City of Charleston Mission Statement

To preserve and enhance the quality of life of the citizens of the City of Charleston.

Values

Citizens

We value our diversity and are committed to treating every resident with respect, honesty and courtesy.

Public Safety

We value every citizen’s safety and understand that safe public spaces and neighborhoods are essential to our quality of life.

Quality Services

We value providing high quality municipal services at the lowest possible cost to our residents.

Physical Place

We value our unique natural resources, our man-made environment, public realm and neighborhoods, and we understand how our physical place affects each resident’s quality of life. We will work with others to increase the sustainability of our physical place.

Regional Partnerships

We value working with other government entities within our region to sustain and improve the quality of life for all citizens.
The Honorable Mayor John J. Tecklenburg seated at desk.

Council members seated from left to right: Robert M. Mitchell-District 4, Kathleen G. Wilson-District 12, F. Gary White, Jr. -District 1, and Marvin D. Wagner-District 5

Council members standing from left to right: A. Peter Shahid, Jr. -District 9, William Dudley Gregorie-District 6, Michael S. Seekings-District 8, Rodney Williams-District 2, Dean C. Riegel-District 10, William A. Moody, Jr. -District 11, James Lewis, Jr. –District 3, and Perry K. Waring-District 7
Letter from the Interim Fire Chief

On behalf of the 359 dedicated and professional men and women of the Charleston Fire Department, I am honored to present the 2016 Charleston Fire Department Annual Report. This report is a window into the deep commitment the members of the CFD demonstrate every hour of the day to fulfilling the mission of protecting the nearly five million residents and visitors to our historic and enchanting city.

2016 reflected our first full year as a CFAI accredited and ISO Class 1 fire department. The members of the department did these achievements and the community justice by working diligently in 2016 to complete the increasing level of professionalism required by the two recognitions. The department also convened representatives from all elements of the service and developed its second edition strategic plan. This exercise further fostered the desire to maintain excellence at every level. The roadmap defined by accreditation, ISO and the strategic plan, coupled with the ardor of a workforce dedicated to service, makes the delivery of this report all the more inspiring to share.

The Charleston Fire Department completed its 134th year of service to the Charleston community in 2016. As the department enters its 135th year, this report proudly reinforces that the members stand ready to protect 24 hours a day, 7 days a week, 365 days a year.

John B. Tippett, Jr.
Interim Fire Chief
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CHARLESTON
FIRE DEPARTMENT

VISION
As the Charleston Fire Department strives to maintain a reputation of exceptional service delivery, it is our vision that, by 2021, we shall be widely known for Service, Commitment, Community, Integrity and Professionalism in the provision of world-class service during a time of transition and transformation.

Charleston Fire Department will enhance workforce development and realize greater stakeholder satisfaction through ever-improving and transparent communications practices.

From industry best practices, we seek to implement cutting-edge training that supports an enhanced emergency response program for the community.

Delivery of a comprehensive community risk reduction program and enriched public outreach will further solidify our strong commitment to the community. Citizens and visitors alike will have a protected place to live and work as a result of our department’s highly-trained and appropriately equipped personnel serving from safe and well distributed facilities.

By exceeding the needs and expectations of our stakeholders, delivering our mission, living our values, and accomplishing our goals, we shall bring this vision to fruition.

<table>
<thead>
<tr>
<th>Emergency Response Program</th>
<th>Workforce Development</th>
<th>Resource Allocation Plan</th>
<th>Community Risk Reduction</th>
<th>Training</th>
<th>Communications</th>
<th>Public Outreach</th>
</tr>
</thead>
</table>

MISSION
The Charleston Fire Department protects and serves our community through professional delivery of prevention, outreach, and emergency response services.

VALUES
Service - Provide safe, timely, and efficient response to our community.
Commitment - Duty and responsibility to our community and members of the organization.
Community - Dedicated to involving and including our citizens.
Integrity - Being honest, respectful and loyal to our community and peers.
Professionalism - Achieve excellence through progressive and courteous service.
Department Historical Overview

1784 - Hand in Hand Fire Company was organized. The company consisted of a bucket brigade
1801 - Charleston Fire Company of Axemen formed, purchasing the first hand engine company
1816 - Eagle Fire Company
1819 - Vigilant Fire Company
1826 - Phoenix and Charleston Fire Companies
1829 - Aetna Fire Company
1838 - German Fire Company
1839 - Marion Fire Company
1840 - Palmetto Fire Company
1842 - Hope Fire Company
1849 - Washington Fire Company
1861 - First steam fire engine purchased by the Charleston Fire Company of Axemen
1861 - Most devastating firestorm in city’s history. Caused $7,000,000 in damage (Equal to $182,010,697 in 2015)
1882 - Mayor William A. Courtenay organized the paid Charleston Fire Department and disbanded the volunteers.
1905 - First automobile purchased to replace the fire chief’s horse and buggy
1910 - First motorized fire engine purchased
1974 - Fire department switched from a 24 hours on duty/24 hours off duty work schedule to a 24 on/48 off work schedule
1989 - Hurricane Hugo devastated the City of Charleston
1991 - Albright & Wilson Americas Inc. chemical plant explosion. Resulted in the formation of the Charleston Fire Department Hazardous Materials Response Team
2007 - Sofa Superstore Fire. Resulted in the deaths of nine Charleston Firefighters and led to sweeping changes for the department.
2010 – The Fire Marshal Division was reinstated as a result of the Sofa Superstore Fire
2015 - Charleston Fire Department receives a Class 1 Public Protection Class (PPC) rating in May, and became an internationally accredited fire department in August

