

**Update to Best Practice Number Three: False Burglar Alarms Since the
Formation of the Metro Alarm Office**



by

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Executive Summary

In 1997, the Memphis Shelby Crime Commission convened a False Alarms Task Force with attendees representing the Memphis Police Department (MPD), Shelby County Sheriff's Office (SCSO), Memphis Fire Department, City of Memphis - Finance Division, the University of Memphis, and Alarm Industry Representatives. The Crime Commission published the findings of this task force in April, 1998, as *Best Practice Number Three: Reducing the Dispatch Rate and Number of False Burglar Alarms in Memphis and Shelby County*.

Mr. Michael Freeman, Administrator of the Metro Alarm Office, contacted the Crime Commission in March, 2004, and requested an updated report on the functioning of the Metro Alarm Office. He specifically requested an analytic comparison of current functioning, as measured by alarm data and revenue collection, with the baseline data and recommendations from the 1998 Crime Commission report.

The accompanying report – *Update to Best Practice Number Three: False Burglar Alarms Since the Formation of the Metro Alarm Office* – re-examines the issue of false burglar alarms since five years have passed after changes to local alarm ordinances and the opening of the Metro Alarm Office. It also evaluates whether the Metro Alarm office has successfully achieved goals for false alarm reduction.

The Best Practice Number 3 Update has three main conclusions:

- **False burglar alarms have not been reduced since the introduction of the Metro Alarm Office. The Crime Commission estimates that the MPD incurs several million dollars expense annually as a result of false alarms.**
- **The Metro Alarm Office has failed to develop an accurate database of alarm users, and has failed to develop an accurate list of households and businesses with false alarms. Without these lists, there is no viable purpose for this office.**
- **That the City and County alarm ordinances are too weak to deter false alarms is a continuing problem. State law limits the extent to which local jurisdictions may impose fines for false alarms. The local alarm ordinances must be strengthened.**

The Crime Commission recommends:

- **Either: 1) re-organize the Metro Alarm Office, or 2) close it.**
If the Metro Alarm office is to remain open:
- **An accurate database that can be understood and accessed by Metro Alarm Office staff must be developed in order to track alarm permits and false alarm data.**
- **Every false burglar alarm must be documented as a warning or citation.**
- **Communication between the Metro Alarm Office, the MPD, and the SCSO needs to be accomplished in real-time to identify alarm users and repeat alarm locations. The current practice of “post alarm” communication results in under-counting of false alarms.**
- **The Metro Alarm office must enhance its educational function since State law limits the extent to which fines may be imposed.**

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Introduction

False burglar alarms happen every day in Memphis. A cat or dog is left inside the house or a child comes home early and sets off the alarm. The siren sounds a false alarm. These seemingly innocent mistakes cost the Memphis Police Department (MPD) over 7.5 million dollars per year.

In 1997, the Memphis Shelby Crime Commission convened a False Alarms Task Force to address the problem of false alarms. Members of this task force included representatives from the MPD, Shelby County Sheriff's Office (SCSO), Memphis Fire Department, City of Memphis – Finance Division, several Alarm Industry representatives, and the University of Memphis. The Crime Commission published the findings of this task force in April, 1998, as *Best Practice Number Three: Reducing the Dispatch Rate and Number of False Burglar Alarms in Memphis and Shelby County*.

This report re-examines the issue of false burglar alarms since five years have passed after substantial changes to the City of Memphis and Shelby County alarm ordinances and the establishment of the Metro Alarm Office. The major issue is whether false alarms have been reduced. That is, has the Metro Alarm office successfully achieved goals for false alarm reduction?

This report briefly reviews the definitions of “false alarms” and some of the changes in the local false alarm ordinances. It presents data on false alarms obtained from the MPD and from the Metro Alarm Office. These materials are used to discuss whether best practices are being implemented in addressing the problem of false burglar alarms in Memphis.

Definitions and Data Sources

Definitions

What is a false alarm? Best practice Number 3 discusses how the choosing of a statistic on false alarms depends on one's definition and point of view. In this paper, a **false alarm** is considered to be any alarm (nuisance, mechanical, or user error) that causes police to travel unnecessarily to an alarm site for whatever reason.

In Memphis, there has also been long standing use by the MPD of a category of **canceled alarms**. A canceled alarm occurs when the alarm company's dispatcher calls police dispatchers to say that the alarm just reported is now known to be false and that police services are not required.

Lastly, **good alarms** are those alarms occurring where a burglary or robbery actually happened and an alarm was activated.

