UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF NEW YORK

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THE CIVIC ASSOCIATION OF THE DEAF OF
NEW YORK CITY, *et ano.*,

Plaintiffs,	**DECLARATION OF** **MICHAEL VECCHI**
- against -	95 Civ. 8591 (RWS)
MICHAEL R. BLOOMBERG, *et al.*,	
Defendants.	

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MICHAEL VECCHI declares, under penalty of perjury, pursuant to 28 U.S.C. § 1746, that the following is true and correct:

1.   I am employed by the New York City Fire Department ("FDNY" or "Department") in the civil service title of Chief of Staff, serving the Department as Associate Commissioner of Management Initiatives.   Among my responsibilities, I oversee the FDNY Management Analysis and Planning ("MAP") unit, which undertakes all data analysis for the Department.

2.   I make this declaration in support of defendants' motion to modify or vacate the injunction previously issued in this action.

3.   One of the projects undertaken by MAP in the last several years is the Management Information Reporting System, which, among other things, regularly generates management indicators, including incident-based reports, tracking FDNY responses by incident and alarm source. The data on which these reports are based is derived from Starfire, the Department's Computer Assisted Dispatch ("CAD") system. Starfire data is captured in the FDNY Data Warehouse, a sophisticated and

comprehensive Oracle database that maintains, in real time, data about every alarm activation handled by the Department.[1]

4.   In order to provide information relevant to this motion, I have directed MAP staff to produce a number of compilations of data for both CY 2009, the most recent year for which we have a complete annual data set, and for the eleven-year period 1999-2009. In all cases, the data originated in the Starfire system and have been generated from the FDNY Data Warehouse from records both maintained in the ordinary course of business and that MAP uses to report from on a regular basis. I have checked the data reflected in all of the statistical exhibits submitted by the FDNY in support of this motion, and verify that all data reflected therein accurately reflect the data produced from the Starfire system.

5.   The first bar graph, annexed to this Declaration as Defendants' Exhibit "B" and entitled "Alarm Box Sources – Structural Fires, Calendar Years 1999 to 2009," shows, in graphical form, the breakdown of all structural fire calls received by the FDNY from all known sources over that eleven-year period.

6.   The next bar graph, entitled "Alarm Box Source – All Incidents, Calendar Years 1999 to 2009," annexed as Defendants' Exhibit "C," shows, in similar fashion, all incidents (both structural and non-structural fires, and medical and non-medical emergencies, as well as malicious false alarms ("MFAs")[2]) for the same period.

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[1] An "activation" is every triggering of an alarm from any source, even if the dispatcher determines there is no emergency requiring any response. An "incident" is an alarm activation that receives a FDNY response.

[2] A malicious false alarm is defined by the FDNY as an alarm suspected of being triggered with malicious intent. For the purposes of this motion, MFAs represent incidents to which the FDNY sent Fire apparatus and determined that there was no legitimate basis for the alarm.

7.   Both charts demonstrate, graphically in the bar chart section, and numerically in the table immediately below the chart, that the number of calls received from telephone sources – primarily via E-911, but also from direct telephone contacts to the FDNY – literally and figuratively dwarf the number of calls received from the street alarm box system.

8.   For example, in CY 1999, there were 353,519 FDNY incidents reported from telephone sources, and 42,497 incidents reported by street alarm boxes. By CY 2009, FDNY incidents reported by telephone source rose to 401,056 – a 13.4% rise in call volume – while alarm box incidents fell to 12,931 – a 69.6% decline.

9.   More importantly, the statistics show an even greater decline in the number of structural fires reported by street alarm boxes over the same period. Structural fires are the most serious and significant firefighting undertaken by the FDNY, posing the greatest risk to both persons and property. In CY 1999, there were 27,171 FDNY structural fires reported from telephone sources, and only 1,188 incidents reported via the alarm box system. By CY 2009, the numbers were 18,836 and 140, respectively. While those numbers represent a 30.7% decline in telephone call volume reporting structural fires, they represent a much steeper drop of 88.2% in street alarm box structural fire reporting.

