

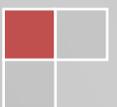
FY 14-15

LEXINGTON COUNTY FIRE SERVICE ANNUAL REPORT

Annual Report from July 2014 through June 2015

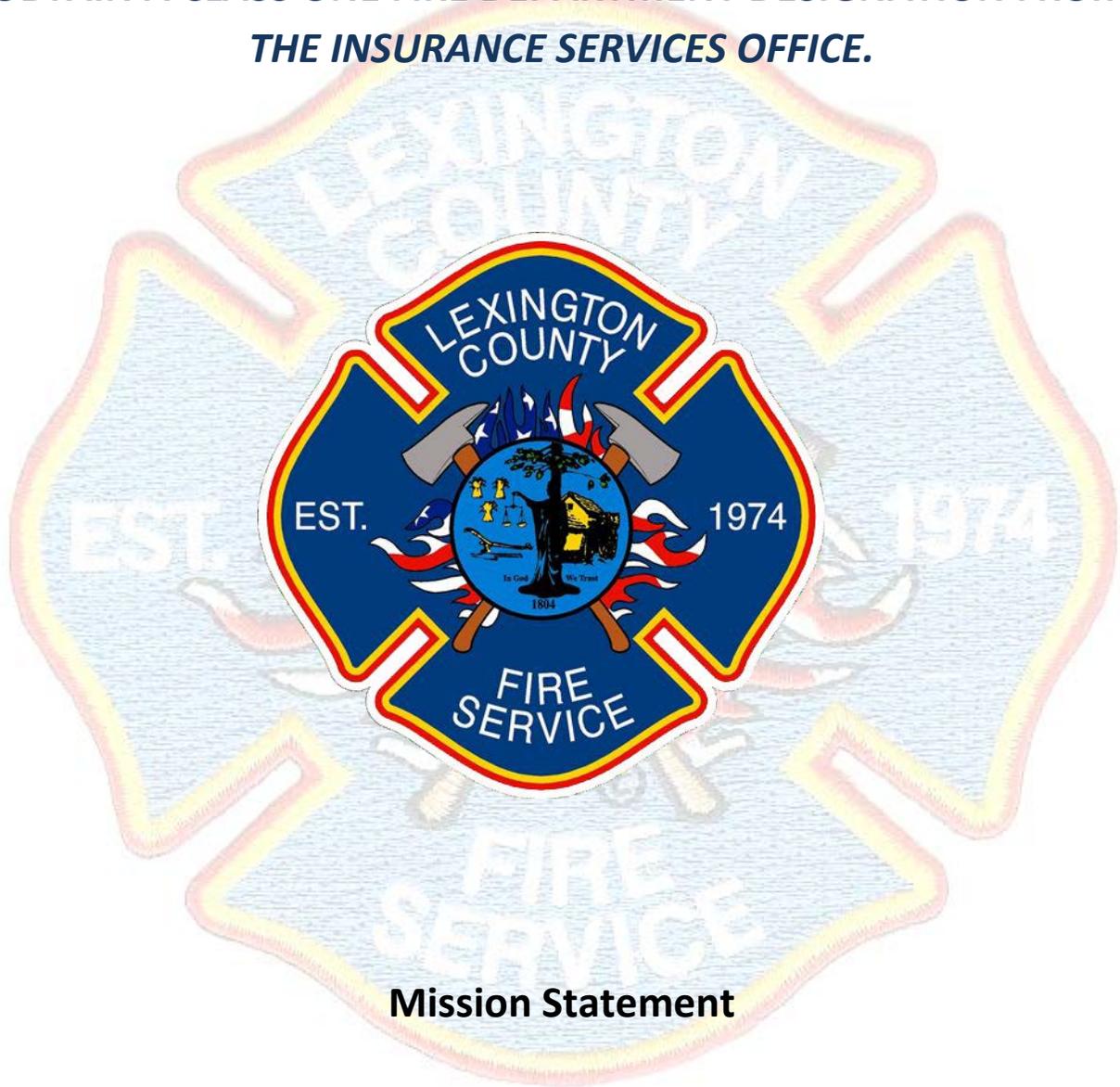


The Lexington County Fire Service is responsible for protecting the lives, livelihoods and resources of Lexington County by planning and implementing effective strategies to successfully combat loss from fire through prevention, education, rescue, suppression, and investigation services.



Vision Statement

***BECOME AN INTERNATIONALLY ACCREDITED AGENCY AND
OBTAIN A CLASS ONE FIRE DEPARTMENT DESIGNATION FROM
THE INSURANCE SERVICES OFFICE.***



Mission Statement

***THE LEXINGTON COUNTY FIRE SERVICE SHALL BE A COMMUNITY
ORIENTED AGENCY THAT PROVIDES QUALITY FIRE PREVENTION,
FIRE SUPPRESSION AND RESCUE SERVICES TO ALL.***

We appreciate you taking time to review our annual report and I hope the information you find here proves helpful. The men and women of the Lexington County Fire Service are dedicated to “service excellence” in everything we do. We maintain a “can-do” attitude and strive for excellent customer service. Our success is directly related to our relationships with partner agencies, all other County departments and the public we serve. Our purpose is to provide the highest level emergency and risk mitigation services through 194 career personnel and 53 volunteers.

The day-to-day mission of the Lexington County Fire Service is to provide quality life safety services that include the five core fire service disciplines:

- Fire Prevention and Public Education
- Fire Inspections and Investigations
- Fire Suppression
- EMS-Basic Life Support
- Special Operations that include Hazardous Materials and Technical Rescue Response

The services offered by the department are guaranteed by utilizing: Automatic Aid agreements, Intergovernmental agreements with surrounding agencies, public/private partnerships, a pool of highly skilled firefighters, dependable apparatus, equipment and a proven track record of quality service to our citizens.

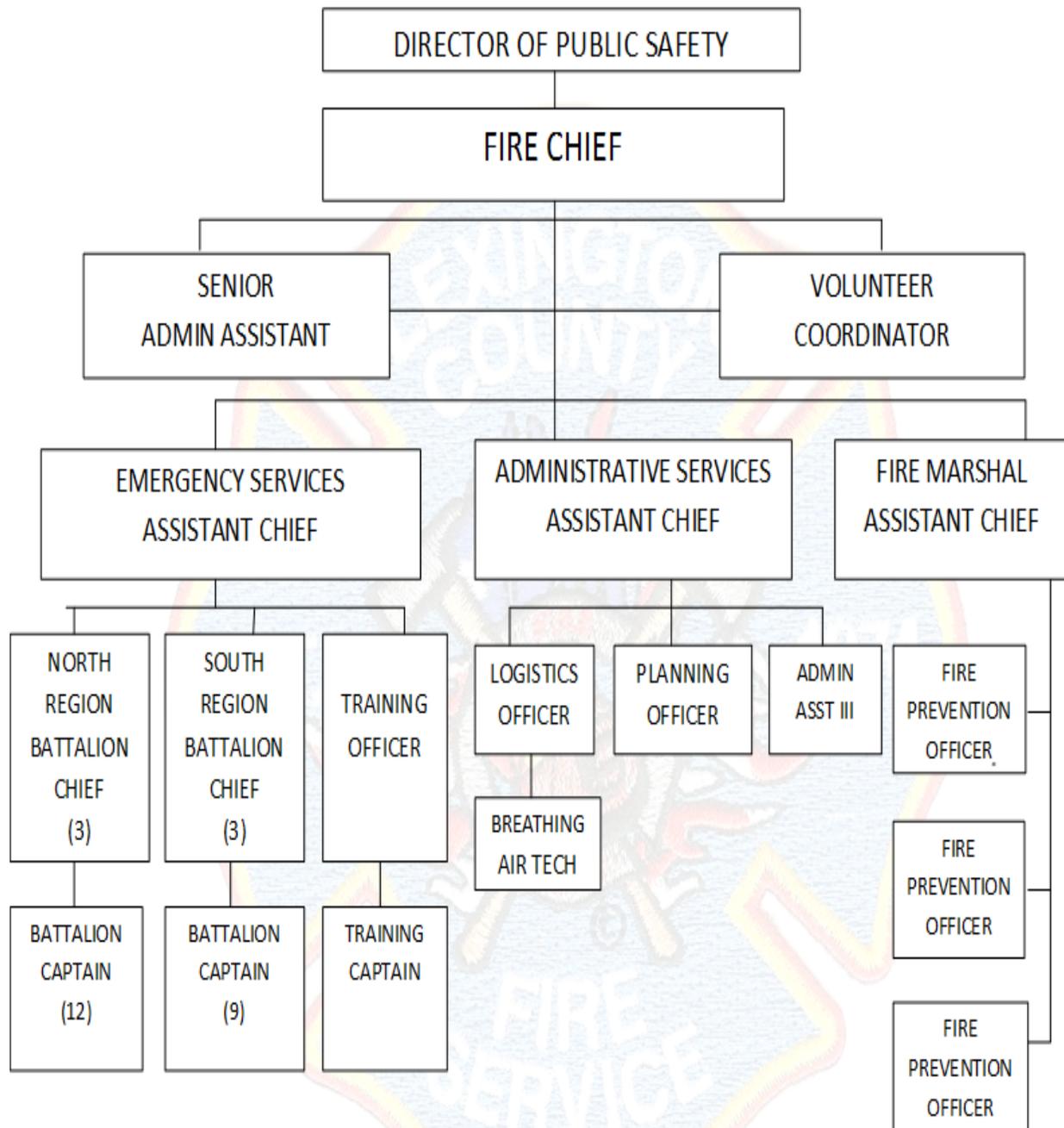
The Lexington County Fire Service shall continue to strive for innovative ways of providing “indispensable, community services” by seeking new partnerships, maintaining the ones we have and utilizing state-of-the art technology. Partnerships bring opportunities to the department, provide an awareness of the public and private sector’s commitment to the community, and acknowledge the courageous efforts of our department and our motto of:

“Honor, Respect and Devotion to Duty”

The Lexington County Fire Service is proud of our community and the services we provide that enhance the quality of life for our citizens. We pledge our continuous commitment to be responsible stewards of your resources, your safety and, most importantly, your trust!

