

**THE
MID COUNTY CONSOLIDATION
FEASIBILITY STUDY**

December 8, 1992

CONDUCTED BY:

APTOS/LA SELVA FIRE PROTECTION DISTRICT

BRANCIFORTE FIRE PROTECTION DISTRICT

CENTRAL FIRE PROTECTION DISTRICT

SCOTTS VALLEY FIRE PROTECTION DISTRICT

MID COUNTY CONSOLIDATION STUDY

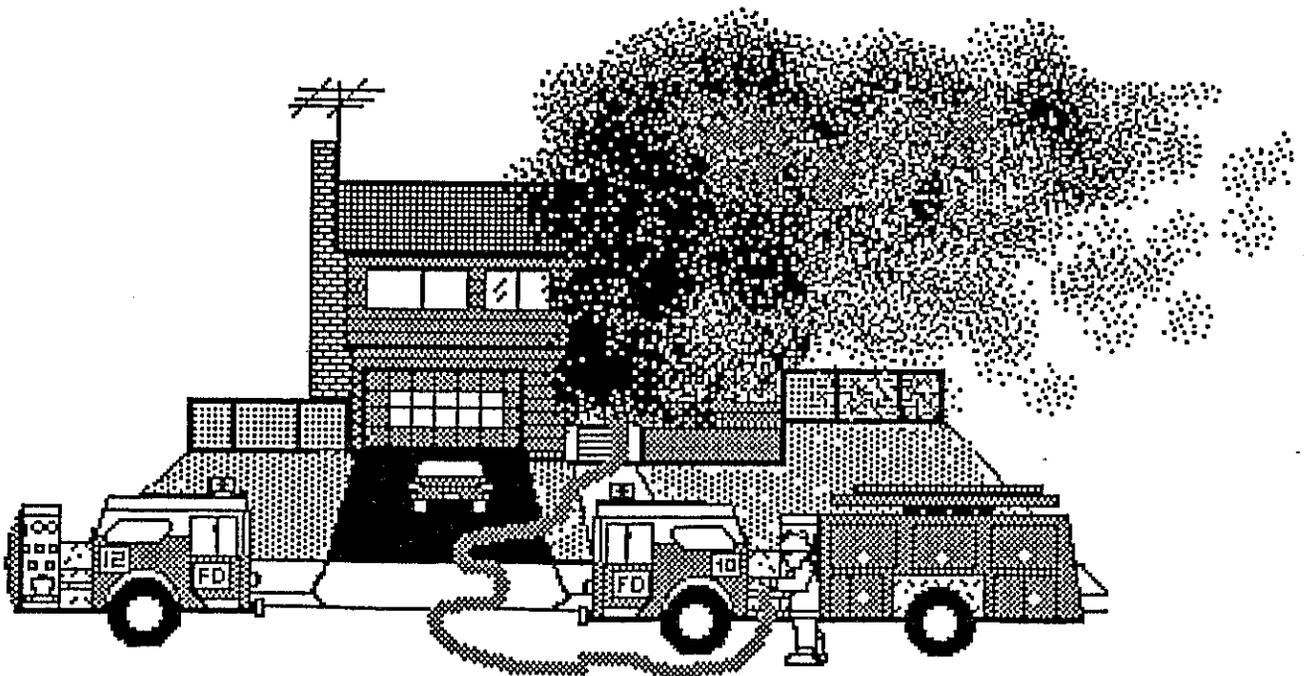
Preface

The Unified Command of Chief Chuck Mornard, Chief Bruce Scott, Chief Robert Stoops and Chief Marc Tranchina (Fire Chiefs of Aptos/La Selva, Scotts Valley, Branciforte, and Central Fire Protection Districts respectively) would like to take this opportunity to thank all the individual people who were involved in the completion of this preliminary consolidation study.

They all are to be highly commended for their contributions and professional attitudes during the course of this project. There were lively discussions from time to time, but always in a respectful and constructive manner.

The report represents hundreds of hours of research and computation of information. Almost all information had to be hand tabulated. One of the difficulties encountered was in translating information from each agency into a common format.

Regardless of the outcome of the overall study, this process has proven that Fire Service personnel are dedicated employees who continue to work closely together in the pursuit of a common goal.



MID-COUNTY CONSOLIDATION STUDY

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INTRODUCTION

The Fire Chiefs and the Boards of Directors of the Aptos/La Selva, Branciforte, Central and Scotts Valley Fire Districts believe that there is an underlying movement by legislators for mass consolidation of Special Districts across the State of California. At one time during 1992/93 State budget negotiations, Senate Bill (SB) 844 empowered LAFCO with the ability to initiate consolidation. All levels of government (including districts) are facing one of the most difficult and challenging financial crises since the inception of Special Districts.

The Districts elected to be proactive by analyzing consolidation. Whether motivated by survival or desire to promote efficiency, "We would rather be part of the planning process instead of victims".¹ Since the Districts are similar demographically and operationally, it is believed that consolidation would be a major target of LAFCO regardless who initiated the process.

The Chiefs of the Districts feel that such a merger has the potential of being feasible economically as well as logistically. "This is an excellent opportunity for the various Districts' Boards and Staffs to interact regarding the topic of consolidation. Consolidation of Special Districts appears to be a high priority of the Governor and State Legislators as well as the County Government(s)." ²

The Districts are concerned that the potential exists for LAFCO to be in the position to dictate how and when consolidation will occur with minimal input from the affected agencies. SB 844 would have given LAFCO the power to do so at any time deemed appropriate. In fact, some legislation in the near future may do just that.

By taking a proactive approach, the Districts have a greater potential of maintaining or improving service levels and continuing to deliver the programs that local district officials have established as being appropriate. We believe that the Boards would not wish to see property tax revenues shifted from the Districts to other governmental programs as a result of inaction.

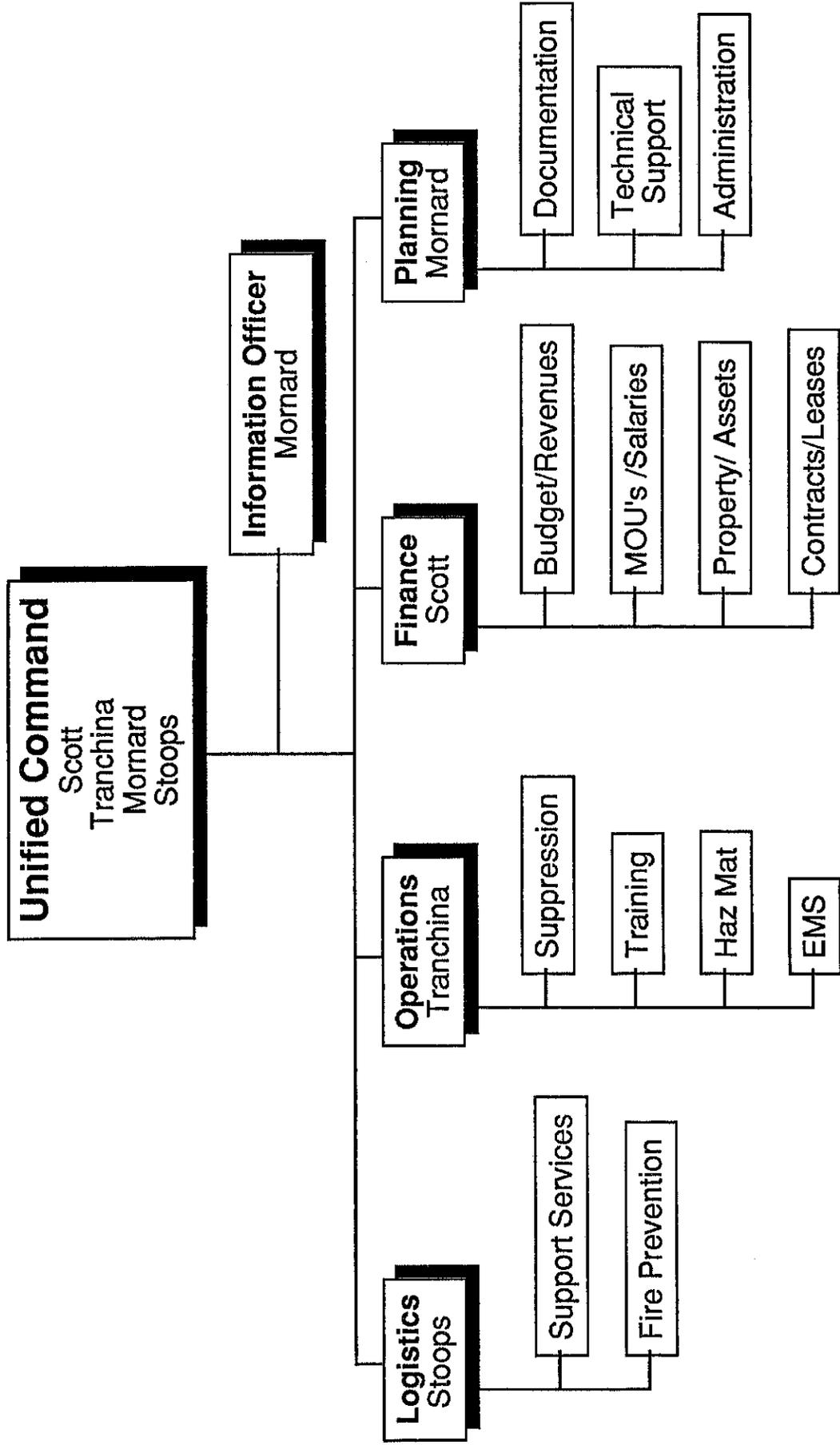
Steps of Consolidation Process:

- Agreement of the Boards of Directors of the Districts to first, initiate discussion regarding potential consolidation and secondly, initiate a motion to prepare a preliminary feasibility study.
- Team selection - Boards decided not to use outside consultants because of limited resources. Personnel of districts were asked to participate and concentrate on their areas of expertise.
- Compile and correlate data for initial draft of feasibility study.
- Presentation of feasibility study to Districts' Boards of Directors.
- Chuck Mornard, Aptos/La Selva FPD, designated Mid County Study spokesperson.

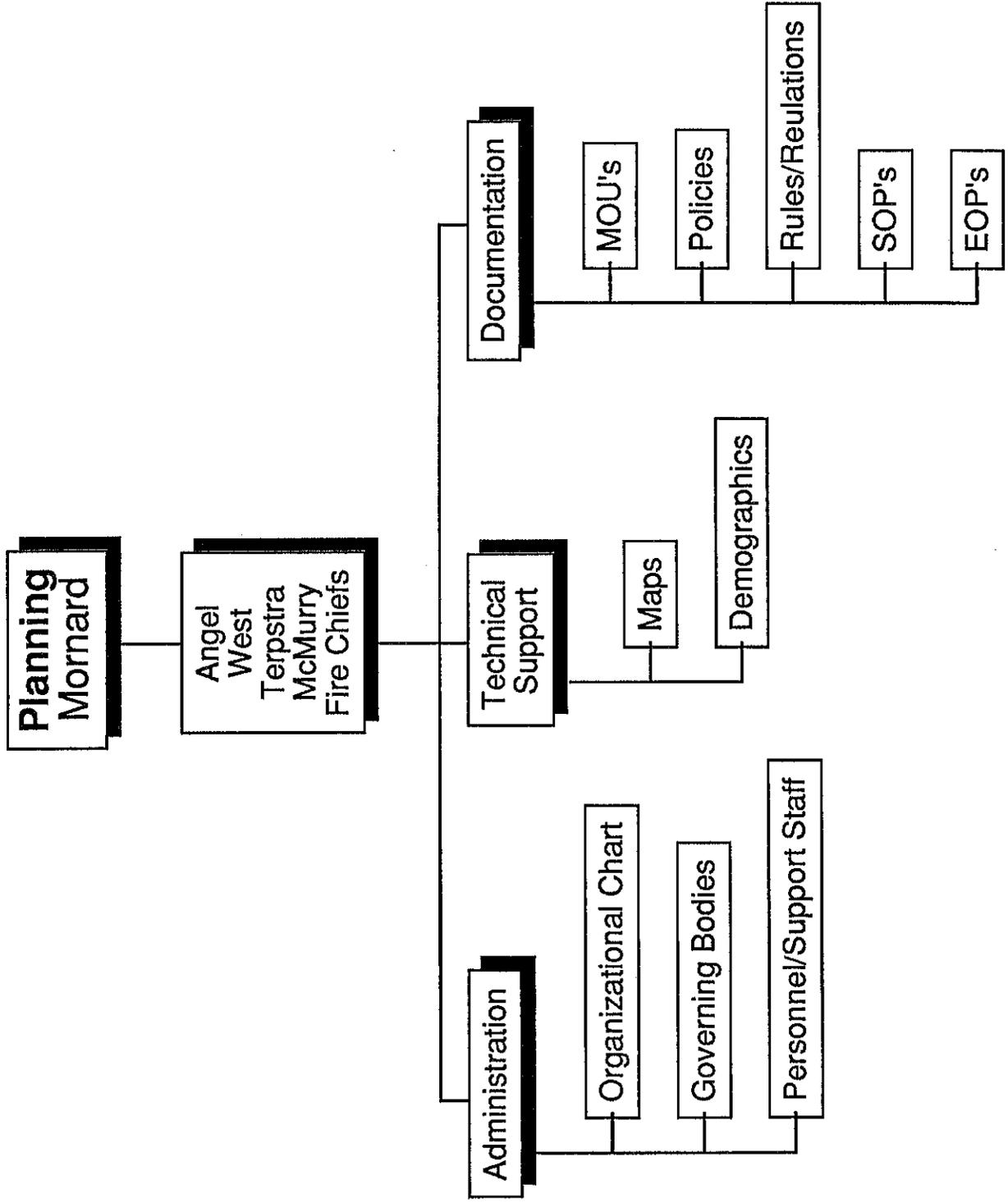
¹ & ² Multi-agency memo dated 8/20/92.

Mid County Fire Study

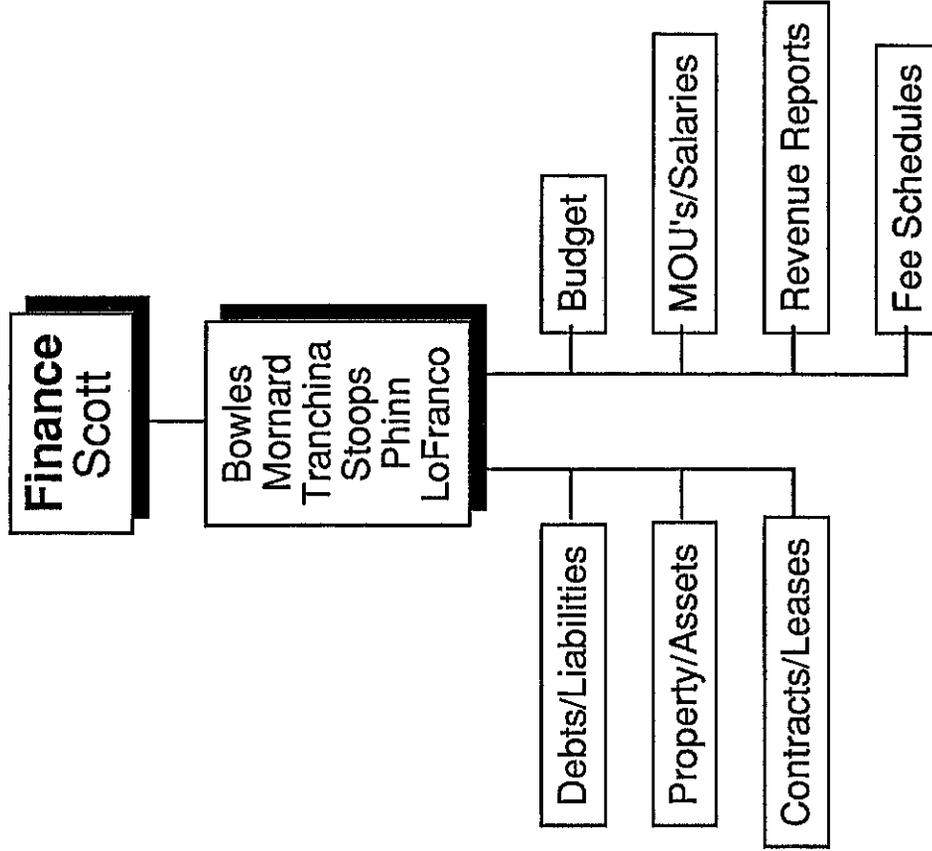
Study Command Chart



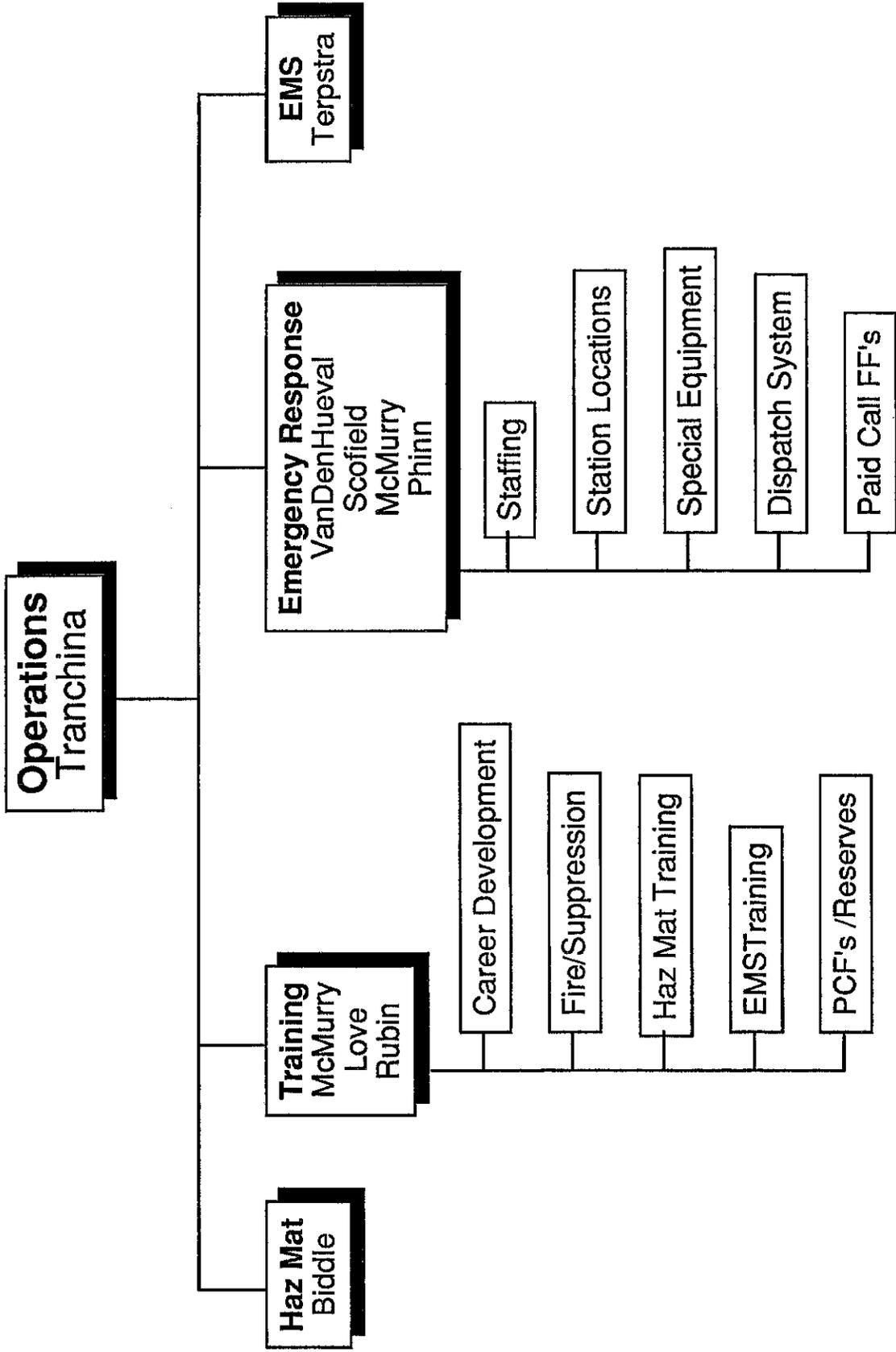
Plans Section



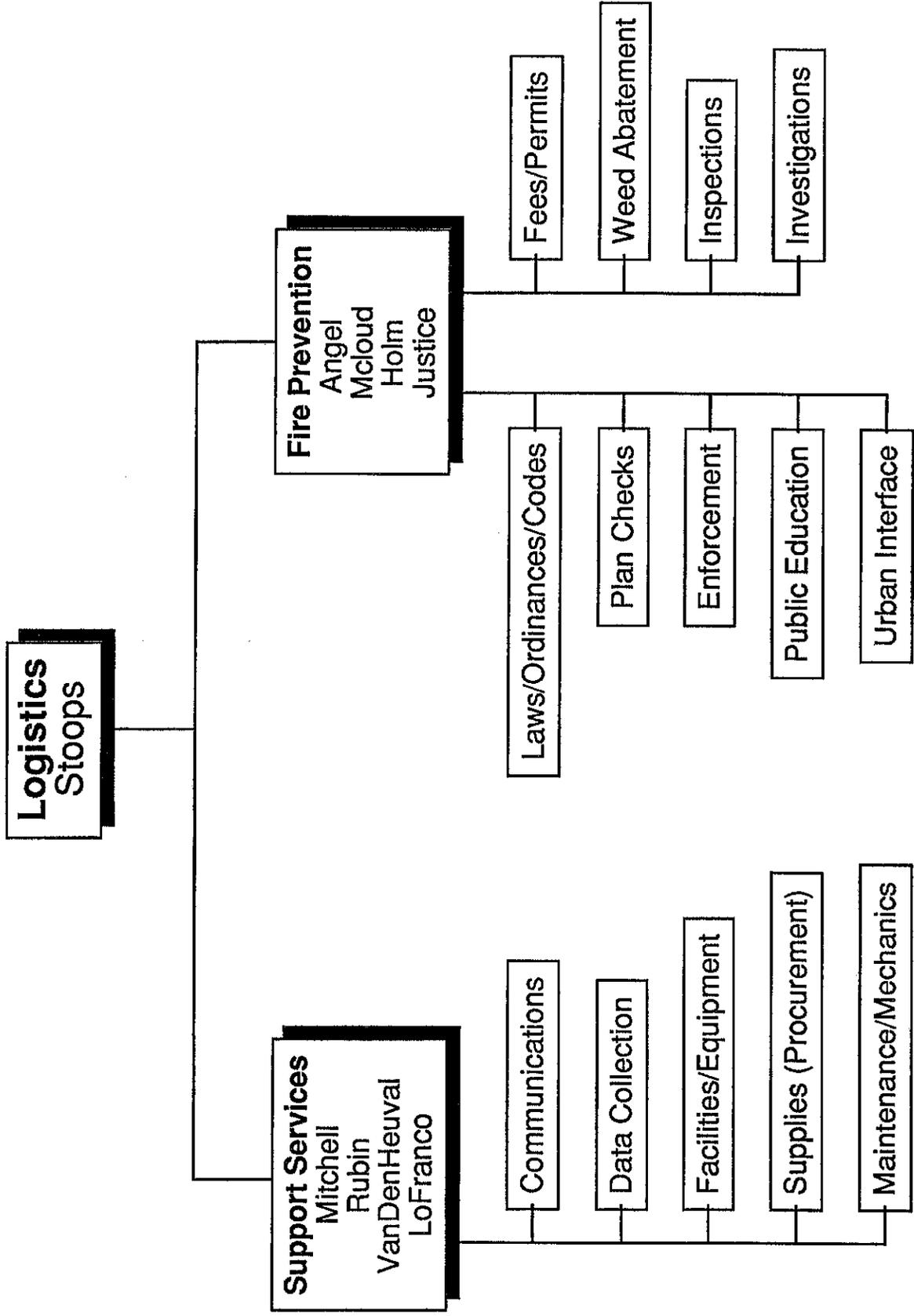
Finance Section



Operations Section



Logistics Section



DEMOGRAPHICS

APTOS/LA SELVA FIRE DISTRICT

ADMIN. PERSONNEL (40-HOUR)	LINE PERSONNEL	SUPPORT STAFF	FIRE PREVENTION BUREAU	TOTAL
1 CHIEF	3 BATT. CHIEFS	1 ADMIN. SECRETARY	1 FIRE MARSHAL	
1 DEPUTY CHIEF (OPS.)	9 CAPTAINS	1 SECRETARY	1 PREV. SPECIALIST	
	9 FF/PARAMEDICS	1 MECHANIC		
	12 FIREFIGHTERS			
2	33 SHIFT PERSONNEL	3	2	TOTAL
POPULATION	3 STATIONS	30,000 PEOPLE	CAREER EMPLOYEES	40
SQUARE MILES	12 SQ. MILES	1,574 CALLS PER YR.	PAID CALL	0

BRACIFORTE FIRE DISTRICT

ADMIN. PERSONNEL	LINE PERSONNEL	SUPPORT STAFF	FIRE PREVENTION BUREAU	TOTAL
1 CHIEF (ON SHIFT)	2 CAPTAINS			
1	3 SHIFT PERSONNEL	0	0	TOTAL
POPULATION	1 STATION	6,000 PEOPLE	CAREER EMPLOYEES	3
SIZE	9 SQ. MILES	147 CALLS PER YR.	PAID CALL	15

CENTRAL FIRE DISTRICT

ADMIN. PERSONNEL (40-HOUR)	LINE PERSONNEL	SUPPORT STAFF	FIRE PREVENTION BUREAU	TOTAL
1 CHIEF	3 BATT. CHIEFS	1 ADMIN. SECRETARY	1 FIRE MARSHAL	
1 DEPUTY CHIEF (ADM.)	12 CAPTAINS	1 SECRETARY	1 CAPTAIN/INSPECTOR	
1 BATT. CHIEF (OPS.)	24 FIREFIGHTERS		1 PREV. SECRETARY	
3	39 SHIFT PERSONNEL	2	3	TOTAL
POPULATION	4 STATIONS	45,000 PEOPLE	CAREER EMPLOYEES	47
SQUARE MILES	21 SQ. MILES	3,139 CALLS PER YR.	PAID CALL	32

SCOTTS VALLEY FIRE DISTRICT

ADMIN. PERSONNEL (40-HOUR)	LINE PERSONNEL	SUPPORT STAFF	FIRE PREVENTION BUREAU	TOTAL
1 CHIEF	3 BATT. CHIEFS	1 ADMIN. SECRETARY	0.5 FIRE MARSHAL	
1 DIVISION CHIEF (OPS.)	6 CAPTAINS	1 SECRETARY	1 CAPTAIN/HAZ MAT	
0.5 DIVISION CHIEF (MARSHAL)	16 FIREFIGHTERS		1 INSPECTOR	
2.5	25 SHIFT PERSONNEL	2	2.5	TOTAL
POPULATION	2 STATIONS	20,000 PEOPLE	CAREER EMPLOYEES	32
SQUARE MILES	21 SQ. MILES	1,058 CALLS PER YR.	PAID CALL	15

MID COUNTY FIRE DISTRICT

ADMIN. PERSONNEL (40-HOUR)	LINE PERSONNEL	SUPPORT STAFF	FIRE PREVENTION BUREAU	TOTAL
8.5 EMPLOYEES	100 SHIFT PERSONNEL	7 EMPLOYEES	7.5 EMPLOYEES	TOTAL
POPULATION	10 STATIONS	101,000 PEOPLE	CAREER EMPLOYEES	122
SQUARE MILES	63 SQ. MILES	5,918 CALLS PER YR.	PAID CALL	62

PLANNING - GOVERNING BOARD

The initial recommendation resulting from the Mid County Fire Protection District Study is to establish and maintain a seven (7) person board of directors. Conceptually, it was determined that all four (4) districts required representation regardless of demographic considerations. It is also known that a "typical" governing board requires an uneven number of persons.

