

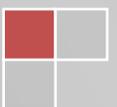
FY 13-14

LEXINGTON COUNTY FIRE SERVICE ANNUAL REPORT

Annual Report from July 2013 through June 2014

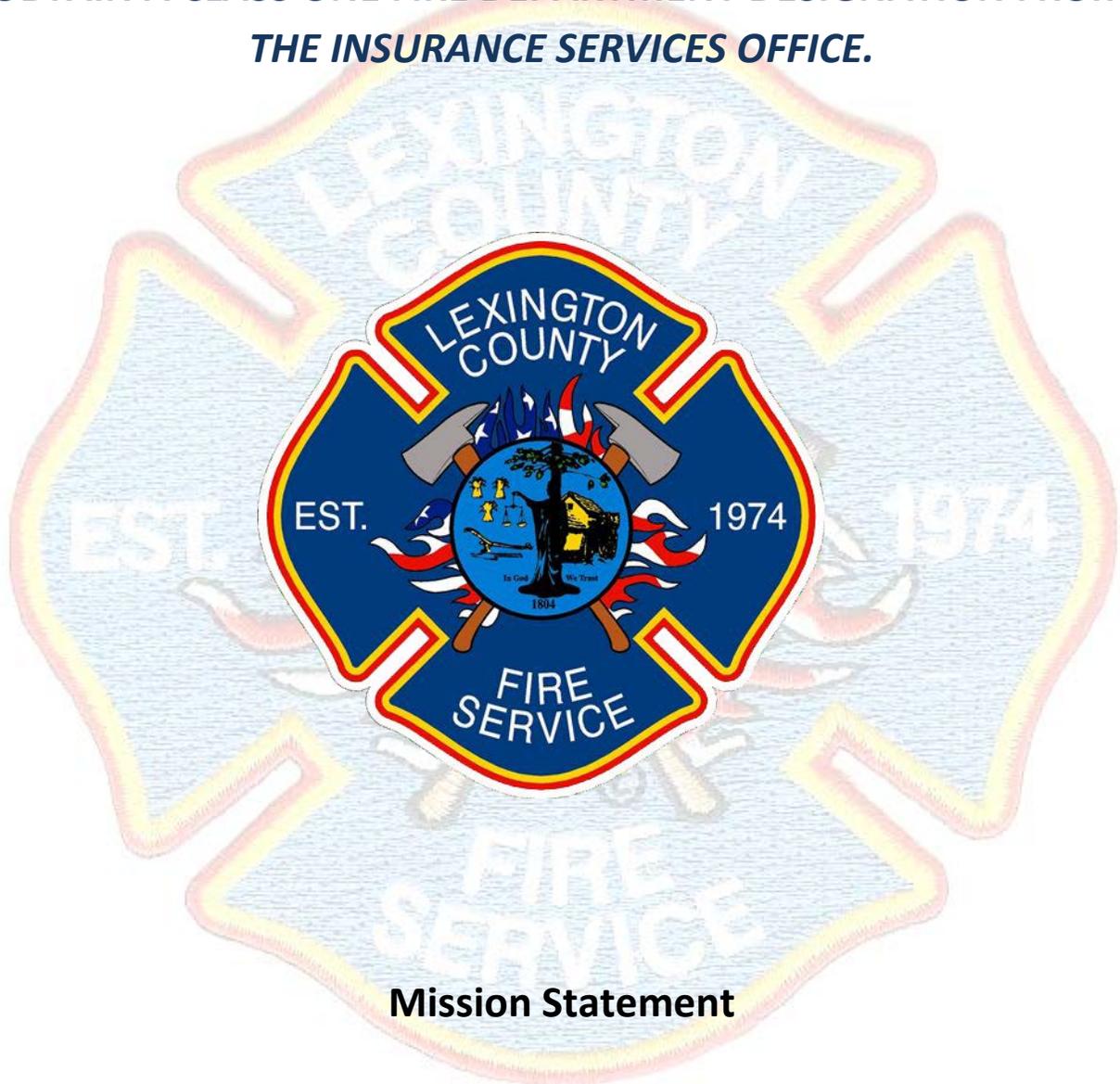


The Lexington County Fire Service is responsible for protecting the lives, livelihoods and resources of Lexington County by planning and implementing effective strategies to successfully combat loss from fire through prevention, education, rescue, suppression, and investigation services.



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 96 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

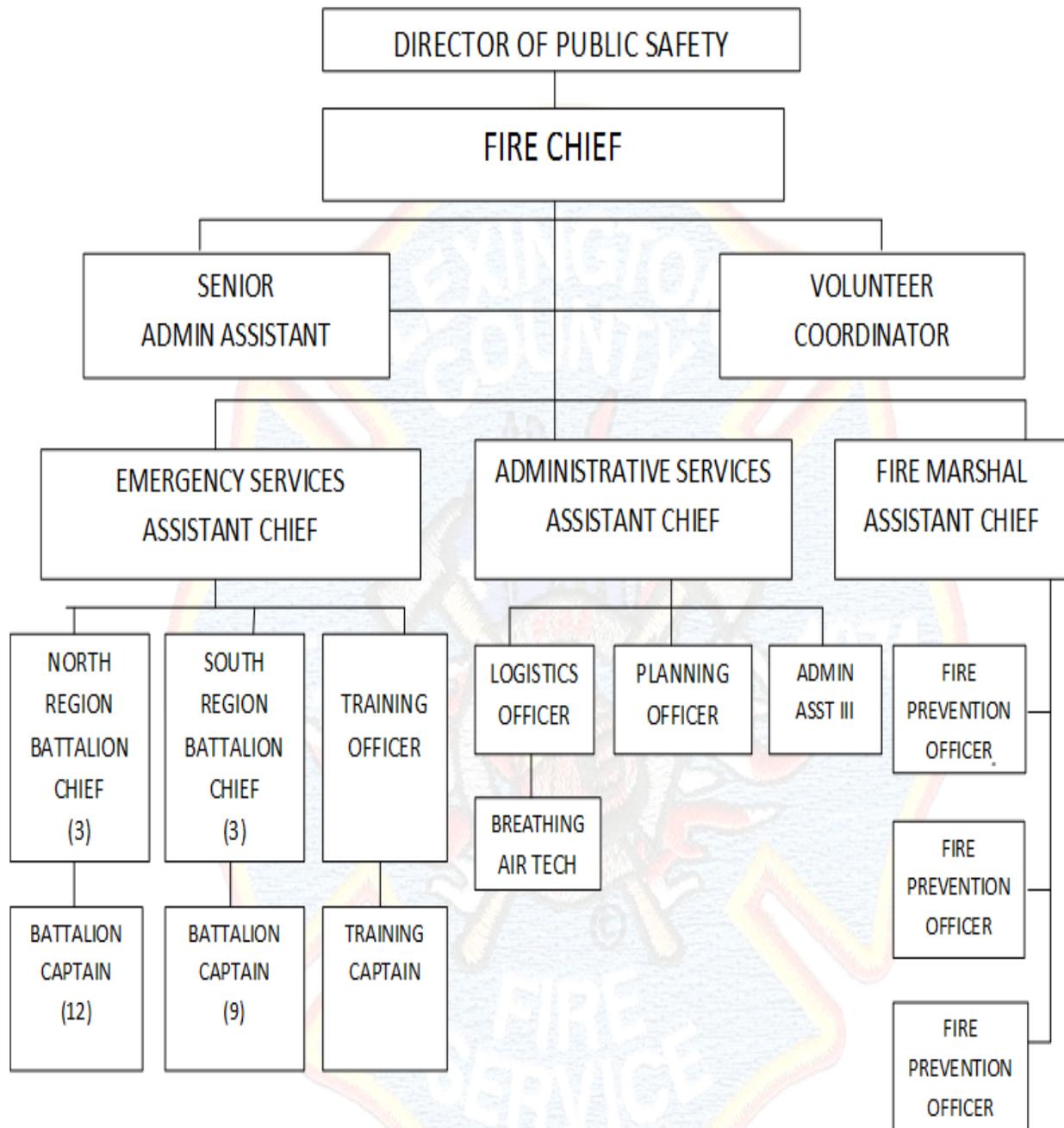
The services offered by the department are guaranteed by utilizing: Automatic Aid agreements, Intergovernmental agreements with surrounding agencies, public/private partnerships, a pool of highly skilled firefighters, dependable apparatus, equipment and a proven track record of quality service to our 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 13-14 Year in Review

