MONTGOMERY COUNTY
FALSE ALARM REDUCTION PROGRAM

ANNUAL REPORT
FOR YEAR ENDING 2013
False Alarm Reduction

The False Alarm Reduction Section (FARS) of the Montgomery County Department of Police completed its eighteenth year of enforcement under the amended Chapter 3A, Alarms, of the Montgomery County Code. We are happy to report that even after all that time, false alarms to which police officers respond still continue to fall. Every single year since we began enforcing the amended alarm law, we have increased the number of alarm users who experience zero false alarms. Almost 69,000 alarm users, or 86.1%, had zero false alarms to which police officers responded in 2013. This clearly demonstrates that the vast majority of alarm users are able to eliminate false alarms and also shows that our alarm law works and works well. In April of 2013 a new director was introduced to the FARS and the section did not skip a beat. Notably, we were still able to reduce false alarms, increase the number of alarm users with zero false alarms, and our dispatch rate for commercial alarm users remained steady – all positive signs.

False alarm dispatch rates in Montgomery County are still among the lowest, if not the lowest, of anywhere in the country. Residential dispatch rates remained steady at .15 in 2013. This equates to just one false alarm response every six years; which is an exceptional statistic. The commercial dispatch rate also remained steady at .64 in 2013 and is still at an all-time low. The combined dispatch rates for 2013 remained the same at .21.

Montgomery County saved $1,286,670 and gained 7,798 hours of recovered police officer time. Revenues generated through the program are still more than $1 million annually. The FARS staff continued its amplified enforcement initiative collecting more than $208,000 in civil citations alone. Alarm companies cancelled 7,802 requests for dispatch freeing up officers to respond to actual emergencies. And, FARS staff remains in the forefront as subject matter experts in the field of false alarm management and reduction.

Police in Montgomery County responded to more false alarms in 2013 than in 2012, and reflects an increase of .03%. The number of new alarm users increased by more than 2,100 in 2013. Coupled with the number of Police hours, work years, and revenue saved by the FARS program, this increase did not represent a significant impact to the program. The program continues to reduce false alarms into its eighteenth year.

The number of registered alarm users continued to rise to 79,696. Police officers responded to fewer alarm calls in 2013 over 1994 when enforcement of the amended burglar alarm law went into effect. These statistics, coupled with a 169% increase in the number of registered alarm users over the same time period, clearly shows that substantial and sustained false alarm reduction has been achieved.

![Graph 1 – False Alarm Reduction](image)
Graph 1 – False Alarm Reduction, provides information on the number of requests for dispatch vs. actual responses. The graph also provides information on calls where no response was made, as well as the total number of alarm users. The graph shows that the number of requests for dispatch fell from 29,979 to 28,763. However, there was an increase in actual responses from 15,979 to 16,441.

Alarm companies are required to cancel police response when it is determined that an alarm activation is false. 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 2013, alarm companies cancelled 7,802 requests for dispatch, which represents 27.1% of the total requests for dispatch. These cancellations provide officers with more time to engage in other more critical law enforcement related activities and community policing initiatives.

The FARS also continued 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 1,234 requests for dispatch that were denied as a result of the violation status of the alarm user or alarm business. This represents only 4.3% of all requests for dispatch.

Graph 2 – Requests for Dispatch vs. Actual Responses below depicts a decrease in the number of requests for dispatch and a slight increase in the number of actual responses.
Chart 1 – Requests for Dispatch vs. Actual Responses

| Year | Requests for Dispatch | Actual Responses | Percentage of Total Calls Responded To |
|------|-----------------------|------------------|---------------------------------------|
| 1994 | 43,936                | 42,821           | 97.5%                                 |
| 1995 | 40,967                | 35,624           | 87.0%                                 |
| 1996 | 40,534                | 32,390           | 79.9%                                 |
| 1997 | 45,791                | 29,219           | 63.8%                                 |
| 1998 | 46,839                | 25,877           | 55.3%                                 |
| 1999 | 48,434                | 25,951           | 53.9%                                 |
| 2000 | 48,603                | 26,877           | 55.3%                                 |
| 2001 | 45,702                | 24,855           | 54.4%                                 |
| 2002 | 46,409                | 23,402           | 50.5%                                 |
| 2003 | 44,673                | 21,452           | 52.0%                                 |
| 2004 | 38,248                | 19,190           | 49.8%                                 |
| 2005 | 36,998                | 16,443           | 44.4%                                 |
| 2006 | 36,751                | 15,652           | 42.6%                                 |
| 2007 | 35,221                | 14,655           | 41.6%                                 |
| 2008 | 35,772                | 15,356           | 43.0%                                 |
| 2009 | 33,209                | 17,533           | 53.0%                                 |
| 2010 | 34,097                | 16,544           | 48.5%                                 |
| 2011 | 30,612                | 16,580           | 54.2%                                 |
| 2012 | 29,979                | 15,979           | 53.3%                                 |
| 2013 | 28,763                | 16,441           | 57.2%                                 |

The false alarm dispatch rate is the truest measure of false alarm reduction, as it calculates the number of false alarm dispatches relative 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 Montgomery County False Alarm Reduction Section reports it has one of the lowest false alarm dispatch rates of any jurisdiction in the entire country.