Respectfully,
Bradley C. Cox
Fire Chief

LEXINGTON COUNTY FIRE SERVICE





FY 14'-15' Year in Review

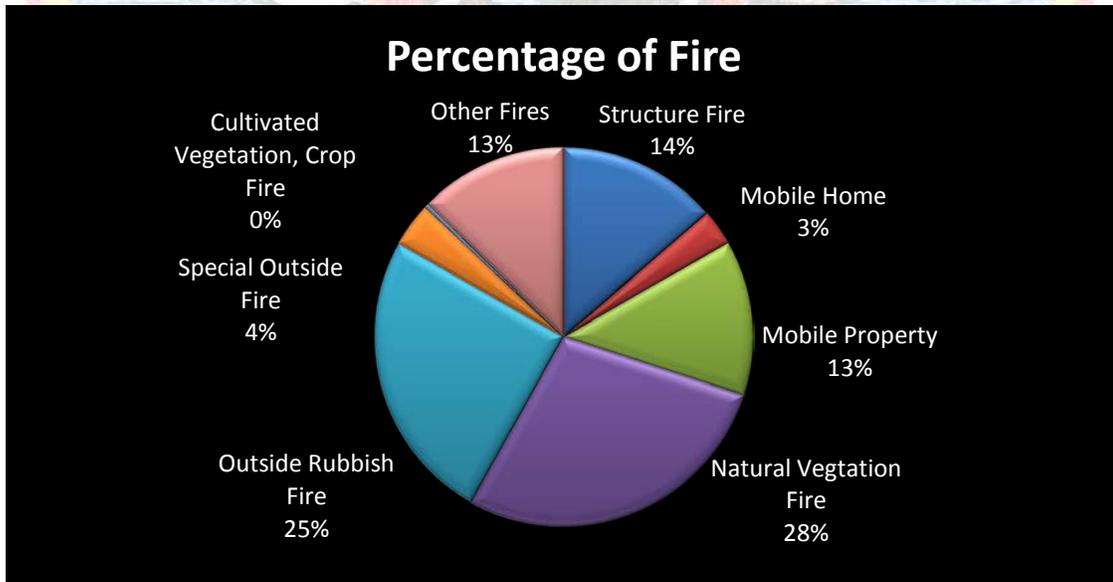
The Lexington County Fire Service demand for service included:

- Total of **20,881 (+11.4%)** units responded to **11,086 (+10.2%)** calls for service.

Fire Data

• 222 Structure Fires	(FY 13-14: 214 Fires)	Change +4%
• 50 Mobile Home Fires	(FY 13-14: 67 Fires)	Change -25%
• 216 Mobile Property Fires	(FY 13-14: 203 Fires)	Change +6%
• 458 Natural Vegetation Fires	(FY 13-14: 488 Fires)	Change -6%
• 408 Outside Rubbish Fires	(FY 13-14: 453 Fires)	Change -10%
• 62 Special Outside Fires	(FY 13-14: 74 Fires)	Change -16%
• 6 Cultivated Vegetation	(FY 13-14: 15 Fires)	Change -60%
• <u>205 Other Fires*</u>	<u>(FY 13-14: 176 Fires)</u>	<u>Change +16%</u>
1627 Total Fires	(FY 13-14: 1690 Fires)	Change -4%

* Includes Cooking Incidents and Trash Fires in a structure



As a result of fire there were:

- 15 civilian injuries (FY 13-14: 15 civilian injuries) Change +0%
- 19 firefighter injuries (FY 13-14: 9 firefighter injuries) Change +111%
- 2 civilian fire deaths (FY 13-14: 4 civilian fire deaths) Change -50%
- 767 acres burned (FY 13-14: 1500 acres burned) Change -49%
- A total fire loss of \$7,089,039 (-26%), (total value of these properties \$45,892,920)

Resources Available:

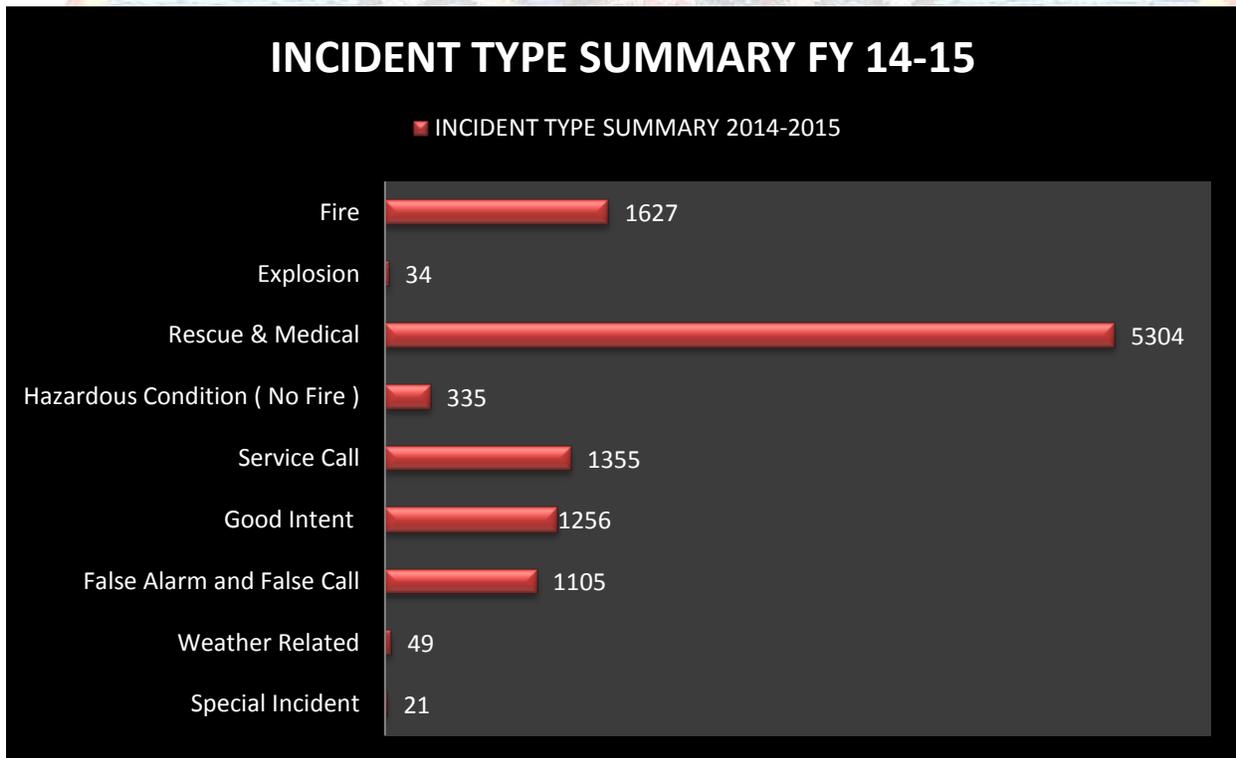
- 194 Paid Personnel
- 53 Volunteers
 - 36 Firefighter II Certified
 - 13 Fireground Support
 - 4 in certification classes
- 20 Engines In-Service
- 7 Reserve Engines
- 4 Ladder Trucks
- 21 Tankers In-Service
- 9 Service Trucks In-Service
- 8 Brush Trucks In-Service
- 4 Emergency Response Vehicles
 - Confined Space Rescue, Haz-Mat, High Angle Rescue, Low Angle Rescue, Trench Rescue, Swift Water Rescue and Structural Collapse Teams.

LEXINGTON COUNTY FIRE SERVICE

STATISTICAL SUMMARY

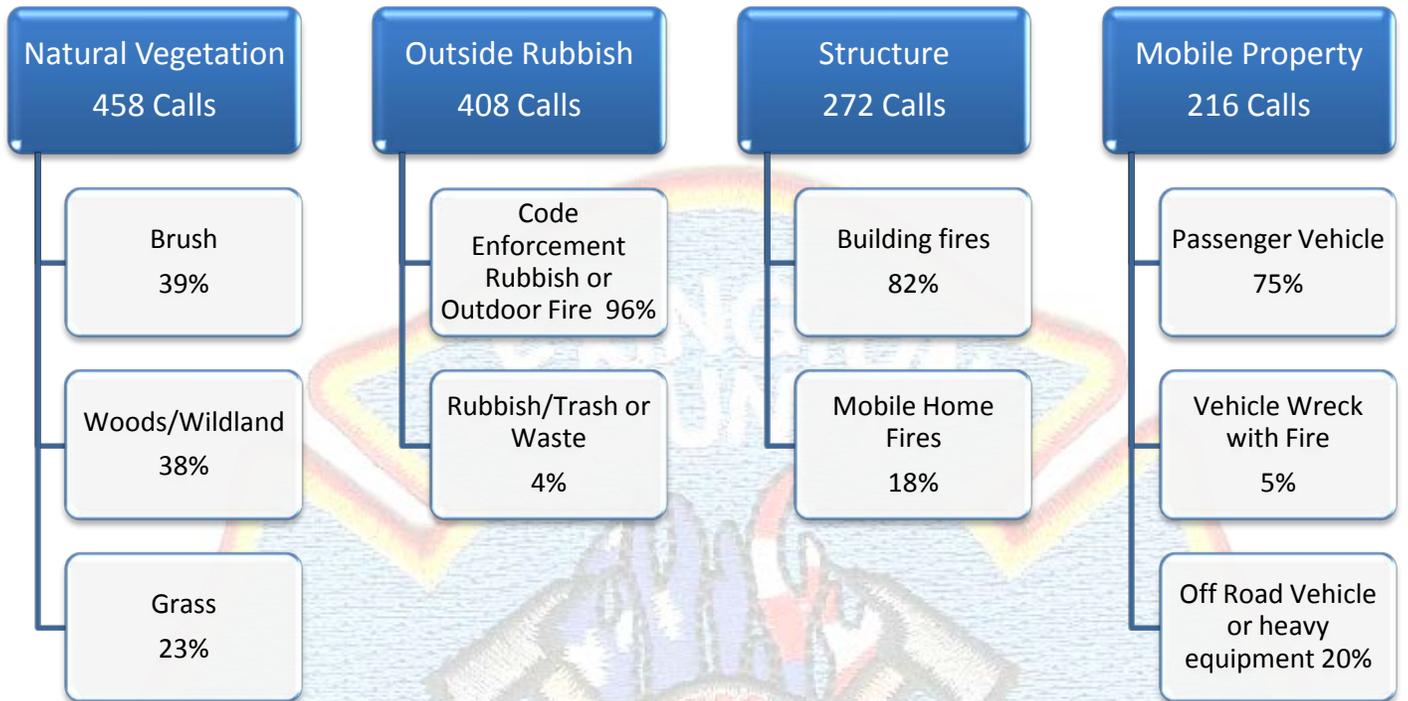
The Lexington County Fire Service responds to a variety of emergency and non-emergency situations. Often what is described to the dispatchers, does not reflect the actual incident; nevertheless, firefighters are trained and prepared to respond to a broad array of situations. To understand the full role the fire service plays in the community, this report profiles the fire service run activity as reflected in our Firehouse Reporting Data. The data collected through Firehouse Reporting is based on the National Fire Incident Reporting System (NFIRS) through the United States Fire Administration (USFA). The data is recorded in one of the following categories: (1) Fire, (2) Explosion, (3) Rescue & Medical, (4) Hazardous Condition, (5) Service Call, (6) Good Intent, (7) False Alarm, (8) Weather Related, (9) Special Incident.

