Verified vs. Enhanced Verified Alarm Systems

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The Las Cruces Police Department and Mesilla Valley Regional Dispatch Authority have been severely impacted by false burglary alarms. The information contained within is intended to inform the reader as to causes, effects, and available solutions to this problem that affects public safety in our community.

Congestion in Delivery of Emergency Services in Urban Areas: The Case of Police Response to Burglar Alarms

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ABSTRACT

Urban governments and in particular large cities face an increasing demand for emergency services. These services have both public and private attributes. If the call for service is real then public involvement but not necessarily provision is justified. However, in case of a false incident it is a private good, and the efficient solution involves market provision. Whether the service is indeed public is unknown until the service is actually delivered. This attribute of this newly defined public good suggests a public private partnership to deliver the good in a socially efficient manner. This solution differs from existing practices.

The emergency service analyzed in this paper is police response to burglar alarms. Such response comprises twenty percent of police efforts. Further, 94 to 99 percent of the burglar alarm calls for service are false. They are thus essentially a private service. This paper suggests an initial private response to an activation followed by police response if an actual burglary is evident. The private response portion in most areas can be provided competitively.

1. **Introduction**

Urban Governments throughout both North America and Western Europe, including in particular Great Britain, experience congestion on both their 911 systems and in police response to emergencies. Government provides most emergency services for equity and/or efficiency reasons. Society chooses for equity reasons to make rescue from life threatening situations generally available so that the poor cannot be denied assistance. Market prices would often be too high to be afforded by the poor. In the case of ambulance, hospital emergency, or Coast Guard services the threat is mainly to human life while in the response to burglar alarms it is invasion of property rights and possibly violent incidents.[1] In the case of fire protection the public interest lies in preventing the spread of fire, a negative externality that threatens both lives and property. Government has usually subsidized these services so prices are below market levels in order to make the service affordable to all. As a consequence, individuals may abuse the system and claim they have an emergency in order to obtain the public service.

This paper discusses the problem of congestion in 911 emergency services that is prevalent in large metropolitan areas. Emergency services often have both private and public attributes. We introduce a new type of public good whose attributes dictate a mixed delivery by public private partnerships. We show that society's welfare could be improved by shifting some production and financing responsibilities to the private sector where competition for delivery prevails; in some cases government can effectively compete with private providers.

The analysis is applied to police response to burglar alarms. Response to false alarms causes congestion on the 911 lines, reduces police response to real and serious events, imposes cost on police, and increases the threat of accidents from rapid police response. The false alarm problem is particularly acute in large cities where the police are already burdened with much crime and where the absolute number and growth of alarm ownership yields a large number of false activations. In Philadelphia, for example, in 2000 only 3,022 out of 140,604 alarm responses involved actual or attempted burglaries. For panic alarms, 430 responses out of 18,247 were bona fide robberies. On the average each Philadelphia system was activated twice compared to 1.3 for the U.S. as a whole, suggesting that the false alarm problem is most serious in

[1] In about 4. percent of all break-ins an assault occurred (Hakim and Blackstone, 1997: 82).

large cities. Further, other crime tends to be more prevalent in large cities, implying that their real cost for alarm response is probably greater.

To determine an efficient provision of response to requests for emergency services, including alarms, requires understanding the nature of the service. Since government delivers the service, it is helpful to discuss the theoretical evolvement of public goods. Samuelson (1954) was first to identify a "pure" public good. Such a good may not be produced at all or in non-optimal amount under free market conditions. However, the good can provide net social benefits and only government which represents the public interest would supply the optimal quantity. It is very costly or even impossible to exclude any one from consuming a public good, and each and every person consumes the full amount of the output. Without government forcing all to share the cost, each person would have a strong motive in becoming a "free rider" or to pay less than the socially optimum amount. Thus, there is essentially no alternative but for government to take responsibility for the supply of public goods. Clearly, however, government does not need to produce the good and could let that be done under competitive market conditions.

The assumptions necessary to classify a good as a pure public good are seldom completely met in reality. For pure public goods the size of the interacting group is the entire society, and the entire supply is commonly consumed. If either or both the requirements of non-exclusion and non-rivalry fail to be met then it falls into the general category of an impure public good. These impure public goods incorporate the notion of congestion cost or excludable benefits. Unlike pure public goods, a larger number of consumers may cause congestion in the consumption of impure public goods. Examples include swimming pools, tennis clubs, golf courses, and highways. (Cornes, and Sandler, 1986: 4).

Buchanan (1965) and Olsen (1965) elaborated on Samuelson's work by defining a more narrow type of impure public good that is frequently found in local communities. In the case of Buchanan's Club good, the entire supply is commonly consumed; however, the size of the interacting group is small. The level of individual benefits decline with the size of the population and the distance from the source of supply.

Another "variant" public good that is similar to a Club good is the local public good. It assumes congestion but does not incorporate excludability for the population within the jurisdictional level. Examples include local schools,

public libraries, or public parks. Police patrol that provides an "umbrella" of security to the community can also be classified as a local pure public good.

Buchanan's and Olsen's definition of Club good assumes that consumers travel to a defined geographical area where the service is provided. However, a "variant" local public good can also be provided at the consumers' own location as long as the two assumptions of excludability and congestion are satisfied. For example, patrol officers educating children at their schools about the dangers of illegal drugs are still providing a local public good. This is a public responsibility since significant externalities exist.

Local governments often provide emergency services because of life threatening conditions and/or a significant level of externalities. In case of a major disaster, like an earthquake, emergency services need to be in place in order to serve the general population. Emergency services include fire protection, police response to alarms, stray animals, gas odor, and ambulance services. The Coast Guard, a federal agency, provides quasi-local services to stranded boaters. These are all local rather than pure public goods since congestion occurs, and residents in other adjacent localities are excluded from enjoying the services. Government provides these services because of their significant externalities and potential life threatening conditions.

Emergency services are distinctively different in one important aspect from local and "variant" public goods. The output of both local and the "variant" local public goods is *a priori* certain at a high probability level. Emergency services have a common attribute; it is unclear whether a real emergency exists at the time service is requested and the emergency crew is sent out. Only when the service is actually rendered does its "emergency" nature become known. For example, poor people without medical insurance often arrive for emergency treatment at expensive hospital emergency rooms where service can normally not be denied even when it turns out to be a non-emergency situation. Indeed the service is often delivered before its emergency status is known. Public ambulances are also often dispatched for what turns out to be non-emergency events. The case of police response to burglar alarms is another example. When police are dispatched it is *a priori* unclear whether a real break-in has occurred. Only after the officers actually provide the service is it known whether an actual break-in is in progress or has occurred. Hence, in all these cases of emergency services, the probability of a real event is less than one. For example, in the case of police,

ex ante response to false alarms will be shown to be a public good at a probability level of at most 6 percent.

In case of a real event, public intervention can be justified. However, in case of non-real event, public financing or intervention is unwarranted. When a real break-in occurs, the public interest requires that police attempt to catch the burglar. Apprehending burglars diminishes the pool of burglars and reduces the probability that others will become victims of burglary. Apprehension also has a deterring effect by raising the cost of criminal activity, and thereby may even reduce the future supply of burglars.

When a false alarm occurs it is a private good and government intervention is unjustified. If a water pipe in the home breaks, it is obviously an emergency; however public intervention is not warranted. Similarly, when an alarm is falsely activated, no one else in the community derives any benefit from the response to the false alarm.

2. **The false alarm problem**

False alarms are a significant problem in all emergency services. For example, 53 percent of 911 calls in Atlanta during 1997 were of a non-emergency nature and added to the congestion on the system (FCC Docket on Assignment of 211: 7). During the year 2000, Philadelphia police reported that 96 percent of their responses to fire alarms, 97 percent for robbery alarms, and 75 percent of medical alarms were of a non-event nature.[2]

We chose police response to alarms as a case study for all emergency services. Alarm systems are purchased from alarm dealers. Dealers sign up the alarm owner for monthly monitoring by a central station. Large dealers usually have their own central station while smaller dealers contract out monitoring to central stations that serve customers of many dealers and enjoy economies of scale.

When an activation occurs, a signal is sent to a central or monitoring station. The central station is supposed to verify whether an intrusion or attempted intrusion occurred. In case of a suspected real event, the protocol is for the central station to request police response. In most situations two officers respond in one or two vehicles. More than one officer is required

[2] Material provided by the Bureau of Administrative Adjudication for Philadelphia P.D. for all alarm codes.

because of the possibility of a violent confrontation if the burglar is on site. Further, most police departments will not accept a central station's cancellation of the request for police response once the police have been dispatched.

The problem is that 94 to 99 percent of all activations are false. For example, DeKalb Georgia police in 2000 found that only 39 out of over 144,000 alarm calls were actual or attempted burglaries (SDM, January 2001:51). In Seattle Washington 97.5 percent of 30,000 police responses to alarm were false and only 40 burglars were actually apprehended. Chicago Police annually respond to over 300,000 activations, 98 percent of which are false. The corresponding figures for West Palm Beach, Florida are 66,000 and 99 percent (Kern, November 2000: 43).

Alarm ownership increases annually by eight to ten percent, yielding an almost identical rise in false activations. Seventy-six percent of false alarms are caused by subscriber error, ten percent by equipment malfunction, and the remaining fourteen percent by weather or telephone problems. On the average, each system activates falsely 1.3 times a year. The commercial rates are three times the residential rate. Banks, schools, and municipal facilities falsely activate seven to ten times the residential rate (AIREF, 1999: 10).

The cost of responding to false activations is substantial. The cost includes the value of the time spent by one or two officers in one or two vehicles. Additional cost items include the time spent by the dispatchers, vehicle costs, and the expected cost of accidents attributed to the response required under mainly emergency situations. Indeed, police officers in Topeka, Kansas; King County, Washington; and Calgary, Canada died in the late 1990s in highway accidents while responding to false alarms. Administrative costs include supervision and data management by police and possible court costs. For example, Seattle Police Department's calculation adjusted for overhead cost yields a $52 average cost per response in year 2000.[3] Further, communications costs of false alarms for the 911 systems are substantial. For example, Seattle, Washington in 2000 incurred $303,237 just to process 911 alarm activations calls.[4] Table 1 illustrates the cost of false alarms for a sample of communities.

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[3] Seattle's calculation were direct police labor ($32.41) + 911 communicator ($10.24) + adjustment for capital and overhead costs ($9) equals $52 per response.

[4] Information obtained from the alarm coordinator for the Seattle Police Department, March 22, 2001.

The cost of patrol officers is a partial indication of the significance of the false alarm problem. Portland, Oregon estimated in 1998 that the equivalent of 45 full time officers responded to false activations. Winston-Salem, North Carolina utilizes the equivalent of 7 officers, Philadelphia 52, and Los Angeles 100. Nationwide, most communities claim that ten to twenty percent of police resources are devoted to false alarm activations. In fact, false alarm calls for police response comprise ten to twenty percent of all calls; for example, in 1998 in Ft. Lauderdale the percentage was 14.7; in Redmond, Washington 12.4; and Coral Gables, Florida 10.3, and in Palm Beach County, Florida the percentage was especially high, 23.6. In West Palm Beach, Florida, alarm calls comprised as much as 25 percent of patrol duties.

Not surprisingly, police responding to mainly false burglar alarms apprehend relatively few burglars. Consequently the cost per arrested burglar is high. In Seattle as a result of alarm activations in year 2000 the cost was $38,500 for each of the 40 apprehended burglars. Such a high per burglar cost raises the issue that the social benefits of alarm response may well be less than the costs. However, some police departments set a low priority for patrol response to alarms. This policy reduces the chance of apprehending burglars.

The cost of false alarms rests on police departments and over time the problem is becoming more acute since police budgets rise at less than three percent annually while false alarm response rises by almost ten percent. Hence, police need to divert patrol officers from security activities that benefit the community, a public good, to serve alarm owners who falsely activate their systems, which we argue, is a private service. Furthermore, officers who are trained to handle crisis situations are expecting to confront a burglar and instead deal with a non- event.

Table 1
Calculated Cost of False Alarms

CITY	YEAR	NUMBER OF FALSE ACTIVATIONS	CALCULATED COST	TOTAL COST	REFERENCE
(1)	(2)	(3)	(4)	(5)	(6)
Nationwide	2000	36 m	$50	$1.86+	Security Sales, 2001, Vol. 22 No. 12 P.8.
Philadelphia, PA	1995	147, 074	28	4.3 m	Hakim and Blackstone, 1996 Percent false 97.4%.
Dade County, Fl.	1995	121, 717	24	2.9 m	Hakim and Blackstone, 1996.
Reno, Nv	1995	11,185	72	0.8 m	Hakim and Blackstone, 1996
Phoenix, Az	1995	47,075	73	3.4 m	Hakim and Blackstone, 1996.
Salt Lake City,	1999	8,213	60	0.5 m	Material supplied by Salt Lake City.

3. Practices to solve the problem

Police departments across North America, Great Britain, and elsewhere struggle with the false alarm problem. Municipal governments have experimented with their ordinances to try to reduce the problem. Ordinances have been adopted that increase and escalate fines for repeat activators, cease response after a certain number of false activations in a calendar year, require education of chronic false activators, mandate registration of alarm systems, and require dispatching calls to use 900 lines.
Some ordinances have even deceased fines. No study has been conducted to evaluate the relative effectiveness of the numerous policies. Such research would lead to a social cost-benefit calculation for each policy/practice to determine the most appropriate alarm ordinance.

A common practice is to increase fines and also to introduce an escalating fine structure for multiple false alarms during a given time period, typically one year. Beset with a large number of false alarms, Clearwater, Florida in 2000 increased its false alarm fine from $30 to $50. New Orleans assesses a fine of $25 for the sixth false alarm in a year with increases to $75 for the fifteenth. Itasca, Illinois charges $75 for the fourth and escalates to $750 for the tenth. Montgomery County, Maryland assesses as high a fine as $4000.

Communities normally allow some free false activations before fines are assessed. The rationale is that alarm owners ought not to be penalized for equipment malfunctions or user error unless the problem occurs often. Montgomery County, Maryland is fairly typical in its allowing three free false alarms in a calendar year. New Orleans allows five such activations. However, Seattle, Washington charges $50 from the first false alarm.

Some experimentation with ordinances to reduce the false alarm problem has involved lowering false alarm fines. Beaumont, Texas stopped charging for false alarm response in December 1977 and instead substituted a $50 charge for reinstatement, which meant that police officers would resume response. Under the new ordinance, officers would respond to eight alarm activations in a year at no charge but then would cease response until a $50 reinstatement fee was paid. An additional false alarm would require a $100

reinstatement fee to once again obtain police response. Under the former ordinance, a fine of $50 was assessed for both the seventh and eighth false activations. The new ordinance has led to an increase in the number of false alarms, a reduction in the revenue obtained from alarm response, and an increase in the number of locations on no- response status from 19 in 1998 to 76 in 1999 (Zarazua, 2000). Similarly, Bartow, Florida in November 2000 was considering increasing the number of free alarms from two to three and reducing the maximum fine from $500 to $250. It was also considering the elimination of fines for those who repaired their malfunctioning alarm systems (Kern, 2000: 43).

Municipalities sometimes assess different false alarm fines for residential and commercial establishments. Commercial establishments have a higher propensity for false alarms, have usually greater ability to pay, and are often required by insurance companies to purchase and operate an alarm system. Commercial establishments are thus more likely than households to pay fines, even if they are high, to maintain continued police response. Irvine, California, for example, fines commercial establishments twice as much as residences. The maximum fines in Montgomery County, Maryland for residences and commercial establishments are, respectively, $1000 and $4000.

Some ordinances are confusing and complicated and make compliance difficult. Confusing ordinances diminish the deterrent effect for alarm owners and confuse dealers who typically operate in many localities. For example, in Vancouver, British Columbia charges for false alarms begin with the fourth, which is $75 for residential, $125 for commercial, and $250 for large commercial users. The fifth through the seventh in a calendar year are then free, but the eighth false alarm is twice the fourth or $250 for commercial alarm owners. Obviously, such a cumbersome structure has limited deterrence effect and serves to confuse all involved. Palm Beach County, Florida charges different registration fees for alarm owners depending upon the total false alarm experience of the dealer from whom the alarm system was obtained. Alarm consumers would have to base their purchase decision on the seemingly unknowable future false alarm experiences of the dealer's other customers. The intent obviously is to provide the dealer with a strong incentive to reduce false alarms. However, such a practice is unfair to careful alarm owners who happened to contract with a dealer that serves other repeat activators.

Registration of alarm systems is also used by municipalities to reduce the number of false alarms and to pay the fixed cost of maintaining the alarm unit, usually within the police department. The normal practice is for the municipality to charge an annual registration/permit fee of between $10 and $50 for the privilege of having an alarm system. Southlake, Texas, for example, has an ordinance that requires annual permits of $10 for residences and $20 for commercial establishments but permits are not required for residents at least 65 years old (Kern, 2000: 43). Permits can be revoked or a policy of no response adopted after five false alarms in a calendar year. Nassau County New York requires a permit in order to have police response to an alarm (SDM, 2000: 28). Port Hueneme, California adopted in 2000 a differential fee structure for permits for residential and commercial alarm systems. The city expects to collect sufficient revenue to increase the number of patrol officers and to reduce the number of false alarms (SDM 2000: 28). Similar to the fine situation some cities like Chicago require only businesses to obtain alarm permits.

Registration of alarms involves substantial resources and is often difficult to achieve. In Redmond, Washington in 2000 only 1200 alarm systems were registered out of an estimated total of 12,000 (SDM, 2000: 28). Registration in Redmond has been unsuccessful even though the police will not respond to activations at unregistered locations.

Non-response to repeat alarm activations is also used to reduce their number. New Orleans police will not respond to burglar alarms for repeat violators, defined as more than 20 in a year. In 2000, 280 locations with alarms were on the Department's list for no response (Philbin, 2000: Metro, p.2). Seattle, Washington, which suspends response after six in a twelve-month period, typically has between 8 and 50 locations on a no response policy (AIREF 1999: 88). Irvine, California suspends response after the seventh false activation in a year. Kenner, Louisiana police do not respond to business alarms during daily peak false alarm periods. They also do not respond to business activations during very intense thunderstorms, which typically cause sensitive systems to activate falsely (Hyman, 1999: Metro, p. B1).

Non-response is a serious problem for the industry, since alarm owners will either stop using their systems and consequently stop paying for monitoring of their systems and/or non owners will be reluctant to purchase a system. High fines could lead to the same result. Toronto, Ontario in 1996 started assessing high ($77) fines from the first false activation and ceased

response after the fourth. Private response quickly developed to cover over 90 percent of the systems in Toronto.

Education of consumers and sometimes dealers, is also used to reduce the number of false alarms. The rationale is that user error accounts for 76 percent of false alarms and also that about 20 percent of users account for 80 percent of false alarms. West Palm Beach, Florida residents on their third false alarm can pay a $250 fine or attend alarm school. The one-hour class is designed to show the attendees the magnitude of the false alarm problem and to provide repeat activators with suggestions on how to reduce such activations (Kern, 2000: 43). New Orleans police have had a seven-hour class for alarm companies deigned to reduce their false alarms. The Department also loans videos to alarm system owners on how to reduce false alarms.

The Fort Lauderdale, Florida police have been especially active in educating consumers and dealers. The police department's alarm coordinator had a meeting to which 250 alarm companies were invited while only 23 sent representatives. The purpose of the meeting was to focus effort on those alarm owners who had the largest number of false alarms in 1998. The attendance of less than ten percent of the alarm companies indicates lack of interest for the program. However, one alarm company with a large percentage of the false alarms in 1998 did attend and even assigned a technician to work with the police department's alarm coordinator. The coordinator, along with an alarm industry representative, visited alarm owners who had the greatest number of false alarms. One automobile dealership reduced its false alarms from 100 per year to none. Overall the education efforts have reportedly reduced false dispatches by 8 percent (AIREF, 1999 48).

The alarm industry established two programs to work with police departments to reduce false alarms. The above Fort Lauderdale effort was part of the second program, the Model States Program, towards which the industry contributed over $900,000. The alarm industry also developed and provided municipal officials at no charge software using dealers' databases with their current information on alarm owners and their addresses. This information is thought to be helpful to the police in updating their database to better conduct their enforcement activities.

An effort directed at dealers occurs in Toronto Ontario where police impose the false alarm fines on the alarm dealers who then have to charge

their customers or absorb the fines themselves. This reduces the transactions costs for the police who are now involved with only 70 companies instead of thousands of alarm owners. The dealers are challenging the police department practice in court. Making dealers responsible for collecting fines and then suspending police response to all the customers of the non-compliant dealer is strongly opposed by the industry.

Another practice that has also been strongly opposed by the industry is requiring calls for police response to alarm activations to be made on 900 lines. Riverside County, California enacted ordinance number 753 which mandated such a policy. The ordinance was to become effective on August 5, 1996. All calls had to be made on the special 900 lines with an automatic $5 charge to the central station. The alarm industry secured an injunction preventing enforcement of the ordinance on the ground that requiring crime victims to pay to report a crime and request assistance violated the due process and equal protection provisions of the Constitution (California Alarm Association, 1996).

Finally, the alarm industry as represented in its Model States Report supports allowing physical response by police to be cancelled if the central station learns after dispatching police but before police arrive at the location that the alarm is indeed false. It further supports strong enforcement of the alarm ordinances, registration of alarms, and reasonable and escalating fines. It encourages suspension of response for non-payment of fines or for exceeding the maximum number of allowed false alarms, verification of all alarms by central stations, and education of alarm system owners.

4. Evaluation of Current practices

The above practices may produce a reduction in false alarms. For example, not responding to alarms for repeat activities obviously reduces false alarms. Targeting repeat activators for intensive education may work short term as well. However, such programs and policies may reduce the perceived and actual level of security, since owners may not arm their systems. Such punitive policies may not be socially efficient; the social cost of reduced security may be greater than the social benefit of reduced false alarms and the resulting cost of police response. These policies also may not account for the public good portion of alarm response, namely, the benefits of apprehending burglars.

The alarm industry claims that response to false activations is a normal police function, a public good. In essence, the industry disputes both the private nature of response to false activations and the related argument that such public police response is socially inefficient.

The basic problem is that no one except the police has an inherent interest in solving the problem. The alarm owner on the average falsely activates her system 1.3 times a year. Since most communities allow three false activations a year, alarm owners usually incur no charges.

Alarm dealers view police response as a gift to their business. They sell a system, charge monthly fees for monitoring the alarm system, and when necessary, obtain police response that is essentially paid for by the general taxpayers. Dealers consider false activations to be an issue merely between the police and the customers. There is also little apparent interest by individual dealers to spend resources to solve their own customers' and the communal problem. The latter is the regular "free rider" problem. Individual dealers view their private cost of reducing their customers' false activations to be greater than their private benefit. Thus, dealers and the alarm associations contest police efforts to cease response, except for non-payment or for repeat activators. They also object to shifting responsibility for their customers' fines to them or to the central stations. The alarm industry prefers that police rather than private companies respond because police response usually makes their product less expensive to customers and thus more appealing. Increased fines for more alarm system

owners will also reduce the purchase of new systems. It is quite ironic that private industry prefers government intervention in the marketplace rather than allow new forms of business, companies offering alarm response, to develop.

Central stations are supposed to verify that an actual intrusion took place and only then to dispatch to the police. However, suppose that a call is verified as false, but a real break-in did indeed occur. In such a case, the central station is liable for breaching its obligation and is likely to suffer negative publicity with perhaps sizable liability suits. Indeed, the central station bears no cost for dispatching police to a false activation while the cost could be high for not dispatching to a real event. Hence, the central station dispatches the police even when the probability of a break-in is extremely small. Sometimes the central station determines that the call was false after the signal was dispatched for police response. Central stations then attempt

to cancel police response. However, police most often do not accept cancellation after they have been dispatched. Cancellation with its added calls itself adds substantial cost to the 911 system. For example, Seattle Washington incurred $97,000 in 2000 for processing cancelled alarm calls.

The alarm associations with a broader view of the just industry realize that the false activations will eventually mean deteriorating business for dealers and central stations. Indeed, the industry has tried to solve the problem. However, the associations as part of the industry would like the police to maintain their free service that benefits their constituents, and in any case the associations have limited influence on their members to curb false activations.

The intuitive practice of ceasing response is economically inappropriate. Suppose that a person has a habit of slamming the garage door and breaking it. As long as the person pays the bill, the repair company will send technicians to repair the damage. No company will deny response after a certain number of calls. The more calls, the better it is for the garage door repair company. In the same vein, there is no reason to deny response to false activations as long as the violator pays the full cost, where no one else is made worse off. The socially efficient solution requires that price reflect the social cost of response.

There is also no reason to cease response during peak alarm periods. The charge should simply be higher, reflecting the straining at capacity. After all, garage door companies still respond when business is booming as long as the customer pays the required charge. Similarly, the police should not decide arbitrarily when to provide services. The socially efficient solution requires response at all times as long as social costs are recovered.

Police often charge higher fees for commercial establishments than for residences, and they normally exempt municipal facilities from charges. Businesses pay higher fees because their demand for response to alarms is more inelastic than is the demand by households. In addition, business owners are often non-residents so that local politicians view them as a desirable source of revenue. Since prices are not cost based, price discrimination is occurring, a practice common under monopoly conditions and often not socially efficient.

Sometimes the public good aspect of alarm response is ignored. Toronto, Ontario police charge for all responses to burglar alarms including

actual events (Hyman, 1999: Metro, p. 81). The probability of catching a burglar and benefiting the community means that the price in the event of an actual or attempted burglary in Toronto is in excess of the correct price. When an activation involves a real or attempted burglary, social efficiency and equity principles suggest that no charge should be imposed.

Local ordinances sometimes impose high charges to discourage false activators. It seems intuitively correct but punitive action causes a misallocation of resources. If the charge is higher than the real cost to the police department, some households and businesses will refrain from buying alarm systems and some owners will not activate their systems. Society will then suffer from a lower level of security. Pareto optimality conditions require that prices be set at their long run marginal cost. The same is clearly true for charges that are lower than their real cost. In such a case, the purchase and use of alarm systems, and false activations are artificially encouraged beyond their social optimum. In addition, there is unjustified provision of below cost service to some, or cross subsidization, of essentially a private service.

Most communities utilize escalating fees for response to repeat false activations. If the marginal cost to the police remains the same, then again escalating fees will discourage uneconomically the purchase and use of alarms. Evidence indeed suggests that repeat visits to the same address do not impose higher costs on the police.

Repeat activators are often municipal facilities like schools or churches that do not have to pay fines or commercial establishments like banks that pay the fines and consider them as inescapable business expenses. One Illinois bank budgeted $12,000 annually for paying the police for false alarm fees. One Texas church in 1998 had 52 false alarms and paid no fees. In many of these cases prices are divorced from cost because of the monopoly power of police. Free response induces careless behavior and at the same time imposes cost on the police. Schools after all have to pay for electricity; they should also pay for police response to false alarms. Social efficiency requires no subsidization of any users.

Police departments, alarm companies, and associations expend enormous efforts to update police registration records. Alarm dealers and their central stations are normally updated with the correct addresses of alarm owners. However, new alarm owners often do not notify the police about the installation of their systems. Frequently, the address provided at registration

differs from the address to which the central station dispatches the police. Different addresses impose costs on the alarm unit in its effort to charge after police response is provided for false activations. In any event, the police normally respond to a signal whether or not the system is registered and an annual fee was paid.

The purpose of a registration fee is to cover both the administrative cost of maintaining and updating alarm ownership records, and the prosecution cost for unpaid fees. It is almost ritualistic that alarm data be collected, updated, and maintained. We question whether such data are needed. These alarm administration units are growing in size. In Philadelphia the number of workers handling unresolved and unpaid response fees rose in a few years from two to eight. Still, the number of unresolved cases where fines cannot be collected is growing significantly. Registration fees are inefficient and inequitable. They are collected from all alarm owners, including those that are cautious and seldom activate their systems. Thus, careful owners with no apparent justification subsidize alarm activators. In the case of false activations, the users are clearly identified and therefore there is no reason for the general taxpayers or even all alarm owners to pay for this service. Moreover, if the transaction cost of collecting and managing the data exceeds the revenues collected from the fees then it would be desirable simply to incorporate the cost in the response fee.

Government provision of response to alarms has had other undesirable consequences. The police and government in general have treated false alarm violators almost like criminals instead of as customers of a service. For example, Pennsylvania State law makes false alarms in excess of three a summary criminal offense with a fine of $300. (Security Sales, 2000: 24). The ordinances are designed to "punish" those who falsely activate their systems. It is even conceivable that alarm activators could be arrested and handcuffed.[5] Let us return to the example of the person who breaks his garage door, discussed previously in this section. Under market conditions there is no punishment involved. The repair or user's error is merely a market transaction that depends upon the forces of supply and demand. The same principle should be applied to alarm response; charges for response by police should reflect cost and involve no punitive aspect.

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[5] A 2001 U.S. Supreme Court decision permits the arrest f those charged with even a summary of offense punishable by a small fine. See Linda Greenhouse, "Dividend Justices. Back Full Arrest on Minor charges," New York Times, April 25, 2001, p.A1.

Even if we accept a punitive function for false alarm fines, the price inelasticity of demand for response precludes any significant reduction. A successful policy to reduce false alarms requires a price elastic demand. However, evidence suggests that high fines have a very limited effect. For example, Jeffersontown Kentucky in 1999 increased fines from zero to $95 for the third and much more for subsequent false responses. Yet, the number of false alarms for the same period in 2000 decreased by only two percent. (SP&T News, 2001: 21). Similarly, New Orleans Police expected that stiff false alarm penalties would yield a 30 percent reduction in false alarms. However six months into the higher penalties, false alarms decreased by only 5 percent (Times Picayune, 2000: B6). Therefore, high fines that are in excess of cost are the wrong policy unless the intention of the fines is merely to punish activators or to raise revenue from a "secure" source. Clearly, since alarm activities yield negative net revenues, the latter objective is not being met.[6]

Cumbersome ordinances like the previously mentioned Vancouver example cause unduly high transaction and administrative costs to police, the alarm industry, and alarm owners. The purpose of these ordinances is to deter false activations. However, alarm owners are often unaware of the details of these complicated ordinances so that the deterrence effect is lost. Alarm companies usually monitor systems from many communities; the different ordinances and practices by police departments make their efforts to control false activations difficult. One advantage of such programs as the Model States is to encourage development of more uniform ordinances. If the ordinance obeys economic principles and improves economic efficiency, it could be desirable. Finally, police have provided only one quality of service: consumers of alarm response do not enjoy the choices that consumers normally have under free market conditions. They can not select the quality of response and its associated price that maximize their utility. Consumers have lacked the empowerment that normally comes from the competition of multiple providers.

When police respond to false activations, non-alarm owners and alarm owners that are careful about their systems subsidize the profligate. There is no justification for such cross-subsidization. Since the cost of false alarms is imposed on the police and thereby the community, there is no justification for

[6] In most communities funding for the alarm unit is part of the general ledger. The net income (registration fees collected minus the unit's expenses) is usually negative. Hence the general taxpayers subsidize alarm activators.

any free responses. False activations should be charged from the first false activation.

5. Market oriented solution

All the solutions that have been implemented by police departments and the alarm industry either achieved a minimal reduction or a temporary reduction of false alarms. Police chiefs and the industry magazines have been bemoaning about the problem for over fifteen years. It can only be overcome if the nature of the good is recognized and an appropriate competitive market solution is implemented.

Adam Smith in his 1776 book **Wealth of Nations** stressed the power of competitive markets in increasing efficiency. Social welfare is maximized through the unimpeded operation of prices or the "invisible hand". Smith further contemplated a relatively limited role for government intervention in the economy. Although Smith was obviously unaware of the false alarm problem, his solution has been successful for many other markets and will work here as well, if market conditions can prevail.

Efficiency in response to burglar alarms requires that both the public and private sectors be involved. Private response should be dispatched to all activations. In the case of an actual or attempted intrusion, private security from the scene requests police response. Since police no longer respond to a large number of false activations they will rapidly respond to an actual event, which is indeed a public good. Each alarm owner will contract with a private company for such a service. Clearly, since response to alarms is labor intensive, the extent of economies of scale is limited. In large urban areas we can expect many alarm response companies to compete. For example, in Philadelphia in 1995 there were 54 establishments providing detective and armored car services, all of which employ guards. (U.S. Dept. of Commerce 1995 : 151). These firms could easily enter the alarm response market. Additional competition will occur from companies or even police departments in surrounding jurisdictions.

Another factor that contributes to the spread of private response is the possible existence of scope economies. Experience shows that some companies will offer a bundle of related services like response, patrol, vacation services, and stationary guards (Usher, 1992 and Hahn, 1999). Another type of scope economies may arise when alarm companies offer

installation, monitoring, and physical response to alarm activations. For example, Protection One that was among the first to offer the entire array of security services has become the second largest alarm company in the U.S. in 2001 (SDM, May 2001: 55). Also, since consumers like to deal with one provider for the entire package, demand was high for alarm response services of these companies. Scope economies may permit low prices and encourage development of private response.

When private response develops in a region, the false alarm problem will finally be solved for the police. Competition among providers will enhance adoption of technology and reduce costs. Consumers will be able to use lower-cost labor as initial responders. The major reason for the lower cost of private companies is their lower labor cost. Indeed, response to false alarms does not require a sworn officer that costs 1.5 times that of a private guard (Blackstone and Hakim, 1996 a: 19-20). In fact, evidence shows that private response has provided a higher quality of service in terms of both promptness of response and in apprehending of burglars than have the police (Hakim and Blackstone, 1997: 218-219). A competitive or monopolistically competitive market with various price/quality packages of services replaces a public monopoly. Further, cross-subsidization between alarm activators and others ceases.

One may question why nationwide is there limited private response to alarms. When police typically provide three responses at no charge and sometimes even additional responses at fees that are often nominal and below cost, private response companies cannot enter and attract customers. However, when police charge at their cost for all responses, private response service could develop.[7]

Some interesting implementation questions remain. Private response can take two forms: police could contract out the service to a private company that will serve the entire or part of the jurisdiction as in the cable TV case. Alternatively, entry to the response business could be open to all interested parties, including of course guard services. We maintain that the second alternative is preferred. The first alternative maintains a monopoly service even if the contract is designated for only a few years. The provider will be a monopolist for the duration of the contract, and government will bear the cost of regulating the provider to ensure that the terms of the contract

[7] Interestingly, some commercial establishments are required by their insurance companies to adhere to UL standards, where private response is required.

are followed. Competition is also likely to provide a richer choice of service offerings tailored to the particular demands of relatively small groups; this product variety which arises in monopolistic competition is likely to attain a higher level of social welfare than the first alternative of a monopoly provider. Also, even if a number of providers compete for the contract under the first alternative, the lowest bidder's price is likely to be higher than what prevails under market conditions.

Competition could also arise from police in adjacent or nearby jurisdictions. Police departments could contract to provide response. Under current practices inter-jurisdictional contract for all police services occurs mainly among rural and suburban communities. In the realm of "managed competition" discussed below, the public police should be allowed to compete with private providers of response to alarm activations. This service could allow some departments to exploit economies of scale and possibly of scope and thereby lower the cost of providing response, including to their own constituents. Further, many jurisdictions were created when transportation and communication were less adequate. Permitting police departments to offer private response in nearby areas could be quite desirable. These would be legal and liability issues that would have to be resolved, but the benefits from increased competition could outweigh the legal complexities.

Another issue is whether police should stop responding to burglar alarms under all conditions? Suppose that in a sparsely populated area no private response emerges. Or, suppose that a private monopoly develops. Should Smith's efficient private market principle be compromised? In other words, should alarm response be public or should the private monopoly be regulated? Richard Posner (1971) argued in related regulation issues that private unregulated solutions are preferred to a regulated monopoly. The latter normally enjoys protection against entry. It also often practices cross subsidization that helps create a constituency, the favored group who receives the service below cost, with a strong interest in maintaining the monopoly even after it is not justified. Accordingly, in keeping with Posner, if a single private response company evolves because of limited market size then the most appropriate public policy is probably to do nothing in terms of regulation. Another alternative is to allow police to provide competitive alarm response but under strict conditions.

6. The public option

Although we advocate private response to all activations and then police dispatch to actual or attempted burglaries, we recognize that some communities may want to preserve public police response.[8] In particular, in a sparsely populated region where no private response emerges, then in case of a *bona fide* dispatch, no response would follow. Therefore, the public good portion of alarm response will not be provided; clearly, public security would decline. The police should be allowed to offer response service but charge their actual cost, or the monetary value of the services sacrificed when police resources are used to respond to alarm activations. Economists refer to this as the long-run marginal cost that includes any extra capital and labor required for response. Clearly, the delivery of service by the public police monopoly might not be efficient. Monopolies often exhibit what economists call X-inefficiency, namely, simple business inefficiency that results from insufficient competition, which allows excess costs and slack.

Unfortunately, in small markets, consumers might have to endure the lack of competition. Still pricing at long-run marginal cost would mean that cross subsidization should and would be avoided. Further, public finance theory suggests that when beneficiaries can be clearly identified and when no externalities exist as in the case of response to false alarms, user charges are desirable instead of funding from the general ledger.

More generally, Stephen Goldsmith, the former Mayor of Indianapolis, Indiana, introduced the concept of "managed competition", which allows government employees to bid against private firms for service provision. Indeed, police in many rural and suburban communities want to retain the service. If police wish to retain the response service as a non-monopoly, they need to price at their long-run marginal cost, and allow others to provide the service under competitive conditions. This means that all false activations are charged, no escalating fees, and no ceasing of response for repeat activators. The function of response to false activations should be established as a separate profit center and its accounting should be divorced from the public functions of police. The police probably enjoy scope economies in the sense

[8] There is another argument why government should be involved in the emergency services. Private provision of service is designed for existing demand. Government, however needs to maintain a higher level of emergency vehicles and personnel than is needed commercially in case of such disasters as earthquakes, terrorist attacks, or an electricity brownout or blackout. In such cases, the general population requires more service than private emergency companies can offer. Public emergency services must be prepared for low probability peak demand while private companies capacity is maintained for merely existing demand that can be profitably provided. On the other hand, one may argue that State or even the Federal government already does or should provide the excess capacity designed for emergency situations. The Federal government allows in catastrophic cases the use of National Guard or even the Army.

that providing alarm response could lower the cost of other services including alarm response. As a result, police should be allowed to compete and consumers will gain.

7. Efficient practices

The marketplace solution has been partially applied in a few communities. Las Vegas, Nevada utilizes a system that is close to our ideal model. The Chief of Police in 1991, at his own discretion and without a change in the ordinance, adopted the non-response policy. Before the change in policy, the annual police cost of response to 8,000 false alarms was $600,000. Each response took 45 minutes and involved two officers. The cost of just the officers' time per response was estimated at $75. As is usual, only one to two percent of calls were valid alarms. The change in response policy meant that police respond to alarms only when dispatched by an agent at the scene. Actually, police response became faster since the officers know that they are going to a real event, and the large number of false activations to which other private agents now respond reduces the pressure on patrol officers. The police are now prepared to confront a criminal, are no longer frustrated by rushing to non-events, and now deliver the service they are mandated and trained to do.

The initial responders are usually guards from a private response company. The guards check the premise. In case a burglary is in progress or has occurred, they will remain outside, dispatch the police, and watch the entrances until police arrive. The guards will enter the premise only if lives are in danger. Alarm systems are not registered and data are not kept on false activations. After considering the rapid growth of Las Vegas, the annual budgetary savings exceed $600,000. Further, the burglary rate diminished from 1600 per 100,000 population in 1990 to 1187 in 1998. Hence, security and police deterrence were not compromised. Police maintain the public function they are obligated to do, namely, pursue burglars, and private response handles the private good of it.

In 1999 Salt Lake City had a significant false alarm problem. Its police responded to 8,213 false alarms at a total cost of $492,780. Ninety- nine percent of all alarm calls were false. The response time was at least forty minutes because response was accorded a low priority. Near the end of the year 2000 an ordinance was passed that adopted the Las Vegas practice. Within a few months, seven companies were offering private response for

fees that were substantially less than the $60 average cost for the police. The price per response ranges from $15 to $35. One company offers a monthly contract for $30 that includes unlimited responses. Another company included response as part of a patrol contract. Further, the response time ranged from 2 to 20 minutes with most under 10 minutes. One company guaranteed free response if its officers' do not arrive at the scene within 20 minutes.

It is noteworthy that false alarms during December 2000 were only 71 compared to 773 for the same period in 1999. Further, false alarm responses in the December 1, 2000 through May 31, 2001 period were only 496 compared to 5151 for the same period a year earlier under the previous ordinance. Indeed, efficient markets developed with many price/quality choices for consumers once police shed the service. Also, Salt Lake City taxpayers saved $280,000 in personnel expenses over the six-month period and non-alarm activators no longer subsidize false activators. Police now had an additional 5102 hours for general patrol or response to valid calls.

The discussion so far suggests that the response to alarms could and should be shifted to the private sector where security companies will compete on service delivery. Clearly, the issue of registration fees is moot in the private option. Police departments and the alarm industry devote many resources to improve the currency of the database of alarm ownership. We question whether such data maintenance is at all necessary even in the case of the public option. The only relevant information for the police concerns who falsely activated their systems and only for a given calendar year so fines can be collected. This is similar to car registration. In any typical city there are cars from numerous cities in the state, from other states, and even from other countries. Police do not maintain a database of all vehicles using the city's road network. The only relevant information for the police concerns the violators of traffic and parking regulations. Similarly, all alarm systems need not be registered. The elimination of registration saves the cost of constantly updating the database. For example, the police department in Seattle, Washington maintains just the names and addresses of alarm violators for a one-year period with the addresses provided by the central stations requesting the response. The responding officer directly hands citations and then the data are recorded. By year's end most of the data are deleted.

8. Conclusions

This paper introduced a new type of public good that incorporates both private and public attributes and suggests a form of public-private partnership for socially efficient provision. This new form of public good applies to most emergency services.

The case study involves police response to burglar alarms that comprises ten to twenty percent of all emergency patrol responses. Unfortunately, 94 to 99 percent of all alarm responses turn out to be a non-event. Only when the service is provided does its nature, whether it is a public or private good, become clear. This characteristic of being unknown *ex ante* is common for most emergency services.

Local jurisdictions differ in their methods of coping with the problem; they use cost recovery, punitive, technological, and educational methods. Unfortunately, most methods fail, have a temporary impact, or involve high transaction costs and unjustified cross subsidization. From an economic viewpoint, the solutions are either inefficient or inequitable or both. The reason for the failure is that consumers, dealers, and central stations lack the motive to eliminate false activations. Only the police have a motive to eliminate the problem. Further, the service has been provided under non-market and public monopolistic conditions. Only Las Vegas and Salt Lake City have adopted policies that involve competition and a form of a Public-Private Partnership that has had a lasting effect on reducing false activations without sacrificing the level of security.

Adam Smith's theory once again proves socially efficient and equitable. Private firms should respond to all activations. In case a burglary is under way or has occurred, the police are dispatched. Police then fulfill their public responsibility, are relieved from response to all false activations, and therefore can promptly respond to valid alarms. Private companies will compete for customers, consumers will be empowered to choose a service that best fit their preferences, prices will be established close to cost, service will be enhanced, and cross-subsidization will be eliminated.

Police can continue responding if the following strict conditions prevail: no artificial barriers prevent entry by private response firms or by other police departments, police price at their real marginal cost, and the alarm service is established as an independent profit center. Then, private companies or other police departments will enter if they can provide the service at lower cost. Further, the reduced pressure on the 911 system will allow police to respond faster to real emergencies of all types. Alarm owners

will pay for all false alarms but will not pay for real activations. Indeed, if the positive externalities of apprehending burglars exceed the long-run marginal cost of response for the police, one may argue that alarm owners who experience an activation that leads to the conviction of a burglar should be subsidized by that difference. The same principles and methods can be applied to other government emergency services like ambulance, fire, and Coast Guard.

Introducing competition into burglar alarm response is equivalent to deregulation, a policy that has worked in many other markets. There is every reason to apply it to public emergency services and expect an overall increase in social welfare.

This paper illustrates the problem of false alarms and the various solutions attempted to solve the problem. Our recommended solution is competition and a public-private partnership. In any event, the time has come to conduct a comprehensive study to evaluate the alternatives that have actually been applied and those suggested by academicians and professionals to determine the solution that indeed maximizes net social benefits.

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POLICE RESPONSE TO BURGLAR ALARMS STUDY: SAN BERNARDINO COUNTY

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EXECUTIVE SUMMARY

I. BURGLAR ALARMS AND CRIME

False burglar alarms are a major issue facing police departments; estimates from agencies across the country suggest that between 8-25% of calls for service are for false alarms. It is estimated that annually there are 36 million false alarms in the United States costing about $1.8 billion (Blackstone, Hakim, and Spiegel, 2002). This equates to approximately 35,000 American police officers that could be shifted to more productive responsibilities. An alarm response policy should weigh the safety of a jurisdiction's citizens and the cost incurred by the city or county and its police department. Thus, alarm response policies should be reviewed periodically to ensure that the policy is achieving stated objectives and is cost effective.

II. POLICIES USED TO MANAGE FALSE ALARMS

There are five noted strategies for managing false alarms: verified police response, fining alarm companies, two call verification of alarms, enhanced management of false alarms, and enhanced public education. Research suggests that adopting a policy of law enforcement agencies as first responders to locations of concern to homeland security, robbery or panic alarms, and alarm calls verified by alarm companies to be legitimate, is an effective way to reduce false alarm calls. Fining systems can also be effective if strategies can be adopted to enhance the efficiency of repeat false alarm identification, generation of fine notices, and collection of fines. Public education is also warranted when using a fining system.

III. SAN BENARDINO COUNTY FALSE ALARM RESPONSE SURVEY: RESULTS AND ANALYSIS

Police and Sheriff's departments located in San Bernardino County were surveyed about their false alarm activity during the summer of 2006. Nine agencies responded. All nine responding departments characterize their residential burglary alarm response policy as first responder to alarm calls with a fine system for false alarms.

- In 6/9 jurisdictions registration is required for residential burglary alarms and 5 agencies required a fee for residential burglary alarm registration.
- Fines for false burglary alarms are typically assessed on (N=3) or after (N=5) the 3rd false alarm; fines generally increase with subsequent alarms (4/9 jurisdictions).
- In 2/9 jurisdictions commercial false alarms are fined at a higher rate than residential false alarms
- The generation of fine notices and collection of fines is the responsibility of the city government in 3/9 jurisdictions; responsibility is shared by city government and police department in 4/9 jurisdictions, police department has sole responsibility in one jurisdiction.
- It is estimated that, on average 74% of false residential burglary alarm fines are collected. Typically, City General Funds receive the fines generated by false burglary alarms.