Chart 2 – False Alarm Dispatch Rates

| Year | Residential | Commercial | Combined |
|------|-------------|------------|----------|
| 1994 | N/A         | N/A        | 1.43     |
| 1995 | .66         | 2.29       | .98      |
| 1996 | .54         | 1.82       | .78      |
| 1997 | .45         | 1.32       | .61      |
| 1998 | .36         | 1.06       | .48      |
| 1999 | .35         | 1.04       | .44      |
| 2000 | .32         | 1.09       | .44      |
| 2001 | .28         | .98        | .38      |
| 2002 | .25         | .94        | .35      |
| 2003 | .23         | .88        | .32      |
| 2004 | .21         | .89        | .30      |
| 2005 | .18         | .86        | .26      |
| 2006 | .16         | .76        | .24      |
| 2007 | .14         | .70        | .22      |
| 2008 | .15         | .70        | .23      |
| 2009 | .17         | .76        | .25      |
| 2010 | .16         | .70        | .23      |
| 2011 | .15         | .72        | .22      |
Assuming Montgomery County’s dispatch rate would have risen a modest amount to 2.0 without enforcement of the alarm law, police officers would have actually responded to 159,392 false alarm activations in 2013. At $110 per dispatch, those 159,392 alarm activations would require approximately 51.1 police officers to do absolutely nothing but respond to burglar alarms at a staggering cost of $17,533,120.

In 2013, an impressive 86.1% of all residential and commercial alarm users experienced no false alarms at all. A total of 68,641 alarm users, had zero false alarm activations to which police officers responded in 2013. This is up from 64,125 in 2011 and 66,770 in 2012. The following pie graphs 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 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.

**Graph 3 – Threshold Statistics**

| False Alarms | Alarm Users |
|--------------|-------------|
| 0            | 68,641      |
| 1-2          | 13,965      |
| 3-5          | 1,875       |
| 6-15         | 582         |
| 16-31        | 13          |

Total 2013 Alarm Users = 79,696

| False Alarms | Alarm Users |
|--------------|-------------|
| 0            | 51,454      |
| 1-2          | 12,294      |
| 3-5          | 1,378       |
| 6-15         | 244         |
| 16-29        | 5           |

Total 2004 Alarm Users = 63,748

| False Alarms | Alarm Users |
|--------------|-------------|
| 0            | 20,468      |
| 1-2          | 15,968      |
| 3-5          | 1,559       |
| 6-15         | 618         |
| 16-29        | 19          |

Total 1995 Alarm Users = 36,436
As a direct result of the FARS’s strict enforcement of the alarm law, there were 11,697 alarm calls to which police officers were not required to respond in 2013. This equates to savings in 2013 of approximately $1,289,670 and 7,798 hours of police officer time, or 7.50 police work years. (Monetary savings are based on a cost of $110 per response. Work year savings are based on an average of 20 minutes per alarm response by two officers.)

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

Graph 4 shows that $1,289,670 in revenue was saved in 2013. A total of $25,049,305 in revenue has been saved since enforcement began.

(Graph 4 – Revenue Saved)

(Graph 5 – Hours Saved)

Graph 5 shows that 7,798 actual hours were saved in 2013. A total of 210,697 hours in police time have been recovered since enforcement began.

(Graph 6 – Work Years Saved)

Graph 6 shows that 7.50 police work years were saved in 2013. A total of 168.01 police work years have been recovered since enforcement began.

