

Ad Hoc Public Safety Committee Report – Background Completed August 2005

Issue #1:

The level of service, deployment capabilities, and staffing levels of the fire department appear inadequate.

A standard for response to fire incidents is described as follows in the City budget:

- Provide a first-due, multi-hazard emergency response arriving on-scene within 5-minutes of notification, minimizing the loss of life, damage to property and the environment for 90% of all incidents.
- Provide a minimum of 1 Chief Officer and six firefighters for initial attack to structure fires within 5-minutes of dispatch.
- Provide a minimum of 1 Chief Officer and fourteen firefighters for sustained attack to structure fires within 20-minutes of dispatch.

NFPA Standard 1710, a national consensus standard, states; "...fire departments shall establish a four-minute response time for the first due Engine Company and an eight-minute response time for a full alarm assignment." National consensus standards require that the first unit should arrive on-scene within 4-minutes, 90% of the time. Currently, the Lompoc Department arrives within 5-1/2 minutes, 65 percent of the time.

Consensus standards should be considered as the MINIMUM level of service in a community since they reflect the thinking of a broad sector of public safety providers.

The Occupational Safety and Health Act, 29 CFR 1910 "2 in, 2 out rule" is a federal law that requires two firefighting personnel to be outside a structure prior to two other firefighters making entry into a fire building: *"...prior to entry being made into a structure that is immediately dangerous to life and health (IDLH) there must be a minimum of two firefighting personnel working inside of a structure as a team and a minimum of two firefighting personnel be on standby outside the structure to provide assistance or perform rescue."*

The National Institute for Occupational Safety and Health investigates firefighter fatalities in the United States. NIOSH has identified the violation of the "2 in, 2 out rule" as contributing factors in firefighter death investigations. Federal and state OSHA enforcement officers usually follow up this finding with punitive action.

The Fire Department currently has three personnel on Engine 2 and occasionally four on Engine 1, which requires both apparatus to arrive at a structure fire in Station Two's area (all structures north of Pine Avenue) prior to making entry. When Engine 1 is staffed with three firefighters, the same condition exists in the entire City. The ability to comply with this standard is exacerbated by the number of overlapping calls for service.

The Fire Chiefs' report to the City Administrator (December 15, 2004) enumerated 42 overlapping calls. In the first quarter of 2005, there were 81. "Overlapping calls" occur about 400 times each year (an average of a little more than one every 24-hours).

This phenomenon creates a void in the emergency management system and puts the public visitors to the City and other public safety personnel at risk. The frequency of overlapping calls currently exceeds more than twice the established 10% variance (280 would be within the allowance) that is described in the budget statement.

The incidents below demonstrate the day-to-day impact created by an understaffed fire department.

Friday, March 4, 2005:

At 7:36 pm, a DUI driver struck a parked vehicle near a school on South A. LPD, LFD and an ambulance were dispatched.

There was no ambulance available in the City so, County Fire Medic 51 was dispatched from their station.

At 7:45 pm, a person reported difficulty breathing and chest pain on North M. LPD, LFD and an ambulance were dispatched.

At this time all City fire units, several LPD units and the only ambulance in the valley were committed. There was no ambulance available for the call on M Street.

Tuesday, April 12, 2005:

At 0700 hrs, E-51 had a fully involved structure fire on Via Cortez in Vandenberg Village.

County E-51, Lompoc E-2A, Vandenberg AFB and County E-31 (Buellton) responded. Additional response included County E-24 (Los Alamos), County E-18 (Gaviota) and an AMR ambulance.

This left Lompoc with only E-1 in the City. Vandenberg AFB was contacted for coverage but they would only send an engine if we had a call.

At 0720, E-1 was dispatched to a medical emergency. This left the City with no engines or ambulances available. Any additional calls would have been refused or had a response time of over 15 minutes.

Both Truck-1 (brakes) and E-2 (electrical wiring) were out of service for mechanical repairs.

E-1 cleared their call at approx. 0740. This means the city and valley were completely uncovered for 20 minutes.

E-2 did not return until after 0815 hrs. Truck-1 was returned from the City yard at approximately 0900.

Automatic aid is commonly used to augment fire services. Rural areas (such as Vandenberg Village, Mission Hills and Mesa Oaks) are more likely to require aid since the response area for the County fire department is dramatically larger than municipal fire departments like Lompoc and the County fire department is primarily located to protect "state responsibility" and wild land fire threat areas.

