

KNOX COUNTY FIRE PREVENTION BUREAU



2006 ANNUAL REPORT

Knox County Fire Prevention Bureau

MISSION STATEMENT

Inspections



Education



Investigations



The mission of the Knox County Fire Prevention Bureau is to make Knox County a safer place to live, work or visit by protecting its residents and guests from the ravages of fire. We accomplish this by conducting life safety inspections of existing structures and new construction, developing proactive and diverse public education programs and maintaining an aggressive fire investigation program.

History and Overview

The Knox County Fire Bureau was established in 1984 to enforce applicable codes adopted by Knox County to reduce the incidence and severity of fires. The Fire Bureau's efforts to meet this goal are channeled through the following concentrations: Codes Enforcement, Public Education and Fire Investigation.

The Fire Bureau is managed by Kathy Saunders, Fire Marshal. Mike Brown serves as Deputy Fire Marshal. Ronda Murray is our Office Administrator, and is working toward becoming an inspector. Part-time intern Jerilyn Majors provides general office support. The remainder of our team consists of five inspectors, two public educators, and three investigators. Although our responsibilities are diverse, we work as a cohesive unit in a combined effort to make Knox County a safer community.

BUREAU ADMINISTRATORS

Fire Marshal



Kathy Saunders

Fire Marshal

Serving Knox County Since: January, 2001

Kathy Saunders is the liaison between the Director of Engineering and Public Works, Bruce Wuethrich, and the Fire Bureau. Kathy represents the Bureau for public and professional organizational interaction. Kathy manages all activities and operations for the Bureau, which includes:

- Developing and implementing goals, objectives, policies and priorities
- Creating and navigating the Bureau's operational budget
- Monitoring and evaluating the efficiency and effectiveness of service delivery methods, programs, and procedures
- Selecting, training, motivating, and evaluating Bureau personnel
- Acting as liaison between county government and local emergency agencies
- Developing new programs and improving existing programs to assist county fire departments

Certifications Held

- Fire Inspector Level II (ICC)- State certified (Tennessee) - 2004
- Fire Inspector Level I (ICC)- State certified (Tennessee) - 2003
- First Responder- State certified (Indiana) - 1998
- Firefighter I- National Fire Protection Association - 1995
- Instructor I- National Fire Protection Association - 1994
- Emergency Medical Technician-State certified (Kansas) - 1993

Professional Affiliations:

- International Association of Fire Chiefs - 1995 - present
- Women in the Fire Service - 1997 - present
- National Fire Protection Association - 1997 - present
- Women Chief Fire Officers - 1999 - present
- Tennessee Fire Safety Inspectors Association - 2005 - present
- Tennessee Fire Chiefs Association - 2002 - present
- Tennessee Valley Society of Fire Protection Engineers - 2001 - present
- East Tennessee Regional Council of Fire Chiefs - 2001 - present
- East Tennessee Building Officials Association - 2001 - present
- International Code Council



OPENING OF THE FLEENOR CENTRAL MONITORING STATION
MARCH 2006

Deputy Fire Marshal



Mike Brown

Deputy Fire Marshal

Serving Knox County Since: May, 1992

Mike Brown is the Bureau's Deputy Fire Marshal. His command falls directly under that of the Fire Marshal. He supervises the fire inspectors, who turn to him for guidance when seeking further clarification regarding codes and plans review. He is also the point of contact when an architect, contractor, or owner disagrees with one of the inspectors. In an effort to address any differences in opinion, and/or the need to explain the application of the codes to a particular project, he will meet with that individual or persons for such discussion. His broad knowledge and experience regarding code requirements and plans review are essential elements in maintaining a good working relationship between the Fire Bureau and the greater community.

In addition to consulting with architects and superintendents regarding code requirements, he also designates time to train inspectors on reviewing plans.

Certifications Held:

- National Fire Protection Association - Certified Chief Fire Prevention Code Analyst
- Southern Standard Building Code Congress - Certified Fire Protection Specialist
- Southern Standard Building Code Congress - Certified Fire Prevention Specialist
- Southern Standard Building Code Congress - Certified Plans Review
- Southern Standard Building Code Congress - Certified Legal and Management
- Southern Standard Building Code Congress - Certified Fire Inspector II
- Southern Standard Building Code Congress - Certified Fire Inspector I
- State of Tennessee Fire Inspector Certification

Professional Affiliations:

- National Fire Protection Association
- East Tennessee Building Officials Association
- Tennessee Fire Safety Inspectors Association
- International Code Council

OFFICE STAFF

Office Manager



Ronda Murray

Office Manager

Serving Knox County Since: December 2000

Certifications:

- International Code Council - Fire Inspector level I
- C.P.R.
- State of Tennessee Fire Inspector certification
- Knoxville Rider Education Program of TN

Professional Affiliations:

- East Tennessee Building Officials Association
- Tennessee Fire Safety Inspectors Association
- International Code Council

Ronda's role is fundamental to the cohesion of the Fire Bureau. She is often a liaison among the three divisions of the Fire Bureau. Her responsibilities include but are not limited to:

- Supervising the Fire Bureau's Intern
- Directing phone calls appropriately and quickly
- Greeting office visitors
- Compiling, monitoring, and obtaining authorization for payment of invoices
- Contacting vendors with invoice issues
- Submitting purchase requisitions
- Tracking and submitting payroll time sheets
- Entering data for plans review and new construction as well as establishing new files
- Processing office mail
- Reviewing supply orders, tracking travel vouchers and reservations
- Assigning schedules for inspectors, and appointments for the Deputy Fire Marshal
- Assisting the Fire Marshal with budget matters
- Maintaining inventory of Bureau vehicles

Learn more about Ronda's role as an inspector in the next section.