In adherence to the aforementioned parameters, the following board configuration was established:

- Aptos/La Selva Fire Protection District - Two (2) members
 - Branciforte Fire Protection District - One (1) member
 - Central Fire Protection District - Two (2) members
 - Scotts Valley Fire Protection District - Two (2) members
- Total** **Seven (7) members**

Each independent district would be responsible for selection of members who would continue to represent the District's interest in part for the Mid County Fire District. It would be beneficial for purposes of representation, continuity and knowledge of each district to choose persons of alternating election terms. This would provide that at least one (1) director would remain in office at all times in the differing areas. Branciforte Fire District would be at a disadvantage regarding this aspect since there would be only one (1) representative from that district.

Future candidates for the Board of Directors would be elected by district elections geographically defined by the borders of the existing independent districts. It also could be decided in the future to adjust those boundaries to include other demographic considerations, such as, population, natural boundaries, etc.

The new Board of Directors then would be responsible for the following:

- Electing Board Officers and Appointing Committee Members
- Selecting a Fire Chief (CAO)
- Finalizing the Organizational Structure
- Negotiating Employee Agreements for Salaries, Benefits, etc.
- Establishing Policy (Personnel System, Procurement, etc.)
- Determining Staffing Levels and Specialized Services
- Adopting a Budget

PLANNING - ORGANIZATION

Prior to the development of an organization structure, it was important that certain assumptions be established. The following criteria was developed in an effort to minimize anxiety levels and the financial impact on existing employees:

- No Layoffs
- No Reduction in Salary
- No Reduction in Rank (Exception: Fire Chiefs)
- No Premature Retirements
- Only Two (2) Battalion Chiefs per shift

Note: Operations Section also established two (2) battalion chiefs per shift as being the appropriate staffing/coverage level.

From these above mentioned assumptions, an organizational chart was established (refer to chart 1). Battalion chiefs, for the purpose of this report, will be considered administration; however, they are shift (line) not forty-hour personnel. Support personnel (e.g. clerks, secretaries, receptionists, inspectors, specialists, etc.) are considered in a separate classification category.

The organizational chart represents an immediate downsizing of four (4) administrative positions. Again, this would be accomplished while meeting the aforementioned criteria. These cost savings of personnel resources would be shifted to line-staffing to assist in accomplishing engine company staffing goals. Further downsizing through attrition (additional administrative personnel retiring within the next five (5) to ten (10) years), would reduce administrative staffing by an additional two (2) persons. This administrative configuration (refer to Charts 2 and 3) would be appropriate to effectively manage the Mid County Fire Department in these difficult fiscal times. The conclusion of this section is based on the organization described in this study and does not include the administrative resources that would be required to provide an Advanced Life Support Transport System.

The support staff described above will remain consistent with present levels pending significant changes in service programs (i.e. paramedic service, etc.). Line/engine staffing is one of the most significant issues regarding consolidation. It would be improved by the shifting of personnel resources from administration, but, to what extent, is dependent on the negotiations of benefits among the Board of Directors and the individual collective bargaining units.

MID COUNTY FIRE - ADMINISTRATIVE ORGANIZATION CHART

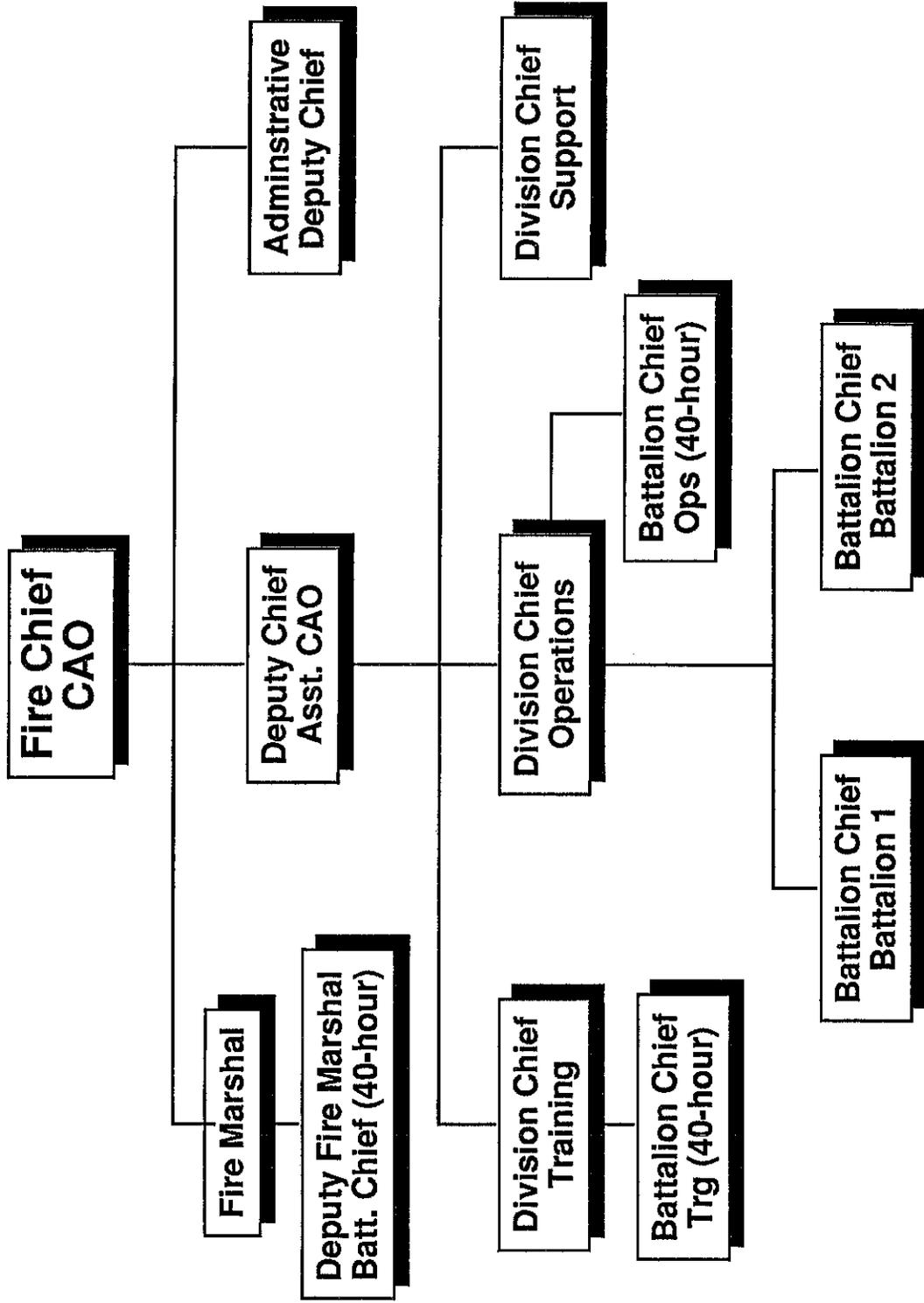


Chart 1

MID COUNTY FIRE - ADMINISTRATIVE ORGANIZATION CHART

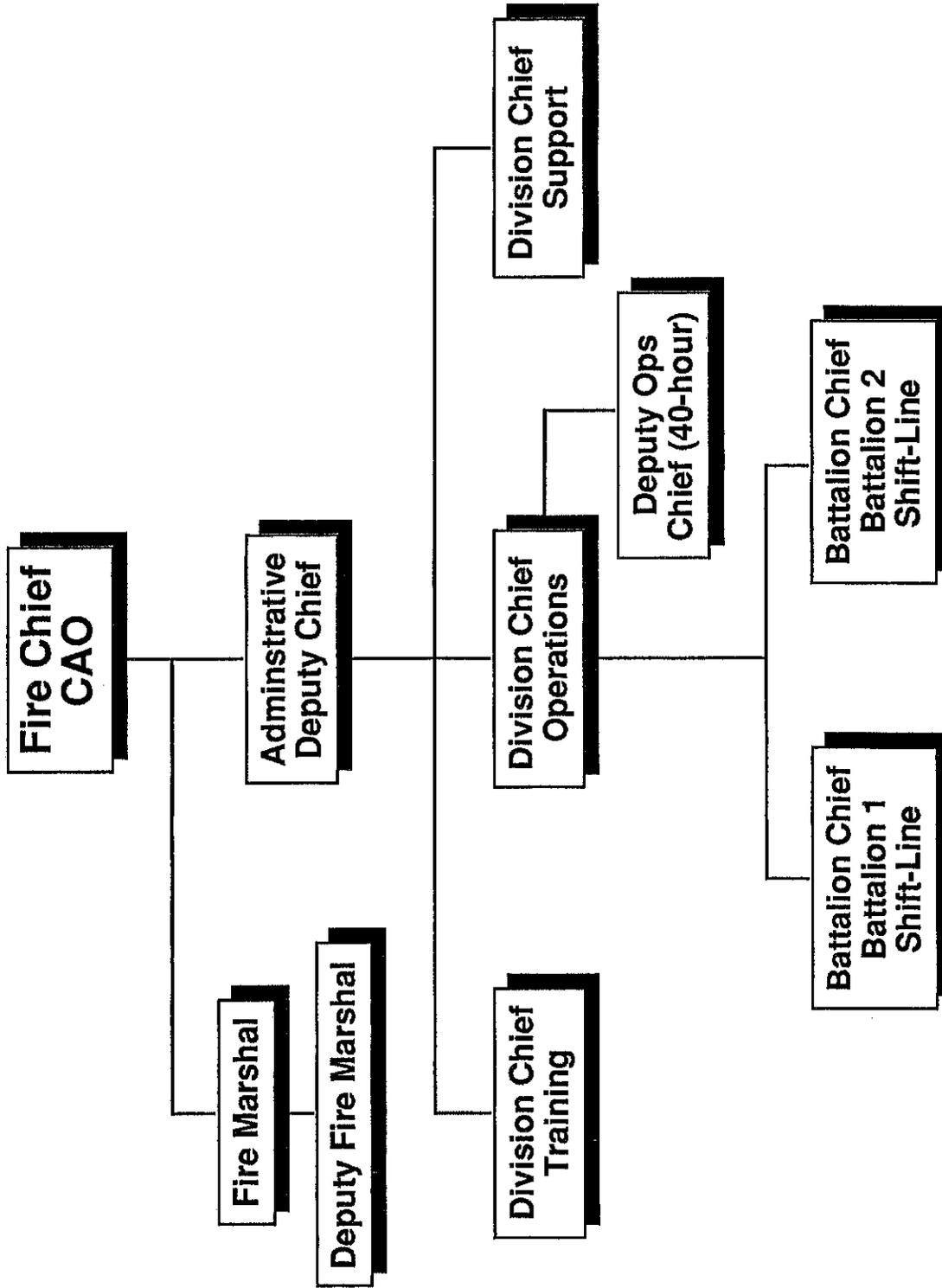


Chart 2

MID COUNTY FIRE - ADMINISTRATIVE ORGANIZATION CHART

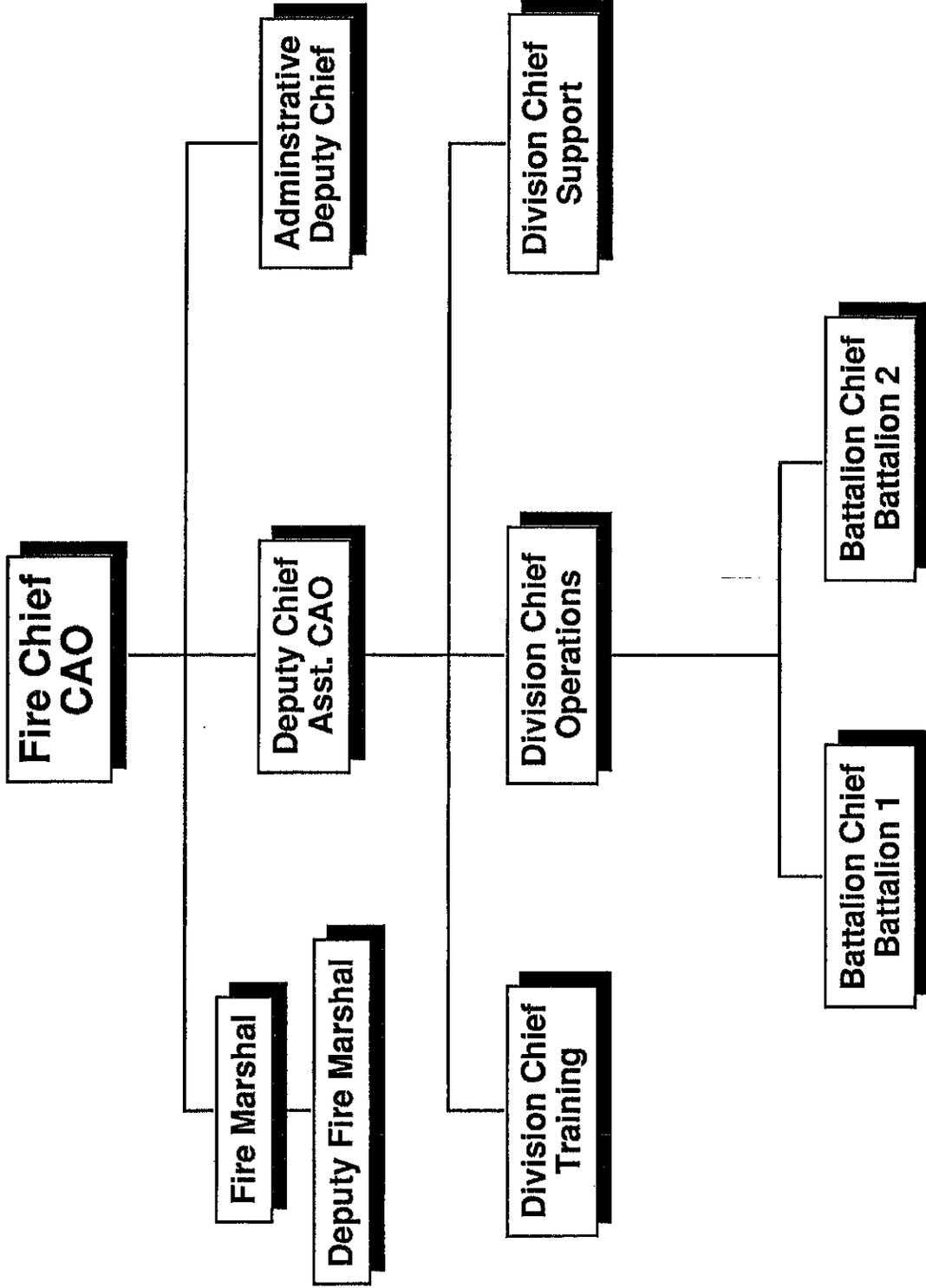
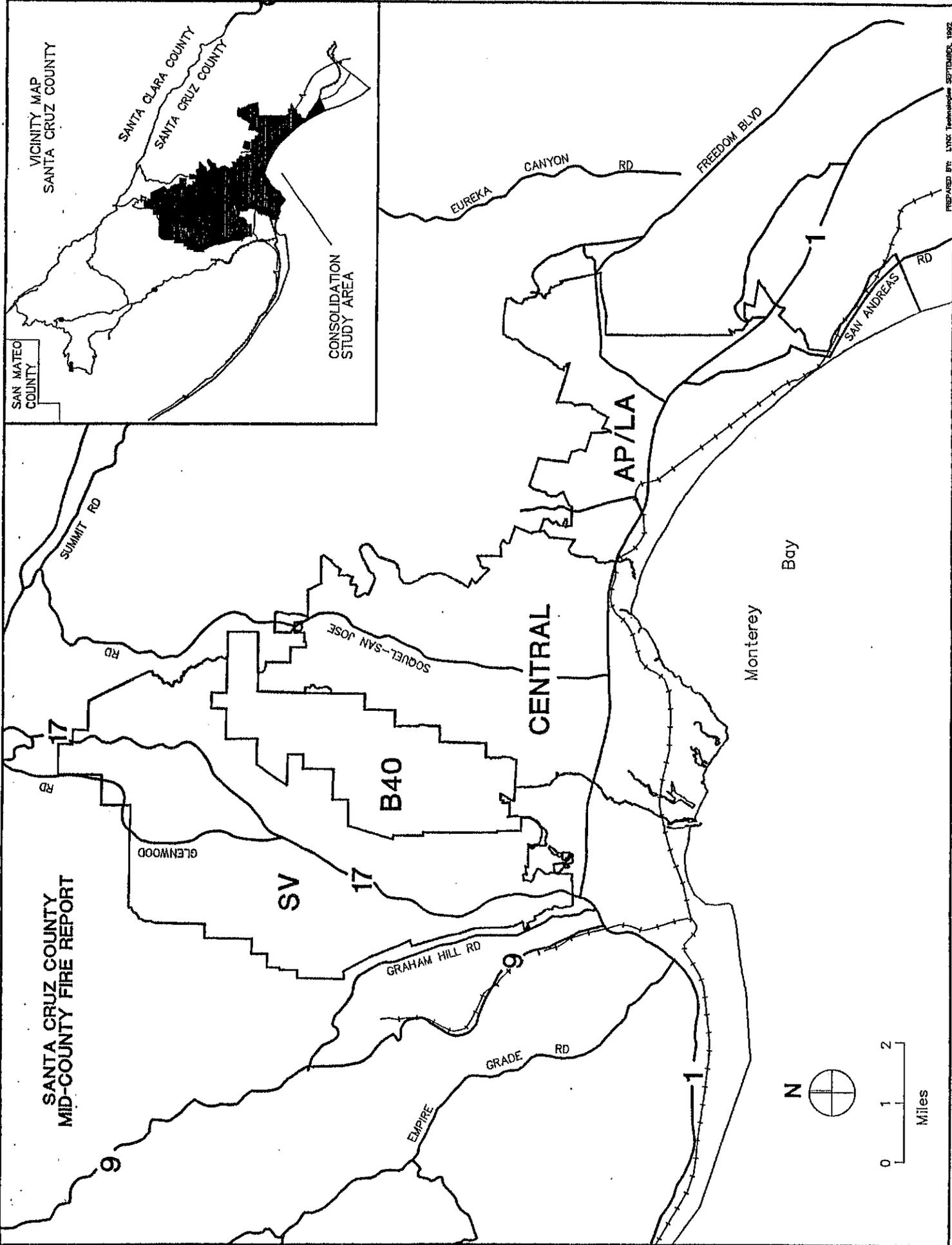


Chart 3



PREPARED BY: LYNN T. HARRISON, SEPTEMBER, 1992

FISCAL ANALYSIS

A fiscal analysis of the consolidation proposal indicates that a consolidation is feasible. However, the form in which it happens and the quantity of operational changes the Districts undergo will directly affect the fiscal bottom line.

Staffing is the paramount cost issue and an effort to offer a minimum staffing of three (3) persons per engine has a significant financial impact. Three (3) person staffing of all engines at all stations would not initially be feasible financially, however, improved engine staffing levels would be realized immediately on some engines. Low volume stations would continue to experience reduced staffing so as to maintain the higher level of staffing at higher volume stations. A reduction in the number of chief officers as a result of a district consolidation and future attrition also would present potential cost shifts from administration to line-staffing.

Descriptive reassignment (without reduction in salary or rank) of administrative personnel to line personnel helps close the staffing gap between existing and desired level of line-staffing. How the varying employee agreements (benefits) are combined, overtime monies are managed and future downsizing of administration through attrition evolves would dictate the accomplishment of preferred line-staffing levels. Alternative staffing levels phased in over a period of several years would yield the same goal and spread the fiscal impact over time.

Individual employee contracts (MOU's) will take time and compromise to reach a uniform agreement among all employee groups. These negotiations probably will be the most problematic and delicate components of the entire consolidation process. The final outcome of this process will have a significant bearing on the amount of monies available to accomplish the above mentioned goals. This is especially true in the area of holiday pay, longevity, education incentive/merit pay and sick leave payoff upon retirement or termination. How constant staffing is achieved through the allocation of overtime monies also will directly impact funds available for staffing issues.

Cost savings would be realized over a period of time by the reduction of duplicated services and the increase of service abilities over and above independent district levels. This can be realized by combining maintenance, training and administrative facilities. Additional savings would occur through consolidated buying power in large quantity purchases and bargaining. As property bases increase, additional personnel could be hired to meet the desired goal. Additional future funding through patient transport or the utilization of paramedic engines in lieu of a paramedic rescue vehicle potentially could offer significant revenue generation or cost savings.

The present participation of each of the four (4) Districts in a common self-insured Workers' Compensation Plan, self-insured Medical Plan, medical-physical examinations and PERS Retirement Plan for their employees coupled with the utilization of the County Auditor for fiscal services lends itself to ease of a consolidation.

EMERGENCY RESPONSE SERVICES

Consolidation, the combining of Aptos/La Selva (A/LS), Branciforte (B-40), Central (CTRL) and Scotts Valley (SV) into one mid county district, offers a greater depth of resources thus reducing the dependence of outside mutual aid significantly. Consolidation also offers an advantage over current auto/mutual aid programs in that the company staffing levels would eventually be consistent throughout the organization. The Mid County District would eliminate the need for "routine" mutual aid and would provide the optimum response for a given incident and not be as heavily dependent on off duty/paid call response. Response levels would be driven by incident type and location as opposed to limited resources readily available. (Currently, three of the four districts operate companies below the accepted industry standard of three people per company.)

The operational advantage of consistent company staffing is profound. The consistent staffing of engine companies would result in higher efficiency and effectiveness in emergency scene operations by requiring less apparatus commitment to an incident simply for the need to deliver appropriate numbers of personnel to the scene. Staffing initially would reflect the present staffing levels existing at each of the stations with the exception of Branciforte which would need to provide constant two (2) person staffing.

Another advantage of consolidation is the consistency of operations and training methods. The Districts currently have a variety of ways of accomplishing the same job done. Consistency in operations makes for a more efficient finished product.

Response times would be consistent with present conditions. As the fiscal conditions permit, the District would be able to add/change companies and perhaps stations, thus improving response times to identified areas. Further study would be necessary to determine priorities based on call volume, response time impact, fiscal ability and political necessity.

The two (2) primary specialty services which the current Districts offer are increased emergency medical service in the form of advanced life support (ALS) and hazardous materials (Haz Mat) response. Those two services are covered in other sections of this report. In general, consolidation offers the ability to maintain and enhance those services to the entire Mid County District, either immediately or over time. Specialized resources such as rescues/ambulances, trucks, water tenders, air/utilities and hazardous material units may need to be strategically located throughout the new District to allow for optimum response anywhere within the District.

