STANDARDS OF COVER 2017

CASTLE ROCK FIRE RESCUE COLORADO

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2017 Standards of Cover

Castle Rock Fire and Rescue Department would like to recognize and thank the following members for the time, effort and attention to detail in the creation of this document.

Fire Chief Arturo Morales

Deputy Chief Norris Croom III

Battalion Chief Eric Morgenthaler

Assistant Chief Craig Rollins

Deputy Fire Marshal Brian Dimock

Lieutenant Jay Allen

Lieutenant Oren Bersagel-Briese

Lieutenant Jason Butts

Fire Fighter / Paramedic Eric Bockhacker

Fire Fighter / EMT Caleb McNeil

Fire Fighter / EMT Geoff Polidoro

Fire Fighter / EMT Casey Venafro

Rocky Mountain Accreditation & Professional Credentialing Consortium

Summary of Changes		
Date of Change	Summary	Approved
July 2018	2013 – 2017 Data tables, 2017 Data, & 2018 – 2022 Benchmarks, Update to Executive Summary, Conclusion and Recommendation	

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2017 Standards of Cover

Executive Summary

The Castle Rock Fire and Rescue Department's vision is "To be the best at providing emergency and prevention services". As such, the Department is committed to continuous improvement. Following the model set forth by the Commission on Fire Accreditation International (CFAI), the Department updated the 2011 Community Risk Assessment and Standards of Cover. During this update, the Department elected to create two separate, yet dependent documents, the 2016 Risk Assessment and this Standards of Cover. The 2016 Risk Assessment may be found on the Department's Strategic Documents web page, and highlight the risks within the jurisdiction by geographic planning zone and service provided. The key elements of the Standards of Cover include: levels of service to be provided, analysis of current response capabilities by geographic area, and recommendations to maximize efficiency of all resources to obtain the best possible emergency response keeping consistent with community expectations.

A general overview of the Department is included in the beginning of this document. This overview includes a description of the community served, to include legal basis, history of the agency, service milestones, financial basis, area description that includes topography, climate, population, and demographic information, as well as community expectations. It also includes a description of the current services provided, the current deployment strategy, community response history, performance objectives and an evaluation and compliance methodology.

As part of the 2016-2019 Strategic Plan, the Department conducted several community open houses to gather feedback and insight into the community's priorities, expectations, and concerns. The top five priorities were: emergency medical services (EMS), fire suppression, wildland fire suppression, technical rescue, and hazardous materials mitigation. The top five community expectations were: response times, education/training of members, up to date equipment/apparatus, professionalism or quality personnel, and ensuring that the Department can deliver the core services. Finally, the community's top five concerns were: growth/development with the Town, staffing, resources, public education, and funding. With the exception of public education, the concerns focused on the Department's ability to keep pace with the growth in the area. With respect to public education, the community's concern focused on an apparent lack. This concern is addressed in the 2016-2019 Strategic Plan, specifically strategic goal #5: Develop an enhanced public outreach and education program.

The Department evaluates the performance of the first arriving unit (distribution) and the arrival of the effective response force (concentration). The effective response force is the minimum number of personnel, equipment, and apparatus needed to mitigate a given type incident, and its level of risk (low, moderate, high/special). Generally, the higher the risk level, the great number of resources needed. Additionally, the Department evaluates performance based on population density (rural: less than 1000 residents/mile^2, urban: greater than 1000 residents/mile^2). When reporting performance, the Department reports call processing time, turnout time, and total response time. The total response time is the time experienced by the customer and includes all aspects of the response:

- Call process time: time from when the call is received to units dispatched

- Turnout time: time from dispatch to apparatus leaving the station
- Travel time: time from leaving the station to arriving on-scene

For the evaluation period, the Department's performance for the 1st arriving unit has improved in both the rural and urban areas while maintaining a relatively high compliance to adopted performance standards (baseline). In rural population areas, the total response time has decreased from 10:10 in 2016 to 10:00 in 2017. In urban population areas the response time has decreased from 8:40 in 2016 to 8:10 in 2017.

Evaluating the effective response force poses a challenge in that, with the exception of emergency medical services, there are too few incidents to perform meaningful statistical analysis or trending. Even so, the Department annually tracks and reports all effective response force incidents for EMS, fire, hazardous materials, wildland fire suppression, and technical rescue at all risk levels (low, moderate and high/special).

Considering that EMS represents 58% of the total call volume, the Department closely monitors its performance for this service category. For moderate risk EMS incidents in rural population areas, the total response time has increased from 10:40 in 2016 to 11:00 in 2017. For moderate risk EMS incidents in urban population areas the total response time of 10:00 remained the same between 2016 and 2017.

Consistent with its commitment to continuous improvement, the Department has defined a compliance methodology and continuous improvement strategy that includes monthly annual reporting requirements. Monthly, the Department reports on performance (call processing, turnout, 1st arrival, and moderate risk EMS effective response force) against adopted standards. Annually, the Department reports on performance for all service and risk levels against adopted standards, trends, any service gaps to include recommendations, and performance standards for the following year.

In reviewing the data in its entirety, the Department's performance has improved since 2011. However, there are specific planning zones that cannot be reached within the adopted performance standards. These are; planning zone 6 (Castle Oaks, Terrain, Cobblestone Ranch, and Liberty Village), planning zone 7 (Crystal Valley Ranch, Heckendorf Ranch, Bell Mountain Ranch, Ditmars Ranch, Sellars Creek, and Lost Canyon Ranch), and planning zone 8 (Yucca Hills and Keene Ranch). Planning zone 6 has experienced an increase in residential growth for the last few years. However annual call volume, while increasing, remains relatively low. Planning zone 7 has been growing for several years. The Department recognized the increased call volume and performance gap in the area. Beginning in 2015, that Department secured funding for a new fire station (Station 152) to open in the fall of 2018. Planning zone 8 is a remote and sparsely populated area that experiences an extremely low call volume (less than 10/year). The Department has no plans to modify its deployment to improve response times in planning zone 8.

The Department's vision is "To be the best at providing emergency and prevention services". While striving "to be the best", the Department must make changes, based on sound statistical data, that would allow for an improvement in the delivery of services and increased safety to the community as well as emergency responders. Understanding the current financial and political climate, as well as the costs associated with any

recommendation, the Department reviewed each of the following recommendations to ensure they are: consistent with community expectations, within the scope and reach of the Department, and achievable with existing resources or plans. Therefore, the following recommendations were made in 2017 based the results of the standards of cover process. The 2018 status/update to these recommendations are provided in ***bold text***:

- Continue with the planning, construction and staffing for Station 152 in the southern portion of the jurisdiction, and consider redefining Station 151 & 154 boundaries to balance call distribution and ensure the best practical response times.
- Closely monitor PZ6 for growth, increasing calls for service and performance.
  Complete / On-going: reported as part of the Annual Department Retreat
- Closely monitor PZ9 for growth, increasing calls for service and performance.
  Complete / On-going: reported as part of the Annual Department Retreat
- Implement the Critical Task Analysis team's recommended changes.
  Complete July 1st, 2017

Finally, the Department should provide an annual report to the Public Safety Commission, Town Manager and Town Council that details; call volumes and trends, updated baselines and benchmarks, and any service gaps and recommended action (if any).
Complete / On-going: reported as part of the Annual Department Retreat

Since the initial adoption of this Standards of Cover, the Department has completed the implementation of the Critical Task Analysis team's recommended changes (July 1, 2017), maintains an on-going effort to monitor growth and performance in PZ6 and PZ9, and published a monthly performance summary and an annual detailed performance and compliance report. Progress on the construction of Station 152 continues and is on-schedule for an early fall of 2018 grand opening. Once Station 152 is operational, the Department will monitor station 151, 152 and 154 performance and compliance to evaluate station boundaries ensuring the highest practical response capabilities.

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RESOLUTION NO. 2017-045

A RESOLUTION APPROVING THE TOWN OF CASTLE ROCK FIRE AND RESCUE DEPARTMENT COMMUNITY RISK ASSESSMENT AND STANDARDS OF COVER

WHEREAS, The Town has adopted the 2016 – 2019 Strategic Plan, and 2014 – 2019 Fire Master Plan to provide direction for the growth and development of the Fire Department, and the emergency services provided to the Town of Castle Rock; and

WHEREAS, the Fire and Rescue Department, through the Fire Chief, has prepared a Community Risk Assessment and Standards of Cover, in accordance with the Commission on Fire Accreditation International (CFAI); and

WHEREAS, the Fire and Rescue Department recommended adoption of the proposed Community Risk Assessment and Standards of Cover to Town Council; and

WHEREAS, Town Council finds that the Community Risk Assessment and Standards of Cover is a data driven, historical review of the Department's performance, identifies risks within the Town, and provides significant value in establishing performance benchmarks for the next five years, subject to annual review and update.

NOW, THEREFORE BE IT RESOLVED BY THE TOWN COUNCIL OF THE TOWN OF CASTLE ROCK AS FOLLOWS:

Section 1. **Approval.** The Town of Castle Rock Fire and Rescue Department Community Risk Assessment attached as ***Exhibit 1*** and Standards of Cover attached as ***Exhibit 2*** are hereby approved.

PASSED, APPROVED AND ADOPTED this 16th day of May, 2017, by the Town Council of the Town of Castle Rock, Colorado, on first and final reading by a vote of 7 for and 0 against.

ATTEST:

Lisa Anderson, Acting Town Clerk

TOWN OF CASTLE ROCK

Jennifer Green, Mayor

Approved as to form:

Robert J. Slentz, Town Attorney

Approved as to content:

Arturo J. Morales, Fire Chief

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Table of Contents

2017 Standards of Cover

A. Introduction

Purpose

The 2017 Standards of Cover works in conjunction with the 2016 Risk Assessment to identify, define and, if possible, quantify the risks within the community and detail how the Castle Rock Fire and Rescue Department (CRFD) prepares for, responds to, and works to mitigate those risks. The Standards of Cover defines the level of service CRFD provides to the jurisdiction. This level of service examines the historical response characteristics within the jurisdiction and establishes a baseline performance criteria, as well as benchmarks, or performance goals, for the first arriving apparatus and the balance of the effective response force (ERF). The ERF represents the complement of apparatus, people and equipment required to mitigate a "typical" emergency. The ERF is entirely dependent on the type and magnitude of the incident. Generally speaking, the larger the incident or greater risk to the community, the more resources are required. To determine the ERF, the Department completed a review of all its incident types and risk level to establish a list of critical tasks. These tasks were then compared to the resources assigned to that call type, and response plans were adjusted accordingly (adding resources to some and removing resources from others).

As stated, the Standards of Cover sets the level of service for the Department, and once approved by the Town of Castle Rock Town Council, establishes the CRFD's response and performance standards that will be reviewed and reported on at least annually.

B. Description of Community Served

Legal Basis

The Town of Castle Rock (TCR), 28 miles south of Denver, founded in 1874, is the county seat of Douglas County, Colorado, and named for the prominent castle tower-shaped butte near the center of town. The CRFD is the fire, rescue, and emergency medical services provider for the Town of Castle Rock, Colorado and the Castle Rock Fire Protection District (CRFPD). The CRFD is a municipal department operating under the TCR, with seven council members elected to four-year terms, one of which serves as mayor.

The TCR operates as a "home rule" municipality under the Constitution of the State of Colorado, and under the Council-Manager form of government.

As outlined in the Castle Rock Municipal Code, Section 3-4, Other Offices, (3), "the Fire Chief, who shall be responsible for planning and directing the work of the fire department, and shall perform such other duties required by this Charter, or as required by the Council or the Town Manager and not inconsistent with this Charter."

Additionally, Section 8.02.010 Emergency Response Authority of the Castle Rock Municipal Code states the following:

> "The Castle Rock Fire Department, the Fire Chief, and his or her duly authorized representatives are hereby assigned as the designated emergency response authority for hazardous materials incidents within the Town of Castle Rock. The Fire Chief shall provide an emergency response to hazardous materials incidents by taking necessary initial action to minimize the effects of such an incident and provide continued supervision and authority over all further efforts to eliminate the threat of immediate and irreparable harm to the environment or public health and safety."

History of the Agency

According to the book, *Douglas County, Colorado: A Photographic Journey*:

> "On April 10, 1892, Mayor W.E. Carver was authorized to purchase 300 feet of fire hose at 20 cents a foot. It was to be mounted on a homemade two-wheel cart. Thus began the Castle Rock Fire Department. On April 8, 1896, Ike Satler was appointed Fire Chief and instructed to organize a company of seven men. By June, he had purchased caps, belts, and blouses. In 1914, the town erected a fire tower and bell; unfortunately, they were destroyed by a cyclone in 1937. Between 1903 and 1915, there were many disastrous fires. A meeting was called January 22, 1915 to mobilize a volunteer fire department. On February 1915, the organization was complete."

The Castle Rock Fire and Rescue Department was formally organized in 1915. On January 22, 1915, a meeting of the citizens of Castle Rock was held for the purpose of organizing a volunteer fire department. The meeting was called to order and L.L. Hunter was elected Chairman and E.S. Triplett was elected Secretary. Members were appointed to develop by-laws to govern the organization.

During the January 29, 1915 meeting, the Committee of Rules and Bylaws reported on the developed bylaws. A motion approved the developed bylaws as written.

Based on meeting minutes on February 2, 1915, the Castle Rock Fire Department was established and made permanent. Bylaws were discussed section by section during this meeting and were adopted as read and corrected. Officers were elected during this meeting. U.S. Sturdevant was elected Foreman, Will Shellabarger 1st Assistant Foreman, E.S. Triplett Secretary, and E.C. Peterson Treasurer. A General Committee was established and ordered to meet with the Town Council at their next regular meeting.

On March 2, 1915, the name of the organization was changed to the Castle Rock Hose Company No. 1.

As noted in the meeting minutes, on June 8, 1915, "the department was called out to extinguish a fire in the chicken house on the property of Nora O'Brien, the damage was nominal. Most of the members of the department were present."

The following historical summary of fire incidents was written by Edgar S. Triplett of Castle Rock on the Fire Department's 25th anniversary, February 1940. Edgar S. Triplett was one of the founding charter members of the Castle Rock Fire and Rescue Department.

> "The first fire that I can recall was about 1895. It was a small house about the size of and looking like a box car. It was situated on Elbert Street between Third and Fourth

Streets, about where the house owned by George Oliver, across the street from Ruth Lewis, now stands. As I remember it, there was not much damage.

In 1896, the school building burned. It was a complete loss. The fire was caused by a defective furnace. I was in the second grade at the time and well remember the commotion.

About 1903, I turned on my first fire alarm when I discovered the home of Gila Garrison at Fifth and Cantril Streets on fire. This also was a complete loss.

In about 1901 or 1902, the Douglas County Record building was destroyed. It was located where the Record-Journal building now stands (R.E.A. office). The hose cart at this time was kept in a shed at the rear of the old court house, at the alley on Fourth Street between Wilcox and Perry Streets. The bell was on top of a pole, with a wire hanging down to pull. That bell was from the old school house and is now mounted in the tower of the old fire house.

About 1909, the two-story store building of J.R. Woltzen at Third and Wilcox caught on fire. The lower half of this building was saved and was repaired. About a year later, it caught on fire again one night while Walter Strange, Roy Dakan, Clarence Day, and I were in it. It was in the winter, and the fire plug on the corner was frozen. During the delay in getting water, the building was destroyed. A bucket brigade saved the firehouse from burning.

About 1903 or 1904, the Grade School building caught on fire through a defective heating plant. This fire was extinguished without serious damage to the building. I was also in this building when it caught on fire.

In 1910, the high school building burned to the ground one night. The fire had gained so much headway when it was discovered that it could not be put out. The cause of this fire was laid to a defective heating plant.

In 1913, the livery barn located on Wilcox Street between Fourth and Fifth Streets was destroyed by fire.

About 1907, the stores of Burke Bros., Mrs. McConnell and Walter Sharp, located north of the Court House, were destroyed by fire (Where Ross King's house is now). This fire occurred on a cold night; and as they were old frame buildings, they were totally destroyed after a hard battle by the citizens with their limited equipment. A year later, the store of the same Mrs. McConnell burned one night with total loss of building and contents. This building was located on Wilcox Street next to the Stone Cafe.

In 1910 or 1911, the Santa Fe Depot, located just north of where the present depot is standing, was destroyed by fire.

My object of citing these disastrous fires is to give the reason for the meeting that was called early in 1915 to organize a fire department."

One of the most significant fire events in Castle Rock was the fire which destroyed the Douglas County Courthouse. On March 11, 1978, the Courthouse, located in downtown Castle Rock, was destroyed by an intentionally set fire. The fire was started by a teenage

girl, allegedly upset that her male friend has been detained in the Douglas County Jail. The building's wooden interior was engulfed in minutes. The building was a total loss and was scraped off the site in April 1978.

In 1993, the Castle Rock Fire and Rescue Department hired its first career Firefighter/Paramedic.

On July 1, 1997, the Castle Rock Fire and Rescue Department started staffing Station 151 (downtown Castle Rock) 24-hours a day and began providing paramedic ambulance transportation. Prior to this date, ambulance transportation was provided by several different private ambulance companies.

Today, the Castle Rock Fire and Rescue Department is a full-service, career organization, staffing four (4) fire stations, protecting the life and property of TCR (34 square miles with approximately 59,000 residents) and those within the Castle Rock Fire Protection District (CRFPD) (32 square miles with approximately 2,000 residents).

Service Milestones

On August 21st, 1998, Station 154 opened near the intersection of Meadows Parkway and Prairie Hawk Drive. This was the first new station built since 1980, and drastically reduced the response times into the north and northwest sections of the Town.

In March 1999, Station 151 and Fire Headquarters opened in its current location on Perry Street. This new building replaced an 80+ year old facility on Third Street that was actually several buildings that had been tied together, was extremely outdated, not up to code, and not capable of housing newer, larger apparatus or crews.

In 2001, the Department completed planning and construction of a Fire Training Center located near downtown Castle Rock. The $1 million facility includes a tower, burn rooms, confined space training prop, and a ventilation simulator.

In 2003, Station 155 opened on Crowfoot Valley Road near the intersection of Sapphire Point. The firehouse was dedicated on August 16, 2003 and currently operates the quint company and a brush unit serving the northeast area of the Town of Castle Rock.

Chief Arturo Morales was hired as the Fire Chief in March 2003. Under his leadership, the Department established a Strategic Master Plan in 2004 that was updated in 2005, 2010, and 2016.

In 2012, the Department received its initial appointment as an Internationally Accredited Agency with a unanimous vote from the Commission on Fire Accreditation International (CFAI).

In 2013, Station 153 was renovated to accommodate additional staffing and place Medic 153 in service. Medic 153 is the Department's third ALS transport unit.

Modern fire apparatus, including a ladder truck (quint), brush apparatus, engines, and medic units (ambulances) have been purchased throughout the last 10 years. The oldest front-line vehicle in the fleet is Engine 153 a 2001 HME, scheduled to be replaced in 2017. The purchases have been part of the Town of Castle Rock's Fleet Replacement Program.

The Town of Castle Rock is in the planning stages (design and architecture) for its next fire station, Station 152, in the Crystal Valley Ranch area. This station is scheduled to open in the fall of 2018 and will dramatically decrease response times to the growing southern portion of the jurisdiction.

Financial Basis

The Castle Rock Fire and Rescue Department is funded through the Town of Castle Rock's annual budget. Within the budget, the Department is funded through major and non-major government funds. A majority of the Department's funding is derived from the General Fund (major government fund). This fund is used to account for resources traditionally associated with government, which are not required legally or by sound financial management to be accounted for in another fund. The functions accounted for within this fund include general government, police, fire, parks maintenance, zoning and historic preservation, and related capital projects.

The Department also receives funding from the Castle Rock Fire Protection District through a court order. In the mid-1980s, the courts established that the Town was annexing the District's tax base and was thereby reducing the ability of the District to raise funds through property tax. The court order states the Town must provide service to the District, and the District provides the Town, funds in the amount of 5% of the Department's operational budget. This percentage reflected the number of calls that occurred within District boundaries.

The Fire Capital Fund is funded through the non-major government fund and accounts for resources and expenditures for the construction, expansion and improvement of fire facilities and other capital needs of the Department. The primary source of revenue in this fund is from development impact fees, which are collected at the time a building permit is issued.

Town of Castle Rock General Fund revenues are derived from taxes, licenses and permits, intergovernmental agreements, charges for service, fines and forfeits, investment earnings, contributions and donations, other revenue, and transfers in. The Department is approximately 32% ($16,201,102) of the 2018 Town of Castle Rock General Fund ($51,445,199). Revenue that supports the growth of the community in the Fire Capital Fund comes from impact fees that are generated by development in Castle Rock. The 2018 Fire Capital Fund of $1,080,547 includes funding for the remaining construction of Station 152.

The Town of Castle Rock and the Castle Rock Fire and Rescue Department are subject to funding restrictions. TABOR, or the Taxpayer Bill of Rights, is an amendment to the Colorado Constitution approved by voters in 1992. This amendment places limits on the amount of revenue a government can collect and spend and requires voter approval for certain changes in tax policy. Local or Castle Rock revenue growth is limited to annual growth plus inflation for the prior year. Due to these funding limitations, department budget projections are difficult to forecast beyond the next fiscal year.

The basic calculation for TABOR is:

- Year one revenue multiplied by the prior year's inflation plus local growth (change in assessed value) = the allowable fiscal year spending / revenue limit

In November 2016, the Town of Castle Rock voters approved approximately $700,000 in excess revenue to be kept and used for public safety improvements. With its portion of these funds, CRFD has approved the purchase of a second set of heavy extrication equipment, automatic external defibrillators (AED) for all Town owned facilities and Police Department patrol vehicles, and "stop the bleed" kits to be placed with the AEDs in all the schools.

Area Description

Topography

The Castle Rock Fire and Rescue Department serves an area of approximately 66 square miles. The service area is comprised of the Town of Castle Rock, which is approximately 34 square miles, and the remaining area is that of unincorporated Douglas County. The area served is located in central Colorado on Interstate 25, roughly 28 miles south of Denver and 37 miles north of Colorado Springs. The elevation of Castle Rock is 6,202 feet. This area lies in the Colorado Piedmont on the western edge of the Great Plains. The front range of the Rocky Mountains are a few miles to the west. East Plum Creek, a stream within the South Platte River drainage basin, runs north then northwest through Castle Rock.

Common topographical features for both the Town and the district consist of rock outcroppings, steep hillsides, cliffs, canyons, mesas, and plateaus. Castle Rock, the castle-shaped butte that is the town's namesake, sits near the town's center, immediately north of downtown. The area is covered with large meadows of grass, small plants, scattered juniper trees, and open Ponderosa Pine woodlands. Other trees common to the area include Gambel Oak, Pinyon, and Pinyon Pine.

These features and fauna are found throughout each of the four station districts and impact the type of risk, equipment, and training that may be needed. The risks range from wildland and interface fires to high/low angle rope rescue over varied terrain and conditions. As such, each station houses a brush truck and all personnel are trained to the operations level in rope rescue.

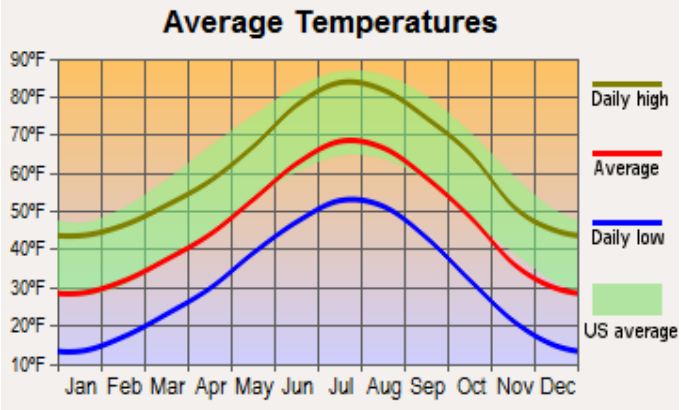
These features do not have a significant impact on responses as apparatus have been designed to function effectively in this environment. Engines and medic units have the requisite horsepower to navigate the changes in elevations, brush trucks are designed to travel both on and off road, and station locations were previously determined to accommodate the growth as directed in the Town's Master Plan.

Climate

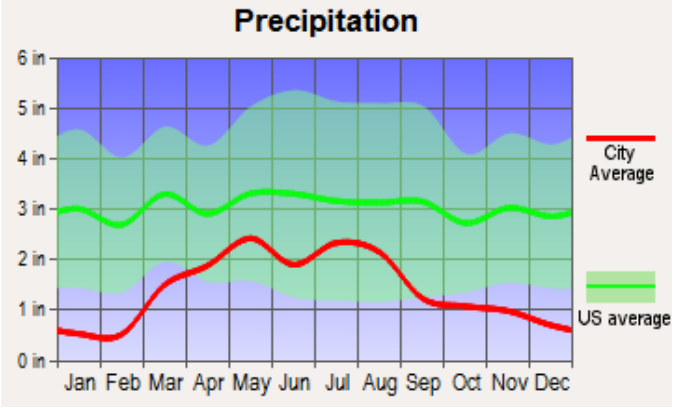
Castle Rock has a semi-arid climate with hot, dry summers and cold, dry winters. The area enjoys roughly 255 days of sunshine per year. On average, the town receives 16.8 inches of precipitation annually, snowfall averages 62.5 inches per year, and the average humidity in the area is 40 percent. The coolest month is January with an average high of 44.8 and low of 12.5 degrees. The warmest month is July with an average high of 85.6 and low of 53 degrees. May is typically the wettest month.

The state of Colorado is ranked number 10 in lightning strikes and Castle Rock gets substantial lightning activity.

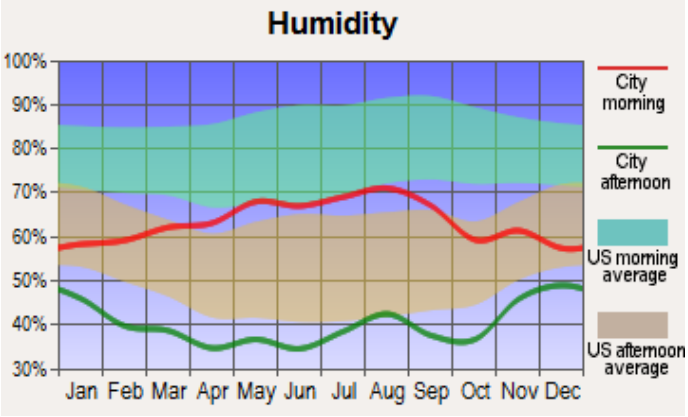
Area Description Chart 1.0



Area Description Chart 2.0



Area Description Chart 3.0



Population

CRFD provides fire and emergency services to roughly 67,500 residents within a 66 square mile jurisdiction, with an overall population density of 1022 residents/mile^2. CRFD defines population densities as follows:

Rural: Less than 1,000 residents/mile^2

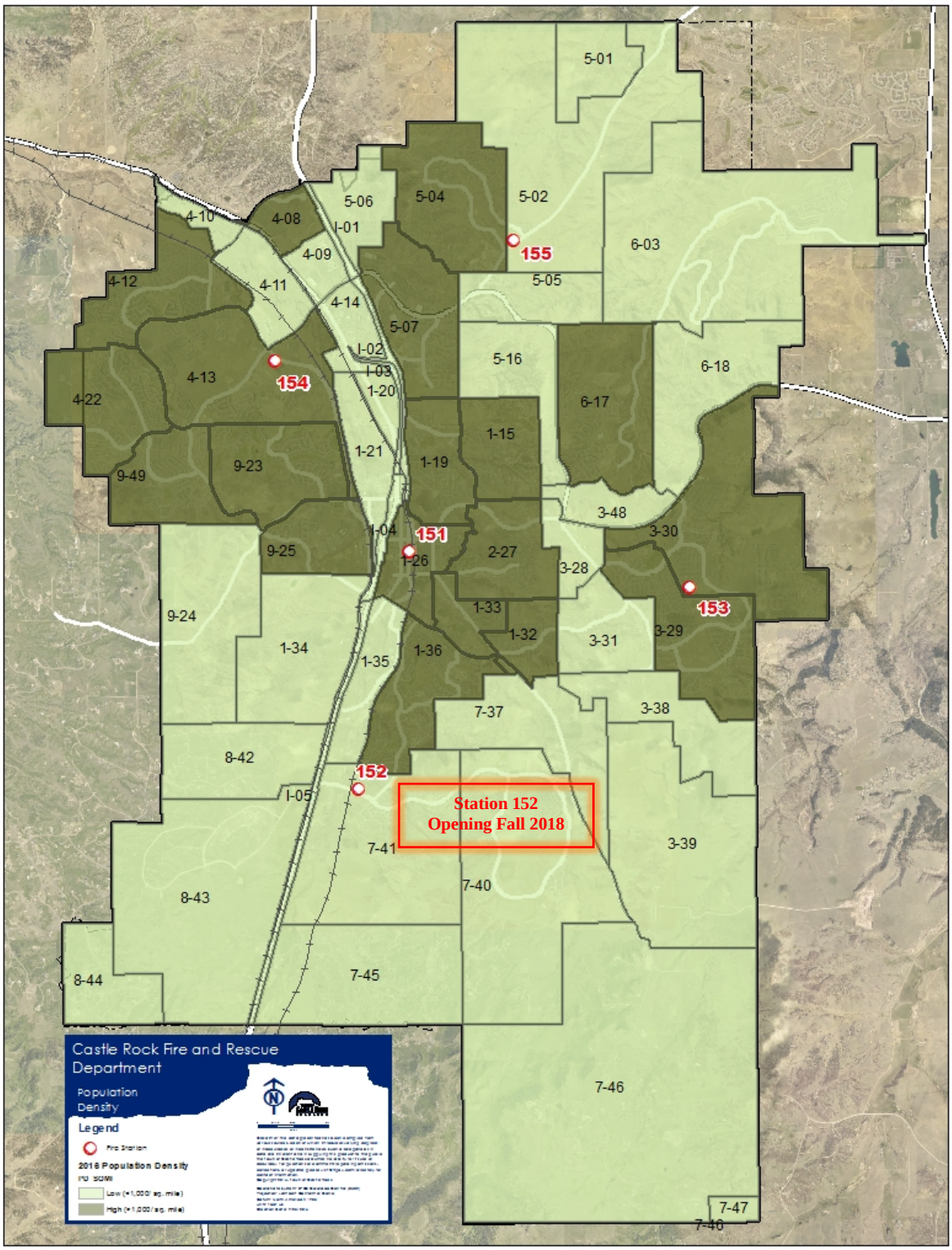
Urban: Greater than 1,000 residents/mile^2

Overall, CRFD's jurisdiction is considered rural with less than 1,000 residents/mile^2. However, CRFD's jurisdiction is divided between two entities, the Town of Castle Rock (TCR), and the Castle Rock Fire Protection District (CRFPD). The Town of Castle Rock's Development Services maintains an annual estimate of the resident population for the 34 square miles of the Town of Castle Rock. As of December 2017, the population within town limits is 65,500. The population density for the Town is 1,926/mile^2 and is considered an urban population density. The Castle Rock Fire Protection District represents the remaining 32 square miles of CRFD's jurisdiction and has an estimated population of 2,000 residents. CRFPD's population density is 63 residents/mile^2 and is considered a rural population density. Furthermore, the population is concentrated in neighborhoods throughout the jurisdiction resulting in pockets of higher population densities. Therefore, CRFD has determined the population density within each of the 56 fire management zones (FMZ) and assigned a density value of rural or urban as appropriate. The Department has established performance guidelines for the rural and urban population densities. These performance guidelines are monitored monthly and revised annually as needed.

Based on the Department's 2015 Daytime Population Study (Town of Castle Rock, 2015), the average daily transportation population on the road system in the Castle Rock area is approximately 118,070 vehicles per day or about 4,920/hour. Compared to data collected in 2011, there has been a total increase in traffic of 13.5%. Peak travel hours for Interstate 25, State Highway 85, and State Highway 86 are 05:00 through 22:00 (5AM – 10PM). The daily population surge due to the influx of employees, customers, and visitors was estimated to reach 80,840 people.

Area Description Map 1.0 geographically shows the urban and rural population densities, with the urban density shown in dark green and the rural density shown in the light green. When compared to the population density study completed for the 2011 Standards of Cover, fire management zones 4-13 and 6-17 increased from rural to urban density. This was not unexpected given the residential growth in those areas.

Area Description Map 1.0: 2016 Population Density Map



C. Community Expectations

Community Expectations

Service Delivery Program Transitions

The Castle Rock Fire and Rescue Department has traditionally provided an "all-hazards" response. In the mid-1990s, the mission was modified to include Advanced Life Support (ALS) response, and in 1997, ALS transport was added. ALS transport was added after the private ambulance company that had served the area ceased operations and pulled out of the county entirely.

Since 2001, the Department has continued to ensure that the level of service for an all-hazards response has been maintained. Through community surveys, the Department has consistently been ranked as number one in services provided by the Town to the community.

Community Expectations, Concerns, and Priorities

As a cornerstone of the 2016 – 2019 Strategic Plan, CRFD hosted several community open houses to gather community input and feedback. The purpose of these meetings was two-fold. First, to educate the community on the services CRFD provides, the capabilities and limitations of those services, as well as provide a brief overview of the Department structure and finances. Second, CRFD asked participants to rank the Department's services, as well as provide their expectations and concerns.

Based on the feedback from the open houses, the community ranked CRFD's services as seen in Table 1.0.

Community Expectation Table 1.0

	SERVICES
1	Emergency Medical Services
2	Fire Suppression
3	Wildland Fire Suppression
4	Technical Rescue
5	Hazardous Materials Mitigation
6	Domestic Preparedness Planning and Response
7	Fire Prevention
8	Public Education
9	Fire Investigation

The community was asked to share their expectations of CRFD. Table 2.0 lists the top 10 community expectations. Given the broad range of responses, the Department grouped similar responses into categories. The definitions of these categories can be found Appendix A: Community Survey Definitions.

Community Expectations Table 2.0

Top 10 Community Expectations	
1	Response Time
2	Training / Education
3	Equipment / Apparatus
4	Qualities
5	Core Service
6	Growth / Development
7	Public Education
8	Staffing
9	Community Involvement
10	Fiscal Responsibility

In addition to providing expectations, the attendees were asked to identify areas of concern within the Department, detailed in table 3.0.

Community Expectations Table 3.0

Top 10 Community Concerns	
1	Growth / Development
2	Staffing
3	Resources
4	Public Education
5	Funding
6	Response Time
7	Disaster Preparedness
8	Wildfire
9	Equipment / Apparatus
10	EMS

The above information was the basis for a two-day internal stakeholder meeting that resulted in the development of the 2016 – 2019 Strategic Plan. Definitions of the Expectations and Concerns categories, may be found in Appendix A: Community Survey Definitions. The Strategic Plan is available at Castle Rock Fire and Rescue Headquarters or online at http://crgov.com/fire/Strategic-Documents.

D. Services Provided

Service Delivery Programs

The Castle Rock Fire and Rescue Department protects the life and property of all residents in a 66 square-mile area, including the Town of Castle Rock and the Castle Rock Fire Protection District in Douglas County. Additionally, the Department services an estimated daytime population of roughly 80,840 people and 118,700 vehicles per day. The Department has 98 career members (96 uniformed staff), and three administrative volunteer members, who staff four fire/rescue stations 24 hours a day to provide fire and medical services to the community. In 2017, the Department responded to 5,660 calls for service.

