

MONTGOMERY COUNTY DEPARTMENT OF POLICE



**FALSE ALARM REDUCTION PROGRAM
2016 ANNUAL REPORT**

MARCH 2017

OVERVIEW

The False Alarm Reduction Section (FARS) of the Montgomery County Department of Police was created to administer Chapter 3A, Alarms, of the Montgomery County Code and reduce the number of false alarms that police must respond to each year. False alarms can take police officers and other public safety personnel away from other events, endangering responding authorities and the community, and wasting public resources.

Police officers responded to about **1,300 (7.8%)** less false alarms in 2016 than in 2015, at the same time, the number of new alarm users increased by about 6,200 in the same time period.

In 2016, there were a total of **10,524 requests** for dispatch to which police did not respond, reducing the impact of false alarms on the quality of service and safety. This was a 4.2% increase over 2015. The time saved by Montgomery County Police not responding to these cancelled alarms equates to approximately **5,613 work hours¹**.

In more than 20 years since the program was initiated, the section has consistently increased the number of alarm users who experience zero false alarms. **In 2016, over 78,000 alarm users, or 88.5%, had zero false alarms.**

Despite some continued staffing challenges in 2016, the FARS was still able to reduce false alarms and increase the number of alarm users with zero false alarms – all positive signs. The *total* number of registered alarm users continues to rise, and despite the significant increase in registered users in 2016, police officers responded to *fewer* alarm calls in 2016 compared to 1994, when enforcement of the amended burglar alarm law went into effect. These statistics, coupled with a 198% increase in the number of registered alarm users over the same time period, demonstrates that substantial and *sustained* false alarm reduction has been achieved.

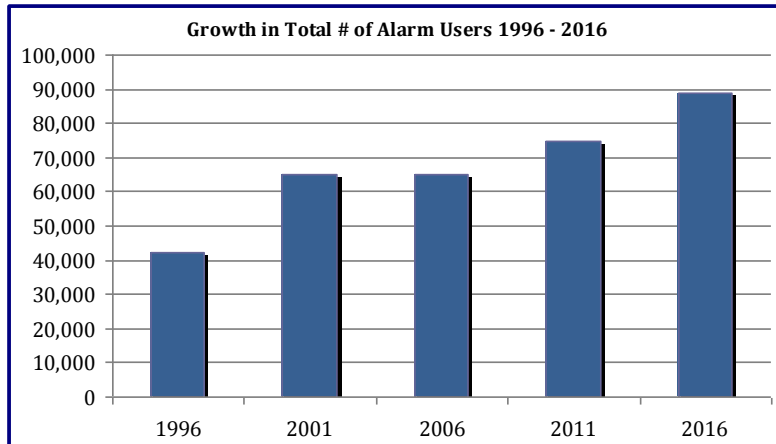
The FARS staff plans to continue its amplified enforcement initiative and remain in the forefront as subject matter experts in the field of false alarm management and reduction.

2016 FALSE ALARM REDUCTION

Alarm Users

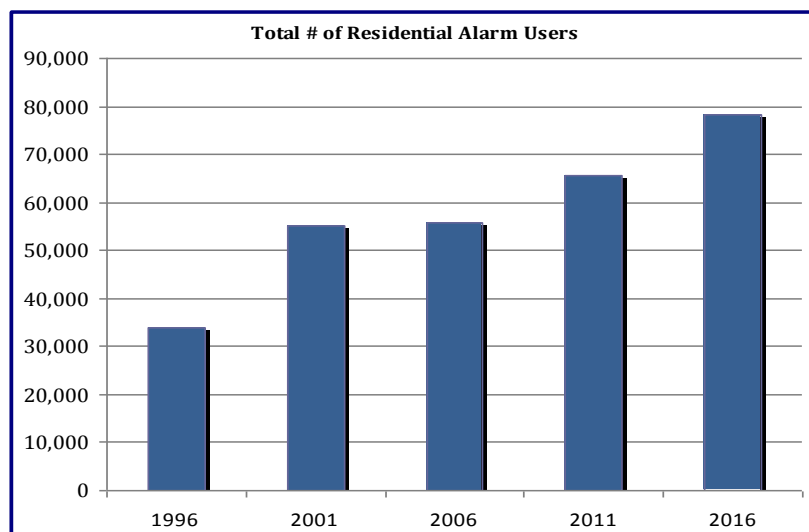
Montgomery County is the most populous jurisdiction in the state of Maryland, consisting of nearly 1.1 million residents. In 2016, FARS received a total of 6,230 new alarm user registration forms (residential and commercial). There was a 4.0% increase in the total number of registered alarm users between 2015 and 2016, accounting for more than 88,500 users.