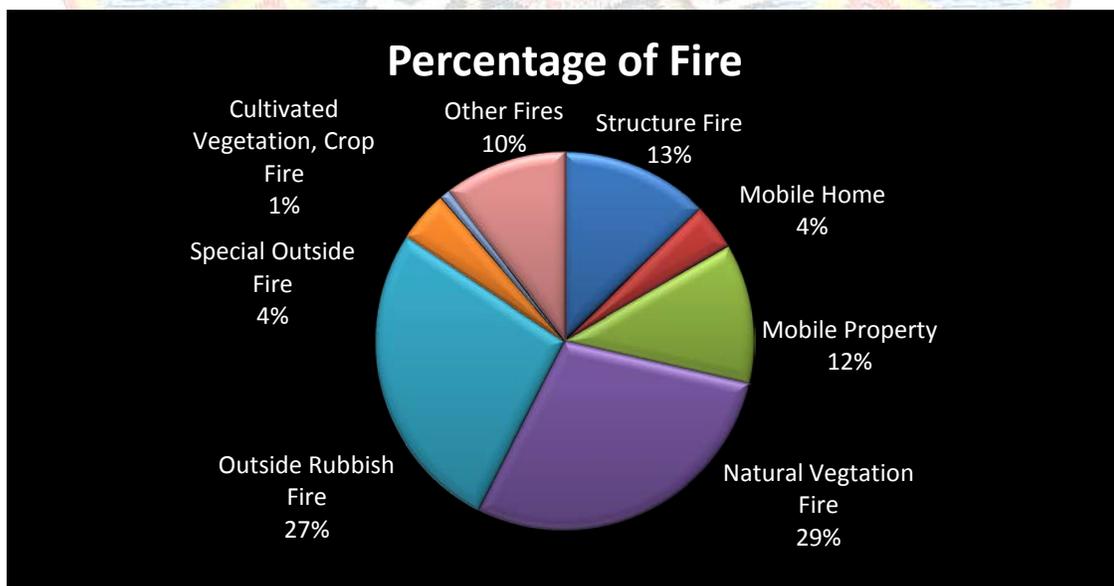
The Lexington County Fire Service demand for service included:

- Total of **18,744** units (+12.4%) responded to **10,060** (+4.8%) calls for service.

Fire Data

• 214 Structure Fires	(FY 12-13: 209 Fires)	Change +2%
• 67 Mobile Home Fires	(FY 12-13: 69 Fires)	Change -3%
• 203 Mobile Property Fires	(FY 12-13: 231 Fires)	Change -12%
• 488 Natural Vegetation Fires	(FY 12-13: 478 Fires)	Change +2%
• 453 Outside Rubbish Fires	(FY 12-13: 432 Fires)	Change +5%
• 74 Special Outside Fires	(FY 12-13: 63 Fires)	Change +17%
• 15 Cultivated Vegetation	(FY 12-13: 9 Fires)	Change +67%
• <u>176 Other Fires*</u>	(FY 12-13: 169 Fires)	Change +4%
1690 Total Fires	(FY 12-13: 1660 Fires)	Change +2%

- * Includes Cooking Incidents and Trash Fires in a structure



As a result of fire there were:

- 15 civilian injuries (FY 12-13: 14 civilian injuries) Change +7%
- 9 firefighter injuries (FY 12-13: 10 firefighter injuries) Change -10%
- 4 civilian fire deaths (FY 12-13: 2 civilian fire deaths) Change +100%
- 1500 acres burned (FY 12-13: 400 acres burned) Change +275%
- A total fire loss of \$9,532,785 (+57%), (total value of these properties \$21,225,810)

Resources Available:

Data as of August 1st,2014

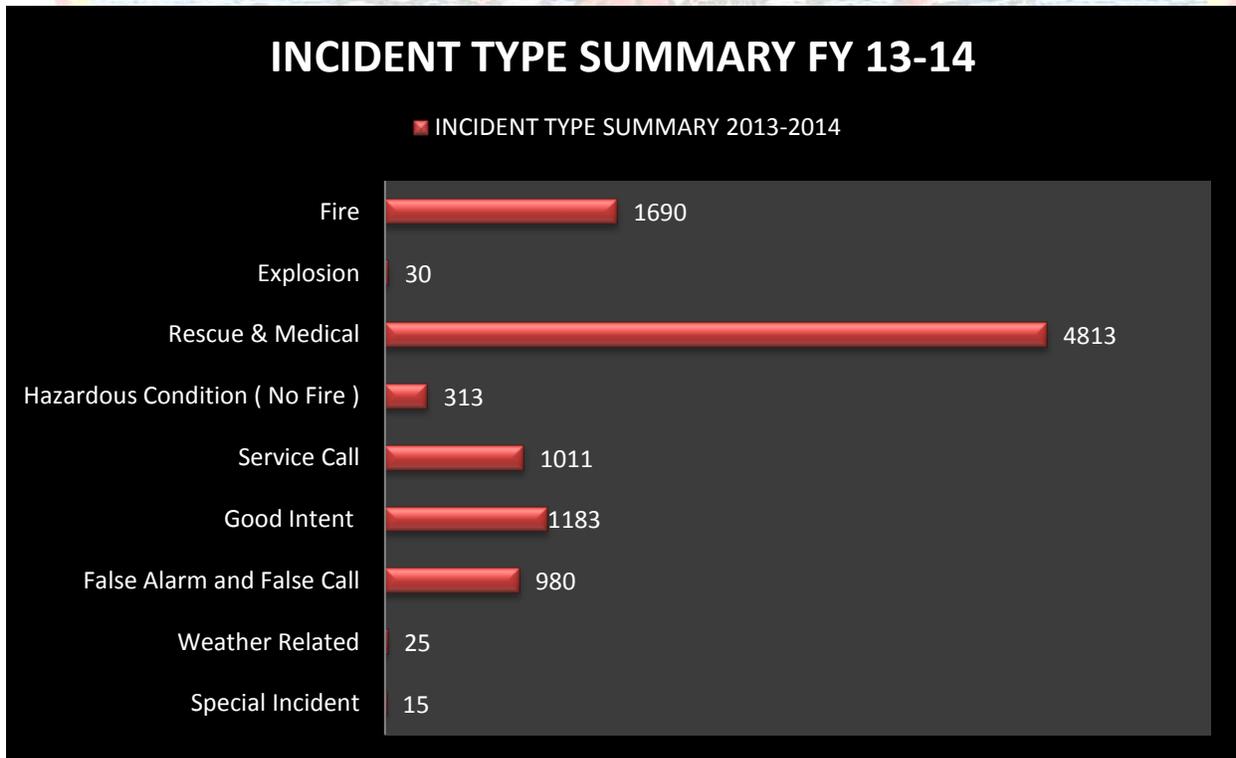
- 194 Paid Personnel
- 96 Volunteers
 - 53 Firefighter II Certified
 - 7 Fireground Support
 - 36 in a various of classes
- 20 Engines In-Service
- 9 Reserve Engines
- 4 Ladder Trucks
- 21 Tankers In-Service
- 1 Reserve Tanker
- 13 Service Trucks In-Service
- 9 Brush Trucks In-Service
- Hazardous Materials Response
- Confined Space Rescue, High Angle Rescue, Low Angle Rescue, Trench Rescue, Swift Water Rescue and Structural Collapse Teams.

LEXINGTON COUNTY FIRE SERVICE

STATISTICAL SUMMARY

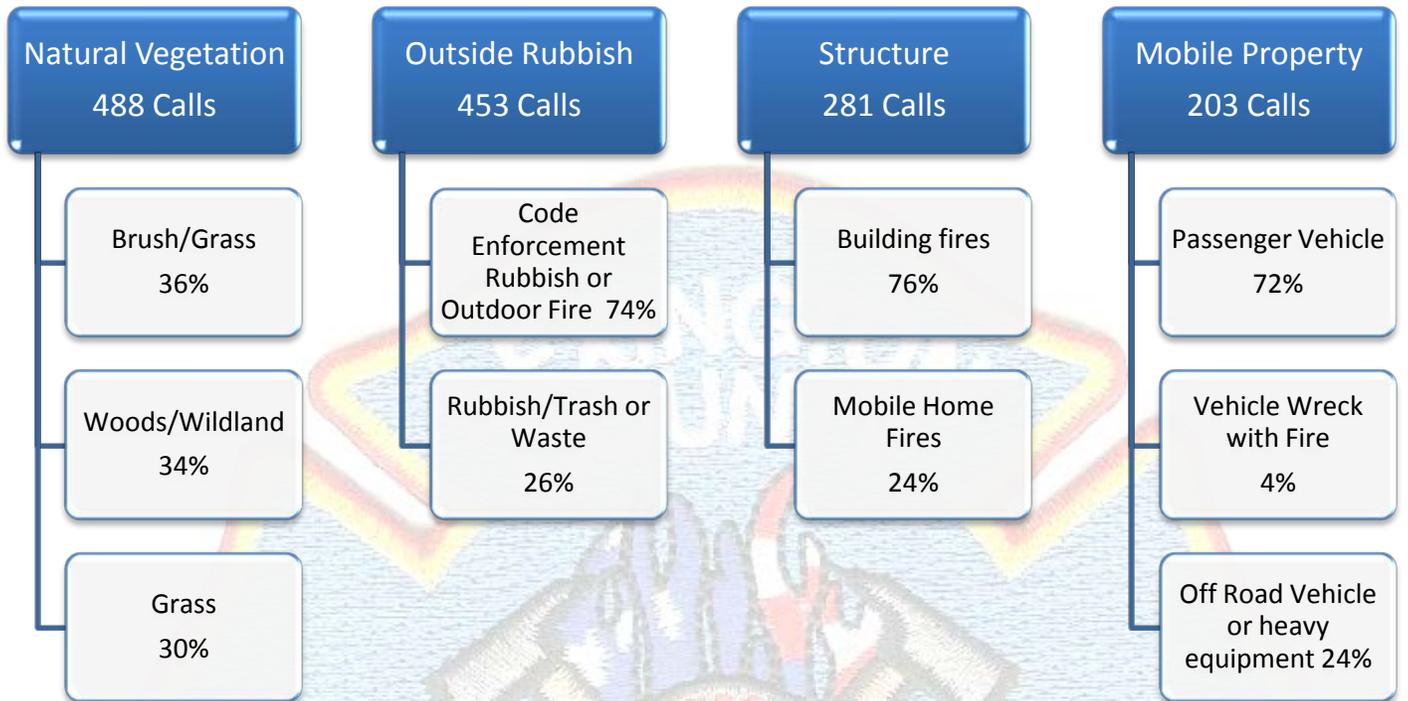
The Lexington County Fire Service responds to a variety of emergency and non-emergency situations. Often what is described to the dispatchers, does not reflect the actual incident; nevertheless, firefighters are trained and prepared to respond to a broad array of situations. To understand the full role the fire department plays in the community, this report profiles the fire department's 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 department name, less than 20% of total responses involved fire. **Over 48% of all Lexington County Fire Service runs are categorized as emergency medical services (EMS) and rescue responses.**