The Castle Rock Fire and Rescue Department Operations Division provides:

- Fire: vehicle and structural fire suppression response
- Wildland Urban Interface Fire Suppression: wildland, vegetation and open area fire suppression that may or may not threaten improvements or structures
- Technical Rescue: trench, confined space, building collapse, high/low angle rope rescue, heavy extrication, and water/ice rescue services
- Emergency Medical Services: Advanced Life Support (ALS) emergency medical services (paramedic ambulance transportation) with all field personnel, at a minimum, certified as EMT-Basics
- Hazardous Materials: operations and technician level response and mitigation
- Specialized: Tracked Rescue Vehicle (TRV153), four-wheel drive off highway vehicle (ATV151), air and light incident support trailer (AIR151), and two unmanned aerial systems (UAS)

The Castle Rock Fire and Rescue Life Safety Division provides:

- Fire code inspections of existing businesses
- Plan reviews
- New construction inspections
- Public education
- Post-incident fire investigation
- UAS services
    - Search & Rescue
    - Thermal & 3D mapping
    - Incident video / photo documentation
    - Remote IDLH reconnaissance
    - Construction site / access documentation

Additional non-emergency programs:

- Child passenger car seat installations
- Public CPR classes
- Tier II hazard assessments
- Smoke/CO alarm replacement program

Services Provided Table 1.0: Prevention and Life Safety Programs		
Program Title	**Description**	**Frequency**
New Construction Plan Review	Construction plans for all projects within the district, including new buildings and tenant improvements are reviewed for code compliance and hazard abatement prior to the start of construction. Another option that is offered to the development community is a pre-project meeting to assist with meeting code requirements early into the project.	As needed
Existing Business Inspection	Occupancy inspections are conducted by certified inspectors to verify compliance with the fire code.	Dependent on risk level and other state mandates, attempting every 1-3 years
Fire Investigations	Fires are investigated by the FPO staff if the officer in charge cannot determine the cause or if other criterion is met.	As needed
Child Passenger Car Seat Installation / Inspection	Installations / inspections are performed by certified CPS Technicians.	As needed
Fire Extinguisher Training	This service provides CFR 1910.157 portable fire extinguisher compliant training for individuals and businesses using an electronic simulator.	As requested
CPR Training	Certified training is provided by certified personnel of CRFD.	Quarterly classes offered; others on an as-needed basis
Wildland Fire Mitigation Assessment	Wildland assessments are provided by trained members of CRFD. Assessments are completed using both FireWise and ICC, IWUIC code.	As requested
UAS Services	FAA approved UAS piloted by FAA licensed pilot. Can fly UAS during emergency and non-emergency operations based on policy.	As requested or needed

Current Deployment

Fire Headquarters is located within Station 151. The responsibilities of Fire Headquarters are listed below:

Fire Headquarters

Fire Headquarters is home to the Operations Division, Life Safety Division, Administrative Services Division, and the Office of the Fire Chief. Fire Headquarters opened in 1999.

Station 151

Station 151 is home to an engine, medic unit, battalion chief, type-VI brush truck, a reserve engine, a reserve medic unit, and the antique fire truck. In addition to CRFD's standard extrication equipment, Engine 151 also carries a compliment of heavy extrication equipment and is dispatched to all vehicle entrapments.

Typical station assignments are:

- Engine 151: one Lieutenant, one Engineer, one Firefighter / EMT or Paramedic
- Medic 151: one Firefighter / EMT, one Firefighter / Paramedic
- Battalion Chief 151: one Battalion Chief

The other units are cross-staffed as necessary.

Station 151 protects: Wilcox Square, Plum Creek, Baldwin Park, Bell Mountain, Castle North, and the Woodlands, as well as other neighborhoods and business districts. Several elementary schools, Douglas County High School, Castle Rock Town Hall, Douglas County administration buildings, parts of Interstate 25, and Rock Park also are in its service call area.

NOTE: With the opening of Station 152, the current deployment model will change by tentatively adding a second aerial apparatus at Station 151 given the type of growth within that district. The engine currently positioned at Station 151 will move to Station 152.

Station 152

Station 152 is currently under construction and scheduled to open in September 2018. This station is planned to house an engine and a type-VI brush truck.

The planned station assignments are:

- Engine 152: one Lieutenant, one Engineer, and two Firefighter / EMT or Paramedic

The type-VI brush truck is cross-staffed when necessary.

Station 152 will protect Crystal Valley Ranch, Bell Mountain Ranch, Lost Canyon Ranch, portions of Plum Creek, a small commercial area, and an elementary school.

Station 153

Station 153 is home to an engine, type-VI brush truck, medic unit, hazardous materials unit (HM153), and tracked rescue vehicle (TRV).

The typical station assignments are:

- Engine 153: one Lieutenant, one Engineer, and one Firefighter / EMT or Paramedic
- Medic 153: one Firefighter / EMT, one Firefighter / Paramedic

The brush truck and HM153 are cross-staffed when necessary.

Station 153 protects Founders Village, Castle Oaks, Cobblestone Ranch, Castlewood Ranch, a small commercial area, a middle school, and three elementary schools. The station's first-due response area competes with The Meadows as the fastest-growing area in the district.

Station 154

Station 154 is home to an engine, medic unit, type-VI brush truck, reserve engine, technical rescue response vehicle (squad) and trailer.

Typical station assignments are:

- Engine 154: one Lieutenant, one Engineer, and one Firefighter / EMT or Paramedic
- Medic 154: one Firefighter / EMT and one Firefighter / Paramedic

The brush truck and technical rescue response vehicle are cross-staffed as necessary.

Station 154 protects The Meadows, Highlands Vista, and Red Hawk areas. Also in the station's district are the Outlets at Castle Rock, a commercial area west of I-25, a high school, a middle school, three elementary schools, a large industrial area, and the Douglas County Sheriff's Office, which houses the Douglas County Regional Communication Center (DRCC) providing dispatch services.

Station 155

Station 155 is home to a quint, type-III wildland engine, reserve medic unit, and reserve quint.

Typical station assignments are:

- Quint 155: one Lieutenant, one Engineer, and one Firefighter / EMT or Paramedic

The type-III engine is cross-staffed as necessary.

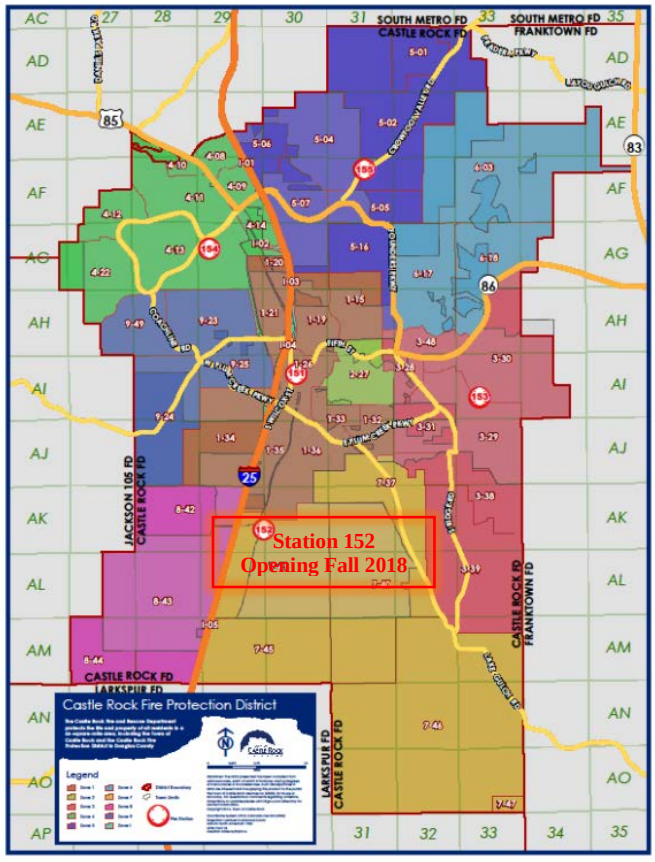
Station 155 protects the residents on Crowfoot Valley Road, Founders Parkway, Silver Heights, Sapphire Point, Diamond Ridge, and Metzler Ranch, several schools, as well as the large commercial area east of I-25 on the north end of Town.

Public Safety Training Center:

The Public Safety Training Center is comprised of two facilities; the Public Safety Training Facility (PSTF) a leased building with a large classroom, office space for the Training Division, Support Services Technician, and a large storage garage, and the Fire Training Center (FTC), a five story training tower with class-A burn rooms on the 1st, 2nd and 4th floors. The PSTF is home to the Training Division (Training Chief and Training Captain), the support service unit, the air/light trailer, a four-wheel drive "gator", reserve staff car, reserve battalion vehicle, and snow plow.

In the fall of 2015, the Department was advised that the lease for the PSTF would not be renewed when it expires in May 2017. As such, the Department is looking at options for the expansion of the FTC and PSTF (Strategic Goal #6).

Current Deployment Map 1.0

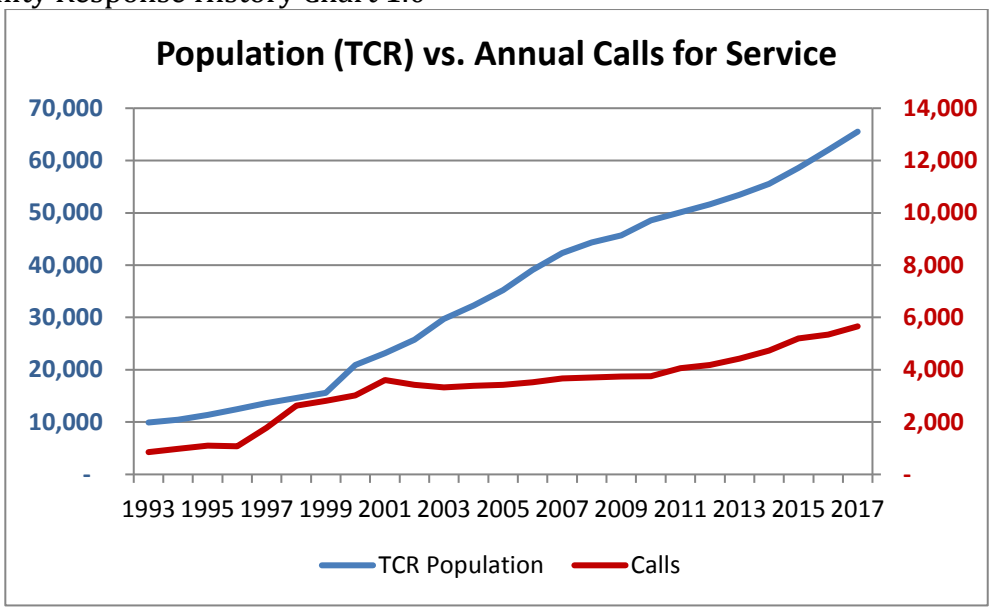


E. Historical Perspective and Summary of System Performance

Community Response History

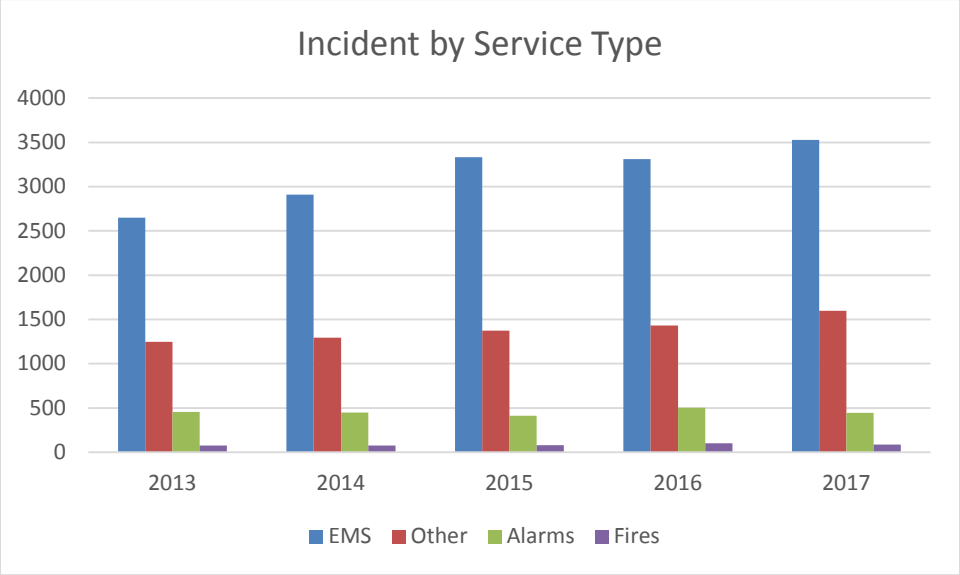
Since 2003, the population of the Town of Castle Rock has roughly doubled; increasing at a rate of 6.5% annually. Since 2003, the call volume has increased by 70% and 3.9% annually. Over the past five years, the call volume has increased by 28%, 6.3% annually while the population grew by 23% and 4.9% annually. However, given the recent and projected growth (commercial and residential), these statistics are not indicative of potential department activity or residential growth.

Community Response History Chart 1.0



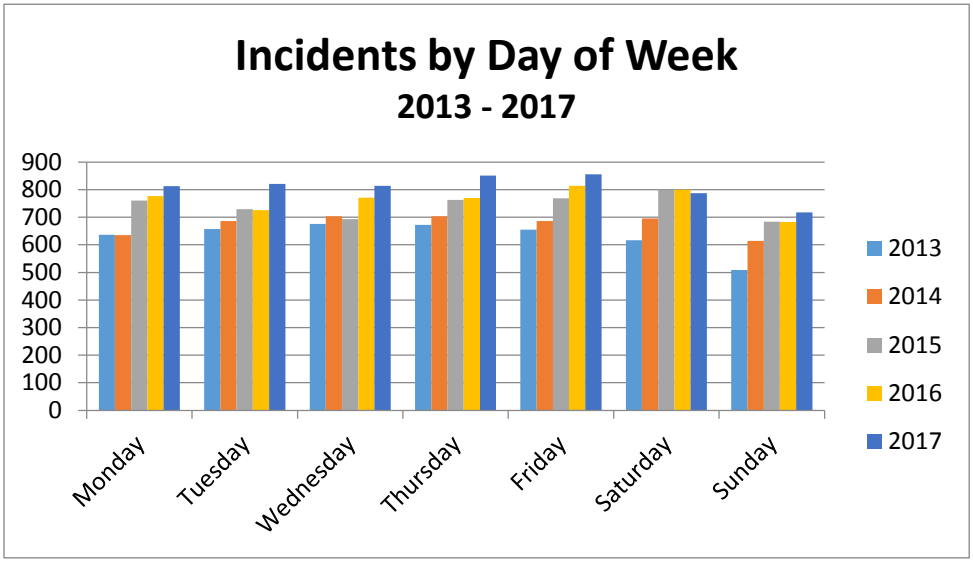
As the Department's call volume increases, the distibution of incidents has also remained relatively static with EMS calls accounting for approximately 62% of the total call volume in 2017, and 64% since 2003. Fires represented 2% of calls in 2017, as well as since 2003. Alarms represented 8% of the calls in 2017 and 9% since 2003. Other calls, represented the remaining 28% of the calls in 2017, and 25% as since 2003.

Community Response History Chart 2.0



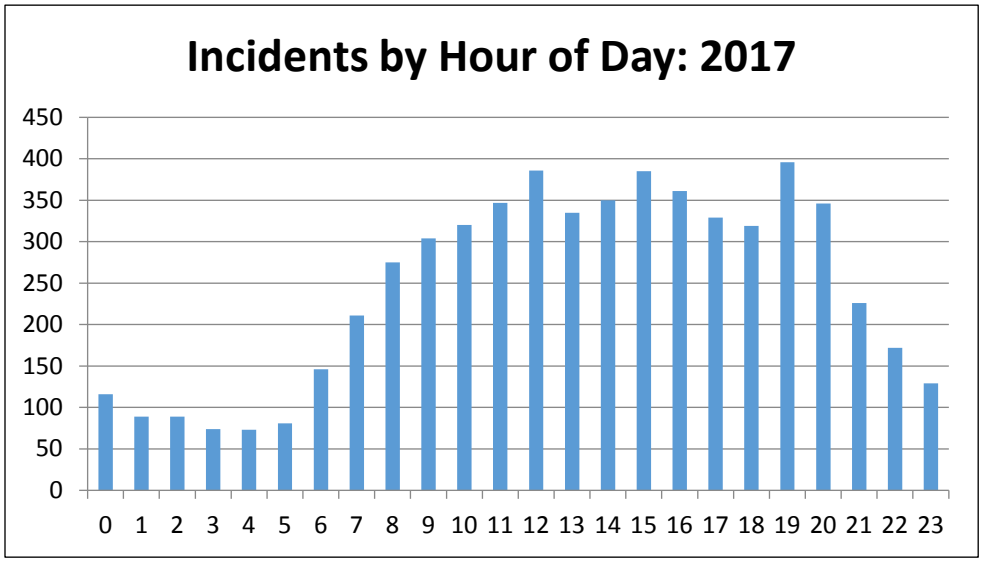
Call volume is generally evenly spread out during the week with a 10% fluctuation between Saturdays and Sundays.

Community Response History Chart 3.0



As expected, call volume decreases after approximately 2300 hours until 0700 hours on a daily basis.

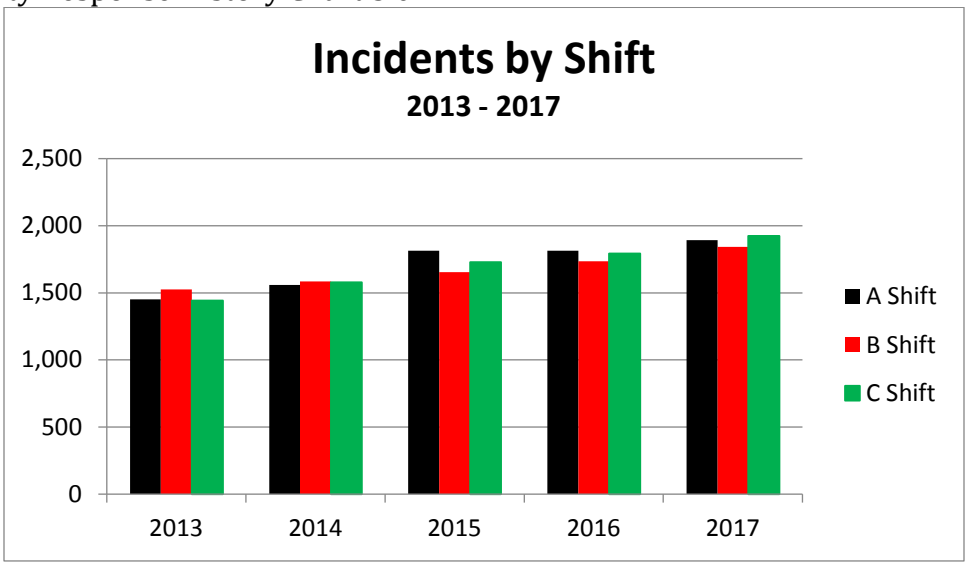
Community Response History Chart 4.0



Incidents by Hour of Day																									
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	Totals
2013	84	88	86	65	49	78	110	168	203	235	243	254	273	250	283	279	265	252	269	227	194	200	147	121	4,423
2014	100	111	82	69	63	52	111	138	214	260	237	268	279	261	285	291	316	296	304	271	222	192	171	132	4,725
2015	114	119	77	72	73	71	120	170	201	280	278	334	309	373	319	321	305	302	311	285	231	223	185	124	5,197
2016	124	98	93	60	75	92	136	198	248	283	295	357	343	322	335	347	301	326	320	358	359	196	159	126	5,551
2017	116	89	89	74	73	81	146	211	275	304	320	347	386	335	350	385	361	329	319	396	346	226	172	129	5,659
Totals	538	505	427	340	333	374	623	885	1141	1362	1373	1560	1590	1541	1572	1623	1548	1505	1523	1537	1352	1037	834	632	25,555

Call distribution across the three shifts has varied, but there has been no study or determination as to why.

Community Response History Chart 5.0



Review of the historical performance includes a review of both the distribution (arrival of the 1st unit) and concentration (arrival of the effective response force).

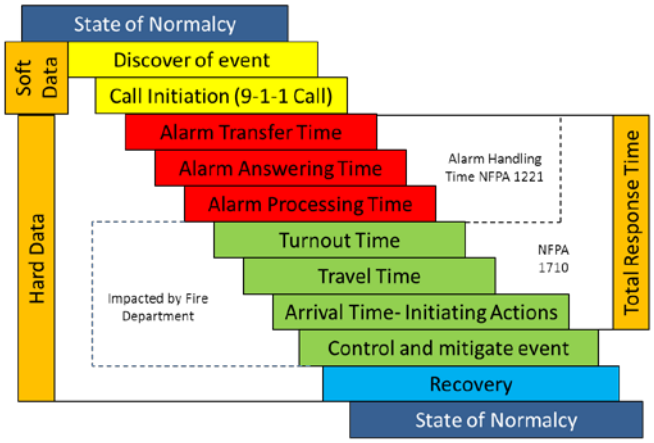
In reviewing distribution data, this data confirmed the conclusion from the 2011 Standards of Cover and assumptions that have arisen since 2011.

1. As will be seen in the Distribution Factor Response Time tables (pp. 25 – 41) for the jurisdiction, stations and planning zone, population density has little impact on call processing or turnout time. However, if the incident occurs on a highway, the call processing time is significantly increased.
2. Station 151 has historically been the busiest station. However, Station 154's call volume has increased in the past five years largely due to the construction of several senior facilities.
3. Even with the residential growth and development throughout the jurisdiction, Stations 151 and 154 maintain the largest population centers.
4. Planning Zone 6, Cobblestone Ranch is growing quickly and approaching the call volume warrant and tenants for a dedicated fire Station.

The jurisdiction, as well as each of the four stations, and nine planning zone are described in detail in the Distribution Factors section of this document.

Composition of Total Response Time

As part of the distribution analysis, all emergent calls were evaluated to determine the total response times based on population density. CRFD defines total response time as the time from when the customer's call is received by the public safety answering point (PSAP) until the first unit arrives on scene. There are three components to the total response time; call processing, turnout, and travel, which are defined below.



- Call processing / alarm handling time: time to answer the call, process the call and dispatch appropriate apparatus
- Turnout time: time from when the crews are notified of the call until the apparatus is moving.
- Travel time: time from when the apparatus starts moving until it arrives on scene.

These components are then filtered by the four station response areas, then the nine planning zones. All times reported within the distribution study are reported at the 90th percentile, or performance 90 percent of the time. Should call volume be less than 10 in any given area, a maximum time or 100th percentile is reported.

Data Analysis and Statistical Limits

For the purpose of the Distribution Factors analysis, CRFD has established the following thresholds for statistical outliers. Any response time with a zero (0:00) time value is assumed to be a data error. This assumption is based on the premise that a zero time is the result of a data entry error. While there are a couple scenarios that could result in a zero time value, i.e. walk-in medical at the station or crews arriving at a scene prior to it being received or processed by the dispatch center (for example, being flagged down by a motorist, or happening upon a motor vehicle accident), these are rare and would have limited effect on the overall analysis. Any response that exceeds the upper limit is assumed to be a data error. This assumption is based on the premise that the upper limit should include all normal responses. All raw data reports run in support of this distribution analysis include a summary of lower and upper limit exclusion.

	Lower limit	Upper limit
Call Processing	0:00	5:00
Turnout	0:00	5:00
Travel	0:00	15:00
Total Response Time	0:00	20:00

For the purpose of the Concentration Factors analysis, CRFD has established the following thresholds for statistical outliers. Any response time with a zero (0:00) time value is assumed to be a data error. This assumption is based on the premise that a zero time is the result of a data entry error. While there are a couple scenarios that could result in a zero time values, walk-in medical at the station or crews arriving at a scene prior to it being receive or processed by the dispatch center, these are rare and would have limited effect on the overall analysis. Any response that exceeds the upper limit is assumed to be a data error. This assumption is based on the premise that the upper limit should include all normal responses. For all effective response force studies, other than EMS, all extended response time are individually verified to ensure data validity. All raw data reports run in support of this distribution analysis include a summary of lower and upper limit exclusion.

	Lower limit	Upper limit
ERF Travel	0:00	25:00
ERF Total Response Time	0:00	30:00

Distribution Factors

For the purpose of this document, Distribution shall be defined as a geographic area. These areas are calculated at a jurisdictional, station response area (current deployment) and nine theoretical station planning zones (PZ). Evaluating the current distribution model provides historical baselines for performance. Evaluating the smaller PZs provides greater resolution on local performance and trends within a station's first due area. The primary distribution factor is the arrival of the 1st due apparatus. Other distribution factors that were evaluated in conjunction with call volume were:

- Simultaneous call volume
- Response time
- 1st Due compliance (based on population density)

The Department consists of four stations staffing three type-II engines, one quint (minimum three-person staffing each), three medic units (two-person staffing), and one battalion chief. When examining distribution, the primary means of evaluation is the arrival of the first unit on scene. It is the arrival of the first unit that allows the company officer to "size-up", or determine the scope and complexity of the incident, and either request additional resources or return units to service. In addition to the primary apparatus, all stations cross-staff a brush truck. Station 153 also cross-staffs the Department's hazardous materials (HAZMAT) truck that is a regional asset. Station 154 also cross-staffs the Department's squad and collapse trailer.

	Daily Staffing (minimum)				
	Suppression Apparatus	Medic	Battalion Chief	Cross-Staffed Units	Daily Staffing
Station 151	Engine 151 4 (3)	Medic 151 2 (2)	BA151 1 (1)	Brush 151	7 (6)
Station 152 proposed	*Engine 152 4 (3)*	*N/A*	*N/A*	*Brush 152*	*4 (3)*
Station 153	Engine 154 4 (3)	Medic 153 2 (2)	N/A	Brush 153 Tracked Rescue Vehicle HazMat 153	6 (5)
Station 154	Engine 154 3 (3)	Medic 154 2 (2)	N/A	Brush 154 Squad 154	5 (5)
Station 155	Quint 155 4 (3)	N/A	N/A	Brush 155	4 (3)
	15 (12)	6 (6)	1 (1)	0	22 (19)
Proposed	*19 (15)*	*6 (6)*	*1 (1)*	*0*	*26 (22)*

The Department added the response category of Interstate in the distribution study. This was done in an attempt to assess what impact the interstate has on call volume and response times even though it does not have a static population like the fire management zones. Distribution Factors Table 1.0 provides a breakdown of area center lane miles, population and population density by station and planning zone.

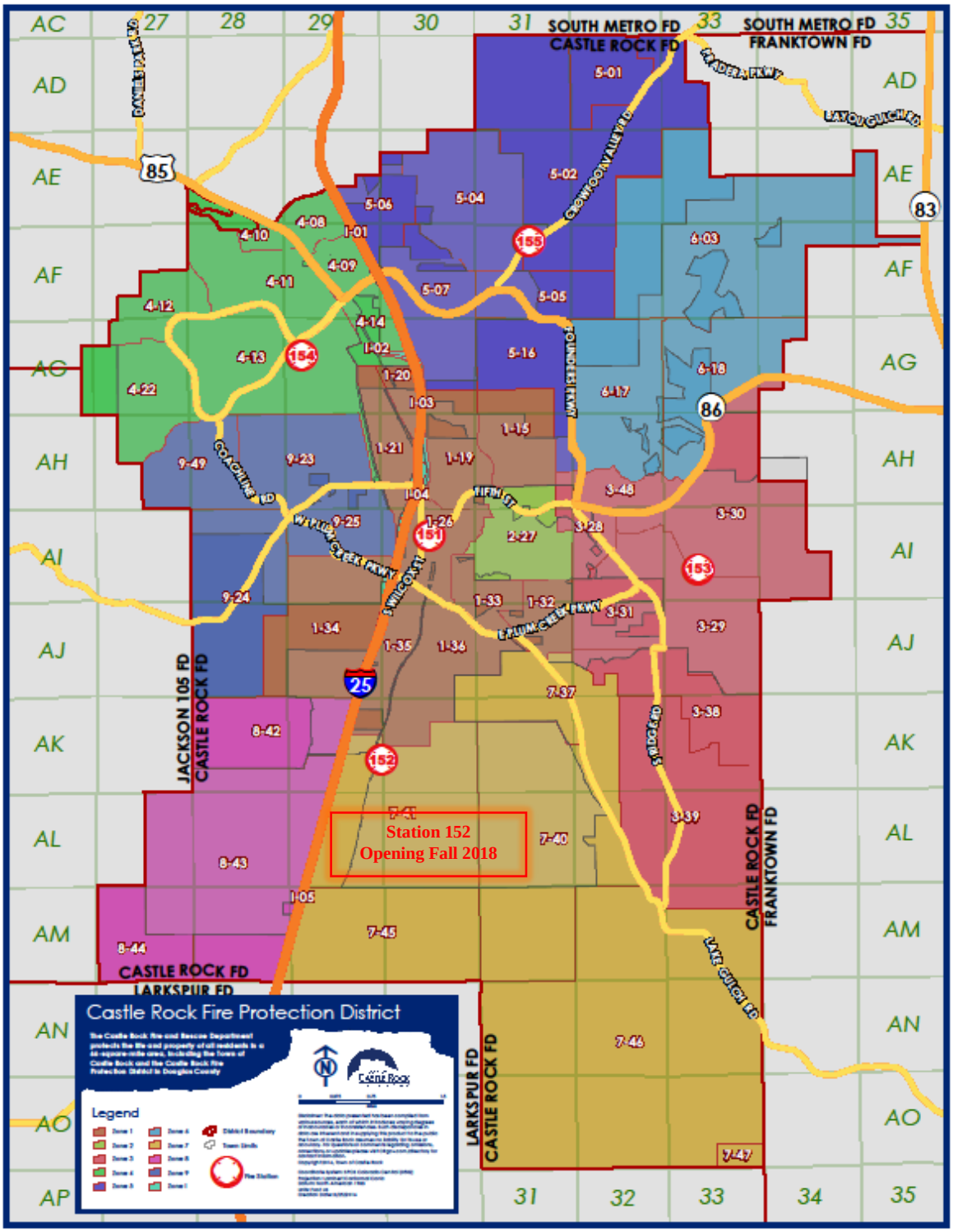
Distribution Factors Table 1.0

Fire Station	Square Miles		Center Lane Miles		Population			
151	22.83	34.5%	135.0	34.7%	18895	31.0%	827/mile²	Rural
153	23.53	35.6%	103.3	26.6%	14196	23.3%	603/mile²	Rural
154	10.74	16.2%	106.3	27.3%	20832	34.2%	1950/mile²	Urban
155	9.07	13.7%	44.3	11.4%	6975	11.5%	765/mile²	Rural
CRFD Total	**66.17**	**100.0%**	**388.9**	**100.0%**	**60898**	**100.0%**	**920/mile²**	**Rural**

Planning Zone	Square Miles		Center Lane Miles		Population			
PZ1	6.95	10.5%	59.0	15.2%	13514	22.2%	1946/mile²	Urban
PZ2	0.88	1.3%	7.2	1.9%	1827	3.0%	2061/mile²	Urban
PZ3	9.05	13.7%	60.3	15.5%	10289	16.9%	1137/mile²	Urban
PZ4	6.00	9.1%	71.6	18.4%	13732	22.5%	2286/mile²	Urban
PZ5	9.00	13.6%	44.3	11.4%	6975	11.5%	775/mile²	Rural
PZ6	6.92	10.5%	37.6	9.7%	3764	6.2%	554/mile²	Rural
PZ7	16.78	25.4%	46.6	12.0%	3446	5.7%	205/mile²	Rural
PZ8	5.31	8.0%	13.1	3.4%	252	0.4%	47/mile²	Rural
PZ9	4.61	7.0%	30.3	7.8%	7111	11.7%	1542/mile²	Urban
Interstate	0.65	1.0%	18.8	4.8%	0	0%	N/A	N/A
CRFD Total	**66.17**	**100.0%**	**388.9**	**100%**	**60898**	**100.0%**	**920/mile²**	**Rural**

The Distribution Factors Map 1.0 displays the four station areas and the nine station planning zones. The lighter shaded areas within each planning zone represent areas within the Town of Castle Rock, while the darker shaded areas are unincorporated Douglas County and represent the Castle Rock Fire Protection District (CFRPD).

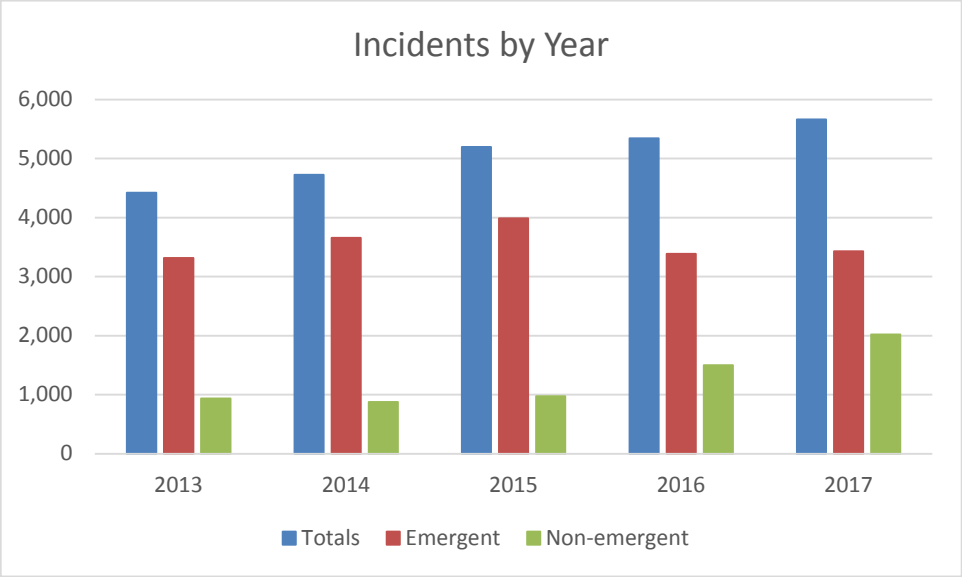
Distribution Factors Map 1.0



Castle Rock Fire and Rescue Department

Castle Rock Fire and Rescue Department covers 66 square miles and a total population of roughly 67,500 residents. The Town of Castle Rock represents 34 square miles and 65,500 residents. The Castle Rock Fire Protection District encompasses the remaining 32 square miles and 2,000 residents. The jurisdiction has a median home value of $344,000 and median household income of $99,725.

