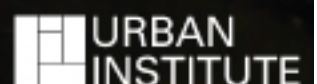




OPPORTUNITIES FOR POLICE COST SAVINGS WITHOUT SACRIFICING SERVICE QUALITY: REDUCING FALSE ALARMS



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Preface

The Urban Institute has undertaken a series of research reports on local and state government approaches to cost saving that minimize negative impacts on service quality, or even improve it. Most local and state governments are under considerable budget pressure and the end is not in sight. The work is intended to identify practical approaches based on evidence from local or state governments that have had actual experience with the approach.

Police Responding to Citizen and Business Security Alarms

This report focuses on ways to reduce calls to police for what turn out to be false alarms from security systems. In many cities, such false alarms often number in the tens of thousands each year, waste millions of dollars of officer time, and detract from attention to reducing crimes.

We welcome feedback from local or state governments on the usefulness of this report, and information on other ways police departments have obtained cost savings relating to false alarms. The information provided here was primarily drawn from the experiences of three local governments: Montgomery County (MD); Seattle (WA); and Salt Lake City (UT).

The report is presented in two sections. The first provides a summary of the findings for public officials. The second provides detailed findings for those wanting more specific information on the various options for reducing the costs of false alarms, and details on how a series of approaches was implemented over time in each jurisdiction examined.

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SUMMARY

The False Alarm Response Issue

Police departments across the nation are responding to millions of false alarms from citizen and business security systems. They are wasting thousands of police years to investigate the false alarms, at a cost of many millions of dollars. There is potential to save substantial costs, or alternatively, to save considerable police officer time by modifying procedures for dealing with false alarms, as has already been done by many cities and counties.

Montgomery County, Maryland Police Department is saving about \$6 Million a year, by our estimate, using a set of approaches that reduced police responses to false alarms from security systems by 60 percent. They had 44,000 false alarm responses in 1994 and 16,000 in 2011, a period during which the number of alarms systems increased significantly. They don't need about 30 officer-years it would have taken annually to investigate what turn out to be false alarms. They not only recovered start-up costs for their false alarm unit but are netting about a half million dollars in fees above the program cost. The key aspects of their program was registration of alarm users, required stronger vetting of alarm calls by the alarm companies, and fines for the remaining false alarms.

Seattle, Washington likewise had an almost 60 percent drop in false alarms from a set of procedures they developed that were somewhat similar to those in Montgomery County. Seattle went from 25,000 false alarms police responses in 2003 to 11,000 in 2011. They are saving at least \$1.7 million a year as a result of their false alarm response reduction program. Their false alarm fees totally offset the cost of the remaining police responses.

Salt Lake City police went much further than the above two departments and required vetting in person by a guard sent by the private alarm company before police would respond. Salt Lake reduced police responses to false alarms by as astonishing 95 percent, saving at least \$500,000 per year. They had over 10,000 false alarms in 1998, and now have about 500.

Definition of False Alarms -Police departments commonly define a false alarm as a call which on investigation shows no evidence of criminal activity such as broken windows, forced doors, items missing, or people injured. Alarm systems by their very presence deter some burglaries. There is a tradeoff in using security systems among tolerating false alarms, deterring crimes, and—infrequently—catching a criminal at the scene.

Sources of False Alarms--Most false alarms come from residential and commercial security systems—what are often called burglar alarms. A small fraction of false alarms comes from “panic” alarms, systems used to summon police when a person feels threatened. These usually require pushing a button on a mobile device that might be carried, or on a stationary device. In cities for which we have data, 90-99 percent of all calls received by police as a result of alarms from security systems or panic alarms are false. Conversely, often less than two percent and sometimes less than half a percent are from crimes.

False alarms occur for a variety of reasons, often user errors by homeowners and employees; sometimes from children, visitors and others inadvertently setting them off; and sometimes from equipment problems.¹

The following information is intended for any community that has a substantial number of false alarms to which police officers respond, and wishes to reduce them.

Possible Solutions

A number of police departments have successfully implemented one or more of the following approaches to reduce false alarms. As a result, these departments spent fewer police hours responding to false alarms, and reduced net costs:

Licensing and Registration of Alarm Companies and Users. Security system installers can be licensed by the city or county or state, and then registered with police. This improves reliability of installation and compliance with codes. Typically, each alarm company pays a modest annual licensing fee. The installer's unique ID number facilitates assessing fees and fines. Usually the licensing body makes no formal review of installers' competency, though this would be desirable.

Each alarm system that is installed is required to be registered with police to ensure it was installed by a licensed company and to facilitate automated billing of fines should they be necessary. Often police policy is to not respond to alarms until newly registered systems go through a "burn-in" period, typically a week, and to not respond to any user not on the registry. Often the users pay a small annual fee to stay registered.

Vetting of Alarms by Alarm Companies before Notifying the Police. Vetting of calls by private security system personnel may include a phone call to the premises; a second call or multiple calls to the owner, property manager, or others designated by the owner; or by video or audio from the premises. Because of the extraordinary high rate of false alarms, police in some cities do not respond until an eyewitness, usually a private guard, notifies them of potential criminal activity.

Fining for False Alarms (Often Graduated by Number of Alarms from a Location). Police charge the alarm company or the user a fee for false alarms. Often fees for a specific property start after one or another threshold number of false alarms within a calendar year then are graduated upwards as the number of alarms rises. The alarm company may pass fees resulting from user error to the customer. For panic alarms, the user often is charged directly. Fees typically start at \$25–\$100 for the first charged alarm, rising as high as several thousand dollars per false alarm after a large number of alarms in one year. In extreme cases, alarm systems may be blacklisted by the police dispatch center to receive no response until the system is changed.

Requiring More Sophisticated Alarm System Technology. Some cities require multiple sensor detection, i.e., that more than one sensor in a property be triggered before an alarm is transmitted. This

¹ Causes of false alarms are not generally recorded by police departments, but there is wide consensus across police officials in the cities we studied that these are the main causes, especially user error.

might be, for example, an exterior alarm from an opened window and an interior alarm from a motion detector. That is intended to reduce alarms from a single faulty sensor, or inadvertent user error.

Offering User Education. To prevent inadvertent triggering, police may hold classes for new alarm system users or users who have had multiple false alarms. Like driver's education classes, these may be either preventive or remedial. A first fine is often waived if a class is attended. Alternatively, attendance can be banked to offset the first fee. Some police departments visit multiple offending users to educate them on site.

Reducing Initial Officer Assignment to Vet Alarms. Most police departments we examined send two officers to respond to an alarm, primarily for officer safety. Another approach is to first send one officer to check the situation, and then follow with a second or more depending on what the first finds.² Because responses to alarms usually turn out to be false alarms, and it is rare that burglars are caught after the delayed responses to alarms, this approach, would roughly halve officer hours responding to alarms, and probably not cause much reduction to safety or results.

Using various combinations and levels of enforcement of the above practices, the three police departments we examined—Montgomery County, Maryland; Seattle, Washington; and Salt Lake City, Utah—reduced false alarms by 60–95 percent. Significant reductions in false alarms³ occurred soon after new approaches were adopted.⁴ The range of reduction they experienced depended on their starting point—what was already being done voluntarily by the local alarm industry—and the stringency of actions the department and its stakeholders were willing to accept.

Potential Impacts Considered

In screening various approaches to cost reduction, we considered a number of criteria: evidence for actual reduction in hours or costs; start-up costs; impact on quality of service, impact on police and citizen safety; impact on disadvantaged populations and political acceptability.