¹ This figure is based on the average time of 16 minutes each, for two officers per alarm call.



The alarm user registration renewal process permits FARS to keep the alarm user database current by removing those users who no longer have an alarm system or have moved from the County. This allows FARS to perform statistical analysis using more accurate numbers, which provides for more meaningful reporting.

Overall, Montgomery County has experienced an increase in total alarm registrants since 1994 (143%), driven primarily by the number of residential alarm users – more than 78,100 users - an increase of 129.4% since 1996.



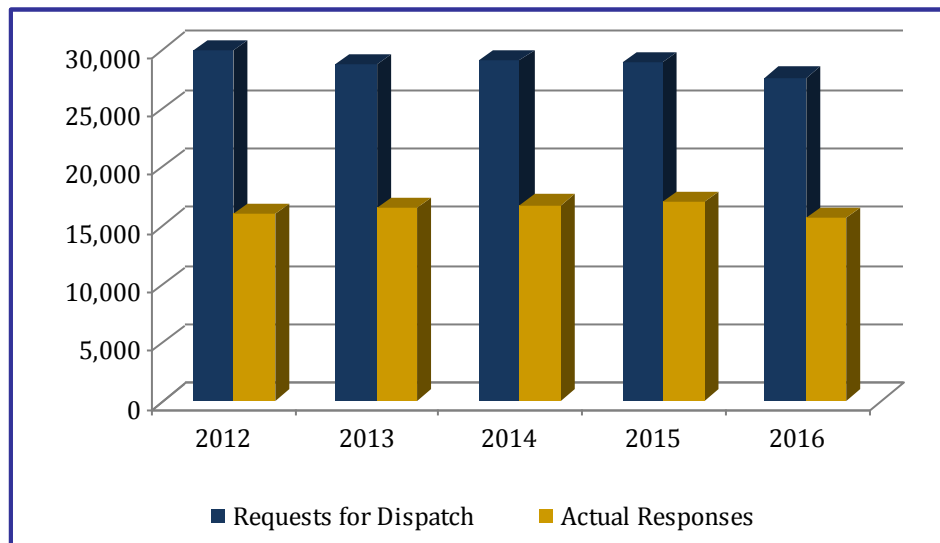
Alarm Responses

A false alarm is an alarm system activation that results in a dispatch request that is not cancelled prior to the arrival of law enforcement at the site, and in which the responding authority finds no evidence of criminal activity to justify a police response. There are several common causes of false alarms:

- Inadequate training of those allowed access to the system. This also includes accidental alarms caused by house/pet sitters, house cleaners, contractors, etc.

- Pets.
- Weak or depleted system batteries.
- Open, unlocked, loose fitting or defective door/window sensors.
- Drafts from air conditioners/heaters, or open windows that cause movement of plants, curtains, etc.

The graph below offers visual representation of the number of requests for dispatch versus actual responses. *Requests for dispatch* include the number of times an alarm monitoring company calls 9-1-1. *Actual response* totals include the number of times an officer actually arrives at a location and investigates the cause of the alarm. Alarm companies are required to cancel police response when it is determined that alarm activation is false, or response is not needed. **In 2016, alarm companies cancelled 6,717 requests for dispatch, or 24% of the total requests for dispatch.** These cancellations provided officers with more time to engage in other more critical law enforcement related activities and community policing initiatives.