Incident Volume by Year

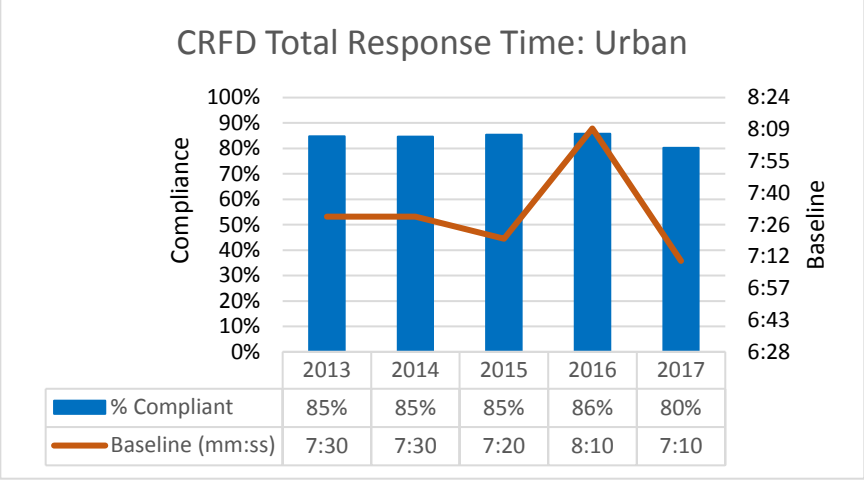


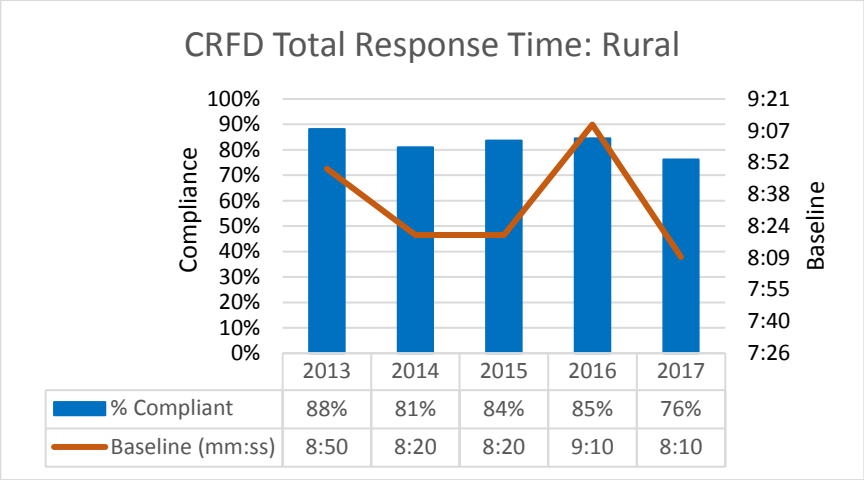
CRFD: 1st Due - 90th Percentile Times - Baseline Performance			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Alarm Handling	Pick-up to Dispatch	Urban	1:35	1:33	2:23	1:15	1:14	1:25	1:00
			n=11322	n=2237	n=2186	n=2464	n=2567	n=1868	
		Rural	1:38	1:36	2:12	1:26	1:21	1:24	
			n=4064	n=796	n=791	n=724	n=754	n=1000	
		Interstate	2:03	2:00	2:05	1:59	1:45	2:38	
			n=881	n=179	n=203	n=182	n=189	n=128	
Turnout Time	Turnout Time 1st Unit	Urban	2:00	1:46	1:50	1:49	2:09	2:15	1:38
			n=11442	n=2216	n=2178	n=2670	n=2503	n=1875	
		Rural	2:01	n=1:51	1:50	1:55	2:06	2:14	
			n=4052	n=791	n=782	n=747	n=732	n=1000	
		Interstate	2:30	2:00	2:30	2:21	2:36	2:42	
			n=827	n=179	n=186	n=186	n=167	n=103	
Travel Time	Travel Time 1st Unit **Distribution**	Urban	5:39	5:41	5:45	5:49	5:31	5:19	4:32
		Rural	7:01	7:26	7:12	7:00	6:57	6:30	5:32
		Interstate	8:07	7:58	8:48	8:02	8:37	8:02	7:32
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	8:10	8:10	8:40	7:50	8:10	8:00	7:10
			n=11754	n=2244	n=2210	n=2779	n=2573	n=1950	
		Rural	9:40	10:00	10:00	9:10	9:50	9:10	8:10
			n=4191	n=798	n=791	n=800	n=791	n=1041	
		Interstate	11:30	11:50	12:50	10:50	11:30	12:00	10:10
			n=709	n=167	n=142	n=154	n=130	n=116	

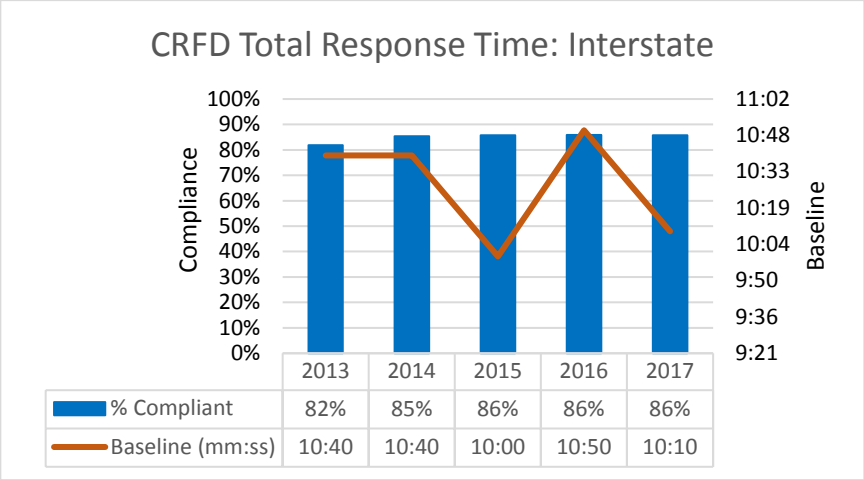
Simultaneous Call Volume: CRFD (all incidents)

	Simultaneous Calls					
	2012	2013	2014	2015	2016	2017
CRFD	28.8%	30.1%	26.7%	29.6%	29.4%	35.1%
	1203	1,331	1,262	1,540	1,531	1,824

CRFD:1st Due Compliance (Total Response Time)



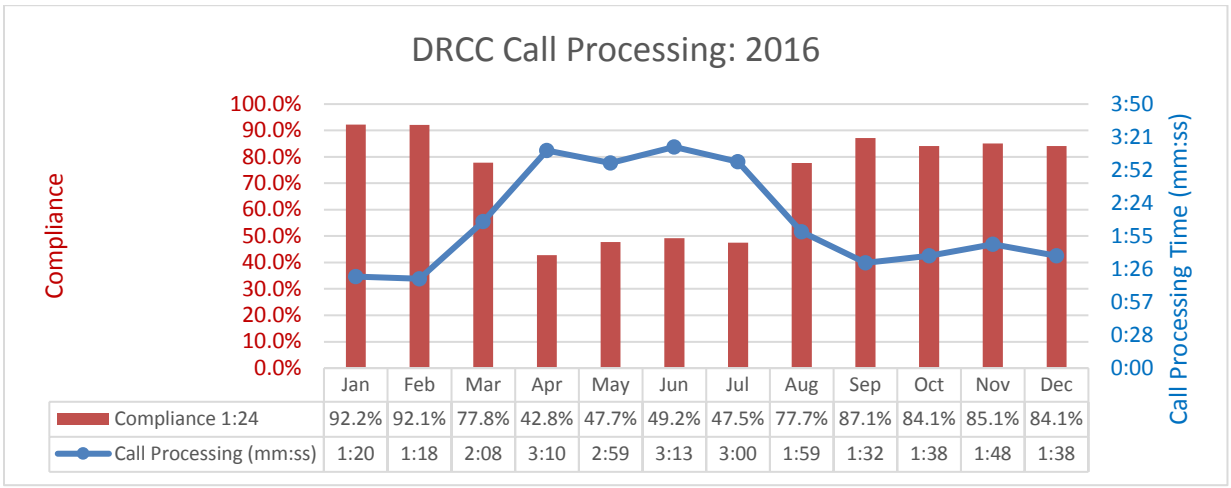




CRFD Summary:

Department wide, the total response times in urban, rural population density as well as the interstate have hovered around the 90% compliance mark, with a notable exception in 2016. Additionally, the annual baselines are trending down which indicates improving performance over time, even with increasing call volume.

As seen in the compliance percentages all population densities in 2016, there was a notable decrease. The root cause of this drop in compliance has been assigned to the change in dispatching processes. From March 22nd through July 31st, Douglas County Regional Dispatch Center (DRCC) strictly followed the ProQA Medical Priority Dispatch System (MPDS). This system required dispatchers to ask all questions prior to dispatching units to a given call. Starting in August, DRCC elected to dispatch units as soon as the incident type and location were confirmed, meanwhile, dispatchers continued to ask questions per the ProQA MPDS system. Once all questions are completed, dispatchers would update the units en-route with the additional information. As seen in chart below, there is a direct and assignable impact of the ProQA process and the modified ProQA process.



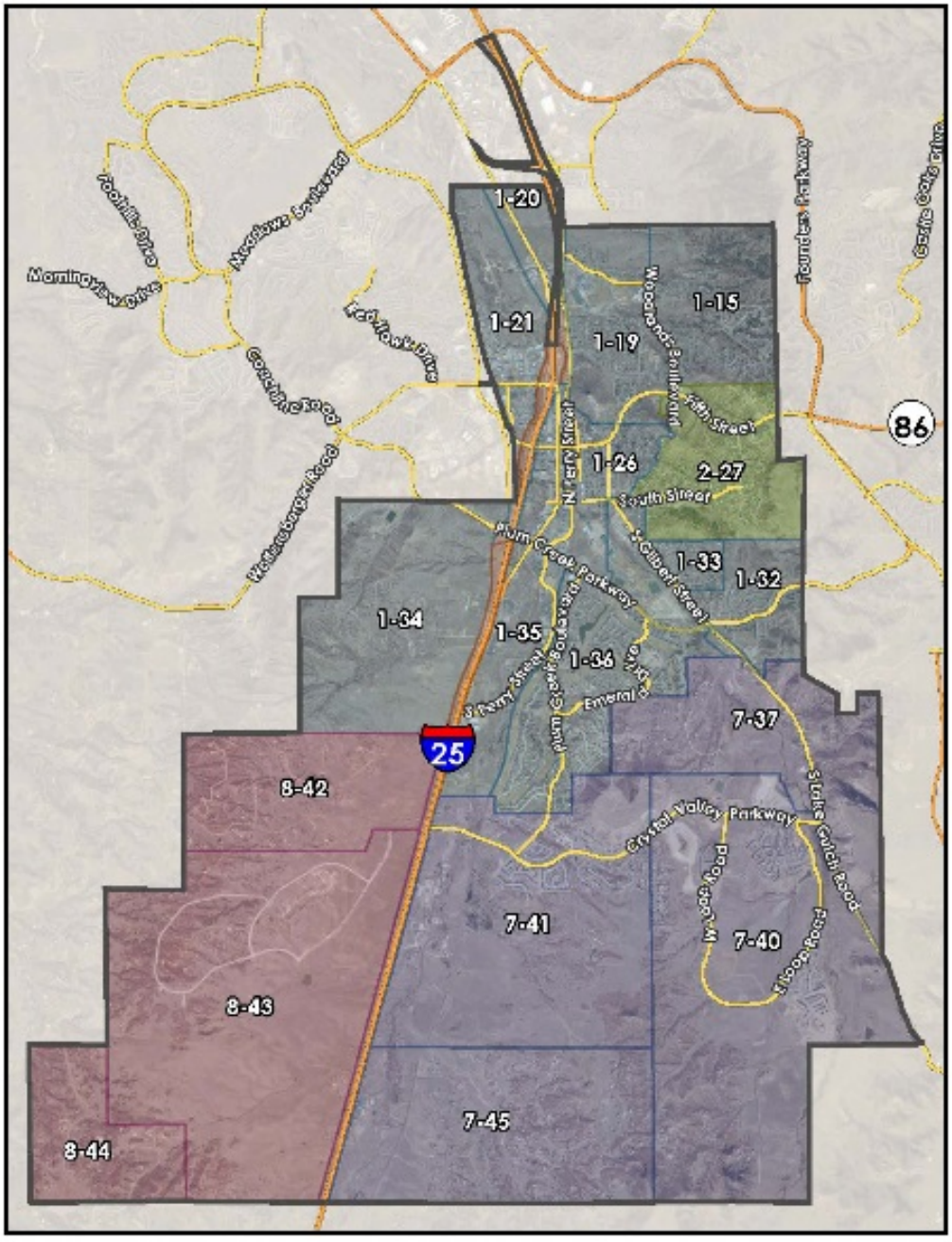
The effect of the protracted call processing times between March 22nd and July 31st has far reaching impacts on all call process and total response times, regardless of the station area or planning zone, specifically on EMS incidents. The effect will also be evident in the increased baselines and benchmarks. As will be seen the following distribution analysis, the increased times are more evident when there is a smaller sample size.

2016	Incidents	90th %	Compliance to 1:24	Compliance to 1:30	Compliance to 1:00
Jan 1st – Mar 21st	889	1:21	91.9%	92.7%	82.3%
Mar 22nd – Jul 31st	1079	3:08	46.4%	50.3%	32.9%
Aug 1st - Dec 31st	1419	1:45	83.6%	85.9%	68.5%
1/1/17 – 12/31/17	3430	1:39	84.5%	86.9%	68.9%

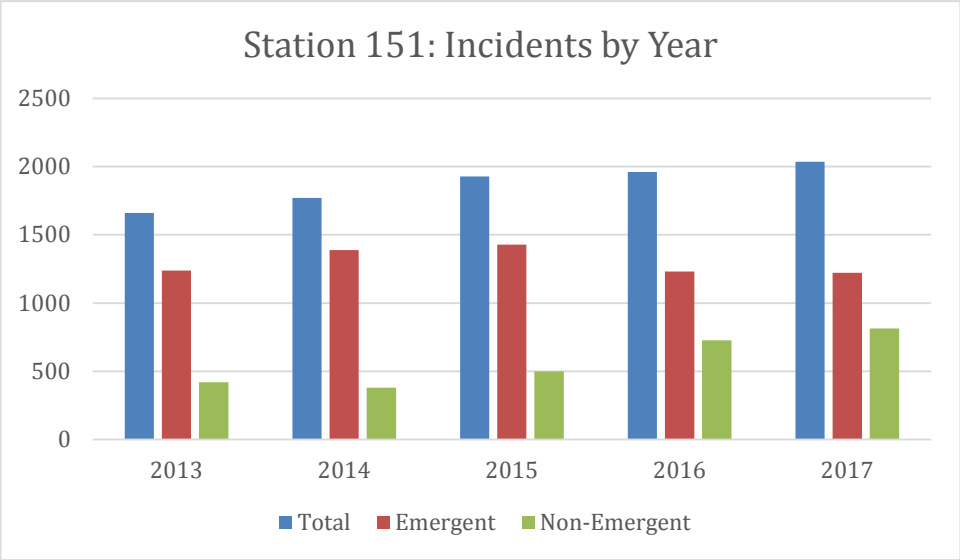
It is also import to understand the benefits of the ProQA MPDS. First and most importantly, the 911 dispatchers are able to focus their questions, providing instructions to the caller, and begin basic treatment before the responders arrive. Secondly, 911 dispatcher are able to provide responders more accurate and detailed information prior to their arrival. Lastly, based on the updated detailed information and MPDS classifications, the response mode may be changed from an~~d~~ emergent response to non-emergent. This increases the safety for both the responder, not having to maneuver through traffic with lights and sirens, and the community by decreasing the risk of traffic accidents secondary to emergency vehicle traffic.

Station 151

Station 151 is located in the historic downtown area of Castle Rock. Typical Station assignments are Engine 151 (minimum three-person staffing), Medic 151 (minimum two-person staffing), and Battalion Chief 151 (one-person staffing). Station 151 has two access points to Interstate I-25 (exits 181, 182) both serving north and south bound lanes. Station 151's district is the 2nd largest within the jurisdiction at 22.8 square miles (34.5%), having approximately 135 center lane miles (34.7%), and an overall population of roughly 19,000 (31%) residents. Station 151 maintains primary response coverage for PZ1, PZ2, PZ8, and a portion of PZ7.



Incident Volume by Year

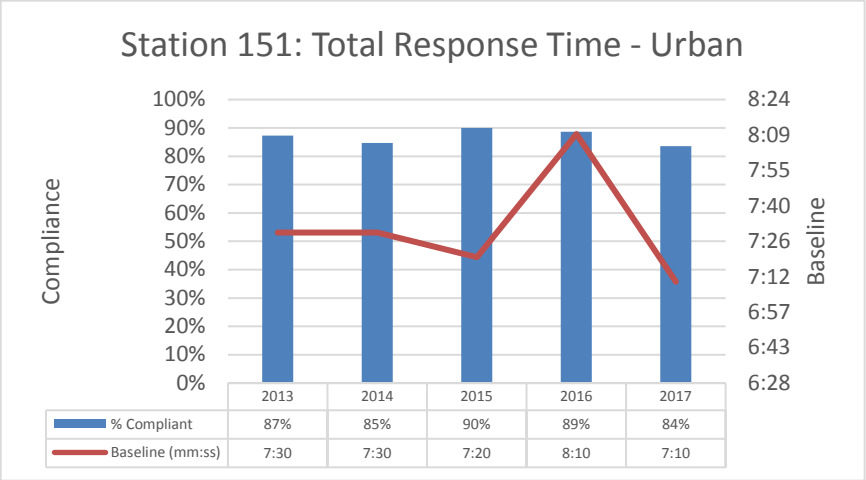


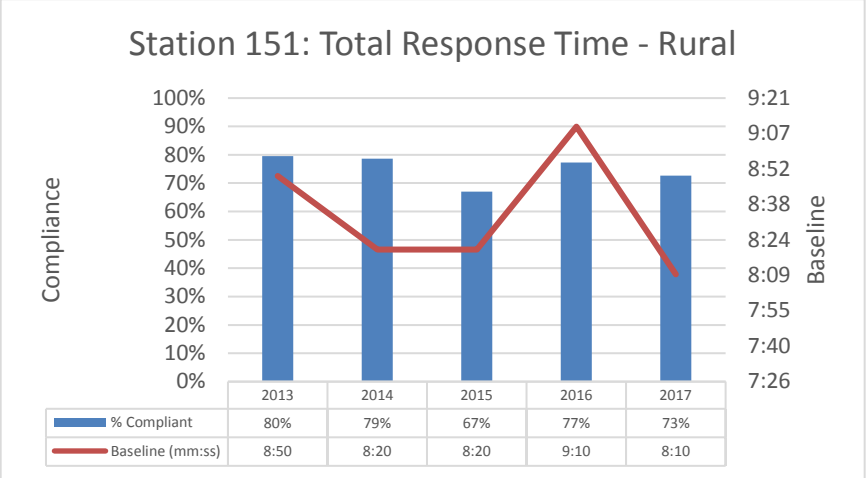
Station 151: 1st Due - 90th Percentile Times - Baseline Performance			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Alarm Handling	Pick-up to Dispatch	Urban	1:36	1:38	2:21	1:18	1:15	1:22	1:00
			n=4206	n=789	n=824	n=825	n=941	n=827	
		Rural	1:37	1:34	2:22	1:26	1:11	1:20	
			n=1499	n=2898	n=289	n=316	n=332	n=265	
		Interstate	2:05	2:05	2:15	1:36	1:35	2:45	
			n=500	n=121	n=98	n=107	n=100	n=74	
Turnout Time	Turnout Time 1st Unit	Urban	2:05	1:50	1:57	1:59	2:14	2:17	1:38
			n=4264	n=784	n=826	n=906	n=914	n=834	
		Rural	2:03	1:52	1:57	1:56	2:07	2:16	
			n=1508	n=298	n=285	n=332	n=326	n=267	
		Interstate	2:19	2:00	2:12	2:06	2:28	2:34	
			n=470	n=121	n=95	m=107	n=88	n=59	
Travel Time	Travel Time 1st Unit **Distribution**	Urban	5:30	5:40	5:30	5:30	5:30	5:10	4:32
		Rural	7:50	8:20	8:10	7:40	7:10	8:00	5:32
		Interstate	8:20	8:20	9:10	8:10	9:00	8:20	7:32
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	8:00	8:00	8:30	7:30	8:10	7:50	7:10
			n=4390	n=793	n=831	n=949	n=946	n=871	
		Rural	10:20	11:00	10:50	10:00	9:50	10:50	8:10
			n=1560	n=300	n=291	n=353	n=338	n=278	
		Interstate	11:50	12:30	12:50	10:50	11:40	13:00	10:10
			n=517	n=125	n=99	n=116	n=101	n=76	

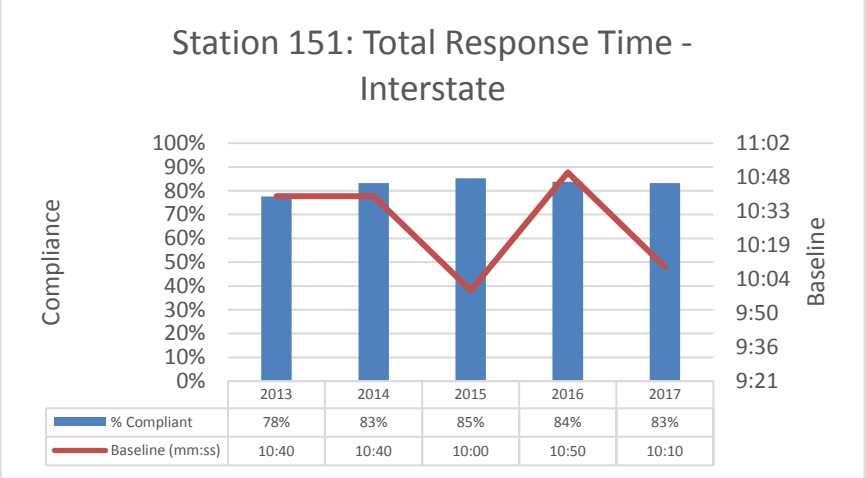
Station 151 Simultaneous Call Volume (all incidents)

	Simultaneous Calls					
	2012	2013	2014	2015	2016	2017
151	15.0%	13.4%	11.9%	12.5%	10.9%	12.3%
	268	222	211	241	213	250

Station 151 1st Due Compliance







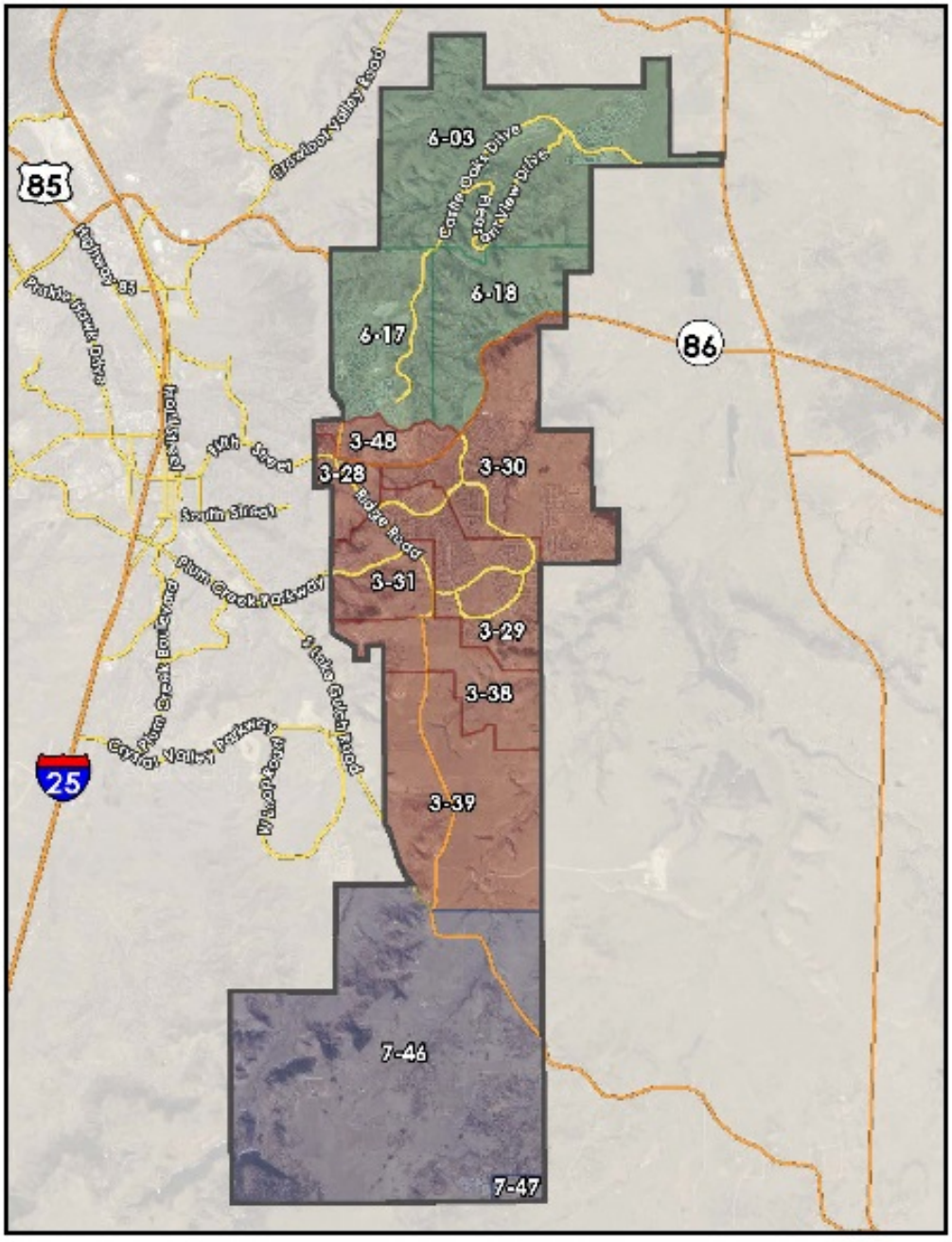
Station 151 Summary:
Station 151's total call volume increased by 22.5%% (375) between 2013 and 2017 with a 4.6% (38) decrease in emergent incidents. The decrease in emergent incidents is related to the ProQA MPDS, and having units respond non-emergently, of slowing from emergent to non-emergent based on information provided by the caller. On average roughly 13% of those calls occurred simultaneously with another call in 151's district. In cases where Engine 151 was not the 1st arriving unit (12.1% of the time), the response time increased by 3:08. Even with the increased call volume, Station 151's compliance for urban areas has been between 84% and 90% to adopted benchmarks. In the rural areas, Station 151's compliance is lower, between 67% and 80% to adopted benchmarks. Compliance time on I-25 is challenging due to longer call processing time and limited point of access, and varies between 78% and 85%. These times are also very volatile due to a lower sample size.

Turnout time at Station 151 has improved since 2011, but is the highest of the four stations. Station 151 houses both on-duty crews for Engine 151, Medic 151 and Battalion 151, as well as fire headquarters (Administration and Life Safety Division). The fire station is on the second floor with the administrative offices on the first floor. This time difference is due to the layout of the station. Station 151 is the only two-story station and requires crews to descend flights of stairs to reach the apparatus floor. Currently, there are no plans to re-design the station.

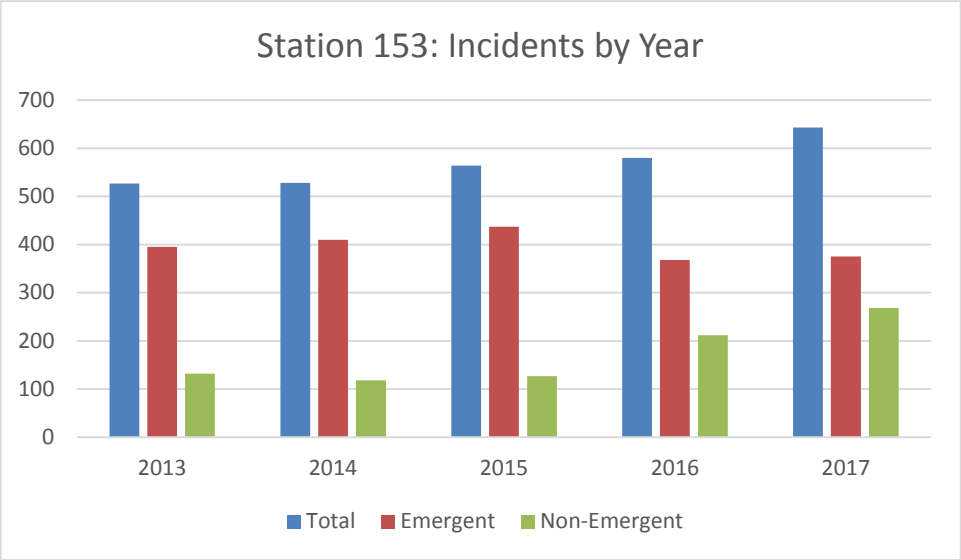
The Department has recognized a performance gap in the southern portion of Station 151's jurisdiction. There are two distinct areas, PZ7 and PZ8. Response times and coverage in PZ7 is being addressed with the planned opening of Station 152 in the fall of 2018 and the placement of an engine company with minimum staffing of three members. With respect to PZ8, given the call volume (maximum of 12 calls annually) and low population (252 residents), there are no plans for a dedicated station.

Station 153

Station 153 is located within a residential neighborhood on the eastern side of the jurisdiction. Typical station assignments are Engine 153 (minimum three-person staffing) and Medic 153 (two-person staffing). Station 153 ‘s district is the largest of CRFD’s station districts at 23.5 square miles (35.6%) having approximately 103.3 center lane miles (26.6%) and an overall population of roughly 14,000 (23.3%) residents. Table 5.0 shows the time analysis for Station 153 and is also displayed in Chart 3.0.



Incident Volume by Year

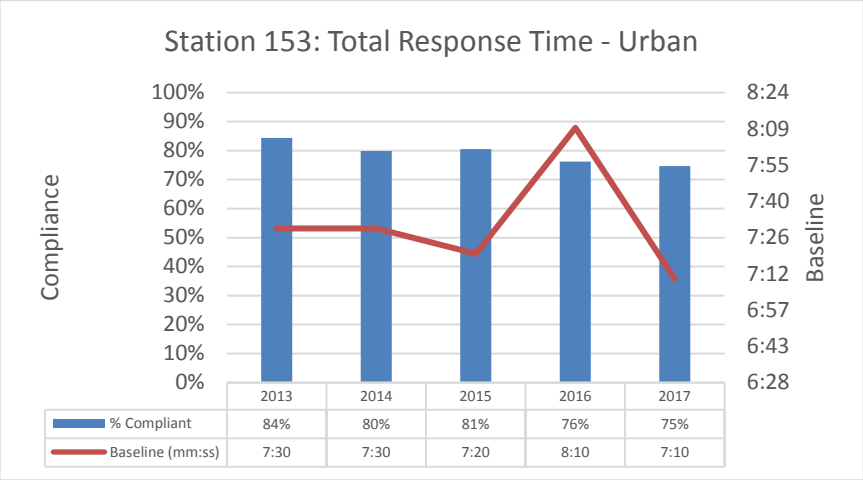


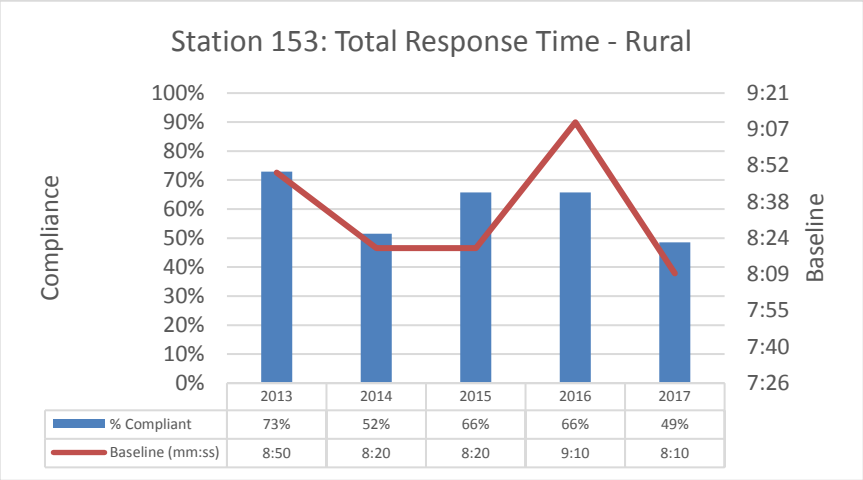
Station 153: 1st Due - 90th Percentile Times - Baseline Performance			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Alarm Handling	Pick-up to Dispatch	Urban	1:32	1:33	2:28	1:09	1:10	1:18	1:00
			n=1436	n=269	n=281	n=312	n=321	n=253	
		Rural	1:57	1:40	2:33	1:51	1:40	1:59	
			n=456	n=102	n=79	n=71	n=83	n=124	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
Turnout Time	Turnout Time 1st Unit	Urban	1:54	1:48	1:41	1:42	2:09	2:08	1:38
			n=1465	n=265	n=284	n=345	n=317	n=254	
		Rural	2:12	1:54	1:54	2:01	2:26	2:25	
			n=456	n=102	n=77	n=74	n=82	n=121	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
Travel Time	Travel Time 1st Unit **Distribution**	Urban	6:30	6:40	6:50	6:30	6:20	5:20	4:32
		Rural	9:10	9:10	9:10	7:50	11:00	9:10	5:32
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	7:32
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	8:50	8:40	9:20	8:40	8:50	8:10	7:10
			n=1495	n=269	n=286	n=354	n=323	n=263	
		Rural	12:10	12:50	14:00	10:10	14:00	11:30	8:10
			n=468	n=101	n=76	n=79	n=83	n=129	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	10:10
			N/A	N/A	N/A	N/A	N/A	N/A	

Station 153 Simultaneous Call Volume (all incidents)

	Simultaneous Calls					
	2012	2013	2014	2015	2016	2017
153	4.3%	6.1%	3.8%	4.3%	3.3%	4.2%
	21	32	20	24	19	27

Station 153 1st Due Compliance



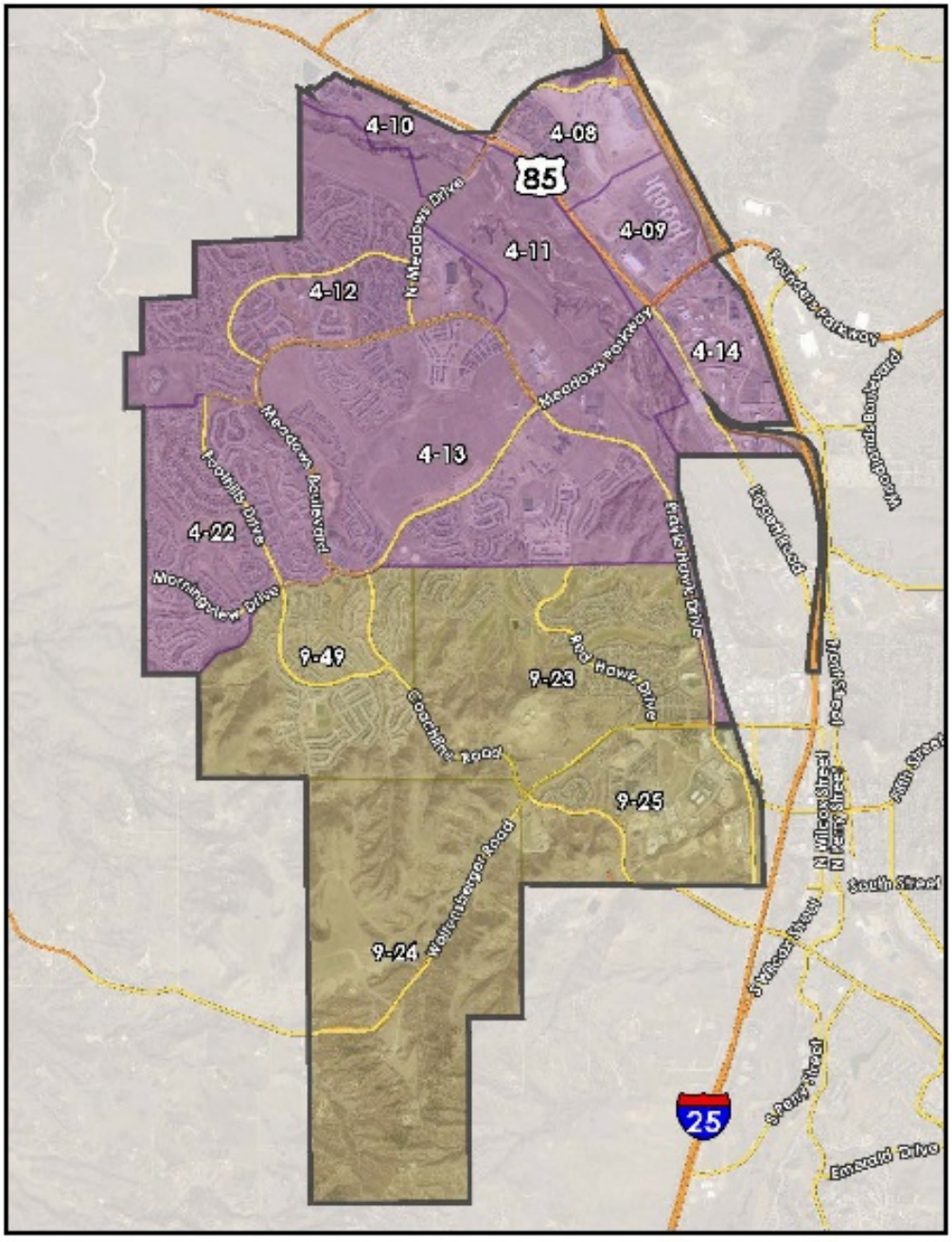


Station 153 Summary:
Station 153 has continued to increase its call volume annually, but still remains the slowest of the four stations. Call volume has increased by 22% (116) since 2013 with an increase in emergency calls of 6% (16). On average, roughly 4.3% of those calls occurred simultaneously with another call in 153's district. In cases where Engine 153 was not the 1st arriving unit (9.1% of the time), the response time increased by 1:50. Station 153's response time compliance in the urban population areas has been between 75% and 84% to adopted benchmarks. However, Station 153's response time compliance for the rural population areas ranges between 52% and 73%. There are three main factors in these compliance numbers. First, Station 153 covers the largest area of the four stations, is primarily rural and has a large agricultural area. Second, Station 153 responds to an area that is a significant distance from the station, Cobblestone Ranch & Liberty Village (PZ6). This area is growing quickly, with the 2017 call volume reaching 150 calls, 75% of the

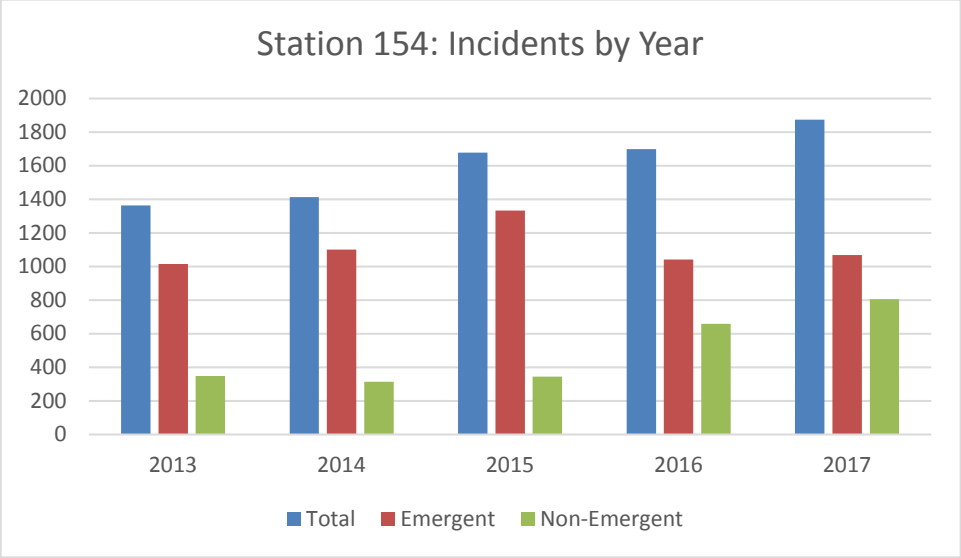
adopted call volume warrants. To ensure the quickest possible response time, CRFD maintains an automatic aid agreement with Franktown Fire Protection District (FFPD). When a call for service is received, CRFD and FFPD units are dispatched together. CRFD recognizes the increasing call volume and growth in PZ6 and monitors its response and performance metrics annually in an attempt to forecast the need for additional resources based on the tenants and warrants approved in the 2014 - 2019 Fire Master Plan.