The Fire Chiefs' report to the City Administrator (December 15, 2004) enumerated 118 occurrences when the County provided automatic aid and 65 occurrences when the City provided the same assistance in the first 11 months of 2004. In the first quarter of 2005, the City received aid 35 times and provided it 14 times, which appears consistent with the previous year.

A typical residential structure fire requires a minimum of 15 firefighters on scene to control the incident in a safe and effective manner. Achieving that number of firefighters at an emergency would require City engines (7 fire fighters), one County engine (4 fire fighters) and one Vandenberg AFB engine (4 fire firefighters). This assumes that all of these resources are available for immediate response when the fire occurs.

Minimum Tasks Necessary at a Moderate-Risk Residential Structural Fire		
Task	Fire Fighters Assigned	Unit Assigned
Attack line	2	First to arrive - Lompoc
Pump operator	1	First to arrive - Lompoc
Rapid Intervention Team	2	First to arrive - Lompoc
Water Supply	1	First to arrive - Lompoc
Search and Rescue	2	Second to arrive - County
Ventilation	2	Second to arrive - County
Utilities shut off	1	Third to arrive - VAFB
Backup Line	2	Third to arrive - VAFB
Safety Officer	1	Assigned - VAFB
Command	1	Battalion Chief - Lompoc
Total	15	

Currently the fire department is not staffed to handle concurrent emergency incidents effectively without a heavy reliance on mutual aid assets from either the County or Vandenberg AFB. Fires in higher risk buildings require a larger response.

Regional comparisons show a ratio of firefighters per 1000 population to be .8 to 1.25. The current average in Lompoc is 0.58 to 1.000 which is well below the regional average. This is the condition prior to any more growth!

City	Population	Ratio to population	Paid Fire Fighters	Stations
<i>Lompoc (2000 census)</i>	<i>41,103</i>	<i>.58</i>	<i>25</i>	<i>2</i>
Gilroy	41,464	.97	40	3
Murrieta	44,282	.95	42	3
Newark	42,471	1.2	51	3
Palm Desert	41,155	1.4	59	3
San Bruno	40,165	.80	35	2
San Luis Obispo	44,174	1.25	55	4

Why are response times and staffing levels so important to the outcome of a fire incident?

- Flashover (the point at which smoke particles in the air are ignited) can occur within 6-10 minutes of a fire's start. If fire apparatus and firefighters are on scene and can intervene prior to flashover occurring, property loss is decreased; and, the risk to civilian and firefighting personnel is reduced.

Why is flashover important?

The Significance of Flashover	
Pre Flashover	Post Flashover
Limited to one room	May spread through structure
Requires smaller attack line	Larger or multiple lines required
Search and rescue easier	Complicates search and rescue
Initial assignment can handle	Additional equipment required

The fire department workload has steadily increased along with the population; however the staffing level has gone unchanged for over a decade.

	1986	1992	1995	2000	2004
Responses	1,211	1,524	1,701	2,153	2,828
Population	30,182	37,649	39,526	41,403	42,500
Staff Level	25	25	25	25	25
Ratio to Population	.82	0.66	0.63	0.60	0.58

Recommendations:

1. Increase fire department staffing to a ratio of 1:1,000. This would require an increase of 16 additional fire personnel based on the 2000 census. This will cost approximately \$87,000 per employee (\$1,392,000 per year) plus recruitment, training and equipment. In order to be effective the new employees may require an additional engine or heavy rescue unit at a cost of about \$300,000. Space to house the additional equipment and employees would cost about \$250 a square foot.
2. Develop plans to accommodate adequate staffing levels consistent with the population expected at General Plan build out levels. The City is growing, hundreds of new housing units, thousands of square feet of commercial space and new industries are settling into vacant spaces. The addition of 16 people in recommendation #1 is to bring staffing up to the current population level. A measured plan to add staff at critical growth points is essential if the City is to avoid the condition that exists today.

3. Consider adopting National Fire Protection Association Standard 1710, "*Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments*" to assure firefighter and the public's safety. This standard was developed by a committee of fire agencies, city administrators and insurance companies. It is a consensus standard, meaning it is a standard that reflects the thinking of a large cross section of American cities concerning the minimum emergency fire and medical response levels for urban areas.

4. Change City standards to conform to the 4-minute industry standard arrival times at 90% of the incidents. Meeting this requirement will require additional staff and equipment.

Issue #2:

The level of emergency medical services (EMS) appears inadequate.

