



New York State
Office of Fire Prevention and Control
Arson Bureau

New York State Arson Board

Fire Investigation Survey • • *Report of Findings* • •

June 2005

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THE NEW YORK STATE ARSON BOARD:

New York State Executive Law, Article 6C, §159 created an Arson Board for the purpose of assisting and advising the Secretary of State and the State Fire Administrator on arson issues and problems in the state. Board membership consists of appointments by the Governor to represent varied interests in arson and related matters. Members include:

- Chairman of the Fire Safety Advisory Board
- State Fire Administrator
- Superintendent of State Police
- Superintendent of Insurance
- Commissioner of the Division of Criminal Justice Services
- Fire Safety Advisory Board Member
- Nine additional members representing the following:
 - State and local police
 - Insurance industry
 - District Attorneys
 - Local government officials
 - At least two representatives of the general public

Board Members - 2004/2005

- James G. Hannigan, Chairman
- James A. Burns, State Fire Administrator
- Wayne E. Bennett, Superintendent of State Police
- Gregory V. Serio, Superintendent of Insurance (2004)
- Howard Mills, Superintendent of Insurance (2005)
- Chauncey G. Parker, Commissioner of Criminal Justice Services
- Richard Abbott, Public Member
- David Cook, Local Government Official
- Louis F. Garcia, Local Government Fire Official
- David E. Harder, Local Police, Sheriff
- Kathleen B. Hogan, District Attorney
- Pedro J. Perez, State Police
- Daniel J. Trevisani, Public Member
- Robert J. Outhouse, Local Police

Acknowledgments

The completion and tabulation of the fire arson questionnaire could not have been accomplished without the cooperation, assistance and dedication of many people from the fire service, law enforcement community and prosecutors office. We thank those officials who took time away from their busy schedules to provide information associated with fire arson investigation in their community.

The Department of State Office of Fire Prevention and Control, in conjunction with the New York State Arson Board, wishes to thank the following people for their roles in developing the questionnaire, tabulating the results and producing this "Report of Findings".

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Chairman, Arson Survey Questionnaire Committee

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INTRODUCTION:

State law mandates that a county shall prepare an arson control plan. It is recognized that many agencies which are essential to the success of arson control are not subject to the jurisdiction of county government. Accordingly, an atmosphere of cooperation is essential to elicit full cooperation among all agencies involved to combat the arson problem.

Prior to focusing on arson and the creation of a statewide Arson Board and the establishment of a standardized fire incident reporting system, arson was mainly publicized and thought to be an issue in major cities. Fire incident reporting by local fire officials to the Department of State's Office of Fire Prevention and Control (OFPC) has shown that arson is not restricted to big cities, rather it is also a problem occurring in small cities, suburban areas and rural communities.

In 1979, New York State began a concentrated effort to address the arson problem by developing a strong, coordinated arson control program. OFPC was charged with the responsibility of administering this statewide arson program and with the Governor's approval and Legislature's support, OFPC was able to assist local governments in the development and funding of arson control plans.

By the early to mid 1980's, plans were developed and in place along with the funding to equip and implement programs aimed at controlling arson at the local level. With this funding and support, numerous programs and fire investigation teams sprung up across the state and flourished well into the 1990's when economic times and tight budgets impacted most if not all programs.

State and national fire investigation training standards and guides and relative court determinations placed further responsibility and demands on fire investigation teams who were already facing staff shortages, diminished resources and funding constraints. The nature of fire investigation has evolved into a complex arena involving skill, technology, knowledge, science and the certification of trained fire investigators.

The demands on fire investigation teams, including recruiting, managing, training and outfitting such a work force, prompted the New York State Arson Board to inquire about the status of fire investigation teams, including resources, response, staffing and interagency

cooperation. The Arson Board undertook this survey initiative after hearing about the difficulties that many counties and municipalities had with maintaining effective team strength and meeting investigative demands given new standards, diminished resources and funding.

OFPC's Arson Bureau, serving as secretariat to the Arson Board, assisted in the preparation and distribution of the "Fire/Arson Investigation Survey". The findings of the survey contained herein, are from more than 400 fire, police and prosecutorial agencies who responded to the questionnaire. We thank all of the agency officials who made this project a success by taking time from their busy schedules to respond to the questionnaire.

PROJECT OVERVIEW AND DESCRIPTION:

In mid 2003, the Arson Board discussed the status of fire/arson investigation teams, the impact resulting from the new standards and guides, which cover their operation and the resource and financial constraints facing local governments. OFPC's Arson Bureau was tasked with developing a survey to assess the status and capabilities of arson teams around the state. This was the first time in over a decade that such information would be gathered directly from the local level.

Arson Bureau staff met and developed an outline for the project. It was decided that statistics from the New York State Fire Incident Reporting (NFIR) system, the Division of Criminal Justice Services (DCJS) Computerized Criminal History (CCH) report and the FBI Uniform Crime Reporting (UCR) system would be utilized to present a statistical overview of the arson problem.

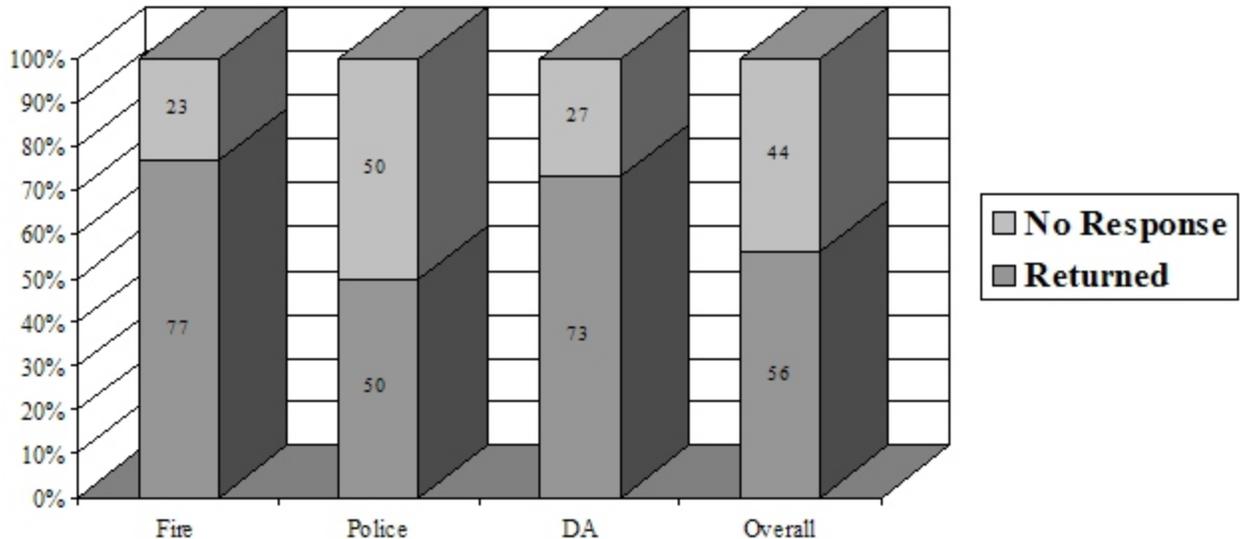
Three separate questionnaires would be developed to canvass the agencies with specific responsibilities in fire investigation, criminal investigation and prosecution. Questionnaires were sent to fire service, law enforcement and prosecutorial agencies across the state. Each of the three questionnaires elicited responses in four overall categories:

1. General - questions regarding the county arson control plan, fire investigation team makeup, caseload and data;
2. Personnel and Training - questions regarding certification, availability, familiarity and compliance with NFPA 921, the Guide for Fire and Explosion Investigations, and NFPA 1033, the Standard for Professional Qualifications for Fire Investigator;
3. Funding - questions dedicated to the budget and financial aspect necessary to fire investigation; and
4. Outside Resources - questions addressing the use of federal, state and private resources, including accelerant detection canines, laboratory services and rating of the services received.