Impact on costs—By reducing false alarms a police department can potentially save substantial costs or, alternatively make a significant amount of officer time available for other duties. Reducing false alarms typically saves on the order of 40 minutes of officer time per false alarm averted. This translates to the equivalent of about \$50-\$120 per false call averted in personnel time, fuel and vehicle wear and tear. Over several years, police departments we examined achieved a reduction of 60-95% of responses to

² We did not find an example of this, but it is analogous to sending a guard to vet the alarm.

³ We should note that when we say false alarms are reduced, it is not necessarily a reduction in the alarm systems going off, but rather whether a call is made to the police department that turns out to be false. When alarms accidentally go off but are vetted before police are notified, there technically was a false alarm but the police don't see it. So in this report when we say false alarms were reduced, we generally mean unnecessary calls to the police department.

⁴ These three departments were chosen because they had published descriptions of their programs, had data for several years before and after implementing their programs, and had up to date data on both their cost savings (after considering implementation costs) and quality of service impacts.

false alarms, and a corresponding portion of their costs. Much of the reduction comes from required or voluntary vetting of calls by the private alarm industry before passing a call to the police. The vetting costs the police little to implement other than time liaising with the alarm industry, and time spent on getting ordinances revised. Usually the city council or county board must get involved to pass or expand ordinances to require implementation of mandatory approaches and fees.

For metro police departments that have tens of thousands of false alarms annually, there can be savings of 5-20 officer years. To get the maximum reduction of false alarms requires some initial investment, typically a small civilian false alarm section of 1-4 FTEs set up to maintain an alarm registry, answer questions about the registration and fines process, and send out bills (if not outsourced to another agency or a private vendor.) In the cities examined here the cost of this unit was more than covered by fees within the first year of operation and thereafter. In Salt Lake City the unit shrank to a third of a civilian year as false alarms reduced.

Another start-up cost is software that needs to be modified in the police dispatch center, if it is desired to automate look-ups of alarm company and user registration, and automate billing of false alarms. Custom software for this purpose used to cost \$500,000 to \$1 Million. There now is off-the-shelf software available at much lower cost. At least one jurisdiction, Salt Lake City, made the changes with in-house IT staff. Some software companies at no cost to the city are willing to take over the entire process of registering companies and users, and sending bills for false alarm fees, in exchange for keeping a portion of the fees obtained. Significant reductions in false alarms also can be made without investing in software, just by making it mandatory for alarm companies to do increased vetting of alarms. Licensing of alarm companies and registration of users costs little.

Impact on service quality—An important question for the various false alarm reduction practices is whether the delay in police response from additional vetting and information taking reduces deterrence of crimes or apprehension of criminals on the scene. The answer, perhaps counter-intuitively, appears to be no. When a private alarm agency has to vet a call by phone before passing it to the police, response may be delayed by two minutes or so. However, only a small fraction of alarms are for actual crimes. Because of that, most police departments give alarms low priority, and the time for the private alarm company to vet the call would be a small increment added to the response time.

Police response to alarms is usually too late to catch anyone on the scene according to the three police departments we researched for this study. Vetting calls has had no discernible impact on burglary rates and closure rates in these cities. In fact, Salt Lake City alarm sites receive much faster response times from private guards dispatched to vet calls than they used to get from the police, because alarms are a lower priority call for the police than for the guard company. Seattle had faster police response to the remaining alarms after vetting, perhaps because the system had fewer dispatches.⁵ Criminals, especially juveniles and amateurs, may be scared off by the presence of alarm systems—both from signs outside a

⁵ A more detailed evaluation, outside the scope of this study, might examine rates of burglaries from alarmed properties before and after a new false alarm policy is implemented, rather than considering burglary and closure rates that include alarmed and non-alarmed properties. But there appears to be no easily discernible negative impact.

home or business that it has an alarm system, and from the sound when the alarm goes off, regardless of vetting policy. Criminals do not know how fast police are responding. If it were widely known that police with vetting policies respond less quickly, one might think that might weaken some of the deterrent effect. But this has not been seen in the departments we examined. Actual burglaries found when alarms have gone off have dropped sharply in Salt Lake City, perhaps because the guards' rapid response is a further deterrent.

Impact on Disadvantaged Populations—Residential burglar alarms are generally found in more affluent homes. Registration fees and false alarm fines shift the burden of paying for responses to false alarms to those who can better afford it, and leave more police hours to focus on actual crime, which tends to be higher in low-income areas.

Commercial burglar alarm systems, however, are used both by major affluent businesses wherever located and by small businesses in disadvantaged neighborhoods with high crime rates. Small businesses may have to pay more for their alarm system's monthly fee if the various vetting measures are undertaken. However, the vetting fees may be largely offset by reduced false alarm fees. It is safer when an alarm system does not cry wolf: alarms get taken more seriously, and real emergencies get responded to more quickly, especially in high crime areas. That benefits everyone.

Impact on Local Government Employees—Reducing false alarms generally seems to be desirable in the eyes of police leadership. There is risk of accidents to police officers in every unnecessary response, and it takes officers away from productive policing. Lower workloads may reduce the number of officers needed, but few officers would argue for more false alarms to save jobs.

Political Acceptance—The approaches discussed here shift some of the burden of false alarms from the public sector (police) to the private sector (alarms companies and their customers.) The main barrier to adopting a false alarm reduction program may be political—what is considered acceptable to households and businesses. People, especially those paying for alarm systems, may not like the idea of additional vetting and slower police response to alarms. Alarm system customers also might resent having to pay even a small extra charge to the private alarm system for mandatory vetting. Some could also resist added fees for false alarms, especially in communities that do not currently impose any fines. Implementing the proven approaches to reduce false alarms requires some initial effort and coordination with local councils and the stakeholders, primarily the local alarm industry and users.

Acceptance will be affected by how well the approaches are explained to the affected households and businesses. Positive experiences from communities using these approaches—such as documented here—might allay some of this concern. The police departments we examined did not find resistance by alarm users or the alarm industry to be a major barrier to stronger false alarm reduction policies. How each gradually implemented their systems for reducing false alarms is discussed in the detailed analysis section.

Reducing the false alarm problem requires a partnership between the police department and the community's alarm industry. Most of the additional vetting needed to reduce false alarms would be

done by the alarm company. Some alarm companies voluntarily vet alarms before ordinances require it. Alarm industry associations in at least some cities have supported mandatory, more stringent vetting because it levels the playing field (all companies have to do the same vetting, so all have similar costs.) Cooperation with the police is seen as good business policy by this industry. Companies also can pass their added cost for vetting to their customers. From the customers' perspective, the added cost may be less than the fines for false alarms vetting may prevent.

However, in some cities the alarm industry lobbied against added requirements, for fear of raising costs and hurting sales.⁶ All the cities we examined noted the importance of meeting with stakeholders and giving them lead time to understand the changes, and time for the industry to advise their customers.

Implementation of a new false alarm policy is likely to require local ordinance changes, unless the industry requests only voluntary changes. The changes in ordinances, or a new ordinance, would likely delay implementation some while gaining concurrence from the local council and the public. Changing ordinances may or may not be politically feasible, depending on how stringent are the practices to be adopted and how well ahead of time the police educate stakeholders—alarm companies, alarm users, the city council, and citizens—before trying to get the ordinance passed.

Concern for start-up costs is another concern that has helped delay adoption of false alarm reduction practices, even though the process can support itself through fees. We discussed above the potential for recouping start-up costs or avoiding them altogether if the process is contracted out and paid for by a percentage of what the contractor collects, so this concern can be dealt with fairly readily by noting the net costs in other cities that adopted these practices.