Charleston Fire Chiefs

Frank L. O’Neill (1882-1894)
O. G. Marjenhoff (1894-1906)
Louis Behrens (1907-1932)
John H. Wohlers (1933-1942)
George W. Stout (1942-1943)
Norman G. Olsen (1943-1957)
Fred Shokes (1958-1967)
Wilmot E. Guthke (1967-1992)
Thomas Carr (2008-2012)
John Tippett (Interim 2017)
Fire Department Highlights 2016

- Developed the Charleston Fire Department’s (CFD) 2016-2021 Strategic Plan
- Maintained accredited status from the Center for Public Safety Excellence by receiving approval of our first Annual Compliance Report.
- Completed and published the CFD’s first Annual Report for the 2015 calendar year.
- Held the first CFD Awards and Recognition Ceremony
- Implemented TeleStaff software to better manage daily staffing of companies and personnel.
- Placed Squad 101 into service June of 2016. Unit is staffed with two personnel during peak hours to enhance EMS First Response capabilities and increase the reliability of engine companies.
- Developed a field decontamination policy that will be implemented in 2017 to positively impact the health and wellness of our firefighters.
- Replaced Tower 102 with a Pierce 100 foot rear mount tower ladder with pump and tank.
- Replaced Engine 117 with a new Pierce pumper.
- took delivery of its second tillered ladder truck to replace the current Ladder 101.
- Broke ground on a new fire station in the Carolina Bay Subdivision (Fire Station 14).
- Equipped all apparatus with Narcan intranasal spray to treat patients suffering from apparent drug overdose.
- Awarded fiscal year 2016 Port Security Grant to purchase new monitoring equipment for the HAZMAT Team.
- Added nine new members to HAZMAT Team.
- All 34 members of the HAZMAT Team became part of the WMD Regional Response Team.
- All department personnel in operations received the Incident Response to Terrorist Bombings class as part of the annual HAZMAT Operations refresher training.
- CFD Honor Guard participated in 25 events in 2016.
- Marine Division members completed training in water rescue operations, rope rescue, in-water self-survival, and use of dry suits.
Fire Department Highlights 2016 (Continued)

- The Technical Rescue Team completed their annual Operational Readiness Exercise to maintain deployable status with the South Carolina Urban Search and Rescue Task Force Program for the third straight year.

- The Technical Rescue Team received grant funding for support of team operations.

- Technical Rescue Team members staffed squad units during Hurricane Mathew, conducting windshield surveys, road clearing, and resident welfare checks.

- 60 members of the department completed Wildland Urban Interface training class.

- Five members of the department’s Wildland Team became “Red Card Certified” and are now deployable nationwide to combat wildfires.

- Reduced at fault vehicle collisions by 32% from the previous year. Non at fault collisions were reduced by 44%.

- Delivered the pilot class for Officer Development Class II. 33 command level personnel from the CFD, St. Johns, and North Charleston Fire Departments attended the class.

- Fire Marshal Division received over 90 positive comments from the community for providing excellent customer service in 2016.

- Deputy Fire Marshals Fluegge and Smith were selected for the City’s third quarter Customer Service Initiative award.

- Produced the first video featuring a special operations team highlighting the CFD Honor Guard.

- Instituted a new standardized hose load for pre-connected handlines.

- Took part in 30 multi-jurisdictional training drills, hosting six.

- The Training Division conducted live fire training for all personnel using the vehicle and propane tank props supported by SCE&G.

- Placed ballistic vests on all frontline apparatus to enhance firefighter safety when responding to violent incidents.

- Up fitted all stations with dormitory lighting feature module of the Purvis Station Alerting System to enhance firefighter safety.
Budget & Finance

2016 Approved Fire Department Budget

Fire Division: $27,066,423
Fire Training Division: $1,122,238
Fire Marshal Division: $903,439
Total Fire Department Budget: $29,092,100
*Note: Apparatus purchases are not included.

Authorized Full-time Employees (FTEs)

Uniformed/Sworn Firefighters: 335
Civilians/Non-sworn: 24.5
### 2016 Incident Responses / Demand for Services

The Charleston Fire Department responded to 23,057 calls for service in 2016. Rescue and Emergency Medical Service (EMS) incidents accounted for 55% of the call volume.

<table>
<thead>
<tr>
<th>General Categories of Incident Types</th>
<th>Number of Incidents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fires</td>
<td>699</td>
</tr>
<tr>
<td>Overpressure, Rupture, No Fire</td>
<td>40</td>
</tr>
<tr>
<td>Rescue, EMS</td>
<td>12,616</td>
</tr>
<tr>
<td>Hazardous Condition</td>
<td>612</td>
</tr>
<tr>
<td>Service Call</td>
<td>1,128</td>
</tr>
<tr>
<td>Good Intent Call</td>
<td>5,060</td>
</tr>
<tr>
<td>False Alarm &amp; False Call</td>
<td>2,728</td>
</tr>
<tr>
<td>Severe Weather, Natural Disaster</td>
<td>43</td>
</tr>
<tr>
<td>Special Incident</td>
<td>131</td>
</tr>
<tr>
<td>Total Incidents</td>
<td>23,057</td>
</tr>
</tbody>
</table>

![2016 Incident Percentages by NFIRS Typing Category](image1)

### 2016 Call Demand by Time of Day

![2016 Call Demand by Time of Day](image2)

### 2016 Loss/Save Report

- **Loss**: 2%
- **Saved**: 98%
2016 Incident Response Performance

Response time performance is measured in accordance with the requirements of the Center for Public Safety Excellence for the purpose of maintaining accreditation and improving response times. Response measurements are taken in each of the following areas and measured against the benchmark:

**Benchmark:** nationally considered best practice that is used to compare actual performance. The benchmark is a goal that the department is trying to reach or meet.

**Call Process:** amount of time it takes for the dispatch center to answer the 911 call and dispatch the appropriate resources.

