

Montgomery County Department of Police

MCPD



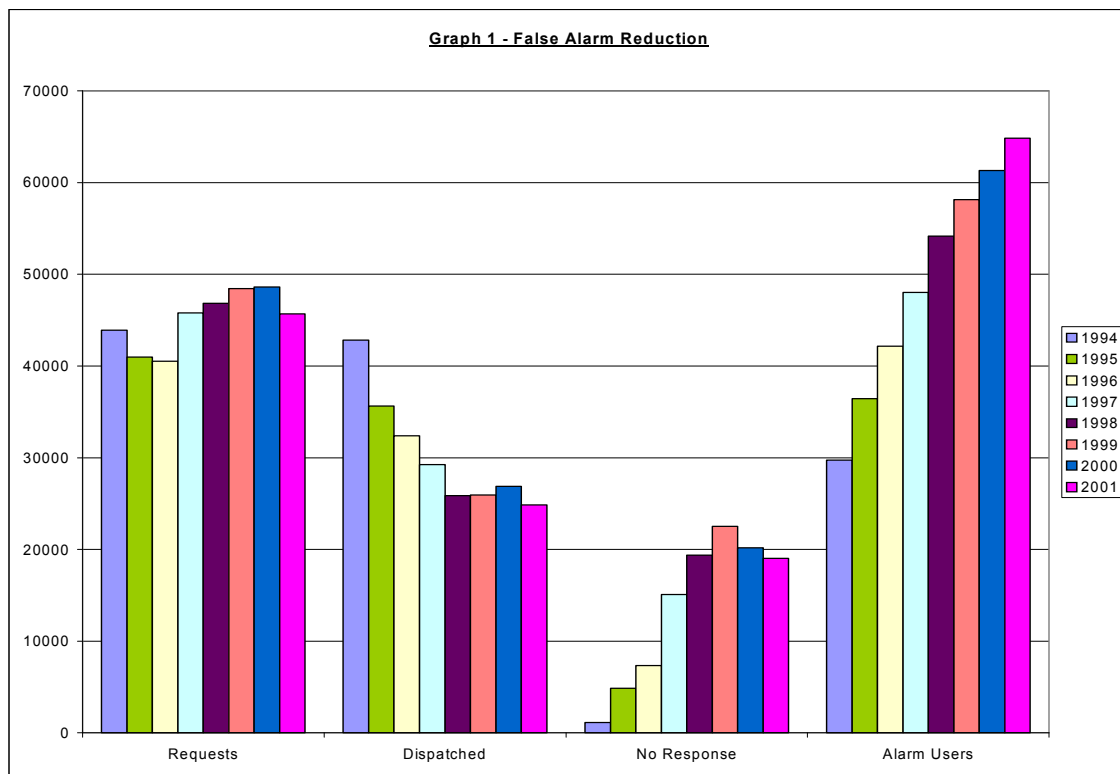
FALSE ALARM REDUCTION PROGRAM

***ANNUAL REPORT
FOR YEAR ENDING 2001***

False Alarm Reduction

The False Alarm Reduction Section (FARS) of the Montgomery County Department of Police completed its sixth year of enforcement under the amended Chapter 3A, Alarms, of the Montgomery County Code. The FARS reports that there was a significant reduction in the incidence of false alarms in calendar year 2001 over calendar year 2000, despite an increase of 7,235 new alarm users. The FARS also exceeded several of its goals for the year, as well as significantly reduced false alarm dispatch rates for both residential and commercial alarm users.

From 1994 through 1998, false alarms continued to decrease. However, in 1999 and 2000, there was a plateau and false alarms to which police officers responded rose very slightly – about .38%. **In calendar year 2001, false alarms to which police officers were required to respond once again began to fall and were reduced by 7.5% over the previous year. The FARS now boasts a full 41.9% reduction in false alarms since enforcement of the False Alarm Reduction Program began in earnest in March 1995.** Additionally, police officers responded to almost 18,000 *less* alarm calls in 2001 over 1994. These statistics, coupled with a 117% increase in the number of registered alarm users over the same time period, clearly shows how successful the false alarm reduction program has been for Montgomery County and why it has become a national model.



Graph 1 above reveals that, for the first time in five years, actual requests for dispatch have fallen. The total number of alarm users in Montgomery County continues to grow. Absent enforcement of the alarm statute, coupled with the increase in alarm users, one would expect that

the actual dispatches to alarm activations would increase substantially, or at least at the same rate of growth. However, actual responses to alarm activations were reduced by 7.5% between 2000 and 2001. In 2001 there were a total of 45,702 requests for dispatch to alarm activations, yet police responded to only 24,855 alarm signals (or close to one-half of the total calls received). There were a total of 19,026 alarm activations to which the police were not required to respond in 2001.

Graph 1 also shows that the County continues to maintain a reduction relative to the total number of requests for dispatch vs. the total number of alarm users. For example, in 1994, Montgomery County police officers responded on 97.5% of all requests for dispatch (43,936 requests for dispatch with 42,821 actual responses). However, in 2001, police officers responded to only 54.4% of all requests for dispatch (45,702 requests for dispatch with only 24,855 actual responses). This represents a 43.1% reduction between requests and dispatches, even with 35,080 *more* alarm users and correlates to a significant savings in police officer time.

Graph 2 and Chart 1 depict the difference between the requests for dispatch and the actual responses since 1994. Requests for dispatch were actually reduced to below 1997 levels, while the actual responses to requests is at an all-time low of 24,855.