Although more personnel and equipment are needed for fire responses, the greatest number of fire department emergency responses throughout the United States is for medical emergencies. Last year the Lompoc Fire Department responded to 2,282 calls for service, of those over 2,026 (88%) were for EMS.

A standard for response to fire incidents is described as follows in the City budget:

- Provide a first-due, multi-hazard emergency response arriving on-scene within 5-minutes of notification, minimizing the loss of life, damage to property and the environment for 90% of all incidents.

NFPA Standard 1710, a national consensus standard, states; "The fire department's EMS for providing a first responder with Automatic External Defibrillator shall be deployed to provide for the arrival of a first responder with AED company within a 4-minute response time to 90 percent of the incidents. When provided, the fire department's EMS for providing Advanced Life Support shall be deployed to provide for the arrival of an ALS company within an 8-minute response time to 90 percent of the incidents."

There were 398 overlapping calls for service in 2004. If we assume that the established averages of 88% were emergency medical calls then the number of occurrences that the response time exceeded the industry standard would have been 350 times (17%). While the City standard allows a longer response time the fire department failed to meet it at more than twice the allowable deviation.

The Fire Chiefs' report to the City Administrator (December 15, 2004) enumerated 3 instances when the AMR ambulance arrival time exceeded 8-minutes (the nationally accepted consensus standard) during November 2004.

NFPA Standard 1710, a national consensus standard, states; "The five basic functions within a career fire department EMS system shall be as follows:

1. Initial response to provide medical treatment at the location of the emergency first responder with Automatic External Defibrillator capability or higher;
2. Basic Life Support response;
3. Advanced Life Support response;

4. Patient transport in an ambulance or alternative vehicle designed to provide for uninterrupted patient care at the ALS or BLS level while en route to a medical facility; and,
5. Assurance of response and medical care through a quality management program."

According to the American Heart Association, irreversible brain damage (biological death) begins to occur between six to eight minutes after cardiac arrest. However, more recent studies have shown that the 8-minute target is not optimum for the defibrillation response interval; rather the 4-6 minute window is a much higher predictor of survivability.

The LFD currently participates in a pilot program to provide Emergency Medical Service, Expanded Scope firefighters on each engine company. The City did not sponsor or fund the

firefighters who acquired this training; however this increased level of service has resulted in the saving of several lives since its inception.

EMS functions can be provided using the "automatic aid" concept; however the City is then dependent on the availability of these outside resources. There are numerous instances throughout the year when there are no automatic aid resources available to the City and weekly occurrences when the nearest ALS ambulance is more than the allowable 8-minute response time away in either Solvang or Santa Maria.

American Medical Response (AMR) is a for profit emergency medical service provider. Several ALS ambulances are stationed throughout Santa Barbara County. The County fire department also operates an ALS ambulance at fire station 51.

AMR frequently moves the ambulance from Lompoc to other areas such as Solvang and Santa Maria, which have higher call volumes and thus more opportunity to earn profit. The county fire department ambulance serves the unincorporated areas and may be committed to other medical emergencies when needed.

Recommendations:

1. The City should provide dedicated and reliable ambulance services. This service can be provided by a City staffed ambulance, a contract with American Medical Response, or a contract with the Santa Barbara County Fire Department.
2. The City should train and provide Emergency Medical Service, Expanded Scope firefighters on each engine company. This is a valuable life saving tool and the City should sponsor and expand this program and provide a pay incentive for fire fighters already qualified to provide this service. The City should acknowledge the value of this program and assure that an adequate staff of trained fire fighters is available on each engine company.

Issue #3:

The level of service, deployment capabilities, and staffing levels of the police department appear inadequate.

The LPD responded to 20,344 calls for service in 2004. Although the LPD does not document the number of overlapping calls that occur, the phrase “any unit to break” can be heard frequently over the LPD radio frequency. The Department’s last workload analysis was completed in 1997. At the time, it was found that the existing patrol staffing levels failed to meet Peace Officers Standards and Training (POST) protocols 25% of the time.

Since 1999, the activity ratio per officer has increased from 47 per month to 63 in 2003. In 2004, the ratio increased to an average of 94 activities per month, with a high of 124. As the workload increased, the ability to solve crimes appears to have been reduced.

Recent increases in “gang related” violent crimes tax an already overburdened police department create an uneasy atmosphere in the community and reflect poorly on the public image of the City of Lompoc.