**Turnout Time:** amount of time it takes for personnel and apparatus to get en route to the call once dispatched.

**Travel Time First Unit:** amount of time it takes for the first unit to drive to the scene.

**First Unit Arrival:** amount of time it takes for the first unit to arrive on scene from the time the call was received.

**ERF (Effective Response Force):** time it takes for a predetermined sufficient amount of personnel to arrive on scene to mitigate the incident effectively.

Due to the low number of structure fires occurring in rural areas (less than 10) within the city limits, data was insufficient for calculating response time elements for 90% performance.

**Urban:** land area with a population density of at least 2,000 people per square mile.

**Moderate Risk Structure Fires:** fires occurring in single family residential buildings.

**High Risk Structure Fires:** fires occurring in multi-family residential buildings, commercial businesses, manufacturing facilities, schools, churches, etc.

### 2016 90% Performance for All Emergency Medical Calls Compared to Benchmark

<table>
<thead>
<tr>
<th></th>
<th>Call Processing</th>
<th>Turnout Time</th>
<th>Travel Time 1st Unit</th>
<th>First Unit Arrival</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benchmark</td>
<td>2:00</td>
<td>1:20</td>
<td>4:00</td>
<td>7:30</td>
</tr>
<tr>
<td>Performance</td>
<td>1:34 (12,282 Calls)</td>
<td>1:44 (11,828 calls)</td>
<td>6:52 (12,123 calls)</td>
<td>8:57 (12,305 Calls)</td>
</tr>
</tbody>
</table>

### 2016 Busiest Companies

<table>
<thead>
<tr>
<th>Unit</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battalion 103</td>
<td>1942</td>
</tr>
<tr>
<td>Engine 108</td>
<td>2418</td>
</tr>
<tr>
<td>Ladder 104</td>
<td>2042</td>
</tr>
<tr>
<td>Squad 101</td>
<td>1962</td>
</tr>
</tbody>
</table>

### 2016 90% Performance for Structure Fire Response Compared to Benmarks

<table>
<thead>
<tr>
<th>Benchmark Urban Moderate Risk</th>
<th>Call Process</th>
<th>Turnout Time</th>
<th>Travel Time 1st Unit</th>
<th>1st Unit Arrival</th>
<th>ERF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Moderate Risk (38 Calls)</td>
<td>2:00</td>
<td>1:30</td>
<td>4:00</td>
<td>7:30</td>
<td>11:30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Benchmark Urban High Risk</th>
<th>Call Process</th>
<th>Turnout Time</th>
<th>Travel Time 1st Unit</th>
<th>1st Unit Arrival</th>
<th>ERF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban High Risk (31 Calls)</td>
<td>2:00</td>
<td>1:30</td>
<td>4:00</td>
<td>7:30</td>
<td>11:30</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Benchmark Urban Moderate Risk</th>
<th>Call Process</th>
<th>Turnout Time</th>
<th>Travel Time 1st Unit</th>
<th>1st Unit Arrival</th>
<th>ERF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benchmark Urban High Risk</td>
<td>Call Process</td>
<td>Turnout Time</td>
<td>Travel Time 1st Unit</td>
<td>1st Unit Arrival</td>
<td>ERF</td>
</tr>
<tr>
<td>Urban High Risk (31 Calls)</td>
<td>2:00</td>
<td>1:30</td>
<td>4:00</td>
<td>7:30</td>
<td>11:30</td>
</tr>
</tbody>
</table>
Charleston Fire Department 2017 Organizational Chart
Charleston Fire Department Command Staff

The Command Staff is focused on carrying out the mission, vision, values of the agency by providing oversight and management of the department on a day-to-day basis acting as representatives of the fire chief. They are responsible for the development of standard operating procedures, developing a yearly work plan, ensuring that personnel are provided with proper tools and equipment to perform their job, and to act as advisors to incident commanders during emergency situations. The Command Staff helps to maintain a proper span of control to ensure the organization’s efficiency.

Position
Currently
Vacant

Interim Fire Chief - Deputy Chief of Operations
John B. Tippett, Jr.

Miss Charleston 2016-2017, Whitney Loomis, visiting Fire Department Headquarters.

Deputy Chief of Training and Technical Services

Chief Fire Marshal
Mike Julazadeh

Administrative Services Manager
Cassandra McSwain
Charleston Fire Department Administrative Division

The Administrative Division is overseen by the fire chief and is managed by the Administrative Services Manager. The Administrative Division provides oversight of the department’s day-to-day operations including: implementation of written directives, accreditation, human resource functions, recruitment, retention, budget, finance, and purchasing.
Operations Division

The primary focus of the Operations Division is to protect the lives and property of the citizens and visitors of Charleston. This focus is maintained through a commitment to the health, wellness, safety, and operational readiness of the division’s personnel. The Operations Division is led by the Deputy Chief of Operations and three assistant chiefs. The deputy chief ensures 24/7 operational readiness and carries out the directives of the fire chief. One assistant chief provides day-to-day coordination of the three shifts, one assistant chief oversees the special operations section, and one assistant chief is assigned as the quality control officer for incident reporting.

Field operations are broken down into four geographic battalions. Each battalion contains three to seven individual companies that staff strategically located fire stations. The battalions are supervised by 12 battalion chiefs (four per shift, one of which serves as the shift commander) who command three shifts of captains, engineers, assistant engineers, and firefighters. Personnel are assigned to one of three working shifts (A, B, C). The shift schedule is a combination 24 hours on duty and 48 hours off duty. The department maintains four special operations groups for technically challenging incident response: Safety, HAZMAT, Marine, Technical Rescue and Wildland Urban Interface. Specialty areas are explained in the subsequent pages.