Data Sources

To do this evaluation, current data on false burglar alarms were obtained from the MPD and the Metro Alarm Office. Data and information from 1996, as included in *Best Practice Number Three: Reducing the Dispatch Rate and Number of False Burglar Alarms in Memphis and Shelby County*, will be used to evaluate change. These 1996 data have the MPD and City of Memphis information prior to the establishment of the Metro Alarm Office.

Information from 1997 to 2004 was requested from the MPD. The MPD reported that data on false alarms from 1997 to mid-2001 were unavailable because of a change in their computer system. Thus, the MPD data for 2002 and 2003 – approximately the 3rd and 4th year of the Metro Alarm Office – will be compared to 1996.

Annual information from the Metro Alarm Office was sought for 2000 to 2003. The Metro Alarm Office is responsible for the administration of permits, renewals, fines, and the alarm school. Thus, the author of this report requested detailed information on permits, non-renewals, and cancellations of permits, total dollars of fines per year, total collections, and information about students in alarm school. A request was also made for the annual numbers of false alarms by users (i.e., none, 1, 2, etc.). The information provided by the Metro Alarm Office in response to the researcher's request in Spring 2004 is included in Appendix A.

Information is obtained from different sources to enable a comparative evaluation of the MPD and Metro Alarm Office data to baseline data. The local false alarm ordinances state that the MPD and the SCSO are to provide the Metro Alarm Office with information about false alarms and why they occurred. A reasonable expectation is that the Metro Alarm data must closely match the MPD data in order for the Metro Alarm data to be useful.

Alarm Ordinances

The primary purpose of the Police Emergency Alarm System Ordinance is to encourage alarm users and the alarm industry to reduce or eliminate false alarm dispatch requests. The City of Memphis and the Shelby County Governments coordinated revision of their Police Emergency Alarm Ordinances to provide a foundation for a false alarm agency (see City of Memphis Ordinance No. 4640, adopted January 19, 1999, and Shelby County Ordinance No. 208, adopted March 22, 1999). The Metro Alarm Office was created in 1999, and was located within the Finance Department of the City of Memphis.

The Metro Alarm Office was formed to administer new and continuing burglar alarm permits, collect fines, and to promote false alarm education through advertising and a false alarm school.

In Memphis and Shelby County, the Police Emergency Alarm System Ordinance sets the cost of new alarm permits at \$30 for the first year, with a \$5 annual renewal fee. The renewal fee is a change from the previous ordinance. The alarm license is not renewable until any outstanding fines have been paid. These alarm permit fees are fairly typical when compared to other jurisdictions.

The ordinance specifies that on-site, written warning letters are to be provided after each false alarm. However, the ordinance does not specify which entity – the responding law enforcement agency or the Metro Alarm Office – is responsible for issuing said warning letters. Fines of \$25 per false alarm are to be imposed on the user after the sixth false alarm in a 12 month period. Attendance at an alarm users’ class in the Metro Alarm School is also required after the seventh false alarm. The ordinance specifies a possible suspension of the alarm permit after the eighth false alarm. The maximum amount of these fines is limited by State law.

Recommendation #1: Amend City Ordinance 4640 and County Ordinance 208 to specify that the responding law enforcement officer is responsible for issuing an on-site warning letter each time the officer responds to a false alarm.

The limit of fines related to false alarm violations in Memphis and Shelby County is much lower than what is allowed in other jurisdictions outside of Tennessee. Seattle, Washington, for example, charges \$125 per miscue. The City of Coral Springs, Florida, has no charge for the first two, but uses an escalation of fines of \$50 for a third false alarm to \$200 for 5 and above. Tacoma, Washington, which cut its false alarm rate in half in 2002, charges the alarm company \$60 per false alarm. Other jurisdictions such as Miami-Dade (\$50) and Burien, WA, (\$100) impose an immediate fine for false alarms in locations that do not have a current alarm permit.

A review of best practices also found jurisdictions raising the threshold before a police officer would be dispatched to the scene of an alarm. Tucson, AZ, police will only respond if a burglary is verified, or if more than one zone of the house triggers an alarm (e.g., a door and a motion detector). They report a 48% drop in false alarms using this two-zone trip requirement. Salt Lake City and Milwaukee require a verified response, with police not responding to alarms unless a security company employee or third party notifies them that a valid burglary is in progress. Salt Lake City reports a 90% drop in false alarms. Milwaukee, WI, just adopted the verified response model in September 2004. The Alarm Industry strongly disagrees with the verified response model calling it “non-response.” Los Angeles initially proposed a verified response model, but eventually settled on a modified non-response model where two false alarms are allowed prior to fines, and a possible suspension of calls to a location. An internet search identified over 90 jurisdictions that are using either a verified or non-response model.

