

# STATE OF WYOMING DEPARTMENT OF FIRE PREVENTION AND ELECTRICAL SAFETY



Annual Report  
Calendar year 2015  
Prepared– May 2016

Lanny Applegate  
Director

# **Department of Fire Prevention and Electrical Safety**

## **2015 Annual Report**

**Plan Period:** January 1, 2015 through December 31, 2015

### **Results Statement:**

- ✚ Wyoming families and individuals living in a stable, safe, supportive, nurturing, healthy environment.
- ✚ A diverse and stable economy that provides a livable income and ensures wage equality.

### **Our Contribution to Wyoming Quality of Life:**

Through aggressive and effective electrical and fire prevention programs we can:

- ✚ Ensure Wyoming children, families, and the public are safe from fire and electrical hazards.
- ✚ Protect the stability of our economic base through effective fire prevention and firefighter training programs.
- ✚ Be responsible as a steward of state assets and effectively responds to the needs of residents and guests.

### **Department Facts:**

The Director/State Fire Marshal of the agency is Lanny Applegate. The contact person for the agency is Lanny Applegate, 320 West 25<sup>th</sup> Street, Capitol Hill Building, Cheyenne, WY 82002; our web address is [wsfm.wyo.gov](http://wsfm.wyo.gov), and our phone number is 307-777-7288. Our agency's statutory references are W.S. 35-9-101 through 35-9-131.

The Department of Fire Prevention and Electrical Safety consists of 34 personnel in 4 divisions: Administration (3), Fire Prevention (9), Electrical Safety (12), and Training (10). Our main office is located in Cheyenne with field offices in Riverton, Douglas, Green River, Sheridan, Afton, Worland, Laramie and Newcastle.

The clients are served by our agency include the following: fire service, law enforcement, architects, engineers, building & fire code officials, federal/state/county agencies, building & electrical contractors, electrical industry, media, child care providers, and the general public.

**Funding:** The total operating budget for the department for FY 15/16 is \$7,337,018.04 of this amount \$6,477,527.89 are General Funds, and \$859,490.75 are Other Funds (electrical licenses and permits).

**Division Budgets:** Administration: \$918,813.20 Fire Prevention: \$1,841,870.64

Electrical Safety: \$1,806,729.07 Training: \$1,415,095.36 Wyoming Fire Academy: \$459,519.02.

### **Boards and Commissions:**

The State Electrical Board reports to the Department of Fire Prevention and Electrical Safety, and has five members who are appointed by the Governor. The State Electrical Board meets *at least twice* a year to meet the statutory mandated requirement.

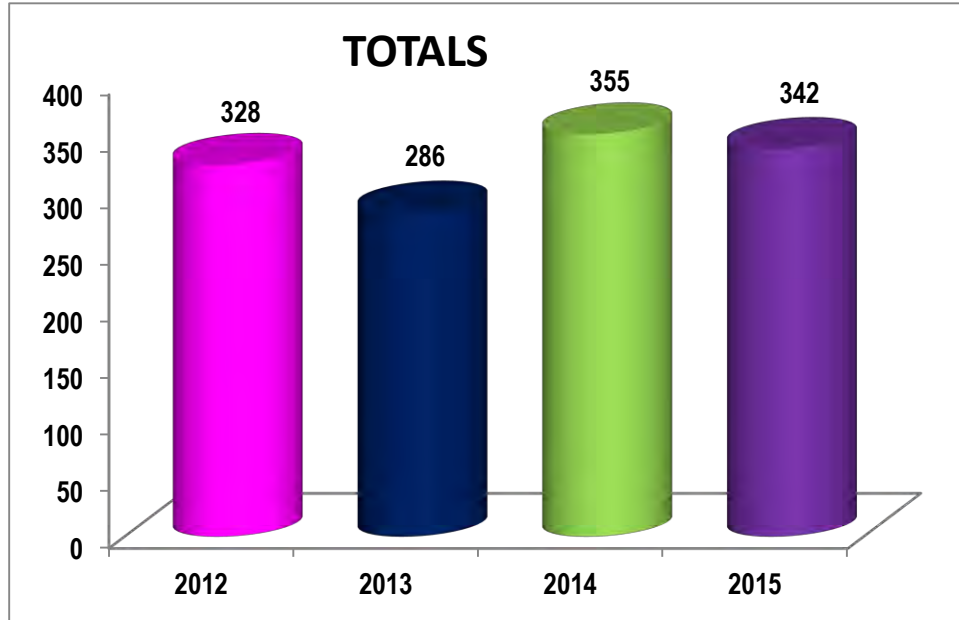
The Council on Fire Prevention and Electrical Safety reports to the Department of Fire Prevention and Electrical Safety, and has five members who are appointed by the Governor. The Council on Fire Prevention meets *at least twice* a year to meet the statutory mandated requirement.

### **Six primary functions of our Department:**

1. ***Conduct Fire and Life Safety, and Electrical Inspections*** in public buildings such as hotels/motels, schools, day cares, restaurants, and institutions.
2. ***Train Firefighters*** from across Wyoming in all aspects of fire suppression and fire prevention.
3. ***Provide Fire and Safety Education Programs*** to the children, families and general public in Wyoming.
4. ***Collect and Analyze Fire Data*** to identify fire problems and trends so resources are accurately directed towards their mitigation.
5. ***Conduct Non-Structural Plan Reviews*** for compliance with fire and life safety and electrical codes on public buildings being constructed or remodeled.
6. ***License*** all electricians working in the state and ***issue permits*** for electrical work being conducted across the state.