Assistant Fire Chiefs

Assistant Chief of Operations / Safety
Joseph Roberts

Assistant Chief of Special Operations
Jason Krusen

Assistant Chief of Quality Control
Raymond Lloyd

Rutledge Avenue and Sheppard Street Fire

Shift Commanders

A-Shift
Battalion 103
Battalion Chief
Richard Williams

B-Shift
Battalion 103
Battalion Chief
Forrest Cockcroft

C-Shift
Battalion 103
Battalion Chief
William Perez
Operations Division: Emergency Medical Response/Fire Suppression

The Charleston Fire Department provides fire suppression and emergency medical response using a myriad of equipment and fire apparatus. Equipment and apparatus are chosen based on the type of risk identified in the City of Charleston’s jurisdictional boundaries. All engine and ladder companies are equipped to perform fire suppression tactics and provide emergency medical care at the basic life support level of service. The Charleston Fire Department works cooperatively with Charleston and Berkeley County Emergency Medical Services to provide EMS care.

Light & Air Truck: Vehicle equipped with onboard air compressor for filling cylinders on scene, generator and light tower, along with on scene rehabilitation equipment.

Fire Pumper or Engine: Carries 750 gallons of water and is able to pump 1,500 gallons per minute when supplied from a fire hydrant or drafting. Carries a variety of equipment.

Water Tender: Used to transport water for fire fighting in areas that do not have hydrants. Carries 2,000 gallons of water and is able to quickly unload into a portable drop tank.

Tractor Drawn Aerial Ladder Truck: Capable of reaching the seventh floor of a building, provides steering capabilities over the rear wheels of the trailer for increased maneuverability. Typically referred to as a tillered ladder.

Tower Ladder: This apparatus is equipped with a platform at the end of its ladder to transport personnel and victims. Carries a variety of equipment to perform forcible entry, rescue/extrication, and perform fire suppression tasks.

Command Vehicle: Transports the battalion chief to the scene of emergencies and provides equipment necessary to command the incident scene from start to finish.
Operations Division: Safety Division

The Safety Division ensures that the Charleston Fire Department meets or exceeds industry best practices for providing a safe working environment for employees. The division is responsible for promoting safety and reducing employee exposure to needless risk, tracking all personnel injuries and vehicle collisions, coordinating annual physicals for firefighters, and performing safety inspections of equipment, vehicles, and fixed facilities.

The Health and Safety Officer is responsible for this division and reports to the Deputy Chief of Operations. He is assisted by three Deputy Safety Officers, one per shift. The Health and Safety Officer reports to the Deputy Chief of Operations. All four members of the Safety Division are certified safety officers through the Fire Department Safety Officer’s Association (FDSOA). Battalion Chief Kenneth Jenkins was recently promoted as the Health and Safety Officer over the division.

### 2016 Fire Department Safety Statistics

<table>
<thead>
<tr>
<th></th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injuries/Exposure</td>
<td>23</td>
<td>72</td>
<td>159</td>
<td>96</td>
</tr>
<tr>
<td>Vehicle Collisions</td>
<td>28</td>
<td>40</td>
<td>49</td>
<td>39</td>
</tr>
<tr>
<td>Vehicle Safety Inspections</td>
<td>70</td>
<td>73</td>
<td>78</td>
<td>81</td>
</tr>
<tr>
<td>Fixed Facility Inspections</td>
<td>19</td>
<td>19</td>
<td>19</td>
<td>19</td>
</tr>
<tr>
<td>Annual Physicals Conducted</td>
<td>249</td>
<td>286</td>
<td>305</td>
<td>302</td>
</tr>
</tbody>
</table>

Amherst Street Fire
Crews conducting a “Hot-wash” review after the fire has been extinguished.
The Charleston Fire Department operates a FEMA Type II Hazardous Materials Response Team with 34 personnel. The Team is comprised of personnel distributed throughout the department’s three shifts. A four-person crew from Engine 109 cross staffs the response vehicle, HAZMAT 101. Cross staffing occurs when crews staff a primary response vehicle and switch over to staff a specialized vehicle when it is needed for specific emergency incidents. Personnel on the team are certified HAZMAT Technicians, Clandestine Lab Technicians, and Weapons of Mass Destruction (WMD) Technicians. Members of the team also serve on the Regional Response Team for Hazardous Materials Response and WMD incidents. The team is subject to callout on a regional and statewide basis.

The team is currently led by Captain Herbert Scott, who reports to the Assistant Chief of Special Operations. The HAZMAT Team Commander is assisted by a Deputy Commander, HAZMAT Safety Officer, and HAZMAT Training Officer.

In 2016 the HAZMAT Team responded to 303 calls for service.
Members of the Charleston Fire Department and the HAZMAT Team operating on scene of a suspicious package near MUSC.

HAZMAT 101: Carries specialized equipment for mitigating hazardous materials incidents. Equipment includes: air/gas monitors, radiation detectors, protective clothing, leak stop devices, and decontamination equipment.
The Charleston Fire Department Technical Rescue Program/Team exists to provide emergency response to a variety of likely technical rescue incidents occurring within the City of Charleston’s jurisdiction and the State of South Carolina. The team has the capability to mitigate the following types of incidents: high and low angle rope rescue, trench rescue, confined space rescue and standby, structural collapse, advanced vehicle extrication, machinery extrication, urban and rural land search, storm response, and support operations for large scale events.

Captain Anthony Morley leads the Technical Rescue/USAR Program and reports to the Assistant Chief of Special Operations. The USAR Team Commander is assisted by a Deputy Commander, USAR Safety Officer, and USAR Training Officer.

Members of the Technical Rescue Team instructing department personnel in rescue operations dealing with persons trapped in stalled elevators.