The remainder of this report provides considerably more detail on our findings for local governments wanting to investigate further these practices, primarily focusing on our analyses of Montgomery County, Maryland; Salt Lake City, Utah; and Seattle, Washington.

⁶ Some cities interviewed about their local alarm industry politics preferred not to be quoted in this report, but we can provide contacts to discuss the issues if so desired.

DETAILED ANALYSIS

We provide in this section more details on the security alarm process, and then discuss our findings on each of the evaluation criteria we used in our examination of the false alarm reduction practices. Finally we summarize the experiences of Montgomery County, MD; and Salt Lake City (UT); and Seattle (WA). For readers interested in the details, we also provide a more in depth discussion of the approaches taken in each of the three communities, and their results for cost saving and maintaining quality of services.

The Security Alarm Process

Typically the handling of an alarm from a security system goes something like this: When the alarm company receives an alarm from one of its customers' properties, it may first try to vet the call by telephoning the property or owner. If they do not know for sure that there is no emergency, or if the called person indeed verifies the alarm, the alarm company calls the police dispatch office. The police dispatcher classifies the alarm call as a residential or business alarm and assigns a priority to it. Usually alarms are considered third priority (no lights or sirens) because the vast majority is false.

The alarm may sit in the dispatchers' queue until higher priority calls have been handled. It then gets assigned to one or more available police units, usually ones already in the area of the property with the alarm. Typically two units are assigned for officer safety or more for a large property with many doors and windows to check. If the responding officer has reason to believe that there has been an attempted or completed illegal entry, he or she will complete an incident report. Otherwise it is reported as a false alarm.

Approaches to False Alarm Reduction

According to literature on false alarms and our discussions with a number of police departments, false alarms from security systems generally are caused by faulty installation, overly sensitive or faulty components, inadequate maintenance, or faulty user behavior (such as forgetting to shut off the alarm quickly after arriving home or after opening a business, or not informing employees, guests, or children on what triggers the alarm.) Panic false alarms also tend to come from inadvertent or inappropriate operation by users—thinking there is an intruder when there is not.

A number of cities have reduced false alarms by 60-95%, with the range depending on the starting point (how much vetting the private alarm industry was already doing voluntarily before the city stepped in), and the stringency of the approaches taken to accredit and register alarm installers, vet calls by the alarm company, and fine alarm companies or users for false alarms they cause.

Over the past 15 years police departments in the three jurisdictions examined have implemented various combinations of the approaches summarized above; often adding more stringent practices after initial successes left them with a smaller but still large number of false alarms. As can be seen in the detailed discussion of these jurisdictions, often two or more approaches were taken at the same time, making it difficult to say how much each contributed to the reduction without further analysis.

Usually alarm companies voluntarily make one or two calls to vet alarms prior to sending them to police. False alarms are not good for business—if too many, both current and potential users may turn away from them. So the industry has a vested interest in cooperating, at least to a point. To be sure the vetting gets done and is equally borne by all companies; some cities have mandated the minimum level of vetting in ordinances.

Criteria for Cost Reduction Approaches

In looking for cost reduction approaches, including cost reduction from false alarms, we used the screening criteria below. We discuss for each what was found in general, and later give more details on the approaches in the three communities we examined.

Cost Reduction: A major criterion was that there is data showing documented reduction in costs or officer time. We also considered start-up and maintenance costs for a false alarm reduction program. Typically some specialized software is needed to maintain directories of registered alarm companies and users, and to help in billing fines for false alarms. Start-up costs also often include creating a false alarm unit to run the program—typically 1-4 civilian personnel.

Reducing false alarms typically has saved on the order of 40 minutes of officer time per alarm averted. This translates to the equivalent of \$50-100 or more per call averted in personnel time, fuel and vehicle wear and tear. Much of the cost reduction came from required or voluntary vetting of calls by the private alarm industry before passing a call to the police. The vetting costs the police little to implement other than time liaising with the alarm industry, and time spent on getting ordinances revised.

Impact on service quality: The second major criterion is that crimes not go unpunished and not be encouraged by the use of false alarm abatement practices. When a private alarm agency has to vet a call by phone before passing it to the police, the call to police and their response may be delayed by two minutes or so. However, because only a small fraction of alarms are for actual crimes, and because response to those few cases usually is too late to catch anyone on the scene, vetting has not had much if any effect on burglary incidence and closure rates.

Criminals, especially juveniles and amateurs, may be scared off by the existence of burglar alarms. They do not know how fast police are responding. If it became known that police were responding less quickly to avoid false alarms, that might dull some of the deterrent effect of the alarms, but this has not been seen in the few departments we examined. In fact, Salt Lake City has much faster response to the scene from private guards than from the police because alarms are a low priority call for the police but high priority for the guard company. Actual burglaries found when alarms

have gone off have dropped sharply in Salt Lake City; it may be that the rapid response by guards is a further deterrent.

The approaches we found for reducing false alarms all have in common a shift in the burden of dealing with them from the public sector (police) to the private sector (alarms companies and their customers.) Purchasers of alarm systems might resent the idea of having to pay even a small amount of extra charges to the private alarm system for mandatory vetting, but that cost is partly hidden because of the already widespread voluntary alarm industry practice of vetting calls. There also may be some resistance to fees for regulating alarm practices but many police departments have not found the resistance to be an overwhelming barrier. It seems fair to shift the cost of deterring false calls to alarm system users rather than having the cost borne by the majority of the public that does not use alarm systems, and for whom police response can be negatively affected by wasting time on false alarms.

Transferability: The approaches discussed here have all been used by many police departments, even the most stringent approaches. Most local governments probably can implement at least some of these false alarm reduction measures, though they often require changes in local ordinances. Changing ordinances may or may not be politically feasible depending on how stringent are the package of approaches to be adopted, and how well ahead of time the police educate the various stakeholders—alarm companies, alarm users, city council, citizens—before trying to get the ordinance passed. Concern for start-up costs has been a factor in delaying adoption of some of the approaches already taken by other cities, even though the process can support itself through fees.

Requiring the private sector just to screen calls costs little other than the political will to require it. Doing registration of alarm systems and users, and charging fees for false alarms, take a considerable start-up cost depending on the volume of false calls (and hence registrations, fees, etc. to process.). Montgomery County Police said some sister jurisdictions that inquired about use of their alarm screening and fines system were not willing to invest in the start-up cost even though there was very high probability of paying it off in less than half a year of operation. There also is a one-time cost to modify dispatch software to assist in identifying calls from non-registered companies or users, and to send bills for various fees.

Disproportionate Impact on Disadvantaged Populations: We considered impacts on disadvantaged populations—whether they benefit or have undue negative impacts from new programs to reduce costs.

Impact on Local Government Employees: There is risk of accidents to police officers in every unnecessary response, and it takes officers away from productive policing. Reduced workloads may reduce the number of officers needed, but few officers would argue for more false alarms to save jobs. In at least one city (Seattle), it also was found that the false alarms led to officer complacency while responding to them, which increased their risk if the alarm proved valid—their mental preparation for dealing with the incident was less than it might otherwise be.

Summary of Experiences from Three Jurisdictions

Over the past 15 years police departments in the three jurisdictions examined took various combinations of the approaches summarized above, often adding more stringent practices after initial successes left them with a smaller but still large number of false alarms. As can be seen in the detailed discussion of these jurisdictions, often two or more approaches were taken at the same time, and it is difficult to say how much each contributed to the reduction without further analysis.