### Performance Measures:

#### **Performance Measure #1: PLAN REVIEW COMPARISON**



	Jan	Feb	Mar	Apr	May	June	July	Aug	Sep	Oct	Nov	Dec	Totals
2012	18	21	28	21	42	38	29	40	14	23	29	25	328
2013	8	24	24	22	39	22	33	37	16	26	16	19	286
2014	18	30	25	28	35	39	34	34	19	41	27	25	355
2015	21	22	37	38	22	40	25	35	27	34	17	24	342

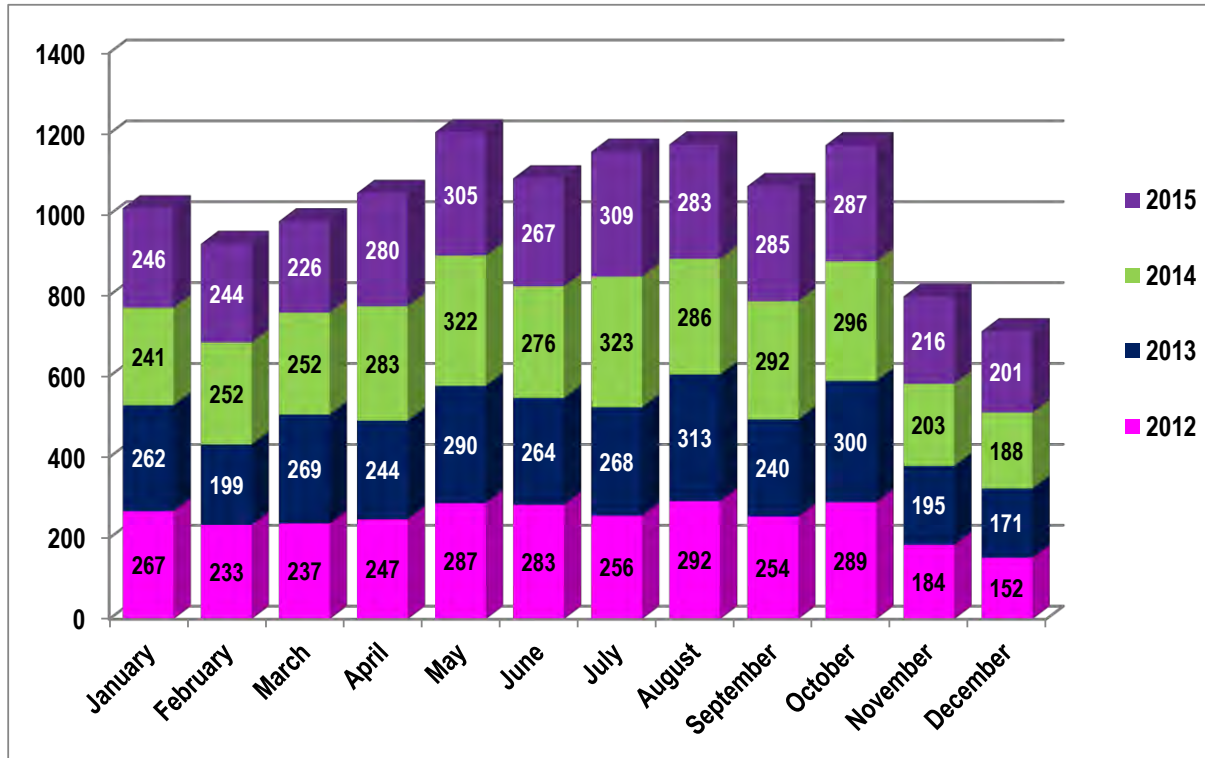
#### **Story behind Performance Measure #1:**

Plan reviews of new, addition and remodel building construction as well as plan review of above ground storage tanks, commercial kitchen hoods, fire alarm systems, fire sprinkler systems and electrical systems is one of the six major business processes we conduct in the department. The purpose of plan review is to ensure compliance with nationally recognized and state adopted fire, life and electrical safety codes. Since 2012 our plan review activity has remained stable with an average of 328 plan reviews a year.

#### **What we propose to do to improve performance measure #1 in the next two years?**

We are implanting a much anticipated records management system, enabling us to re-engineer our plan review business processes in order to increase efficiencies within the department and increase service to our constituency. We are also instituting a state wide public education initiative that will increase contractor and architect or awareness of our statutorily required plan review application and submittal process.

**Performance Measure #2:  
FIRE INSPECTION COMPARISON**



	2012	2013	2014	2015
January	267	262	241	246
February	233	199	252	244
March	237	269	252	226
April	247	244	283	280
May	287	290	322	305
June	283	264	276	267
July	256	268	323	309
August	292	313	286	283
September	254	240	292	285
October	289	300	296	287
November	184	195	203	216
December	152	171	188	201
<b>Totals</b>	<b>2,981</b>	<b>3,015</b>	<b>3,214</b>	<b>3149</b>