Total Calls – 10,060

What is our fire problem?



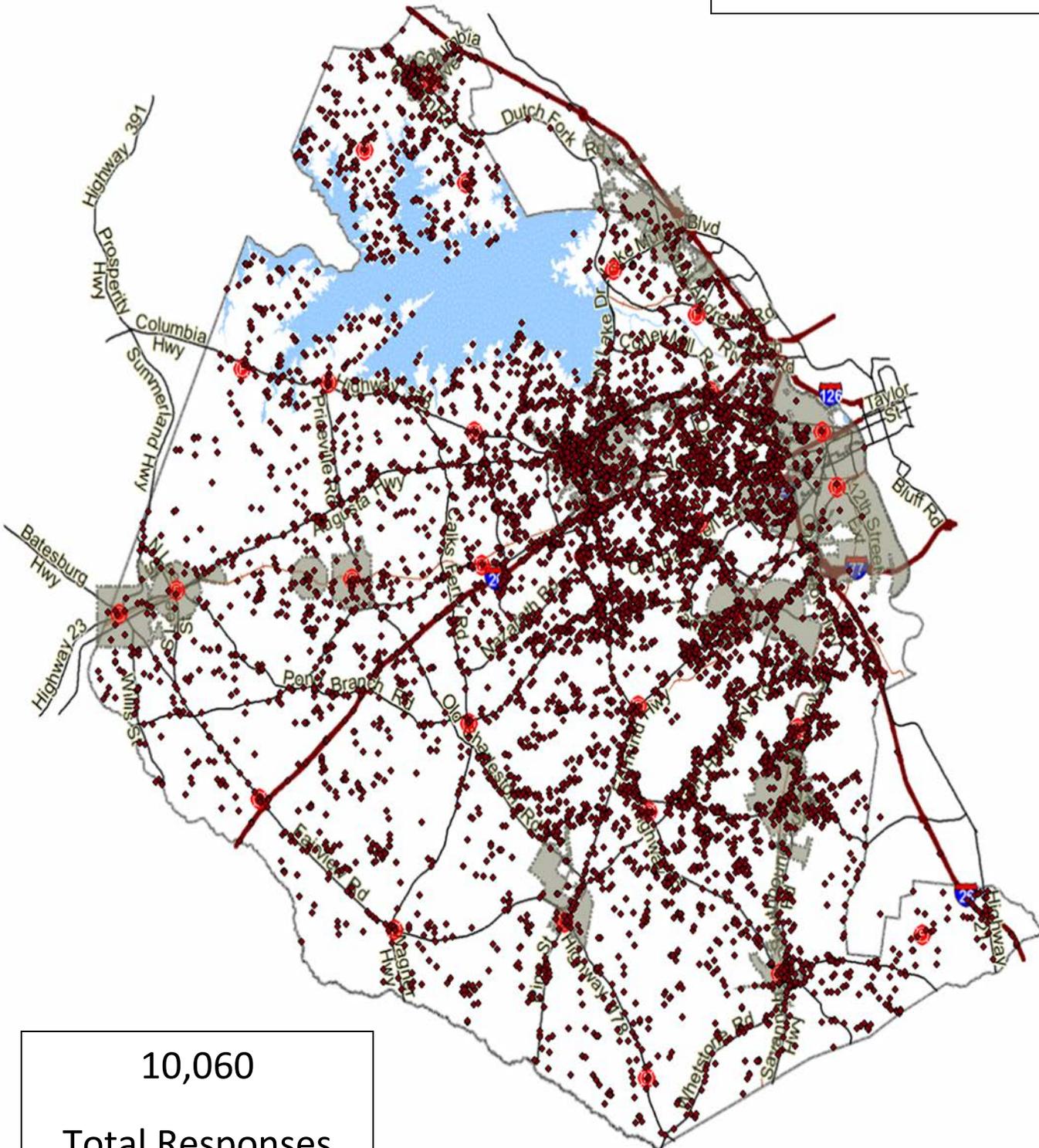
Rescue and EMS Incidents

EMS Call, excluding vehicle accident without injuries	2,943 Calls	61%
Motor Vehicle accident with injuries	893 Calls	19%
Medical Assist, Assist EMS	347 Calls	7%
Motor vehicle accident with no injuries	280 Calls	6%
Overtured vehicle with or w/o injuries	189 Calls	4%
Special Rescue / ERT Response	161 Calls	3%
	4813 Calls	100%



Lexington County Fire Service

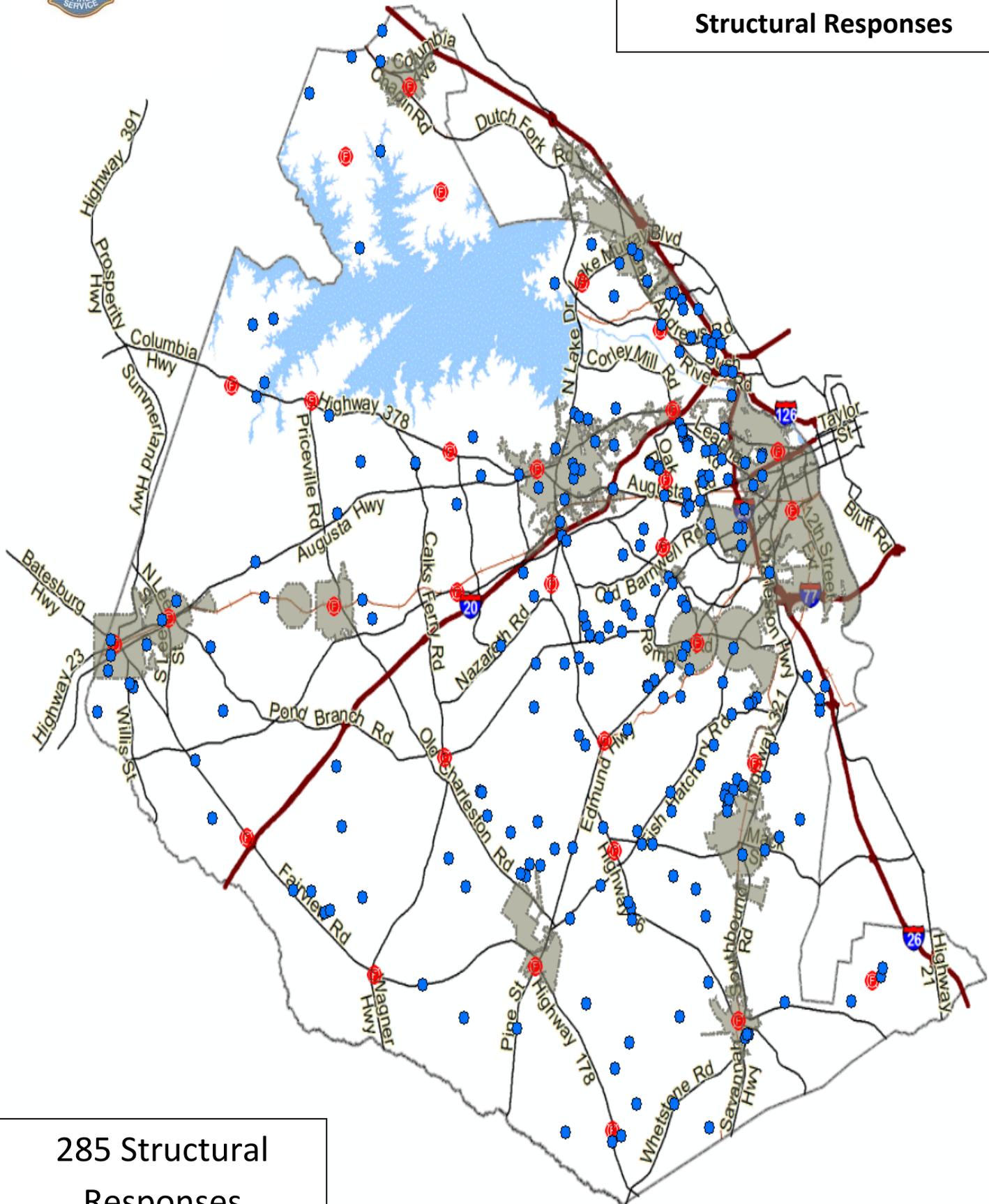
All Responses



- Sixty-four (64%) of all incidents occur in the urban/suburban areas of the county