Consolidation offers operational efficiency and service to the mid county independent Districts. Consistent staffing, equipment, training and methods of operation will enhance service as compared to the current system. Considerable effort and compromise will be necessary to standardize the components of the system in the short term, but once complete, consolidation will be more operationally effective.

EMS EMERGENCY RESPONSE SERVICES

The optimum service to constituents would be to provide paramedic response throughout the entire consolidated (Mid County) District. However, the logistics of such coverage would be difficult at this time when one considers hiring additional personnel, purchasing additional equipment and obtaining the necessary license. AMR/West, the current transport company for the County, is presently completing negotiations of its contract with Santa Cruz County officials. This contract does not allow for fragmentation of the Advance Life Support (ALS) transport system and will be awarded for the period of five (5) years with an automatic five (5) year option to renew. This does not mandate that paramedic services should not be provided by the Mid County District; it simply means that the new district would have to work around or augment the existing system to avoid confrontation or litigation with the County of Santa Cruz. A partial coverage system could provide ALS services to specific areas of the newly created District (those areas with extended ALS response times) and stay within the constraints of the Santa Cruz County/AMR agreement. If there were a desire to provide paramedic services or paramedic transport services throughout the entire Consolidated District, this could be accomplished later in an incremental manner.

Currently, the service provided by AMR/West Ambulance Service adequately covers much of the proposed district. Service islands appear in the existing Aptos/La Selva (A/LS) and the Scotts Valley (SV) Fire Districts. Maintaining the present paramedic system in A/LSFD and the addition of a paramedic capable engine operating in the SVFD (station one area) would augment the existing system and provide consistent ALS service to the entire Consolidated District. The paramedic engine, initially, would be staffed with a minimum of one (1) firefighter/paramedic (FF/PM) and would be equipped appropriately to meet county paramedic unit standards. Considering the nine (9) FF/PMs currently certified from the A/LSFD, two (2) certifiable FF/PMs from the Central Fire District and one (1) FF/PM from the SVFD, a cadre of twelve (12) FF/PMs could easily maintain a constant staffing of three (3) FF/PMs on duty per shift (allowing for one (1) FF/PM to be absent at any one time per shift).

As an option, the paramedic unit currently in A/LSFD could be converted from a rescue/ambulance to an engine based system. This option would ease the staffing constraints by not having to staff the paramedic ambulance/rescue unit (with two (2) FF/PMs) in addition to the three (3) engines.

Other options could be expanded later to provide coverage to other portions of the Mid County District as equipment and paramedical personnel could be acquired. As personnel, equipment and fiscal impact issues are dealt with, additional ALS capable units could be added to serve the entire Mid County District. The topic of paramedic service or paramedic transport service is a comprehensive subject in itself. It would be the recommendation of staff to evaluate this issue independently in the future if a merger were to occur.

HAZARDOUS MATERIALS RESPONSE SERVICES

The consolidation of the four (4) Fire Districts into a mid county fire department would increase the level of response and service. The general public has an increased awareness of hazardous materials (Haz-Mat) and the dangers associated to health and the environment. Statewide, the Fire Service has taken on the responsibility of providing emergency response to these incidents and has developed Haz-Mat Teams. Fire service response is directly in line with the mission statements of the Fire Districts and any increase in this level of service should be viewed as beneficial, to not only public safety and environmental protection, but to the increased safety of our own personnel as well.

Overall hazardous materials responses average four percent (4%) of total call volume of the four (4) Districts combined. This percentage is likely to increase in future years. The consolidation of the four (4) Fire Districts would increase the level of response and service throughout the new district as:

- Three (3) of the four (4) departments that currently do not have a hazardous materials response team would have a Haz-Mat Team responding to their hazardous material incidents.
- Combining districts resources such as technicians and specialists would expand the current response team from nine (9) to fifteen (15).
- The response team would be able to handle all haz-mat related alarms on an immediate dispatch, thereby decreasing response time.
- Recertification training of all line personnel for the operations level and On Scene Commander could be provided by team members. Five (5) personnel are currently CSTI certified instructors.

There are many challenges that the Mid County Consolidated District would need to address in the future. They include placement of the response van, staffing, equipment and training. The Haz-Mat Response Van would need to be located in the area of highest call volume and highest risk. The current number of team members is sufficient to provide adequate coverage. The call volume does not currently justify dedicated staffing to a Haz-Mat Team only. Recommended staffing would be four (4) personnel who also would have engine company responsibility from one (1) of the stations. Scotts Valley Fire's Haz-Mat response vehicle is still in the process of being equipped. An additional \$20,000.00 in equipment expenditures would be required to complete the inventory. It would be desirable to bring all technicians up to the specialist level. The cost for the additional 80 hours of training is approximately two thousand dollars (\$2,000.00) per person.

TRAINING SERVICES

The four (4) independent Districts have adequate training programs. The current training programs of each agency would compliment each other if the consolidation occurs, thus taking the best parts of each individual department and developing a superior training system. The analysis and recommendations of this study are based on the establishment of a central training division. A consolidated training program lends justification to specialized programs and facilities that each individual district cannot provide alone. Greater resources provide for greater expertise among the training staff. Integrated company standards would provide essential accountability to ensure training and operational goals be met.

It would be essential that a centralized training division be established and would be a key component to the standardization of operations for the Mid County Fire District. A centralized training staff and facility would be necessary to provide this consistency in operations. The Paid Call/Volunteer program also would be enhanced through a combined instructor(s) pool and greater resources from which to draw. Centralization of training also would be necessary for record keeping and ISO grading purposes.

Consolidation of independent districts creates a larger hiring pool and allows the opportunity to establish a recruit academy. Due to limited resources, none of the individual agencies are able to justify or provide a training academy on their own. Consolidation would eliminate repetitive recruitment and promotional testing. A single exam process would provide a candidate list for all position vacancies within the mid-county agency, thus being more cost and time effective.

Each individual district training staff, as a result of this study, has recognized the need for a comprehensive career development process within its respective organization. Currently, career development paths are inconsistent in the separate districts. Some of the agencies do not have an established career program. Among those agencies that do, some are not conceptually linked to fair compensation or comparable worth practices. It would appear logical to include this program among those on the list of priority training issues. Input and compromise would be required on the part of all labor groups in incorporating career development guidelines into the consolidated training system.

A training staff that is not stifled by competing collateral duties will enhance training efforts by improving the ability to focus on the creation and implementation of training plans and exercises. Currently, each agency has a training officer who has additional and, sometimes, conflicting responsibilities. An independent training officer would have a greater ability to provide more specialized and technological training. The specialized staff would be important to an integrated district because the logistics of training delivery would become more complex due to the increased size, the different demographical aspects and the combined mixture of paid and volunteer employees of the proposed Mid County District.

DOCUMENTATION

Each agency has on file resolutions and ordinances that are authorizing documents which have been adopted by the Boards of Directors to generate policy. The documents that exist for each agency parallel one another very closely. The titles vary, but the intent and content are very similar. Each agency has a document authorized by the Board of Directors that establishes policy relating to the following:

- Mission Statement and Department Goals
- Personnel System & Rules of Conduct
- Procurement Procedures

Each agency's procedure manuals carry out identified policies. The documents vary somewhat, but are similar in their intent. These are called Standard Operating Procedures (SOPs) and Emergency Operating Procedures (EOPs). The SOPs and EOPs are generated by staff to implement district policy. They are approved by the Fire Chief prior to implementation. These documents address the following categories:

- Administrative Procedures
- Response Procedures
- Operations Procedures
- Training Standards
- Fire Prevention (Codes, Inspection, Investigation, Pub. Ed., etc.)

There are various methods of relaying information throughout the individual agencies. The internal communications for the Districts include various forms of orders, memos and bulletins to relay information and provide accountability.

- General Orders
- Special Orders
- Training Bulletins

There is an array of other important documents that would have to be consolidated for the Mid County District; some of these include:

- Disaster Procedures
- Master Plan

While the documents of each district parallel each other, considerable time would be required upon consolidation to merge all of the documents into a common format. Additionally, many of the specific documents would be modified due to other changes resulting from the consolidation of the districts.

The merging of these documents would be imperative to the success of the consolidated district. Common policies and procedures would be the foundation of district operations and business.

FIRE PREVENTION SERVICES

The mid county consolidation of fire prevention bureaus is feasible and would offer a higher level of service to the public. This would be accomplished through the standardization of prevention laws, regulations and codes and the interpretation and enforcement of those documents. The study recommends including and utilizing line-staffing for public education and engine company inspection purposes.

Rather than four (4) separate fire prevention bureaus and programs with two (2) or three (3) people in each, there would be a combined and expanded work force available, inevitably promoting consistency, specific expertise and a more efficient level of service. The Mid County Fire Department Prevention Bureau would be managed by one (1) Fire Marshal (versus three) and one (1) set of policies, procedures, codes, charges, etc. (versus four) and would provide the necessary combined expertise for specific problems.

The consolidated bureau would standardize code interpretation and enforcement and equalize the fee structure currently being charged by each independent district mid-county-wide. Each department currently enforces the 1991 Uniform Fire Code, however, each jurisdiction has minor differences, thereby impacting the continuity of service that should not be hindered by code requirements unique to each district. A primary goal of the combined Fire Prevention Division would be to synthesize all written code type literature and future amendments thereof into a single document based on district (mid county) wide needs.

The consolidation proposal suggests that the Mid County Fire Department Prevention Bureau assign programs district-wide (as some departments currently do) to engine companies (line-personnel) because of inadequate bureau staffing and existing work loads. The engine company inspection program would include the inspection of B-2 (business) facilities.

Currently, it is sometimes necessary to pay overtime to meet the needs of programs such as fire investigation and public education. Bureau overtime would not be eliminated, but, with the application of flexible/rotating work hours in conjunction with the normal forty (40) hour work-week, overtime cost could be reduced significantly.

The Mid County Study proposes a dedicated plan check position. This position would greatly reduce costs of outside plan reviews and reduce the turn-a-round time needed for the Fire Department review process. The consolidated bureau would continue to inspect the more complex "R" & "I" occupancies and facilities (schools, licensed care facilities, etc.). The Consolidated Fire Prevention Bureau would provide more efficient services to the public through:

- Standardization of codes (interpretation and application) and fees
- Continuity and specialization of services
- Fire Prevention tasks being performed by bureau staff, reduced overtime
- Use of line personnel for some fire prevention tasks

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The merging of these documents would be imperative to the success of the consolidated district. Common policies and procedures would be the foundation of district operations and business.

SUPPORT SERVICES

The independent Districts involved in the consolidation study currently contract with Santa Cruz County Communications to provide dispatch services. Total group charges for this service in fiscal year 1991/92 were \$61,083.00. The system functions well and offers enhancements such as Emergency Medical Dispatch. With few minor changes, the present system could accommodate easily the needs of a combined fire district. The addition of a support frequency would eliminate fire tactical frequencies being used for everyday logistical purposes. It would be recommended to continue contracting with County Communications, if consolidation occurs.

All Fire Agencies involved in the consolidation study currently buy their office supplies from various suppliers. If support services/supplies of the four (4) individual districts were combined, the purchasing power would be great. Expenditures for fiscal year 1991/92 were \$734,500.00, which could be reduced through seeking contracts with vendors who give cost breaks on quantity purchases. All districts should look at joint purchasing in order to save money even if consolidation doesn't occur.

Aptos/La Selva and Scotts Valley Fire Districts own office space for a total of fourteen (14) offices, three (3) conference rooms and a multi-purpose room (which can be converted into offices). Central Fire District leases two (2) office spaces, with a total of eight (8) offices and a conference room at a cost of \$3396 per month. Branciforte has a one-person office.

Aptos/La Selva Administrative Headquarters which, in fact, is on the boundary line between the Aptos/La Selva and Central Fire Districts could convert a multi-use area into five (5) additional offices offering fourteen (14) offices, three (3) reception areas and two (2) meeting rooms. This office could house the core of administration until future master planning could be conducted. Scotts Valley District Office and two (2) to three (3) of Central's offices would continue to be used for satellite fire prevention activities. This merger of administration would reduce the cost of renting. The potential of building a new combination administrative headquarters and training facility in the Central Fire District would have to be considered also as a potential future alternative.

Currently, there are a total of thirty-five (35) available apparatus bays. To staff all stations with at least three (3) firefighters, one (1) available apparatus bay at Branciforte's Fire Station would have to be converted into living quarters. Currently, Branciforte can house only one (1) firefighter. This would leave a total of thirty-four (34) available apparatus bays. Future thought should be given to the existing problem that Central Stations 3 & 4 are in the area Flood Zone. Most fire stations are in good condition and some have been remodeled in the last five (5) years.

Existing facilities with minor conversions would provide adequate offices and housing for the operations of the Mid County Fire District until further planning and improvements could be conducted.

MECHANICAL MAINTENANCE

The single most logical and feasible component element of this study indicates, as we already knew, that the need for a joint mechanical maintenance and repair facility where fire apparatus and equipment, exclusively, are repaired is a necessity. Each district currently deals with this issue in individual ways, however, combining all the rolling stock of the four districts brings this issue to a head.

The development of a combined apparatus shop and repair facility together with regularly assigned single-role mechanics who are experienced and knowledgeable would be an asset to all districts involved in this study.

This concept of joint mechanical maintenance has been discussed extensively in the past. This may remain as a viable topic for implementation of a joint powers authority even if the consolidation as whole was rejected.

CONCLUSION/RECOMMENDATIONS

The Fire Chiefs were directed by the Boards of Directors of the Fire Districts to perform the task of developing a preliminary feasibility study for the consolidation of the four individual fire districts of Aptos/La Selva, Branciforte, Central and Scotts Valley. The pages that you have just reviewed and the preliminary findings of this report indicate that such consolidation is feasible. The Fire Chiefs concur with the conclusion and are confident that this preliminary data is accurate and reliable.

It is now the responsibility of the Boards of Directors of the individual districts to analyze the data in the preliminary study which has been prepared for your review. It would be the recommendation of the Chiefs of the four districts that a decision of some type be made so that we can conclude the consolidation study process.

Since the Districts are approaching mid-Fiscal Year, it is advisable that the January Board Meetings be viewed as a target date for a decision regarding the future of this project.

There is an array of options available to you for consideration:

- To proceed with consolidation with intent to meet the July 1, 1993 deadline;
- To decide that consolidation is not in the best interest(s) of your respective agency(ies);
- To place consolidation on hold for future deliberation;
- To partially consolidate (two or more);
- To consolidate certain particular services, e.g. training center, purchasing, mechanical maintenance, etc.;
- To request further more indepth information on any or all topics.

If your decision is to pursue consolidation immediately, it is necessary to be aware of the fact that LAFCO requires a minimum of 120 days (4 months) to process any consolidation requests. Therefore, if it is the desire of the boards to consolidate by the July 1, 1993 Fiscal Year deadline, it is essential to proceed rapidly .

As stated above, the potential exists that two or more of the districts may elect to proceed with consolidation on their own, which would support the need for expedient direction by the Boards in toto.

To reiterate, regardless of the outcome of the study, the exercise was a good learning and sharing process for all contributing parties.

Part Two - Support Documents

Financial Section.....A

Operation Section.....B

Emergency Medical Services Section..... C

Hazardous Materials Section..... D

Training Section.....E

Fire Prevention Section.....F

Documentation Section..... G

Support Services - Communication Section..... H

Mechanical/Maintenance Section.....I

FINANCIAL SECTION

History and Current Status

Introduction

In this report, the finance section will attempt to:

- Display current fiscal conditions in each of the four Fire Districts. This will include assessed evaluations, revenues, expenses, indebtedness and those monies designated for reserves or carry over.
- Examine the feasibility and fiscal impact of a merger by the four Districts. This evaluation shall use the staffing recommendations from the Operations Section and the Administration Sections.
- Provide a summary with recommendations.

Background

Aptos/La Selva, Central, Branciforte and Scotts Valley Fire Districts were established under the California Health and Safety Code Sec. 13800 and reorganized under the statutes of 1987. Two of the Districts contain, within their boundaries, the incorporated cities of Scotts Valley and Capitola.

The funding for these Districts is derived predominately from property taxes, state augmentation funds and fee schedules. The Fire Chief of each District functions as the Finance Officer and is responsible for the management of the District budget. The elected Districts' Governing Boards of Directors oversee and monitor the Chiefs' management of the Districts' Budgets.

Presently, each of the Districts utilize the services of the Santa Cruz County Auditor to administer the bookkeeping aspect of their fiscal management programs. This includes payroll, issuance of vouchers, account activity reports and collection of revenues.

Exhibit A - Compares the different components of the individual District profiles, e.g. assessed valuation, budget, call volume and quantity of personnel employed.

Exhibit B - Illustrates the breakdown of all sources of revenues for each District for the fiscal year of 1991/92.

Exhibit C - Is a projection of revenues available for the fiscal year of 1992/93. This chart reflects current projections and will undergo continuous revisions due to the current lack of official interpretation of the recent State Budget legislations.

It is important to realize that the FY 1992/93 funding statistics (Exhibit C), represent a significant quantity of one time realized monies. This is found in the form of surplus PERS money and General Reserves. These monies, once expended, are not recoverable.

Exhibit D - Represents the current budgets of the four Districts for the Fiscal Year 1992/93. These expenditures reflect the use of the PERS and Reserve monies for such one time purchases as fixed assets. A District would be ill advised to expend such windfalls on expenses that are incurred year after year, e.g. wages and benefits.

Exhibit E - Is a record of the individual indebtedness of the four districts.

Level One and Level Two Revenues

As previously mentioned, District Revenues originate from several sources. For budgeting purposes, these are normally divided into two categories:

- Level One - Reoccurring Monies
- Level Two - One Time Realized Monies

Reoccurring Monies are those funds received from the property tax base and supplemental special taxes and fees. These monies are used to finance the cost of doing business on a daily basis. Salaries, benefits and service/supplies are funded using this source because of its stability and dependability to be there year after year. SDAF funds are presently included in this area of "dependable monies". In view of the present State Financial crisis, it is debatable whether or not SDAF will be here in the future.

One Time Realized Monies such as PERS surplus, reserves, and State and Federal aid are of a nature that they are not continually reoccurring from one year to the next. This category of funds commonly is earmarked for purchases of fixed assets, designated reserves and contingency funds. Dependency on these monies for funding reoccurring costs can ultimately create a financial crisis during fiscally dry years.

The following chart demonstrates the District's solvency in regards to reoccurring revenues and expenditures.

Level One

Revenues

	<u>1992/93</u>			
	Aptos	Central	B-40	Scotts Valley
Revenue	\$3,572,390	\$4,804,522	\$230,629	\$2,395,774

Consolidated Total \$11,232,686

Expenditures

1992/93

	Aptos	Central	B-40	Scotts Valley
Salaries	\$2,203,859	\$2,807,059	\$117,566	\$1,608,178
Benefits	\$874,839	\$1,095,535	\$67,093	\$563,338
Service/Sup	\$527,236	\$832,180	\$57,611	\$312,308
Sub Totals	\$3,605,934 (-\$33,544)	\$4,734,774 (+\$69,748)	\$242,270 (-\$11,641)	\$2,483,824 (-\$88,050)

Consolidated Total \$11,066,802

- With the exception of Scotts Valley Fire, the above expense projections do not include anticipated salary negotiations.
- Due to the State financial maneuvering, most districts are using one time monies to finance the 1992/93 Fiscal Year expenses.
- Overtime requirements based on established minimum staffing levels and employee utilization of benefits (e.g. holidays-off, vacations, sick leave, personal leaves) relative to contractual agreements will have a significant impact on annual fiscal expenditure totals. This impact cannot be accurately estimated until employee bargaining unit negotiation of M.O.U.'s provisions are known.
- Individual employee contracts (MOU's) will take time and compromise to reach an uniform agreement among all employee groups. These negotiations probably would be the most problematic and delicate components of the entire consolidation process. The final outcome of this process would have a significant bearing on the amount of monies available to accomplish staffing goals. This is especially true in the area of holiday pay, longevity and education incentive/merit pay as indicated below:

Comparison of Benefits

BENEFITS	A/LSFD	B-40	CFPD	SVFD
Holiday	13 (24 Hrs)	0	8 (24 Hrs)	9 (24 Hrs)
Longevity	Yes	No	No	No
EIP	1%-4% (\$134/mo)	0	2%-5% of Base	\$100/mo.

Consolidation Salary/Benefit Analysis

In an effort to develop a cost analysis for a consolidated District, certain assumptions were adopted:

- A Uniform salary scale was developed using the highest salary in each of the job descriptions as a base.

- No position realized a pay reduction.
- Benefit packages were estimated at a percentage of the total salaries. Many differences in the MOU's exist and will require a further study to document the required language and solutions to develop a single MOU.
- Staffing levels were ultimately filled to the desired level of three persons per station, with two shift battalion chiefs. This would necessitate the hiring of a minimum of ten (10) new employees.
- If adopted, constant level staffing would require additional personnel.
- Existing level of Paramedic service in the Aptos/La Selva area was maintained.
- Each individual District's service and supply expenditure projections were added together to total a consolidated District projection.

Exhibit 1 - Represents a salary scale and a staffing inventory for planning purposes only. It is utilized only to determine feasibility of a consolidation using the aforementioned conditions.

THE MID-COUNTY CONSOLIDATED DISTRICT

Expenditure/Revenue Comparison

Salaries (Including overtime @ 15%)	\$6,424,645	
Benefits (Estimated @ 40%)	\$2,569,858	
Service and Supplies	\$1,729,335	
TOTAL	\$10,723,838	
Level One Revenues	\$11,232,686	
FY 93/94 Increase 10%	\$1,123,268	
TOTAL	\$12,355,954	\$1,632,116+

Summary

A fiscal analysis of the consolidation proposal finds that a merger is feasible. However, the form in which it happens and the quantity of operational changes the Districts undergo will directly affect the fiscal bottom line. Staffing is the paramount cost issue and in an effort to offer all stations a minimum of three (3) person staffing, the hiring of ten (10) additional personnel has a significant financial impact. Alternative staffing levels phased in over a period of several years would yield the same goal and spread the fiscal impact. As property bases increase, additional personnel could be hired to meet the desired goal.

The present participation of each of the four Districts in a common self-insured Workers' Compensation Plan, self-insured Medical Plan and PERS Retirement Plan for their employees coupled with the utilization of the County Auditor for fiscal services lends itself to ease of a consolidation.

Issues

- Initially three (3) person staffing at all stations would not be feasible due to employee time off. Low volume stations would experience a periodic reduced staffing down to two (2), so as to maintain the higher level of staffing at higher volume stations.
- Cost savings would be realized over a period of time by the reduction of duplicate services and the increase of service abilities over and above individual District levels. This could be realized in the form of a vehicle maintenance facility, a training center, a single administration building and a single prevention bureau.
- Additional savings would be reflected in the larger District buying power through large quantity purchases and bargaining.
- Individual MOU's would take time and compromise to reach a uniform agreement between all labor groups.
- A reduction in the number of Chief Officers as a result of a District merger (through attrition and reclassification) also would present potential savings in wages and benefits.
- The utilization of paramedic engines in lieu of a paramedic rescue vehicle within the Aptos/La Selva District appears to offer significant cost advantages.