### Story behind Performance Measure #2:

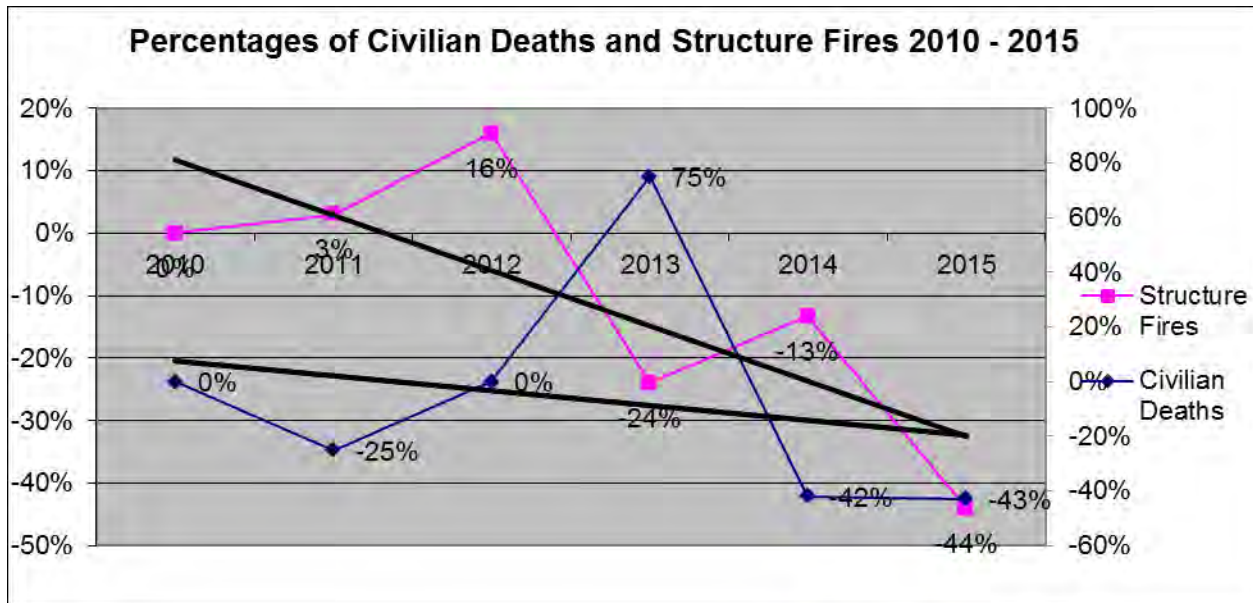
Fire inspections are generated from primarily 2 sources. First, priority plan review inspections come from newly constructed or remodeled buildings, above ground storage tanks, commercial kitchen hoods, fire alarms systems, fire sprinkler systems and electrical systems that go through the plan review process of the agency. Second, maintenance inspections are prioritized and conducted on a regular basis using the following general criteria; educational facilities, hotels/motels/senior centers, State owned/public leased buildings, assembly occupancies, day care centers, business occupancies and above ground storage facilities. Fire inspections are conducted to ensure compliance with nationally recognized and state adopted fire and life safety codes.

### What do you propose to do to improve performance in performance measure #2 in the next two years?

A critical area will be to continue to gather and document data that reflects how reviewers and inspectors have effectively impacted the fire problem that exists today. The implementation of the agency's new records management system and the subsequent implementation of WyoStat practices will greatly aid the department in the improvement of its performance.

### Performance Measure #3

#### CIVILIAN DEATHS AND STRUCTURE FIRES REPORTED



### Story behind Performance Measure #3:

There is a great deal of data that supports the idea that fire prevention measures, especially, fire fatalities/injuries and property loss can be significantly reduced through public education programs and fire inspection and code enforcement activities.

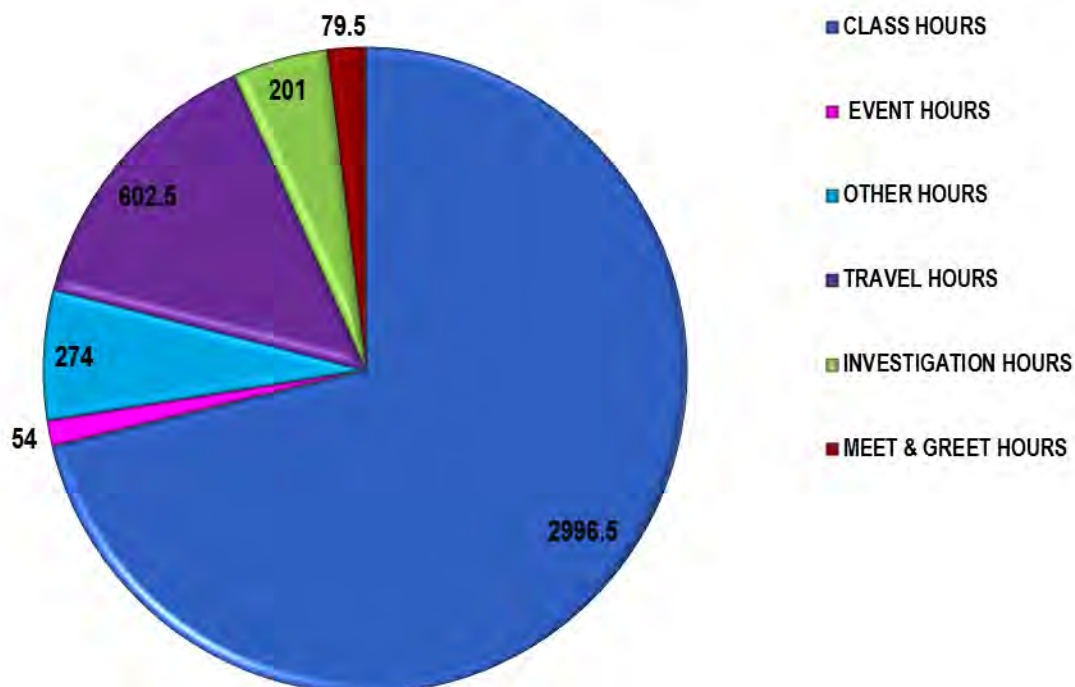
The vast majority of fire deaths in Wyoming occur in residential occupancies. The baseline for 2010 was 7 civilian fire deaths and 684 structure fires. In 2015 there were 4 civilian fire deaths and 383 reported structure fires. There are three population groups considered to be at risk in fire situations: infants/youth, elderly, and developmentally disabled. We also know low income households are more susceptible to fires resulting in death and injury. Most residential fire-related deaths remain preventable and continue to pose a significant public health problem.

