166	9,164 sf	\$ 3,001,543	9,164 sf	\$ 3,842,287
Fire Station 6	6,525 sf	\$ 397,784	7,654 sf	\$ 1,344,441	N/A	N/A
Fire Station 7	4,061 sf	\$ 482,402	7,661 sf	\$ 2,635,709	7,661 sf	\$ 3,489,630
San Rafael Comm. Ctr.	13,748 sf	\$ 756,992	14,536 sf	\$ 1,133,861	N/A	N/A
Terra Linda Comm. Ctr.	5,499 sf	\$ 538,286	9,682 sf	\$ 2,633,433	7,629 sf	\$ 3,781,716

For the Police Department, the "as is" strategy is based on renovation of the current Police Station and the construction of a new addition on the east end of the building. This strategy requires that the entire City Hall facility be improved with respect to its structure and life safety considerations in order to meet code requirements for an essential facility.

The modernization budget for Fire Station No. 1 is based on complete demolition of the existing station and subsequent construction of a new facility, due to the difficulty of adding space to the existing building on its tight urban site.

Fire Station No. 2 could be modernized through either renovation and addition or new construction. As the current site is impeded by the training tower (which is in poor condition), the station may benefit from the considerable site efficiencies that could be gained by new construction.

		+ Life Safety ation Only)	-		New Co	onstruction
STRATEGY I	Size	Budget	Size	Budget	Size	Budget
City Hall w/ Police*	27,410 sf	\$3,612,755	46,233 sf	\$ 17,998,936	N/A	N/A
Fire Station 1	9,671 sf	\$1,324,295	N/A	N/A	11,690 sf	\$ 4,492,188
Fire Station 2	3,284 sf	\$ 563,531	13,048 sf	\$ 5,374,773	13,048 sf	\$ 5,817,331

^{*} Full modernization budget addition includes approximately \$4.9 million for parking.

Budget for Strategy II - New Fire, New Police

Strategy II differs from Strategy I only in that it develops a new facility for Fire Station No. 1 and Fire Department Administration on one site, and a new Police Station on another site. All other facilities are candidates for improvement, whether seismic/life safety only or full modernization, on their current sites.

The first of two workable options for Strategy II develops a new Police Station in the southeast portion of the City Hall site, and a new fire facility across the street at the corner of Fifth and D Streets. The second option, dubbed IIb, involves the construction of a new fire facility adjacent to City Hall, and a new Police Station on another site yet to be acquired. For purposes of this analysis, the land acquisition and preparation budget for the private site has been estimated at approximately \$3.5 million.

The estimated capital costs associated with Strategy II are shown in the table below. The first column shows the estimated budget for completing the proposed structural and life safety improvements at each facility. The next columns show the action, size, and budget for fully modernizing and expanding each facility to meet strategic program requirements. The modernization budget includes the cost of seismic and life safety renovations to the existing facility.



STRATEGY II	Facility Size	Building Budget	Parking Budget	Total Facility Budget	Comments
Option IIa					
PD on City Hall site	28,505 gsf	\$ 11,388,127	\$ 4,937,969	\$ 16,326,096	rooftop parking
FD on Blue House site	40,195 gsf	\$ 4,548,415	\$ 4,430,498	\$ 8,978,913	
Ila Total Project Budget	-			\$ 25,305,008	
Option IIb					
PD on private site	28,505 gsf	\$ 11,299,681	\$ 3,832,400	\$ 18,632,081	incl. land budget
FD on City Hall site	11,690 gsf	\$ 4,593,246	\$ 2,239,916	\$ 6,833,162	rooftop parking
IIb Total Project Budget				\$ 25,465,243	

VII. FACILITY SUMMARIES

This section contains a summary of the evaluation, strategic program, and available development strategies for improving each facility considered in this study.

POLICE DEPARTMENT



1400 Fifth Street public entry



Modular unit in parking lot



New dispatch

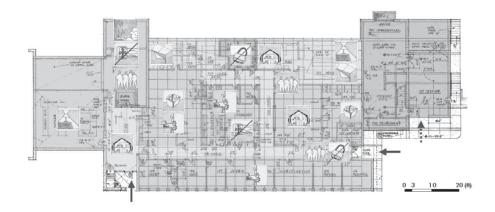
POLICE DEPARTMENT

Facility Evaluation

The Police Department occupies the entire first floor – approximately 8,900 square feet – of City Hall, as well as a modular unit and a container in the parking lot. Even after certain investigations and support services functions moved into approximately 5,300 square feet of leased offices off-site, the Police Station in City Hall continues to suffer from a severe shortage of space. The briefing room, locker rooms, and armory are undersized. Evidence processing and storage operate out of a modular trailer and a steel container, which present real challenges to security as well as preservation of evidence. The department also has no space to provide a decontamination area or appropriate facilities for storage and handling of potentially hazardous materials.

Improper security zoning increases the potential safety risk to personnel, detainees, and the public. Holding cells are out of compliance with applicable codes and regulations, making them difficult to supervise and potentially unsafe; juveniles also cannot be separated from adult detainees. Dispatch's uninterrupted power supply (UPS) is at capacity, and must be replaced if equipment is added or upgraded. The Police Station has a dark, "basement" feel due to its location partially below grade and set into the hill.

In addition, the Police Station suffers from the same structural and infrastructure deficiencies found in other areas of City Hall, such as poor ventilation, outdated mechanical and electrical systems, and energy-inefficient lighting. Refer to the *City Hall* summary for more details.



Work Area

Circulation/Reception/Information

Restricted Area

Building Service

Restrooms

Strategic Program

The strategic program for the Police Department strives to correct the operational inefficiencies created by the current facility, including the lack of space and the resulting need to house key functions off-site.

The Police Department expects that its staffing will grow from its current level of 108 FTE to a total of approximately 140 FTE in 2022, with the majority of growth occurring in the ranks of patrol, investigative, and street crime officers. The department also plans to increase efficiency and improve service through an increase in the number of volunteers from nearly 40 today to approximately 60 in 2022.

The following table summarizes the program for the Police Department. The first column shows the amount of space currently available for each division. The second column shows the amount of space currently needed for today's staffing levels. The final column lists the amount of space required to handle operations and staffing levels anticipated for the year 2022. All areas are shown in gross square feet, which includes an allowance for circulation, wall thicknesses, fixed equipment, and other unassignable space.

Strategic Program for Police Department	Current Space (gsf)	Current Need (gsf)	2022 Need (gsf)
Administration	1,174	1,807	1,807
Operations	2,312	5,717	6,712
Investigations/			
Support Svcs	3,842	7,900	9,304
Common Areas	2,535	8,548	9,614
Enclosed Parking/			
Vehicular Access	-	960	1,068
Citibank (Leased)	5,294	-	-
Total	15,156	24,932	28,505

As the first two columns show, the Police Department is operating with a serious space deficiency (almost 40%) compared to the amount of space that it currently needs. The "current need" program provides offices for supervisors (captains, corporals, lieutenants, and sergeants); a vastly expanded evidence processing and storage area; a larger records unit; a prisoner processing area in compliance with applicable codes and regulations; workspace for volunteers; and improved support areas such as an armory, training spaces, and locker rooms.

As the table also shows, the 2022 need for space is not significantly larger than the current need. The additional space needed for 2022 is to support the expected increases in staffing over the next two decades.

FACILITY SUMMARIES



Offices are overcrowded and shared by two to four people.



Lockers make corridors impassable



Briefing room

POLICE DEPARTMENT



Public lobby

Currently, the police use 60 parking spaces at City Hall, 10 of which are taken up by the facility's trash area, a container used for evidence processing and storage, and a modular trailer. The remaining 50 spaces provide less than half of the 111 spaces the department currently needs. The Police Department expects that it will need 115 parking spaces by the year 2022, just four spaces more than its current need.

Facility		Current Spaces Needed	
Police Department	60	111	115

Development Strategies and Implementation

Along with Fire Stations No. 1 and 2, the Police Station was rated the highest priority for seismic, life safety, and modernization improvements. Considerations included the critical nature of police operations and the current severe inefficiencies created by the lack of space in the Police Station.

The first option for the Police Station would be to address seismic and life safety issues throughout City Hall, focusing on strengthening the structure, adding fire sprinklers, and installing an emergency generator. An addition to the existing Police Station would provide additional space, but City Hall would still require seismic and life safety upgrades. A new, freestanding Police Station could be constructed adjacent to City Hall on the same site, providing sufficient space for police while eliminating the need to upgrade City Hall to meet the requirements for an essential facility. (Constructing a new Police Station on a different site would likely have a similar project budget, unless the site is not currently owned by the City.)

Development Strategies	Size (gsf)	Facility Budget	Parking Budget	Project Budget	Net Parking Increase
Strategy I - "As Is"					
Seismic + life safety upgrades to City Hall	27,150	\$ 3,612, 755	N/A	\$ 3,612, 755	0 spaces
Police addition + City Hall upgrade	19,343	\$ 13,264,023	\$ 4,853,868	\$ 17,998,936	64 spaces (2 levels under + rooftop)
Strategy II – New Fire,	New Police				
Ila New Police on City Hall site	28,505	\$ 11,388,127	\$ 4,937,969	\$ 16,326,096	84 spaces (1 level under + rooftop)
IIb New Police on privately-owned site	28,505	\$ 14,799,681	\$ 3,832,400	\$ 18,632,081	116 spaces
Strategy III - New Publ	ic Safety Fa	cility			
Illa On City Hall site	41,871	\$ 16,067,215	\$ 15,436,850	\$ 31,504,065	164 spaces (2 levels under+deck at CH)
IIIb On Blue House block	41,871	\$ 18,295,529	\$ 8,015,150	\$ 26,310,679	125 spaces (1 level under+deck at CH)
IIIc.1 On private site, with Fire Station 1	41,871	\$ 19,448,096	\$ 5,644,210	\$ 25,092,306	182 spaces
IIIc.2 On private site, with Fire Station 2	46,718	\$ 21,332,915	\$ 6,194,045	\$ 27,526,960	181 spaces



Overcrowded, shared office

FIRE STATION NO. 1 & FIRE DEPT. ADMIN.

1039 C Street



Engines have a tight fit through apparatus doors

FIRE STATION NO. 1 AND FIRE DEPARTMENT ADMINISTRATION

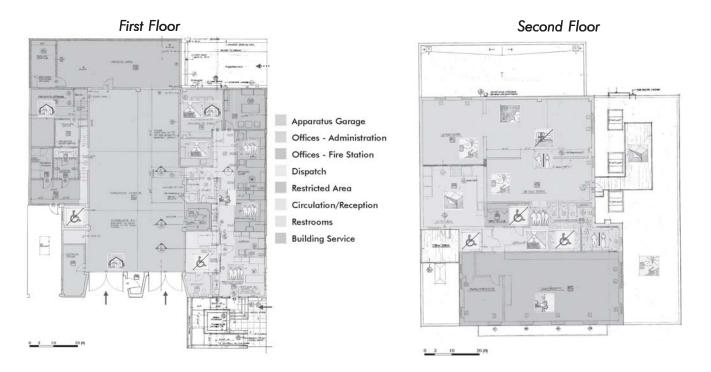
Located on C Street in the heart of San Rafael's downtown and civic center area, Fire Station No. 1 is the oldest of the City's fire stations. Originally completed in 1917, Fire Station No. 1 (FS1) has been remodeled several times over the years, most recently in 1986 to its current size of approximately 9,411 square feet.

FS1 provides a handsome headquarters for San Rafael's dedicated Fire Department. An engine company and a paramedics team currently operate out of FS1, which serves the downtown and western portions of the City. FS1 also houses the Fire Department's administrative offices and its dispatch center, although dispatch is scheduled to move off-site in 2003. The Fire Department's mechanic also is located at FS1, servicing everything from SCBA gear to ladder trucks out of a small workroom and garage.

Facility Evaluation

Firefighting and Paramedic Operations

The original building's shell is of cast-in-place concrete, with a wood roof and interior construction. Additions on the north and west sides are of wood and/or masonry.