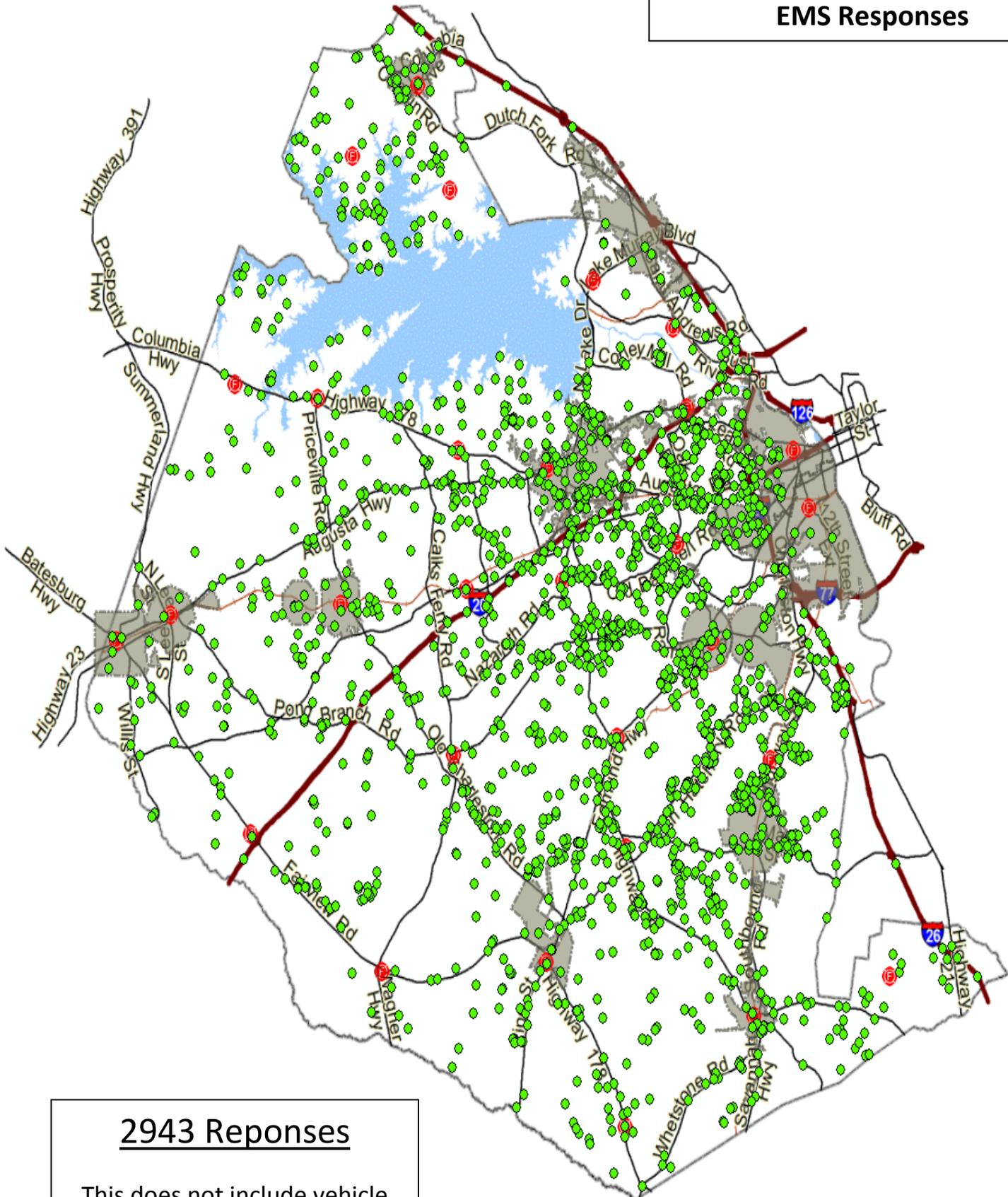
Lexington County Fire Service
Structural Responses



285 Structural Responses



Lexington County Fire Service EMS Responses



2943 Reponses

This does not include vehicle accidents and special medical responses

Staffing for Incident Responses

Status	Personnel On Scene		Personnel at Station	
	Fire Calls	Medical Calls	Fire Calls	Medical Calls
Career	24,158 (92.42%)	8,726 (93.28%)	N/A	N/A
*Volunteer	1,982 (7.58%)	629 (6.72%)	1,940 (7.42%)	547 (5.85%)
*Change from FY 12'-13'	3,603 (12.73%) (-5.15%)	1,086 (9.99%) (-3.27%)	3,492 (12.34%) (-4.92%)	1,054 (9.69%) (-3.84%)

All Incidents	On Scene	Station	Units
AVERAGE # OF CAREER PERSONNEL RESPONDING PER CALL	3.27	N/A	N/A
AVERAGE # OF VOLUNTEER PERSONNEL RESPONDING PER CALL	.26	.25	N/A
*AVERAGE # OF CAREER AND VOLUNTEER ON SCENE / AVERAGE # OF UNITS ON SCENE	3.53	N/A	1.86
*CHANGE FROM FY 12'-13' – ALL CALLS	3.61 (-2%)	N/A	1.74 (+6%)

37,982 Personnel responded to fire incidents throughout Lexington County with an overall average of 3.78 personnel per incident.

3,990 Personnel responded to Structure Fires throughout Lexington County with an overall average of 14 personnel responding on 4.7 units.

Average of 24.5 minutes to obtain the average of 14 personnel on scene

Incident Response Hours

	Total Hours	Equivalent to
Volunteer on Scene	383 Hours	.13 - Career personnel
Volunteer at Station	221 Hours	.08 – Career Personnel
Change from 12'-13' Total Hrs.	6576 Hours (-91%)	2.26 Career Personnel (-91%)

NFPA 1720 STAFFING AND RESPONSE TIMES COMPARISON

STRUCTURE FIRE RESPONSES

JULY 1, 2013 – JUNE 30, 2014

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%

FY '13-'14	Calls Calculated for NFPA 1720	Average Personnel	Response Time	Monthly Objective Met
Urban	55	4.69	9 min	0%
Suburban	64	4.17	10 min	3%
Rural	80	5.05	14 min	44%
Totals	199	4.67		

Average Response Time:

1st unit on scene—8 min. 43 sec. (Avg. Personnel – 1.47*)

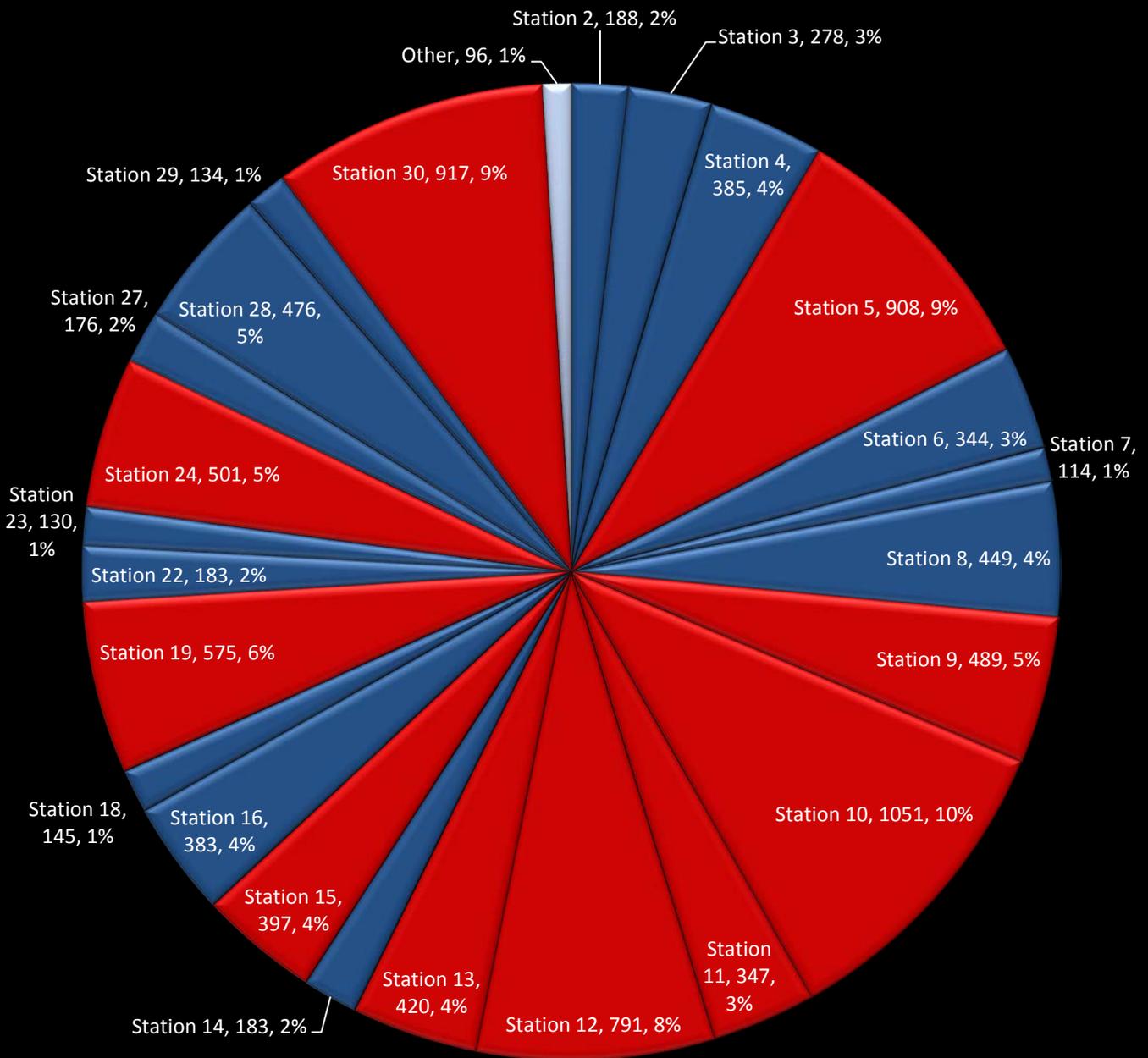
2nd unit on scene—12 min. 41 sec. (Avg. Personnel – 1.29*)