**What do we propose to do to improve performance measure #3 the next two years?**

In partnership with local fire departments, continue to target occupancy types that are showing the highest frequency of fires, property loss and lives lost. Assist the local fire departments in implementing educational programs to address identified fire problems in the area.

Actively participate and support the Wyoming Fire Sprinkler coalition in its mission to educate the public on the life safety benefits of residential fire sprinkler systems. This effort includes building positive working relationships with Architects, Building Officials, Contractors and Developers across the State of Wyoming. Expand and develop new relationships with other state agencies and other like-minded agencies outside of state government to provide additional avenues for fire prevention and residential fire sprinkler system education. This includes utilizing grant funding to assist in constructing 3 additional side by side fire sprinkler demonstration units which will be placed and utilized in the Cody, Rock Springs and Gillette areas.

## HOURS BREAKDOWN FOR TRAINERS & FIRE ACADEMY

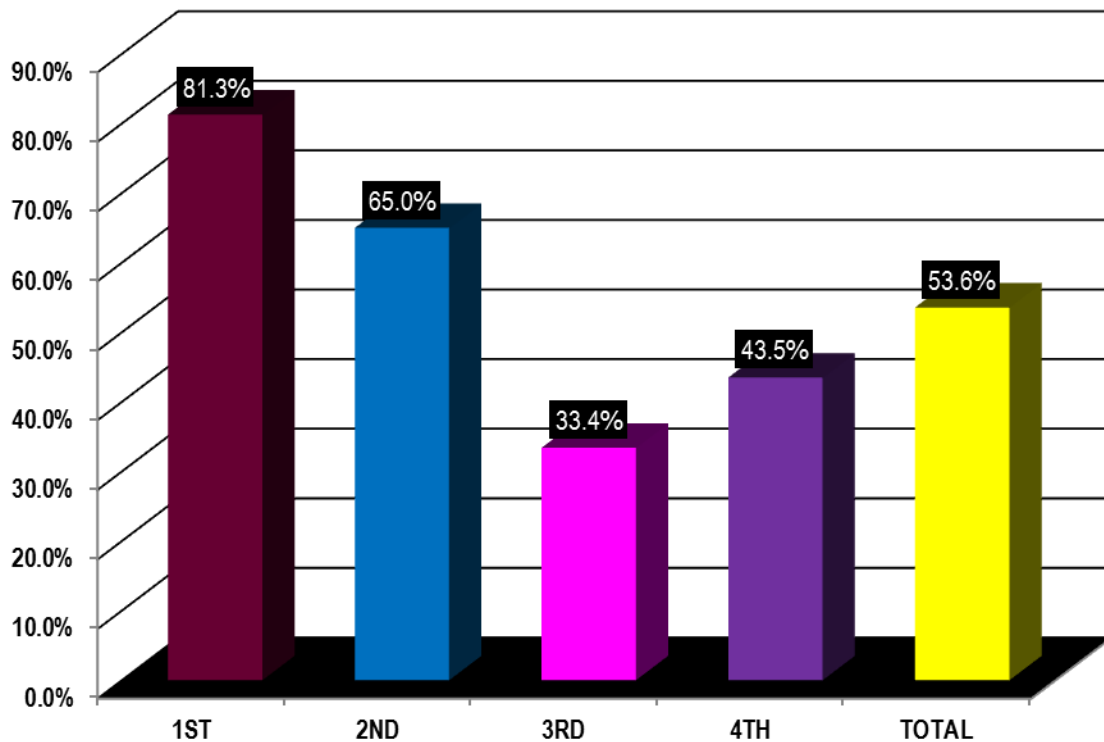


Overall activity for the Training Division in 2015 can be broken down into several categories. Class hours include those offered by regional trainers around the state, the fire academy and online courses. The combination of all three represent the bulk of instructional activities conducted statewide and range from basic firefighting to hazardous materials, technical rescue, chief officer development, industrial and various other first responder training. Event hours encompass DFPES sponsored or supported meetings at the fire academy.

Another key category to point out are the investigation hours. Our trainers also serve as fire investigators and completed over 200 hours of investigations throughout 2015 at the request of the state's fire service. The remaining categories; other, travel, meet & greets comprise the time our staff spends preparing for training activities, traveling to and from locations and meeting with our customers face to face.