FS1 predates even the earliest version of the Uniform Building Code. That the building has survived more than a few strong Bay Area earthquakes during the past 86 years is a testament to the knowledge and skill of its original builders, as well as to the care with which the City has maintained the facility. The structure also appears to be in good condition, without signs of excessive cracking, differential settlement, or other problems. However, CH Wells rated FS1's expected performance during future strong earthquakes as "poor," meaning that major damage – or even partial or full collapse – is a real possibility. The age of the concrete walls is a significant consideration in the structural consultant's rating, as is the possible lack of reinforcing steel (the extent of masonry reinforcement, if any, cannot be determined without tearing open the walls). Upgrading the structure to meet the requirements for an essential facility will require significant work, including new concrete shear walls, connectors, holdowns, and foundations at certain locations.

Life safety shortcomings at FS1 include the lack of a fire suppression system (sprinklers) and adequate exit signage. Firefighters and paramedics returning from calls involving bodily fluids and/or toxic substances (including chemicals used for firefighting) do not have an appropriate decontamination area. Provisions for exhaust in the apparatus bay are inadequate, exposing emergency workers and administrative personnel to potentially high levels of vehicular fumes. Administrative areas are all but completely out of compliance with ADA requirements, making both ingress and egress difficult and even hazardous.

FS1's modernization needs are many. Its mechanical and electrical systems are outdated and ineffective, and many interior and exterior surfaces sorely need refinishing. While firefighters and paramedics do an outstanding job of providing service to the community despite the facility's shortcomings, operations are less than efficient due primarily to a shortage of space, especially in the apparatus bays and equipment storage areas. The layout of living areas does not support the needs of a modern, diverse firefighting and paramedic workforce.

Fire Department Administration

The administrative offices, originally built to accommodate a smaller number of employees, are seriously overcrowded. Division chiefs, fire marshals, and clerical staff squeeze into cubicles designed for half as many personnel. The conference room doubles as records storage, and is lined with file cabinets. Members of the public who visit the offices find that there is little space available for activities such as plan checks.

Fire Department Administration currently needs 17 parking spaces to accommodate its department-owned vehicles. However, no spaces are available on-site at FS1, and only nine spaces are allocated to the department on the City Hall site across the street. Fire Department vehicles park in red-zone areas and curb cuts on the east and north sides of the facility.

FACILITY SUMMARIES



Open dormitory limits hiring female firefighters and paramedics





The service/mechanic's areas are extremely small; this operation will move to Fire Station No. 2 by 2022.

FIRE STATION NO. 1 & FIRE DEPT. ADMIN.

Strategic Program

Firefighting and Paramedic Operations

Operationally, FS1 is currently staffed by an engine company and a paramedic team on each shift; this staffing level is expected to be maintained through 2022.

The "current needs" program in the table below aims to correct deficiencies in the amount of space available for emergency equipment and protective clothing storage, decontamination, hazardous materials storage, and living areas for a diverse workforce. Note that the current needs column includes the recommended amounts of space for the service and mechanic's operation, which the Fire Department would like to move to Fire Station No. 2 by the year 2022.

Strategic Program for Fire Station No. 1	Current Space	Current Need	2022 Need
FS1 Administrative Areas	263	709	709
Operations	2,200	2,837	2,837
Living Areas	2,705	2,613	2,613
Service/Mechanic ¹	1,094	3,109	_
Classroom	-	1,200	1,200
Subtotal, nsf	6,262	9,268	6,159
Circulation	1,603	2,317	1,540
Total gsf	7,865	11,585	7,699

Fire Department Administration

It is expected that Fire Department Administration will remain co-located with the firefighting and paramedic operations of FS1, due to the preference for both to remain downtown. However, administrative functions could be located elsewhere, either on their own or with another fire station.

A project is currently underway to move the Fire Department's dispatch operation into leased space in a building adjacent to FS1. It is expected that this provision will be sufficient to meet dispatch needs through and beyond 2022. As such, dispatch was not included in either the current or the 2022 program for this project.

Strategic Program for FD Administration	Current Space	Current Need	2022 Need
Offices	748	1,315	1,815
Support	210	585	585
Conference	198	370	370
Dispatch ²	199	_	_
Subtotal, nsf	1,355	2,270	2,770
Circulation	191	681	921
Total gsf	1,546	2,951	3,991

¹Service/mechanic's operation to move to Fire Station No. 2 by 2022.



The Fire Administration conference room is also used as a library and storage for files and records.



Administrative areas are very crowded; many desks are shared by two to three personnel.

²Dispatch will move into leased space in 2003.

The need for parking for vehicles associated with Fire Department administrative functions is expected to grow from 17 spaces at present to 21 spaces by 2022.

Parking Needs	Current Spaces	Current Spaces	2022 Spaces
	Available	Needed	Needed
Fire Department Administration	9*	17	21

^{*}Provided at City Hall

Development Strategies and Implementation

FS1 was rated as the highest priority for improvements. It is the only fire station in southern San Rafael located west of US Highway 101, and serves the downtown area and surrounding residential neighborhoods. It is critical for the facility to resist damage from earthquakes, fires, and other disasters, especially if such disasters also delay response by other fire stations (such as if debris blocks thoroughfares under the freeway).

Seismic/life safety improvements will focus on upgrading the existing facility's structure, adding fire sprinklers, and installing an emergency generator. Full modernization by adding onto the existing facility would not be possible on FS1's tight urban site, as there is simply no room for expansion. Demolishing and rebuilding FS1 would likely require a zoning variance to increase the allowable floor area ratio (FAR), as current zoning only allows a facility of approximately 7,750 square feet.

Fire Station No. 1 is a candidate for moving to another site, such as the east end of City Hall's parcel or the corner of Fifth and D Streets, or for inclusion in a public safety facility with the Police Department.

FACILITY SUMMARIES



There is no room for expansion on FS1's tight urban site. Note fire vehicle parked across service driveway.

Development Strategies	Size (gsf)	Facility Budget	Parking Budget	Project Budget	Net Parking Increase
Strategy I - "As Is"					
Seismic + life safety upgrades to FS1	9,671	\$ 1,324,295	N/A	\$ 1,324,295	0 spaces
Rebuild FS1	11,690	\$ 4,492,188	N/A	\$4,492,188	0 spaces
Strategy II - New Fire,	New Police				
Ila New Fire on Blue House parcel	11,690	\$ 4,548,415	\$ 4,430,498	\$ 8,978,913	71 spaces (1 level under+grade)
Ilb New Fire on City Hall site	11,690	\$ 4,593,246	\$ 2,239,916	\$ 6,833,162	41 spaces (1 level under+rooftop)
Strategy III – New Pub	lic Safety Fa	cility			
IIIa On City Hall site	41,871	\$ 16,067,215	\$ 15,436,850	\$ 31,504,065	164 spaces (2 levels under+deck at CH)
IIIb On Blue House block	41,871	\$ 18,295,529	\$ 8,015,150	\$ 26,310,679	125 spaces (1 level under+deck at CH)
IIIc.1 On private site	41,871	\$ 19,448,096	\$ 5,644,210	\$ 25,092,306	182 spaces

FIRE STATION NO. 2



210 Third Street



Drill tower

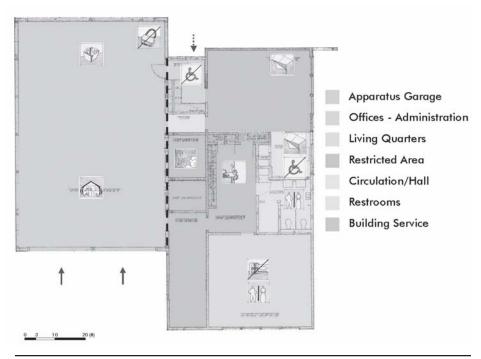
FIRE STATION NO. 2

San Rafael's Fire Department added Fire Station No. 2 (FS2) in 1957 after a fire destroyed an entire city block before it could be contained by personnel from FS1, who were trapped on the "wrong" side of the busy Northwestern Pacific railroad tracks that ran through downtown San Rafael at that time. By far the smallest of San Rafael's fire stations, this approximately 2,982 square foot facility serves a portion of the city east of Highway 101 and provides backup for Fire Stations No. 1, 4, 5, and 7.

In addition to the station building, the site also features training facilities such as a five-story drill tower and an approximately 1,000 square foot modular classroom. FS2's location at the corner of Third Street and Union enables onduty personnel from other stations to attend training sessions without compromising their ability to respond to any emergency calls that may come in.

Facility Evaluation

FS2 is a one-story, lightweight wood-framed structure designed in accordance with the 1955 Uniform Building Code. Although the building is in good condition structurally, its expected performance in a major earthquake is rated as "fair," meaning that minor to moderate levels of damage are likely. Some lateral force-resisting elements will be overstressed if evaluated by the 1997 UBC, which requires a 35% greater base shear design force than the 1955 code. Seismic improvements should include replacement of roof sheathing over the apparatus bays, reframing certain shear walls, and new foundations at certain locations.



The drill tower has fared somewhat worse structurally than the station, primarily due to water infiltration. The tower's floor slab is lower than the level of the surrounding grade, and no floor drains were included in the design to handle the resulting ponding. Water damage to floor and wall panels can be seen throughout the tower. The base of the tower suffers from dry rot. In order to remain standing in a major earthquake, the tower will likely require replacement of all water-damaged sheathing and framing elements, additional reinforcing straps and holdowns, and a new foundation.

FS2 lacks fire sprinklers and appropriate exit signage, and does not comply with ADA accessibility requirements. Hazardous materials, including firefighting chemicals as well as toxic substances cleaned up from spills around the community, are stored in the drill tower, for want of a more appropriate space. Without a decontamination area, personnel must either risk contaminating areas inside the station, or hose themselves off in the driveway, washing potentially dangerous substances into the storm or sewer systems.

A whole host of modernization issues plagues FS2. By far the smallest of San Rafael's fire stations, FS2 is less than half the size of Fire Station No. 6 (which is by no means a large facility). Operational areas such as apparatus bays and storage were not designed to accommodate the amounts and sizes of engines, equipment, and protective clothing used in modern operations. Living quarters are tiny and poorly-ventilated, and cannot provide gender separation for a diverse workforce. Outdated mechanical and electrical systems require replacement.

The parcel on which FS2 currently sits also limits operational efficiency. The station itself is oriented along the Third Street end of the long, narrow site. Navigation between the building and the driveways onto Union Street is complicated by the presence of the modular classroom and the drill tower. Parked vehicles of personnel and visitors to the facility, equipment trailers, and training props further restrict the already crowded site.

Strategic Program

FS2 is currently staffed by a single three-person engine company per shift. By 2022, the Fire Department would like FS2 to be able to house three more firefighters or paramedics per shift, should changes in the surrounding community require the capacity for additional response. The department would also like to shift its service and mechanic's operation to FS2 from its current tiny space at Fire Station No. 1.

The program that addresses current needs at FS2 corrects deficiencies in the amount of space available for emergency equipment and protective clothing storage, decontamination, hazardous materials storage, and living areas for a diverse workforce. Additional space also is needed for a larger classroom and the associated storage for training materials and equipment.



Kitchen



The current layout of FS2's long, narrow site makes circulation difficult and restricts training opportunities



Small work area and storage

FIRE STATION NO. 2





The classroom at FS2 is small and lacks storage for training materials and supplies.

Note that the modular classroom, which is approximately 1,000 square feet, is not included in the current net or gross square foot areas in the table below.

Strategic Program for Fire Station No. 2	Current Space	Current Need	2022 Need
Administrative Areas	82	559	679
Operations	1,604	2,837	2,837
Living Areas	1,134	1,870	2,613
Service/Mechanic	_	_	3,109
Classroom	1	1,200	1,200
Subtotal, nsf	2,820	6,466	10,438
Circulation	162	1,617	2,610
Total gsf	2,982	8,083	13,048

Development Strategies and Implementation

FS2 received the highest priority rating for improvements. Its serious structural and space deficiencies and importance as a training facility made it a first tier candidate for both seismic/life safety and modernization upgrades. The station's central location and responsibility to provide backup to four out of San Rafael's other five fire stations make it important for FS2 to provide continuous service, especially after an earthquake.