Station 154

Station 154 is located in the northwestern portion of the jurisdiction, just to the east of the Department's highest population center, and west of the main retail center with two access points to I-25 (exits 184 and 185). Typical station assignments are Engine 154 (minimum three-person staffing) and Medic 154 (two-person staffing). Of the four station districts, Station 154 ranks third with respect to area and road miles, 10.7 sq. miles (16.2%) and 106.3 center lane miles (27.3%) respectively. Station 154 is the most populous district, in excess of 20,000 (34.2%) residents. Table 6.0 shows the time analysis for Station 154 and is also displayed in Chart 4.0.



Incident Volume by Year

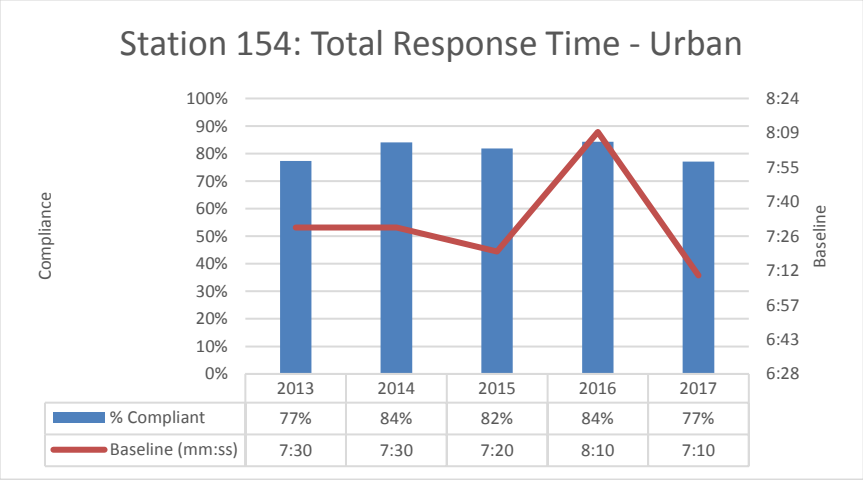


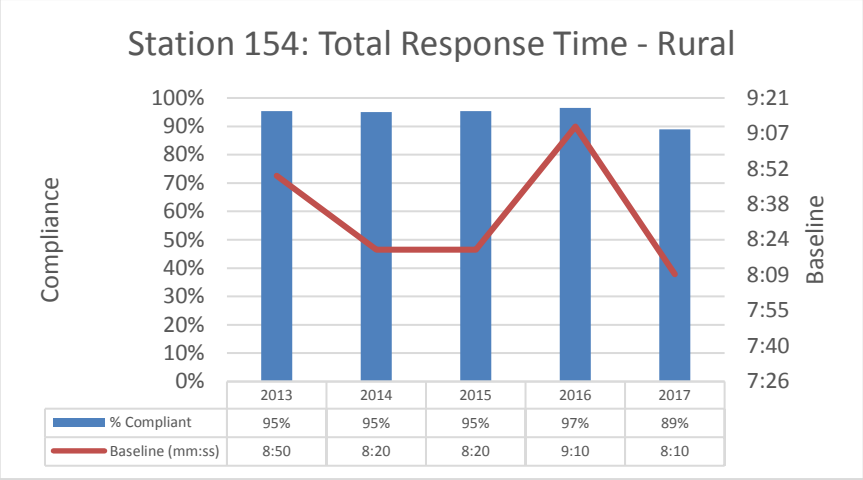
Station 154: 1st Due - 90th Percentile Times - Baseline Performance			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Alarm Handling	Pick-up to Dispatch	Urban	1:36	1:33	2:21	1:15	1:14	1:28	1:00
			n=3744	n=756	n=713	n=961	n=876	n=438	
		Rural	1:35	1:40	1:56	1:23	1:37	1:20	
			n=1482	n=280	n=286	n=214	n=200	n=502	
		Interstate	1:44	1:39	2:03	3:32	1:18	1:25	
			n=111	n=23	n=28	n=19	n=20	n=21	
Turnout Time	Turnout Time 1st Unit	Urban	1:55	1:47	1:47	1:42	2:04	2:16	1:38
			n=3779	n=749	n=707	n=1027	n=858	n=439	
		Rural	2:00	1:49	1:43	1:48	1:56	2:12	
			n=1479	n=276	n=283	n=223	n=191	n=506	
		Interstate	2:17	1:49	3:13	1:53	2:26	3:00	
			n=108	n=23	n=28	n=21	n=18	n=18	
Travel Time	Travel Time 1st Unit **Distribution**	Urban	5:50	5:50	5:50	6:00	5:40	5:50	4:32
		Rural	5:10	5:30	5:00	5:10	4:40	4:50	5:32
		Interstate	7:20	6:30	8:10	7:20	8:00	5:20	7:32
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	8:20	8:30	8:50	8:00	8:10	8:30	7:10
			n=3873	n=759	n=720	n=1064	n=876	n=454	
		Rural	7:30	7:50	7:20	7:20	7:20	7:10	8:10
			n=1534	n=280	n=289	n=239	n=200	n=526	
		Interstate	10:30	9:30	10:50	10:10	12:10	10:00	10:10
			n=114	n=22	n=28	n=23	n=19	n=22	

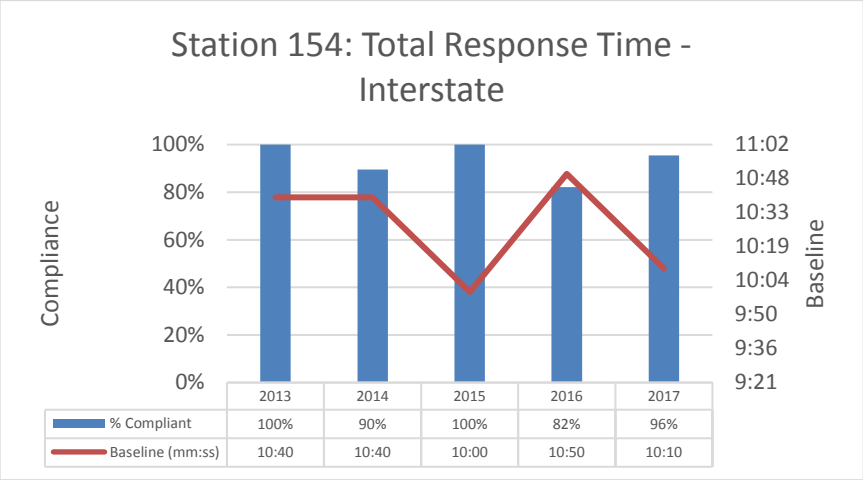
Station 154 Simultaneous Call Volume (all incidents)

	Simultaneous Calls					
	2012	2013	2014	2015	2016	2017
154	6.3%	3.5%	5.8%	5.4%	6.4%	6.1%
	76	149	133	164	160	240

Station 154 1st Due Compliance





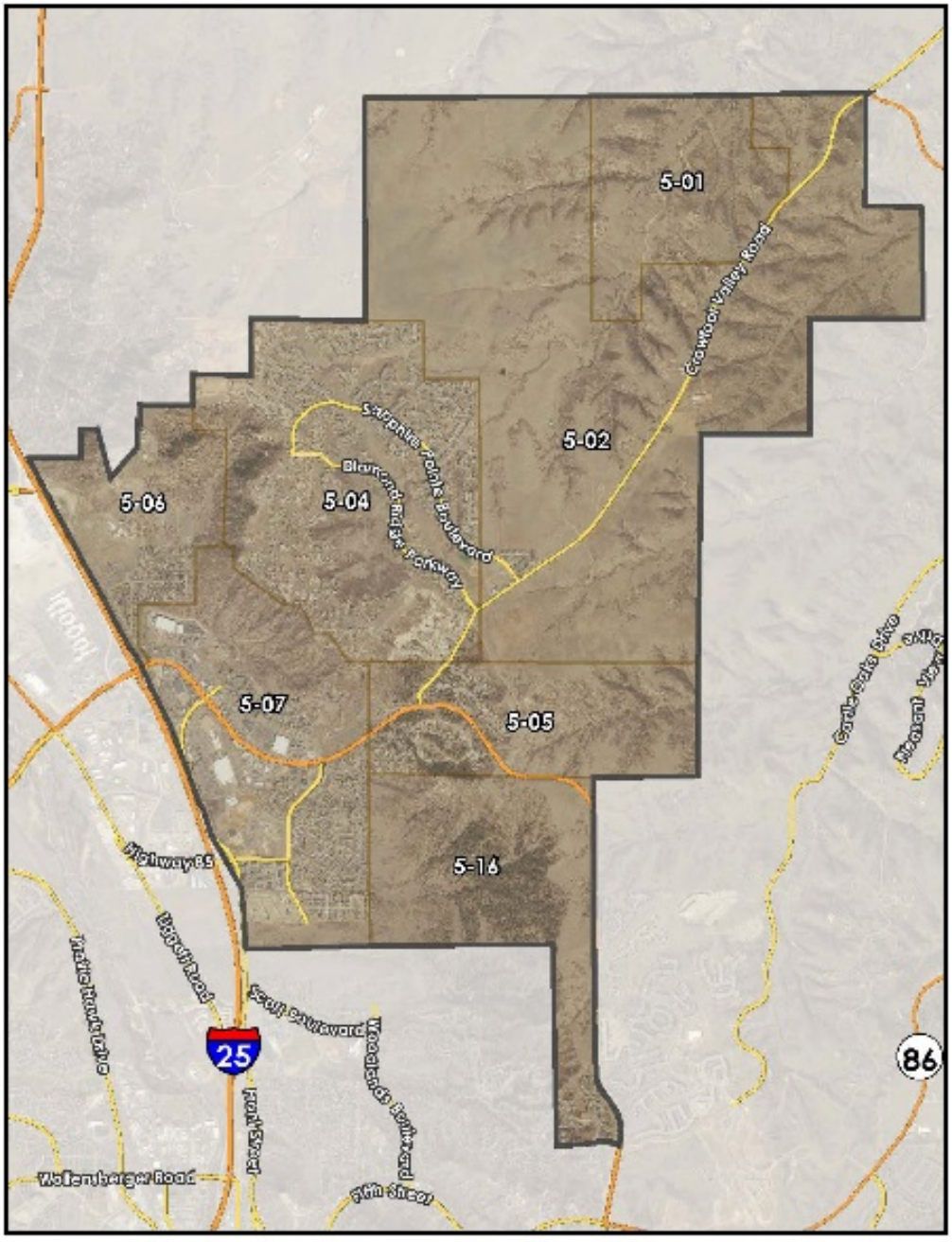


Station 154 Summary:
Station 154 is the most populous station district, and has seen an increase in call volume of 37% (510) since 2013 and an increase of emergent calls of 73% (318). The dramatic increase in call volume is partly due to the residential growth, but more so due to the seven senior living facilities and 24-hour care facilities located within the district. With the opening of just one of these centers, the annual call volume increases by 92 calls. Roughly 5.6% of those calls occurred simultaneously with another call in 154's district. In cases where Engine 154 was not the first unit to arrive (11.2% of the time), the response time increased by 3:04. Station 154's rural compliance has remained very high since 2013. This is largely in part due to the proximity of the rural areas to the station. Fire management zones (FMZ) 15409, 15411, and 15414 are commercial/retail centers and represented 28% of its call volume from 2013. Additionally, the Douglas County Sherriff's Office and jail resides in FMZ 15414, which is a regular source of EMS incidents.

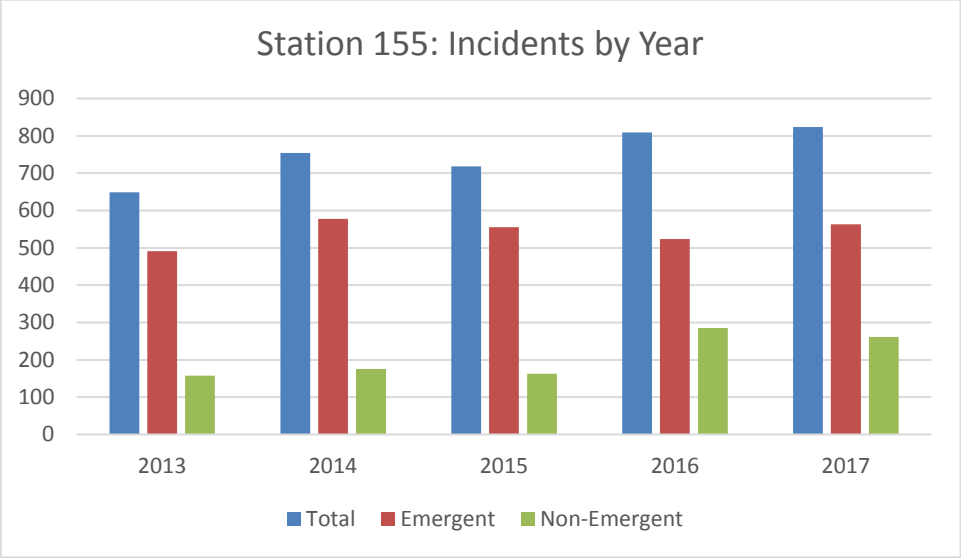
Station 154 has two areas that it struggles to meet adopted benchmarks, the southern portion of PZ9 and the western portion of PZ4. The portion of PZ9 is rural and accounts for a total of 23 calls for service since 2013 with a 90th percentile response time of 12:00. Within PZ4, Station 154 struggles with the western FMZs specifically 15412 and 15422. These FMZs are at the opposite end of PZ4 and essentially 180 degrees around the main access. These two FMZs account for 721 emergent calls since 2013 with a 90th percentile response time of 9:00, 0:40 higher than the 2017 urban baseline. Currently, there are no plans to address these performance gaps.

Station 155

Station 155 is located in the northeastern portion of the jurisdiction, centered between several residential neighborhoods and east of Castle Rock's main retail centers. Typical station assignment are Quint 155 (minimum three-person staffing). Station 155 has the smallest district with respect to area, center lane miles, and overall population at 9.07 sq. miles (13.7%), 44.3 (11.4%), and 6975 (11.5%) respectively.



Incident Volume by Year

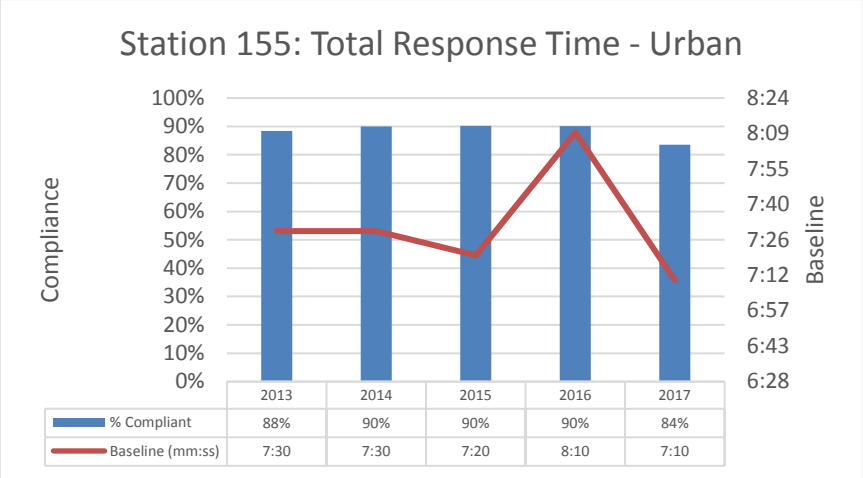


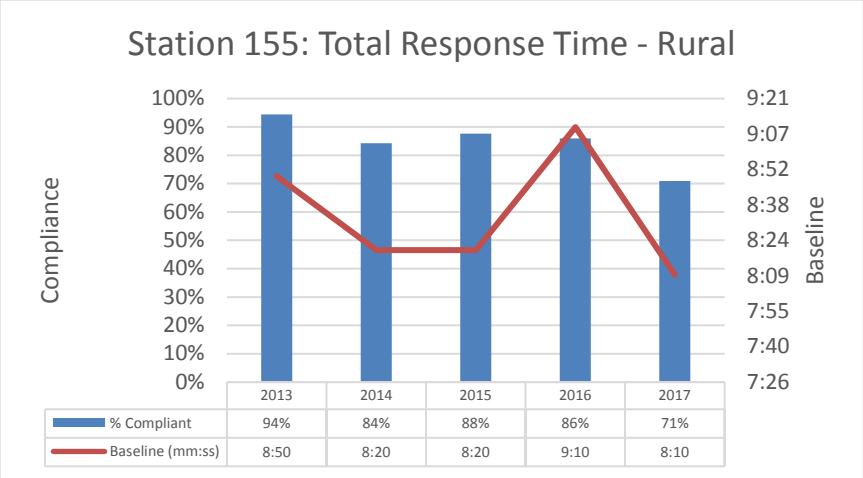
Station 155: 1st Due - 90th Percentile Times - Baseline Performance			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Alarm Handling	Pick-up to Dispatch	Urban	1:35	1:28	2:20	1:11	1:15	1:33	1:00
			n=1934	n=423	n=367	n=366	n=428	n=349	
		Rural	1:33	1:32	1:57	:124	1:03	1:31	
			n=620	n=117	n=135	n=122	n=139	n=107	
		Interstate	1:56	1:56	1:42	3:01	1:10	4:12	
			n=75	n=20	n=15	n=13	n=10	n=17	
Turnout Time	Turnout Time 1st Unit	Urban	1:54	1:42	1:44	1:42	2:00	2:14	1:38
			n=1932	n=418	n=361	n=392	n=413	n=348	
		Rural	1:53	1:47	1:45	1:40	2:01	2:07	
			n=605	n=115	n=135	n=118	n=133	n=104	
		Interstate	2:21	1:56	1:37	2:01	2:39	2:52	
			n=73	n=21	n=14	n=14	n=9	n=15	
Travel Time	Travel Time 1st Unit **Distribution**	Urban	5:10	5:20	5:20	5:00	5:00	4:50	4:32
		Rural	6:40	7:00	7:00	6:40	6:30	6:00	5:32
		Interstate	7:20	7:00	9:30	8:40	6:30	5:50	7:32
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:40	7:40	8:10	7:20	7:30	7:40	7:10
			n=1996	n=423	n=373	n=410	n=428	n=362	
		Rural	9:00	9:30	9:40	8:40	8:50	8:10	8:10
			n=629	n=117	n=135	n=129	n=140	n=108	
		Interstate	9:50	9:50	12:30	12:00	8:30	10:50	10:10
			n=78	n=20	n=15	n=15	n=10	n=18	

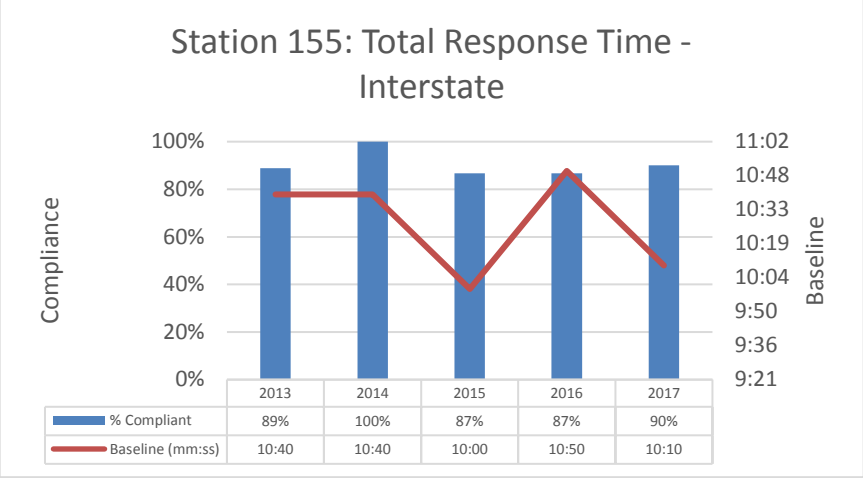
Station 155 Simultaneous Call Volume (all incidents)

	Simultaneous Calls					
	2012	2013	2014	2015	2016	2017
155	6.3%	3.5%	5.8%	5.4%	8.4%	9.4%
	40	23	44	39	52	50

Station 155 1st Due Compliance





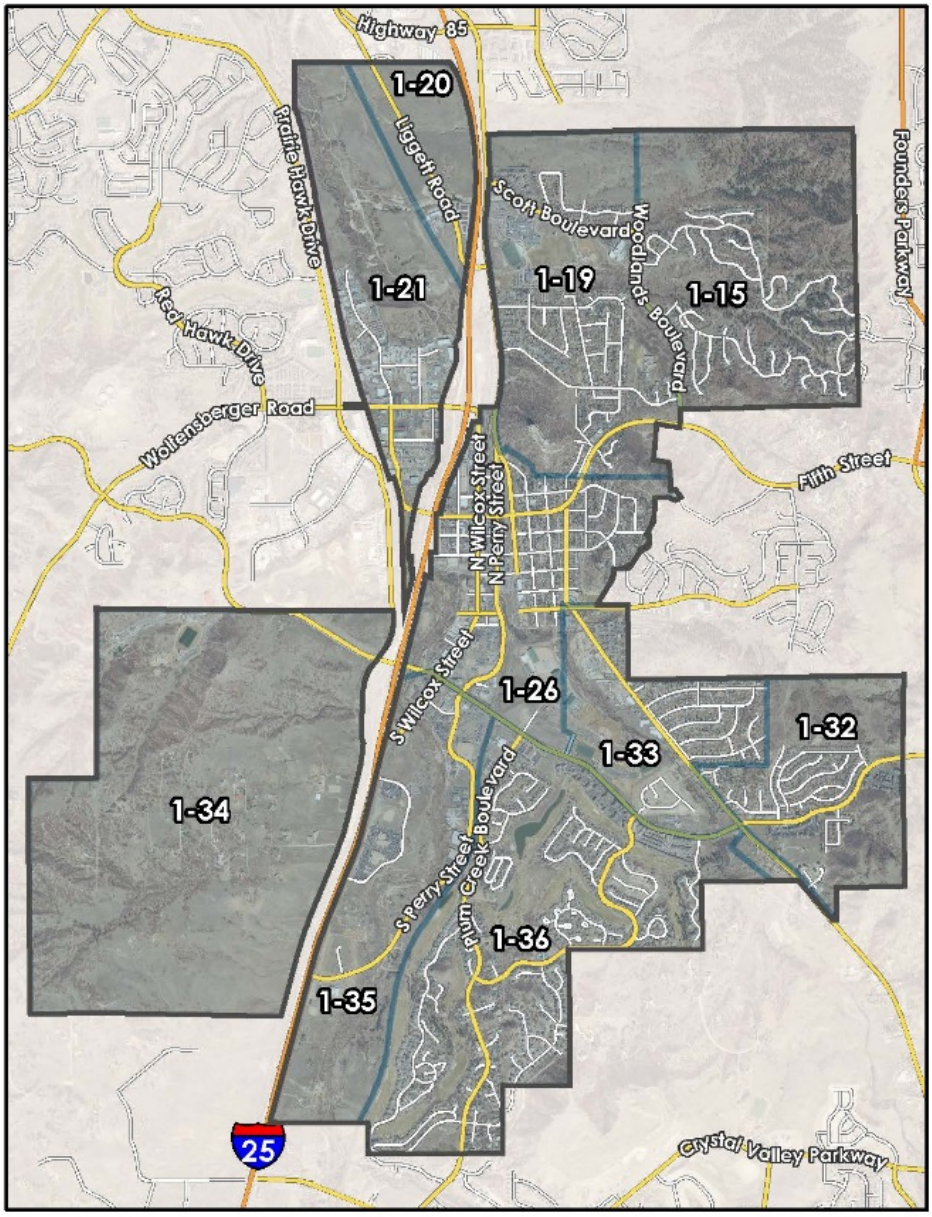


Station 155 Summary:
Station 155 is the smallest of the four station areas, and the third busiest. Call volume in Station 155 has increased by 27% (175) since 2013 with an increase of emergent calls of 17% (74). Roughly 6.5% of those calls occurred simultaneously with another call in 155's district. In cases where Quint 155 was not the first arriving unit (15.6% of the time), the response time increased by 1:10.

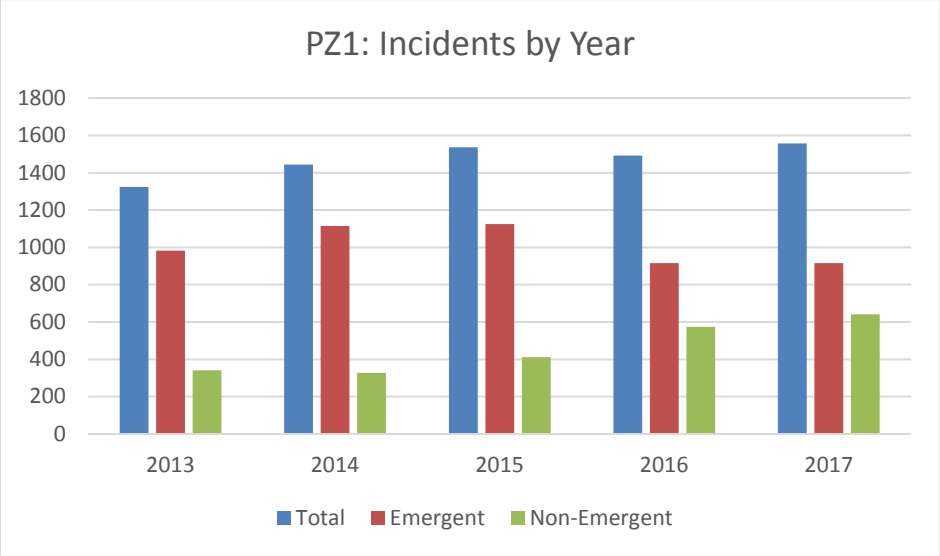
Station 155's response time compliance in the urban population areas has been between 84% and 90% to adopted benchmarks. However, Station 155's response time compliance for the rural population areas ranges between 71% and 94%. Station 155's response time compliance for the rural population areas ranges between 87% and 100%.

Planning Zone 1 (PZ1)

PZ1 covers 6.95 square miles with an estimated population of 13,513 (population density 1,944/mile^2), and is 85% residential, 15% commercial with 24% of its area dedicated as open space. PZ1 has 125 centerline road miles (measuring both directions of travel). PZ1 includes the historic Downtown area, Craig & Gould, Young American, Plum Creek, and The Woodlands neighborhoods and a section of railroad that runs parallel to Perry St. as well as a portion of Interstate 25 with two access points (exits 181, 182). Buildings in this PZ vary dramatically in their age (from late 1800's to current), construction and protection systems. The residences have a median home value of $298,700. PZ1 covers two high schools, three elementary schools, one multi-story senior facility, two assisted living facilities, one skilled nursing center, four multi-family condos/apartment complexes, and 18 churches.



Incident Volume by Year

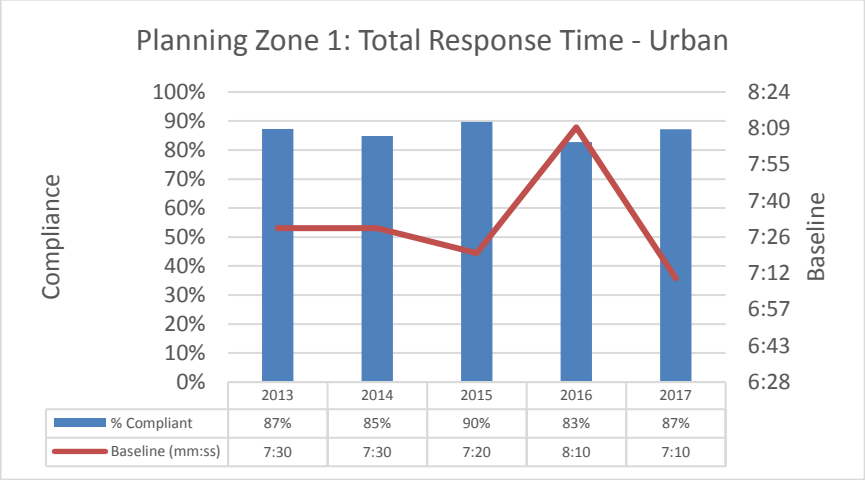


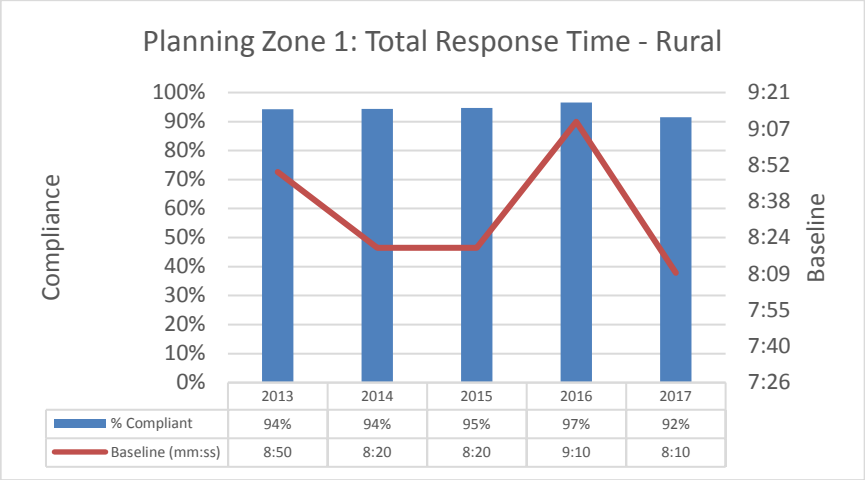
PZ1: 1st Due - 90th Percentile Times - Baseline Performance			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Alarm Handling	Pick-up to Dispatch	Urban	1:35	1:37	2:21	1:18	1:15	1:21	1:00
			n=3737	n=701	n=715	n=739	n=857	n=725	
		Rural	1:33	1:34	2:16	1:21	1:10	1:13	
			n=1078	n=205	n=188	n=237	n=247	n=201	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
Turnout Time	Turnout Time 1st Unit	Urban	2:05	1:50	1:55	1:59	2:15	2:17	1:38
			n=3784	n=695	n=717	n=806	n=830	n=736	
		Rural	2:01	1:51	1:54	1:55	2:07	2:13	
			n=201	n=206	n=186	n=248	n=242	n=203	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
Travel Time	Travel Time 1st Unit **Distribution**	Urban	5:30	5:40	5:40	5:30	5:30	5:00	4:32
		Rural	5:50	5:20	5:00	4:40	3:50	5:10	5:32
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	7:32
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	8:00	8:00	8:30	7:30	8:10	7:50	7:10
			n=3897	n=705	n=721	n=845	n=861	n=765	
		Rural	7:10	7:50	8:10	6:50	6:40	7:20	8:10
			n=1126	n=208	n=189	n=266	n=251	n=212	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	10:10
			N/A	N/A	N/A	N/A	N/A	N/A	

PZ1 Simultaneous Call Volume (all incidents)

	Simultaneous Calls					
	2012	2013	2014	2015	2016	2017
PZ1	11.8%	11.4%	9.6%	10.5%	8.4%	9.4%
	169	151	139	162	125	147

PZ 1st Due Compliance



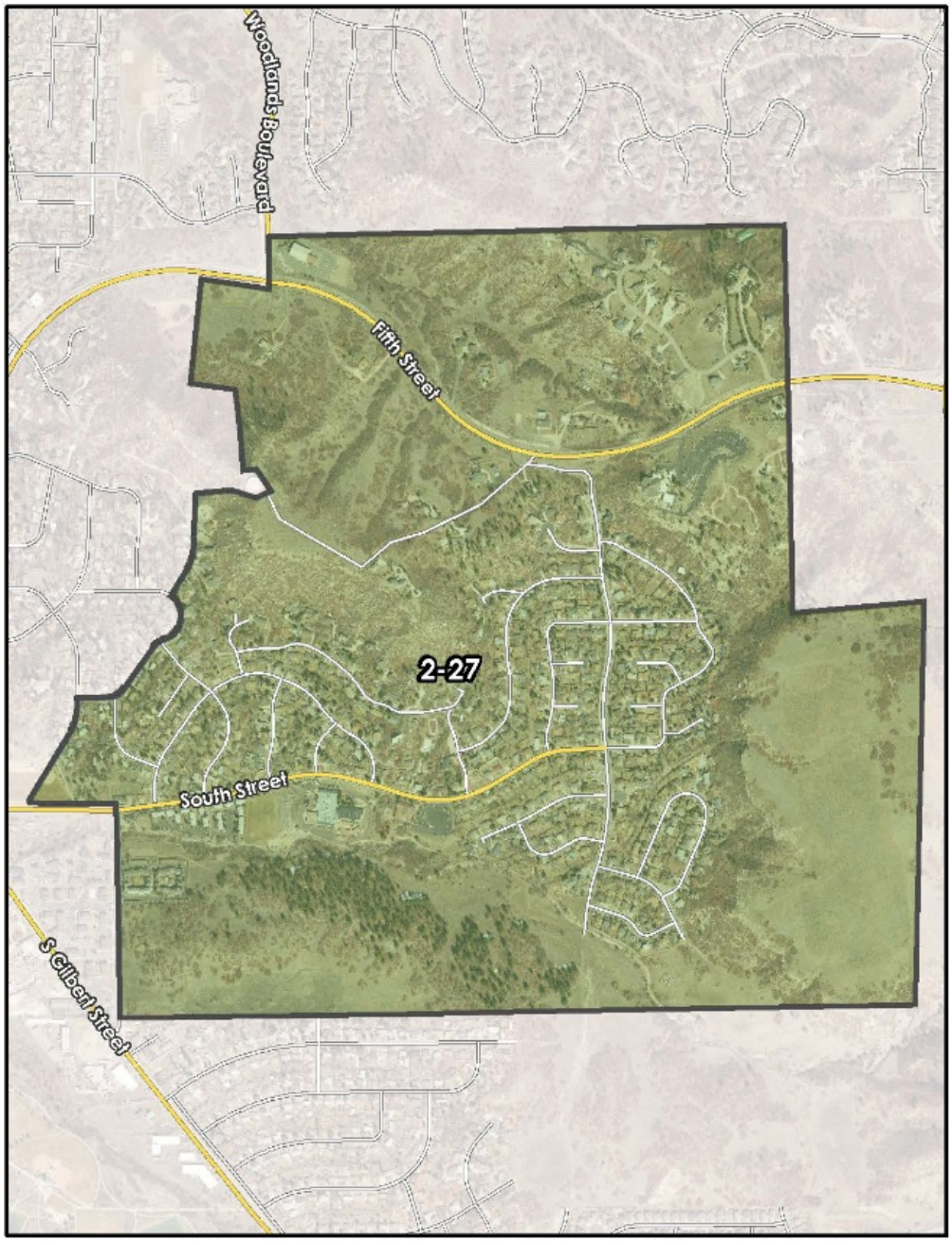


PZ1 Summary:

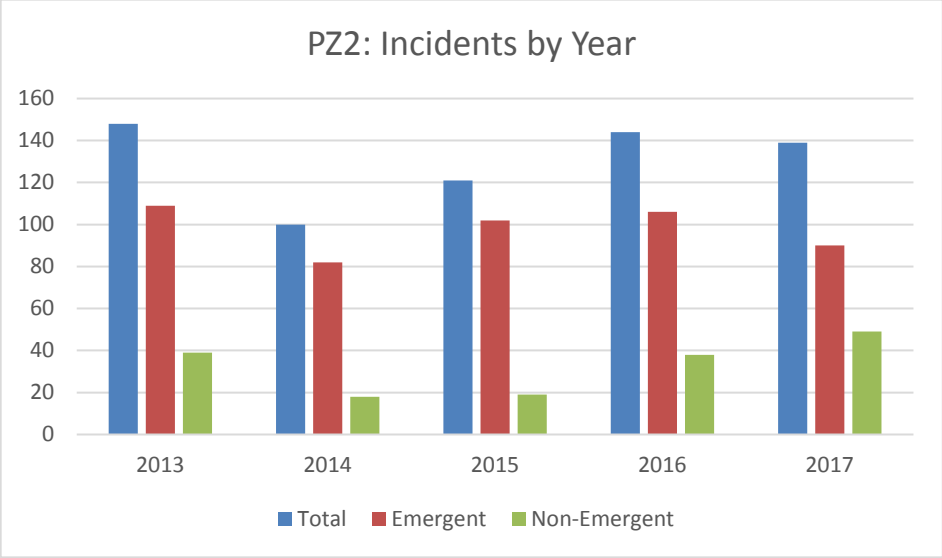
PZ1 is the busiest of the planning zones, and maintains a high compliance to stated bechmarks. Even with the changes in the dispatching process, PZ1 maintained relatively high compliance numbers in 2017.