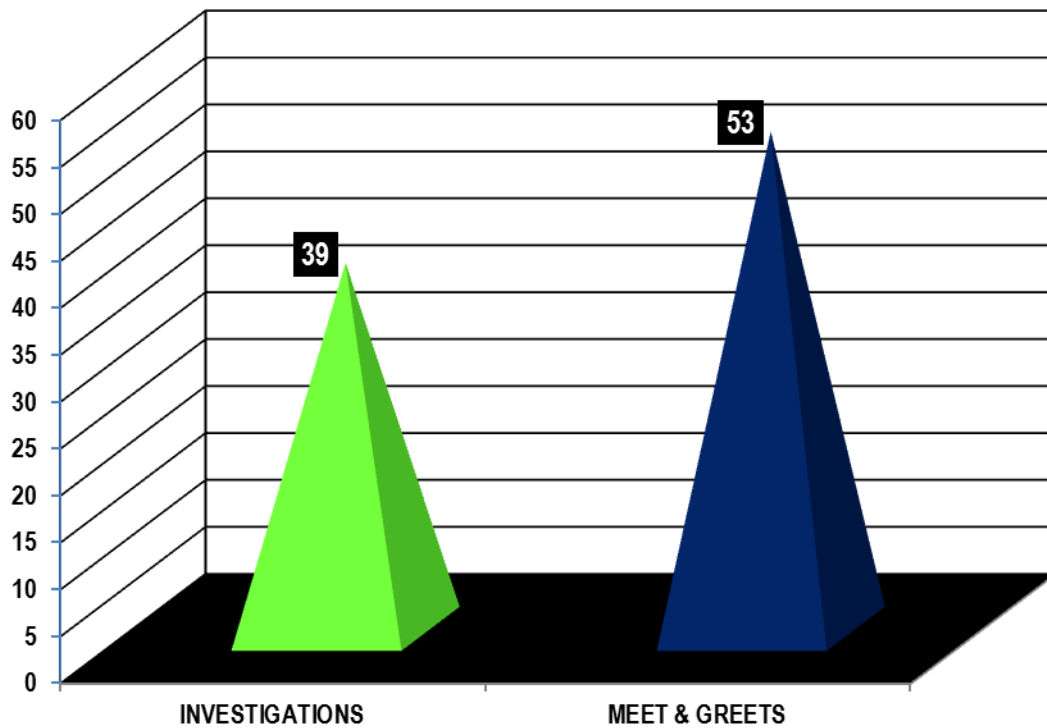


PERCENTAGE OF AVAILABLE HOURS USED FOR TRAINERS ACTIVITIES



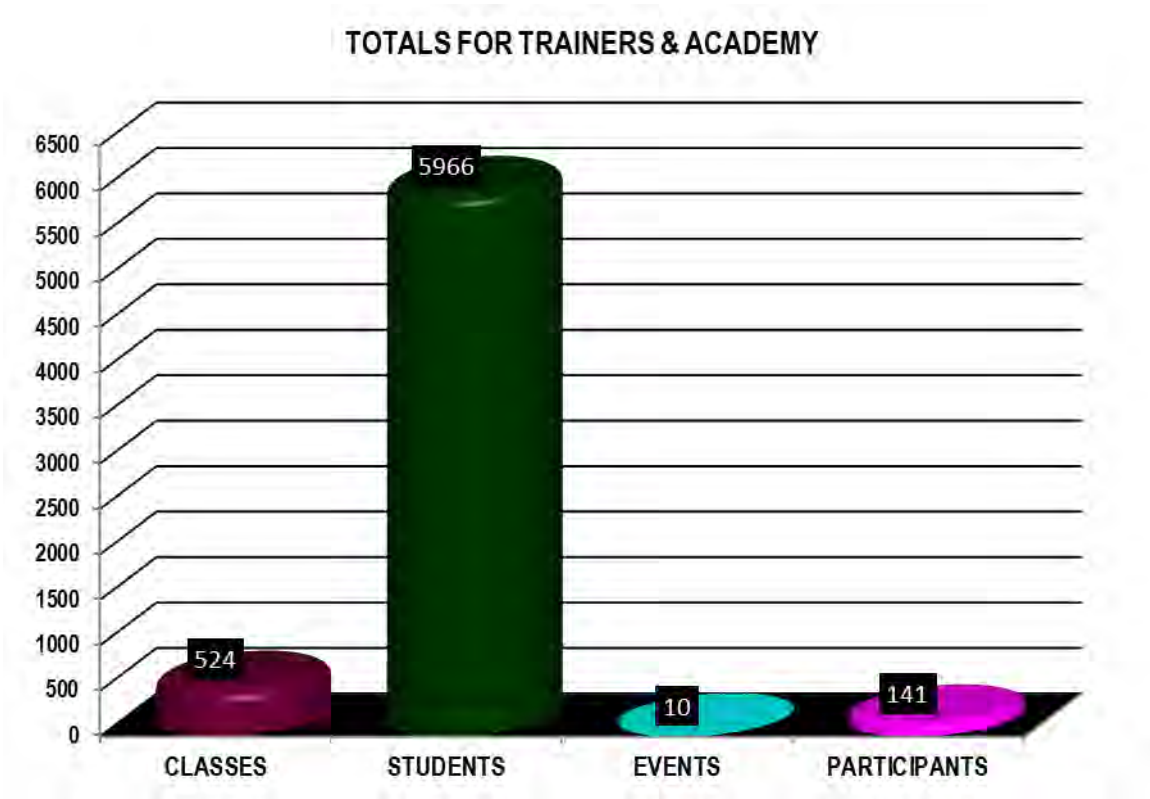
DFPES trainers conduct various training and investigation activities throughout the year statewide. As a function of engaging in these activities, it is expected they will achieve a minimum of 35% on average of their time spent either instructing or investigating. These numbers include travel time to and from locations. In 2015, our training staff averaged 53.6% of available hours against their charged activities equating to 18.6% over the stated goal.

This graph also demonstrates the typical participation curve of our fire service customers throughout the year. Historically, a significant amount of training is conducted during the first half of the year due to several factors such as increased fire department requests, wildfire training, regional fire schools and conferences. During the summer months, activity slows down because of busy customer schedules and wildfire season. The end of the year results in a ramp up of training again, barring the holidays.