Seismic/life safety improvements would focus on upgrading the existing facility's structure, adding fire sprinklers, and installing an emergency generator. Full modernization would address all seismic/life safety needs and expand the facility to meet all operational, living, and storage needs. Demolition and rebuilding of FS2 also is an option, considering current conditions and the potential challenges involved in expanding the existing facility.

The costs for the modernization projects below include the drill tower and a drafting pit. A separate study commissioned by the City in 2002 estimated that structural improvements to the existing tower would total approximately \$105,000, while the cost to replace the tower would total approximately \$250,000.² It should be noted that the drill tower and drafting pit are just two of the features of a modern fire training facility. The need for other features (such as confined space props, etc.) should be studied in more detail once a development strategy for FS2 has been selected.

¹Modular classroom is approximately 1,000 square feet.

² Training Tower Rehabilitation Study, Kappe + Du Architects, March 2002.

Development Strategies	Size (gsf)	Facility Budget	Parking Budget	Project Budget	Comments
Strategy I - "As Is"					
Seismic + life safety upgrades	3,242	\$ 399,160	N/A	\$ 399,160	
Seismic, life safety + addition/renovation	13,048	\$5,390,204	N/A	\$5,390,204	Includes renovation of drill tower
Rebuild FS2	13,048	\$6,037,952	\$119,600	\$6,157,552	Includes new drill tower
Strategy III – New Publ	ic Safety Fa	cility			
IIIc.2 On private site, with Fire Station 2	46,718	\$ 21,332,915	\$ 6,194,045	\$ 27,526,960	Includes Police Station and FD Admin.

FIRE STATION NO. 4



46 Castro Street



Single dormitory prevents the inclusion of female firefighters

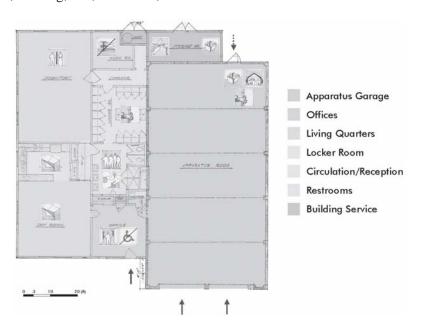
FIRE STATION NO. 4

Located on a relatively small site in a business/industrial area, Fire Station No. 4 (FS4) serves San Rafael's Canal district. This approximately 4,120 square foot facility was constructed in 1964 in response to increased commercial and residential growth in this portion of the city. FS4 is staffed by a three-person engine company and also houses San Rafael's hose tender – a pumper equipped with one mile of hose.

Facility Evaluation

FS4 is of mixed construction, with tilt-up concrete apparatus bays and living quarters made of lightweight wood-framed construction. Apart from some dry rot decay in the eave of the high roof, the facility is in good condition structurally.

However, its performance in a major earthquake is expected to be poor, with a significant risk of serious damage or even collapse. One major factor in this rating is that the structural design for the facility did not provide a complete load path to transfer lateral loads from the roof diaphragm to the foundation. As a result, in an earthquake, the heavier concrete apparatus bays will likely place too much load on the lighter wood frame of the living quarters. Some of the concrete columns are also at risk, as is the low roof. In order to bring FS4 into compliance with today's structural requirements for an essential facility, a number of improvements are necessary, including new or strengthened shear walls, framing, ties, holdowns, and foundations.



Life safety needs at FS4 include a fire suppression system (sprinklers), appropriate exit signage, and an emergency generator that would allow the station to remain functional during power outages. Also lacking are appropriate areas for decontamination and for handling and storage of hazardous materials.

There are many opportunities for modernization at FS4. Overall, the facility's small size presents challenges to operational efficiency, with particular space deficits noted in the office, apparatus bays, and storage areas. Its mechanical and electrical systems are outdated and in need of replacement, and worn surfaces on the facility's exterior and interior are due for refinishing. FS4 also lacks appropriate signage that would identify it within the local community.

Strategic Program

FS4 is currently staffed by three firefighters per shift. By 2022, the Fire Department would like to be able to house three more firefighters (or paramedics) per shift at FS4, as needed to respond to changes in the surrounding community. In the more immediate term, FS4 must be modernized to address its current needs, such as for emergency equipment and protective clothing storage, meeting space, and living areas that permit separation of male and female staff.

Strategic Program for Fire Station No. 4	Current Space	Current Need	2022 Need
Administrative Areas	196	555	675
Operations	2,108	2,843	2,843
Living Areas	1,482	1,870	2,613
Subtotal, nsf	3,786	5,268	6,131
Circulation	334	1,317	1,533
Total gsf	4,120	6,585	7,664

Development Strategies and Implementation

FS4 was rated as medium priority in comparison to some of the other facilities in this study. This must not be interpreted to mean that improvements at FS4 are not as badly needed as at other facilities. FS4 is an essential part of San Rafael's emergency services plan, and its facility needs are of critical importance – especially its need for structural improvements. Rather, the fact that FS4 was rated as "medium" should serve only to underscore the severity of deficiencies at other facilities in this study.

Cost estimates were developed for three levels of improvements at FS4. Seismic/life safety improvements would focus on upgrading the existing facility's structure, adding fire sprinklers, and installing an emergency generator. Full modernization would address all seismic/life safety needs and expand the facility to meet all operational, living, and storage needs. Demolition and rebuilding of FS4 also is an option, considering current conditions and the potential challenges involved in expanding the existing facility.

Type of Improvements	Size (gsf)	Project Budget	Comments
Seismic + life safety	4,380 sf	\$ 611,800	
Modernization	7,664 sf	\$ 2,321,427	
Demolish and rebuild	7,664 sf	\$ 3,169,080	



Landscape slopes toward the building on the west side



Storage is at a premium

FIRE STATION NO. 5



955 Pt. San Pedro Road



Hydrant repair area



Hose storage in apparatus bay

FIRE STATION NO. 5

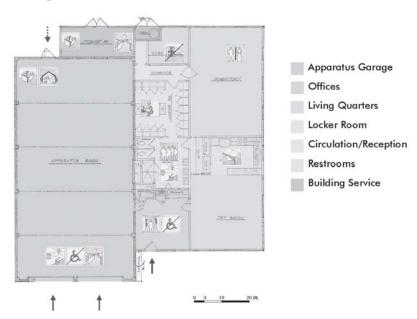
Fire Station No. 5 (FS5) was built in 1966 as a mirror image of Fire Station No. 4, which was constructed just two years earlier. Its three-person engine/truck company serves the Loch Lomond, Glenwood, and Peacock Gap areas of eastern San Rafael. FS5 provides backup for Fire Station No. 2, and will house the city's new Urban Search and Rescue Unit. FS5 also houses the Fire Department's hydrant repair unit and is used for hose storage.

Facility Evaluation

Although its floor plan mirrors that of Fire Station No. 4, which earned a seismic performance rating of "poor," FS5 may be expected to weather a major earthquake with minor to moderate damage. This is largely due to the fact that FS5 is entirely a wood-framed structure (rather than of mixed wood/concrete construction), allowing it to move more as a unit. Still, there is room at FS5 for seismic upgrades, including strengthening the connection between the high and low roof diaphragms, adding steel bracing at the apparatus bay doors, and renailing plywood at certain shear elements.

Life safety needs at FS5 include a fire suppression system (sprinklers), appropriate exit signage, and an emergency generator, to allow the station to continue functioning during power outages. FS5 lacks appropriate areas for decontamination and for handling and storage of hazardous materials.

FS5 also has undersized and inefficient operational and living areas, inadequate storage, outdated mechanical and electrical systems, and worn interior and exterior finishes. FS5 suffers from particularly poor ventilation as well as from clog- and rupture-prone plumbing and sewer systems. Hydrant repair takes over an outdoor patio.



Strategic Program

FS5 is currently staffed by a single company of three firefighters. By 2022, the Fire Department would like to be able to house a second three-person unit at FS5, as needed to respond to changes in the surrounding community. The Fire Department also projects a need by 2022 for a classroom at FS5 that could serve as a resource for the community when not in use by the department.

In the more immediate term, FS5 must be expanded to address its current operational and storage space needs. It should also provide sufficient, appropriate space to accommodate a workforce composed of both men and women.

Strategic Program for Fire Station No. 5	Current Space	Current Need	2022 Need
	<u> </u>	-	
Administrative Areas	196	555	675
Operations	2,108	2,843	2,843
Living Areas	1,482	1,870	2,613
Classroom		_	1,200
Subtotal, nsf	3,786	5,268	7,331
Circulation	334	1,317	1,833
Total gsf	4,120	6,585	9,164

Development Strategies and Implementation

FS5 was rated as "medium priority" in this study. However, it must not be inferred that improvements at FS5 are not needed, or somehow less important than at other facilities. The need to correct seismic and life safety problems at FS5 is of critical importance, as is the need for a variety of modernization upgrades. Rather, FS5's medium rating should serve only to underscore the extent of deficiencies at the three facilities given top priority in this study.

Cost estimates were developed for three levels of improvements at FS5. Seismic/life safety improvements would upgrade the existing facility's structure, add fire sprinklers, and provide an emergency generator, but would not add any operational or living space. Full modernization would address all seismic/life safety needs and expand the facility to meet all operational, living, and storage needs, including the addition of a classroom. Demolition and rebuilding of FS5 also is an option, considering current conditions and the potential challenges involved in expanding the existing facility.

Type of Improvements	Size (gsf)	Project Budget	Comments
Seismic + life safety	4,380 sf	\$ 473,166	
Modernization	9,164 sf	\$ 3,001,543	
Demolish and rebuild	9,164 sf	\$ 3,842,287	



Kitchen

FIRE STATION NO. 6



650 Del Ganado



Captain's office

FIRE STATION NO. 6

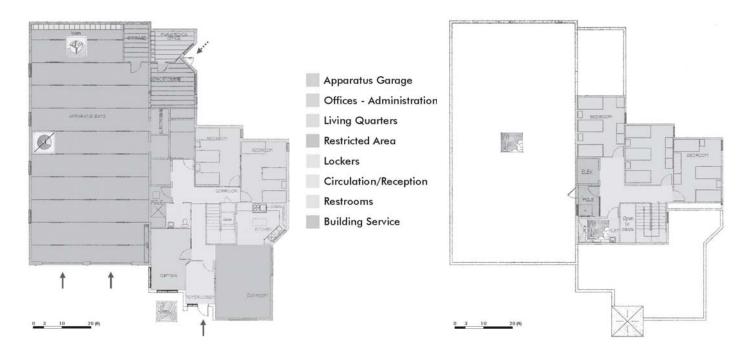
The newest of San Rafael's fire stations, Fire Station No. 6 is located adjacent to the Terra Linda Community Center on Del Ganado Road in northern San Rafael. At approximately 6,265 square feet, Fire Station No. 6 (FS6) was constructed in 1995-1996 to accommodate modern apparatus and equipment as well as a more diverse workforce. The current facility, which replaced an older building originally constructed in the 1950s on the same site, now houses one firefighting company and a paramedics unit.

Facility Evaluation

FS6 was designed to meet the requirements of the 1991 Uniform Building Code, which is similar to the version of UBC currently in effect. The structural consultant identified only one shear wall that may require improvements. The expected performance of FS6 in a major earthquake has been rated as "good," meaning that the building should remain standing with minor, if any, damage.

Life safety needs at FS6 are relatively minor. It has a working fire suppression (sprinkler) system and was designed to comply with ADA requirements. Its most pressing life safety need is an improved space for decontamination as well as storage and handling of hazardous materials.