10.   A comparison with alarm box call volume figures cited by the Court from 1993 and 1994 show an even greater decline as one looks further back in time. According to those numbers, which I have not separately confirmed, in 1993, there were 15,380 non-redundant calls[3] reporting a fire or other emergency from street alarm

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[3] Non-redundant calls are calls not duplicated from 911 or from other sources.

boxes; by 1994, the figure had dropped to 13,013. By contrast, in CY 2009 – the most recent year for which statistics are available – the street alarm box system generated a total of fewer than 1,935[4] such calls for Fire/EMS services, representing more than an 87.4% drop in volume from 1993.

11.   For a more detailed picture of current performance, I provided data to Defendants' counsel for 2009, resulting in a spreadsheet that I have checked against the data I provided, and hereby attest to the table's accuracy and fidelity to those data. The spreadsheet, entitled "FDNY Incidents by Alarm Box and Other Sources for CY 2009," is annexed as Defendants' Exhibit "D."

12.   Defendants' Exhibit "D" divides all incidents into two primary groups: incidents reported from street alarm boxes (set forth in the upper, red-colored section of the chart), and incidents reported from all other sources (set forth in the lower, blue-colored section).

13.   The red street alarm box portion of the spreadsheet is further broken down by type of alarm box: Box Alarm Read-Out System ("BARS") boxes, which are older style electromechanical pull boxes that have been on the streets of New York for more than a century; and Emergency Response System ("ERS") boxes, which are of more recent vintage, and are intercom-style boxes through which callers can communicate directly with dispatchers. The ERS boxes have two buttons. The blue button is used to request Police assistance, and the red button, Fire/EMS assistance.

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[4] This total number of non-MFA calls includes calls where there was at least one additional source, so the number of truly non-redundant calls is likely lower, and the resulting drop in the volume of such calls since 1993 even greater than 87.4%.

14.   While every pull of a BARS box elicits a FDNY dispatcher review to insure a Fire response to the box location (whether in response to the BARS alarm itself, or as the result of a previously received call from another source), ERS boxes may elicit various responses depending upon the presence or absence of communication at the caller's end, and the time of the call. These different types of FDNY dispatch categories, reflected in the second column of the red section of Defendants' Exhibit "D," are explained below.

15.   The first row of the second column, labeled "BARS" reflects that, in CY 2009, there were a total of 3,102 incidents received from BARS boxes, of which 2,805 were MFAs. The right-most column of the spreadsheet shows that these 2,805 MFAs constituted 90.4% of all 3,102 incidents reported by BARS boxes.

16.   The other lines in the second column of the alarm box section of the spreadsheet are explained as follows:

- "ERS" refers to incidents resulting from ERS boxes

- "ERS No Contact" refers to incidents resulting from ERS boxes where no voice is heard.

    Fallback policy for "silent" calls: Because most MFAs are known to be called in between 8:00 a.m. and 11:00 p.m., the FDNY established a "fallback policy" to minimize the squandering of resources on MFAs. Under the fallback policy, if a call is received from an ERS box between the hours of 8:00 a.m. and 11:00 p.m., and the Fire Alarm Receipt Dispatcher ("ARD") does not hear either a voice or tapping of any sort, but is able to hear ambient sound (indicating that the box is in good working order), the call will be classified as "ERS No Contact" and no unit will be dispatched. If, however, the ARD cannot hear any audio whatsoever from the box during this period, one Engine company will be sent to the alarm box location, based on the possibility that a call for assistance may have been sent, but that the box may be broken. If a silent call with ambient noise comes in at any other time, the ARD will dispatch an Engine company to the alarm box location.

- "ERS Timeout": If the ARD does not establish contact with an ERS red-button call within 10 seconds – even if the ARD is handling another emergency call – the call will be automatically transferred to the Decision Dispatcher ("DD") (the person to whom the ARD would normally forward the information received from the caller for appropriate FDNY response), who will automatically dispatch one Engine Company.

- "ERS No Console Available" refers to instances where a call comes in and no ARD is available to handle the call. In such instances, the call will be automatically transferred to the DD, who will automatically dispatch one Engine company.

- "Verbal" refers to a report of an incident by a person flagging down a Fire apparatus or appearing at a Fire house.

17. In the lower, blue-colored section of Defendants' Exhibit "D," pertaining to FDNY calls from sources other than street alarm boxes, the categories in the second column reflect the various ways that such calls enter the FDNY Dispatch System. Those categories are described as follows:

- "Class 3" refers to calls from private fire alarm companies.