(The dramatic difference starting in 2002 vs. previous years is due to erroneously using a full 2080 hours as a work year measure between 1994 and 2001, which is not an accurate figure.)
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 $17,500,000 in 2013 alone responding to false alarms. The $25,046,305 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            |
| 2002 | $1,895,760    | 14,043      | 13.5            |
| 2003 | $1,928,790    | 14,301      | 13.75           |
| 2004 | $1,574,280    | 12,794      | 12.30           |
| 2005 | $1,708,740    | 12,657      | 12.17           |
| 2006 | $1,730,700    | 12,820      | 12.32           |
| 2007 | $1,687,590    | 12,500      | 12.02           |
| 2008 | $1,805,950    | 12,673      | 12.18           |
| 2009 | $1,421,105    | 9,973       | 9.59            |
| 2010 | $1,677,500    | 11,183      | 10.75           |
| 2011 | $1,385,000    | 9,233       | 8.88            |
| 2012 | $1,455,740    | 8,823       | 8.48            |
| 2013 | $1,286,670    | 7,798       | 7.50            |
| TOTAL| $25,046,305   | 210,697     | 168.01          |

### Government Alarm Users

The number of government alarm users fell in 2013 to 491, which is down from 503 in 2012 and 507 in 2011. Of those, 80 or 16.3 % had at least one false alarm. This represents an additional decrease from 17.7% in 2012 and 18% 2011. Those 80 alarm users collectively had 116 false alarms. A total of 411 different government alarm users (83.7%) had zero false alarms. Government facilities still rank better than all other commercial alarm users, where 70.9% had zero false alarms. Only one government facility incurred more than 5 chargeable false alarms, which is dramatically lower than any other commercial alarm user, which tops out at 20.
Chart 4 – Government Alarm Users

| Date | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 to 13 | 14 to 21 |
|------|---|---|---|---|---|---|---|---|---|---|-----------|----------|
| 1999 | 332 | 72 | 22 | 13 | 2 | 1 | 0 | 1 | 0 | 1 | 1 | 0 |
| 2000 | 335 | 54 | 17 | 14 | 7 | 1 | 1 | 0 | 1 | 2 | 0 | 0 |
| 2001 | 355 | 50 | 33 | 5 | 4 | 2 | 1 | 2 | 1 | 0 | 0 | 2 |
| 2002 | 404 | 69 | 22 | 10 | 3 | 0 | 3 | 2 | 0 | 2 | 1 | 0 |
| 2003 | 400 | 74 | 17 | 2 | 3 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| 2004 | 354 | 94 | 34 | 12 | 9 | 3 | 3 | 3 | 0 | 1 | 2 | 0 |
| 2005 | 424 | 71 | 24 | 7 | 3 | 3 | 2 | 3 | 0 | 1 | 4 | 3 |
| 2006 | 431 | 80 | 27 | 7 | 4 | 4 | 3 | 0 | 1 | 0 | 3 | 1 |
| 2007 | 433 | 64 | 33 | 13 | 2 | 1 | 4 | 0 | 0 | 0 | 0 | 1 |
| 2008 | 409 | 71 | 15 | 12 | 5 | 2 | 2 | 2 | 0 | 0 | 1 | 0 |
| 2009 | 394 | 90 | 27 | 7 | 5 | 5 | 2 | 0 | 1 | 0 | 0 | 2 |
| 2010 | 430 | 64 | 17 | 10 | 6 | 1 | 3 | 0 | 2 | 0 | 1 | 1 |
| 2011 | 416 | 59 | 17 | 7 | 5 | 1 | 1 | 1 | 0 | 0 | 0 | 0 |
| 2012 | 414 | 65 | 13 | 6 | 3 | 2 | 0 | 0 | 0 | 0 | 0 | 0 |
| 2013 | 411 | 56 | 18 | 3 | 1 | 1 | 1 | 0 | 0 | 0 | 0 | 0 |

Chart 4 is different from Charts 10-12, which appear later in this report, in that the number of alarm users at each threshold level is **not** included in the preceding level. For example, the chart reflects that 56 government alarm users had one false alarm and 18 government alarm users had two false alarms in 2012. The 18 at the two threshold are **not** included in the 56 count for one false alarm. Another way to view this report is that 56 government alarm users had one and only one false alarm. An additional 18 government alarm users had two and only two false alarms. An additional 3 government alarm users had three and only three false alarms and so on. Adding up the 2013 column will show the total number of government alarm users at 491.
Revenue

The following two charts 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 2013. The second chart covers fiscal year 13. The FY13 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 2013 chart, as false alarms and the resultant false alarm response fees, are calculated on a calendar year basis.