Usually alarm companies voluntarily make one or two calls to vet alarms before sending them to police. False alarms are not good for business—if too many, both current and potential users may turn away from them. So the industry has a vested interest in cooperating, at least up to a point. To be sure the vetting gets done and is equally borne by all companies; some cities have mandated a level of vetting in ordinances.

Montgomery County, Maryland. Each year only a few of the calls generated by alarms systems were not false. Starting in 1993 Montgomery County had a requirement to reduce false alarms from *commercial* alarm systems by registration of alarm systems, licensing of alarm installers, and vetting of alarms by at least one telephone call to the premises before calling the police. In 1995 the County passed an ordinance requiring the same approaches to be used for residential systems. In 2002 Montgomery County changed its alarm law again to impose fees for false alarms following the first one in a calendar year for a particular property. The fees rose for each successive false alarm.⁷

From this combination of approaches, the number of alarms requiring police to be dispatched dropped from 45,000 in 1994 to 30,000 in 2011. And of the 30,000 in 2011, only 16,000 had to have *completed* patrol responses; i.e., the call was not canceled before an officer actually had to investigate it. In contrast, back in 1994, 45,000 of 46,000 calls received were dispatched. Many calls at present are ended after dispatch but prior to officer arrival by continued vetting. Completed responses dropped 64 percent from 1994 to 2011. In that time the number of alarm systems in the county increased from 30,000 to 75,000. The number of police responses per alarm installation shrunk from 1.42 per system in 1994—more than one alarm per system—to 0.21 per system in 2011—only one for every five systems.

The false alarm program is run by a four-civilian unit that costs about \$535,000 annually but collects \$1.1 million in fees. In addition to this net positive cash flow, we estimate that the County is saving an additional \$7 million per year in officer time—about 20 positions, the amount of time responses would take if the 1994 false alarm rate per system had continued.

Seattle, Washington. This city requires registration of alarm systems, registration of alarm companies, vetting of alarms by at least two phone calls, and fines for false alarms. Seattle reduced its false alarms by 56 percent, from 25,000 in 2003 to 11,000 in 2010. Still unhappy with the size of the problem, Seattle

⁷ Montgomery County and some other jurisdictions prefer to speak of “fees” rather than “fines” for multiple false alarms, perhaps because no law is broken by having a false alarm. But the term makes it less clear that the charge is intended to be a punishment of sorts.

sharply escalated fees for false alarms in 2010, starting at \$115 per call. Calls dropped only slightly more in 2011, but the fees were then enough to cover the costs of the police response and the false alarm unit, so it became a cost-neutral issue.

Salt Lake City, Utah. In 2000 Salt Lake City implemented one of the most radical and most effective approaches to reducing false alarms. The city not only required registration of alarm companies and users, but also would not accept an alarm for police dispatch until the alarm company sends a guard to the premises (if there is no video from them). Salt Lake City reduced false alarms by 95 percent, from 10,000 in 1998 to less than 500 in 2011. Each false alarm takes an average of 0.86 hours to investigate there, which amounts to 8,193 fewer police hours needed for responses to alarms in 2011 than in 1998. This translates to saving \$508,000 per year—more than four officer years. The head of the Salt Lake City false alarm unit said that the police spent about three years educating stakeholders and lobbying to get this ordinance passed, but now all are pleased with the outcomes. According to the one person left with responsibility for false alarms, she spent less than a third of her time dealing with the 473 false responses in 2011.

The next sections provide more complete descriptions of the approaches taken in each community.

Montgomery County, Maryland: Callbacks and Fees

Montgomery County, Maryland, is a large suburban county adjacent to the District of Columbia, with a population of 964,000. It uses some of the common, effective approaches to reducing false alarms.

As in most jurisdictions, all calls for a dispatch for a burglar alarm are received by voice from the alarm company, not directly from the alarm system. At least two patrol cars, with one officer each, are sent to most alarms, even though the vast majority turns out to be false. The primary reason for sending two officers is officer safety. A few years ago, one car was sent to a call and the responding officer killed, along with the store manager. Since then the policy is a minimum of two cars. Alarm calls without known extenuating circumstances are considered third priority—officers respond with no lights or sirens and drive at regulated speeds. Usually the units assigned are already on patrol in the area, so most of the incremental officer time to respond is investigative time on the scene.

Registrations and Vetting Phone Call for All Users. In 1994, Montgomery County passed an ordinance that continued to require, as it had since 1983, registration of *commercial* alarm system users and registration of alarm installation and monitoring companies, but now added the same requirement for *residential* alarm systems, which compose the majority of alarms and which have higher false alarm rates than do commercial systems.

To get registered, an alarm company must first obtain a license from the Maryland State Police, which does a criminal history background check. Once the alarm company has its state license, it can apply for a county license. No competency testing is required at either level.⁸ The alarm company pays an annual fee of \$200 per year for its license. The alarm user pays \$30 for the initial registration, and then \$10 every two years for renewal.

⁸The County reportedly has tried for years to get the State to require a competency check before issuing a license, and cities considering this approach might try to get this requirement from the start.

As part of evaluating whether an alarm was installed properly, and to let the users get used to operating the alarms, companies must wait seven days after a system is installed before they can begin sending calls about it to the police department. This helps reduce the number of false alarms stemming from installation and usage errors. The Montgomery County ordinance also required the alarm company to make at least one vetting phone call for both residential and commercial alarms before calling the police. Usually the vetting call goes to the premises.

Fees for a Second False Alarm. In 2002 Montgomery County added an assessment of graduated fees for false alarms. For residential properties the fees ranged from \$25 for the second false alarm in a year, to \$1,000 for the fifteenth. For commercial properties, the fees continue up to \$4,000 for the twentieth false alarm. On the third false alarm the owner must contract for an inspection of the alarm system and pay a fee for it. Invoices are sent directly to the offending alarm user, who is responsible for payment. Customers may negotiate with their alarm companies to recover all or a portion of the fee paid, but the customer is responsible for the payment to the county. (In other jurisdictions, the alarm company is held responsible for the false alarm fees and may pass them on to the users.)