INSPECTIONS

I. New construction is assigned to Rick Smith and Shawn Remington. These inspectors review plans for projects and apply that information at the project work sites as well. New construction inspections range from inspecting the initial slab of concrete up to the final inspection for the required Certificate of Occupancy. Meetings are often conducted to clarify code requirements, and are actually recommended during the initial stages of a project as well as during the pre-construction stages of a project. The following list identifies some of the functions of the new construction team:

Activities – New Construction

- Plans review and on site inspections
- New buildings, plan revisions, renovations
- Inspections for tents
- Inspections for fuel tank installations
- Framing and firewall inspections
- Progress checks
- Coordinating new hydrant testing
- Fire alarm and detection systems testing
- Suppression system testing

II. Existing construction is assigned to Chip Widener and Travis Evans. This team conducts inspections on existing Knox County businesses in an effort to maintain the fire and life safety features of these establishments. Typical activities of the existing construction inspectors are:

Activities – Existing Construction

- Plans review
- Existing facility inspections
- State licensed facility inspections
- Beer Board applicant inspections
- Complaint inspections
- Occupancy and tenant changes
- Existing hydrant issues
- Fire alarm and detection systems testing
- Suppression system testing

III. Governmental construction is inspected by Steve Chamberlain. This includes facilities owned by government entities and all private schools located in Knox County.

Activities – Government Construction

- All inspections required by governmental facilities
- Plans review and on site inspections
- New buildings, plan revisions, renovations
- Framing and firewall inspections
- Progress checks
- Existing facility inspections
- Complaint inspections
- Occupancy and tenant changes
- Coordinating new hydrant testing
- Existing hydrant issues
- Fire alarm and detection systems testing
- Suppression system testing

IV. On-call inspector services

Our on-call program assists local fire departments by providing technical expertise regarding life safety features. This aids them in determining whether a building is safe to occupy after an incident has occurred. The inspectors are scheduled to be on-call on a weekly rotation.

Providing on-call inspectors is just one of the various measures taken by the Fire Bureau in an effort to create a safer community. It allows an inspector's input at a key time, helping to ensure all fire protection system discharges or impairments are returned to working order and therefore able to deliver the protection they were intended to provide.



New Construction Inspectors



Rick Smith

Inspector

Serving Knox County Since: October 1990

Certifications Held:

- National Fire Protection Association - Fire Inspector Level I
- Southern Standard Building Code Congress - Fire Inspector Level I
- State of Tennessee Fire Inspector Certification
- State of Tennessee Fire Fighter I

Professional Affiliations:

- East Tennessee Building Officials Association
- Tennessee Fire Safety Inspectors Association
- Knox County Government Safety Committee Member
- International Code Council



Shawn Remington

Inspector

Serving Knox County Since: July 2001

Certifications Held:

- Southern Standard Building Code - Fire Inspector Level I
- Southern Standard Building Code - Fire Inspector Level II
- International Code Conference - Building Code Inspector Level I

Professional Affiliations:

- East Tennessee Building Officials Association
- Tennessee Fire Safety Inspectors Association
- International Code Council

Existing Construction Inspectors



Chip Widener

Inspector

Serving Knox County Since: August 1986

Certifications Held:

- National Board on Fire Service Professional Qualifications- Fire Inspector I and II
- National Fire Protection Association - Fire Inspector Level I
- Southern Standard Building Code Congress -Fire Inspector Level I
- International Code Council - Fire Inspector Level II
- State of Tennessee Fire Inspector Certification

Professional Affiliations:

- East Tennessee Building Officials Association
- Tennessee Fire Safety Inspectors Association
- International Code Council

Certifications Held:

- Southern Standard Building Code Congress - Fire Inspector Level I
- International Code Council - Fire Inspector Level II
- State of Tennessee Fire Inspector Certification

Professional Affiliations:

- East Tennessee Building Officials Association
- Tennessee Fire Safety Inspectors Association
- International Code Council



Travis Evans

Inspector

Serving Knox County Since:
June 2001



Ronda Murray

Inspector

Serving Knox County Since: December 2000

While working full-time at the Fire Bureau, Ronda pursued certification as a Fire Inspector, earning her Level I in 2004. She accompanies other Inspectors in the office two days each week, thereby receiving on-the-job training in the field.

Governmental Inspector



Steve Chamberlain

Inspector

Serving Knox County Since: June 1993

Certifications Held:

- Southern Standard Building Code Congress - Fire Inspector Level I
- International Code Council - Fire Inspector Level II
- State of Tennessee Unarmed Security Guard Certification
- State of Tennessee Fire Inspector Certification
- National Board on Fire Service Professional Qualifications - Fire Inspector II

Professional Affiliations:

- East Tennessee Building Officials Association
- Tennessee Fire Safety Inspectors Association
- International Code Council



CODE ENFORCEMENT ACTIVITIES

Totals

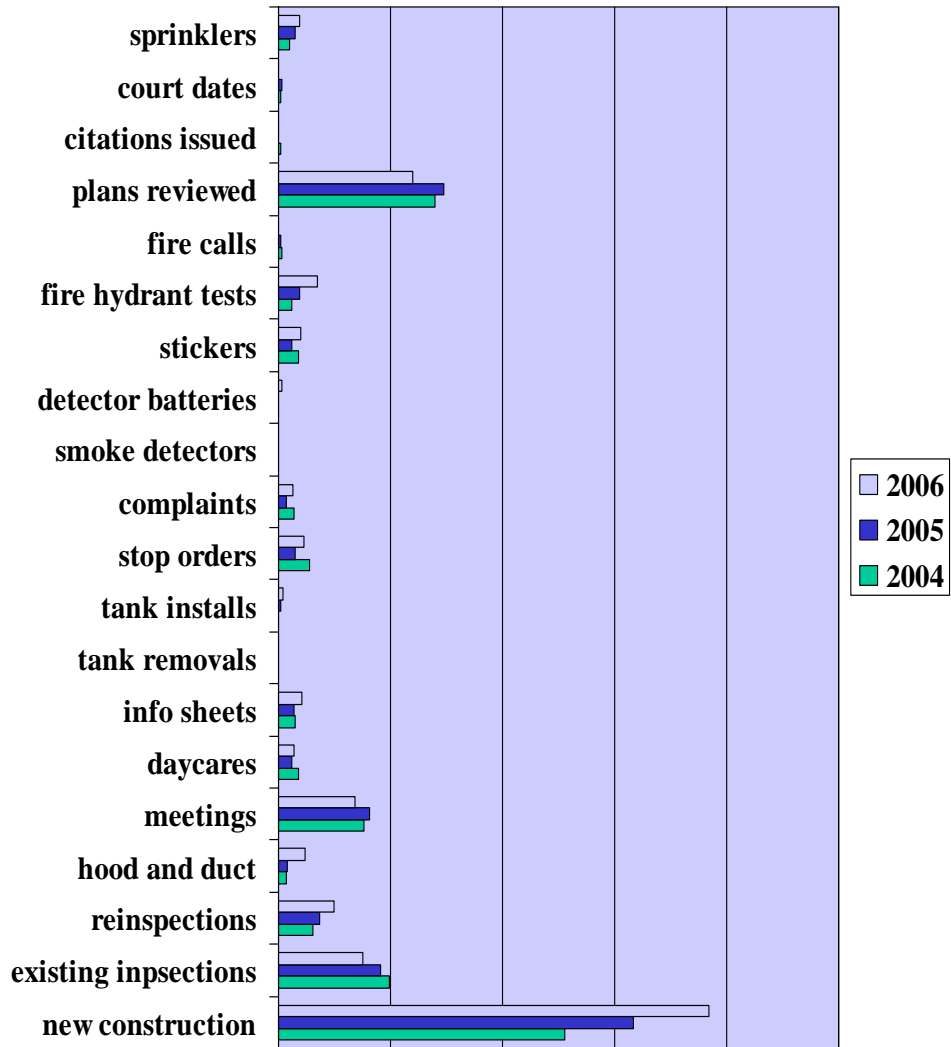
	2003	2004	2005	2006
New construction	2335	2551	3171	3845
Existing inspections	1496	986	909	751
Re-inspections	492	309	371	497
Sprinkler tests	110	95	148	185
Hood system tests	54	65	81	240
Meetings/Consultations	1119	764	811	679
Daycares	156	179	118	142
Information sheets	368	147	135	205
Tank removals	3	0	14	8
Tank installations	10	14	16	35
Violation and Stop work notices	317	275	153	230
Complaints	158	140	74	126
Smoke detectors installed	26	1	8	12
Smoke detector batteries installed	12	6	4	32
Green stickers	179	180	122	197
Fire hydrants tested	95	122	190	342
Fire calls	51	29	23	7
Citations issued	17	18	11	2
Court appearances	22	24	32	4