Historically, the number of dispatch requests has been declining: the numbers have dropped about 37% over the last 20 years and 10% over the last five years. In 2016, the number of dispatch requests dropped slightly, about 4.6%, from 28,945 to 27,623. The number of actual responses to alarm calls decreased by about 1,300, which was a decrease of about 7.8% in 2016 as compared to 2015. More importantly, the percentage of total calls responded to decreased slightly over the same time period, but the 2016 percentage of dispatch requests that result in response (56.6%) has returned to levels comparable to the mid-2000s. This decrease may be attributed to a decrease in total alarm calls for service.

False Alarm Rates

The false alarm rate is the most common measure of false alarm reduction, as it calculates the number of false alarm dispatches relative to the total number of alarm users.

| Year | Total Registered Users | Total False Alarms | False Alarm Rate |
|------|------------------------|---------------------|------------------|
| 1994 | 29,756 | 42,821 ² | 1.44 |
| 1999 | 58,143 | 24,400 | .42 |
| 2004 | 63,748 | 17,624 | .28 |
| 2009 | 71,011 | 16,816 | .24 |
| 2016 | 88,313 | 15,645 | .17 |

This table demonstrates that although the total number of registered users has increased over the last twenty years, the false alarm dispatch rate has continued to drop. Montgomery County's dispatch rates remain among the lowest in the country.

Another measure of program effectiveness is the total number of alarm users who had NO false alarms. In 2016, a total of 78,125 alarm users had ZERO false alarms; essentially, 88.5% of all alarm users in Montgomery County successfully managed their alarm systems. In 1995, the year after the county alarm code was implemented, only 56.2% of the registered alarm users had no false alarms. This is a significant improvement, given the increase in the total number of users. The chart below represents the false alarm numbers over the last two decades.

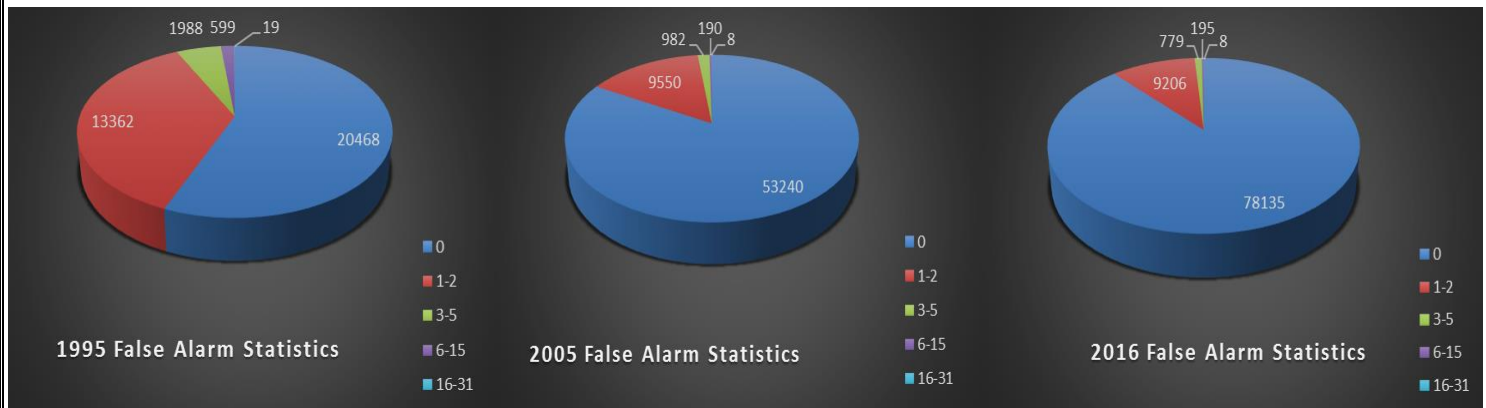
| 2016 <i>Total Users = 88,313</i> | | 2005 <i>Total Users = 63,970</i> | | 1995 <i>Total Users = 36,436</i> | |
|-------------------------------------|-------------|-------------------------------------|-------------|-------------------------------------|-------------|
| False Alarms | Alarm Users | False Alarms | Alarm Users | False Alarms | Alarm Users |
| 0 | 78,125 | 0 | 53,240 | 0 | 20,468 |
| 1-2 | 9,206 | 1-2 | 9,550 | 1-2 | 13,362 |
| 3-5 | 779 | 3-5 | 982 | 3-5 | 1,988 |
| 6-15 | 195 | 6-15 | 190 | 6-15 | 599 |
| 16-31 | 8 | 16-31 | 8 | 16-31 | 19 |