EXHIBIT 1

MID COUNTY FIRE DISTRICT

	Monthly	Quantity	TOTAL ANNUAL
Fire Chief II	\$6,280	1	\$75,360
Deputy Chief II	\$5,900	1	\$70,800
Deputy Chief I	\$5,900	1	\$70,800
Fire Marshal	\$5,500	1	\$66,000
Division Chief II	\$5,200	3	\$187,200
Deputy Fire Marshal	\$4,875	1	\$58,500
Admin. Battalion Chiefs	\$4,875	2	\$117,000
Battalion Chief II	\$4,643	7	\$390,012
Battalion Chief I	\$4,505	2	\$108,120
Admin. Captain	\$4,250	2	\$102,000
Captain II	\$4,095	25	\$1,228,500
Captain I	\$3,934	2	\$94,416
Firefighter/PM III	\$3,638	9	\$392,904
Firefighter/PM I	\$3,367	3	\$121,212
Firefighter V	\$3,538	30	\$1,273,680
Firefighter IV	\$3,419	3	\$123,084
Firefighter III	\$3,267	9	\$352,836
Firefighter II	\$3,164	3	\$113,904
Firefighter I	\$3,087	6	\$222,264
Inspector II	\$3,419	1	\$41,028
Prev. Specialist	\$2,778	1	\$33,336
Plan Checker	\$4,250	1	\$51,000
Mechanic II	\$4,115	1	\$49,380
Mechanic I	\$3,919	1	\$47,028
Admin Asst. III	\$2,731	2	\$65,544
Admin Asst. I	\$2,450	1	\$29,400
Secretary III	\$2,188	2	\$52,512
Secretary II	\$2,084	1	\$25,008
Secretary I	\$1,985	1	\$23,820
<hr/>			
Total		123	\$5,586,648

Salaries: \$5,586,648

Overtime: \$837,997 15%

Benefits: \$2,569,858 40%

Total \$8,994,503

Present Salaries/Benefits: \$8,462,628 122 Personnel

Mid County Fire Report

Current Status Comparison

Exhibit A

DEPARTMENT	NUMBER OF BOARD MEMBERS	FY 92-93 BUDGET	SQUARE MILES	ACRES	TOTAL # OF CAREER PERSONNEL	TOTAL # OF PCF/ VOLUNTEER PERSONNEL	CY 91 CALLS	FY 91/92 ASSESSED VALUATION
<u>Aptos/La Selva</u>	5	3,927,638.00	11.35	7,264	40	0	1,574	1,718,597,249.00
<u>Branciforte</u>	5	258,006.00	7.70	4,975	3	15	138	101,089,386.00
<u>Central</u>	7	5,950,152.00	20.89	13,374	47	29	3,139	2,495,675,189.00
<u>Scotts Valley</u>	5	2,656,984.00	20.80	13,315	32	15	1,058	1,308,591,576.00
<u>TOTAL</u>	22	12,792,780.00	60.74	38,928	125	59	5,909	5,623,953,400.00

EXHIBIT B
MEGA DISTRICT REVENUES
1991 - 1992

Acct #	Account Name	Scotts Valley	Aptos/LaSelva	Central	Branciforte
91111	PROPERTY CURRENT SECURED	1,503,627.00	2,146,446.00	3,098,756.00	135,072.00
91112	SUPPLEMENTAL SECURED	52,446.00	77,295.00	116,202.00	5,213.00
91121	PROPERTY CURRENT UNSECURED	71,609.00	102,508.00	147,389.00	6,378.00
91122	SUPPLEMENTAL CURRENT UNSECURED	1,505.00	2,218.00	3,335.00	150.00
91311	PROPERTY PRIOR SECURED	76,363.00	110,800.00	162,417.00	6,743.00
91321	PROPERTY PRIOR UNSECURED	827.00	1,204.00	1,761.00	73.00
91322	SUPPLEMENTAL PRIOR UNSECURED	0.00	0.00	0.00	0.00
91609	S.D.A.F.	355,559.00	730,000.00	1,040,000.00	49,864.00
91612	FIRE PROTECTION TAX	0.00	127,496.00	0.00	36,013.00
92801	PERMITS	47,671.00	0.00	0.00	780.00
94111	INTEREST	-11,171.00	39,705.00	47,812.00	-888.00
94211	RENTS	3,550.00	0.00	2,750.00	0.00
95203	H.O.P.T.R	37,525.00	53,716.00	77,235.00	3,343.00
95535	STATE AID EARTHQUAKE	0.00	0.00	0.00	0.00
95595	MANDATED REIMBURSEMENT	34,467.00	0.00	3,939.00	0.00
95820	FED AID EARTHQUAKE	0.00	0.00	30,120.00	0.00
96001	CHARGES FOR SERVICES	12,188.00	60,360.00	7,199.00	3,113.00
96886	COPY CHARGES	0.00	0.00	479.00	4.00
97032	SALE OF FIXED ASSETS	0.00	0.00	6,971.00	750.00
97070	OTHER REVENUE	0.00	0.00	0.00	0.00
97079	OTHER REVENUE	1,502.00	59,832.00	0.00	0.00
97086	MEMBER CONTRIBUTION	385.00	0.00	0.00	0.00
97091	P.E.R.S. REFUND	333,645.00	206,915.00	612,811.00	4,906.00
97116	DONATIONS	0.00	0.00	65.00	0.00
	CARRY OVER FROM 90-91	92,458.00	1,192,439.00	1,241,626.00	27,336.00
	TOTAL	2,614,156.00	4,910,934.00	6,600,867.00	278,850.00
	TOTAL REVENUES	14,404,807.00			
	GEN RESERVE	963,201.00			
	TOTAL REVENUES (All Sources)	15,368,008.00			

EXHIBIT C

MEGA DISTRICT AVAILABLE FUNDS
(From All Sources)
1992 - 1993 FY

Account Name	Scotts Valley	Aptos/Laselva	Central	Branciforte
GENERAL FUND (Carry Over)	164,446.00	903,891.00	1,476,536.00	27,986.00
CAPITAL OUTLAY	14,461.00	296,045.00	0.00	856.00
ZONE-A	65,237.00	0.00	0.00	0.00
92 - 93 REVENUE	2,330,537.00	3,572,390.00	4,804,522.00	230,000.00
GEN RESERVE	0.00	212,327.00	800,000.00	864.00
P.E.R.S.	212,000.00	0.00	700,000.00	0.00
TOTAL	2,786,681.00	4,984,663.00	7,781,058.00	259,706.00

TOTAL ESTIMATED REVENUES 92-93 FY = 15,811,478.00
 TOTAL ESTIMATED EXPENDITURES 92-93 FY = 12,831,188.00

AVAILABLE FUNDING FOR 93-94 FY = 2,980,290.00

EXHIBIT D
MEGA DISTRICT EXPENDITURES
1992 - 1993

Account Name	Scotts Valley	Aptos/Laselva	Central	Branciforte
SALARIES	1,608,178.00	2,203,859.00	2,807,059.00	117,566.00
BENEFITS	563,338.00	874,839.00	1,095,535.00	67,093.00
SERVICES AND SUPPLIES	312,308.00	527,236.00	832,180.00	57,611.00
OTHER CHARGES	101,625.00	157,504.00	122,000.00	7,736.00
FIXED ASSETS	0.00	14,200.00	693,378.00	0.00
CONTINGENCIES	109,943.00	150,000.00	400,000.00	8,000.00
TOTAL EXPENDITURES	2,695,392.00	3,927,638.00	5,950,152.00	258,006.00
GRAND TOTAL (ALL)	12,831,188.00			

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EXHIBIT E

Individual District Debt

<u>Obligation</u>	<u>Aptos/La Selva</u>	<u>Central</u>	<u>Scotts Valley</u>	<u>Branciforte</u>
Real Estate	\$560,000	\$0.00	\$247,000	\$0.00
Apparatus	\$0.00	\$213,863.00	\$0.00	\$0.00
Structures	\$0.00	\$0.00	\$0.00	\$0.00
Loans/Notes	\$0.00	\$0.00	\$0.00	\$0.00

* As of 11/1/92

OPERATIONS SECTION

Emergency Response Division

Historical Data

Personnel/Apparatus/Staffing:

Aptos/La Selva Fire District

- Station #1 6934 Soquel Drive, Aptos
- Apparatus: Engines 3511, 3510 (Res) - Water Tender 3540
Air Cascade Trailer - Command Vehicle
 - Staffing: Three assigned - 1 Capt & 2 FF
(Min station staffing-three)
One B.C.
- Station #2 300 Bonita Drive, Rio del Mar
- Apparatus: Engine 3512 - Rescue/Ambulance 3560
 - Staffing: Five assigned - 1 Capt, 2 FF/PM, 1 FF
(Min station staffing-four)
- Station #3 312 Estrella Avenue, La Selva Beach
- Apparatus: Engine 3513 - Rescue ambulance 3561 (Res)
 - Staffing: Three assigned - 1 Capt, 1 FF, 1 FF/PM
(Min station staffing-two)
- * Minimum Staffing by M.O.U. with ALSFFA is Seven (7).
- ** All off-duty firefighters carry pagers & respond for structure fires & wildland fires.

Administrative Offices 7960 Soquel Drive, Aptos

Personnel: Total: Forty-three (43) authorized.

- 2 Administrative Chiefs and 1 Fire Marshal (40 hrs)

1 Fire Chief
1 Deputy Chief
1 Fire Marshal (Div Chief)

- 1 Air Cascade Trailer Unit

1991 American Bristol

- 3 Misc.Vehicles

1980 Chevy Pick-up (FWD)

1984 Olds Sedan

1988 Ford Sedan

Scotts Valley Fire District

Operational Staffing:

Scotts Valley Fire District has eight (8) people assigned to each of two (2) shifts and nine (9) assigned to the third shift. It is the goal of the district to maintain three-person engine companies at Erba and Sims Rd. Stations. The Sims Rd. Station has operated with two (2) when staffing patterns have dictated.

Minimum staffing, as agreed to by the District and the Firefighters Association, is three (3): Captain, Driver Operator and a Firefighter.

Make up of the staffing consists of the following:

- Shift Battalion Chief

Erba Station

Captain
Operator (D/O or FFII)
Firefighter
Firefighter

Sims Station

Captain
Operator (D/O or FFII)
Firefighter

Rank structures vary among shifts, but the desire is to have a captain or acting captain, operator and firefighter on each engine.

Paid Call Firefighters (PCF) supplement the career firefighters. The PCFs respond directly to structure and wildland fires and are utilized as supplemental suppression personnel. There is no rank structure within the PCF program. PCFs are subordinate to firefighters.

Off-duty career personnel carry pagers and may respond to any multiple engine response or upon special request by an incident commander/duty chief. Off-duty career personnel respond to the closest station with available equipment to provide district coverage and "next available" response.

Special Skills:

Scotts Valley has eight (8) certified hazardous materials technicians who provide emergency response as part of a hazardous materials response team. A ninth member is in training. The goal is to have three (3) technicians assigned to each shift.

Line personnel are certified to Emergency Medical Technician-Defibrillator standards. This is in addition to standard EMT-1 certification.

The duty chiefs are ICS qualified strike team leaders, division/group supervisors and Type 2 Plans and Logistics Section Chiefs.

Apparatus

Station	Unit	Make	Yr	F.L.	Reserve	ICS Type	Cap	Tank	Replace/ Refurb.
St.1	Engine 2510	Ford VanPelt	1972	No	Yes	1	1000	700	N/A
St.1	Engine 2511	Hann VanPelt	1985	Yes		1	1500	500	2000
St.2	Engine 2512	Ford VanPelt	1988	Yes		1	1250	750	2003
St.1	Engine 2513	Inter KME	1991	Yes		2	1000	500	2006
St.1	Truck 2570	Duplex VanPelt	1980	Yes		2	1500	400	1999
St.1	Tender 2540	Ford VanPelt	1975	Yes		1	750	2000	1997
St.1	HazMat 2565	Grum. Paoletti	1990	Yes					2006
St.1	Comm 2503	GMC Blazer	1989	Yes					1998

Branciforte Fire District

Operational Staffing

Branciforte has one (1) career person assigned to each 24-hour shift. The fire chief and two (2) captains cover the shift responsibilities and are augmented by volunteer response and off-duty personnel.

The career personnel are stationed at Station One at 2711 Branciforte Dr.

Apparatus Assignments

Station One (Branciforte Dr.):

2660
2610
2640

Station Two (Rider Ridge Rd.):

2650 (responded by volunteer personnel; station is a garage on a long term lease.)

Special Skills

- Certified Paramedic (1)
- Heavy Rescue, Systems 1 level (4)
- State life guard and water rescue (4)
- Hazardous Materials Incident Commander (4)
- Strike Team/Division Group Supervisor (1)

Central Fire District

On Duty Staffing: 13 Personnel Per Day (Minimum Staffing)

- 1 Battalion Chief / 4 Captains / 8 Firefighters
- 32 Paid Call Firefighters

District Coverage

- 4 Triple Combination Pumpers (STAFFED)
- 1 Battalion Chief Suburban (STAFFED)

Battalion Chief is on shift and can respond to any call. The Battalion Chief is backed-up by the duty Chief (Asst. Chief or Chief).

Disaster Plans:

- Flood plan, Santa Cruz County Operational Manual, Hazardous Material Plan.

Staffing Levels Per Day:

1 Shift Battalion Chief

<u>St. 1</u>	<u>St. 2</u>	<u>St. 3</u>	<u>St. 4</u>
1 Captain (Capt)	1 Capt	1 Capt	1 Capt
2 Firefighters (FF)	2 FF	2 FF	2 FF

Apparatus:

<u>Station 1</u>	1991 EMERGENCY RESPONSE (1068)
1988 Pierce	(Engine)
1974 Mack	(Engine) Reserve
1974 Crown	(Truck 75 ft./Engine)
1987 Chevy	(Cascade)/Hurst Tool

<u>Station 2</u>	1991 EMERGENCY RESPONSE (475)
1992 Pierce	(Engine)
1976 Van Pelt	(Engine) Reserve
1974 Brush	(Engine) Type 3
<u>Station 3</u>	1991 EMERGENCY RESPONSE (703)
1992 Pierce	(Engine)
1965 Crown	(Engine) Reserve
1991 Freightliner	(Water Tender 2100 gallons/w foam)
1972 Dodge	(Rescue)/Hurst Tool
<u>Station 4</u>	1991 EMERGENCY RESPONSE (893)
1983 Mack	(Engine)
1970 Crown	(Engine) Reserve

Response Patterns and Procedures

Aptos/La Selva Fire District

Code II

- Single Unit - Public Service
 - Smoke Check (Outside Structure)
 - Lock-Out (Residential)
 - Water-Vac
 - Sprinkler System Tamper Switch
 - Alarm System Reset
- Single Engine/Rescue Unit
 - Pick-Up and Put-Back

Code III

- Single Engine
 - Fire Alarm Sounding
 - Vehicle Leaking Fuel, Fuel Spill
 - Wires Down
 - Natural Gas Leak or L.P.G. Tank Leak (Outside Structure)
- Single Engine/Rescue Unit
 - Medical Aid
 - Rescue

Note: Except to Highway #1 where 2nd engine responds until advised.

- Two Engines (3rd Engine Moves Up if Both Engines Committed)
 - Vehicle Fire
 - Trash/Rubbish/Dumpster Fire

Note: 2nd due engine Code II until advised
(except to Highway #1)
- Two Engines/Rescue Unit (3rd Engine Moves Up and Battalion Chief Responds if Both Engines Committed)
 - Vehicle Accident

Note: 2nd due engine Code II until advised
(except to Highway #1)
- Battalion Chief/Two Engines/Rescue Unit (3rd Engine Moves Up if Both Engines Committed)
 - Hazardous Materials Incident

Note: 1st due engine Code III: remainder of assignment Code II until advised.
 - Surf Rescue/Cliff Rescue

Note: 2nd due engine Code II until advised
- Battalion Chief/Three Engines Water Tender*/Rescue Unit
 - Structure Fire
 - Wildland Fire
 - Structure Response (as per County Comm., i.e., sparking, arcing, smoke inside structure, smoking appliance, smell of gas or gas leak in a structure, etc.) Note: 1st-due engine Code III, 3rd due engine automatic move-up to Station 2 remainder of assignment Code II to scene/staging.

* The water tender responds on all wildland fires and structure fires in water deficient areas as defined below, or at the discretion of the Battalion Chief.

All addresses or areas accessed by the following streets:

Los Olas Dr.	Valencia Rd.	Encino Dr.
Aptos Creek Rd.	Cox Rd.	Vista Del Mar Dr.
Trout gulch Rd.	Day Valley Rd.	Cuesta Dr.
Cathedral Dr.	Loma Prieta Dr.	San Andreas Rd.

* Must Cover station is St. 2 (due to its central location and immediate freeway access).

Branciforte Fire District

Branciforte has identified the following response patterns/procedures for the following incidents:

Structure Fires	1 engine (2610) 1 water tender (2640) 1 type 4 engine (2650)
Wildland Fires	1 engine (2610) 1 water tender (2640) 1 type 4 engine (2650)
Medical Emergencies	1 rescue (2660)
Vehicle Fires	1 engine (2610) 1 type 4 engine (2650)
Vehicle Accidents	1 engine (2610) 1 rescue (2660)
Smoke checks	1 engine (2610)
Hazardous Materials	1 engine (2610) 1 rescue (2660)

When an incident occurs north of Branciforte Dr. at Vine Hill Rd., 2650 responds to all incidents.

Central Fire District

Structure Fires (Urban)	(2) On-duty Engines (1) Reserve Engine (1) Cascade (1) Battalion Chief P.C.F. Activated 3470 Special Call/Target Hazard
Structure Fires (Rural)	(2) On-duty Engine (1) Battalion Chief P.C.F. Activated
Medicals	(2) On-duty Engine
Wildland Response	(2) On-duty Engines (1) Reserve Engine (1) Water Tender (1) Battalion Chief P.C.F. Activated

Hazardous Material (Response)	(1) On-duty Engine (1) Battalion Chief
Coastal Response	(1) On-duty Engine (1) Battalion Chief
Vehicle Accident	(1) On-duty Engine (1) Battalion Chief (optional)
Misc. Calls	(1) On-duty Engine
Vehicle Lock-outs	Do not respond

Paid Call Firefighters respond on all general alarms and manned reserve engines and unmanned stations. They respond using a reserve engine in place of an on-duty engine company that is committed to a call.

Scotts Valley Fire District

Scotts Valley responds to the following types of incidents with the identified first alarm response:

Urban Structure Fires:	2 engines, 2511 & 2512 1 battalion chief, 2503 1 telesquirt, 2570 (off duty and PCF) 1 support unit, 2565 (off duty and PCF)
Rural Structure Fires:	2 engines, 2513 & 2512 1 battalion chief, 2503 1 water tender, 2540 (off duty and PCF) 1 support unit, 2565 (off duty and PCF)
Wildland Fires:	2 engines, 2513 & 2512 1 battalion chief, 2503 1 water tender, 2540 (off duty and PCF) 1 support unit, 2565 (off duty and PCF)

EMS, vehicle fires, public service, vehicle accidents and hazardous materials incidents get a single engine response based on response area.

Fire Station Locations and Response Area

Scotts Valley utilized Fire Loss Management Systems (a consultant) to conduct a study of fire station locations based on response times, required fire flow, call volume and automatic aid effectiveness. The study indicated a need for a third station in the lower Glenwood Dr. area. It also projected a potential future need of a fourth station depending on growth and call volume in the Marywood area to the extreme north end of the district. A response time goal of five (5) minutes to 95% of the calls in the urban areas and five (5) minutes to 90% of the calls to the rural areas of the district has been adopted through adoption of the study.

Central Fire District

Response Volume & Times

<u>Type of Inc.</u>	<u>St.1</u>	<u>St.2</u>	<u>St.3</u>	<u>St.4</u>	<u>Total</u>	<u>%/Total</u>
Struc. Fire	113	77	77	97	364	12
Vehicle Fire	13	11	24	17	65	2
Wildland Fire	15	6	22	8	51	2
Medical Aid	676	239	326	562	1803	7
Public Service	65	21	43	77	206	7
Vehicle Acc	38	27	85	47	207	3
Veh Acc w/Inj	37	10	27	21	95	3
Miscellaneous	111	74	99	64	348	10
Total Inc's	1068	475	703	893	3139	100%
% of Total	34%	16%	22%	28%		100%

Structure Fire Includes:

- Any fire within a structure
- Alarm sounding, Fire or False

Miscellaneous Includes:

- Automatic Aid
- Flooding
- Hazardous Materials
- Helicopter Standby
- Lines down
- Mutual Aid
- Power Pole Fire
- Smoke Check/Illegal Burn

<u>To:</u>	<u>Mutual Aid</u>	<u>Auto Aid</u>
Aptos	22	
Branciforte	6	1
CDF	2	
Santa Cruz	16	7
Other	13	2

Scotts Valley Fire District

Call Volume by Station Response Areas: Alarms by first in response areas (CY 1991):

<u>Station</u>	<u># of Calls</u>	<u>% of Total</u>
Station 1 (Erba)	845	79.9
Station 2 (Sims)	164	15.5
Mutual/Auto Aid	48	4.6
Total	1058	100.0%

Calls by Station Response Areas Including Glenwood

<u>Station</u>	<u># of Calls</u>	<u>% of Total</u>
Station 1 (Erba)	525	49.6
Station 2 (Sims)	164	15.5
Station 3 (Glenwood)	320	30.3
Mutual/Auto Aid	48	4.6
Total	1058	100.0%

Note: Glenwood station response area shown for statistical and planning purposes.

Station One (Erba Station) has been identified as a "must cover" station due to the call volume.

Response Times (CY 1991):

<u>Station</u>	<u>Calls Under</u>	<u>Calls Over Average</u>	<u>Max. Time</u>
	5 Minutes (%)	5 Minutes (%)	
Station 1 (Erba)	61%	39%	5.78 min. 15 min.
Station 2 (Sims)	51%	41%	6.14 min. 8 min.

Maximum times are established based on travel time with all units on base. Response times are identified as the time from dispatch until the first engine arrives at scene.

Mutual Aid/Auto Aid

Aptos/La Selva Fire District

- A/LSFD is on the S.C. Co. Master Mutual Aid Agreement.
- A/LSFD has an Auto Aid Agreement with Central Fire District to respond to all medicals, vehicle accidents and fires on the Cabrillo College Campus. Additionally, A/LSFD provides one (1) engine to any fire on or off of Soquel Drive up to and including Park Avenue (North of Hwy #1), except Porter Gulch Road.

CFD provides one engine to A/LSFD to any fire on Soquel Drive up to #8999 Soquel Drive.
- A/LSFD is currently finalizing an auto aid agreement with CDF/CO. Fire which will provide one (1) engine from either agency to be sent to each other's adjoining response areas. Details will follow.

- A/LSFD responds jointly with Freedom Fire (Co. Fire Area) to incidents on, or adjacent to, Hwy #1 between Mar Monte Avenue and Buena Vista Drive.

Branciforte Fire District

Branciforte is a party to the State of California Master and Santa Cruz County Mutual Aid Plan.

Auto aid is provided to the City of Santa Cruz in DeLaveaga Park. The City reciprocates by providing response to Old Pilkington Rd and related areas.

Central Fire provides automatic aid of one (1) engine to fires on Paul Sweet Rd. and Rodeo Gulch Rd. and related areas.

A water tender is responded to lower Glen Canyon Rd. to Scotts Valley for all fires. Scotts Valley reciprocates with one (1) engine to all wildland and structure fires.

Central Fire District

Mutual Aid Agreements:

- A. Aptos
- B. Branciforte
- C. Central
- D. Santa Cruz

Auto Aid Agreements:

- A. Central (Old San Jose Rd. To Stetson Rd.)
- B. Aptos (Dist. #1 Area)
- C. Branciforte (Hidden Valley, Paul Sweet Rd., N. Rodeo Gulch, Olson Rd.)
- D. Santa Cruz

Scotts Valley Fire District

Scotts Valley is a party to the State of California Master and Santa Cruz County Mutual Aid Plans.

Automatic aid with Santa Cruz City exists for the south end of the district including most of Pasatiempo. Response is provided into the Carbonero Estates area of the city from the Sims Station. The agreement reciprocates one (1) engine between the agencies.

An automatic aid agreement with Santa Cruz County Fire was established to provide a mutual response from Glenwood Cutoff to upper Glenwood. Response is also provided into Ocean St. Extension and Graham Hill Rd. by the Sims Rd. Stations. The agreement reciprocates one (1) engine and one (1) water tender.

Scotts Valley provides one (1) engine automatic aid to all of Branciforte's district. Branciforte reciprocates with a water tender response to lower Glen Canyon Rd.

State Responsibility Areas, Local Responsibility Areas, Mutual Threat Zone

Aptos/La Selva Fire District

- SRA boundary line is Soquel Drive from the Western boundary to Freedom Blvd. where it then follows Hwy #1 to the Eastern boundary.
- LRA is all area from the Pacific Ocean to the above described boundary line.
- MTZ is currently being established and finalized as beginning at the intersection of Soquel Drive and the S.P. Railroad tracks (South of Aptos Village) extending along the tracks to the Eastern boundary.

Branciforte Fire District

Branciforte is entirely State Responsibility Area (SRA) for purposes of wildland fire protection. The district shares responsibility with CDF for these areas.

Scotts Valley Fire District

Scotts Valley has joint jurisdictional responsibility in areas defined as state responsibility areas (SRA) with the California Department of Forestry and Fire Protection (CDF). SRA includes those areas outside the city limits of Scotts Valley and outside the areas designated by CDF as local responsibility areas.

Local responsibility areas of the district include the City of Scotts Valley, Pasatiempo and the Rolling Woods development off of Graham Hill Rd.

Scotts Valley has entered into a Mutual Threat Zone agreement with the California Department of Forestry and Fire Protection. This agreement is essentially an automatic aid agreement to allow the use of special resources (aircraft, handcrews and bulldozers) on an automatic basis within pre-identified areas of local responsibility areas.

OPERATIONS SECTION

Emergency Response Division

Current Situation

The four (4) existing districts provide emergency service to an area of approximately 60 square miles. This area encompasses both urban and rural environments with significant areas of wildland/urban interface in addition to two (2) incorporated cities. Services rendered to the communities by the individual districts are similar but vary in quantity of resources committed to an incident and in response times. Two districts presently provide specialty services. Aptos/La Selva provides paramedic level EMS and Scotts Valley provides a hazardous materials response team and EMT-Defibrillator. These services are provided over and above the basic level of EMS and Haz Mat response.

The operational structure of the districts all follow traditional lines of fire service organizations. Shift personnel operate in one of four line positions: Battalion Chief, Captain, Driver/Engineer and Firefighter. Various districts use different position titles, but the functions remain similar. Personnel also are assigned additional titles that reflect specialized capabilities such as: Paramedic, HazMat Tech, EMT Defibrillator, Mechanic, Heavy Rescue and various overhead positions.

Line Personnel

	Line Chief/BC	CAPT	OPER/FF	Volunteer
Aptos	3	9	21	0
Branciforte	1	2	0	15
Central	3	12	24	29
Scotts Valley	3	6	16	15
Totals	10	29	61	59

Dispatch:

Emergency Dispatch for the districts is performed by Santa Cruz County Communications (911 Center). Resource tracking is accomplished by field incident commanders/duty officers. Each agency maintains its own dispatch/run cards for purposes of initial 1st alarm dispatch of resources.

Mutual Aid:

All of the districts are party to the California State Master Mutual Aid Agreement and the Santa Cruz County Mutual Aid Plan.