*Note: Average personnel 1st unit – 293 Total Personnel / 199 Total Calls = 1.47

*Note: Average personnel 2nd unit – 257 Total Personnel / 199 Total Calls = 1.29

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, a large amount is from Lake Murray. **Sixty-four percent (64%) of all incidents occur in the urban/suburban areas of the county within the districts of ten (10) fire stations.**

Incidents by District



Automatic and Mutual Aid

Columbia Metro

- Mutual Aid Recieved - 1 Call
- Automatic Aid Recieved - 1 Call
- Mutual Aid Given- 1 Call
- Automatic Aid Given - 1 Call

Town of Batesburg/Leesville

- Mutual Aid Received- 33 Calls
- Automatic Aid Received- 43 Calls
- Mutual Aid Given- 10 Calls
- Automatic Aid Given- 20 Calls

Caw Caw Fire Department

- Mutual Aid Received - 2 Calls
- Mutual Aid Given - 1 Call

City of Cayce

- Mutual Aid Received- 2 Calls
- Mutual Aid Given- 7 Calls
- Automatic Aid Given 1

City of Columbia/Richland County

- Mutual Aid Received- 13 Calls
- Automatic Aid Received- 1 Call
- Mutual Aid Given- 25 Calls

Irmo Fire Department

- Mutual Aid Received- 9 Calls
- Automatic Aid Received- 2 Calls
- Mutual Aid Given- 37 Calls
- Automatic Aid Given- 24 Calls

Jumper Station Fire Department

- Mutual Aid Given - 2 Calls

Little Mountain Fire Department

- Mutual Aid Received - 1 Call
- Mutual Aid Given- 3 Call

Newberry County Fire Service

- Mutual Aid Received- 3 Calls

North Fire Department

- Mutual Aid Received- 1 Call
- Mutual Aid Given - 1 Call

Sandy Run Calhoun County

- Mutual Aid Received- 2 Calls
- Mutual Aid Given- 15 Calls

City of West Columbia

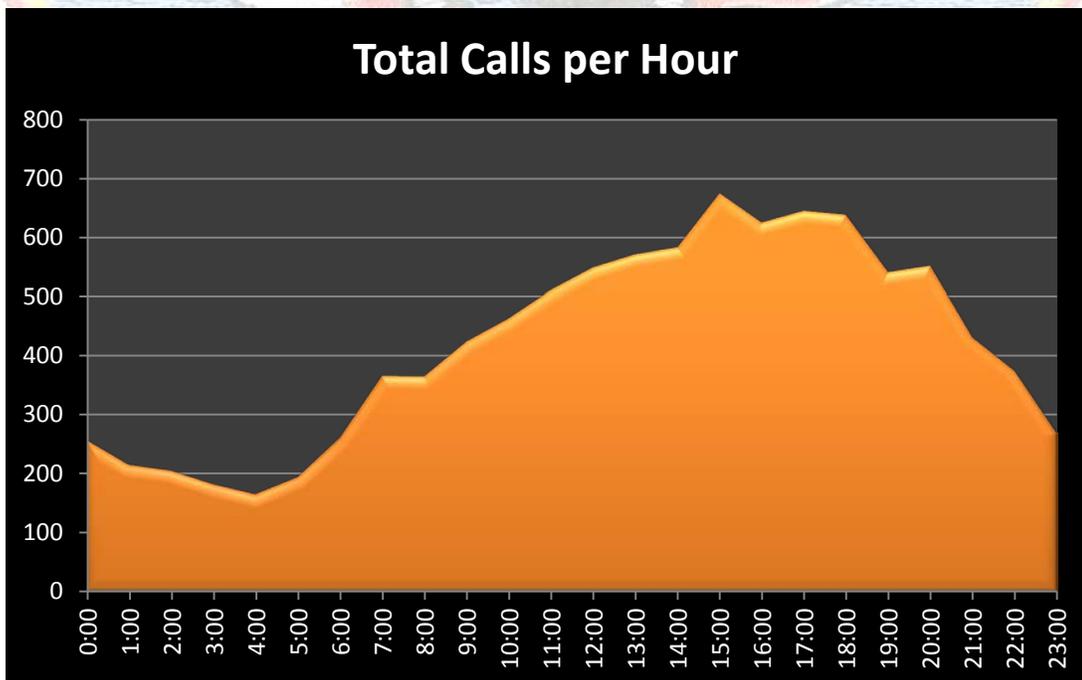
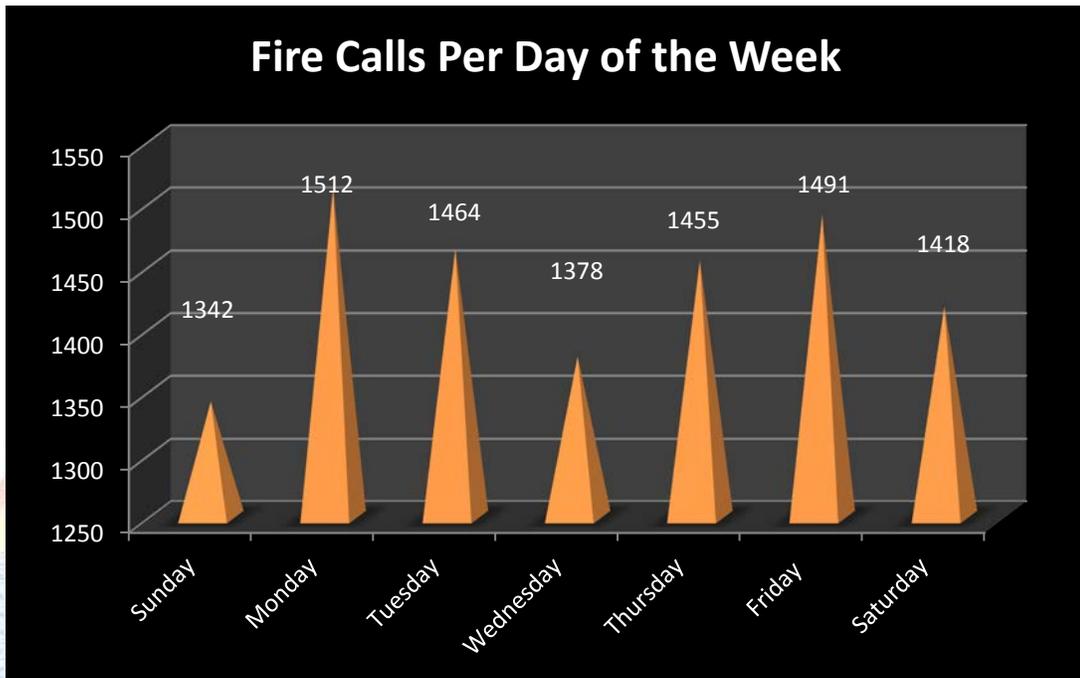
- Mutual Aid Received - 7 Calls
- Mutual Aid Given- 7 Calls

Totals

- **Mutual Aid Given - 109 Calls**
- **Mutual Aid Received - 74 Calls**
- **Automatic Aid Given - 46 Calls**
- **Automatic Aid Received - 47 Calls**