Specific categories were developed for each particular discipline according to its role in addressing fire and arson related matters. For example, the fire questionnaire addressed issues regarding equipment use and availability, while the prosecutors questionnaire covered issues regarding specific prosecutorial concerns. The layout and content of the questions were scrutinized and molded over several months.

In February 2004, the questionnaires were finalized and mailed to agencies identified in the counties' arson control plan on file with OFPC. In all, 112 fire service, 563 police agency and 62 district attorney questionnaires were distributed with a target return date of March 31, 2004. The filing deadline was extended to April 15, 2004 with responses received from 87 fire, 281 police and 36 prosecutors offices. All of the questionnaire responses were entered into a database to track and tabulate the information. A preliminary report of findings was presented to the Arson Board at the July 27, 2004 meeting in Albany, New York. The Report of Findings was approved by the Arson Board at the June, 2005 meeting in Nassau County, New York with copies available from the OFPC website.

Survey Responses - % by Discipline



EXECUTIVE SUMMARY:

The Governor's appointed Arson Board has endeavored to stay focused on specific issues confronting effective arson control efforts and building upon program initiatives currently in place. The Arson Board has embarked on a survey of assessing the strength of statewide arson control programs and believes the survey will provide a benchmark, identifying successful initiatives as well as areas in need of support.

While society has placed the primary burden of dealing with arson on the fire service, with help periodically by law enforcement, federal, state and local program dollars supporting such arson control initiatives has not kept pace with agency needs. The concerns of officials in agencies, whose goals include the reduction and prevention of arson have identified numerous shortfalls including arson and arrest statistics, staffing, equipment, funding and number of qualified investigators, including their availability 24 hours a day, 7 days a week.

Beginning in the late 1970's, New York State appropriated \$5.5m to support development of local arson control plans and program initiatives. Funding spearheaded the development of county/municipal fire investigation teams and additionally established a process whereby fire, police and prosecutors would collaborate on strategies aimed at fighting arson. Over the ensuing years it appears that these programs, which once flourished are now facing diminished budgets impacting program initiatives, staffing, training, education and equipment acquisition. Increased funding is necessary in order to establish an effective assault on arson across the state.

Problems exist in tracking the extent of arson in New York since many fires are not investigated or in instances where an investigation was conducted, no causal determination was made or could not be ascertained. Differences in reporting arson exists between the UCR system, CCH report and NFIR system. The key to successful data gathering lies with trained fire investigators capable of identifying origin and cause and a high level of reporting compliance. Arson arrest data reported by law enforcement to state and federal agencies must depict accurate totals for both the UCR system, and the CCH report in order to clearly identify arson crimes closed by arrest.

Survey response also identified shortfalls in training for both fire and law enforcement officials. Half of the team members identified as responsible for conducting fire/arson

investigations lack appropriate training and certification. Firefighters, fire investigators and police officers must be aware of the possibility of arson from the beginning. Officials first on the scene must know when and where to call for expert assistance as all fires need to be investigated. Selective investigation allows fraudulent fires to go undetected, property damage and insurance rates to escalate, arsonists to go undetected and contributes to unnecessary fire injuries and death.

Current economic conditions have forced many communities and metropolitan areas to cutback on spending in order to maintain a balanced budget. Funding earmarked for fire protection has suffered dramatically with the closing of fire stations and elimination of fire marshal positions. Fewer fire investigators lead to fewer fires investigated and fewer arsons detected, which becomes a vicious cycle as arson is perceived as decreasing. The reality however, in New York State, is that arson rates have remained steady over the years. The only measurable reduction is the number of felony arson arrests; the CCH report data identified a steady decline of more than 46% of felony arson arrests over the past 16 years (1987-2003) from 920 to 493. We believe this decline to be directly attributable to the deficiencies agency officials identified in the response questionnaires.

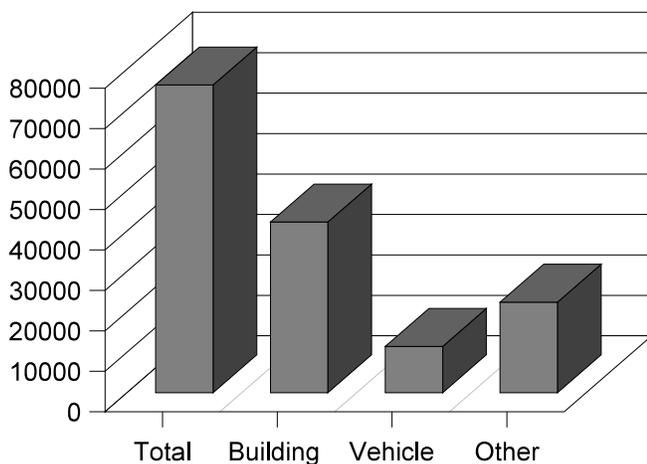
While the survey provides an overall view of arson control efforts in New York State, the response from a broad array of fire, police and prosecutors identifies shortfalls and deficiencies in aspects relating to fire/arson investigation and arson control. If the arson control planning process is going to meet present and future needs, it must meet the challenges of the constantly increasing burden on existing resources. We must continue to seek new and innovative approaches to an old and growing problem. We must also encourage cooperative partnerships between federal, state, local and private entities to collectively address the arson problem in New York State.

It is hoped the results of the Arson Survey will serve as a catalyst to educate government and elected officials to the concerns raised by those fire, police and district attorneys whose goals include the reduction and prevention of arson in New York.

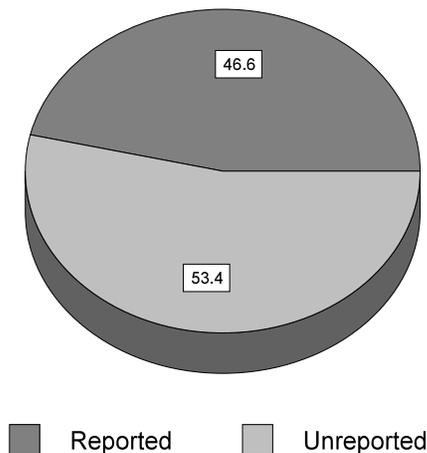
STATEWIDE FIRES / ARSON ARRESTS:

General Municipal Law §204-d delegates the responsibility of fire investigation to the fire chief. Section 204-d states that the fire chief shall determine or cause to be determined, the cause of each fire or explosion which the department has been called to suppress. Additionally, the fire chief shall file a report with OFPC detailing their findings and any additional information regarding the fire or explosion.