Mutual/Automatic Aid agreements exist in all of the districts. These agreements include automatic aid, mutual aid, SRA and LRA documents and Mutual Threat Zones. The Aid agreements impact most of the neighboring fire agencies and reflect reciprocal services with a mutual benefit.

Incidents:

The nature of each district's incidents is similar, thus the services rendered are also similar. Each district responds to fires, medical emergencies, vehicle accidents, hazardous materials, releases, public service, and disaster incidents. The districts also respond to incidents, specific in nature to their own geographic area. Train emergencies, ocean rescue, swift water rescue and target hazards reflect the specialized needs of the individual communities.

Compatibility and Interaction:

The Districts have been long-time participants in mutual aid that is exercised regularly on incidents and training evolutions. This commitment has resulted in a continuing interaction among individual agencies from the firefighters to the fire chiefs. The high level of compatibility of emergency operations, fire apparatus, equipment and training standards are a product of this labor.

Variances exist among the districts in the delivery of resources to an incident in both volume and method of delivery. This is due primarily to the quantity, type, and the location of resources available to each district.

Off-duty and/or paid call/volunteer personnel are utilized by each of the four (4) districts to supplement response levels. The following chart #1 illustrates the **on-duty response** to specific incident categories. The response of a water tender, truck or air unit typically is dependent upon off-duty/volunteer response.

Chart 1

On-Duty Staffing and Resource Response Levels

	Aptos	Central	B-40	S. V.
Urban structure	3E,R+BC(9)	2E+BC(7)	E(1)	2E+BC(7)
Rural structure	3E,WT+R+BC(9)	2E,WT+BC(7)	E(1)	2E+BC(7)
Wildland	3E,WT+R+BC(9)	2E,WT+BC(7)	E(1)	2E+BC(7)
Vehicle Acc	E,R,(4-5)	E(3)	E(1)	E(3)
Medical	E,R,(4-5)	E(3)	E(1)	E(3)
HazMat	2E,R(6-7)	E(3)	E(1)	E(3)
*Other	E(2)	E(3)	E(1)	E(3)

E=engine WT=water tender R=rescue U=utility

* all single engine responses

(#) indicate on-duty staff responding

Distribution of Resources

Ten fire stations exist within the four (4) districts. Each station differs in its call volume, equipment housed and staffing level. Exhibit #2 illustrates the distribution of resources and staffing in the ten (1) individual stations.

Response Times

Level of service is commonly measured by the quantity, type and kind of resources delivered to an incident within an identified time standard. Response times are tracked within a jurisdiction to be used as a planning tool, an evaluation tool, determining risk levels, station response zones and station locations. Response time data is captured in Chart 2.

Chart 2

Response Times

	Aptos	Central	B-40	S.V.
5 min or less	86%	74%	*	56%
Over 5 min	14%	26%	*	44%
Max	11 min	13 min	17 min	15 min
District Goal	5 min or less=80%	5 min or less=80%	*	5 min or less = 95% (urban) 90% (rural)

* Data not available

Alternatives/Recommendations

Staffing

Phasing of staffing levels must be accomplished, contingent upon fiscal ability of the newly consolidated district. Phased levels of increased staffing would allow for the district to build as funding became available.

Phase I (Present)

Staffing, initially, would reflect the present staffing levels existing at each of the stations with the exception of Branciforte. Branciforte would need to be increased to a constant level of two person staffing.

Phase II (Future)

Staff each engine with three (3) personnel at each of the ten (10) stations. This would allow for operational consistency throughout the district. Personnel might be required to shift over to other specialized apparatus strategically housed in quarters to meet the requirements of certain alarm types and incidents. Specialized apparatus might have unique staffing requirements based on specialized needs or skills.

Phase III (Future)

Augmentation of busy stations and target hazard areas. Additional companies would be put in place as funding permitted to augment busy or high risk areas.

Simultaneously with the phasing of staffing, a fire station location study would have to be conducted to determine the optimum locations for the district as a whole.

Battalions

Operating the proposed district in a Two Battalion system would allow an efficient supervisory ratio of one (1) to five (5). This would require six (6) shift battalion chiefs to staff the three (3) working shifts. Battalion boundary division lines would be subject to a secondary study. It is projected that the Battalion boundary would be along the ridge dividing Old San Jose Road and Rodeo Gulch Road and follow the current response boundaries of 17th Ave. and Thurber stations on the West and Soquel and Capitola stations on the East.

Response

The consistent staffing of engine companies potentially would result in higher efficiency and effectiveness in emergency scene operations. This would result in less apparatus committing to an incident simply for the need to deliver appropriate numbers of personnel to the scene.

By combining all the district resources, a greater depth of resources would be realized. The dependence of outside mutual aid would be reduced significantly.

Specialized resources, e.g. trucks, water tenders, air/utility and haz mat units, would need to be strategically located throughout the new district to allow for optimum response anywhere within the district.

The Haz Mat unit presently at Scotts Valley Station 1 would best serve the district as a whole by being relocated to a more central location.

Proposed Response Procedures, 1st Alarm

Structure	3 engines
Commercial	3 engines, Truck
Structure/Rural	3 engines, Water Tender (off duty)
Wildland	3 engines, Water Tender (off duty)
Medical	1 engine
Haz Mat	1 engine
Other	1 engine

Multiple alarm incidents would continue to use mutual aid agreements for both control activities and the support of covering stations.

The concept of dispatching the closest available resources to an incident provides for the best operational efficiency effectiveness. For purposes of immediate implementation, the current manual run-card system/Geo file could be utilized as it exists today.

The operational management of a ten (10) station fire district, however, requires a CAD (Computer Aided Dispatch) to assist in managing the resources. It would be extremely cumbersome for an incident commander/duty officer to track and move resources based on demand within a ten (10) station district on an on-going basis.

Volunteer and off duty personnel would be needed to augment the daily staffing in times of multi-engine responses or multiple alarms.

Administrative staff duty rotation would be necessary to provide back-up and overhead support to the battalion chiefs.

Mutual Aid

All the districts have effective mutual aid/auto aid systems in place. Existing agreements would remain in effect upon consolidation. Contract language would need revision based on organizational change. Further study would be necessary to determine additional potential auto aid/mutual aid areas. Revision of multiple alarm assignments would be necessary. Consideration of mutual aid/auto aid sent today will require evaluation and review.

Summary

There are several factors that effect operations as they relate to consolidated fire services. The determining factor is the question as to whether service levels are improved as a result of consolidation for the same or less money.

Operational service levels are determined by a variety of factors:

- Well trained, qualified response personnel.
- Response times to an incident for first in and subsequent companies.
- Company staffing levels as well as standardized personnel requirements based on fire flows and incident needs.
- Consistent operations, training and incident management.
- Equipment types consistent with response needs and operational efficiency.
- Specialty services offered (EMS, hazardous materials response, etc.).

Each district has gone to the extent possible within fiscal constraints to provide the best possible service considering the above factors. Each of the factors must

be weighed individually and then as a whole to determine whether or not consolidation offers a benefit to each of the districts.

Personnel Qualifications and Training

Response personnel, as a whole, are well qualified. The impact of consolidation would be standardization of training and operations. Training is considered in another part of this report.

The logistics of personnel tracking and accountability would have to be done on a larger scale as compared to what occurs currently. Consolidated staff would mean that staff positions could be more specialized, thus improving training, operations and standardization.

Response Times

Response times are typically used as a measurement tool for station location and effectiveness of the move up system. This proposal assumes that all current stations would maintain a staffed company. Under that assumption, response times should remain consistent with current conditions. As the fiscal conditions permit, the district should be able to add companies and perhaps stations, thus improving response times to identified areas. Further study would be necessary to determine priorities based on call volume, response time impact, fiscal ability and political necessity.

An in-depth move up and cover system would be necessary to ensure that response time goals are maintained. The ability of a field duty officer to ensure adequate coverage of the entire district is limited. A computer aided dispatch (CAD) would be essential to the effective resource management of the district.

A move-up system requires that "must cover" stations be identified. The system would necessitate a Paid Call Firefighter and Off Duty response system that parallels current systems in order to maintain adequate coverage.

Automatic aid agreements currently in existence with agencies outside the proposed district would be maintained and could, perhaps, be enhanced.

Staffing Levels

The issue of staffing levels actually relates to two (2) areas: staffing on companies and staffing requirements based on incident workload.

Consolidation offers an advantage over current auto/mutual aid programs in that the company staffing levels could be consistent throughout the organization. Currently, three (3) of the four (4) districts operate companies below the accepted industry standard of three (3) people per company. The operational advantage of consistent company staffing is profound.

Occasionally, some of the districts have more than three (3) people assigned to a station. It does not appear that this practice would be able to be continued in

the early stages of consolidation. The impact might be offset by the depth and operational consistency of a ten (10) station district.

Consolidating the districts would allow a greater depth of resources. The individual districts currently rely upon support from other agencies, paid call firefighters and off-duty response to deliver required fire flow to a fire. This is in addition to covering additional calls in the response area.

The consolidated district would eliminate the need for "routine" mutual aid. The consolidated district would be able to provide the optimum response for a given incident and not be as heavily dependent on off duty/paid call response. Response levels would be driven by incident type and location as opposed to limited resources readily available.

Consistency

One of the more profound advantages of consolidation is a consistency of operations and training methods. The districts currently have a variety of ways of accomplishing the same job done. Consistent operations makes for a more efficient finished product.

Automatic and mutual aid have started this process, but there still exists a need for consistency in terms of operations, training and incident management.

As with operations, equipment and apparatus consistency also run the gambit. There are differences between the districts currently related to equipment compliments and types. This creates a difference in the operations that a particular company is able to perform or the method in which the evolution is performed. A common set of expectations between an incident commander and the companies manifests in efficiency.

Considerable effort and compromise will be required to develop common operational methods in addition to standardization of equipment and supplies.

Specialty Services

The two (2) primary specialty services that the current districts offer are increased emergency medical service in the form of advanced life support and hazardous materials response. Those two (2) services are covered in other sections of this report. As a generality, consolidation offers the ability to maintain and enhance those services to the entire consolidated district, either immediately or over time.

Conclusion

Consolidation offers operational efficiency and service to all of the existing districts. Consistent staffing, equipment, training and methods of operation will enhance service as compared to the current system. Considerable effort and compromise would be necessary to standardize the components of the system in the short term, but, once complete, consolidation would be more operationally effective.

Mid County Fire Report
Operations Chart
CURRENT STATUS

Fire Stations	Total Calls	Assigned Line Staff Per Shift	Minimum Line Staff Per Shift	PCFs	Engines							
					Type 1	Type 2	Type 4	Truck	Water Tender	Air Unit	HazMat	
SCOTT'S VALLEY	873	4 (1)	3	15	2	1			1	1		1
SIMS	185	3	2		1							
BRANCIFORTE	138	1	1	15	1		1					
THURBER	475	3	3	4	2		1					
17th AVE	1068	3 (1)	3	16	2			1			1	
CAPITOLA	893	3	3	4	2							
SOQUEL	703	3	3	5	2	1				1		
APTOS	602	3 (1)	3		2					1	1	
RIO DEL MAR	672	5	4		1							
LA SELVA	300	3	2		1							
TOTAL	5909	31 (3)	27	59	16	2	2	2	2	3	2	1

() = Battalion Chief

EMS EMERGENCY RESPONSE SECTION

Historical Data/Current Operations

Aptos/La Selva Fire District

The Aptos/La Selva Fire District presently operates the only fire based ALS program in Santa Cruz County. The district began paramedic operations in 1977. The district utilizes Firefighter/Paramedics who respond in a transport capable rescue unit. These "dual role" employees augment the on duty staffing.

While the A/LSFD paramedic unit does have patient transport capability, it currently does not routinely transport patients to the hospital. In all but the most severe cases, patient care is transferred to a local private paramedic ambulance. If the patient's condition warrants an additional paramedic riding along, the A/LSFD paramedic unit will accompany the ambulance to the hospital. In extreme situations, the A/LSFD paramedics may elect to transport the patient in the fire department paramedic unit. This is done in cases where time is of the essence and the delay in waiting for an ambulance could negatively alter the patient's condition.

The district maintains a cadre of nine (9) Firefighter/Paramedics, assigning three (3) per shift. Consistent with the Santa Cruz County paramedic unit staffing policy, two (2) FF/PMs are always assigned to the paramedic unit. The third FF/PM is rotated onto an engine for additional firefighting experience

Central Fire District

The Central Fire District currently provides EMS services on the BLS/EMT-1 care level. All engine companies, including reserve units, are outfitted with an airway/resuscitator kit (including adult, pediatric and infant bag valve masks), first aid kit and portable suction unit. All line personnel are EMT-1 certified, including the battalion chiefs and the fire captain assigned to the Fire Prevention Bureau.

Scotts Valley Fire District

The Scotts Valley Fire District operates a BLS level EMS system that is enhanced with an automatic defibrillator program (EMT-D). Automatic defibrillators contain circuitry that enables the unit to interpret life threatening EKG rhythms and deliver the appropriate electrical shock therapy. These units have a proven track record nationally in regards to their reliability and the dramatic effect they have had on the cardiac arrest save rate. All engine companies, including reserve units, are outfitted with a airway/resuscitator kit (including adult, pediatric and infant bag valve masks), first aid kit, portable suction unit. Front line engines also are equipped with a Laerdal Heartstart 1000 automatic defibrillator unit. All line personnel are certified to the EMT-1/EMT-D level.

Branciforte Fire District

The Branciforte Fire District currently provides EMS services on the BLS/EMT-1 care level. Paid employees currently are all certified to the EMT-1A level. Units carry adequate medical equipment, including oxygen/airway kits and first aid boxes. Of the fifteen (15) volunteers currently on the roster, approximately eight (8) volunteers are certified to the EMT-1 level. Most medical responses are handled utilizing 2660, a utility type rescue unit, with one (1) on duty member augmented by volunteer or off-duty personnel.

AMR/West Ambulance Service

Transportation for patients is furnished by the private provider "Pac Med". "Pac Med" has both ALS and BLS capabilities and has been providing ALS care and transportation for Santa Cruz County since 1985. Pac Med has recently consolidated operations with three other companies. They will operate as a public stock based company under the name of "AMR" or American Medical Response, Inc.

EMS Dispatch System

Dispatch services are provided on contract with the County of Santa Cruz Communications Center. County Comm. has utilized the "Emergency Medical Dispatch" system since 1988. This system allows dispatchers to prioritize a patient's condition via the telephone and dispatch the most appropriate EMS response.

Presently, a patient accesses the emergency medical services system by dialing 911. A determination is made as to the nearest first-responder fire service agency and the nearest private ambulance. The dispatch to both agencies takes place simultaneously. The dispatcher provides pre-arrival instructions to the caller. These instructions follow pre-determined questions and answers. On most medical emergencies, the fire department responds to the scene first and provides initial patient care. Whenever possible, firefighters stabilize the patients and await the arrival of the private ambulance personnel who will continue to provide BLS care or begin ALS level care.

2nd/3rd Alarm Medical Dispatch System

Large multiple victim incidents require that large numbers of patients be transported to local and regional hospitals. The number of ambulances provided by PacMed can quickly become inadequate to handle the given situation. In an effort to provide a quick access system for additional transport units, the Santa Cruz County Fire Chiefs established a 2nd and 3rd Alarm - Medical dispatch system. Several Santa Cruz County Fire Districts have transport capable rescue units. Up to five (5) of these units may be activated quickly by incident commanders of large medical oriented incidents.

County EMS Agency

Under California Administrative Code Title 22 - EMS Regulations, the County of Santa Cruz is charged with the responsibility of administering the county's EMS system. The Santa Cruz County EMS Agency is responsible for the development, implementation and monitoring of prehospital care protocols, the monitoring of EMS certifications issued for the county, data collection and EMS quality assurance.

The County of Santa Cruz EMS Agency is directly under the control of the County Health Officer. The agency currently employs a full-time administrator (Don Haitt), a full time Medical Director (Dr. Kent Benedict), a data collection specialist and clerical support.

California State EMS Authority

The California State EMS Authority is responsible for establishing statewide standards for all prehospital care aspects. The EMSA is the facilitator for the constant updating of California Administrative Code Title 22 - EMS Regulations. The state now certifies all paramedics in the state, thus creating a statewide reciprocity for paramedics.

EMS Service Levels ALS vs. BLS

ALS Services Overview

The Advanced Life Support (ALS) level of care allows for invasive patient care in the prehospital care setting. Invasive care implies that medications or procedures may be administered to the patient. The ALS scope of practice includes IV therapy, electrical shock therapy, administration of medication (including cardiac agents and narcotics), advanced airway maneuvers and anti-shock trousers. While invasive care, when administered correctly, can greatly improve a patient's condition, it can also adversely alter the patient's condition. To minimize this problem, paramedics must receive authorization from a physician to administer most medication and procedures.

EMT-P (Paramedics), in accordance with the Health and Safety code, shall have the following scope of practice:

- Render rescue, first aid and resuscitation services.
- Perform cardio-pulmonary resuscitation and defibrillation.
- During training, and while caring for patients in a participating general acute care hospital under the direct supervision of a physician or authorized registered nurse, or while at the scene of a medical emergency and during transportation when medical control is maintained by a physician or an authorized registered nurse, an EMT-P may:

- Administer intravenous saline, glucose, or volume expanding agents/solutions. This includes intraosseous (into bone) injections in pediatric patients
- Perform pulmonary ventilation by use of esophageal airway, endotracheal intubation or other airway management techniques approved by the County Health Officer.
- Obtain blood samples for laboratory analysis.
- Administer parenterally, orally or topically any of the following classes of drugs or solutions: antiarrhythmic agents, vagolytic agents, chronotropic agents, analgesic agents, alkalinizing agents, vasopressor agents, narcotic antagonists, diuretics, anticonvulsants, ophthalmic agents, oxytocic agents, antihistaminics, bronchodilators and emetics.
- Assist in childbirth
- Apply anti shock trousers
- Perform any other standard emergency medical treatment practice approved by the County Health Officer.

EMS Service Levels

Three (3) major points must be met to operate an ALS (paramedic) level service in California:

- Minimum Staffing Level

Presently in Santa Cruz County, the minimum staffing level for paramedic units is two (2) certified paramedics per active unit. While the Aptos/La Selva Fire District has met this standard since the inception of their paramedic program, authorization to staff the unit with only one (1) paramedic was granted recently by the County of Santa Cruz. This approval was granted to assist the district in dealing with the pending budget crisis; however, the district has not yet found it necessary to drop to one (1) paramedic.

- Minimum Equipment Requirements

All paramedics in Santa Cruz County must carry the minimum inventory and equipment levels as stated in the Santa Cruz County EMS Policies. This requirement only specifies the equipment to be carried, not the type of apparatus to be utilized. Either transport capable units or non transport units may be placed in service as a paramedic unit.

- **Base Station Hospitals**

Field Care medical control is maintained via communication with an assigned Base Station Hospital. A Base Station Hospital must have a physician on duty and have specially trained nurses or Mobile Intensive Care Nurses (MICN) on duty on a 24 hour basis. Orders for medications and/or medical procedures are issued to paramedic in two ways. First, standing orders are preauthorized orders which have been issued for many common or life threatening medical ailments or problems. In this case the paramedic may proceed with the procedure or medication **prior** to contacting the Base Hospital by telephone or via radio. Secondly, in situations not covered by a standing order, the paramedic must establish Base Station contact in order to be issued the appropriate order. In either case, the medical responsibility lies with the Base Station Hospital.

Presently, both the Dominican Santa Cruz Hospital and the Watsonville Community Hospital serve as Base Station Hospitals for Santa Cruz County.

ALS Personnel (EMT-Paramedic)

The Aptos/La Selva Fire District presently maintains nine (9) currently certified paramedics. Under Federal Dept. of Transportation and California Title 22 requirements, previously certified paramedics may reactivate their certifications to current status. This requires a minimum of continuing educational hours and, most importantly, a series of written and skills examination to assure proficiency. While several A/LSFD employees are eligible to recertify, it is unlikely that any are truly interested.

The Central Fire District has two (2) full-time employees who are qualified to act as paramedics. One is presently certified while the other is currently recertifying through the State of California.

The Scotts Valley Fire District has one (1) full-time employee who is a certified paramedic.

EMS Service Levels

BLS Services Overview

The Basic Life Support (BLS) level of care is primarily based around non-invasive patient care. In BLS care, the EMT may administer oxygen, water or glucose to a patient. No other medications are authorized for administration by an EMT-1. While the scope of practice is limited in contrast to the paramedic or ALS care level, it is no less important. EMT-1 personnel are well versed on patient assessment and evaluation techniques, as well as having a strong knowledge base regarding anatomy/physiology and injury/illness processes. Early assessment of the patient by an EMT-1 is often relied upon greatly by paramedical and hospital personnel.

The term "Basic Life Support" is used to describe the EMT-1 (112 hour) , First Responder (44 hour) and the First aid (21 hour) levels of EMS training and certification. Skills allowed in the scope of practice include:

- Patient assessment including physical examination, vital signs and history taking
- Airway maintenance and oxygen administration including suctioning
- Bandaging and splinting
- Patient spinal immobilization

BLS Personnel (EMT-1)

Presently, approximately 100 members of the proposed district possess and maintain EMT-1 Ambulance certification. This number represents all operational personnel below the rank of battalion chief in all four fire districts.

Engine Based vs. Squad/Ambulance Based Paramedic Systems

While the County of Santa Cruz presently requires a staffing level of two (2) paramedics per active unit, the option of an engine based system utilizing one paramedic per unit does exist. In an engine based system, one member of the engine company is a certified paramedic. A full complement of paramedic equipment is carried on board. The engine paramedic begins ALS patient care while waiting for the responding ambulance to arrive. The two (2) paramedics on the ambulance assist with patient care until such time as a transfer of the patient occurs. The ambulance crew transports the patient to the hospital while the engine crew is made available to respond to other emergencies.

HAZARDOUS MATERIALS RESPONSE SECTION

Terminology of Training and Response Levels

Operations Level - A minimum of 16 hours of training for first response personnel for the purpose of size-up, protecting nearby citizens, property and the environment. Actions are defensive with the intent of release containment from a safe distance.

Technician Level - A minimum of 200 hours training focused on Response Team activities. Technicians are trained to choose suitable protective clothing, identification of substances, mitigation of leaks and spills and team entry into unknown and contaminated environments. They also are trained to fill Incident Command Haz-Mat positions.

Specialist Level - A minimum of 80 hours in addition to the Technician's 200 hours. All of the above activities with additional tactical field operations training and hands on experience with large scale incidents.

Haz-Mat Incident Command/Scene Manager - 40 hours of training required by California Government Code 8574.19-21 for officers responsible for all decisions relating to the management of the incident.

Department Profiles

Aptos/La Selva Fire District

Aptos/La Selva currently responds engine companies to haz-mat incidents. The District has four (4) personnel trained to the Technician response level and utilize these personnel to assist the Incident Commander with decision making and to fill out Incident Command positions at a large scale incident. Most responses are handled at an engine company level, with unknown and large scale incidents requiring a mutual aid Response Team. Aptos/La Selva has normally utilized Watsonville Fire's Haz-Mat Team for these types of responses. All other personnel are trained to the operations level.

Of a total call volume for 1991 of 1574 alarms, Aptos responded to 56 haz-mat incidents (about 3.5% of total alarms).

Branciforte Fire District

Branciforte Fire responds to haz-mat alarms with an engine company with additional staffing from Volunteer firefighters. Personnel are trained to Operations level and large scale incidents would require a mutual aid haz-mat team.

Of a total call volume of 138 alarms in 1991, two (2) responses were to haz-mat calls (1.5% of total alarms).

Central Fire District

Central Fire District responds to haz-mat incidents with on duty engine companies and most incidents are handled at this level. The District has two (2) personnel trained to the Specialist level and they are utilized to assist with decision making and to fill Incident Command positions on larger incidents. All other personnel are trained at the operations level. Large scale incidents would require the response of a mutual aid response team, usually Watsonville Fire.

Total call volume for Central Fire in 1991 was 3,139 alarms, 91 of which were responses to haz-mat calls (approximately 3% of total responses).

Scotts Valley Fire District

Scotts Valley initially responds to haz-mat alarms with on duty engine companies. The District has seven (7) personnel trained to the Technician level and two (2) at the Specialist level. These personnel make up a full Level A Response Team. The District does not provide dedicated staffing of the Response Team. Large scale incidents that require a response team depend on off-duty response. All other personnel are trained to the operations level.

The Hazardous Material Response Team responds in a well-equipped van and have the ability to provide entry into Level A, B or C incidents and assist with identification of products as well as mitigating hazards.

In addition to Hazardous Materials Response, Scotts Valley Fire is the Administering Agency for hazardous materials regulation, inspection, permitting and enforcement. This service is provided within the city limits by a formal memorandum of understanding between the Fire District and City of Scotts Valley.

Scotts Valley Fire responded to 1058 alarms in 1991, 77 of which were haz-mat calls (about 7% of total alarms).

Future Impact

Overall hazardous materials responses average four percent (4%) of total call volume of the four (4) Districts combined. This percentage is likely to increase in future years. The consolidation of the four (4) fire districts would increase the level of response and service throughout the new district as follows:

- The combination of Technicians and Specialists would expand the current response team from nine (9) to fifteen (15).
- The response team would be able to handle all haz-mat related alarms on an immediate dispatch, decreasing response time.