Alarm calls account for between 1% and 12% of all calls for service (Mean = 6%)

- On average, 98.95% of burglary alarms are false.
- An arrest for burglary was made in only 0.08% of responses to burglar alarm activations.
- Responding to false burglary alarms (from dispatch to clearing the call) takes between 4.72 min. to 25.00 min. (Mean=17.06 min.)

- Average hours per year consumed responding to false burglary alarms ranges from 146 hrs. to 4,382 hrs. (Mean= 1,602 hrs).
- The manpower cost per year for 2-officer response (8/9 jurisdictions) to false burglary alarms ranges from $12,025 to $409,949. (Mean= $ 171,845).

POLICE RESPONSE TO BURGLAR ALARMS STUDY: SAN BERNARDINO COUNTY

The purpose of this white paper is to examine the issues and problems associated with police departments' policies and responses to false burglar alarms, especially in San Bernardino County. False alarms have become a major issue for police departments in that they consume substantial resources without resulting in an equivalent impact on crime or public safety. Nationally, approximately eight to 25 percent of police calls for service are for false alarms when a department fails to implement procedures to reduce false alarms, alarm calls constitute a higher percentage of calls for service. This represents a significant drain on police resources and results in departments not being able to provide adequate attention to those calls that are of a higher priority, especially those calls involving crime.

Nationally, false burglar alarms are a major issue facing police departments; 8-25% of calls for service are for false alarms.

The issue is particularly cogent for cities and departments in San Bernardino County. The overwhelming majority of cities in the county are experiencing rapid population growth. San Bernardino is one of the fastest growing counties in California. This results not only in an increase demand for police services, but it also precipitates an ever increasing number of alarms being installed especially in residential neighborhoods. Alarms are standard in many new houses in the area. In many instances, police response to calls for service has lagged behind as the result of population growth and changes in crime rates. In some instances, cities have not allocated new positions to keep abreast with the expansion, and in other cases, police departments have experienced substantial difficulty in attracting and hiring qualified police applicants. This results in additional pressures on police departments in terms of responding to crime and calls for service in a timely and effective manner.

Nationally, there have been several studies examining the problem. Most of the studies have been conducted by police departments. Additionally, the National Institute of Justice commissioned a study and at least one alarm company, SONITROL, conducted a study. These studies resulted in a variety of recommended policies and responses that are examined in the body of this report. The number of studies also demonstrates the level of concern relative to the problem. Departments in San Bernardino County currently have alarm response policies. In essence, an alarm response policy should weigh the safety of a jurisdiction's citizens and the cost incurred by the city or county and its police department. Thus, alarm response policies should be reviewed periodically to ensure that the policy is achieving stated objectives and is cost effective. Do departments have the "best" policy that serves their needs?

Alarm policies require periodic review in rapidly changing communities.

This report uses data collected from cities in San Bernardino County. All cities and the Sheriff's Department were sent questionnaires. It should be remembered that this report serves as a summary for all cities participating in the study. As police chiefs decide on pursuing new strategies, the data contained in this report can be edited to include only that agency for presentation to city officials. The arguments for a particular strategy can be tailored and compared with the data from the city. This will lead to a stronger argument for the policy change.

I. BURGLAR ALARMS AND CRIME

Before discussing the relevant policy issues and problems associated with false alarms, it is important to discuss how alarms affect crime. Such a discussion provides valuable background information that is important in subsequent policy decisions. Their operation should frame policy to ensure maximum effectiveness.

The Preventive Aspects of Burglar Alarms

First, it should be noted that there are two types of alarms that are reported to the police: 1) burglar alarms and 2) robbery or panic alarms. Burglary alarms are those alarms that are activated when an intruder attempts to enter a business or residence usually when the occupant is not present. The overwhelming majority of alarms received by police departments are burglary alarms. Robbery or panic alarms, on the other hand, are those alarms that are initiated by citizens as the result of a real or perceived intruder. In terms of robbery alarms, many businesses including financial institutions and others maintain robbery alarms. Residential burglary alarms have panic alarms whereby a resident or inhabitant can quickly summons the police in emergency situations. This paper focuses on burglary alarms, as opposed to robbery or panic alarms. Police departments should continue to maintain a rapid response to robbery and panic alarms. Although the majority of such alarms are false alarms, they have a greater potential to be legitimate as compared to burglary alarms. They also alert the police to a possible serious crime in progress.

Burglary alarms can be tripped by intruders or accidentally during activation/disarmament.

Robbery or panic alarms are activated intentionally by citizens perceiving a threat of immediate danger.

Burglary alarms serve two purposes, and it is debatable as to which purpose is the primary objective. First, burglar alarms serve to deter or prevent burglaries. There is a body of research that indicates that burglars, except for the most inexperienced, attempt to identify targets that are not guarded. They do not randomly select targets. They investigate the whereabouts of inhabitants and the level of difficulty for entry and exit. The mere presence of a burglar alarm has somewhat of a deterrent effect, and this presence becomes explicit with the posting of a burglar alarm sign. Indeed, the posting of a sign likely serves as a strong deterrent as having an actual alarm.

There is sparse research examining the impact of burglar alarms on the incidence of burglaries. Hakim and Buck found that residences with alarms had a 1.4 percent chance of burglary, and homes without alarms had a 2.3 chance of burglary. The effect for businesses was more profound. Businesses with alarms had a 4.2 percent chance of victimization, while non-alarm businesses had an 18.2 percent chance of being burgled. This research seems to indicate that the presence of burglar alarms have a preventive effect. However, it should be noted that most alarms are installed in residences and businesses in higher socio-economic areas, and the highest burglary victimization generally occurs in lower socio-economic areas. Thus, the findings may be artifacts resulting from the research design. Thus, it is not known from a research standpoint how effective alarms are in deterring crime. It may be that less costly precautions such as adequate lighting, a vehicle in the driveway, presence of a dog, and target hardening such as deadbolt locks may be just as effective in deterring burglaries as alarms.

Alarms have little impact on residential burglary.

Non-alarm <u>businesses</u> are 3.5 times as likely to be victimized compared with alarmed properties.

The second purpose of an alarm is to facilitate detection and apprehension of burglars and other criminals. Indeed, when alarm companies market alarms, one of the benefits often mentioned is a police response. However, police responses to burglar alarms, especially those in residential areas, may be of the lowest priority in terms of dispatch. With few exceptions, there is not a rapid police response. Police officers respond to more pressing calls for service, especially considering that almost all alarm calls are false. The high number of false alarms increases the level of danger to police officers, when there actually is a crime in progress officers do not take them seriously and often are not as attentive as needed. This is not to say that alarms are of no utility in assisting the police in apprehending potential burglars. The primary benefit of an activated alarm is that it raises the awareness of neighbors and passersby to the point that they more carefully observe what is transpiring. In many instances, if they observe something suspicious they immediately notify the police, and in some cases, they give officers descriptions of suspicious persons or activities. This more often leads to an apprehension as compared to responding to an alarm. Thus, police response is not as important as the public awareness raised by the alarm.

<u>The Costs Associated with Responding to Alarms</u>

As noted above, police response to alarms is very costly. At first glance, it would appear that alarm calls would not be of concern to police managers. Police departments have large numbers of sworn and civilian personnel, and patrol officers who respond to citizen calls for service and alarms are allocated throughout the jurisdiction on a 24 hour basis. However, the majority of police departments, if not all, are understaffed as discussed above. That is, their workloads are substantial to the

Police response to alarms is very costly.

20 alarm calls consume about 1 officer for a 10 hour shift.

point that additional duties or responsibilities often detract from other important tasks. Police departments do not have human resources to spare, especially considering that each alarm call consumes 20 to 40 minutes of an officer's time (this time figure includes response time and time on the scene). This means that 20 alarm calls would consume one officer for a ten hour shift.

Thus, there is a level of costs to departments when responding to alarms. Sampson succinctly summarized the problem,

> If alarms are highly reliable, the public benefits from police catching burglars, taking them out of circulation and reducing the risk of burglary for everyone in the community. However, if alarms are unreliable, then automatic police response becomes a personal service to the alarm owner, providing no benefits to the public at large.

There have been several studies examining the number of alarms and their effectiveness in terms of leading to the arrest of burglars or other criminals. Blackstone, Hakim, and Spiegel note,

> … in DeKalb, Georgia, in 2000, only 39 out of over 144,000 alarm calls were actual or attempted burglaries. That same year, 97.5 percent of 30,000 police responses to burglar alarms in Seattle were false, and only 40 burglars were actually apprehended. Chicago police annually respond to over 300,000 alarms, 98 percent are false.

It should be noted that these statistics include both residential and commercial alarms, and it is likely that most of the burglary apprehensions were for commercial establishments, which have a higher alarm reliability rate. Moreover, it is not known what percentages of the burglary apprehensions was the result of a rapid police response to the alarms.

Blackstone, Hakim, and Spiegel estimated that annually there are 36 million false alarms in the United States costing about $1.8 billion. In other words, if false alarms did not occur, approximately 35,000 American police officers could be shifted to more productive responsibilities. In later sections of this report, the impact of false alarm calls in cities in San Bernardino County is examined. The following section of the report examines measures enacted by departments to better manage false alarms.

Blackstone, Hakim, and Spiegel estimated that annually there are 36 million false alarms in the United States costing about $1.8 billion. In other words, if false alarms did not occur, approximately 35,000 American police officers could be shifted to more productive responsibilities.

II. POLICIES USED TO MANAGE FALSE ALARMS

Research indicates that when a department or city has no policy governing burglar alarms, burglar alarm calls will constitute approximately 8 to 25 percent of a department's total citizen calls for service consuming vast amounts of patrol personnel's time. There are a number of departments that have not instituted any policies, but it appears that most if not all departments in San Bernardino have such a policy. This section examines the various policies that have been implemented and their effectiveness in reducing false burglar alarms, impact on crime, and criminal apprehension are discussed.

POLICIES TO MANAGE ALARMS

- Verified Police Response
- Fining Alarm Companies
- Two Call Verification of Alarms
- Enhanced Management of False Alarms
- Enhanced Public Education

No Restrictive Policy

There are a number of departments that have not enacted alarm policies. When no policy exists, there is no incentive by alarm owners or alarm businesses to reduce the number of false alarms. **False alarms account for upward to 25 percent of police calls for service in cities that do not have any type of restrictive policies.** It has been shown that there are numerous policies that can reduce the volume of false alarms.

Verified Police Response

Verified police response is where burglary alarms are verified by a third party before a police response. Cities such as Salt Lake City UT, Las Vegas NV, Milwaukee WI, and Fremont CA, California have enacted verified police response ordinances or policies. In Salt Lake City, the alarm companies have hired private security companies to respond to burglar alarms. Verified police response requires a visual verification of the alarm's legitimacy and if an alarm is determined to be legitimate, the police are summoned. **Verified police response in Salt Lake City has resulted in a 90 percent reduction in the number of alarm calls answered by police officers.** It has also resulted in a more rapid police response to alarms since in many cases, alarms are a low priority. Verified police response is the optimal policy since it results in reduced calls, officer safety, and greater citizen satisfaction. Alarm companies are adamantly opposed to verified police response since it generally results in reduced company profits. They often initiate public relations campaigns using scare tactics to discourage the adoption of such policies. The issue is extremely political and difficult when attempting to secure city council approval.

Verified Police Response

Adopting verified police response to alarm calls while maintaining rapid response to all panic alarms and alarms to homeland security targets, can significantly reduce the costs associated with false alarms and improve pubic safety.

When verified police response is used for burglar alarms, it is recommended that the police respond to all panic alarms and robbery alarms. Moreover, agencies can continue to act as first responders to "potentially dangerous" targets. For example, the Fremont, California Police Department responds to burglar alarms

at potential "homeland security" targets that include gun shops, businesses that sell chemicals, and financial institutions. Departments can modify a verified police response to meet their unique needs.

Fining Alarm Companies

An unusual program was adopted in Palm Beach County, Florida, where alarm companies, rather than alarm owners, were fined. Each year alarm companies are assessed a registration or business fee. The amount of the fee is determined by the number of false alarms from the company's subscribers. The alarm company is also fined based on the number of false alarms. If the company does not pay the fine, the department does not respond to any locations that are served by the alarm company.

Fining Alarm Companies

Billing alarm companies annually through a sliding registration fee based on the number of false alarms will help to recoup costs associated with attending false alarms, but it will not reduce the drain on officer time.

This policy provides an incentive to alarm companies to actively reduce the number of false alarms, although it was reported that the policy change had little effect on the number of false alarms. The policy should improve public relations with citizens since they are not fined. However, citizens do not have any incentive to improve their management of their alarm systems.

A form of the fining alarm companies' strategy was attempted in Riverside. Here the department required that alarm companies report alarms using a 900 telephone number, which resulted in the alarm company incurring a charge for each call. The alarm companies sued, and the department was forced to abandon the program.

Two Call Verification of Alarms

Currently, most alarm companies will attempt to make one telephone call to the business or residence when an alarm is activated. If the alarm company is unable to connect with an occupant, the police are called. However, the majority of false alarm activations occur when leaving or arriving. For example, a large number of false alarms occur when residents leave their residence for work. Thus, in many cases, the alarm companies are unable to make contact with the alarm owner. Some departments' alarm policies require departments to maintain work and cell phone numbers that are called when the alarm owner is not reached on the first telephone call. This procedure can reduce the number of false alarms depending on the amount of effort exerted by the alarm company.

Two Call Verification

There is no empirical evidence of material change in the number of false alarms; results depend on the effort exerted by the alarm company.

Enhanced Management of False Alarms

There has been a reduction in the number of alarms when departments have implemented a fine system for false alarms.

Generally, alarm owners are fined upon a third false alarm within a twelve month period. In many cases, these systems are manual or only semi-automated. The City of Phoenix developed a computerized system to keep track of the number of false alarms, which increased better recordkeeping and the number of fines. It also resulted in a substantial decrease in the number of false alarms.

Police departments generally do not place a great deal of emphasis on these systems, and recordkeeping may be deficient or have lapses in efficiency since the money generated from these fines generally goes to the jurisdiction's general fund. However, the preventive or deterrent effects of fines should be considered. That is, if police departments maintained better records that resulted in a larger number of fines, it may have an impact on alarm owner behavior, which occurred in Phoenix. The fear of receiving a fine for false alarms should be no different than fear of receiving a speeding citation. Moreover, the fines for false alarms may be too low. These fines generally are around $50.00 for the third false alarm, which is significantly lower than any traffic fine.

Enhanced Management of False Alarms

Using a computerized or semi-automated system to improve record keeping may enhance the effectiveness of recovering costs for false alarms. However, if fines are set too low (near $50.00) there is little impact on alarm owner behavior. False alarms are unlikely to decline.

Enhanced Public Education

In the vast majority of cases, alarm owners are ignorant of the problems and issues surrounding false alarms. Alarm companies provide alarm owners with little or no information when an alarm is installed. In many cases, the alarm company does not have a vested interest in reducing the number of alarms – only in maximizing profits. There are several methods by which to enhance public education:

1. Develop a false alarm information sheet and require alarm companies to provide copies to each new subscriber. Alarm installers should be required to cover the material with the alarm owner at the time of installation.
2. Develop brochures or door-hangers that officers can leave at the scene of false alarms.
3. Provide classes for citizens regarding the management of their alarms. In some cities such as Phoenix, a class could be taken in lieu of the first fine.

Enhanced Public Education

Phoenix Police Department maintains that public education in conjunction with a more efficient fine system (computerized) led to a substantial decline in false alarms.

The Phoenix Police Department maintains that public education in conjunction with a more efficient fine system substantially contributed to the reduction in false alarms.

This section of the report examined the various options that have been used by police departments to better manage false burglar alarms. Essentially, there are six directions police departments can take, and each has its advantages and disadvantages. The following section examines the data and information provided by the departments participating in this study.

III. SAN BENARDINO COUNTY FALSE ALARM RESPONSE SURVEY: RESULTS AND ANALYSIS

In June 2006, professors from the Center for Criminal Justice Research at California State University-San Bernardino developed a False Alarm Response Survey Instrument in partnership with the Fontana, Ontario and Redlands Police Departments. The survey was designed to gather information from law enforcement agencies serving communities in San Bernardino County to understand the resource drain placed on agencies by alarm response policies.

The survey was disseminated via email to all members of the San Bernardino County Police Chiefs and Sheriff's Association. Ten police departments returned the survey, we were able to use the data provided from nine of these departments (See Table 1).

The data in Table 1 show that there is wide variation in the number of patrol officers per 100,000 residential population in the nine cities. The data reveal substantial variance in patrol coverage. Rialto has the lowest patrol coverage with about 40 officers per 100,000 and San Bernardino has the highest rate of 155 officers per 100,000 residential population.

Table 1. Responding Departments

Department	Residential Population 2005[a]	N Sworn Officers in Patrol 05-06 Fiscal Yr.
Barstow	23,684	21
Chino	76,547	40
Fontana	159,769	72
Montclair	35,479	35
Ontario	171,186	83
Redlands	70,145	35
Rialto	100,321	40
San Bernardino	199,723	155
Upland	74,014	65

[a] As reported in UCR 2005

Alarm Response Ordinance/ Policies & Registration Information

All nine departments are currently the first responder for residential burglary alarms and there is a fine system in place for false alarms. None of the responding departments have a verified response policy.

The false alarm ordinances/policies in these jurisdictions have been in effect from 1979 to as recently as 2004 (see Table 2). In six of the nine jurisdictions, residential alarms systems are required to be registered. Estimates are that between 50 and 95 percent of residential alarms are in fact registered in these jurisdictions (average 66%), with the reported fee for registration ranging from $15.00 to $35.00 with the most frequent charge being $25.00.

Police in jurisdictions are 1st responders to alarms and use a fine system to deal with repeat false alarms.

On average, about 66% of residential alarms are registered.

Table 2. Year of Alarm Ordinance/Policy Enactment and Alarm Registration Information

Department	Year Alarm Ordinance/Policy Enacted	Res. Alarm Registration Required	% Res. Alarms Registered (Est.)	Res. Registration Fee $
Barstow	1997	Yes	50	25.00
Chino	1990	No	-	-
Fontana	2001	No	-	-
Montclair	1982	Yes	60	-
Ontario	2004	Yes	75	25.00
Redlands	2000	No	-	-
Rialto	1986	Yes	95	15.00
San Bernardino	1982	Yes	50	25.00[a]
Upland	1979	Yes	-	35.00

[a] Residential low income registration fee is $10.00 per year

False Alarm Activation Fine Policies

In seven of the nine jurisdictions, fines for responding to false residential or commercial burglary alarm activations are assessed on either the third (N= 3) or fourth (N= 4) false alarm in a 12 month period or fiscal year (See Table 3). In six of the nine jurisdictions, the fine for false residential and commercial alarms is equal. Two jurisdictions (Ontario, Rialto) assess a higher fine for false commercial alarms. Initial fines range from $40 to $100. Five of the nine jurisdictions increase fines for false residential or commercial alarms on subsequent false activations. In four of these jurisdictions the fine increases by $25.00 for each subsequent false alarm. In the fourth jurisdiction (Chino), the fine roughly doubles for each subsequent false alarm within a fiscal year.

Many jurisdictions have fines lower than $75.00; this may be too low to act as a deterrent.

Fines are not assessed until after the 3rd alarm or later. Assigning fines upon the second false alarm would defray the cost of police. Resources.

Table 3. False Alarm Fine Policies

	Residential				Commercial			
Department	Fine on False Alarm #	1st Fine ($)	2nd Fine ($)	3rd Fine ($)	Fine on False Alarm #	1st Fine ($)	2nd Fine ($)	3rd Fine ($)
Barstow	3	50.00	75.00	100.00	3	50.00	75.00	100.00
Chino	4	40.00	75.00	150.00	4	40.00	75.00	150.00
Fontana	4	63.00	63.00	63.00	4	63.00	63.00	63.00
Montclair	4	50.00	50.00	50.00	4	50.00	50.00	50.00
Ontario	3	50.00	75.00	100.00	3	75.00	100.00	150.00
Redlands	3	100.00	100.00	100.00	4	-	-	-
Rialto	3	75.00	100.00	125.00	3	100.00	150.00	200.00
San Bernardino	5	75.00	75.00	75.00	5	75.00	75.00	75.00
Upland	2	50.00	75.00	100.00	2	50.00	75.00	100.00

[B] Upland waives the fine for the first alarm if the alarm is registered but does not distinguish between residential and commercial alarms. If the alarm is not registered there is a fine of $25.00 for the first alarm.

False Alarm Fine Collection

Three of the nine jurisdictions report the generation of fine notices and the collection of funds is the responsibility of the city government (See Table 4). Four jurisdictions report the responsibility is shared by the police department and city government, while in the remaining two jurisdictions the police department is solely responsible. The percent of residential fines collected is estimated to range from 50 to 100 percent (mean= 72%), while estimated collection of commercial fines ranges from 68 to 100 percent (mean = 74%). In eight of the nine jurisdictions, the city general fund receives the fines collected. In one department the fines go to the police department budget (Rialto). The majority of respondents (N=5) estimate that the fine and collection process is costing the police department or the city more than it is generating, but three respondents estimate that the process is generating a surplus. It should be noted that this process is extremely labor intensive with substantial costs.

Only 2 jurisdictions estimate %100 collection of fines.

- **In 4/9 jurisdictions the city generates fine notices.**
- **Most fines are received by the city.**

Information management deficiencies may contribute to inefficient collection. Collection systems should be reviewed.

Table 4. False Alarm Fine Collection

Department	Generation of Notices & Collection of Funds	% Res. Fines Collected (Est.)	% Comm. Fines Collected (Est.)	Fines Received by
Barstow	Police Dept.	95	95	City General Funds
Chino	City Govt.	-	-	City General Funds
Fontana	City Govt.	76	76	City General Funds
Montclair	Other	80	75	City General Funds
Ontario	City Govt.	100	100	City General Funds
Redlands	Other	100	100	City General Funds
Rialto	Other	80	80	Police Dept. Budget
San Bernardino	Police Dept.	50	70	City General Funds
Upland[A]	Other	68	68	City General Funds
Mean	-	72.11	73.78	-

[A]Upland's system does not distinguish between residential and commercial alarms.

Effectiveness of Alarm Ordinance in Reducing False Alarms

Only three of the responding departments (Ontario, Fontana, and Rialto) report that enactment of the alarm ordinance achieved a desirable reduction in the number of false alarms. Ontario's ordinance was enacted the most recently (2004); they report a 15 percent reduction in the number of false alarms. Fontana's ordinance (enacted in 2001), is reported to have achieved a 10 percent reduction in the number of false alarms. No numbers are available for Rialto (1986). The remaining jurisdictions report that their ordinances have not achieved a desirable reduction in the number of false alarms, but all ordinances were enacted prior to 2001. There are no apparent differences in response policy, registration requirements or fine

While some jurisdictions show marginal effectiveness in alarm reduction with the enactment of alarm ordinances, most have not had satisfactory reductions in alarm calls.

systems between departments that report a desirable reduction in false alarms and those that do not that might be considered to account for the reduction (i.e. Both Ontario and Fontana report desirable reductions in the number of false alarms, Ontario requires alarm registration, Fontana does not, Ontario increases fines for repeat false alarms, Fontana does not etc.).

Current Alarm Statistics

Tables 5 and 6 display statistics reported by departments for the period July 1, 2005 through June 30, 2006. In Table 5, Residential and Commercial alarm activations account for between one and 12 percent of all calls for service (mean = 6%). Departments were requested to report the number of alarm activations (column 4) and the number of burglaries as measured by reports (column 5). The sixth column indicates that between 97.8 (Barstow & San Bernardino) and 99.7 percent (Fontana) of alarm calls are false alarms (mean = 99%).

Most alarms are false. For cities in San Bernardino County, an average of 99% of burglar alarms are false.

Table 5. Residential and Commercial Alarm Activations as a Percent of all Calls for Service, Number of Alarm Activations and False Alarms, July 1, 2005-June 30, 2006

Department	City Population[a]	Alarm Calls as % of all Calls for Service	# of Alarm Activations	# of Burglary Reports	% Alarms that are False[b]
Barstow	23,684	3.50	1,146	25	97.82
Chino	76,547	5.20	4,558	42	99.08
Fontana	159,769	7.50	8,529	22	99.72
Montclair	35,479	4.40	1,876	24	98.72
Ontario	171,186	1.00	9,701	86	99.11
Redlands	70,145	7.00	4,541	36	99.21
Rialto	100,321	6.52	4,840	38	99.22
San Bernardino	199,723	12.00	12,216	266	97.82
Upland	74,014	5.00	3,608	5	99.86
Sum			51,015	544	
Mean	101,208	5.79	5,668	60	98.95

[a] City population as reported in UCR 2005
[b] % Alarms that are False = Proportion of alarm activations that did not result in a burglary report.

As a note to Table 5, research indicates that nationally about 99 percent of alarm activations are false. It appears that the cities in San Bernardino County are consistent with national findings.

Table 6 broadens the information contained in Table 5. Table 6 reports the number of burglary reports, burglary arrests, other reports, and other arrests. Other reports of arrests include information for offenses other than burglary. For example, officers might encounter a vandalism, assault, or domestic violence violation once they respond to a burglar alarm.

On average, an arrest is made in response to a burglary alarm 0.08% of the time.

There were 544 actual burglaries in the nine cities. This led to 60 arrests. Two points can be made. First, alarms resulted in arrest in only 7.9 percent of cases where there was an actual burglary, and second, there were burglary arrests in only 0.08 percent of all alarm activations.

The data are striking. For example, Fontana only made seven total arrests from 8,529 alarm activations. Ontario made six total arrests for 9,701 alarm activations.

Table 6. Number of Report and Arrest Dispositions from Residential and Commercial Alarm Responses, July 1, 2005-June 30, 2006

	BURGLARY		OTHER	
Department	Number of Reports	Number of Arrests	Number of Reports	Number of Arrests
Barstow	25	4	2	-
Chino	42	4	-	-
Fontana	22	1	12	6
Montclair	24	2	0	3
Ontario	86	1	7	5
Redlands	36	3	11	0
Rialto	38	3	25	3
San Bernardino	266	25	-	-
Upland	5	-	-	-
Sum	544	43	57	17
Mean	60	5	10	3

Table 7 presents the time and cost allocated to responding to *false* residential and commercial burglary alarms by department. Only Fontana, Ontario and San Bernardino report having previously formally evaluated the impact of the alarm ordinance/policy on police resources. The average time in minutes spent responding to a false alarm activation ranges from 4.72 minutes to 25 minutes (mean=17). This translates into an average of 1,602 hours per year responding to false alarms. In eight of the nine jurisdictions two officers are required to respond to an alarm call, thus the cost per year to respond to false burglary

On average, each jurisdiction spends $171,845 per year dealing with false alarms.

alarms ranges from $20,253 (Barstow) to $ 409,949 (San Bernardino).

Table 7. Time and Cost Allocated to Responding to False Residential and Commercial Burglary Alarms July 1, 2005-June 30, 2006

Department	N False Alarms	Avg. Min/ Response [a]	Hours/Yr. Responding to False Alarms	Avg. Hourly Cost of Patrol Officer [b] (Est.)	Cost/Yr. for One Officer Response to False Alarms	N Officers Required to Respond to Alarms	Manpower Cost/Yr. for Response to False Alarms
Barstow	1,121	25.00	467	$44.80	$20,925	1	$20,253
Chino	4,516	14.48	1,090	$100.10	$109,055	2	$218,190
Fontana	8,507	16.77[c]	2,378	$53.75	$127,802	2	$255,603
Montclair	1,852	4.72	146	$41.27	$6,013	2	$12,025
Ontario	9,615	11.40	1,827	$54.39	$99,362	2	$198,725
Redlands	4,505	24.16	1,725	$63.50	$109,538	2	$219,075
Rialto	4,802	15.00	1,200	$46.00	$55,223	2	$110,446
San Bernardino	11,950	22.00	4,382	$46.78	$204,974	2	$409,949
Upland	3,603	20.00	1,201	$43.44	$52,171	2	$104,343
Sum	50,471	153.53	14,416	$494.03	$78,5073		$1,546,609
Mean	5,608	17.06	1,602	$ 54.89	$87,230	-	$ 171,845

[a] Time between dispatch and clearing the call
[b] Including fringe benefits
[c] Mean of average min per residential response and average min per commercial response

Table 8 provides a breakdown of the crime rates in the various responding cities using the Federal Bureau of Investigation's Uniform Crime Reports. It appears that based on a comparison between the 2004 and 2005 data, the rate of property crime is declining in all cities except Fontana, Redlands, and Upland with Redlands having a significant increase. Most likely, it will be difficult for a chief to convince the city to adopt a verified alarm response policy if burglaries are on the increase.

Table 8. Changes in Crime Rates in the Study Cities

Department	City Population 2005[a]	Number of Burglaries 2005[a]	Burglary Rate/100, 000 2005	% Change in Burglary Rate 2004/2005[b]	% Change in Property Crime Rate 2004/2005	% Change in Violent Crime Rate 2004/2005
Barstow	23,684	305	1,287.79	+0.86	-3.57	+8.25
Chino	76,547	521	680.63	+7.65	-2.02	-22.03
Fontana	159,769	782	489.46	+3.73	+0.60	-10.76
Montclair	35,479	253	713.10	-4.26	-8.33	-9.05
Ontario	171,186	991	578.90	+0.03	-5.92	-13.47
Redlands	70,145	553	788.37	+3.47	+18.01	+3.18
Rialto	100,321	715	712.71	+6.34	-0.81	-20.00
San Bernardino	199,723	2,525	1,264.25	-1.76	-1.70	-5.75
Upland	74,014	466	629.61	+4.72	+0.30	-7.80

[a] As reported in UCR 2005
[b] Percent Change in Volume and Rate per 100,000 Inhabitants 2004/2005

On the other hand, it appears that violent crime is declining in all cities except Barstow, and Redlands. An increase in violent crime would provide additional justification for a change to a verified alarm response policy, although it is not the sole justification for a change in policies.

San Bernardino County False Alarm Response Survey: Summary of the Results

All nine responding departments characterize their residential burglary alarm response policy as first responder to alarm calls with a fine system for false alarms.

- In 6/9 jurisdictions registration is required for residential burglary alarms.
- In 5/9 jurisdictions a fee is required for residential burglary alarm registration.
- Fines for false burglary alarms are assessed on the, 2nd false alarm (N=1), 3rd false alarm (N= 3), 4th false alarm (N=3), 5th false alarm (N=1) or 8th false alarm (N=1); fines generally increase with subsequent alarms (5/9 jurisdictions).
- In 2/ 9 jurisdictions commercial false alarms are fined at a higher rate than residential false alarms.

Summary of the Results Continued

The generation of fine notices and collection of fines is the responsibility of the city government in 3/9 jurisdictions; responsibility is shared by city government and police department in 4/9 jurisdictions, police department has sole responsibility in two jurisdictions.

- Between 50% to 100% (Mean = 72%) of false residential burglary alarm fines are collected.
- Between 68% to 100% (Mean = 74%) of commercial false burglary alarm fines are collected.
- Usually the City General Funds receive the fines generated by false burglary alarms.

Alarm calls account for between 1% and 12% of all calls for service (Mean = 6%).

- On average, 99% of burglary alarms are false.
- Only 0.08% of burglary alarm responses result in a burglary arrest.
- Responding to false burglary alarms (from dispatch to clearing the call) takes between 4.72 min. to 25.00 min. (Mean = 17.06 min.).
- Average hours per year consumed responding to false burglary alarms ranges from 146 hrs. to 4,382 hrs. (Mean = 1,602 hours).
- The manpower cost per year for 2-officer response (8/9 jurisdictions) to false burglary alarms ranges from $12,025 to $409,949. (Mean = $171,845).

IV. SUMMARY AND CONCLUSIONS

This study was commissioned by several police departments in San Bernardino County with the researchers meeting with representatives from the Fontana, Ontario, and Redlands Police Departments. The purpose of the study was to identify options and supporting data for altering police departments' false alarm policies. It was realized that several of the departments are contemplating pursuing a verified alarm response policy, but there are also departments that wish to examine current policies and possibly adopt changes that may reduce the number of false alarms without adopting a verified police response, which is wrought with political problems. Thus, it is the intent of this report to identify all options and allow departments to make informed decisions on the direction to pursue. Also, the researchers will work with chiefs and departmental staff to fashion a policy for presentation to city officials. The researchers will avail themselves to make presentations when needed.

The research to date supports a verified police response to alarms as the most efficient method of responding to alarms. A verified police response substantially reduces the number of alarm calls to police departments without posing a significant level of danger to the public. Indeed, it can be argued that a verified response does not increase public danger or increase safety problems. Cities where a verified response has been adopted have not witnessed increases in burglary or other crimes as a result of the policy change. However, as noted, alarm companies will exert every effort including public fear tactics to ensure that this policy is not adopted by a police department.

Short of a verified police response, there are other measures that a department should consider. In essence, it is in a department's best interest to adopt policies that reduce the number of false alarms in a jurisdiction. It was found in the current study that approximately six percent of all calls for service are false alarms, and about 99 percent of such calls are false. As discussed above in this report, there are three areas where departments can take action that possibly will reduce the number of alarms: 1) better recordkeeping for false alarms, 2) levying fines on the second false alarm and increasing the amounts of the fines, and 3) public education.

A fourth issue must also be raised. At this junction we do not know the percentage of cases where alarm companies are actually attempting to contact alarm owners prior to notifying the police. There may be a percentage of cases where the alarm company notifies the police without attempting to call the alarm

owner. Police departments should consider surveying a random sample of alarm calls to determine if this is occurring. If so, stringent enforcement of alarm company procedures may lead to a reduction in calls.

V. APPENDIX: SURVEY

FALSE ALARM RESPONSE SURVEY

To Whom It May Concern:

We are requesting your participation in a survey designed to collect information on false alarm responses of agencies located in San Bernardino County. This survey is being sent to all agencies in this service area. The impetus for this research is that the San Bernardino Association of Chiefs of Police and Sheriff are considering the feasibility of recommending a model policy on alarm response. Prior to discussing this matter, it is important to discover how agencies currently respond to false and to what extent they are satisfied with their current policies.

The attached survey takes approximately 20 minutes to complete if you have your current false alarm statistics available. Data collected from this survey will be used to better understand the resource drain placed on agencies. It is also our intent to identify agencies with very effective programs that may want to share their experience with other departments. Information that is collected will be contained in a report that will be shared with all police departments and the Sheriff's Department in San Bernardino County.

The Institutional Review Board of California State University, San Bernardino, has approved this survey. Your participation in this study is voluntary. If you decide to complete the survey, you are not obligated to answer any survey questions in the future. The aggregated responses will be presented to the San Bernardino County Association of Police Chiefs and Sheriff. Additionally, the report may contain tables containing data and information for specific agencies. The resultant report will be distributed through the San Bernardino Chiefs of Police and Sheriff's Association. If you have any questions or concerns, you may reach Dr. Larry Gaines at (909) 537-5508 or lgaines@csusb.edu.

Thank you.

Larry K. Gaines, Ph.D.
California State University, San Bernardino
For Research Purposes Only

False Alarm Response Survey

Fontana Police Department, Ontario Police Department, and Redlands Police Department,
in partnership with the Center for Criminal Justice Research
Department of Criminal Justice, California State University, San Bernardino

Revised June 2, 2006.

This survey was designed to gather information from law enforcement agencies servicing communities in San Bernardino County. The purpose of this project is to better understand the resource drain placed on agencies by alarm response policies. It is also our intent to identify response policies that are more effective. The survey will take about 20 minutes to complete if you have your false alarm statistics available. You may choose to terminate your involvement with this project at any time. Your participation is voluntary. This survey was approved by the Institutional Review Board of California State University.

Once you have completed this survey, you can return it to the research team in one of three ways:

a. fax the completed survey to: C/O Dr. Larry Gaines at 909-537-7025
b. email the survey to: lgaines@csusb.edu
c. mail the completed survey to:

False Alarm Response Survey
C/O Larry Gaines, Chair
Department of Criminal Justice
California State University, San Bernardino
5500 University Parkway, San Bernardino, CA 92407

Alarm Response Policy Information

1. Name of Law Enforcement Agency completing survey _____

2. On average, how many sworn officers were working in the patrol division during this past fiscal year (July 1, 2005 to June 30, 2006)? _____

3. Please estimate the average hourly cost of a patrol officer including fringe benefits: _____

4. How many officers are required to respond to an alarm call? ☐ None ☐ One ☐ Two

5. On average, how many officers typically respond to alarm calls? _____

6. How would you characterize your alarm response policy for **residential burglary alarms** (excluding panic alarms)? (select **one** answer):

☐ first responder to alarm calls with no fine system

☐ first responder to alarm calls with a fine system for false alarms

☐ verified response (phone verification by alarm provider)

☐ verified response (physical check by alarm provider)

☐ other _____ (please explain)

7. Is your agency currently considering making adjustments to your alarm response policy?

☐ Yes ☐ No

If so, why are you considering a change? _____

_____

_____

_____

_____

What are you changing? _____

_____

_____

_____

_____

_____

8. Does your jurisdiction have a false alarm ordinance/policy in place? ☐ Yes ☐ No

If no, please continue to question 24.

If yes, please answer the following questions about your ordinance:

9. Date ordinance/policy was enacted: _____

10. Has the alarm ordinance achieved a desirable reduction in the number of false alarms?

☐ Yes If yes, what percent _____% decrease? ☐ No

11. Has your agency formally evaluated the impact of this ordinance/policy on police resources?

☐ Yes ☐ No

12. Do you require individuals to register their residential alarm systems (permit required)?

☐ Yes ☐ No

13. If registration/permit required, what percent of alarms do you estimate are actually registered? _____

14. If registration/permit required, amount of fee $_____

15. Are individuals fine for false residential burglary alarms? ☐ Yes ☐ No

16. If yes, fines are assessed on the _____ false residential alarm in a 12 month period.
(Insert Number)

17. Are businesses fined for false commercial burglary alarms? ☐ Yes ☐ No

18. If yes, fines are assessed on the _____ false commercial alarm in a 12 month period.
(Insert Number)

19. In some jurisdictions, the amount of fine increases with the number of false alarms within a 12 month period. What is the fine for the first and subsequent alarms after the alarm threshold has been reached?

a. Amount of first fine during a 12 month period (residential) $ _____ b.(commercial) $ _____

c. Amount of second fine during a 12 month period (residential) $ _____ d.(commercial) $_____

e. Amount of third fine during a 12 month period (residential) $ _____ f. (commercial) $ _____

20. How are the fine notices generated and funds collected?

☐ Police Department ☐ City Government ☐ Other _____

21. What percent of fines do you estimate are collected? (residential) ____% b. (commercial) ____%

22. What unit of government receives these fines?

☐ Police Department budget ☐ City general funds ☐ Other _____

23. Generally, would you estimate that the fining and collection process is:

☐ breaking even in terms of resources expended and funds generated

☐ costing the police department or the city more than it is generating

☐ generating a surplus

☐ other: _____
(please explain)

The next series of questions require some detailed information about the number of calls for service that your agency received during the July 1, 2005 to June 30, 2006 fiscal year. Answering these items may take some time if the information needs to be generated. **If only partial information is available, please include what you can.**

24. Police departments generally use a priority system when dispatching calls.

a. How many levels does your system use? _____

b. With "1" being the highest priority, what priority are unverified burglary alarms? _____

c. Within the priority level where alarms fall, what percent of other calls within this level are dispatched before unverified alarms? _____ %

Please examine your CAD calls for the past year—**July 1, 2005 to June 30, 2006**—and indicate the total number of calls for each category.

	a. Residential Burglary Alarm Activations	**b. Commercial Burglary Alarm Activations**	**c. Panic or Robbery Alarm Activations**
25. Number of Alarm Activations (from the calls for service data system)			
26. Alarm Calls as a % of ALL calls for service			
Alarm Call Disposition 27. Number of False Alarms			
28. Number of Burglary Reports			
29. Number of Other Reports			
30. Number of Burglary arrests			
31. Number of Other arrests			
32. Number of addresses with repeat alarm calls for service (July 1, 2005 - June 30, 2006)			
33. Average time (in minutes) officers spend responding to false alarm calls (time between dispatch and clearing the call)			

34. The San Bernardino Association of Chiefs of Police and Sheriff is considering the feasibility of adopting a model policy on alarm response. If such a position was developed, would you be interested in participating in the development process?

☐ Yes ☐ No

If you do not want the information from your department contained in the report, please mark the box . ☐

Thank you for taking the time to complete this survey.

Results will be presented at an upcoming
San Bernardino County Police Chiefs Association meeting.

Evaluation of Alternative Policies to Combat False Emergency Calls

Andrew J. Buck, Erwin A. Blackstone, and Simon Hakim

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Evaluation of Alternative Policies to Combat False Emergency Calls

1. Introduction

An essential function of the police is emergency response. There are two sources of civilian calls for response. One source is the 911 emergency systems. The other source is activation of burglar alarm systems. There is considerable overlap between the two sources. Nationwide, the 911 system generated 183 million calls in 2002. During the same period there were more than $36 million burglar alarm activations. With this number of calls there is a public policy problem to the extent that these emergency response systems generate a high proportion of non-emergency and false calls. Illustrative of the problem is the fact that nationwide 94-99 percent of all burglar alarm activations turn out to be false. These calls result in a congestion problem for the communications network. Perhaps more importantly, emergency calls often result in an increasing physical response by the police, requiring the use of resources that might be better allocated elsewhere.

The false activation issue is the primary focus of the paper. Nationwide data for emergency responses are not available, but are available for individual communities. In 2000 in Philadelphia 96 percent of fire alarms, 97 percent of burglar alarms and 75 percent of medical alarms are false or of non-emergency nature (Blackstone, Hakim, and Spiegel, 2002: 16). In 2000 the cost of responding to false burglar alarms was estimated at $1.8 billion nationwide; in the range of $30-95 per alarm activation. (Blackstone and Hakim, 2003). To add context, President Clinton's anti-crime initiative budgeted an additional 100,000 policemen. Solving the problem of false alarms could increase the effective size of the nation's police forces by 35,000.

Communities across North America and Great Britain attempt to curb false alarms by instituting ordinances and/or special practices by police departments. These ordinances and policies vary significantly across communities and are usually intuitively based. In general these efforts have been unsuccessful; either the number of false activations did not decrease much over the long run or there was a decline in social welfare. The latter occurred because alarm owners discontinued use of their alarm systems, causing a reduction in the sense of, and actual, security. Further, the variability of the mandated procedures of these ordinances and policies create difficulties for central stations that monitor alarms from many communities.

In this paper we shall describe and evaluate alternative ordinances and policies meant to deal with response to false burglar alarms. We will use economic theory and performance data to evaluate and select the preferred alternative. The preferred alternative should maximize social benefits. Such an evaluation framework could be applied to other emergency services.

In section 2 we describe the economic theory and the associated criteria used to evaluate alternative ordinances and policies. Section 3 incorporates the description and evaluation of the alternatives, and section 4 presents the theoretically based preferred alternative. In section 4 we present data on performance for the major alternatives to determine whether economic theory indeed suits the case of false response to emergency calls**.** In section 5 we present some issues

involved in implementation of the preferred alternative. Section 6 provides the conclusions and policy implications.

2. Theoretical Criteria

Economic theory should be applied in the search for an optimal solution to the false alarm problem. Efficient provision of response to requests for emergency services, including alarms, requires understanding the nature of the service. Services can be either public goods or private goods. The categorization hinges on whether non-payers can be excluded from consumption (excludability) and whether consumption by one person reduces the amount of the service available for others (rivalry). The categorization is a continuum in both the excludability and rivalry dimensions, but can be usefully summarized as in Table 1.

Table 1
Private versus Public Goods

		Non-rival	
		Low	High
Non-excludable	High	Commons Good (Fish in the ocean)	Public Good (National defense)
	Low	Private Good (Wheat)	Collective Good (Pay-per-view TV)

National defense is regarded as a pure public good because no resident of the country can be excluded from its consumption, and the consumption of national defense by one person does not reduce the amount of national defense available for others to consume. Wheat is a pure private good since those who do not pay for it can be excluded from its consumption and the amount consumed by one person is not available for consumption by another.

It is very costly or even impossible to exclude anyone from consuming a public good, and each and every person consumes the full amount of the output. Without government forcing all to share the cost, each person would have a strong motive to become a “free rider”, or to pay less than the socially optimum amount. Thus, there is essentially no alternative but for government to take responsibility for the supply of public goods. However, government does not necessarily need to produce the good and could let that be done under competitive market conditions.

The assumptions necessary to classify a good as a pure public good are seldom completely met in reality. For pure public goods the size of the interacting group is the entire society, and the entire supply is commonly consumed. If either or both the requirements of non-exclusion and non-rivalry fail to be met then the good falls into the general category of an impure public good. These impure public goods incorporate the notion of congestion cost or excludable benefits. Unlike pure public goods, a larger number of consumers may cause congestion in the consumption of impure public goods. Examples include swimming pools, tennis clubs, golf courses, and highways (Cornes and Sandler, 1986; 4). Congestion is an externality in consumption. A bridge across a river is an impure public good. If the number of cars on the bridge is small then there is no rivalry in consumption, although those who do not pay the toll can be excluded from using the bridge. Everyone that pays the toll can get onto the bridge.

However, if one too many cars tries to use the bridge then everyone's trip across the bridge is delayed.

A local public good involves congestion, but does not incorporate excludability for the population within the jurisdiction. Examples include local schools, public libraries, or public parks. Police patrol that provides an "umbrella" of security to the community can also be classified as a local pure public good.

Local governments often provide emergency services because of life threatening conditions. In case of a major disaster, like an earthquake, emergency services need to be in place in order to serve the general population. Emergency services include fire protection, police response to alarms, stray animals, gas odor, and ambulance services. These are all local rather than pure public goods since congestion occurs, and residents in other adjacent localities are often excluded from enjoying the services. Government provides these services because of their significant externalities and potential life threatening conditions.

The service provided by the police department, community security, has the same general characteristics as a public good up to a point. Namely, no resident can be excluded from consumption of community security and all households consume the same amount of community security being produced by the presence of the police. The 'up to a point' caveat involves the depletability of police resources when they must respond to a call for emergency help. As long as the calls for emergency response are few in number there is no congestion problem and the cost to society of responding to the next emergency call is essentially zero. Therefore the correct price to the user for efficient allocation of police services is zero, up to the point of congestion. Without congestion, police simply serve one particular consumer or area but no other consumer is expressly denied police services.