In 2004, the patrol division referred 3,989 cases to detectives for further investigation. Of these, 37% were “cleared”, meaning that the case was resolved. This compares unfavorably with a clearance rate of 72% in 1998.

The message is simple – if you commit a burglary, vandalize a business or private home, steal a car or bicycle or steal a purse you have a good chance of avoiding capture by the police. The inability to resolve criminal issues may be the result of insufficient staffing levels.

Police Department staffing levels:

City	Population	Ratio to population	Sworn Police Officers
<i>Lompoc</i>	<i>41,103</i>	<i>1+</i>	<i>49</i>
Hanford	41,686	1+	49
Newark	42,471	1+	45
Palm Springs	42,807	2+	92
San Luis Obispo	44,174	1.5	61

LPD currently has 49 fulltime and 2 half-time sworn officers. Of these, 31 are assigned to patrol, 11.5 are assigned to investigations (detectives, narcotics and gang enforcement), 3.5 are assigned to the Community Services Section and the remaining 4 are managing the department. The ratio of officers to citizens in Lompoc is 1.16, the lowest in Santa Barbara County.

In addition to sworn officers, there are 21 fulltime and 2 half-time support personnel (jailers, dispatchers and office staff), 19 hourly employees (including crossing guards and translators), 44 citizen volunteers and 13 police explorers. Thus, the unpaid members (57) exceed the number of sworn officers. While the non-sworn personnel can successfully handle many tasks, the real crime fighting must be done by sworn police officers that have the authority to arrest and detain the suspects of criminal activity.

LPD response times are directly related to the number of officers available on patrol when an incident occurs.

2004 Critical Events		
Type of incident	Occurrences	Avg. response time
Person with gun	15	1.7 minutes
Gang fight	33	2.2 minutes
Suicide attempt	43	2.7 minutes
Robbery	19	4.1 minutes
Domestic disturbances	1,000	4.4 minutes

2004 All Service Calls		
Type of incident	Occurrences	Response time
In progress	6,431	3.9 minutes
Just occurred	550	3.6 minutes
Urgent call	9,307	6.1 minutes
Non-urgent call	4,037	6 minutes

The Ad Hoc Public Safety Forum was unable to determine what constituted an adequate response time for police officers. However, a determined and aggressive assailant can cause substantial pain and suffering in the 4.4 minutes that it takes to respond to domestic violence situations.

We recognize the City Council has recently supported the establishment of a permanent gang and drug enforcement unit to closely monitor gang/drug activity, serve drug and gang-related arrest and search warrants, enforce court ordered gang injunctions and identify and to arrest gang members and drug suppliers and users who commit crimes. We encourage the City Council to be pro-active and to continue their support of these kinds of effective crime fighting tools.

Recommendation:

1. The City Council should establish acceptable limits for staffing the police department. As a minimum, a goal of 75% clearance ratio should be established in the detective division and a patrol strength that is sufficient to handle two in-progress violent crimes responses should be provided.

Issue #4:

Fire and Police Department facilities appear inadequate.

Both the fire and police departments require adequate administrative, training and operational workspace to accomplish their assigned missions.

Fire department facilities are overcrowded, some fire and rescue equipment is stored outside where it is subjected to adverse environmental conditions and there is no training facility available for skills maintenance training. Growth of the City to the east, west and north may result in extended response times and place those areas outside the currently established 5-minute response time.

The fire department does not have a budget that facilitates the purchase of new equipment. Community service groups have donated specialized equipment, such as a thermal imager, which is a necessary tool to assure that fires are located and extinguished prior to fire equipment departing the location.

The police department has outgrown the facility that was constructed in the late 1980's. The facility has several issues: 1) insufficient space to store evidence and equipment, 2) converted closets to offices, 3) insufficient meeting space and, 4) inadequate parking. These crowded conditions have an effect on the performance of basic fire and police functions.

The Police Department does not have a budget that facilitates the purchase of all necessary new equipment. Local citizens and community service groups have donated some specialized equipment, such as a K-9, which are necessary tools to provide an effective level of police service in combating crime in our community.

These crowded conditions have an effect on the performance of basic fire and police functions.

Recommendations:

1. The City should provide adequate facilities to house current and future public safety functions. The City Council should direct the City staff to provide recommendations and develop cost estimates for facilities that will be adequate to support current and future operations. The focus of this study should be needs that are expected to meet the General Plan build-out levels.
2. The City Council should then assure that future budgets reflect line items that incrementally improve fire and police facilities to meet current and future needs. Construction costs may exceed \$250 per square foot and additional land may be required for the placement of buildings.