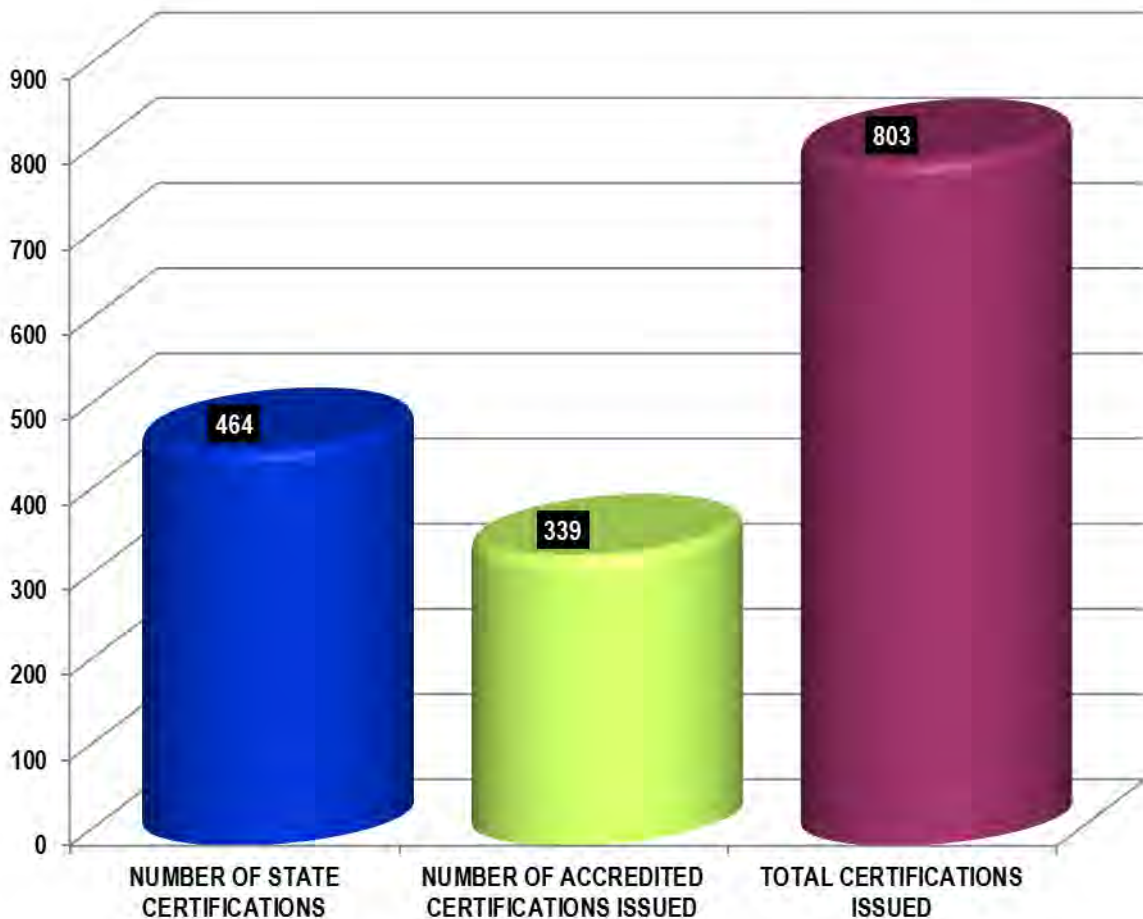
Investigations and meet & greet are two metrics used to gauge trainer activity throughout the year. In 2015, our staff completed 39 fire investigations statewide and met with 53 old and new fire service customers to schedule training. As noted in a previous graph, investigations amounted to 201 hours equating to just over 5 hours per investigation on average. Meet & greet hours totaled 79.5 hours which averages 1.5 hours per meeting. Reaching out to our customers face to face is an important tool in determining local training needs and staying in touch with those whom we serve.

Investigation requests by our fire service customers fluctuate from year to year depending on the number of fires occurring and complexity. This is a statutorily mandated duty for the DFPES and falls on our regional staff who are state and/or nationally certified. It's worth noting here that these duties comprise 10-15% of staff time to complete throughout the year and, as such, will be broken down further as a separate metric in future annual reports.



2015 DFPES Training Division activity can also be measured by the number of classes conducted, students contacted, events and participants. Throughout the year classes include, but are not limited to; traditional classroom delivery, both regional and at the academy, fire schools and blended online learning. As stated previously, these instructional activities range from basic firefighting to hazardous materials, technical rescue, chief officer development and various other first responder training. There were 524 classes of this nature conducted contacting 5,966 students statewide.

Events sponsored or supported by the Training Division amounted to 10 with 141 participants. These are recorded mainly as meetings and range from those conducted by the Wyoming Office of Homeland Security, the National Weather Service, Emergency Management and Industry. This is another metric used to measure fire academy usage beyond direct training related activities.



The DFPES Training Division is tasked with maintaining the state's fire service certification program. Certification is the direct result of training activities conducted by division staff, both regionally and at the fire academy. The division offers both State of Wyoming and nationally accredited (Pro Board) firefighter certifications across several standards maintained by our office and a state advisory committee. In 2015, there were 464 state certifications issued, 339 nationally accredited certifications for a total of 803.

#### **2015 Totals Breakdown – DFPES Training Division** **Training & Certification**

524 Classes Delivered  
5,966 Students Instructed  
2,996.5 Contact Hours  
803 Total Certifications Issued

- 464 State Certifications
- 339 National Accredited Certifications

10 Fire Academy Events Sponsored or Supported  
141 Event Participants

### Fire Investigations

39 Fires Investigated by the DFPES training staff  
201 Hours Utilized for Investigations

### Meet & Greet

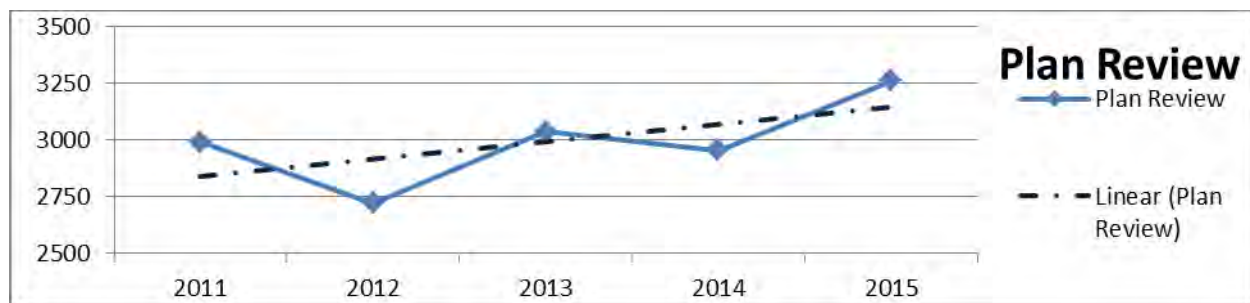
53 Meet & Greet Conducted by DFPES training staff  
79.5 Hours Utilized for Meet & Greet