Members of the CFD and its Technical Rescue Team (TRT) working to free a person entrapped by a wall collapse at a construction site near Church and Chalmers Streets.
Members of the Technical Rescue/USAR team along with South Carolina Task Force 3 participate in an Operational Readiness Exercise (O.R.E.).

Charleston’s Technical Rescue Trailer is equipped to respond to a variety of incidents involving structural collapse. The trailer contains: cutting, wall breaching, shoring, and heavy lifting equipment.
Operations: Special Operations - Marine Division

The Charleston Fire Department Marine Division provides a professionally trained response team to maritime emergencies in the greater Charleston area. This includes, but is not limited to, shoreline, near shore and off shore areas of the Charleston Harbor.

The Louis Behrens named after the third chief of the fire department (call sign Marine 101), is a 36’ Metal Craft Firestorm Fireboat. The vessel is equipped with a 3,000 GPM fire pump that was delivered to Charleston and placed in service late 2012. Marine 101 is crossed staffed by Engine Company 102 with a minimum crew of four trained maritime personnel.

The Marine Division is comprised of 25 members, 11 certified/qualified M101 pilots, 18 certified as USCG-OUPV licensed Captains. The Marine Division is led by Captain Rob Fulmer who reports to the Assistant Chief of Special Operations. Members of the Marine Division as well as other Charleston Fire Department personnel participate in the Charleston County Marine Incident Response Team (MIRT).

SEA TIME

The Marine Team spent a total of 5,000 hours underway in 2016, performing various missions that included: training, emergency response, and harbor safety.

TRAINING

Each member of the Marine Team averaged 200 hours of marine training in 2016.
Marine 101 Incident History
Comparison by Year

Marine 101 Operating at a boat fire on the Ashley River

Marine 101 and Auto Aid Crews working fire at St. John’s Marina

2016 Apparatus Response Marine 101

Marine 101 Operating at a boat fire on the Ashley River
Operations Division: Special Operations - Wildland Urban Interface

In 2016, the department established its first Wildland Team to address the risk of fires occurring in areas of the city where developments adjoin forests. The team has the capability to provide for mitigation of the following types of incidents; wildland fire extinguishment and containment, structural triage, and assistance to federal, state and local agencies. The team is developing a skill set and training responders in the department to be better prepared to operate in the Wildland Urban Interface (WUI) areas of the city as it continues to grow into the suburban areas.

The CFD Wildland Team has twelve team members, five of which have obtained US Forestry Service Red Card Certification. Calls will be responded to using on-duty personnel, and prescribed burns and management tasks will utilize off-duty personnel when available. There is some basic equipment and PPE that is located on Brush 101, Brush 102 and designated Wildland stations 17, 18, and 20. Station 21 will also receive equipment once brought online in 2017.

Currently the team is lead by Captain Zsolt Szoke of Station 18 located on Daniel Island.
**Operations Division: Special Operations - Honor Guard**

The Honor Guard is comprised of 21 trained personnel that work together as a ceremonial unit, and led by Captain David Griffin. Their primary role is to provide funeral honors for fallen emergency responders as well as stand guard at their calling hours. The Charleston Fire Department Honor Guard also serves as the “guardians of the colors” as they escort and display the national flag at ceremonial occasions including departmental graduations, departmental promotions, and community, statewide, and national events.

Members of the Honor Guard are required to attend training and ceremonies to remain active with the team. Each October, four members travel to Emmitsburg, Maryland to participate in the National Fallen Firefighters Memorial Weekend at the National Fire Academy. They work in concert with other emergency service honor guards to honor fallen firefighters. The Honor Guard deploys approximately 20-25 times per year.

**Peer Fitness Training Program**

In its continued effort to reduce on the job injuries and improve the health and wellness of its personnel, the Charleston Fire Department has adopted and implemented a Peer Fitness Training Program. A team of personnel has been certified as peer fitness trainers to standards established in the Wellness Fitness Initiative (WFI). The WFI is a joint venture between the International Association of Fire Fighters (IAFF) and the International Association of Fire Chiefs (IAFC), in collaboration with the American Council of Exercise (ACE). The WFI seeks to promote wellness over time to maintain fit, healthy, and capable firefighters throughout their career and into retirement. The fire department’s Health and Wellness program works with the City of Charleston’s Wellness Coordinator.
Training & Technical Services Division

The Training & Technical Services Division is an integral part of the CFD. The division is overseen by a Deputy Chief, and is assisted by Assistant Chief Christopher Vanhoy along with two battalion chiefs. The division is responsible for the research, development, and delivery of all training to the fire department whether it is annual recertification, recruit or new technology training in the field of fire or EMS.

In addition, the division also coordinates maintenance projects at the department’s 17 worksites, new station construction, renovations of existing facilities, and up fitting of automotive apparatus. Our fleet team maintains and repairs the department’s 22 front line response apparatus, reserve units, fire boat, as well as a fleet of emergency and non-emergency passenger vehicles.
Training & Technical Services Division: Training Division

The Training Division supports the Charleston Fire Department’s mission of preserving life and property. They do this by ensuring a level of professionalism in everything they do. Training staff provides training, education, and personal development opportunities to all of our firefighters and officers.

The Training Division is led by Training Director Robert Baldwin who reports to the Deputy Chief of Training and Technical Services. The department has a total of 38 South Carolina Fire Academy Certified instructors in its ranks. Six of the 38 are assigned to the Training Division, the remaining 32 work on the front line and serve in an adjunct instructor capacity on their days not on shift.

Members of the CFD participate in Live-Fire Training using the natural gas fed car fire simulator

![Graph showing 2016 Incumbent Training Hours: Total Hours Conducted by the Training Division](image)

![Graph showing 2016 Fire Department Total Training Hours Completed by Month](image)
In 2016, thirty recruits began a six month journey to become Charleston Firefighters. Twenty-three graduated successfully and now serve our community.