Total Fire Inspections in 2006 7539

Total Plans Reviewed in 2006 1194

Total Plans Review Hours for 2006 1463

CODE ENFORCEMENT ACTIVITIES



Events, Training, and Accomplishments 2006

Year 2006 proved to be an eventful year for the Fire Bureau. In fact, the activities and accomplishments of this year are probably more diverse than any before.

FEBRUARY



In February, we had the unique opportunity of participating in an eight minute hockey match during half-time at a Knoxville Ice Bears game. As a result, the Fire Bureau received a donation for our smoke alarm program from the Ice Bears.

We had such a blast! It was actually very comical at times. We were grateful for the padding. What a fun way to bring in a donation! We hope to participate again next year.



MARCH



On March 14th, Deputy Fire Marshal Mike Brown and Fire Prevention Specialist April Bradford participated as vendors in the 18th Annual Product Show hosted by the Knoxville Chapter of the Construction Specification Institute. Others participating and in attendance included architects, engineers, contractors, interior designers, and specifiers. This provided an excellent opportunity to field questions particularly from architects regarding fire codes, inspections, etc.

APRIL



The Code Adoption Committee met in April of 2006 regarding ICC codes to be adopted by the county. Members of the committee are Fire Marshal Kathy Saunders, Deputy Fire Marshal Mike Brown, and inspectors Steve Chamberlain, Shawn Remington, and Chip Widener.

MAY

In May, Fire Prevention Specialist April Bradford earned an “A” in Spanish at Pellissippi State Community College. She took the class in an effort to refresh her knowledge of Spanish from high school 14 years ago. Rural/Metro reimbursed her for tuition since April pursued taking the class to aid in the effort of expanding fire safety education to the Hispanic community.

SEPTEMBER



Fire Investigator Mark Sells left the Fire Bureau to be Fire Marshal in Lavern, TN, taking accelerant detection canine Maude with him.



OCTOBER



Employee	Accomplishment
Inspector Rick Smith	Level II Fire Inspector certification
Inspector Shawn Remington	Level I Building Inspector certification

- Thanks to the extensive efforts of Fire Inspector Chip Widener, in cooperation with the I.T. staff, the Fire Bureau's website was expanded greatly, from two strictly readable pages to numerous informational pages, forms, and related links. Updating the website has made our agency more community-friendly by providing an avenue to educate individuals in the community about who we are and what services we provide. Making request forms and complaint forms available online has also expanded the number of avenues services can be requested by the community.



www.knoxcounty.org/fire

- The Fire Bureau was thrilled to be the recipient of an almost \$50,000 Department of Homeland Security Grant. This award allowed us to purchase a brand new Life Safety House mobile classroom trailer; a much-needed improvement from the trailer we have used for the past 13 years.



NOVEMBER

- Fire Marshal Saunders participated in the 2006 IBC Performing Nonstructural Plan Review Seminar in Myrtle Beach. The International Code Council organizes this training.
- Nov 8th through the 11th, 2006, the Tennessee Fire Safety Inspectors Association Conference was held in Murfreesboro, TN. In attendance from the Fire Bureau were Inspectors Chip Widener, Ronda Murray, Steve Chamberlain, and Travis Evans.



- The Fire Bureau commenced a new program for distributing and installing visual smoke alarms to individuals who are deaf or hard-of-hearing. More information regarding this new program is included in the Public Education section of this report.

DECEMBER

- In December, the Code Adoption Committee submitted their recommendations, with intended passage, to the Board of Construction Standards and Appeals, recommending that we adopt the following codes and their amendments: the 2006 International Fire Code, the 2006 International Building Code, and the National Fire Protection Association 2006 Life Safety Code.



- Fire Prevention Specialist April Bradford completed an EMT-IV Technician Course through Roane State Community College. Rural/Metro reimbursed her for the tuition expense. She subsequently passed the National and State Registry exams, earning National certification as an EMT-Basic and State certification as an EMT-Intravenous Therapy. April has been accepted into Rural/Metro Fire Department's recruit academy, which begins in January 2007.

PUBLIC EDUCATION

OVERVIEW

The Public Education Office of the Bureau is charged with providing fire prevention and life safety education programs to the citizens and businesses of Knox County. Although programs are offered to all demographics, we primarily target children and senior citizens as they are the most susceptible to death and injury from fire.