- "EMS Link" refers to calls coming into the CAD system administered by Emergency Medical Services that is electronically linked to the FDNY CAD system. The FDNY DD makes the decision as to the appropriate FDNY response, depending upon the nature of the medical emergency. Where appropriate, the responding Fire unit will be qualified for Certified First Responder-Defibrillator ("CFR-D") response.

- "PD Link" refers to a category of telephone calls that are automatically transferred via computer link from the NYPD to FDNY Dispatch. Most PD Link transfers involve medical emergencies.

- "UCT/911" refers to calls to E-911 where the caller's information is entered by the NYPD Unified Call Taker into the NYPD's SPRINT system.

- "Phone" refers to calls to E-911 where the PCT/UCT transfers the call to the FDNY's CAD system, whereupon the caller's information is taken by the Fire ARD.

18. Defendants' Exhibit "D" establishes a number of important points. The street alarm box system is responsible for only 2.7% of all calls received from all sources combined, yet it is responsible for fully 43.3% of all MFAs burdening the FDNY Dispatch System. Thus, the street alarm box system is responsible for burdening the FDNY with 16 times more MFAs than would be expected by its proportion of total call volume.

19. Measuring the MFA rate by source – that is, the percentage of all calls received from a given source that prove to be MFAs – as an indication of source reliability, Defendants' Exhibit "D" demonstrates that the street alarm box system has an MFA rate of 85.0%, as compared with a 3.1% MFA rate for all other sources.

20. A comparison of these two reliability indicators establishes an MFA rate for the street alarm box system that is over 27 times greater than the MFA rate for all other sources; or, to put it another way, each call received from a street alarm box for FDNY/EMS services is over 27 times more likely to be a malicious false alarm than is a similar call from any other source.

21. It is important to bear in mind that MFAs are more than a mere burden or inconvenience. Each MFA represents wasted time during which firefighting resources and dispatchers could have been attending to a legitimate and urgent call for Fire or EMS assistance, engendering delays that can have a direct human toll in lost property and lost lives. Equally importantly, however, an MFA that gets a FDNY response means that Fire personnel are sent racing through busy City streets on Fire apparatus, with lights and sirens on, in order to arrive where they are needed as quickly as possible, placing themselves in harm's way, risking traffic accidents involving

themselves and others, all for no legitimate reason whatsoever. These risks are not theoretical: In CY 2009, there were 532 accidents involving Fire apparatus, causing reported injuries to 48 Firefighters and 70 civilians.

22.   Defendants' Exhibit "D" also shows that the street alarm box system offers little benefit to counterbalance the substantial burdens it imposes on the FDNY. While generating 16 times its proportional share of MFAs by call volume, the street alarm box system consistently reports legitimate incidents at rates far below its 2.7% share of all calls: It reports only 0.5% of all structural fires – the most serious fire events to which the FDNY responds; only 1.4% of all non-structural fires; only 0.6% of all non-medical emergencies; and, at most, no more than 0.2% of all medical emergencies.[5]

23.   With respect to the deaf and hard-of-hearing ("D/HH") community, the available statistics suggest that the ERS system serves neither the D/HH population nor the emergency response system very well at all. From the point of view of D/HH callers, a review I performed of the extremely few calls in which some form of tapping was heard by ARDs suggests that ERS boxes are not the choice of D/HH callers as a portal to the City's emergency response system. Additionally, my review demonstrates that a "tapping" call conveyed to the FDNY dispatch system from ERS boxes is no more likely to be a reliable source of emergency requests than any other call originating in the street alarm box system.

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[5] The MAP unit, for purposes of its management function, does not break out separate statistics for true medical emergencies as opposed to incidents that are called in as medical emergencies but have resolved by the time assistance arrives, or turn out to be non-emergencies for other reasons.

24.   For example, in CY 2007, the FDNY initially designated 25 ERS calls as possible tapping calls because the dispatcher thought s/he heard possible taps. Of that number, 21 "tapping" calls turned out to be MFAs (84.0%, just 1% shy of the 85% MFA rate for the alarm box system as a whole); three calls did not require a Fire response ("NSO's" – Not Sent Out); and one call was, in fact, a fire. However, in that one incident, the ERS call was the seventeenth call received about the fire, the first having been received by telephone.