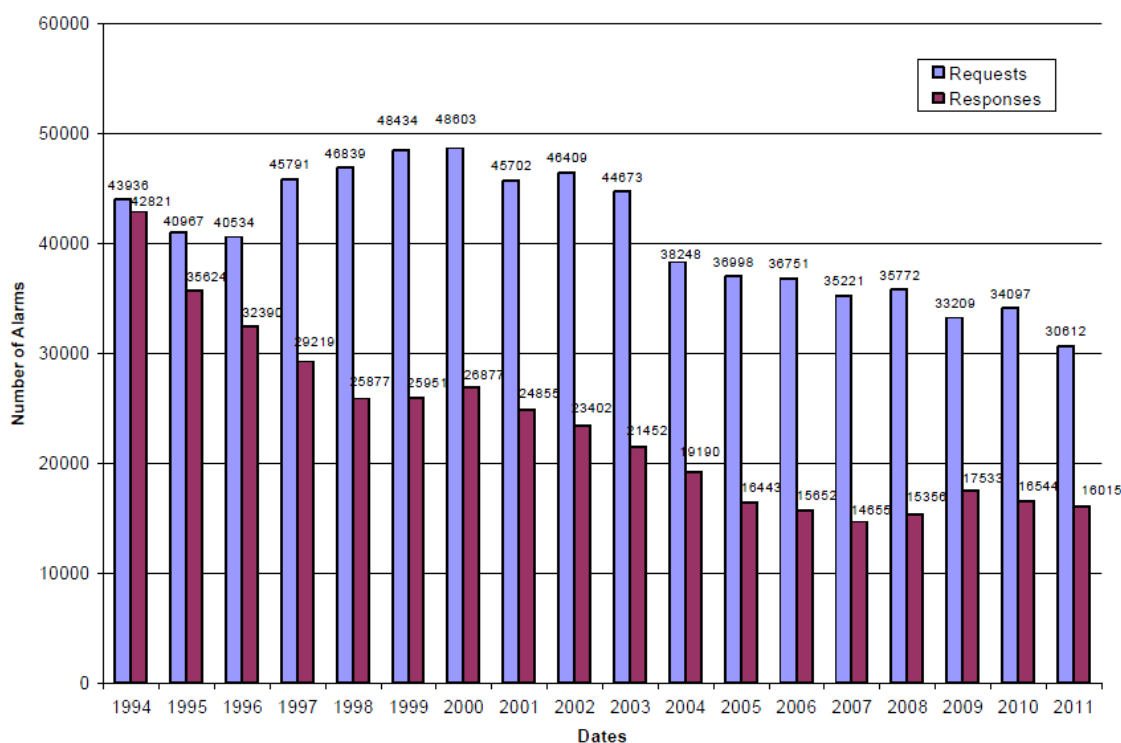
Voluntary “Enhanced Call Verification.” While Montgomery County was increasing legal requirements to reduce false alarms, much of the alarm industry volunteered to use Emergency Call Verification, that is, to make at least two calls, not just one, prior to calling the police. This made a surprisingly large difference in identifying false alarms. Alarm companies require owners to provide their cell phone numbers and number for others with authority to decide if the alarm required a response. The first call usually is to the alarm premises and the second, if needed, to its owner, its property manager, or another designee. The alarm companies continue the vetting process down the chain of phone numbers, often right until the police arrive.

The County 9-1-1 operators ask every alarm company that requests a dispatch whether it attempted to verify the call. The operators have a field on their call-take screen where they enter yes or no to this question. If no, the false alarm unit can issue a \$500 civil citation to the alarm company. The head of the false alarm unit said, “It only takes a couple of those for the alarm company to do what they are supposed to do.”

Cumulative Results. The Montgomery County police department defines the false alarm rate as the “number of alarms not cleared by the first vetting call or other information, divided by the number of alarms automatically generated.” In 1994 the county police were sent 46,000 alarms after vetting by the alarm companies. Of these, 45,000 received completed police responses. Over 90 percent of these responses turned out to be for false alarms. The 45,000 was 55 percent lower than it had once been, but was still considered too high.

By 2010, the number of alarms sent to the police had dropped to 34,097, of which 16,544 had completed responses. There had been a significant drop in 1995, the first year the new legislation was enforced, and the numbers continued to decline over the next several years (see figure 1.)

Figure 1. Alarm-Prompted Requests for Dispatch versus Actual Responses, Montgomery County, Maryland, 1994–2011



Source: Montgomery County false alarm report for 2011.

In 2011 the police dispatch center received 30,612 calls from alarm systems after phone call vetting by the alarm companies. This was about a 12 percent drop from the trend in the immediately previous years, a cumulative one-third drop since 1995 and an almost two-thirds drop (61.5 percent) since alarm companies started to voluntarily increase vetting. This reduction occurred while the county population and number of alarm systems increased significantly between 1995 and 2011. It is not clear how much the added fees caused the additional decrease from 2002 to 2011, versus the effect of increased voluntary vetting and education.

Of the 30,612 alarms sent to the police in 2011, 16,015, a little over half, resulted in a completed response. In contrast, almost all alarm calls received in 1995 were responded to after one-call vetting. The reduction in responses after the police are first called is due to continued vetting by the alarm company after a police unit is dispatched. A subgroup of alarms, about 1,000–2,000 of the 30,000, is not assigned for response after a call from the alarm company because they are not from registered alarm systems.

Of the 16,015 alarms investigated by officers in 2011, only 747 (4.6 percent) were considered valid—either a crime or suspicious circumstances.

False Alarm Rate per System. Montgomery County had 74,775 registered alarm systems in 2011, of which 65,616 were residential and 9,159 commercial. (In some cities, like Washington DC, the proportion of commercial alarms is the higher of the two.) The net annual false alarm rate was 0.15 calls per residential system and 0.72 per commercial system. More than 64,000 alarm users (85.8 percent) had no false alarms to which police officers responded in 2011. The combined false alarm response rate was 0.21 per system, down dramatically from the 1995 level of 1.42 per system (i.e., more than one false alarm response a year per installation.)

The alarm industry has told Montgomery County that every year they are vetting and canceling about 75 percent of the more than 100,000 calls they receive, before sending 30,000 on to the police department, so the alarm company vetting is critical for reducing costs of false alarms.

Program Administration. The False Alarm Reduction Section of the Montgomery County Police Department administers the false alarm program. This is a four-civilian unit that handles licensing of installers and registration of alarm systems, oversees required inspections of alarm systems, levies fees for false alarms, and collects fees for registration, renewals, appeals, alarm business licenses, and false alarms.

Costs Saved. Montgomery County PD valued the officer hours and vehicle costs saved at \$95 per call, including loaded officer salaries and pro rata vehicle and equipment costs for two units at 20 minutes each for investigative response and electronic record keeping afterward. Montgomery County estimated total savings of \$1.385 million in 2011 (\$95 multiplied by the 14,580 alarm responses not completed out of the 30,000 calls sent). In our opinion this seems to underestimate the overall savings, as it only counts savings from vetting calls after they arrive at the dispatch center. Savings from the practices that reduced calls to 30,000 should also be considered.

If false alarms had continued at the 1995 rate per installation, false calls would now number more than 110,000, 94,000 more than the number of responses completed last year. By this reckoning, Montgomery County has saved close to 63,000 officer hours in 2011. This means the growing community does not have to hire 30 more officers just to keep up with false alarms. The County is probably saving close to \$6 million per year from the cumulative effects of measures taken to reduce false alarms over the past 15 years.

Few, if any, police departments explicitly track the use of the police hours saved by reducing false alarms. . In Montgomery County, false alarm prevention helps reduce the number of officers needed to keep up with demand as the county grows, rather than leading to layoffs. Montgomery County assigns officers to districts and beats based on a computer program that considers the call workload as well as other factors. The reduced workload from fewer false alarms means fewer officers are needed in each district, but the number has not been computed explicitly with their models.

The annual budget for the False Alarm Reduction Section was \$525,000 in 2011, which includes salary and benefits, computers, custom software and maintenance, supplies, postage, and paper. This amount was more than offset by the \$1.128 million in registration fees and fees for excessive false alarms they took in.

Modifying the dispatch software to check alarm company registration and track false alarms for billing required a start-up cost. When Montgomery County 15 years ago created an electronic interface with its CAD system for dealing with false alarms, they paid approximately \$500,000 for hardware and a custom software program that downloads alarm calls and then tracks and bills for them if false. There now are off-the-shelf products that do the same thing, so the same level of customization may not be required. It may take 1–3 years to pass the break-even point in out-of-pocket dollars outlaid (new software and false alarm personnel versus fees taken in). However, saving 20 police years annually far more than offsets the one-time software cost.

Impact on Service Quality. The reduction of false alarms frees officer time to pursue other calls. There were no known negative side effects of the program on service quality

Seattle, Washington: Graduated Escalation of Vetting and Fees

Seattle has a resident population of 610,000 that swells to a million on weekdays. Prior to 2004, Seattle had been having about 25,000 alarms sent to the police dispatch center annually, of which only 2 percent were considered valid.