PUBLIC EDUCATION A PARTNERSHIP



The County Fire Bureau and Rural Metro Fire Department partner in this effort by jointly funding two public education positions, currently filled by **Larry Wilder** and **April Bradford**. Larry Wilder is primarily responsible for bringing the “Fire Safety House” out to area kindergarten classes to teach fire prevention and safety. The Safety House is actually a trailer with the interior modeled after a home to allow the students to discuss and practice fire safety in a realistic environment. April is primarily stationed at Safety City to provide fire prevention and safety education to area second graders who visit the facility on field trips.

SAFETY CITY



Front of the Facility

Rear of Facility

Fire Safety House

Approximately 200 children learn and utilize fire safety skills each week at Safety City. The facility is owned and operated by the Knoxville Police Department.

Upon arrival at Safety City, students are divided into two separate classrooms for an hour of instruction. **One class learns rules regarding bike, pedestrian, passenger, and driver safety as well as learning about calling 911.** The other class learns about **fire safety** instead. After lunch, the students switch to the other classroom to learn the safety curriculum their classmates covered in the morning portion of the program.



Subsequent to classroom instruction, the students are immediately engaged in **activities** which allow them **to exercise the safety knowledge and skills that were just covered in the classroom**. The fire safety activities begin with a visit to the **fire safety house**.

The downstairs portion of the safety house curriculum includes covering rules which help to prevent fires, after which the students move to the kitchen and are asked to point out placement of items which break these fire prevention rules and any other safety hazards they see in the kitchen. As the students point these hazards out, the instructor adjusts the items to remove the hazards.



The students then move upstairs to practice the knowledge and skills learned in the classroom such as *crawling low under smoke, knowing two ways out, checking the door for heat, using the window as a second way out when necessary, escape ladders, and smoke alarms.*



The safety house portion concludes with a fire escape drill using fake smoke, pretending the first way out is not viable, exiting through the window and proceeding to the meeting place. At the meeting place, we take a head-count and discuss what to do if someone is missing – don't go back in for any reason, once out stay out, call 911, provide the necessary emergency information.



The fire safety program concludes by returning to the classroom for:

- (a) A display and discussion of the firefighter gear and equipment while dressing a student in an oversized set of gear, and
- (b) Participation in a "Fire Feud" game that consists of questions serving as a review.

Safety Fairs are held at Safety City semi-annually. These events are held to provide safety education to children in the general community. The same topics are addressed but the curriculum is much more abbreviated. A parent or adult must accompany the child, so this provides a greater opportunity to educate parents directly.

LIFE SAFETY HOUSE

We are fortunate to have a variety of teaching tools to aid us in the delivery of our programs. In 2006, we received a tremendous boost from a Department of Homeland Security Grant. The grant of nearly \$50,000.00 enabled us to purchase a brand new Life Safety House mobile classroom trailer. It is designed as a “kid sized” home with a bedroom, kitchen and living room that we use to teach valuable fire and life safety education at the schools. If not for this program, many children would not receive this unique type of training.



**ADDITIONAL OPPORTUNITIES TO EDUCATE
CHILDREN/YOUNG ADULTS**

- Each year, Rural Metro's Fire Department and Emergency Medical Services Divisions participate in Schooled for Success, providing an opportunity for students interested in these fields to learn more about them via an on-the-job environment. Fire Prevention Specialists Larry Wilder and April Bradford assist in coordinating the fire division's activities for the students. These activities usually include touring the fire station, riding on the fire engine when calls come in, donning and doffing fire gear, hands-on use of a fire extinguisher on a controlled fire, and flowing water at the nozzle of a hose line.



- Rural Metro Fire Department plays an enormous role in fire prevention and safety education to both children *and* parents. Fire truck visits and station visits provide excellent opportunities for firefighters to deliver this education to the audiences with which they interact. Requests for such activities are received by Fire Prevention Specialists Larry Wilder and April Bradford, who schedule the activities according to station availability and subsequently notify the fire stations with the necessary details.



- Larry and April also visit area schools upon requests for fire prevention and safety presentations. This includes groups up to and including high schools and colleges. We also respond to such requests at daycares, preschools, and other such entities.

EDUCATING PARENTS AND ADULTS

It is imperative that parents receive fire prevention and safety education. We can teach children the information, but reinforcement and application of the safety skills learned require intervention from parents/guardians. After a school field trip or visit from the fire department, children are likely to tell their parents what they learned about the importance of having working smoke alarms and escape ladders, but only the adults in the household have the ability to follow through with these vital purchases and subsequent maintenance.

It is important to also educate grandparents and others who care for children. A child's primary residence should have working smoke alarms, escape ladders, and an escape plan which they have practiced. However, these preparations *also* need to have taken place at other residences where they might stay, such as a second residence due to joint custody arrangements, overnight visits with grandparents or other family members, etc.

The Fire Bureau utilizes diverse avenues to educate parents and other adults regarding fire prevention and safety, and related services available through the Fire Bureau and Rural Metro Fire Department.

- Presentations to various community groups and agencies.
- Participation in community expos, fairs, safety days, etc. For instance, we have participated in Knoxville's Healthy Living Expo, Safety City Safety Fairs, the Knox County Health Department's Incredible Baby Shower, Baby Safety Day at

Babies R Us, the Knox County Employees Health and Benefits Fair, and the Knox County Sheriff Department's Appreciation Day.

- Media releases via newspaper, television, and radio.
- Presentations to new parent classes.
- Educational fire prevention and safety literature available upon request as supplies permit.
- Rural Metro Fire Department plays a large role in the delivery of fire prevention and safety education to both children *and* parents. Fire truck visits and station visits provide excellent opportunities for firefighters to deliver this education to the audiences with which they interact. Requests for such activities are received by Fire Prevention Specialists Larry Wilder and April Bradford, who schedule the activities according to station availability and subsequently notify the fire stations with the necessary details.

SENIORS

We have also made great strides in providing education and training to the senior citizen community of Knox County. Our office is actively involved with programs and agencies such as the Knox County Office on Aging, the Knox County Sheriff's Office Senior Citizen Awareness Network (SCAN), Senior Companions, Knox County Senior Centers, Baptist Senior Health and others to provide fire and life safety education regularly to this growing demographic. The number of programs delivered to this segment has grown steadily over the past three years and we look forward to new opportunities in the future to serve our senior community.

Each year we participate as a vendor at Knoxville's Senior Summit. This event is heavily attended, providing a remarkable opportunity to educate this facet of the community.