Planning Zone 2 (PZ2)

PZ2 is the smallest of the PZs at 0.88 square miles with an estimated population of 1,827 (population density 2,076/mile^2), and is 98% residential, 2% commercial with 15% of its area dedicated as open space. PZ2 has 16 centerline road miles (measuring both directions of travel). PZ2 covers Homestead Village, Aspen Grove Condos and the Winrock Apartments. The houses are of earlier construction (late 70's to the early 2000's) with median home values of $258,400. PZ2 also includes one elementary school, one multi-story senior facility, four churches and two condo/apartment complexes.



Incident Volume by Year

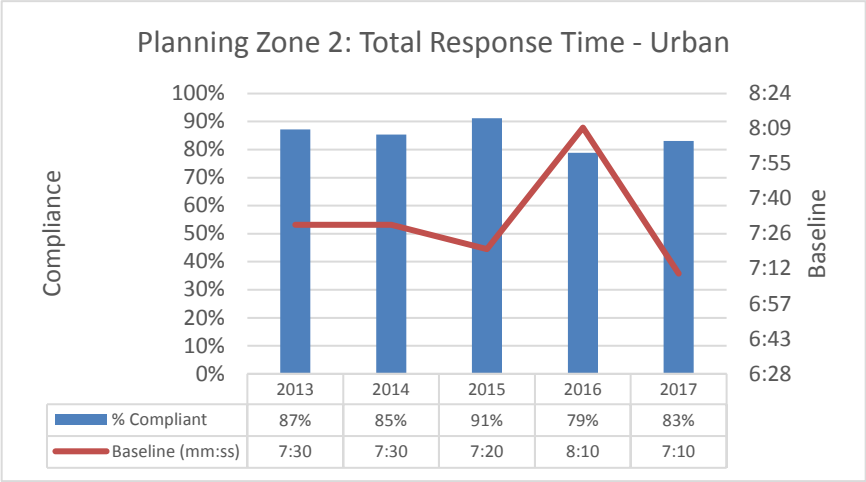


PZ2: 1st Due - 90th Percentile Times - Baseline Performance			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Alarm Handling	Pick-up to Dispatch	Urban	1:38	1:38	2:11	1:23	1:02	1:44	1:00
			n=468	n=89	n=108	n=85	n=81	n=105	
		Rural	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
Turnout Time	Turnout Time 1st Unit	Urban	2:06	1:50	1:58	1:54	2:13	2:26	1:38
			n=478	n=90	n=108	n=98	n=81	n=101	
		Rural	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
Travel Time	Travel Time 1st Unit **Distribution**	Urban	5:50	5:20	5:30	5:00	5:40	5:30	4:32
		Rural	N/A	N/A	N/A	N/A	N/A	N/A	5:32
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	7:32
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	8:00	7:40	8:20	7:20	7:50	8:40	7:10
			n=491	n=89	n=109	n=102	n=82	n=109	
		Rural	N/A	N/A	N/A	N/A	N/A	N/A	8:10
			N/A	N/A	N/A	N/A	N/A	N/A	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	10:10
			N/A	N/A	N/A	N/A	N/A	N/A	

PZ2: Simultaneous Call Volume (all incidents)

	Simultaneous Calls					
	2012	2013	2014	2015	2016	2017
PZ2	1.8%	2.0%	2.0%	0.8%	1.4%	2.2%
	3	3	2	1	2	3

PZ2: 1st Due Compliance

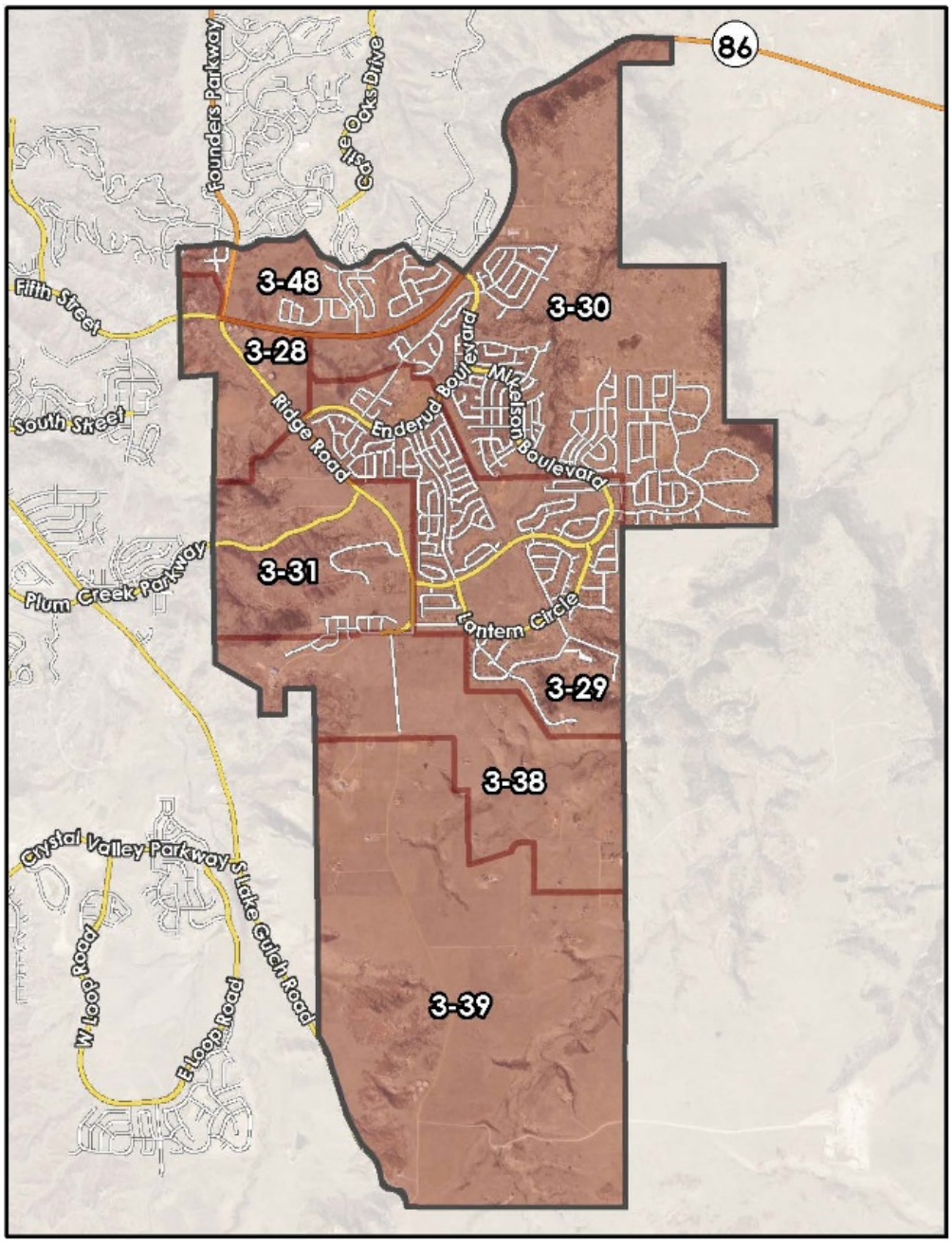


PZ2 Summary:

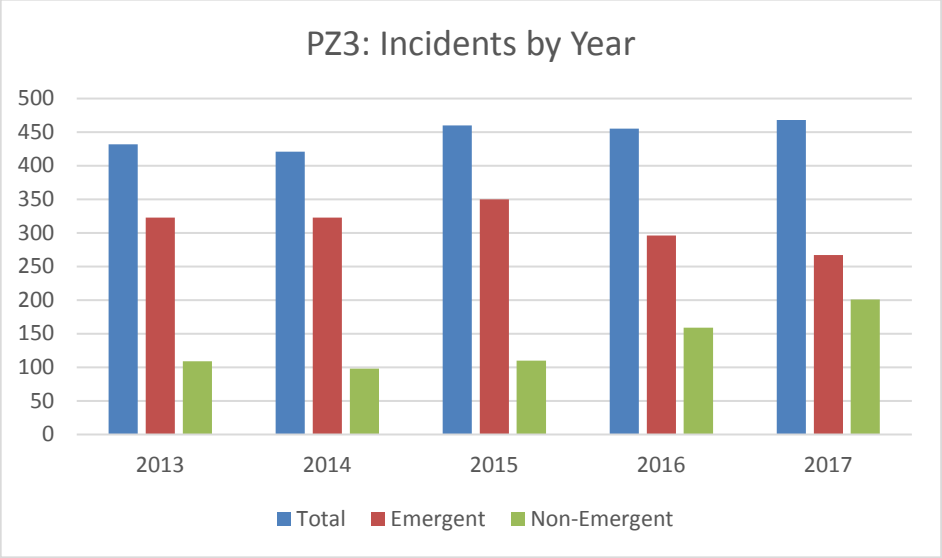
PZ2 is the smallest planning zone, and maintains a relatively high compliance to adopted benchmarks, with the exception of 2016 due to the dispatch process changes.

Planning Zone 3 (PZ3)

PZ3 covers 9.05 square miles with an estimated population of 10,288 (population density 1,137/mile^2), and is 99% residential, 1% commercial with 11% of its area dedicated as open space. PZ3 has 123 centerline road miles (measuring both directions of travel). PZ3 includes Founders Village and Castlewood Ranch neighborhoods as well as a section of State Highway 86. The construction in PZ3 is typical construction from the mid 1970's to current lightweight methods with a median home value of $251,400. PZ3 has one middle school, two elementary schools, and four churches.



Incident Volume by Year

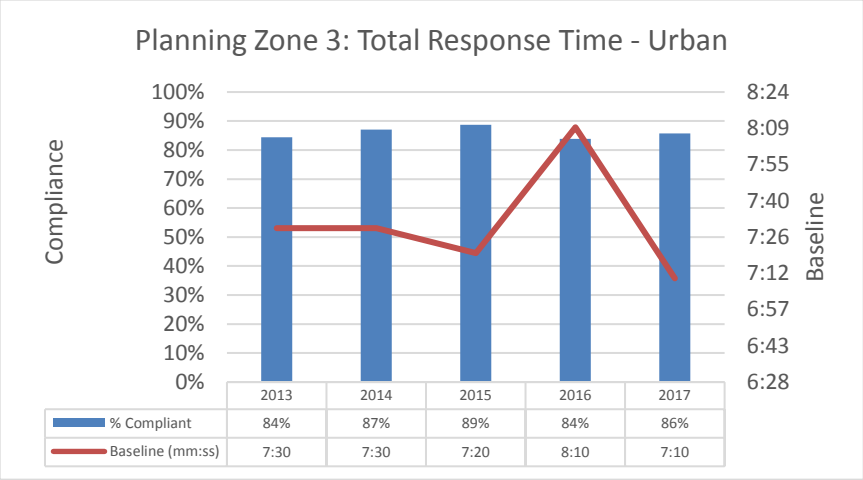


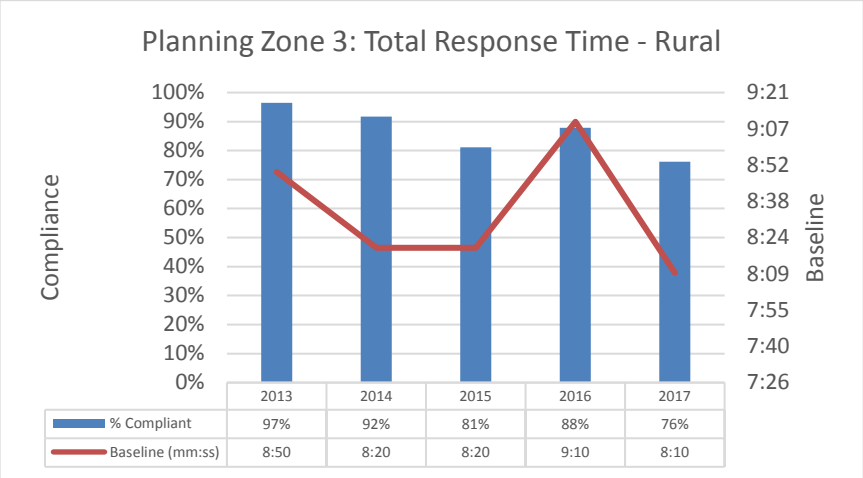
PZ3: 1st Due - 90th Percentile Times - Baseline Performance			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Alarm Handling	Pick-up to Dispatch	Urban	1:33	1:35	2:33	1:09	1:09	1:18	1:00
			n=1279	n=223	n=248	n=272	n=283	n=253	
		Rural	1:43	1:31	1:58	1:48	2:04	1:41	
			n=206	n=42	n=41	n=32	n=35	n=56	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
Turnout Time	Turnout Time 1st Unit	Urban	1:54	1:52	1:39	1:41	2:04	2:08	1:38
			n=1307	n=219	n=252	n=303	n=280	n=253	
		Rural	2:04	1:46	1:38	1:53	2:24	2:27	
			n=202	n=43	n=39	n=33	n=34	n=53	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
Travel Time	Travel Time 1st Unit **Distribution**	Urban	5:20	5:20	5:20	5:10	5:00	5:20	4:32
		Rural	6:40	6:50	6:40	7:20	5:50	5:50	5:32
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	7:32
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	8:00	7:50	8:40	7:30	7:50	8:10	7:10
			n=1333	n=223	n=253	n=310	n=284	n=263	
		Rural	8:50	9:00	9:20	9:20	8:20	8:20	8:10
			n=213	n=42	n=41	n=37	n=36	n=57	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	10:10
			N/A	N/A	N/A	N/A	N/A	N/A	

PZ3: Simultaneous Call Volume (all incidents)

	Simultaneous Calls					
	2012	2013	2014	2015	2016	2017
PZ3	4.1%	5.1%	2.9%	3.3%	2.4%	2.4%
	17	22	12	15	11	11

PZ3: 1st Due Compliance



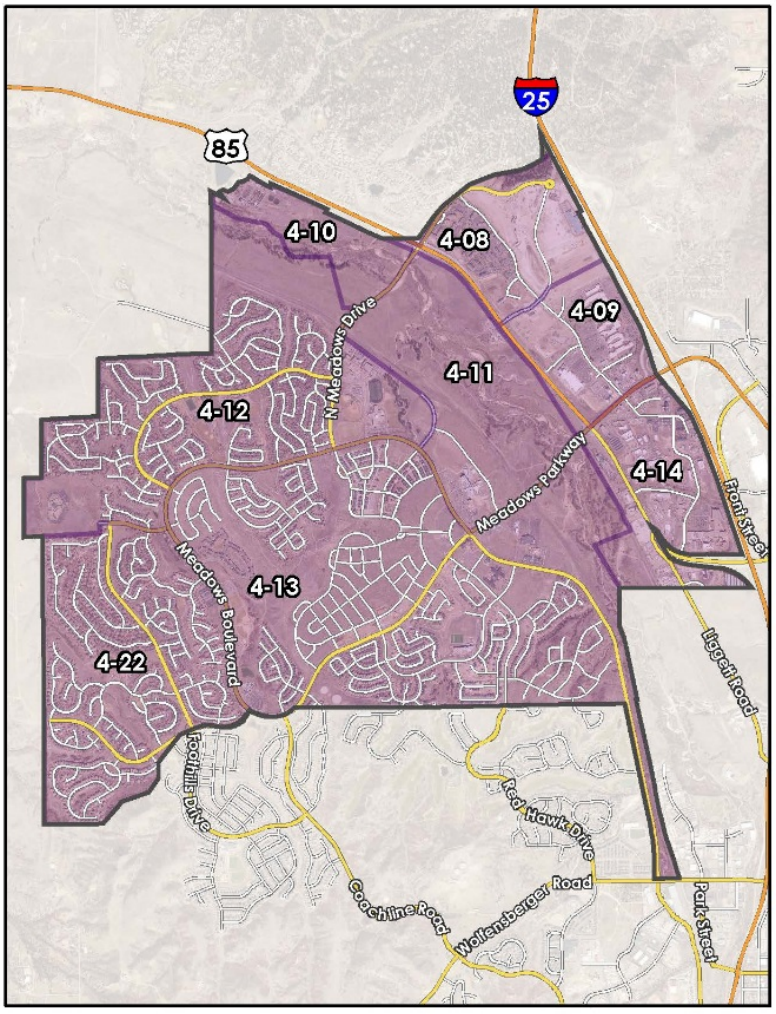


PZ3 Summary:

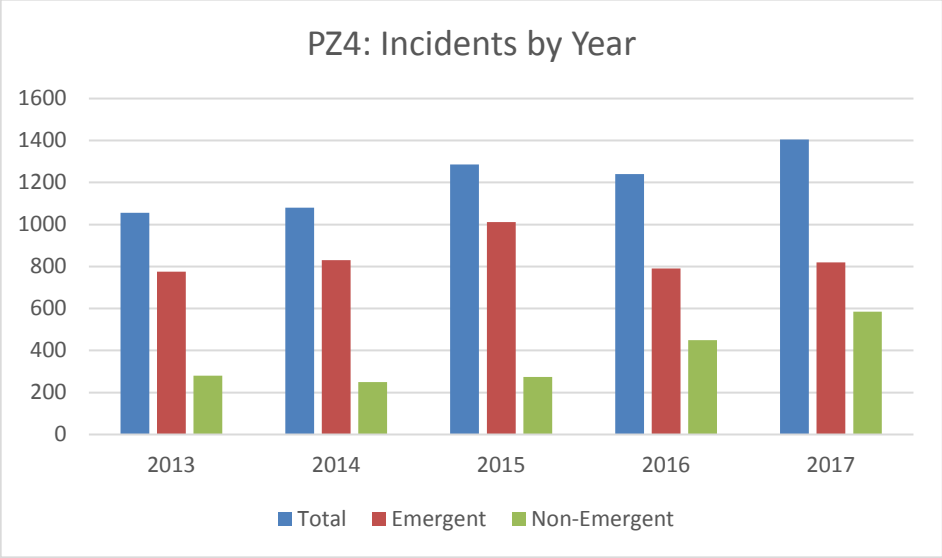
Given the change in reporting methodology, reporting to longer term benchmarks, PZ3's compliance percentages are consistent with the rest of the jurisdiction.

Planning Zone 4 (PZ4)

PZ4 covers 6.0 square miles and is the Department's most populous PZ with an estimated population of 13,720 (population density 2,287/mile^2) and is 94% residential, 6% commercial with 18% of its area dedicated as open space. PZ4 has 145 centerline road miles (measuring both directions of travel). PZ4 includes The Meadows and Castlegate neighborhoods. Additionally, this zone contains the site of one of the nation's largest mixed use construction sites, The Promenade. This site is being developed in multiple phases and will eventually encompass roughly 1,000,000 square feet of commercial and residential over commercial space. In conjunction with The Promenade and to ease traffic congestion on Meadows Parkway, the Town of Castle Rock partnered with the Colorado Department of Transportation to build the North Meadows Extension. The project connects North Meadows Drive and Castle Rock Parkway with Interstate 25, and includes two bridges and a new exit for I-25. The residential construction in PZ4 is primarily lightweight with the vast majority of the homes built within the last 15 years with a median home value of $279,700. PZ4 has three elementary schools, one middle school, one high school, Castle Rock Adventist Health Campus, The Outlets at Castle Rock, the Douglas County Justice Center, one large multi-story senior facility, several single story senior facilities, four churches, portions of I-25, State Highway 85 and a section of railroad on it eastern boundary.



Incident Volume by Year

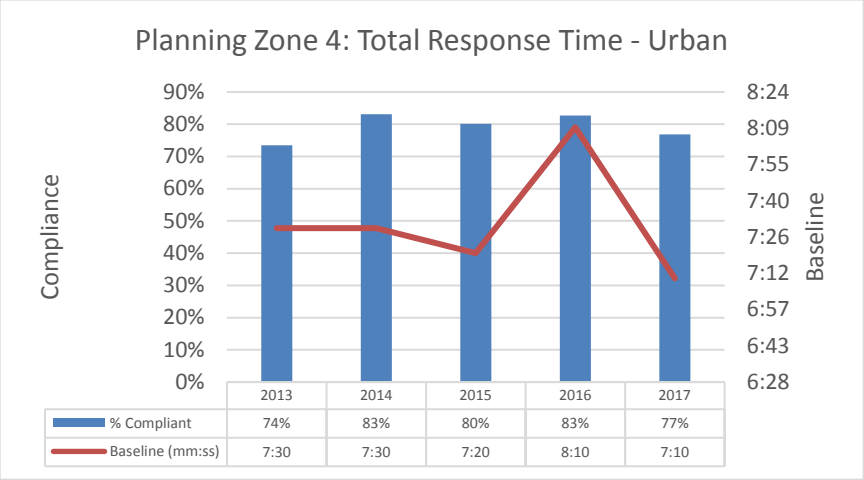


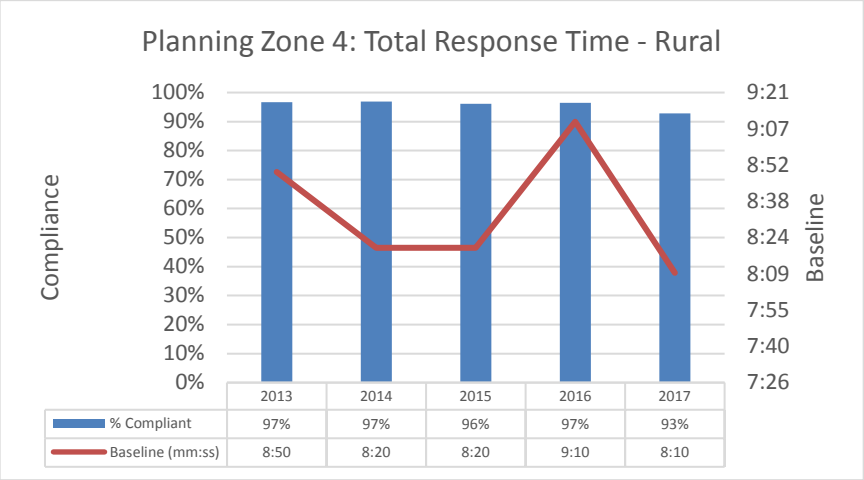
PZ4: 1st Due - 90th Percentile Times - Baseline Performance			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Alarm Handling	Pick-up to Dispatch	Urban	1:39	1:40	2:21	1:14	1:18	1:39	1:00
			n=2607	n=533	n=496	n=696	n=634	n=249	
		Rural	1:34	1:40	1:56	1:23	1:36	1:16	
			n=1458	n=279	n=282	n=207	n=195	n=495	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
Turnout Time	Turnout Time 1st Unit	Urban	1:56	1:47	1:50	1:43	2:07	2:23	1:38
			n=2360	n=527	n=494	n=748	n=616	n=245	
		Rural	1:59	1:49	1:43	1:46	1:56	2:11	
			n=1452	n=275	n=279	n=215	n=187	n=496	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
Travel Time	Travel Time 1st Unit **Distribution**	Urban	6:00	5:50	6:00	6:10	5:50	5:50	4:32
		Rural	5:00	5:30	5:00	5:00	4:40	4:30	5:32
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	7:32
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	8:30	8:30	9:20	8:10	8:20	8:40	7:10
			n=2704	n=536	n=503	n=775	n=633	n=257	
		Rural	7:20	7:50	7:10	7:10	7:10	7:00	8:10
			n=1507	n=279	n=285	n=231	n=195	n=517	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	10:10
			N/A	N/A	N/A	N/A	N/A	N/A	

PZ4: Simultaneous Call Volume (all incidents)

	Simultaneous Calls					
	2012	2013	2014	2015	2016	2017
PZ4	5.0%	7.8%	7.8%	7.5%	7.3%	9.8%
	37	82	84	96	91	138

PZ4: 1st Due Compliance



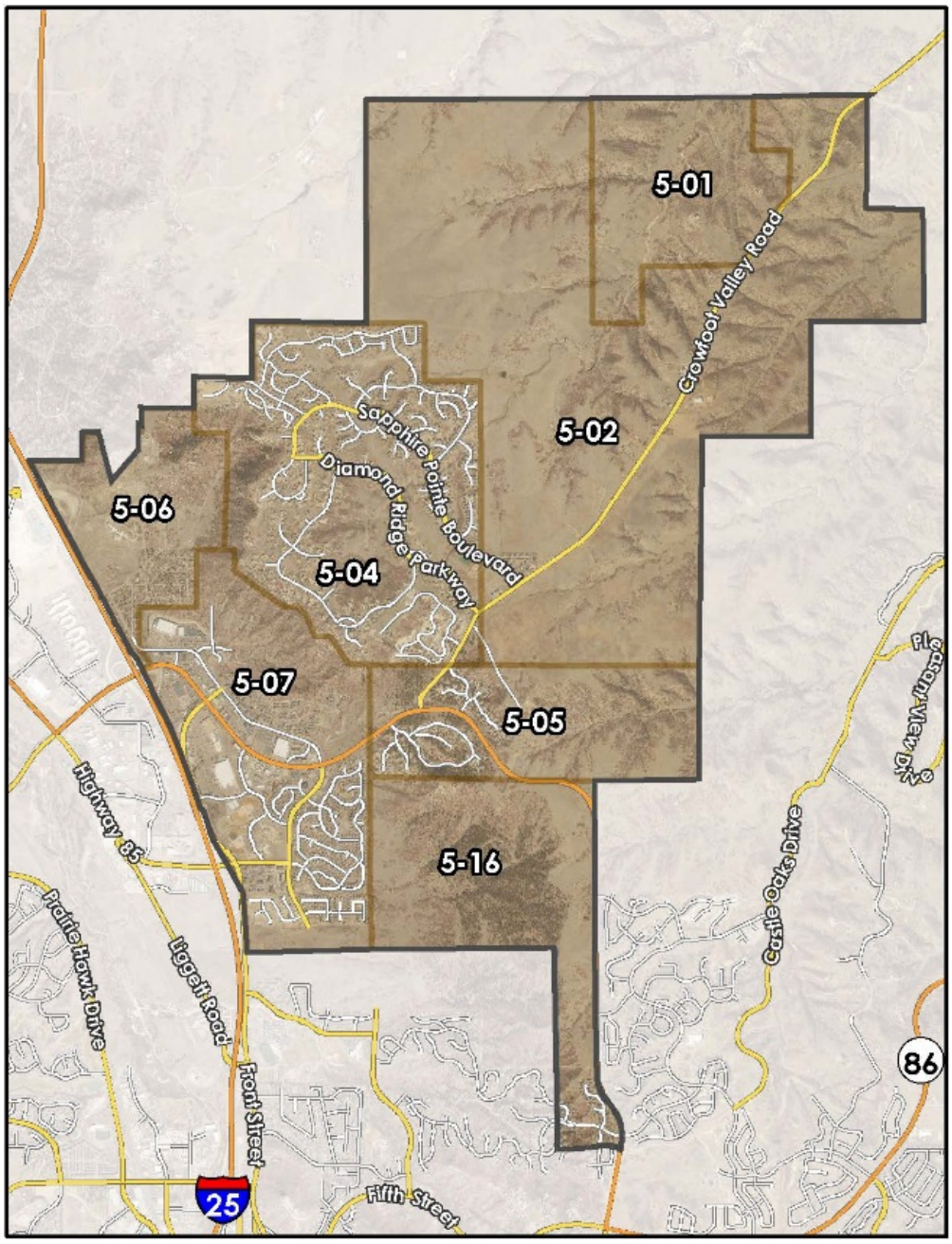


PZ4 Summary:

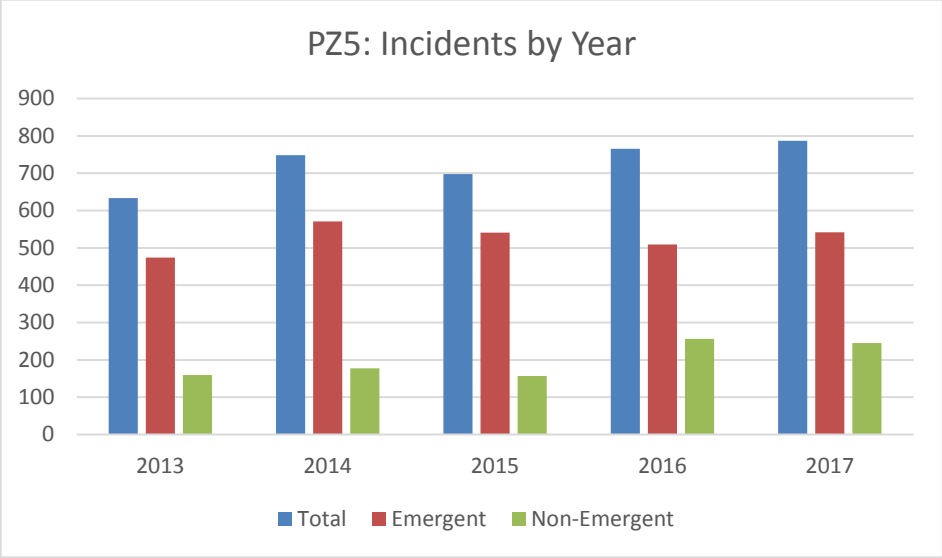
PZ4 has seen dramatic growth in the past five years in both development and calls for service. One of the significant contributing factors to the increasing call volume is the number of senior care facilities. With this growth, the Department has been able to maintain relatively high compliance in both the urban and rural population densities, with the exception of the urban areas in 2016 due to the dispatch process changes.

Planning Zone 5 (PZ5)

PZ5 covers 9.0 square miles with and estimated population of 6,975 (population density 775/mile^2) and is 92% residential, 8% commercial, and 9% of its area dedicated as open space. PZ5 has 93 centerline road miles (measuring both directions of travel). PZ5 includes Diamond Ridge, Sapphire Point, Metzler Ranch, Maher Ranch, Brookwood, Silver Heights, Lemon Gulch, and Echo Ridge neighborhoods. Residential construction varies from the 1970's to current lightweight methods with a median home value of $400,500. PZ5 has one elementary school, two multi-story senior care facilities, several "big box" retail stores, portions of Interstate 25 and a portion of State Highway 86.