A false alarm is defined by Seattle code as alarm activation with the subsequent police investigation finding no evidence of a crime or need for police assistance, with no police report filed by the property owner, or with no eyewitness or video of a problem. Because most alarms are false, Seattle dispatch considers calls from burglar alarms third priority unless extenuating circumstances make it more immediate.

The stated goals of Seattle's false alarm reduction program are to reduce false alarm responses by police and to recover expenses brought on by false alarm responses. That is, the program not only wants to reduce costs but also to recover the remaining costs. Seattle also has found that officers who routinely respond to alarms often become complacent, knowing that almost 98 percent are false. This could create a hazard to officers coming upon a real emergency. (Other cities also noted that every unnecessary call increases the risk of traffic accidents.) The reduction of false alarms keeps officers where they are most needed to apprehend criminals, rather than checking on alarm notification.

Licensing of Systems and False Alarm Fees. January 1, 2004 marked the start date for a stronger ordinance than previously existed in Seattle to reduce false alarms. It required licensing of alarm companies by the city, and a fee of \$90 per false alarm, starting with the first alarm. Alarm companies had to file for a license with the City Department of Revenue and Consumer Protection, but no background check or monitoring of false alarms by the company is required.⁹

Seattle also innovatively started charging \$30 for an alarm that was dispatched (assigned to a police unit for response) but cancelled before police arrived at the scene. Alarm calls sit in a dispatch queue for as long as half an hour waiting to be assigned. Once dispatched, police in the patrol area typically take only five minutes or so to reach the premises. There are few calls with cancellation occurring in these last five

⁹ The Seattle alarm administrator suggested that future ordinances might track exactly how many alarms each company monitors and the number of false alarms each alarm generates. This would identify alarm companies with an unusually high number of false alarms per system and encourage them develop best practices to reduce the rate.

minutes, after the officers are dispatched.¹⁰ In 2007, three years after the ordinance went into effect; police were dispatched to 14,119 alarm calls, about 44 percent less than in 2003. Of these, still only 2.4 percent (332 calls) had physical evidence of a crime. While the reduction was a big improvement over previous years, the remaining false alarms were estimated to cost citizens approximately \$1.2 million. Additional efforts were desired to reduce the false alarms further.

Enhanced Call Verification and Registration of Alarm Systems. In 2009 Seattle began requiring a unique identifying number (UIN) for each alarm monitoring company, registration of each alarm system location, and mandatory Enhanced Call Verification—additional vetting for all alarm calls. The alarm company is charged a \$10 yearly fee for registering each new alarm location, with the charge usually passed on to the customer.

The Washington Burglar & Fire Alarm Association (now the Electronic Security Association of Washington) endorsed this ordinance, stating that “it would level the playing field, ensuring that all companies are playing by the same rules and are in compliance with the effective Seattle Municipal Code.”

Under the ordinance the alarm companies are responsible for revising the list of locations they monitor. If the alarm company does not provide the police dispatch center with a UIN, its alarms do not receive a response. Prior to this, the police did not verify that the alarm company was licensed, and all alarm companies would get police responses whether they were following the ordinance or not. Any alarm company requesting police dispatch without a UIN gets flagged for the city’s Revenue and Consumer Affairs unit to verify that the company is licensed.

Prior to forwarding an alarm to the police, alarm companies must attempt to verify that it was valid by monitoring audio or video from the site, or by making calls to at least two telephone numbers provided by the owner. This is called Enhanced Call Verification. The phone numbers might include the premises, the owner’s mobile phone, or other people designated by the owner. If a call confirms the problem, police are dispatched immediately. To cancel a response with the first call, the person contacted has to know the alarm code; otherwise a second call is required. An exception is made for sensitive properties or the suspicions of the alarm company—those calls can be given immediate responses. Robbery, panic, or duress alarms that are manually triggered do not require ECV, and are immediately dispatched.

When an alarm is found to be false, the city bills the alarm company, which may pass the fee to the user depending on who is at fault. If the responding officers do not document physical evidence of the need for a police response, the call is assumed to be false and the UIN number is automatically billed.

False Alarm Workshops. Alarm companies can get a one- time waiver from the false alarm fee if they then switch to a private guard response for that property or if their customer attends an alarm user workshop, offered free by the police department at least once a month. Attendance can be banked to offset a future first false alarm. For large community groups or businesses the police will bring the class to the community. The alarm user workshop is a way for the police department to explain the municipal

¹⁰ This \$30 charge might not be worth the billing effort in other cities unless the billing is automated and many calls are cancelled after dispatch but before officers arrive, as in Montgomery County, Maryland, which had 16,000 such calls last year.

code and why false alarms can significantly impact crime response times. The workshop also aids home and business owners by giving them additional ways to keep their properties secure.

Higher Fines. The 2009 law further reduced false alarms by 13 percent. The 2004 and 2009 laws together reduced false alarms by 57 percent, from over 25,000 in 2003 to 11,062 in 2010.

While pleased with this large reduction the city was not satisfied with still having 11,000 false alarms in 2010. They were estimated to cost over \$1 million, based on Seattle's estimated cost of \$123 per call. Of Seattle's 1,652 reported actual burglaries in 2010, very few were reported by alarm. The responses to false alarms outnumbered responses to burglaries by more than 6 to 1.

With the hope of achieving further reduction of false alarms, Seattle further increased the fees for false alarms on January 1, 2011, both as incentive to encourage use of the waiver options and to more fully recover their cost. The new fees were \$115 for a false burglar alarm and \$230 for a false panic, duress, or robbery alarm. The number of alarms in 2011 was 10,897, only slightly lower than the 11,062 in 2010. Still in 2011 only a small number of calls were for valid alarms. It was not clear whether the higher fees were the sole reason for the small further decrease, versus the cumulative effect of previous practices or even other factors. But regardless of their impact on the number of false alarms, the additional fees pay for most of the cost of the responses (\$115 fine vs \$123 cost per false alarm.)

Panic Alarms. A subset of the false alarm problem, accounting for about 10 percent of the false responses in Seattle, comes from panic, robbery, or duress personal alarms, split about 50-50 between businesses and residences. These alarms are personally activated, in contrast to burglar alarms, which are set off by sensors. Panic alarms are given high priority responses, regardless of whether the system is registered, and typically are assigned more officers than burglar alarms. In Seattle these alarms have had about the same false alarm rate per system as fixed location burglar alarms.

Seattle police encourage citizens to call 9-1-1 rather than use their panic alarms, to improve the accuracy of the response and reduce false alarms. The alarm monitoring company screens panic alarm activation before police dispatch is notified, wasting precious minutes in a true emergency. Response to a 9-1-1 call is usually faster. The advantages of the panic alarms are that it might be more accessible in an emergency and can be silently triggered.

False Alarm Unit. Seattle established a special unit in the police department to manage its false alarm program. The unit is assisted by the Finance Administration Section, Revenue and Consumer Protection, for billing false alarm and licensing fees. At its peak the unit had two detectives and two administrative specialists, but in 2012 due to staffing reallocation and the reduction in false alarms, the unit was reduced to one detective and one administrative specialist.

Cost Saving and Recovery. As noted above, since 2003 Seattle reduced false alarms from 25,000 per year to below 11,000. Using their estimate of \$123 per call, they saved \$1.7 million in police time and equipment wear and tear. Annual fees and false alarm fines are now high enough to recover most of the cost of police response to alarm calls that are not prevented.