2003 Statewide Fires



2003 Causal Factors



Fires:

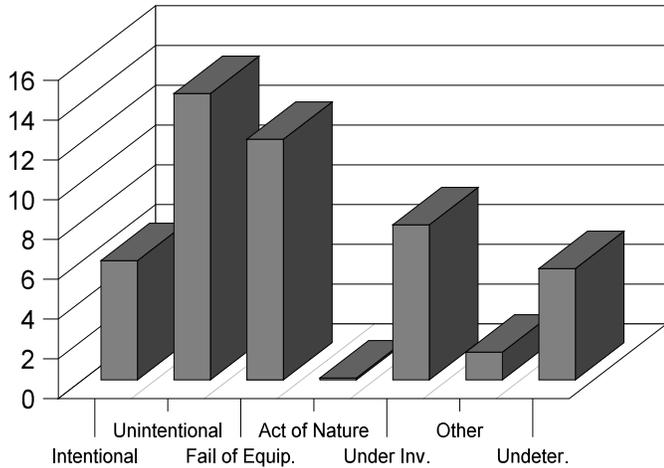
As reported in 2003 to the OFPC's Fire Incident Reporting System, (most current data available) fire departments responded to 76,088 fire incidents. A breakdown of the fires identified 42,215 building, 11,461 vehicle and 22,412 other type fires including outside brush, grass and dumpster. The dollar loss associated with these incidents totals \$334 million in direct fire loss, excluding New York City.* Fire departments also identified an additional \$140 million in indirect loss. These reported incidents resulted in 1,242 injuries to both civilians and firefighters and resulted in the loss of 86 lives.

Causal Factors:

In 2003, fire departments reported causal factors for only 35,424 incidents. This equates to 46.6% of the total.

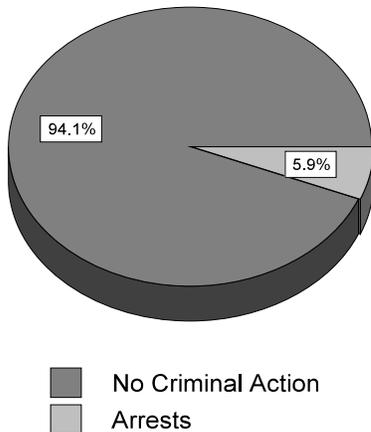
** New York City does not report dollar loss*

2003 % of Reported Causal Factors



Where causal factors were reported, 4,578 or 6.0% of the total incidents were intentional fires. This figure alone is more than double the national average of 2.4% of all fires being intentionally caused as reported by the US Fire Administration for 2003. In New York State, 5,918 fires (7.8%) were classified as under investigation and 4,232 (5.6%) were classified as undetermined. Fire officials and statisticians maintain one-third to one-half of those fires listed as under investigation or undetermined were in fact intentional in nature, thus utilizing this criteria a total of 9,653 fires (12.7%), should be categorized as intentionally caused fires in New York State.

Incendiary Fires vs. Arrests



Arrests:

A review of 2003 statistics from DCJS, identified police agencies as making 493 felony and 72 misdemeanor arson arrests. These 565 arrests represent only 12.3% of the 4,578 fires identified by the fire service as intentionally set. When factoring in the number of incidents where the causal factor was categorized under investigation or undetermined or 9,653 fires, those cleared by arrest drops significantly to 5.9% or only one in every fifteen intentionally set fires leading to an arrest.

In 2003, using the FBI's UCR system, police reported 4,171 reported or known crimes of arson in New York State. For the same period, police also reported 661 arson arrests to DCJS. Utilizing the reported arson and arrest data supplied by police, the number of arson incidents statewide decreased by 8.9% and reported arrests increased by 14.5% over figures reported by fire chiefs and DCJS. Regardless of the reporting medium, UCR system, CCH report or NFIR system, the underlying theme is that arson data in New York State is disparate and most likely under reported.

Survey results coupled with data supplied by local, state and federal agencies indicate that the current system of fire investigation is not effective in identifying arson and current program initiatives are inadequate in controlling arson. Two primary areas need attention: first, a large percentage of fires in New York State go un-investigated, or as a result of an investigation no determination is made and the cause is left undetermined. Second, the degree and level of training necessary to become certified and to maintain fire investigation certification, has steadily risen over the years. This is due in part to federal court decisions regarding expert testimony and evidence. State training and accreditation agencies as well as other affiliated organizations have updated curriculum, training courses and fire investigator standards to meet and be in compliance with accepted national guides and standards for fire investigation. While those responsible for fire/arson investigation are aware of these standards, only 50% identify as being certified to the minimal level.

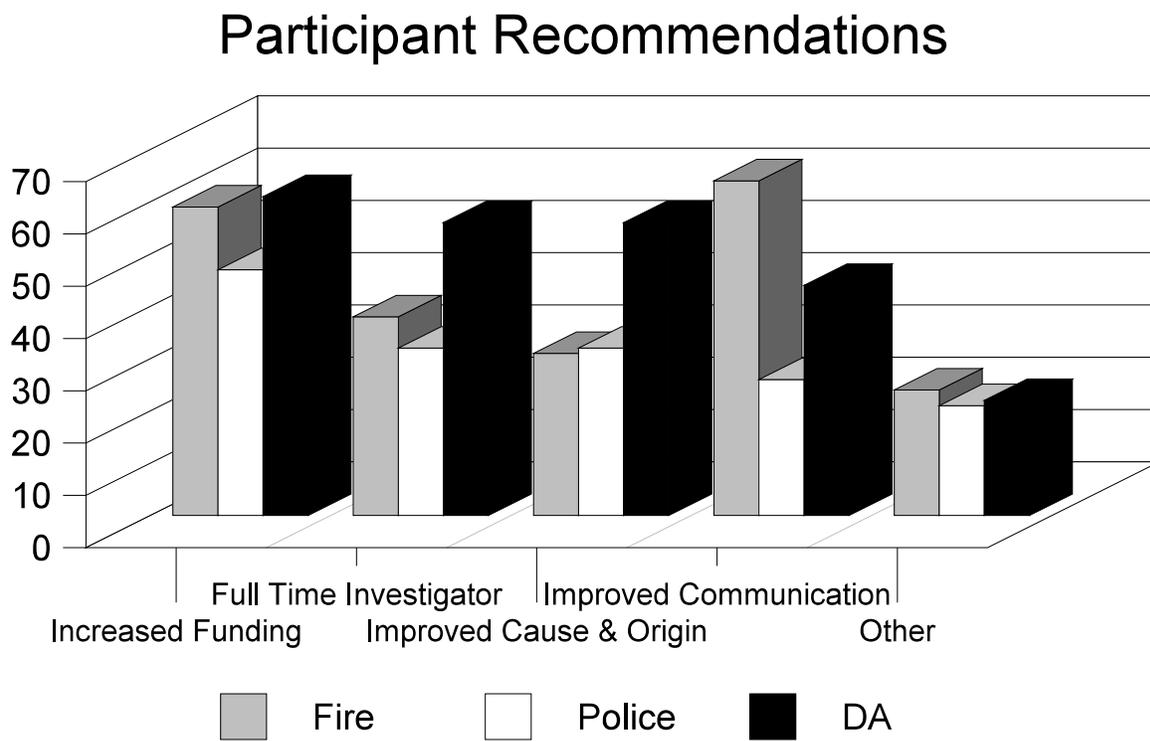
All reported fires or explosions must be investigated and in those instances where arson is detected or suspected, police must be notified and commit to the investigation. Further, all fire and police officials given the responsibility of fire/arson investigation must be appropriately trained and meet minimal NYS fire investigator level II certification requirements.