While “fire” is part of the service name, less than 15% of total responses involved fire. **Over 48% of all Lexington County Fire Service runs are categorized as Emergency Medical Services/First Responder and rescue responses.**



Total Calls – 11,086

Most Common Incident Types



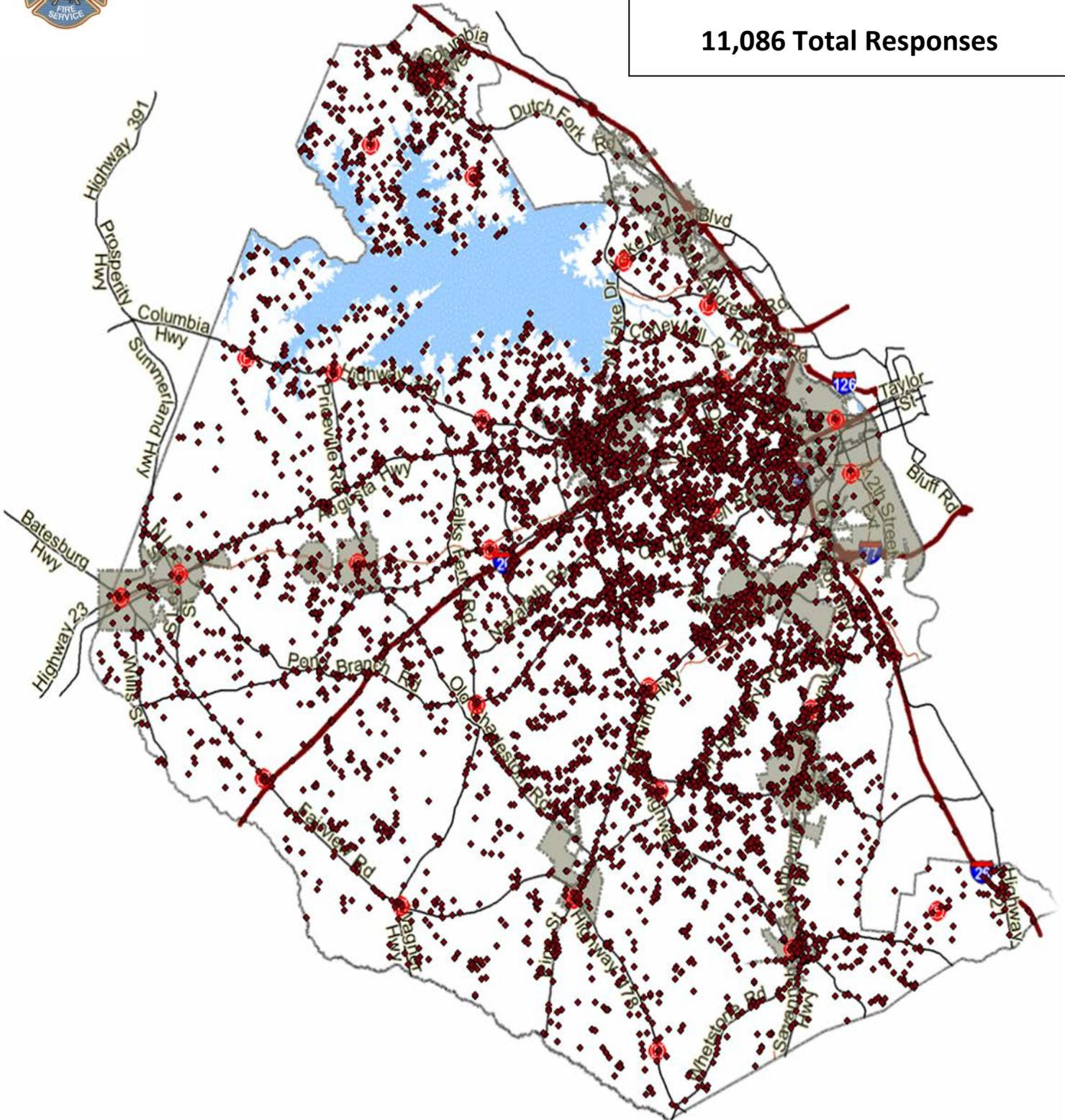
Rescue and EMS Incidents

EMS Call, excluding vehicle accident without injuries	3,351 Calls	63%
Motor Vehicle accident with injuries	1,086 Calls	20%
Medical Assist, Assist EMS	310 Calls	6%
Motor vehicle accident without injuries	291 Calls	5%
Overturned vehicle with or without injuries	184 Calls	4%
<u>Special Rescue / ERT Response</u>	82 Calls	2%
	5,304 Calls	100%



Lexington County Fire Service

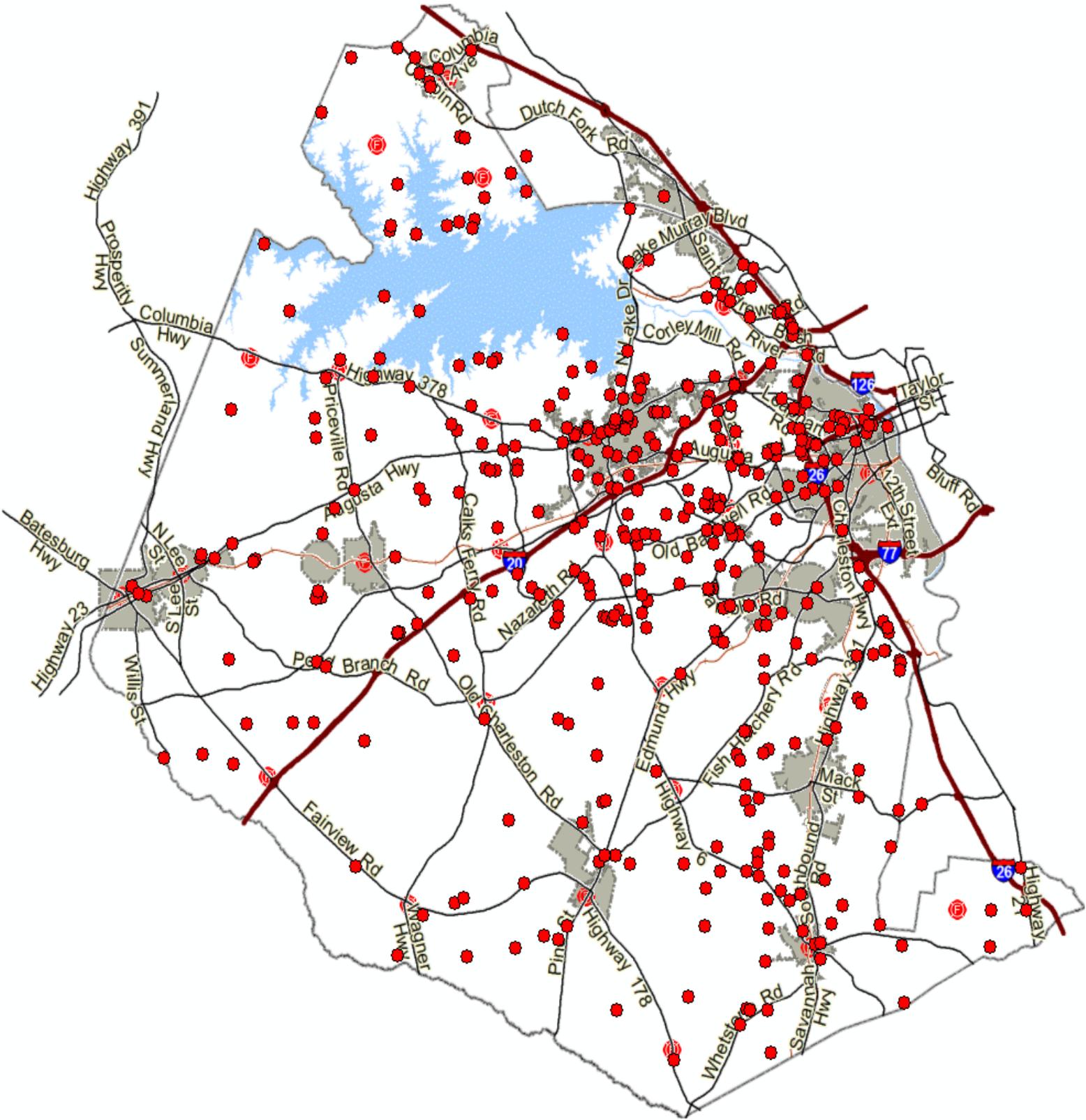
11,086 Total Responses



Note: Sixty-Seven (67%) of all incidents occur in the urban/suburban areas of the county.