25.   In 2008, 12 transmissions were initially classified as tapping calls, again, because of a dispatcher's belief that s/he might have heard taps of some kind. Of those calls, 10 (83.3%) were classified MFAs; one classified "unwarranted" (the term used when an alarm box, usually inside a building, is being tested and the tester neglects to inform the FDNY, or when an electrical problem causes an unintended alarm), and, the last, "unnecessary" (the term used when someone calls in an emergency by alarm box or phone which the FDNY, upon responding, determines was unnecessary).

26.   In CY 2009, dispatchers initially characterized six calls as tapping calls, all six of which were determined, upon FDNY response, to have been MFAs. According to the incident reports I reviewed, in none of the above cases did FDNY personnel responding to the incident ever encounter a D/HH person at the alarm box or in the surrounding area.

27.   Thus, according to my review of available incident documentation, in the past three years, the FDNY has received 43 calls in which some form of tapping was heard, of which 37 (86% of all such calls) were determined by FDNY personnel

responding to the alarm to be MFAs. Only one tapping call reported an actual fire, and that call was the seventeenth call received about that incident.

28. Thus, all of the performance and reliability indicators discussed above reveal the street alarm box system as one that is used by the public far less often than it once was; that is dwarfed in call volume by the number of calls received by the Fire Dispatch System from E-911 and other sources available from the street; that is over 27 times less reliable than those other sources; and that introduces fully 16 times its proportional share of MFAs into the system.

Dated: New York, New York
June 22, 2010

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MICHAEL VECCHI

ALARM BOX SOURCES
STRUCTURAL FIRES
CALENDAR YEARS 1999 TO 2009
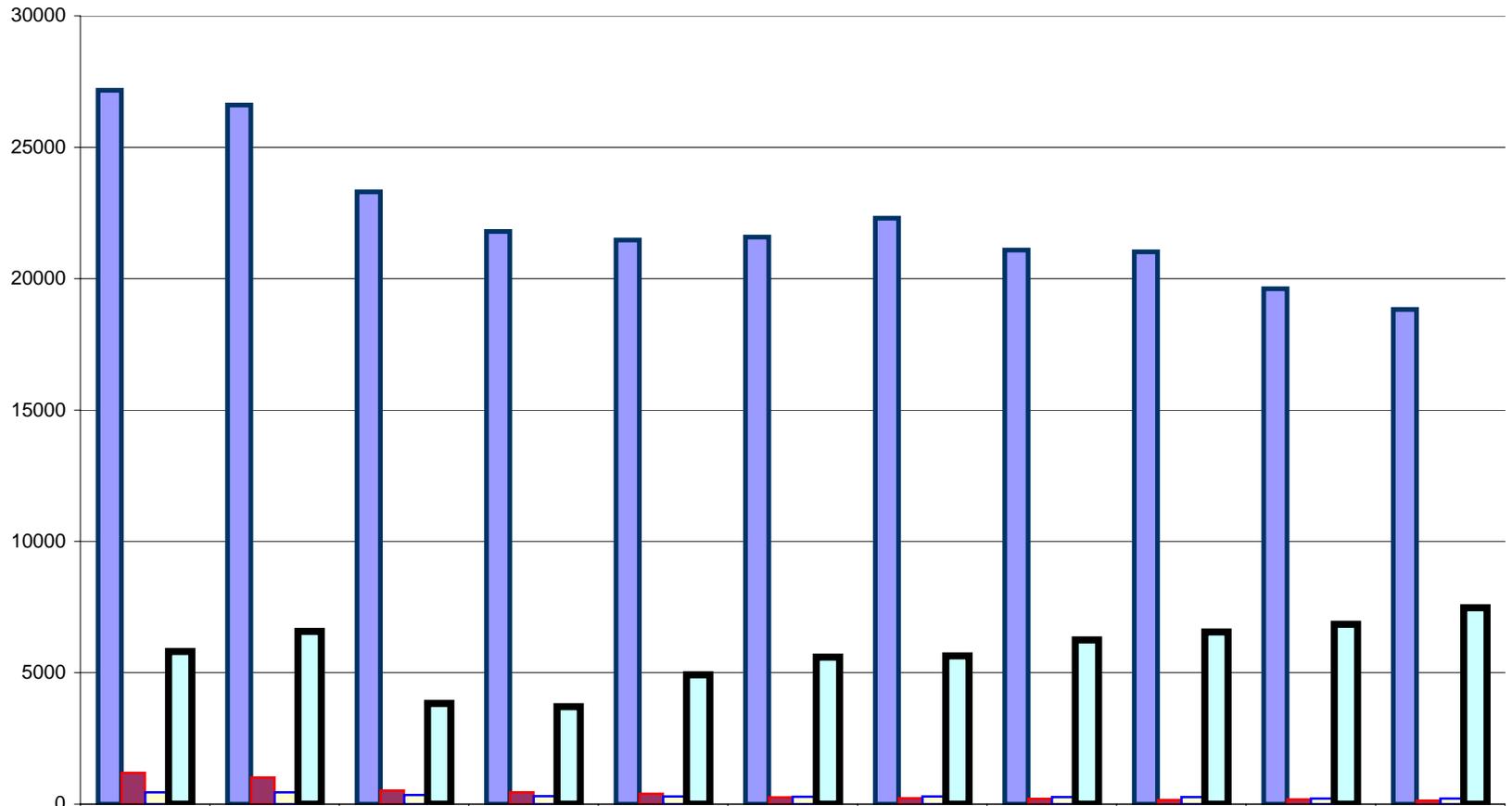
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
PHONE	27171	26606	23302	21792	21471	21579	22297	21092	21017	19618	18836
ALARM BOX	1188	1011	519	448	393	261	229	200	161	180	140
VERBAL	448	452	354	300	295	280	288	273	273	216	211
PRIVATE FIRE ALARM	5808	6577	3836	3704	4923	5597	5638	6251	6552	6841	7479