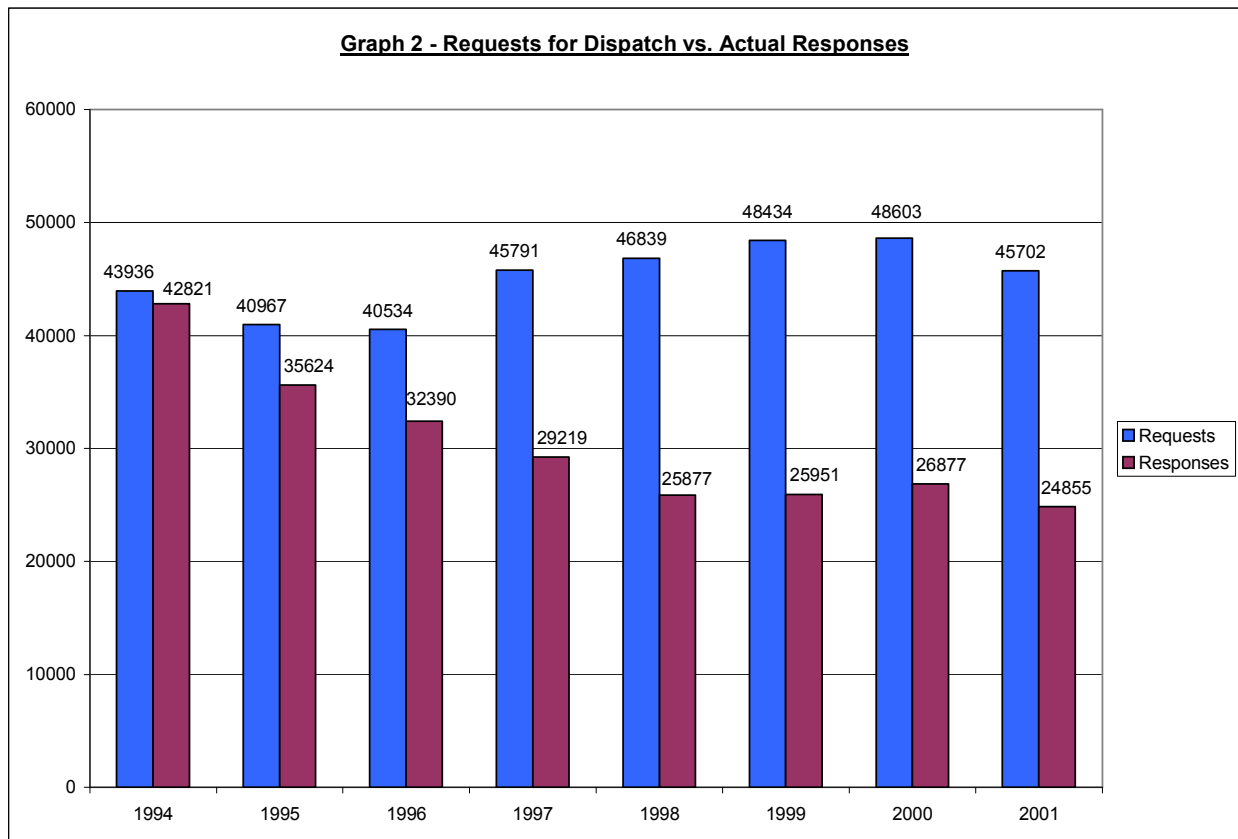


Chart 1 – Requests for Dispatch vs. Actual Responses

<u>Year</u>	<u>Requests for Dispatch</u>	<u>Actual Responses</u>	<u>Percentage of Total Calls Responded To</u>
2001	45,702	24,855	54.4%
2000	48,603	26,877	55.3%
1999	48,434	25,951	53.9%
1998	46,839	25,877	55.3%
1997	45,791	29,219	63.8%
1996	40,534	32,390	79.9%
1995	40,967	35,624	87.0%
1994	43,936	42,821	97.5%

One critical enforcement measure in the alarm statute is the requirement that an alarm company cancel a police response when it is determined that an alarm activation is false. The high number of non-responses was due, in part, to that required cancellation by alarm companies. The higher the number of cancellations, the better the job the alarm companies are doing of reducing the number of false alarms to which police officers respond. In 2001 alarm companies cancelled 7,939 requests for dispatch, an increase of more than 500 cancellations from 2000. These cancellations provide officers with more time to engage in other more critical law enforcement related activities and community policing initiatives.

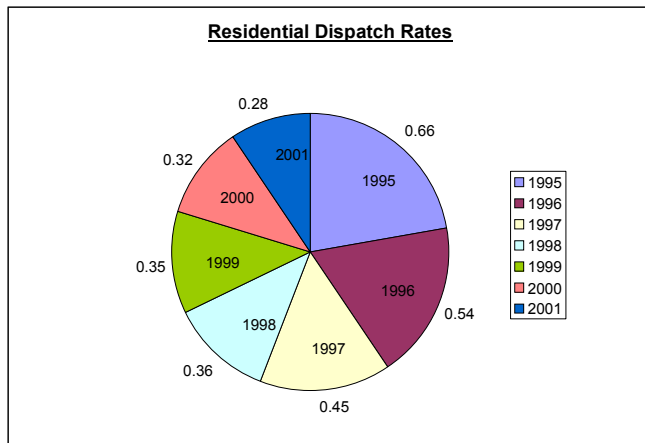
The false alarm dispatch rate is perhaps the truest measure of false alarm reduction, as it calculates the number of false alarm dispatches relevant to the total number of alarm users. The false alarm dispatch rate is the only rate, which takes into account the growth of the alarm user base. **The National Burglar and Fire Alarm Association, an alarm industry trade group, states that Montgomery County has the lowest reported residential false alarm dispatch rate of any jurisdiction in the country at .28.** This means that overall, residential alarm users experience, on average, only 1 false alarm about every four years, which is a remarkable statistic. The commercial false alarm dispatch rate is .98, which is down significantly from 2000 levels. This marks the first time ever that the commercial dispatch rate fell below 1.0. **Combined residential and commercial false alarm dispatch rates fell to an all-time low of .38, and is one of lowest combined reported dispatch rates in the entire country.**