Chart 5 – Calendar Year Revenue

| CALENDAR YEAR 2013 | ACTUAL REVENUES |
|--------------------|-----------------|
| **Alarm User Registration Fees** | |
| Residential | $163,190 |
| Commercial | 20,850 |
| **TOTAL** | **$184,040** |
| **Alarm User Registration Renewal Fees** | |
| Residential | $243,605 |
| County Attorney Collections | 2,250 |
| Total Residential | **$245,855** |
| Commercial | $30,610 |
| County Attorney Collections | 890 |
| Total Commercial | **$31,500** |
| **TOTAL** | **$277,355** |
| **False Alarm Response Fees** | |
| Residential | $84,172 |
| County Attorney Collections | 28,240 |
| Total Residential | **$112,412** |
| Commercial | $305,161 |
| County Attorney Collections | 36,135 |
| Total Commercial | **$341,296** |
| **TOTAL** | **$453,708** |
| **Alarm Business Fees** | |
| License | $79,000 |
| Civil Citations | 208,600 |
| Administrative Fees | 1,036 |
| **TOTAL** | **$288,636** |
| **Appeal Filing Fees** | |
| Residential | $255 |
| Commercial | 105 |
| **TOTAL** | **$360** |
| **Alarm User Civil Citations** | |
| Residential | $000 |
| Commercial | 100 |
| **TOTAL** | **$100** |
| **GRAND TOTAL** | **$1,204,199** |
## Chart 6 – Fiscal Year Revenue

| FISCAL YEAR 13 | ACTUAL REVENUES |
|----------------|-----------------|
| **Alarm User Registration Fees** | |
| Residential | $166,050 |
| Commercial | 19,090 |
| **TOTAL** | **$185,140** |
| **Alarm User Registration Renewal Fees** | |
| Residential | $236,595 |
| County Attorney Collections | 1,100 |
| Total Residential | **$237,695** |
| Commercial | $27,220 |
| County Attorney Collections | 330 |
| Total Commercial | **$27,550** |
| **TOTAL** | **$265,245** |
| **False Alarm Response Fees** | |
| Residential | $84,519 |
| County Attorney Collections | 14,784 |
| Total Residential | **$99,303** |
| Commercial | $333,283 |
| County Attorney Collections | 16,335 |
| Total Commercial | **$349,618** |
| **TOTAL** | **$448,921** |
| **Alarm Business Fees** | |
| License | $76,758 |
| Civil Citations | 142,250 |
| Administrative Fees | 454 |
| **TOTAL** | **$219,462** |
| **Appeal Filing Fees** | |
| Residential | $180 |
| Commercial | 90 |
| **TOTAL** | **$270** |
| **Alarm User Civil Citations** | |
| Residential | $000 |
| Commercial | 100 |
| **TOTAL** | **$100** |
| **GRAND TOTAL** | **$1,119,138** |
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 false alarms. This tool is the ability to place accounts, where 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 rose slightly to 91% in 2013 over 89.5% in 2012. 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 and the above statistic bears this out.

The following chart reflects the amount billed for false alarm response fees in 2013 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 2013. The actual collection of monies for those calendar year 2013 false alarms extended into calendar year 2014, and, therefore, reflects different totals than the Calendar Year Revenue Chart.

**Chart 7 – Calendar Year 2012 Billed vs. Collected False Alarm Response Fees**

| False Alarm Response Fees | Billed  | Collected* | Past Due (>30 & <51 days overdue) | Delinquent (>50 days overdue) |
|---------------------------|---------|------------|----------------------------------|------------------------------|
| Commercial                | $327,725| $311,525   | $6,725                           | $8,750                       |
| Residential               | $123,275| $98,250    | $13,225                          | $11,250                      |
| **Total**                 | **$451,000** | **$409,775** | **$19,950**                     | **$20,000**                  |

*Represents fees collected in 2013 and 2014 against false alarm response fees billed in 2013.

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 $20,000 listed above was referred to the Office of the County Attorney for collection early in 2014 and the affected alarm users have been placed in a non-response status until payment is received.
### General Statistics

Chart 8 shows false alarm reduction statistics from 1994, when the new alarm law first went into effect but false alarm response fees were not yet being imposed, through 2013.