While FS6 is perhaps the most generously-sized of San Rafael's fire stations, it is still a very modest facility in comparison to many fire stations in other areas of California. The apparatus bays are appropriately-sized for modern engines, and living areas were designed to accommodate any mixture of male and female



personnel. However, FS6 does not provide sufficient storage for all of the equipment and protective clothing used by its firefighters and paramedics. As FS6 was constructed less than 10 years ago, its mechanical and electrical systems are still adequate, and no problems have been reported with these systems.

Strategic Program

FS6 is currently staffed by a company of three firefighters and a three-person paramedic unit. The strategic program for FS6 expands living areas to accommodate a sixth person (the current facility was designed to accommodate five live-in personnel per shift). It also provides space for decontamination, storage of equipment and protective clothing, fitness equipment, and a station office/meeting room.

As the table below illustrates, the amount of space in the strategic program to meet current needs is expected to be sufficient through the 2022 planning horizon.

Strategic Program for Fire Station No. 6	Current Space	Current Need	2022 Need
Administrative Areas	431	673	673
Operations	2,504	2,837	2,837
Living Areas	1,778	2,613	2,613
Subtotal, nsf	4,713	6,123	6,123
Circulation	1,552	1,531	1,531
Total gsf	6,265	7,654	7,654

Development Strategies and Implementation

As FS6 is in generally good condition, it was given a low priority for improvements. Demolition and reconstruction is not indicated, nor would it be a cost-effective means of meeting program requirements; as such, a cost estimate for full reconstruction was not developed.

FS6 is, however, a candidate for seismic, life safety, and modernization improvements to the existing facility. Seismic/life safety improvements would be minor, taking care of a few small structural issues and adding space appropriate for decontamination and handling of hazardous materials. Full modernization would address the seismic/life safety needs and expand the facility to meet all operational, living, and storage needs.

Type of Improvements	Size (gsf)	Project Budget	Comments
Seismic + life safety	6,525 sf	\$ 397,784	
Modernization	7,654 sf	\$ 1,344,441	
Demolish and rebuild	N/A	N/A	



Apparatus bay



Kitchen

FIRE STATION NO. 7



3350 Civic Center Drive



Engines are a tight fit in the small apparatus bays.

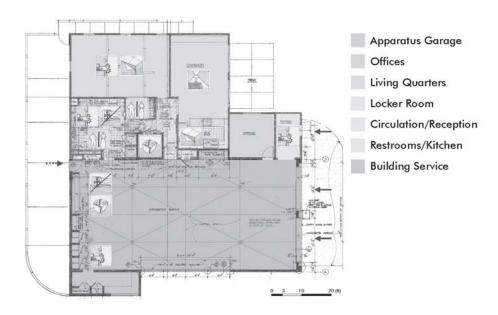
FIRE STATION NO. 7

Fire Station No. 7 (FS7) serves the portion of San Rafael north of the hill and, for the most part, east of Highway 101. This approximately 3,801 square foot facility is located across the street from the Marin County Civic Center. Constructed in 1978, FS7 sits on a large parcel of land owned by the County.

Facility Evaluation

While FS7 is in good condition structurally, its seismic condition has been rated as "poor," meaning that there is a significant risk of damage or even collapse in the event of a major earthquake. While wood-framed structures of its type tend to perform well under seismic loads, FS7's cantilevered columns are insufficient to handle the lateral forces required by modern codes. In addition, the base shear design force required by the 1997 Uniform Building Code is 235% greater than that required by the 1973 UBC. The roof diaphragm and shear walls must be strengthened, and several new shear walls must be added. Although it is not of seismic concern, the floor slab also has many cracks which may have resulted from inappropriate design of control joints and/or reinforcing, improper curing, and/or soil or fill conditions under the slab.

FS7 lacks a fire suppression system (sprinklers) and an emergency generator, posing the risk of delays for personnel needing to respond to emergencies in the community. The building is out of compliance with many ADA requirements, and lacks sufficient exit signage. The lack of exhaust hoses in the apparatus bay may expose personnel to vehicular fumes. And FS7 does not provide an appropriate area for decontamination upon returning from calls involving bodily fluids or hazardous substances.



In general, FS7 is too small to efficiently support modern firefighting operations. The apparatus bays are undersized, and storage for equipment and protective clothing is at a premium. Living areas are tiny, and the open dormitory layout cannot accommodate any mixture of male and female staff. Finishes throughout the facility are worn and in need of replacement, as are the mechanical and electrical systems.

Strategic Program

FS7 is currently staffed by a single company of three firefighters. By 2022, the Fire Department would like to be able to house a second three-person unit at FS7 as well, of paramedics or otherwise, depending on the changing needs of the surrounding community. FS7 must provide sufficient space to accommodate a workforce that may include both men and women.

In addition to adding space to meet future needs, the program for FS7 also addresses its current needs for operational and storage space appropriate for modern fire operations.

Strategic Program for Fire	Current	Current	2022
Station No. 7	Space	Need	Need
Administrative Areas	216	559	679
Operations	1,951	2,837	2,837
Living Areas	1,213	1,870	2,613
Subtotal, nsf	3,380	5,266	6,129
Circulation	421	1,317	1,532
Total gsf	3,801	6,583	7,661

Development Strategies and Implementation

In consideration of factors such as its expected poor performance in a major earthquake, FS7 was one of three fire stations given top priority for improvements.

Three different levels of improvements were developed for cost estimating. Seismic/life safety improvements would upgrade the existing facility's structure, add fire sprinklers, and provide an emergency generator, but would not add any operational or living space. Full modernization would address all seismic/life safety needs and expand the facility to meet all operational, living, and storage needs. FS7 is also a candidate for demolition and reconstruction, due to current conditions and the potential difficulty of expanding the existing facility.

Type of Improvements	Size (gsf)	Project Budget	Comments
Seismic + life safety	4,061	\$ 482,402	
Modernization	7,661	\$ 2,635,709	
Demolish and rebuild	7,661	\$ 3,489,630	



The dormitory cannot provide separation for male and female personnel

SAN RAFAEL COMM. CTR.



618 B Street



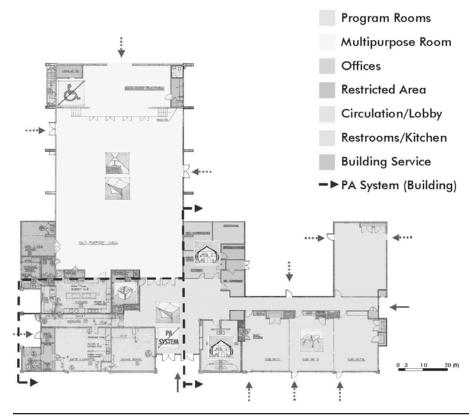
Multipurpose Hall

SAN RAFAEL COMMUNITY CENTER

The San Rafael Community Center (SRCC) is a lightweight wood-framed building approximately 14,500 square feet in size. As a recreation destination, it currently serves approximately 500 people per day. Its downtown location at 618 B Street will make it a natural choice for refuge for residents displaced from their homes by an earthquake or other disaster. SRCC is also designated as a backup emergency operations center (EOC), in the event that the first choice, Council Chambers at City Hall, is incapacitated or otherwise unavailable.

Facility Evaluation

Originally constructed in 1975, the facility was designed in accordance with the structural requirements of the 1974 Uniform Building Code, and appears to be in good condition structurally. While wood-framed buildings of this type tend to perform fairly well during ground-shaking events, the facility does not comply with recent structural codes, which require 65% higher base shear resistance than the 1974 codes. CH Wells classified the building as being in "fair" condition seismically, with a number of improvements required in order to prevent the minor to moderate damage that can be expected in a major earthquake event. Modifications such as resheathing, new connectors, and reconstructed shear walls are required to complete load transfer paths between the roof, vertical support elements, and foundation.



SRCC lacks fire sprinklers and a fire alarm system, increasing its vulnerability to the very disasters from which it is intended to provide refuge. The facility also is out of compliance with a number of ADA requirements, limiting its ability to shelter persons with certain disabilities and potentially making navigation and exiting hazardous during emergencies. The public address system at SRCC is inoperable, which will make it more difficult to broadcast important announcements and information. The facility also lacks a generator for backup power during emergencies.

The American Red Cross calculates shelter capacity using a guideline of 70 square feet of sleeping area per person. By this measure, SRCC could currently accommodate approximately 112 people in its program rooms, including its multipurpose hall. In the event that its club room must be pressed into service as a backup emergency operations center (EOC), SRCC's shelter capacity will drop to approximately 89 people.

In terms of modernization for shelter purposes, the most glaring shortcomings of SRCC are its lack of dedicated storage for shelter supplies (water, cots, dried goods, and the like) and its undersized restrooms, which would likely suffer under the pressure to accommodate up to 112 shelter residents for three days until the Red Cross takes over. The commercial-sized kitchen should be adequate to accommodate the demands of shelter-seekers, although the appliances are old. The Club Room also has kitchenette facilities to supplement the main kitchen.

Many exterior and interior surfaces at SRCC are worn and need refinishing, and the building's electrical system is due for replacement. Interior lighting is insufficient. The wood floor in the main multipurpose hall is buckling. Exterior soffits are showing signs of leaks.

Strategic Program

At 70 square feet per person, the program areas at SRCC could shelter a total of approximately 112 people. The City feels that this is acceptable capacity, and does not believe that additional capacity will be required at this location. Therefore, needs for additional space at SRCC for shelter use are essentially limited to increasing restroom capacity and adding dedicated storage space for shelter and backup EOC supplies. As the following table shows, the current need for space should be adequate to meet anticipated shelter needs through 2022.



The kitchen is adequately sized...



...but the restrooms are small.

SAN RAFAEL COMM. CTR.



Strategic Program for San Rafael Community Center	Current Space	Current Need	2022 Need
Sleeping areas	8,064	8,064	
Support (kitchen, etc.)	1800	2,006	
Shelter storage	_	200	
EOC storage	_	200	
Subtotal, nsf	9,864	10,470	
Total shelter areas, gsf	10,880	11,668	
SRCC total facility	13,748		

Development Strategies and Implementation

Considering the relatively low level of needed upgrades compared to the other facilities examined in this study, SRCC was given a lower priority for improvements.

Cost estimates were developed at three levels. Seismic/life safety improvements would bolster the facility's structure, install fire sprinklers, and add an emergency generator. Full modernization would include all seismic/life safety improvements and add space for dedicated shelter and EOC storage. Demolition and reconstruction is not an option for meeting seismic, life safety, and modernization requirements at SRCC.

Type of Improvements	Size (gsf)	Project Budget	Comments
Seismic + life safety	13,748 sf	\$ 756,992	
Modernization	14,536 sf	\$ 1,133,861	



TERRA LINDA COMM. CTR.



670 Del Ganado Road



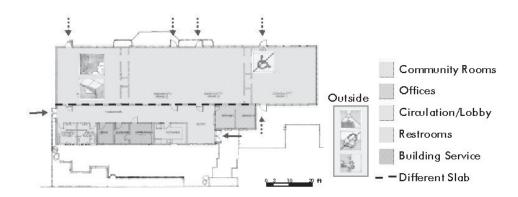
TERRA LINDA COMMUNITY CENTER

Terra Linda Community Center (TLCC) is the only City-owned facility in northern San Rafael currently designated for use as a shelter during emergencies. It also is designated for use as a backup emergency operations center (EOC), although its distance from downtown San Rafael keeps it from being the City's first choice in that regard.

TLCC was originally constructed as a school in 1954, and was expanded in the 1960s. It is located at 670 Del Ganado Road, next to Fire Station No. 6. Also located on the TLCC site are a pool and its attendant pool house, neither of which would likely be used for shelter purposes and which therefore were not evaluated as part of this study.

Facility Evaluation

At its current size, TLCC's shelter capacity is roughly one-third that of the San Rafael Community Center. Approximately 3,670 of its 5,499 square feet would be useful for shelter purposes during an emergency. According to the American Red Cross' guideline of 70 square feet per person in a shelter, TLCC's 2,574 square foot main program room could accommodate only 36 people. Shelter support areas at TLCC include a foyer, a residential-style kitchen, and two small restrooms, each with a single water closet.