NEIGHBORHOODS/HOMEOWNER ASSOCIATIONS

Additionally, the number of programs delivered to neighborhoods and home owner associations has grown. We actively participate in the National Night Out program where the Fire Bureau, in conjunction with Rural Metro Fire Department, delivers education and training to thousands of families each year.

THE WORKPLACE

We have increased the number of programs delivered to businesses and industry in Knox County by teaching such programs as portable fire extinguisher use and evacuation drills. General workplace fire prevention and safety messages have included topics such as abstaining from candle use at the office, safe operation and supervision of small space heaters in the workplace, the dangers of overloaded outlets, extension cords, prohibiting circuit breakers from being taped open, maintenance of smoke alarm systems, fire extinguishers, and posted escape plans, the dangers of cluttered work and storage spaces, the importance of visible and marked exits, unobstructed evacuation paths, and the value

of conducting successful evacuation drills which include a system for accounting for the building occupants upon reaching the meeting place(s).

INDIVIDUALS WITH HEARING LOSS

Fire Prevention Specialist April Bradford has a particular interest in working with members of the community who are deaf and hard-of-hearing. Her undergraduate studies include a concentration in educational sign language interpreting. This year, she pursued the following goals:

- a) Increasing the community's accessibility to fire safety information by having open captions added to our two most popular fire safety videos and by offering fire prevention and safety presentations to the Tennessee School for the Deaf and the Knoxville Center of the Deaf.
- b) Increasing awareness about the need for an alternative means of alert to fire and smoke in the residence when an individual has partial or complete hearing loss,
- c) whether they have no assistive hearing devices, or whether they take their hearing aids out prior to sleeping.
- d) Commencing a visual smoke alarm program to complement our conventional smoke alarm program (see more information below).

SMOKE DETECTOR and REPLACEMENT BATTERY PROGRAMS – CONVENTIONAL AND VISUAL/STROBE DETECTORS

Working smoke detectors in a home increase an occupant's chance of surviving a fire by 50 percent. The Fire Bureau stresses the importance of this life-saving device through its educational endeavors. We do not want someone to be without them because they cannot afford them. Therefore, we have the following programs available to the public.

- (a) Conventional Smoke Detector Program
This program provides for one smoke detector in households otherwise unable to afford them. The Fire Bureau provides the detectors and Rural Metro Fire Department installs them.
- (b) Visual/Strobe Smoke Detector Program
This program provides for one visual/strobe light smoke detector, model 7109/LS, in households otherwise unable to afford them. The Fire Bureau provides the detectors and conducts the majority of installations. These detectors were purchased at cost (\$79) by way of a special program available through the manufacturer, Gentex. If we receive a request for one of these detectors from someone who is able to afford one at cost, we allow them to purchase from us. In turn, we use that payment to purchase another visual detector for someone who is unable to afford one.
- (c) Replacement of Smoke Detector Batteries
It is imperative that smoke detector batteries are replaced at least two times per year, preferably in conjunction with the Daylight Savings time changes as a helpful reminder. If unable to afford a battery, we will provide one and

Rural/Metro will install it in place of the previous battery. Even residents with hard-wired detectors need to keep up with maintaining a reliable back-up battery in case the power failed.

To access these programs, the Fire Bureau has a smoke detector line available for requests at 215-FIRE (3473).

Funding/Donations: The Fire Bureau is a non-profit agency, depending primarily on donations from the community to support and maintain the above programs. This year we were particularly blessed with sizeable donations from two area businesses, giving us the means to initiate the visual smoke alarm program. We hope to continue receiving the community's support in order to make these life-saving programs available to the public.

MEDIA RELEASES AND INTERVIEWS

At certain times during the year, particular fire hazards seem more profound than others. For instance, alternative heating sources pose a higher fire hazard during winter months. One step the Fire Bureau takes to mitigate heightened seasonal risks, is educating and reminding the public about these risks through public service announcements in the newspaper, on television, and via radio.

FIRE PREVENTION WEEK – EVERY OCTOBER

Fire Prevention Week takes place every October. It provides an opportunity for a national focus on fire prevention and safety. The National Fire Protection Association chooses a specific fire prevention theme for Fire Prevention Week, such as “watch what you heat,” and “practice your escape plan.” The Fire Bureau and Rural Metro Fire Department team up by distributing information and materials to the schools as well as holding four open houses at fire stations during the month of October.

GOALS FOR 2007

We make every effort possible to make Knox County a safer place to live, work or visit for our residents and guests. We have made it our goal to continue the growth of all our education programs and smoke detector programs for the years to come. For the year 2007, we want to expand each of our programs carefully while developing new ones to connect with different audiences. For instance, there is a growing Hispanic community in Knox County. Improvements in communications have enabled us to break down some of the barriers that prevented us from reaching this community in the past. We look forward to this new endeavor. A bright future lies ahead for the Knox County Fire Prevention Bureau.

Fire Prevention Specialists



Certifications Held:

- Licensed Emergency Medical Technician in the State of Tennessee with multiple certifications.

Professional Affiliations:

- National Information Officers Association (NIOA)

Larry Wilder

Fire Prevention Specialist

Serving Knox County Since: January, 2003



Certifications Held:

- Licensed Emergency Medical Technician-Intravenous in the State of Tennessee

Professional Affiliations:

- National Information Officers Association (NIOA)

April Bradford

Fire Prevention Specialist

Serving Knox County Since: January, 2005

VARIOUS EDUCATION PROGRAMS AND EVENTS	
Safety City Programs * 5,211 children plus 1,268 adults	*6,479
Life Safety House School Visits	48
New Parent Classes	13
Senior Programs	53
Homeowners Associations Education	16
Extinguisher Training Programs	14
Training for Workplaces	48
Expos/Fairs/Pub Ed Booth	7
Miscellaneous Programs and Events	83
TOTAL	6761

SMOKE DETECTORS INSTALLED	
<u>CONVENTIONAL</u> DETECTORS (entire year)	<u>VISUAL/STROBE</u> DETECTORS (program began 11/06)
273	20
COMBINED TOTAL 293	

SMOKE DETECTOR BATTERIES INSTALLED
TOTAL 432

PUBLIC EDUCATION PROGRAMS BY RURAL METRO FIRE DEPARTMENT STATIONS		
Station Number	Station Visits	Truck Visits
10	5	12
11	14	24
14	0	4
15	1	12
16	0	11
17	1	3
25	0	5
26	0	1
27	0	2
28	2	2
30	4	14
31	3	6
33	2	0
34	1	4
TOTAL	100 Station visits	33 Truck Visits

Fire Investigations



Mike Dalton



Greg Lampkin



Fire Investigations in Knox County

History and Overview

In 1985, the Knox County Fire Prevention Bureau in conjunction with the Knox County Sheriff's Office began investigating fires to determine their origin and cause. The Fire Marshal and an investigator assigned to the Fire Bureau from the Sheriff's Office were responsible for investigating all fires. The county received an exemption from the State of Tennessee for plans review and inspections. This exemption also applied to fire investigations. The Fire Marshal was designated as an Assistant to the Commissioner of Insurance, which delegated the authority to perform investigations.