- Recertification training of all line personnel for the operations level and on scene commander could be provided by team members. Five (5) personnel are CSTI certified instructors.
- The general public has an increased awareness of hazardous materials and the dangers associated to health and the environment. Statewide, the Fire Service has taken on the responsibility to provide emergency response to these incidents with the development of Haz-Mat Teams. Fire service response is directly in line with the mission statements of the fire districts and any increase in this level of service should be viewed as beneficial, not only to public safety and environmental protection, but to the increased safety of fire department personnel as well.

Implementation

The challenges that the consolidated district will need to address include:

- Placement of the Response Van - The van could be either centrally located in the district or in the area with the highest call volume of highest risk.
- Staffing - The number of team members is sufficient to provide adequate coverage. The call volume does not currently justify dedicated staffing to a Haz-Mat Team only. Recommended staffing would be four (4) personnel that would also have engine company responsibility at one (1) of the stations. The team members assigned would be able to stay current on haz-mat, as well as firefighting skills. There currently are enough haz-mat personnel at the rank of captain, driver and firefighter to staff an engine company with secondary haz-mat responsibility.
- Equipment - Scotts Valley Fire's Haz-Mat response vehicle is still in the process of being equipped. An additional \$20,000.00 in equipment expenditures will be required to complete the inventory. This figure includes \$15,000.00 for an on-board computer system to assist with chemical properties, as well as tying into pre-plan information. On-going maintenance costs and replacement costs are unknown.
- Training - It would be desirable to bring all technicians up to the specialist level. The cost for this additional 80 hours of training is dependent on the state's development of regional training centers. Currently, the training is available only at CSTI in San Luis Obispo. The current cost including accommodations is between \$1,500 to \$2,000 per student. The upgrades could be spread out over five years. On-going training for the team requires overtime and occasional travel to outside conferences. A commitment to on-going training is necessary for a response team to function, and also to keep proficiency levels in line with state and federal requirements.

TRAINING SECTION

History and Current Status

Maintenance Training

Aptos/La Selva

A yearly training schedule is developed by the Deputy and Battalion Chiefs. Monthly training emphasizes Department Emergency Operating Procedures and Performance Standards and is oriented towards "hands on" training. Station Captains are provided with training materials by Battalion Chiefs and schedule company drills leading to monthly multi-company drill. Multi-company drills are conducted in field and are scenario based to apply reviewed skills in pseudo-emergency situations. In addition, EMT training (2 hrs daily) is monitored by station captains and tested semi-annually. Additions/deletions are made to the yearly schedule as opportunities are presented or unanticipated situations develop.

Branciforte

Training sessions are conducted as company drills for each company and then followed by a department drill. The captain in charge of the company is responsible for teaching the company level. The Training Captain is responsible for teaching the department drill and developing a yearly schedule which includes guest speakers and new training ideas.

Central

Paid Personnel: Skills maintenance for Paid Personnel is accomplished through a monthly schedule established by the Training Officer. Topics for training are determined on a month to month basis. The topics consist of regular skills maintenance items (ladders, vehicle extrication, hose lays, etc.) as well as any new equipment or apparatus operations that arise. Specialized training such as Rescue Systems, Hazardous Materials and EMS are instructed by personnel most qualified or interested in the topic.

Paid Call Firefighter: Paid Call Personnel are trained four times a month under the direction of the Training Officer. Drills are every Wednesday 1900 hours to 2100 hours. Special weekend drills are scheduled occasionally. During the 12 month probationary period, Entry Level Probationary Paid Call Firefighters are trained in First Responder Medical, First Responder Haz Mat and CPR. Other career development training is provided in-house.

Scotts Valley

Skills maintenance is accomplished through a monthly schedule established by the training officer. The company officer is the focal point of scheduling and accomplishing maintenance training identified on the schedule. Multi-company

drills are conducted/coordinated by the training officer and/or battalion chief. Special training, guest instructors, new methods and techniques also are included in the monthly training schedule. A shift captain is assigned the responsibility of training for the Paid Call Firefighter program.

Career Development/Promotional

Aptos/La Selva

Aptos/La Selva Fire has no formal career development program. The SVFPD program was being looked at as a model. It has been the Department's practice to send each officer to two Asilomar classes annually.

Entry Level Firefighter, Firefighter/Paramedic:

The successful candidate must complete and pass an open test consisting of a written exam, a physical agility test, an oral interview, a medical physical and a background check. On hire the candidate must successfully complete a 12 month probationary period.

Acting Captain/Vacation Float: Appointed by the Fire Chief to three (3) available positions. Manages a department program in addition to providing vacation and sick relief for assigned shift.

Captain: Promotional position. Requires meeting minimum requirements and successful completion of assessment lab.

Acting Battalion Chief: Appointment by Fire Chief to 3 available positions.

Battalion Chief: Promotional position. Requires meeting minimum requirements and successful completion of assessment lab.

Fire Marshal: Promotional position. Requires meeting minimum requirements and successful completion of assessment lab.

Deputy Chief: Promotional position. Requires meeting minimum requirements and successful completion of assessment lab.

Fire Chief: Promotional position. Requires meeting minimum requirements and successful completion of assessment lab.

Branciforte

Branciforte Fire's Career Development Program is designed to parallel the California Fire Service Training and Education Systems requirements for volunteers.

Vol. Firefighter: New hire volunteers are required to go through a background check, oral interview, DMV check and a medical physical.

Vol. Engineer: This is a promotional position. All personnel are required to have one year at the rank of firefighter and completion of a one year program which includes: training in apparatus operation, pump operation, water supply, and pre incident planning. After successful completion, the member must pass the Class B license testing process. Engineers must also possess FFI and EMT IA certifications.

Vol. Lieutenant: This is a promotional position. All personnel are required to have a minimum of one year at the rank of Engineer. They must complete the Volunteer Fire Officer class and one on one training with the Training Captain.

Fire Captain: An open competition supervisory position that requires a written test, oral board and a simulation. Required training for this position is obtained primarily from the California Fire Service Training and Education System.

Fire Chief: An open competition supervisory position. The Board of Directors invites the best qualified applicants (determined by a selection committee) to participate in an oral interview.

Central

Paid Call Firefighter: There are four steps within the Paid Call ranks that are achieved through educational and training requirements as well as time in service.

PCF Entry Level: After passing a written exam, physical agility, oral interview, medical physical and a background check, the PCF is hired and placed on probationary status for 12 months.

The District may have up to 40 Paid Call Firefighters. The current roster consists of 29. Testing for new PCF's usually occurs when the roster approaches 15 - 20.

New Paid Professional Firefighters are promoted from the qualified PCF II rank.

Paid Professional Firefighters: Central Fire District has no formal career development program and step raises are based primarily on successful performance evaluations and time in service. Promotional requirements are identified in department policies and procedures and are left up to the individual to meet the requirements prior to probationary exams. The Department supports all training within the California Fire Service Training and Education System and will authorize other specialized training classes on an individual basis.

Experience and education requirements for career development/promotions are outlined in each job description.

Scotts Valley

Scotts Valley's Career Development Program is designed to parallel the California Fire Service Training and Education System requirements. Each level of the system is predicated on successful completion of each lesser level.

Paid Call Fire fighter (PCF): Entry level test including physical agility, medical physical, oral interview and driving record check.

Entry level Firefighter: Test open to PCF personnel and includes written, oral and Chief's oral. Must complete Firefighter I while on probation (first year).

Firefighter I: Meets state requirements for Firefighter I and is tied to the IFSTA training materials. Firefighter I is the only required career development step. Further advancement through the system is optional on the part of the employee.

Firefighter II: A one year program that meets state requirements for Firefighter II, EMT, Driver Operator IA and IB. Must obtain Class B Driver's License. Successful candidates, at completion, can drive and operate engines and water tenders. Employee is advanced to Firefighter II pay scale upon successful completion of the testing process.

Driver/Operator: A one year program that trains the employee in truck operations, servicing of apparatus, apparatus systems, pre-incident planning and water supplies. Successful candidates can drive and operate trucks. Employee is advanced to Driver Operator pay scale upon successful completion of the testing process.

Fire Captain: A promotional supervisory position that requires passage of an examination and appointment by the Fire Chief after completing prerequisite requirements that are made up of outside education in addition to in-house training.

Battalion Chief: A promotional managerial position that requires passage of an examination and appointment by the Fire Chief after completing prerequisite requirements that are made up of outside education in addition to in-house training.

Support Staff: Varies based on position. Requirements are outlined in each job description.

Special Skills Training

Aptos/La Selva

EMS

EMT-I: An entry level minimum qualification. Certification must be maintained by all line personnel. Department provides on shift EMT training and recertification testing.

EMT-Paramedic: Normal department staffing is firefighter/paramedics. Personnel are required to meet continuing education (C.E.) requirements and recertify every four (4) years. Personnel attend C.E. on duty, if possible. When attending off duty, the Department pays time and one-half wage per C.E. hour to maximum of forty-eight (48) hours.

Hazardous Materials Response

All line personnel trained to minimum of first responder. All officers trained to be on scene commander. Four (4) personnel trained to technician level and provide in service training.

Heavy Rescue

All personnel trained to Systems 1 level. In service training is provided yearly.

Surf Rescue

Three personnel trained in surf rescue.

Branciforte

EMS

Volunteer firefighters are required to complete the First Responder course given through the department. All personnel are encouraged to obtain EMT-IA Certification which is required of all engineers and staff officers.

Hazardous Materials Response

All response personnel are trained to first responder operational. All paid staff personnel are trained as hazardous materials incident commander/scene managers. Skills are maintained through the maintenance training schedule.

Heavy Rescue

Four firefighters are trained to the System 1 level in heavy rescue as outlined by the State Fire Training System. No formal program exists to utilize these people.

Scotts Valley

EMS

Paid Call Firefighters (PCF) are required to have a minimum of advanced first aid as a prerequisite to hiring. Most PCF personnel have obtained First Responder EMS training or Emergency Medical Technician on their own.

Emergency Medical Technician 1 is required during the Firefighter II Career Development Program. Personnel maintain current certification through on going in service training. A recertification test is administered bi-annually.

Line personnel are trained as Emergency Medical Technician - Defibrillator (EMT-D). EMT-D requires quarterly recertification by a certified instructor.

Hazardous Materials Response

All response personnel are trained to first responder operational. Proficiencies are maintained through the normal maintenance training schedule.

Personnel assigned as part of the hazardous materials response team are trained to the technician level. Skill levels are maintained through special team training.

Duty chief personnel are trained as hazardous materials incident commanders/scene managers. Skills are maintained through the maintenance training schedule.

Heavy Rescue

Three people are trained to the System 1 level in heavy rescue as outlined by the State Fire Training System. No formal program exists to utilize these personnel for training or response.

Training Staff/Specialized Instructors

Aptos/La Selva

Shift captains implement the training schedule. Battalion chiefs provide standardization by supplying additional technical information and multi-company drills.

- Four (4) ROP EMT instructors and eight additional paramedics provide "in house" monthly EMT training and testing.
- Four (4) Haz Mat techs provide "in house" training
- Two (2) Driver/Operator trainers provide and track training to maintain all personnel with class B licenses.
- A/LSFD is a training site for AHA CPR classes and maintains six to eight (6-8) instructors.
- Seven (7) credentialed community college instructors.

Branciforte

The Training Officer is a Captain with operations responsibility in addition to training. The Assistant Training Officer is a volunteer.

Instructor Certifications: Branciforte has personnel who are certified to instruct in the following courses:

- First Responder (EMS) (3)
- CPR (2)
- Class B Drivers License sign off (1)
- California State Fire Service Instructor (3)

Central

The Training Officer is appointed by the Fire Chief and is currently a Battalion Chief working a shift schedule. He is responsible for all aspects of training and training development to Paid Professional and Paid Call Firefighters.

Specialized training areas are presented by qualified personnel who participate in Program Management areas such as Rescue Systems, Hazardous Materials, and EMS. The Training Officer will coordinate and schedule training to be presented by these individuals to both Paid Professional and Paid Call Firefighters.

Paid Call drills occasionally will be instructed by a PCF III or a Duty Battalion Chief in the absence of the Training Officer.

Cabrillo College ROP Staff is utilized for some required certification training.

Shift Captains are required to organize and instruct one Paid Call Drill per year.

Instructor Qualifications: Central has personnel who are qualified to instruct the following courses:

- Investigation 1 (1)
- Investigation 1A (1)
- Prevention I (1)
- Master Instructor (1)
- Driver/Operator (3)
- Basic Fire School (2)
- Firefighter I (3)
- Haz Mat (2)
- Fire Behavior (1)
- Heavy Rescue (1)
- EMS (1)
- Rescue Systems (4)

Scotts Valley

The training officer is a division chief who has operations responsibility in addition to training. The battalion chiefs coordinate training within their areas of responsibility and expertise (e.g. Hazardous Materials and Emergency Medical Technician training). A shift captain is assigned the responsibility of Paid Call Firefighter training.

Instructor Certifications: Scotts Valley has personnel who are certified to instruct the following courses:

- Hazardous Materials On Scene Commander (3)
- Hazardous Materials First Responder (3)
- EMT, Defibrillation Module (3)
- ICS Strike Team Leader
- ICS Division/Group Supervisor
- First Responder (EMS)
- CPR (2)
- California Class B Drivers License sign off (2)
- Credentialed Community College Instructors (7)
- State Driver/Operator IA and IB (2)

Safety Program

Aptos/La Selva

The Deputy Chief is the department Safety Officer. A safety committee consists of the Safety Officer and five additional personnel representing all department ranks and the firefighter's association.

Department Emergency Operating Procedures in sections on SCBA, PASS, Emergency Scene Safety, Protective Clothing & Equipment, Safety Officer, Structure Collapse/Evacuation, Driver Safety, and Emergency Traffic exist, if needed.

Branciforte

Branciforte Fire has a safety program that meets the requirements of SB 198 and is conducted through the maintenance training delivery system. The Safety Officer is the Operations Captain/Training Officer.

Central

The District Safety Officer is a shift Battalion Chief who acts as the Management Team Supervisor for the Safety Committee. The Safety Committee consists of two (2) Battalion Chiefs, three (3) Captains and two (2) Firefighters. The Committee meets once a month. The primary responsibilities of the Safety Officer and Committee are to meet requirements for NFPA 1500 and SB 198.

Scotts Valley

Scotts Valley has a safety policy adopted by the Board of Directors to meet the requirements of SB 198. The policy assigns the Operations Chief as the safety officer for the district. Standard Operating Procedures identify procedures for carrying out the policy. Training is conducted through the maintenance training delivery system.

Branciforte

- 1 Slide projector
- 1 Overhead projector
- Video library
- Most of IFSTA Manual and Apparatus Operator Manual

Central

- 3 Slide projectors
- 1 Projector stand
- 2 Projection lens
- 1 Audio cassette
- Overhead projector
- 1 Character generator
- 3 16mm film projectors
- 1 Portable screen
- 1 Radiant screen/stand
- 1 Fog machine
- 1 Fire simulator
- 1 Training dummy
- Programmable dissolve unit
- 1 Wollensak Cassette/slide 1 projector
- 1 Movie projector stand
- 2 Training signs
- Video library
- Manual library
- 1 Video editing system

Scotts Valley

- 1 Satellite Dish, Erba Station
- Library including 3 complete sets of IFSTA training manuals
- Video library
- 2 Slide projectors
- 1 Video projector
- 2 VCRs (VHS)
- 1 simulator (combination slide/overhead)
- 1 dissolve unit (for use with multiple slide projectors)
- 1 video camera with title generator
- 1 Wollensack tape player (slide/tape sync.)
- 1 smoke generator

Training Reports and Records

Aptos/La Selva

Monthly training records are completed on hard copy and stored in the administrative office. Firetrac software was acquired to computerize record keeping, but software support problems have led away from implementing the system.

Additional documentation, (physical fitness, driver certification, etc.), is the responsibility of the individual program manager and is stored on hard copy or a data base developed by the individual for that purpose.

Paramedic continuing education documentation is the individuals responsibility and tracked on a County of Santa Cruz form.

Branciforte

The Macintosh Resource Manager Training data base software is utilized to track training records, current certifications and tracking of maintenance training activities.

Central

The training session is recorded on one of three forms and is transferred into the computer on a daily basis. Quarterly reports for both Paid and Paid Call Firefighters are submitted to the Training Officer for review. An annual report is prepared by the Training Officer. Each employee has a training file maintained by the Training Officer consisting of formal education, certification, annual training and DMV records.

Scotts Valley

The IBM compatible SUNPRO training data base software is utilized to track training records. This includes certifications (Drivers License, EMT, Haz Mat Tech, Fire Officer Certifications, etc.) as well as personal training records that are tied to educational incentive in addition to tracking of maintenance training activities.

Training Budgets

Aptos/La Selva

The total expenditures for training for fiscal year 1991/1992 were approximately \$16,300.00. This includes approximately \$4,200.00 in paramedic continuing education, as well as various course fees. The Watsonville Training Tower was utilized at a cost of \$500.00. Overtime and staff costs are not included in this figure.

Branciforte

The expenditures for training for fiscal year 1991/1992 were approximately \$3,000.00. This reflects approximately \$2,000.00 of registration and expenses for personnel related to training and education outside the District in addition to approximately \$1,000.00 for material costs. Expenditures for staff costs to cover vacant shifts created by outside education are not included in this figure.

Central

The expenditures for training for fiscal year 1991/1992 were approximately \$24,000.00. This reflects approximately \$21,000.00 for registration and expenses for personnel related to training and education outside the district in addition to approximately \$3,000.00 for material cost. Expenditures for staff cost to cover vacant shifts created by outside education are not included in this figure.

Scotts Valley

The expenditures for training for fiscal year 1991/1992 were approximately \$15,000.00. This reflects approximately \$11,000 for registration and expenses for personnel related to training and education outside the district in addition to approximately \$4,000.00 for material costs. Expenditures for staff costs to cover vacant shifts created by outside education are not included in this figure.

Observations

Several observations related to consolidating the training functions of the existing districts were made by the training research staff.

All four of the agencies have good training programs that compliment each other very well when combined. A weak point of one program is strengthened and complimented by a strong point of another program.

Consolidation creates a larger hiring pool and the ability to conduct a recruit academy. None of the agencies is able to justify or provide a recruit academy on its own due to the small numbers typically hired by the individual agencies. Consolidation creates a need for fewer tests (consolidation of tests), thus reducing cost.

A Training Officer and staff that does not have collateral duties would enhance the training provided through the ability to focus on training topics and issues. Each agency, currently, has a training officer who has additional responsibilities.

A larger clerical pool would be available to draw from to assist in training records and documentation.

The ability to provide more specialized and technological training would be possible. An example would be the use of the cable television network to deliver training information in a constant manner to an integrated district.

Combining the career development paths of the agencies would require labor relations negotiations. The career development paths are currently inconsistent and would require negotiations and compromise to establish the system. Some of the agencies do not currently have an established career path solidly linked to pay scales while others do have this in place. Operations would also require that evaluations and consistent methods be established.

One large organization would be more attractive to grant allotments for training.

The logistics of training delivery becomes more difficult due to the size of the district, number of stations, number of personnel and Paid Call/Volunteer program.

The consolidated district would have an instructor pool on staff for:

- EMS
- Hazardous Materials
- Fire Officer Courses
- Heavy Rescue

As individual agencies, the size of the agencies does not justify the cost of a dedicated training facility for each agency. By consolidating, there is greater depth of funding and a justification for a training center due to the size of the consolidated district.

Ten stations and the number of proposed personnel would require a centralized training division/bureau in addition to a central training facility/center. The consolidation of training equipment and materials would be more cost effective and provide for comprehensive use of the materials.

A consolidated training function would provide for consistent operations and standards throughout the organization. Each district is doing well facing the demands being placed on them, however, standardized training and operations would enhance effectiveness.

Recommendations

As stated, each agency is effective at conducting training to meet its needs. The programs would compliment each other very well, thus taking the best parts of each to develop an effective training system.

It would be essential that a centralized training division/bureau (depending on organizational layout) be established. This would be the key to standardization of operations for the consolidated organization.

For purposes of this study, the following proposal is based on the establishment of a central training division. The following components have been considered with recommendations following:

- Training Staff
- Training Facilities
- Career Development
- Maintenance Training
- Promotional Testing
- Paid Call/Volunteer Firefighter Training
- Special Skills Training
- Training Records and Reports

Training Staff

Based on projected work load the following staff is recommended:

- Training Officer (Administrative Chief Rank)
- Asst. Training Officer* (Maintenance Training, Career Development)
- Asst. Training Officer* (Paid Call/Volunteer Firefighter Program)
- Secretary

*Rank of Asst. Training Officer determined by organizational layout.

Training Facilities

The analysis of current activities of each of the agencies points to a glaring need for a central training facility. Small classroom groups are accommodated at some of the fire stations.

A comprehensive training center including a driver training area, pumping area, area for vehicle extrication/rescue, area to lay hose, hazardous material props, a tower for ladders and potential for live fire training is essential. Such a facility would be necessary to conduct standard operational training in addition to providing a method to achieve career development training. A classroom facility with restrooms also would be necessary.

The facility should be centrally located in the district and should have easy access with little interface with neighbors.

A master facility plan should identify the need for a training facility and research conducted as to size, location and specific needs.

Career Development

All of the agencies have identified a need for specific career development paths. The ideology behind career development is that specific expectations are given to the employee with specific requirements to meet for each career position. Certain positions are identified as mandatory and the remainder are optional on the part of the employee.

Pay scales are based on the position achieved by the employee on a merit system. In this way, the district is paying the employee for the specific skills learned. For promotional and specific specialized positions, a finite number of positions are established. Any number of employees may excel through the remainder of the positions.

A current career development comparison is appendix A. A proposed model for use by the consolidated district is appendix B.

Labor relations negotiations would be necessary to establish the link between pay scales and career development steps. This should be done at the time of

consolidating the memorandums of understanding from each of the firefighter associations.

Maintenance Training

A centralized training division/bureau is necessary to provide consistency and standardization. A training schedule would be published on a regular basis to provide themes and direction for the training. The company officers would continue to be the focus of providing maintenance training. Battalion chiefs and training personnel also would be active in skills maintenance training .

Company evolutions would be utilized to assure that the companies meet identified standards. The Operations Chief and Training Chief would have to work very closely on establishing company evolutions and standards. These would be utilized to assure operational effectiveness and provide for accountability of the companies .

Recruitment/Promotional Testing

The training division/bureau would be responsible for recruitment and promotional testing. In cases of advanced testing processes, the training officer would act as a coordinator in the process.

It is anticipated that the recruitment/hiring process would be an open process for entry level personnel and include equal employment opportunity and affirmative action programs.

Paid Call Volunteer Training

There are approximately sixty paid call/volunteer firefighters throughout the agencies. It is anticipated that need for this program would not diminish, but in fact, grow in size to approximately 75 people throughout the district.

A system of operational response and training would be necessary to ensure competency of the paid call/volunteer personnel.

Special Skills Training

The instructor pool on staff with a consolidated district would be a tremendous asset. Training would be available for:

- EMT-I, including ongoing recertification
- EMT-P, including ongoing recertification
- Hazardous Materials Technician
- Hazardous Materials On Scene Commander
- Hazardous Materials Operations First Responder
- Basic ICS
- ICS Division Group Supervisor
- ICS Strike Team Leader

- Heavy Rescue
- Class B Drivers License certification
- State Certified Courses
- Various Community College and ROP courses

Clearly, consolidation would provide a tremendous training depth of training experience and ability.

Training Reports and Records

One clerical person would be required to maintain training reports, records and documents. A computerized program to track the information would be imperative.

Summary

The current training programs of each agency would compliment each other very well if they were merged. Weak points of one program are strong points of another.

A centralized training staff, function and facility would be essential to provide for consistency in operations. Centralization of training also would be necessary for record keeping purposes.

A larger organization would lend justification to programs and facilities that each individual district cannot justify alone. A larger budget and greater resources would provide the potential for a specialized training program and staff.

Effort would be required on the part of labor relations negotiations to incorporate a career development system into the program. Each individual training staff has currently identified the need for career development within each organization. It would be a logical program to enter into by the consolidated district.

The Paid Call/Volunteer program would be enhanced through a larger instructor pool and greater resources to draw from.

Consistent company standards would provide essential accountability to ensure training and operational goals are met.

FIRE PREVENTION SECTION

History and Current Status

Aptos/La Selva

The Aptos/La Selva Fire Department has experienced several reorganizations in the past. The Fire Marshal and Deputy Fire Marshal titles have been held by various officers in conjunction with other duties. The Fire District hired a full-time Fire Marshal in November 1991. In October 1992, the position of Fire Prevention Specialist was made permanent after a six-month trial period.

Branciforte

Branciforte has not had a Fire Prevention program because of light activity and limited staffing. Over the years, Branciforte relied on neighboring fire districts for advice. In 1990, a contract was entered into with the County Fire Marshal's Office to handle new development in the district.