Memphis Police Department Data

Table 1 identifies the calls-for-service information and false alarm information from the MPD for Memphis in 1996, 2002 and 2003. Though the 1996 data does not include areas of the City that were annexed in 1997, Table 2 reflects that it is the percentage breakdown in calls for service that is of concern when examining false alarms. The 1996 benchmark is the only data that are available prior to establishment of the Metro Alarm Office.

From a police administrator’s point of view, the number of false alarm calls in relation to the number of calls for service provides the most telling indication of the extent of the problem. It is also the most commonly used index in studies of false alarms because these “percentage” figures are widely available across jurisdictions.

Table 1. Calls for service to Memphis Police Department by type of false alarm, 1996, 2002 and 2003.

	1996		2002		2003	
Calls for Service	Number	Percent	Number	Percent	Number	Percent
Total CFS	774,734	100.0	869,325	100.0	833,057	100.0
False alarm or cancel	122,774	15.8	136,975	15.8	131,089	15.7
False alarm	108,810	14.0	115,450	13.3	107,554	12.9
Cancel prior to dispatch	13,964	1.8	21,525	2.5	23,535	2.8
Good	2,369	0.3	1,328	0.2	1,616	0.2

Table 1 reflects the data that false alarms have dropped from 14% of calls for service in 1996 to about 12.9% in 2003. **While the percentage of false alarms in relation to all calls for service has dropped, it is notable that there remain well over 100,000 false alarms per year.** Put another way, false alarms represented about 1 in 7 of the calls for service in 1996 and a little better at 1 in 7.8 calls in 2003. The number of “good” burglar alarms by comparison is a very low percentage of calls for service and just over 1% when burglar alarm calls are used as the statistical base. The reality is that, in Memphis, the vast majority of burglar alarm calls are false alarms.

Best Practice Number Three: Reducing the Dispatch Rate and Number of False Burglar Alarms in Memphis and Shelby County projected an increase in false alarm dispatches if nothing was done about the problem, simply because the number of alarm users was expected to increase over time. **Notably, Table 1 shows that there has been a substantial improvement in cancellation of false burglar alarms prior to the dispatch of a police officer to the scene.** Cancellations prior to dispatch were about 11% of false alarm calls in 1996, compared to nearly 18% in 2003. While these data do not tell us exactly who canceled the alarm, nor what caused the alarm, the increased cancellation prior to dispatch appears to be an indication that alarm companies with centralized monitoring have made some improvements in how they deal with false alarms.

In Table 1, the total number of false alarms and cancellations prior to dispatch suggests that there really has not been any substantial reduction in the burden of false alarms on the MPD. Table 2 translates these numbers into dollar costs. The calculations are estimated using an assumption that false alarm dispatches cost about \$75 per call for service (Phoenix estimate). False alarm cancellations come with an additional cost to the City of Memphis of about \$10.24 per call to an emergency operator. The total of false alarms and cancellations indicates very little change in the burden upon police and emergency service operators since the introduction of the Metro Alarm Office. Accepting cancellations is important when

comparing the difference between \$75 to dispatch versus \$10.24 to cancel, but the reality is that the trend toward increased cancellations due to false alarms is also costing the City of Memphis substantial monies.

Table 2. The cost of false alarms and cancellations prior to dispatch.

Cost	1996		2002		2003	
	Number	\$	Number	\$	Number	\$
False alarm	108,810	8,160,750	115,450	8,658,750	107,554	8,066,550
Cancel prior to dispatch	13,964	142,991	21,525	220,416	23,535	240,998
TOTAL		\$8,303,741		\$8,879,166		\$8,307,548

Metro Alarm Office Data

Burglar alarm registration

A key recommendation in *Best Practice Number Three: Reducing the Dispatch Rate and Number of False Burglar Alarms in Memphis and Shelby County* was the necessity of maintaining an alarm user registration database. An accurate database is essential for the police to identify the alarm system user, as opposed to the burglar. The Model Cities and Model States programs for false alarm prevention also highlight the importance of a database for identifying repeat false alarm users. These studies found that it is possible to substantially reduce false alarms by targeting this repeating offender group. A database is crucial to planning an education and prevention program.

The City of Memphis Ordinance 4640 requires that **all** businesses and residences in Memphis that are protected by a burglar, fire, or emergency alarm **apply for and maintain** a “City of Memphis – Metro Alarm – Permit.” Thus, the Metro Alarm Office has two tasks: issue new permits and renew permits. In March of 1998, there were 78,785 permits on file with the Treasury Department of the City of Memphis.