#### Chart 8 – False Alarm Reduction

| Year | Requests for Dispatch | Dispatched/Responses | No Response | Verified Calls | % Reduction | % Reduction From Base |
|------|-----------------------|----------------------|-------------|---------------|-------------|----------------------|
| 1994 | 43,936                | 42,821               | 1,115*      | 488           | -16.8%      | -15.7%               |
| 1995 | 40,967                | 35,624               | 4,855       | 805           | -9.1%       | -24.3%               |
| 1996 | 40,534                | 32,390               | 7,339       | 1,515         | -9.8%       | -32.0%               |
| 1997 | 45,791                | 29,219               | 15,057      | 1,591         | -11.4%      | -39.6%               |
| 1998 | 46,839                | 25,877               | 19,371      | 1,515         | -16.8%      | -39.4%               |
| 1999 | 48,434                | 25,951               | 20,932      | 1,551         | +.003%      | -37.2%               |
| 2000 | 48,603                | 26,877               | 20,172      | 1,554         | +.035%      | -37.2%               |
| 2001 | 45,702                | 24,855               | 19,026      | 1,821         | -7.5%       | -41.9%               |
| 2002 | 46,409                | 23,402               | 21,064      | 1,943         | -5.8%       | -45.3%               |
| 2003 | 44,673                | 21,452               | 21,431      | 1,790         | -8.3%       | -49.9%               |
| 2004 | 38,248                | 19,190               | 17,492      | 1,566         | -10.5%      | -55.2%               |
| 2005 | 36,998                | 16,443               | 18,986      | 1,569         | -14.3%      | -61.6%               |
| 2006 | 36,751                | 15,652               | 19,230      | 1,869         | -4.8%       | -64.4%               |
| 2007 | 35,221                | 14,655               | 18,751      | 1,815         | -6.4%       | -66.6%               |
| 2008 | 35,772                | 15,356               | 19,010      | 1,406         | +.05%       | -64.1%               |
| 2009 | 33,209                | 17,533               | 14,959      | 717           | +.14%       | -59.0%               |
| 2010 | 34,097                | 16,544               | 16,775      | 778           | -5.6%       | -61.4%               |
| 2011 | 30,612                | 16,580               | 13,850      | 747           | -3.2%       | -62.6%               |
| 2012 | 29,979                | 15,979               | 13,234      | 766           | -0.2%       | -62.7%               |
| 2013 | 28,763                | 16,441               | 11,697      | 625           | +2.9%       | -61.6%               |

*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 on the following page reflects the number of alarm users each year since 1994. The FARS received 6,102 new alarm user registration forms in 2013.

Chart 9 does not reflect an increase of overall alarm users by 6,102 (the number of new registered alarm users), because some alarm users each year move out of the area or remove their alarm systems and are no longer required to have an alarm user registration. Additionally, with alarm user registration renewal, the FARS is much better able to keep the alarm user database current by removing those alarm users, who no longer have an alarm system or have moved. This allows the FARS to perform statistical analysis using more accurate numbers, which provides for more meaningful and accurate reporting.
### Chart 9 – Alarm Users

| Year | Residential | Commercial | Combined |
|------|-------------|------------|----------|
| 1994 | N/A         | N/A        | 29,756   |
| 1995 | 29,387      | 7,049      | 36,436   |
| 1996 | 34,048      | 8,102      | 42,150   |
| 1997 | 39,192      | 8,879      | 48,008   |
| 1998 | 44,827      | 9,348      | 54,175   |
| 1999 | 48,654      | 9,489      | 58,143   |
| 2000 | 51,743      | 9,591      | 61,334   |
| 2001 | 55,024      | 9,812      | 64,836   |
| 2002 | 57,026      | 9,499      | 66,525   |
| 2003 | 57,223      | 9,241      | 66,474   |
| 2004 | 54,960      | 8,788      | 63,748   |
| 2005 | 55,095      | 8,875      | 63,970   |
| 2006 | 55,752      | 9,083      | 64,835   |
| 2007 | 56,511      | 9,231      | 65,742   |
| 2008 | 58,586      | 9,211      | 67,797   |
| 2009 | 61,818      | 9,193      | 71,011   |
| 2010 | 63,707      | 9,134      | 72,841   |
| 2011 | 65,616      | 9,159      | 74,775   |
| 2012 | 68,208      | 9,327      | 77,535   |
| 2013 | 70,228      | 9,468      | 79,696   |

Charts 10, 11 and 12 on the following pages depict the number of alarm users that had a specific number of false alarms from 1995 through 2013 for select years. The charts also show the percentage of change between 2012 vs. 2013, as well as the percentage of change between the base year of 1995 and 2013, which shows the reduction of false alarms since inception of the program. Chart 10 shows residential alarm users. Chart 11 shows commercial alarm users, and Chart 12 reflects total alarm users (both residential and commercial combined).

In 2013, 68,641 alarm users had ZERO false alarms to which police officers were required to respond. This represents 86.1% of all alarm users which is down slightly from 2012 at 86.2%. 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). More residential and commercial alarm users succeeded in having zero false alarms in 2013 over 2012.