FINDINGS:

In the process of compiling and analyzing the data received from survey participants, several areas of concern, including issues directly effecting the fire investigation community, were identified in the following general categories:

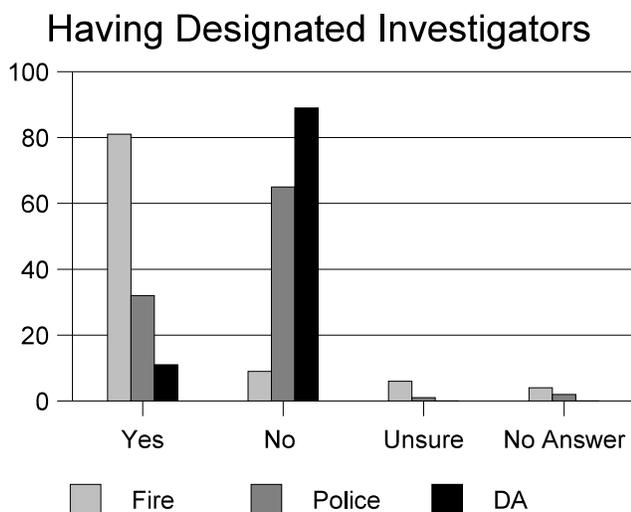
- Arson Control Plans;
- Training and Certification;
- Equipment;
- Resources and Staffing;
- Interagency Coordination and Communications;
- Funding; and
- Arson Arrests

The graph indicates specific areas identified by each discipline where recommendations for improvement would be beneficial to the fire/arson investigation.



Arson Control Plans

In the early 1980's, the state legislature appropriated arson planning grant funds to OFPC to assist localities in developing and implementing arson control plans. These plans addressed specific responsibilities for combating arson and encouraged coordinating efforts from all involved agencies. Many of the arson control plans on file with OFPC, having been developed in the early eighties, are now 24 years old, outdated and in need of revision.



Survey response identified that 78% of the county arson control plans have not been updated since their original adoption and only 7% of those revised have submitted those changes to OFPC as required in General Municipal Law 204-c. In response to the question regarding whether their agency was named in the county's arson control plan, 16% of fire agencies, 30% of police agencies and 50% of the district attorneys were unsure as to whether their agency was named in the arson control plan. In instances with no formal team, protocol for investigation, or standard operating procedure, each agency's role and involvement in controlling arson is questionable.

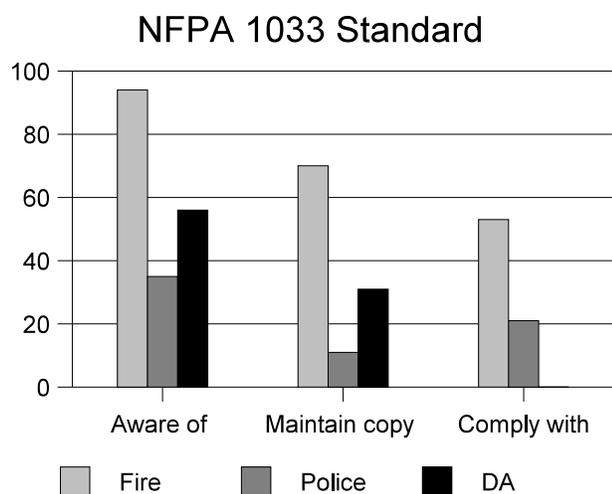
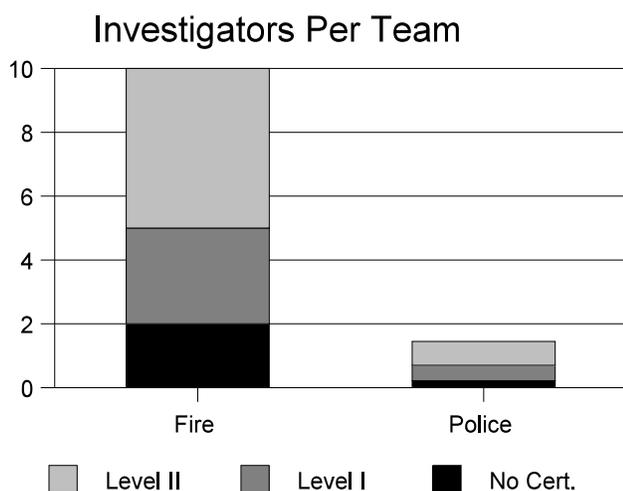
Recommendation:

Conduct an annual review of the county arson control plan and identify each agency's role and responsibility to improve coordination and communication between all involved

agencies. In those areas with outdated or no formalized plan, community officials and leaders must commit to developing such a plan to identify the responsibilities of all involved agencies, training requirements and policies and procedures for conducting a fire/arson investigation.

Training and Certification

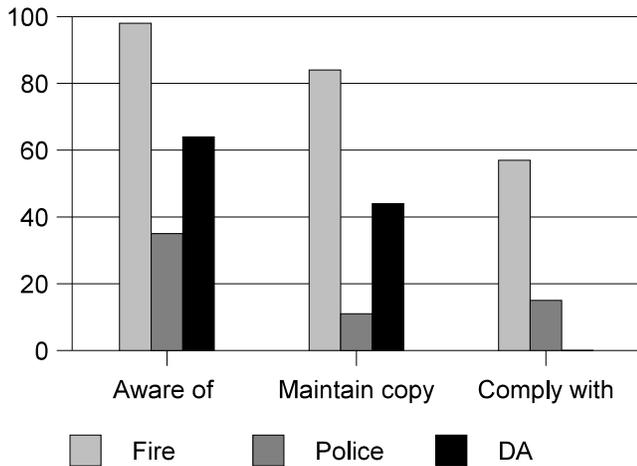
A large percentage of public fire investigators in New York State have not received specialized training or are minimally certified to conduct a fire/arson investigation. Survey participants have identified an average of 10 members per team with varying levels of training and certification. Of those investigators who are certified, only half have advanced beyond basic fire investigation principles and practices. Further, few have taken advantage of specialized advanced training made available to them. Fire agencies indicated that only 30% of their personnel have taken advanced training in such areas as electrical fire cause determination, interviewing, fire scene photography and documentation, fire evidence collection and juvenile firesetting intervention. Police agency response reflects a significantly lower number of trained, certified fire investigators per team.