This researcher obtained information from the Metro Alarm Office on new and renewal (other) permits. Table 3 reflects the total number of new and renewal permits for 2000 through 2003.

Table 3. Metro Alarm Data on Alarm System Permits.

	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>
New permits	19,953	7,486	8,185	7,979
Renewal permits	8,567	3,818	2,503	4,361

The numbers of new permits issued in 2001, 2002, and 2003 are very similar to information on new permits issued by the Finance Department from 1995 to 1997. The higher number of permits in 2000 is most likely a result of public awareness of the “new” Metro Alarm Office.

The low number of renewal permits, as counted in the database, is notable. The database will

not be accurate if it is not maintained. It is important that the renewals be targeted to ensure accuracy of the database. It appears from this information that the Metro Alarm Office has failed to collect renewal fees. Even a rudimentary estimate suggests that 60,000 to 80,000 permits could be renewed each year, yielding a renewal amount of \$300,000 to \$400,000 per year. Failure to renew a permit within 30 days of its documented renewal date results in a charge of the new permit fee when the alarm user takes action to renew the permit. It is not clear from Section 28-137 of Ordinance 4640, Article IV Police Emergency Alarm System if any additional fine may be levied when a user fails to renew a permit within the allotted time.

Recommendation #2: Amend City Ordinance 4640 and County Ordinance 208 to impose a sanction for failure to obtain or renew an alarm system permit.

A best practice identified in several jurisdictions was that users (locations) lacking permits were notified via certified mail, and the police refused to respond to alarms in locations where a permit was known to be out of compliance. The forthcoming sections identify that non-compliance for false alarms is more of an issue than non-compliance for permit renewal.

Penalties and fines collected

The Metro Alarm Office has a recommended fine structure for false alarms. This fine structure is limited by State law. Data provided by the Metro Alarm Office suggest that the fines collected by the Metro Alarm Office, like the procedures related to permit issuance, are lower than would be expected if the Metro Alarm Office were functioning properly. It is notable that State limitations on how fines may be levied and collected impact means by which Metro Alarm can enact their procedures.

Table 4. Fines collected in Memphis.

Year	Fines collected
2000	\$2,500
2001	\$1,200
2002	\$3,500
2003	\$2,500

Recommendation #3: Suspend alarm permits when fines are unpaid. The bulk of fines are for false alarms. Best practice review suggests that these users will pay their fines to obtain a valid permit if a non-response policy is also implemented.

False alarm data from the Metro Alarm Office

The intent of the researcher in collecting information from the Metro Alarm Office was to evaluate the adequacy of the registration database, and to assess the extent of the problem of “repeat” alarms. The researcher requested that the Metro Alarm Office provide data for an annual count of alarm systems with zero false alarms, one, two, and so on, to an upper-bound of 7 or more false alarms, reflecting the point where sanctions in the ordinance should be occurring. These data should have been readily available since enforcement of citations

cannot be accomplished if one cannot identify how many false alarms have occurred.

Table 5 and Table 6 contain data provided by the Metro Alarm Office, showing the number of false alarms from alarm systems in the City. Data from Table 5 suggest that there are clear and substantial problems with the Metro Alarm Office database.

In Table 5, the number of zero (or no) false alarms clearly exceeds the number of permits (new and renewed) said to have been issued by the Metro Alarm Office. Moreover, with about 8,000 new permits per year, it is unlikely that the number of zero false alarms would decline, as was reported for 2002. The Metro Alarm Office provided information on users that reported their alarms were no longer active (N=497), but there are too few of these inactive systems to explain the discrepancy in the zero false alarm category.

Table 5. False Alarms Count in Memphis.

No. of False Alarms	2000	2001	2002	2003
None	101,935	109,039	107,800	109,078
1	10,125	5,326	6,383	5,403
2	2,410	1,171	1,219	1,090
3	795	364	419	334
4	385	137	182	124
5	216	76	85	89
6	122	42	51	29
7 or more	271	105	121	113

A recompilation of Table 5, which was provided by the Metro Alarm Office, is shown below as Table 6 to estimate the total number of false alarms. For 7 or more false alarms, 7 was used as the upper limit. In examining the total number of alarms shown at the bottom of the second column for each year, one questions how it is possible that there were only 10,491 false alarms in 2003.

Table 6. Estimate of Total Number of False Alarms in Memphis.