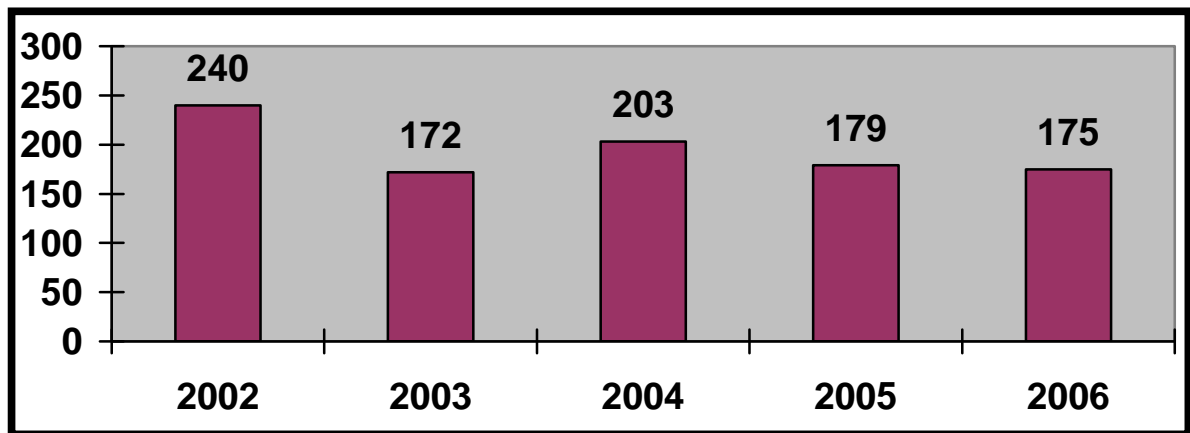
During fiscal year 1986, the Fire Bureau received its first computer to be used to compile data on fires in Knox County. All records since 1986 have been stored electronically.

Origin and cause investigations are performed at all fires so that an incendiary cause is not overlooked thereby allowing a criminal to escape justice. When the cause of a fire is determined to be incendiary, a criminal investigation is conducted. The Fire Investigation Unit also works closely with public education and fire inspection personnel who work to make Knox County a fire-safe community.

The Knox County Fire Investigation Unit currently conducts all fire investigations outside the city limits of Knoxville. This unit is made up of two Investigators from the Fire Prevention Bureau, a Detective assigned from the Knox County Sheriff's Office, a Special Agent with the Federal Bureau of Alcohol, Tobacco and Firearms and two volunteer Origin and Cause investigators from area fire departments. The Fire Investigation Unit investigates all working structure fires in Knox County. In addition, vehicle and ground cover fires are investigated when the engine company officer believes that the fire was intentionally set. All follow-up investigations are the responsibility of the Sheriff's Detective and the Fire Bureau Investigators.

Fire Investigation Statistics

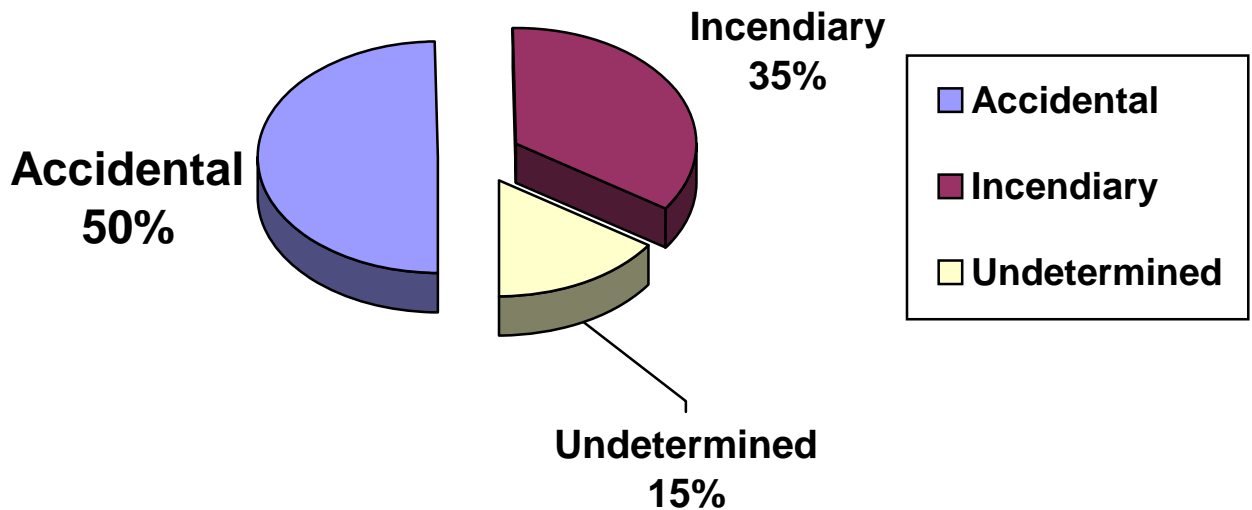
Number of Fires Investigated – 2002 through 2006



10 Year Arson Statistics

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
<i>Total Fires</i>	143	146	160	245	222	240	172	203	179	175
<i>Arson Fires</i>	70	61	66	89	94	86	72	87	49	61
<i>Arrests</i>	UK	5	3	7	17	13	7	17	13	9
<i>Arsons Cleared by Arrests</i>	UK	8%	5%	8%	18%	15%	10%	20%	27%	15%