Overall, TLCC is in good condition structurally. However, its expected seismic performance has been rated as only "fair," meaning that minor to moderate damage can be expected in a major earthquake. The facility was designed in accordance with the 1952 Uniform Building Code, the requirements of which are significantly less stringent than those of more recent versions. In the facility's favor is its lightweight wood-framed construction, which generally tends to perform better under earthquake loads than some other types of constructions. But incomplete lateral load paths in the original design and interruptions resulting

FACILITY SUMMARIES

from remodeling projects create opportunities for seismic damage to TLCC's structure. Upgrades are required to increase its ability to resist the lateral and shear forces associated with earthquakes. Such upgrades include new roof and wall sheathing to increase the strength of shear walls and the roof diaphragm.

TLCC's location next door to a fire station does not mitigate its need for the fire suppression and alarm systems it currently lacks. TLCC also is out of compliance with the ADA, which may prevent it from offering shelter to San Rafael residents with certain disabilities. The malfunctioning public address system at TLCC is malfunctioning will make it difficult to broadcast important announcements during times of emergency. And the lack of an emergency generator will further complicate shelter operations, should power service be interrupted as a result of a disaster.

In general, TLCC is simply too small to operate effectively as an emergency shelter. Its current rated capacity of 36 people will make it difficult to run efficiently, and will certainly lead to a number of people being diverted to other shelters. With its small size and residential-quality appliances, TLCC's kitchen will have trouble meeting the challenge of providing multiple daily meals for 36 people plus volunteers and shelter workers. The restrooms at TLCC are likely to prove inadequate to serve the shelter when fully-occupied; locker rooms in the pool house may be able to provide some relief, assuming that they survive whatever disaster has prompted the need for emergency shelter.

TLCC also lacks dedicated storage for shelter supplies such as water, cots, and food, meaning that such supplies must be brought in if the facility is pressed into service as a shelter. The need for such storage at TLCC is perhaps even more critical than at SRCC, as TLCC's location "over the hill" from downtown San Rafael may delay or even prevent the transportation of supplies, should an earthquake or other disaster disrupt the flow of traffic along Highway 101.

Mechanical and electrical systems at TLCC are outdated and overdue for replacement. The building's roof also leaks, which may be related to the roof-mounted HVAC unit.

Strategic Program

The target shelter capacity for TLCC is 61 people, 25 more than its current capacity of 36. In addition to enlarging the amount of space appropriate for sleeping, the strategic program for TLCC also improves support areas such as the kitchen, restrooms, and dedicated storage for shelter supplies. The program also includes storage associated with TLCC's designation as a backup EOC. With the exception of dedicated storage, all areas that are expanded and improved for shelter purposes will benefit the recreational, educational, and social programs and services offered at TLCC.



Poor wheelchair access



Peeling and staining at ceiling indicate leaking roof



Main program room

TERRA LINDA COMM. CTR.

The strategic program for TLCC includes only areas that can be used for shelter purposes, including sleeping areas. As the following table shows, no additional space beyond the current need is required to meet the need for space through 2022.

Strategic Program for Terra Linda Community Center	Current Space	Current Need	2022 Need
Sleeping areas	2,574	4,324	4,324
Support (kitchen, etc.)	482	1,550	1,550
Shelter storage	_	200	200
EOC storage	_	200	200
Subtotal, nsf	3,056	6,274	6,274
Total shelter areas, gsf	_	7,301	7,301
TLCC total facility	5,499		

Development Strategies and Implementation

TLCC was rated as a "medium" priority for improvements. Cost estimates for improving TLCC were developed at three levels. Seismic/life safety improvements would bolster the facility's structure, install fire sprinklers, and add an emergency generator. Full modernization would involve all seismic/life safety improvements and enlarge the facility to accommodate the target shelter population and all needed support spaces.

TLCC is also a candidate for demolition and reconstruction, due to current conditions and the potential difficulty of expanding the existing facility. For the purposes of estimating the costs of demolishing and rebuilding TLCC, offices and other non-shelter spaces (which were not contemplated in the program confirmation phase) were assumed to remain at their current size.

Development Strategies	Size (gsf)	Project Budget	Comments
Seismic + life safety	5,499	\$ 538,286	
Modernization	9,682	\$ 2,633,433	
Demolish and rebuild	9,682	\$ 3,781,716	



Restrooms are small



Main corridor



Kitchen is inadequate for shelter needs



CITY HALL



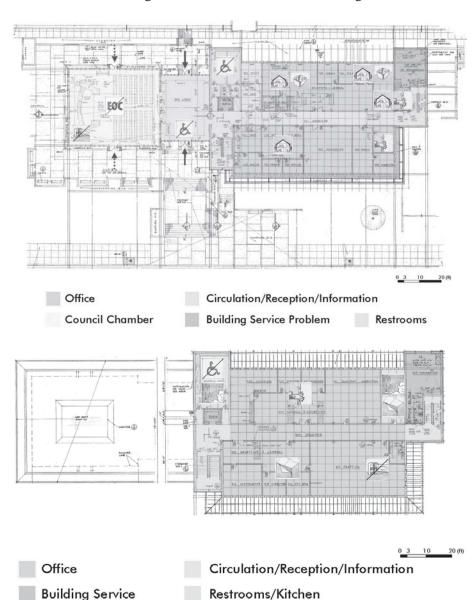
1400 Fifth Street

CITY HALL

San Rafael's three-story City Hall was constructed in 1965-1966 on a large downtown site on Fifth Street between C and E Streets. In approximately 27,150 square feet, it houses the City's Administrative, Police, and Community Development Departments (except for Public Works, which moved to a new off-site facility in January 2003). City Hall also includes council chambers, which is currently the first choice for use as an emergency operations center (EOC).

Facility Evaluation

City Hall is a reinforced concrete structure designed in accordance with the 1964 Uniform Building Code. The council chambers wing is constructed of



Building systems, though wellcared for, are at the end of their expected useful lives.

FACILITY SUMMARIES

reinforced masonry. In general, the building's structure is in good condition, and the design does provide a complete load path for the transfer of lateral (seismic) loads from the roof diaphragm to the foundation. However, the 1997 UBC requires a 65% larger base shear than the 1964 design code, meaning that lateral force resisting elements will likely be overstressed by seismic challenges as strong as those contemplated by the current UBC. In general, the seismic performance of City Hall in its current condition can be rated as "fair," meaning that it may sustain minor to moderate damage in a major earthquake.

Required to bring the building up to the "essential facility" level are improvements such as reinforcing the wall piers (the narrow sections on concrete wall between window openings) of the main building, strengthening walls between the main building and the council chambers wing, and adding connectors between the brick walls and the roof structure of the council chambers wing. In addition, rooftop-mounted air-handling units should be re-mounted in a code-compliant manner.

In terms of life safety, the facility lacks a fire suppression system and a centralized fire alarm system, which are required in essential facilities. More smoke detectors are required to compensate for the lack of sprinklers. The facility also does not fully comply with ADA guidelines. Life safety issues specific to the Police Station are described in the Police Station section.

San Rafael's City Hall was constructed in the 1960s to house administrative and police functions for the City's residents, who at that time totaled approximately 30,000. San Rafael's population has nearly doubled since then, and its City Hall now shows signs of struggling to accommodate the personnel and equipment needed to serve the City's increased populace. Space is at a premium, although the problem for the Community Development Department has been greatly alleviated by the Public Works division's recent move to the new corp yard. Modular units and storage containers have been installed in the parking lots, adding much-needed space but removing a number of much-needed parking spaces.

Interior finishes show signs of heavy use and are due for replacement. Electrical and mechanical systems are at the end of their useful lives, making them inefficient and costly to operate and maintain. The HVAC system also provides inconsistent air quality and temperature throughout the building.

Out of a total of 144 parking spaces on the City Hall site, 42 are currently designated for Administration and Community Development functions. Another 14 are reserved for city pool vehicles, and an additional 17 are available for visitors to City Hall and the adjacent San Rafael Public Library. The remaining spaces are either used by the Police and Fire Departments, or covered by modular units or storage containers.



Wall piers



Difficult wheelchair access from parking lot.



Storage areas are few, far between, and full.

CITY HALL



North public entrance

Strategic Program

The strategic program for City Hall functions shows that the Administration Department is operating under a current space deficiency that will only get larger during the next two decades. All divisions are currently deficient, with Information Services, Human Resources, Finance, and the City Attorney's office all operating with less than 50% of their current space requirements. A relatively small amount of space is needed above and beyond the current need to accommodate staff who may be added in the next 20 years.

Current space provisions for the Community Development Department and the City Council chambers are adequate, and are expected to remain sufficient through 2022.

The following table summarizes the program for all functions in City Hall except the Police Department. The first column shows the amount of space currently available for each department. The second column shows the amount of space currently needed for today's staffing levels. The final column lists the amount of space required to handle operations and staffing levels anticipated for the year 2022. All areas are shown in gross square feet, which includes an allowance for circulation, wall thicknesses, fixed equipment, and other unassignable space.

Strategic Program for City Hall Departments	Current Space (gsf)	Current Need (gsf)	2022 Need (gsf)
Administration	5,734	5,734	5,734
Community Development	5,885	11,583	12,623
City Council/Lobby	2,669	2,669	2,669
Total	14,288	19,986	21,026

Parking needs for City Hall functions other than the Police Department are based on the City's zoning ordinances, which require one parking space per 250 square feet of space in office buildings. This requirement is based on a standard ratio that generally provides sufficient parking for staff and visitors of typical office buildings. However, this ratio does not likely account for vehicle fleets such as the City's pool cars. As such, projected parking needs for City Hall add the number of spaces needed for pool vehicles onto the need estimated using the zoning ratio.

Using the areas developed for the strategic program results in a current need for approximately 90 vehicles, including city pool vehicles. This assumes that the first floor of City Hall continues to be occupied by the Police Department, which uses a different method for projecting parking needs. By 2022, Administration and Community Development are projected to need approximately 94 parking spaces to accommodate staff, visitors, and pool cars. (If the Police Department should vacate the first floor of City Hall, enabling the entire facility to revert to office use, the number of required spaces would increase to 129.)



Council chambers are designated as the primary EOC in times of emergency.

FACILITY SUMMARIES

	Current	Current	2022
	Spaces	Spaces	Spaces
	Available	Needed	Needed
City Hall: Administration + Community Dev.	56	90	94

Development Strategies and Implementation

City Hall is a candidate for renovation as part of this project only if the Police Department remains in the building. This is not to say that there are not opportunities for significant improvements at City Hall outside of the needs of the Police Department. Rather, if a new police facility is developed on a different site, the need to upgrade City Hall to meet essential facility requirements is eliminated.

Moving the Police Department to another facility will free up approximately 8,900 gross square feet on the lower level of City Hall. This would present the opportunity to expand functions currently occupying crowded spaces in City Hall, and/or the chance to relocate certain off-site functions (such as the print shop).

Moving the Police Department off-site may also free up parking on the City Hall site, depending on the particular siting strategy for alternative police facilities.



East entrance from police parking area.