Lexington County Fire Service
272 - Structural Fires



Staffing for Incident Responses

Status	Number of Personnel On Scene		Number of Personnel at Station	
	Fire	Medical /Rescue	Fire	Medical/Rescue
Career	30,695 (91.11%)	10,330 (91.95%)	N/A	N/A
Volunteer	2,995 (8.89%)	904 (8.05%)	1,131	368
Change from FY 13'-14'	+1,013 (+51%)	+275 (+36%)	N/A	N/A

All Incidents	On Scene	Station	Units
AVERAGE # OF CAREER PERSONNEL RESPONDING PER CALL	3.70	N/A	N/A
AVERAGE # OF VOLUNTEER PERSONNEL RESPONDING PER CALL	.35	.14	N/A
AVERAGE # OF CAREER AND VOLUNTEER ON SCENE / AVERAGE # OF UNITS ON SCENE	4.05	N/A	1.88
CHANGE FROM FY 12'-13' – ALL CALLS	.5 (+14%)	N/A	.02 (+1%)

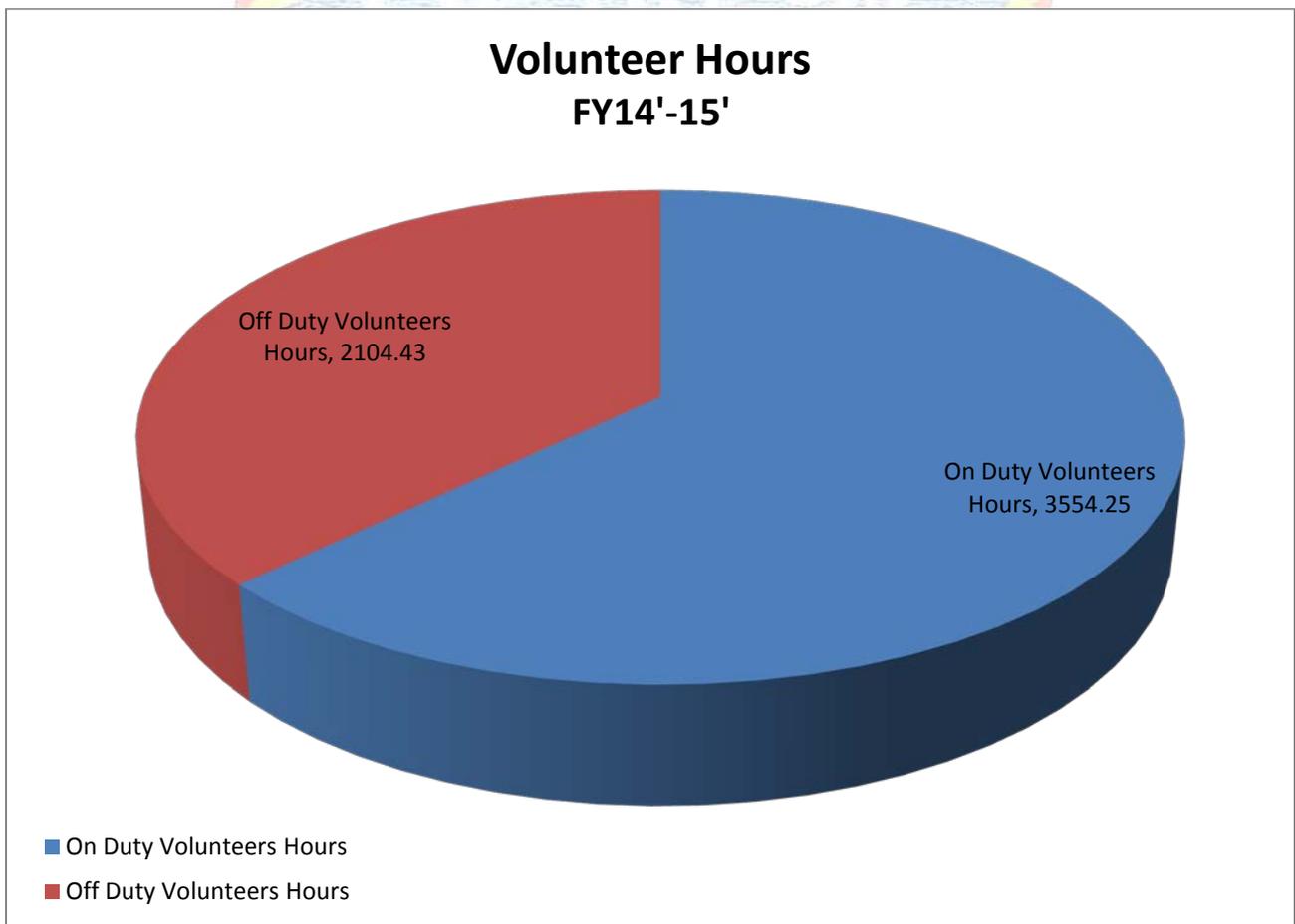
46,423 Personnel responded to all incidents throughout Lexington County with an overall average of 4.19 personnel per incident (+ 11%).

NFPA 1720 Standard: 3,772 Personnel responded to 272 Structure Fires throughout Lexington County with an overall average of 14 personnel responding on 8.2 units.

Average of 28.5 minutes to obtain the average of 15 personnel on scene.

Volunteer Response Hours

	Hours	Equivalent to
On Duty Volunteers	3,554.25 Hours	.41 Career personnel per day (+.28)
Off Duty Volunteers	2,104.43 Hours	.24 Career Personnel per day (+.16)
Total	5,658.68 Hours	.65 Career Personnel per day (+.44)



Compared to FY 13'-14':

On Duty Volunteer – 206.71 hours
Off Duty Volunteer – 604 hours
Total Hours – 810.71

NFPA 1720 STAFFING AND RESPONSE TIMES COMPARISON

STRUCTURE FIRE RESPONSES

JULY 1, 2014 – JUNE 30, 2015

NFPA Standard				
Demand Zone	Demographics	Min Staff	Response Time	Objective
Urban	>1000	15	9	90%
Suburban	500-999	10	10	80%
Rural	<500	6	14	80%

LCFS	Calls Calculated for NFPA 1720	Average Personnel	Response Time	Monthly Objective Met
Urban	43	5.0	9 min	2%
Suburban	52	4.8	10 min	6%
Rural	81	5.6	14 min	51%
*Totals	176	5.13		

* Total number based upon incidents requiring a full assignment after first unit arrival.

Average Response Time:

1st unit on scene—7 min. 22 sec. (Avg. Personnel – 2.23)

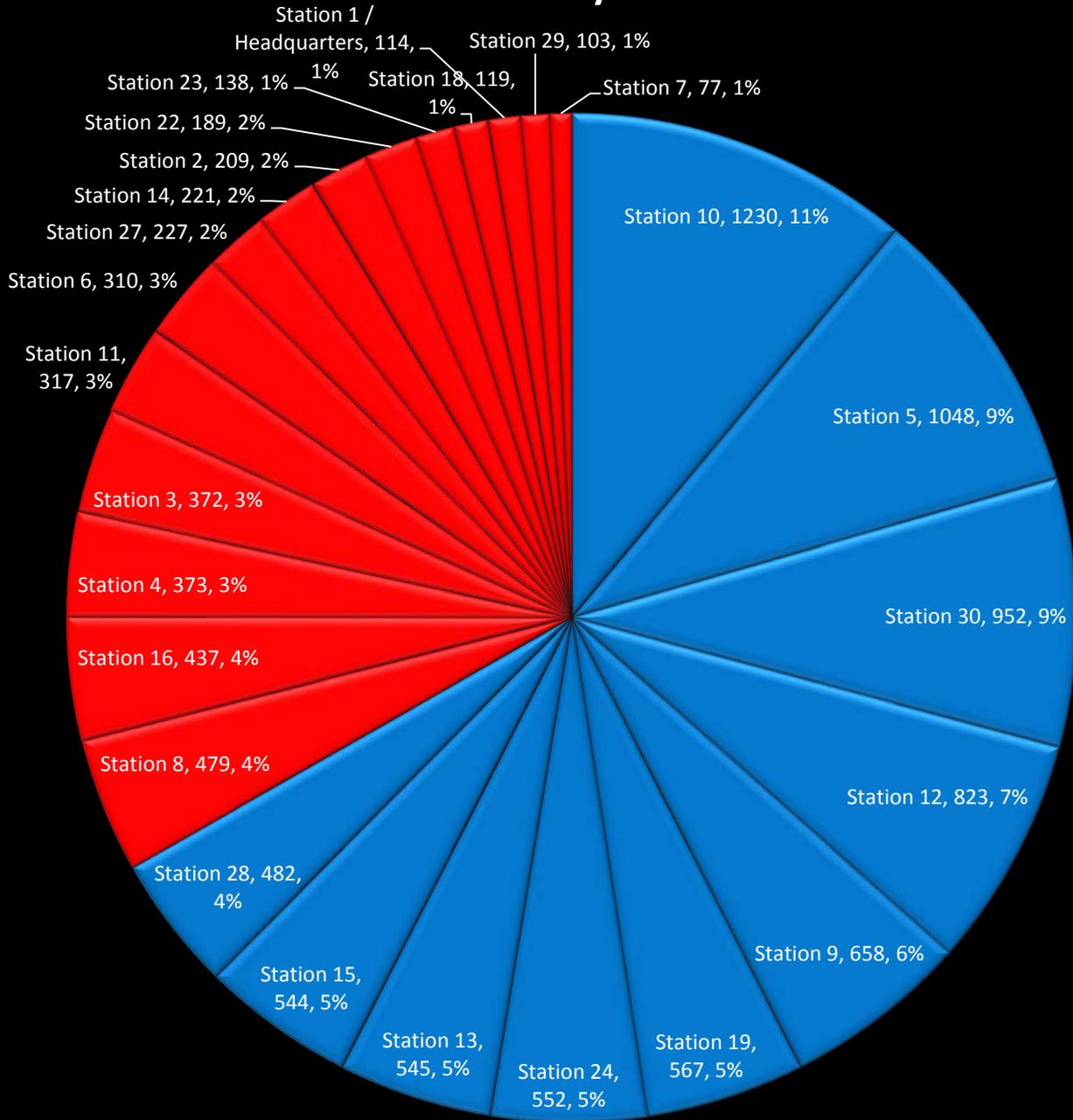
Average personnel 1st unit – 392 Total Personnel / 176 Total Calls = 2.23