Charts 10-12 are calculated slightly different from the commensurate Chart 4, which reflects government alarm users only. (Government alarm users are included in commercial statistics reported in these charts.) The total number of alarm users for each category will be reflected in the zero and one false alarm rows. Those alarm users, who had two false alarms, are included in the number that had one false alarm. Those alarm users with three false alarms are included in the number that had two and one false alarms respectively. For example, Chart 10 shows that 61,927 alarm users had zero false alarms and 8,301 alarm users had one false alarm. Those two lines add up to the total number of residential alarm users (68,208). Looking further, of the 8,301 alarm users, who had one false alarm, 1,606 of those alarm users went on to have a second false alarm. Of those, 364 went on to have a third false alarm. The column proceeds in the same fashion throughout the entire chart.
The number of residential alarm users, who had no false alarms from 2012 to 2013, rose by 2.9%. As a percentage of the total, 88.2% of residential alarm users had no false alarms in 2013, which is the same as 2012. Keep in mind that when viewing any of the statistical data in this report, it is important to look at those numbers in relation to the total number of alarm users.

**Chart 10**

**Residential Alarm Users**

**With Specific Numbers of False Alarms**

| # of FA’s* | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 | 2011 | 2013 | % Change (12-13) | % Base Change (95-13) |
|------------|------|------|------|------|------|------|------|------|------|------|----------------|---------------------|
| 0          | 18116| 28428| 37384| 44044| 47130| 47510| 49872| 53578| 57660| 61927| +2.9%           | +241.8%             |
| 1          | 11271| 10701| 11270| 10980| 10103| 7585 | 6639 | 8240 | 7956 | 8301 | +3.5%           | -16.4%              |
| 2          | 4153 | 3516 | 3292 | 2950 | 2306 | 1392 | 1171 | 1642 | 1446 | 1606 | +7.9%           | -61.3%              |
| 3          | 1171 | 371  | 985  | 793  | 565  | 327  | 244  | 366  | 341  | 364  | +16.7%          | -68.9%              |
| 4          | 668  | 333  | 261  | 217  | 143  | 99   | 57   | 99   | 90   | 88   | +18.9%          | -86.8%              |
| 5          | 292  | 106  | 89   | 68   | 38   | 30   | 15   | 37   | 30   | 30   | +42.9%          | -89.7%              |
| 6          | 128  | 32   | 21   | 14   | 12   | 6    | 6    | 12   | 9    | 17   | +112.5%         | -86.7%              |
| 7          | 50   | 13   | 10   | 7    | 9    | 3    | 3    | 0    | 3    | 11   | +83.3%          | -78.0%              |
| 8          | 19   | 5    | 2    | 4    | 5    | 1    | 1    | 0    | 0    | 3    | 0.0%            | -84.2%              |
| 9          | 9    | 1    | 2    | 1    | 2    | 0    | 1    | 0    | 0    | 2    | +100%           | -77.8%              |
| 10         | 7    | 0    | 1    | 0    | 1    | 0    | 0    | 0    | 0    | 1    | 0.0%            | 85.7%               |
| 11         | 6    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | 0.0%            | 83.3%               |
| 12         | 3    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | +100%           | -66.7%              |
| 13         | 1    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | +100%           | 0.0%                |
| 14         | 2    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | +100%           | -50.0%              |
| 15         | 2    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | +100%           | -50.0%              |
| 16         | 1    | 0    | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 1    | +100%           | 0.0%                |

*FA’s = False Alarms
The number of commercial alarm users, who had no false alarms from 2012 to 2013, rose by 2.0%. As a percentage of the total, 70.9% of commercial alarm users had no false alarms in 2013. Keep in mind that when viewing any of the statistical data in this report, it is important to look at those numbers in relation to the total number of alarm users.