Incident Volume by Year

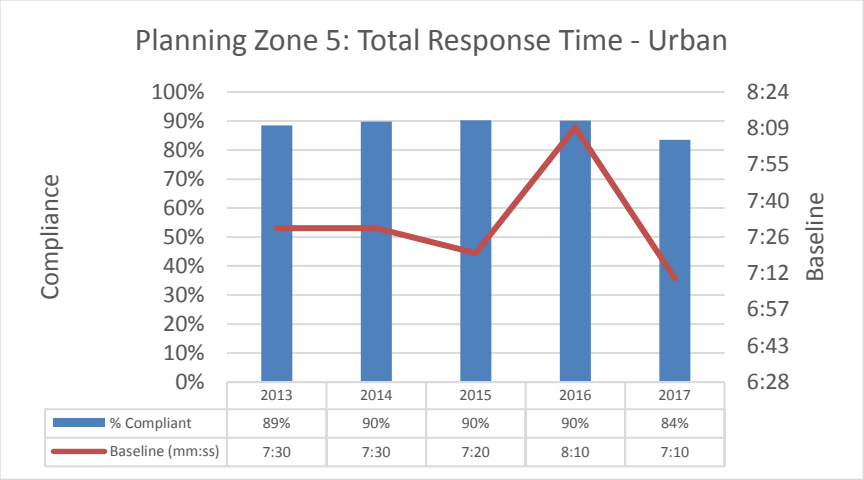


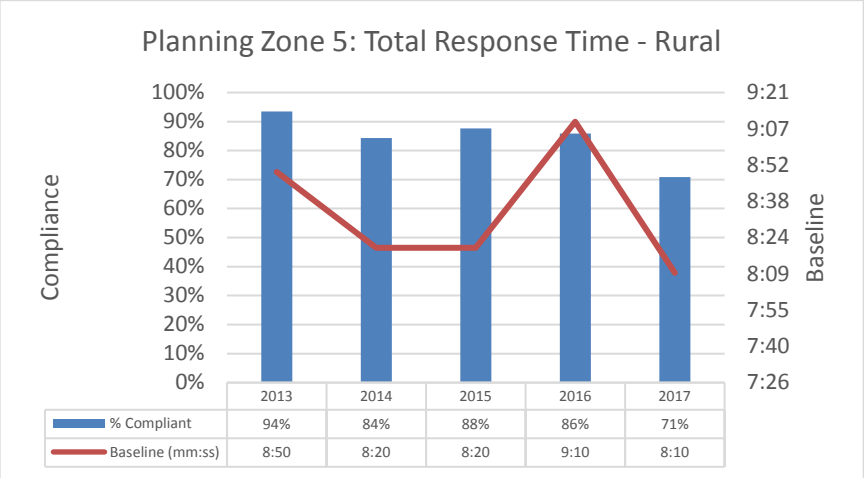
PZ5: 1st Due - 90th Percentile Times - Baseline Performance			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Alarm Handling	Pick-up to Dispatch	Urban	1:34	1:28	2:20	1:11	1:15	1:33	1:00
			n=1941	n=423	n=368	n=367	n=431	n=352	
		Rural	1:33	1:32	1:57	1:24	1:03	1:31	
			n=620	n=117	n=135	n=122	n=139	n=107	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
Turnout Time	Turnout Time 1st Unit	Urban	1:55	1:42	1:44	1:42	2:01	2:15	1:38
			n=1939	n=418	n=361	n=393	n=416	n=351	
		Rural	1:53	1:47	1:45	1:40	2:01	2:07	
			n=605	n=115	n=135	n=118	n=133	n=104	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
Travel Time	Travel Time 1st Unit **Distribution**	Urban	5:10	5:20	5:20	5:00	5:00	4:50	4:32
		Rural	6:40	7:00	7:00	6:40	6:30	6:00	5:32
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	7:32
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	7:40	7:40	8:10	7:20	7:30	7:40	7:10
			n=2003	n=423	n=373	n=411	n=431	n=365	
		Rural	9:00	9:30	9:40	8:40	8:50	8:10	8:10
			n=629	n=117	n=135	n=129	n=140	n=108	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	10:10
			N/A	N/A	N/A	N/A	N/A	N/A	

PZ5: Simultaneous Call Volume (all incidents)

	Simultaneous Calls				
	2013	2014	2015	2016	2017
PZ5	3.5%	5.6%	5.4%	5.8%	6.1%
	22	42	38	44	48

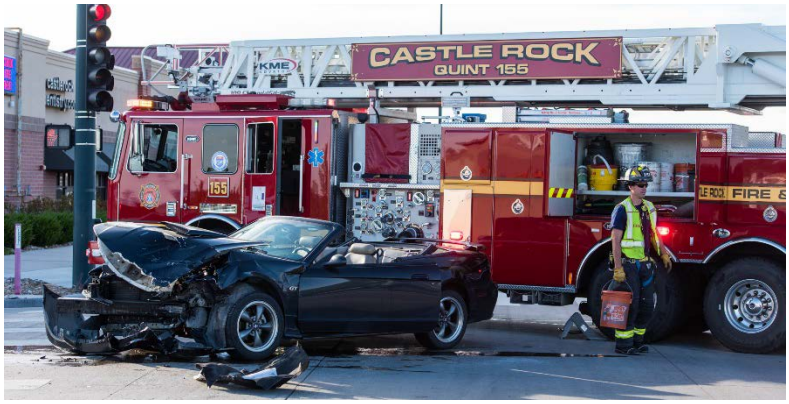
PZ5: 1st Due Compliance





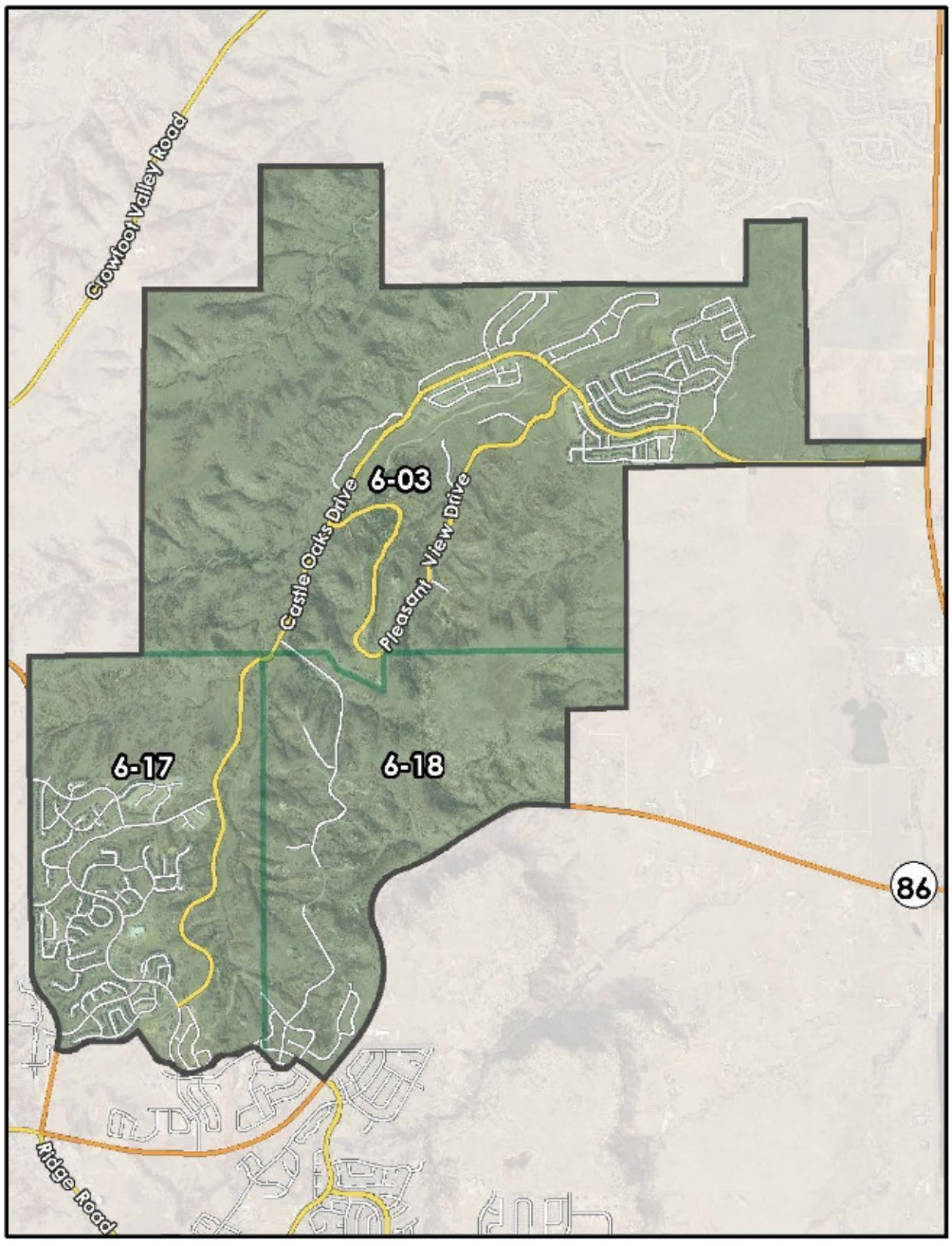
PZ5 Summary:

PZ5 has fluctuated in its call volume; however, the simultaneous incidents have seen a fairly steady increase since 2013. In conjunction with that increase, the Department has been able to maintain high compliance numbers, with the exception of 2016 due to the dispatch process changes.

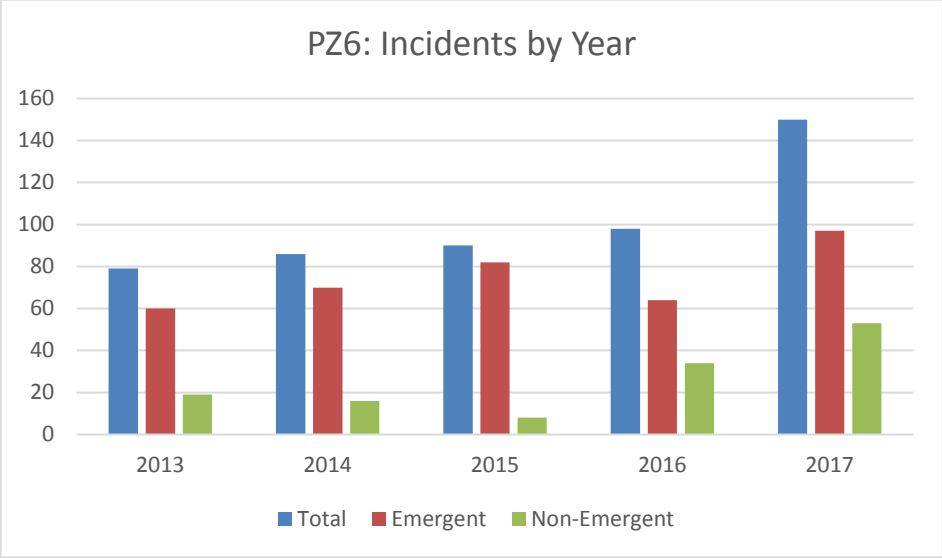


Planning Zone 6 (PZ6)

PZ6 covers 6.9 square miles with and estimated population of 3,764 (population density 544/mile^2) and is 99.9% residential, .1% commercial, and 40% of its area dedicated as open space. PZ6 has 79 centerline road miles (measuring both directions of travel). PZ6 includes Castle Oaks, Terrain, Liberty Village and Cobblestone Ranch neighborhoods. The construction in PZ6 is primarily lightweight with the vast majority of the homes built within the last 15 years with a median home value of $406,800. PZ6 has one elementary school and is bordered to the south and west by State Highway 86 and to the east by State Highway 83.



Incident Volume by Year

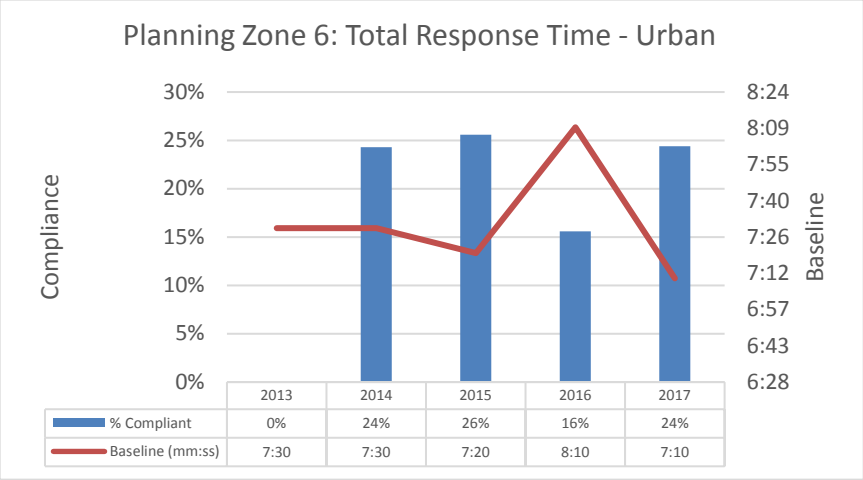


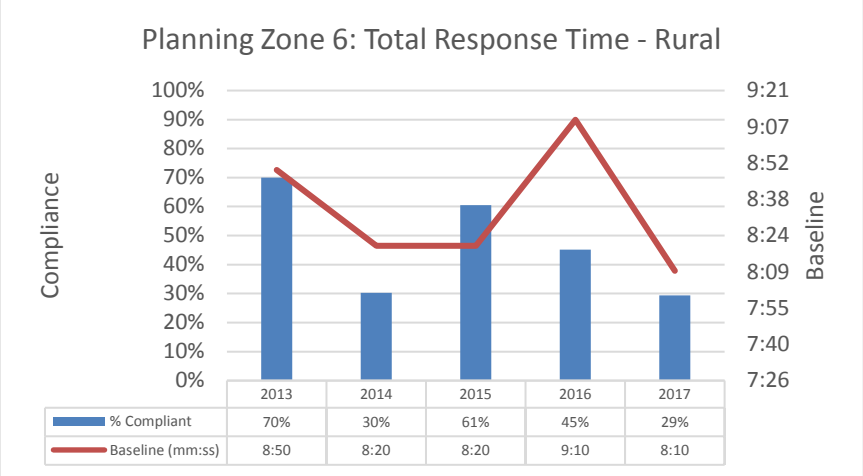
PZ6: 1st Due - 90th Percentile Times - Baseline Performance			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Alarm Handling	Pick-up to Dispatch	Urban	1:29	1:29	1:36	0:55	1:19	N/A	1:00
			n=152	n=45	n=32	n=39	n=36	N/A	
		Rural	2:17	1:41	2:51	2:05	2:43	2:29	
			n=209	n=51	n=31	n=35	n=33	n=59	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
Turnout Time	Turnout Time 1st Unit	Urban	1:59	1:37	1:47	1:49	2:37	N/A	1:38
			n=152	n=45	n=31	n=41	n=35	N/A	
		Rural	2:15	2:01	1:58	2:08	2:34	2:14	
			n=209	n=50	n=31	n=37	n=33	n=58	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
Travel Time	Travel Time 1st Unit **Distribution**	Urban	8:10	7:50	8:10	8:40	8:30	N/A	4:32
		Rural	9:10	10:10	9:10	7:50	8:50	8:00	5:32
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	7:32
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	10:40	10:10	10:40	10:30	11:10	N/A	7:10
			n=157	n=45	n=32	m=43	n=37	N/A	
		Rural	12:00	12:10	14:00	10:10	12:20	11:30	8:10
			n=213	n=51	n=31	n=38	n=33	n=60	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	10:10
			N/A	N/A	N/A	N/A	N/A	N/A	

PZ6: Simultaneous Call Volume (all incidents)

	Simultaneous Calls				
	2013	2014	2015	2016	2017
PZ6	1.3%	1.2%	1.1%	1.0%	2.0%
	1	1	1	1	3

PZ6: 1st Due Compliance



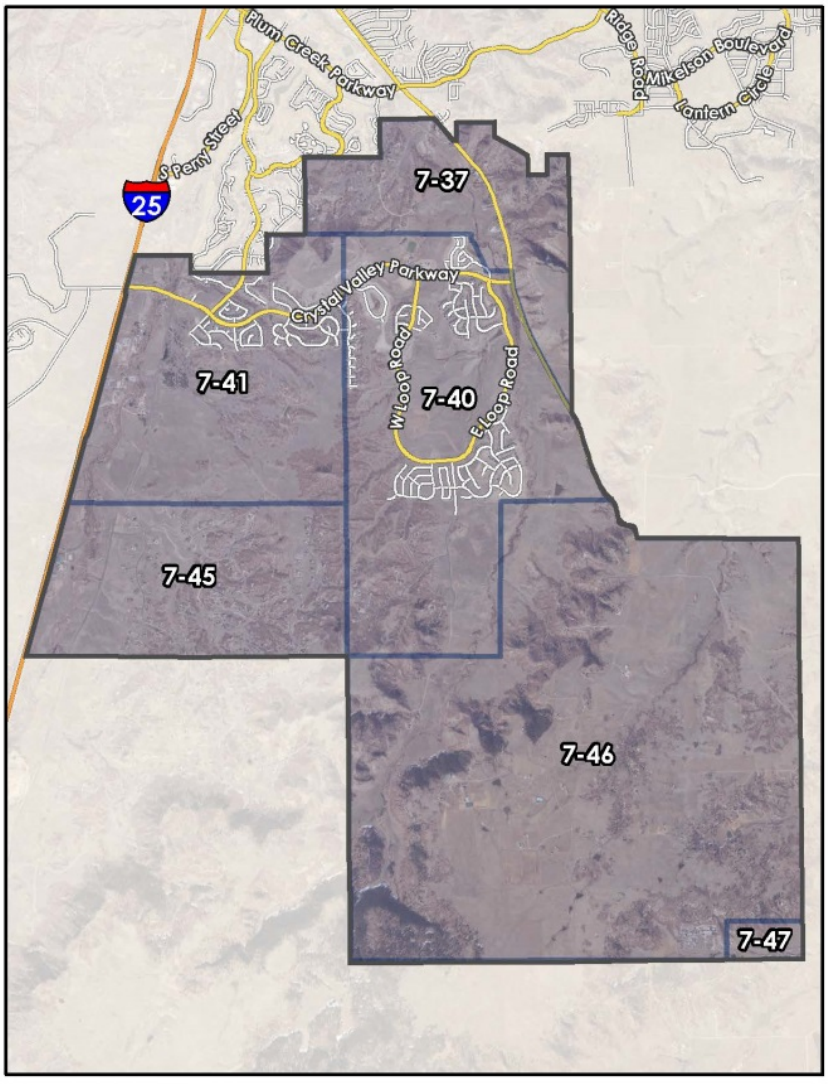


PZ6 Summary:

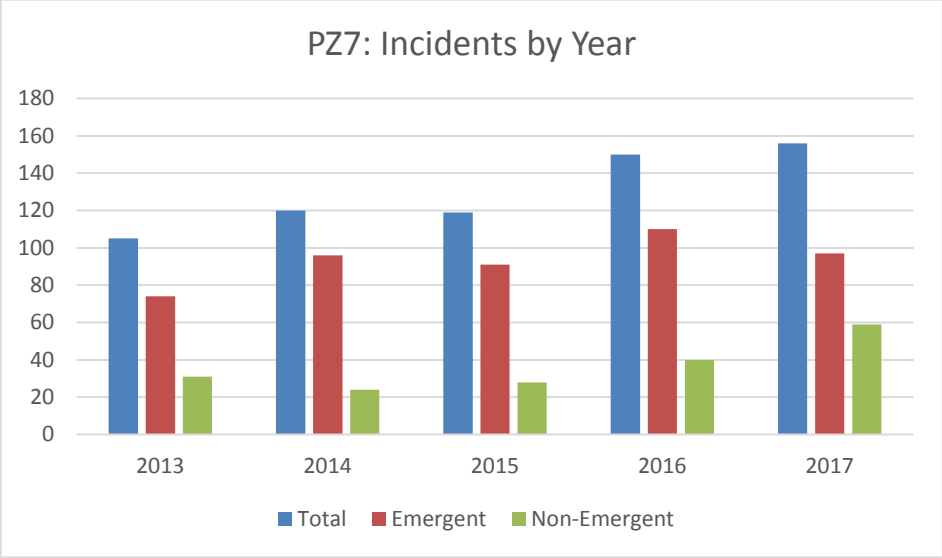
PZ6 has seen a steady increase in calls since 2013 that correlates with the residential growth in the area with a spike in 2017. Given its distance from Station 153, fire management zone 6-03 receives an automatic aid unit from Franktown Fire Protection District on all incidents. Even with that, PZ6 has extended response times. CRFD recognizes the increasing call volume and growth in PZ6 and monitors its response and performance metrics annually in an attempt to forecast the need for additional resources based on the tenants and warrants approved in the 2014-2019 Fire Master Plan. The dispatch process changes had a dramatic impact on PZ6's compliance number, largely due to the smaller sample size.

Planning Zone 7 (PZ7)

PZ7 covers 16.8 square miles with an estimated population of 3,587 (population density 214/mile^2) and is 99% residential, 1% commercial and 6% of its area dedicated as open space. PZ7 has 96 centerline road miles (measuring both directions of travel). PZ7 includes, Crystal Valley Ranch, Heckendorf Ranch, The Lanterns, Ditmars Ranch, Bell Mountain Ranch, Sellars Creek, and Lost Canyon Ranch neighborhoods. The residential construction varies greatly from typical 1970's construction to current lightweight methods with a median home value of $358,400. PZ7 is largely residential with one notable exception, a large satellite communication facility in the far southwest corner of the PZ. PZ7 is bordered to the west by a section of railroad running parallel to the east frontage road of Interstate 25. The Department has been monitoring growth in this PZ and tracking performance. The Department has recognized that it cannot meet its established baselines in the most populated areas of PZ7. As calls for service increase in PZ7 and district wide, the likelihood that a 2nd due company will be responding, increases as well. To address these concerns, the Department has begun planning and design for a new fire station, estimated to open in the fall of 2018.



Incident Volume by Year

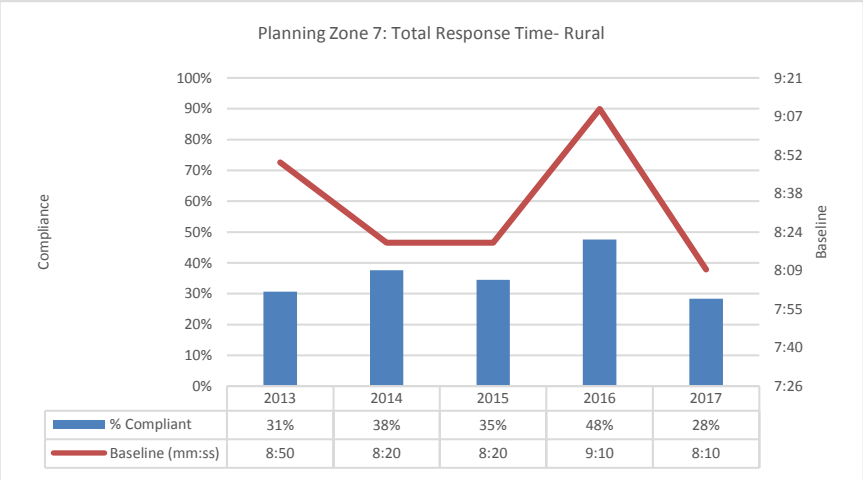


PZ7: 1st Due - 90th Percentile Times - Baseline Performance			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Alarm Handling	Pick-up to Dispatch	Urban	N/A	N/A	N/A	N/A	N/A	N/A	1:00
			N/A	N/A	N/A	N/A	N/A	N/A	
		Rural	1:57	1:36	2:29	1:26	1:13	1:32	
			n=437	n=96	n=107	n=76	n=92	n=66	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
Turnout Time	Turnout Time 1st Unit	Urban	N/A	N/A	N/A	N/A	N/A	N/A	1:38
			N/A	N/A	N/A	N/A	N/A	N/A	
		Rural	2:08	1:57	2:00	2:03	2:09	2:25	
			n=442	n=96	n=105	n=81	n=91	n=69	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
Travel Time	Travel Time 1st Unit **Distribution**	Urban	N/A	N/A	N/A	N/A	N/A	N/A	4:32
		Rural	10:30	11:00	9:30	8:50	10:30	12:40	5:32
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	7:32
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	N/A	N/A	N/A	N/A	N/A	N/A	7:10
			N/A	N/A	N/A	N/A	N/A	N/A	
		Rural	13:30	13:10	12:50	11:10	14:30	14:20	8:10
			n=449	n=95	n=105	n=84	n=93	n=72	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	10:10
			N/A	N/A	N/A	N/A	N/A	N/A	

PZ7: Simultaneous Call Volume (all incidents)

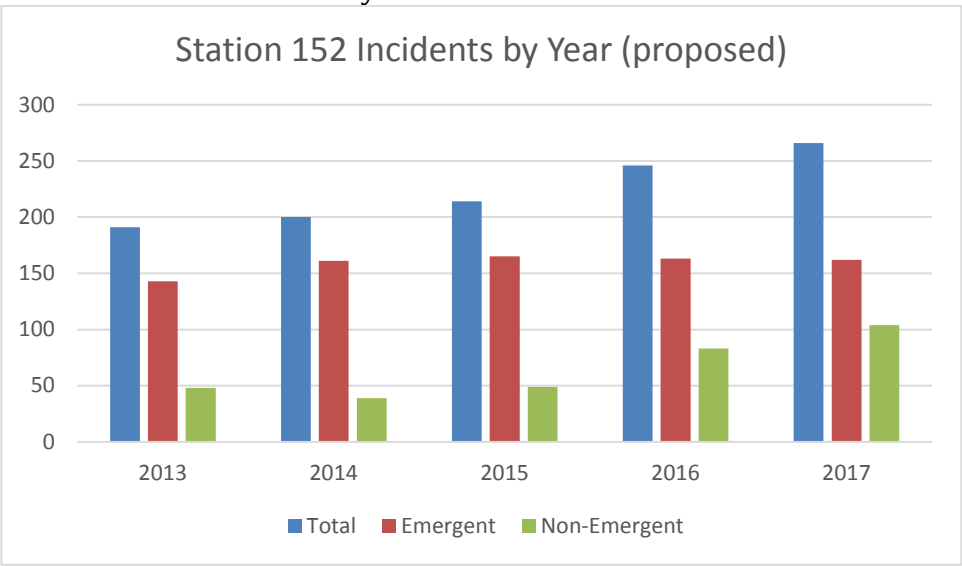
	Simultaneous Calls					
	2012	2013	2014	2015	2016	2017
PZ7	1.3%	0.0%	6.7%	1.7%	0.7%	1.9%
	1	0	8	2	1	3

PZ7: 1st Due Compliance



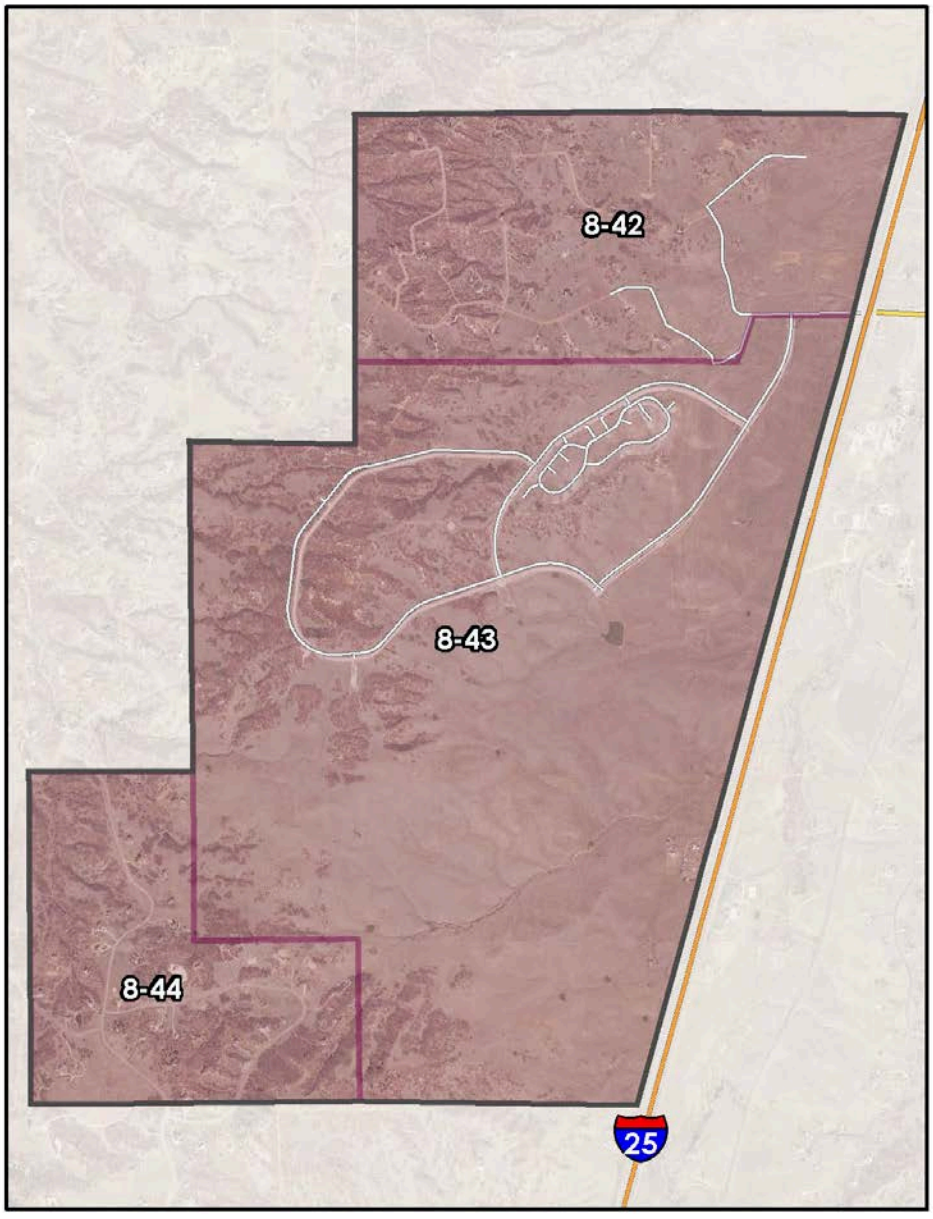
PZ7 Summary:
For several years, the Department has recognized that its response times in PZ7 have exceeded the adopted baselines. However, the call volume in PZ7 has remained relatively low compared to other PZ's. That said, the Department has proceeded with the planning of a station in PZ7. The Town has held property in PZ7 for a fire station, which is located in the northwestern portion of the PZ with access to two main thoroughfares and good access to expected residential development. Additionally, with the planned station location, Station 152 will be positioned to respond into Station 151's southern area where response times are a concern, adding to 152's 1st due area. The chart below shows the proposed Station 152 response area incidents by year. Station 152 is planned to open in the fall of 2018.

Proposed Station 152 Call Volume by Year

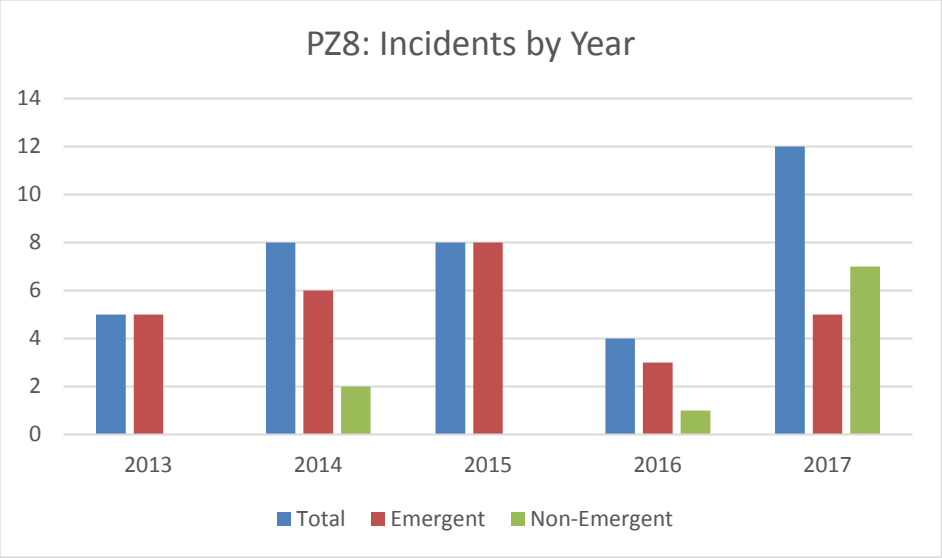


Planning Zone 8 (PZ8)

PZ8 covers 5.3 square miles with an estimated population of 252 (population density 48/mile^2) and is 100% residential. PZ8 has 26 centerline road miles (measuring both directions of travel). PZ8 is largely undeveloped property covering Yucca Hills and portions of Keene Ranch, both within unincorporated Douglas County. Yucca Hills has older homes and various lots sizes. Keene Ranch has larger, higher priced homes on a minimum of 5 acre lots. Keene Ranch is a shared response area with Jackson 105, a mostly volunteer agency to the west, and Larkspur Fire, a combination department to the south. Additionally, to access Keene Ranch, CRFD units must leave the jurisdiction on Tomah Rd before they can make entry into the neighborhood. PZ8 also contains a section of railroad that runs parallel to the west frontage road for Interstate 25. The median home value in PZ8 is $615,600.



Incident Volume by Year

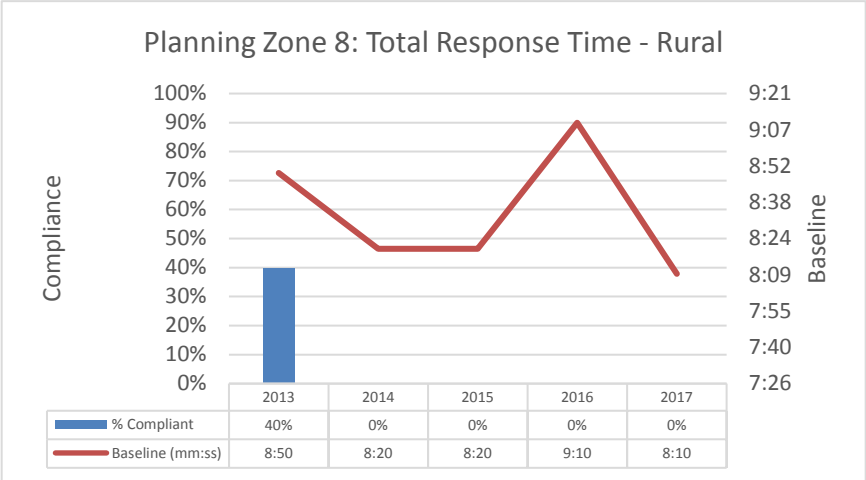


PZ8: 1st Due - 90th Percentile Times - Baseline Performance			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Alarm Handling	Pick-up to Dispatch	Urban	N/A	N/A	N/A	N/A	N/A	N/A	1:00
			N/A	N/A	N/A	N/A	N/A	N/A	
		Rural	2:10	3:08	2:10	1:51	3:57	1:10	
			n=27	n=5	n=3	n=8	n=6	n=5	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
Turnout Time	Turnout Time 1st Unit	Urban	N/A	N/A	N/A	N/A	N/A	N/A	1:38
			N/A	N/A	N/A	N/A	N/A	N/A	
		Rural	2:45	1:55	1:52	3:13	1:47	2:25	
			n=27	n=5	n=3	n=8	n=6	n=5	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
Travel Time	Travel Time 1st Unit **Distribution**	Urban	N/A	N/A	N/A	N/A	N/A	N/A	4:32
		Rural	13:00	14:50	12:50	12:10	12:10	13:00	5:32
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	7:32
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	N/A	N/A	N/A	N/A	N/A	N/A	7:10
			N/A	N/A	N/A	N/A	N/A	N/A	
		Rural	16:00	17:40	19:10	15:40	13:50	15:00	8:10
			n=27	n=5	n=3	n=8	n=6	n=5	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	10:10
			N/A	N/A	N/A	N/A	N/A	N/A	

PZ8: Simultaneous Call Volume (all incidents)

	Simultaneous Calls					
	2012	2013	2014	2015	2016	2017
PZ8	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
	0	0	0	0	0	0

PZ8: 1st Due Compliance

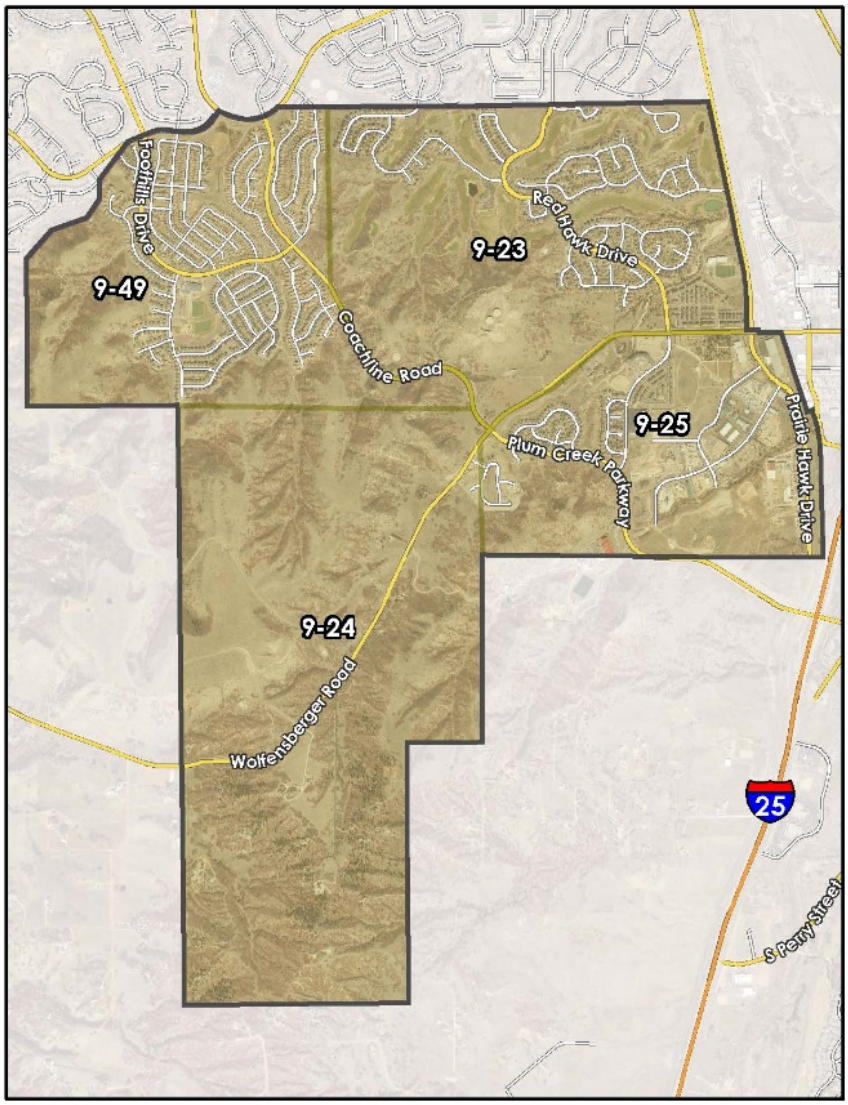


PZ8 Summary:

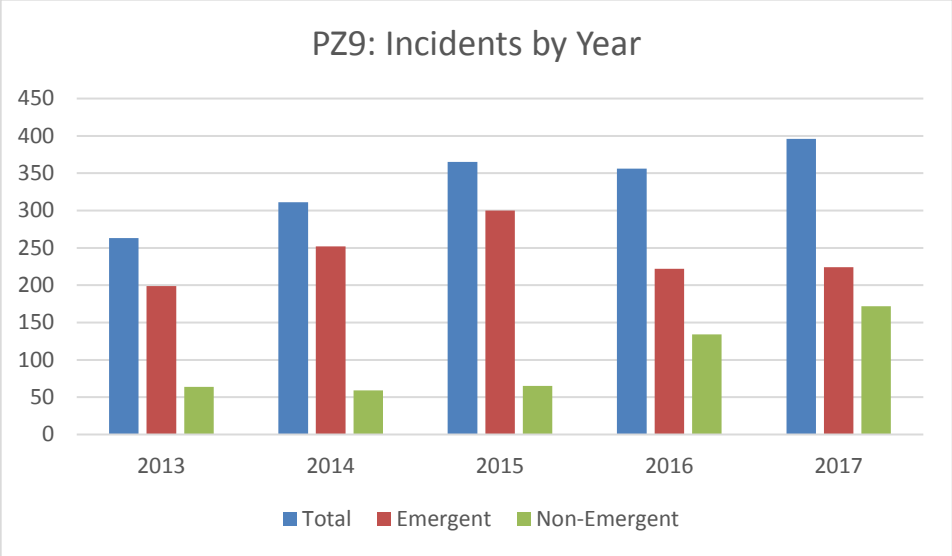
The Department recognizes that the response times in PZ8 exceed the stated baselines. However, given the call volume (maximum of 8 calls annually) and low population (252 residents), there are no plans for a dedicated station.