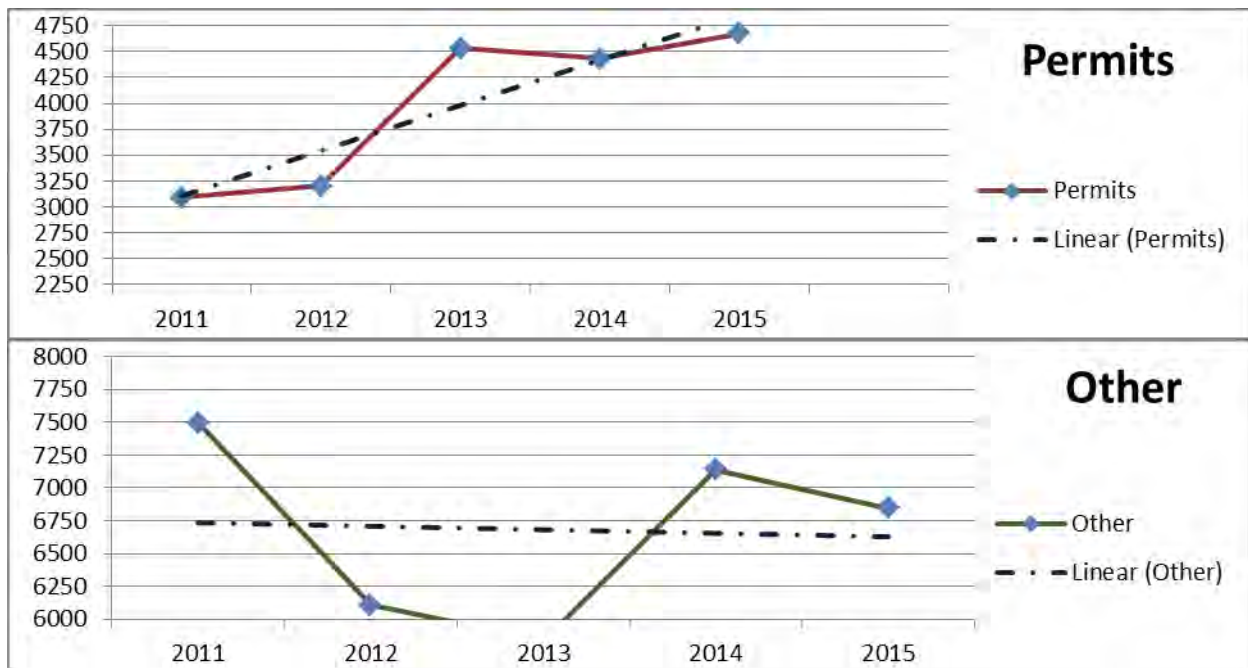
**\* WFIRS (Wyoming Fire Incident Reporting System) information is incomplete for the 2015 calendar year due to an unexpected loss of data. This information is being recovered and will be reported at a later date. \***

### Electrical inspections 2013-2015

	2013	2014	2015
<b>Plan Review</b>	3036	2954	3261
<b>Permits</b>	4531	4433	4752
<b>Other</b>	5831	7140	6928

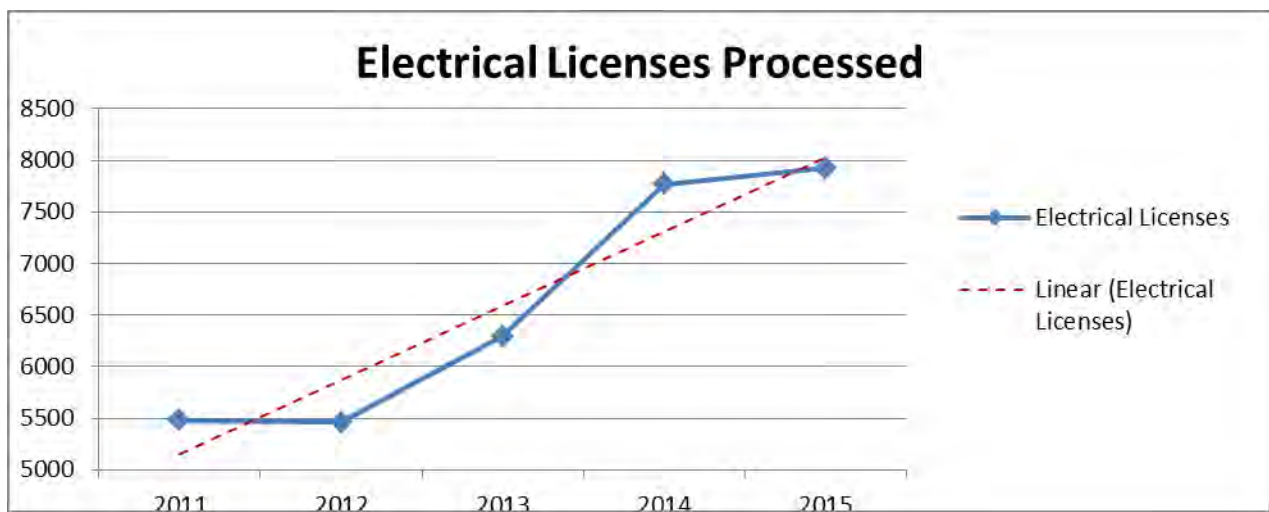
The table above depicts the types of electrical inspections and how many inspections were accomplished in 2013, 2014 and 2015.