Issue #5:

Funding to support public safety improvements appears inadequate.

Seventy-two percent of the City General Fund budget is dedicated to the public safety function. The current level of dollar support for police, fire and EMS is not adequate to support the response level of each function.

The City has significantly less General Fund revenue than other cities in the region. When compared to San Luis Obispo (population 44,174) Lompoc has 1/3 the sales tax, half the property tax and 1/4 the transient occupancy tax available for the General Fund.

In 1998 the City Council proposed Measure L-98, a 2½-cent utility user's tax, as a method of adding monies to the General Fund. The public could not be convinced that the funds (nearly \$1M) would be used exclusively for funding public safety improvements and it was defeated by a wide margin. The City responded by eliminating a dozen fulltime positions and negotiated a 5% salary concession from the remaining employees.

A consensus of taxpayer advocates seems to agree that when a service is provided, the people who benefit from that service should pay for it. All citizens benefit from a strong public safety infrastructure, however not all citizens pay utility or property taxes, therefore the most equitable source for funding may be some form of consumer (sales) tax.

Citizens may not be convinced to support a tax increase for public safety unless there is some measure of assurance that the funds won't be used by a future City Council for other "high interest" projects. In other words any request for a tax increase would have to include provisions to guarantee that police, fire and EMS funding would be increased and that the increase would be protected from future cuts.

Recent (2003) changes to state law (SB566) allow a city or county to place a local transaction and use tax proposal before the voters and earmark it for a specific purpose. This action requires a 2/3-voter approval. While this threshold is high, it is not unachievable and this approach has been successful in other areas of the state.

The City finance director indicated that a transaction tax would not penalize local merchants since Lompoc "imports" more goods than it exports (e.g. more high ticket items are bought outside the City limits and returned for use in Lompoc). Under this type of taxation a new car buyer from Lompoc who purchased their vehicle in Oxnard would pay the sales tax and it would be returned to Lompoc, not stay in Oxnard.

Recommendations:

1. The City Council should request that the staff prepare cost estimates for staffing increases and then recommend a sales tax increase measure specific to Public Safety for a future election. The alternatives to a sales tax increase may be the suspension of all other General Fund services (e.g. parks, library, etc.); however this is not prudent and would meet considerable resistance from City residents. Another alternative may be to contract police and fire services to the County. This option may prove to be more costly than using City staff and the ability of the City Council to provide oversight may be limited.

2. The City Council should request that the staff prepare cost estimates for the repair and/or construction of adequate facilities.

Issue #6:

Pre-retirement age attrition may impact the delivery of effective public safety services.

Current state law allows a public safety employee to retire at 50-years old. This provides a "service life" of less than 30-years per employee. When police officers or firefighters leave prior to retirement age it creates an adverse impact on public safety.

New candidates require a minimum of 1-year on-the-job to become familiar with the specific policies of the City of Lompoc, the tactics and strategies used by these agencies and to gain sufficient experience to handle the day-to-day challenges of each job.

When employees resign prior to retirement it leaves an experience void that is difficult to replace. Even if experienced employees are acquired from another agency it still takes about 1-year before they become fully self-sufficient.

Fifty-one officers have left the LPD in the last five years, which represents about 10% of the authorized staff. 29 of those left for another agency, the bulk of them to the Santa Maria PD. The net experience loss to Santa Maria from the LPD was 114.2 years.

Training a new employee requires that an experienced "training officer" be assigned to guide and develop the new member. So, when staffing levels include one or more trainees the number of available resources is actually reduced to a ratio of two on-duty employees for each staff position.

It should be noted that historically there has never been an absence of a large "qualified candidate" pool for each open public safety position. Typically, the ratio is 100, and sometimes 1,000 to 1 for each open position.

The challenges of public safety, work schedule, pay and benefits are attractive to many people. The issue is not the absence of qualified resources; it is the retention of experienced personnel who are familiar with the City, its people and the challenges of providing public safety services in our community.

Recommendation:

1. Develop recruitment mechanisms to become and remain competitive in the public safety employee marketplace. The City Council should request that the staff provide a summary of the reasons employees resign from the police department or choose lateral transfers to other agencies. The staff should be directed to provide recommendations on how to remain competitive in the marketplace and retain experienced employees.