No. of False Alarms	2000		2001		2002		2003	
	Users	Alarms	Users	Alarms	Users	Alarms	Users	Alarms
None	101,935	0	109,039	0	107,800	0	109,078	0
1	10,125	10,125	5,326	5,326	6,383	6,383	5,403	5,403
2	2,410	4,820	1,171	2,342	1,219	2,438	1,090	2,180
3	795	2,385	364	1,092	419	1,257	334	1,002
4	385	1,540	137	548	182	728	124	496
5	216	1,080	76	380	85	425	89	445
6	122	732	42	252	51	306	29	174
7 or more	271	1,897	105	735	121	847	113	791
		22,579		10,675		12,384		10,491

In comparing the false alarm data in Table 6 to the 100,000 plus false alarms recorded by the MPD, it becomes apparent that the Metro Alarm database does not adequately serve the purposes for which the office was created. Explanations for this database inadequacy could include:

- 1) there are substantial numbers of instances where citations (warnings) are not being issued,
- 2) citations are not being forwarded from the MPD to the Metro Alarm Office, or
- 3) data provided to the Metro Alarm Office may not have been consistently entered into the computer.

Recommendation #4: The MPD and the Metro Alarm Office establish a Task Force to discuss the problems of non-issuance and non-recording of alarm citations, and to implement a plan of action to ensure that citations are issued and recorded. There is no purpose for a false alarm database in the Metro Alarm Office if false alarms cannot be (or are not being) counted.

Alarm School

At founding of the Metro Alarm Office, an education program – Alarm School – was to be developed to educate system users with more than 8 false alarms over a one year period. City of Memphis Ordinance 4640 includes a provision requiring an alarm user to attend a training class and pay a fine after the seventh false alarm.

Table 7. Alarm School Data.

Year	Persons attending alarm school	Alarms since attending school
2001	10	33
2002	32	92
2003	66	231

The Phoenix model was recommended as a best practice for establishing a false alarm school. It is not clear from the Metro Alarm Office data exactly how many alarm users met the criteria requiring that they participate in Alarm School. Further, it is not clear from the Metro Alarm Office data why participation in the Alarm School has not reduced false alarms. The Phoenix model suggested a higher success rate for persons that attend school than what is suggested based on the Metro Alarm Office data.

Recommendation #5: Amend the Police Emergency Alarm System Ordinances to reflect maximum use of the fines allowed by State law, and institute suspension of alarm permits for noncompliance with the Ordinances. More strict penalties could result in increased user compliance and fewer false alarms.

Summary

The data compiled for this report suggest that the Metro Alarm Office, in its current functioning, has failed to reduce the false alarm dispatch rate in Memphis. Further, the Metro Alarm Office failed to collect data on new and renewed alarm permits. Production of an alarm user database is essential if alarm users are to be tracked, sanctioned, and re-educated to prevent false alarms.

Communication between the Metro Alarm Office and the Memphis Police Department appears to be lacking. Warnings and citations must be issued and recorded if an alarm database is to be reliable and valid.

A purpose in creating the Metro Alarm Office was to educate the public on the cost of false alarms. This will not be possible if fines are not collected, warnings not issued, and permits not renewed.

An effective alarm ordinance is a critical tool for preventing false alarms. While large monetary fines cannot be imposed in Memphis due to limitations placed by State law, other sanctions and maximum use of fines allowable by law should be revisited. Suspension of alarm permits and notification that police will not respond if a permit is not valid is a viable method of reducing false alarm calls. The non-response method shifts the burden of cost incurred for false alarms to users who have not paid their fines, and it works to prevent false alarms because sanctions have meaning. The Crime Commission concludes that the current practices and procedures used within the Metro Alarm Office are ineffective, possibly costing more than \$8,000,000 of City and MPD monies each year due to false alarm dispatch and cancellations.

References

Alarm Industry Research and Educational Foundation (1999). Model States Report: Best Practices in Reducing False Dispatches. Internet Site: www.airef.org

Blackstone, Erwin A., Simon Hakim, and Uriel Spiegel (2001). Congestion in Delivery of Emergency Services in Urban Areas: The Case of Police Response to Burglar Alarms. www.centralone.com/news/fa_temple.htm Accessed on: October 11, 2004.

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Report Addendum

Mr. Michael Freeman, Administrator of the Metro Alarm Office provided new data to the Crime Commission on 11/5/04, following his being verbally briefed on the contents of this report. This Report Addendum addresses the updated information provided by Mr. Freeman.

Addendum to Update to Best Practice Number Three: False Burglar Alarms Since the Formation of the Metro Alarm Office

This analysis responds to the additional Metro Alarm data and materials provided by Mr. Freeman on November 5, 2004 (Appendix B). From a best practice vantage point, the Metro Alarm numbers continue to appear problematic for two reasons: 1) they are not consistent with verifiable information from the Memphis Police Department (MPD), and 2) the Metro Alarm numbers are not internally consistent. These problems are illustrated and explained in the following two tables.