Overall statistics indicate there is a marginal number of dedicated fire investigators who are both trained and certified. With regard to the fire service, results indicate that 17% of county and/or municipal fire investigation team members are not certified. 33% are certified to New York State Level I standards, which consists of thirty six (36) hours of classroom instruction and thirty (30) hours of practical fire investigation experience. The remaining half of all investigators are New York State Level II * Certified, the highest level of state certification. New York State Level II certification is achieved by attaining Level I certification and completion of the 80 hour Fire/Arson Investigation course and documentation of 50 hours of practical fire/arson investigation experience.

** Level II Fire Investigator Certification is recognized by the courts as someone qualified in the field of fire investigation to render an expert opinion as to the definitive cause of a fire.*

NFPA 921 Guide



Survey response from police agencies indicate that, on average, less than one investigator per agency responding to a fire investigation is certified at the Fire Investigator II level. Police agencies in general appear to have minimal investigative personnel certified at a level necessary to determine a fire to be arson or incendiary in nature.

Prosecutors indicate that only eleven percent have any investigators assigned to provide fire investigation services or assistance to county or municipal fire investigation teams.

In order to be compliant with NFPA 921, NFPA 1033 and New York State Standards necessary to determine the origin and cause of a fire, an investigator needs an understanding of physics and needs to be knowledgeable in chemistry and electricity. The investigator must also be familiar with the concepts of heat release rate, fire plume, building construction, flame travel, ceiling layer development and flashover. All investigators should also have some knowledge and training in the legal aspects of an investigation, including how to gain access to a scene, how to identify, process and handle evidence, how to question witnesses as well as creating a detailed report of findings on the specifics of the investigation, including the origin and cause of the fire. In fire investigation units or teams where both police and fire personnel are assigned, personnel should have familiarity with basic fire science and law enforcement processes and procedures. Departments that become familiar with each other's technology and terminology benefit through good communication and a sound working relationship. The formation of a good working relationship will lead to more complete and thorough investigations leading to more arson arrests and ultimately more convictions.

Recommendation:

In instances where a fire's cause has been determined to be incendiary in nature, those who are charged with the responsibility of investigating the origin and cause must be sufficiently

trained and certified in all aspects of fire investigation, as the investigator is likely to be called as a witness and may be asked to offer his/her expert opinion.

The field of fire investigation is becoming increasingly specialized and technical in nature. Fire and police services are evolving into agencies which rely upon specially trained individuals or units to fulfill its needs in particular areas, i.e. HazMat, WMD, SWAT, Evidence Technicians, etc. The field of fire investigation is no different. Assigned personnel must be adequately trained and certified as fire investigators to determine a fire to be incendiary or arson. The minimum level established by the courts is New York State Level II certification or equivalent, including federally sponsored courses and college level courses deemed equivalent by the State Fire Administrator.

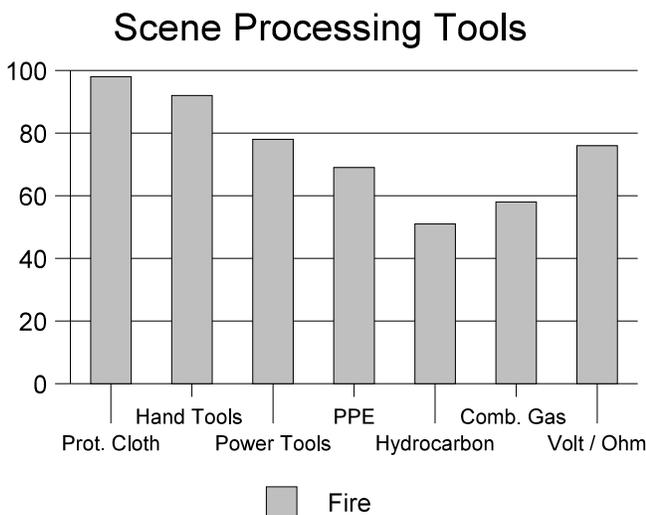
While a significant percentage of fire/arson investigation training is already provided by OFPC, additional training including the development of a field delivered practical component, would serve to expand the student's comprehension of the dynamics of fire. The use of modular burn trailers, where fire development and flashover can be observed, facilitates a student's understanding of this phenomenon and the importance it plays in origin and cause determination.

Additionally, training designed to provide concise practical and technical guidance on arson prosecution should be developed and provided on a routine basis by the New York State Prosecutors Training Institute (NYPTI) for new prosecutors and those assigned arson cases. NYPTI instructors can draw heavily upon successful arson prosecutors in the state to advance additional legal information and topics germane to the prosecution of arson.

Equipment

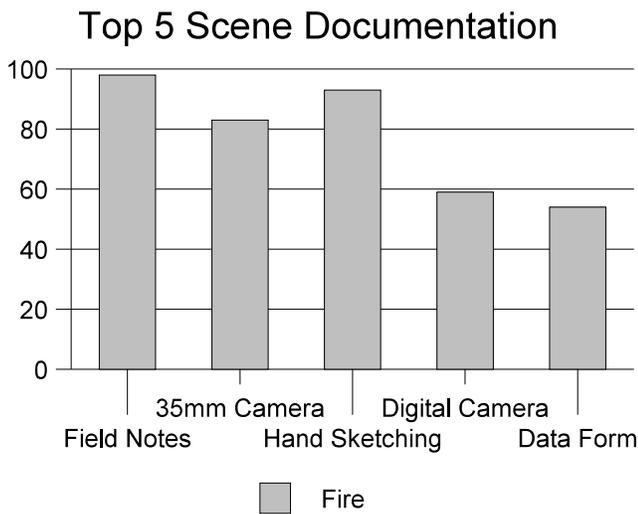
In response to the survey question regarding possession of sufficient equipment to conduct an in-depth origin and cause investigation, 54% of the responding agencies indicated they did not have sufficient equipment to perform such an investigation.

In some instances, the teams and individuals charged with the responsibility of conducting fire investigations are doing so without basic tools and equipment. Without proper tools and equipment to process and document a fire scene, findings may be missed or overlooked or may compromise the detection and collection of critical evidence to support the investigation team's findings.



Response from those agencies directly responsible for conducting a fire investigation indicate that they lack some basic scene processing tools and equipment.

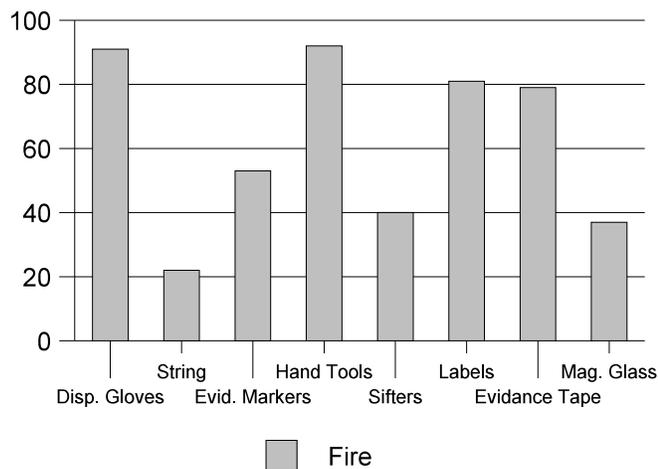
- 2% don't possess protective clothing
- 8% lack simple hand tools
- 22% have no power tools
- 24% report not having volt/ohm meters
- 31% don't have breathing apparatus
- 41% have no combustible gas meters
- 49% don't possess hydrocarbon meters



It is essential that agencies participating in fire investigation equip their team members with full protective equipment, including turn out gear, respirator protection and/or self contained breathing apparatus. Basic hand tools, power tools and electrical meters are also required to dig out and process a fire scene.