2nd unit on scene—9 min. 37 sec. (Avg. Personnel – 2.24)

Average personnel 2nd unit – 395 Total Personnel / 176 Total Calls = 2.24

Lexington County consist of 758 square miles with an estimated population of 270,406. Approximately 99.7% of all property within Lexington County is within five miles of a fire station. There are 24 Fire Stations that provide protection for the citizens of Lexington County. Lexington County has a total area of 758 square miles of which 699 square miles is land and 59 square miles (7.74%) is water, primarily from Lake Murray. **Sixty-seven percent (67%) of all incidents occur in the urban/suburban areas of the county within the districts of ten (10) fire stations (Blue).**

Incidents by District

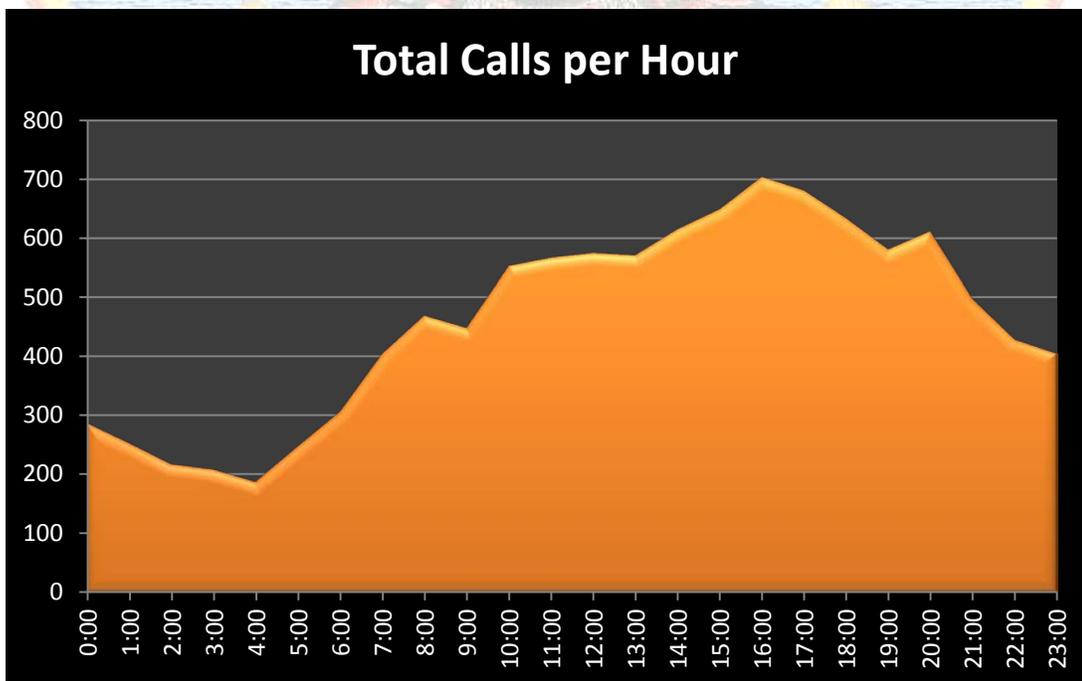
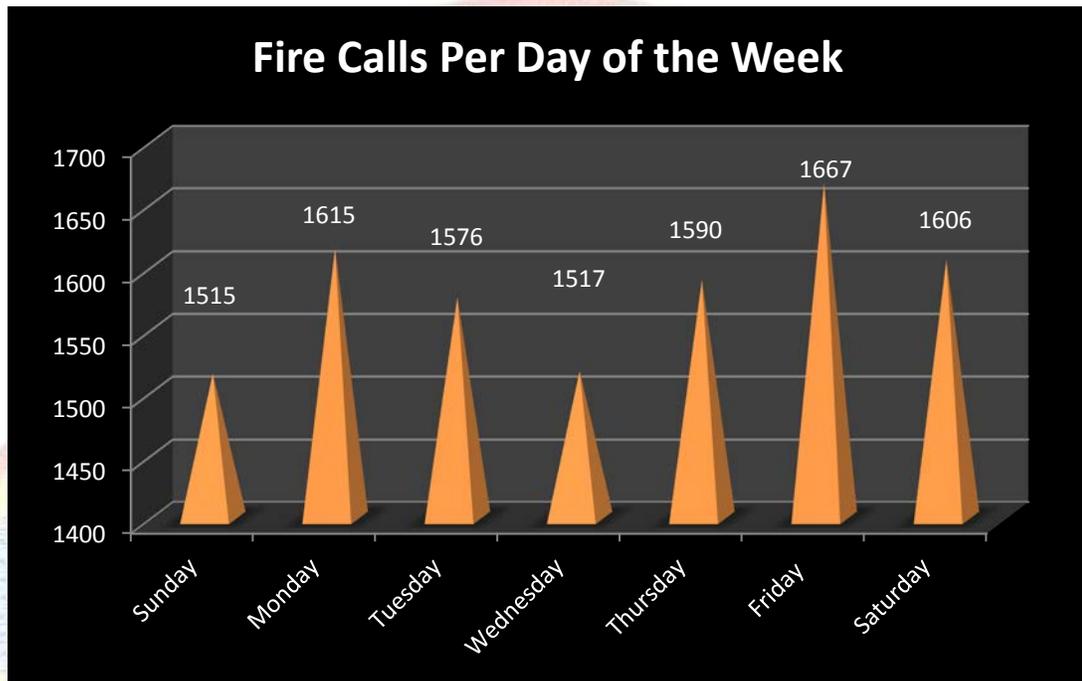


Automatic and Mutual Aid

<u>Name of Department</u>	<u>Automatic Aid - Given</u>	<u>Automatic Aid - Received</u>	<u>Mutual Aid – Given</u>	<u>Mutual Aid - Received</u>
Batesburg / Leesville FD	14	49	19	34
West Columbia FD	29	19	14	9
Irmo Fire District	39	8	8	11
Columbia / Richland County	0	0	20	17
Sandy Run / Calhoun County	1	1	11	1
City Of Cayce	0	0	5	3
Columbia Airport Fire Department	3	1	1	0
Little Mountain Fire Department	0	0	4	1
Newberry County Fire Department	0	0	2	1
Jumper Station / Calhoun County	0	0	2	1
Sandy Ridge Fire Department	0	0	1	1
New Holland Fire Department	0	0	2	0
Monetta Fire Department	0	0	1	0
Wagner Fire Department	0	0	1	0
Totals	86	78	91	79

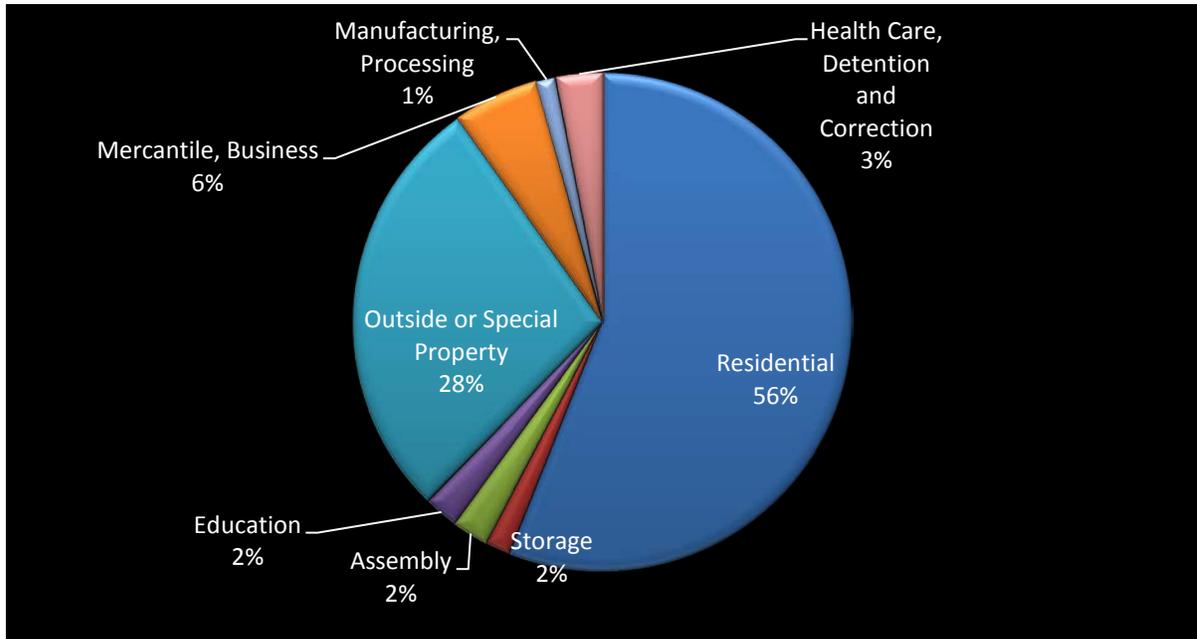
When are Incidents likely to occur?