Fire Classifications

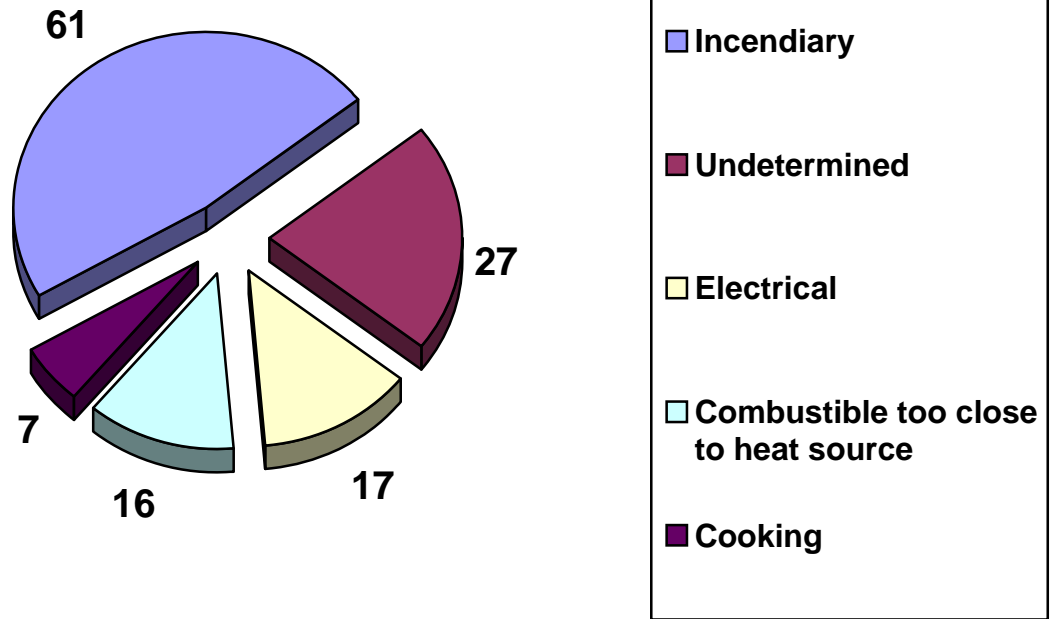


Fire causes are divided into three separate classifications. In 2006, the number of accidental fires was higher than the number of incendiary fires in Knox County. Many of these accidental fires can be effectively prevented through public education and code enforcement.

Incendiary fires are costly to the citizens. Fire protection costs and increased insurance rates are just a couple of reasons work is continually done to solve arson fires. Many long hours and multi-agency cooperation are required to complete this task.

An investigator responds to all working fires in Knox County. Responding to every working fire provides Fire Prevention personnel with an accurate account of fire causes in Knox County, thereby allowing public education programs to be designed to address specific problems. It also prevents an intentionally set fire from being overlooked by fire department personnel.

Causes of Fires



The Fire Investigation Unit investigated a total of 7 fires caused by cooking in 2006.

Top Ten Causes of Residential Fires

	2005	2006
Incendiary	24	22
Undetermined	20	12
Possible Electrical	16	12
Combustible too Close to Heat Source	11	10
Appliance Malfunction	6	7
Cooking	4	6
Lightning Strike	4	3
Smoking	8	3
Open Flame (Candle)	4	2
Chimney	3	2

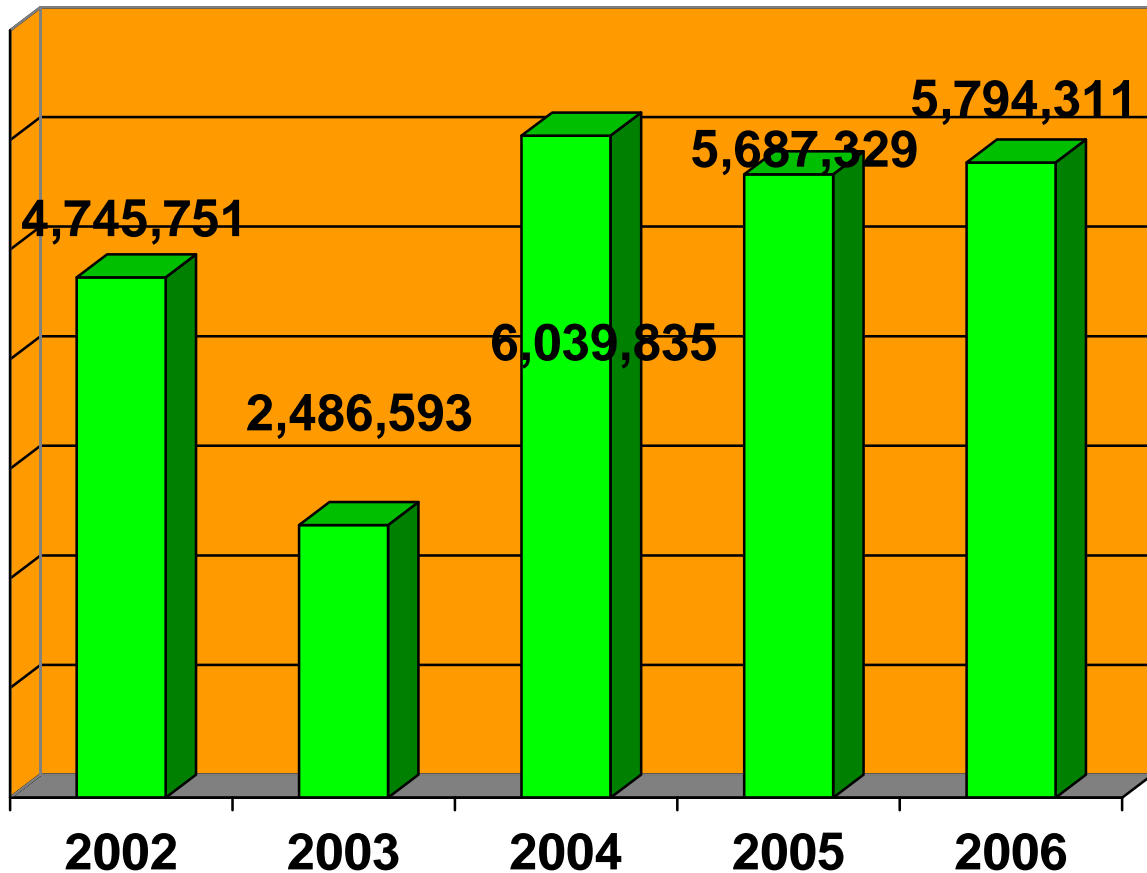
Smoke Detectors in Homes

	2005	2006
Number of Residential Fires	113	96
Percent of Homes with Smoke Detectors	64%	55%
Percent with Smoke Detectors in Proper Working Order	69%	64%

Dollar Loss Resulting From Fire

The dollar loss for all fires investigated is determined by the amount of square footage and contents damaged by fire. The guide used to determine the dollar loss is the Standard Building Code Congress International's Building Valuation Data sheet that is provided on a semi-annual basis. The N.A.D.A. guide is used to determine the value of vehicles involved in fires.