**Chart 11**

**Commercial Alarm Users With Specific Numbers of False Alarms**

| # of False Alarms | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 | 2011 | 2013 | % Change (12-13) | % Base Change (95-13) |
|-------------------|------|------|------|------|------|------|------|------|------|------|-----------------|---------------------|
| 0                 | 2352 | 4820 | 5416 | 5906 | 5632 | 5730 | 6217 | 6035 | 6465 | 6714 | +2.0%           | +185.5%             |
| 1                 | 1479 | 2457 | 2334 | 2256 | 1502 | 1455 | 1536 | 1343 | 1304 |      |                |                     |
| 2                 | 1435 | 292  | 287  | 285  | 1864 | 1502 | 1455 | 1536 | 1343 | 1304 | +5.3%           | -51.7%              |
| 3                 | 331  | 177  | 176  | 185  | 1399 | 1299 | 1236 | 1243 | 1343 | 1304 | +1.7%           | -59.9%              |
| 4                 | 217  | 123  | 112  | 125  | 98   | 85   | 71   | 105  | 73   | 73   | -4.0%           | -66.4%              |
| 5                 | 145  | 80   | 80   | 85   | 76   | 63   | 48   | 69   | 52   | 55   | +22.2%          | -62.1%              |
| 6                 | 109  | 67   | 58   | 48   | 48   | 43   | 31   | 50   | 39   | 39   | +11.4%          | -64.2%              |
| 7                 | 75   | 45   | 42   | 35   | 28   | 20   | 15   | 28   | 23   | 21   | +50.0%          | -57.1%              |
| 8                 | 145  | 80   | 80   | 85   | 76   | 63   | 48   | 69   | 52   | 55   | +22.2%          | -62.1%              |
| 9                 | 109  | 67   | 58   | 48   | 48   | 43   | 31   | 50   | 39   | 39   | +11.4%          | -64.2%              |
| 10                | 75   | 45   | 42   | 35   | 28   | 20   | 15   | 28   | 23   | 21   | +50.0%          | -57.1%              |
| 11                | 145  | 80   | 80   | 85   | 76   | 63   | 48   | 69   | 52   | 55   | +22.2%          | -62.1%              |
| 12                | 109  | 67   | 58   | 48   | 48   | 43   | 31   | 50   | 39   | 39   | +11.4%          | -64.2%              |
| 13                | 75   | 45   | 42   | 35   | 28   | 20   | 15   | 28   | 23   | 21   | +50.0%          | -57.1%              |
| 14                | 145  | 80   | 80   | 85   | 76   | 63   | 48   | 69   | 52   | 55   | +22.2%          | -62.1%              |
| 15                | 109  | 67   | 58   | 48   | 48   | 43   | 31   | 50   | 39   | 39   | +11.4%          | -64.2%              |
| 16                | 75   | 45   | 42   | 35   | 28   | 20   | 15   | 28   | 23   | 21   | +50.0%          | -57.1%              |
| 17                | 145  | 80   | 80   | 85   | 76   | 63   | 48   | 69   | 52   | 55   | +22.2%          | -62.1%              |
| 18                | 109  | 67   | 58   | 48   | 48   | 43   | 31   | 50   | 39   | 39   | +11.4%          | -64.2%              |
| 19                | 75   | 45   | 42   | 35   | 28   | 20   | 15   | 28   | 23   | 21   | +50.0%          | -57.1%              |
| 20                | 145  | 80   | 80   | 85   | 76   | 63   | 48   | 69   | 52   | 55   | +22.2%          | -62.1%              |
| 21                | 109  | 67   | 58   | 48   | 48   | 43   | 31   | 50   | 39   | 39   | +11.4%          | -64.2%              |
| 22                | 75   | 45   | 42   | 35   | 28   | 20   | 15   | 28   | 23   | 21   | +50.0%          | -57.1%              |
| 23                | 145  | 80   | 80   | 85   | 76   | 63   | 48   | 69   | 52   | 55   | +22.2%          | -62.1%              |
| 24                | 109  | 67   | 58   | 48   | 48   | 43   | 31   | 50   | 39   | 39   | +11.4%          | -64.2%              |
| 25                | 75   | 45   | 42   | 35   | 28   | 20   | 15   | 28   | 23   | 21   | +50.0%          | -57.1%              |
| 26                | 145  | 80   | 80   | 85   | 76   | 63   | 48   | 69   | 52   | 55   | +22.2%          | -62.1%              |
| 27                | 109  | 67   | 58   | 48   | 48   | 43   | 31   | 50   | 39   | 39   | +11.4%          | -64.2%              |
| 28                | 75   | 45   | 42   | 35   | 28   | 20   | 15   | 28   | 23   | 21   | +50.0%          | -57.1%              |
| 29                | 145  | 80   | 80   | 85   | 76   | 63   | 48   | 69   | 52   | 55   | +22.2%          | -62.1%              |
| 30                | 109  | 67   | 58   | 48   | 48   | 43   | 31   | 50   | 39   | 39   | +11.4%          | -64.2%              |
| 31                | 75   | 45   | 42   | 35   | 28   | 20   | 15   | 28   | 23   | 21   | +50.0%          | -57.1%              |

In 2013 the number of false alarms at the top of the threshold; i.e. those with more than 10 false alarms, were slightly elevated as compared to 2012 even with time being devoted to the Major Offender Project. This shows that money alone will not fix the false alarm problem. There must be continuing education performed and early intervention with alarm users who are experiencing false alarms so that they do not reach these thresholds, which are unacceptable. The FARS staff is working diligently to intervene and educate the alarm users that fall into this category.
More than 68,000 alarm users had no false alarms in 2013. As a percentage of the total, 86.1% of residential and commercial alarm users combined had no false alarms in 2013, meaning that only 13.9% of all alarm users had at least one false alarm. Keep in mind that when viewing any of the statistical data in this report, it is important to look at those numbers in relation to the total number of alarm users.