When is the most likely time for a call to occur? The top graph displays the Days of the Week, with Friday being the busiest day of the week. Monday is the second busiest day of the week. Although the day of the week which fires occur changes from year to year; the time of day stays around the typical afternoon and evening hours of 10:00am-8:00pm.



Property Use Summary

The pie graph below indicates the property use where calls occur. As you can see our primary response is to residential structures, whether it's for fire, medical, fire alarm or service calls.



What is our Fire Problem?

Property Use	Total Losses	Percentage of Value Saved
Other	\$56,800	99.20%
Assembly	\$123,350	98.03%
Education	\$1,000	99.99%
Health Care, Detention & Correction	\$25,000	99.65%
Residential	*\$4,803,130	32.25%
Mercantile, Business	\$763,400	89.24%
Manufacturing, Processing	\$154,500	97.82%
Industrial, Agriculture, Mining	\$10,350	99.86%
Storage	\$304,650	88.07%
Outside or Special	\$846,859	95.70%

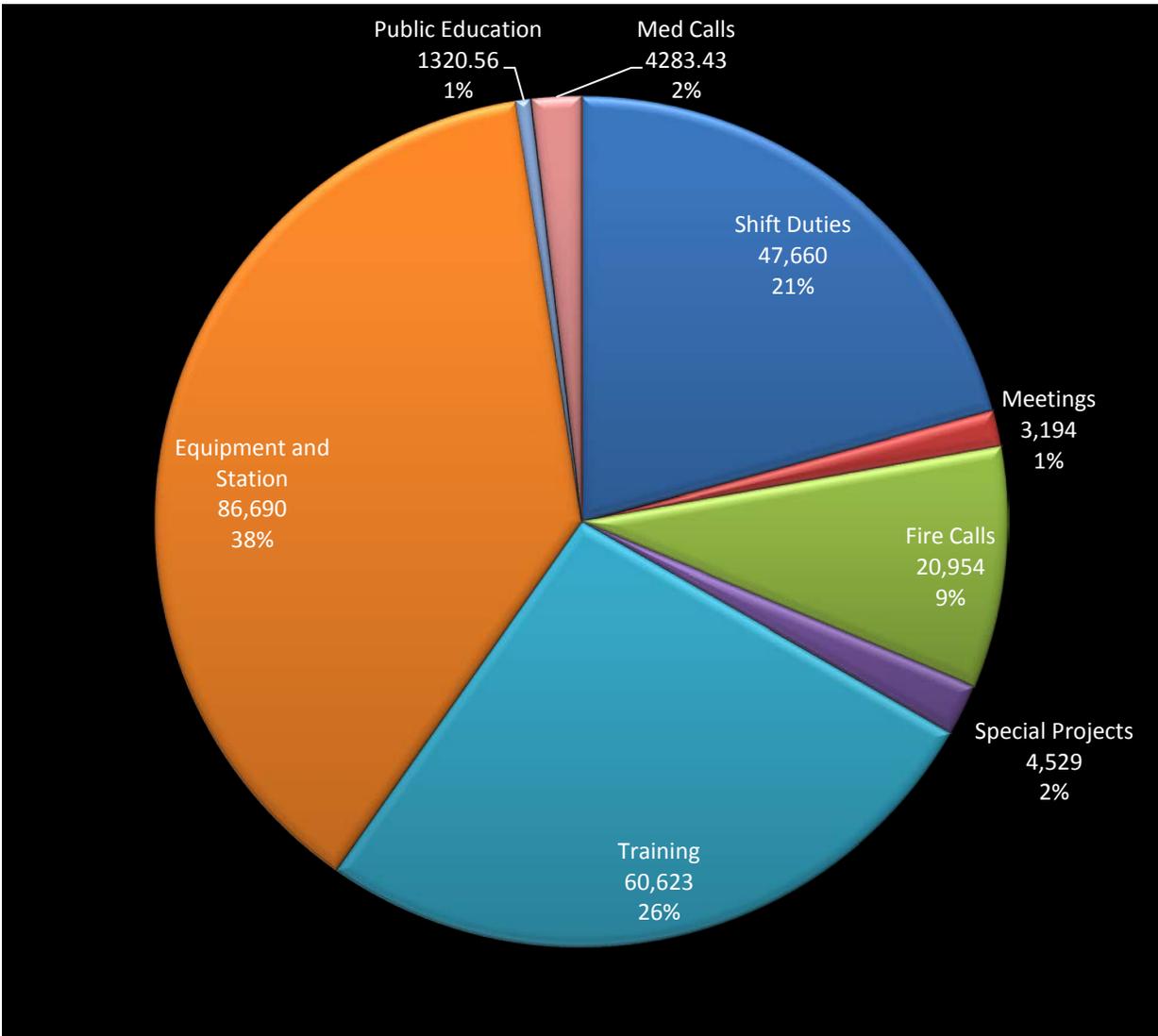
*** 68% of our fire loss occurs in residential properties**

Fire Cause Related to Fire Losses

Cause of Ignition	Total Number	% of all Fires	Total Est. Loss	% of All Fire Losses
Intentional / Deliberate	153	14.58%	\$50,300	0.71%
Unintentional	324	30.89%	\$2,377,564	33.54%
Failure of equipment or heat source	49	4.67%	\$140,655	1.98%
Act of Nature	36	3.43%	\$211,000	2.98%
Cause under Investigation	43	4.10%	\$1,075,100	15.17%*
Cause Undetermined after investigation	358	34.13%	\$2,795,250	39.43%*
Cause Other	86	8.20%	\$439,170	6.20%*
Total	1049	100%	\$7,089,039	100%

*** 51% of fire calls with a loss of \$4,309,520 had No Determination.**

PERCENTAGE/HOURS OF ACTIVITY PER SHIFT



Average productivity per person per day

194 personnel – 10.5 hours per day

Equipment and Station Duties are defined as maintenance and readiness checks for equipment, vehicles and station resources.

Shift Duties are defined as all administrative duties and reports in firehouse.

Special Projects are defined as Accreditation, ISO required activities, and committees.

Goal

The LCFS shall ensure all members the healthiest and safest possible work environment.

(Comparison)

<u>July 2013 -> June 2014</u>		<u>July 2014 -> June 2015</u>		<u>Year +/-</u>
Lost Time Due To Sick Leave or Workers Comp.	Totals	Lost Time Due To Sick Leave or Workers Comp.	Totals	
*Sick/FMLA Leave	13,258.86 4.55 FTE Loss	Sick/FMLA Leave	14,056.87 4.83 FTE Loss	(+) .28
*Workers Comp. Light Duty	7727.68 2.65 FTE Loss	Workers Comp. Light Duty	12,053.76 4.14 FTE Loss	(+) 1.49
Average Hrs. Per Pay Period – Shift Personnel	112.00	Average Hrs. Per Pay Period – Shift Personnel	112.00	
180 Personnel @ 24 Hrs. per shift	4320.00	180 Personnel @ 24 Hrs. per shift	4320.00	
Total Hours Paid	483,840	Total Hours Paid	483,840	(+-) 0%
% Lost Time SICK/FMLA	2.54%	% Lost Time SICK/FMLA	2.86%	(+) .28%
% Lost Time – Work Related	1.48%	% Lost Time – Work Related	2.54%	(+) 1.08%
Total % of Lost Time	4.02%	Total % of Lost Time	5.40%	(+) 1.38%
	Total : 7.20 Personnel Loss		Total: 8.97 Personnel Loss	(+) 1.77

*An average of 8.97 personnel were lost throughout the fiscal year due to injury and sick leave.

Safety Objectives

1. Track lost work related time and it shall not exceed 1% (Actual 2.54%) of the total available work hours for the department.
2. The percentage of total workforce accumulating lost work time shall not exceed 5% (Actual 5.40 %) of the total workforce for each fiscal year.

TRAINING DIVISION

- Manage the training program for all career and volunteer personnel.
- Coordinate with the fire academy to ensure that all personnel are meeting current standards and best practices.
- Provide skill based training to ensure individual and team competency in performing emergency operations.
- Provide firefighter safety and survival training.
- Career tracking and development committee.
- Develop and administer the hiring process for Firefighter Two certification as well as Recruit Firefighter.
- Oversee the Field Training Program.
- Update General Operating Guidelines for the Recruit Program.
- Develop and facilitate the promotional process for Apparatus Operator, Captain, and Battalion Chief's positions.
- Research continuing education opportunities of institutions of higher learning.
- Manage the training and increase involvement of the Emergency Response Team and as well as respond to Special Operations type calls.
- Coordinate Multi Company Drills for Fire Service Personnel to include EMS and Dispatch.

Training Summary:

Total Training for Lexington County Fire Service: 60,623 Hours.