Central

Central Fire Protection District has experienced two consolidations during the Eighties. Prior to consolidation, Fire Prevention had been conducted by the Fire Chiefs of the pre-consolidated districts. In 1982, an Assistant Chief was assigned the duties of Fire Prevention with inspector support from the County Fire Marshal's Office. In 1984, a Fire Inspector was hired to perform the work previously done by the County. In 1986, another Fire Inspector was hired due to work load. In 1990, a reorganization of staff resulted in one Battalion Chief/Fire Marshal, one permanent Captain, one rotational Captain and one Fire Prevention Secretary.

Scotts Valley

Scotts Valley's Fire Prevention program began in the early Seventies. From 1972 to 1977, the District employed a Fire Marshal who was responsible for the program. From 1977 to 1983, the District contracted with the County Fire Marshal's Office. In 1983, new development increased, thereby requiring the District to hire a full-time Fire Marshal in addition to the County's contract as backup. In 1989, the District hired a Fire Inspector to handle the increasing maintenance inspection work load. A Hazardous Material Officer was added in 1990 to administer the City's Hazardous Material program.

Current Conditions

All four districts involved in the study use the 1991 Edition of the Uniform Fire Code and the Fire Safety Element section of the County General Plan. In addition, Central and Scotts Valley work with the Cities of Capitola and Scotts Valley General Plans respectively.

Aptos/La Selva

Aptos/La Selva Fire Protection District operates the Fire Prevention Division with two full-time staff members, a Fire Marshal/Division Chief and a Fire Prevention Specialist. Fire Prevention provides plan check, site review and inspection services, answers citizen complaints, administers the weed abatement program and conducts license and maintenance inspections on specialized occupancies. Investigation and Public Education/Training programs are handled by suppression personnel under the direction of the Fire Marshal.

Branciforte

Branciforte continues to contract for prevention services with the County Fire Marshal's Office, primarily for plan check and new construction field inspections. The District is mostly rural/residential requiring minimal routine commercial fire safety maintenance inspections. The District does routine fire investigation, but must rely upon the mutual aid plan for major fire investigations. The Public Education program is limited to station tours.

Central

Central's Fire Prevention Division is a division under the Operations Section of the Fire District. Fire Prevention is normally staffed with one Battalion Chief/Fire Marshal, one Fire Prevention Secretary, one permanent Captain and one rotational Captain. Currently, there is a vacancy in the permanent Captain position. The Fire Prevention Division provides a wide variety of services that include engineering, enforcement, education and investigations. All technical plan checks are currently reviewed by a Fire Protection Engineer contracted by the District. Central Fire has an organized Fire Investigation unit that is under the direction of the Fire Marshal. Suppression staff is involved with inspections and public education programs under the direction of the Fire Marshal.

Scotts Valley

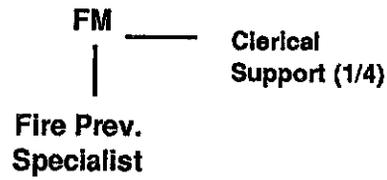
Scotts Valley's Fire Prevention Program is a section of the Support Services Division, employing a Division Chief/Fire Marshal, Hazardous Material Officer and a Fire Inspector. The prevention program has two sections, Fire Prevention and Hazardous Material. The Fire Prevention portion provides a full service fire safety program including plan review, field inspections of new construction, maintenance inspections of public and licensed facilities and investigations. Public Education is performed by engine company personnel under the direction of the Fire Marshal. The Fire District is the Administrative Agency for the City of Scotts Valley's Hazardous Material Program; therefore, the District conducts a full permit program for all facilities handling or using hazardous materials, including oversight of mitigation measures.

The Current Organization Chart (Table 1) represents each department as it exists today. The numbers reflect staffing levels within Fire Prevention, suppression personnel directed by the Fire Marshal and contracted technical services.

Table 1

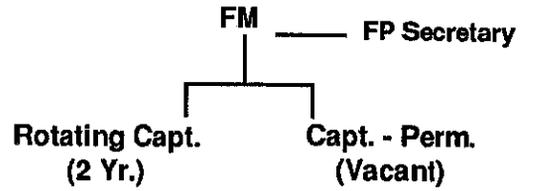
**FIRE PREVENTION DIVISION
Existing**

ALSFD



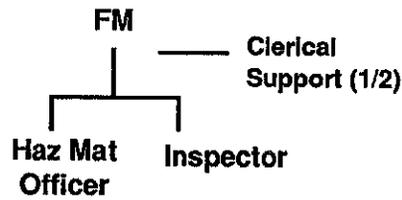
Contract out for
Fire Protection
Engineering Services

Central



Contract out for
Fire Protection
Engineering Services

SVFD



Branciforte

FM (1/2)
Contract out for
additional services

Statistics

The Work Load Summary Sheet (Table 2) identifies the current tasks performed by the four Districts. These figures were obtained through extensive analysis of each agency's work load. Table 1 summarizes the hours associated with each task, thereby reflecting the proposed staffing levels necessary.

Table 2

Fire Prevention Work Load Summary

Category	Bureau		Engine Company		Fees
	Number	Hours	Number	Hours	
Technical Services					
Advance Planning	188	197			
Permit Process/Plan Check	1085	864			
Revenue					\$113,000
Development Fees					\$52,156
Code Development	59	204			
Hazardous Materials		900			
Haz. Mat. Investigation	8	20			
Fire Investigation	75	1109	57 ³	570	
Juvenile Firesetter Program	59	370	63 ³	150	
Public Education Program		500		2208 ³	
Complaints	380	213			
Technical Assistance	365	600			
Interagency Contacts	89	223.5			
Sub Total	2308	5200.5	120	2928	
Fire & Life Safety					
Inspectible Occupancies	4117 ⁴				
Eng. Co. Inspections			3150 ¹	4870	
Bureau Inspections	581 ²	3014			
Site/Field Inspections	1256	1896.5			
Weed Abatement		1180			
Sub Total	1941	6090.5	3150	4870	
TOTAL	4369	14219	3150	4870	\$165,156

- ¹ Scotts Valley and Branciforte do not have Engine Company Inspection Programs.
- ² Not all inspections are made on an annual basis due to Bureau staffing level. Hours are based on inspections actually completed.
- ³ Public Education Programs and Fire Investigations are done by suppression personnel in Aptos/La Selva Fire Dept.
- ⁴ Total number of inspectable occupancies in the four fire districts.

Summary

The consolidation would offer a higher level of service to the public through increased staffing levels, thereby providing an opportunity for a more efficient level of service. Rather than three small Fire Prevention Programs with two or three people, there would be an expanded work force available. The new Division, governed by one set of policies and procedures, would provide the necessary expertise for specific problems as well as addressing the normal day-to-day work load.

The consolidated Fire Prevention Division not only would ensure standardization of code interpretation and enforcement, but would equalize the fees currently charged by each department as well. Standardization would be instrumental in improving the working relationship between the fire service and the public.

While each District currently enforces the 1991 Uniform Fire code, each jurisdiction has minor differences. Continuity of service should not be hindered by code requirements unique to each district. A future goal of the Fire Prevention Division would be the consolidation of all code changes into a single document based on district wide needs.

The consolidation proposal also would allow the new Fire Prevention Division to provide programs that some departments currently assign to engine company personnel because of a lack of bureau staffing. Currently, it is sometimes necessary to pay overtime to meet the needs of programs such as fire investigation and public education. This is not to say there is not a need for bureau overtime, but with the use of flexible work hours in conjunction with the normal eight to five work day, overtime use should be greatly reduced.

The consolidation would allow for a dedicated plan check position. This position would greatly reduce costs of outside plan review and reduce the turn-a-round time needed for the plan review process. The engine company inspection program would have broader coverage of B-2 (business) facilities and the bureau could handle more complex "R" & "I" occupancies (licensed care facilities) inspections.

The staff of the new Fire Prevention Division would be able to provide more efficient services for the public through:

- Standardization of codes (interpretation and application) and fees
- Continuity of services
- Fire Prevention tasks performed by bureau staff
- Reduced overtime

The recommendation of the Fire Prevention Section is to consolidate all current Fire Prevention Programs into one.

DOCUMENTATION SECTION

History and Current Status

Aptos/La Selva

Personnel System

Board adopted and authorized personnel policies. It contains:

- Personnel System
- Employee Relations
- Severability
- Term Definitions
- Administration
- Classification Plan
- Compensation
- Examination Announcement
- Examinations
- Employment Lists
- Appointments
- Assignments with the Classified Service
- Probationary Period
- Performance Evaluation Reports
- Physical Requirements
- Employee Responsibilities, Conduct and Appearance
- Residency
- Non-Exclusionary Mess
- Disciplinary Action
- Formal Grievance Procedure
- Separation of Service
- Leaves
- Dept. Related Travel Expense
- Employer-Employee Relations

Standard Operating Procedures (SOP)

Staff and program manager generated for daily activities and operations. Authorized and approved by the Fire Chief. It includes procedures for the following major categories:

- Administration
- Personnel Procedures
- Firefighting and Emergency Procedures
- Fire Prevention and Safety Control
- Apparatus, Tools and Equipment
- Buildings, Grounds and Furnishings

- Purchasing, Stores and Supplies
- Fire Training
- Emergency Medical Services
- Dispatch/Communications

Emergency Operating Procedures

Staff generated, approved and authorized by the Fire Chief. The purpose is to provide standardization for incident operations. The EOP Manual contains:

- Command Procedures
- Standard Company Operations
- Communications
- Safety Procedures
- Tactical Guidelines
- Special Operations
- EMS Procedures

Disaster Procedures Manual and Field Operations Guide

Staff generated as a guide to disaster operations and that is approved by the Fire Chief. It contains:

- Administrative Plan (Evacuation, Resources, Maps, Etc.)
- Earthquake Annex
- Hazardous Materials Annex
- Multiple Casualty Annex
- Storm, Flood, High Wind Annex

Branciforte

Rules and Regulations

Board adopted and authorized containing the following:

- Authority and Scope of the Fire District
- Definitions
- Purpose and Organization of the Fire Dept.
- Personnel Job Descriptions and Responsibilities
- Rules of Conduct
- Parameters for Support Services (Fire Prevention)
- Disciplinary Action Parameters
- Performance Evaluation Criteria
- Grievances
- Personnel Assignment and Recall
- Provision for SOP Manual
- Personnel Procedures
- Employment Policies

Standard Operating Procedures (SOP)

The Standard Operating Procedures contain the following major categories:

- Personnel/Administration Policy
- Apparatus Maintenance Policy
- Emergency Scene/Response Procedures
- Safety/Decon Standards
- Radio Policies
- Training Fire Prevention

Personnel Manual

Board adopted document dealing with personnel issues and contains:

- Job Descriptions
- Employee Benefits

Inner Office Memos

Memos within the department to individual members of the department.

Central

Personnel Management System

A policy adopted by the Board of Directors dealing with personnel and contains:

- Authority
- Definitions
- Administration of the System
- Classification Plan
- Compensation
- Announcements, Applications
- Examinations
- Examination Process Review
- Employment Lists
- Appointments
- Probationary Period
- Leaves of Absence
- Personnel Shift and Location Assignment
- Corrective and Disciplinary Action
- Separation from Service
- Grievance Procedure
- Performance Evaluation
- Physical Requirements
- Employee Organizations
- Employee Conduct and Scope of Responsibility

- Uniform and Grooming Standards
- Residence Requirements
- General Orders

Standard Operating Procedures

Staff generated procedures that are approved by the Fire Chief. They are divided into five major divisions:

- Administration
- Operations
- Fire Prevention
- Training
- Suppression/Rescue

Special Interest Memos

Memos generated for immediate distribution to relay information that is temporary in nature.

General Orders

Staff generated for immediate release as an interim measure until an SOP can be generated.

Disaster Procedures

A staff generated procedure that deals with disaster response procedures. The flood annex is complete to date.

Scotts Valley

Rules and Regulations:

A policy document adopted by the Board of Directors. It contains:

- Authority and Scope of the Fire District
- Definitions
- Purpose and Organization of the Fire Department
- Personnel Job Descriptions and Responsibilities
- Rules of Conduct
- Parameters for Support Services (Fire Prevention)
- Disciplinary Action Parameters
- Performance Evaluation Criteria
- Grievances
- Personnel Assignment and Recall
- Provision for SOP Manual
- Personnel Procedures

- Employment Policies
- Compensation Allowance

Policy Manual:

Policies adopted by Board Resolution:

- Mutual/Auto Aid Agreements
- Hazardous Materials Response Vehicle Policy
- Purchasing Authorization and Policy
- Contractual Agreements

Standard Operating Procedures (SOP):

Operating procedures prepared by staff to carry out identified policies. It is broken into three basic categories:

- Administration (Personnel, Finance, etc.)
- Operations (Response, Training, Safety, etc.)
- Support Services (Fire Prevention, Haz Mat Administration)

Training Bulletins:

Information from the training division related to new methods, procedures, policies or techniques. A method of getting out information and holding personnel accountable for it. Broken down into ten categories:

- Fire Suppression
- Safety
- Apparatus
- Haz Mat
- EMS
- Rescue
- Management
- Investigation
- Prevention
- Miscellaneous

Employee Handbook

A handbook distributed to each employee that contains information and documents. It contains:

- MOU
- Benefit Packets and Information
- Information Sheets on District Programs
- Rules and Regulations
- Career Development and Training Information

Overview

Each agency has on file resolutions and ordinances that are policy authorizing documents.

The documents that exist for each agency parallel one another very closely. The titles vary, but the intent and content are very similar. Each agency has a document authorized by the Board of Directors that establishes policy. These deal with Board established policy related to personnel, finance and related issues.

Each agency has a procedure manual to carry out identified policies. They vary somewhat, but are similar in their intent. The operating procedures are generated by staff in most cases.

There are various methods of relaying information throughout the individual agencies. Various forms of orders, memos and bulletins are used to relay information and provide accountability.

Recommendation

It is recommended that the consolidated district blend the existing documents into the following documents:

Policy Manual

A Board adopted document that generates policy. The Board of Directors establishes policies related to the following:

- Mission, Purpose and Scope of the district
- Personnel System
- Rules of Conduct
- Finance (Procurement Procedures)

Standard Operating Procedures

Staff generated procedures that carry out district policy. Approved by the Fire Chief prior to implementation. May be generated by a program manager. The major category headings would be:

- Administration (Personnel, Finance)
- Incident Response (Response Procedures, Mutual/Auto Aid, ICS, Incident Communications, EMS, Hazardous Materials Response)
- Operations (Facilities, Apparatus, Maintenance, Safety)
- Training (Career Development, Maintenance Training, Standards)

- Fire Prevention (Codes, Public Education, Haz Mat Inspection, Investigation)

Master Plan

A document containing projections for the district based on current and projected trends and service levels.

Disaster Plan

A plan to serve as a guide during disasters or high activity periods. It should contain as a minimum:

- Administrative Annex
- Flood/Storm Annex
- Earthquake Annex
- Hazardous Materials Annex
- Large Scale or Multiple Fire annex
- Multiple Casualty Incident Annex

Internal District Communications

General Orders: Orders issued from district staff as an interim until a Standard Operating Procedure is generated and processed.

Special Orders: Orders issued from district staff that are temporary in nature (street closure, hydrant problem, etc.)

Training Bulletins: Bulletins issued by the Training Division that have training value. A method of issuing information about new procedures, equipment and processes that provides accountability.

Employee Handbook

The employee handbook is an information guide for use by all employees. It would contain benefit information, training information and information about the district for new employees as well as a reference for tenured employees.

Routing

All stations and offices will have a copy of the Policy Manual, Standard Operating Procedures, Master Plan, Disaster Plan, Special Orders, General Orders and Training Bulletins. Each employee would have a copy of the Employee Handbook.

Summary

While the documents of each district parallel each other, considerable time would be required upon consolidation to merge all of the documents into a common format. Additionally, many of the specific documents would change based on changes as a result of consolidating the districts.

The consolidation of these documents would be imperative to the success of the consolidated district. Common policies and procedures would be the foundation of district operations and business.

SUPPORT SERVICES/COMMUNICATIONS SECTION

History and Current Status

Emergency Communications Systems

All fire agencies involved in the consolidation study currently contract with Santa Cruz County Communications to provide dispatch services. Total group charges for this service in FY 1991/92 were \$61,083.00. Charges are as follows:

A/LSFD	CFPD	SVFPD	B-40
\$16,670.00	\$33,350.00	\$9,548.00	\$1,515.00

Fees are based on the number of calls into the 911 system for each agency.

Each fire station in the study group is equipped with a base station radio. CFPD and SVFPD have Motorola 9000 scanning radios with a minimum of 32 channel capability. B-40 is in the process of upgrading their six (6) channel non-scanning radio. All A/LSFD fire stations have non-scanning, 4-channel Motorola base stations which are compatible on the four primary fire frequencies.

All primary response apparatus in the study contain Motorola mobile radios with a minimum of 32-channel, transmit, receive and scan operation. Some reserve apparatus may have non-scanning 4-channel mobile radios.

All primary response apparatus in the study carry a minimum of one Motorola scanning portable radio. Two models are seen: the 120-channel Saber and the 16-channel MT 1000. Two districts supply additional non-scanning 4- or 6-channel radios on the apparatus for all on-duty people. Other districts supply additional radios in a "bank" in the Command Vehicle.

All members of the involved agencies are supplied with pagers and are routinely paged to incidents within their respective districts. There appears to be a 60/40 mix of Minitor I page/channel and Minitor II, 2 page/channel Motorola pagers respectively. All pagers are complete with chargers.

There are 23 separate dispatch pager tones used by the current districts. They are as follows:

A/LSFD	CFPD	SVFPD	B-40
350 All Stations	501 Station 1	557 Station 1	359 All Call
351 Station 1	502 Station 2	558 All Call	369 Chief
352 Station 2	503 Station 3	559 Station 2	379 2602
353 Station 3	504 Station 4		389 2601
354 Off Duty	506 Batt. Chief		
356 Chiefs	507 Invest.		
357 Mechanic	508 Chiefs		
358 Invest.	509 All Call		

Maintenance of the above radio systems for FY 1991/92 was \$21,109.00 broken down as follows:

A/LSFD	CFPD	SVFPD	B-40
\$5,923.00	\$6,200.00	\$6,482.00	\$2,504.00

As a note, SVFPD owns the license for the "Yellow" fire tactical frequency.

Office Communication Systems

Telephone

All of the districts use different business telephone systems. The one common denominator being AT&T long distance.

A/LSFD uses a Comdial system with which the office staff is not pleased.

CFD uses an AT&T Merlin system which is the most advanced small business system that company offers. The office staff states that they are happy with the product.

SVFPD uses an AT&T Spirit system with which the office staff states they are happy.

B-40 maintains a standard Pac-Bell, two (2) line telephone system.

The involved agencies own a total of fourteen (14) cellular telephones. Ten of these telephones are portable and can be used at remote locations outside of the vehicle.

A total of \$37,469.00 was spent on telephone services in FY 1991/92 as follows:

A/LSFD	CFPD	SVFPD	B-40
\$13,152.00	\$14,700.00	\$7,081.00	\$2,536.00

FAX

All of the district administrative offices have FAX machines for a total of four (4).

Copy Machines

The involved districts own a total of ten copy machines of varying sophistication.

Additional Communication Systems

Each fire station in the study has access to cable television. All service is provided by United Artists Cable with the exception of Capitola which is serviced by Sonic. Effort is being made by the County Training Officers to access this medium for training purposes.

Nine of the ten existing stations have VHS video players.

SVFPD owns a satellite down link for access to national fire and emergency training broadcasts.

All districts own standard slide and/or slide sync and overhead projectors. In addition, CFPD and SVFPD own slide projection systems with "dissolve" features.

CFPD and SVFPD also own title generators for minor editing of VHS VCR tapes.

Alternatives and Recommendations

Emergency/Support Communication Systems

Dispatch

Alternatives:

- Continue contract with Santa Cruz County Communications
- Operate a separate dispatch center for district fire operations
- Research a contract with an alternative dispatch center
 - Scotts Valley Police
 - Capitola Police
 - CDF
 - Private Company

Recommendation:

- Continue contract with County Communications. The system functions well and offers enhancements such as Emergency Medical Dispatch.

Radios

Alternatives:

- Present hardware and operations are functional and presently there is no need to change to another system.

Recommendation:

Use existing hardware. Possibly re-distribute existing hardware to match operational needs.

Paging Systems

Alternatives:

- Use existing pager tones and pagers
- Re-structure existing pager tones and use existing pagers.

Recommendation:

- Restructure existing pager tones and use existing pagers. See example below:

All Stations	Station Pager	Off Duty/PCF	Batt. Chiefs	Admin Chiefs	Fire Invest.
350	351 St. 1	558 Dist. 1	506	507	508
	352 St. 2				
	353 St. 3	359 Dist. 2			
	354 St. 4				
	355 St. 5	509 Dist. 3			
	356 St. 6				
	357 St. 7	354 Dist. 4			
	358 St. 8				
	359 St. 9				
	360 St. 10				

Note: Changing pager tones costs \$100.00 per pager. By keeping off duty and PCF pagers on the existing tones, total cost of "system changes" would be approximately \$1500.00.

Support Frequency

Alternative:

- The addition of a repeatered "support frequency" for coordination of apparatus, personnel, fire prevention, etc.
- Recommendation
- Investigate acquiring a business frequency for the above use.

Office Communication Systems

Telephone, FAX, Copy Machines

Alternatives:

- Final decisions as to Administrative and Fire Prevention office locations would dictate what type of telephone system would be most

desirable. Initial research indicates that a system such as the AT&T Merlin system could be used quite effectively.

- In addition, disbursement and use of existing FAX and copy machines also would be best at that time.

Additional Communication Systems

Information on this equipment is being forwarded to the Training Division for use in its project.

Summary

The present four fire districts are dispatched and coordinate their individual and mutual aid emergency response using the existing radio system. With few minor changes, the present system easily could accommodate the needs of a combined fire district. As stated, the addition of a support frequency would eliminate fire tactical frequencies being used for everyday logistical purposes.

Office system needs should be evaluated when administrative needs are defined more clearly.

SUPPORT SERVICES - SUPPLIES

History and Current Status

Office Expenses - 21121

All Fire Agencies involved in the consolidation study currently buy their office supplies from various suppliers. A/LSFD purchases the bulk of office supplies from Costco with immediate needs from Palace Art & Office Supply. CFPD purchases the bulk of office supplies from the Office Club with immediate needs from Palace Art & Office Supply. SVFPD purchases all their supplies from Palace Art & Office Supply. B-40 purchases all office supplies from Poor Richard's Office supply. The total group charges for office expenses in FY 1991/92 were \$40,637.00 as follows:

A/LSFD	CFPD	SVFPD	B-40
\$14,410.00	\$14,592.00	\$9,935.00	\$1,700.00

Telephone and Telegraph - 21141

All Fire Agencies use AT&T telephone service, but each of the agencies use different types of business telephone systems. The total group charges for telephone services in FY 1991/92 were \$37,469.00 as:

A/LSFD	CFPD	SVFPD	B-40
\$13,152.00	\$14,700.00	\$7,081.00	\$2,536.00

For a more detailed report on telephone systems, refer to the Communications Section report of the Support Service.

Maintenance of Structures/Improvements - 21367

All Fire Agencies continue to maintain and improve their structures on an annual basis. The total group charges for maintenance and improvements for FY 1991/92 were \$53,149.00 as follows:

A/LSFD	CFPD	SVFPD	B-40
\$8,930.00	\$31,248.00	\$10,471.00	\$1,900.00

Central Fire District completely remodeled its Station Four during FY 1991/92 due to earthquake damage and deterioration.

Utilities - 21601

All Fire Agencies use P.G.&E. for electric and gas but receive water from various Utility Districts which include the City of Santa Cruz, Scotts Valley and Soquel

Creek. The total group charges for these utilities during FY 1991/92 were \$61,054.00 as follows:

A/LSFD	CFPD	SVFPD	B-40
\$20,000.00	\$22,936.00	\$16,218.00	\$1,900.00

Maintenance - Office Equipment - 22111

All Fire Agencies have F.A.X. machines at the administration buildings, copy machines at the administration buildings with some stations having units as well, along with telephone systems which require maintenance on a continuing basis. The total group charges for the maintenance of office equipment for FY 1991/92 were \$14,304.00 as follows:

A/LSFD	CFPD	SVFPD	B-40
\$4,500.00	\$3,871.00	\$5,333.00	\$600.00

Small Tools - 22131

All Fire Agencies require the purchasing of small tools for apparatus and minor maintenance work around the stations and offices. The tools are purchased from various suppliers. The total group charges for small tools in FY 1991/92 were \$18,861.00 as follows:

A/LSFD	CFPD	SVFPD	B-40
\$8,085.00	\$1,657.00	\$8,519.00	\$600.00

Fuel - 21132

All Fire Agencies use both diesel fuel and gasoline in their vehicles. A/LSFD and CFPD fuel tanks are above ground Con-Vault type, B-40 and SVFPD are below ground single side steel. The total charges for fuel for FY 1991/92 were \$47,057.00 as follows:

A/LSFD	CFPD	SVFPD	B-40
\$21,000.00	\$14,770.00	\$9,287.00	\$2,000.00

The following is a breakdown of each fire agency's fuel tank capacity, location, suppliers, costs and other pertinent details:

Aptos/La Selva Fire

Location	Type	Quantity	Fuel	Cost
Station 1	Above Ground	1000 Gal.	Diesel	\$0.83
Station 1	Above Ground	1000 Gal.	Gasoline	\$1.21

Note: Fuel is purchased from Bay Area Distributors/Diablo Petroleum.