Given the statistics cited in the introduction it would appear that many local jurisdictions are at or near the congestion point in the provision of emergency response. Once the congestion externality has been reached the municipal authority must decide on a course of action in order to restore the efficient allocation of police services. The response can be to exclude some residents from consumption of police services, thereby moving the service along the private good dimension. Or, the response could be to restore non-rivalry in consumption of police services by expanding the size of the police department, thereby moving the service back in the direction of being a public good.

Exclusion can be achieved by charging a price for the specific service that is causing the congestion problem or simply excluding certain consumers by not responding to calls for emergency help. Charging for response and not responding to emergency calls are both in practice around the country.

Expanding the size of the department requires additional financial resources. Additional funding for a larger department can be achieved through either a tax imposed on all residents or by charging the consumers of the service producing the congestion problem. An increase in local taxes in order to increase the size of the local police department in order to deal with emergency response is usually not politically expedient. There is also an efficiency question since all

residents are being asked to fund a service being provided to only a subset of the residents. A fee for emergency response is often used around the country, but the sums involved are never large enough to be meaningful for the expansion of a police department.

The public good – private good dichotomy is further clouded by the fact that emergency services are distinctly different in one important aspect from other local public goods. The output of emergency response is *a priori* uncertain with a high probability level. Emergency services have a common attribute; it is unclear whether a real emergency exists at the time service is actually requested and the emergency crew is dispatched. Only when the service is actually rendered does its "emergency" nature become known. For example, poor people without medical insurance often arrive for emergency treatment at expensive hospital emergency rooms where service can normally not be denied even when it turns out to be a non-emergency situation. In a hospital setting the service is often delivered before its emergency status is known. After all, diagnosis is required in order to determine the nature of the illness. Public ambulances are also often dispatched for what turns out to be non-emergency events. The case of police response to burglar alarms is another example. When police are dispatched it is *a priori* unclear whether a real break-in has occurred. Only after the officers actually provide the service is it known whether an actual break-in is in progress or has occurred. Hence, in all these cases of emergency services, the probability of a real event is less than one. In the case of police, *ex ante* response to false alarms will be shown to be a public good at a probability level of at most 6 percent.

In case of a bona fide emergency event, public intervention can be justified. However, in the case of a non-emergency event, public financing or intervention is unwarranted. When a real break-in occurs, the public interest requires that police attempt to catch the burglar. Apprehending burglars diminishes the pool of burglars and reduces the probability that others will become victims of burglary. Several studies confirm that burglars tend to repeat their activities in the same neighborhood unless apprehended (Rengert and Waselchick. 1985). For example, in June 2003, New York City police were looking for a burglar that broke into a dozen homes and a school in a three-block area of the upper West Side of Manhattan (Mbugua, 2003). Apprehension also has a deterrent effect by raising the expected cost of criminal activity, and thereby may even reduce the future supply of burglars.

Response to a valid alarm can lead to the apprehension of suspected burglars. Seattle police in 2002 responded to 24,505 alarms, of which 325 were valid alarms, and they arrested 46 suspects. (Seattle Police Department, 2003:5). These apprehensions are the public good aspect of alarm response. Unfortunately, the overwhelming proportion of false alarms meant that the cost per arrested Seattle burglar in 2002 was $31,444.

Noteworthy, not all alarm systems provide the same extent of social benefits. Audible alarms scare off burglars and that enhances private benefits of the alarm owner but at the expense of beneficial spillover effects to other residents of the community. If the burglar escapes as a result of the audible alarm, the usual event, beneficial spillovers do not exist, only private benefits result. Nevertheless, police involvement is still justified because of the chance of catching the burglar. In the case of a silent alarm, where the burglar is unaware that a signal has been transmitted, the police are more likely to surprise and apprehend the burglar; however the burglar may cause greater damage and pose greater danger to the residents. If the community's interest

is in apprehending burglars then silent alarm installation should be encouraged over audible systems.

Police services are an impure local public good. The presence of the police, like national defense, provides an umbrella of security for all of the residents. No resident can be excluded from consumption of the service and a change in the number of households in the jurisdiction does not change the amount of service available for consumption. However, burglar alarms add a unique element to the mix. When a burglar activates an alarm and the police respond and apprehend the criminal then their response has both public and private good aspects. It is a private good since the household's property is preserved. It is a public good since community security has increased and a criminal has been taken off the street.

When a false alarm occurs police response is a private good and government intervention is unjustified. No one in the community is positively or negatively affected by police response to false alarms. Furthermore, such police response entails a social opportunity cost since police are withdrawn from other public services. When an alarm is falsely activated, no one else in the community derives any benefit from the response to the false alarm. Therefore, the community should not bear the cost. Restoration of the equality between private marginal benefits of an alarm system and the marginal social cost of responding to an alarm activation the local government should impose a cost on the alarm user, essentially mimicking the provision of a public good. Alternatively, initial burglar alarm response could be handled by the private sector, in which case the market place would internalize the social costs of response to those calling for the response.

3. Description and Evaluation of Alternatives

Table 2 presents three alternative approaches to the false alarm problem: police response, private response, and public-private partnerships. Within police response there have been eight distinct policies regarding response to alarm activation. Compressing the attributes of the eight alternatives to five basic categories of policy features makes evaluation feasible. These categories include punitive actions, education of alarm activators, improved verification, imposing alarm registration fees, and market oriented solutions.

Punitive action involves fines above cost, escalating fines, and ceasing response. This solution can even make alarm activators criminals while they are just obtaining a service that could be priced by markets. High enough fines can reduce the use of alarms and cause a decline in both the level of actual and perceived security with a consequent reduction in social welfare. Punitive actions like raising fines are effective when consumers (violators) are price sensitive. This situation does not seem to exist in the case of false alarms. In Clearwater Florida the fines were increased from $30 to $50 in 2001 but alarm calls only decreased from 7701 in 2001 to 7265 in 2002. A fifty percent increase in price caused only a 5.8 percent reduction in false alarms.

There are better ways to resolve the problem of response to false alarms than punitive actions undertaken by government. False alarm activators are often taken to court or response is terminated for their persistent actions. However, response to false alarms can be considered a regular commercial transaction. Let's assume that a person enjoys intentionally kicking his own

refrigerator and breaking its door on a daily basis. The person calls the service department every time and requests a change of the door. As long as he pays the company's regular charges it will serve him without imposing any unnecessary delays or raising the price. Similarly, alarm activators who innocently cause false alarms should not be treated in a punitive manner.[1] Government should either price the provided service at its cost or just divest itself from responding to false alarms and agree to respond to alarms proven to be valid. In such a case, private providers will emerge and markets will generate ways through which only valid alarms will reach police dispatchers.

In 1996 Toronto, Ontario began pricing all responses to false alarms at $75 (Canadian), a high rate; in 2002 the rate was $83.50 (Canadian) and was assessed on the monitoring station that called a special, dedicated number to request police response. The fee was high enough that private response soon developed and within one year the number of police dispatches declined from 57,875 to 27,981 (Seattle Police Department, 2003:13). Alarm companies and subscribers now had an incentive to employ less expensive private response to verify the occurrence of a valid alarm (for which the control station would not have to pay).

Education. The police with some participation of the alarm industry usually provide education of alarm owners. Ongoing education on the use of a private product is not the proper function of government and clearly causes unjustified cross subsidization from non-activating alarm owners and non-owners to activators. Police provide education since they bear the burden of response, much of it without adequate reimbursement. Evidence suggests that the benefits of education in reducing false alarms are only temporary; the effects diminish after a concentrated program is terminated or reduced. In any event, one officer assigned to educate false activators must reduce 1,000 false activations in a year to pay the officer's $60,000 cost, the average overall cost for an officer. Our review of the evidence did not reveal such a substantial reduction in false responses. For example, Fort Lauderdale, Florida initiated an extensive education program through alarm dealers to curb the worst offending alarm activators. The lack of incentive to participate in such a program is indicated by the fact that only 23 out of 250 invited dealers actually attended the meeting. The program involved at least one police sergeant who visited activators with 35 or more false activations during a nine month period in 1998. The number of false dispatches fell by only 133, or one percent, at a public cost of over $500 per "saved" response (Model States Report, 1999: 47-48).

Education of consumers is the sole responsibility and interest of commercial providers. The seller of a refrigerator is blamed when the product malfunctions or when additional information on its operation is needed. When an alarm malfunctions or falsely activates, the police become the target since they traditionally have provided alarm response. The direct relationship between the seller and the buyer is weaker in the case of alarms due to the accepted police obligation for response. Hence, the seller's interest in educating consumers in avoiding false activations is attenuated in the case of burglar alarms compared to most other goods and services. Once police eliminate their obligation for response, this "natural" sellers' responsibility and interest in educating their consumers will be restored.

[1] In Phoenix, Arizona unpaid fines can result in misdemeanor criminal offenses. Government considers it a crime since the activators unjustifiably use up its resources.

Indeed, when the alarm industry initiated its Model Cities and Model States programs, it encouraged its members to contact repeat activators and educate them in the proper use of their system. However, such peer pressure from the industry was significantly reduced once the program was complete, and the rates of false alarms tended to return to their previous levels. Education by the industry or by police does not have a permanent effect unless the program is retained.

On the other hand, if police respond only to physically verified activations or when police charge their real cost for false activations then the obligation of education shifts completely to the alarm companies, and administrative action to maintain the service is not necessary. This brings the case of burglar alarm response closer to the refrigerator example.

Improved verification by central stations includes calling both the premises from which the signal comes and if unsuccessful calling someone other than at the alarmed premises. For example, the secondary contact for ADT includes a cellular telephone, a work telephone, or anyone else pre-assigned by the alarm owner. ADT claims that such enhanced verification reduces false dispatches by 35 percent for residences and 50 percent for businesses (SDM, Sept. 2003).

Improved verification is an improvement. However, non-members of the Central Station Alarm Association often do not verify activations. Further, verification involves immediate cost and exposes the central station to litigation when it cancels response to a real activation while the benefit to the central station is minimal at best. Thus, it is not in the interest of central stations to verify. It is the usual conflict of interest between the individual firm and the industry that leads to a non-optimal solution to the industry.

The state of Florida and the city of Seattle Washington have mandated verification. Seattle fines the dispatching alarm company $250 for requesting police dispatch without verifying the alarm. Assuring compliance with the law involves high cost to the police. In any event, requiring verification is clearly an improvement over current practices and will reduce false alarm response somewhat. However, false alarm response is not a public good that require police involvement.

Registration fees are intended to cover the cost of managing alarm administration and response to false alarms. Unfortunately, there is no connection between registration and the use of service, causing unjustified cross subsidy from non-activating alarm owners to activators. Such a flat fee produces no incentive to reduce false alarm activations when no additional fines are imposed on activations. In practice registration fees seldom cover alarm response cost. For example, in Los Angeles in 2001 alarm registration fees yielded $4.34 million when as much as $11 million was spent responding to false alarms. Part of the shortfall occurred because only 140,000 residences paid the required fee when the estimated number of alarmed residences was 300,000 (Edds, 2003).

Since the activators are well defined, the cost should be directly imposed on false activations. Further, there is little benefit to the police of having information on alarm owners. When police respond they need to know only the exact address that is indeed updated by the dealer and

provided to them by the central station at the time alarm response is requested. Alarm dealers obviously have the addresses of their customers.

It is obvious that ordinances related to response to emergency calls are often based on the intuition of public decision makers. The cost that non-emergency responses impose on public resources causes public decision makers to search for punitive actions like high and escalating fines, ceasing response to repeat activators, or mandatory education sessions. All these solutions appear to have been ineffective or just temporary in duration. The fundamental flaw common to all of them is that they do not equate marginal private benefits with long run marginal social costs in the context of a public good subject to congestion costs.

An efficient solution might be expected to have a solid theoretical foundation that has been shown to apply to a wide range of situations. Economic theory that promotes competitive markets and circumscribes the use of public monopolies can be applied to this particular case of alarm response. Using economic theory we can consider false alarm response as a service that should be priced at the appropriate measure of cost.

Certain elements should be considered in the selection of the best alternative from among those in Table 2. The preferred alternative should allow as much competition as possible in responding to alarm activations. Reducing government monopoly power and allowing private alternatives to emerge can accomplish this. The preferred alternative should allow police and private response companies to compete in offering response services. Competition might even occur between police departments of adjacent jurisdictions. The greater is the competition among response entities, the greater the pressure to lower the cost of the service. Unfortunately, the current practice of police providing free responses prohibits private response providers from entering this market.

The preferred alternative should require consumers of false alarm response to pay for the cost of the service rendered. Response to false alarm activation does not entail any of the public goods attributes that require public intervention and therefore the clearly identified consumers should cover the cost of response.

The selected alternative should be simple in order to reduce transaction costs for central stations that monitor alarms from many different jurisdictions. At present, central stations exploiting economies of scale monitor alarms from numerous communities across North America, making it very difficult for their personnel to follow diverse, complicated and often changing ordinances. Also, complicated ordinances are costly and difficult for both police and the owners of alarms to follow, thus reducing any deterrent impact.

It is also important to avoid solutions where concentrated efforts are made for a short period of time, causing the reduction in false activations to be only temporary.

The preferred solution should avoid cross subsidization among users of response by charging all consumers their respective cost. In addition, business consumers should not be charged higher fees than residential or municipal facilities unless the cost of serving them is higher than the other uses. Indeed, competition among providers of response will assure competitive prices and

thereby avoid cross subsidization which imposes costs on others. Competition will also avoid price discrimination which signals the presence of monopoly, like that of police, is unnecessary and undesirable.
If the preferred alternative remains in the domain of police then response to false alarms should be considered as a profit unit. Cutting cost will enable the alarm unit to retain the savings.

4. The preferred alternative

The alternative that performs the best is the public-private partnership. Evidence suggests that this solution that is based on economic theory is preferred. It reduces police involvement in the response to false alarms, provides for a competitive market for response, eliminates cross subsidization while imposing the cost of response on users. Here the police do not respond to an activation unless an authorized party physically present at the site verifies the validity of the alarm. In effect, the alarm owners contract private response companies to fulfill the private function of responding to false alarms. In case of a real activation, to fulfill the public responsibility of maintaining security and apprehending burglars someone at the scene dispatches the police. This alternative provides for more efficient and timely response. Since 94 to 99 percent of all activations are false, most police departments assign a low priority to alarm response. Toronto, Ontario police take more than 30 minutes to respond to an unverified alarm, but respond in less than 10 minutes to a verified alarm. Private companies, however, respond promptly in order to preserve their clientele. Thus, overall, the response time to real activations is lower than when police respond to all activations.

In addition to improved response time and lower resource costs, the public-private partnership also results in lower administrative costs. In a public-private partnership there is no need for police maintenance of the alarm owner database since this becomes the responsibility of the private responder. Therefore there is no justification for the registration fees paid to the police department. Since police only respond to physically verified activations the onus of imposing and collecting fines is removed from their operations.

The public private partnership can be evaluated in terms of both the level of activations and the direction of change. The following information is indicative of the success of private response: Charlotte NC, Phoenix AZ and Seattle, WA which maintained police response had 656, 482, and 460 false dispatches per 10,000 residents in 2001, respectively. Toronto and Salt Lake City had only 108, and 49, respectively.

How those differences in activations per 10,000 residents were achieved is impressive as well. In Salt Lake City, for example, total police responses to alarms decreased from 9439 in 2000 to 898 in 2001 after the adoption of the physical verification requirement. Valid alarms decreased from 64 to 5 over the same period. In 2002 the respective numbers were 803 and 10. Further, citizens are paying as little as five dollars per month for the service of private guard response. Verified response saved 8482 officer hours per year, or $508,920 in associated personnel costs. Finally, police response to high priority calls now takes two minutes or less because of reduced responsibility for false alarm response.

Similar experience was obtained for Eugene Oregon where verified response was adopted in 2002. In the first six months after the change, the number of police responses was 183 versus 2642 in the immediate six-months prior to the change. Valid alarms decreased from 39 to 3 over the same period.

Verified response has also contributed to the development and adoption of new technology. In Las Vegas, whose ordinance was implemented in 1991, many residences have installed alarm systems with video cameras. The police accept video transmissions as evidence of a valid alarm, obviating the necessity for physical verified response. Diffusion of video verification is uncommon in other communities where private response is not required. Clearly, pricing response at real cost encourages adoption of efficient technology.

The ultimate superiority of the public-private partnership alternative is indicated by the satisfaction of police, alarm owners, and the general public with this solution. The only dissatisfied party is the alarm industry that now finds its customers having pay for a service that previously was subsidized by the police.

5. Evidence from the implementation of the market solution

Verified response, which results in the introduction of private response to false alarms, has been implemented in Las Vegas (1991), Salt Lake City, (2000), and in a slightly different way in Toronto (1996). The larger the city, the more alarm systems exist, and the more private response companies the market can accommodate. Larger markets permit greater competition, lower prices, better service and more service options. Thus, in larger cities a market similar to monopolistic competition will replace the monopoly police provider.

Initially, when physical verification was required many response companies, mainly private guard companies, entered the market. However, as competition increased, exit of less efficient companies occurred. For example, in Salt Lake City (SLC), the number of response companies declined from seven to five in the three-year period after physical verification was required, indicating that prices were low enough to force exit from the industry. It may be that in a city the size of SLC only a few firms can take advantage of economies of scale and scope.

The process of implementation, after all, showed that response is unlikely to be successful as a stand-alone service. It is difficult to obtain sufficient numbers of alarm customers within a small enough area to sustain the market mandated twenty minutes response time. Most firms offer patrol service; one company has its alarm response units monitor stationary guards and perform locking and unlocking services for buildings. There are evidently economies of scope in the provision of alarm response. Thus, the successful companies all provide alarm response in conjunction with other guard-type activities.

Implementing the market solution has led to a wide variety of choices for subscribers. For example, in 2003 in Salt Lake City one company offered three responses per year at no additional charge for $4 per month and each additional response at $15. Responses were guaranteed to occur within 15 minutes. Another Salt Lake company offered to respond for $20 to $25 per response with service within 10 to 12 minutes. Companies also offered the choice of

armed response. Indeed, as density within the required market area mandated by the 20 minutes response time rises, alarm owners enjoy greater variety and quality at lower prices. On average Salt Lake City companies responded within the range of 5 to 20 minutes in 2003 compared to 40 minutes in 2000 when police still responded.

Most alarm companies' contract with other companies to obtain response services. Liability and the dangers of adverse publicity from an unfortunate event encourage companies to avoid use of their own personnel or vehicles. The market solution has also yielded some alarm companies that provide private response for a fee through a contracted company. Some consumers contract directly with companies to provide that response service. The issue of armed versus unarmed responders has also proven to be important. In Toronto, for example, responders were originally armed but liability concerns have led to their being unarmed.

6. Conclusions

Our evaluation of ten alternatives for response to false activations revealed that the public private option is preferred both on standard economic criteria and experience. Reducing the government monopoly as alarm response provider would result in more competition, would lower cost to society, improve quality of service, and reduce the government bureaucracy of managing the alarm unit. This solution will entail public provision of the public good aspect of alarm response and private provision of the private good aspect of false alarm response.

Response to false alarm activations is a nuisance and a waste of at least ten percent of local police budgets. Police Chiefs have been complaining about the problem of false alarms for many years. A variety of alarm industry and public policy intuitive solutions have been tried and shown to have been largely unsuccessful. This paper reveals a comprehensive identification of alternatives, their evaluation, and a rational selection of the preferred solution. The paper showed that Adam Smith's assertion in his 1776 book *The Wealth of Nations* that greater competition yields a more efficient solution and greater consumer satisfaction is true in the case of alarm response as well. It further shows that government involvement in the marketplace should be kept to the minimum necessary for the public good aspect of the service.

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Verified Response Really Does Work

Law Enforcement endorsing this paper are:

Las Vegas Metro

Salt Lake City, Utah

Arvada, CO

Salem, Oregon

West Valley City, Utah

Broomfield, CO

Lakewood, CO

Westminster, CO

South Salt Lake, Utah

Verified Response Works in Our Cities

Introduction

The police departments of Las Vegas Metro, Nevada; Salt Lake City, Utah; Eugene, Oregon; Salem, Oregon; Arvada, Colorado; Broomfield City and County, Colorado; Lakewood, Colorado; West Valley City, Utah; Westminster, Colorado; Burien, Washington and South Salt Lake City, Utah have joined together to recommend this guide to city leaders and police jurisdictions interested in learning from the experience of cities who have solved their false alarm dilemma.

In 1998, police in our nation responded to approximately 38 million alarm activations, at an estimated annual cost of $1.5 billion. In the United States alone, "solving the problem of false alarms would by itself relieve 35,000 officers from providing an essentially private service." [1] It is important to note that a surge of growth since 1998 increased the number of installed systems by at least 50%. The industry did not fix the false alarm problem before the growth; consequently the alarm response workload for the police in many cities has increased significantly.

An alarm signal is NOT an indicator of a criminal activity. A traditional alarm system can only detect motion – not criminal intent. They report human error, system malfunctions and abnormal conditions, most of which have little to do with crime.[2]

Las Vegas Solved Their Problem

As more and more cities and police departments face limited resources and budget cuts, a logical area of reduction is unproductive calls for service; that being alarm responses, which are consistently 98 – 99% false. Las Vegas solved the problem in 1991 by creating the practice known as "Verified Response" (VR). They continue to practice it today and have experienced 13 years of success.[3] Deputy Chief Mike Ault with Las Vegas Metropolitan Police Department states that, "First, the alarm company is, by default, contracting government services without our approval. Not only is that rude, but it is illegal."

VR shifts alarm signal verification to alarm companies by requiring an eyewitness such as a private guard responder or a video camera (CCTV) with interactive audio to verify that a crime has or is occurring before police are dispatched. Some police departments developed slight variations in the plan such as requiring dual zone verification or broadcast and file which leaves response determination to officer discretion; based on officer knowledge, current circumstances and the false alarm history of the premise. Police departments implementing VR continue responding to the human activated alarms, such as hold-up, panic and duress. These types of alarms continue to be 98% - 99% false,

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[1] Sampson, Rana (2002). "False Burglar Alarms." Problem-Oriented Guides for Police Series No. 5. Published by the U.S. Department of Justice and the Office of Community Oriented Policing Services (COPS).

[2] Jones, Lee. (2004). "Selective Citizen Privileges." Report to Mayor and City Councils.

[3] McLaughlin, Sandra (2004). "Las Vegas Statement on Alarm Response." Spokesperson for Las Vegas Metro Police Department.

but generally are only 10% of alarm responses. Moreover, panic and hold-up alarms are generally human-activated as opposed to mechanically activated, and assumes (perhaps falsely) they are legitimate calls for help.

A report published by the U.S. Department of Justice and written by Rana Sampson entitled, "False Burglar Alarms" cited Las Vegas and Salt Lake City as having the "best response" by requiring alarm companies to visually verify alarm legitimacy before calling the police.[4]

The Alarm Industry's History of Attempts at Solving the Alarm Problem

The alarm industry has long been aware of the false alarm issue. Shortly after the start of mass marketing in the early 1960's, the false alarm problem had grown so large that law enforcement felt compelled to deal with it by introducing the first false alarm ordinances in 1972. These ordinances were largely unsuccessful at curbing the problem and with the continued growth of the alarm industry, and under additional pressure from law enforcement, the alarm industry made their first attempt at dealing with the problem in 1984. In a joint effort with the International Association of Chiefs' of Police (IACP) an Alarm Efficiency Task Force was formed. Their recommendation called for user education, state licensing, dealer training, equipment testing and telephone verification to solve the false alarm problem. With no great success from this program and after commission of several false alarm studies, the alarm industry again attempted to deal with this issue in 1992 by creating the False Alarm Coalition Effort (CARE). In 1994, the IACP, FBI and police departments joined together to develop the False Alarm Resolution. In 1995, the alarm industry introduced the Model States Plan and now in 2004 the Security Industry Alarm Coalition (SIAC) was formed. This group has introduced the two-call telephone verification or Enhanced Call Verification (ECV). [5]

Attempts have recently been made by the alarm industry to influence state legislators to require mandatory police response to alarm signal verification. State Senator Jeff Plale (D-South Milwaukee) said he will introduce a measure in January requiring police departments in the state to respond to all burglar alarm calls.[6] Members of the North Texas Alarm Association appeared before the Texas House of Representatives Law Enforcement Committee in August, 2004 to propose "Mandated Police Alarm Response."

Law Enforcement was told that by following the alarm industry advice, cities would recover their cost of enforcement and reduce the number of police responses to false alarms. All of these alarm industry efforts heavily burden the police with the responsibility for reduction and enforcement of the false alarm problem.
To date, none of these programs have had long-term success at either false alarm reduction or cost recovery.

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[4] Sampson, Rana. (2002). "False Burglar Alarms." Problem-Oriented Guides for Police Series No. 5. Published by the U.S. Department of Justice and the COPS Office.
[5] National Burglar and Fire Alarm Association (2004) "Industry and Association History." NBFAA Website.
[6] Diedrich, John & Borowski, Greg J. "Alarms Sound Over Policy Change." (Sept. 18, 2004) Milwaukee Journal Sentinel.

Dr. Simon Hakim, Professor of Economics at Temple University, who is one of the leading experts in the country and has studied this issue for the past ten years said, "Reducing the government monopoly as alarm response provider would result in more competition, would lower cost to society, improve quality of service, and reduce the government bureaucracy of managing the alarm unit. This solution will entail public provision of the public good aspect of alarm response and private provision of the private good aspect of false alarm response. Response to false alarm activations is a nuisance and a waste of at least ten percent of local police budgets. Police Chiefs have been complaining about the problem of false alarms for many years. A variety of alarm industry and public policy initiative solutions have been tried and shown to have been largely unsuccessful."[7]

Model States Plan - Large Effort, Little Results

The group of cities endorsing VR would like to go on record as stating that the Model States Plan does **not** work. It is better than doing nothing about the false alarm problem, but it leaves the city and police department holding the responsibility for; tracking alarms, issuing warning letters, billing, collections, false alarm prevention, suspension or no response programs (due to a high number of false alarms) and registering alarm users with permits. Issuing permits has NOTHING to do with the false alarm problem. It is merely a means to financially support the bureaucracy created to deal with the problem. The Salem, Oregon Burglar Alarm Task Force (2003) stated: "The information contained in active permits may not be current or may not be available at the time of alarm response dispatch, which relegates the alarm permit to simply an administrative function with little or no real value in responding to alarm calls."[8]

The Model States Plan leaves a city with the brunt of responsibility for fulfilling a private civil contract that was agreed upon by two private parties (alarm company & alarm owner), with neither the city nor the police department being a participant in that contract. Alarm companies have no control over police priority on alarm response nor the backlog of police calls; and yet alarm representatives have been known to promise an unrealistic and unattainable police response time to their future customers[9].

As author Anne E. Schwarts states: "Increased fines alone are not the right solution. More fines don't do much to put that cop on the street where he or she belongs. Sure, customers don't mind footing the bill for their own false alarms because they feel that's part of the protections they pay for. But private alarm companies don't have the right to use our public safety professionals as an added-value service for their businesses. Alarm companies can make their personnel available by setting up patrols while sworn police

[7] Buck, Andrew; Blackstone, Erwin & Hakim, Simon. (2004). "Evaluation of Alternative Policies to Combat False Emergency Calls." Temple University, Philadelphia, Pennsylvania.
[8] Salem, Oregon Burglar Alarm Task Force. (2003). "Report to Mayor and City Council."
[9] Salt Lake City Police Department. (2002). "Verified Response: The False Alarm Solution." Innovations in American Government Awards Top 100 Programs.

officers, paid for by all the taxpaying public, can engage in the kinds of preventive patrols that have been shown to reduce crime."[10]

Time and time again it has been proven in cities that the first year or two the Model States Plan will result in a 15 – 25% reduction in alarm responses. Then, the results level out as the ordinance enforcement lessens, the number of new alarm systems increase and law enforcement priorities change. On the other hand, cities adopting VR have achieved reduction rates ranging from 69 – 90%, holding year-after-year, and equally as important, without the administrative burden of "managing" the false alarm problem.

Two-Call Verification or Enhanced Call Verification (ECV)

The most recent proposal from the industry has been to make a second telephone call to a location apart from the alarm site. What the industry fails to mention is that after two calls, or 10 calls, when monitoring firms call the police they are still saying that they do NOT have any indication of a burglary or other criminal act, but there is some unknown trouble with the system. It is not a "verification" process, but a filtering process. Bear in mind that national spokespersons from the alarm industry have no control over the individual monitoring company practices. A single attempted telephone call has been the verification standard for more than 10 years and even now, not all monitoring companies practice this concept. A second phone call is unenforceable from a police ordinance standpoint. The alarm industry can adopt this concept without a mandate from Law Enforcement. While enhanced verification is to be encouraged, ECV alone is not an all-encompassing solution to the false alarm problem.

80-20 Claim

Another claim by the alarm industry is that 80% of the false alarms are caused by 20% of the users. Salem, Oregon[11]; Arlington, Texas[12]; and Seattle, Washington[13] found this claim to be untrue. Their statistics have shown that 60 – 80% of the alarm activations occurred at premises having one or two false alarms a year. In the past, the national alarm associations had posted on their website the ratio of 1.5 false alarms per premise per year which is a more accurate representation of many alarm systems having a few false alarms.

Crime Rates

Opponents claim that burglaries are on the rise in cities which have adopted VR. Verified Response is designed to reduce police response to excessive false alarms. It was never designed, nor is it intended to deal with property crimes.

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[10] Schwarts, Anne E. (2004) "Reason for alarm: False alarms take cops from real crimes." On Milwaukee.com.
[11] Salem Oregon Burglar Alarm Taskforce (2003). "Report to Salem Mayor and City Council."
[12] White, Jennifer. (2002). "False Alarm Paper to Arlington Mayor and City Council."
[13] Garnica, Detective. (2004). "Percentage of alarms on first and second alarm signals."

Based on the FBI Uniform Crime Report, the first full year (2001) of VR in Salt Lake City realized a minimal 1.8% burglary increase. In 2002, there was a 12% increase in burglaries. For 2003, Salt Lake City burglaries decreased by 6.4%. A long-range view of Salt Lake City burglaries shows that they have **decreased by 32%** from 1991-2003**.** [14]

Burglaries in other VR cities have appeared to be typical of crime statistics, which are generally very cyclical in nature. Opponents of VR tend to exclaim very loudly about any burglary increase is due to police implementation of a VR style ordinance. While the burglary rates in 2003 increased by only 12% in Arvada, Colorado (a VR city), Seattle (not a VR city) experienced a 20% increase in residential burglaries[15]. In any study of this issue, notice the failure of alarms to produce any significant number of arrests. Seattle police in 2002 responded to 24,505 alarms, of which 325 were valid alarms, and they arrested 46 suspects. The overwhelming proportion of false alarms meant that the cost per arrested Seattle burglar was $31,444.[16] Police response to alarm signals has not proven to be an effective crime-fighting tool.

LA Story

Give your taxpayers the right to expect their police officers to respond to real calls for help. Allow officers to be proactive in your city in preventing crime, rather than chasing a ghost signal. As LAPD Chief Bratton said, "The 15% of the patrol resources we now spend chasing false alarms ... that 15% of officer activity could be focused in the parks, in the schoolyards, on the streets -- prioritized, focused patrols in areas where we know we have problems." [17] Chief Bratton was convinced that VR was the correct solution for LA. Due to political pressure on the city council from the alarm industry and the lobbyists they hired, VR was not implemented. Instead, a different alarm ordinance was passed. Now alarm owners are allowed two false alarms in one year and, then, placed on no response. They will be fined $115 on the first alarm with a 45-minute to 3-hour response. LAPD is burdened with tracking false alarms, no response premises, permits, warning letters, billing and the collection process. A private guard response in LA could provide quicker response. In the rare instance that an actual crime is detected, the combined response between private guard and police would be faster than police response alone, due to the reduced priority given alarm calls by police. Recent news articles state that this program has not been able to be implemented due to the inability of the current computer tracking system and the new computer system is not expected to be online for another 18 months.[18]

Scare Tactics

The alarm industry when confronted with VR will send letters to alarm users in your community using emotional scare tactics and inflammatory statements. This has been the

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[14] FBI Uniform Crime Report (1981, 2001, 2002, 2003).
[15] Heckman, Candace & Castro, Hector. (2004). "Residential burglaries are up 20% in Seattle." Seattle PI.
[16] Buck, A., Blackstone, E., Hakim, S. (2004) "Evaluation of Alternative Policies to Combat False Emergency Calls." Center for Competitive Government at Temple University, PA.
[17] McGreevy, Patrick. (Jan. 29, 2003). "Chief Wins Key Test on Alarm Plan." Los Angeles Times.
[18] Los Angles Daily News (April 10, 2004). Editorial.

alarm industry modus operandi throughout the nation. Outlandish statements such as these will attempt to enrage your citizens:

*Your tax dollars are not at work![19]
*Shouldn't we as citizens and taxpayers, have the right of our highly trained police officers responding first to our homes and businesses?[17]
*Your city and police department should agree to accept the help offered from the alarm association, a strong, knowledgeable, local group of alarm dealers.[17]
*The Model Alarm Ordinance maintains police response, recoups police department costs in responding to alarms, and reduces false alarms through a system of permits and false alarm fee.[20]
*If you feel that the police department policy is not fair to the citizens and taxpayers of Eugene, please contact your Mayor and your City Council Member. A listing of the elected officials in your city is attached for reference. [21]
*Your alarm company feels that the police department's action is unacceptable and we sincerely believe that your elected city officials should take a further look at this before it becomes accepted policy.[22]
*Murder, rape, assault, and arson often accompany burglaries. Women and children are most often the victims.[23]

The letters from alarm companies will (as a courtesy) list the mayor and city leaders' phone number and email addresses and the date of the next council meeting. Eugene, Oregon's police department proactively sent educational letters to all alarm users in their city before the inflammatory letters arrived from the alarm industry and also hired a public relations firm. Educating citizens who have only been exposed to a very one-sided view will prove beneficial to all. One thing to keep in mind – a very small, but loud minority, will appear at your city council meeting and a special interest group will have created their hostile feelings. In Salt Lake City, one month after implementation of the VR ordinance, the complaining phone calls abruptly ceased and neither the mayor's office or the city council now receive complaints about the VR ordinance.

VR Works!

Bottom line on this issue is that alarm calls are consistently 98 – 99% false. Eighty percent of your taxpayers are subsidizing less than 20% of the citizens who have alarm systems. An industry is using "free" public safety resources for private security matters.

Albert Einstein once said, "The definition of insanity is doing the same thing over and over again and expecting different results." Continuing the Model States approach and copying other cities failures over the past 30 years will bring the same results – heavy administrative/police burden and light on false alarm reduction.

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[19] North Texas Alarm Association (2002). Arlington, Texas
[20] Brinks Security (2004). Milwaukee, Wisconsin letter to alarm users.
[21] ADT Security (2002). Eugene, Oregon letter to alarm users.
[22] Brinks Security (2000). Salt Lake City, Utah letter to alarm users.
[23] Deseret Newspaper (2000) Full-page ad paid for by the Utah Alarm Association. Garren Echols.

Verified Response has worked well in our cities we believe it will work well in your city.

Contact any of the cities endorsing this paper for further information or:

Las Vegas Metropolitan
Police Department
Deputy Chief Mike Ault
Professional Standards Division
702-229-3425

Lakewood Police Department
Division Chief John Camper
Support Services Division
303-987-7302

Captain Mark Peck
Salt Lake City Police Department
801-799-3201
Mark.peck@slcgov.com

Eugene Police Department
Public Information Officer Pam Olshanski
541-682-5124

Arvada Police Department
Commander Gary Creager
720-898-6814

Salem Police Department
Sgt. Steve Bellshaw
503-588-6259

Cities who have adopted Verified Response to date are:

Milwaukee, Wisconsin
Eugene, Oregon
Lane County, Oregon
Taylorsville, Utah
Murray, Utah
Westminster, Colorado
Broomfield, Colorado
Burien, Washington
Las Vegas, Nevada
Salem, Oregon
Arvada, Colorado
Henderson, Nevada
Winnipeg, Canada
Breckenridge, Colorado
Lakewood, Colorado
Aurora, Colorado
Salt Lake City, Utah
Bellingham, Washington
West Valley City, Utah
Victoria, British Columbia
Yakima, Washington
Summit County, Colorado
South Salt Lake City, Utah

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U.S. Department of Justice
Office of Community Oriented Policing Services

COPS
COMMUNITY ORIENTED POLICING SERVICES
U.S. DEPARTMENT OF JUSTICE

Problem-Oriented Guides for Police
Problem-Specific Guides Series
No. 5

False Burglar Alarms

2nd Edition

by Rana Sampson

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Rana Sampson

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About the Problem-Specific Guides Series

The *Problem-Specific Guides* summarize knowledge about how police can reduce the harm caused by specific crime and disorder problems. They are guides to prevention and to improving the overall response to incidents, not to investigating offenses or handling specific incidents. Neither do they cover all of the technical details about how to implement specific responses. The guides are written for police—of whatever rank or assignment—who must address the specific problem the guides cover. The guides will be most useful to officers who:

- **Understand basic problem-oriented policing principles and methods**. The guides are not primers in problem-oriented policing. They deal only briefly with the initial decision to focus on a particular problem, methods to analyze the problem, and means to assess the results of a problem-oriented policing project. They are designed to help police decide how best to analyze and address a problem they have already identified. (A companion series of *Problem-Solving Tools* guides has been produced to aid in various aspects of problem analysis and assessment.)

- **Can look at a problem in depth**. Depending on the complexity of the problem, you should be prepared to spend perhaps weeks, or even months, analyzing and responding to it. Carefully studying a problem before responding helps you design the right strategy, one that is most likely to work in your community. You should not blindly adopt the responses others have used; you must decide whether they are appropriate to your local situation. What is true in one place may not be true elsewhere; what works in one place may not work everywhere.

- **Are willing to consider new ways of doing police business**. The guides describe responses that other police departments have used or that researchers have tested. While

not all of these responses will be appropriate to your particular problem, they should help give a broader view of the kinds of things you could do. You may think you cannot implement some of these responses in your jurisdiction, but perhaps you can. In many places, when police have discovered a more effective response, they have succeeded in having laws and policies changed, improving the response to the problem. (A companion series of *Response Guides* has been produced to help you understand how commonly-used police responses work on a variety of problems.)

- **Understand the value and the limits of research knowledge**. For some types of problems, a lot of useful research is available to the police; for other problems, little is available. Accordingly, some guides in this series summarize existing research whereas other guides illustrate the need for more research on that particular problem. Regardless, research has not provided definitive answers to all the questions you might have about the problem. The research may help get you started in designing your own responses, but it cannot tell you exactly what to do. This will depend greatly on the particular nature of your local problem. In the interest of keeping the guides readable, not every piece of relevant research has been cited, nor has every point been attributed to its sources. To have done so would have overwhelmed and distracted the reader. The references listed at the end of each guide are those drawn on most heavily; they are not a complete bibliography of research on the subject.

- **Are willing to work with others to find effective solutions to the problem**. The police alone cannot implement many of the responses discussed in the guides. They must frequently implement them in partnership with other responsible private and public bodies including other

government agencies, non-governmental organizations, private businesses, public utilities, community groups, and individual citizens. An effective problem-solver must know how to forge genuine partnerships with others and be prepared to invest considerable effort in making these partnerships work. Each guide identifies particular individuals or groups in the community with whom police might work to improve the overall response to that problem. Thorough analysis of problems often reveals that individuals and groups other than the police are in a stronger position to address problems and that police ought to shift some greater responsibility to them to do so. Response Guide No. 3, *Shifting and Sharing Responsibility for Public Safety Problems*, provides further discussion of this topic.

The COPS Office defines community policing as "a policing philosophy that promotes and supports organizational strategies to address the causes and reduce the fear of crime and social disorder through problem-solving tactics and police-community partnerships." These guides emphasize problem-solving and police-community partnerships in the context of addressing specific public safety problems. For the most part, the organizational strategies that can facilitate *problem-solving* and *police-community partnerships* vary considerably and discussion of them is beyond the scope of these guides.

These guides have drawn on research findings and police practices in the United States, the United Kingdom, Canada, Australia, New Zealand, the Netherlands, and Scandinavia. Even though laws, customs and police practices vary from country to country, it is apparent that the police everywhere experience common problems. In

a world that is becoming increasingly interconnected, it is important that police be aware of research and successful practices beyond the borders of their own countries.

Each guide is informed by a thorough review of the research literature and reported police practice and is anonymously peer-reviewed by line police officers, police executives and researchers prior to publication.

The COPS Office and the authors encourage you to provide feedback on this guide and to report on your own agency's experiences dealing with a similar problem. Your agency may have effectively addressed a problem using responses not considered in these guides and your experiences and knowledge could benefit others. This information will be used to update the guides. If you wish to provide feedback and share your experiences it should be sent via e-mail to cops_pubs@usdoj.gov.

For more information about problem-oriented policing, visit the Center for Problem-Oriented Policing online at www.popcenter.org. This website offers free online access to:

- the Problem-Specific Guides series
- the companion *Response Guides* and *Problem-Solving Tools series*
- instructional information about problem-oriented policing and related topics
- an interactive problem-oriented policing training exercise
- an interactive *Problem Analysis Module*
- a manual for crime analysts
- online access to important police research and practices
- information about problem-oriented policing conferences and award programs.

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The project team that developed the guide series comprised Herman Goldstein (University of Wisconsin Law School), Ronald V. Clarke (Rutgers University), John E. Eck (University of Cincinnati), Michael S. Scott (University of Wisconsin Law School), Rana Sampson (Police Consultant), and Deborah Lamm Weisel (North Carolina State University.)

Members of the San Diego; National City, California; and Savannah, Georgia police departments provided feedback on the guides' format and style in the early stages of the project.

Cynthia E. Pappas oversaw the project for the COPS Office. Research for the guide was conducted at the Criminal Justice Library at Rutgers University under the direction of Phyllis Schultze. Suzanne Fregly edited this guide.

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The Problem of False Burglar Alarms

What This Guide Does and Does Not Cover

This guide deals with the problem of false burglar alarms. It begins by reviewing factors that increase the risks of false burglar alarms. It then identifies a series of questions that might help you analyze your local problem. Finally, it reviews responses to the problem and what is known about them from evaluative research and police practice.

False burglar alarms is but one aspect of the larger set of problems related to alarms and misuse of police resources. This guide is limited to addressing the particular harms created by false burglar alarms. Related problems not directly addressed in this guide, each of which require separate analysis, include:

- misuse and abuse of 911
- false fire alarms
- false vehicle alarms
- false robbery alarms
- noise complaints about audible alarms.

Some of these related problems are covered in other guides in this series, all of which are listed at the end of this guide. For the most up-to-date listing of current and future guides, see www.popcenter.org.

General Description of the Problem

In the United States in 2002, police responded to approximately 36 million alarm activations, at an estimated annual cost of $1.8 billion.[1] Most of these activations were burglar alarms.[§] This guide examines current police responses and presents alternative strategies to address the false alarm dilemma. Purchasers of an alarm system are told to expect a police response to an alarm activation, even though they bought the system from a private alarm company with no link to a police department. The vast majority of alarm calls—between 94 and 98 percent (higher in some jurisdictions)—are false.[§§] In other words, alarms' *reliability*, which can be measured by these rates of false activations, is generally between 2 and 6 percent. Nationwide, false alarms account for somewhere between 10 and 25 percent of *all* calls to police.[2] For many U.S. police agencies, false burglar alarms constitute the highest-volume type of call for service. In the United States alone, "solving the problem of false alarms would, by itself, relieve 35,000 officers from providing an essentially private service."[3]

During the 1990s, consolidation within the alarm industry changed the way alarm companies delivered services. Larger companies purchased smaller ones, and a number of alarm monitoring companies moved, sometimes out of state, to achieve economies of scale. For example, a company in Texas might monitor the alarms of tens of thousands of customers in Utah or other distant states.[§§§] When an alarm goes off, the monitoring company calls the owner. If no one answers or the person who answers gives the wrong prearranged code, the monitoring company calls the police, expecting them to respond.[§§§§]

§ In some cities, police also respond to fire alarms. It is typical for burglar alarm calls to substantially outnumber fire alarm calls to police departments.

§§ For example, in Dallas, Texas, of the 62,000 alarm calls in 2004, only 2.8 percent were valid (Security Sales and Integration 2005). In Salt Lake City, Utah, of the thousands of alarm calls responded to in 1999, only 0.3 percent resulted from crime (*Salt Lake Tribune 2000*). In Eugene, Oregon, from the 5,944 alarm calls in 2001, police made only 10 arrests (Salem Police Department, Burglar Alarm Task Force 2004).

§§§ The mergers also mean that alarm systems originally installed and serviced by one company may now be serviced by another. Many politicians, fearful of alienating their local security industry, often initially support police response to *all* alarms. However, the monitoring companies they are supporting may not be local at all.

§§§§ A few alarm companies still respond as part of their contract with customers, but this is rare.

An estimated 32 million security alarm systems have been installed in the United States,[4] and most of these are monitored. The industry adds roughly 3 million new systems each year.[§] Sixty percent of those are in residences, the rest in commercial and institutional properties.[5] Alarm industry statistics indicate that the average security system costs between $100 and $1,200, depending on its complexity, and monitoring fees average about $35 per month. Some security companies offer free alarm systems because the monthly monitoring fee alone produces strong profits for the industry. At least one of every seven U.S. businesses and one of every five U.S. residences have alarms.[6] The recent trend of wiring new residential construction with alarm capacity has the potential to significantly increase the number of alarm calls in the coming decade. Consequently, even those police agencies with recently enacted false alarm policies and ordinances should revisit their approach; otherwise, their workload may be further consumed with false alarm calls.[§§]

Alarm associations suggest that false burglar alarms are not evenly distributed: some alarm systems experience no false alarms, and others, many. In some jurisdictions, the pattern of false alarms is much more widely distributed.[§§§] Whether concentrated across locations or not, the aggregate number of false alarm calls among all alarmed premises places a high demand on limited police resources.

§ Estimates of the number of new alarms installed differ (see Hakim and Blackstone 1997; Spivey and Cobb 1997; Blackstone, Hakim, and Spiegel 2000; and National Burglar & Fire Alarm Association 2005).

§§ In Arlington, Texas, between 1985 and 2001, the number of police responses to residential alarm calls increased 494 percent, and commercial alarm calls increased 186 percent, with 99 percent proving false. In 2001, alarm calls accounted for 19 percent of all dispatched calls for service (White 2002).