A closer examination reveals that commercial alarm users have improved 224.4% since 1995 towards the achievement of no false alarms, while residential users have been 289% more successful in managing false alarms. In 1995, nearly 7% of all commercial alarm users had six or more false alarms. In 2016, commercial alarm users accounted for about 100% of the users with six or more false. There were no residential alarm users with six or more false alarms in 2016. In 2015, there were 12 users in this category.

² The number of verified calls for 1994 is unknown. 42,821 is the total number of alarm dispatches that occurred.

| Number of Users with No False Alarms | | | | |
|--------------------------------------|--------|--------|--------|----------|
| | 1995 | 2005 | 2016 | % Change |
| Commercial | 2,352 | 5,730 | 7,629 | 224.40 |
| Residential | 18,116 | 47,510 | 70,496 | 289.10 |

The charts below graphically show that more alarm users (as a percentage of total alarm users for a given year) are achieving the zero false alarm thresholds. This statistic, which is supported by the low false alarm 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. This is a positive measure of the program’s impact on County resources.



Cost Avoidance

As a direct result of the FARS’ strict enforcement of the alarm law, there were 10,524 alarm calls that police officers were not required to respond to in 2016. Using the averages established by the Police Department, this equates to approximately **5,613 hours of police officer time, or an estimated \$1,189,212 in cost avoidance.** Monetary cost avoidance is based on an average salary cost³ of \$113. Work year savings are based on an average of 16 minutes per alarm response by two officers.

REVENUE

The charts on the next two pages reflect revenue collected by the FARS for alarm user registration and renewal fees, false alarm response fees, alarm business license and administrative fees, civil citations, and appeal filing fees.

The first chart covers *calendar* year 2016. The second chart covers *fiscal* year 2016. The FY2016 chart is included only as a reference because budget projections are based on fiscal rather than calendar years. The more accurate chart is the calendar year 2016 chart, as

³ Includes fringe benefits, operating expenses and vehicle but does not include costs related to policing, such as training, the cost of dispatching, etc.

false alarms and the resultant false alarm response fees are calculated on a calendar year basis.

| CALENDAR YEAR 2016 | ACTUAL REVENUES |
|--|--------------------|
| <u>Alarm User Registration Fees</u> | |
| Residential | \$167,389 |
| Commercial | <u>16,940</u> |
| TOTAL | \$184,329 |
| <u>Alarm User Registration Renewal Fees</u> | |
| Residential | \$192,555 |
| County Attorney Collections | <u>1,015</u> |
| Total Residential | \$193,570 |
| Commercial | \$ 29,582 |
| County Attorney Collections | <u>320</u> |
| Total Commercial | \$29,902 |
| TOTAL | \$223,472 |
| <u>False Alarm Response Fees</u> | |
| Residential | \$ 74,383 |
| County Attorney Collections | <u>9,482</u> |
| Total Residential | \$ 83,865 |
| Commercial | \$416,730 |
| County Attorney Collections | <u>17,385</u> |
| Total Commercial | \$434,115 |
| TOTAL | \$517,980 |
| <u>Alarm Business Fees</u> | |
| License | \$ 65,024 |
| Civil Citations | 191,750 |
| Administrative Fees | <u>0</u> |
| TOTAL | \$256,774 |
| <u>Appeal Filing Fees</u> | |
| Residential | \$120 |
| Commercial | <u>15</u> |
| TOTAL | \$135 |
| GRAND TOTAL | \$1,182,690 |
| | |