Chart 2 – False Alarm Dispatch Rates

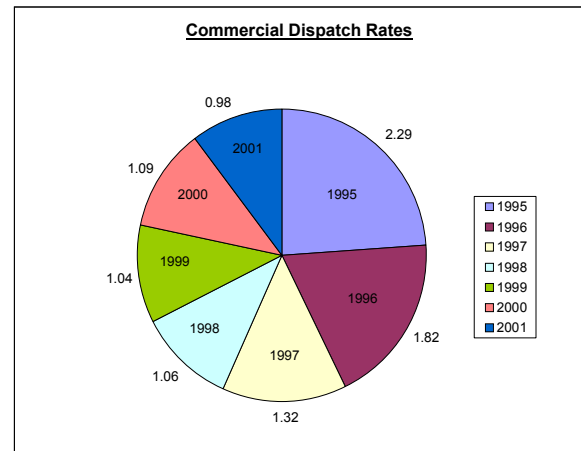
TYPE	1994	1995	1996	1997	1998	1999	2000	2001
Residential	N/A	.66	.54	.45	.36	.35	.32	.28
Commercial	N/A	2.29	1.82	1.32	1.06	1.04	1.09	.98
Both	1.43	.98	.78	.61	.48	.44	.44	.38

The following pie charts (Graphs 3, 4 and 5) graphically depict the significant reductions in residential, non-residential and combined dispatch rates.

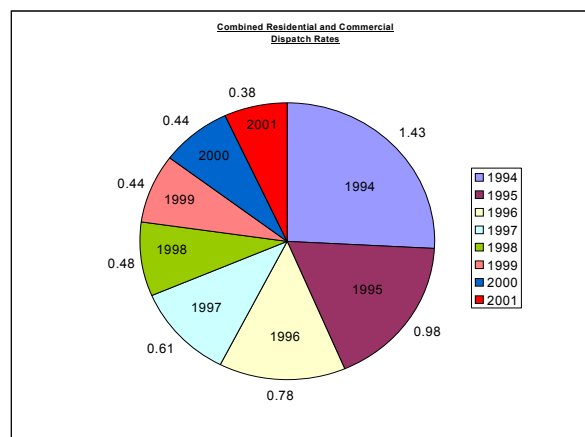
Graph 3



Graph 4



Graph 5



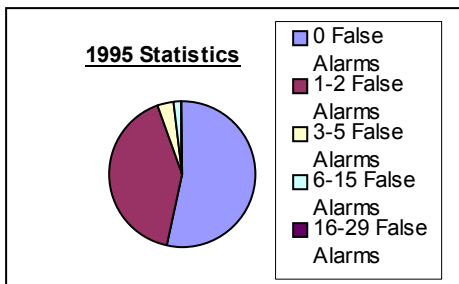
It is not unusual to find commercial false alarm dispatch rates as high as 4.0 or residential false alarm dispatch rates at or above 1.0. A dispatch rate of 4.0 means that *every* alarm user has four actual responses *every* year. If Montgomery County's false alarm dispatch rate were 4.0 instead of its current overall rate of .38, police officers would have responded to almost 250,000 alarm activations in 2001. That would require 79 police officers to do absolutely nothing but respond to burglar alarms at a staggering cost of approximately \$12,000,000.

In projecting the number of alarm activations to which police would have responded in 2001, absent any enforcement of the alarm statute, statistics show that police officers would have actually responded to 91,997 alarm activations instead of 24,855. This number assumes that the dispatch rate of 1.43 would remain constant through 2001. A more accurate assumption would be that, absent any enforcement of the amended alarm law, the dispatch rate would continue to rise significantly each year, and the number of actual responses in 2001 would be more than 150,000. This projection clearly shows just how significant the .38 dispatch rate and the 24,855

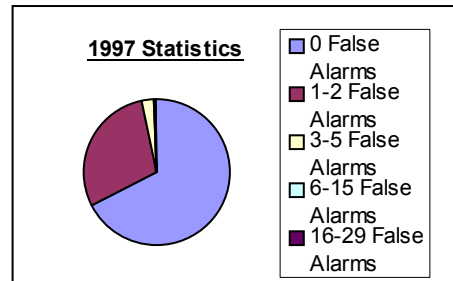
(as opposed to over 150,000) actual responses to alarm activations in 2001 really are. Estimated costs to respond to 150,000 alarm calls would be \$7,500,000; clearly a cost that no local jurisdiction can absorb.

The FARS continued its strict enforcement of all requirements for requesting dispatch, including providing the correct alarm user registration and alarm business license numbers. Police officers were not dispatched when an alarm business failed to provide all of the required information to Emergency Communications Center calltakers. Nor were police dispatched if an alarm user was in a violation status for failure to register, failure to pay a false alarm response fee or failure to upgrade the system to meet county installation standards. The legally mandated non-response provisions in the alarm law resulted in 2,469 requests for dispatch that were denied as a result of the violation status of the alarm user or alarm business. It is significant that this number is down from 3,282 in 2000, which represents a full 813 fewer requests for dispatch that were in violation of the statute. This is directly attributable to the FARS's enforcement initiative, that began in 2000, which cited alarm businesses that were illegally requesting dispatch. It is also notable that this number is down from 3,651 in 1999, and clearly shows that alarm companies are doing a better job of complying with the mandates of the alarm law.

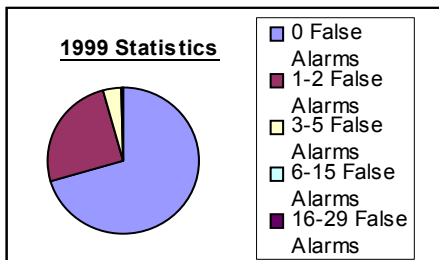
In 2001, 9.3% more residential and commercial alarm users experienced no false alarms at all. **A total of 49,950 alarm users had zero false alarm activations in 2001.** As the following pie graphs show, each year, more alarm users achieve the zero false alarm threshold. This statistic, which is supported by the low false dispatch rate, is indicative of the success of the overall false alarm reduction program. These reductions become more significant when viewed with the steady increase in the number of alarm users each year.