§§§ While false alarm calls may be clustered among a relatively small number of premises in some jurisdictions, other jurisdictions have found a much broader distribution. For example, one study of a Midwestern capital city showed that 70 percent of all alarm permit holders had one or two false alarm calls (Gilbertson 2005).The Salem (Oregon) Police Department also found that a large number of locations accounted for the volume of alarm calls: 2,643 separate locations accounted for 5,688 alarm calls (Salem Police Department, Burglar Alarm Task Force 2004).

The Causes of False Burglar Alarms

Research suggests that false burglar alarms result from three main causes:

- user errors, such as using incorrect keypad codes, leaving a door or window open when activating the alarm, roaming pets or helium balloons, and errors arising from inadequate employee training, such as entering and exiting alarmed premises incorrectly[7,§]
- faulty or inappropriately selected equipment
- poor installation, including failing to install motion detectors in sensible areas or at appropriate heights.[§§]

§ One U.K. study found that user error caused about 50 percent of alarm activations (Gill and Hemming 2003).

§§ The alarm industry suggests user error accounts for the largest portion of false calls, poor installation is on the decline, and faulty equipment is less of a problem given recent technological advances [International Association of Chiefs of Police n.d.(a)].

These are not the sole causes. Bad weather, alarm monitoring-center mistakes, and alarm line errors also falsely signal a burglar's presence.[8]

Commercial properties tend to have even higher false alarm rates than residential properties because more people tend to share responsibility for activating and deactivating the alarm systems, and the systems tend to be more complex. The rate of false alarms for commercial alarm users may be as much as three times higher than the rate of false alarms among residential alarm users.[9] Chronic false alarm activations are often due to inadequate employee training or inferior systems that have not been upgraded.

The Effectiveness of Burglar Alarms

Burglar alarms are intended to prevent burglary and to help police apprehend burglars, which, if done reliably and efficiently, benefits the public at large. If, however, burglar alarms are unreliable or inefficient, the drain on police resources from responding to them may outweigh their benefits. Here we review the evidence of burglar alarms' contribution to these two worthwhile objectives.

§ See the POP guides titled *Burglary of Single-Family Houses and Burglary of Retail Establishments* for more complete coverage of burglary prevention measures.

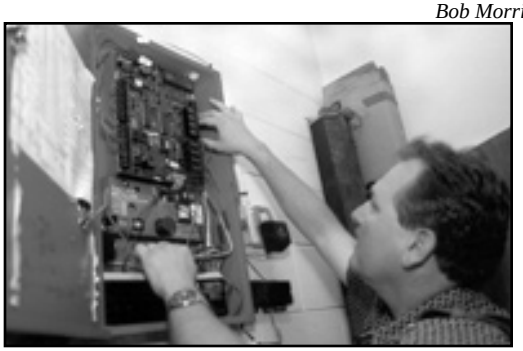
Studies from both the United States and the United Kingdom have shown burglar alarms to be among the most effective burglary-deterrence measures.[10] However, a number of other measures that do not impose a substantial burden on police are also effective at preventing burglary. Occupancy, or signs of occupancy, is the biggest deterrent. In addition, closed-circuit television, window bars, barking dogs, nosy neighbors, and motion-activated lights have also been shown to be effective.[§] For the most part, burglars avoid alarmed premises because easier choices are usually available.[11] Given the availability of non-alarmed premises and similarly unprotected targets (such as houses with open garage doors or windows), burglars may be deterred by the mere presence of an alarm company's window sticker or yard sign.[12]

Do burglar alarms account for burglary declines in the United States? The U.S. burglary rate has declined steadily and substantially since the early 1980s.[13] During the same time, the number of premises with alarms rose, but there is no evidence of a link between the two. During the 1990s through 2004, when alarm ownership experienced a steep rise, other types of crime declined just as sharply as burglary, suggesting that factors other than an increase in the number of alarm systems fueled the burglary decline.

Are alarms an efficient and effective way to catch burglars? Although burglary remains one of the most frequently reported crimes, the clearance rate for U.S. burglaries has remained below 15 percent for many years.[14] Clearly, whatever contribution burglar alarms are making to solving burglary cases is modest, at best.

The available research does not provide much support for alarms' value in catching burglars. One study found that police were more likely to catch burglars in the act on premises without alarms than those with alarm systems.[15] Police responses to burglary calls at locations without alarms are typically the result of an eyewitness, such as a neighbor, which is more reliable than an alarm.

Bob Morris



Proper installation of alarm systems is essential to prevent false alarms.

The Costs of False Burglar Alarms

Each false alarm requires approximately 20 minutes of police time, usually for two officers. This costs the public hundreds of millions of dollars. In the vast majority of jurisdictions, the cost of responding to false alarms is not recouped through fines. Jurisdictions trying to recoup costs generally omit the lost-opportunity costs, a potentially significant part of the equation.[§] Typical costs include

- personnel costs of police call-takers and dispatchers
- personnel, equipment, and costs related to backup personnel
- personnel costs associated with analyzing false alarms
- software, hardware, office space, and equipment costs for false alarm management
- administrative and staff costs of notifications, permitting, billing, and education programs
- costs of developing, printing, and distributing publications to educate the public and alarm companies about false alarms
- lost-opportunity costs, when police are unavailable to work on actual crime problems
- costs associated with call displacement, because the response to other 911 calls takes longer.

In addition, in some jurisdictions, officers have sustained injuries or their vehicles have been damaged as the result of traffic accidents while responding to false alarm calls.

§ Lost-opportunity costs might include time that police could have spent conducting problem-solving efforts to reduce documented crime and disorder, reducing repeat calls at crime hot spots, and engaging the community in public safety initiatives. These all compete with time spent on chronic false-alarm response.

As an inducement to buy an alarm system, a number of companies offer "free monitoring services" for the first few months. Many insurance companies offer discounts on insurance premiums to customers with operable alarm systems. These discounts may be as much as 20 percent for commercial customers, and slightly less for residential owners.[16] In addition, many police departments offer several "free" false alarms before imposing any fine, even though the cost to respond is significant right from the start. The offers of free monitoring services by alarm companies and discounts from insurers call into question the appropriateness of the current trend in U.S. policing of allowing three or four free false alarms per calendar year, because they provide no up-front incentives to encourage owners to prevent false alarms.

Certain burglary prevention measures have costs only to the owner. Lights, locks, and bars installed by a property owner (if within the fire code) are cost-free to the rest of the community. The individual purchaser bears these costs. On the other hand, alarm systems are not cost-free to the community, especially if up to 98 percent of alarms are false but still require the time and resources of a police response.[§]

Another social cost of burglar alarms is the noise neighbors endure when audible alarms sound, fueling noise complaint calls to the police. Some callers seek to alert the police that a neighboring alarm has been activated. Others merely want the police to stop the noise. In many jurisdictions, legislators have passed time restrictions for audible alarms, limiting them to 15 or 20 minutes and prohibiting extra sounding cycles.[§§]

[§] In 2004, 86 percent of Dallas, Texas, households and businesses (representing the percent of unalarmed premises in the City) subsidized the police alarm response to the 14 percent of households and businesses that have alarms (Dallas City Council 2005).

[§§] In New South Wales, Australia, the Environmental Protection Authority prohibits the sale of building-intruder alarms produced after September 1997 that sound for more than five minutes or that can automatically reset and sound again, since police and insurance groups have reported that most burglaries are over within five minutes. See www.environment.nsw.gov.au/noise/alarms.htm.

One of the hidden costs of false burglar alarms is that they can distort the proper geographic distribution of police. False burglar alarms do not necessarily concentrate in the same places where crime in general, or burglary in particular, concentrates. Burglary rates are typically much higher in urban areas than in either suburban or rural areas,[§] and residential burglaries tend to concentrate in and around low-income areas. Yet more affluent areas tend to have burglar alarms.[17] In 2004, those at highest risk for burglary had household incomes below $25,000. Those with incomes below $7,500 were at the greatest risk, having twice the risk of households with incomes of $75,000 or more.[18] In the United Kingdom, the risk of burglary among those with household income less than £5,000 was twice the national average.[19] To the extent that calls-for-service data (which can be heavily skewed by alarm calls) are used to allocate police personnel to different areas, more officers might be assigned where there are a lot of false burglar alarms rather than where there is a lot of crime. No matter where they are assigned, officers spending time responding to false burglar alarms have less time available to attend to other crime problems.

§ In 2004, the burglary rate for urban areas was higher than rural or suburban areas: 41.9 burglaries per 1,000 urban households; 27.8 per 1,000 rural households; and 23.2 per suburban households (Catalano 2005).

So, while alarm systems may have some benefit for alarm owners as part of an overall security package, the question remains whether non-alarm owners in the community should shoulder a share of the cost. If alarm use resulted in enhanced public safety—that is, alarms led to much higher burglar apprehension rates or, ideally, fewer burglaries across an entire jurisdiction—its public value would be more evident. However, the fact that alarm calls are overwhelmingly false and do not contribute substantially to police ability to apprehend burglars makes the underwriting of alarm response by police and entire communities (all taxpayers subsidize police response to alarmed properties) an expensive and inefficient approach to burglary reduction across an entire jurisdiction.

Bob Morris

User errors account for a high percentage of false burglar alarms.

Understanding Your Local Problem

Stakeholders

The following groups have an interest in the false burglar alarms problem and ought to be considered for the contribution they might make to gathering information about the problem and responding to it:

- community members who do not own alarms
- alarm owners
- private security companies
- local government finance officials
- public building managers
- private alarm companies.

Asking the Right Questions

The information provided above is only a generalized description of false alarms. The first step to address your community's false alarm problem is to analyze it. You must combine the basic facts with a more specific understanding of your community's problem. Careful analysis will help you design a more effective response strategy.[§] This analysis should, at a minimum, answer the following questions:

- What proportion of your department's call-for-service workload involves responding to alarms?
- What proportion of the department's alarm calls is false?
- What proportion of the department's alarm calls are burglar alarms, and what proportion of those are false?
- What proportion of the department's noise calls relate to alarms,[§§] and what are the call-taking costs for these?

§ For an example of how one city analyzed and responded to its false burglar-alarm problem, see Salt Lake City Police Department (2001), at www.popcenter.org/Library/Goldstein/2001/01-55(F).pdf.

§§ Do not include vehicle alarms, as they are a different alarm problem requiring separate analysis.

- What is the department's true cost of responding to alarms (police departments should locally determine the average time spent responding to alarm calls; see "The Costs of False Burglar Alarms," above)?
- How many residential and commercial alarm systems are operable in your jurisdiction, and what is the anticipated growth rate for alarm installation?
- At what rate do police catch burglars at alarm calls?
- What are the numbers of false alarm calls from businesses, residences, and governmental, public, or semipublic premises (such as schools, city labs, museums, and city storage yards)?
- Are there any identifiable patterns for commercial alarm calls, such as at opening and closing times or during the holidays? (This indicates that alarm companies must educate specific groups of alarm owners.)
- Are there any identifiable patterns for residential alarm calls, such as the frequency of alarm calls that are cancelled by the owner (or alarm company) within 15 minutes of the initial activation? (This indicates the alarm company's responsibility for educating owners about proper alarm operation.)
- Do some alarm companies have higher false alarm rates than others?
- What does a review of websites for alarm companies in your area suggest about the accuracy of their claims when trying to gain new customers?
- What does a review of alarm company policies and contracts suggest about alarm companies' obligations to alarm owners?

- Has your department identified jurisdictions that have successfully reduced their total number of false alarms, not just their rates per system (see "Responses to the Problem of False Burglar Alarms," below, for examples)?
- Has the department interviewed alarm company personnel to determine their perspectives on the false alarm problem, and their openness to new solutions? Has the alarm industry done an analysis to determine the most failure-prone parts of the systems installed in the area, or why so many alarm users make mistakes in activating and deactivating their alarms?
- Has the department interviewed groups of property owners (with and without alarms) to determine their perspectives on the false alarm problem, and their openness to new solutions?
- Has the department met with police union or police association leaders to determine their perspectives on the false alarm problem, their openness to new solutions, and their willingness to support a new approach?

Measuring Your Effectiveness

You should take measures of the false alarm problem *before* implementing responses, to determine how serious the problem is, and *after* implementing them, to determine whether the responses have been effective. Measurement allows you to determine to what degree your efforts have succeeded, and suggests how you might modify your responses if they are not producing the desired results. For more detailed guidance on measuring effectiveness,

see the companion guide to this series, *Assessing Responses to Problems: An Introductory Guide for Police Problem-Solvers*. The following are potentially useful measures of the effectiveness of responses to false alarms:

- reduced number of alarm calls
- reduced false alarm numbers for various types of premises—commercial, residential, and governmental (such as schools, city labs, museums, and city storage yards)
- reduced number of false alarm calls at high-risk times, such as at business opening and closing times, during stormy weather, or during the holiday seasons
- reduced number of personnel hours devoted to handling false alarm calls
- reduced percentage of the police department's call load devoted to false alarms
- increased percentage of uncommitted time for officers to engage in problem-solving concerning actual crime and disorder problems
- reduced costs of handling false alarm calls
- reduced false alarm rates of individual alarm companies
- increased rate at which police catch burglars at alarm calls (if false calls are minimized and response times are improved, burglar apprehension rates should rise).

Responses to the Problem of False Burglar Alarms

Your analysis of your local problem should give you a better understanding of the factors contributing to it. Once you have analyzed your local problem and established a baseline for measuring effectiveness, you should consider possible responses to address the problem.

The following response strategies provide a foundation of ideas for addressing your particular problem. These strategies are drawn from a variety of research studies, police reports, and news articles. Several of these strategies may apply to your community's problem. It is critical that you tailor responses to local circumstances, and that you can justify each response based on reliable analysis. In most cases, an effective strategy will involve implementing several different responses. Law enforcement responses alone are seldom effective in reducing or solving the problem. Do not limit yourself to considering what police can do: carefully consider who else in your community shares responsibility for the problem and can help police better respond to it. The responsibility of responding, in some cases, may need to be shifted toward those who have the capacity to implement more effective responses. (For more detailed information on shifting and sharing responsibility, see Response Guide No. 3, *Shifting and Sharing Responsibility for Public Safety Problems*).

This guide assumes that the alarm industry has the responsibility to improve the quality of its equipment, install devices more accurately, improve its advice to consumers about the suitability of different types of systems for different types of homes and businesses, and increase user knowledge of its products. The responses described below have some potential to reduce false alarm calls. Police policies that stimulate the alarm industry to improve its products' overall reliability are strongly preferred so as to minimize the burden on police in the effort to reduce the incidence of false burglar alarms.

Specific Responses to Reduce False Burglar Alarms

1. Requiring alarm companies to verify alarm legitimacy before calling the police (commonly called "verified response"). Under this approach, alarm monitoring companies must verify the legitimacy of alarms (except holdup, duress, and panic alarms) before calling the police. Verified response typically involves *visual* on-scene verification of a break-in. Verification may also be established by remote *video* surveillance. *Audio* intrusion detection technology is also available.[§] However, it is not nearly as effective as visual on-scene or video verification at this point.[§§] As for in-person verification, it is usually conducted by private security personnel who travel to the location, assess the situation, and if necessary, contact police.[§§§] By requiring alarm monitoring companies to screen alarm activations, police response is reserved for true break-ins, actual attempts and holdup, duress, and panic alarms. Under this approach, only holdup, duress, and panic alarms require permits, whereas burglar alarms do not, reducing the administrative costs associated with a police-staffed false alarm program.[20]

§ Audio intrusion detection technology relies on sensors that, when activated, transmit a signal to the alarm company whereby an operator listens to live audio from the location and decides whether to notify the police.

§§ London's Metropolitan Police Service (2006) found that audio verification false alarm rates were 80 percent. Several cities in the United States, including Fremont (California), Salt Lake City, and Burien (Washington), have also examined audio verification versus visual/video verification and found significant false alarm rates for audio monitoring. The Fremont Police Department (2006) found a 96 percent false rate with audio monitoring in an analysis of one year's worth of audio alarms. The Salt Lake City Police Department (2006) found an 82 percent false rate on audio monitoring over several years, although the number of audio alarms calls was modest. The Burien Police Department (2006) found a 92 percent false rate on audio alarms in its review of nearly seven years of audio calls that were made from the unincorporated areas of King County ,Washington, and 13 contract cities in King County.

§§§ Private security forces in the United States outnumber sworn police officers by about four to one (Betten and Mervosh 2005). The Private Sector Liaison Committee of the International Association of Chiefs of Police, collaborating with alarm industry organizations, published guidelines for private security response but noted, "the alarm industry does not support response by other than sworn police officers, except as a final step in an escalating series of sanctions for alarm system abusers or as a supplement to response service provided by local police." [International Association of Chiefs of Police n.d.(c)].

Cities adopting verified response have found enormous decreases in the number of alarm calls, typically around 90 percent, which improves police response times to other types of calls. In 2000, Salt Lake City, Utah, adopted verified response using visual verification. By significantly reducing the number of calls to which officers needed to respond, the Salt Lake City Police Department gained an equivalent of five full-time officers, decreased the workload of call-takers and dispatchers, and decreased the response time to other calls for service. Area alarm industry representatives cited increased revenues (as a result of the service charge applied for verification) and similar sales levels to those before the verified response policy.[21]

This approach may be most feasible in more populous areas: jurisdictions with few alarm customers scattered over a large area may have difficulty securing a private resource that can deliver satisfactory and cost-effective response times.[22] However, in all likelihood, police in those jurisdictions have long response times to these alarm calls. In cities adopting verified response, insurance companies continue to provide discounts to alarm owners, as it is the monitoring itself, not whether it is done by police or private security, that appears to matter.[23] Over the past few years, between 20 and 25 U.S. cities have adopted this approach, and several police agencies in Canada have done so as well.

The International Association of Chiefs of Police (supported by the National Burglar & Fire Alarm Association and the Central Station Alarm Association) recommends an approach to reducing false alarms that includes, among other things, telephone (or other electronic) verification by alarm companies and notification to alarm owners every time their alarm

activates.[24] The difference between this approach and verified response is that the latter requires the alarm company to make visual or video verification, eliminating the police response to almost all false alarms. Common arguments against using alarm company personnel to verify alarms are that the public expects a police response and police are better trained than private security to respond to such situations.[25] In addition, some mass media reports of verified response policies are characterized in a light unfavorable to police, creating the impression that police are providing less effective service.

The majority of police agencies that adopted verified response had to withstand significant resistance from the alarm industry. The alarm industry has defeated verified response proposals in many other cities. Adopting a verified response policy requires an investment in educating political leaders, the public, and interested parties (alarm companies, police unions, and the media) about the costs and benefits of a modified response. It also requires alarm companies' availability for initial response to alarms.

2. Charging a fee for service for all false holdup, duress, and panic alarms. When an alarm is personally activated (as in a holdup, duress, or panic alarm), gaining additional verification before dispatching a police officer is unrealistic. Even though these calls would seem the most likely to be true, many will also be false. As a result, a fee for service is charged for false holdup, duress, and panic alarm calls both so that police do not have to absorb the costs of false calls and to encourage responsible handling of these alarms. Salt Lake City, Utah, has adopted a fining approach to reduce the number of false holdup, duress, and panic alarms. In the United Kingdom, a combined approach of fines, eventual loss of police service, and

device reengineering is used to reduce technology-related false alarms.[26] Each department should conduct a separate analysis of holdup, duress, and panic alarms to identify the size and scope of the local problem.

3. Responding to holdup, duress, and panic alarms only if they come from a building. This approach is intended to stem the burgeoning use of mobile personal alarms and should be used in addition to the strategies discussed above.[§] New technology has prompted entrepreneurs to market mobile alarms: some handheld, some worn on clothing, others in automobiles. If police response is promised as part of these advances, the volume of false alarm calls could increase dramatically. To combat this potential problem, police agencies can adopt policies providing for police response only when an alarm originates from a building. Salt Lake City's ordinance includes a section to address this problem, but again, a separate analysis of this problem is recommended.[§§]

Responses With Limited Effectiveness

4. Establishing an ordinance requiring owners to obtain alarm permits and to pay escalating fines for false alarms. Many police agencies rely on a local alarm ordinance to guide policy and establish false alarm fines.[§§§] Some ordinances provide for fixed fines, others include escalating fines against repeat abusers, and a few apply a cost-recovery system. Typically, fines are allocated to the general fund and not to the police budget. Invariably, alarm owners are not fined until they have several false alarms (usually three or four). Many ordinances also require alarm owners to obtain a permit. In theory, alarm permits help police departments to track and fine alarm abusers and to notify the most chronic abusers of the suspension

§ Those panic devices police provide to victims of ongoing crimes, such as stalking, may be exempted.

§§ False duress calls from cell phones are similar to the problem of false mobile personal-alarm calls. With the advent of E911 Phase 2, which reveals the location of cell phone users calling 911, police agencies will face the dilemma of whether to respond to cell phone hang-up calls to 911. Most of these hang-ups are the result of unintentionally dialing 911. The 911 operator hears no caller and has to decide whether to dispatch an officer. In essence, these are the equivalent of false burglar alarms. For more information about this particular problem, see the POP guide titled *Misuse and Abuse of 911*.

§§§ The National Burglar & Fire Alarm Association and the False Alarm Reduction Association offer guidance for jurisdictions wishing to draft an ordinance providing sample language, including definitions; registration requirements; duties of users, installers, and monitors; fines; notifications; suspensions; appeals; and reinstatement. Further, the guidance includes checklists for installers and users, and guidelines for setting fines and fees (National Burglar & Fire Alarm Association and the False Alarm Reduction Association 2001).

of police response. However, some jurisdictions have found that some alarm companies do not make their customers aware of the permit requirement, and many alarm owners do not apply for required permits, which severely compromises this response's effectiveness.[27] This approach is administratively costly and requires continued officer dispatch (except in the most chronic cases).[§] Some residents resent police fines for services, as they mistakenly believe their taxes cover them. As a result, it may be difficult to collect fines; collection rates can be as low as 60 percent without significant follow-up.[28] Finally, some jurisdictions have experienced initial reductions in the number of false alarms after an ordinance has been passed, but in general, these initial decreases do not endure over the long term.[29]

[§] In 2004, the city of Dallas, Texas, spent upwards of $650,000 administering its false alarm-reduction program involving fines and collections (Dallas City Council 2005).

[§§] Calculating lost-opportunity costs might be less difficult for departments engaged in problem-oriented policing. Line officers in these departments proactively address specific crime and disorder problems.

5. Setting a cost recovery-based fee for all false alarm calls. A fee for service would cover all costs associated with responding to false alarms. These include lost-opportunity costs for officers responding to false alarms rather than proactively working on reducing crime and disorder problems.[§§] A fee for service differs from a fine in that it is not punitive; it is meant only to recover costs. It is unclear whether a fee for service reduces false alarms, though it does reimburse the city for providing a police response to calls that are almost always false. Any cost-recovery policy would need to incorporate follow-up action against nonpayers.

6. Charging permit fees and fines directly to alarm companies. To lessen the administrative burden inherent in strategies requiring alarm users to obtain permits and to pay fines in the event of a false alarm, some jurisdictions charge these fees directly to the alarm installation or monitoring company. Not only does this practice ensure

that all new alarms are registered with police, but it also greatly reduces the number of contacts that police alarm administrators must make. Rather than contacting thousands of alarm owners, alarm administrators make contact with a much smaller number of installers and monitoring companies.

7. Outsourcing the administration of permits, fines, and fees. Administering permits, fines, and fees can be cumbersome and, if not implemented properly, the deterrent value of an ordinance is lost. Automation is essential to reduce the alarm administrator's workload.[§] These administrative duties can be outsourced to a private firm in exchange for a portion of the fees.[§§] Even with outsourcing, collection rates may be only about 60 or 70 percent.[30] However, it is important to recognize that this response only manages, but will not solve, the problem.

8. Requiring alarm monitoring companies to make two calls to owners of activated systems before calling police. Most jurisdictions require alarm monitoring companies to make a single contact with the owner of an activated alarm system to learn whether the alarm was inadvertently set off during routine operations (e.g., arming or disarming the system). A practice labeled "enhanced call verification" requires monitoring companies to attempt contact using two or more phone numbers (for example, an owner's home phone and cell phone) before calling police. Jurisdictions adopting this strategy have noted modest reductions (around 25 to 40 percent) in the number of false alarm calls to police.[31] Customer satisfaction may increase because fines for police response to false alarms are avoided. However, because alarm monitoring companies generally handle customers from many jurisdictions, they

§ The Central Station Alarm Association developed a software package, False Alarm Analysis Program, to assist jurisdictions with the cumbersome task of administration. The software creates invoices and bills, tracks payment delinquency, and provides reports that analyze individual alarm users' false alarm rates and those of customers of individual monitoring companies. The software package also has online training. See www.csaaul.org/faap.htm. However, "off the shelf" software packages may not suit every jurisdiction's needs (Kanable 2001).

§§ The Charlotte-Mecklenburg (North Carolina) Police Department outsourced the administration and tracking of ordinance enforcement to a private company (Mowrey n.d.). The company launched a media campaign to encourage users to register alarms and also set up a toll-free telephone number to answer questions about the local ordinance (Kanable 2001).

may have difficulty applying multiple policies correctly. Furthermore, not all alarm companies comply with these directives, fearing liability if police are not called to the scene when a crime is in fact occurring. It is important to note that these efforts to contact the alarm owner are not the equivalent of verification. The person called may be out of town or away from the location and would have no idea if their premise was being burgled. Finally, police cannot verify or enforce the "enhanced call verification" approach.

9. Accepting dispatch cancellations. Some police agencies will cancel a dispatch upon request by an alarm company. The alarm company cancellation is usually based on telephone, not visual, verification. This approach can lead to decreases in the number of alarm calls, but it also inadvertently increases the number of incoming calls to dispatchers, because cancellation calls must be fielded and dispatched.[§]

§ An evaluation of Memphis, Tennessee's, Alarm Office found that, while some alarm companies did indeed cancel alarm calls before dispatch, the practice did not have a measurable impact on the overall number of false alarms to which police were required to respond (Forde and Hellman 2004). Similarly, since Montgomery County, Maryland, enacted its alarm ordinance in 1995, alarm monitoring companies cancelled 24 percent of all requests for dispatch. While this reduced the number of false alarms to which police responded, it also increased dispatchers' workload (Montgomery County Police Department 2004).

10. Alerting alarm companies about false-alarm abusers. Some police agencies contact alarm companies with the names of customers who are false-alarm abusers. This practice can reduce false alarms if alarm companies work with alarm owners to remedy the abuse.[32] This approach depends on the alarm company's willingness to follow up with its customers, and its capacity to bring abusers into line. It works best if both the alarm companies and the abusers are charged for costs. Alerting alarm companies requires police administrative staffing and police response to all alarm calls, and it may necessitate additional police resources as the number of alarm systems rises. In addition, some alarm companies may not be willing to share customer lists with police.

11. Setting criteria for temporarily suspending police response. After a predetermined number of false alarms, some jurisdictions withhold police response to subsequent alarm activations.[§] Other jurisdictions will not dispatch police to locations that do not have a valid alarm permit on file. Proper implementation requires quick access to the number of prior false alarms and the permit status of the location, adding responsibilities to police call dispatchers. This response can be combined with a modified verified response policy so that either the police or a private security company respond to all alarms. Alarm owners should be warned of the intent to suspend police response and should receive official notification of the suspension of services. Many jurisdictions allow owners to appeal the suspension decision and to "earn back" police response after some time. This approach can involve significant financial costs for the police in accommodating the administrative and appeal work this approach requires.

12. Publishing alarm companies' false alarm rates on websites or elsewhere. Police can calculate and publish the false alarm rates of individual alarm companies to help potential buyers make informed decisions. This could prompt companies with higher false alarm rates to improve their practices, but requires significant police administrative work.

13. Conducting alarm users' education classes. Some police agencies hold false-alarm classes for abusers, usually with some success. These classes typically offer information on the scope of the false alarm problem in the local area and the basic functions of alarm systems, along with maintenance procedures and other practices that can help to reduce false alarm activations.[§§] Many jurisdictions waive the fine incurred for a false alarm if the alarm owner attends the class. While some jurisdictions such as Phoenix,

[§] In 2004, the Los Angeles (California) Police Department restructured its response to burglar alarms by 1) increasing fines, 2) suspending service after two false alarms in a rolling 12-month period, and 3) requiring alarm verification for all calls after suspension. In 2005, these changes reduced the number of alarm calls by about half, led to approximately the same cancellation rate, and required approximately half the number of alarm dispatches (Los Angeles Police Department 2005). The approach requires a significant amount of administrative work, including alarm permitting, false alarm classes, appeals processes, and use of a collection agency for past-due accounts [Los Angeles Police Commission, Alarms Section, Board of Police Commissioners (n.d.)].

[§§] The False Alarm Reduction Association and National Burglar & Fire Alarm Association created guidelines for establishing an alarm users' awareness school (False Alarm Reduction Association and National Burglar & Fire Alarm Association 2000).

Arizona, and Bellevue, Washington, claim that as few as 10 percent of attendees have a subsequent false alarm, other jurisdictions such as Memphis, Tennessee, and Fort Lauderdale, Florida, have not experienced the same success level of success.[33] The most effective alarm education efforts are done by alarm monitoring and installation companies providing on-premises instruction so that users receive hand-on training with their own equipment.[34] Most often, however, police teach the alarm reduction classes offered. Representatives from alarm companies, arguably the group most knowledgeable about reducing false alarm calls, sometimes choose not to even attend. In general, alarm users' classes must lead to a *dramatic* reduction in the total number of false alarms in a given jurisdiction to pay for the personnel and administrative costs of operating the program.[35] Further, it is debatable whether police should bear the responsibility for alarm education efforts required for using a private consumer product.[36]

14. Lowering the call priority of alarms. Avoiding the political issues involved in disagreeing with the alarm industry or in battling with city or county legislators, some police agencies have simply lowered the call priority for alarms (other than holdup, duress, and panic alarms). Other jurisdictions simply issue a general alert, allowing officers on patrol to respond at their discretion. This does not reduce the number of false alarms, nor does it reduce the number of alarm calls coming into a police dispatch center.

Response Not Recommended

15. Providing an emergency police response to unverified burglar alarm calls. A number of police agencies still respond to alarm calls with their highest priority, often referred to as "priority one," authorizing the swiftest response to the call. The research does not support this level of response due to the high rate of false alarms. In addition, this approach does nothing to address the underlying causes of false alarms.

Appendix: Summary of Responses to False Burglar Alarms

The table below summarizes the responses to false burglar alarms, the mechanism by which they are intended to work, the conditions under which they ought to work best, and some factors you should consider before implementing a particular response. It is critical that you tailor responses to local circumstances, and that you can justify each response based on reliable analysis. In most cases, an effective strategy will involve implementing several different responses. Law enforcement responses alone are seldom effective in reducing or solving the problem.

Response No.	Page No.	Response	How It Works	Works Best If…	Considerations
Effective Responses					
1.	16	Requiring alarm companies to verify alarm legitimacy before calling the police (commonly called "verified response")	The alarm company responds to the scene of an alarm and calls the police only if a crime has occurred or been attempted. If the alarm company is in visual contact with the alarm site, such as through CCTV, and can verify a crime or an attempt, police will respond	…holdup, panic, and duress alarms are exempted; alarm companies are prohibited from classifying an alarm call as duress when it isn't; and combined with responses 2 and 3 below	Requires educating the public, police union, and media to enable police leaders to establish departmental policy, or to encourage local (and sometimes state) legislators to enact ordinances
2.	18	Charging a fee for service for all false holdup, duress, and panic alarms	Used in combination with response 1, keeps these types of alarm calls from becoming unmanageable	…the alarm industry is prohibited from classifying ordinary burglar alarms as "duress" alarms, and combined with responses 1 and 3	Requires permits for holdup, duress, and panic alarms, as well as false alarm-reduction management to monitor trends in such calls

Response No.	Page No.	Response	How It Works	Works Best If…	Considerations
3.	19	Responding to holdup, duress, and panic alarms only if they come from a building	For an example, see the Salt Lake City ordinance at www.slcgov.com/police. Police may make exceptions for panic alarms given to high-risk domestic violence and stalking victims	…publicized so that mobile-alarm manufacturers know the police will not respond	Requires outreach to mobile-alarm manufacturers
Responses With Limited Effectiveness					
4.	19	Establishing an ordinance requiring owners to obtain alarm permits and to pay escalating fines for false alarms	Requires permits for alarm owners and escalating fines for false alarms	…all alarmed premises obtain required permits, the community has an extremely low number of false alarms, and officers have sufficient free time so that responding to false alarm calls does not impede their ability to work on actual crime problems	Involves significant administrative resources; collection rates may be low; may involve taking legal action against nonpayers
5.	20	Setting a cost recovery-based fee for all false-alarm calls	The city calculates the true cost of false-alarm response, including the lost-opportunity costs for police	…the political climate is more supportive of fees for service than "verified response"	Involves billing and follow-up with customers who fail to pay; may involve taking legal action against nonpayers
6.	20	Charging permit fees and fines directly to alarm companies	Reduces the number of contacts police must make to recover costs, and ensures all new alarm system owners obtain permits	...alarm companies recognize the value of reduced administrative workload for police	Requires cooperation from alarm companies

Response No.	Page No.	Response	How It Works	Works Best If...	Considerations
7.	21	Outsourcing the administration of permits, fines, and fees	Private companies are contracted to manage the administrative burden of permitting, tracking down, and collecting fines and fees from nonpayers	...permitting, fine, and fee transactions are automated	Manages, but does not solve, the false alarm problem
8.	21	Requiring alarm monitoring companies to make two calls to owners of activated systems before calling police	Provides an additional opportunity to verify the validity of an alarm by contacting owners who are not on the alarmed premises when alarm activates	...alarm monitoring companies are diligent in applying policy, and alarm owners have multiple contact numbers	Monitoring companies serving multiple jurisdictions may have difficulty applying multiple policies correctly; some alarm companies fear liability if police are not called immediately
9.	22	Accepting dispatch cancellations	The alarm company verifies (usually by telephone) that the alarm was false, and then calls police, who cancel their response	...established by ordinance, and alarm companies follow through	Increases the number of incoming calls dispatchers must handle
10.	22	Alerting alarm companies about false-alarm abusers	Police sort records of false-alarm abusers by company, and notify the companies	...accompanied by sanctions for noncompliance; or alarm companies, along with individual alarm owners, are charged for costs	Requires police staff time to sort records, and alarm company cooperation in dealing with alarm owners

Response No.	Page No.	Response	How It Works	Works Best If…	Considerations
11.	23	Setting criteria for temporarily suspending police response	Police response is withheld for properties with chronic false alarms or for those premises without a valid alarm permit, and can be combined with a modified "verified response" policy	…police have quick access to database containing the number of prior false alarms and permit status, and alarm owners are notified of the intent to suspend police response	Requires significant administrative effort to maintain current records of prior false alarms and permit status
12.	23	Publishing alarm companies' false alarm rates on websites or elsewhere	Police post alarm companies' false alarm rates on department websites or elsewhere	…police alert alarm companies that they are going to do so, and give them time to reduce their false alarm rates before publication	Requires accurate and regular updating, perhaps quarterly. In the United Kingdom, an inspectorate monitors companies' false alarm rates. For those companies unwilling to reduce high rates, the police do not respond to alarms without evidence of a crime in progress[37]
13.	23	Conducting alarm users' education classes	Police hold classes for alarm abusers to reduce the number of errors made activating and deactivating the system	…classes are taught by the alarm installation and monitoring companies, and provide on-premises instruction so users receive hands-on training	If police lead classes, they must develop expertise in typical alarm systems and their false-trigger patterns; must lead to a dramatic reduction in the number of false alarms to be cost-effective; unclear what responsibility police should have for educating users of a private consumer product

Response No.	Page No.	Response	How It Works	Works Best If…	Considerations
14.	24	Lowering the call priority of alarms	Police code alarm calls as "low priority" for dispatch purposes	…police have sufficient resources to respond to alarm calls, and local legislators are unwilling to address the problem in any other way	Does not address the underlying causes of false alarms; does not reduce the number of incoming calls to police dispatchers
Response Not Recommended					
15.	25	Providing a high priority emergency police response to unverified burglar alarm calls	Police treat alarm calls as actual emergencies, despite extensive research findings to the contrary	…the community has few crime problems, and police have sufficient resources to do so	Assumes police desire full responsibility for false alarms, or the community and legislature are unwilling to accept extensive research concerning the percentage of false alarms

Endnotes

[1] Blackstone, Buck, and Hakim (2005).
[2] Blackstone, Buck and Hakim (2005); International Association of Chiefs of Police (n.d.)(a).
[3] Blackstone, Hakim, and Spiegel (2000); Blackstone, Buck, and Hakim (2005).
[4] National Burglar & Fire Alarm Association (2005).
[5] Blackstone, Hakim, and Spiegel (2000).
[6] Light (2001); Hakim and Blackstone (1997).
[7] Seattle Police Department (n.d.).
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[9] Blackstone, Hakim, and Spiegel (2001); Gilbertson (2005).
[10] Budd (2001); Palmer, Holmes, and Hollin (2002); Hakim, Rengert, and Shachmurove (2001).
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[18] Catalano (2005).
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[20] Blackstone, Buck, and Hakim (2005).
[21] Salt Lake City Police Department (2001).
[22] Baranzini (2002); Cahalane (2001).
[23] Salem Police Department, Burglar Alarm Task Force (2004); Steckler (2005); Werner (2005).
[24] International Association of Chiefs of Police (2002).
[25] International Association of Chiefs of Police (2002).
[26] British Security Industry Association (2005).
[27] Butterfield (2003); Forde and Hellman (2004); Blackstone, Buck, and Hakim (2005); Steckler (2005).

[28] Forde and Hellman (2004).
[29] Blackstone, Buck, and Hakim (2005).
[30] Stephens (2005).
[31] Mowrey and Rice (2004); Fernandez (2005).
[32] Phoenix Police Department (2000).
[33] False Alarm Reduction Association and the National Burglar & Fire Alarm Association (2000); Security Industry Association (2005); Gill and Hemming (2003); Forde and Hellman (2004).
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Recommended Readings

- **A Police Guide to Surveying Citizens and Their Environments**, Bureau of Justice Assistance, 1993. This guide offers a practical introduction for police practitioners to two types of surveys that police find useful: surveying public opinion and surveying the physical environment. It provides guidance on whether and how to conduct cost-effective surveys.

- **Assessing Responses to Problems: An Introductory Guide for Police Problem-Solvers**, by John E. Eck (U.S. Department of Justice, Office of Community Oriented Policing Services, 2001). This guide is a companion to the *Problem-Oriented Guides for Police* series. It provides basic guidance to measuring and assessing problem-oriented policing efforts.

- **Conducting Community Surveys**, by Deborah Weisel (Bureau of Justice Statistics and Office of Community Oriented Policing Services, 1999). This guide, along with accompanying computer software, provides practical, basic pointers for police in conducting community surveys. The document is also available at www.ojp.usdoj.gov/bjs.

- **Crime Prevention Studies**, edited by Ronald V. Clarke (Criminal Justice Press, 1993, et seq.). This is a series of volumes of applied and theoretical research on reducing opportunities for crime. Many chapters are evaluations of initiatives to reduce specific crime and disorder problems.

- **Excellence in Problem-Oriented Policing: The 1999 Herman Goldstein Award Winners.** This document produced by the National Institute of Justice in collaboration with the Office of Community Oriented Policing Services and the Police Executive Research Forum provides detailed reports of the best submissions to the annual award program that recognizes exemplary problem-oriented responses to various community problems. A similar publication is available for the award winners from subsequent years. The documents are also available at www.ojp.usdoj.gov/nij.

- **Not Rocket Science? Problem-Solving and Crime Reduction**, by Tim Read and Nick Tilley (Home Office Crime Reduction Research Series, 2000). Identifies and describes the factors that make problem-solving effective or ineffective as it is being practiced in police forces in England and Wales.

- **Opportunity Makes the Thief: Practical Theory for Crime Prevention**, by Marcus Felson and Ronald V. Clarke (Home Office Police Research Series, Paper No. 98, 1998). Explains how crime theories such as routine activity theory, rational choice theory and crime pattern theory have practical implications for the police in their efforts to prevent crime.

- **Problem Analysis in Policing**, by Rachel Boba (Police Foundation, 2003). Introduces and defines problem analysis and provides guidance on how problem analysis can be integrated and institutionalized into modern policing practices.

- **Problem-Oriented Policing**, by Herman Goldstein (McGraw-Hill, 1990, and Temple University Press, 1990). Explains the principles and methods of problem-oriented policing, provides examples of it in practice, and discusses how a police agency can implement the concept.

- **Problem-Oriented Policing and Crime Prevention**, by Anthony A. Braga (Criminal Justice Press, 2003). Provides a thorough review of significant policing research about problem places, high-activity offenders, and repeat victims, with a focus on the applicability of those findings to problem-oriented policing. Explains how police departments can facilitate problem-oriented policing by improving crime analysis, measuring performance, and securing productive partnerships.

- **Problem-Oriented Policing: Reflections on the First 20 Years**, by Michael S. Scott (U.S. Department of Justice, Office of Community Oriented Policing Services, 2000). Describes how the most critical elements of Herman Goldstein's problem-oriented policing model have developed in practice over its 20-year history, and proposes future directions for problem-oriented policing. The report is also available at www.cops.usdoj.gov.

- **Problem-Solving: Problem-Oriented Policing in Newport News,** by John E. Eck and William Spelman (Police Executive Research Forum, 1987). Explains the rationale behind problem-oriented policing and the problem-solving process, and provides examples of effective problem-solving in one agency.

- **Problem-Solving Tips: A Guide to Reducing Crime and Disorder Through Problem-Solving Partnerships** by Karin Schmerler, Matt Perkins, Scott Phillips, Tammy Rinehart and Meg Townsend. (U.S. Department of Justice, Office of Community Oriented Policing Services, 1998) (also available at www.cops.usdoj.gov). Provides a brief introduction to problem-solving, basic information on the SARA model and detailed suggestions about the problem-solving process.

- **Situational Crime Prevention: Successful Case Studies**, Second Edition, edited by Ronald V. Clarke (Harrow and Heston, 1997). Explains the principles and methods of situational crime prevention, and presents over 20 case studies of effective crime prevention initiatives.

- **Tackling Crime and Other Public-Safety Problems: Case Studies in Problem-Solving**, by Rana Sampson and Michael S. Scott (U.S. Department of Justice, Office of Community Oriented Policing Services, 2000) (also available at www.cops.usdoj.gov). Presents case studies of effective police problem-solving on 18 types of crime and disorder problems.

- **Using Analysis for Problem-Solving: A Guidebook for Law Enforcement**, by Timothy S. Bynum (U.S. Department of Justice, Office of Community Oriented Policing Services, 2001). Provides an introduction for police to analyzing problems within the context of problem-oriented policing.

- **Using Research: A Primer for Law Enforcement Managers**, Second Edition, by John E. Eck and Nancy G. LaVigne (Police Executive Research Forum, 1994). Explains many of the basics of research as it applies to police management and problem-solving.

Other Problem-Oriented Guides for Police

Problem-Specific Guides series:

1. **Assaults in and Around Bars, 2nd Edition.** Michael S. Scott. 2001. ISBN: 1-932582-00-2
2. **Street Prostitution, 2nd Edition.** Michael S. Scott. 2001. ISBN: 1-932582-01-0
3. **Speeding in Residential Areas.** Michael S. Scott. 2001. ISBN: 1-932582-02-9
4. **Drug Dealing in Privately Owned Apartment Complexes**. Rana Sampson. 2001. ISBN: 1-932582-03-7
5. **False Burglar Alarms, 2nd Edition.** Rana Sampson. 2001. ISBN: 1-932582-04-5
6. **Disorderly Youth in Public Places.** Michael S. Scott. 2001. ISBN: 1-932582-05-3
7. **Loud Car Stereos.** Michael S. Scott. 2001. ISBN: 1-932582-06-1
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15. **Burglary of Retail Establishments.** Ronald V. Clarke. 2002. ISBN: 1-932582-14-2
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20. **Financial Crimes Against the Elderly.** Kelly Dedel Johnson. 2003. ISBN: 1-932582-22-3
21. **Check and Card Fraud.** Graeme R. Newman. 2003. ISBN: 1-932582-27-4
22. **Stalking.** The National Center for Victims of Crime. 2004. ISBN: 1-932582-30-4
23. **Gun Violence Among Serious Young Offenders.** Anthony A. Braga. 2004. ISBN: 1-932582-31-2
24. **Prescription Fraud.** Julie Wartell and Nancy G. La Vigne. 2004. ISBN: 1-932582-33-9
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For Council Meeting: January 12, 2004
Agenda Item: **5.b**

TO: MAYOR AND CITY COUNCIL

FROM: BURGLAR ALARM TASK FORCE

SUBJECT: FINAL REPORT AND RECOMMENDATIONS

ISSUE:

Should the City Council adopt a Burglar Alarm Response Policy proposed by the Salem Police Department (SPD)?

RECOMMENDATION:

The Burglar Alarm Task Force recommends that the Salem City Council:

(A) Adopt a policy that continues the current method of SPD patrol unit response to burglar alarm calls with the following modifications:

(1) Broadcast unverified burglar alarm calls via an "all-units bulletin," which allows any SPD patrol unit the discretion to respond.

(2) Dispatch SPD patrol units to verified burglar alarm calls.

(B) Adopt an ordinance to revise applicable sections of the Salem Revised Code to:

(1) Eliminate the permit system, including the permit fees for all alarm owners.

(2) Increase the fine/bail up to $ 150 per occurrence to the alarm holder for an SPD response to a false verified alarm dispatch. Fine to be issued using a standard citation form and at the discretion of a responding SPD Police Officer.

(3) Require the alarm industry to conduct enhanced (two-call) verification prior to placing an unverified burglar alarm call to the Willamette Valley Communications Center/Salem Police Department dispatch.

(4) Define the types of alerts (human, electronic) that result in a particular (verified and unverified) alarm call response.

(5) Provide for a "call-off" procedure for false burglar alarm calls.

(6) Establish standards for Private Security Responder companies responding to alarm calls.

BACKGROUND:

The Council appointed a thirteen-member task force (Attachment A) consisting of ten (10) citizens at large and three (3) Councilors on August 11, 2003 for the purpose of reviewing a proposed Burglar Alarm Response Policy proposed by the Salem Police Department. (Attachment B) As a result, the Burglar Alarm Task Force convened a series of meetings to receive information from citizens, alarm installation/sales/monitoring companies, electronic call centers, private security response companies, other jurisdictions facing similar problems with high false alarm rates, and a representative of the Coordinated Alarm Reduction Effort (CARE).