- Phone includes UCT/911 and EMS and PD Links for Medical Calls
- Alarm box includes calls that came in through ERS and BARS boxes

ALARM BOX SOURCES
ALL INCIDENTS
CALENDAR YEARS 1999 TO 2009
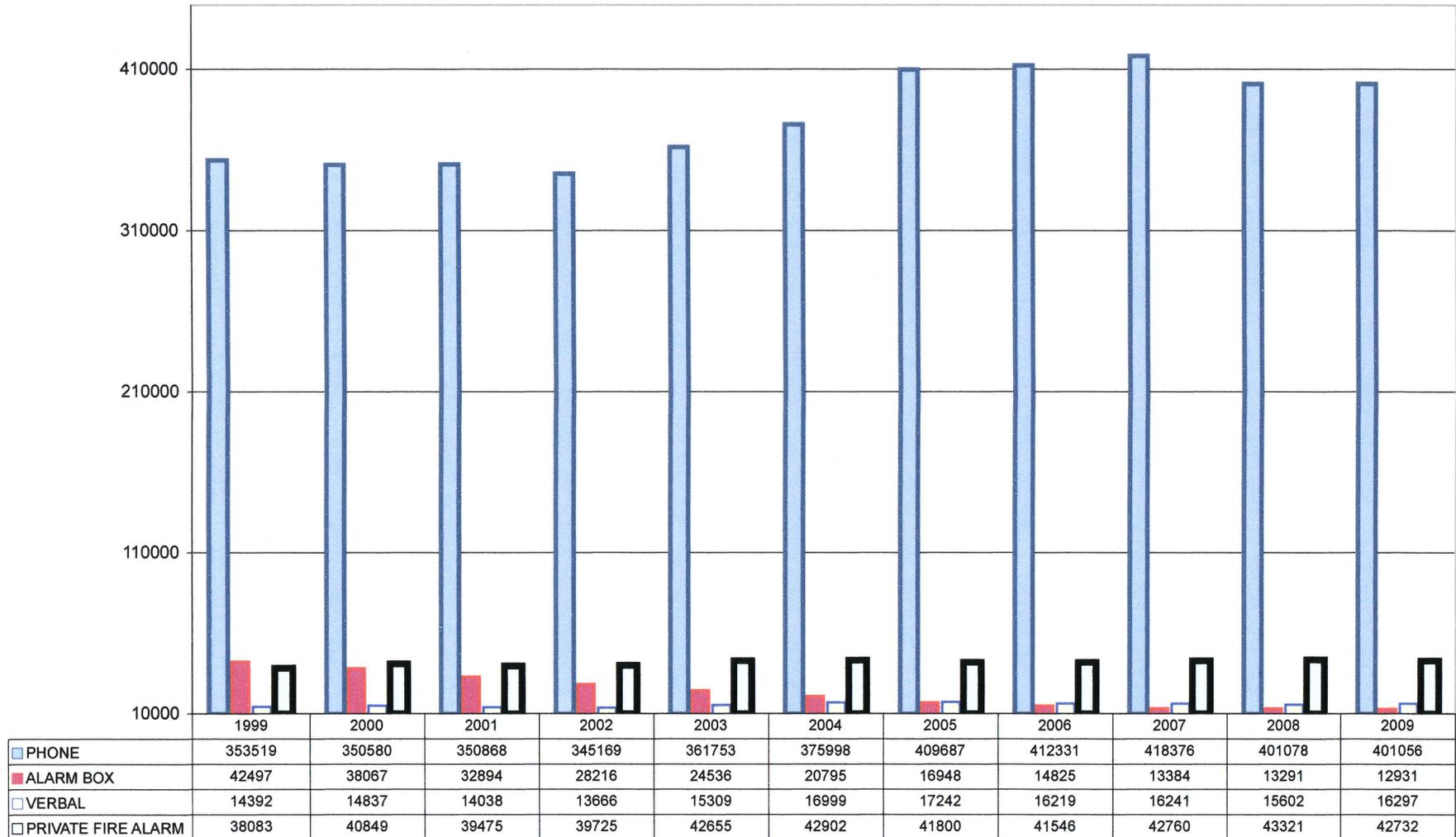
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
PHONE	353519	350580	350868	345169	361753	375998	409687	412331	418376	401078	401056
ALARM BOX	42497	38067	32894	28216	24536	20795	16948	14825	13384	13291	12931
VERBAL	14392	14837	14038	13666	15309	16999	17242	16219	16241	15602	16297
PRIVATE FIRE ALARM	38083	40849	39475	39725	42655	42902	41800	41546	42760	43321	42732

