

**DEPARTMENT OF POLICE**

**CITY OF SAINT PAUL**

**INTER-OFFICE COMMUNICATION**

**TO:** Kathy Wuorinen, Interim Chief of Police

**FROM:** Karl Battle, Crime Analysis Unit

**SUBJECT:** Costs Associate with False Alarms

**DATE:** April 26, 2016

The following information highlights an assortment of metrics related to false alarms (incident code 36) to include estimated average timelines for these calls as well as the estimated average cost per false alarm.

If we assume that the general fund budget is proportionately allocated to cover costs of crime, line 9 is what the Department would have expect to spend per calendar year on false alarms, considering false alarms made up approximately 1.6 to 2 percent of the original permanent reports filed. Notice, the average cost per permanent report multiplied by the number of false alarms (line 7 \* line 4) equals more than 1.6 to 2 percent allocation (line 8 is greater than line 9). To break even on false alarms, the Department would have needed to have net revenue, on average, of \$1,598,510.81 per year from 2013 through 2015.

Line Number	Description	Year		
		2013	2014	2015
3	General Fund Budget (In Dollar Amount)	\$ 80,811,866.00	\$ 84,450,262.00	\$ 86,068,806.00
2	Total Calls for Service	277,077.00	281,203.00	273,948.00
3	Original Reports	136,939.00	130,985.00	137,610.00
4	False Alarms	5,359.00	5,110.00	4,532.00
5	False Alarms as Percent of Total Calls	1.93%	1.82%	1.62%
6	Average Cost of Call (In Dollar Amount)	\$ 291.66	\$ 300.32	\$ 308.55
7	Average Cost of Original Report (In Dollar Amount)	\$ 590.13	\$ 644.73	\$ 625.45
8	Cost for False Alarms (In Dollar Amount)	\$ 3,162,508.78	\$ 3,294,582.12	\$ 2,834,560.20
9	Line 3 Percentage of Total Budget (In Dollar Amount)	\$ 1,962,997.97	\$ 1,534,623.88	\$ 1,398,139.86
	Difference Between Line 8 and Line 9	\$ 1,599,510.81	\$ 1,759,958.24	\$ 1,436,221.34
10	Average Time On False Alarm Call (In Minutes)	27	30	31
11	Average Time Spent on False Alarms Per Year (In Hours)	6,028.88	6,387.50	5,853.83
12	How Much Work is this per Year? (In FTEs)	2.90	3.07	2.81
13	Cost of False Alarms for FTEs (Assuming Average Cost @ 70k per year)	\$ 202,894.83	\$ 214,963.04	\$ 197,004.01
	Average Revenue Amount Needed per False Alarm to Break Even	\$ 298.47	\$ 344.41	\$ 316.91
	Total Revenue Needed from Servicing False Alarms	\$ 1,599,510.81	\$ 1,759,958.24	\$ 1,436,221.34

#### Description of Calculations by Line Number

1. Approved general fund budget amount
2. The number of calls for service for all incident types
3. The number of all original reports generated for calls for service
4. The amount of false alarms (code 36) as reported by R & D
5. Number of false alarms divided by total calls for service (line 4/ line 2)
6. General fund dollar amount divided by number of calls for service (line 1/ line 2)
7. General fund dollar amount divided by number of original reports (line 1/ line 3)
8. Number false alarms multiplied by average cost of a false alarm (line 4 \* line 8)
9. General budget multiplied by false alarms as a percent of calls (line 1 \* line 5)
10. Average time from when officer arrived on call to when call was cleared
11. Average time on call multiplied by number of false alarms multiplied by 24 (line 11 \* line 4/ 24)
12. Assume 40 hour work week (2080 hours per year); line 12 divided by 2080 hours
13. Number of full time employees (FTE) multiplied by assumed average annual salary of one FTE

False Alarms - Residential - 2016

	Current	Proposed	Alternate	Difference (proposed-current)	Difference (alternate-current)
<b>Current number of alarm permits</b>	10,297				
Current cost per permit	\$28,000	\$288,316			
Proposed cost per permit	\$58,000	\$597,226		\$308,910	\$102,970
<b>Alternate</b>	<b>\$38</b>		\$391,286		
<b>False Alarm fee for 1st</b>					
Current	2,053				
Proposed	\$0	\$0			
<b>Alternate</b>	<b>\$0</b>		\$0	\$0	\$0
<b>False Alarm fee for 2nd</b>					
Current	605				
Proposed	\$0	\$0			
<b>Alternate</b>	<b>\$75</b>		\$45,375	\$0	\$45,375
<b>False Alarm fee for 3rd</b>					
Current	251				
Proposed	\$25	\$6,275			
<b>Alternate</b>	<b>\$100</b>	\$12,550	\$25,100	\$6,275	\$18,825
<b>False Alarm fee for 4th</b>					
Current	135				
Proposed	\$50	\$6,750			
<b>Alternate</b>	<b>\$200</b>	\$13,500	\$27,000	\$6,750	\$20,250
<b>False Alarm fee for 5th</b>					
Current	74				
Proposed	\$75	\$5,550			
<b>Alternate</b>	<b>\$300</b>	\$9,250	\$22,200	\$3,700	\$16,650
<b>False Alarm fee for 6th</b>					
Current	48				
Proposed	\$100	\$4,800			
<b>Alternate</b>	<b>\$400</b>	\$12,000	\$19,200	\$7,200	\$14,400
<b>False Alarm fee for 7th or more</b>					
Current	177				
Proposed	\$150	\$26,550			
<b>Alternate</b>	<b>\$300</b>	\$53,100	\$88,500	\$26,550	\$61,950
	\$500				
		<b>\$338,241</b>	<b>\$618,661</b>	<b>\$339,385</b>	<b>\$280,420</b>

# Alarm Permit Fees and False Alarm Fees

Alarm Call	Permit Fee	Call 1	Call 2	Call 3	Call 4	Call 5	Call 6	Call 7 or more	Revenue
Current Fee	\$28	\$0	\$0	\$25	\$50	\$75	\$100	\$150	\$338,241
Proposed	\$58	\$0	\$0	\$50	\$100	\$125	\$250	\$300	\$697,626
* Alternate 1	\$38	\$0	\$75	\$100	\$200	\$300	\$400	\$500	\$618,661
Alternate 2	\$38	\$0	\$0	\$75	\$100	\$200	\$300	\$400	\$523,611
Alternate 3	\$30	\$0	\$100	\$200	\$300	\$400	\$500	\$600	Short \$97K \$619,910
# off Calls	10,297	2,053	605	251	135	74	48	177	

Additional Revenue Budgeted = \$282,565  
 Target Revenue \$620,806

Total False Alarm Calls = 3,343