The information presented provided task force members with a general understanding of the following issues:

(1) Contributing factors to Salem's false alarm rate of 98.7% (2002).
(2) Alarm notice procedures used by the Willamette Valley Communications Center (WVCC) and the Salem Police Department dispatch desk.
(3) Alarm permit issues (use, accuracy, renewal, fees collected)
(4) False alarm fines and collection efforts.
(5) Ordinances from other jurisdictions and the alarm industry (Eugene, Tacoma, Model Alarm Ordinance).
(6) Current protocol of Police Officer response to false alarms.
(7) Wide array of types of alarms, sales and installation methods, and types of monitoring equipment.
(8) Required certifications and licenses for alarm system installers.
(9) Repeat false alarm offenders; issues surrounding false alarms at businesses and homes.
(10) Variety of notification procedures used by the alarm industry.
(11) Contrast and comparison to monitoring and alert procedures when responding to fire, panic, intrusion alarm systems.
(12) Historical relationship between crime rate and false alarm response.

The membership of the BATF felt that including the various alarm industry representatives in all of the fact-finding and deliberations was important in making its recommendation(s) to City Council. We want to thank the alarm industry representatives and the California Alarm Reduction Effort (CARE) organization for their close involvement with and invaluable assistance rendered to the BATF.

FACTS AND FINDINGS:

(1) The 5,688 alarm calls that Salem Police Officers were dispatched to in 2002 represents almost one-twelfth or one month's worth of total dispatched calls in a year. Of these, 46 or 1% were the result of suspected criminal action. In 2001, there were 5,756 alarm calls and currently, this trend appears to holding at about the same rate. Statistics for the City of Salem's False Alarm Responses are found at Attachment C.

(2) A comprehensive listing (Attachment D) of all of the false alarm calls received (2643 sites) by the WVCC/Salem Police Department Dispatch indicates the following trends: (a) most of the repeating false alarms calls are at business locations, (b) the "high-repeaters" were in malls or multiple business locations, (c) 43% of the false alarm sites (1146) only had one false alarm call in 2002, (d) Most of the 1,2,3 false alarm call sites (total of 1783) were homes or small businesses, (d) the 1,2,3 false alarm call sites represent 67% of all false alarm call sites. A majority of household false alarm calls were distributed across a large number of households that had only 1, 2 or 3 total number of false alarm calls in a year. The BATF concluded that the overall false alarm call problem exists due to a high number of infrequent false alarms at households and small businesses and a smaller number of frequent false alarms at businesses.

(3) Nationwide, cities are recognizing the need to adopt ordinances to address this problem. While the alarm industry has promoted its "Model Alarm Reduction Ordinance," there is no uniform method that cities are adopting to address the high number of false alarms. The City of Eugene has recently completed its first six months of a Verified Response method. The initial report from the Eugene Police Department is found in Attachment E. There is disagreement between the alarm industry and the law enforcement jurisdictions about how various forms of alarm ordinance affect crime rates and reduction in the number of false alarms in the larger-sized cities that have adopted various ordinances (Attachment F). Where alarm response ordinances (regardless of response method employed) have been enacted, a decrease in the number of false alarm calls has occurred.

(4) There are no existing City of Salem ordinances governing alarm providers or private security responders.

(5) Salem's current practice of issuing permits to citizens and businesses at a cost of $25 per year does not recover the costs of administration or the cost of responding to alarm calls. With the alarm permits processed through the City's outdated automated permit system, tracking and enforcement of expired permits is haphazard at best. The information contained in active permits may not be current or may not be available at the time of alarm response dispatch, which relegates the alarm permit

to simply an administrative function with little or no real value in responding to alarm calls.

(6) The alarm industry indicates that it is promoting a number of self-help ideas for alarm owners and for city police dispatch departments including: enhanced call verification, "three-strikes" policies for repetitious false alarms, higher fines for false alarm calls, and education and training for alarm holders. Some of the larger, nation-wide alarm industry and lobbying firms have indicated that these efforts are in the development phase. Currently, a number of alarm monitoring companies have not yet adopted or implemented these methods of call verification or more outreach training for alarm holders.

(7) The current practice of imposing false alarm fines does not effectively deter false alarm calls under the current method of responding to unverified alarm calls.

(8) Currently, Salem Police Officers only respond to alarm calls when not dispatched to calls with a higher priority. Currently, there is no use of the "all-units bulletin" for alarm calls. An "all units bulletin" would enable dispatch to notify all units on patrol of the alarm call. Currently, when an alarm call is received, dispatch notifies an officer who is working within the district where the alarm originates. An "all units bulletin" would notify all patrol officers of the alarm, regardless of their assigned district. This enables any available officer to respond at the officer's discretion.

(9) Most monitoring alarm companies use a "call-center" to actually process the alert and to contact the WVCC. Some alarm companies may attempt to locate the alarm holder or their contact designee, many call dispatch first and then attempt to locate the alarm holder. Some alarm industry firms make no effort to contact or follow-up with more information on an alarm call.

(10) The alarm industry has a wide range of products available, including audio monitored, audio with video monitored , multi-zoned electronically monitored alarms, audible alarms, panic (human-activated) alarms, single-zoned alarms, and "plug-in" alarms (requiring no wiring or electrician). All of the alarm systems use a telephone line to trigger the alert signal, with systems having a separate dedicated line and some systems sharing the same line as the voice and data (computer, fax) equipment in the business or home. Many of the current false alarm calls are a result of triggering a single- or a multiple- (or cross-) zoned electrically monitored alert system.

(11) Upon arrival at the alarm site address, the responding police officer will perform an inspection of the outside of the premises to verify or to find indication that a crime may be in progress. If the responsible person or the alarm holder is not present or does not appear after a reasonable amount of time, the responding police officer will leave a false alarm response card and will forward a copy of this form to the finance department to process the false alarm fine. The amount of time the responding police officer spends on these calls is approximately 40 minutes.

(12) In many cases, the responsible person or alarm holder appear at the alarm site location and await the arrival of the responding police officer (or vice-versa). The alarm holder may have disarmed the alert. Few of these disarmed alerts are ever passed onto the dispatch center to "call-off" the alarm response call.

(13) Currently, the K-9 unit is frequently dispatched to respond to alarm calls, particularly to businesses or homes that are large or difficult to search. To-date, of the calls responded to by the K-9 unit comprising 40 plus years of experience, approximately four have been actual crimes. This situation causes the need to "re-train" the police dog; the frequent activity of looking for nothing causes the dog to start to believe it is looking for nothing. As a result of a number of false alarm calls in a week, the handling police officer must conduct re-conditioning drills with the police dog in order to maintain its sensitivity to looking for humans or evidence it is instructed to locate. Additionally, the process of searching is physically taxing on the K-9 rendering him less effective when needed at a verified crime.

(14)No conclusive evidence or trend analysis exists (that is acceptable to both law enforcement and alarm industry managers) to confirm or to deny a direct impact of police response methods upon the burglary or overall crime rate in a city. BATF members agreed that an announcement in the Statesman Journal or made by alarm companies would not, by itself, cause persons to commit a crime: too many other factors (economic situation, drugs, propensity, aptitude) exist that would more than likely be the incentive to commit burglary or unauthorized entry than a change in police response methodology.

(15)SRC 38.045, Effect of Permit on Emergency Response, states: "The City of Salem shall not, by virtue of the issuance of an alarm system permit, be obligated to respond, nor accord any priority in response to an alarm from a licensed system. (Ord No. 1-89)"

(16)BATF member Chuck Huggins (independent full service insurance agency owner) presented information that the method of police response to burglar alarms is not a factor used by insurance carriers to deny coverage or to increase premium costs. Some insurance carriers offer a discount to the premium cost for theft coverage where a burglar alarm is installed and operating. (Attachment G)

(17)The cause of most false alarm alerts is human error (70-75%) such as: failure to properly disarm or to reset the alarm (alarm owners, residents, untrained employees) and the triggering of the alarm by pets, power interruptions, wind, or environmental problems. (Attachment H)

(18)Alarm industry firms responded to an informal survey (Attachment I) that revealed the following facts regarding monitored alarm systems from the responding companies: (a) they serve about 4000 customers, with approximately 600 businesses and 3400 households, (b) monthly charges ranges from $22.50 to $40.00 for basic service. Given that there are approximately 20,000 separate business and households in the city limits, it is estimated that about 20% of the sites in Salem may be monitored by burglar alarm systems.

(19) There are currently at least eight (8) companies that offer private security response within the city limits. Based upon information provided by a provider, it is estimated that if all alarm response was by a private firm, that 10-15 employees per shift would be required. BATF members felt that this number of providers could meet this need if required. Salem Police Department does not provide alarm call response to school district and many higher education locations, private security responders are

contracted by those entities to provide all response (Salem Police and Fire departments respond to verified alarm and fire calls). Information regarding the certification requirements for unarmed private security response employees is found at Attachment J.

(20) The City of Salem currently collects a portion of its false alarm fines for an average monthly revenue gained of approximately $ 3,200. The established fines for false alarms have not been changed within the past few years. The affect of altering the amounts or the method of collecting the fines on revenue stream cannot be determined. Given the annual revenues of $38,150, BATF members did not feel by only increasing the amount of the false alarm fine, that this action alone would only recover a small portion of the costs for police response and would not have a significant impact in reducing the number of false alarm calls.

(21) The BATF received numerous publications from a variety of industry and joint police-alarm industry associations that indicated successes in reducing false alarms through a variety of dispatch call verification methods, tougher enforcement (higher fines), repeat offender remedies, and requirements for alarm holder training, supplier qualifications, and mandating the use of modern alarm monitoring equipment and systems. (Attachment L)

METHODS OF ALARM RESPONSE CONSIDERED

The BATF agreed that the City of Salem should adopt a Burglar Alarm Response Policy for the SPD and also revise applicable Salem Revised Code sections. The BATF determined that the first consideration in making its recommendation was to determine the type of alarm call response method most appropriate to the impact on public safety. Secondly, administrative and financial resources to support the implementation of the type of selected call response method must be considered. Also, the BATF felt that additional revisions should be adopted to further reduce the frequency and causes of false burglar alarm calls.

The seven basic methods (Attachment K) of alarm call response include:

(1) Unverified Calls Response – Police (current method)
(2) Verified Calls Response - Police
(3) Discretionary Response - Police
(4) Coordinated Response- Police
(5) Contracted - Provider
(6) Limited False Alarm - Police
(7) Pre-Paid Contracted - Provider

A brief description of each method of response is as follows:

Unverified Calls Response – Police: All calls are responded to regardless of how they are triggered: type of alarm, presence of a responsible person at the alarm site, or ability to verify

likelihood of a crime or threat to a person. Currently, these calls are assigned by district and are the lowest priority, which results in many not being responded to by Police Officers.

Verified Calls Response – Police: Known as "verified response". Police respond to calls if the likelihood of a crime or personal injury exists. Defined triggers include: witness on-site, video only, and video with audio. Other triggers discussed but not included in the definition were: cross-zoning (multiple trips), audio with two-way, and audio without video.

Discretionary Response – Police: This method uses the all-units bulletin to announce a burglar alarm call to the entire shift on patrol. Not currently used. Can be employed with other alarm call responses. Allows for response by patrol unit (within or outside of the district with the alarm call) based upon officer judgment and availability. Response would be for all calls, regardless of method of triggering the alarm call.

Coordinated Response – Police: This method mandates the presence of a responsible person at the alarm site before patrol unit will enter or investigate the alarm call. Requires greater effort by alarm monitoring company and alarm holder to locate a responsible person and to coordinate link-up with patrol unit when available. Allows for greater ability to reduce false alarms by use of a responsible person to "call-off" the false alarm before patrol unit arrives at the alarm site.

Contracted – Provider: Issue city contract(s) to private security provider(s) to perform all alarm call response in lieu of the Salem Police Department. This would require an additional revenue component (permits, licenses) and a database component if the city wanted to outsource the permit and database system to the contractor(s).

Limited False Alarm - Police: This is the "three-strikes and you're out" procedure. Upon the occurrence of a third false alarm call in a given period, the Police would no longer respond for any further false alarm calls at that site until a time certain or cure process were implemented at the site with the frequent false alarm calls. This method would require robust administrative support and potential additional assistance to an alarm holder and alarm monitoring company at the occurrence of the third false alarm call. At larger business sites with multiple alarm systems and alarm holders, there may be difficulty distinguishing between the frequent and infrequent false alarm call locations.

Pre-Paid Contractor – Provider: Same as Contracted – Provider above, except that the city- or contractor-issued permit would be increased to allow for a certain number of false alarm calls without penalty in a given period. Some alarm monitoring and private security companies now structure their monthly fees with this as an option to the various monitoring and security plans they offer to alarm system owners.

ANALYSIS OF BURGLAR ALARM POLICY (A)

The BATF evaluated the response methods above and determined that the two most likely methods discussed to meet the criteria listed above were the Coordinated Response (6 votes) and the Verified Response (7 votes). The criteria that the BATF weighed and used in voting for its final recommendations included each method's ability to:

1. Reduce the tendency to place false alarm calls,
2. Reduce the number of false alarm calls, reduce impact on SPD patrol operations,
3. Provide similar or greater SPD availability,
4. Lessen the amount of administrative requirements, and
5. Be cost-effective (administration, SPD officer time, alarm company costs)

Upon further analysis, the BATF majority voted to include the Verified Response method [(**Recommendation (A)(1)**] to the City Council. The BATF also felt that the SPD should still continue to provide response to unverified alarm calls via the Discretionary Response or the "all-units bulletin" method. The BATF unanimously voted to also include this method [**Recommendation (A)(2)**] in its overall recommendations.

ANALYSIS OF BURGLAR ALARM ORDINANCE – RECOMMENDATION (B)

City staff would need to identify the applicable SRC affected by these recommendations. BATF feels that new sections may need to be created to encompass the items below that would require actions by alarm industry firms, alarm owners, and private security response companies.

(1) Permit System. In considering Finding # 4, the BATF concluded that the permit system does not provide a benefit to the public, the alarm owners, the alarm industry firms, or to the person (SPD patrol unit, private security company) responding at the alarm site due to a number of factors, which includes:

- Many false alarm calls are made to un-permitted sites. Neither SPD nor the alarm industry firms have any method to verify or to enforce that all sites with alarms have a current and accurate permit on file.
- Permits are managed within the City's Permit Application Center (PAC) database, which is antiquated and has limited capabilities and access.
- The revenue of approximately $ 48,000 per year does not recover the costs for administering (issuance, database entry, monitoring, collections, renewal processing) the permits.

- SPD Dispatch attempts to use the information contained on the permit to contact the alarm owner or a designated responsible person to meet the responding SPD patrol unit. The inaccuracy of the information and additional phone calls that Dispatch must make to locate the alarm owner or a designated responsible person frequently results in the SPD patrol unit having to wait until either no one or someone appears at the alarm site or until a higher priority call is assigned to the SPD patrol unit. (Finding # 10)

(2) Fine for False Alarm Call Response. In considering Findings # 5 and # 20, the BATF considered that SPD patrol units (under the verified response method) could be dispatched to alarm calls that were false or that they did not otherwise qualify as "verified" as defined in Recommendation (B)(4). Without an ability to understand all of the costs involved, the BATF felt that the responding SPD patrol unit should have the same flexibility to issue a citation in this instance up the fine/bail limits they use for other minor or traffic infractions. Currently, the SPD patrol unit may issue, and the municipal judge may impose, up to $ 150 per occurrence for similar infraction of city ordinances. Also, the BATF felt, regardless of the event(s) or error(s) made to cause the call to the false alarm site, that the alarm owner must be held responsible for exercising a reasonable standard of care in the operation and maintenance of the alarm alert system.

(3) Enhanced (Two-Call) Verification. As depicted in Finding # 5, this additional effort (advocated by the alarm monitoring industry) could be a helpful tool if the alarm monitoring company is required to make a minimum of two calls to responsible persons. The BATF felt that this extra step (some companies do this, some do not) by the alarm industry would provide a pre-emptive manner to reduce the tendency to place false alarm calls to the SPD Dispatch.

(4) Definition of types of burglar alarm calls that are verified and unverified. In considering Findings # 8 and # 9, the BATF conducted three separate votes to discern that verified call response triggers included: witness on-site, video with audio, video, and private security. Cross-zoning and audio without video were discounted by majority vote in that these alert triggers were deemed as unreliable. There was concern by some BATF members that we should have defined what triggers qualify for verified response prior to voting on the methods of response. The majority of the BATF indicated that this concern would not have altered their vote for verified response.

(5) "Call-off" Procedure. In considering Finding # 11, and Recommendation (B)(3), the BATF felt that alarm industry, alarm owners, and responsible persons should be required to follow-up and notify the SPD Dispatch that a false alarm has been "cleared." The call-off procedure would reduce SPD patrol unit dispatches and all-units burglar alarm notices. If an SPD patrol unit is already responding, the officer wait time would be eliminated or reduced at the false alarm site. This would not be an enforceable item, but rather, an incentive to reduce an alarm owner's chance of being cited with a fine/bail for a false alarm call.

(6) Standards for Private Security Companies. While private security companies should support and comply with all of the recommendations above, specific standards for qualifications, background checks, and mandatory training (initial, continuing) should be adopted into city ordinance. While State law mandates minimums in these areas, the City of Salem should enact additional requirements unique to its policies for public safety. A few examples of why standards should be set for a private security responder company include: when acting as the primary responder for a burglar alarm call sent directly from the alarm monitoring company, when armed or unarmed, or when acting as the Responsible Person for a verified response burglar alarm call coordinated through the SPD Dispatch.

ISSUES CONSIDERED AND DISCUSSED BUT NOT INCLUDED IN THE FINAL RECOMMENDATIONS

These include:

(1) City issues license or franchise to alarm monitoring companies.
(2) Dedication of revenues (fines, fees, permits) to either the General Fund or to the Police Department.
(3) Notification requirement by real estate transfer entities at the time of sale or lease for a property with an installed burglar alarm system.
(4) Enhancements to the City's permit system.
(5) The validity of statements about the effect that verified response by a police department has in relation to the level of crime in a city.
(6) "Three-strikes and you're out" policy.

SUMMARY

The Burglar Alarm Task Force discovered, with current shortfalls in the number of available police officers on any one shift and the rising rate of crime throughout Salem that available funding provides only a limited response to preventing and reacting to crimes that are: more likely prevalent and more likely serious than the current trend in false burglar alarm calls.

Currently, the SPD patrol units on any one shift are not reacting to most of the burglar alarm calls due to higher call priorities consisting of verified crimes and the simple reality that most alarms are clearly false. Burglar alarm call response should realistically balance the resources against the known threat for the greatest number of people. Approximately 20% of the households in Salem have installed and operating burglar alarm systems – 80% do not.

Current Salem Revised Code 38. 045 impels that the City of Salem **shall not** accord any priority or obligation to respond to burglar alarm calls. The perception that the Salem Police Department must respond to burglar alarm calls has not been true since this SRC was enacted in 1989-1990.

The alarm industry advocates for the adoption of a Model Burglar Alarm ordinance as a means of reducing false alarms with stiffer penalties, education, enhanced call verification, and limited response policies. The BATF adopted most of these in our final recommendations to City Council.

By responding to unverified alarm calls when SPD patrol units are available (and believe that a crime may be occurring) with verified alarm calls that are prioritized, the majority of the BATF feels that more police officers will be available to prevent or to react to crime in Salem.

The enhanced (two-call) verification system, the "call-off" procedure, the elimination of the permit system, adding standards for private security response companies, and increasing the fines for false alarms to "verified" calls will, with the adoption of the recommended response methods, reduce the number of false alarm calls.

Currently, many alarm industry firms are offering, at additional cost of $6 to $40 per month to the alarm owner, private security response for alarms. While the BATF considered the presence and ability of private security response companies, the BATF did not feel that it would or could take a position to advocate or require alarm industry firms o offer services of a private security response company. The BATF felt that the decision to purchase services from a private security responder company is left best up to the alarm subscribers, the selling private security responder, and the alarm industry. Our recommendations to modify the current burglar alarm response policy and city ordinance were made irrespective of the market for private security response.

The BATF elected Ms. Anna Peterson to present this Final Report and Recommendations to the Salem City Council. The report was prepared by city staff, in coordination with the Chair of the BATF, Councilor Dan Clem. This report includes edits made by BATF and has the general concurrence of the BATF voting members at the November 18, 2003 meeting.

Attachments:

A - Council Appointment of the Burglar Alarm Task Force (Aug 11, 2003)
B – Salem Police Department Proposed Response to Burglar Alarms (May 12, 2003)
C – FAQ/Statistics About False Alarm Response in Salem (Sep 2003)
D - False Alarm Calls Listing for 2002
E – City of Eugene's Six-Month Review of Verified Response (Jun 3, 2003)

F - Various Jurisdictional Ordinances Adopted (Sep 2003)
G - Insurance Company Alarm Credits (Sep 2003)
H – National Study of False Alarms for the Security Industry Association
I - BATF Alarm Industry Questionnaire (Sep 5, 2003)
J - DPSST Private Security Unarmed Instructor's Training Manual (2001)
K – Minutes for BATF Meetings (8/19, 9/9, 9/16, 9/30, 10/14, 10/28, 11/18)
L – Alarm Industry Publications (various)

Attachment A

For Council Meeting: August 11, 2003

Agenda Item: 4.2.x

TO: MAYOR AND CITY COUNCIL

THRU: ROBERT D. DELONG, CITY MANAGER

FROM: LINDA BERMAN, PUBLIC INFORMATION OFFICER

SUBJECT: APPOINTMENT OF BURGLAR ALARM TASK FORCE

ISSUE:

Appointment of the Burglar Alarm Task Force.

RECOMMENDATION:

1. The Mayor will appoint three Councilors to the Task Force.

2. The Council will appoint 12 public/industry members.

The recommended appointees are listed below in the Facts and Findings section.

BACKGROUND:

The Council has requested that a Task Force be appointed to review the proposed Burglar Alarm Response Policy proposed by the Salem Police Department. Requests for appointment were reviewed by Mayor Taylor and Councilor Clem.

FACTS AND FINDINGS:

Recommended Council representatives: Councilors Bennett, Clem and Quillinan.

Recommended public/industry representatives: Marin Arreolla (small business owner), John Baker (Real Estate business owner), Keith Butler (SCS Communications and Security), Bob Burton (alarm homeowner), Amanda Dalton (citizen), Byron Hawkins (local security system employee), Chuck Huggins (Insurance), Steve Margreaves (alarm company owner), Vince Milligan (retired), and Anna Pederson (public safety advocate).

Non-voting members: Leon Wheeler from the Independent Fire and Burglar Alarm Dealers Association, representatives from ADT, Brinks, Sonitrol, and a representative from the Alarm Industry Advisory Group to be named later.

For the Council Meeting of May 12, 2003
Agenda Item No.:_____

TO: Mayor and City Council

THROUGH: Robert D. DeLong
City Manager

FROM: Walter E. Myers
Chief of Police

SUBJECT: **Salem Police Department's Response to Alarms**

ISSUE:

Should the Salem Police Department change their response policy regarding alarm calls and amend Chapter 38 of the Salem Revised Code related to alarms?

RECOMMENDATION:

That Council approve option #1 as listed and that the Salem Police Department no longer respond to alarms other than manually activated silent panic, duress, hold-up alarms, and those alarms where apparent criminal activity has been "verified" by third party confirmation. Response to all other alarms will be the responsibility of the alarm company and/or a "Private Security Responder" employed by the alarm provider or other designee of the alarm subscriber.

The Salem City Council should amend Chapter 38 of the Salem Revised Code to set forth specific duties of "Alarm Providers" and duties of "Private Security Responders"

BACKGROUND:

It has long been the policy of the Salem Police Department to respond to all silent and audible alarm reports received through Willamette Valley Communications Center (WVCC). Requests for response to alarms comprise approximately 8% of all calls for police service.

In 2001 officers were dispatched to 5,756 alarm calls. 17 or less than 1% of the alarm activations were the result of suspected criminal activity. In 2002, officers were dispatched to 5,688 alarm calls, 46 or 1% were the result of suspected criminal action.

Not only do these false alarm calls have a drastic impact on police services but they also have a significant impact on Willamette Valley Communication Center. The average alarm call involves three phone calls, an incoming call which is the equivalent of a 911 emergency call, a call by the dispatcher in an attempt to make contact at the alarm site, and a second incoming call by the alarm company to

provide "responsible person" information, again the equivalent of a 911 call. Many alarms can involve 5 or more phone calls which slows the response to both 911 and business calls.

The City of Salem currently requires a permit to use or maintain an alarm system. Alarm permits cost $20 and are renewable for $12 after the initial year. Alarm permits have generated revenue to the general fund in the average amount of $48,494 over the last three years.

The police department is recommending the permit process be discontinued. If the City continues to require an operating permit, citizens may think a police response is implied with the permit. This will mean the general fund revenue generated by the permit process will be eliminated.

Fines for false alarms are progressive. There is no fine for the first false alarm in a calendar year. The fine is $50 for the second false alarm, $100 for the third, $150 for the fourth, $200 for the fifth, and $250 for six and above. Average revenue from false alarm fines over the last four years is $55,617.

False alarm fees will still be assessed but the amount of fines collected will be considerably less. For example, if we decrease our responses by approximately 85% this could result in a corresponding 85% reduction in false alarm fees.

Based on a random sampling of 50 alarm calls responded to in calendar year 2000, officers spent an average of 18 minutes investigating an alarm call. The average number of officers responding to these 50 alarm calls was 1.3 officers. If we could see an 80% reduction in alarm response down from 5,688 in 2002 to 1,138 (4,550 fewer responses), this would translate into 1,365 hours. This time could be used for directed traffic enforcement or crime reduction efforts.

It is our belief this policy would result in a reduction of our response times to emergency calls and improve our ability to work neighborhood issues and traffic enforcement. Salt Lake City, Utah has implemented a plan similar to what the police department is proposing. They saw a 47 second reduction in emergency response the first year verified response was implemented.

In researching which response policy would be the most effective use of police officer's time, City resources, and taxpayer dollars, the Salem Police Department considered the following:

1. Verified Response:

The verified response approach requires independent verification of a need for police presence at the site of an intrusion alarm *before* police are involved at all. This means that, in the case of monitored alarm systems, the monitoring company, on receiving an intrusion alarm activation, dispatches a private security service (either their own service or one they contract with to provide follow-up service) to the site of the alarm. If there is a crime in progress or positive evidence of an attempted crime, the private security advises the monitoring company, who then requests police response. If the private security responder finds no crime or criminal attempt, the monitoring company is advised of that condition, but the police are never involved in the process at all. For unmonitored alarm systems, police would

respond only if there was independent verification of a need for service (e.g., a neighbor calling and saying that the alarm was going off and they saw an open door when they knew the residents were away).

The theory behind verified response is that the police will rarely, if ever, be involved with false alarms (Salt Lake City saw a 90% reduction in the first year, Eugene, in their first 6 months, have gone from over 2,000 responses to around 200). Few people question that response to an actual crime or attempted crime is a basic police service. People do question the wisdom, however, of making it a basic police service to use the police to respond to places where circumstantial information is consistently wrong 99% of the time indicating that a crime *might* have happened. Verified response works to assure that police are involved only in alarm instances where crimes or attempted crimes are actually involved. It is the only model that addresses the waste of police resources aspect of the false alarm problem.

Under a verified response system, an immediate priority dispatch of officers is justified because a threat to property has been independently verified.

2. Permit / Fine Driven Response (our current policy):

The City issues a user permit and fines for false alarms. Police respond to every alarm activation. This plan is inexpensive for alarm users and alarm companies. This policy is time intensive to manage and enforce. It uses trained police officers to enforce permits and fines, neither of which is a crime. Alarm response by police is subsidized by ALL citizens whether they have an alarm or not. (Alarm companies estimate 20% of residences and businesses have alarms). False alarms are not reduced (99% false), simply reimbursed. In addition, response to alarms is generally delayed due to officers being tied up on other higher priority calls for service.

3. Cost Recovery:

The cost recovery approach uses annual permit fees and/or fines to generate income to offset the actual cost of administering and operating a police alarm response program. The costs can either be shared by all alarm users (annual permit fee) or absorbed by only those using the service (service fees/fines to those generating false alarms), or by some combination of the two. The cost recovery approach involves billing a responsible party for at least the **actual cost** of *each* false alarm to which police respond as opposed to an escalating fine scale. Cities who use this program use the fees to hire employees to deal with the alarm problem. Phoenix, AZ Police Department has 12 civilian employees and 2 detectives, Portland Police Bureau's alarm unit consists of more than four full time personnel to monitor and administer their alarm program.

Cost recovery, while not eliminating staff time and associated costs related to responding to and processing false alarms, does - in theory - generate sufficient revenue to offset the expenses.
False alarms aren't significantly reduced, and the police still have to respond to them all. Police are still responding to a 95% + false alarm rate.

4. Two Call Verification:

This approach is championed by the alarm companies. If the alarm goes off, the alarm company will call the site and then an alternate number prior to calling the police. The second call is made to a number other than where the alarm is sounding, such as the subscriber's cell phone or pager. It is a 50/50 chance the person not at the site will know why the alarm has been activated.

This policy would involve voluntary compliance by the alarm companies. Discussions with the alarm companies show this would take a corporate decision to make this policy for each company. It is not likely a nationwide policy change will be implemented. It would also be an unenforceable policy for the police. You cannot fine or suspend an alarm subscriber if the alarm company does not do what it is required to do. It is difficult to impose fines on alarm companies for not following policy, especially when the majority of companies are based in other states.

This approach could reduce the number of alarms 30% to 50% over a period of 3 years. However, 99% of responses are still false and the number of alarm users is increasing an average of 10% per year.

FACTS AND FINDINGS:

1. The Salem Police Department provides professional law enforcement services to a city of more than 141,000 population with a very lean staff ratio of 1.2 officers per 1,000 residents, well below the national and statewide averages.

2. Budget projections for the next several years indicate there is no relief in sight. The police department and all City departments will be forced to continue in our attempts to do more with less while alarm users are increasing about 10% per year.

3. Responding to alarms makes up 8% of the police department's total call load with 5,688 responses in 2002. 99% of those alarms were false.

4. In addition to the drain on police officer resources, those 5,688 alarms generated almost 20,000 phone calls to or from an already overburdened 911 Center.

5. The loss of revenue due to discontinuing alarm permits and fewer false alarm fines will be more than offset by the reduction in workload for city staff.

6. Salem Police personnel would continue to respond immediately to those alarms that are manually activated alarms intended to signal panic, duress or robbery. Bank alarms and residential panic alarms are two common examples of alarms that will continue to receive **immediate** police response.

7. Requiring confirmation by a third party before responding to alarms will dramatically reduce the demands on the patrol officer and the 911 Center. We anticipate it will have a positive effect on dispatch and response times to true emergencies.

8. Third party confirmation includes, but is not limited to, video/audio confirmation by the alarm company, responding private security officer or other designee of the alarm subscriber, confirmation from a witness or other confirmation independent of the alarm signal that a crime has occurred or an emergency exists.

9. Alarm owners should be better served by private security personnel verifying the status of their alarm rather than waiting for a police officer to clear from a higher priority call to respond. This should result in officers responding only to the 1% of all alarms calls which are valid or manually activated alarms.

10. While many suggest raising the permit fee or false alarm fine to cover the cost of police response, the "costs" are too great for this to be a realistic option. Other jurisdictions have demonstrated that alarm companies can provide a more rapid private security response for only $5 more a month added to their customer's monthly bill.

11. After more than two years of research, including meeting with alarm company representatives, we are more convinced than ever this proposal provides the best balance in providing basic police services to all the citizens of Salem.

12. We are also recommending revisions to the Salem Revised Code Chapter 38. These changes include eliminating the alarm permit requirement and requiring Private Security Responders to be certified by the Oregon Department of Public Safety Standards and Training (DPSST). See attachment B.

13. The Salem Police Department will provide the City Council with written results of the reduction of alarm responses one year from the time these changes are enacted.

Summary:

The Salem Police Department has explored various options for reducing false alarms for the last five years. All of the above listed options have been considered. The conclusion of the Salem Police Department is verified response is the preferable method of response given the current fiscal climate. We are responding to more calls for service with fewer officers. Alarm calls which are 99% false should not be allowed to interfere with our ability to respond to true emergency calls in a timely manner. Salt Lake City, Utah experienced a 47 second reduction in response time to genuine emergency calls the first year verified response was implemented.

These alternative response policies were presented to the Chief's Police Advisory Committee and the Salem Neighborhood Association's Police Liaison Committee. They were presented in written form

(See Attachment) as well as in an oral presentation. Members of both committees voted unanimously for verified response as the policy which should be implemented by the Salem Police Department.

The Office of Community Oriented Policing Services, U.S. Department of Justice commissioned a nationwide study to look at the problem of false alarms. The conclusion of the study was requiring alarm companies to verify a need for police response before calling the police is the best response. This study can be reviewed by going to their website www.cops.usdoj.gov .

Denise Shaw, formerly with the Charles County, Maryland False Alarm Reduction Unit summed it up best when she said **"Tell me of any other industry that makes a profit from selling a product, collects a monthly profit from that product, where their product only operates correctly 2% of the time, and where another entity, who does not share in the profit from the product's sale and operation, is required to provide free services to support that product?"**

Frequently Asked Questions About False Alarm Response

Year	Calls For Service	Alarm Calls	Percentage
1999	68,806	5,737	8.3%
2000	69,722	5,725	8.2%
2001	71,169	5,756	8.1%
2002	75,595	5,688	7.5%
Total	285,292	22,906	8.02%
Ave. per year	71,323	5,726	8.02%

Number of Alarms vs. Alarm Premises

2001 4,899 alarms at 2,120 sites
2002 4,671 alarms at 2,092 sites

Number of Valid Alarms

Year	Alarm Calls	Audible	Silent	# of Valid Alarms	Percent
2001	5,756	4,620 (80%)	1,136	17	- 1%
2002	5,688	4,598 (86%)	1,090	46	1%

Permits (Alarm permits cost $20 and are renewable for $12 after the initial year)
Alarm permits have generated revenue to the general fund in the amount of:
99-00 - $46,272
00-01 - $45,979
01-02 - $53,233
Average - $ 48,494

Fines: Fines for false alarms are $50 for the second false alarm, $100 for the third, $150 for the fourth, $200 for the fifth, and $250 for six and above. Fines are not assessed for the first false alarm per calendar year.

Revenue for the general fund from false alarm fines totaled:
99-00 - $67,815
00-01 - $59,214
01-02 - $39,822
Average - $55,617

2002 Alarm Sites

# of Alarms	Address	Owner	Monitoring Co.
45	831 Lancaster Dr NE	Lancaster Mall	various
35	401 Center St NE	Salem Center Mall	various
22	205 Chemeketa St NE	Credit Union	Allied Security
22	461 High St SE	City of Salem 5 Oaks	Protection One
22	3740 Market St NE	Fred Meyer	Fred Meyer Security
19	630 Center St NE	Washington Mutual	Alarm Central
19	2360 Fairgrounds Rd NE	Conquistodor Restaurant	ProTeck
17	3525 Commercial St SE	RentTown	Security Alarm
15	198 Commercial St SE	Mt. West Jennings	Sonitrol
14	1880 Lancaster Dr NE	PacWest	ADT
14	1890 Lancaster Dr NE	America's Best Tires	Affordable Monitoring
14	2611 Pringle Rd SE	Willamette ESD	ADT
14	4780 Liberty Rd S	Shurguard Storage	Custom Security
13	450 Marion St NE	Mervyn's	Target Security
13	1705 Silverton Rd NE	Sofia's Auto Repair	Monotronics
13	2805 Valpak Rd NE	Truax Oil	Sonitrol
12	694 Church St NE	NW Human Services	Protection One
12	1205 Capitol St NE	Payless Shoes	Alarmex
12	1930 Turner Rd SE	Lowe's	Vector Security
12	3545 Portland Rd NE	Plaza del Sol	All American Monitoring
12	3878 Beverly Av NE	Office Building	various
12	4555 Liberty Rd S	Sunnyslope Shopping Center	various
12	4770 Commercial St SE	Jack in the Box	SSD
11	480 Center St NE	Salem Center	various
11	1010 Hawthorne Av SE	Costco	Sonitrol
11	1295 12th St SE	Dave Power Automotive	Central Monitoring
11	1660 Lancaster Dr NE	El Mirador	Professional Security
11	2093 Lancaster Dr NE	Taco Bell	ADT
11	2380 Claxter Rd NE	West Coast Beet Seed	Honeywell
11	3135 Commercial St SE	Rock N Rogers	Safe 2000
11	4059 Market St NE	Bible Center Fellowship	Security Professionals
10	388 State Street	Capitol Center	Salem Fire Alarm
10	775 Front St NE	Keith Brown	Protection One
10	1501 Lancaster Dr NE	Carl's Jr. Restaurant	Cascade Alarms
10	1599 State Street	Eric Olsen, Atty.	Brinks
10	2625 Liberty St NE	Applebee's	RLD Services
10	3000 Market St NE	Business complex	various
10	4263 Commercial St SE	Kelly's	Merchant Patrol
10	4755 Liberty Rd S	Willamette Dental	Phillips Electronics
10	5492 Commercial St SE	Cottman Transmission	Security Associates
10	5514 Commercial St SE	Dale's Remodeling	Monitronics

Date: June 3, 2003

To: Dennis Taylor, City Manager
Police Commission Members

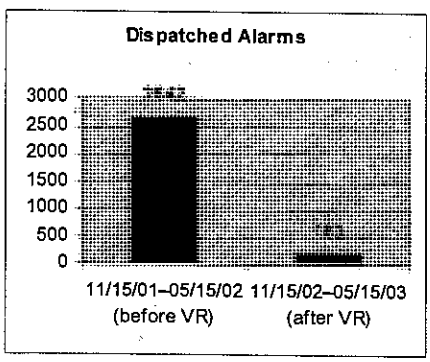
From: Thad Buchanan, Interim Chief of Police

Subject: INTRUSION ALARMS / SIX-MONTH REVIEW OF *VERIFIED RESPONSE*

The purpose of this memo is to provide a six-month review of the effectiveness of the department's verified response procedures specific to intrusion alarms. The city of Eugene's verified response protocol which was implemented on November 15, 2002, requires security alarm service providers to provide an eyewitness confirmation that a valid intrusion alarm has occurred before calling the police. The alarm service provider may use independent monitoring or dispatch private security to verify an alarm is actually due to a criminal act. Once the alarm is determined to be a valid alarm, police are called. The first six months of implementation have resulted in a dramatic decrease in the number of dispatched alarms and illustrates why verified response has become a proven law enforcement strategy to dramatically reduce police response to false intrusion alarms and more effectively utilize existing police resources.

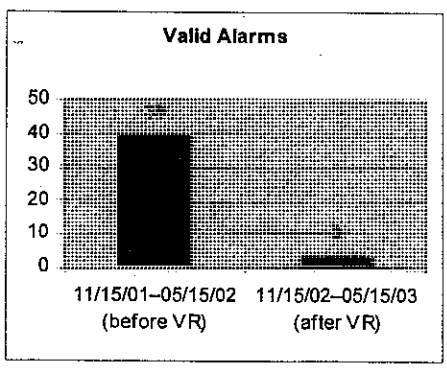
In 2001 Eugene Police responded to 5,944 intrusion alarm activations. Approximately 98.5% of these calls were false. Only 88, or 1.5% of the calls resulted in a police report and just 10 people were arrested at the scene of the crime. This high level of police response to false alarms was diminishing police responsiveness to other calls and was a tremendous drain on Eugene's limited staffing resources.

City of Eugene – Six Month Comparison



A significant reduction in dispatched alarm calls has been achieved in the first six months of the verified response protocol. This graph shows that during the same time period prior to implementing verified response, officers were dispatched to 2,642 intrusion alarm activations. Thirty-nine, or approximately 1.5%, of these calls resulted in a police report being taken and seven arrests, (0.26%), were made by officers on the scene.

During the first six months of the verified response program, the number of dispatches to intrusion alarm activations plummeted to 183. Of the 183 alarm activations that were dispatched, three or approximately 1.6%, generated a police report indicating some sort of criminal activity had occurred. Although the number of alarms to which officers were dispatched was reduced significantly, the single arrest in 2003 represents 0.54% of



calls. However, with only six months of data to review, it is too soon to draw any reliable conclusions about the rate of arrests in the verified response program. *The data from both time periods exclude robbery, panic, hold-up and duress alarms which remain a high priority for police response and do not require verification prior to dispatch.*

City of Eugene – Alarm History

The false alarm ordinance that was adopted by the City Council in 1996 and amended in 2001 employed a fee and fine structure to regulate false alarms. Following this amendment, police staff began research to establish a fee structure for the newly amended ordinance. Much of this research was focused on identifying appropriate fees and fines to make the program self-sustaining and completely cost-recoverable. Not a single community with a similar fee and fine based ordinance that staff reviewed was fully cost-recoverable. In fact, most were suffering significant deficits. Following the receipt of detailed information and data from other law enforcement agencies, the Eugene Police Department investigated the feasibility of moving directly to a verified response program rather than imposing the regulatory system that had been planned.

In August 2002, prior to implementing a verified response protocol, the priority for police response to all intrusion alarms was reduced. This change was made to more effectively utilize our limited staffing, given the high percentage of false alarms that we had historically experienced, and was in accordance with alarm response recommendations of the International Association of Chiefs' of Police Model States Report specific to intrusion alarm calls. This reduction in priority excluded robbery/hold-up and panic/duress alarms which remained a high priority.

Along with this change, Eugene Police officials met with alarm company representatives during August 2002 to discuss the history of police response to alarms and how the percentage of false alarms (98.5%) had necessitated a change in police practices. Extensive efforts were made to educate the community about the change to verified response prior to and following the implementation. Local media outlets, newspaper editorial staff, community meetings and educational literature were all avenues that were aggressively pursued to provide as much information as possible to the public and to address concerns of alarm customers.

Internally, policy was developed to address police response to intrusion alarm activations. General Order 308.27 identifies alarms requiring verification and exclusions to the verification protocol.

Next Steps:

Based upon the data presented above, the first six months of the verified response program has been very successful. Staff will now focus on reducing calls for service for non-verified intrusion alarms by continuing to review all calls for service involving intrusion alarms. The goal of this effort will be to reduce the significant time burden these calls place on 911 call-takers, thus freeing the call-takers to devote more time to valid calls for service in the community. It is important to note that while some alarm companies, such as Sonitrol, have taken effective and timely steps to inform their customers and employees of the new verification protocols other companies are still in the early stages of making necessary changes. Police staff will continue to monitor the response of alarm companies to the verification requirements with the goal of improving compliance with the alarm verification procedures prior to contacting police.

While the data collected thus far is very encouraging, staff plan to conduct another internal review of the data at the one-year mark. This review will be helpful in providing a more comprehensive analysis of the data and program results.

BURGLAR ALARM TASK FORCE

RESEARCH SUMMARY

TACOMA

Licensing:

Alarm monitoring companies pay an annual fee to be licensed for the privilege of doing business in the City of Tacoma, just like any other business. The fee is based upon the size of the monitoring company and ranges from $100 to $500 annually. Alarm companies are billed $40 for an alarm device license for each alarm they monitor. This is less than $3.50/month for the alarm holder if the alarm companies choose to pass the cost along. The alarm companies are billed $60 per false alarm their client activates. By billing the alarm monitoring company who called dispatch to send an officer to the alarm, the costs of billings are kept to a minimum.

SALT LAKE CITY

Verified Response:

ADT added an additional $5 to the $24.95 monthly monitoring fee to cover verified response costs. Most companies ranged from a $5 - $7 monthly increase.

There are some claims that burglaries will increase if the police are no longer first responders. In Salt Lake burglaries at alarmed sites prior to implementing verified response comprised 2% of all burglaries. After verified response was implemented, burglaries at alarmed sites comprised 2% of all burglaries. Burglaries did not increase.

Prior to implementing verified response Salt Lake City police responded to 35 – 50 false alarms per day. The average now is two false human activated alarms per day.

EUGENE

Verified Response:

In a measured 6 month period before verified response, Eugene dispatched officers to 2,642 intrusion alarm activations. In the same 6 month period after implementing verified response, officers were dispatched to 183 alarm activations.

CHARLOTTE-MECKLENBURG

Police response to permitted alarm holders only:

Beginning September 1, 2003 the alarm monitoring company must provide police dispatch with the alarm holder's permit number before officers will be dispatched.

In 1996 Charlotte-Mecklenburg instituted an ordinance requiring no-cost registration of alarm systems; failure to register could result in a $100.00 fine; there are two "free" false alarms annually per registered site; fines range from $50.00 to $500.00 annually. Fee schedule: false alarms 3, 4, and 5 are $50.00 each; 6 and 7 are $100.00 each; 8 and 9 are $250.00 each; 10 and above are $500.00 each. If the service charges are not paid, the police will not respond to future alarms. If an audible alarm sounds for more than 15 minutes there is a fine. If there are any changes to the permit information they must be made within 30 days or there will be a $100.00 fine.

This ordinance resulted in a 30% reduction in police response to alarms in the first year.

The administration of the ordinance is outsourced to a third party private company. The third party private company administering the ordinance is dealing with $617,000 in unpaid fines and has turned those fees over to a collection agency.

SAN FRANCISCO

Licensing:

Ordinance requires monitoring companies collect licensing fees from alarm holders. Alarm companies would be held financially accountable for any uncollected fees and could be criminally prosecuted.

The California Alarm Association (CAA) has filed suit claiming the ordinance forces alarm companies to act as tax collectors. The money goes into the general fund – not to the police department.

LOS ANGELES

Alarm calls dispatched as "all units":

Alarm calls are dispatched to all the units (patrol officers) at once. When an officer becomes available that officer can respond. This eliminates the issue of what priority to give alarm calls.

Former Chief Bernard Parks conducted a study in LA that contributed to the determination of this policy. He is often misquoted as saying that verified response will not change the way officers are dispatched to alarm calls. Former Chief Parks believes very strongly in verified response: "Absolute best," "Absolute number one goal is verified response," "That's the goal."

LA city attorney determined that police response couldn't be denied if the alarm holder cannot afford to pay alarm fees.

SALEM

Rejected the alarm industry's CARE (Coordinated Alarm Reduction Effort) as proposed to Salem due to the large administrative requirements.

Currently, response to alarms is lower priority under verified crimes.