- Phone includes UCT/911 and EMS and PD Links for Medical Calls
- Alarm box includes calls that came in through ERS and BARS boxes

FDNY INCIDENTS BY ALARM BOX AND OTHER SOURCES
FOR CY 2009

Source*	Category	Malicious False Alarms	Structural Fires	Non Structural Fires	Non-Medical Emerg.	Medical/ Medical MFA	Total Legitimate (non-MFA) Incidents	Total	% MFA by Source
Alarm Boxes (BARS & ERS Red-Button)	BARS	2,805	23	24	183	67	297	3,102	90.4%
	ERS	1,578	105	183	756	225	1,269	2,847	55.4%
	ERS No Contact	5,984	12	19	247	41	319	6,303	94.9%
	ERS Timeout	9	0	0	4	0	4	13	69.2%
	ERS No Console Available	620	0	6	38	2	46	666	93.1%
	Total Alarm Box Incidents	10,996	140	232	1,228	335	1,935	12,931	85.0%
	Alarm Box Share (%) of Total Incidents in Category	43.3%	0.5%	1.4%	0.6%	0.2%	0.4%	2.7%	
Non-Alarm Box Sources	Phone	4,613	7,670	7,611	67,245	4,710	87,236	91,849	5.0%
	Verbal	111	211	654	11,197	4,124	16,186	16,297	0.7%
	Class 3	1,275	7,479	27	33,879	72	41,457	42,732	3.0%
	EMS Link	0	10	24	473	84,206	84,713	84,713	0.0%
	PD Link	0	23	9	1,713	113,352	115,097	115,097	0.0%
	UCT/911	8,382	11,133	8,454	78,665	2,763	101,015	109,397	7.7%
	Total Non-Alarm Box Incidents	14,381	26,526	16,779	193,172	209,227	445,704	460,085	3.1%
	Non-Alarm Box Share (%) of Total Incidents in Category	56.7%	99.5%	98.6%	99.4%	99.8%	99.6%	97.3%	
Total Incidents		25,377	26,666	17,011	194,400	209,562	447,639	473,016	5.4%

Key Statistics:

85.0% of all alarm box calls are MFAs (BARS & ERS combined); 90.4% of all BARS box calls are MFAs
3.1% of all non-alarm box calls are MFAs
Alarm boxes constitute only 2.7% of all incidents reported, but are responsible for 43.3% of all MFAs, 16 times their proportion of total calls
Alarm boxes constitute only 0.4% of all legitimate incidents, approximately 1/7 of their proportion of total incidents
Non-alarm box sources constitute 99.6% of all legitimate incidents reported, 2.4% more than their proportion of total calls

* 8 incidents are of unknown source, and are not included in this table