| FISCAL YEAR 16 | ACTUAL REVENUES |
|--|--------------------|
| <u>Alarm User Registration Fees</u> | |
| Residential | \$154,800 |
| Commercial | <u>16,170</u> |
| TOTAL | \$170,970 |
| <u>Alarm User Registration Renewal Fees</u> | |
| Residential | \$231,451 |
| County Attorney Collections | <u>1,269</u> |
| Total Residential | \$232,720 |
| Commercial | \$34,462 |
| County Attorney Collections | <u>160</u> |
| Total Commercial | \$34,622 |
| TOTAL | \$267,342 |
| <u>False Alarm Response Fees</u> | |
| Residential | \$ 90,811 |
| County Attorney Collections | <u>9,774</u> |
| Total Residential | \$100,585 |
| Commercial | \$477,575 |
| County Attorney Collections | <u>11,550</u> |
| Total Commercial | \$489,125 |
| TOTAL | \$589,710 |
| <u>Alarm Business Fees</u> | |
| License | \$ 44,624 |
| Civil Citations | 20,500 |
| Administrative Fees | <u>238</u> |
| TOTAL | \$ 65,362 |
| <u>Appeal Filing Fees</u> | |
| Residential | \$285 |
| Commercial | <u>15</u> |
| TOTAL | \$300 |
| GRAND TOTAL | \$1,093,684 |
| | |

| CALENDAR YEAR COMPARISON | ACTUAL REVENUES | | |
|--|--------------------|--------------------|--------------------|
| | 2014 | 2015 | 2016 |
| <u>Alarm User Registration Fees</u> | | | |
| Residential | \$151,400 | \$158,825 | \$167,389 |
| Commercial | <u>19,130</u> | <u>17,970</u> | <u>16,940</u> |
| TOTAL | \$170,530 | \$176,795 | \$184,329 |
| <u>Alarm User Registration Renewal Fees</u> | | | |
| Residential | \$228,060 | \$258,780 | \$192,555 |
| County Attorney Collections | <u>2,210</u> | <u>1,228</u> | <u>1,015</u> |
| Total Residential | \$230,270 | \$260,008 | \$193,570 |
| Commercial | \$30,665 | \$31,895 | \$29,582 |
| County Attorney Collections | <u>570</u> | <u>170</u> | <u>320</u> |
| Total Commercial | \$31,235 | \$32,065 | \$32,065 |
| TOTAL | \$261,505 | \$292,073 | \$223,472 |
| <u>False Alarm Response Fees</u> | | | |
| Residential | \$94,252 | \$100,343 | \$ 74,383 |
| County Attorney Collections | <u>24,878</u> | <u>9,153</u> | <u>9,482</u> |
| Total Residential | \$119,130 | \$109,496 | \$ 83,865 |
| Commercial | \$305,436 | \$441,547 | \$416,730 |
| County Attorney Collections | <u>33,700</u> | <u>22,942</u> | <u>17,385</u> |
| Total Commercial | \$339,136 | \$464,489 | \$434,115 |
| TOTAL | \$458,266 | \$573,985 | \$517,980 |
| <u>Alarm Business Fees</u> | | | |
| License | \$ 67,300 | \$ 56,400 | \$ 65,024 |
| Civil Citations | 285,500 | 112,500 | 191,750 |
| Administrative Fees | <u>504</u> | <u>464</u> | <u>0</u> |
| TOTAL | \$353,304 | \$169,364 | \$256,774 |
| <u>Appeal Filing Fees</u> | | | |
| Residential | \$255 | \$315 | \$120 |
| Commercial | <u>135</u> | <u>105</u> | <u>15</u> |
| TOTAL | \$390 | \$420 | \$135 |
| GRAND TOTAL | \$1,243,995 | \$1,212,637 | \$1,182,690 |
| | | | |

Collection of false alarm response fees is always a priority for the FARS. Strict enforcement of this aspect of the alarm law clearly shows that Montgomery County is serious about the issue of false alarms. This tool is the ability to place accounts in which alarm users fail to remit the required false alarm response fees into a denied response status. Along with the denied response status, accounts are referred to the Office of the County Attorney for collection action.