Planning Zone 9 (PZ9)

PZ9 covers 4.6 square miles with an estimated population of 7,111 (population density 1,546/mile^2) and is 97% residential, 3% commercial with 30% of its area dedicated as open space. PZ3 has 64 centerline road miles (measuring both directions of travel). PZ9 includes the Red Hawk, Castle Highlands, Castle Meadows, and the Reserve at Castle Highlands neighborhoods. The construction in PZ9 is primarily lightweight with the vast majority of the homes built within the last 15 years with a median home value of $397,400. PZ9 includes one elementary school, one large senior facility, a large multi-use indoor/outdoor recreation center and miles of soft-surface recreational trails. For several years, this PZ has met the minimum call volume requirements the construction of a new fire station. However, given that the response times for the first arriving unit and effective response force meet adopted baselines, and are consistent with the Department's performance compared to adopted benchmarks. The Department has elected to not build a fire station in this area yet. The Department will monitor call volume and performance quarterly and annually to identify trends that could negatively affect the residents in this area.



Incident Volume by Year

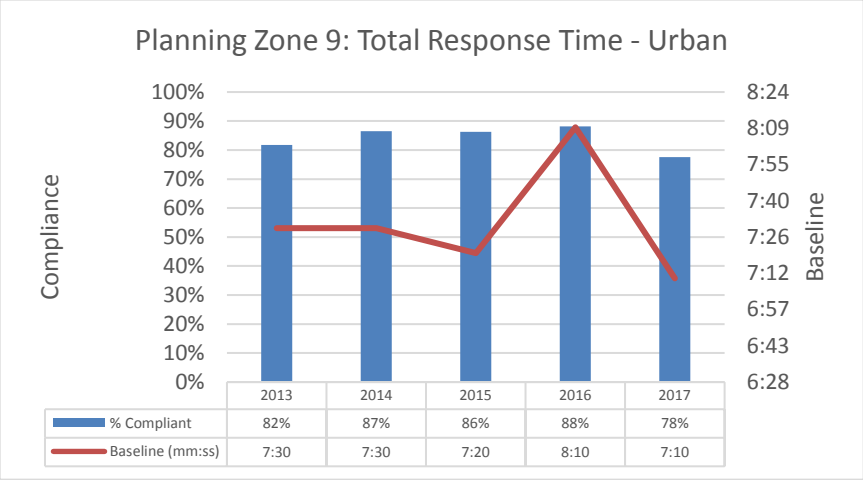


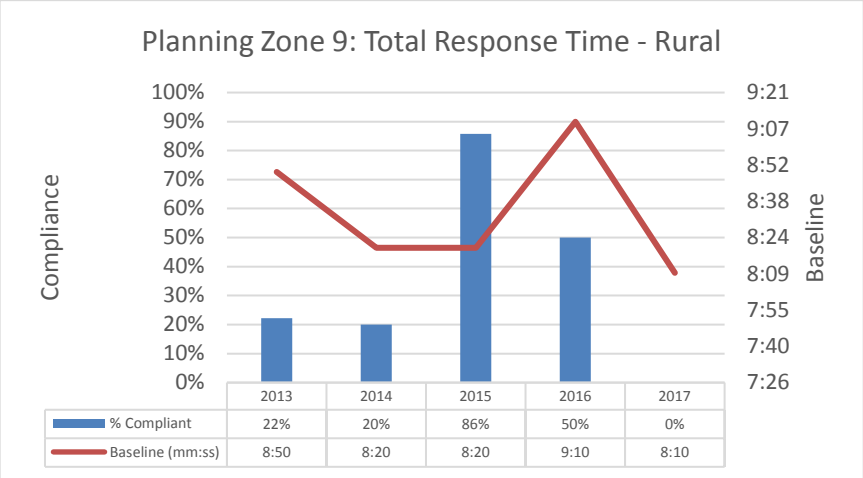
PZ9: 1st Due - 90th Percentile Times - Baseline Performance			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Alarm Handling	Pick-up to Dispatch	Urban	1:31	1:28	2:24	1:19	1:06	1:16	1:00
			n=1136	n=223	n=219	n=266	n=245	n=183	
		Rural	1:25	0:36	1:00	1:25	2:19	2:59	
			n=22	n=2	n=2	n=6	n=5	n=8	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
Turnout Time	Turnout Time 1st Unit	Urban	1:50	1:47	1:40	1:41	1:52	2:10	1:38
			n=1150	n=222	n=215	n=281	n=244	n=188	
		Rural	2:27	1:39	1:34	2:01	1:52	3:29	
			n=23	n=1	n=2	n=7	n=4	n=9	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
Travel Time	Travel Time 1st Unit **Distribution**	Urban	5:30	5:40	5:30	5:20	5:30	5:50	4:32
		Rural	9:40	7:00	13:40	8:40	10:30	9:40	5:32
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	7:32
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	8:00	8:00	8:20	7:30	7:50	8:10	7:10
			n=1169	n=223	n=219	n=291	n=245	n=191	
		Rural	11:50	9:10	15:50	11:20	11:50	12:10	8:10
			n=24	n=1	n=2	n=7	n=5	n=9	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	10:10
			N/A	N/A	N/A	N/A	N/A	N/A	

PZ9: Simultaneous Call Volume (all incidents)

	Simultaneous Calls					
	2012	2013	2014	2015	2016	2017
PZ9	3.1%	3.4%	3.9%	1.4%	1.4%	2.3%
	8	9	12	5	5	9

PZ9: 1st Due Compliance





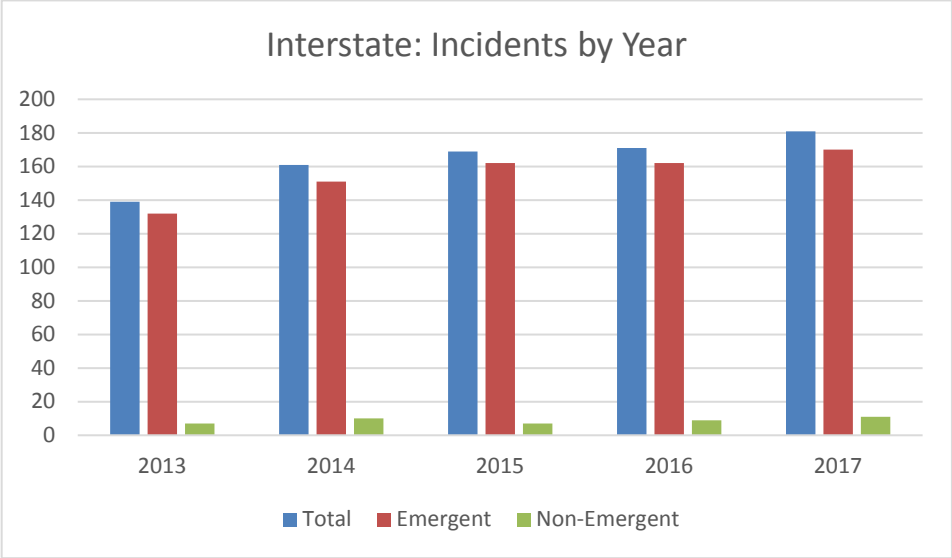
PZ9 Summary:

Response times in PZ9's urban areas consistently meet the Department's stated baselines, with the exception of 2016 due to the dispatch process changes. This planning zone has met the minimum annual call volume for planning a new station since 2008. However, given that both Station 151 and Station 154 are able to meet the stated baseline for the vast majority of incidents, no station is being planned. The Department will continue to closely monitor the call volume and performance in this PZ to ensure additional resources are planned for accordingly.

Interstate

CRFD includes 9 miles of interstate highway (I-25) with four access points (exits 181, 182, 184, 185) all with northbound and southbound access. To ensure the best possible responses, south bound I-25, north of exit 185 includes units from South Metro Fire and Rescue Authority (SMFRA). Two SMFRA stations (Stations 36 & 39) have easy access to southbound I-25. Likewise, Larkspur Fire Protection District (LFPD), co-responds northbound I-25 up to mile marker 177.5, where there is an emergency vehicle turn-around.

Incident Volume by Year

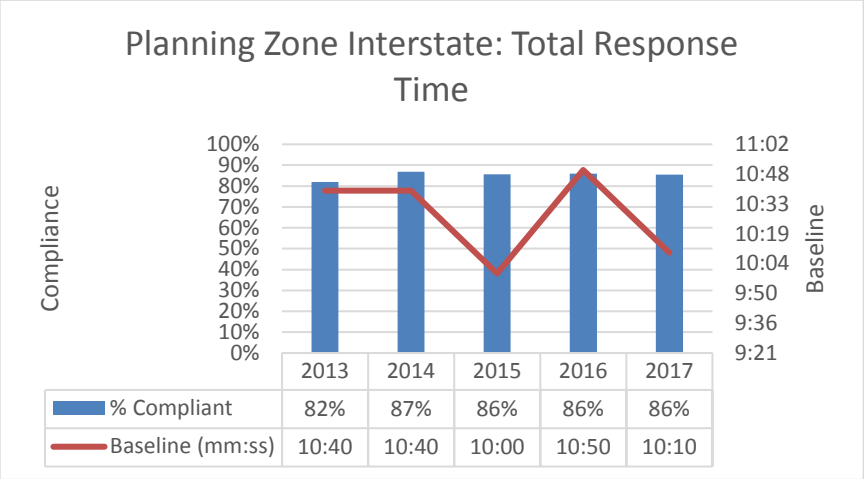


Interstate: 1st Due - 90th Percentile Times - Baseline Performance			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Alarm Handling	Pick-up to Dispatch	Urban	N/A	N/A	N/A	N/A	N/A	N/A	1:00
			N/A	N/A	N/A	N/A	N/A	N/A	
		Rural	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
		Interstate	2:02	1:58	2:12	1:59	1:34	2:45	
			n=684	n=162	n=141	n=139	n=130	n=112	
Turnout Time	Turnout Time 1st Unit	Urban	N/A	N/A	N/A	N/A	N/A	N/A	1:38
			N/A	N/A	N/A	N/A	N/A	N/A	
		Rural	N/A	N/A	N/A	N/A	N/A	N/A	
			N/A	N/A	N/A	N/A	N/A	N/A	
		Interstate	2:20	1:56	2:09	2:06	2:27	2:37	
			n=649	n=163	n=137	n=142	n=115	n=92	
Travel Time	Travel Time 1st Unit **Distribution**	Urban	N/A	N/A	N/A	N/A	N/A	N/A	4:32
		Rural	N/A	N/A	N/A	N/A	N/A	N/A	5:32
		Interstate	8:10	8:00	8:50	8:10	8:40	8:10	7:32
Total Response Time	Total Response Time 1st Unit on Scene **Distribution**	Urban	N/A	N/A	N/A	N/A	N/A	N/A	7:10
			N/A	N/A	N/A	N/A	N/A	N/A	
		Rural	N/A	N/A	N/A	N/A	N/A	N/A	8:10
			N/A	N/A	N/A	N/A	N/A	N/A	
		Interstate	11:30	11:50	12:50	10:50	11:30	12:00	10:10
			n=707	n=165	n=142	n=154	n=130	n=116	

PZ Interstate: Simultaneous Call Volume (all incidents)

	Simultaneous Calls					
	2012	2013	2014	2015	2016	2017
PZ9	3.1%	3.4%	3.9%	1.4%	1.4%	2.3%
	8	9	12	5	5	9

PZ Interstate: 1st Due Compliance



Interstate Summary:

Responses to highway incidents are challenging because there are limited access points, the individuals calling to report an incident rarely stop, and call processing tends to take longer to ensure an accurate location is provided. This is evident in the 1:58 call processing time. Travel time is entirely dependent on the road/weather conditions and how much traffic has already amassed. The Department has little effect on these conditions, yet continues to strive for improved services on the highway. The interstate planning zone, was not impacted by the dispatch process change as dramatically, as ProQA is used almost exclusively for EMS incidents.

Distribution Summary

In summary for the jurisdiction as a whole, total response time compliance has remained in the high 80% to mid 90% annually with previously adopted baselines. However, based on internal and external stakeholder feedback, at the end of 2017 the Department has move to reporting all performance against adopted benchmarks (performance goals). This change in reporting methodology resulted in an apparent decrease in performance, when actual performance remained relatively stable. Performance in 2016 was directly affected due to the changes in the dispatching process (implementation of ProQA). The Department experienced little difference (four seconds) in call processing times based on population density (urban vs. rural). However, the Department has noticed a significant difference in call processing times for calls on the interstate (2:15 vs. 1:39). This is due to all calls being made from mobile phones, requiring the dispatcher to determine the location of the incident. Many times the reporting party [caller] does not stop at the incident and does not provide detailed or accurate incident information leading to additional questions by the dispatcher.

Since 2013, turnout times have continued to improve. This is in part due to the implementation of mobile data terminals (MDT). MDTs are apparatus based computers that are connected to the computer aided dispatch system (CAD), and enable the company officer to mark their unit en-route. This removed any delay due to radio traffic between the officer, other responding units, and the dispatch center. Since the implementation of the MDCs, the turnout time baseline has decreased 26 seconds (2:18 to 1:52). No other physical changes have been made to reduce turnout times. However, turnout times are published monthly by apparatus and shift allowing crews to compare their performance with others in their station and against the Department benchmark.

Total response time (baselines) in the rural population densities have fluctuated between 10:00 and 9:20. Rural response time compliance is typically dependent on the location of the incident. If the incident is in planning zones 6, 7 or 8, or the southern portion of PZ3, the Department recognizes it will likely not meet response time benchmark or baselines due to distance. Strategic Goal #3 sets the expectation that Station 152 will open in the fall of 2018. This new station will close the gap for the population centers and forecasted growth in PZ7. There are no plans for PZ8 or the southern portion of PZ3 due to the very low population and corresponding call volume. Response times and frequency in PZ6 are monitored annually. However, given recent growth in PZ6, the annual call volume is less beginning to approach 2014 – 2019 Master Plan warrant for planning a station. In 2017 PZ6 received 150 calls for service, or 75% on the minimum threshold for planning a station.

Total response time (baselines) for the urban population densities has fluctuated between 8:10 and 7:50 since 2013, even with an increasing call volume and simultaneous call volume trend.

The Department will continue to monitor its performance and compliance to selected baseline performance standards monthly and all baseline performance standards annually.

Concentration Factors

For the purpose of this document, Concentration shall de defined as the arrangement or spacing of multiple resources so that an effective response force (ERF) can arrive on scene within defined performance expectations (total response time). Concentration factors are factors that may influence the performance within a given concentration area.

To obtain a better understanding of the issues affecting concentration, the Department reviewed the number of calls by service type (EMS, fire, HAZMAT, technical rescue and wildland urban interface) as well as the associated response times for the 1st arriving unit and the arrival of the ERF. These were reviewed by service type and geographic area, first the jurisdiction as a whole, second by station area, and lastly by station planning zone, if sufficient data was available. By reviewing the calls by service type, understanding the location and the frequency which they occur, an assessment may be completed to determine if and where there are any deficiencies in the current deployment model. All data tables may be found in their respective Appendices.

It is important to note that as data is increasingly sorted, the sample size becomes smaller and data become increasingly volatile. Thus, the sample size may not be sufficient for determining trends or forecasting. The Center for Public Safety Excellence (CPSE) offers a rule of thumb "that a sample size of approximately 400 is going to have an approximately 5 percent margin of error 95 percent of the time" (CPSE, 2016, p.87).

The Department updated its critical task analysis (CTA) in late 2016. The CTAs define the critical tasks that must be accomplished on any given incident to ensure the safety of the customer and responders. The CTAs are the basis for determining the Department's needed response plans which define the number and type of apparatus as well as the number of personnel for each call type. The response plans are synonymous with the 1st alarm or ERF. The 2016 CTAs may be found in Appendix B.

As noted in the Distribution Factors, there is little effect of population density on call processing or turnout time. As such the call processing and turnout time in this section are not reported by population density.

To better summarize the factors effecting the arrival of the ERF (concentration), each service type is individually reviewed looking at the annual compliance to stated baseline performance goals.

Emergency Medical Service (EMS)

As with most, if not all fire agencies, EMS is the highest frequency call type for CRFD. Annually, EMS represents roughly 64% of all calls for service. The EMS call type includes a broad spectrum of incidents to include, but are not limited to, emergent and non-emergent medical incidents, motor vehicle accidents (MVA), extrication from a passenger vehicle, and mass casualty incidents (MCI). Incidents may receive a different effective response force (ERF) as defined by their specific CTA, found in Appendix B. Below are summaries of each EMS risk level defined by CRFD:

Low Risk EMS: *1 Medic (2 personnel)*
Low risk EMS incidents fall into three categories; Medical Assist Clinic (emergent) and Medical Assists (emergent) in which only the medic unit arrived on-scene. The second category represents when a medic unit arrives first and cancels the balance of the response, typically due to the low risk nature of the incident. For the concentration factor analysis, only emergent responses are reviewed.

A detailed summary of the Department performance may be found in Appendix C: Data Tables – EMS. Concentration Factor Table 1.0 provides an overview of the Department's performance against adopted baselines for the last five years. Concentration Factors Table 2.0 provides a summary of low risk EMS call volume by station and planning zone.

Concentration Factors Table 1.0

EMS:	Rural					Urban				
Low Risk	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
CRFD	100%	96%	85%	91%	80%	94%	80%	94%	76%	79%
Station 151	83%	88%	69%	82%	86%	82%	75%	100%	N/A	N/A
Station 153	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station 154	100%	80%	100%	100%	64%	N/A	N/A	N/A	N/A	N/A
Station 155	N/A	N/A	N/A	N/A	N/A	91%	73%	83%	68%	67%

Concentration Factors Table 2.0

EMS: Low Risk	Rural						Urban					
	2013	2014	2015	2016	2017	Total	2013	2014	2015	2016	2017	Total
CRFD	19	17	10	15	25	86	32	19	35	23	25	134
Station 151	13	17	10	13	9	62	11	4	2	0	0	17
Station 153	0	0	0	0	0	0	0	0	0	0	0	0
Station 154	6	0	0	2	16	24	0	5	10	0		15
Station 155	0	0	0	0	0	0	21	10	23	23	25	102
PZ1	13	17	10	13	9	62	11	4	2	0	0	17
PZ2	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	0
PZ3	0	0	0	0	0	0	0	0	0	0	0	0
PZ4	6	0	0	2	16	24	0	5	10	0	0	15
PZ5	0	0	0	0	0	0	21	10	23	23	25	102
PZ6	0	0	0	0	0	0	0	0	0	0	0	0
PZ7	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A
PZ8	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A
PZ9	0	0	0	0	0	0	0	0	0	0	0	0

Low risk, emergent EMS incidents in the rural population densities have fluctuated from 8:00 in 2013 to 12:20 in 2017 with the highest baseline records in 2017. Call volume in the rural areas has ranged from 10 to 25 call per year with a total of 86 incidents. However there were only 86 incidents from 2013 through 2017 representing a volatile data set. Regardless the increase in response time is due to an increasing simultaneous call volume requiring medic units from more remote locations to respond, thus increasing the total response time. The Department's performance for Low Risk emergent EMS incidents in the urban population densities has fluctuated from 7:00 in 2013 to 8:30 in 2017 with a spike in 2014 at 11:50. Call volume in the urban areas ranges from 19 to 32 calls per year with a total of 136 incidents.

The dramatic change in annual baselines is in part due to the small sample size, less than 40 incidents per year in either population density. Another factor is an increasing number of simultaneous calls requiring units to respond from stations further away than the primary stations.

Moderate Risk EMS: *1 Engine/Quint and 1 Medic (5 personnel)*
Moderate risk EMS incidents are the majority of the Department's call volume and have increased from 2012 – 2015. 2016 shows a decrease from 2015, this is due to the implementation of ProQA MPDS and the re-classification of EMS calls to a non-emergent response. Since 2012, ERF total response times have decreased in both the rural and urban areas, with the exception of 2016. Again, this is due to the changes in the dispatching process. A detailed summary of the Department's performance may be found in Appendix C: Data Tables – EMS. Concentration Factors Table 3.0 shows annual compliance compared to the CRFD's adopted baselines for Moderate Risk EMS incidents. Concentration Factors Table 4.0 provides a summary of moderate risk EMS call volume by station and planning zone.

Concentration Factors Table 3.0

EMS:	Rural					Urban				
Moderate Risk	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
CRFD	86%	87%	86%	75%	80%	89%	88%	85%	82%	80%
Station 151	76%	85%	85%	67%	77%	93%	89%	85%	84%	80%
Station 153	69%	67%	82%	57%	68%	75%	84%	86%	72%	79%
Station 154	94%	94%	91%	92%	93%	90%	89%	85%	84%	80%
Station 155	84%	89%	83%	68%	79%	90%	86%	81%	81%	81%
PZ1	92%	93%	96%	83%	80%	93%	89%	85%	84%	94%
PZ2	N/A	N/A	N/A	N/A	N/A	90%	87%	85%	83%	82%
PZ3	88%	93%	93%	75%	86%	75%	88%	90%	77%	86%
PZ4	95%	96%	92%	93%	90%	89%	89%	82%	81%	77%
PZ5	84%	89%	83%	68%	79%	90%	86%	81%	81%	81%
PZ6	61%	50%	60%	0%	58%	N/A	48%	55%	35%	46%
PZ7	31%	59%	53%	34%	34%	N/A	N/A	N/A	N/A	N/A
PZ8	33%	0%	0%	0%	0%	N/A	N/A	N/A	N/A	N/A
PZ9	0%	0%	80%	100%	N/A	92%	92%	90%	89.5%	87.7%

The Department recognizes the performance gaps for ERF arrival in PZ7 & PZ8. With the planned opening of Station 152 (opening in the fall of 2018) in PZ7, the distribution (1st arrival) performance will improve; however, there will still be a concentration (ERF) performance gap. The Department will closely monitor the call volume, ERF performance and unit hour utilization to determine the need for additional resources in Station 152. With respect to PZ8, given the extremely low frequency of calls (< 10 per year), there are no plans to address the extended response times in that planning zone.

Concentration Factors Table 4.0

EMS: Moderate Risk	Rural						Urban					
	2013	2014	2015	2016	2017	Total	2013	2014	2015	2016	2017	Total
CRFD	730	526	585	551	574	2966	1,481	1,962	2,210	1,675	1,700	7,328
Station 151	180	235	256	215	220	886	683	745	778	642	616	2,848
Station 153	73	44	37	39	63	193	212	253	278	229	204	972
Station 154	385	133	182	189	197	889	342	648	856	556	576	2,402
Station 155	92	114	110	108	94	424	244	316	298	248	304	1,106
PZ1	128	176	194	140	155	793	598	681	693	555	555	2,527
PZ2	N/A	N/A	N/A	N/A	N/A	N/A	86	62	83	86	61	317
PZ3	40	30	30	29	36	165	212	226	245	202	171	885
PZ4	384	130	176	186	197	1073	186	458	625	382	411	1,651
PZ5	93	114	110	108	94	519	247	319	299	248	304	1,113
PZ6	23	4	5	4	20	56	0	25	33	26	33	84
PZ7	52	61	58	78	66	315	N/A	N/A	N/A	N/A	N/A	N/A
PZ8	3	5	6	2	3	19	N/A	N/A	N/A	N/A	N/A	N/A
PZ9	3	3	5	1	0	12	152	191	232	176	165	751

High Risk EMS: *1 Engine/Quint, 1 Medic and 1 Chief (6 personnel)*
High risk EMS incidents are those that require additional personnel to provide effective patient care (Medical Assist ECHO) or occur on the interstate. The frequency of these calls are relatively low, typically less than 120 per year. Additionally, given the duties of the battalion chief and their dynamic location, they may be responding from across the district causing a longer than normal response time. As previously discussed, the smaller the sample size, the more volatile the data, and therefore less reliable for planning or analysis. With that in mind, high risk EMS incidents in the urban area have remained relatively stable and decreased in the rural areas. Response times vary dramatically from year to year due to the low frequency.

Incidents on the interstate have increased from 48 to 117 since 2013 with varying response times, the longer response times occur when a second due chief officer or mutual aid medic unit are required. A detailed summary of the Department's performance may be found in Appendix C: Data Tables – EMS. Concentration Factors Table 5.0 shows annual compliance compared to the CRFD's adopted baselines for Moderate Risk EMS incidents. Concentration Factors Table 6.0 provides a summary of moderate risk EMS call volume by station and planning zone.

Concentration Factors Table 5.0

EMS:	Rural					Urban				
High Risk	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
CRFD	89%	96%	83%	84%	77%	82%	95%	88%	82%	75%
Station 151	75%	100%	80%	75%	75%	93%	93%	90%	89%	81%
Station 153	100%	100%	100%	75%	100%	75%	100%	57%	67%	80%
Station 154	90%	83%	88%	100%	83%	67%	100%	92%	75%	56%
Station 155	100%	100%	60%	100%	50%	83%	86%	92%	83%	75%
PZ1	100%	100%	89%	88%	86%	93%	93%	89%	89%	83%
PZ2	N/A	N/A	N/A	N/A	N/A	100%	100%	100%	100%	50%
PZ3	100%	100%	100%	67%	100%	75%	100%	57%	60%	78%
PZ4	90%	100%	83%	100%	83%	60%	100%	93%	67%	33%
PZ5	100%	100%	75%	100%	50%	83%	86%	93%	83%	75%
PZ6	0%	N/A	N/A	0%	0%	N/A	100%	N/A	100%	100%
PZ7	33%	100%	0%	60%	0%	N/A	N/A	N/A	N/A	N/A
PZ8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PZ9	N/A	0%	100%	N/A	N/A	75%	100%	89%	100%	86%

EMS	Interstate				
High Risk	2013	2014	2015	2016	2017
CRFD	92%	94%	83%	81%	87%
Station 151	93%	95%	84%	79%	80%
Station 153	N/A	N/A	N/A	N/A	N/A
Station 154	82%	90%	88%	82%	88%
Station 154	100%	100%	73%	100%	82%

Concentration Factors Table 6.0

EMS: High Risk	Rural						Urban					
	2013	2014	2015	2016	2017	Total	2013	2014	2015	2016	2017	Total
CRFD	28	23	28	25	23	99	63	75	73	82	86	316
Station 151	8	10	11	12	9	42	29	29	31	38	42	140
Station 153	4	4	2	4	4	14	4	11	7	12	11	41
Station 154	11	6	10	4	6	26	18	21	22	20	17	80
Station 155	5	3	5	5	4	17	12	14	13	12	16	55
PZ1	4	6	9	8	7	30	29	27	28	36	40	131
PZ2	N/A	N/A	N/A	N/A	N/A	N/A	1	2	3	2	2	9
PZ3	5	2	2	3	4	11	4	9	7	10	10	36
PZ4	11	5	8	4	6	23	5	12	12	15	10	49
PZ5	5	3	5	5	4	17	12	14	14	12	16	56
PZ6	0	0	0	0	0	0	0	2	0	2	1	5
PZ7	3	6	2	5	2	15	N/A	N/A	N/A	N/A	N/A	N/A
PZ8	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A
PZ9	0	1	2	0	0	3	12	9	9	5	7	30

Interstate						
EMS: High Risk	2013	2014	2015	2016	2017	Total
CRFD	48	71	79	78	117	393
Station 151	155	7	6	11	6	11
Station 153	N/A	N/A	N/A	N/A	N/A	N/A
Station 154	11	10	8	11	16	56
Station 155	7	6	11	6	11	41

EMS Concentration Summary:
Moderate risk EMS represents the bulk of the Department's call volume. As the Department's analysis becomes more geographically specific, there are identified areas that the Department does not meet its adopted baselines, specifically within PZ6, PZ7 and PZ8. The Department closely monitors PZ6 and PZ7. The Department does not have a station planned for PZ6, but given the recent and projected growth, the Department will continue to monitor the performance thresholds and warrants as outlined in the 2014-2019 Master Plan to determine when a dedicated station needs to be planned. To close the performance

gap in PZ7, Station 152 is scheduled to open no later than the fall of 2018. This station will house a single ALS engine company staffed with a minimum of three members. While this will not address the EMS ERF performance gap, it will close the distribution performance gap and provide ALS care while the medic unit is en-route. Furthermore, the Department will monitor PZ7's performance thresholds and warrants as outlined in the 2014-2019 Master Plan to determine when additional unit(s) will be needed. PZ8 is rural, remote, and has an extremely low annual call volume. Consequently, there are no plans for a dedicated station in that planning zone.

Even with EMS being the majority of the Department's call volume, the Low and High risk EMS incidents are relatively low in volume and make it difficult to accurately trend performance or forecast needs. That said, trends for both low and high risk EMS generally follow the moderate risk EMS trends for call distribution and location.

In addition to reviewing the response times by planning zone, the Department reviews the frequency and average time that all three transports are committed to an incident. This data begins in 2014 with the addition of Medic 153. Concentration Factors Table 7.0 shows the frequency and average time of when all three medic units are committed, as well as the number of times an out of district medic arrived on-scene.

Concentration Factor Table 7.0

	2014	2015	2016	2017	avg. 14-17
Time (avg.)	17:43	16:01	13:27	14:47	15:30
Frequency	158	207	233	301	225
Out of District Aid Received	68	70	94	126	90

Additionally, Concentration Factors Table 8.0 shows the time of day and day of week that all medic units are committed. The green indicates the lowest frequency, increasing from yellow to orange and red indicating the highest frequency. Based on this data, the highest frequency of all medic units committed is between the hours of 11:00 and 19:00. CRFD addresses this by having the dispatch center notify the on-duty Battalion Chief of a resource depletion. Upon this notification, the Battalion Chief has the option to request an automatic aid medic unit be moved into the district for coverage.

Concentration Factor Table 8.0

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
00:00-00:59	1	0	0	0	0	1	2	4
01:00-01:59	4	1	1	0	0	0	1	7
02:00-02:59	1	4	0	0	1	3	0	9
03:00-03:59	0	0	0	1	1	0	2	4
04:00-04:59	0	0	2	0	2	0	0	4
05:00-05:59	1	0	2	0	2	0	0	5
06:00-06:59	1	0	0	3	0	0	2	6
07:00-07:59	4	1	2	0	5	2	0	14
08:00-08:59	3	5	5	5	2	1	1	22
09:00-09:59	6	1	13	10	11	7	5	53
10:00-10:59	4	14	7	9	8	7	6	55
11:00-11:59	12	11	13	15	12	11	9	83
12:00-12:59	14	12	11	11	10	16	8	82
13:00-13:59	6	8	10	9	18	14	14	79
14:00-14:59	8	13	8	14	13	7	8	71
15:00-15:59	11	7	6	12	7	7	10	60
16:00-16:59	17	11	8	12	7	6	2	63
17:00-17:59	5	10	13	11	7	4	6	56
18:00-18:59	14	11	10	12	6	10	4	67
19:00-19:59	7	7	6	7	8	11	0	46
20:00-20:59	3	2	4	5	14	7	2	37
21:00-21:59	7	7	5	4	9	4	3	39
22:00-22:59	4	4	4	5	5	2	1	25
23:00-23:59	1	1	2	1	0	3	0	8
Total	134	130	132	146	148	123	86	899

Concentration Factors: Fire

The Department experiences a relatively low percentage of fire incidents, 0.8% annually. Because of this low call volume, the performance analysis and trending is difficult, and can almost be done on a call-by call basis. In fact, when elevating the ERF response, each incident is individually screened to ensure it meets the criteria. Additionally, each ERF time is reviewed for accuracy. If an ERF response includes a confirmed erroneous or in correct time value, it is excluded from the analysis. All Fire Suppression data tables may be found in the Appendix D Data Tables – Fire Suppression. Below is the summary and analysis of each fire risk level.

Fire Low Risk: *2 Suppression Companies (6 personnel)*

Low risk fire includes dumpster fires, vehicle fires, and outbuildings fires and account for 0.3% of the call volume from 2013 – 2017. Each call type has a different ERF as defined by their respective CTA. The ERF for vehicle fires was selected because it represents the greatest number of responses within the evaluation period. Between 2013 and 2017, CRFD was dispatched to 118 low risk fire suppression incidents. However, only 44 of those received an ERF. A detailed description of the Critical Task Analysis can be found in Appendix B: 2016 Critical Task Analysis. Concentration Factors Tables 9.0 and 10.0, shows the Department' compliance to adopted benchmarks for both rural and urban population densities. The following table, Concentration Factors Table 11.0, details the annual call volume for low risk fire incidents. As evidence by table 11.0, the low frequency and small sample size makes performance trending and forecasting impractical. A detailed summary of the Department annual response data for low risk fire incidents may be found in Appendix D: Data Tables – Fire Suppression.