Multi Company Drill Hours:

1536 Hours of training across 2 multi company drills.

384 Fire Service Participants

4 Hours/ Drill/ Student

FF II Certification Project:

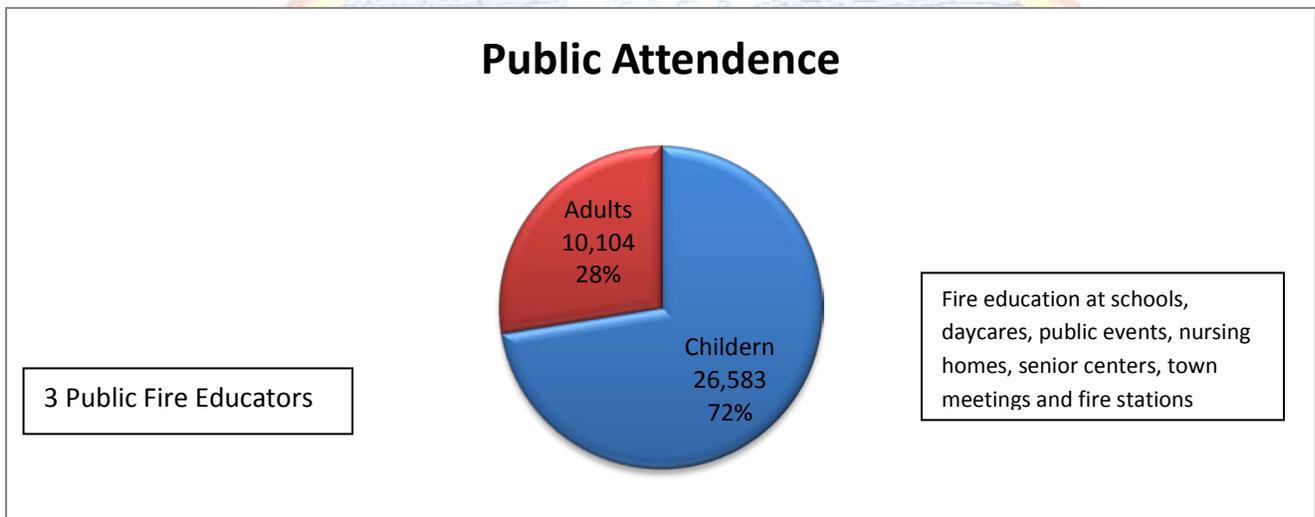
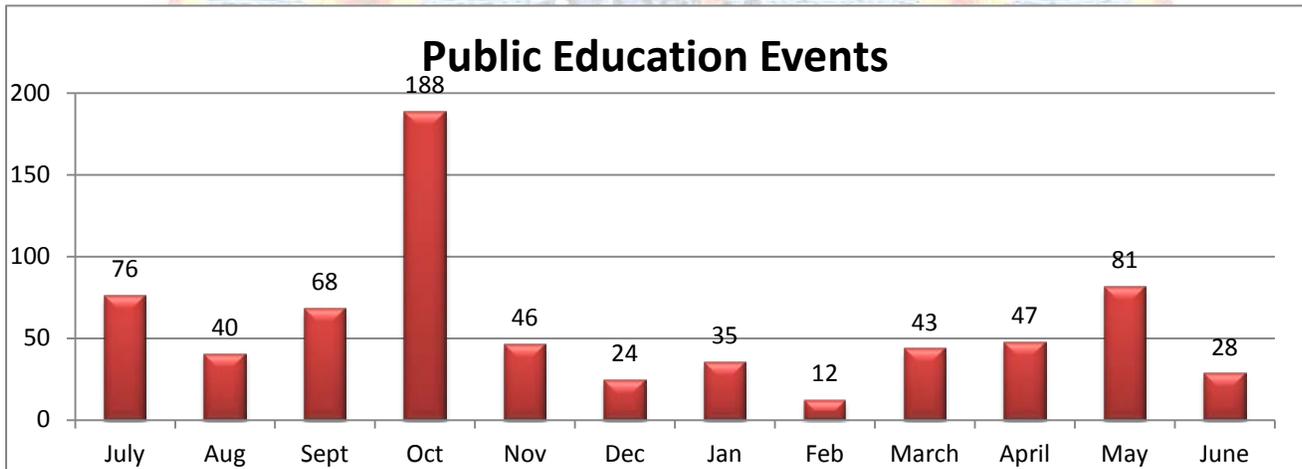
All career personnel (194) are now FFII certified.

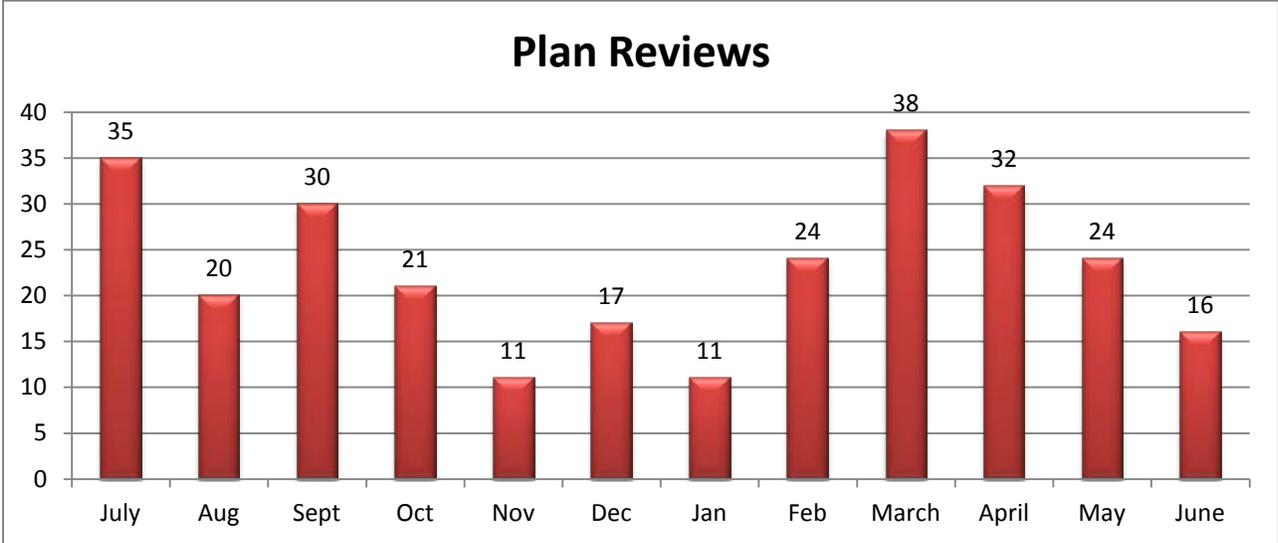
FIRE MARSHAL DIVISION

DUTIES:

- Firehouse Entries
- Burn Ordinance
- Code Enforcement
- Fire Alarm Ordinance
- Inspections
- Wildland Firefighter Operations
- Fire Prevention
- Operational Plans
- Public Education
- Fire Service Web Site
- Plan Review
- Liaison to State Fire Marshal
- County Wildland FF Team
- Liaison to SC Forestry Commission
- State Firefighter Mobilization
- Weather and Emergency Preparedness Notifications
- Wildland Fire Investigations