Table 1 compares the calls-for-service (CFS) information in relation to false alarms and canceled alarms. These data are provided by Mr. Freeman in his November 5 memo. If CFS represent calls for burglar alarms, it would seem reasonable that CFS would include false alarms, canceled alarms, and good alarms (actual burglaries). Using the Metro Alarm data provided on November 5, CFS minus false and canceled alarms yields an estimate of 24,000 good alarms in 2001. The MPD reported 15,719 burglaries to the Federal Bureau of Investigation (FBI) for inclusion in the 2001 Uniform Crime Report (UCR). Comparison of the Metro Alarm data with the MPD UCR data suggests that the Metro Alarm data are not accurate, overstating real burglaries by over 8,000 incidents for 2001. Metro Alarm information on the number of burglaries for 2002 suggests that there were no burglaries in 2002. The MPD UCR data lists 16,283 burglaries as having been reported to the MPD in 2002. Metro Alarm’s data for 2003 suggest that there were 34,000 good alarms. The MPD UCR data for Memphis lists 16,900 burglaries as having been reported to the MPD in 2003.

Table 1: Metro Alarm data for 2001-2004 provided on November 5, 2005 by Michael Freeman

	2001	2002	2003	2004
Calls for service	152,000	136,000	133,000	115,000
False alarms	118,000	114,000	76,000	58,000
Canceled calls	10,000	22,000	23,000	19,800
Estimate on good alarms (CFS – False and canceled)	24,000	0	34,000	37,200

The information from the Metro Alarm November 5 memo related to permits and financial information also appears to be inaccurate. Mr. Freeman states that the “average permit acquisition has been 14,000.” Using Mr. Freeman’s estimated average new permit acquisition and multiplying that by the \$30 new alarm permit fee yields a *potential* revenue of \$420,000 per year. Similarly, one can use the information Mr. Freeman provided for permit renewals and estimate renewal revenue based on a \$5 permit renewal fee. Total dollars in revenue for this office would then be the sum of new permits and renewal permits.

Table 2 analyzes the disparity between the revenue that should be collected using Mr. Freeman’s data on new and renewed permits, and the actual revenue that Mr. Freeman reports his office collected in each year, 2000-2004, respectively.

Table 2: Alarm permit acquisitions and renewals – Enterprise account balance compared with projected revenue

	Year				
	2000	2001	2002	2003	2004
Alarm permits	14,000	14,000	14,000	14,000	14,000
Dollars from permits	\$420,000	\$420,000	\$420,000	\$420,000	\$420,000
Alarm renewals	39,000	35,000	35,000	30,000	36,000
Dollars from renewals	\$195,000	\$175,000	\$175,000	\$150,000	\$180,000
Total dollars	\$615,000	\$595,000	\$595,000	\$570,000	\$600,000
Enterprise fund account	\$167,894	\$210,148	\$112,067	\$156,000	\$262,461
Difference between Metro Alarm memo and Total dollars	-\$447,106	-\$384,852	-\$482,933	-\$414,000	-\$337,539

If the Metro Alarm data are accurate, the enterprise fund account balance should match the projected yield, which is based on the cost of new and renewal permits multiplied by the respective fees. However, the differences between the enterprise fund account and the projected revenue range from \$337,539 to \$482,933 in uncollected fees.

The Crime Commission concludes that the figures provided in the November 5, 2004 memo from the Metro Alarm Office cannot be accurate, even accounting for any degree of “rounding.” Further, we use the November 5 memo data as additional evidence that the Metro Alarm Office is not functioning as recommended, and that the Metro Alarm Office needs to develop an accurate, usable permit database.

**Appendix A:
Data provided by Metro Alarm in Spring 2004**

This Appendix documents requests for information made to the Metro Alarm Office and Metro Alarm's responses to the requests.

To: Michael Freeman, Administrator, Metro Alarm Office
From: Dr. David Forde, University of Memphis, 678-5733

Mike,

I would like to obtain information about false burglar alarms for businesses and households in Memphis. If you have Shelby County information, I would like that too.

The categories follow at the end of this e-mail.

Please give me a call if you require any clarification.