Each morning the police department issues a Patrol Morning Report that details the previous 24 hours most significant activity. The following is a quote from the Monday, 9/22/03 report written by the sergeant whose squad begins duty at 1600:

> Very, very busy. At one point we were 26 calls down with no clear units. In progress domestics holding for 2 hours. Shift 5 hit the street with no briefing. We caught up to the call load by 2200 hours. Thanks to Sgt. M and his squad for the assistance.

Dispatch must make an average of three telephone calls for each alarm.

Officers spend an average of 18 minutes waiting for a responsible person (RP) at each alarm call.

City of Salem False Alarm Invoiced and Collected Report: 8/01/02 – 6/27/03:
Amount Invoiced: $38,150.00
Amount Collected: $35,050.00 ($3,100.00 outstanding)
Fees ranged from $50 - $1450
All revenue collected goes into the general fund, not to the police department.

Oregon has hiring requirements for private responders, requires criminal history background checks, requires extensive training for private responders.

VERIFICATION RESPONSE CITIES

Las Vegas, Nevada
Lane County, Oregon
Arvada, Colorado
West Valley City, Utah
Salt Lake City, Utah
Taylorsville, Utah
Henderson, Nevada
Eugene, Oregon
Victoria, British Columbia
Murray, Utah

VERIFIED RESPONSE OPTIONS

This method is usually accomplished per policy without the creation of an alarm unit and accompanying employees, software, tracking and billing, and permits. Police continue to respond to the human activated alarms such as panic and robbery, but do not issue fines for this type of false alarm. All other types of alarms are responded to with verification. A few examples of cities with this option:

Victoria, British Columbia
Eugene, Oregon
West Valley City, Utah
Lane County, Oregon
Arvada, Colorado

INSURANCE COMPANIES

When asked about their procedures regarding homeowners' insurance coverage in cities where the police departments have or have not implemented verified response the answer from USAA and State Farm was the same. Both give discounts to homeowners who have installed monitored alarm systems. Neither gives consideration to the policies of the local law enforcement agency.

MONITORED ALARM ORDINANCE REVIEW

TACOMA

- ***Purpose and Intent*** of the ordinance is to:
  1. protect public safety by curtailing or eliminating the extraordinary number of false alarms which prevent or delay public safety personnel from responding to legitimate calls for public service;
  2. recover the costs associated with responses to false alarms;
  3. stop the current subsidization of private business with public tax dollars;
  4. reduce or eliminate the instances of false alarm activations in the City of Tacoma;
  5. license the alarm industry in the City of Tacoma.

- ***False Alarm*** means the reporting of the activation of any monitored alarm system where police units dispatched to the location determine that there is no evidence of a crime, fire, or other activity on the premises that would warrant a call for immediate police assistance or investigation. An alarm shall be presumed to be false if the responding City personnel do not locate evidence of intrusion. No false alarm fees will be assessed during the time period for which no response is made at the direction of a supervising officer for a large number of alarms activated due to earthquakes, hurricanes, tornadoes, or other acts of God.

- ***Monitored Alarm System*** includes any monitored burglary, panic, intrusion, premises, property, robbery, or other type of alarm device.

- ***Alarm System Operator's License (*$100-$500 per annum*)*** is required for any person/company to operate an alarm monitoring service within the jurisdictional limits of the City of Tacoma, even if such monitoring is conducted from a location outside the city limits. There may be as many as 48 alarm monitoring companies operating in the City of Tacoma.

- ***Monitored Alarm Device License (*$40 per annum*)*** is required for any Alarm System Operator who arranges to monitor an alarm device within the City of Tacoma. Each monitored alarm device license shall be issued for a particular alarm device and is not transferable. Tax and License will bill the Alarm System Operator annually, with provisions made for pro-rated device licenses to be issued for the addition of new customers quarterly.

- ***False Alarm Service Fee (*$60 per occurrence*)*** will be assessed to the Alarm System Operators on a monthly basis by Tax and License. A CAD report will be generated in LESA based on information provided by the officers for Tax and License. No fees will be assessed if the responding units are cancelled prior to arrival at the scene.

- ***Alarm System Operators*** will lose their privilege to conduct business in the City of Tacoma if their fees are not paid in full. Licensees who fail to pay the assessed fees will be treated as any other business in the City as provided for under Title 6. Their license will first be suspended after 30 days and revoked after 60 days. Notification will be made by the Tax and License Manager to the company and to LESA and TPD. All alarm monitoring companies are required to notify their subscriber within ten days of the notice. No police response shall be made to alarm devices until licenses are reinstated.

- ***Appeals*** will be brought by the Alarm System Operator to the Tax and License Manager after the assessed fees have been paid. The Tax and License Manager will then determine if the matter will go before the Hearings Examiner for resolution, according to existing provisions in Title 6.

ORDINANCE NO. 27019

AN ORDINANCE regulating alarm monitoring companies and monitored alarm devices, imposing license fees, recovering costs related to responses to false alarms, and providing for enforcement and penalties; and amending Title 6 of the Tacoma Municipal Code by adding thereto a new chapter, to be known and designated as Chapter 6.92, "Alarm Devices."

WHEREAS the Tacoma Police Department annually responds to approximately 12,000 alarms of which approximately 98 percent are false, and

WHEREAS responses to false activations of monitored alarm systems constitute approximately 99 percent of all false police alarms, and

WHEREAS responses to false monitored alarms have diverted the annual equivalent of approximately nine full-time sworn peace officers from regular police duties, and

WHEREAS responses to false monitored alarms thereby endanger the public by preventing, diverting, or delaying police officers from patrolling a neighborhood; responding to calls for service; or investigating and solving crimes, and

WHEREAS the use of tax dollars to pay for responses to false monitored alarm systems is not in the public interest because it confers a private benefit to an alarm owner while detracting from overall public safety, and

WHEREAS the use of tax dollars to cover the costs of responses to false monitored alarms unfairly requires the estimated 75 percent of taxpayers who do not own alarms to subsidize the costs of response to their net detriment, and

WHEREAS private firms in the local area offer private response services for a fee, but most alarm owners instead rely on the "free" service provided by the Tacoma Police Department, and

WHEREAS vendors of monitored alarm systems obtain a private benefit from public monies because they advertise that police will respond when their monitored alarm systems are activated, and

WHEREAS vendors of monitored alarm systems are thereby using public money to increase private profit, and

WHEREAS the significant amount of police resources expended on false monitored alarms is both expensive and dangerous to peace officers, and

WHEREAS the regulation of monitored alarm systems within the City is in the best interest of public health, safety, and welfare, and

WHEREAS the City has the power to license, for revenue, the privilege of engaging in business in the City of Tacoma, and

WHEREAS it is necessary to establish licensing for monitored alarm systems and recover costs associated with responses to false alarms; Now, Therefore,

BE IT ORDAINED BY THE CITY OF TACOMA:

Section 1. That Title 6 of the Tacoma Municipal Code is hereby amended by adding thereto a new chapter, to be known and designated as Chapter 6.92, "Alarm Devices," to read as follows:

Chapter 6.92
ALARM DEVICES

Sections:

6.92.010 Purpose.
6.92.020 Exercise of regulatory police power and revenue license power.
6.92.030 License required.
6.92.040 Definitions.
6.92.050 Alarm system operator (monitoring company) license.
6.92.060 Monitored alarm device license.
6.92.070 Duty of licensee.
6.92.080 Regulations.
6.92.090 Certain devices, systems, uses prohibited.
6.92.100 Suspension or revocation.
6.92.110 False alarm response fee.
6.92.120 Fees.
6.92.130 Penalty and interest for failure to pay.
6.92.140 Method of payment.
6.92.150 Appeals.
6.92.160 Penalties.
6.92.170 Mailing of notices.
6.92.180 Duty to supply ordinances and information to system subscribers.
6.92.190 Severability.
6.92.200 Public disclosure – Confidentiality – Information sharing.
6.92.210 Effective date.
6.92.220 Initial compliance date.
6.92.230 Administrative provisions.
6.92.240 Short title.

6.92.010 Purpose. The purpose and intent of this chapter is to: (1) protect public safety by curtailing or eliminating the extraordinary number of false alarms which prevent, hinder, or delay public safety personnel from responding to legitimate calls for public service; (2) recover the costs associated with responses to false alarms as the expenditure of such public funds constitutes an unlawful gifting of public monies; (3) stop the current subsidization of private business with public tax dollars; (4) reduce or eliminate the instances of false alarm activations in the City of Tacoma; and (5) license

the alarm industry in the City of Tacoma. The recitals set forth in the preamble to this ordinance are hereby incorporated by reference as if fully stated herein.

6.92.020 Exercise of regulatory police power and revenue license power.

A. The provisions of this chapter shall be deemed an exercise of the City's police power to promote the health, safety, and welfare of the general public, and are not intended to protect individuals or create or otherwise establish or designate any particular class or group of persons who will or should be especially affected by the terms of this chapter. This chapter neither imposes nor creates duties on the part of the City or any of its departments, and the obligation of complying with the requirements of this chapter, and any liability for failing to do so, is placed solely upon the parties responsible for owning, operating, monitoring, or maintaining monitored alarm systems.

B. To the extent that the City may not exercise regulatory power with respect to the licensing requirements of this chapter, the provisions of this chapter pertaining to licensing shall be deemed an exercise of the power of the City of Tacoma to license for revenue the privilege of engaging in business in the City.

6.92.030 License required.

A. It shall be unlawful for any person to connect to a monitored alarm system in the City of Tacoma, or to monitor such an alarm system, directly or indirectly, via telephone, cable, wire, wireless, video, electronic, or other form of

connection to or by any outside entity or source without first having obtained a license or licenses required by this chapter.

B. It shall be unlawful for any person to permit to be used or operate any monitored alarm system in the City of Tacoma that is connected by means of telephone, cable, wire, wireless, video, electronic, or other form of connection to any outside entity or source that is not licensed or is not monitored by a person licensed pursuant to this chapter.

C. The licenses required pursuant to this chapter are separate from and in addition to any licenses required by any other chapter of the Tacoma Municipal Code including, but not limited to, those required pursuant to Chapter 6.01, Administrative Procedures for Tacoma Taxes; Chapter 6.02, General Provisions; Chapter 6.59, Burglar Alarms; and Chapter 6.69, Annual Business License.

D. It shall be unlawful for any person to avoid any of the licensing requirements of this chapter by subcontracting for monitoring services or making any other contractual or business arrangement that has the effect of avoiding the requirements of this chapter.

6.92.040 Definitions. Unless the context or subject matter otherwise requires, terms defined herein shall have the following meanings when used in this chapter:

"Alarm system" or "alarm device" means any system, device, or mechanism which, when activated, transmits a telephonic, wireless, electronic,

video, or other form of message to a private monitoring company, or some other number, or emits an audible or visible signal that can be heard or seen by persons outside the protected premises, or transmits a signal beyond the premises in some other fashion, except any system, device, or mechanism primarily protecting a motor vehicle.

"Alarm system monitoring company" or "alarm system operator" means any person, individual, partnership, corporation, or other form of association that engages in the business of monitoring intrusion, property, burglary, robbery, panic alarms, or other alarm systems located in the City of Tacoma, and which reports any activation of such alarm systems to the police, police dispatch, and/or the Law Enforcement Support Agency, directly or indirectly. This includes alarm system monitoring companies and alarm system operators that are located outside the city limits of Tacoma and which monitor alarms installed within the city limits of Tacoma.

"Alarm system user" means the person having or maintaining a property, intrusion, burglary, robbery, panic, or other alarm system. It means only a subscriber when the system is connected to an alarm system monitoring company.

"Burglary alarm system" has the same meaning as "property alarm" below.

"Chief of Police" means the Chief of the Tacoma Police Department, or his or her designee.

"Department" shall mean the Finance Department of the City of Tacoma.

"Director" shall mean the Director of Finance, or his or her designee.

"False alarm" means the reporting of the activation of any monitored alarm system where police units dispatched to the location determine that there is no evidence of a crime or other activity on the premises that would warrant a call for immediate police assistance or investigation. An alarm shall be presumed to be false if the responding City personnel do not locate evidence of intrusion, commission of an unlawful act, or emergency on the premises that might have caused the alarm to sound. If earthquakes, hurricanes, tornadoes, or other acts of God set off a large number of alarms, a police supervisor may determine that no responses will be made to such alarms during the pendency of such event. No false alarm fees will be assessed during the time period for which no response is made as determined by the police supervisor.

"Fire alarm" means a signal initiated by a device such as a manual fire alarm box, automatic fire detector, waterflow switch, smoke detector, or other device which, when activated, is indicative of the presence of a fire or fire signature. All fire alarms shall be exempt from the provisions of this chapter.

"Monitored alarm system" means any system, device, or mechanism which, when activated, transmits a telephonic, wireless, electronic, video, or other form of message or communication to a private monitoring company, other number, or person who can then notify police that an alarm has been activated. This includes all systems which transmit telephonic, wireless,

electronic, video, or other form of message from an alarm installed within the city limits of Tacoma to any location outside of Tacoma (e.g., an alarm monitoring center located in a state other than Washington). All alarms that are monitored, except fire alarms, are included within the definition of "monitored alarm system"; e.g., any monitored burglary, intrusion, panic, premises, property, robbery, or other type of alarm device.

"Panic alarm" has the same meaning as "robbery alarm" below.

"Permittee" or "Licensee" means the person(s), corporation(s), or other business entity to whom a license or licenses have been issued under this chapter.

"Person" means any individual, partnership, corporation, trust, incorporated or unincorporated entity, or other entity or group of persons, but excludes the United States, the state of Washington, and any political subdivision or municipal corporation thereof.

"Police Department" or "police" means the Tacoma Police Department.

"Premises" means any area and any portion of any area protected by an alarm system.

"Property alarm," "intrusion alarm," or "burglary alarm" means any system, device, or mechanism for detection and reporting of any unauthorized entry or attempted entry or property damage upon real property protected by the system which may be activated by sensors or other techniques and, when activated, transmits a telephonic, wireless, electronic, video, or other form of

message, or emits an audible or visible signal that can be heard or seen by persons outside the protected premises, or transmits a signal beyond the protected premises.

"Residence" means a building or structure or portion thereof designed to be used as a place of abode for human beings and that is not used for any other primary purpose. The term includes all dwelling units within the definition of a "residential use."

"Robbery alarm" or "panic alarm" means any system, device, or mechanism, activated by an individual on or near the premises, to alert others that a robbery or any other crime is in progress, or that the user is in need of immediate assistance or aid in order to avoid injury or serious bodily harm, which meets the following criteria:

1. The system is installed on real property (the "protected premises");

2. It is designed to be activated by an individual for the purpose of summoning assistance to the premises;

3. It transmits a telephonic, wireless, electronic, video, or other form of message or emits an audible, visible, or electronic signal that can be heard, seen, or received by persons outside the protected premises; and

4. It is intended to summon police assistance to the premises.

"System subscriber" means any person, corporation, or other business entity that purchased, contracted for, or has had any alarm system installed in or on premises owned or controlled by them.

6.92.050 Alarm system operator (monitoring company) license. An alarm system operator license shall be required for any person to be or become or operate or provide an alarm monitoring service within the jurisdictional limits of the City of Tacoma. This includes any person who monitors alarm devices installed in the jurisdictional limits of Tacoma even if such monitoring is conducted from a location outside the city limits of Tacoma (e.g., an alarm monitoring center in another state). Such license shall be valid for the calendar year in which it is issued and is not transferable.

6.92.060 Monitored alarm device license.

A. Monitored alarm device licenses shall be required for any alarm system operator renting, leasing, installing, placing, subscribing, contracting, subcontracting, or otherwise arranging to monitor an alarm device within the city limits of Tacoma. Each monitored alarm device license shall be issued for a particular device, and shall not be transferable from: one monitored alarm device to another; from one person to another; or from one premise, building, dwelling, or residence to another. A monitored alarm device license is valid only for the calendar year in which it is issued. If an alarm system operator or subscriber transfers, assigns, or subcontracts monitoring services for a validly licensed alarm device to another alarm system operator, the existing valid

license shall remain in full force and effect for the remainder of the calendar year in which it was issued. An alarm system operator who assumes responsibility for monitoring an alarm device that has already been licensed for that year must report all such transfers in its quarterly report. The alarm system operator shall provide the transfer information in the form required by the Director (e.g., Excel spreadsheet). The transfer information shall include, at a minimum, the name of the alarm system operator under which the device was previously licensed, the name of the alarm system operator assuming responsibility for the alarm, the address where the device is installed, and the name of the subscriber.

B. Alarm system operators shall update quarterly, in the form required by the Director (e.g., Excel spreadsheet), a list of all alarm devices monitored by them within the jurisdictional limits of the City of Tacoma. Such list shall include the information required by the Director which, at a minimum, shall include the address where the alarm is installed, the name of the subscriber, the type of alarm, and the number of alarm devices.

6.92.070 Duty of licensee.

A. It shall be the duty of all licensees granted licenses under this chapter to comply with all applicable regulations in this chapter or elsewhere, and the failure of any licensee so to do shall constitute, but shall not be exclusive grounds for, suspension or revocation of any license and shall constitute a violation of this chapter.

B. It shall be the duty of all licensees granted licenses under this chapter not to have in their employ or financially interested in the business to be conducted any person who has had his or her license revoked or suspended by the City of Tacoma within one year from the date of such revocation.

C. It shall be the duty of any person engaged in or representing himself or herself as being engaged in an alarm monitoring business in the City of Tacoma, whether it be for selling, leasing, renting, servicing, inspecting, installing, maintaining, repairing, or monitoring alarms, to obtain all licenses required by this or any other chapter including those required pursuant to Chapter 6.02, General Provisions; Chapter 6.59, Burglar Alarms; and Chapter 6.69, Annual Business License.

6.92.080 Regulations.

A. All monitored alarm systems and alarm system operators shall comply with the regulations set forth in this chapter.

B. Fees shall be assessed for all responses to false monitored alarms.

C. No fee shall be assessed for a police response to the report of an audible or visual alarm.

6.92.090 Certain devices, systems, uses prohibited.

A. No person shall operate or use an alarm system which emits an audible sound where such emission does not automatically cease within ten minutes.

B. No person shall operate or use an alarm system which automatically dials the Tacoma Police Department directly and delivers a prerecorded message.

C. No person shall install, monitor, operate, or use a monitored alarm system which is not licensed as required pursuant to this chapter.

6.92.100 Suspension or revocation.

The Director shall have the power and authority to suspend or revoke any license issued under the provisions of this chapter as set forth in Chapter 6.01 and Chapter 6.02. The Director shall notify the licensee, in writing by ordinary mail, of the suspension or revocation of the license and the grounds therefor. Any license issued, or application therefor, under this chapter may be denied, suspended, or revoked based upon one or more of the grounds set forth in Sections 6.01.230, 6.02.070, and 6.02.145 of the Tacoma Municipal Code and/or any violation of this chapter. The Director shall also immediately notify the Police Department of the revocation, and no police response may be made to any alarm devices monitored by the alarm system operator until all suspended or revoked licenses are reinstated. No suspended or revoked license may be reinstated without prior payment of all license and alarm response fees due and outstanding.

6.92.110 False alarm response fee.

A. Alarm system operators shall be assessed a false alarm response fee for each police response to a false monitored alarm which is registered to the

alarm system operator. No fee shall be assessed if the responding units are canceled prior to arrival at the scene.

B. No license hereunder shall be granted or renewed under this chapter unless all assessed false alarm response fees are paid in full. Licensees who fail to pay assessed response fees within 60 days may have all licenses suspended by the Director. Licensees who fail to pay assessed response fees within 90 days may have all licenses and registration revoked by the Director.

C. Any license suspended or revoked by the Director shall not be reinstated without payment of all outstanding balances for licenses and false alarm response fees.

6.92.120 Fees. The license fees for the various classes of licenses shall be and are hereby fixed as follows:

Alarm System Operator License	
For one to 100 devices	$100.00 per annum
For 101 to 200 devices	$200.00 per annum
For 201 to 500 devices	$400.00 per annum
For 501 or more devices	$500.00 per annum
Monitored Alarm Device License	
$40.00 per annum (per device)	
Pro-rated fees to be charged quarterly for periods of less than a year as follows:	
Alarm devices installed Jan 1 to Mar 31	$30.00 per device
Alarm devices installed Apr 1 to Jun 30	$20.00 per device
Alarm devices installed Jul 1 to Sep 30	$10.00 per device
False Alarm Service Fee	
$60.00 per occurrence	

6.92.130 Penalty and interest for failure to pay.

A. If payment of any fee due under this chapter is not received on or before the last day of the month in which it becomes due or within an extension of time granted by the Director, there shall be added to the amount, from the date it becomes due, a penalty as provided in Chapter 6.01 of the Tacoma Municipal Code.

B. In addition to said penalty, interest shall be charged as set forth in Chapter 6.01 of the Tacoma Municipal Code.

C. The licensee shall be notified by mail of the amount of any penalties and interest so added or assessed, and the same shall become due and shall be paid within ten days from the date of such notice.

D. Any penalty fee or assessment of interest may be appealed as provided in Sections 6.01.140 and 6.01.150 of the Tacoma Municipal Code, provided that any penalty or assessment is fully paid at the time the appeal is filed. Any appeal must be filed within the time limits set in Sections 6.01.140 and 6.01.150.

6.92.140 Method of payment.

A. Device License Fees. Except for the initial compliance period set forth in Section 6.92.220, the fees for monitored alarm devices shall be payable in advance by the alarm system operator on an annual basis with quarterly adjustments for additional devices. Annual device licenses expire as of

December 31 in the calendar year in which they were issued and must be renewed by January 31 of the next year in order to avoid penalty.

1. The initial device license fees shall be payable on or before January 31 of the annual period for which fees are due. At the time of payment of the annual fee, each alarm system operator shall provide, in the format specified by the Director (e.g. an Excel spreadsheet), a list of all addresses at which monitored alarms are installed, the name of the corresponding subscriber, and the number of devices at such address.

2. Each alarm system operator shall provide quarterly, in the format specified by the Director (e.g. an Excel spreadsheet), a list of all additional addresses at which monitored alarms were installed during such quarter, the name of the corresponding subscriber, and the number of devices at such address. The Director shall assess each alarm system operator for each additional device and such assessment shall be due and payable no later than the last day of the month following the end of the quarter.

B. Alarm System Operators License. Except for the initial compliance period set forth in Section 6.92.220, the alarm system operators license is payable on an annual basis. The license fee shall be payable on or before December 31 of the year preceding the beginning of the annual period for which the license fee is due. The alarm system operators license expires as of December 31 in the calendar year in which it is issued and must be renewed by January 31 of the next year in order to avoid penalty.

C. False Alarm Service Fees. The false alarm service fees imposed by this chapter shall be due and payable within 60 days of the date they are billed to the alarm system operator, and remittance shall be made on or before such date.

6.92.150 Appeals.

A. Any licensee under this chapter aggrieved by the denial, revocation, or suspension of a license issued pursuant to this chapter may, upon full payment of any fees assessed and/or due or owing, appeal the same as provided in Chapter 6.02 of the Tacoma Municipal Code.

B. Any licensee under this chapter aggrieved by the imposition of a false alarm response fee, penalty, or assessment of interest may appeal the same as provided in Sections 6.01.140 and 6.01.150 of the Tacoma Municipal Code, provided that any and all fees, penalties, or assessments are fully paid at the time the appeal is filed and that all other requirements for an appeal have been met.

6.92.160 Penalties. Any violation of this chapter shall constitute a misdemeanor and any person convicted thereof shall, upon such conviction, be subject to a penalty by fine in an amount not exceeding $1,000.00 or by confinement in the county jail for a period not exceeding 90 days, or both such fine and imprisonment.

6.92.170 Mailing of notices. Any notice required by this chapter to be mailed shall be sent by ordinary mail, addressed to the address as reflected in

the records of the Director. Failure to receive such notice shall not relieve the obligation to pay any fee, interest, or penalty, nor shall such failure extend any time limit. It is the responsibility of the licensee to inform the Director in writing about a change in address.

6.92.180 Duty to supply ordinances and information to system subscribers.

A. All persons licensed pursuant to this chapter shall supply each of their system subscribers with copies of all current ordinances pertaining to alarms and a copy of the licensee's policies and practices with respect to billing a system subscriber for any fees or licenses established by this or any other chapter of the Tacoma Municipal Code.

B. All persons licensed pursuant to this chapter shall notify each of their system subscribers of the revocation or suspension of any license issued by the City of Tacoma. The notice shall be in writing and shall be mailed to all system subscribers no later than the tenth calendar day following such suspension or revocation.

C. Failure to comply with the notice requirements set forth herein shall constitute separate and independent grounds for imposition of penalties as provided herein and for suspension and revocation of any license(s) issued by the City of Tacoma.

6.92.190 Severability. If any provision, section, or part of this chapter shall be held invalid or its application to any person or circumstance is held

invalid, all other parts, provisions, and sections of this chapter or the application to other persons or circumstances shall not be affected.

6.92.200 Public disclosure – Confidentiality – Information sharing. All requests for public disclosure or for information shall be governed by Section 6.01.200. In addition to the provisions of Chapter 6.01.200, information and statistics gathered by the Tacoma Police Department and/or the Law Enforcement Support Agency pertaining to calls for service and responses to alarms may be made available to the Tax and License Division of the Finance Department and other City departments, as necessary, to fully carry out the purposes of this chapter.

6.92.210 Effective Date. This ordinance shall take effect January 1, 2003.

6.92.220 Initial compliance date. All persons subject to this ordinance shall have until March 31, 2003, to obtain all required and applicable licenses and pay all related fees, and to pay false alarm response fees accrued through March 31, 2003. Fees for the initial compliance period shall be computed from and paid for the period beginning January 1, 2003.

6.92.230 Administrative provisions. The provisions of Chapter 6.01 and Chapter 6.02 shall apply to this chapter unless there are specific provisions in this chapter which are contrary thereto.

6.92.240 Short title. This ordinance shall be known as the Alarm Devices Code and may be cited as such.

Passed _____

_____
Mayor

Attest:

_____
City Clerk

Approved as to form and legality:

_____
City Attorney

ord9346.doc-TRO:jld

Company Alarm Credits

SAFECO

Local		5%
Police Station		6%
Fire Station		
Central Station		10%

Oregon Mutual

Local w/ outside bell		2%
Fire or Police Alert		10%
Central Station		15%
** Western Protectors - same*		

Sublimity

Local		98% Base Premium
Police & Fire		97% Base Premium
Central		95% Base Premium

North Pacific

Local		2%		
Police Alarm		3%		both
Fire Alarm		3%		6%
Central Fire		5%		both
Central Burglary		5%		10%

Allied

Local Fire		2%		both
Local Burglary		2%		4%
Police Alarm/alert		3%		both
Fire Alarm/alert		3%		6%
Central Fire		5%		both
Central Police		5%		10%

National Study of False Alarms for the Security Industry Association

SOURCE OF FALSE ALARMS

- 71% o f the alarms were caused by user errors
- 13% by an environmental problem on the premise (e.g., a curtain blowing)
- 8% by equipment or power problems
- 8% were due to unknown causes.

Of the user-caused problems, one quarter related to making an error in entering codes, and three quarters were due to movement issues, including:

- Someone authorized to enter not putting in a code - 26%
- Some authorized to be inside moving around after a system was armed - 23%
- Exiting or opening after arming the perimeter (e.g., getting the paper) - 25%
- Pet movement - 13%
- All other - 13%

Susan Ellerin, Ph.D.
President
STAT Resources, Inc.
T: 617-713-4601
C: 617-510-0289
F: 617-734-4095

Note: This study was done in mid-90's and the only thing the researcher expects has changed since then is that the equipment has gotten much better.

ALARM INDUSTRY QUESTIONNAIRE

FROM THE BURGLAR ALARM TASK FORCE, CITY OF SALEM

The information provided below is considered confidential and provided for statistical analysis only

1. *How many customers (by number or by percent) do you monitor for in the various plans you offer?*

   Company A: 2097 total as of August 22, 2003
   Company B: 1476 total
   Company C: Subscribers = 170; Currently monitored = 125

2. *How many are businesses and how many are residences?*

   Company A: 420 Businesses; 1677 Residential
   Company B: 111 Businesses; 1,365 Residential
   Company C: 86 Businesses; 72 Residential

3. *Does your company have licensing agreements in other jurisdictions?*

   Company A: Yes
   Company B: We are licensed (to do general business) in the State of Oregon as a company as well as all our employees
   Company C: Not clear what you're asking here. Not appropriate; not part of this market

4. *What are the approximate costs for the license you pay for, monthly charges to your customers, and the charges for false alarms you pay the jurisdiction?*

   Company A: $40 per account; charges to customer (under review and audit at this time; proprietary information); $60 false alarm charges. We feel these charges should be sent directly to the alarm users and not through alarm companies.
   Company B: The only city that we pay false alarm fees to directly is the City of Tacoma and that is $60 per false alarm and all the charges are passed through to the customer. (Under the new City of Tacoma ordinance, the licensing fee can range from $100 to $500 annually. Alarm companies will be billed for an alarm device license for each alarm they monitor, which will be $40. This is less than $3.50/month for the client, if the alarm companies choose to pass this cost along to their subscribers. The alarm companies will be billed monthly for each false alarm their client activates, at a cost of $60 per false alarm.)
   Company C: Monthly monitoring fee is $22.50. This alarm company does not

pay false alarm fines.

5. *What do you feel are the causes of false alarms?*

Company A: The majority (over 70%) are User errors. Users make mistakes, Users aren't trained properly, User forget; some employees & janitors are just careless. In addition, less than 20% are causing the false alarm problem. In many municipalities schools and government buildings are known to have high false alarm rates. In addition, around least 80% of our customer base is not having false alarm problems; they are using them properly, and protecting their lives and property without problems. There are many methods for reducing false alarms with a well thought out and administered alarm ordinance. Will provide more information and documentation to the Task Force in future meetings as requested.

Company B: 75% are user error; the majority are entry/exit delay problems.

Company C: Number one cause is human error which can be a result of improper or too little training by the alarm system installer. Number two cause is misapplication of equipment.

Attachment J

2001
DPSST Private Security
Unarmed Instructor's
Training Manual

Department of Public Safety Standards and Training
Private Security Unit - 1320 Capitol Street NE, Salem OR 97303
Phone (503) 378-4888 Fax (503) 373-0858

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PO-2-D-9 Identify the consequences of a private citizen or a private security officer becoming an "agent of law enforcement" in Miranda warnings and searches.
PO-2-D-10 Identify legal constraints in searching the person of another as a private security officer.
PO-2-D-11 Identify criminal implications of searches by private citizens or private security officers.
PO-2-D-12 Identify civil implications of searches by private citizens or private security officers.
PO-2-D-13 Identify limitations of "consent to search" (including property).
PO-2-D-14 Identify the limitations of student search on school property.
PO-2-D-15 Identify the importance of chain of custody.
PO-2-D-16 Identify the importance of learning company policies on this issue.

E. Courtroom Testimony

PO-2-E-1 Identify how a witness should prepare to testify.
PO-2-E-2 Identify the purpose of the pretrial conference with the district attorney or municipal prosecutor.
PO-2-E-3 Identify where a witness should look while testifying.
PO-2-E-4 Identify the most important requirement of a witness.
PO-2-E-5 Identify how reports, notes or files should be used in testifying.
PO-2-E-6 Identify what a witness should do before and after testifying.
PO-2-E-7 Identify what elements "perjury" include.
PO-2-E-8 Identify how a witness may be impeached.

III. FIRE DETECTION AND REPORTING, AND SAFETY ISSUES

A. Fire Behavior

PO-3-A-1 Identify the four elements that a flaming fire requires.
PO-3-A-2 Identify the four classes of fire and their components.

B. Reporting a Fire

PO-3-B-1 Identify information a private security officer will need to relate to the emergency dispatcher.

C. Safety Issues Involving a Fire

PO-3-C-1 Identify factors a private security officer must consider prior to taking action at a fire.

IV. WHEN AND HOW TO NOTIFY PUBLIC AUTHORITIES

A. Role of the Private Security Officer

PO-4-A-1 Identify five skills which enable you to be an effective communicator.
PO-4-A-2 Identify three groups of people that are impacted by a private security professional's attitude.
PO-4-A-3 Identify the role of the private security officer in reporting an emergency.
PO-4-A-4 Identify the two functions of the communicator.

B. Responder Safety

PO-4-B-1 Identify the awareness priority.
PO-4-B-2 Identify six pieces of "Safety" information that should be gathered, and relayed to responding units if possible.

C. Reporting Emergencies

PO-4-C-1 Identify five tips to fast and efficient gathering of information.
PO-4-C-2 Identify the two minimum "Ws" used in information gathering.
PO-4-C-3 Identify the six vehicle descriptors.
PO-4-C-4 Identify the format used for a physical description of a person to a public safety agency.

V. TECHNIQUES OF OBSERVING AND REPORTING INCIDENTS AND HOW TO PREPARE AN INCIDENT REPORT

A. Preliminary Investigations

PO-5-A-1 Identify why safety is important as the "first on the scene".
PO-5-A-2 Identify the first aid priorities of the "first on the scene".
PO-5-A-3 Identify the importance of reporting a "safe route" to responders.
PO-5-A-4 Identify the need to protect the crime scene and evidence.
PO-5-A-5 Identify the importance of securing the point of entry and exit.
PO-5-A-6 Identify the need for proper witness handling.
PO-5-A-7 Identify options of handling a suspect still on the scene.

B. Report Writing

PO-5-B-1 Identify the importance of good report writing.
PO-5-B-2 Identify the basic information a report should contain.
PO-5-B-3 Identify the importance of a "chronological order of events" in writing a report.
PO-5-B-4 Identify the advantages and disadvantages of using an officer notebook.
PO-5-B-5 Identify the advantages of writing in "first person".

VI. THE FUNDAMENTALS OF PATROLLING AND CONTACTS IN THE FIELD

A. Foot or Vehicle Patrol

PO-6-A-1 Identify the importance of a daily individual patrol and location action plan.

B. Citizen Contacts in the Field

PO-6-B-1 Identify the objectives of the field interview and frequent citizen contacts.
PO-6-B-2 Identify the SARA method for resolving problem situations.

C. Tactical Communications with Emotional, Angry or Hostile Citizens

PO-6-C-1 Identify the five tactical communication phases of a citizen contact.

MINUTES
BURGLAR ALARM TASK FORCE
November 18, 2003
6:00 p.m.
City Hall, Room 325

Welcome

Dan Clem, Chair called the meeting to order at 6:00 p.m.

Roll Call of Board Members

Task Force members present: Chair Dan Clem, Keith Butler, Chuck Huggins, John Baker, Vince Mulligan, Steve Magreaves, Anna Peterson, Wes Bennett, Byron Hawkins

Others Present

Alarm Industry Representatives: Jon Sargent, Derek Bliss

Staff Present: Police Chief Walt Myers, Sargent Steve Bellshaw, Kimberly Barnett, Margaret Blaine

Approval of Minutes from October 28, 2003

Byron Hawkins **moved** to approve the minutes; **seconded** by Anna Peterson. The vote was taken and **approved.**

Task Force Deliberations
Verbatim testimony by Anna Peterson:

I thought a lot about this item and haven't said anything to anybody on the committee about it or Councilor Clem. I want to direct my comments to John Sargent because I personally was insulted by the letter you sent to the members of the task force and to me and personally was concerned when I read about it in the newspaper, but the thing I was most concerned about is in this cover letter. Twice you make reference to people on the task force who failed to attend meetings, and in your list of things that you hoped people would attend to you say it's hoped that the summary will be useful to those members of the task force that were unable to attend all of the meetings. I just thought it would be important to point out that every member of this task force came forward to serve as a volunteer. They have given time from their businesses , from their families, from their homes, from other activities, many other activities that may have had previous commitments. And from time to time when people are volunteers in this city, they do these meetings. But I felt that your repeated remark about how they failed to be at meetings really was disrespectful to the intent. I know people on this task force have studied numerous reports and have come well prepared with the intention of doing good work. I felt that was unfair.

Verbatim response by John Sargent:

I apologize for giving you that impression, it was certainly not my intention at all. It was simply to try to summarize the massive amount of documents and presentations.

Peterson:
Well, the summary does help that, but I think it is important to value volunteers for the tremendous time they give. You are a lobbyist, you are paid to show up. You are paid for every word you write and every minute you sit. I think it was a cheap shot and I simply request that any future communication you might have regarding this task force recognizes the intent of the people.

Sargent:
I certainly do recognize that, I apologize if anyone took it that way.

Peterson:
And then we won't see that kind of reference in letters from you or your industry.

Sargent:
I hope you understand that it was not the intent.

Chairman Clem expressed concern over another piece of correspondence from Jeff Martin. Clem felt the work done by the task force was very collaborative, and in the interest of the entire publics' safety.

Councilor Bennett stated he took exception to Jon Sargent's comments and did not think there was room for criticism when people were volunteering their time. Councilor Bennett hopes that Jon Sargent can correct the notion that he left throughout the community about this committee.

Steve Margreaves noted that the key vote that was taken on October 14, regarding verified response versus the coordinated option, was very close. He was absent from the meeting and the vote was 4 to 4, with the Chairman breaking the tie. He felt the members should have been notified this vote was going to be taken on October 14.

Chairman Clem responded that the agendas that were sent to members listed the intent of the meeting. Clem did not agree that an attendance problem caused the outcome of the vote, and that the committee had previously agreed to not bring up previously taken votes for the purpose of re-voting.

Margreaves felt this group was divided about recommending what is included as verified response to Council. Margreaves **moved** to reconsider the vote that was taken on October 14; **seconded** by Amanda Dalton. The vote was taken and **failed.** Margreaves, Dalton and Hawkins voted in favor.

Dalton commented that the council will have a very tough decision and will face the same discussions that came forward three months ago.

Hawkins noted that he supported the work done and will be a supporter of these recommendations to the community. He explained that he voted for reconsideration because there are some other things that would be helpful. He believes that what is coming out of this is going to be of benefit to the community.

Chairman Clem reviewed the report for edits. The intent was to show all of the information that was submitted. He asked if anyone wished to add anything to the report, to file a minority report with council.

Dalton requested that under Fact/Findings, it should state that 40% of the false alarms were made by the same people; noting that some types of alarms were repetitive.

Chairman Clem responded that information was shown in #19.

Dalton suggested that those paragraphs could be combined.

Item # 13: remove the word "unanimously".
Item #12: awkwardly written, will be rewritten. ...20 plus years of experience, only four criminals have been apprehended.
Item #12 remove "frequently" and replace with "the K-9 unit has been dispatched."
Page 1, B.(3): remove "and alarm holders"
Page 2, B.(6): remove the word "false"
Facts/Findings #15: replace insurance company with insurance agency
Analysis of Burglar Alarm Ordinance (B) (2) replace "must be help responsible" with "must be held responsible"

Summary Edits:

First Paragraph
Omit first sentence "and what taxpayers are paying for" and replace with "that funding provides"

Second Paragraph - No change

Third Paragraph - Omit the first sentence.

Fourth Paragraph - Remove the word "Also." Remove "alarm monitoring companies" and replace with "alarm industry"

Fifth Paragraph - Remove "By incorporating response to.." Replace with "By responding to unverified alarm calls"

Sixth Paragraph - insert the word for "verified" false alarms, remove the "the elimination of the permit system"

Change last phrase to read: "provide greater incentives for reducing the number of false alarm calls."

Seventh Paragraph - In the first sentence remove the word "false"

Change sentence: remove the phrase starting with "Concomitant with" ...start the sentence with: "The BATF felt the decision of hiring private security responders is best left up to the alarm subscribers..."

Strike every reference to the word "monitoring" in the paragraph.

Chairman Clem referred to the Issue statement on page 1 of the report: "Should the City Council adopt a Burglar Alarm Response Policy proposed by the Salem Police Department." The police proposed verified responses, and the task force went beyond that. The task force looked at the

alarm industry, at different kinds of responses, at a whole host of data involving what the current situation was. Essentially the task force challenged all of the points that the police department had made and made its own independent sentence. The task force did a lot more than what was required and he is very proud of that.

Chairman Clem noted that under the Recommendation, Item A is policy change and B is recommendation for ordinance change. Current SRC says that the police are not obligated to respond to alarms, so it doesn't make sense to change the ordinance saying they will. The reason the ordinance is in there is a legal one. If the city is required to respond to a burglar alarm then it builds in all sorts of financial and otherwise liability. That was put in 1989-1990 that the city shall not be obligated to respond to a licensed alarm. It didn't make sense that we ever addressed that the city should pass an ordinance change that they should respond. We answered the question about verified response which is a policy. We provided recommendations for both policy and ordinance changes.

Chairman Clem told the committee that changes might be made when the report is reviewed by the city's legal department.

Steve Margraeves asked why the task force didn't include lawyers, noting that a lot of work was done and now it might be changed.

Kim Barnett explained that a lot of legal research has to go into the recommendations.

Wes Bennett noted that the report doesn't address silent alarms.

Chairman Clem noted that a statement should be added about what it doesn't include.

Huggins **moved** to approve the report as amended; **seconded** by Margreaves. The vote was taken and **approved unanimously**.

Chairman Clem thanked staff for their work; particularly Kim Barnett who did the lion's share of the work on the report. He also thanked all the additional people who came to help, and personally appreciated having the alarm association in attendance.

Jon Sargent (verbatim): I became aware late this afternoon of a newspaper article and I didn't care for the way it was written and the way it was put together. I know a little about how it was orchestrated last week because they wanted to quote me and I didn't say anything. It tends to do the same thing that we see in other cities when they are working on this, and that is paint a picture of the alarm industry as the bad guys. And we've got our own agenda and I personally almost want to use the word ?. I also want to thank you for what you've done here by taking out these two paragraphs, for example. You've taken out what's presented as a negative, and made it much more fair and balanced. I think if you compare what you read in the paper and what you see, we are obligated to notify our customers about what's going on and will offer an amendment. Some alarm people in this world are very emotional people and they will say and do things. There is nothing we can do to stop that. I just want to say these last changes here are very fair and balanced.

Chairman Clem (verbatim): I would hope the alarm companies in keeping their subscribers informed would also remind them that you played a very active role and that most of the model ordinance recommendations were adopted by this task force.

Chairman Clem informed the task force that it will depend on the City Manager as to when the task force report will go to Council.

Chairman Clem asked members to contact staff if they did not want to serve on the task force any longer.

Chairman Clem thanked everyone for their participation and noted that on the average, 9 of 13 members attended, and most of the time there was a 90% attendance rate.

Chairman Clem thanked staff for their efforts and noted that Kim Barnett was an absolute genius at helping put these things together. She's the one who deserves the praise. (Applause).

The meeting adjourned at 7:20 p.m.

Respectfully submitted,

Margaret Blaine

MINUTES
BURGLAR ALARM TASK FORCE
October 28
6:00 p.m.
City Hall, Room 325

Welcome

Dan Clem, Chair called the meeting to order at 6:00 p.m.

Roll Call of Board Members

Task Force members present: Chair Dan Clem, Byron Hawkins, Vince Milligan, Bob Burton, Anna Peterson, John Baker, Keith Butler, Amanda Dalton, Chuck Huggins, Marin Arreolla, Steve Margreaves.

Others Present

Alarm Industry Representatives: Jon Sargent, Derek Bliss

Staff Present: Police Chief Myers, Sargent Steve Bellshaw, Kimberly Barnett, Judy Postier.

From the public: Dan de Carbonel, Statesman Journal

Approval of Minutes from October 14, 2003

Sgt. Bellshaw asked to have the last line of the third paragraph on page 2 be changed from "...three officers that started a security company in Salem." to "... started out as security officers before becoming police officers." The minutes were moved and approved unanimously with that change.

Task Force Deliberations

Dan Clem recapped what had been accomplished in the last meeting and commented that tonight's goal is to develop items to be included in the ordinance. Dan then provided the definition of discretionary response and asked for comments and discussion. Questions and discussion included: a time line for an agency broadcast alarm call(All Units Bulletin); Police Department routine and changes necessary to implement an agency broadcast system; perception of burglars; fear of no response; how much information is provided to an officer; the importance of the police department's role; use of private security; and a strong desire to not increase bureaucracy. Dan called for a vote on All Units Bulletin with provisions for a discretionary response by Officers for unverified alarm calls being included in the ordinance requirements. The **vote** passed unanimously with no abstentions.

The next category to be recommended in an ordinance was Permits/License - should the City continue to issue permits. Questions and discussion included: what is required in current permits; what are alarm company responsibilities; what are alarm owner responsibilities; what information is necessary to dispatch; what a permit can and cannot

do; the revocation and fining process; and form and cost that a fine would take. A vote was called for on should the Committee recommend the City continue to require permits for alarms as part of the proposed ordinance. The **vote** passed unanimously with one abstention.

The next category for discussion was Alarm Company Licensing - does the City issue licenses to alarm monitoring companies? Questions and discussion included: what is currently mandated by law; purpose of a license; what the City's interest is in tracking alarm companies; the nature of complaints; installation issues; and conditions of a business license in Salem. A vote was called for asking if the Committee should recommend licensing of alarm monitoring companies. The **vote** was 2 yes, 7 no, 2 abstentions. The vote failed.

The Committee then discussed enhanced verification - the requirement for two or three calls to verify the alarm is not a false alarm. Questions and discussion included: the difference between a two-call or three-call verification; definition of responsible party; anticipated reduction in false alarms; cancellation calls; and call progression. A vote was then called for asking if the Committee should recommend enhanced verification before response to burglar alarms. The **vote** passed unanimously.

The next category for discussion was verified response. Dan Clem asked the group to consider what elements would be acceptable as a verified response. The final list to be voted on included: audio with video; video only; private security; cross zoning; audio without video; witness on site; and audio with two-way. Upon discussion, it was agreed to remove audio without video and cross zoning from the list for separate treatment. A vote was called for asking if the Committee should recommend the remaining list for inclusion in a proposed ordinance. The **vote** passed unanimously. The Committee then discussed the audio without video and cross zoning options. After discussion, a vote was called for asking if cross zoning should be included as an option for verified response. The **vote** was 7 yes, 1 no, 2 abstentions. The vote passed. Further discussion on the option to include audio without video resulted in a motion to not include the option in the list. The **vote** passed unanimously to not include audio without video as a verified response.

Whether to impose a fine for a verified false alarm was the next category discussed. A motion was made to give the responding officer the discretion of determining whether a fine should be issued. After a brief discussion, a vote was called asking if the Committee should recommend giving the responding officer the discretion to determine if a fine should be issued for a verified false alarm. The **vote** was 9 yes, 1 no. The vote passed.