POLICE DEPARTMENT

		Current		20	22		
POLICE DEPARTMENT	Staff	Space	Need	Staff		Number	@
Administration		-			•		
Chief of Police	1	180	200	1	200	1	200
Administrative Secretary	1	145	160	1	160	1	160
COPS Sergeant	1	160	120	1	120	1	120
Administrative Analyst	1	120	120	1	120	1	120
Crime Analyst	1	120	120	1	120	1	120
Personnel Officer	1	120	120	1	120	1	120
Support Services Admin Tech	1	150	150	1	150	1	150
Analysts	3	-	360	3	360	3	120
Copy Area		-	40		40	1	40
Net Usable Area		995	1,390		1,390		
Circulation/Grossing			417		417	30%	
Gross Area			1,807		1,807		
Staff	10		•	10	•		
Operations							
Captain	1	90	160	1	160	1	160
Patrol Lieutenant	2	90	280	3	420	3	140
Patrol Sergeant	6	150	360	7	480	4	120
Patrol Corporal	6	-	240	8	320	4	80
Patrol Officer	37	-	_	43	_		
Patrol PSS	2	-	160	2	160	2	80
Patrol Cadet	1	-	80	3	240	3	80
Traffic Sergeant	1	64	120	1	120	1	120
Traffic Officers	4	-	240	8	480	8	60
Marine Auxiliary*	7	-	-	12	-		
Reserve*	7	-	-	7	-		
Prisoner Processing Area							
Holding Cells		120	120		120	2	60
Safety Cell		-	60		60	1	60
Juvenile Holding Room		-	60		60	1	60
Prisoner Processing Desk		34	80		80	1	80
Mugging/Fingerprint		-	40		40	1	40
Hard Interview Rooms		70	200		200	2	100
Interview Monitoring Room		-	48		48	1	48
Report Writing Room		206	480		480	1	480
Patrol Briefing Room		960	1,000		1,000	1	1000
Patrol Briefing Storage		-	100		100	1	100
Equipment		175	500		500	1	500
Marine Aux./Reserve Lockers		-	70		95	19	5
Net Usable Area		1,959	4,398		5,163		
Circulation/Grossing			1,319		1,549	30%	
Gross Area			5,717		6,712		
Staff	60			76			

^{*} Not included in staff counts.

POLICE DEPARTMENT			Current		20	22		
Captain	POLICE DEPARTMENT	Staff	Space	Need	Staff	Space	Number	@
Cardet	Investigations/Support Services		•					
Cadet	Captain	1	136	160	1	160	1	160
Street Crime Officer		1	-	120	4	120	1	120
Investigations Corporal/Detective 8 504 640 12 960 12 80	Street Crime Sergeant	-	-		1	120	1	120
Support Services Manager 1 90 140 1	Street Crime Officer	_	-		4	320	4	80
Support Services PSS 1	Investigations Corporal/Detective	8	504	640	12	960	12	80
Counseling Youth Counselor 1 60 120 1 120 1 120 Counselor Intern 3 192 192 3 192 3 64 Interview/Counseling Room - 125 125 1 125 Training 1 200 60 2 120 2 60 Training Storage 1 200 60 2 120 2 60 Training Storage 1 200 60 2 120 2 60 Training Storage 1 200 60 2 120 2 60 Training Storage 1 200 200 200 1 200 Records 2 Comm Spec II 8 535 240 8 240 4 60 Records Storage 1 94 120 1 120 1 100 Dispatch Supervisor - - - - 1	Support Services Manager	1	90	140	1	140	1	140
Youth Counselor Counselor Intern 1 60 120 1 120 1 120 Counselor Intern 3 192 192 3 192 3 64 Interview/Counseling Room - 125 125 1 125 Training Training Officer/PSS 1 200 60 2 120 2 60 Training Storage 120 200 200 1 200 200 1 200 Records 8 240 4 20 1 120	Support Services PSS	1	-	80	1	80	1	80
Counselor Intern 3 192 192 3 192 3 64 Interview/Counseling Room - 125 125 1 125 Training Training Officer/PSS 1 200 60 2 120 2 60 Training Storage 120 200 200 1 200 Records 1 200 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 200 1 200 1 200 200 1 200 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 400 1 400 1 400 1 400 1 400 1 1 200 1 200 1 1 200 1 1 1 </td <td>Counseling</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Counseling							
Interview/Counseling Room	Youth Counselor	1	60	120	1	120	1	120
Training Training Officer/PSS 1 200 60 2 120 2 60 Training Storage 120 200 200 1 200 Records 1 120 200 200 1 200 Records Supervisor 1 94 120 1 120 1 120 Records & Comm Spec II 8 535 240 8 240 4 60 Records Counter/Workstation - 100 100 1 100 Records Storage - 400 400 1 400 Dispatch 100 400 400 1 400 Dispatch Supervisor - - - 1 120 1 120 Dispatch Supervisor - - - 1 120 1 120 Dispatch Break Room - - 100 100 1 100 P&E Technician 1 -	Counselor Intern	3	192	192	3	192	3	64
Training Officer/PSS 1 200 60 2 120 2 60 Training Storage 120 200 200 1 200 Records 8 200 1 200 Records Supervisor 1 94 120 1 120 1 120 Records & Comm Spec II 8 535 240 8 240 4 60 Records Counter/Workstation - 100 100 1 100 1 100 1 100 1 100 1 100 1 100 1 100 1 100 1 100 1 100 1 120 1 120 1 120 1 120 1 120 1 120 1 120 1 120 1 120 1 120 1 120 1 120 1 120 1 120 1 120 1 120 1	Interview/Counseling Room		-	125		125	1	125
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Records Records Supervisor 1 94 120 1 120 1 120 Records & Comm Spec II 8 535 240 8 240 4 60 Records Counter/Workstation - 100 100 1 100 Records Storage - 400 400 1 400 Dispatch 0 400 400 1 400 Dispatch Supervisor - - - 1 120 1 120 Dispatch Supervisor - - - - 1 120 1 120 Dispatch Supervisor - - - 1 1 200 1 200 Dispatch Break Room - 100 10 600 1 600 Dispatch Break Room - 100 100 1 100 P&E Technician 1 - 70 3 210 3 70 E			120	200		200	1	200
Records & Comm Spec II 8 535 240 8 240 4 60 Records Counter/Workstation - 100 100 1 100 Records Storage - 400 400 1 400 Dispatch - - - 1 120 1 120 Dispatch Supervisor - - - - 1 120 1 120 Dispatch Supervisor - - - - 1 120 1 120 Dispatch Supervisor - - - 1 1 200 1 600 1 600 1 600 1 600 1 600 1 600 1 100 1 100 1 100 1 100 1 100 1 1,500 1 1,500 1 1,500 1 1,500 1 1,500 1 1,500 1 1,00 1								
Records Counter/Workstation - 100 100 1 100 Records Storage - 400 400 1 400 Dispatch - - - 1 120 1 120 Dispatch Supervisor - - - 1 120 1 120 Dispatch Break Room - - 100 10 600 1 600 Dispatch Break Room - 100 100 100 1 100 Property and Evidence - 100 100 1 100 1 100 100 1 100 100 1 100 1 100 1 100 1 1,500 1 1,500 1 1,500 1 1,500 1 1,500 1 1,500 1 1,500 1 1,500 1 1,00 1 100 1 100 1 100 1 100 1 100 <	Records Supervisor	1	94	120	1	120	1	120
Records Counter/Workstation - 100 100 1 100 Records Storage - 400 400 1 400 Dispatch - - - 1 120 1 120 Dispatch Supervisor - - - - 1 120 1 120 Dispatch Supervisor - - - 1 120 1 120 Dispatch Supervisor - - - 1 1 200 1 600 1 600 1 600 1 600 1 600 1 600 1 600 1 600 1 100 1 100 1 100 1 100 1 100 1 100 1 1,500 1 1,500 1 1,500 1 1,500 1 1,500 1 1,500 1 1,500 1 1,00 1 100 1 100	Records & Comm Spec II	8	535	240	8	240	4	60
Dispatch Dispatch Supervisor - - - 1 120 1 120 Dispatch Dispatch Break Room 10 465 600 10 600 1 600 Dispatch Break Room - 100 100 1 100 Property and Evidence - 100 100 1 100 P&E Technician 1 - 70 3 210 3 70 Evidence Storage Room 272 1,500 1,500 1 1,500 Evidence Processing Room - 200 200 1 200 Drying Room - 100 100 1 100 1 100 Narcotics Lab 48 100 100 1 100 1 100 Systems Systems Manager 1 160 1 160 1 160 1 160 1 350 1 350 1 350 1 350 1 <td>Records Counter/Workstation</td> <td></td> <td>-</td> <td>100</td> <td></td> <td>100</td> <td>1</td> <td>100</td>	Records Counter/Workstation		-	100		100	1	100
Dispatch Supervisor - - - 1 120 1 120 Dispatch Dispatch Break Room 10 465 600 10 600 1 600 Dispatch Break Room - 100 100 1 100 Property and Evidence - 100 100 1 100 P&E Technician 1 - 70 3 210 3 70 Evidence Storage Room 272 1,500 1,500 1 1,500 Evidence Processing Room - 200 200 1 200 Drying Room - 100 100 1 100 Narcotics Lab 48 100 100 1 100 Systems Systems Manager 1 160 160 1 160 1 160 Network Room 245 350 350 1 350 Net Usable 3,256 6,077 7,157 Ci	Records Storage		-	400		400	1	400
Dispatch Dispatch Break Room 10 465 600 10 600 1 600 Property and Evidence P&E Technician 1 - 70 3 210 3 70 Evidence Storage Room 272 1,500 1,500 1 1,500 Evidence Processing Room - 200 200 1 200 Drying Room - 100 100 1 100 Narcotics Lab 48 100 100 1 100 Systems Systems Manager 1 160 160 1 160 1 160 Network Room 245 350 350 1 350 Net Usable 3,256 6,077 7,157 Circulation/Grossing 1,823 2,147 30% Gross Area 7,900 9,304	Dispatch							
Dispatch Break Room - 100 100 1 100 Property and Evidence - - 70 3 210 3 70 Evidence Storage Room 272 1,500 1,500 1 1,500 Evidence Processing Room - 200 200 1 200 Drying Room - 100 100 1 100 Narcotics Lab 48 100 100 1 100 Systems Systems Manager 1 160 160 1 160 1 160 Network Room 245 350 350 1 350 Network Storage Room 135 200 200 1 200 Net Usable 3,256 6,077 7,157 Circulation/Grossing 1,823 2,147 30% Gross Area 7,900 9,304	Dispatch Supervisor	-	-	-	1	120	1	120
Property and Evidence P&E Technician 1 - 70 3 210 3 70 Evidence Storage Room 272 1,500 1,500 1 1,500 Evidence Processing Room - 200 200 1 200 Drying Room - 100 100 1 100 Narcotics Lab 48 100 100 1 100 Systems Systems Manager 1 160 160 1 160 1 160 Network Room 245 350 350 1 350 Network Storage Room 135 200 200 1 200 Net Usable 3,256 6,077 7,157 Circulation/Grossing 1,823 2,147 30% Gross Area 7,900 9,304	Dispatch	10	465	600	10	600	1	600
P&E Technician 1 - 70 3 210 3 70 Evidence Storage Room 272 1,500 1,500 1 1,500 Evidence Processing Room - 200 200 1 200 Drying Room - 100 100 1 100 Narcotics Lab 48 100 100 1 100 Systems 5ystems 8 8 100 1 100 1 100 Network Room 245 350 350 1 350 Network Storage Room 135 200 200 1 200 Net Usable 3,256 6,077 7,157 7,157 Circulation/Grossing 1,823 2,147 30% Gross Area 7,900 9,304 7,904 7,904 7,900	Dispatch Break Room		-	100		100	1	100
Evidence Storage Room 272 1,500 1,500 1 1,500 Evidence Processing Room - 200 200 1 200 Drying Room - 100 100 1 100 Narcotics Lab 48 100 100 1 100 Systems 5ystems 8 8 1 100 1 100 1 100 1 100 1 100 1 100 1 100 1 100 1 100 1 100 1 160 1 160 1 160 1 160 1 160 1 160 1 160 1 350 1 350 1 350 1 350 1 350 1 300 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200 1 200<	Property and Evidence							
Evidence Processing Room - 200 200 1 200 Drying Room - 100 100 1 100 Narcotics Lab 48 100 100 1 100 Systems Systems Manager 1 160 160 1 160 1 160 Network Room 245 350 350 1 350 Network Storage Room 135 200 200 1 200 Net Usable 3,256 6,077 7,157 Circulation/Grossing 1,823 2,147 30% Gross Area 7,900 9,304	P&E Technician	1	-	70	3	210	3	70
Drying Room - 100 100 1 100 Narcotics Lab 48 100 100 1 100 Systems 8 1 160 1 160 1 160 1 160 1 160 1 160 1 160 1 150 1 350 1 350 1 350 1 350 1 350 1 200 <t< td=""><td>Evidence Storage Room</td><td></td><td>272</td><td>1,500</td><td></td><td>1,500</td><td>1</td><td>1,500</td></t<>	Evidence Storage Room		272	1,500		1,500	1	1,500
Narcotics Lab 48 100 100 1 100 Systems 359 1 160 1 100 1 100 1 100 <	Evidence Processing Room		-	200		200	1	200
Systems Systems Manager 1 160 160 1 160 1 160 Network Room 245 350 350 1 350 Network Storage Room 135 200 200 1 200 Net Usable 3,256 6,077 7,157 Circulation/Grossing 1,823 2,147 30% Gross Area 7,900 9,304	Drying Room		-	100		100	1	100
Systems Manager 1 160 160 1 160 1 160 Network Room 245 350 350 1 350 Network Storage Room 135 200 200 1 200 Net Usable 3,256 6,077 7,157 7,157 Circulation/Grossing 1,823 2,147 30% Gross Area 7,900 9,304	Narcotics Lab		48	100		100	1	100
Network Room 245 350 350 1 350 Network Storage Room 135 200 200 1 200 Net Usable 3,256 6,077 7,157 7,157 2,147 30% Circulation/Grossing 1,823 2,147 30% Gross Area 7,900 9,304	Systems							
Network Storage Room 135 200 200 1 200 Net Usable 3,256 6,077 7,157 Circulation/Grossing 1,823 2,147 30% Gross Area 7,900 9,304	Systems Manager	1	160	160	1	160	1	160
Net Usable 3,256 6,077 7,157 Circulation/Grossing 1,823 2,147 30% Gross Area 7,900 9,304	Network Room		245	350		350	1	350
Net Usable 3,256 6,077 7,157 Circulation/Grossing 1,823 2,147 30% Gross Area 7,900 9,304	Network Storage Room		135	200		200	1	200
Gross Area 7,900 9,304			3,256	6,077		7,157		
	Circulation/Grossing			1,823		2,147	30%	
Staff 38 54	Gross Area			7,900		9,304		
	Staff	38			54			