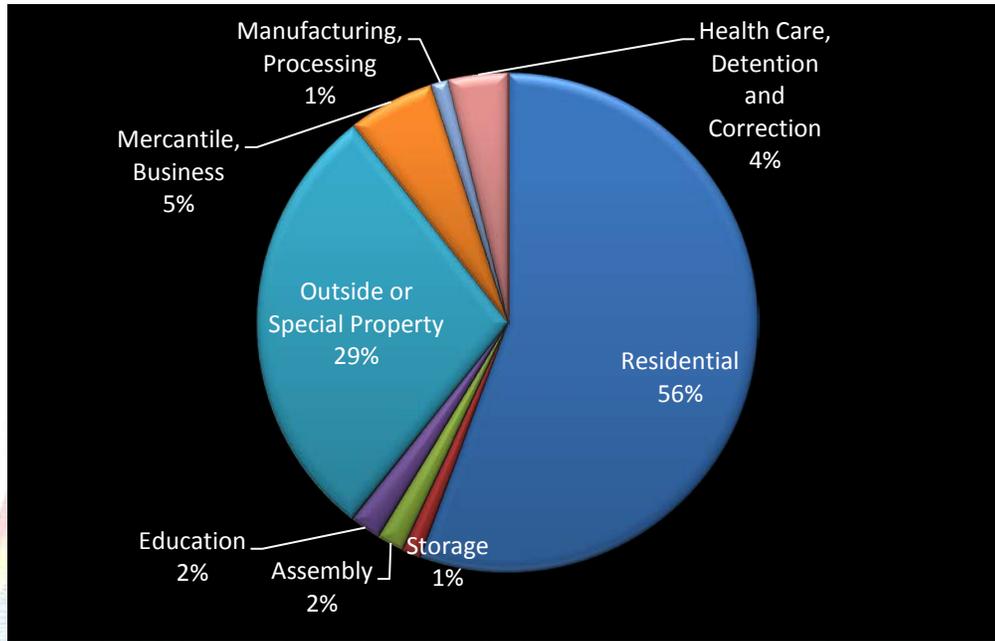
When are Incidents likely to occur?

When is the most likely time for a call to occur? The top graph displays the Days of the Week, with Monday being the busiest day of the week. Friday 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 12:00pm-8:00pm.



Property Use Summary

The pie graph below indicates the property use for 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.



Property Use	Total Losses	Percentage of Value Saved
Other	\$173,500	0%
Assembly	\$75,800	38.99%
Education	\$6,000	0%
Health Care, Detention & Correction	\$3,700	0%
Residential	\$7,376,450	56.07%
Mercantile, Business	\$152,460	89.22%
Manufacturing, Processing	\$555,000	0%
Industrial, Agriculture, Mining	\$5,400	36.47%
Storage	\$448,750	46.57%
Outside or Special	\$735,725	46.03%
Total Loss	\$9,532,785	

(77% of our fire loss occurs in residential properties)

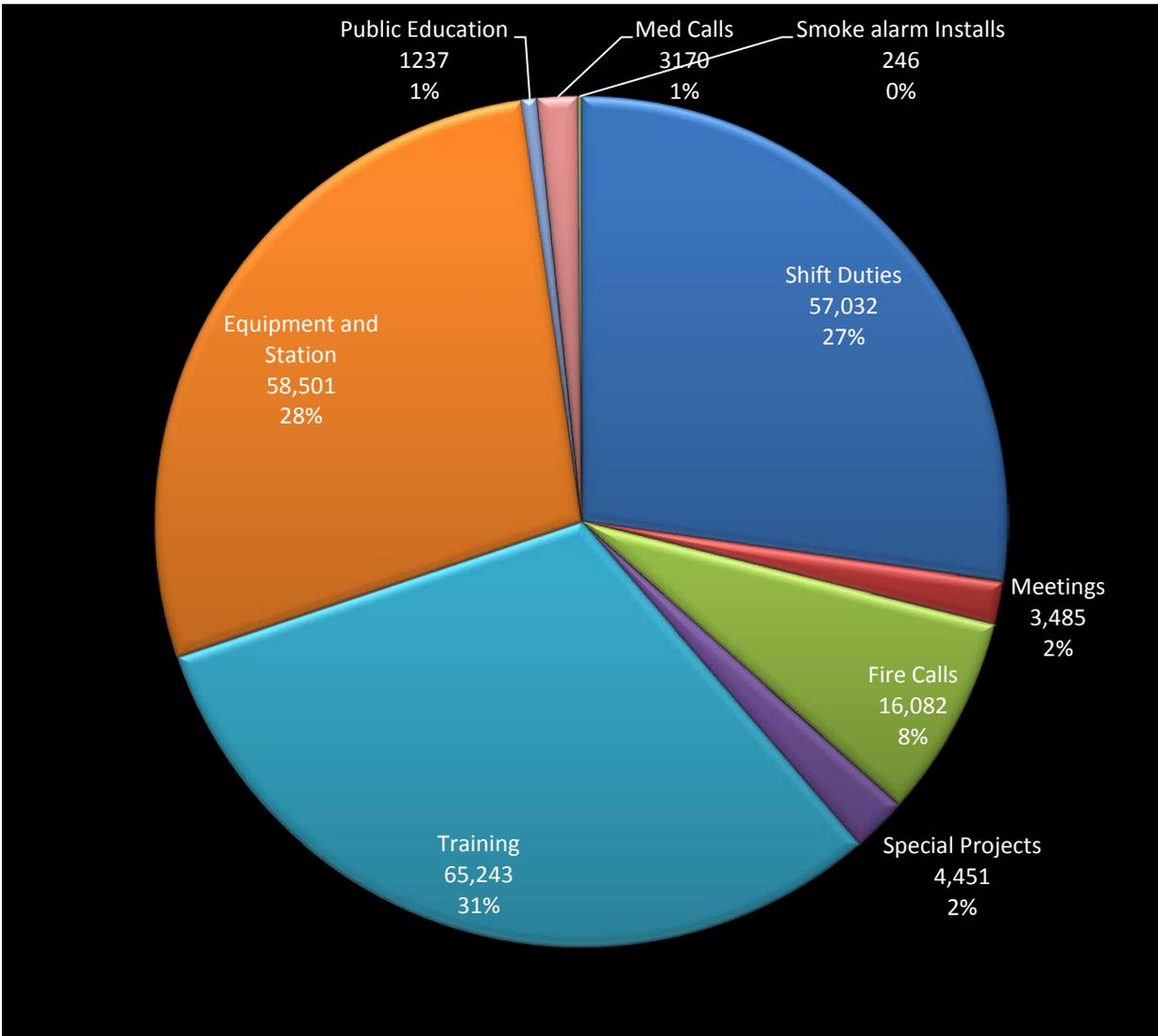
Fire Cause Related to Fire Losses

Cause of Ignition	Total Number	% of all Fires	Total Est. Loss	% of All Fire Losses
Intentional	149	13.20%	\$3,110	0.04%
Unintentional	378	33.48%	\$2,007,680	26.88%
Failure of equipment or heat source	70	6.20%	\$759,050	10.16%
Act of Nature	31	2.74%	\$174,450	2.34%
Cause under Investigation	51	4.52%	\$571,500	7.65%*
Cause Undetermined after investigation	337	29.85%	\$3,529,190	47.26%*
Cause Other	113	10.00%	\$423,110	5.67%*
Total Fire Loss			\$7,468,090	

Note:

*** 61% of fire calls with a loss of \$4,523,800 had No Determination**

PERCENTAGE/HOURS OF ACTIVITY PER SHIFT



Average productivity per person per day

180 personnel – 10.3 hours per day

*Note: Equipment and Station Duties – Maintenance and readiness checks for equipment, vehicles and station resources.

Shift Duties – All administrative duties, Reports in Firehouse

Special Projects – Accreditation, ISO, committees.