Branciforte Fire

Location	Type	Quantity	Fuel	Cost
Station 1	*Below Ground	350 Gal.	Diesel	\$0.66
Station 1	*Below Ground	350 Gal.	Gasoline	\$0.99

Note: Fuel is purchased from Sebek Distributors of Santa Cruz, the distributor for Santa Cruz County. Branciforte Fire District contacted Sebek and advised them they were a County agency and Sebek started delivery to them at the County rate.

* These fuel tanks may need to be removed and replaced due to the current State mandates on Hazardous Materials.

Central Fire

Location	Type	Quantity	Fuel	Cost
Station 1	Above Ground	1000 Gal.	Diesel	\$0.96

Note: Fuel is purchased from G. N. Renn Distributor of Salinas. Generally Station 1 and 2 use diesel from Station 1 with Stations 3 and 4 receiving their fuel from the City of Capitola on Kennedy Drive at a cost of \$0.81 per gallon. Staff vehicles utilize mostly gasoline, which is received at the City of Capitola on Kennedy Drive and the County of Santa Cruz Corporation Yard located on Brommer Street for a cost of \$1.04 per gallon.

Scotts Valley Fire

Location	Type	Quantity	Fuel	Cost
Station 1	*Below Ground	8000 Gal	Diesel	\$0.83
Station 1	*Below Ground	8000 Gal	Gasoline	\$1.14

Note: Fuel is purchased from Salinas Valley Oil. The fuel tanks are jointly shared by SVFPD and the City of Scotts Valley.

* These tanks may need to be removed and replaced due to the current state mandates on Hazardous Materials.

Household Expenses - 22304

All Fire Agencies incur expenses for janitorial services, supplies and other household necessities in order to sustain their clean and neat appearance. A/LSFD purchases supplies from Coast Paper Company. CFPD purchases supplies from Ledyards. SVFPD purchases supplies from Mid-Valley Supply. B-40 purchases supplies also from Mid-Valley Supply. The total group charges for Household Expenses during FY 1991/92 were \$31,281.00 as follows:

A/LSFD	CFPD	SVFPD	B-40
\$12,050.00	\$10,673.00	\$6,684.00	\$1,694.00

Clothing and Personal Supplies - 22351

All Fire Agencies purchase clothing and personal supplies for employees through various suppliers. Some of those suppliers are Dick Bruhn's, Work-Rite of Oxnard, Halprin Supply, Bricker-Mincolla of San Mateo, Red Wing, L. N. Curtis, Cascade Fire Equipment and others. The total group charges for clothing and personal supplies during FY 1991/92 were \$68,803.00 as follows:

A/LSFD	CFPD	SVFPD	B-40
\$25,832.00	\$20,613.00	\$19,528.00	\$2,800.00

Uniform Replacement - 22353

All Fire Agencies have a uniform replacement program. These uniforms are purchased mainly from Dick Bruhn's. The total group charges for uniform replacement in FY 1991/92 were \$47,028.00 as follows:

A/LSFD	CFPD	SVFPD	B-40
\$24,350.00	\$13,028.00	\$9,650.00	\$0.00
		*1	*2

Note:

- * 1. SVFPD - \$9,650.00 is located in Account #22355 Uniform Cleaning Allowance and is used for replacement and cleaning of uniforms.
- *2. B-40 - Money for this category is located in Account #22351 Clothing and Personal Supplies.

Laundry Service - 25137

All Fire Agencies operate differently in regards to laundry service. A/LSFD has fire retardent uniforms that can be laundered by each employee. CFPD uniforms require dry cleaning which is provided by Vapor Cleaners. SVFPD has fire retardent uniforms which are laundered by Kings Cleaners. B-40 Personnel are responsible for maintaining their own uniforms and receive no uniform allowance. The total group charges for laundry service in FY 1991/92 were \$16,041.00 as follows:

A/LSFD	CFPD	SVFPD	B-40
\$0.00	\$16,041.00	\$0.00	\$0.00
		*1	*2

Note:

- *1. SVFPD laundry service monies are located in Account #22355 Uniform Cleaning Allowance.
- *2. B-40 has a uniform replacement program which is in Account #22351 Clothing and Personal Supplies and has no cleaning service provided.

Special District Expenses - 25221

All Fire Agencies have special expenses due to the multitude of programs within. These expenditures are made through a variety of vendors who provide the item of need. The total group charges for Special District Expenses in FY 1991/92 were \$70,160.00 as follows:

A/LSFD	CFPD	SVFPD	B-40
\$5,170.00	\$51,287.00	\$11,674.00	\$2,029.00

Equipment - 85111

All Fire Agencies acquire equipment needed for their daily operations. This equipment is purchased through a large variety of suppliers who provide the needed items. The total group charges for equipment during FY 1991/92 were \$228,656.00 as follows:

A/LSFD	CFPD	SVFPD	B-40
\$50,349.00	\$21,503.00	\$228,656.00	\$35,000.00

Summary

If support services/supplies of the four districts were combined, the purchasing power would be great. Expenditures for FY 1991/92 were \$734,500.00 which could be reduced through seeking out contracts with vendors who give cost breaks on quantity purchases. All districts should look at joint purchasing in order to save money even if consolidation doesn't occur.

FACILITIES & EQUIPMENT

(Appendix B)

Fire Stations

Aptos/La Selva Fire

Three stations and nine (9) available apparatus bays (*Station I - 4 bays, Station II - 3 bays, *Station III - 2 bays). All stations can house at least three (3) firefighters and each has a kitchen, a day room, an office and an emergency power generator.

*Special Notes: Station I & III use one apparatus bay as a work-out area. There are two (2) unused bays.

Branciforte Fire

One station and * three (3) available apparatus bays. The station can house one (1) firefighter and it has a kitchen, an office, an emergency power generator and *NO day room.

*Special Note: Need to enclose one apparatus bay for a three (3) firefighter dorm and small day room.

Central Fire

Four stations and sixteen (16) available apparatus bays (*Station 1 - 5 bays, Station 2 - 3 bays, *Station 3 - 6 bays and *Station 4 - 2 bays). All stations can house at least three (3) firefighters (Station 1 has a dorm that can house six (6) firefighters and a separate bedroom). Each has a kitchen, a day room, an office and an emergency power generator.

*Special Notes: Station 1 uses one bay for apparatus mechanical work. Station 3 & 4 are in the area Flood Zone (Station 3 has been flooded twice). Station 4 was remodeled in 1992. There are three (3) unused bays.

Scotts Valley Fire

Two stations and seven (7) available apparatus bays (Station 1 - 6 bays, Station 2 - 1 bay). All stations can house at least three (3) firefighters (Station 1 can house eight (8) firefighters). Station 1 has two (2) offices and training room - Station 2 has one (1) office and each has a kitchen, a day room and an emergency power generator.

*Special Note: Station 1 was remodeled in 1986 and Station 2 was remodeled in 1990.

Summary

There are a total of thirty-five (35) available apparatus bays of which five (5) bays are not used. All stations can house at least three (3) firefighters, except Branciforte which can house only one (1) firefighter. This could be corrected by converting one bay into a dorm and a day room. Central's Stations 3 & 4 are in the area Flood Zone (Station 3 has been flooded twice). All stations are in good structural condition, some have been remodeled in the last five (5) years.

FACILITIES AND EQUIPMENT

(Appendix C)

Additional Property

Branciforte

- 310 Rider Ridge Road - 99 year lease, a cost of \$1.00 per year, 25'x12' lot, foundation only.

Central

- 3030 Porter Street, Soquel - Vacant lot next to Station 3 - currently rented.
- 4150 Jade St., Capitola - Vacant lot approximately 25,000 sq. ft. - possible administrative building site.
- 920 17th Ave., Live Oak - Three (3) bedroom house, unknown square footage, next to Station 1.

Scotts Valley

- Charles Hill Rd., Scotts Valley - Vacant Lot , 33,000 sq. ft.
- *Glenwood Drive (Marywood), Scotts Valley (5 miles north of Scotts Valley) - Vacant lot, 54,000 sq. ft. - property was donated for **fire station use only**.
- 265 Glenwood Drive, Scotts Valley - two buildings - 1) Three (3) bedroom house, 1100 sq. ft. 2) One (1) bedroom cabin, 500 sq. ft., cabin is currently rented, lot 42,000 sq. ft.

Summary

There are seven pieces of property. Five properties are vacant lots of which one is leased for 99 years and one can be used only as a fire station. One lot is currently being rented out. Two properties have residential houses on them. One is currently being rented out. The value of all the property is unknown at this time. The Jade Street property is of sufficient size and is centrally located for a future administration office building site.

FACILITIES AND EQUIPMENT

(Appendix D)

Special Information

Fuel Storage:

Aptos/La Selva

Station 1 - Two 1,000 gallon, above ground tanks, installed 1991, both gas & diesel.

Branciforte

Station 1 - Two 350 gallon, **Single wall underground tanks, gas installed 1970, diesel installed 1982.

Central

Station 1 - One 1,000 gallon, above ground tank, diesel only.

Scotts Valley

Station 1 - Two 8,000 gallon, **single wall underground tanks, both gas & diesel, installed 1982 - joint ownership.

* Special Note: Underground fuel tanks will not meet future requirements for underground fuel storage and fuel dispensing. Both do not have proper underground fuel tank monitoring system.

Exhaust Systems (Apparatus Rooms):

Central: All stations

Scotts Valley: All stations

Hose Towers:

Aptos/La Selva: Station 1

Central: Station 1 & 3

Scotts Valley: Station 1 - minor repairs needed

Training Towers:

Aptos/La Selva: Station 1 - Limited special use

Air Systems - SCBA's:

Aptos/La Selva:

Mobile Cascade Trailer - No on-site refill system

Central

Fixed refill system (high & low pressure) SCBA and Mobile Cascade Apparatus.

Scotts Valley

Fixed refill system (high & low pressure) SCBA bottles only.

Oxygen System:

Aptos/La Selva

Fixed refill system for D size bottles

EMS Special Equipment:

Aptos/La Selva

Equipped for all Advance Life support

Scotts Valley

Automatic defibrillator (3 units)

Rescue Special Equipment:

Aptos/La Selva

Air bag system (Vetter)
Hydraulic power tool (Holmatro)

Central

Air bag system (Vetter)
Hydraulic power tools (2 units - Hurst)

Scotts Valley

Air bag system (Vetter)
Hydraulic power tools (2 units - Hurst)

Additional Property

There are several pieces of property that could be used for a future administration office, training site or fire station. Also, there is property that could be sold to finance some of these projects.

Special Information

Currently, the underground fuel storage units at Scotts Valley and Branciforte do not meet federal, state and local requirements for fuel monitoring. They would have to meet the same requirements for vapor recovery fuel dispensing by 1994 and double wall fuel tanks by 1998. A general estimate for the upgrade:

Item	Scotts Val.	Branciforte	Total
Monitoring System	\$5,000 to \$7,000	\$1,000 to \$2,000	\$6,000 to \$9,000
Vapor Recovery	\$3,000 to \$5,000	\$3,000 to \$5,000	\$6,000 to \$10,000
Double Wall Tank	\$60,000 to \$70,000	Unknown	
Tank Removal	\$15,000 to \$20,000	\$7,000 to \$11,000	\$22,000 to \$31,000

Recommended at this time:

- The removal of the fuel tanks at Branciforte.
Cost: \$7,000 to \$11,000.
- The installation of a monitoring system at Scotts Valley to current requirements. Cost: \$5,000 to \$7,000.
- The evaluation of the use of an underground or above ground fuel system at Scotts Valley before 1994.

Scotts Valley's hose tower needs repair, but it is not a major problem.

All other equipment is either in good condition or compatible with each other.

MECHANICS/MAINTENANCE SECTION

History and Current Status

Introduction

This report covers a brief overview of each individual department's maintenance/repair program, vehicle replacement program, facilities and staffing and a recommendation on how the four (4) maintenance programs and facilities could be combined into a functional program for both an interim period and a long range program. This report does not cover all minor details which would have to be handled at a later date if/when the consolidation is approved and the committees are given the approval to finalize each program.

Summary

Each district handles apparatus repair, maintenance of small tools, nozzle repair, hose repair, etc., by utilizing three (3) methods: qualified shift personnel, forty-hour department mechanic or sending the equipment to an outside shop or repair facility.

Shop facilities for each district are out of a station. The tools and equipment range from being able to do light repairs to heavy mechanical, depending upon the facilities, the qualifications, experience level and the extent of each department's preventive maintenance program.

Inventory of replacement parts and filters for annual service is kept to a minimum, utilizing local automotive stores or shops for parts. Station mechanical shop facilities will handle individual district needs. However, it would not handle the consolidated district without consolidating all of the mechanical services.

Replacement programs for apparatus and miscellaneous vehicles varies depending on service demands, budgets and programs established. Large apparatus is normally kept in frontline service for a period between fifteen to twenty years, depending on type and quality of work. Sedans are normally replaced as they reach 70,000 miles. A history of costly repairs, design deficiency or changes in operations may result in a vehicle being replaced prior to its service life listed above. In some cases, departments have extended the service life of an apparatus by repowering a vehicle or refurbishing, depending on the condition of the vehicle.

Small tools, breathing apparatus and hose repair are handled by shift personnel, full-time mechanic or sent out to an outside repair facility, depending on the equipment or individual department program established.

Maintenance records are maintained by computer programs or on paper and file programs. The computer programs are two separate programs run by two different computers. At this time, the programs are not compatible.

Recommendation

After meeting with the department mechanics and reviewing some of the information contained in this report as well as looking at other fire departments of the same size as the proposed consolidated mid-county department (with ten (10) stations and approximately 54 fire department vehicles), we are recommending a "Two Phase Program" to handle apparatus maintenance, small tools and engine repair, some miscellaneous equipment, shop facilities and staffing requirements.

Phase I

Staffing: We recommend a minimum of two (2) full-time mechanics be in place when the consolidation becomes effective, working a five (5) day work week: one (1) master mechanic and one (1) assistant mechanic. One (1) shared clerical person to handle records, combining apparatus computer programs data and assistance in scheduling would be necessary as well.

This would eliminate the problem of having shift personnel perform maintenance, and result in less down time for apparatus, vehicles, small tools and equipment. Shift personnel could be better utilized in other areas of the department.

When a person can specialize on one job, greater productivity is achieved with fewer errors and the individual is able to contribute more to developing his/her field. The fire service should be no less concerned than business in quality and quantity of production.

Shop Facilities: There are two plans we recommend for an interim period of two years.

- Plan #1 is to locate a repair garage that is for rent with bays, office, vehicle hoists and enough room to park apparatus and staff vehicles which need service and repair.

Note: Engine companies would utilize a reserve apparatus when apparatus is being repaired or serviced. Staff personnel would drop off a vehicle and pick up a reserve sedan.

- Plan #2 is to utilize a current fire station in conjunction with an engine company as a temporary facility for mechanical repair. The recommended stations: Central Fire Station #1 or Scotts Valley Station #1. This would be dependent upon the operational plan and staffing of stations.

Apparatus and Miscellaneous Vehicles: Maintain the current inventory until further review is done, taking into consideration the operational response plan, consolidation of a vehicle replacement program and review of each apparatus as to life expectancy and condition.

Small Engines: Tools, station generators and small engines could be serviced and repaired by the mechanical shop. Some specialized equipment would be handled by employees qualified as certified service personnel. As an example: Breathing Apparatus, Hazardous Materials Equipment, Cliff Rescue Equipment and Ropes, etc.

Phase 2

Staffing: Maintain the staffing level as outlined in Phase #1.

Shop Facilities: Build a new mechanical shop at one of the available properties owned by the consolidated fire district.

The building would have to have a minimum of three drive-through apparatus bays. One bay would have to be long enough to handle a minimum of a 75 ft. aerial ladder. Bay height would have to be high enough to place an engine on a hoist and raise 6 to 8 feet off the ground, which would enable mechanical personnel to work under the vehicle. At this time, the mechanics are repairing vehicles without a hoist (causing back and neck strains). Additional down time for apparatus occurs because of poor access to the undercarriage and the time wasted to manually jack-up an engine with a portable hydraulic jack.

A butler building would be the most cost effective building to build and would provide versatility, allowing room for expansion of additional bays and the ability to change its function. The shop would have to contain: a storage area large enough to hold tires, oil, parts, filters, waste oil and antifreeze, etc., a work bench area to handle drills, welders, specialized equipment and an office for records and reports.

The outside grounds area must contain: an area for steam cleaning engines with a waste collection, pump test pit (large enough to handle 1500 gpm pump). Engine companies could perform annual pump tests having a mechanic nearby when problems arise. A parking area large enough to park engines and sedans would be essential.

Conclusion

Building a full service shop with full-time mechanics would provide the consolidated district with the best cost savings and enhance repair and fabrication abilities. There would be less down time for repairs. Apparatus would not be taken to an outside shop (except on occasion, depending on the repair). The District would not be the victim of an outside time schedule which could mean weeks before apparatus is repaired and would not pay current shop rates of approximately \$65.00 - \$70.00 per hour. The quality of work performed would be a major benefit in having an on-site service center. The mechanics would be able to focus on just fire apparatus and equipment.

An additional benefit would be having a mechanic on call for major breakdowns or to respond to greater alarm fires for the purpose of monitoring the engines' performance (trouble-shooting and repairing breakdowns on the spot, thereby keeping equipment on line for the emergencies).

The possible cost savings in the future, by having service capabilities, would enable the District to reduce its fleet size, eliminating the need for a large reserve fleet of apparatus. This would depend on service level and emergency responses. An additional future consideration would be to contract out to other fire departments to have a countywide J.P.A. service center for fire apparatus repairs. Doing so could mean a cost savings for all districts who choose to participate.

We do not recommend contracting out to a county or city facility for maintenance repairs. There are other fire districts currently contracting to county service centers and having major problems with over extended down time for repairs. The quality of repairs performed and the service life of apparatus has been reduced causing reserve apparatus to be used more often as front line apparatus.

Aptos/La Selva

Apparatus maintenance is performed at Station 1. The maintenance is performed by one (1) Master Mechanic, full-time forty-hour per week position with on-call responsibilities. Both major and light mechanical work is performed by the mechanic. When time allows, the mechanic will repair or install equipment at station facilities. Small engines and tools are repaired and serviced at Station 1 by the Master Mechanic.

Hose and SCBA repairs are handled by on-duty shift personnel.

Branciforte

Apparatus maintenance is performed at the station. Shift captain performs light mechanical maintenance; major mechanical is shipped to an outside repair shop.

Central Fire

Apparatus maintenance is performed at Station 1. The maintenance work is performed by one (1) mechanic, twenty-four (24) hour shift, assisted by two (2) other on-duty shift personnel (firefighter and captain). The mechanic is the only person who receives differential pay for mechanical work. The mechanic completes both major and light repairs and is called back to work for emergency repairs when necessary.

The mechanical shift is still responsible for emergency response as an engine company and for other engine company responsibilities, e.g. fire prevention, training, etc.

Hose, SCBA, hand light, flashlight and helmet repairs are handled by on-duty shift personnel.

Summary:

Listed below is the number of vehicles we would have as a combined agency and other miscellaneous information.

Engines:	(18)	Cascade Trailers:	(1)	
Water Tenders:	(4)	Cascade/Light Unit:	(1)	
Rescue Units:	(2)	Haz Mat Van:	(1)	
Rescue/Amb:	(2)	Staff Vehicles:	(17)	
Brush Units:	(2)	Command Vehicles:	(3)	
Utility Units:	(1)	Public Education:	(1)	Trailer
Trucks/Engine:	(2)		(1)	Public Ed. Fire Engine
Equipment Total:	54			

Apparatus Replacement Schedule

Aptos/La Selva Fire District

	Purchase	Reserve	Actual	F.L.	Surplus
Engines					
#1-Seagrave	1982	1992	1993	11 yrs.	1997
#2-Van Pelt/Ken.	1985	1995	1989	4 yrs.	2000
#3-Seagrave	1986	1996	1998	12 yrs.	2001
#4-Seagrave	1989	1999	2003	14 yrs.	2004
#5-Seagrave	1993	2003	2003	10 yrs.	2008
#6	1998	2008	2008	10 yrs.	2013
#7	2003	2013	2013	10 yrs.	2018

- Engines: 10 yrs. frontline service and 5 yrs. reserve service.

	Purchase	Reserve	Actual	F.L.	Surplus
Water Tender					
#1-Van Pelt/Int'l.	1986	1996	0		2001
#2	1996	2006	0		2011

- Water Tender: 10 yrs. frontline service and 5 yrs. reserve service.

	Purchase	Reserve	Actual	F.L.	Surplus
Rescue/Amb					
#1-Braun/Ford	1986	1992	1991		1998
#2-Road RescFord	1991	1997	0		2003
#3-	1997	2003	0		2006

- Rescue/Ambulance: 6 yrs. frontline service and 6 yrs. reserve service.

	Purchase	Reserve	Actual	F.L.	Surplus
Command Veh					
#1-Ford Bronco	1989	1994	0		1997
#2	1994	1999	0		2002

- Command Vehicle: 5 yrs. frontline service and 3 yrs. reserve service.

	Purchase	Reserve	Actual	F.L.	Surplus
Staff Vehicles					
#1-Chevy PU (FWD)	1980	1986	1985		1990
#2-Olds Sedan	1984	1990	1988		1994
#3-Ford Sedan	1988	1994	0		1998
#4-Ford Bronco(FWD)	1989	1995	0		1999
#5-Ford Bronco(FWD)	1990	1996	0		2000

- Staff Vehicles: 6 yrs. frontline, then either sale or 3+yrs. reserve use.

Central Fire Protection District

Apparatus Replacement Schedule Standard: 11/92

Engines:	20 Years of Age
Water Tenders:	25 Years of Age
Utility Vehicle	25 Years of Age
Aerial Ladders:	25 Years of Age
Staff Vehicles:	7 Years of Age or 70,000 Miles
Re-Power Completed:	10 Years Added to Service Life

Unit	Year	Description	Age	Retire	Review for Down Grade
13	1965	Crown 1250 GPM Type 1 E	27	1994	1992 Reserve * Note 1
14	1970	Crown 1250 GPM Type 1 E	22	1991	1992 Reserve * Note 2
60	1971	Dodge/Rescue Type 2 R	20	1996	1992 On Line * Note 3
17	1974	Mack 1500 GPM Type 1 E	18	1994	1992 Reserve
50	1974	Inter 250 GPM Type 3E	18	1994	1992 On Line * Note 4
70	1974	Crown 75 Ft/Aerial/1500	18	1999	1995 Review / On Line
16	1983	Mack 1500 GPM Type 1 E	9	2003	1998 On Line
15	1985	Beck 1000 GPM Type 2 E	7	2000	1992 Reserve * Note 5
60	1987	Chevy/Light/Cascade	5	2012	2007 Review / On Line
10	1988	Pierce 1250 GPM Type 1 E	3	2008	2002 Review / On Line
40	1991	Freight 1000 GPM Type 1 WT	1	2016	2011 Review / On Line
19	1992	Pierce 1250 GPM Type 1 E	0	2002	1997 Review / On Line
20	1992	Pierce 1250 GPM Type 1 E	0	2002	1997 Review / On Line
18	1949	Mack Engine Public Ed	43	-----	-----

Staff Vehicles: Sedans, Vans, Pick-Up

Unit	Year	Description	Mileage	Age	Retire	Review for Down Grade
94	1986	GMC/Command	70000	6	1992	1992*Note6
90	1987	Chevy/Sedan	53200	5	1994	1993
92	1987	Chevy/Sedan	52010	5	1994	1993
91	1989	Chevy/Van	24415	3	1996	1995
93	1989	GMC/Pick-Up	19111	3	1996	1995
96	1991	Ford/Sedan	23492	1	1997	1996
97	1991	Ford/Sedan	12857	1	1997	1996
98	1992	Ford/Sedan	00125	1	1998	1197

Notes:

1. 1965 Crown was re-powered in 1984 which adds 10 years to its service life (its retirement date 1994); however, at this time, we feel another 5 years could be added which would give this engine 32 years of service. The apparatus is in good condition.
2. 1970 Crown was re-powered in 1981 which adds 10 years to its service life from the re-power date to 1991. At this time, we feel another 5 years could be added; the apparatus is in good condition.
3. The rescue unit is now being modified to carry the following equipment: Haz Mat decon equipment, hurst tool, minor heavy rescue equipment and arson investigation equipment. The purpose is to see if this piece of equipment could be utilized to a greater extent. If the run response cannot be justified, it might be advisable to delete this apparatus from the fleet.
4. 1974 International Type #3 will be ready to be retired in 1994. There is a consideration of retiring Unit #15 and #50 and replacing these pieces of apparatus with one (1) Type #3 engine, reducing the fleet by one (1) Type #2 engine and recouping up some of the cost by selling both engines.
5. 1985 Beck was built on a commercial chassis and has not been a reliable piece of apparatus due to its break-downs, stress on the frame causing the water tank to crack, pump components to shift and it has a Detroit diesel engine which has been discontinued due to mechanical problems. This apparatus has been placed in a reserve status in an attempt to obtain at least fifteen years of service.
6. Vehicle should be replaced according to the replacement program. Due to 1992/93 budget shortfall, there is consideration of running this vehicle to 90,000 miles.