		Current		20	22		
POLICE DEPARTMENT	Staff	Space	Need	Staff	Space	Number	@
Common Areas							
Lobby/Reception		200	400		400	1	400
Interview Room		-	125		125	1	125
Public Restrooms		-	160		160	2	80
Volunteers*/Overflow Work Area	39	-	360	60	480	4	120
Administrative Conference Room		-	400		400	1	400
Small Conference Room		-	300		300	1	300
Locker Room - Women		345	700		900	1	900
Locker Room - Men		655	1,000		1,300	1	1,300
Kitchen/Break Room		48	150		150	1	150
Work Room		40	-		-		_
Supply Room		210	210		210	1	210
Storage Room		650	650		650	1	650
Copy Area/Mailboxes		-	80		80	1	80
Copy Rooms			140		140	2	70
Armory		-	200		200	1	200
Gun Lockers		-	-		-		-
Physical Training Room		-	1,500		1,500	1	1,500
Physical Training Storage		-	200		200	1	200
Backup EOC Storage		-	-		200		
Net Usable		2,148	6,575		7,395		
Circulation/Grossing			1,973		2,219	30%	
Gross Area			8,548		9,614		
Enclosed Parking/							
Vehicular Access	(No.)			(No.)			
Motorcycles (@ 47 sf)	10		470	10	470	10	47
Training Motorcycles (@ 47 sf)	2		94	2	94	2	47
Bicycles (@ 27 sf)	8		216	12	324	12	27
Vehicular Sallyport (2 car)			650		650	1	650
Gross Area		-	960		1,068		,

^{*} Not included in staff counts.

Summary

	Current			2022		
	Staff	Space	Need	Staff	Space	
Total, Police Department						
Administration	10		1,807	10	1,807	
Operations	60		5,717	76	6,712	
Investigations/Support Svcs	38		7,900	54	9,304	
Common Areas			8,548		9,614	
Enclosed Parking/Veh. Access			960		1,068	
Total Staff	108			140		
Gross Area		15,156	24,932		28,505	

FIRE STATION NO. 1 AND FIRE DEPARTMENT ADMINISTRATION

		Current		20	22		
FIRE STATION NO. 1	No.	Space	Need	No.	Space		@
Operational Areas		-					
Foyer/Lobby (w/Public Counter)		-	100		100		
Captain/Communications Office		113	200		200		
Paramedics Office		150	150		150		
Station Office/Meeting		-	210		210		
Toilet (No Shower)		-	49		49		
Dayroom		752	550		550		
Kitchen (w/Storage)		324	200		200		
Dormitories (w/Desks, Lockers)	1	1,272	1,332	6	1,332		222
Toilet/Showers	1	237	231	3	231		77
Gym		120	300		300		
Apparatus Bay		1,794	2,264		2,264		
Apparatus Storage		319	150		150		
Work/Storage		-	163		163		
Jan/Decontam/Laundry		39	200		200		
Protective Clothing Storage		48	60		60		
Service Bay		628	2,264	-	-		
Service Storage		124	375	-	-		
Mechanic's Office		85	170	-	-		
Mechanic's Storage/SCBA Maint.		257	300	-	-		
Classroom		-	-		-		
Classroom Storage		-	-		-		
Classroom Toilets		-	-		-		
Net Usable Area		6,262	9,268		6,159		
Circulation/Grossing		1,603	2,317		1,540	25%	
Gross Area		7,865	11,585		7,699		
Existing Fire Station No. 1		9,411					

		Current		20	22		
FIRE DEPT. ADMINISTRATION	Staff	Space	Need	Staff	Space	Number	@
Fire Chief	1	169	200	1	200		
Assistant Fire Chief	-	-	-	1	140		
Division Chiefs	3	195	300	3	300	3	100
Fire Marshal/Deputy Fire Marshal	2	65	-	_	-		
Fire Marshal		-	120	1	120		
Deputy Fire Marshal		-	100	1	100		
Fire Inspector	2	65	200	2	200	2	100
Training Officer	1	95	120	1	120		
Training Storage		-	40		40		
Clerical/Admin Assistant	1	83	60	2	120	2	60
Admin Assistant to the Chief	1	-	60	2	120	2	60
Intern/Contract	0.5	-	75	1	75		
Dispatch* (w/Toilet, Dorm, Kitchen)	1	199	-	2	-		1,000 SF
Paramedic Services Head	-	-	-	1	120		
Community Fire Services	-	-	-	1	120		
Receptionist	1	76	80	1	80		
Lobby w/ Public Counter		107	120		120		
Small Conference		210	210		210		
Large Conference		-	375		375		
Kitchen/Break Room		21	60		60		
File Room					300		
Copy Area		-	80		80		
Evidence/Arson Storage		70	70		70		
Net Usable		1,355	2,270		3,070		
Circulation/Grossing		191	681		921	30%	
Gross Area		1,546	2,951		3,991		
Staff	13.5			20			

^{*} Dispatch will be provided separately, in a leased facility adjacent to the existing Fire Station No.1. This project is currently under way.

FIRE STATION NO. 2

		Current		20	22		
FIRE STATION NO. 2	No.	Space	Need	No.	Space		@
Operational Areas					-		
Foyer/Lobby (w/Public Counter)		-	100		100		
Captain/Communications Office		82	200		200		
Paramedics Office		-	-		120		
Station Office/Meeting		-	210		210		
Toilet (No Shower)		-	49		49		
Dayroom		352	550		550		
Kitchen (w/Storage)		96	200		200		
Dormitories (w/Desks, Lockers)	1	509	666	6	1,332		222
Toilet/Showers	1	177	154	3	231		77
Gym		-	300		300		
Apparatus Bay		1,386	2,264		2,264		
Apparatus Storage		-	150		150		
Work/Storage		174	163		163		
Jan/Decontam/Laundry		44	200		200		
Protective Clothing Storage		-	60		60		
Service Bay		-	-	1	2,264		
Service Storage		-	-	1	375		
Mechanic's Office		-	-	1	170		
Mechanic's Storage/SCBA Maint.		-	-	1	300		
Classroom		1,000	1,000	1	1,000		
Classroom Storage		-	100	1	100		
Classroom Toilets		-	100	1	100		
Net Usable Area		2,820	6,466		10,438		
Circulation/Grossing		162	1,617		2,610	25%	
Gross Area		2,982	8,083		13,048		

FIRE STATION NO. 4

		Current		20	22		
FIRE STATION NO. 4	No.	Space	Need	No.	Space		@
Operational Areas							
Foyer/Lobby (w/Public Counter)		-	100		100		
Captain/Communications Office		196	196		196		
Paramedics Office		_	-		120		
Station Office/Meeting		-	210		210		
Toilet (No Shower)		-	49		49		
Dayroom		390	550		550		
Kitchen (w/Storage)		145	200		200		
Dormitories (w/Desks, Lockers)		776	666	6	1,332		222
Toilet/Showers		171	154	3	231		77
Gym		-	300		300		
Apparatus Bay		1,843	2,264		2,264		
Apparatus Storage		156	156		156		
Work/Storage		88	163		163		
Jan/Decontam/Laundry		21	200		200		
Protective Clothing Storage			60		60		
Service Bay			-		-		
Service Storage			-		-		
Mechanic's Office			-		-		
Mechanic's Storage/SCBA Maint.			-		-		
Classroom			-		-		
Classroom Storage			-		-		
Classroom Toilets			-		-		
Net Usable Area		3,786	5,268		6,131		
Circulation/Grossing		334	1,317		1,533	25%	
Gross Area		4,120	6,585		7,664		

FIRE STATION NO. 5

		Current		20	22		
FIRE STATION NO. 5	No.	Space	Need	No.	Space		@
Operational Areas					-		
Foyer/Lobby (w/Public Counter)		-	100		100		
Captain/Communications Office		196	196		196		
Paramedics Office		-	-		120		
Station Office/Meeting		-	210		210		
Toilet (No Shower)		-	49		49		
Dayroom		390	550		550		
Kitchen (w/Storage)		145	200		200		
Dormitories (w/Desks, Lockers)		776	666	6	1,332		222
Toilet/Showers		171	154	3	231		77
Gym		-	300		300		
Apparatus Bay		1,843	2,264		2,264		
Apparatus Storage		156	156		156		
Work/Storage		88	163		163		
Jan/Decontam/Laundry		21	200		200		
Protective Clothing Storage			60		60		
Service Bay			-		-		
Service Storage			-		-		
Mechanic's Office			-		-		
Mechanic's Storage/SCBA Maint.			-		-		
Classroom			-	1	1,000		
Classroom Storage			-	1	100		
Classroom Toilets			-	11	100		
Net Usable Area		3,786	5,268		7,331		_
Circulation/Grossing		334	1,317		1,833	25%	
Gross Area		4,120	6,585		9,164		

FIRE STATION NO. 6

		Current		20	22		
FIRE STATION NO. 6	No.	Space	Need	No.	Space		@
Operational Areas							
Foyer/Lobby (w/Public Counter)		102	102		102		
Captain/Communications Office		192	192		192		
Paramedics Office		88	120		120		
Station Office/Meeting		-	210		210		
Toilet (No Shower)		49	49		49		
Dayroom		344	550		550		
Kitchen (w/Storage)		170	200		200		
Dormitories (w/Desks, Lockers)	5	1,110	1,332	6	1,332		222
Toilet/Showers	2	154	231	3	231		77
Gym		-	300		300		
Apparatus Bay*		2,264	2,264		2,264		
Apparatus Storage		77	150		150		
Work/Storage		163	163		163		
Jan/Decontam/Laundry		-	200		200		
Protective Clothing Storage*		-	60		60		
Service Bay			-		-		
Service Storage			-		-		
Mechanic's Office			-		-		
Mechanic's Storage/SCBA Maint.			-		-		
Classroom			-		-		
Classroom Storage			-		-		
Classroom Toilets			-		=		
Net Usable Area		4,713	6,123		6,123		
Circulation/Grossing		1,552	1,531		1,531	25%	
Gross Area		6,265	7,654		7,654		

^{*} Apparatus bay currently includes protective clothing storage.