Dan Clem then asked the Committee how unmonitored alarms should be treated. After a very brief discussion, a vote was called for to respond to unverified alarms with an All Units Bulletin. The **vote** passed unanimously.

The next discussion was to determine where funds from fines would go - to the General Fund or to the Police Department. A concern was discussed regarding the perception of the public as to where the money would go when an officer has the discretion of determining how much a fine should be. It could be considered a conflict. During discussion it was agreed that the Police Department could certainly use the funds but it was not within the realm of this committee to make that determination. A motion was made and seconded to drop the discussion of where the funds should go. The **vote**

passed unanimously to drop the subject and not include it in the recommendations to Council.

The question was then asked, what should the maximum fine be set at. Comments and questions during discussion included current fines for noise ordinance violations, progressive fines, verified calls that end up being false, current processes for periodic review of fines, what is the benefit of officers having to attend court to defend high bail amounts, and will false alarms be reduced by imposing a fine. A vote was called for to make a recommendation to set the maximum fine at $150, and to allow the officer discretion in determining how much of the maximum bail to impose. The **vote** passed, 9 yes, 1 no.

A motion was then made to require real estate agents to provide alarm information to the purchaser at the time of title transfer. Discussion and questions included what format the information would be provided in, whose responsibility would it be to ensure information had been included in sale, what is currently in the disclosure at the time of sale, and real estate sales without a realtor. A vote was called for to make a recommendation to require title companies to provide alarm information at the time of title transfer. The **vote** was 3 yes, 5 no, 2 abstentions. The vote failed.

The next subject of discussion was, should there be a fine for false alarms that are called off before an officer arrives at the scene. Discussion included, is there a higher level of responsibility, would it help reduce false alarm calls, and the effect of including cross zoning and audio with two-way as a method of verification. Discussion resulted in a motion to revisit the issue of accepting cross zoning and audio with two-way and remove them from the list of acceptable verification methods. A vote was called for to remove cross zoning and audio with two-way from the list of recommended acceptable verification options. The **vote** was 4 no, 6 yes. The vote passed.

Dan Clem then asked to group to consider a number of administrative items: does the Committee want to form a writing group to draft the proposed ordinance; does the Committee want to require group approval of the final product, or majority rules; and who will present the final report to Council. The group agreed Dan Clem and staff could draft the proposed ordinance. They further agreed that the report would be e-mailed to the group for review and comment. Anna Peterson was chosen as the presenter of the final report to City Council. The group further agreed to meet to review the proposed report before presenting it to the City Council. Dan Clem asked all members of the group to please attend the Council meeting when the report is presented.

Next Meeting:

November 18, 2003, at 6 p.m. in Room 325 at City Hall.

Adjourn

The meeting adjourned at 10:00 p.m.

Respectfully submitted,

Judy Postier
Staff Assistant

MINUTES
BURGLAR ALARM TASK FORCE
October 14
6:00 p.m.
City Hall, Room 325

Welcome

Dan Clem, Chair called the meeting to order at 6:05 p.m.

Roll Call of Board Members

Task Force members present: Chair Dan Clem, Kasia Quillinan, Byron Hawkins, Vince Milligan, Bob Burton, Anna Peterson, John Baker, Keith Butler, Amanda Dalton, Chuck Huggins,

Alarm Industry Representatives: Jon Sargent, Derek Bliss

Staff Present: Police Chief Myers, Sargent Steve Bellshaw, Kimberly Barnett, Judy Postier.

Approval of Minutes from September 30, 2003

It was noted that Chuck Huggins was present at the September 30 meeting but was omitted from the minutes. With that correction, the minutes were approved as presented.

Presentation by Derek Bliss, First Response Inc.

Derek Bliss, employed by a private security company, provided information regarding private security response policy, costs, and training. He informed the committee that his private security firm responds to approximately 14,000 alarms per year, covered by about 150 officers. Derek commented that the major difference between a police response and a private security response is that private security has a duty to observe and report, where a police officer has a duty to act such as make arrests. Derek compared police officer training certification to private security certification, noting that the major differences are in the length of the classes and the firearm training. He further commented that private security has the benefit of having codes and keys for entering the residence or business to verify intrusion, disarm an alarm, reset the alarm, and leave a report for the owner.

Discussion and questions of Mr. Bliss included the following: Bob Burton asked about the monthly costs for private security. Derek replied that it varies from $6 per month to $45 per month, with the upper range including usually 2 alarm responses without further charges. Bob further asked if they provide response to other alarm companies. Derek replied that they work with both the end user and alarm companies to provide security. Bob Burton then asked how many times per year were the private security guards given handgun training. Derek replied that state law requires certification twice a year, where police officers must certify at least quarterly.

Byron Hawkins asked if First Response had a presence here in Salem, or how much of

a presence other security companies have here. Derek responded that he has familiarized himself with the companies in the area, and has a personal interest as he has family here. There are a number of companies in Salem, with the larger players being Advanced, ProStar, and AAA. He commented that the private security industry is growing and that several companies have merged. Byron also asked if Derek's company was involved in Eugene's development of an alarm response. Derek replied that they were actively involved and worked very closely with the police department. The initial feeling that the alarm companies would spend thousands of dollars to fight it did not materialize.

Dan Clem asked if Derek's firm or any other firm contracts with a governmental entity to cover an entire jurisdiction. Derek replied that is a yes and no situation; in a town that is not large enough to have their own police force, private security can provide needed services. Eugene is seeing a good relationship with private security, but the company contracts with the end user but not the City of Eugene. With homeland security becoming such an issue, there is a need at reservoirs, treatment plants, etc. so there are more opportunities for private security in the future. Dan then asked in terms of contracting with people or businesses, does private security act as the responsible person or as a clearing agent at the alarm site. Derek replied that they act as an agent or responsible party for the property owner.

Bob Burton asked how many private security responders would Salem need. Derek replied that it depends on the call load. Most calls come in during the day that involve actual theft, but most false alarms come in at night, with an average of two during the day and three at night. Dan commented that we originally figured it would take 15 private security to replace the current officer response for alarm response. Dan then asked how much private security officers make. Derek replied that his firm provides health insurance, bonus', uniform allowance, and then pay them approximately $10 per hour for a starting wage, with the average salary for an armed officer at $11.25. Dan asked if a lot of officers get a start in private security. Sgt . Bellshaw commented that the City has three officers that started a security company in Salem.

John Baker asked if alarm response was just a portion of their workload in Portland. Derek agreed and said patrol, mall security, special events, construction sites, etc. all are part of the workload. John then asked what has prevented the same response in Salem. Derek replied that Salem is not quite there yet in terms of population and need. The relationship between private security and law enforcement is growing on a positive note. Kasia Quillinan asked what percentage of alarm holders are actually billed back for false alarms in his company, and how do you go about collecting those fees; are they billed directly or do they go through the police department, or what process is used? Derek replied that they work with the end user as a rule, and with alarm companies in some instances. They never bill the police department unless there is a contract providing for that. Many alarm owners have retainers or programs that include a set number of alarm responses built in. The goal is to reduce false alarms so we try to work with owners who have a problem.

Dan asked, with regard to the number of private security needed, could Salem expand and contract to meet additional needs if Salem decided to go more toward using private security. Derek replied that expansion is not typically a challenge, with stepping stones to getting a full private security force in place. Networking with the local authorities is a first step.

Task Force Deliberations

Dan Clem informed the committee that he had developed a check list (handout on file) for consideration based on the discussion and votes from the previous meeting.

Dan recapped what had already been agreed upon: majority rules; alarms are a deterrent but that criminals are not likely to be affected by whatever this committee recommends; agreed we did not agree on whether businesses and homeowners should be treated the same; need an ordinance that is broad; ordinance should offer options, encourage private security, be flexible, not harness the police, fees collected should not go to the General Fund but to the police, address alarm presence in real estate transfers by title transfer and rental changes; alarm companies should be responsible for training, education, and inspection of alarms; and calls need a verification system to eliminate false alarms before a police officer is dispatched.

Dan then reviewed the bulleted items on the checklist with the committee. During discussion, it was determined that Verified Police Response items should be changed to include possible false alarm fines, and eliminated the permits and fee items. For definition purposes, Discretionary Police Response is the same as All Units Broadcast Police Response.

Anna Peterson was concerned that the Verified Police Response still significantly involves the Communications Center because false alarm calls will still be coming in. Kim Barnett responded that it will significantly reduce the number of calls because Dispatch will not be the central person making all the calls; in this scenario the alarm company will be responsible for the majority of the calls. Dan added that with this scenario, if there is no responsible person identified and no estimated time of arrival, then there is no call to Dispatch.

John Baker asked if you have an unmonitored alarm, there will be no responsible person, so there will be no response from the police. Sgt. Bellshaw replied that what it becomes is a 911 call, because someone has called the police in response to hearing it. Amanda then asked if it would be safer to just have an unmonitored alarm so that you would get a response every time. Dan replied that you could also receive a false alarm fine, as well as a nuisance fine for the noise, if an officer responds and then finds it is a false alarm.

Bob Burton asked Derek if there are liability issues for contracting with private security. Derek replied that the alarm company is first in line. Jon Sargent asked if First Response had a limitation or indemnification of liability. Derek replied that yes, it is currently $7 million aggregate.

Byron Hawkins commented that his company's experience in Eugene showed the bottom line is, the homeowner wants someone to respond. The lowest cost provided is private security. The City has extreme budget shortages, so you need a drastic measure to provide the needed security, which is a response by private security. ADT's experience in Eugene has been very positive as it is a large company. By having a contract with the City, which puts everyone on a level playing field, and by prepaying for responses to the City, then when a false alarm comes in, it is deducted from the escrow account. Anna Peterson responded that what the City of Eugene ends up doing is orchestrating a huge system for the alarm companies and still does not address the false alarm numbers. Dan replied that it does reduce the number of false alarms that the City responds to. Byron agreed with Anna and said that politics will always play a

part. A No Response policy will upset the citizens and cause a backlash. Dan replied that what the City of Eugene is doing is requiring a verified response in order to get a police officer dispatched. All unverified alarms go to the private security firms. Amanda suggested offering businesses incentives to use private security for their responsible party.

10 minute break at 7:50 p.m.

Dan asked the group if they felt all basic options had been listed. All agreed that all options had been listed that the group had discussed. Anna Peterson commented that a favored solution is not listed in just one box. The group agreed that items under the major options could be altered once a method of response had been narrowed down. Jon Sargent commented that LA is doing a "three strikes" effort where there is no response after 3 false alarms. Dan replied that it could be considered a sixth method of response for the committee to evaluate. He asked for a show of hands to indicate support for a sixth response, "three strikes." By show of hands, a sixth method was not added to the list of Methods of Response (4 yes, 5 no).

Dan then asked the committee to vote on their two favored methods to narrow down the choices. Verified Police Response (7 votes) and Coordinated Police Response (6 votes) were chosen for final discussion. The count for all categories was: Current Police Response 1; Verified Police Response 7; Discretionary Police Response 1; Coordinated Police Response 6; Contract Provider Response 3.

Dan then opened the discussion to the bulleted items for the two favored methods. Discussion items included absolute verification of alarms; greatest possibility of reducing false alarms; audio/video monitoring; personal responsibility of the owners; risk regarding personal safety of responders; and alarm company responsibility/involvement.

After discussion, it was decided to finalize the bulleted items after a main response was selected. Dan then called for a vote on the remaining two methods of response. The vote was 5 for Verified Response and 4 for Coordinated Response. Verified Response was selected as the final method of response. It was agreed that the bulleted items will be presented for discussion at the next meeting, as well as discussion about what the ordinance should include.

Next Meeting:

October 28, 2003, 6:00 p.m. in Room 325, City Hall

Adjourn

The meeting adjourned at 8:50 p.m.

Respectfully submitted,

Judy Postier
Staff Assistant

MINUTES
BURGLAR ALARM TASK FORCE
September 30, 2003
6:00 p.m.
Council Chambers

Welcome

Dan Clem, Chair called the meeting to order at 6:05 p.m. Dan Clem outlined the expected time line for the remaining meetings and for bringing the Task Force's recommendations to the City Council.

Roll Call of Board Members

Task Force members present: Chair Dan Clem, Wes Bennett, Kasia Quillinan, Byron Hawkins, Vince Milligan, Bob Burton, Anna Peterson, John Baker, Keith Butler, Amanda Dalton, Marin Arreolla.

Alarm Industry Representatives: Jon Sargent

Staff Present: Police Chief Myers, Sargent Steve Bellshaw, Kimberly Barnett, Judy Postier.

Approval of Minutes from September 9 and September 16, 2003

A motion was made and seconded to approve the Minutes from September 9 and September 26 as presented. The motion passed unanimously with no discussion.

Kimberly Barnett Research Information Summary

Kim Barnett gave a presentation on research into licensing and verified alarms in other communities. Kim reviewed verified response in various communities, and provided information to refute claims that requiring verification of alarms before police response would increase crime. Kim informed the task force that Salem rejected the CARE proposal due to large amount of administrative costs. She then reviewed Salem Police Department procedures and provided an example from the police log regarding the average call load. Kim further provided information regarding the current status of false alarm fine payments and collections. Kim also addressed information regarding home insurance rates in relation to monitored home alarms.

Comments and discussion following Ms. Barnett's presentation included the following:

Dan Clem remarked that the basic question is - is there a homeowner's insurance discount for having a monitored alarm system? Two of the largest insurance companies, USAA and State Farm, do honor a discount for monitored alarm systems, regardless of the jurisdictional police department policy for responses. Wes Bennett commented that his State Farm agent said it would increase premiums if police made a policy to not respond. Bob Burton asked, if alarm companies are filing suit because it is making them tax collectors (San Francisco), what would it take to channel fines and license fees to Police instead of general fund. Dan Clem responded that if the fines go

people as best we can. Marin Arreolla asked if the causes for false alarms are the same for individuals and businesses? Dan replied that time of day is the major difference. Anna Peterson asked, do we really catch criminals? The criminals are not where the alarms are going off - we are chasing ghosts - and that is the core question . Kasia agrees and added that in none of the police reports she has read in the course of her business, has a crook been caught because an alarm went off. Dan asked the task force if there was agreement that the two statements are correct: we are not sending any signals to criminals with our recommendations, and alarms do not cause crooks to be caught. Kasia Quillinan, Anna Peterson, Marin Arreolla, John Baker, and Chuck Huggins were in agreement.

Amanda commented that we have the public to protect. She agreed that criminals will not step up their crime if we don't respond to alarms until after 6:00 p.m. but she disagreed that criminals would not be affected by headlines saying the Police Department does not respond to alarms. Bob Burton asked how can you convince me to have an alarm, when I have a number of guns, and my alarm will accomplish nothing. Chuck Huggins replied that alarms are a deterrent. Dan remarked that alarms act as a deterrent. There was general agreement alarms are a deterrent. Chief Myers commented that one option is when a call comes in to broadcast an alarm allowing an officer to respond when an officer is free to respond.

Anna Peterson stated it seems that a lot of rules, regulations, and procedures are dealing with equipment failure - will our process address that? If you have a dog barking, or trash, there is an ordinance related to them being a nuisance. Could the alarms be considered a nuisance. Marin asked if are alarm companies are taking the time to train in a way that allows the user to properly use the equipment. Byron Hawkins commented that, almost universally, they give a video and instruction booklet, salesman gives instruction, installer gives instruction, and it is very basic. He further commented that these are not complex system, and false alarms are coming and going errors, or motion issues. Byron felt businesses are more oriented to protecting their assets; homeowners are worried about possessions; and homeowners are more concerned about intrusion, and think in terms of police, where businesses just want to stop burglary. John Baker commented that he is hesitant to go on these general guidelines - most businesses are family businesses, not the mall type, and he would feel just as violated if his business was broken into.

Dan asked the task force if there was agreement on whether Salem needs an ordinance. There was general agreement that Salem does need an ordinance. Dan then asked if the ordinance should address standards of performance? Bob Burton commented that alarm companies have to be held responsible. Wes Bennett replied that we should run this by the City Attorney to find out what we can put into an ordinance. Chuck Huggins spoke for a broad ordinance that would not tie the Police down - no standards for performance. Amanda asked if current policy addresses performance of the alarms. Sgt. Bellshaw replied that the Police Department doesn't have anyone to do that type of work, and code inspectors do not have the time to take that on. Chuck stated that if they are such a problem that they are a nuisance, then the Police can step in. Jon Sargent stated that there are some standards that should be in every ordinance - all sounders should shut off in 10 minutes; and panic buttons should have dual activation. Sgt. Bellshaw commented that audible alarms outside the house are currently addressed in the available ordinance with a cut off time.

LAS CRUCES POLICE DEPARTMENT

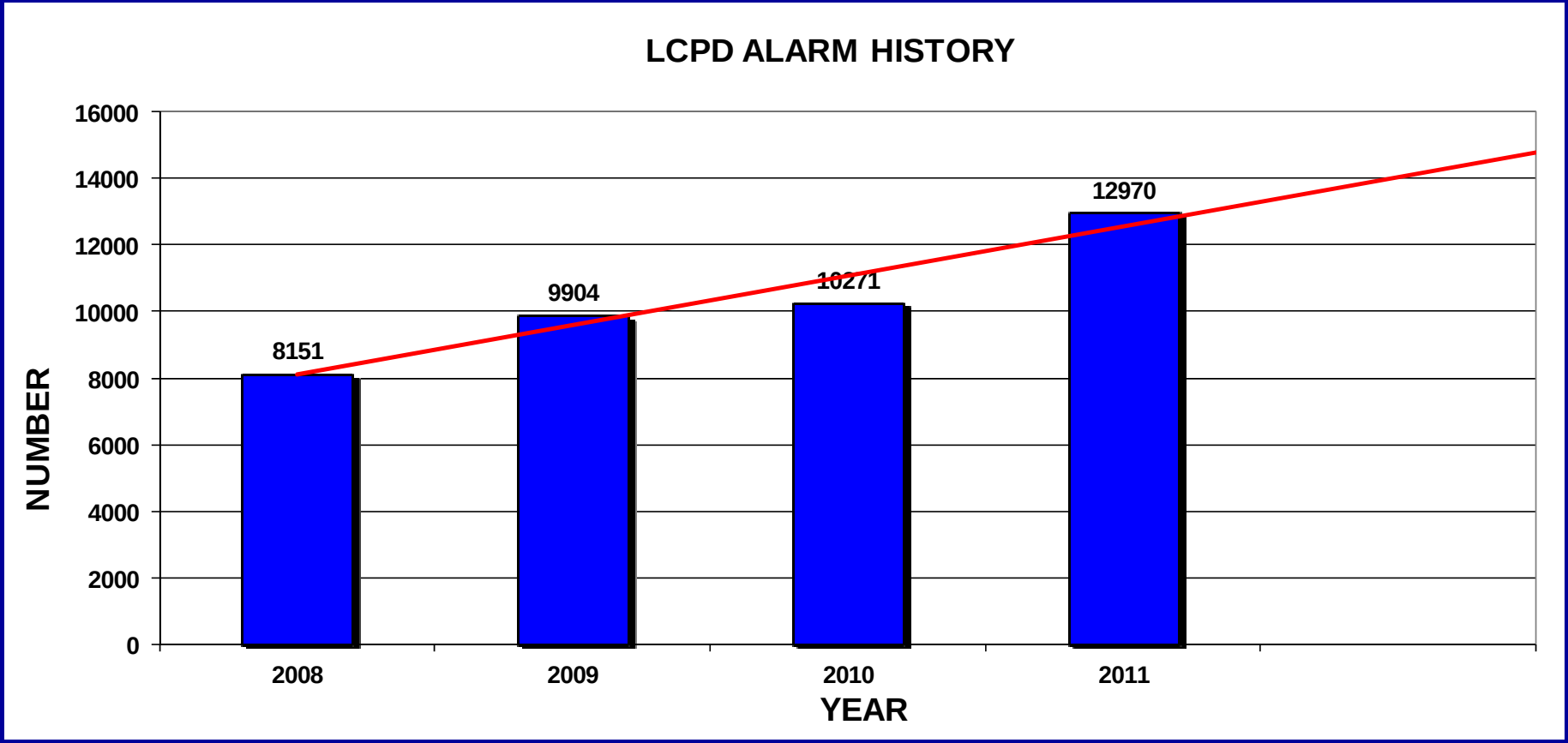
FALSE ALARM SOLUTIONS

LT. SEAN KEARNEY

THE PROBLEM (updated as of year-end)

- In 2011 LCPD received 12,970 burglary alarm calls
  -Single most common call for service at ~8% of total (*source-TIBURON CAD data 2011*)
- Only 50 of these calls were actual crimes or incidents requiring a report; 5 arrests made (2 for burglary)
- MVRDA is hugely impacted as well whether the calls are dispatched, cancelled, or otherwise disposed of-they must be monitored start to finish
- A false alarm is defined as an alarm call for service that results from a non-public safety-related cause (example: wrong passcode, pet in residence, weather, etc.)
- This equals 99.6% false burglary alarms overall, which is typical of the national average

THE PROBLEM



source: TIBURON CAD data 2011

CAUSES OF FALSE ALARMS

- User error
- Faulty equipment
- Faulty installation
- Weather/ phone/ electrical issues

- None of these are a public safety responsibility…

THE COSTS…

- At 1 man hour and $40 for each response (LCPD, dispatch, and vehicle costs, conservatively estimated):
  - $518,800 in manpower and equipment costs (2.6% of entire LCPD FY2012 budget) per year
  - $103,760 expended for each arrest made on burglary alarm responses for 2011
  - At $45,000 salary, this equates to over 11.5 patrol officers' labor cost for the entire year which has had no value to the public at large but yet has already been paid for with the existing budget
  - 11 officers is 12.5% of LCPD's patrol force which could be utilized for other tasks
  - In terms of time, this equates to over 6 officers handling burglary alarms FULL TIME (2,080 hours per year)

GOVERNMENT RESEARCH

- According to a 2007 United States Department of Justice study by Rana Sampson (*False Burglar Alarms, 2nd Edition*) on this international problem:
  - In the United States in 2002, police responded to approximately 36 million alarm activations, at an estimated annual cost of $1.8 billion. Most of these activations were burglar alarms.
  - Purchasers of an alarm system are told to expect a police response to an alarm activation, even though they bought the system from a private alarm company with no link to a police department.
  - The vast majority of alarm calls—between 94 and 98 percent (higher in some jurisdictions)—are false. In other words, alarms' reliability, which can be measured by these rates of false activations, is generally between 2 and 6 percent.
  - Nationwide, false alarms account for somewhere between 10 and 25 percent of all calls to police. For many U.S. police agencies, false burglar alarms constitute the highest-volume type of call for service.
  - In the United States alone, solving the problem of false alarms would, by itself, relieve 35,000 officers from providing an essentially private service.

http://www.popcenter.org/problems/false_alarms/

GOVERNMENT RESEARCH

The Effectiveness of Burglar Alarms

- Burglar alarms are intended to prevent burglary and to help police apprehend burglars, which, if done reliably and efficiently, benefits the public at large. If, however, burglar alarms are unreliable or inefficient, the drain on police resources from responding to them may outweigh their benefits. Here we review the evidence of burglar alarms' contribution to these two worthwhile objectives.
- Studies from both the United States and the United Kingdom have shown burglar alarms to be among the most effective burglary-deterrence measures. However, a number of other measures that do not impose a substantial burden on police are also effective at preventing burglary. Occupancy, or signs of occupancy, is the biggest deterrent. In addition, closed-circuit television, window bars, barking dogs, nosy neighbors, and motion-activated lights have also been shown to be effective. For the most part, burglars avoid alarmed premises because easier choices are usually available. Given the availability of non-alarmed premises and similarly unprotected targets (such as houses with open garage doors or windows), burglars may be deterred by the mere presence of an alarm company's window sticker or yard sign.
- Do burglar alarms account for burglary declines in the United States? The U.S. burglary rate has declined steadily and substantially since the early 1980s. During the same time, the number of premises with alarms rose, but there is no evidence of a link between the two. During the 1990s through 2004, when alarm ownership experienced a steep rise, other types of crime declined just as sharply as burglary, suggesting that factors other than an increase in the number of alarm systems fueled the burglary decline.
- Are alarms an efficient and effective way to catch burglars? Although burglary remains one of the most frequently reported crimes, the clearance rate for U.S. burglaries has remained below 15 percent for many years. Clearly, whatever contribution burglar alarms are making to solving burglary cases is modest, at best.
- The available research does not provide much support for alarms' value in catching burglars. One study found that police were more likely to catch burglars in the act on premises without alarms than those with alarm systems. Police responses to burglary calls at locations without alarms are typically the result of an eyewitness, such as a neighbor, which is more reliable than an alarm.

http://www.popcenter.org/problems/false_alarms/

USDOJ RECOMMENDED SOLUTIONS

Response Not Recommended

- Providing an emergency police response to unverified burglar alarm calls. A number of police agencies still respond to alarm calls with their highest priority, often referred to as "priority one," authorizing the swiftest response to the call. The research does not support this level of response due to the high rate of false alarms. In addition, this approach does nothing to address the underlying causes of false alarms.
  - LCPD and MVRDA currently classify all alarms as "priority one" calls

http://www.popcenter.org/problems/false_alarms/summary

USDOJ RECOMMENDED SOLUTIONS

Responses With Limited Effectiveness

- **Establishing an ordinance requiring owners to obtain alarm permits and to pay escalating fines for false alarms.** Many police agencies rely on a local alarm ordinance to guide policy and establish false alarm fines. Some ordinances provide for fixed fines, others include escalating fines against repeat abusers, and a few apply a cost-recovery system. Typically, fines are allocated to the general fund and not to the police budget. Invariably, alarm owners are not fined until they have several false alarms (usually three or four). Many ordinances also require alarm owners to obtain a permit. In theory, alarm permits help police departments to track and fine alarm abusers and to notify the most chronic abusers of the suspension of police response. However, some jurisdictions have found that some alarm companies do not make their customers aware of the permit requirement, and many alarm owners do not apply for required permits, which severely compromises this response's effectiveness. This approach is administratively costly and requires continued officer dispatch (except in the most chronic cases). Some residents resent police fines for services, as they mistakenly believe their taxes cover them. As a result, it may be difficult to collect fines; collection rates can be as low as 60 percent without significant follow-up. Finally, some jurisdictions have experienced initial reductions in the number of false alarms after an ordinance has been passed, but in general, these initial decreases do not endure over the long term. The National Burglar & Fire Alarm Association and the False Alarm Reduction Association offer guidance for jurisdictions wishing to draft an ordinance providing sample language, including definitions; registration requirements; duties of users, installers, and monitors; fines; notifications; suspensions; appeals; and reinstatement. Further, the guidance includes checklists for installers and users, and guidelines for setting fines and fees. In 2004, the city of Dallas, Texas, spent upwards of $650,000 administering its false alarm-reduction program involving fines and collections.

- **Setting a cost recovery-based fee for all false alarm calls.** A fee for service would cover all costs associated with responding to false alarms. These include lost-opportunity costs for officers responding to false alarms rather than proactively working on reducing crime and disorder problems. A fee for service differs from a fine in that it is not punitive; it is meant only to recover costs. It is unclear whether a fee for service reduces false alarms, though it does reimburse the city for providing a police response to calls that are almost always false. Any cost-recovery policy would need to incorporate follow-up action against nonpayers. Calculating lost-opportunity costs might be less difficult for departments engaged in problem-oriented policing. Line officers in these departments proactively address specific crime and disorder problems.

- **Charging permit fees and fines directly to alarm companies.** To lessen the administrative burden inherent in strategies requiring alarm users to obtain permits and to pay fines in the event of a false alarm, some jurisdictions charge these fees directly to the alarm installation or monitoring company. Not only does this practice ensure that all new alarms are registered with police, but it also greatly reduces the number of contacts that police alarm administrators must make. Rather than contacting thousands of alarm owners, alarm administrators make contact with a much smaller number of installers and monitoring companies.

- **Outsourcing the administration of permits, fines, and fees.** Administering permits, fines, and fees can be cumbersome and, if not implemented properly, the deterrent value of an ordinance is lost. Automation is essential to reduce the alarm administrator's workload. These administrative duties can be outsourced to a private firm in exchange for a portion of the fees. Even with outsourcing, collection rates may be only about 60 or 70 percent. However, it is important to recognize that this response only manages, but will not solve, the problem.

http://www.popcenter.org/problems/false_alarms/summary

USDOJ RECOMMENDED SOLUTIONS

Responses With Limited Effectiveness (CONTINUED)

- **Requiring alarm monitoring companies to make two calls to owners of activated systems before calling police, commonly known as Enhanced Call Verification (ECV).** Most jurisdictions require alarm monitoring companies to make a single contact with the owner of an activated alarm system to learn whether the alarm was inadvertently set off during routine operations (e.g., arming or disarming the system). A practice labeled "enhanced call verification" requires monitoring companies to attempt contact using two or more phone numbers (for example, an owner's home phone and cell phone) before calling police. Jurisdictions adopting this strategy have noted modest reductions (around 25 to 40 percent) in the number of false alarm calls to police. Customer satisfaction may increase because fines for police response to false alarms are avoided. However, because alarm monitoring companies generally handle customers from many jurisdictions, they may have difficulty applying multiple policies correctly. Furthermore, not all alarm companies comply with these directives, fearing liability if police are not called to the scene when a crime is in fact occurring. It is important to note that these efforts to contact the alarm owner are not the equivalent of verification. The person called may be out of town or away from the location and would have no idea if their premise was being burgled. Finally, police cannot verify or enforce the "enhanced call verification" approach.

- **Accepting dispatch cancellations.** Some police agencies will cancel a dispatch upon request by an alarm company. The alarm company cancellation is usually based on telephone, not visual, verification. This approach can lead to decreases in the number of alarm calls, but it also inadvertently increases the number of incoming calls to dispatchers, because cancellation calls must be fielded and dispatched. An evaluation of Memphis, Tennessee's, Alarm Office found that, while some alarm companies did indeed cancel alarm calls before dispatch, the practice did not have a measurable impact on the overall number of false alarms to which police were required to respond. Similarly, since Montgomery County, Maryland, enacted its alarm ordinance in 1995, alarm monitoring companies cancelled 24 percent of all requests for dispatch. While this reduced the number of false alarms to which police responded, it also increased dispatchers' workload.

- **Alerting alarm companies about false-alarm abusers.** Some police agencies contact alarm companies with the names of customers who are false-alarm abusers. This practice can reduce false alarms if alarm companies work with alarm owners to remedy the abuse. This approach depends on the alarm company's willingness to follow up with its customers, and its capacity to bring abusers into line. It works best if both the alarm companies and the abusers are charged for costs. Alerting alarm companies requires police administrative staffing and police response to all alarm calls, and it may necessitate additional police resources as the number of alarm systems rises. In addition, some alarm companies may not be willing to share customer lists with police.

http://www.popcenter.org/problems/false_alarms/summary

USDOJ RECOMMENDED SOLUTIONS

Responses With Limited Effectiveness (CONTINUED)

- **Setting criteria for temporarily suspending police response.** After a predetermined number of false alarms, some jurisdictions withhold police response to subsequent alarm activations. Other jurisdictions will not dispatch police to locations that do not have a valid alarm permit on file. Proper implementation requires quick access to the number of prior false alarms and the permit status of the location, adding responsibilities to police call dispatchers. This response can be combined with a modified verified response policy so that either the police or a private security company respond to all alarms. Alarm owners should be warned of the intent to suspend police response and should receive official notification of the suspension of services. Many jurisdictions allow owners to appeal the suspension decision and to "earn back" police response after some time. This approach can involve significant financial costs for the police in accommodating the administrative and appeal work this approach requires. In 2004, the Los Angeles (California) Police Department restructured its response to burglar alarms by 1) increasing fines, 2) suspending service after two false alarms in a rolling 12-month period, and 3) requiring alarm verification for all calls after suspension. In 2005, these changes reduced the number of alarm calls by about half, led to approximately the same cancellation rate, and required approximately half the number of alarm dispatches The approach requires a significant amount of administrative work, including alarm permitting, false alarm classes, appeals processes, and use of a collection agency for past-due accounts .

- **Publishing alarm companies' false alarm rates on websites or elsewhere.** Police can calculate and publish the false alarm rates of individual alarm companies to help potential buyers make informed decisions. This could prompt companies with higher false alarm rates to improve their practices, but requires significant police administrative work.

- **Conducting alarm users' education classes.** Some police agencies hold false-alarm classes for abusers, usually with some success. These classes typically offer information on the scope of the false alarm problem in the local area and the basic functions of alarm systems, along with maintenance procedures and other practices that can help to reduce false alarm activations. Many jurisdictions waive the fine incurred for a false alarm if the alarm owner attends the class. While some jurisdictions such as Phoenix, Arizona, and Bellevue, Washington, claim that as few as 10 percent of attendees have a subsequent false alarm, other jurisdictions such as Memphis, Tennessee, and Fort Lauderdale, Florida, have not experienced the same success level of success. The most effective alarm education efforts are done by alarm monitoring and installation companies providing on-premises instruction so that users receive hand-on training with their own equipment. Most often, however, police teach the alarm reduction classes offered. Representatives from alarm companies, arguably the group most knowledgeable about reducing false alarm calls, sometimes choose not to even attend. In general, alarm users' classes must lead to a dramatic reduction in the total number of false alarms in a given jurisdiction to pay for the personnel and administrative costs of operating the program. Further, it is debatable whether police should bear the responsibility for alarm education efforts required for using a private consumer product. The False Alarm Reduction Association and National Burglar & Fire Alarm Association created guidelines for establishing an alarm users' awareness school .

- **Lowering the call priority of alarms.** Avoiding the political issues involved in disagreeing with the alarm industry or in battling with city or county legislators, some police agencies have simply lowered the call priority for alarms (other than holdup, duress, and panic alarms). Other jurisdictions simply issue a general alert, allowing officers on patrol to respond at their discretion. This does not reduce the number of false alarms, nor does it reduce the number of alarm calls coming into a police dispatch center.

http://www.popcenter.org/problems/false_alarms/summary

USDOJ RECOMMENDED SOLUTIONS

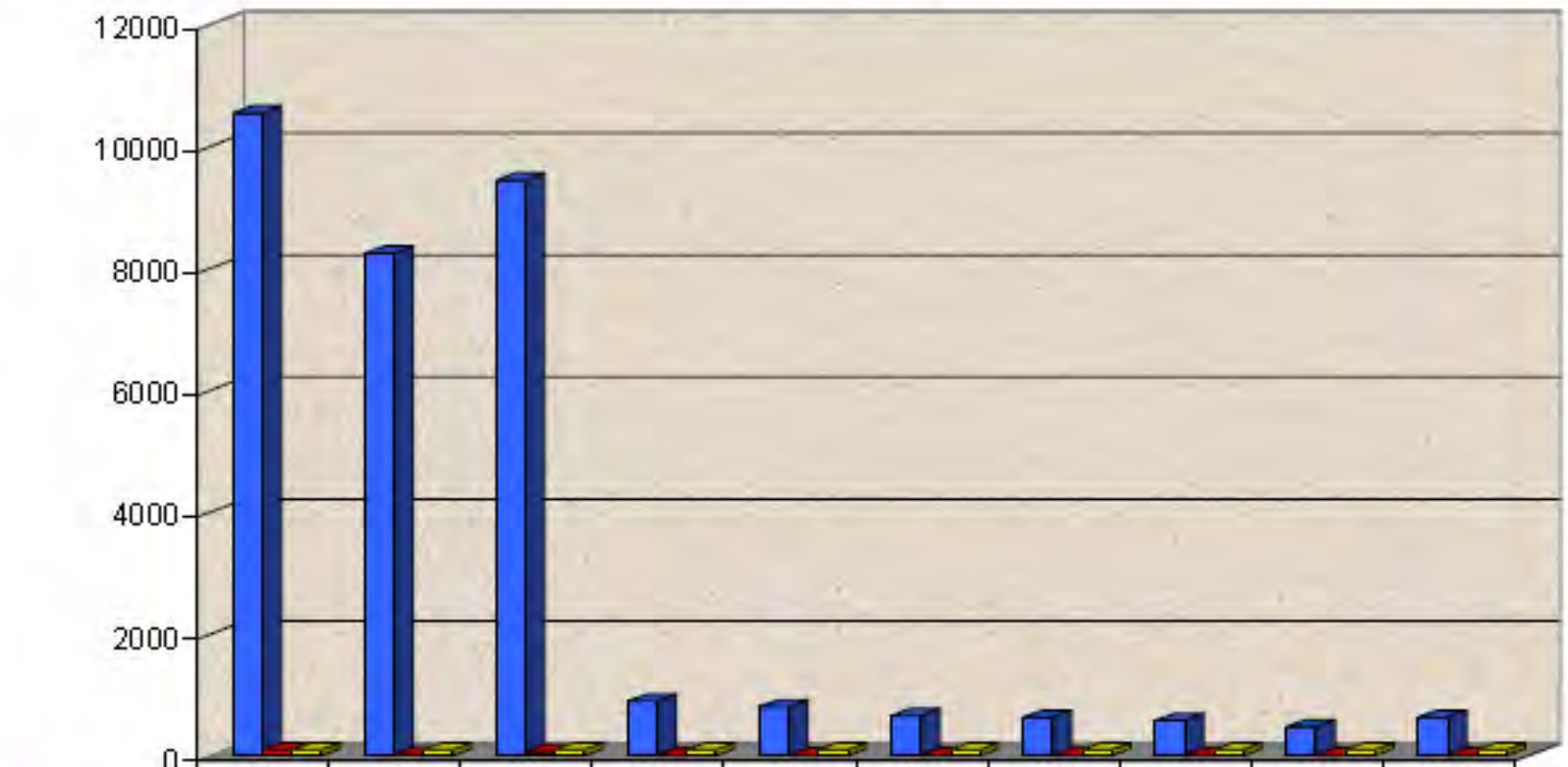
EFFECTIVE responses include:

- VERIFIED RESPONSE

-Cities adopting verified response have found enormous decreases in the number of alarm calls, typically around 90 percent, which improves police response times to other types of calls. In 2000, Salt Lake City, Utah adopted verified response using visual verification. By significantly reducing the number of calls to which officers needed to respond, the Salt Lake City Police Department gained an equivalent of five full-time officers, decreased the workload of call-takers and dispatchers, and decreased the response time to other calls for service. Area alarm industry representatives cited increased revenues (as a result of the service charge applied for verification) and similar sales levels to those before the verified response policy.

http://www.popcenter.org/problems/false_alarms/summary

VERIFIED RESPONSE RESULTS
courtesy Salt Lake City Police Department



	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Alarm Responses	10542	8236	9439	898	803	658	634	577	473	635
Valid Alarms	97	23	64	5	10	8	5	5	7	8
% False	99	99	99	99	99	99	99	99	98	99

Verified Response Began 12-1-2000

VERIFIED RESPONSE

- Officers will respond if there is audio, video, or personal verification of criminal activity

- Alarm and/ or private security companies would be encouraged to perform this task for a reasonable cost

  -Enhanced business opportunities/ jobs

- Human-activated alarms (panic, duress, robbery, and medical) as well as fire alarms would continue to be serviced as normal, although ~99% of these continue to be false as well

➢ **Effectiveness**- >90% immediately and indefinitely

➢ **Response times** for priority and non-priority calls will improve

➢ **Cost=ZERO TO US:** Cost is shifted back to the private security industry and alarm companies

CITIES USING VERIFIED RESPONSE, courtesy Salt Lake City Police Department

CITY	YEAR	POPULATION
Las Vegas, NV	1991	1 million
Lane County, OR	1999	300,000
Arvada, CO	2000	95,000
West Valley City, UT	2000	100,330
Salt Lake City, UT	2000	184,000
Henderson, NV	2001	145,000
Eugene, OR	2002	117,155
Victoria, BC, Canada	2003	78,000
Murray, UT	2003	65,000
Thurston County, WA	2003	252,264
Loveland, CO	2004	60,000
Salem, OR	2004	118,355
Winnipeg, MN, Canada	2004	633,451
Yakima, WA	2004	60,850
Westminster, CO	2004	90,000
Breckenridge, CO	2004	4,540
Broomfield, CO	2004	34,756
Lakewood, CO	2004	135,000
Burien, WA	2004	30,000
Milwaukee, WI	2004	629,296
Aurora, CO	2004	222,103
Bellingham, WA	2005	62,000
Fremont, CA	2005	200,000
Turlock, CA	2006	68,549
Modesto, CA	2006	201,165
Madison, WI	2007	233,209
Fontana, CA	2007	196,069
Ruidoso, NM	2008	8,029
Indio, CA	2010	76,036
Cathedral City, CA	2010	51,200
Wheatridge, CO	2010	31,242
Stockton, CA	2011	291,707
Detroit, MI	2011	713,777
San Jose, CA	2011	945,942

ISSUES FOR CONSIDERATION

- ALL of these alarm responses have been the result of a public entity servicing a private contract-are there anti-donation issues? Blackstone and Hakim at Temple University have studied this issue extensively over the past 10 years.

- An estimated 13.9 percent of the Las Cruces population (residential and business) has been tasking 100 percent of the taxpayers to service these contracts with near ZERO benefit to the public at large (*source-local alarm industry estimate of alarmed premises, NM Taxation and Revenue Department, and 2010 U.S. Census data)*

- Is this a reasonable use of our limited resources?

POSSIBLE COURSES OF ACTION

- Do nothing and allow the problem to continue impacting public safety and the community

- Tracking and/ or penalizing false alarm abusers by the City in conjunction with ECV and other "limited effectiveness" strategies

  -Example: False Alarm Unit; with or without outsourcing of software and services

  -Funding issues?

- Verified Response for Burglary Alarms

  -Mandatory Private Security response in ordinance?

  -Some sections of CLC alarm ordinance (chapter 4) would require modification or repeal

QUESTIONS??

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New Mexico
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Since
1928
Community Partnership

Salt Lake City Police Department

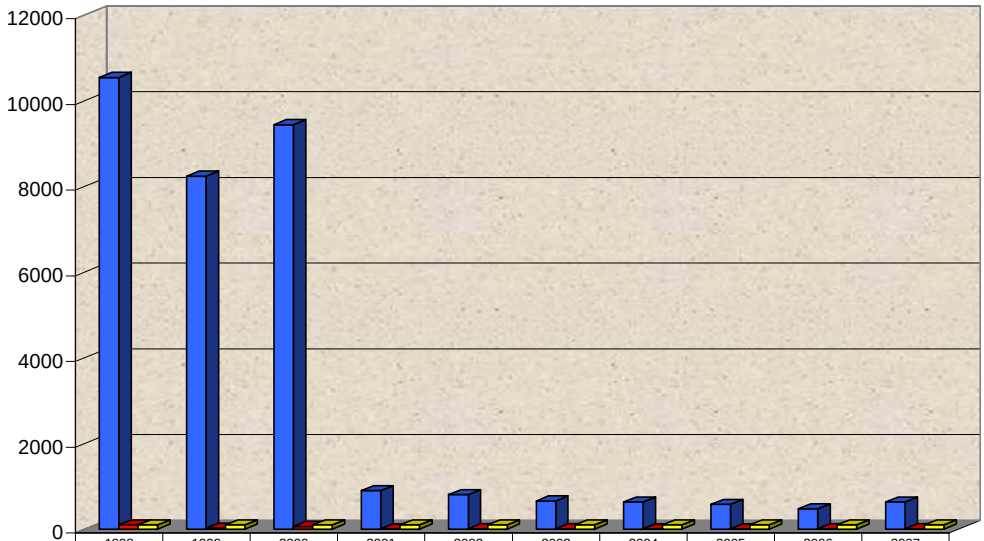
Verified Response: The False Alarm Solution

Verified Response (definition): requiring an eye-witness verification of an alarm activation before police are dispatched.

Verified Response is designed to reduce police response to alarm signals that traditionally have proven to be 98 - 99% false throughout this nation. It is not designed, nor is it intended, to deal with property crimes. A traditional alarm system can only detect motion – not criminal intent.

Graph 1 indicates the dramatic reduction of police response to alarm signals without compromising public safety.

Salt Lake City Police Department
Alarm Responses



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Verified Response Began 12-1-2000

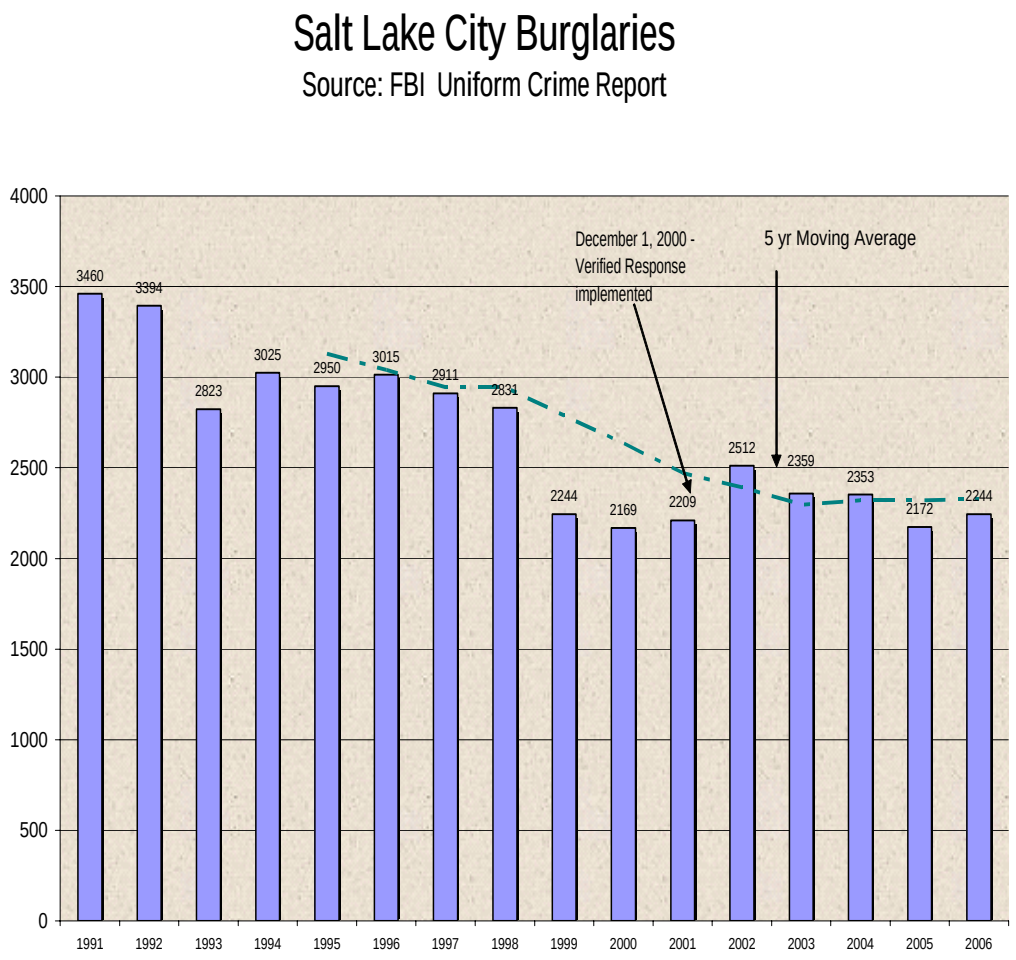
The Verified Response ordinance became effective on December 1, 2000. Our department immediately experienced an unprecedented 90% reduction in alarm responses. Past efforts to reduce the volume of false alarms through permits, warnings, fines and suspensions had only a modest effect. Police response to alarms was most effective and efficient when it was first verified that alarm activation was indicative of suspicious activity. Private security guards are ideally suited to make this initial verification. Police continue to respond to human-activated alarms such as robbery, panic and duress which continue to be 99% false.