Yours sincerely,
David

1. Total dollars of fines by year
 2. Total dollars collected by year
 3. Number of false alarms by year (2000, 2001, 2002, and 2003)
 - a. None
 - b. 1
 - c. 2
 - d. 3
 - e. 4
 - f. 5
 - g. 6
 - h. 7 or more
 4. Total number of false alarms by year by:
 - a. with permit
 - b. without permit
 5. Number of permits broken down by month and year including:
 - a. New permits
 - b. Renewals
 - c. Not renewed
 6. Number of people who have attended alarm school by month and year
 - a. Of these people, number of false alarms they have had since attending alarm school
 7. The number of people that have asked to have their name removed from the alarm database by year
-

Ricci,
I thought you'd like to know that our request made it to Rhonda Holt who says she will get to it next week. She is on vacation this week.

David
----- Original Message -----
From: "David R Forde" <drforde@memphis.edu>
To: "David R Forde" <drforde@memphis.edu>
Sent: Thursday, April 08, 2004 8:25 AM
Subject: Fw: Fwd: Request for information

>
> ----- Original Message -----
> From: "Mike Freeman" <michael.freeman@cityofmemphis.org>
> To: <drforde@memphis.edu>
> Sent: Wednesday, April 07, 2004 2:58 PM
> Subject: Re: Fwd: Request for information

>
>
> Fyi...
>
> We'll get back w/the development.
>
Mr. Freeman,
I will be on vacation next week and will start on this request when I return.

Rhonda Holt
Systems Administrator
City of Memphis Treasury Dept.
rhonda.holt@cityofmemphis.org
(901) 576-6312
Fax (901) 576-6304

>>> Mike Freeman 04/02/04 12:12PM >>>
Rhonda, Dr. Forde would like to have this basic information our system has.
Please work with us on extracting this data as we are putting together a report.

Thank you for your assistance.

4/26/04

Michael,
I'm writing to inquire as to when we can expect the false alarm data from your office. Please advise.

Thanks,
David

David R. Forde, Ph.D.

----- Original Message -----

From: [Ricci Hellman](mailto:Ricci.Hellman)

To: drforde@memphis.edu

Cc: [Mike Heidingsfield](mailto:Mike.Heidingsfield)

Sent: Monday, May 24, 2004 1:56 PM

Subject: Metro Alarm

David: I called Mike Freeman to touch base with him about their request for a data-based report. I inquired how the data transmission was going between their office and your office. Mike said that he checked with Rhonda Holt and she said that she should have the data ready to send to you by the end of this week. Please let me know if when/if the data arrives. Thanks,
Ricci

Rhonda,

I would like to know the counts on the number of alarms in households for each year. That is, how many households in 2000 had zero false alarms, how many had 1, how many had 2, etc., and how many had 7 or more (as a final category). Repeat the same information for 2001, 2002, and 2003.

Additionally, one more item of great interest to add to the list, is how many alarms were turned in each year for households which did not have a valid alarm permit?

I look forward to seeing these materials.

Thanks,

David

----- Original Message -----

From: "Rhonda Holt" <Rhonda.Holt@cityofmemphis.org>

To: <drforde@memphis.edu>

Sent: Monday, June 07, 2004 3:00 PM

Subject: Request for Information - Metro Alarm Office

Dr. Forde,

Could you please provide clarification on items 3.1 thru 3.8 below?

3.. Number of false alarms by year (2000, 2001, 2002, and 2003)

1.. None

2.. 1

3.. 2

4.. 3

5.. 4

6.. 5

7.. 6

8.. 7 or more

Rhonda Holt

Systems Administrator

City of Memphis Treasury Dept.

rhonda.holt@cityofmemphis.org

(901) 576-6312

Fax (901) 576-6304

Mr. Freeman,

Here is the information Dr. Forde requested. I have provided answers for items 1, 3, 4, and 5.

Martha can provide the data for Item 6 which deals with alarm school attendance. Shelia can pull a journal for item 2 for dollars collected by year. Karen may be able to provide information for item 7 which is how many people ask to have their name removed from the alarm database by year.

Rhonda Holt
Systems Administrator
City of Memphis Treasury Dept.
rhonda.holt@cityofmemphis.org
(901) 576-6312
Fax (901) 576-6304

Number of False Alarms by Year with Permit					
			City	County	
		2000	13,435	34	
		2001	7,589	27	
		2002	9,400	1,831	
		2003	8,182	2,787	
Number of False Alarms by Year without Permit					
			City	County	
		2000	10,140	50	
		2001	3,498	20	
		2002	3,444	1,034	
		2003	2,847	2,794	

----- Original Message -----

From: "Rhonda Holt" <Rhonda.Holt@cityofmemphis.org>
To: <drforde@memphis.edu>
Cc: "Karen Robinson" <Karen.Robinson@cityofmemphis.org>; "Martha Gwyn" <Martha.Gwyn@cityofmemphis.org>; "Mike Freeman" <michael.freeman@cityofmemphis.org>
Sent: Wednesday, June 16, 2004 8:34 AM
Subject: Request for Intormation - Metro Alarm Office - Correction toQuestion 6