FIRE STATION NO. 7

		Current		20	22		
FIRE STATION NO. 7	No.	Space	Need	No.	Space		@
Operational Areas		-					
Foyer/Lobby (w/Public Counter)		72	100		100		
Captain/Communications Office		144	200		200		
Paramedics Office		-	-		120		
Station Office/Meeting		-	210		210		
Toilet (No Shower)		-	49		49		
Dayroom		331	550		550		
Kitchen (w/Storage)		122	200		200		
Dormitories (w/Desks, Lockers)*	1	451	666	6	1,332		222
Toilet/Showers*	1	309	154	3	231		77
Gym		-	300		300		
Apparatus Bay		1,830	2,264		2,264		
Apparatus Storage		-	150		150		
Work/Storage		111	163		163		
Jan/Decontam/Laundry		10	200		200		
Protective Clothing Storage		-	60		60		
Service Bay		-	-		-		
Service Storage		-	-		-		
Mechanic's Office		-	-		-		
Mechanic's Storage/SCBA Maint.		-	-		-		
Classroom		-	-		-		
Classroom Storage		-	-		-		
Classroom Toilets		-	-		-		
Net Usable Area		3,380	5,266		6,129		
Circulation/Grossing		421	1,317		1,532	25%	
Gross Area		3,801	6,583		7,661		

^{*} Lockers currently are located within the toilet/shower room.

SAN RAFAEL COMMUNITY CENTER

		Current		2022)
SRCC	Space	Capacity	Need	Capacity	Need
Shelter Areas					
Foyer/Lobby	765		765	765	
Reception	144		144	144	
Kitchen	416		416	416	
Kitchen Storage	81		81	81	
Men's Toilets	197		300	300	
Women's Toilets	197		300	300	
Multipurpose Hall	4,662	66	4,662	4,662	66
Club Room*	1,709	23	1,709	1,709	23
Game Room	438	6	438	438	6
Arts & Crafts	490	7	490	490	7
Tiny Tots*	765	10	765	765	10
Shelter Storage	-		200	200	
Backup EOC Areas					
EOC Storage			200	200	
Net Usable Area	9,864		10,470	10,470	
Circulation/Grossing	1,016		1,198	1,198	
Gross Area	10,880		11,668	11,668	
Shelter Capacity		112			112
Existing Facilit	y 13,748				

^{*} Includes one or more kitchenettes.

TERRA LINDA COMMUNITY CENTER

		Current	2022		
TLCC	Space	Capacity	Need	Capacity	Need
Shelter Areas					
Foyer	137		400	400	
Kitchen (incl. Storage)	155		550	550	
Community Room	2,574	36	2,574	2,574	36
Multipurpose Room	-		1,750	1,750	25
Men's Toilets	95		300	300	
Women's Toilets	95		300	300	
Shelter Storage	-		200	200	
Backup EOC Areas					
EOC Storage			200	200	
Net Usable Area	3,056		6,274	6,274	
Circulation/Grossing	614		1,027	1,027	
Gross Area	3,670		7,301	7,301	
Shelter Capacity		36		•	61
Existing Facility	5,499				

CITY HALL

		Current		20	22			
COMMUNITY DEVELOPMENT	Staff	Space	Need	Staff		Number	@	
Director's Office								
Director	1	140	140	1	140	1	200	
Senior Secretary	1	72	72	i	72	1	160	
Clerk Typist	1	72	72	i	72	1	120	
Net Usable Area	<u> </u>	284	284	<u> </u>	284			
Circulation/Grossing		85	85		85	30%		
Gross Area		369	369		369	3370		
Staff	3	33,	33,	3	33,			
Building & Safety Division								
Manager	1	140	140	1	140			
Building Technician	i	72	72	i	72			
Building Inspector	3	168	168	3	168	3	56	
Engineering	3	72	72	1	72	3	50	
Code Enforcement Manager	- 1	140	140		140			
Code Enforcement Officer	4	240	240	4	240	4	60	
Net Usable Area	4	832	832	4	832		- 00	
		250	250		250	30%		
Circulation/Grossing Gross Area						30%		
Staff	10	1,082	1,082	11	1,082			
Sidii	10			11				
Planning Division								
Advanced Planning	2	144	144	2	144	2	72	
Prin. Advanced Planning	1	140	140	1	140			
Current Planning	4	288	288	4	288	4	72	
Prin. Current Planning	1	140	140	1	140			
Planning Tech	2	144	144	2	144	2	72	
Intern	2	112	112	2	112	2	56	
Public Works	-	60	60	1	60			
Net Usable Area		832	832		832			
Circulation/Grossing		250	250		250	30%		
Gross Area		1,082	1,082		1,082			
Staff	10			11				
Common Areas								
Reception Area/Public Counter	_	920	920		920			
Medium Conference	_	_	_		_			
Small Conference	_	_	_		_			
Large Conference/Training	_	400	400		400			
Work Room	_	175	175		175			
Filing Area	_	250	250		250			
Lunch Room	_	350	350		350			
Copy Workstation	_	72	72		72			
Open Shelving Area	_	100	100		100			
Net Usable Area		2,267	2,267		2,267	,		
Circulation/Grossing		680	680		680	30%		
Gross Area		2,947	2,947	I	2,947	30,0		

		Current		20	22		
ADMINISTRATION	Staff	Space	Need	Staff	Space	Number	@
City Manager							
Mayor	1	180	225	1	225		
City Manager	1	225	225	1	225		
Assistant City Managers	2	180	360	2	360	2	180
Sec'y to Mayor & City Manager	1	56	60	1	60		
Sec'y to Assistant City Manager	1	56	60	1	60		
Admin Analyst/Assistant	_	_		1	60		
City Council Member Office	_	_	120	1	120		
Copy Area		_	40		40		
Storage		64	64		64		
Net Usable Area		761	1,154		1,214		
Circulation/Grossing		228	346	1	364		
Gross Area		989	1,500		1,578		
Staff	6	, ,	.,000	8	.,0,		
oran	Ū						
City Manager		120	200		200	1	200
Information Services Director	1	140	140	1	140	-	
Network Analyst	2	84	160	2	160	2	80
MIS Technician	2	56	120	3	180	3	60
GIS Analyst	_	-		i	80	J	
Communications Specialist	_	_	_	l i	120		
Communications Spec. Storage	_	_	_	'	100		
Computer Room		180	300		300		
Storage Room		-	200		200		
Lab		_	100		100		
Computer Training Room		_	500		500		
Copy Area		_	40		40		
Net Usable Area		460	1,560		1,920		
Circulation/Grossing		138	468	I	576		
Gross Area		598	2,028		2,496		
Staff	5	370	2,020	8	2,470		
oldii	3						
City Clerk							
City Clerk	1	130	140	1	140		
Deputy City Clerk	1	42	72	1	72		
Sec'y to City Clerk/Claims	1	42	60	1	60		
Clerk/Typist Temp	1	24	60	i	60		
Work Room/Library	-	180	180		180		
Records Storage (Fireproof)		64	150		150		
Copy Area			40		40		
Net Usable Area		482	702		702		
Circulation/Grossing		145	211		211		
Gross Area		627	913		913		
Staff	4			4	,		
Jiuli							

		Current		20	22		
ADMINISTRATION	Staff	Space	Need	Staff	Space	Number	@
Human Resources					-		
Assistant Director HR	1	140	140	1	140		
Personnel Tech	1	42	60	1	60		
Benefits Administrator	1	42	60	1	60		
Personnel Analyst	_	_	-	1	60		
Trainer	1	24	60	1	60		
Risk Manager	1	140	140	1	140		
Assistant to Risk Manager	1	_	60	1	60		
Volunteer Project Manager**	1 -	_	120	1	120		
Applicant Visitor Area		24	100		100		
Testing Room		100	500		500		
Secure Records Storage		90	150		150		
Copy Area		_	40		40		
Net Usable Area	•	602	1,430	,	1,490	•	
Circulation/Grossing		181	429		447	30%	
Gross Area		783	1,859		1,937		
Staff	7		,	8	·		
Finance							
Assistant Director Finance	1	135	140	1	140		
Acct Supervisor	1	45	120	1	120		
Junior Acct	2	60	120	2	120	2	60
Acct Tech Payroll	1	40	72	1	72		
Acct Clerk II AP	1	42	60	1	60		
Revenue Supervisor	1	40	120	1	120		
Business License Examiner	1	30	60	1	60		
Acct Clerk II Bus License	1	42	60	1	60		
Acct Clerk II Cashier	1	42	60	1	60		
Customer Services Clerk	1	30	60	1	60		
Purchasing Agent	-	_	-	1	60		
Capital Projects Acct	_	_	_	1	60		
Auditors/Temps Project Space		_	200	•	200		
Safe/Secure Records		72	72		72		
File/Storage Room		40	200		200		
Work Area		48		_			
Secured Collection Room		-	100		100		
Copy Area		_	40		40		
Net Usable Area	11	666	1,484	13	1,604		
Circulation/Grossing	- •	200	445		481	30%	
Gross Area		866	1,929		2,085		
Staff			, = -		,		
O I M I I							

		Current		20	22		
ADMINISTRATION	Staff	Space	Need	Staff	Space	Number	@
City Attorney							
City Attorney	1	-	180	1	180		
Deputy City Attorney	1	92	140	1	140		
Assistant City Attorney	1	92	140	2	280		
Legal Assistant	1	42	60	1	60		
Clerk/Intern	_	-	-	1	60		
Library		160	250		250		
Copy Area		_	40		40		
Net Usable Area		386	810		1,010	*	
Circulation/Grossing		116	243		303		
Gross Area		502	1,053		1,313		
Staff	4		.,	6	.,		
Parking Services							
Parking Services Manager	1 -		140	1	140		
Parking Enforcement Supervisor	1 -		100	1	100		
Parking Enforcement Officers	6 -		180	8	240	4	60
Clerical	1 -		60	1	60		
Account Analyst			_	1	60		
Auditor/Collections			_	2	200		
Parking Meter Technician	1 -		200	2	200		
Lead Parking Lot Attendant	1 -			1			
Parking Lot Security Officer	1 -		_	i	_		
Shared Parking Lot Workstation			60	•	60		
Lockers and Changing Area			100		100		
Kitchenette			60		60		
Storage			80		80		
Copy Area			40		40		
Net Usable Area			1,020		1,340		
Circulation/Grossing		_	306		402		
Gross Area*		_	-			in leased space	۵
Staff	12	_	_	18	1,772	iii ieuseu spuci	C
Siun	12			10			
Common Areas Concierge	_		60		60		
Mail Room		54	200		200		
Conference Room – Medium	_	. 34	240		240		
Conference Room – Public		240	350		350		
Conference Room – Small #1		240	120		120		
Conference Room – Small #2	_	•	120		120		
Kitchenette	_	•	150		150		
Confidentiality Room	_	•	80		80		
Public Access Corridor	-	875	80		80		
Public Access Corridor Public Counter		0/3	450	-	450		
Copy Area	-	•	450 -		450 -		
Net Usable Area		1,169	1,770		1,770		
Circulation/Grossing		351	531		531		
Gross Area		1,520	2,301		2,301		

Summary

		Current		20)22
CITY HALL	Staff	Space	Need	Staff	Space
Function					
Community Development	25	5,734	5,734	27	5,734
Administration	49	5,885	11,583	65	12,623
Council Chambers and Lobby		2,669	2,669		2,669
Gross Area		14,288	19,986		21,026
Total Staff	74			92	
Existing City Hall		27,150			



GROUP 4

ARCHITECTURE
RESEARCH +
PLANNING, INC