Dollar Loss for Last Five Years





The Fire Investigation Unit investigated 42 vehicle fires in 2006; many of these were arson. The Fire Investigation Unit works closely with the Sheriff's Office Auto Theft Division and many insurance companies to solve these fires.

Major Incidents of 2006

The year of 2006 brought several major incidents to Knox County. The following are some of the incidents in which the Knox County Fire Investigation Unit was involved.

- January 1, 2006: An arson fire caused approximately \$350,000 in damage to a home in the Gibbs community.
- January 3, 2006: A light bulb used to heat a doghouse set fire to a Halls home causing \$200,000 in damage.
- January 31, 2006: An arson fire caused half a million dollars in damage to the Town and Country Bookstore on Clinton Hwy. A suspect was later arrested and charged with this fire.
- March 3, 2006: An arson fire destroyed the office of a car lot on Clinton Hwy causing \$200,000 in damage.
- March 29, 2006: An arson fire caused \$750,000 in damage to a Halls residence.
- May 5, 2006: An arson fire caused \$170,000 in damage to a home under construction in the Powell community.
- December 8, 2006: A cooking fire caused \$200,000 damage to a west Knox County home.
- December 10, 2006: A chimney fire destroyed a Corryton home causing \$200,000 in damage.
- December 26, 2006: A Christmas night fire caused \$600,000 in damage to a northeast Knox County home. The fire started as a result of an improperly built fireplace.

Fire Fatalities

The Year 2006 was a very tragic year across the state of Tennessee. Unfortunately, Knox County did not escape the tragic number of fires, with a total of five residents dying from fire related injuries.

- On March 12th, a Halls resident died after falling asleep while smoking a cigarette.
- On April 5th, a west Knox County woman died after she discovered a fire in her bedroom. The residents attempted to fight the fire before being trapped by the flames.
- On April 12th, an elderly south Knox County man died after an electrical heater caught fire and he was unable to escape.
- On August 17th, a northwest Knox County woman died after a cigarette ignited vapors from spilled gasoline in her garage.
- On October 28th, an automobile accident caused the death of a Florida woman when her pickup truck caught fire after being struck on I-40 near Lovell Rd.



An elderly man died as a result of this fire in south Knox County.

Knox County Fire Fatalities 1985 to 2006

1985	4
1986	0
1987	2
1988	7
1989	4
1990	2
1991	1
1992	0
1993	4
1994	8
1995	1
1996	0
1997	1
1998	3
1999	1
2000	5
2001	2
2002	2
2003	2
2004	1
2005	5
2006	5
TOTAL	60

Fire Investigation Task Force

During fiscal year 1995 the Knox County Fire Investigation Task Force began assisting with on-scene investigations. The Task Force is currently made up of almost twenty firefighters, law enforcement officers, and technical experts who have been trained in various fire investigation techniques. The membership of the Task Force currently includes individuals from the Knox County Fire Prevention Bureau, Rural/Metro Fire Department, Karns Fire Department, Knoxville Volunteer Rescue Squad, Federal Bureau of Alcohol, Tobacco and Firearms and the Forensic Anthropology Center from the University of Tennessee's Department of Anthropology. Members of the Task Force assisted investigators at **21** fire scenes in 2006.

In 2004, a replacement vehicle was purchased for the Fire Investigation Unit. This vehicle carries a large amount of equipment to be used at fire scenes. Such items as extra shovels, ladders, generator and lights are carried on this vehicle. The new vehicle also offers office space where computers can be operated and interviews can be performed. The new FIU-1 is a 1992 Ford/Horton retired Ambulance. It replaced a 1992 Chevrolet pickup truck that was overloaded. The new vehicle required only a minimal amount of work to be placed in service.



The "new" Fire Investigation Unit.

Training Activities and Accomplishments of 2006

The year of 2006 was a very busy year for investigations. In order to keep the skills of the investigators up to date with the ever-changing field of fire investigations, Knox County's investigators attend and teach several schools in the related fields of investigations.

Detective Dalton instructed at the Nebraska Chapter IAAI conference to approximately 130 investigators.

Detective Dalton and Investigator Lampkin teach a weeklong fire investigation section at the National Forensic Academy which the University of Tennessee sponsors. This involves classroom instruction as well as several test burns at acquired structures. This class is in progress three times a year.

Detective Dalton attended the IAAI annual seminar in Denver, Colorado in April 2006.

Detective Dalton was nominated for the International Association of Arson Investigators Board of Directors slot during the IAAI annual meeting in Denver, Colorado. If elected, he will fill the position in May 2007.

In August, Detective Dalton and Investigators Lampkin, Patrick and Johnson attended the Tennessee Chapter of the International Association of Arson Investigators annual conference, held in Gatlinburg.

Detective Dalton and Investigator Lampkin served on the Board of Directors of the Tennessee Advisory Committee on Arson. This board assists in planning the annual training seminar, rewards money through the Arson Hotline, and works with local, state, federal, and private investigators to make Tennessee a more arson resistant state.



Arson is to blame for this fire in east Knox County.

Staffing of the Knox County Fire Investigation Unit				
Mike Dalton	Full-time	Detective/Sergeant	Knox County Sheriff's Office	575
Greg Lampkin	Full-time	Fire Investigator	Knox County Fire Bureau	FM10
Michael Patrick	Volunteer	Fire Investigator	Rural/Metro Fire Department	FM11
Dan Johnson	Volunteer	Origin and Cause Investigator	Town of Farragut	FM21
David Icove	Reserve Officer	Fire Investigator	Knox County Sheriff's Office	

This report was compiled and composed by Fire Investigator Greg Lampkin, Knox County Fire Prevention Bureau. The data listed in this report was gathered from the Fire Investigation Unit's computer database. All information is public record and is used to prepare education and prevention materials.