Dr. Forde

Corrections were made to question 6 pertaining to false alarm school attendance and subsequent false alarms. Please see attached

Rhonda Holt

Systems Administrator
 City of Memphis Treasury Dept.
 rhonda.holt@cityofmemphis.org
 (901) 576-6312
 Fax (901) 576-6304

Total Dollars of Fines by Year (1)												
Year	Fines											
2000	2,500											
2001	1,200											
2002	3,500											
2003	2,500											
The count below is of alarm users who have notified the Metro Alarm Office that their permit is no longer active. (7)												
497												
Number of People Who Have Attended Alarm School by Month and Year (6)												
And The Number of False Alarm Calls Since Attending Class												

	2001	Calls	2002	Calls	2003	Calls	2004	Calls
January								
February								
March					15	94	13	1
April			6	82	15	18		
May			10	10				
June					13	66		
July								
August					16	47		
September								
October			16					
November	10	33			7	6		
December					0			
	10		32		66		13	

Appendix B:
Data provided by Metro Alarm on 11/5/2004

Dr. Ricci Hellman of the Crime Commission contacted Mr. Michael Freeman, Administrator of Metro Alarm, on 11/1/04 to share the results of this report with him verbally, prior to the release of the written report. Mr. Freeman responded by saying that he believed the data provided by Ms. Holt were incorrect, and that he wished to provide accurate data. The information contained in this Appendix includes the data and Memo that Mr. Freeman sent to the Crime Commission on 11/5/04. This is also the information that is addressed in the Addendum to this report.

Memphis and Shelby County Metro Alarm Office

Calls for Service (CFS)

2001 CFS	2002 CFS	2003 CFS	2004 CFS *
152,000	136,000	133,000	115,000

* Trend forecasts average monthly CFS @ 10,500. From Jan. to Oct. 04 CFS was 94,000.

False Alarm Calls

2001 FA Calls *	2002 FA Calls	2003 FA Calls	2004 FA Calls **
118,000	114,000	76,000	58,000

Cost: 118K x 75 = 8.8 Mill 114K x 75 = 8.5 Mill 76K x 75 = 5.7 Mill 58K x 75 = 4.3 Mill

* Trend forecasts Jan. to June 01 FA @ 59,000. From July to Dec 01 FA were 59,000.

** Trend forecasts Nov. to Dec. 04 FA @ 5,000. From Jan. to Oct. 04 FA were 53,000.

Saved in FA approximately \$8 million.

Cancelled Calls

2001 Cancelled Calls	2002 Cancelled Calls	2003 Cancelled Calls	2004 Cancelled Calls *
10,000	22,000	23,000	19,800

Cost Savings: 20K x 65 = 650K 22K x 65 = 1.4 Mill 23K x 65 = 1.49 Mill 20K x 65 = 1.3 Mill

* Trend forecasts Nov. to Dec. 04 monthly cancelled calls @ 1,700.

Saved in CA approximately \$4.9 million.

False Alarm Citations

2001 Citations	2002 Citations	2003 Citations	2004 Citations *
		31,000	17,000

* Trend forecasts Nov. to Dec. 04 written citations @ 1,800 per month.

Citations written have no relation to false alarm #7 collection because each citation could have different addresses. However, actual collection for 2000 to present is: \$62,210.

Yearly average: \$15,500.

Alarm Permit Renewals

The average permit acquisition from 2000 until 2003 has been 14,000 annually. From 2000 to 2003 43,000 new permits were acquired. Database withstanding attrition compiles 100 to 130K accounts.

2000 Alarm Renewals	2001 Alarm Renewals	2002 Alarm Renewals	2003 Alarm Renewals	2004 Alarm Renewals
39,000	35,000	35,000	30,000	36,000

The average permit renewal from 2000 has been approximately 44K annually.

Enterprise Fund Account

2000 Revenue	2001 Revenue	2002 Revenue	2003 Revenue	2004 Revenue
\$167,894 +	\$210,148 +	\$112,067 +	\$156,000 +	\$262,461 +

Submitted subsequent to meetings with upper management proposals to obtain integrated system with both law enforcement agencies but unmerged due to budget constraints.

Regarding false alarm calls we have information by address upon citation issuance but not when a call for services is ensued.

Submitted by:
 Michael F. Freeman Dudley Williamson Jim Tusant
 Metro Alarm Office Metro Alarm Board Metro Alarm Board