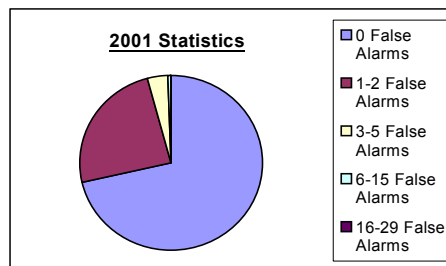
1995 Alarm Users = 36,436



1997 Alarm Users = 48,008



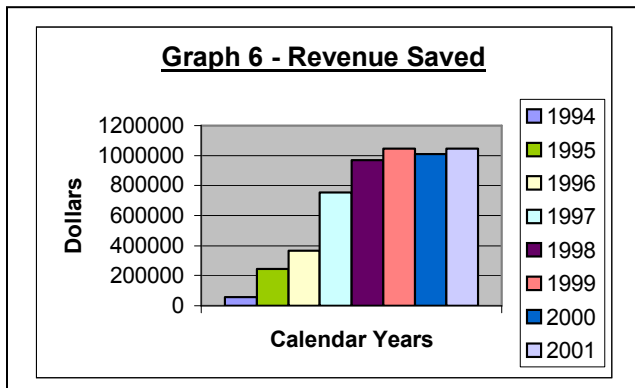
1999 Alarm Users = 58,143



2001 Alarm Users = 64,836

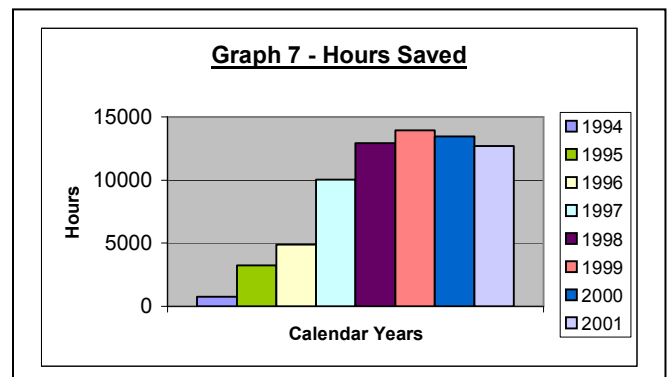
As a direct result of the FARS's strict enforcement of the alarm legislation, there were 19,026 alarm calls to which police officers were not required to respond in 2001. **This equates to savings in 2001 of approximately \$1,046,430 and 12,684 hours of police officer time, or 6.10 police work years.** (Monetary savings are based on a conservative cost of \$55.00 per response. Work year savings are based on an average of 20 minutes per alarm response by two officers.) This timesaving allows police officers more time to engage in proactive crime prevention efforts, neighborhood patrol, and community policing initiatives.

The following graphs illustrate the revenues, hours, and work years saved as a result of the false alarm reduction program.

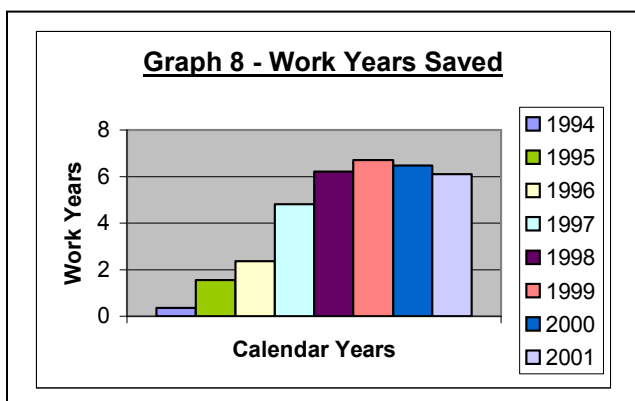


Graph 6 shows that the actual revenue saved in 2001 as a result of police officers responding to 19,026 less false alarms was \$1,046,430. Since the FARS began enforcement of the alarm statute, the total revenue saved by Montgomery County has been \$5,488,480.

Graph 7 shows that the actual hours saved in 2001 as a result of police officers responding to 19,026 less false alarms was 12,684 hours. Since the FARS began enforcement of the alarm statute, Montgomery County has recovered 71,899 hours in police officer time.



Graph 8 shows that 6.10 actual work years were saved in 2001 as a result of enforcement of the alarm statute. Since enforcement began, Montgomery County has recovered a total of 34.57 work years of police officer time.



The total savings in dollars, hours, and work years since 1994 have been significant, and are depicted in Chart 3 below. As stated previously in this report, absent strict enforcement of the alarm statute, Montgomery County would have **paid** more than \$5,000,000 in 2001 alone responding to false alarms. The \$5,488,480 savings to the county is, therefore, even more significant.

Chart 3 – Cumulative Savings

Year	Revenue Saved	Hours Saved	Work Years Saved
1994	\$ 55,750	743	.35
1995	\$ 242,750	3,236	1.56
1996	\$ 366,950	4,892	2.35
1997	\$ 752,850	10,038	4.82
1998	\$ 968,550	12,914	6.21
1999	\$1,046,600	13,954	6.71
2000	\$1,008,600	13,448	6.47
2001	\$1,046,430	12,684	6.10
TOTAL	\$5,488,480	71,899	34.57

In calendar year 2001, the FARS had 454 registered government facilities, all of which were held to the same strict standards as all other alarm users. Of the 454 government alarm users, 99, or 22%, had a least one false alarm. This is down from 104, or 23%, government alarm users in 2000. Those 99 alarm users collectively had 206 false alarms. The good news for government alarm users is that once again, 355, or 77%, had **zero** false alarms in 2001. This percentage is slightly better than the percentages shown for all other alarm users (74.1%). The following chart reflects government alarm user activity for 1999 through 2001.