Political Acceptability. Seattle police avoided some of the expected resistance to the escalated requirements and fees because of their close work with the alarm industry, which in the past tended to

spearhead community outrage if they felt a city ordinance would impact their business. Because Seattle bills alarm companies rather than their subscribers for false alarms, regardless of who is at fault, a major alarm company sued the city for “excessive taxation.” The company settled after losing most of its motions. To head off such problems in the future, the police now notify the alarm industry when ordinance changes are being considered and strive to give the industry ample time to adjust to policy changes. When a false alarm fee hike goes into effect, the industry at least has time to notify their customers regarding changes, and may recommend a private guard response. The police, the local alarm industry, and their customers all need to work together to reduce false alarm responses.

Further Potential Ordinance Revisions. The Seattle false alarm administrator provided thoughts on strengthening the Seattle alarm ordinance in the future, based on their past experience. Possible new features are listed below. Most already have been tried by one or more police departments in the Seattle area (and possibly elsewhere).

- *Require sequential signal verification from two separate sensors within 10 minutes of each other, to trigger a police dispatch to a security alarm.* Many false alarms are from single alarm trips created when the user activates the alarm and fails to secure a door or window when exiting the premises. The suggested requirement is for at least two sensors to activate before sending out an alarm. They might be, for example, an exterior window alarm and an interior motion detector. Pierce County and some other communities in the State of Washington already have such an ordinance.
- *Lower the “no response” threshold from six false alarms in 12 months to three in 6 months.* This suggestion came from the Washington alarm industry. Most agree that if a location has many false alarms, it should be on a “no response” list sooner rather than later.
- *Do not allow use of new “one plus” alarms. Require replacement of such existing alarms if they have any false alarms, or list them as “no response.”* Many false alarms are activated by so-called “one plus” alarm systems in which users are supposed to activate the system by entering their security code plus one other digit. For example, an alarm with the system code 1-2-3-4 would be activated if the user entered 1-2-3-4-8.
- *Do not allow new single action robbery/panic/duress actuators (buttons, key fobs, etc.), only ones with dual action.* Any false alarms from a single action device would require its replacement or it would be listed as “no response.” Any new installation would require a dual action alarm to help prevent accidental activation.
- *Require the SIA CP-01 standard on new alarm system installations.* The SIA CP-01 standard for alarm systems comes highly recommended by the alarm industry. It has design features that eliminate many false alarms created by technologically inferior systems. Requiring better technology levels the playing field for alarm companies as did requiring two callbacks to vet alarms.

Salt Lake City, Utah: Vetting by Alarm Company Guards

Salt Lake City is one of several police departments that use the most radical—and most effective—approach to reduce costs from false alarms: vetting by eyewitness, usually guards sent to the scene of the alarm. Salt Lake experienced a 95 percent reduction in false alarms using this approach.

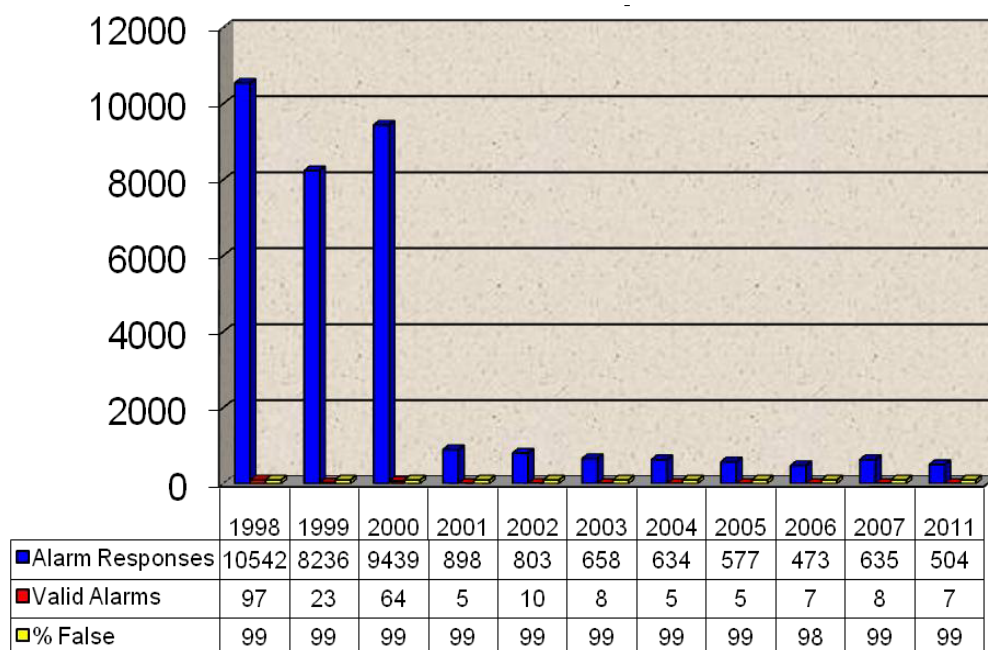
The number of commercial alarms in Salt Lake City is more than twice the number of residential alarms. The Seattle police false alarm administrator said that commercial false alarms were mostly due to employees not having the alarm code and to cleaning crews not being informed about the system. Residential false alarms often are triggered by children and visitors who do not know how to use the alarm system, and by the motion of pets and even ceiling fans.

Fines Alone. In 1994 an alarm ordinance was adopted allowing the first four false alarms in a year, then charging a \$100 fine starting with the fifth alarm. False alarms dropped by 16 percent in the first year this policy was implemented, but the next year false alarms increased by 13 percent. The fines and voluntary vetting by the alarm companies were judged insufficient by themselves for adequately reducing false alarms.

By 1998–2000 Salt Lake City police were running 8,200–10,500 false alarm calls, which made up about 12 percent of all their calls. In 1999, for example, the police responded to 8,213 alarm activations, of which only 23 (less than a third of one percent) justified a police report, and only a few of these were for actual burglaries. Response times were about 40 minutes from police dispatch receiving an alarm to officers arriving on the scene, because the calls were given low priority because so few were valid, and so they sat in a queue.

Verified Response. Salt Lake City researched other alternatives for reducing false alarms and then adopted an ordinance effective December 1, 2000, that required alarm companies to send a guard to verify the need before calling the police. Las Vegas had been doing something similar since 1991. The alarm companies could first try to vet the call by phone or video but if this technology were not present or failed to resolve the situation, they required eyewitness verification at the scene. This requirement, called *Verified Response*, had dramatic results—an immediate, unprecedented 90 percent drop in false alarms to the police, as shown in figure 2. The drop increased to 95 percent by the end of calendar 2011. In 2011, police responded to only 504 alarms, and of these only 7 were valid, about one percent.

Figure 2. Salt Lake City Police Department Alarm Responses, 1998–2011



Source: Salt Lake City police department, 2012.

Most of the alarm companies serving Salt Lake are large national firms that contract with local guard companies to do the eyewitness vetting. The alarm company monitoring the burglar alarms and doing the phone vetting may not be in the same city as the guard company they dispatch. The guard response is faster than the police response because the police assign a low priority to alarm calls. However, police respond immediately to human-activated robbery, panic, and duress alarms. The first false alarm of these types incurs a \$50 fine.

False alarms are charged to the alarm company rather than the alarm owner, regardless of their cause.

Political Underpinning. The Salt Lake City false alarm unit director said that the police spent about three years educating stakeholders and lobbying to get this ordinance passed. A campaign was undertaken to inform the public, elected officials, and the alarm industry about the purposes and advantages of Verified Response. Many local alarm companies were initially against the ordinance because police response was part of their sales pitch. But some were in favor because they could make a little more money charging for the new vetting service (about \$7 per month more), and the changes improved relations with the police and their clients. The charge was offset for many users by a sharp reduction in false alarm fees, which started at \$100 and often averaged more than one per year per alarm user. The alarm users have accepted the practice, and now all stakeholders are pleased with the outcomes.