### 2016 Recruit Training Hours by Subject Area

<table>
<thead>
<tr>
<th>Subject Area</th>
<th>Number of Training Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire Training</td>
<td>482</td>
</tr>
<tr>
<td>Safety &amp; Survival</td>
<td>48</td>
</tr>
<tr>
<td>Hazardous Materials</td>
<td>48</td>
</tr>
<tr>
<td>Vehicle Extrication</td>
<td>16</td>
</tr>
<tr>
<td>Incident Command</td>
<td>16</td>
</tr>
<tr>
<td>Emergency Vehicle Driver</td>
<td>40</td>
</tr>
<tr>
<td>Emergency Medical Technician</td>
<td>266</td>
</tr>
<tr>
<td>Physical Fitness</td>
<td>89</td>
</tr>
</tbody>
</table>
Training & Technical Services Division: Technical Services

Technical Services oversees logistics, facility management, and fleet maintenance. This division is currently led by Battalion Chief Greg Chesher who reports to the Deputy Chief of Training and Technical Services. He has direct oversight of Technical Services Division’s daily operations. Logistics and fleet maintenance are divided into the following sections: fire apparatus maintenance/repair, general vehicle maintenance/repair, small engine maintenance/repair, facility maintenance/repair, and logistical needs such as facility supplies, uniforms, and personal protective equipment. Logistics and fleet maintenance are managed by a logistics coordinator and lead mechanic. Staff generally work Monday through Friday, but are subject to after-hours call back based on department needs.
**Technical Services: Logistics**

Logistics is responsible for ensuring that station repairs are completed in a timely manner. This section is also responsible for issuing and tracking of uniforms, personal protection equipment (PPE), loose tools and equipment, and issuing of supplies to maintain facilities. Logistics maintains a cache of replacement equipment and protective clothing.

**Technical Services: Fleet Services**

Fleet Services is comprised of Lead Mechanic Bill Palmer and two fire mechanics. These mechanics are certified Automotive Services Excellence (ASE) and Emergency Vehicle Technicians (EVT). Fleet services is responsible for ensuring that equipment, vehicles, and apparatus are kept mechanically sound and ready to respond to emergencies. Fleet services performs the maintenance on all small engine powered equipment, equipment operated through electrical power supply as well as hydraulic equipment. Fleet Services oversees annual third-party testing of aerial ladders, ground ladders, and fire pumps on apparatus.

*Charleston Fire Department Mechanic completing maintenance on Tender 101.*
Technical Services: SCBA Maintenance Program

Self-Contained Breathing Apparatus (SCBA) are worn by all fire department personnel operating in atmospheres that are considered to be Immediately Dangerous to Life and Health (IDLH). The SCBA Maintenance Program ensures: the department has an adequate quantity of properly trained SCBA Technicians, an adequate supply of approved SCBA replacement parts on-hand, and all SCBAs are tested at least once annually, and repaired as needed.

The Charleston Fire Department has 10 personnel certified to test and repair SCBAs. The program is conducted by using personnel when they complete their normal work shift.

Technical Services: PPE Maintenance Program

The Personal Protective Equipment (PPE) Program works in conjunction with the SCBA Maintenance Program. Members working in this program are also cross-trained as SCBA Repair Technicians. This program performs annual testing of the protective clothing ensemble worn by firefighters. The ensemble provides limited thermal protection from elevated temperatures encountered during firefighting operations. Technicians clean, inspect, and repair components of the ensemble at least annually or as needed.

This program ensures that all personnel have proper protection to perform firefighting operations and reduces the downtime of gear being out of service. This program has increased efficiency by having in-house personnel trained to perform testing and repairs, virtually eliminating the need to send the gear off to an outside vendor for routine cleaning, inspection, and repair.

2016 SCBA Maintenance Statistics

- Turnaround time for repairs 24-48 hours
- 283 SCBAs Flow Tested
- 241 SCBA repairs made
- 54 air cylinders repaired
- 6 face pieces repaired
- 1500 work hours logged by SCBA Technicians

2016 PPE Maintenance Statistics

- 914 sets of Turnout Gear inspected
- 914 miscellaneous repairs made to Turnout Gear
- 75 sets of Turnout Gear Cleaned in addition to being inspection
- 133 sets of turnout gear purchased to replace gear that failed testing
- Average turn around time to clean inspect and repair gear is approximately 48 hours
Fire Marshal Division

The Fire Marshal Division was created in July 2010 and the responsibilities of the Fire Code Official were transferred from the Building Official to the newly created fire marshal position. This newly formed division is striving to build a robust fire prevention program that includes the elements of fire code enforcement, fire plan review, fire and arson investigation, and community risk reduction education. Organizing these elements under a fire marshal allows the department to expand its community risk reduction mission and promote preventative strategies to preserve our historic community.

The mission of the Fire Marshal Division is to preserve life and property through community safety education, effective fire inspections, detailed fire plan reviews, and comprehensive fire investigations. Our vision is to be a model agency in fire prevention, community engagement and risk reduction while promoting firefighter, citizen, and community safety and property preservation.

The division is currently responsible for conducting fire safety surveys of new and existing buildings, conducting business license fire safety inspections, reviewing plans for fire code compliance, conducting fire and arson investigations, and coordinating a variety of community risk reduction education programs. The division manages several elements for the department including: public information requests, coordinates the pre-fire plan and hydrant maintenance programs, manages public education supplies, and news releases. Additionally, the community educator serves as the Public Information Officer (PIO) and provides timely educational messages for the community while managing our media contacts and multimedia outreach.