Chart 4 – Government Alarm Users

# of False Alarms	# of Alarm Users 1999	# of Alarm Users 2000	# of Alarm Users 2001
0	332	355	355
1	72	54	50
2	22	17	33
3	13	14	5
4	2	7	4
5	1	1	2
6	0	1	1
7	1	0	2
8	0	1	1
9	1	2	0
10-13	1	0	0
14-21	0	0	1

Revenue

The following two charts reflect revenue collected by the FARS for alarm user registration fees, false alarm response fees, alarm business license fees, civil citations, and appeal filing fees. The first chart covers *calendar* year 2001. The second chart covers *fiscal* year 01. The FY01 chart is included as a reference, because budget projections are based on fiscal rather than calendar years. The calendar year 2001 chart is included, as false alarms and the resultant false alarm response fees are calculated on a calendar year basis.

Chart 5 – Calendar Year Revenue

CALENDAR YEAR 2001	ACTUAL REVENUES
<u>Registration Fees</u>	
Residential	\$189,210
Commercial	<u>26,520</u>
TOTAL	\$215,730
<u>False Alarm Response Fees</u>	
Residential	\$ 67,405
County Attorney Collections	<u>5,495</u>
Total Residential	\$ 72,900
Commercial	\$471,748
County Attorney Collections	<u>45,944</u>
Total Commercial	\$517,692
TOTAL	\$590,592
<u>Alarm Business Fees</u>	
License	\$ 37,620
Civil Citations	<u>44,800</u>
TOTAL	\$ 82,420
<u>Appeal Filing Fees</u>	
Residential	\$ 855
Commercial	<u>450</u>
TOTAL	\$ 1,305
GRAND TOTAL	\$890,047

Chart 6 – Fiscal Year Revenue

FISCAL YEAR 2001	ACTUAL REVENUES
<u>Registration Fees</u>	
Residential	\$196,650
Commercial	<u>28,730</u>
TOTAL	\$225,380
<u>False Alarm Response Fees</u>	
Residential	\$ 72,666
County Attorney Collections	<u>5,565</u>
Total Residential	\$ 78,231
Commercial	\$577,709
County Attorney Collections	<u>49,397</u>
Total Commercial	\$627,106
TOTAL	\$705,337
<u>Alarm Business Fees</u>	
License	\$ 39,490
Civil Citations	<u>65,400</u>
TOTAL	\$ 104,890
<u>Appeal Filing Fees</u>	
Residential	\$ 810
Commercial	<u>585</u>
TOTAL	\$ 1,395
GRAND TOTAL	\$1,037,002

Collection of false alarm response fees is always a priority for the FARS, as it shows alarm users that Montgomery County is serious about false alarms and does, in fact, enforce its alarm statute. **The FARS’s collection rate in 2001 was 89.2% of all false alarm response fees billed.** The suspension of police response provision in Chapter 3A, Alarms, for failure to remit false alarm response fees greatly enhances the FARS’s ability to collect on unpaid bills.

The following chart reflects the amount billed for false alarm response fees versus the amount collected for both residential and commercial alarm users. Please note that the “collected” amount in the following chart reflects payments made against false alarms that occurred in 2001. The actual collection of monies for those calendar year 2001 false alarms extended into calendar year 2002, and, therefore, reflects different totals from the Calendar Year Revenue Chart.

**Chart 7 – Calendar Year 2001 Billed vs. Collected
False Alarm Response Fees**

False Alarm Response Fees	Billed	Collected	Past Due (>30 & <60 days overdue)	Delinquent (>50 days overdue)
Commercial	\$467,925	\$417,275*	\$34,800	\$15,650
Residential	\$66,950	\$59,850*	\$4,375	\$2,675
Total	\$534,875	\$477,125*	\$39,175	\$18,325

*Represents fees collected in 2001 and 2002 against false alarm response fees billed in 2001.

The FARS is in the process of attempting to collect the past due amounts listed above. The FARS has sent overdue notices to all affected alarm users. The \$18,325 listed above has been referred to the Office of the County Attorney for collection and the affected alarm users have been placed in a non-response status until payment is received.

Major Accomplishments

Successful Defeat of Pre-Emption Attempt

In the 2001 Maryland legislative session, two separate bills were introduced, which would have had the effect of pre-empting local jurisdictions from licensing alarm companies and regulating false alarms. Had these bills passed, it would have had a devastating effect on every local jurisdiction's ability to reduce false alarms. The FARS director put out the alert to all area jurisdictions and gathered the support of the Maryland Chief's of Police Association and the Maryland Association of Counties, as well as Baltimore, Howard, Charles, Prince George's and Frederick counties in an attempt to defeat the bills. Testifying on behalf of the licensing bill, the Maryland Burglar and Fire Alarm Association stated that requiring separate alarm business licenses in the various counties/cities that enacted alarm legislation was unfair and argued for one state license. The Maryland Chief's, MACo, and the counties listed above, along with Montgomery County, testified that false alarms were a local issue, licensing of alarm companies provided the enforcement authority required to ensure that alarm companies took some responsibility for false alarms and their reduction, and that these matters were best handled on a local level, as they had been for more than 10 years (by Montgomery County).

Based on the efforts spearheaded by the Montgomery County FARS director, House Bill 1369, which would have pre-empted local jurisdictions from enacting and enforcing their own local false alarm reduction ordinances, was withdrawn on March 23, 2001. Additionally, House Bill 1368, which would have pre-empted local jurisdictions from licensing alarm companies, received an unfavorable report from the Commerce and Government Committee on March 26, 2001 and was never forwarded to the Senate for debate. Absent the collective efforts of all parties involved, these bills may well have passed into law and negated the excellent work of the Montgomery County Police Department's FARS and their false alarm reduction efforts over the past six years.

Enforcement

As was reported in last year's annual report, one of the FARS's main goals in calendar year 2000 was to increase enforcement of the alarm law with relation to alarm companies. By issuing Class A civil citations to offending alarm companies, the intent of the initiative was for alarm companies to change their behavior and become more responsible and compliant with the mandates of the law.