Goal

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

(Comparison)

<u>July 2012 -> June 2013</u>		<u>July 2013 -> June 2014</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	16,400.90 5.62 FTE Loss	Sick/FMLA Leave	13,258.86 4.55 FTE Loss	(-) 1.07
Workers Comp. Light Duty	6384.42 2.19 FTE Loss	Workers Comp. Light Duty	7727.68 2.65 FTE Loss	(+) .46
Average Hrs. Per Pay Period - Shift Personnel	112.00	Average Hrs. Per Pay Period - Shift Personnel	112.00	
171 Personnel @ 24 Hrs. per shift	4104.00	180 Personnel @ 24 Hrs. per shift	4320.00	
Total Hours Paid	459,648	Total Hours Paid	483,840	(+) 5.26%
% Lost Time SICK/FMLA	3.56%	% Lost Time SICK/FMLA	2.54%	(-) 1.02%
% Lost Time - Work Related	1.38%	% Lost Time - Work Related	1.48%	(+) .10%
Total % of Lost Time	4.94%	Total % of Lost Time	4.02%	(-) .92%
	Total : 7.81 Personnel Loss		Total : 7.20 Personnel Loss	(-) .61

Department Safety Objectives

- 1. Track lost work related time and it shall not exceed 1% (Actual 1.48%) of the total available work hours for the department.**
- 2. The percentage of total workforce accumulating lost work time shall not exceed 5% (Actual 4.02 %) 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: 65,243 Hours

Multi Company Drill Hours:

2441 Hours of training across 3 multi company drills

599 Fire Service Participants

4.1 Hours/ Drill/ Student

FF II Certification Project:

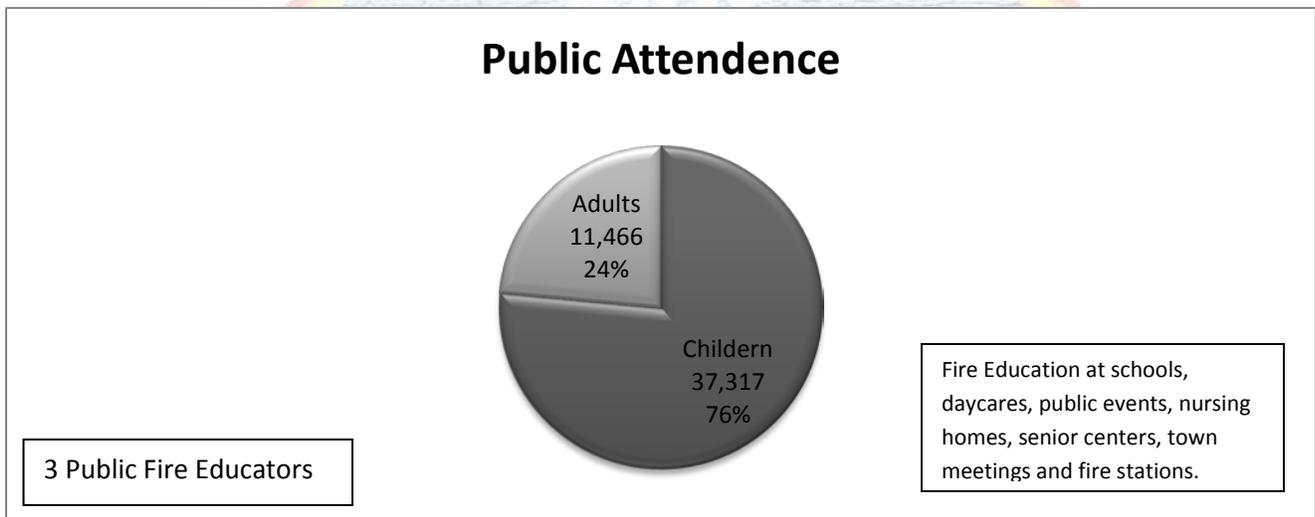
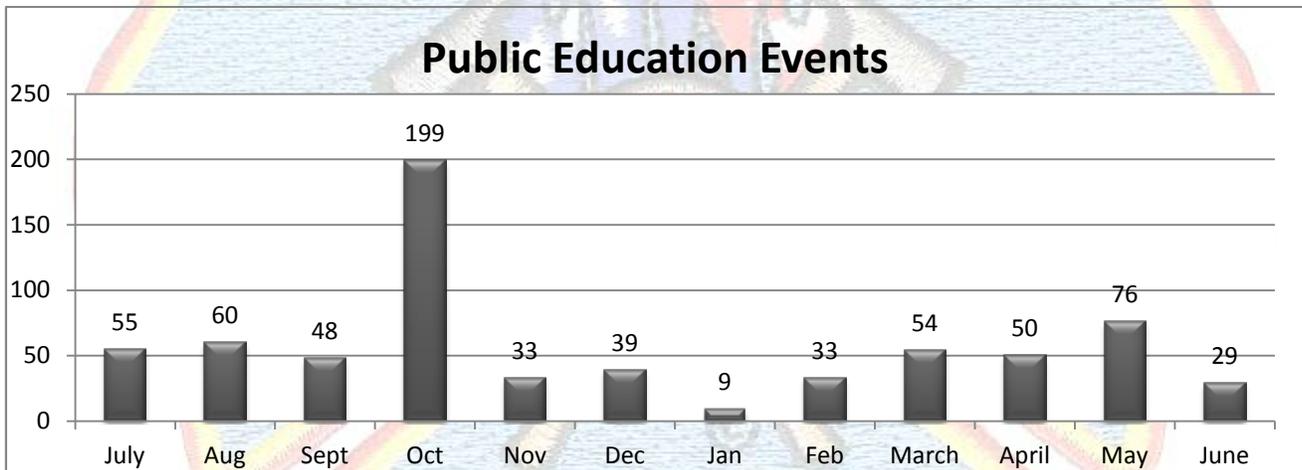
All career personnel (192) are now FFII certified.

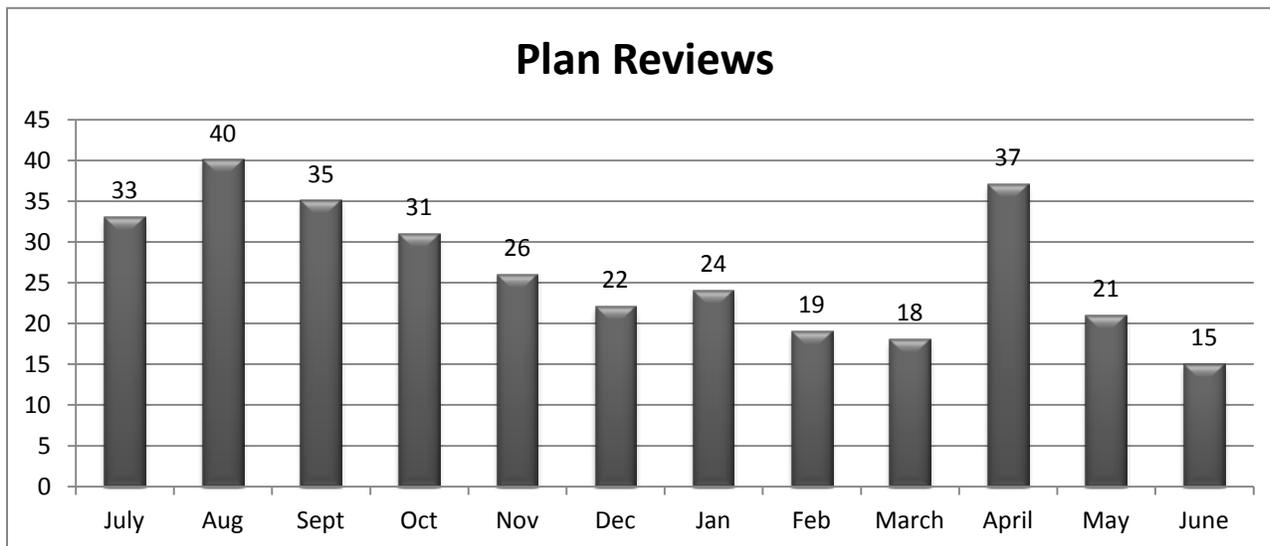
FIRE MARSHAL DIVISION

DUTIES:

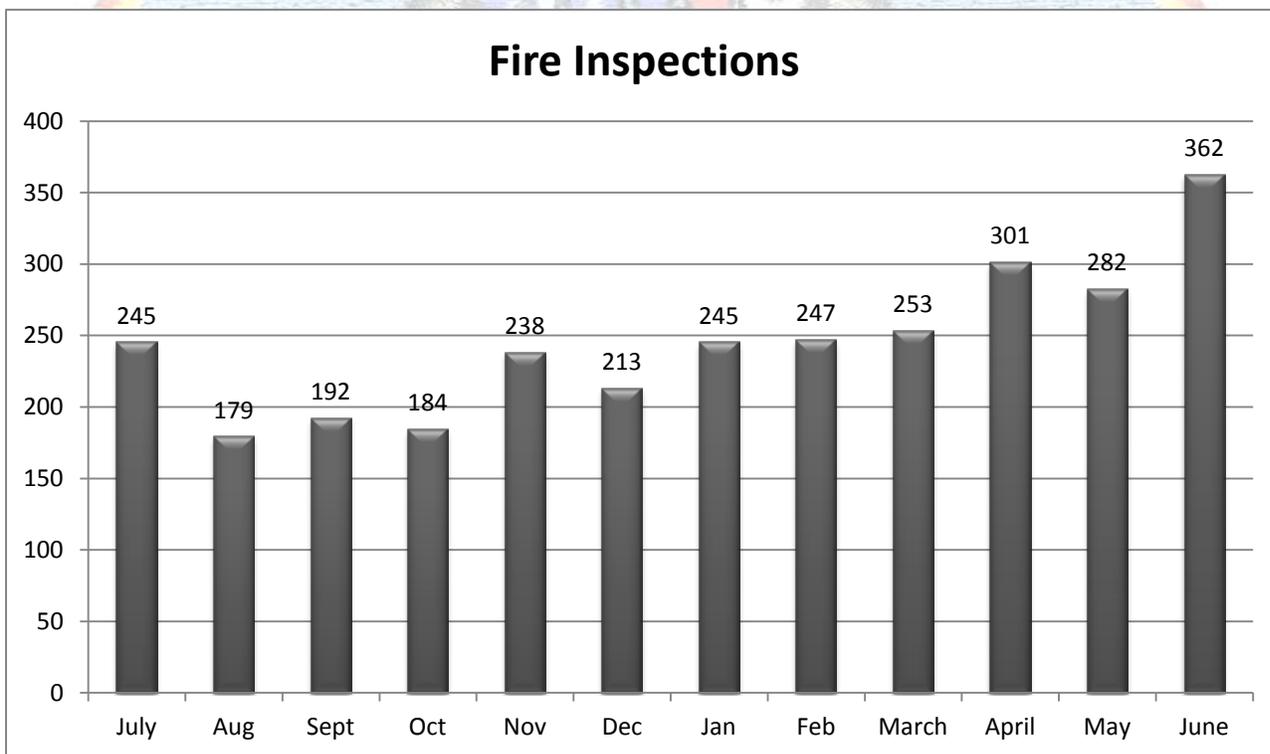
- Firehouse Software
- Burn Ordinance
- Code Enforcement
- Fire Alarm Ordinance
- Inspections
- Wildland Firefighter Operations
- Fire Prevention
- Operational Plans
- Public Education
- Fire Service Web Site
- Plans Review
- Liaison to State Fire Marshal
- County Wildland FF Team
- Liaison to SC Forestry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