The graphs above depict a comparison of electrical inspections conducted from 2011-2015.

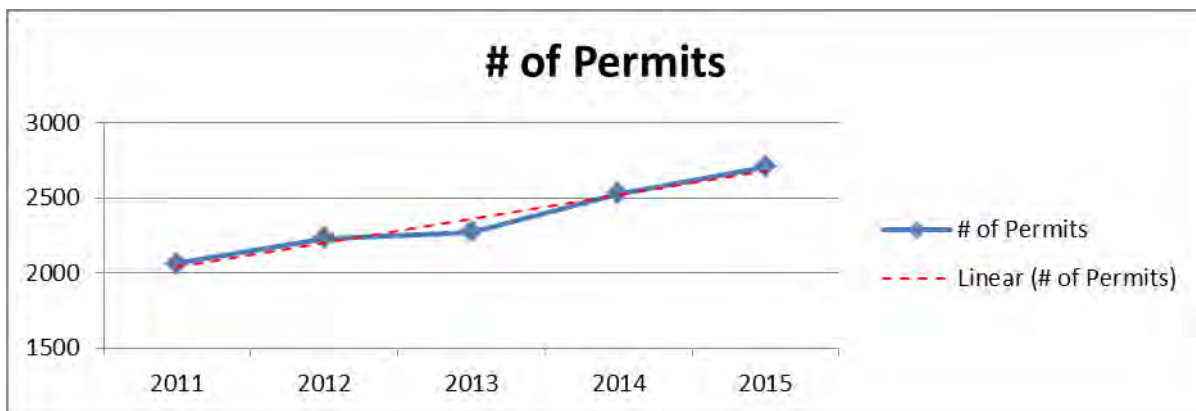
### Professional Electrical Licenses' Issued 2011-2015





The graphs above depict the number of electrical license processed and issued for the period 2011-2015.

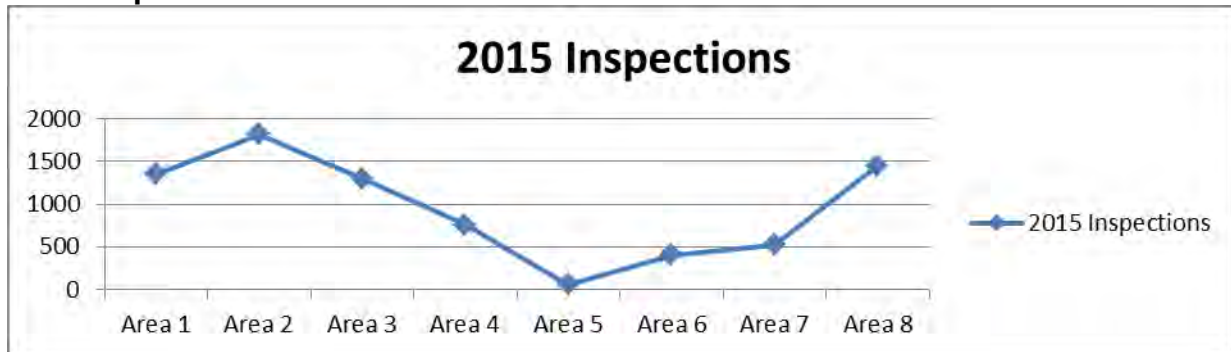
### Electrical Wiring Permits Issued 2011-2015



The graph above depicts the number of wiring permits issued for the period 2011-2015.

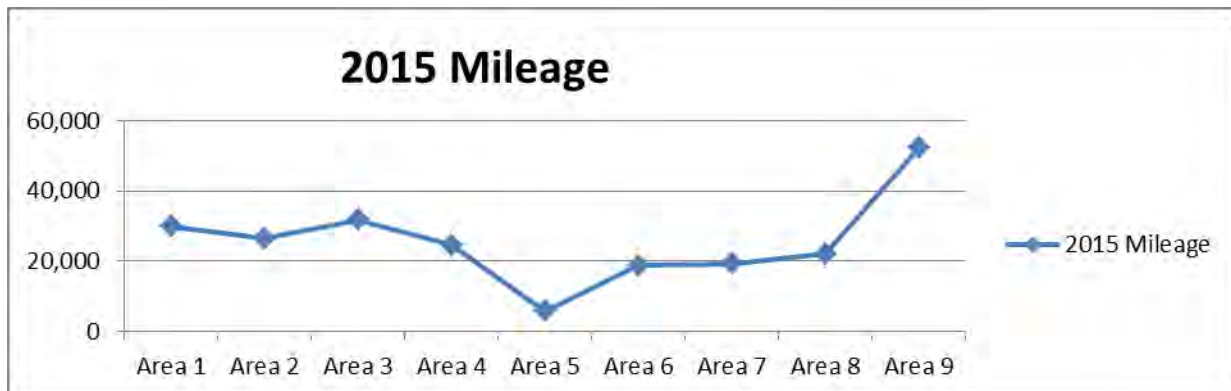
## Electrical Inspection's by Area & Miles Traveled in 2015

### Area Inspections



The above graph indicates the number of inspections conducted in each area for the year 2015.

### Area Mileage



The above graph indicates the the mileage driven in the given areas for 2015.

Area 1- Park, Big Horn and Washakie

Area 2- Sheridan and Johnson

Area 3- Converse, Niobrara, Goshen and Platte

Area 4- Laramie, Albany and Carbon

Area 5- Sublette and Sweetwater (This position was vacant for 9 months)

Area 6- Lincoln and Uinta

Area 7- Fremont and Hot Springs

Area 8- Crook, Weston and Wright

Area 9- Licensing investigator



# Department of Fire Prevention & Electrical Safety

## Organizational Chart