Regarding the forms of fire scene documentation, response indicates the most common methods are field notes, hand

Evidence Collection Tools



sketching, 35mm camera, digital camera and use of a data form.

Computer technology is used for fire investigative purposes by 71% of the responding agencies. Less than half, however, have internet access and only 27% possess laptop computers for field use. The use of this medium allows for broader access to reference material, documentation methods, sketching, digital photography review, report writing and increased communication and networking capability.

Responding agencies report the use of the following evidence collection tools: disposable gloves, hand tools, evidence tape and labels in a majority of the responses. Teams indicated they lacked the following:

- 47% don't possess markers used to identify evidence
- 60% have no sifters for examining crucial finite evidence in fire debris
- 63% lack a simple magnifying glass to examine fire debris and evidence up close
- 78% don't have string for gridline layout necessary for "black hole" scene processing

While most agencies possess or have access to basic hand tools, many lack the equipment necessary to conduct an in-depth investigation, and more than 55% have said they are lacking a dedicated vehicle to transport the equipment.

Recommendation:

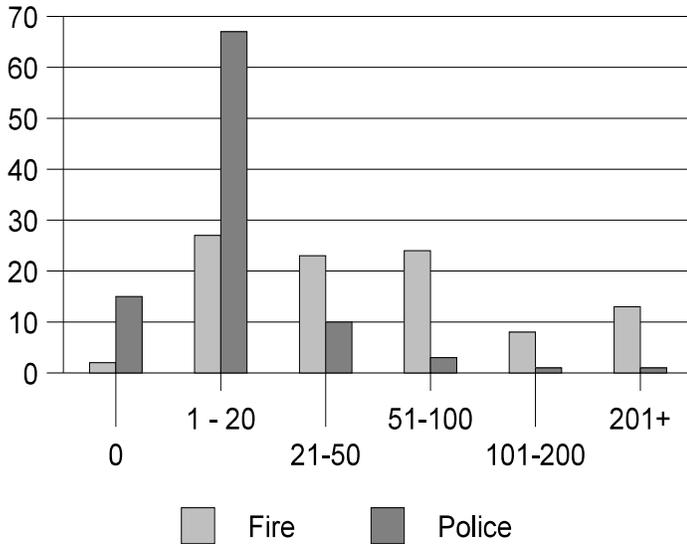
In order to conduct an origin and cause determination, investigators must have proper tools and equipment to complete all tasks associated with the investigation. Many agencies lack necessary equipment to perform an in-depth fire investigation. Agencies involved in fire investigation should provide tools and equipment deemed necessary to conduct a thorough investigation. State and federal program funding should be made available, through grants, for agencies to acquire needed equipment to conduct an in-depth fire investigation. Successful state

arson control initiatives in the early 1980's provided funding and support to local governments to acquire necessary equipment and supplies to perform all aspects of fire investigation. Funding of this type has proven to be successful in support of local efforts to control arson, and therefore new funding initiatives should be considered. Partnerships should be explored and formed with insurance companies and local insurance representatives, community groups and other civic minded groups in order to support fire investigation team needs.

Resources and Staffing

The majority of responding agencies identified shortfalls in staffing levels and the availability of certified fire investigators for all coverage periods.

Average Fire Investigations / Year

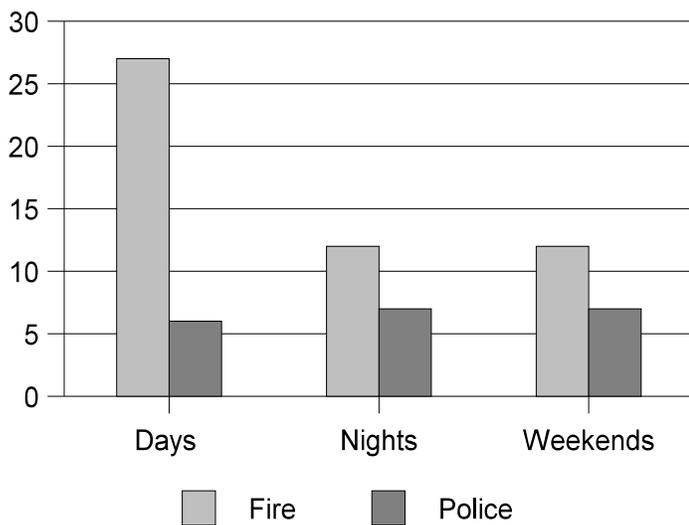


Participants identified the average number of fire investigations handled by their agencies as follows:

	Fire	Police
0	2%	15%
1-20	27%	67%
21-50	23%	10%
51-100	24%	3%
101-200	8%	1%
201+	13%	1%

Those instances with a higher number of investigations (101+) are routinely handled by larger agencies in metropolitan regions of the state (NYC, Buffalo, Rochester, Utica, Syracuse, Nassau, Suffolk, and Broome counties).

Difficulty Providing Investigators



Fire agencies identified problems providing fire investigators in 27% of their weekday responses. 12% of the fire agencies also identified problems providing investigators during night and weekend coverage periods.

Police agencies identified issues providing fire investigators in only 6% of the weekday responses and 7% of the night time and weekends, however they identified having less than one certified fire investigator per agency. This would appear that they have little difficulty assigning officers to a fire scene, although those

officers are most likely performing other duties including traffic control, scene security, interviewing and or evidence submission.

Prosecutors were asked a question regarding their opinion on whether there were enough qualified fire investigators from all disciplines readily available to perform origin and cause determinations within their jurisdictions. 53% felt there was an insufficient number of investigators readily available at any given time.