This initiative was continued into calendar year 2001. By maintaining this enforcement tool, the FARS continued to be successful, once again, in changing the behavior of alarm companies and garnering greater compliance with Chapter 3A, Alarms. This is important, as all of the provisions of the law collectively are what enable the county to continue to reduce false alarms to which police officers must respond.

The FARS, once again, exceeded its goal by issuing 106 Class A Civil Citations for violation of Chapter 3A, Alarms. Most violations involved requesting dispatch, after receiving written notification from the FARS not to do so, for alarm users who were in a non-response status for failure to remit false alarm response fees or failure to register.

It is also interesting to note that of the 106 civil citations, 71, or almost three-fourths of the total, were issued to one alarm business and a company acquired by that business. Staff are currently working with that alarm business to gain greater compliance. These statistics show that, for the most part, alarm businesses are complying with the provisions of the alarm law.

CAD Conversion

The FARS currently uses a two-way electronic interface with the Computer Aided Dispatch system to share information on alarm activations and alarm users and alarm businesses. The CAD>FATB interface allows the FARS to download all alarm activations from the CAD system directly into the False Alarm Tracking and Billing System utilized by the FARS. This interface negates the need to perform the time-consuming task of data entry and ensures a more accurate accounting of false alarms. The FATB>CAD interface provides the Emergency Communications Center personnel with all pertinent information on alarm users and alarm businesses and decreases the number of keystrokes needed to dispatch a call. It also provides the ECC personnel with crucial information about which alarm users may be in a “denied police response” status for violation of the alarm law.

With the new CAD system slated to begin operation in August 2002, it was necessary to work with the county’s integrator, TRW, and the CAD vendor, PRC, to ensure that the two-way interface continues to operate post August 2002. If no new interface were included in the new CAD system, it would have required FARS staff to manually verify and enter all alarm activation data, and would have also required the FARS to hire additional staff to handle this time-consuming operation.

Through lengthy discussions with both TRW and PRC, the FARS was successful in negotiating a new two-way interface that will continue to facilitate dispatch of alarm activations and provide the FARS with the data necessary to enforce Chapter 3A, Alarms, of the Montgomery County Code.

Major Offender Program

The Major Offender Program, designed to identify those alarm users who have the highest number of false alarms and to then suggest appropriate solutions to drastically reduce or eliminate the false alarms, continued to be a very successful initiative for the FARS in 2001.

The FARS goal in 2001 was to reach 45 different alarm users through this program. FARS staff far exceeded this goal by identifying and working with 108 different alarm users, who were experiencing false alarm problems. Of those 108 alarm users, only 10 were not successful in reducing or eliminating their false alarms. Through the FARS’s supportive intervention, 98 alarm users were successful in reducing or eliminating their false alarms.

Collection Efforts

When an alarm user fails to pay a false alarm response fee, the FARS advises the alarm user's alarm company that it may no longer request dispatch for that user and refers the account to the Office of the County Attorney for collection action. In 2001, the FARS referred 335 different alarm user accounts to the Office of the County Attorney for collection of outstanding/delinquent fees that totaled \$88,297.50.

FARS Director Named "Police Official of the Year" by Industry Trade Association

The National Burglar and Fire Alarm Association presented the FARS director, Norma Beaubien, with its "Police Official of the Year" award in April 2001. The award is presented annually to a law enforcement official, who has done outstanding work to improve the safety of their community through a cooperative relationship with the electronic systems industry. This national recognition was attained through the extensive work the FARS director contributes to the national false alarm reduction efforts, her industry committee work, and the success of the Montgomery County False Alarm Reduction Program.

Police Chief Charles A. Moose praised the FARS director for her leadership and her accomplishments in the area of false alarm reduction. Moose commented, "I am extremely proud of the work that Norma has done. By receiving this prestigious national award, it is evident that her exemplary efforts are recognized and appreciated among her peers in the industry. That recognition is probably the highest compliment she could receive."

FARS has Full Employee Complement

For the first time in almost five years, the FARS reached its full employee complement by hiring two new employees. A new Program Specialist was hired in June, who has responsibility for licensing alarm companies and implementing the Major Offender Program, among other things. A new Office Services Coordinator was hired in September to handle the day-to-day administrative tasks of the office, as well as reconcile financials with the county's general ledger, among other things. Both new hires enable the FARS to move forward with false alarm reduction efforts, provide exemplary service to our customers, and implement new initiatives.

Alarm Unit Training for Area Jurisdictions

Based on the two new hires in the Montgomery County FARS, as well as new false alarm reduction programs throughout the Washington-Metropolitan area, the FARS director approached the National Burglar and Fire Alarm Association (NBFAA) to request training regarding burglar alarm systems. Alarm industry leaders Ron and Beth Cain and William Moody worked very hard on putting together a training class that would help law enforcement better understand the technology involved in burglar alarm systems, equipment installation, contracts, and false alarms. This one-day course was attended by law enforcement representatives from all over Maryland and Virginia and provided a great learning opportunity. It further reflects the wonderful partnership developed by the FARS director with the alarm industry and their outstanding willingness to work together to solve the false alarm problem.

General Statistics

Chart 8 shows false alarm reduction statistics from 1994, when the new alarm law was in effect but false alarm response fees were not yet being imposed, through 2001. The chart shows the actual number of requests for dispatch, the number of calls that were ultimately dispatched and responded to, requests where no response was required or was refused, verified calls and the percentage of false alarm reduction. Circumstances under which no response may occur include cancellation of response by the alarm company, duplicate calls for the same location, blanket cancellations by supervisory police personnel, and refusals where the alarm company or alarm user was in a violation status.