Industry and User Education. There is a small risk of putting the alarm company employee in harm's way if perpetrators are still on the scene. To reduce this risk, guards are offered free attendance at a three-hour class given by the police on how to respond to alarms—both what to do (passing on

information) and what not to do (attempt apprehension).. The guards are not to enter a building if they see an open window or door, nor make an apprehension; they call the police, and that generates a top priority call of potential burglary in progress.

Police also offer alarm owners a free false alarm prevention course. Attendance before or after a false alarm can be used in lieu of one fine.

Costs Saved. Salt Lake estimated that investigating a false alarm takes 0.86 police hours, just slightly more than the two communities discussed earlier. About 8,482 fewer police hours were needed for alarm responses in 2006 than in 1998. Salt Lake estimated they saved about \$508,000 per year—more than four officer- years. In addition were (unrecorded) savings of call taker and dispatcher time. The estimated cost saving was based on an average loaded cost of \$60 per hour for each officer, including salary, benefits, and the amortized costs of the police car, computer, and equipment.

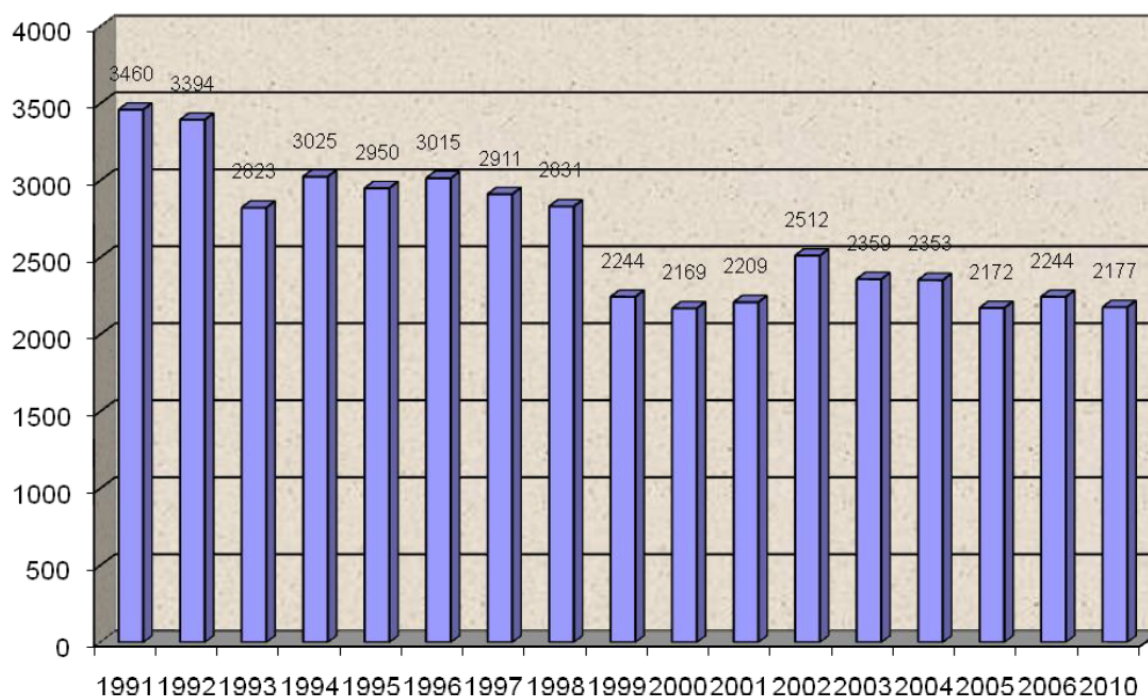
In-house IT personnel upgraded software for the dispatch system to accommodate the new vetting procedures. (Salt Lake did not have an estimate for the IT labor.)

Because there are so few false alarms now, the program now requires only about one-third of a staff person's time each year to maintain, according to the person with that responsibility. In 2011 the City collected about \$45,000 from fines for false alarms, which mostly offset the cost of running the program.

Impact on Service Quality. Average response times for the private guards is much faster (6–13 minutes) than for the police (40 minutes), because burglar alarms are not given top response priority by dispatch but are a top priority for the alarm company. The average police response time to high-priority calls has dropped from five minutes to three minutes, possibly due in part to false alarms being taken out of the response queues. (Further study is needed to determine what portion of the drop might be attributed to the reduction in false alarm responses.) According to the police, the apprehension rate of burglars caught on site has increased.

The number of reported burglaries has not increased as a result of the new vetting policy. As shown in figure 3 below, the number of burglaries had been trending downward and dropped fairly sharply the year *before* implementation of the stricter false alarms policy. The rate has remained at that lower level in all but one anomalous year since then. Thus, the change in vetting policy has not had any apparent impact on the deterrent effect of alarms. A more detailed study of burglary rates for premises with alarms would provide further evidence whether this were true. At the minimum, the change has not affected the overall burglary rate.

Figure 3. Salt Lake City Burglaries from the FBI Uniform Crime Report



Source: Salt Lake City police, 2012.

The instances of verified criminal activity in properties where alarms went off dropped sharply along with the false alarms. Verified instances of criminal activity ranged from 23 to 97 per year in the years before the change, and 5 to 10 per year after. These numbers are a very small fraction of the total burglary incidents. It is possible that rapid response by the alarm company has additional deterrent effect.

Transferability. Las Vegas and at least 30 other communities are now using Verified Response.¹¹ As a cautionary note, Dallas reportedly had tried something similar but reversed course: delayed responses led to negative headlines, and a business-oriented mayor felt the approach was too hard on businesses. Also, as previously noted above, some cities have had the security industry alarm coalition lobby against Verified Response.

Caveats

Our analysis relied on published data and data sent to us by the communities whose false alarm procedures are summarized in this report. We did not attempt to obtain raw dispatch data on false alarms to verify their results. We did have extensive dialogues with the head of each false alarm program by phone and e-mail on various points of the data. We discussed the source of their data and the definitions used. We received updates from each department on their latest data and comments on improvements they would like to see in their programs. The data they provided had face validity, and

¹¹ The Salt Lake City false alarm unit compiled a list of users, which includes Milwaukee, Madison, and Detroit, as well as Las Vegas.

the results were quite consistent across the communities. The data available from each city were somewhat different because of how the cities keep records, but each had data on the reduction in false alarms from a baseline, and on cost savings. Contacts in each jurisdiction are listed at the end of this report.

Conclusion

Many cities and counties have significantly reduced false alarms and their associated cost, including Montgomery County, Maryland; Salt Lake City, Utah; and Seattle, Washington. These communities are continuing their programs and considering ways to go even further. This report provides examples of successful implementation and a variety of approaches that a police department can use to reduce their own officer hours spent on unnecessary false alarms and attendant costs. Fees can offset the costs of the false alarm reduction programs and the remaining police hours spent on false alarms. The entire false alarm reduction program can even be totally outsourced at no cost. If the program is to be undertaken internally, there will be some start-up costs, and the programs have to be explained to the alarm industry, alarm users, and local jurisdiction governing bodies before implementation, because they usually require ordinance changes. In all of the communities examined, start-up costs were recovered through fees, and the programs now run at neutral cost or with positive revenue flow to the community.

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We greatly appreciate assistance from the heads of false alarm reduction in all three cities examined. They reviewed drafts of their sections and made many helpful corrections and additions. Any further errors are those of the authors.

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