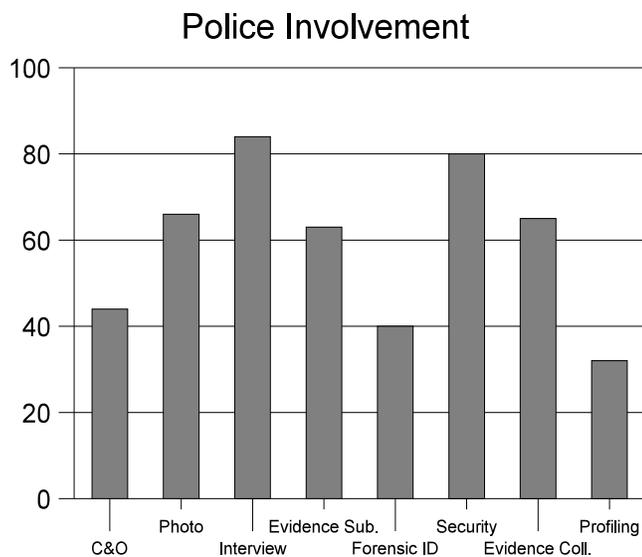
Recommendation:

The importance of conducting a thorough and proper fire investigation can not be understated. Trained and certified fire investigators must be readily available day and night, including weekends and holidays. Personnel assigned to conduct a fire investigation may be required to work several days to thoroughly examine a fire scene, document their findings and follow the investigation through to completion. Qualified staff must be in place and available to respond prior to the occurrence of such an incident. Fire and police agencies, as well as county fire investigation teams, should look to recruit individuals who are qualified and available to perform fire investigations at all times of the day or night to increase staffing levels or look to supplement the volunteer ranks by hiring full-time fire investigators.

Interagency Coordination and Communication

The divided process of a fire investigation where all three disciplines (fire, police, prosecutors) have distinct roles and responsibilities, as identified in law, necessitates strong interagency coordination and good communication, especially in criminal matters. Results indicate that all three disciplines believe improved interagency communication and coordination is needed. The very nature of the fire investigation process, where each has separate responsibilities, does not readily promote communication and coordination between agencies.

Approximately 60% of fire agencies responding to the survey indicated that improved interagency communication was an area needing improvement. 26% of responding police agencies and 44% of prosecutors identified the same concern with respect to the importance of communication between agencies.

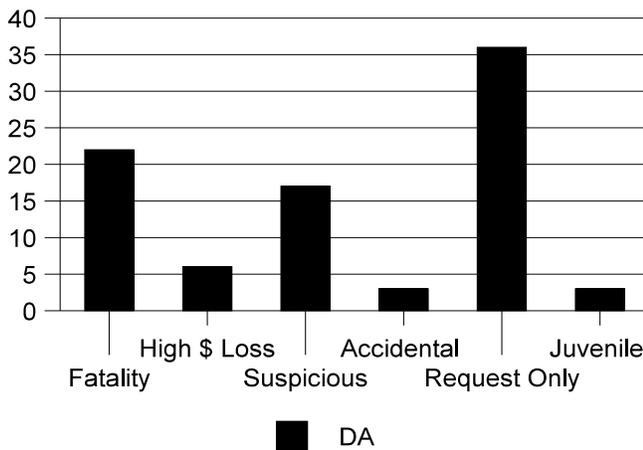


Police agencies identified the tasks which they are routinely requested to provide at fire scenes to include:

Origin and Cause	44%
Photo Documentation	66%
Interviews	84%
Evidence Submission	63%
Forensic Documentation	40%
Scene Security	81%
Evidence Collection	65%
Suspect Profiling	32%

This data suggests that law enforcement agencies are fulfilling a support role in the fire investigation process by providing scene security, interview, photo documentation and evidentiary assistance, with less than 50% of police agencies participating in actual origin and cause determination. Overall response underscores the need for interagency communication and coordination necessary to process a scene, identify, collect and process evidence, develop the case and arrest the responsible parties for the crime and ultimately present the case to a District Attorney for prosecution.

Prosecutor Response



Prosecutors showed there were established protocols for an office staff member to respond in certain situations, including:

- 3% - respond to accidental fires or those involving juveniles.
- 6% - go to those involving a high dollar loss
- 17% - respond to fires of a suspicious nature
- 22% - go to fires involving fatalities
- 36% - respond only upon request

The distinction between each disciplines' role in the fire/arson investigation does not promote a

fluid process from initial investigation through prosecution. The current system places the responsibility for fire investigation at the municipal level, in the hands of the fire chief. The degree of involvement of other agencies is not automatic and they do not respond to all fires on a routine basis. Even in instances where the fire is ultimately labeled suspicious or incendiary, information must be communicated to police agencies who make the decision regarding their degree of participation. The statistics from fire and law enforcement agencies in 2003 show there were approximately 3,500 fires definitively classified as incendiary. During the same period, only 565 (16%) arson arrests were made. This large disparity underscores the need for better communication and a commitment to work together in arson related matters.

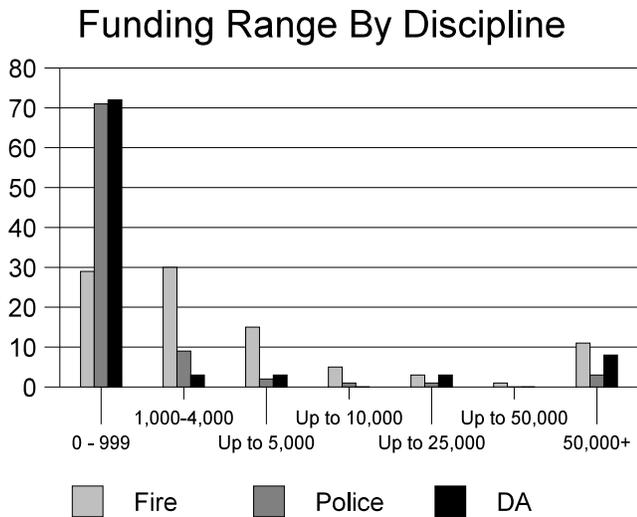
Recommendation:

A renewed emphasis should be placed on the requirements necessary for a systematic fire investigation to occur. Fire investigations identify factors which lessen the number and severity of fires, strengthen fire and building codes, aid in the development of fire prevention and public education programs and planning for future fire protection needs. A thorough fire investigation of all incendiary and suspicious fires is necessary and will serve as a strong deterrent to the crime of arson. The function of conducting a fire investigation in New York is the responsibility of the fire chief or, by special legislation, a fire marshal. In instances where a fire is classified as incendiary or suspicious by the chief, the fire is referred to local law enforcement for criminal investigation. In those communities with an arson control plan and where an established working

relationship exists between police, fire and prosecutors, cases are routinely adjudicated with a higher degree of convictions. Good communication coupled with coordination of agency resources, as identified in the state arson control plan, should be practiced by all agencies whose responsibility is the investigation of fires, including those labeled as incendiary or suspicious in origin.

Funding

Participants identified there is little dedicated funding available and committed for fire/arson investigation initiatives. Limited financial resources earmarked for fire investigation does not allow agencies to fully staff, train and equip a fire investigation team.



Responding fire agencies reported 75% of their investigation teams are funded at \$5000 or less annually. 59% work with less than \$4000 and nearly half of those, or 29%, exist annually on less than \$1000 for staffing, travel, equipment, training and team operation.

Police agencies reported 71% allocating only \$1000 to fire investigation. An additional 9% of those agencies allocate between \$1000 and \$4000.

72% of responding prosecutorial agencies dedicate less than \$1000 annually toward fire investigation.

Respondents were asked to prioritize program items which, if funds were available, would be used to enhance their fire investigative initiatives. The response is listed in order of importance to that discipline.