In the first year, Verified Response freed 8,482 officer hours which could then be redirected to other police priorities and also saved $508,920 in associated personnel costs.

This program has received recognition from the Herman Goldstein Problem Oriented Policing Award, Innovations in American Government and the IACP Webber Seavey Award.

Verified Response has been a win-win for our citizens and our department. Due to the low priority of alarm signals, private guard response time to alarm activations has been much quicker than police response. Police have been able to reduce the response time to high priority emergency calls, including panic, robbery and duress alarms, by nearly one minute. Most citizens will pay as little as an additional $5 per month on their monitoring account for guard response, rather than the former $100 false alarm fines. Most importantly, our officers were able to redirect time spent on answering false alarm signals to other public safety concerns.

(Graph 2. Source: FBI Uniform Crime Report)



LAS CRUCES POLICE DEPARTMENT

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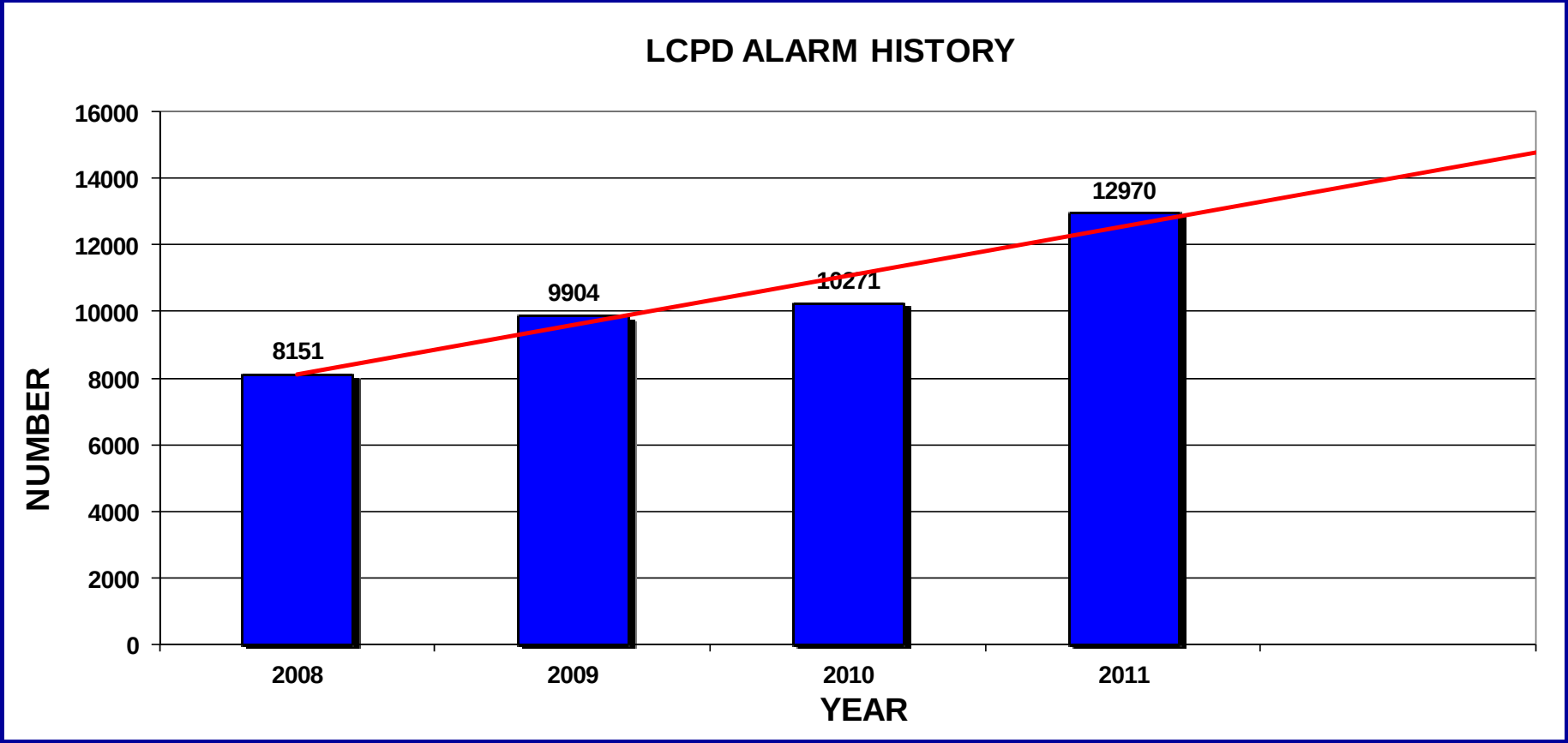

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GOVERNMENT RESEARCH

The Effectiveness of Burglar Alarms

- **Reliability and Efficiency of Burglar Alarms**
- **Studies from both the United States and the United Kingdom**
- **Do burglar alarms account for burglary declines in the United States?**
- **Are alarms an efficient and effective way to catch burglars?**
- **Does available research provide support for alarms' value in catching burglars?**

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USDOJ RECOMMENDED SOLUTIONS

Response Not Recommended

- Providing an emergency police response to unverified burglar alarm calls. A number of police agencies still respond to alarm calls with their highest priority, often referred to as “priority one,” authorizing the swiftest response to the call. The research does not support this level of response due to the high rate of false alarms. In addition, this approach does nothing to address the underlying causes of false alarms.
  - LCPD and MVRDA currently classify all alarms as “priority one” calls

http://www.popcenter.org/problems/false_alarms/summary

USDOJ RECOMMENDED SOLUTIONS

Responses With Limited Effectiveness

- **Establishing an ordinance requiring owners to obtain alarm permits and to pay escalating fines for false alarms.**
- **Setting a cost recovery-based fee for all false alarm calls.**
- **Charging permit fees and fines directly to alarm companies.**
- **Outsourcing the administration of permits, fines, and fees.**

http://www.popcenter.org/problems/false_alarms/summary

USDOJ RECOMMENDED SOLUTIONS

Responses With Limited Effectiveness (CONTINUED)

- **Requiring alarm monitoring companies to make two calls to owners of activated systems before calling police, commonly known as Enhanced Call Verification (ECV).**
- **Accepting dispatch cancellations.**
- **Alerting alarm companies about false-alarm abusers.**

http://www.popcenter.org/problems/false_alarms/summary

USDOJ RECOMMENDED SOLUTIONS

Responses With Limited Effectiveness (CONTINUED)

- **Setting criteria for temporarily suspending police response.**
- **Publishing alarm companies' false alarm rates on websites or elsewhere.**
- **Conducting alarm users' education classes.**
- **Lowering the call priority of alarms.**

http://www.popcenter.org/problems/false_alarms/summary

USDOJ RECOMMENDED SOLUTIONS

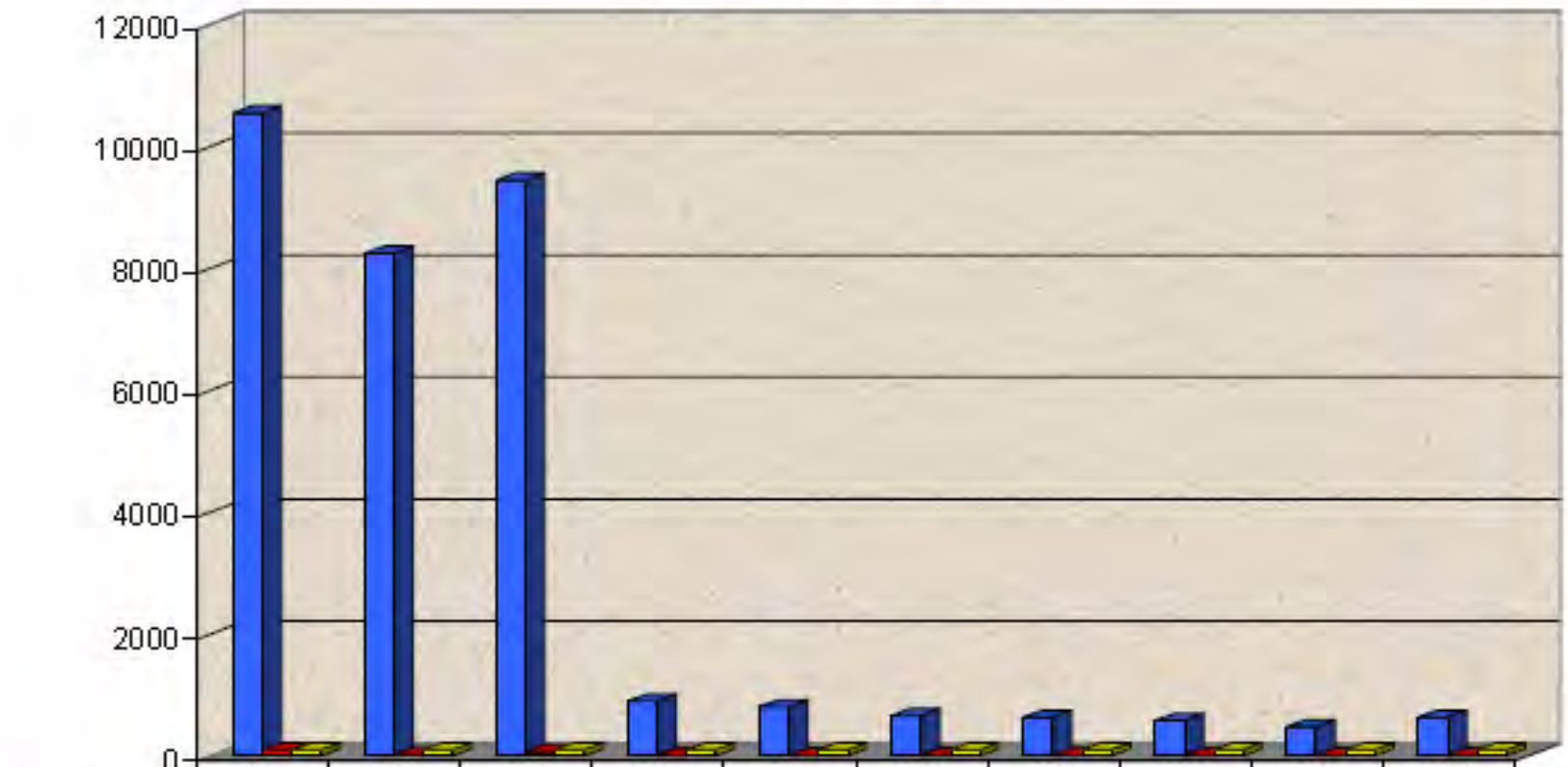
EFFECTIVE responses include:

- VERIFIED RESPONSE

-Cities adopting verified response have found enormous decreases in the number of alarm calls, typically around 90 percent, which improves police response times to other types of calls. In 2000, Salt Lake City, Utah adopted verified response using visual verification. By significantly reducing the number of calls to which officers needed to respond, the Salt Lake City Police Department gained an equivalent of five full-time officers, decreased the workload of call-takers and dispatchers, and decreased the response time to other calls for service. Area alarm industry representatives cited increased revenues (as a result of the service charge applied for verification) and similar sales levels to those before the verified response policy.

http://www.popcenter.org/problems/false_alarms/summary

VERIFIED RESPONSE RESULTS
courtesy Salt Lake City Police Department



	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Alarm Responses	10542	8236	9439	898	803	658	634	577	473	635
Valid Alarms	97	23	64	5	10	8	5	5	7	8
% False	99	99	99	99	99	99	99	99	98	99

Verified Response Began 12-1-2000

VERIFIED RESPONSE

- Officers will respond if there is audio, video, or personal verification of criminal activity

- Alarm and/ or private security companies would be encouraged to perform this task for a reasonable cost

  -Enhanced business opportunities/ jobs

- Human-activated alarms (panic, duress, robbery, and medical) as well as fire alarms would continue to be serviced as normal, although ~99% of these continue to be false as well

➢ **Effectiveness**- >90% immediately and indefinitely

➢ **Response times** for priority and non-priority calls will improve

➢ **Cost=ZERO TO US:** Cost is shifted back to the private security industry and alarm companies

CITIES USING VERIFIED RESPONSE, courtesy Salt Lake City Police Department

CITY	YEAR	POPULATION
Las Vegas, NV	1991	1 million
Lane County, OR	1999	300,000
Arvada, CO	2000	95,000
West Valley City, UT	2000	100,330
Salt Lake City, UT	2000	184,000
Henderson, NV	2001	145,000
Eugene, OR	2002	117,155
Victoria, BC, Canada	2003	78,000
Murray, UT	2003	65,000
Thurston County, WA	2003	252,264
Loveland, CO	2004	60,000
Salem, OR	2004	118,355
Winnipeg, MN, Canada	2004	633,451
Yakima, WA	2004	60,850
Westminster, CO	2004	90,000
Breckenridge, CO	2004	4,540
Broomfield, CO	2004	34,756
Lakewood, CO	2004	135,000
Burien, WA	2004	30,000
Milwaukee, WI	2004	629,296
Aurora, CO	2004	222,103
Bellingham, WA	2005	62,000
Fremont, CA	2005	200,000
Turlock, CA	2006	68,549
Modesto, CA	2006	201,165
Madison, WI	2007	233,209
Fontana, CA	2007	196,069
Ruidoso, NM	2008	8,029
Indio, CA	2010	76,036
Cathedral City, CA	2010	51,200
Wheatridge, CO	2010	31,242
Stockton, CA	2011	291,707
Detroit, MI	2011	713,777
San Jose, CA	2011	945,942

ISSUES FOR CONSIDERATION

- ALL of these alarm responses have been the result of a public entity servicing a private contract-are there anti-donation issues? Blackstone and Hakim at Temple University have studied this issue extensively over the past 10 years.

- An estimated 13.9 percent of the Las Cruces population (residential and business) has been tasking 100 percent of the taxpayers to service these contracts with near ZERO benefit to the public at large (*source-local alarm industry estimate of alarmed premises, NM Taxation and Revenue Department, and 2010 U.S. Census data)*

- Is this a reasonable use of our limited resources?

POSSIBLE COURSES OF ACTION

- Do nothing and allow the problem to continue impacting public safety and the community

- Tracking and/ or penalizing false alarm abusers by the City in conjunction with ECV and other "limited effectiveness" strategies

  -Example: False Alarm Unit; with or without outsourcing of software and services

  -Funding issues?

- Verified Response for Burglary Alarms

  -Mandatory Private Security response in ordinance?

  -Some sections of CLC alarm ordinance (chapter 4) would require modification or repeal

QUESTIONS??

Professionalism • Respect • Integrity • Dedication • Excellence
OFFICER
LAS CRUCES
POLICE
LAS CRUCES
New Mexico
Serving
Since
1928
Community Partnership

Verified vs. Enhanced Verified Alarm Systems – A

Mesilla Valley Regional Dispatch Authority

False Alarm Impact on Operations & Community

January 2012

Overview

- How does MVRDA handle Alarm Calls?
- Alarm Processing Times & Frequency
- False Alarm Concerns

How an Alarm is Handled

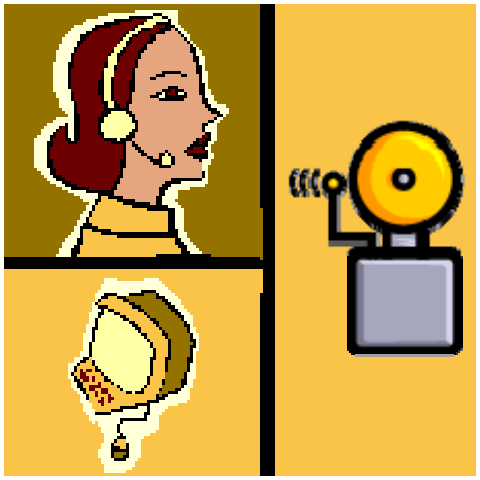
1. Silent or audible alarm at resident or business is activated by intruder, occupant, or event.

How an Alarm is Handled

2. Alarm is sent via telephone, internet, or radio waves to a Commercial Alarm Monitoring Company

How an Alarm is Handled

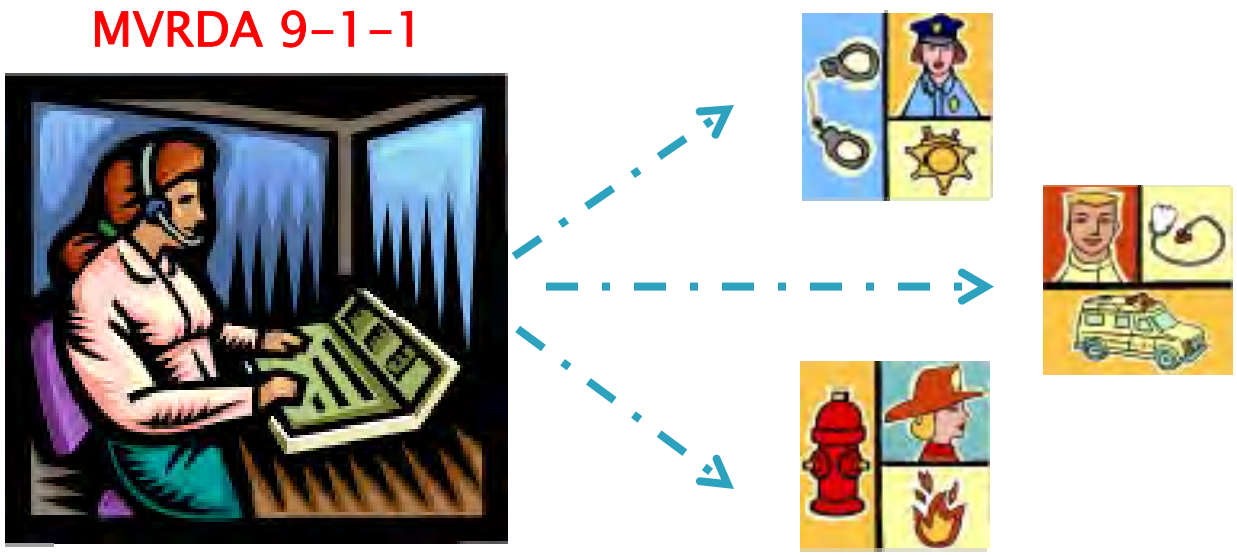
AMCE Alarms Inc.



MVRDA 9-1-1

3. Alarm Company calls MVRDA to report alarm. MVRDA gathers dispatch information.

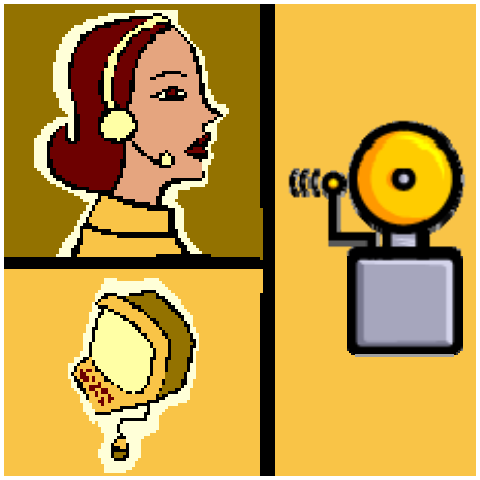
How an Alarm is Handled



4. MVRDA dispatches Public Safety Responders to the Alarm.

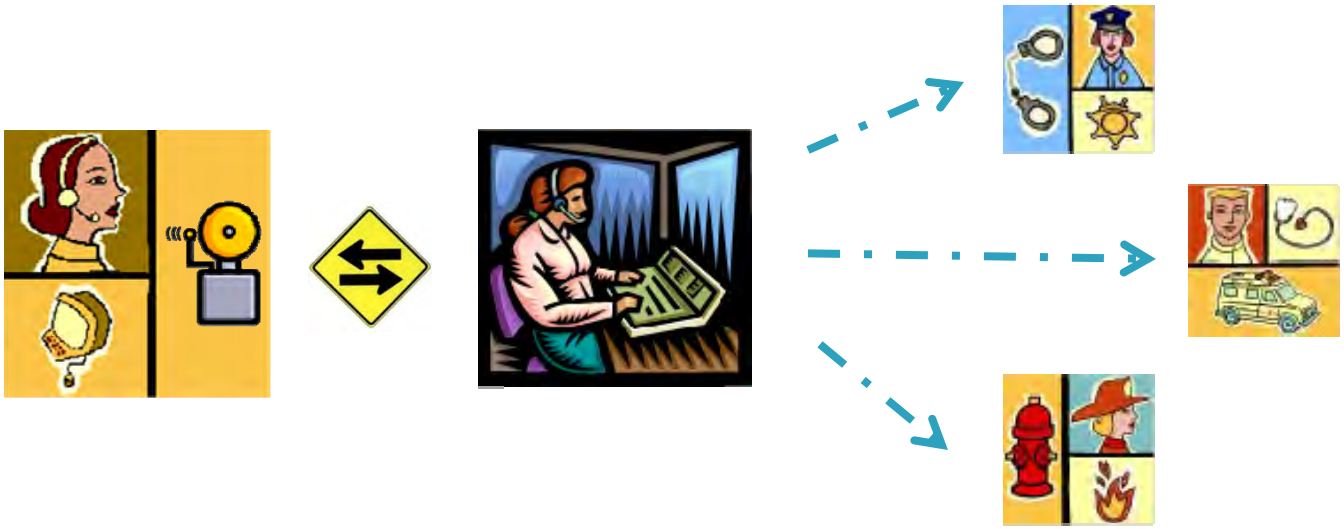
How an Alarm is Handled

AMCE Alarms Inc.



5. Meanwhile… Alarm Company attempts to validate alarm by calling property owner or responsible party

How an Alarm is Handled



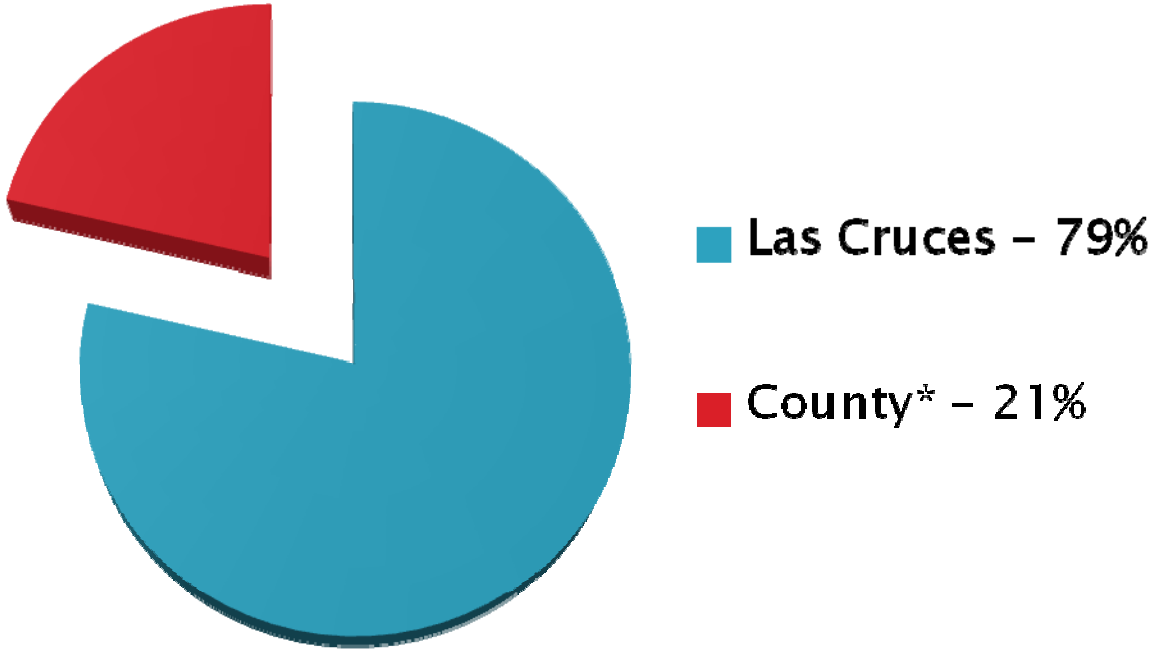
6. MVRDA may receive update from Alarm Company and updates Responders.

Alarm Processing Time

- From Initial Call to Dispatch
  - Alarm call takes approximately 1 minute to process
  - May take up to 5 minutes if information not readily available from Alarm Company
  - One call taker dedicated to the telephone call
- From Dispatching to Clear
  - Alarm call may tie up field units for an hour

Alarm Frequency

15,578 Alarm Calls in 2011



*Includes Hatch, Mesilla & Sunland Park

False Alarm Concerns

- Alarm Companies notify MVRDA <u>before</u> an alarm is verified
  - Responders automatically dispatched
  - Call back information not always available from alarm company
  - MVRDA staff spends time on call backs or trying to locate responsible party

False Alarm Concerns

- Unverified Alarms Tie Up Resources
  - Responders responding to Alarms are not available for other calls
  - MVRDA staff often involved in call backs to residence or business (Alarm Companies do not always call MVRDA back)
  - MVRDA staff on phone with unverified alarm calls cannot answer other 9-1-1 calls

False Alarm Concerns

- Cost in Man Hours
  - Approximately 286 Phone-Hours dealing with Alarm calls in 2011
  - Additional hours added when call backs taken into consideration
  - 9-1-1 Call volume continues to increase annually. Increase in unverified alarm calls impact ability to answer 9-1-1 calls.

Questions?

Hugo Costa Jr., ENP
Director

Verified vs. Enhanced Verified Alarm Systems – B

Las Cruces False Alarm Reduction Best Practices Plan and Presentation

New Law Video

Alarm Management Solutions(approx. 12 min)

www.siacinc.org

http://www.youtube.com/watch?v=3kCTAaOiOcM

Model Ordinance

- Permit/Registration
- ECV
- Enforce Fines

“Informed Responses to Common Criticisms”

A. Alarm calls are 98% false.

#1- Alarm systems are designed to deter an event from happening.

#2- When alarm systems fail to deter an event they are designed to warn the occupants that an event is occurring.

#3- If the attack continues the system is designed to minimize the risk to lives and property.

#4- The final design function is to summon assistance, in preference a well trained, sworn law enforcement official.

B. A small and elite percentage of the community is receiving a disproportionate level of service.

C. By restricting response we will be able to save "*X*" man hours which we will be able to redirect to other missions.

D. Responding to alarm calls takes officers away from other more important calls.

E. A first response by a third party will not have a negative impact on the public.

F. Requests for alarm response represent over 20% of the total call load.

G. Alarm calls rarely result in an apprehension.

Hand Outs

- EVC
- Video monitoring and alarm dispatch reduction
- Rutgers Study
- Salt Lake City Study

Success in Reduction of False Alarms

- Oakland, CA
- Kirkland, WA
- Marietta, GA
- Lakewood, CO
- Spokane, WA
- Olympia, WA

City of Oakland
Security Alarm Program

History

In 2009, The City of Oakland Police Department examined its calls-for-service workload to determine whether calls could be handled more efficiently. The data indicated that the department was responding to a large number of false alarms. In addition, due to some long term staff retirements and transfer of some duties the city's old false alarm program was no longer working effectively. A decision was made to improve the alarm program by working with the industry to obtain current alarm customer records, insure all had valid alarm permits and outsource the city's alarm management function to a 3rd party company. The ordinance was revised and became effective on July 28th, 2009 with an additional amendment in 2010 relating to alarm permit renewal fees being collected by their outsource company in 2010.

Oakland Alarm Ordinance

In 2009, there were 13,000 identified alarm users in our database. This year, staff identified over 19,000 additional alarm users that were not participating in the alarm program bringing the current number of identified alarm users in 2011 to over 32,000 (+246%). After three invalid alarm dispatches in a twelve-month period the police department will not respond without eyewitness, video or audio confirmation of criminal activity.

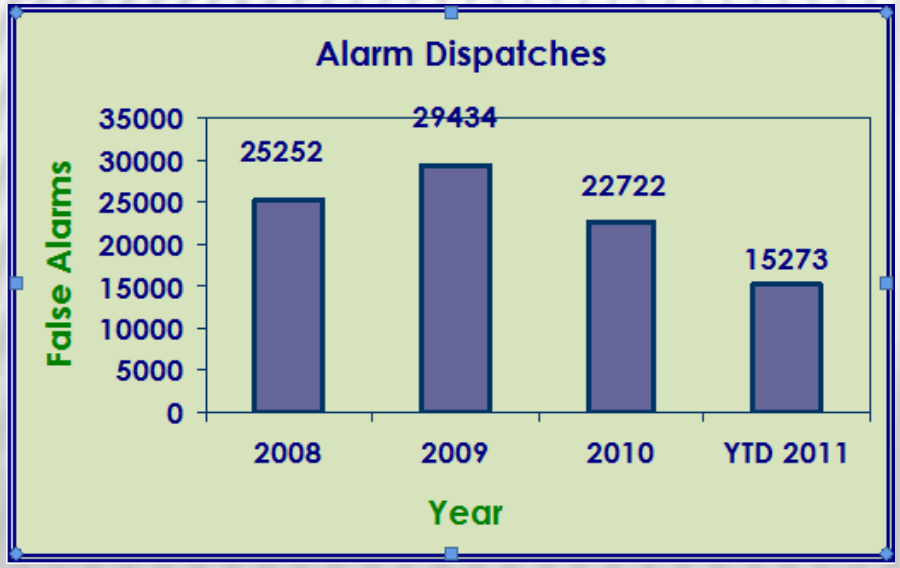
Key Points to Reducing Dispatches

- **Enhanced call verification (2-call)**
- **No "freebies" – all false alarms are charged**
- **Consumer education - online school**
- **Outsource alarm administration**
- **Provided citizens the ability to pay alarm invoices on-line**

City of Oakland
Security Alarm Program

Successful Results

The City of Oakland **reduced alarm dispatches 22.8%** from 2009 to 2010 *(see graph below).* In addition, City **collected $1,034,230 alarm-related fees** in FY 2009-10. With the help of third party administration and good enforcement of the ordinance the city expects to end the fiscal year with substantially less alarm dispatches and increased revenue.



For more information contact:

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City of Kirkland
Security Alarm Program

History

In 2006, The City of Kirkland Police Department began exploring ways to improve their alarm program. Their false alarm management employee joined FARA and became active in local alarm association. Drawing from other successful ordinances in Washington and the knowledge gained from FARA and ESA, the department crafted an ordinance based on the recommended Best Practices.

Alarm Ordinance

The Kirkland program requires registration of alarm businesses, annual registration of alarm sites, and Enhanced Call Verification. It provides one free response and fines that start at $50 with the 2nd false alarm, then $100, $150, & $200. Police Response is Suspended with the 6th false alarm. The program is well managed by an on-staff person and ECV is enforced by the 911 center.

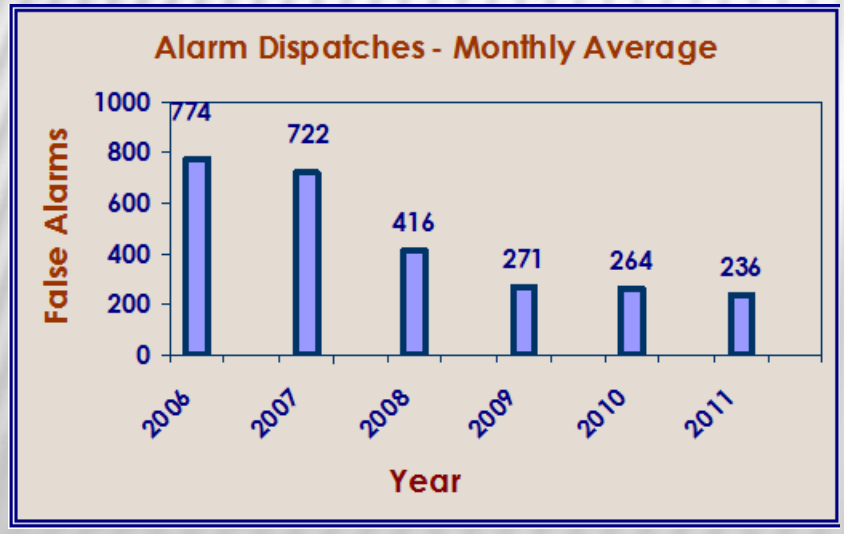
Key Points to Reducing Dispatches

- **Enhanced call verification (2-call)**
- **Annual alarm Site Registration**
- **City Administered – ECV enforced**
- **One Free Response with escalating false alarm fines**
- **Registration suspension after six alarms**

City of Marietta
Security Alarm Program

Successful Results

By the end of the first full year under the program Marietta experienced a 46% reduction in unnecessary police dispatches. (See the chart) By the end of 2009 the reductions had improved to 65%. The projected result for 2011, based on results through the first 5 months, shows an **overall reduction of 70% from 2007 levels**.



For more information contact:
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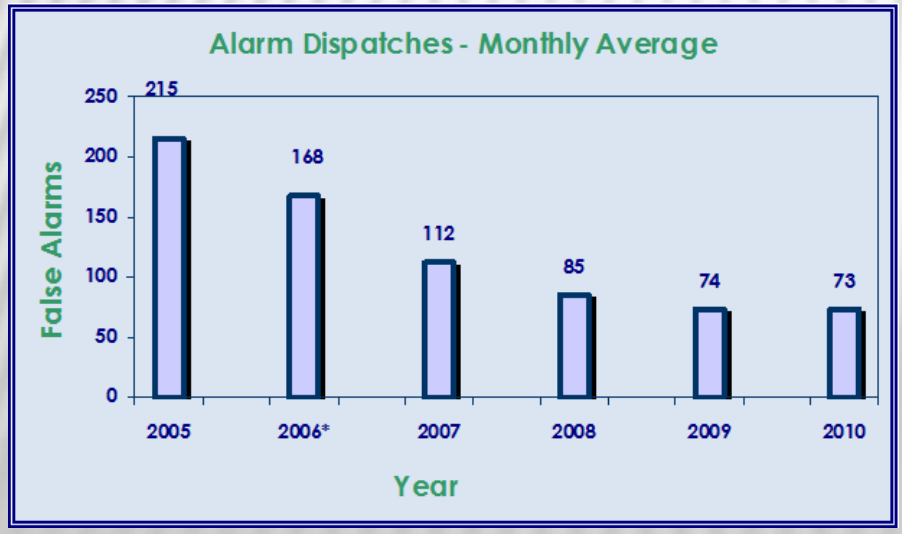
dflynn@mariettaga.gov

City of Kirkland
Security Alarm Program

Successful Results

Kirkland has **reduced false alarms by 66**% from its pre-ordinance level in 2005 *(see graph below)*. The police responded to an average of 215 alarms per month in 2005. In 2010 that number had dropped to 73 per month. Their new ordinance went into effect July 1, 2006.



For more information contact:

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pball@kirklandwa.gov

City of Marietta
Security Alarm Program

History

In 2007, the Marietta Police Department did a thorough examination of its calls-for-service. Analysis from that study indicated that approximately 10% of total calls for service were for alarm calls. Since officer-safety protocols require dispatching two officers to all alarm calls, this was an important category of call where reductions would have a significant impact on reducing officer time and overall calls for service. A new alarm ordinance was passed in July 2007 and made effective January 1, 2008 to address this problem. Advance notice of the ordinance had a positive pro-active response from our citizens and local alarm companies. As a result, the effects of the new ordinance were almost immediate. Marietta has a population of approximately 70,000.

Marietta Alarm Ordinances

The new alarm ordinance includes alarm registration, Enhanced Call Verification (ECV), and progressive fines beginning with the 3rd false alarm each year. The **ECV requirement** and the act of **cancelling alarm dispatches** by the monitoring company when it is determined that a dispatch is no longer necessary have been very important contributors to the overall success of the program.

Key Points to Reducing Dispatches

- **Enhanced call verification (2-call)**
- **Annual alarm registration**
- **Consumer and alarm company cooperation**

City of Lakewood
Security Alarm Program

History

Drawing on the success of two neighboring jurisdictions, in 2009 the Lakewood, Washington Police Department adopted a new ordinance aimed at reducing false alarms and providing cost recovery. They ultimately modeled their ordinance after those of Olympia and Pierce County, Washington. Lakewood has a population of about 60,000. The ordinance went into effect on May 15, 2009.

Lakewood Alarm Ordinances

The ordinance includes all of the Best Practices -annual registration, mandatory call verification prior to dispatch (ECV), modern control equipment, no free responses, suspended response after four false alarms, and 3rd Party Administration. In addition to the Best Practices, the ordinance also requires receipt of sequential alarms.

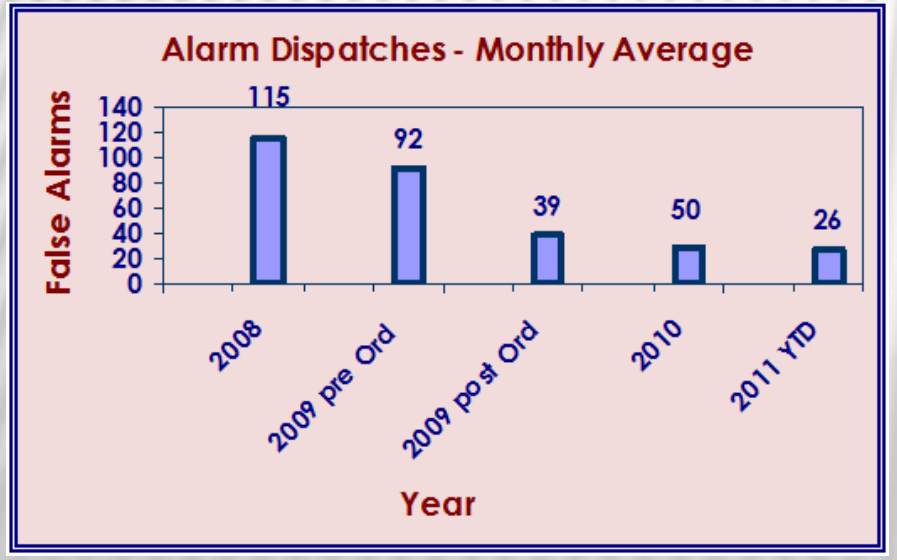
Key Points to Reducing Dispatches

- **Enhanced call verification (2-call)**
- **Installation of modern equipment (ANSI SIA CP-01)**
- **3rd Party Administration**
- **No Free Responses – all false alarms are charged**
- **Registration suspension after four alarms**

City of Lakewood
Security Alarm Program

Successful Results

In the first half year under the new ordinance Lakewood realized **immediate reductions of 58%** in unnecessary police dispatches *(see graph below)*. By the end of 2010, the first full year under the ordinance, **dispatches were down by 76%** compared to 2008 levels. Use of a 3rd party administrator has relieved the department of a large part of the program's administrative burden, including the billing and collection of fines and fees.



For more information contact:
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City of Spokane
Security Alarm Program

History

In 2005 and 2006, The City of Spokane Police Department began looking for ways to update and improve their alarm ordinance with the goal of reducing the number of unnecessary police dispatches and improving their collection rate of fines and fees. The Department met with members of the local alarm industry to develop a cooperative approach to false alarm reduction. Alarm professionals recommended adoption of the industry developed *Best Practices* and pointed to the City of Olympia's promising results from their 2005 ordinance. In January 2006, an ordinance mirroring that of Olympia, Washington was adopted and made effective May 2006. By the end of 2007, the first full year under the new rules, responses were down by 65%. In 2009 Spokane began enforcing Enhanced Call Verification and Registration at the point of dispatch. If the monitoring company had not performed their two-call verification (ECV) the police would not respond. This change in enforcement netted another 41% reduction in unnecessary police responses from 2008 levels. By 2009, the new ordinance had the overall result of reducing police responses from over **600/month** pre-ordinance to just over **100/month**.

Key Points to Reducing Dispatches

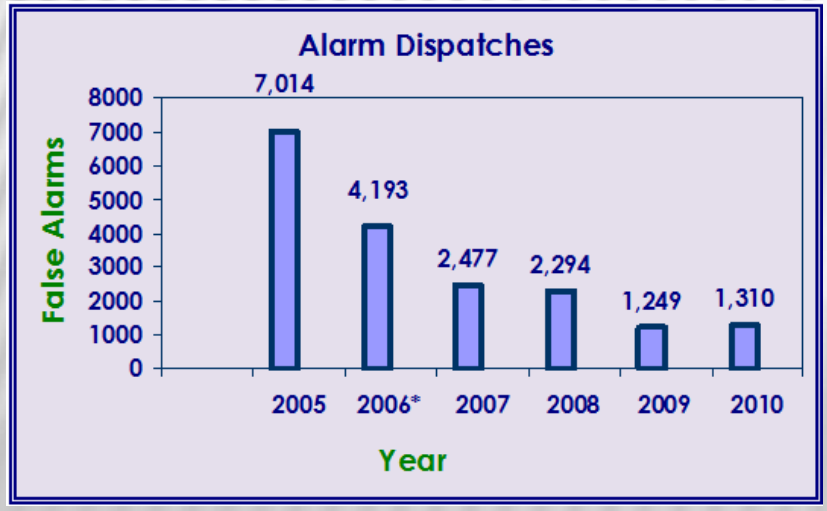
- **Enhanced call verification (2-call)**
- **No Free Responses – all false alarms are charged**
- **Enforcement of ECV & Registration**
- **Suspended Response with 4th False Alarm**
- **Outsource alarm administration**

City of Spokane
Security Alarm Program

Alarm Ordinance

Spokane has a population of **210,000**. For 2011, there are **17,373 registered accounts** – 70% of which are residential. (Before adoption of the ordinance the city estimated that they had 6,000 systems). Spokane requires annual registration & the fee is reduced for anyone who did not have a false alarm the prior year. Enhanced Call Verification is enforced. Police will not respond unless the verification calls have been made.

Spokane has **reduced alarm dispatches 81.5%** from 2005 to 2010 *(see graph below)*. By Utilizing 3rd Party Administrator for the program, their **collection of fines and fees has been over 93% -**with **75% of the funds coming back to the city**.



For more information contact:

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False Alarm Reduction Unit
Spokane Police Department
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jgoldman@spokanepolice.org

City of Olympia
Security Alarm Program

History

In 2003, The City of Olympia Police Department began examining its calls-for-service workload to determine whether calls could be handled more efficiently. The data indicated that the department was responding to a large number of false alarms – calls that did not increase public safety and that detracted from valuable police service in other areas. The Department asked the alarm industry and interested citizens to partner with the police to develop new ordinances aimed at reducing false alarms. After working for a year and a half, two ordinances were drafted and signed into law. The new ordinances went into effect on January 1, 2005 and the program was fully operational in June 2005.

Olympia Security Alarm Ordinances

The ordinances, OMC 5.55 and 16.46, address both the alarm industry and alarm users. Key to the new ordinances is the relationship between security alarm businesses and their customers. The companies and their customers must work together to ensure that proper call verification procedures are followed, that equipment is in good working order, and that customers are trained to use their equipment correctly.

Key Points to Reducing Dispatches

OMC 5.55:

- **Enhanced call verification (2-call)**
- **Installation of modern equipment (ANSI SIA CP-01)**
- **Consumer education**

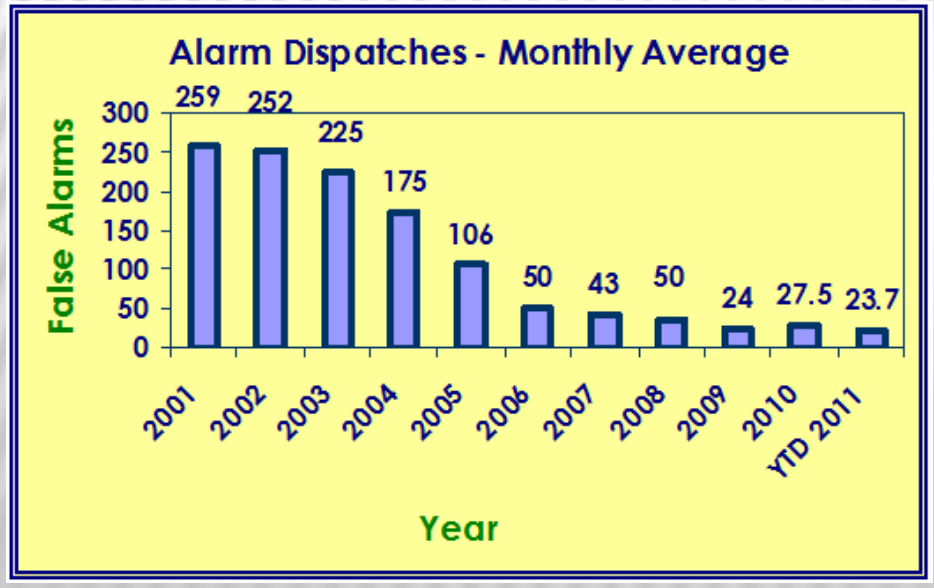
OMC 16.46

- **No "freebies" – all false alarms are charged**
- **Registration suspension after four alarms**

City of Olympia
Security Alarm Program

Successful Results

The City of Olympia has **reduced false alarms by over 89.5%** from its initial 2003 levels *(see graph below)*. In addition, since 2008 the City **collected an average of 95.1% of the alarm-related fees**. The police officers enjoy responding less often to these non-events and the public has responded favorably. By contracting with a third party vendor for the tracking and billing of false alarms, the City was able implement the program quickly while providing alarm response and great service to our citizens. These accomplishments have allowed the Olympia Police Department to be both more effective and efficient.



For more information contact:
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Administrative Secretary
Olympia Police Department
360.753.8147
mwieland@ci.olympia.wa.us

Albuquerque, Santa Fe, and hundreds of other cities have the same problem and have found the most measurable reduction in false alarms and costs by using SIAC and the information presented here today.