Chart 8 – False Alarm Reduction

Year	Requests for Dispatch	Dispatched	No Response	Verified Calls	% Reduction	% Reduction From Base
2001	45,702	24,855	19,026	1821	-7.5%	-41.9%
2000	48,603	26,877	20,172	1554	+0.035%	-37.2%
1999	48,434	25,951	20,932	1551	+0.003%	-39.4%
1998	46,839	25,877	19,371	1,591	-11.4%	-39.6%
1997	45,791	29,219	15,057	1,515	-9.8%	-32.0%
1996	40,534	32,390	7,339	805	-9.1%	-24.3%
1995	40,967	35,624	4,855	488	-16.8%	-15.7%
1994	43,936	42,821	1,115*			

*Does not include dispatch vs. non-dispatch or verified calls for January, February or March, 1994, as statistics for those months are not available.

Chart 9 reflects the number of alarm users each year since 1994. Alarm user registrations have more than doubled since implementation and enforcement of the false alarm reduction program began in 1994. The FARS received 7,235 new alarm user registrations in 2001. (The chart below does not reflect an increase of overall alarm users of 7,235 because some users each year move out of the area or remove their alarm systems and are no longer required to have an alarm user registration.) This increase coupled with the 41.9% decrease in alarm activations to which police officers must respond each year is truly remarkable. The success and results of this program are what make it a model for other municipalities across the country.

Chart 9 – Alarm Users

TYPE	1994	1995	1996	1997	1998	1999	2000	2001
Residential		29,398	34,048	39,129	44,827	48,654	51,743	55,024
Commercial		7,049	8,102	8,879	9,348	9,489	9,591	9,812
Both	29,756	36,436	42,150	48,008	54,175	58,143	61,334	64,836

The following charts depict the number of alarm users that had a specific number of false alarms from 1995 through 2001 and the percentage of change from year to year and from the base year of 1995. Chart 10 shows residential alarm users. Chart 11 shows commercial alarm users, and Chart 12 reflects total alarms (both residential and commercial combined.)

As stated earlier in this report, each year an increasing number of alarm users have no false alarms at all. **In 2001, 49,950 alarm users had ZERO false alarms to which police officers were required to respond.** This is up from 45,684 in 2000. Therefore, the most compelling statistic in these charts is in the number of alarm users that appear on the 0 row (meaning they have had no false alarms for the entire calendar year).

Chart 10
Residential Alarm Users
With Specific Numbers of False Alarms

# of False Alarms	1995	1996	% Change (95-96)	1997	% Change (96-97)	1998	% Change (97-98)	1999	% Change (98-99)	2000	% Change (99-00)	2001	% Change (00-01)	% Base Change (95-01)
0	18116	23328	+28.7	28428	+22.0	33946	+19.4	37,384	+10.1	40,227	+7.6	44,044	+9.5	+143
1	11271	10720	-4.9	10701	-.1	10881	+2.0	11,270	+3.5	11,516	+2.2	10,980	-4.7	-2.6
2	4153	3852	-7.2	3516	-8.7	3379	-3.9	3,292	-2.6	3,395	+3.1	2,950	-13.1	-29.0
3	1171	540	-54.0	371	-31.3	1012	+17.3	985	-2.7	945	-4.1	793	-16.1	-32.3
4	668	513	-23.2	333	-35.1	309	-7.2	261	-15.5	251	-3.8	217	-13.5	-67.5
5	292	168	-42.5	106	-37.0	106	0	89	-16.0	91	+2.2	68	-25.3	-76.7
6	128	57	-55.5	32	-43.8	40	+25.0	32	-20.0	30	-6.3	21	-30.0	-83.6
7	50	25	-50.0	13	-48.0	15	+15.4	10	-33.3	11	+10.0	7	-36.4	-86.0
8	19	12	-37.0	5	-58.3	6	+20.0	2	-66.7	3	+50.0	4	+33.3	-79.0
9	9	4	-55.5	1	-75.0	2	+100	2	0	0	-100	1	+100	-88.9
10	7	0	-100	0		1	+100	1	+100	0	-100	0	-100	-100
11	6	0	-100	0		0		1	+100	0	-100	0	-100	-100
12	3	0	-100	0		0		1	+100	0	-100	0	-100	-100
13	1	0	-100	0		0		1	+100	0	-100	0	-100	-100
14	2	0	-100	0		0		1	+100	0	-100	0	-100	-100
15	2	0	-100	0		0		1	+100	0	-100	0	-100	-100
16	1	0	-100	0		0		1	+100	0	-100	0	-100	-100