STATS: Total 685 Events





Total of 2,941 Inspections with 3 Inspectors

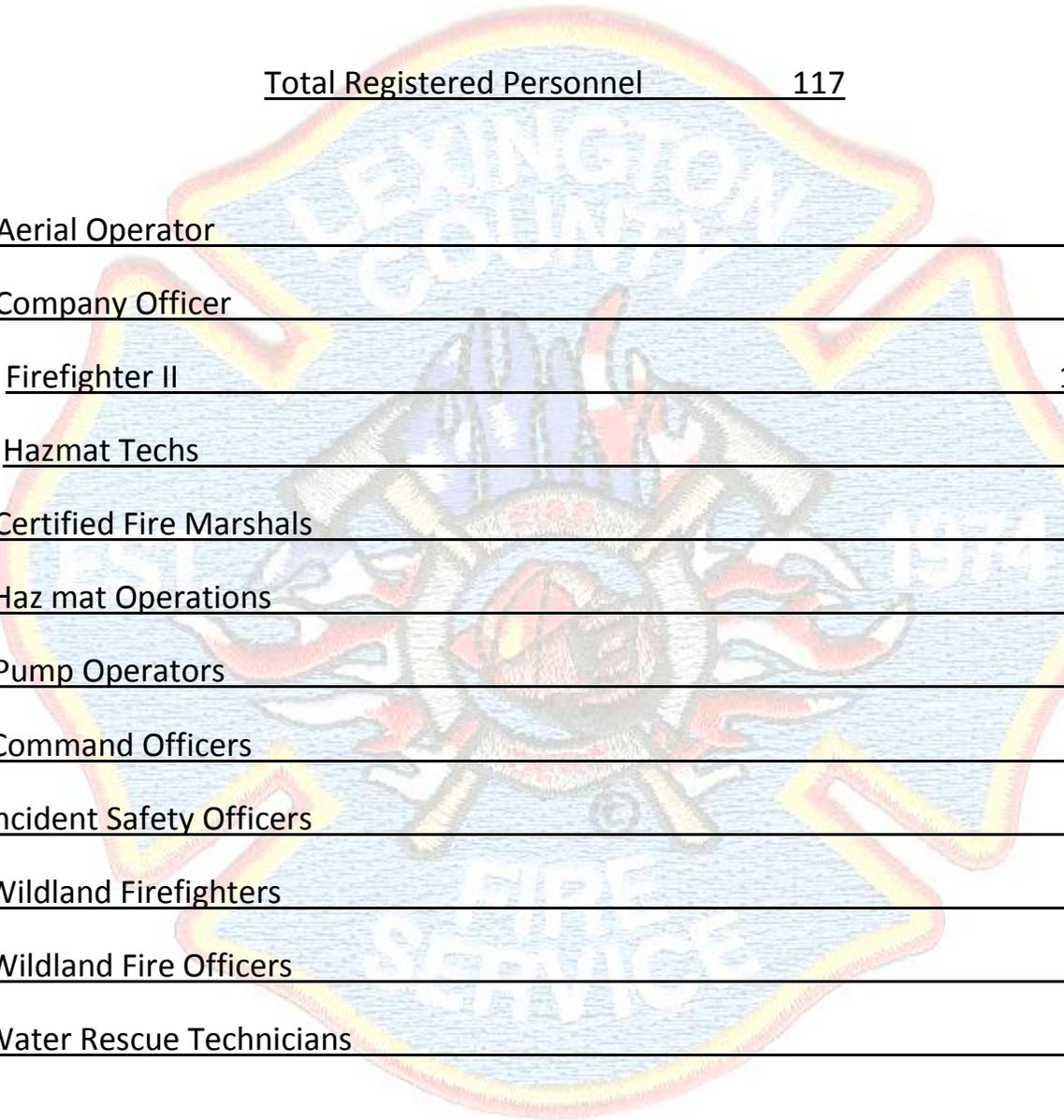


Total Plan Reviews – 321

State Firefighter Mobilization

2 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>Haz mat 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 96 firefighters with the issue of uniforms, Personal Protective Equipment (PPE), and other items as may be requested.

Logistics is also responsible for all pagers, radio's, SCBA 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, 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 13-14

Cleaned and inspected over 500 individual pieces of PPE and logged in Firehouse.

Conducted the annual fire extinguisher inspection of 268 extinguishers at a cost of \$2,081.69.

Refilled 25 dry powder extinguishers at a cost of \$850.00.

Refilled 32 foam extinguishers at a cost of \$2,048.00

Tested 2,335 ft of ladders at a cost of \$4,577.00

Annual Hose Testing – Tested over 20 miles of fire hose.

Held a one day “ Mass Fitting “ of over 200 fire service personnel (Career and Volunteer) to fit them for duty uniforms, duty boots and some for PPE.



Fire Service Task Accomplishments

Fiscal Year 2013-2014



- 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
- Monthly building fire reports forwarded 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 685 public fire education events within the county for an estimated 37,317 children and 11,466 adults
- Performed 2941 public commercial fire inspections
- Reviewed 321 plans for new construction, additions, or remodels to commercial properties
- Installed 77 smoke alarms
- All vehicles have the new Fire Service Decal
- Explorer Post 1974 was established through partnership with Lexington Technology Center
- Communication headsets installed in E-14 and E-28
- Evaluated new Rapid Intervention Team bag for implementation in 2014
- O2 meters included within first responder bags

- Implemented full set of Supplied Air Breathing Apparatus hoses for Emergency Response Team
- Implemented 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
- Changed vendors on Class B uniforms which improved quality and reduced price
- Continued purchase of dress uniforms for career personnel and secured \$30,000 in One Percent Funding to complete this process within 2014
- Implemented Firehouse Analytics software
- Secured funding through One Percent Funds for Oct. 2, 2014 40th Anniversary Fire Service Awards Dinner
- MDA Boot Drive collected \$33,593.96
- The 13th Annual Jeff Chavis Boot Drive collected \$51,294.88, exceeding our goal of \$50,000. This brings our total from Boot Drive in a twelve year period to more than \$670,175.
- Added 1 Fire Prevention Officer to Fire Prevention Division
- Separated County Fire Service area into 3 Fire Prevention regions for inspections and fire prevention
- Developed a process to gather information within firehouse on inspections and prevention activities and inspection tracking
- Created a permitting process utilizing firehouse for permitting activities related to the International Fire Code
- Developed a resource manual and GOG for tracking smoke, carbon monoxide alarms and battery installs by fire service personnel

- 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 each large public gathering sporting event within the County
- Established 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 13-01, 25 graduates
- Completion of first Volunteer Fire ground Support Class, 7 students
- Ongoing Volunteer Firefighter II Certification Program
- Conducted hiring process/interviewed over 80 candidates
- Conducted two Apparatus Operator promotional processes
- 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 three Multi Company Drills totaling over 700 hours of training
- Began formulating standard single company drills for all personnel
- Conducted First Lexington County Public Safety "Career Expo"
- Established Automatic Aid Agreement with Columbia Metropolitan Airport
- Established mandatory positions of Firefighter II or Fire ground Support for all Volunteers
- Terminated all individual station fundraisers and associated accounts
- Began standardizing all Fire Station signs to reflect Lexington County Fire Service
- Implemented Rip and Run technology for all station

- Implemented operational channels for fire ground command functions
- Fire Chief held monthly meetings for all personnel at fire headquarters
- Began process to acquire Mobile Digital Terminals for all first responding fire apparatus
- Printed and distributed map grid books for all stations
- Added a Customer Satisfaction Survey to website
- Formulated and submitted seven (7) projects for the Penny for Progress and will utilize this document as fire service Capital Improvement Plan
- Continued revisions of GOG's and adding of new GOG's. To date a total of 52 GOG's have been completed and 57 are under review.