<u>Fire</u>	<u>Police</u>	<u>District Attorney</u>
Training	Training	Training
Equipment	Equipment	Staff
Staff	Overtime	Laboratory Services
Anti-Arson/Prevention	Staff	Anti-Arson/Prevention
Travel	Anti-Arson/Prevention	Equipment

All three disciplines identified training, equipment, staff and anti-arson/prevention programs as a high priority where funding would be applied if available.

Recommendation:

Funding must be committed and allocated for fire investigation purposes for personnel, equipment, training, protective equipment, evidence collection and scene documentation. Increasing agency funding dedicated to fire/arson investigation will bolster community anti-arson efforts and will produce a stronger and more viable system aimed at combating arson. Partnerships should be explored and formed with insurance companies, local insurance representatives, community groups and other civic minded groups in order to support fire investigation team needs as well as seeking grants from state and federal agencies and private foundations.

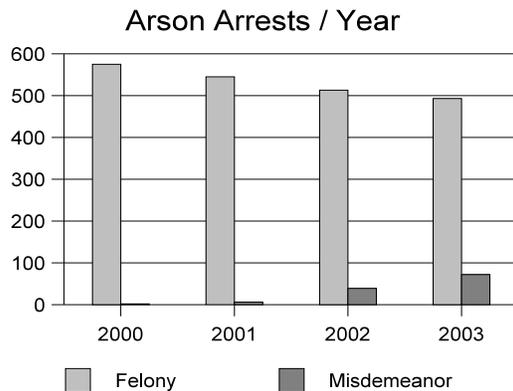
Arson Arrests

Statistics from the CCH report identified, in the four year period from 2000 through 2003, the number of arrests for arson charges were exceedingly low compared to the number of intentional caused fires identified by fire chiefs and investigators using the NFIR system.

In 2003, DCJS reported there were 493

felony and 72 misdemeanor arrests for arson.

The number of arrests in the preceding three year period are identified as:



<u>Year</u>	<u>Felony</u>	<u>Misdemeanor</u>	<u>Total</u>
2002	513	39	552
2001	545	6	551
2000	575	2	577

It should be noted that the misdemeanor charge of Arson 5th degree was passed by the legislature in November of 2001. While those misdemeanor arrests have increased since enacted, the number of felony arson arrests, those which involve buildings and vehicles, has steadily declined.

According to data received from the U.S. Fire Administration and UCR system, statistics in New York are significantly lower than those at the national level. Nationally 16,163 arrests for arson accounted for 24% of all fires definitively labeled incendiary, as compared to 12.3% in New York State. The national ratio of arrests to estimated incendiary fires using criteria apportioning the undetermined causal factors, equals 11% as compared to New York's 5.9%.

In New York, eleven counties and municipalities utilize designated fire marshals/investigators who are responsible for fire investigations including the arrest of those responsible for such criminal activity. Those counties include the five boroughs encompassing New York City, Broome and Nassau counties and certain municipalities within Erie, Monroe, Oneida and Suffolk counties. According to UCR system statistics those eleven counties accounted for 59% of the arson arrests in the state in 2003. In instances where fire marshals operate, arson arrests are almost four times the statewide average.

Recommendation:

The division between fire's origin and cause responsibility and law enforcement's criminal investigation responsibility affords no one investigator or one agency the responsibility to progressively follow an investigation through to completion. While the fire investigation process does not lend to early detection or determination of criminality, law enforcement agencies must recognize that the investigation process starts at the initial fire response and systematically unfolds as the scene is processed. A determination is made, based in part by the findings and evidence uncovered during that process. Many communities have had success with designating a fire marshal or fire investigation unit with law enforcement powers with the sole responsibility for the investigation, which includes the apprehension of those responsible for criminal acts of arson. The concept of creating a fire marshal or fire investigator position at the county or local level with full authority to conduct fire/arson investigations, including the powers of arrest, would provide a strong and seamless mechanism to control arson. Elected and governmental officials should explore the possibility of creating the position of fire marshal or creating an arson strike force whose responsibility is exclusively fire/arson investigation and control.

CONCLUSION:

The 2004 survey conducted upon bequest of the Arson Board, solicited statewide input from the fire service, law enforcement and prosecutors as a means to assess the crime of arson and the resources vital to the apprehension of those responsible.

It is clear that arson continues to be a "crime of great magnitude" affecting citizens across the state, in communities large and small. Annually, thousands of intentionally set fires are identified by fire service officials and only hundreds are closed through arrest. The act of deliberately setting fires results in the loss of life and is the cause of great property loss. These incidents have far reaching fiscal implications to not only fire victims, but also to the community, the insurance industry as well as to the state and local economy.

Survey data has aided in assessing the root of the cause for this dilemma, as one which stems from the lack of dedicated resources necessary to address the increasing forensic requirements, necessary to thoroughly investigate fires and to prepare and present arson cases for criminal prosecution. Traditionally, the common investigative practice for fire and arson requires the handling of an incident by multiple agencies; the first agency being the fire service functioning as an administrative agency conducting an initial investigation to determine a fires origin and cause, then when a crime is determined or suspected, the case is handed off to a law enforcement agency tasked with building and pursuing the criminal case. This fragmented style of investigation is fraught with problems and often leads to cases falling short of the bench mark required for successful prosecution.

Current data indicates that the vast majority of volunteer firefighters, who make up 80 percent of all firefighters and investigators in the state, do not have the time, equipment or funding to become adequately trained to conduct in-depth investigations or to maintain certification to state and national standards. In addition, lacking the skills and experience needed to properly conduct an arson investigation leads to a large number of fires being classified as undetermined or with unknown cause allowing arson to go undetected, thus contributing to inaccurate data which understates the arson problem.

Correspondingly, data indicates that police agencies maintain, on average, less than one certified investigator per agency who has special training in fire/arson investigation with certification at the minimum state level. An arrest is made in only 12.3% of the fires determined by fire officials to be arson, with the vast majority of these arrests, 59%, coming from counties/municipalities which have dedicated fire marshals.

This report of findings explores the many various public agencies and their programs, concerned with the investigation, prevention and control of arson. It has brought to light specific issues confronting effective arson control efforts. It is hoped that this report will serve to enlighten those charged with administering fire/arson investigation programs and serve to educate legislators and elected officials to the findings and recommendations outlined in this Arson Survey - Report of Findings.

The lack of accurate statistics identifying the scope of the arson problem in New York

is a major problem. New York cannot afford to have fires go uninvestigated or left undetermined as a result of insufficient funds, staff shortages, training needs and or lack of dedicated equipment. Fire and police departments must work cooperatively and become more proficient in justifying the costs of arson investigation as a necessary component of local government. Increased funding is a prerequisite for communities to properly administer programs aimed at combating the crime of arson. More state and federal funding and resources are needed to help local governments investigate fires and reduce the incidence of arson.

As a result of the survey data and associated findings, we conclude that more must be done to stop arson, such as: including better communication between participating agencies; additional funds for personnel, training and equipment; legislation allowing for the creation of fire marshals at both the state and local levels; strengthening arson penal codes; and developing training and education programs targeting insurance fraud, juvenile fire setting and fostering public education and awareness about arson. It's time to strike back to win the war on arson.