### Chart 12

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

| # of False Alarms | 1995 | 1997 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 | 2011 | 2013 | % Change (12-13) | % Base Change (95-13) |
|-------------------|------|------|------|------|------|------|------|------|------|------|----------------|-----------------|
| 0                 | 20468| 32342| 42800| 49950| 52762| 53240| 56089| 59613| 64125| 68641| 2.8%            | 235.4%           |
| 1                 | 15968| 14760| 15343| 14886| 13712| 12626| 1180 | 1194 | 1285 | 1204 | 2.7%            | -30.8%           |
| 2                 | 6852 | 5973 | 5626 | 5206 | 4170 | 2894 | 3178 | 2789 | 2910 | 2940 | 6.7%            | -57.3%           |
| 3                 | 2606 | 1208 | 2332 | 1579 | 3870 | 1790 | 1008 | 1119 | 1120 | 1129 | 6.4%            | -59.0%           |
| 4                 | 1781 | 1103 | 1042 | 971  | 755  | 582  | 582  | 504  | 522  | 504  | 2.4%            | -71.3%           |
| 5                 | 1055 | 551  | 564  | 527  | 397  | 289  | 262  | 256  | 280  | 280  | 4.6%            | -72.1%           |
| 6                 | 618  | 324  | 306  | 242  | 198  | 166  | 210  | 185  | 200  | 200  | 13.0%           | -67.6%           |
| 7                 | 381  | 190  | 192  | 148  | 124  | 101  | 139  | 112  | 131  | 131  | 9.2%            | -65.6%           |
| 8                 | 236  | 128  | 114  | 129  | 103  | 86   | 72   | 105  | 73   | 76   | -3.8%           | -67.8%           |
| 9                 | 154  | 81   | 82   | 86   | 78   | 63   | 49   | 69   | 52   | 57   | 23.9%           | -63.0%           |
| 10                | 116  | 67   | 48   | 43   | 31   | 50   | 39   | 41   | 41   | 41   | 13.9%           | -64.7%           |
| 11                | 81   | 45   | 35   | 28   | 30   | 22   | 40   | 32   | 28   | 28   | 27.3%           | -65.4%           |
| 12                | 52   | 32   | 29   | 25   | 20   | 15   | 28   | 23   | 22   | 22   | 57.1%           | -57.7%           |
| 13                | 36   | 17   | 19   | 22   | 16   | 11   | 19   | 21   | 16   | 16   | 45.5%           | -55.6%           |
| 14                | 32   | 11   | 14   | 18   | 7    | 13   | 10   | 11   | 11   | 11   | 45.5%           | -65.6%           |
| 15                | 26   | 8    | 11   | 15   | 5    | 8    | 9    | 8    | 6    | 6    | 20.0%           | -76.9%           |
| 16                | 19   | 5    | 6    | 9    | 4    | 8    | 5    | 7    | 7    | 7    | -20.0%          | -78.9%           |
| 17                | 11   | 5    | 8    | 8    | 3    | 7    | 6    | 7    | 6    | 6    | 0               | -72.7%           |
| 18                | 11   | 3    | 0    | 7    | 3    | 6    | 4    | 6    | 3    | 3    | 50.0%           | -72.7%           |
| 19                | 8    | 1    | 0    | 4    | 2    | 6    | 2    | 3    | 5    | 5    | 0               | -75.0%           |
| 20                | 5    | 1    | 0    | 3    | 1    | 4    | 3    | 4    | 4    | 4    | 50.0%           | -80.0%           |
| 21                | 5    | 1    | 0    | 2    | 0    | 1    | 0    | 1    | 2    | 0    | -100%           | -100%            |
| 22                | 4    | 1    | 0    | 0    | 0    | 0    | 0    | 1    | 2    | 0    | -100%           | -100%            |
| 23                | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | -100%           | -100%            |
| 24                | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | -100%           | -100%            |
| 25                | 2    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | -100%           | -100%            |
| 26                | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | -100%           | -100%            |
| 27                | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | -100%           | -100%            |
| 28                | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | -100%           | -100%            |
| 29                | 1    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | -100%           | -100%            |
| 30                | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | -100%           | -100%            |
| 31                | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | -100%           | -100%            |