Deputy Fire Marshal
Rick Anewalt

Deputy Fire Marshal
Rick Fluegge

Deputy Fire Marshal
Josh Smith

Deputy Fire Marshal Division Organizational Chart
Community Outreach and Education Activities

Smoke alarm blitz with American Red Cross in the North Central Neighborhood

### 2016 Fire Code Enforcement and Fire Plan Review Summary

<table>
<thead>
<tr>
<th></th>
<th>Inspections</th>
<th>Re-Inspections</th>
<th>Plan Reviews</th>
</tr>
</thead>
<tbody>
<tr>
<td># Completed</td>
<td>3,006</td>
<td>1,983</td>
<td>2,261</td>
</tr>
</tbody>
</table>

### Type of Community Event

<table>
<thead>
<tr>
<th>Event</th>
<th>Count</th>
<th>Adults</th>
<th>Children</th>
<th>Smoke Alarms</th>
<th>Car Seats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apparatus Tours</td>
<td>76</td>
<td>167</td>
<td>296</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Neighborhood Canvas (After the Fire)</td>
<td>28</td>
<td>226</td>
<td>96</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>Neighborhood Canvas (Pre Fire)</td>
<td>233</td>
<td>1642</td>
<td>2279</td>
<td>120</td>
<td>0</td>
</tr>
<tr>
<td>Car Seat Event (Checkpoint)</td>
<td>2</td>
<td>25</td>
<td>10</td>
<td>0</td>
<td>24</td>
</tr>
<tr>
<td>Car Seat Install</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Career Day</td>
<td>2</td>
<td>14</td>
<td>60</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Community Outreach Event</td>
<td>94</td>
<td>5670</td>
<td>4651</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Detector Install, Inspection, or Battery Change</td>
<td>128</td>
<td>335</td>
<td>57</td>
<td>285</td>
<td>0</td>
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<tr>
<td>Display or Both</td>
<td>12</td>
<td>1010</td>
<td>766</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Emergency &amp; Response Training - Residents</td>
<td>2</td>
<td>40</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Parade or Festival</td>
<td>9</td>
<td>250</td>
<td>210</td>
<td>0</td>
<td>0</td>
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<tr>
<td>Safety Education - Information Distribution</td>
<td>7</td>
<td>52</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Safety Presentation - Business</td>
<td>1</td>
<td>10</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Safety Presentation - Business Association</td>
<td>1</td>
<td>60</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Safety Presentation - General</td>
<td>5</td>
<td>90</td>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Safety Presentation - Neighborhood Association</td>
<td>7</td>
<td>85</td>
<td>0</td>
<td>7</td>
<td>0</td>
</tr>
<tr>
<td>Safety Presentation - School</td>
<td>47</td>
<td>398</td>
<td>2850</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>Safety Presentation - Seniors</td>
<td>4</td>
<td>52</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Station Tour</td>
<td>73</td>
<td>232</td>
<td>349</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>YFQ (Juvenile Firesetter Intervention)</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>733</strong></td>
<td><strong>10361</strong></td>
<td><strong>11645</strong></td>
<td><strong>436</strong></td>
<td><strong>28</strong></td>
</tr>
</tbody>
</table>
Fire Investigation Activities

Fire Investigators searching through debris looking for evidence to determine origin and cause of a fire on Hanover Street

2016 Fires by Cause of Ignition

<table>
<thead>
<tr>
<th>Cause of Ignition</th>
<th>Number of Fires</th>
</tr>
</thead>
<tbody>
<tr>
<td>Act of Nature</td>
<td>11</td>
</tr>
<tr>
<td>Under Investigation</td>
<td>62</td>
</tr>
<tr>
<td>Undetermined after Investigation</td>
<td>63</td>
</tr>
<tr>
<td>Cause, Other</td>
<td>14</td>
</tr>
<tr>
<td>Failure of Equipment or Heat Source</td>
<td>39</td>
</tr>
<tr>
<td>Intentional</td>
<td>44</td>
</tr>
<tr>
<td>Unintentional</td>
<td>143</td>
</tr>
</tbody>
</table>

2016 Fire Marshal Division Investigations Status Report

- **Closed with Exceptional Clearance**: 1%
- **Investigations Closed**: 70%
- **Investigations Closed with Arrest**: 4%
- **Investigations Inactive**: 1%
- **Investigations Open**: 24%

Fire Investigator taking scene photographs to determine origin and cause of a fire
Fire Department Personnel Statistical Information

2016 Fire Department Demographics by Race

2016 Demographics by Years of Service

2016 Fire Department Personnel by Position

<table>
<thead>
<tr>
<th>Position</th>
<th>Number of Personnel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recruit Firefighters</td>
<td>16</td>
</tr>
<tr>
<td>Firefighters</td>
<td>118</td>
</tr>
<tr>
<td>Assistant Engineers</td>
<td>36</td>
</tr>
<tr>
<td>Engineers</td>
<td>59</td>
</tr>
<tr>
<td>Captains</td>
<td>63</td>
</tr>
<tr>
<td>Chief Officers</td>
<td>19</td>
</tr>
<tr>
<td>Civilian Staff</td>
<td>12</td>
</tr>
</tbody>
</table>
## Charleston Fire Department: 2016 Promotions