Chart 11
Commercial Alarm Users With Specific Numbers of False Alarms

# of False Alarms	1995	1996	% Change (95-96)	1997	% Change (96-97)	1998	% Change (97-98)	1999	% Change (98-99)	2000	% Change (99-00)	2001	% Change (00-01)	% Base Change (95-01)
0	2352	4020	+71.7	4820	+19.9	5412	+12.3	5416	+0.7	5457	+0.7	5906	+8.2	+151
1	4697	4082	-13.1	4059	-.6	3936	-3.0	4073	+3.5	4134	+1.5	3906	-5.5	-16.8
2	2699	2580	-4.4	2457	-4.8	2290	-6.8	2334	+1.9	2474	+6.0	2256	-8.8	-16.4
3	1435	1019	-29.1	837	-17.9	1335	+59.5	1347	+9	1433	+6.4	1299	-9.3	-9.5
4	1113	1039	-6.6	770	-25.9	789	+2.5	781	-1.0	861	+10.2	744	-10.1	-30.4
5	763	648	-15.1	445	-31.3	478	+7.4	475	-.6	527	+10.9	459	-12.9	-39.8
6	490	403	-17.7	292	-27.5	286	-2.0	287	+3	332	+15.7	285	-14.1	-41.8
7	331	250	-24.4	177	-29.2	183	+3.4	176	-3.8	216	+22.7	185	-14.3	-44.1
8	217	177	-18.4	123	-30.5	119	-3.2	112	-5.9	141	+25.9	125	-11.3	-42.4
9	145	120	-17.2	80	-33.3	80	0	80	0	99	+23.8	85	-14.1	-41.4
10	109	84	-22.9	67	-20.2	58	-13.4	58	0	68	+17.2	48	-29.4	-56.0
11	75	57	-24.0	45	-21.0	37	-17.8	42	+13.5	46	+9.5	35	-24.0	-53.3
12	49	40	-18.4	32	-2.0	27	-15.6	28	+3.7	32	+14.3	25	-21.9	-49.0
13	35	33	-5.7	17	-48.5	19	+11.8	18	-5.3	26	+44.4	22	-15.4	-37.1
14	30	25	-16.7	11	-56.0	11	0	13	+18.2	20	+53.8	18	-10.0	-40.0
15	24	23	-4.2	8	-65.2	8	0	10	+25.0	14	+40.0	11	-21.4	-54.2
16	18	20	+11.0	5	-75.0	3	-40.0	5	+66.7	7	+40.0	9	+28.6	-50.0
17	11	15	+36.4	5	-66.6	3	-40.0	1	-66.7	7	+60.0	8	+14.3	-27.3
18	11	10	-9.1	3	-70.0	2	-33.3	0	-100	6	+100	7	+14.3	-36.4
19	8	7	-12.5	1	-85.7	2	+100	0	-100	3	+100	4	+25.0	-50.0
20	5	6	+16.7	1	-83.3	0	-100	0	0	1*	+100	3	+20.0	-40.0
21	5	4	-20.0	1	-75.0	0	-100	0	0	1*	+100	2	+100	-60.0
22	4	3	-25.0	1	-66.6	0	-100	0	0	1*	+100	0	-100	-100
23	2	4	+100	0	-100	0	0	0	0	1*	+100	0	-100	-100
24	2	4	+100	0	-100	0	0	0	0	1*	+100	0	-100	-100
25	2	2	0	0	-100	0	0	0	0	1*	+100	0	-100	-100
26	1	0	-100	0	0	0	0	0	0	0	0	0	-100	-100
27	1	0	-100	0	0	0	0	0	0	0	0	0	-100	-100
28	1	0	-100	0	0	0	0	0	0	0	0	0	-100	-100
29	1	0	-100	0	0	0	0	0	0	0	0	0	-100	-100

*False Alarm Numbers 20 through 25 constitute false alarms charged to the same commercial alarm user.

Chart 12
Both Residential and Commercial Alarm Users With Specific Numbers of False Alarms

# of False Alarms	1995	1996	% Change (95-96)	1997	% Change (96-97)	1998	% Change (97-98)	1999	% Change (98-99)	2000	% Change (99-00)	2001	% Change (00-01)	% Base Change (95-01)
0	20468	27348	+33.6	33248	+21.9	39358	+18.4	42800	+8.7	45684	+6.7	49950	+9.3	+144
1	15968	14802	-7.3	14760	-.2	14817	+.03	15343	-3.5	15650	+2.0	14886	-4.9	-6.8
2	6852	6432	-6.1	5973	-7.1	5669	-5.1	5626	-.7	5869	+4.3	5206	-11.3	-24.0
3	2606	1559	-40.2	1208	-22.5	2347	+94.3	2332	-.6	2378	+1.9	2092	-12.0	-19.7
4	1781	1552	-12.8	1103	-28.9	1098	-.05	1042	-5.1	1112	+6.7	991	-10.9	-44.3
5	1055	816	-22.6	551	-32.5	584	+6.0	564	-3.4	618	+9.6	527	-14.7	-50.0
6	618	460	-25.6	324	-39.6	326	+.06	319	-2.1	362	+13.5	306	-15.5	-50.0
7	381	275	-27.8	190	-31.0	198	+4.2	186	-6.1	227	+22.0	192	-15.4	-50.0
8	236	189	-19.9	128	-32.3	125	-2.3	114	-8.8	144	+26.3	129	-10.4	-45.3
9	154	124	-19.5	81	-34.7	82	+1.2	82	0	99	+20.7	86	-13.1	-44.1
10	116	84	-27.6	67	-20.2	59	-11.9	59	0	68	+15.3	48	-29.4	-56.0
11	81	57	-29.6	45	-21.0	37	-17.8	43	+16.2	46	+7.0	35	-24.0	-53.3
12	52	40	-23.1	32	-20.0	27	-15.6	29	+7.4	32	+10.3	25	-21.9	-49.0
13	36	33	-8.3	17	-48.5	19	+11.8	19	0	26	+36.8	22	-15.4	-37.1
14	32	25	-21.9	11	-56.0	11	0	14	+27.3	20	+42.9	18	-10.0	-40.0
15	26	23	-11.5	8	-65.2	8	0	11	+37.5	14	+27.3	11	-21.4	-54.2
16	19	20	+5.3	5	-75.0	3	-40.0	6	+33.3	7	+16.7	9	+28.6	-50.0
17	11	15	+36.4	5	-66.7	3	-40.0	1	-66.7	7	+600	8	+14.3	-27.3
18	11	10	-9.1	3	-70.0	2	-33.3	0	-100	6	+600	7	+14.3	-36.4
19	8	7	-12.5	1	-85.7	2	+100	0	-100	3	+300	4	+25.0	-50.0
20	5	6	+16.7	1	-83.3	0	-100	0	0	1	+100	3	+20.0	-40.0
21	5	4	-20.0	1	-75.0	0	-100	0	0	1	+100	2	+100	-60.0
22	4	3	-25.0	1	-66.7	0	-100	0	0	1	+100	0	-100	-100
23	2	4	+100	0	-100	0	0	0	0	1	+100	0	-100	-100
24	2	4	+100	0	-100	0	0	0	0	1	+100	0	-100	-100
25	2	2	0	0	-100	0	0	0	0	1	+100	0	-100	-100
26	1	0	-100	0	0	0	0	0	0	0	0	0	-100	-100
27	1	0	-100	0	0	0	0	0	0	0	0	0	-100	-100
28	1	0	-100	0	0	0	0	0	0	0	0	0	-100	-100
29	1	0	-100	0	0	0	0	0	0	0	0	0	-100	-100