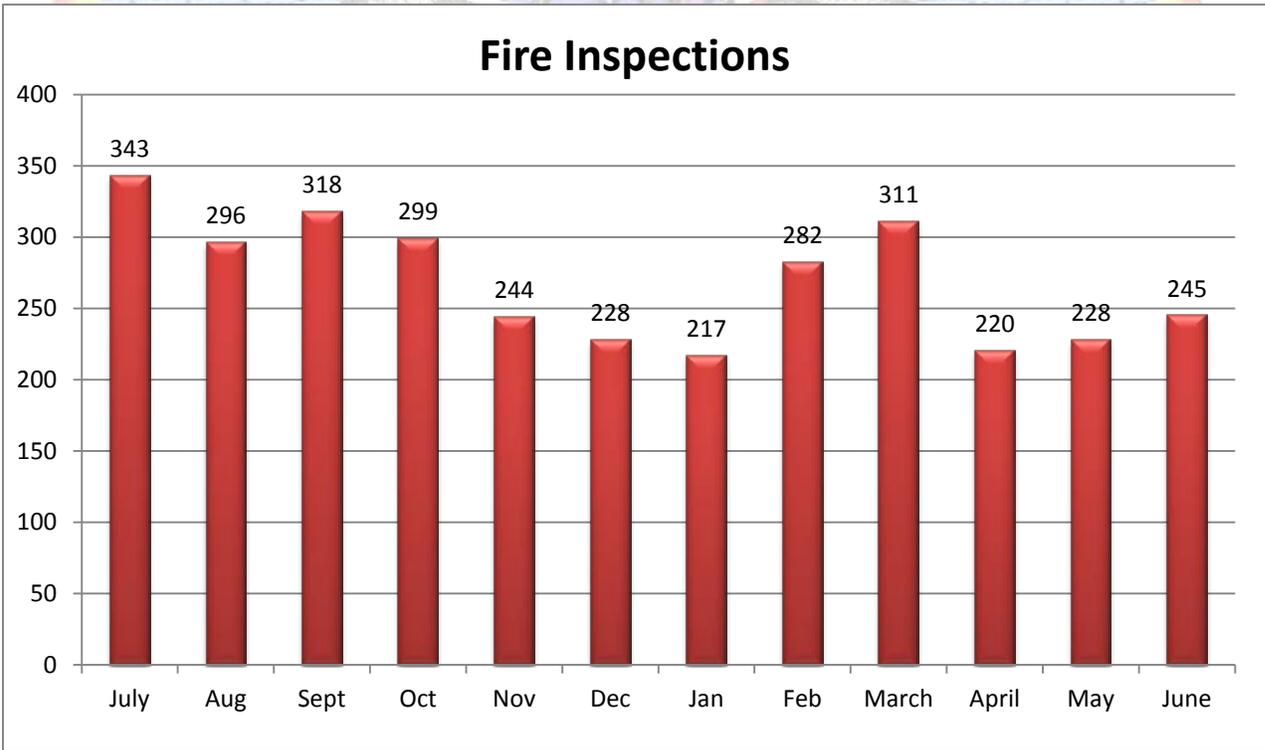
STATS: Total 688 Events





Total Plan Reviews – 279

Total Plan Review for FY13'-14' - 321



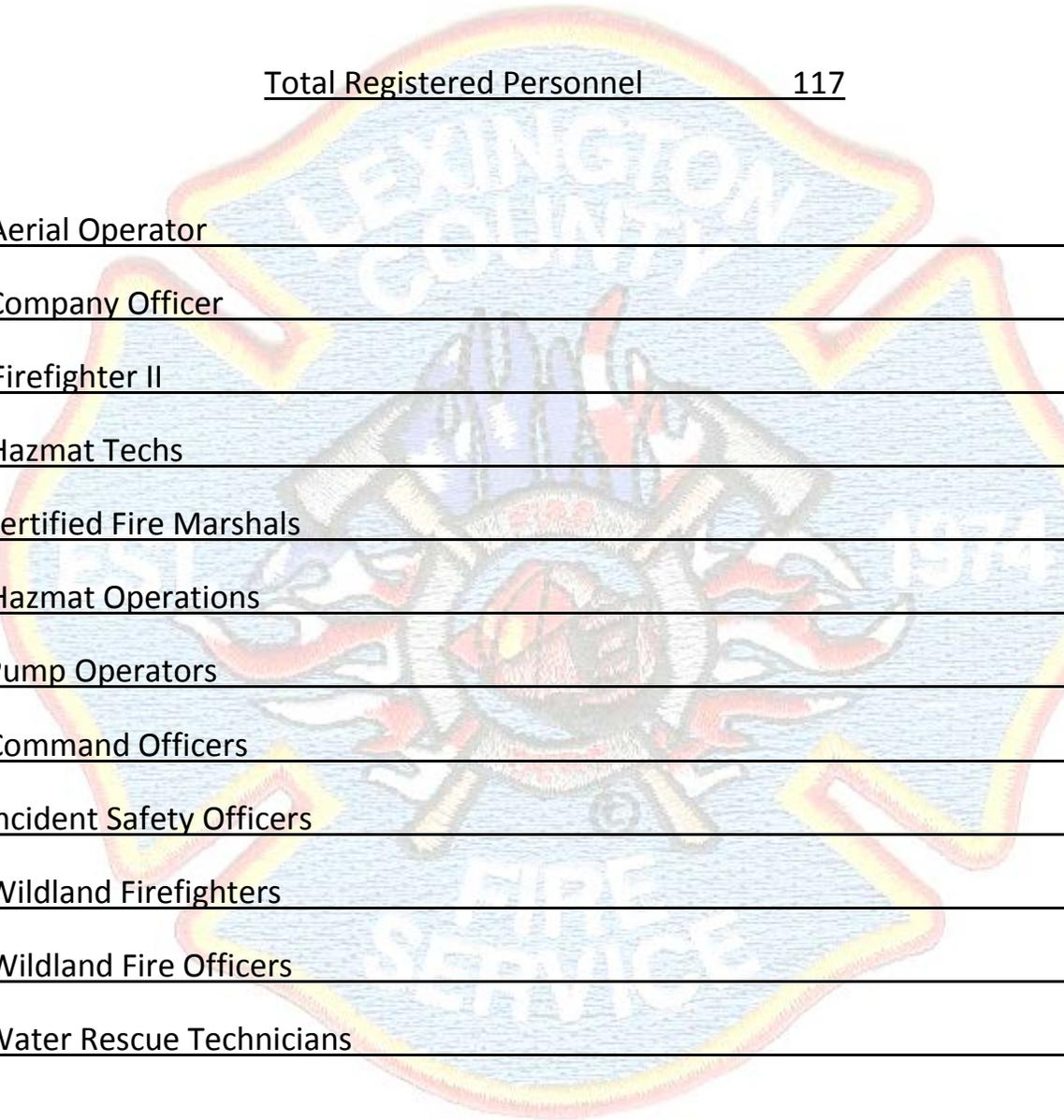
Total of 3,231 Inspections conducted by 3 Inspectors

Total Inspections for FY13'-14' - 2941

State Firefighter Mobilization

0 Deployments

Personnel Assigned to Mobilization



<u>Total Registered Personnel</u>	<u>117</u>
<u>Aerial Operator</u>	<u>55</u>
<u>Company Officer</u>	<u>21</u>
<u>Firefighter II</u>	<u>117</u>
<u>Hazmat Techs</u>	<u>19</u>
<u>Certified Fire Marshals</u>	<u>2</u>
<u>Hazmat Operations</u>	<u>100</u>
<u>Pump Operators</u>	<u>91</u>
<u>Command Officers</u>	<u>11</u>
<u>Incident Safety Officers</u>	<u>54</u>
<u>Wildland Firefighters</u>	<u>51</u>
<u>Wildland Fire Officers</u>	<u>14</u>
<u>Water Rescue Technicians</u>	<u>14</u>

LOGISTICS DIVISION

The Logistics Division currently supports 24 fire stations along with the Fire Training Center and Headquarters by providing station supplies, equipment for fire suppression, and medical supplies. Logistics supports a career and part time staff of 194 and a volunteer staff of 53 firefighters with the issue of uniforms, Personal Protective Equipment (PPE), and other items as may be requested.

Logistics is also responsible for all pagers, radios, self-contained breathing apparatus and all breathing air needs through its Breathing Air Division. We maintain 5 air compressors located at Station 8, Station 9, Station 13, Station 22 and the Fire Training Center and 6 air cascade systems on Service Truck 8, Service Truck 13, Service Truck 14, Service Truck 18, Service Truck 22, and Breathing Air 1.

The Logistics Division strives to meet the needs of the Lexington County Fire Service in a timely manner as efficiently as possible by use of the latest technology.

Stats and Implementations for FY 14-15

Cleaned and inspected over 368 individual pieces of PPE and logged in Firehouse.

Conducted an annual fire extinguisher inspection of 271 extinguishers at a cost of \$4,489.86

Refilled 37 dry powder extinguishers at a cost of \$1,254.00.

Refilled 35 foam extinguishers at a cost of \$2,240.00

Tested 2,247 ft. of ladders at a cost of \$5,256.91

Annual Hose Testing – Tested over 21 miles of fire hose.

Distributed 462 cases of water, 69 cases of Power Aid, and 150 boxes of flavor packets

Issued 152 duty pants, 120 duty boots, 72 shorts, 119 belts, 897 tee shirts, 128 ball caps, 57 job shirts and 75 stocking caps

Issued 100 Class “B” duty uniforms



Fire Service Task Accomplishments

Fiscal Year 2014-2015



- **Requested an ISO inspection. After Inspection, improved rating from a class 5 to a class 3.**
- Continue to track Fire demand/response zones built based upon NFPA 1720.
- Updated the Departmental Growth Matrix based on population and call volume.
- GIS mapping system implemented allowing Planning/Research Division to map growth, call volume, hydrants, station location and station response districts.
- We continue to provide monthly building fire reports to Community Development and Building Inspections Department.
- Reviewed and confirmed secondary employment of all personnel.
- Completed annual update of Strategic Plan.
- Public education materials distributed to all fire stations to provide onsite information for citizens.
- Performed 688 public fire education events within the county for an estimated 26,583 children and 10,104 adults.
- Performed 3,231 commercial fire inspections.
- Reviewed 279 plans for new construction, additions, or remodels to commercial properties.
- Installed 105 smoke alarms and 1 hearing impaired alarm along with batteries.
- Continued our association with Explorer Post 1974 that was established through partnership with Lexington Technology Center.
- Communication headsets installed in E-3, E-5, and E-16.
- Completed project for implementing new Rapid Intervention Team bag.
- Implemented a second full set of Supplied Air Breathing Apparatus hoses for Emergency Response Team.

- Continued to improve on our Rehabilitation Unit.
- Standardized Class B uniforms for career and volunteer personnel.
- Began purchasing of Class B uniforms for volunteer personnel.
- Developed a specification for Personal Protective Gear (PPE) for fire ground support personnel and implemented change.
- Oversaw the fitting of Duty Uniforms, Dress Uniforms, and PPE for 30 potential new employees for Class 14-01 & Class 15-01.
- Upgraded all fire service Hurst tool equipment and oversaw the maintenance by the Hurst dealer.
- Conducted annual self-contained breathing apparatus testing on 297 units and 307 individual face pieces.
- Hosted 2 MSA (Mine Safety Appliances) self-contained breathing apparatus care classes. A 3 day class in November 2014 and a 4 day class in April 2015.
- Conducted quarterly air samples and semi-annual maintenance of breathing air compressors.
- Completed the purchase of dress uniforms for career personnel.
- Oct. 2, 2014 we celebrated our 40th Anniversary at the Fire Service Awards Dinner.
- MDA Boot Drive collected \$49,971.
- The 13th Annual Jeff Chavis Boot Drive collected \$53,985.00 exceeding our goal of \$50,000. This brings our total from Boot Drive in a thirteen year period to more than \$724,160.
- Continued the process to gather information within firehouse on inspections, prevention activities and inspection tracking.
- Continued the permitting process utilizing firehouse for permitting activities related to the International Fire Code.

- Developed and implemented a plan review section and user forms through firehouse to assist with cataloging plan reviews.
- Initiated and implemented an inspection program for all public schools in the Lexington County Fire Service response areas and completed initial inspections on these facilities.
- Began a program to place a fire prevention officer at large public gatherings and sporting events within the county as necessary.
- Continued a fire safe business award recognition program for the County to recognize businesses within the County that are exceptional in their efforts to promote fire and life safety for their business.
- Completion of Recruit School 14-01, and 15-01.
- Ongoing Volunteer Firefighter II Certification Program.
- Conducted hiring process/interviewed over 80 candidates, hiring 17 for recruit class 15-02.
- Conducted one Captain's promotional process.
- Promoted continuing education and higher education within the department by hosting seminars/representatives from Columbia Southern University, Waldorf College, and Columbia College.
- Reorganized the Drill Grounds to promote increased functionality.
- Conducted Multi Company Drills totaling over 1500 hours of training.
- Continued the standardization of single company drills for all personnel.
- Conducted a pilot program for Mobile Data Terminals.
- Monthly meetings were offered for all personnel at fire headquarters.
- Added a Customer Satisfaction Survey to website.
- Continued revisions of GOG's and adding of new GOG's. To date a total of 47 GOG's have been completed this year and 52 are under review.
- Initiated a project for alerting fire stations thru the use of the palmetto 800 system.
- Completed the automatic aid agreement with West Columbia Fire Department.

- Began the initial steps for an automatic aid agreement with Cayce Fire Department and Columbia/Richland County.