The FARS collection rate increased from 85% in 2015 to 91% in 2016. The combination of the Office of the County Attorney as the FARS Collector and suspension of police response provision in Chapter 3A, Alarms, for failure to remit false alarm response fees greatly enhances the FARS ability to collect on unpaid bills. In 2016, staffing shortages continued to impact the FARS ability to place alarm users in denied response; however, FARS was able to increase collection efforts, which resulted in a 6% increase.

The following chart reflects the amount billed for false alarm response fees in 2016 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 2016. The actual collection of monies for those calendar year 2016 false alarms extends into calendar year 2017, therefore reflects different totals than the Calendar Year Revenue Chart. Further, this chart concentrates on calendar year 2016 and does not account for monies received from accounts that owed for previous years.

| Calendar Year 2016 Billed v. Collected False Alarm Response Fees | | | | |
|---|------------------|-------------------|--|---|
| False Alarm Response Fees | Billed | Collected* | Past Due (>30 & <51 days overdue) | Delinquent (>50 days overdue) |
| Commercial | \$364,250 | \$ 332,305 | \$ 230 | \$ 43,810 |
| Residential | \$ 75,150 | \$ 67,235 | \$ 25 | \$ 23,967 |
| | | | | |
| Total | \$439,400 | \$399,540 | \$ 255 | \$67,777 |

**Represents fees collected in 2016 and 2017 against false alarm response fees billed in 2016.*

The FARS is in the process of attempting to collect the past due amounts listed above. The FARS has sent the overdue notices to all affected alarm users. The \$67,777 listed above will be referred to the Office of the County Attorney for collection in early 2017 and the affected alarm users will be placed in a non-response status until payment is received.

CONCLUSION

Overall, the 2016 Annual Report on the status of the False Alarm Reduction Program is positive. In 2016 the percentage of alarm responses that were verified increased to 198% since 1994, the number of dispatch requests from the alarm companies has declined 37.1% since 1994, and the total number of responses has declined 63.5% over the same time. This indicates that alarm companies are better managing and vetting the alarm systems and owners have become more responsible.

The FARS will continue its strict enforcement of all requirements for requesting dispatch, including providing the correct alarm user registration and alarm business license numbers. The legally mandated non-response provisions of the alarm law resulted in 1,515 requests for dispatch that were denied as a result of the violation status of the alarm

user or alarm business. This represents only 5.5% of all requests for dispatch and is a slight increase over 2015, where the percentage was 5.4%.

There must be continuing education performed and early intervention with alarm users who are experiencing false alarms, so that they do not reach unacceptable thresholds and waste valuable resources. In 2016 the FARS ability to enforce the major offender project, which reaches out to alarm users experiencing excessive false alarms, was stalled due to staffing shortages. The major offender project is instrumental in ensuring that alarm users experiencing excessive false alarms are educated about their alarm system and the impact to police resources. The number of alarm users that exceeded the 16 to 31 false alarm count in a calendar year decreased for commercial alarm users in 2016 and there were no residential alarm users in this category. In 2017, the FARS staff will work diligently to intervene and educate the alarm users that fall into this category quickly and expeditiously to ensure we continue to reduce the number of alarm users in this range.

In 2016, the FARS worked cohesively with the Emergency Communication Center (ECC) to identify and remedy any discrepancies between our current Altaris Computer Aided Dispatch (CAD) system and the new Motorola Premier One CAD system. We continue to collaborate strategic efforts to ensure a smooth operational transition. The Motorola Premier One CAD is anticipated to go on-line in April 2017.

Looking ahead to 2017, the FARS intends to focus on collaborating with the Patrol Services Bureau (PSB) and the Management Services Bureau (MSB) to refine and further reduce false alarms. Additionally, we plan to proceed with reviewing the alarm law Chapter 3A, Alarms and the Executive Regulation to determine what updates may need to be considered to ensure both the law and executive regulation are current with today's standards. Furthermore, the FARS is pioneering new strategies to reduce wasted allocation of resources by increasing instruction to involved stakeholders, to include the ECC and PSB, identifying targeted discrepancies, and engaging users and alarm companies with timely correspondence.