<table>
<thead>
<tr>
<th>Deputy Chief</th>
<th>Assistant Engineers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mark Davis</td>
<td>Trevor Ashe</td>
</tr>
<tr>
<td>Assistant Chief</td>
<td>Evan English</td>
</tr>
<tr>
<td>Joseph Roberts</td>
<td>Travis O’Neill</td>
</tr>
<tr>
<td>Jason Krusen</td>
<td>Michael Sullivan</td>
</tr>
<tr>
<td>Shift Commander</td>
<td>Ryan Criscio</td>
</tr>
<tr>
<td>Forrest Cockcroft</td>
<td>Tristan Davidson</td>
</tr>
<tr>
<td>William Perez</td>
<td>Clinton Donellan</td>
</tr>
<tr>
<td>Captains</td>
<td>Justin Kahle</td>
</tr>
<tr>
<td>Thomas J. Axson</td>
<td>Joshua Murphy</td>
</tr>
<tr>
<td>Edward Henry</td>
<td>Ranoslav Petrovski</td>
</tr>
<tr>
<td>Michael Campbell</td>
<td>Parker Shanks</td>
</tr>
<tr>
<td>Lane Warren</td>
<td></td>
</tr>
<tr>
<td>Michael Chandler</td>
<td></td>
</tr>
<tr>
<td>Jason Evans</td>
<td></td>
</tr>
</tbody>
</table>

Battalion Chief Joseph Roberts receiving his promotion to the rank of Assistant Chief.

Engineers (left – right) Lane Warren, Michael Chandler, and Jason Evans receiving their promotion to Captain at CFD Headquarters.
Charleston Fire Department: 2016 Service Awards

Captain William Taylor recipient of the 2016 Knights of Columbus Firefighter of the Year Award.

Medal of Gallantry
Rescue at 44 Drake Street
Captain Rob Fulmer, E102B
FF Quentin Myers, E102B
FF Steven Azzarella, (Working E102B)
FF/PM Michael Diaz, E106B
FF Tyler Kurkiewicz, E106B

Fire Chief’s Award of Excellence
Battalion Chief Gregory Chesher

Chief Officer of the Year
Battalion Chief Robert Baldwin

Captain of the Year
Captain James Richardson

Engineer of the Year
Engineer Michael Calabro

Firefighter of the Year
Asst. Engineer Tristan Davidson

Community Outreach
Asst. Fire Marshal Stephen Mantie
Engine 109 A-shift
Engineer Jamal Goss
Asst. Engr. Ryan Criscio
Asst. Engr. Jason Dunnigan
FF Kim Drayton

Knights of Columbus FF of the Year
Captain William Taylor

Commendations
Captain Bobby Wright - Submitted by the community for his work in raising Breast Cancer Awareness

Maintenance & Logistics Team—Outstanding Internal Customer Service
Lead Mechanic William Palmer
Mechanic Joseph Waters
Mechanic Joseph Williams
Logistics Coord. William Garwood
Admin. Specialist Veronica Varn
Trades Helper Steven Vargas

Fire Marshal Division—Delivery of high quality fire prevention and community risk reduction services.
Deputy Fire Marshal Rick Anwalt
Deputy Fire Marshal Rick Fluegge
Deputy Fire Marshal Josh Smith
Asst. Fire Marshal Stephen Mantie
Asst. Fire Marshal Brandon Shaw
Asst. Fire Marshal Daniel Failla
Asst. Fire Marshal James Davidson
Fire Inspector John Rhodes
Fire Inspector Keith Hutton
Admin. Specialist Debbie Brown
Admin. Specialist Sybil Richardson

Unit Citations
Engine 111 B-Shift
(CPR Save)
Engr. P. Tumminia,
Asst. Engr. T. O’Neill
FF D. Kerns
FF E. Foerster

Engine 116 C-shift
(CPR Save)
Captain R. Delk
Engr. D. Arthur
FF T. Sohrweide

Squad 101
(Submitted by CCEMS)
FF/EMT P. Shanks
FF/EMT S. Miller

Charleston S.C. 1882
IN MEMORY OF CHARLESTON’S FALLEN

MAY THEIR SACRIFICE NOT BE IN VAIN,
BUT BE HONORED BY ALLOWING US TO LEARN FROM OUR PAST
AND PAVE THE WAY FORWARD.

A/ENGR T. GOFF - MAY 25, 1901
DRIVER G. H. SANDERS - JUNE 4, 1902
F.F. E. PARSONS - SEPTEMBER 9, 1902
ENGR. W. NELSON - NOVEMBER 27, 1902
CHIEF O. G. MARJENHOFF - DECEMBER 27, 1906
F.F. A. L. KNICKMEYER - OCTOBER 6, 1910
ACT CHIEF M. J. MORRIS - JULY 17, 1915
F.F. G. H. ZWINGMANN - SEPTEMBER 5, 1915
ENGR. M. L. PRINCE - MAY 27, 1916
F.F. J. F. BRAINOVICH - SEPTEMBER 4, 1916
CHIEF LOUIS BEHRENS - OCTOBER 12, 1932
F.F. J. W. HENDRICKS - MAY 7, 1957
CAPT. E.C. THOMAS - JULY 10, 1961

F.F. H. T. FOSBERRY - OCTOBER 19, 1965
ENGR. F. W. SHEPHARD - DECEMBER 9, 1985
ENGR. R. D. MORRIS - JUNE 29, 1991
F.F. A. TILLMAN - APRIL 2, 1999
CAPT M. BENKE - JUNE 18, 2007
CAPT. W. HUTCHINSON - JUNE 18, 2007
CAPT. L. MULKEY - JUNE 18, 2007
ENGR. B. BAITY - JUNE 18, 2007
ENGR. M. KELSEY - JUNE 18, 2007
ASST. ENGR. M. FRENCH - JUNE 18, 2007
F.F. M. CHAMPAIGN - JUNE 18, 2007
F.F. J. DRAYTON - JUNE 18, 2007
F.F. B. THOMPSON - JUNE 18, 2007
Dear Firefighters, thank you for all you do for our community. We are all very thankful for all your hard work and your bravery. I think it’s cool how you get to climb ladders and go inside burning buildings. Although I could probably never do what you guys do, but thanks anyway. From, Otto Schneider