Concentration Factors Table 9.0

Low Risk: Fire	Rural					Urban				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
CRFD	50%	100%	100%	100%	50%	100%	67%	67%	100%	0%
Station 151	N/A	100%	N/A	100%	0%	100%	N/A	0%	100%	0%
Station 153	0%	N/A	100%	100%	N/A	N/A	100%	100%	N/A	N/A
Station 154	50%	N/A	N/A	N/A	100%	100%	N/A	100%	0%	N/A
Station 155	N/A	N/A	100%	N/A	N/A	100%	50%	N/A	100%	N/A

Concentration Factors Table 10.0

Low Risk: Fire	Interstate				
	2013	2014	2015	2016	2017
CRFD	57%	100%	100%	67%	33%
Station 151	60%	67%	100%	67%	0%
Station 153	N/A	N/A	N/A	N/A	N/A
Station 154	0%	100%	100%	67%	100%
Station 155	100%	N/A	N/A	N/A	N/A

Concentration Factors Table 11.0

Low Risk Fire ERF Incidents												
Fire: Low Risk	Rural						Urban					
	2013	2014	2015	2016	2017	Total	2013	2014	2015	2016	2017	Total
CRFD	2	1	1	3	2	9	4	3	3	4	1	15
Station 151	0	1	0	2	1	4	1	0	1	2	1	5
Station 153	1	0	0	1	0	2	0	1	0	0	0	1
Station 154	1	0	0	0	1	2	1	0	2	0	0	3
Station 155	0	0	1	0	0	1	2	2	0	2	0	6
PZ1	0	1	0	2	1	4	1	0	1	2	1	5
PZ2	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	0	0
PZ3	1	0	0	1	0	2	0	1	0	0	0	1
PZ4	1	0	0	0	1	2	0	0	0	0	0	0
PZ5	0	0	1	0	0	1	2	2	0	2	0	6
PZ6	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	0
PZ7	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	0
PZ8	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	0
PZ9	0	0	0	0	0	0	1	0	2	0	0	3

Fire: Moderate Risk: *3 Engines, 1 Quint, 2 Medics, and 2 Chiefs (18 Personnel)*
Moderate risk fires are fires that occur in single family residential structures and account for 0.5% of the annual call volume. On April 1 2013, the Department increased its ERF adding one medic unit to fill the role of initial rapid intervention team (IRIT). The Department again updated its ERF/CTA in July 2017, this change added an additional (4th) suppression company to staff a dedicated rapid intervention team (RIT). The second medic company was re-assigned from IRIT to that of patient care/transport or establishment of a medical group. Since the implementation of this change, the Department has had a total of 2 fires in which a full ERF arrived on scene. Prior to the ERF/CTA change there were 18 incidents that received a full ERF. However, considering that those incidents no longer represent the Department's deployment model, they are not included in Concentration Factors Tables 12.0 or 13.0 below.

As seen in the Concentration Factor Tables 12.0, the Department's compliance to adopted benchmarks vary dramatically from year to year. This is due to the extremely low frequency of moderate risk structure fire that receive an ERF, as shown in Concentration Factors Table 13.0 A detailed summary of the Department's annual response data, including data prior to the ERF update of 7/1/2017, for moderate risk fire incidents, may be found in Appendix D: Data Tables – Fire Suppression.

Concentration Factors Table 12.0

Moderate Risk: Fire	Rural					Urban				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
CRFD	N/A	0%	50%	0%	N/A	0%	50%	50%	50.0%	100.0%
Station 151	N/A	0%	N/A	N/A	N/A	0%	33%	100%	20.0%	100.0%
Station 153	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station 154	N/A	N/A	100%	0%	N/A	N/A	50%	33%	N/A	100.0%
Station 155	N/A	N/A	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Concentration Factors Table 13.0

Moderate Risk Fire ERF Incidents												
Fire: Moderate Risk	Rural						Urban					
	2013	2014	2015	2016	2017	Total	2013	2014	2015	2016	2017	Total
CRFD	0	1	2	1	0	4	2	6	4	2	2	16
Station 151	0	1	0	0	0	1	1	3	1	2	1	8
Station 153	0	0	0	0	0	0	1	1	0	0	0	2
Station 154	0	0	1	1	0	2	0	2	3	0	1	6
Station 155	0	0	1	0	0	1	0	0	0	0	0	0

As part of the CTA review and update process, to ensure the safety of crews operating on the fire ground, the CTA team elected to recommend the addition of a third engine company for the IRIT function. In doing so, the role of the second medic changed to that of patient care/transport or establishment of a medical group.

Fire: High Risk: *4 Engines, 1 Quint, 2 Medics, and 2 Chiefs (21 personnel)*
High risk fires are fires that occur in commercial occupancies or multi-family structures and account for 0.3% of the annual call volume. On April 1, 2013, the Department increased its ERF adding one medic unit to fill the role of initial rapid intervention team (IRIT). The Department again updated its ERF/CTA in July 2017, this change added an additional (5th) suppression company to staff a dedicated rapid intervention team (RIT). The second medic company was re-assigned from IRIT to that of patient care/transport or establishment of a medical group. Prior to the July 2017 ERF/CTA change, there were 11 incidents that received a full ERF. However, considering that those incidents no longer represent the Department's deployment model, they are not included in Concentration Factors Tables 14.0 or 15.0 below.

As seen in the Concentration Factor Tables 14.0, the Department's compliance to adopted benchmarks vary dramatically from year to year. This is due to the extremely low frequency of moderate risk structure fire that receive an ERF, as shown in Concentration Factors Table 15.0 A detailed summary of the Department's annual response data, including data prior to the ERF update of 7/1/2017, for moderate risk fire incidents, may be found in Appendix D: Data Tables – Fire Suppression.

Concentration Factors Table 14.0

High Risk: Fire	Rural					Urban				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
CRFD	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	50.0%
Station 151	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station 153	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station 154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100.0%
Station 155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0%

Concentration Factors Table 15.0

High Risk Fire ERF Incidents												
Fire Risk: High	Rural						Urban					
	2013	2014	2015	2016	2017	Total	2013	2014	2015	2016	2017	Total
CRFD	0	1	0	0	0	1	2	5	2	1	2	12
Station 151	0	0	0	0	0	0	1	2	1	0	0	4
Station 153	0	0	0	0	0	0	0	0	0	0	0	0
Station 154	0	1	0	0	0	1	0	0	1	0	1	2
Station 155	0	0	0	0	0	0	1	3	0	1	1	6

Fire Concentration Summary:
Fire incidents account for only 1.7% of CRFD's annual call volume. Because of that low call volume and small sample size, performance trending and forecasting is not practical and subject to a great deal of variation. As such, the Department has elected to use a five-year time window for establishing baselines and benchmarks. However, even with a five-year time window, the sample size is still very low and thus introduces a great deal of volatility.

Conversely, one benefit of a small size is that all incidents may be individually reviewed. Annually, the Department reviews all moderate and high risk fire suppression ERF incidents to evaluate performance and determine if there was significant deviation from the adopted baselines. The following incidents were excluded from the data analysis, and the reason for exclusion.

Incident Number	Discussion
2014-1446	Arrival time for Q155 (18:13) is not correct. Q155 arrived shortly after E153 completed a 360 size-up and controlled utilities
2014-2720	Arrival time for Q155 (18:49) is not correct.
2015-0654	Reclassified from outside smoke investigation to structure fire
2015-1271	Reclassified from outside smoke investigation to structure fire
2015-5072	Arrival time for E151 not correct (2:24). E151 arrived at the same time as MED151 (9:47)
2016-2785	Incorrect arrival Time for T32
2017	No data exclusions in 2017 (updated CTA July 1 2017)

In addition to identifying statistical outliers that should be excluded, the call-by-call review of ERF responses can identify other incidents that should be reviewed in greater detail. In reviewing all high risk fire ERF responses for 2016, incident #16-2785 exceeded the 30 minute limit. In reviewing the CAD data for this incident, the ERF required an automatic aid aerial apparatus, Tower 32 (T32), because both CRFD quints were out of service. The total response time for T32, per CAD, was 44:02. However, working with DRCC and pulling the audio file, T32's actual response time was 27 minutes and 11 seconds (11:37:39 – 12:04:40). Additionally, T32 was the final apparatus needed to complete the ERF. Therefore, the ERF time for this incident is 27:11, unfortunately the Department is not able to update the CAD data to reflect the actual response time. In reviewing the incident narrative, the crew of Tower 32 was assigned as the "on-deck" (stand-by) crew and the aerial device was not required.

Given that CRFD experienced service issues with its quints in 2016, this forced the Department to rely on auto/mutual aid partners. This was the only incident that required an automatic aid aerial to complete an ERF. Lastly, the outcome of this incident was not affected by the protracted response time, in fact the aerial device was not needed.

Concentration Factors: HAZMAT

Hazardous Materials (HAZMAT) incidents are the third most frequent incident type accounting for 2.7% of the Department's annual call volume after EMS and "Other" respectively. The majority of the HAZMAT incidents fall into the low and moderate risk categories. The Department maintains an "operations level" of service with all personnel trained and certified to the State of Colorado HAZMAT Operations level. The Department has a number of personnel trained and certified to the State of Colorado HAZMAT Technician level, and is an active participant in the Arapahoe/Douglas/Elbert Hazardous Materials Task Force, and maintains automatic and mutual aid agreements with all surrounding agencies as well as those along the Front Range to ensure sufficient resources can be called upon as needed. The detailed CTAs are found in Appendix B.

HAZMAT Low Risk: *2 Suppression Units (6 personnel)*

Low risk HAZMAT incidents include LP/gas leak (inside and outside), fuel spills less than 25 gallons, and carbon monoxide alarms with no symptoms and accounts for 1.8% of the Department's call volume for the evaluation period. The ERF of two suppression companies (6 members) was selected because it is the most frequently used ERF. Between 2013 and 2017, CRFD was dispatched to 475 low risk HAZMAT incidents. However, only 302 of those received an ERF. A detailed description of the Critical Task Analysis can be found in Appendix B: 2016 Critical Task Analysis. Concentration Factors Table 16.0 shows the Department, compliance to the Department's adopted benchmarks for low risk HAZMAT incidents. The following table, Concentration Factors Table 17.0, details the annual call volume for low risk HAZMAT incidents. As evidence by table 17.0, the low frequency and small sample size makes performance trending and forecasting impractical. A detailed summary of the Department's annual response data for low risk HAZMAT incidents may be found in Appendix E: Data Tables – HAZMAT.

Concentration Factors Table 16.0

HAZMAT:	Rural					Urban				
Low Risk	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
CRFD	95%	59%	100%	82%	70%	81%	84%	73%	80%	79%
Station 151	100%	57%	100%	67%	67%	91%	83%	77%	75%	85%
Station 153	100%	0%	100%	0%	100%	100%	100%	50%	50%	80%
Station 154	92%	70%	100%	88%	100%	71%	73%	70%	79%	67%
Station 155	100%	100%	83%	100%	80%	80%	93%	90%	92%	100%

Concentration Factors Table 17.0

HAZMAT: Low Risk	Rural						Urban					
	2013	2014	2015	2016	2017	Total	2013	2014	2015	2016	2017	Total
CRFD	20	22	11	17	10	80	41	62	41	40	38	222
Station 151	5	8	4	3	6	26	13	18	13	12	13	69
Station 153	2	2	1	0	1	6	3	8	8	2	5	26
Station 154	12	10	6	8	2	38	15	22	10	14	15	76
Station 155	1	2	0	6	1	10	10	14	10	12	5	51
PZ1	5	6	4	2	4	21	12	16	12	11	11	62
PZ2	N/A	N/A	N/A	N/A	N/A	N/A	1	2	1	1	2	7
PZ3	0	0	0	0	0	0	3	7	7	1	4	22
PZ4	12	10	6	8	2	38	13	19	6	10	10	58
PZ5	1	2	0	6	1	10	10	14	10	12	5	51
PZ6	2	2	1	0	1	6	0	1	1	1	1	4
PZ7	0	2	0	0	2	4	N/A	N/A	N/A	N/A	N/A	N/A
PZ8	0	0	0	1	0	1	N/A	N/A	N/A	N/A	N/A	N/A
PZ9	0	0	0	0	0	0	2	3	4	4	5	18

HAZMAT Moderate Risk: *2 Suppression Units, 1 Medic, and 1 Chief (9 personnel)*
Moderate risk HAZMAT incidents include fuel spills greater than 25 gallons, gas/LP line rupture/cut, chemical/biological investigations, chlorine alarms and carbon monoxide alarms with symptoms, and accounts for 1.5% of the Department call volume for the evaluation period. The ERF for inside LP/gas line rupture was selected for this analysis because it requires the greatest number of resources. Between 2013 and 2017, CRFD was dispatched to nearly 107 moderate risk HAZMAT incidents. However, only 58 of those received an ERF. While the sample size begins to seem viable for trending and forecasting, once the statistics are broken into geographic area, the sample sizes decrease rapidly. However, one constant is the higher call volume in Station 154's area. These incidents tend to follow areas of growth and development. Not surprisingly, underground gas lines are disturbed or damaged with the use of heavy machinery. A detailed description of the Critical Task Analysis can be found in Appendix B: 2016 Critical Task Analysis. Concentration Factors Table 18.0 shows the Department's compliance to adopted benchmarks. The following table, Concentration Factors Table 19.0, details the annual call volume for moderate risk HAZMAT incidents. A detailed summary of the Department's annual response data for high risk HAZMAT incidents may be found in Appendix E: Data Tables – Hazardous Materials.

Concentration Factors Table 18.0

HAZMAT: Moderate Risk	Rural					Urban				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
CRFD	75%	100%	75%	67%	100%	50%	73%	100%	88%	85%
Station 151	100%	100%	67%	N/A	N/A	100%	67%	100%	100%	100%
Station 153	100%	N/A	N/A	0%	100%	N/A	100%	N/A	N/A	50%
Station 154	50%	100%	100%	100%	N/A	50%	50%	100%	67%	83%
Station 155	N/A	N/A	N/A	N/A	N/A	0%	100%	100%	N/A	N/A

Concentration Factors Table 19.0

HAZMAT: Moderate Risk	Rural						Urban					
	2013	2014	2015	2016	2017	Total	2013	2014	2015	2016	2017	Total
CRFD	4	2	4	3	2	15	6	11	5	8	13	43
Station 151	1	1	3	0	0	5	1	3	2	5	5	16
Station 153	1	0	0	1	2	4	0	1	0	0	2	3
Station 154	2	1	1	2	0	6	4	4	1	3	6	18
Station 155	0	0	0	0	0	0	1	3	2	0	0	6
PZ1	1	0	1	0	0	2	1	3	1	5	4	14
PZ2	N/A	N/A	N/A	N/A	N/A	N/A	0	0	1	0	1	2
PZ3	1	0	0	1	2	4	0	0	0	0	2	2
PZ4	2	1	1	2	0	6	2	2	1	2	5	12
PZ5	0	0	0	0	0	0	1	3	2	0	0	6
PZ6	1	0	0	0	2	3	0	1	0	0	0	1
PZ7	0	1	1	0	0	2	N/A	N/A	N/A	N/A	N/A	N/A
PZ8	0	0	1	0	0	1	N/A	N/A	N/A	N/A	N/A	N/A
PZ9	0	0	0	0	0	0	2	2	0	1	1	6

HAZMAT High Risk: *2 Suppression Companies, 1 HAZMAT, 1 Medic, and 1 Chief (12 personnel)*
High risk HAZMAT calls are very rare. These incidents are limited to a hazardous materials release. It is important to note that the stated ERF is intended to determine the level of entry and/or complexity of the incident. If an entry is required that necessitates Level A or B protective ensemble, additional resources (HAZMAT Task Force) must be called. Between 2013 and 2017, CRFD was dispatched to 19 high risk HAZMAT incidents. However, only four of those received an ERF. Concentration Factors Table 20.0 shows the Department's compliance to adopted benchmarks for high risk HAZMAT incidents. The following table, Concentration Factors Table 21.0, details the annual call volume for high risk HAZMAT incidents. As evidence by table 21.0, the low frequency and small sample size makes performance trending and forecasting impractical. A detailed summary of the Department annual response data for high risk HAZMAT incidents may be found in Appendix E: Data Tables – Hazardous Materials.

Concentration Factors Table 20.0

HAZMAT: High Risk	Rural					Urban				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
CRFD	0%	N/A	0%	N/A	N/A	N/A	N/A	N/A	100%	N/A
Station 151	0%	N/A	0%	N/A	N/A	N/A	N/A	N/A	100%	N/A
Station 153	0%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station 154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station 155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Concentration Factors Table 21.0

HAZMAT: High Risk	Rural						Urban						
	2013	2014	2015	2016	2017	Total	2012	2013	2014	2015	2016	2017	Total
CRFD	2	0	1	0	0	3	0	0	0	1	0	0	1
Station 151	1	0	1	0	0	2	0	0	0	1	0	0	1
Station 153	1	0	0	0	0	1	0	0	0	0	0	0	0
Station 154	0	0	0	0	0	0	0	0	0	0	0	0	0
Station 155	0	0	0	0	0	0	0	0	0	0	0	0	0
PZ1	1	0	1	0	0	2	0	0	0	1	0	0	1
PZ2	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	0	0
PZ3	1	0	0	0	0	1	0	0	0	0	0	0	0
PZ4	0	0	0	0	0	0	0	0	0	0	0	0	0
PZ5	0	0	0	0	0	0	0	0	0	0	0	0	0
PZ6	0	0	0	0	0	0	N/A	N/A	0	0	0	0	0
PZ7	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PZ8	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
PZ9	0	0	0	0	0	0	0	0	0	0	0	0	0

HAZMAT Concentration Factors Summary:
The low call volume for all HAZMAT incidents makes it impractical for any trend or forecasting analysis. Annually, the Department individually reviews all high risk HAZMAT ERF incidents to evaluate performance and determine if there was significant deviation from adopted baselines.

Concentration Factors: Wildland

The wildland fire risk is pervasive throughout the jurisdiction, and is highly weather dependent. The region experiences sustained winds and low humidity year round. Because of the climate, the Department responds to wildland fires through the year. There are four call types for wildland; outside smoke investigation, illegal/controlled burn, wildland fire [non-threatening], and wildland fire [threatening]. Each of these receive a different ERF, and are detailed in Appendix B: 2016 Critical Task Analysis.

Wildland Low Risk: 1 Engine and 1 Brush Truck (6 personnel)
Low risk wildland incidents include outside smoke investigations and illegal/controlled burns, and accounts for 0.6% of the Department call volume for the evaluation period. Between 2013 and 2017, CRFD responded (emergent) to 121 low risk wildland incidents. Of which, only 14 received a complete ERF. The ERF for outside smoke investigation was selected for this analysis because it requires the greatest number of resources. Concentration Factors Table 22.0 shows the Department's compliance to adopted baselines for low risk wildland incidents. The following table, Concentration Factors Table 23.0, details the annual call volume for low risk wildland incidents. As evidence by table 23.0, the low frequency and small sample size makes performance trending and forecasting impractical. A detailed summary of the Department's annual response data for low risk wildland incidents may be found in Appendix F: Data Tables – Wildland Fire Suppression.

Concentration Factors Table 22.0

Wildland: Low Risk	Rural						Urban					
	2012	2013	2014	2015	2016	2017	2012	2013	2014	2015	2016	2017
CRFD	0%	0%	N/A	N/A	N/A	100%	100%	80%	50%	N/A	50%	100%
Station 151	0%	N/A	N/A	N/A	N/A	100%	100%	100%	N/A	N/A	N/A	N/A
Station 153	N/A	0%	N/A	N/A	N/A	N/A	N/A	N/A	100%	N/A	0%	N/A
Station 154	0%	N/A	N/A	N/A	N/A	N/A	100%	0%	0%	N/A	100%	100%
Station 155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0%	N/A	N/A	N/A

Concentration Factors Table 23.0

Wildland: Low Risk	Rural						Urban					
	2013	2014	2015	2016	2017	Total	2013	2014	2015	2016	2017	Total
CRFD	1	0	0	0	2	3	5	3	0	2	1	11
Station 151	0	0	0	0	2	2	4	0	0	0	0	4
Station 153	1	0	0	0	0	1	0	1	0	1	0	2
Station 154	0	0	0	0	0	0	1	1	0	1	1	4
Station 155	0	0	0	0	0	0	0	1	0	0	0	1
PZ1	0	0	0	0	1	1	4	0	0	0	0	4
PZ2	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	0
PZ3	1	0	0	0	0	1	0	1	0	1	0	2
PZ4	0	0	0	0	0	0	0	1	0	1	0	2
PZ5	0	0	0	0	0	0	0	1	0	0	0	1
PZ6	0	0	0	0	0	0	N/A	0	0	0	0	N/A
PZ7	0	0	0	0	1	1	N/A	N/A	N/A	N/A	N/A	N/A
PZ8	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A
PZ9	0	0	0	0	0	0	1	0	0	0	1	2

Wildland Moderate Risk: *2 Brush Trucks, 1 Engine, 1 Medic and 1 Chief (12 personnel)*
Moderate risk wildland fire fires are vegetation fires that do not immediately threaten structures or improvements and account for 0.2% of Department call volume for the evaluation period. Between 2013 and 2017, CRFD responded (emergent) to 76 moderate risk wildland incidents. Of which, only 18 received a complete ERF. This ERF was updated on April 1st, 2014 to include the addition of a medic unit for lookout or medical group as determined by the incident commander. Therefore, the following analysis only include incidents with the current ERF. A detailed description of the Critical Task Analysis can be found in Appendix B: 2016 Critical Task Analysis. Concentration Factors Table 24.0 shows the Department's compliance to adopted baselines for moderate risk wildland incidents. The following table, Concentration Factors Table 25.0, details the annual call volume for moderate risk wildland incidents. As evidence by table 25.0, the low frequency and small sample size makes performance trending and forecasting impractical. A detailed summary of the Department's annual response data for moderate risk wildland incidents may be found in Appendix F: Data Tables – Wildland Fire Suppression.

Concentration Factors Table 24.0

Wildland: Moderate Risk	Rural						Urban					
	2012	2013	2014	2015	2016	2017	2012	2013	2014	2015	2016	2017
CRFD	N/A	N/A	0%	50%	50%	50%	N/A	N/A	50%	33%	100%	100%
Station 151	N/A	N/A	0%	0%	67%	100%	N/A	N/A	N/A	50%	100%	N/A
Station 153	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100%	N/A	N/A	100%
Station 154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0%	0%	100%	N/A
Station 155	N/A	N/A	N/A	100%	0%	0%	N/A	N/A	N/A	N/A	N/A	N/A

Concentration Factors Table 25.0

Wildland: Moderate Risk	Rural						Urban					
	2013	2014	2015	2016	2017	Total	2013	2014	2015	2016	2017	Total
CRFD	0	1	2	4	2	9	0	2	3	2	2	9
Station 151	0	1	1	3	1	6	0	0	2	1	0	3
Station 153	0	0	0	0	0	0	0	1	0	0	2	3
Station 154	0	0	0	0	0	0	0	1	1	1	0	3
Station 155	0	0	1	1	1	3	0	0	0	0	0	0
PZ1	0	0	0	1	0	1	0	0	1	1	0	2
PZ2	N/A	N/A	N/A	N/A	N/A	N/A	0	1	1	0	0	2
PZ3	0	0	0	0	0	0	0	1	0	0	1	2
PZ4	0	0	0	0	0	0	0	1	0	1	0	2
PZ5	0	0	1	1	1	3	0	0	0	0	0	0
PZ6	0	0	0	0	0	0	N/A	0	0	0	1	1
PZ7	0	1	1	2	1	5	N/A	N/A	N/A	N/A	N/A	N/A
PZ8	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A
PZ9	0	0	0	0	0	0	0	0	1	0	0	1

Wildland: High Risk: 2 Type VI Brush, 1 Engine or Type III Brush, 1 Medic, and 1 Chief (16 personnel) High risk wildland fires are vegetation fires that immediately threaten structures or improvements. There was one high risk wildland incident during the evaluation period that received a complete ERF. This ERF was updated on April 1st, 2014 to include the addition of a medic unit for lookout or medical group as determined by the incident commander. Therefore, the following analysis only includes incidents with the current ERF. A detailed summary of the Department's annual response data for moderate risk wildland incidents may be found in Appendix F: Data Tables – Wildland Fire Suppression.

Concentration Factors Table 26.0

Wildland: High Risk	Rural					Urban				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
CRFD	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0%	N/A
Station 151	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0%	N/A
Station 153	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station 154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station 155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Concentration Factors Table 27.0

Wildland: High Risk	Rural						Urban					
	2013	2014	2015	2016	2017	Total	2013	2014	2015	2016	2017	Total
CRFD	0	0	0	0	0	0	0	0	0	1	0	1
Station 151	0	0	0	0	0	0	0	0	0	1	0	1
Station 153	0	0	0	0	0	0	0	0	0	0	0	0
Station 154	0	0	0	0	0	0	0	0	0	0	0	0
Station 155	0	0	0	0	0	0	0	0	0	0	0	0
PZ1	0	0	0	0	0	0	0	0	0	1	0	1
PZ2	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	0
PZ3	0	0	0	0	0	0	0	0	0	0	0	0
PZ4	0	0	0	0	0	0	0	0	0	0	0	0
PZ5	0	0	0	0	0	0	0	0	0	0	0	0
PZ6	0	0	0	0	0	0	N/A	0	0	0	0	0
PZ7	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A
PZ8	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A
PZ9	0	0	0	0	0	0	0	0	0	0		0

Wildland Concentration Factors Summary:
The low call volume for all wildland fire incidents make it impractical for any trend or forecasting analysis. However, based on incident reports, actions taken, and the frequency of an ERF arriving, the CTA team is recommending the CTA for illegal/controlled burn be decreased to one suppression unit (engine/quint) with minimum staffing of three members.

Concentration Factors: Technical Rescue

As defined in Section D Services Provided, technical rescue incidents include:

- Trench rescue
- Confined space rescue
- Building collapse
- High/low angle rope rescue
- Water/ice rescue
- Heavy extrication (commercial vehicles)

Generally speaking, technical rescue incidents are considered low frequency / high risk incidents. As such, they typically require multiple companies, special equipment and technical knowledge/expertise to effect rescues in the safest manner possible, for both the victim and rescuers.

Technical Rescue Low Risk: *1 Suppression unit (3 personnel)*

Low risk technical rescue incidents are typically responses to people trapped in an elevator and received an emergent response, and accounts for 0.1% of the Department call volume for the evaluation period. A detailed description of the Critical Task Analysis can be found in Appendix B: 2016 Critical Task Analysis. Concentration Factors Table 28.0 shows the Department's compliance to adopted baselines for low risk technical rescue incidents. The following table, Concentration Factors Table 29.0, details the annual call volume for low risk technical rescue incidents. As evidence by table 29.0, the low frequency and small sample size makes performance trending and forecasting impractical. A detailed summary of the Department's annual response data for low risk technical rescue incidents may be found in Appendix G: Data Tables – Technical Rescue.

Concentration Factors Table 28.0

Tech Rescue:	Rural					Urban				
Low Risk	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
CRFD	100%	75%	100%	N/A	N/A	100%	N/A	N/A	100%	N/A
Station 151	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station 153	N/A	N/A	N/A	N/A	N/A	100%	N/A	N/A	N/A	N/A
Station 154	100%	75%	100%	N/A	N/A	N/A	N/A	N/A	100%	N/A
Station 155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Concentration Factors Table 29.0

Tech Rescue: Low Risk	Rural						Urban					
	2013	2014	2015	2016	2017	Total	2013	2014	2015	2016	2017	Total
CRFD	1	4	4	0	0	9	1	0	0	1	0	2
Station 151	0	0	0	0	0	0	0	0	0	0	0	0
Station 153	0	0	0	0	0	0	1	0	0	0	0	1
Station 154	1	4	4	0	0	9	0	0	0	1	0	1
Station 155	0	0	0	0	0	0	0	0	0	0	0	0
PZ1	0	0	0	0	0	0	0	0	0	0	0	0
PZ2	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	0
PZ3	0	0	0	0	0	0	1	0	0	0	0	1
PZ4	1	4	4	0	0	9	0	0	0	1	0	1
PZ5	0	0	0	0	0	0	0	0	0	0	0	0
PZ6	0	0	0	0	0	0	N/A	0	0	0	0	0
PZ7	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A
PZ8	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A
PZ9	0	0	0	0	0	0	0	0	0	0	0	0

Technical Rescue Moderate Risk: *1 Suppression Unit, 1 Medic, 1 Squad, and 1 Chief (9 personnel)*
Moderate risk technical rescue incidents include; HI/LO angle rope rescue, extrication of victims from machinery, or extrication/rescue other, and accounts for 0.2% of the Department's call volume for the evaluation period. Between 2013 and 2017, CRFD was dispatched to 84 moderate risk technical rescue incidents. However, only one of those received an ERF. The ERF for HI/LO angle rope rescue was selected because it was the only incident type that received an ERF during the evaluation period. A detailed description of all the Critical Task Analysis can be found in Appendix B: 2016 Critical Task Analysis. Concentration Factors Table 30.0 shows the Department's compliance to adopted baselines for moderate risk technical rescue incidents. The following table, Concentration Factors Table 31.0, details the annual call volume for low risk technical rescue incidents. As evidence by table 31.0, the low frequency and small sample size makes performance trending and forecasting impractical. A detailed summary of the Department's annual response data for low risk technical rescue incidents may be found in Appendix G: Data Tables – Technical Rescue.

Concentration Factors Table 30.0

Tech Rescue: Moderate Risk	Rural					Urban				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
CRFD	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100%	N/A	N/A
Station 151	N/A	N/A	N/A	N/A	N/A	N/A	N/A	100%	N/A	N/A
Station 153	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station 154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station 155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Concentration Factors Table 31.0

Tech Rescue: Moderate Risk	Rural						Urban					
	2013	2014	2015	2016	2017	Total	2013	2014	2015	2016	2017	Total
CRFD	0	0	0	0	0	0	0	0	1	0	0	1
Station 151	0	0	0	0	0	0	0	0	1	0	0	1
Station 153	0	0	0	0	0	0	0	0	0	0	0	0
Station 154	0	0	0	0	0	0	0	0	0	0	0	0
Station 155	0	0	0	0	0	0	0	0	0	0	0	0
PZ1	0	0	0	0	0	0	0	0	1	0	0	1
PZ2	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	0
PZ3	0	0	0	0	0	0	0	0	0	0	0	0
PZ4	0	0	0	0	0	0	0	0	0	0	0	0
PZ5	0	0	0	0	0	0	0	0	0	0	0	0
PZ6	0	0	0	0	0	0	N/A	0	0	0	0	0
PZ7	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A
PZ8	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A
PZ9	0	0	0	0	0	0	0	0	0	0	0	0

Technical Rescue High Risk:

High risk technical rescue incidents include any incidents that include dive, trench, confined space, collapse, or water/ice rescues. The ERF for these incidents vary depending on the type and complexity of the event and are detailed in the Appendix B: 2016 Critical Task Analysis. Between 2013 and 2017, there were no high risk technical rescue incidents that received an ERF.

Concentration Factors Table 32.0

Tech Rescue: High Risk	Rural					Urban				
	2013	2014	2015	2016	2017	2013	2014	2015	2016	2017
CRFD	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station 151	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station 153	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station 154	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Station 155	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Concentration Factors Table 33.0

Tech Rescue: High Risk	Rural						Urban					
	2013	2014	2015	2016	2017	Total	2013	2014	2015	2016	2017	Total
CRFD	0	0	0	0	0	0	0	0	0	0	0	0
Station 151	0	0	0	0	0	0	0	0	0	0	0	0
Station 153	0	0	0	0	0	0	0	0	0	0	0	0
Station 154	0	0	0	0	0	0	0	0	0	0	0	0
Station 155	0	0	0	0	0	0	0	0	0	0	0	0
PZ1	0	0	0	0	0	0	0	0	0	0	0	0
PZ2	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0	0
PZ3	0	0	0	0	0	0	0	0	0	0	0	0
PZ4	0	0	0	0	0	0	0	0	0	0	0	0
PZ5	0	0	0	0	0	0	0	0	0	0	0	0
PZ6	0	0	0	0	0	0	N/A	N/A	0	0	0	0
PZ7	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A
PZ8	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A
PZ9	0	0	0	0	0	0	0	0	0	0	0	0

Technical Rescue Concentration Factors Summary:
As with other services, the low call volume for all technical rescue incidents make it impractical for any trend or forecasting analysis. The Department will monitor these incidents as they occur as they present a very low frequency and high risk service type.

Concentration Factor: Summary

Generally speaking, with the exception of EMS, CRFD does not have sufficient ERF call volume to generate an adequate sample size to perform statistically stable trending or forecasting analysis, even using a five year time window. That said, CRFD will continue to evaluate and report all service and risk levels on an annual basis. Additionally the Department will review all moderate and high risk ERF incidents for Fire, HAZMAT, Technical Rescue, and Wildland to verify compliance to adopted performance standards, monitor potential trends, and report on an annual basis.

With respect to EMS, CRFD maintains a relatively high compliance to adopted baselines except in areas that are very rural or lightly populated (PZ7, PZ8 and parts of PZ6). With the planned addition of Station 152, the Department is addressing 1st due performance gaps within PZ7, and will monitor ERF times and call volumes to determine when that area warrants additional resources. As previously stated, the Department does not have plans for fire stations in PZ6 and PZ9, but given the current and projected growth, the Department will continue to monitor the performance thresholds, and warrants as outlined in the 2014-2019 Master Plan to determine when a dedicated station needs to be planned. Additionally, PZ8 is rural, remote, and has an extremely low annual call volume. Consequently, there are no plans for a dedicated station in that planning zone.

Reliability Factors

For the purpose of this study, "Reliability" shall be defined as the ability of the first due suppression company (engine or quint) to respond to calls within its primary response area or station district. Reliability is reported as a simple percentage (percent time assigned unit was first on scene in its district). Beyond reliability, the Department examined travel time delta, the difference in time between the in-station suppression unit and out-of-station suppression unit, to gain better understanding on the impact of units not being available for calls within their 1st due response area. In addition to the reliability and travel time delta, it is important to understand what units are responding in place of the first due company when that company is otherwise occupied. Lastly, the Department examined each company's hourly utilization, or in other words, what percentage of each hour was a company engaged in an incident.

The following information details each of the Department's suppression companies' reliability from 2013 through 2017. There are four tables and two charts for each apparatus. The first table shows the percentage of reliability by year and overall. The second table shows that travel time delta in minutes and seconds (MM:SS) with a chart depicting the five year trend. The third is a chart showing the number of incidents within a station area that the 1st due unit was not the unit assigned to that station. The fourth table shows the unit hour utilization (UHU) for each apparatus by hour of the day. Green indicates lower UHUs while yellow and orange indicate higher UHUs. Red shows the highest UHU for that apparatus. The higher the UHU, the less reliable that unit is - due to being committed to other incidents. In addition, this UHU data is limited only to in-service or out of service. The Department cannot track why a unit was out of service, i.e. calls, training, public education, maintenance, etc. Currently the Department is not aware of any automated method to account for a unit's non-emergent commit time.

Typical fire service UHU for medic units is between 25% and 30%. When a unit exceeds 30% UHU, then consideration must be given on how to reduce the UHU. This can be done by reassigning response zones to reduce call volume, adding an additional unit in that response zone, adding an additional unit in the overall service area, etc. In addition to medic unit UHU, the Department is reviewing the frequency and average time that all three medic units are committed.

Engine 151

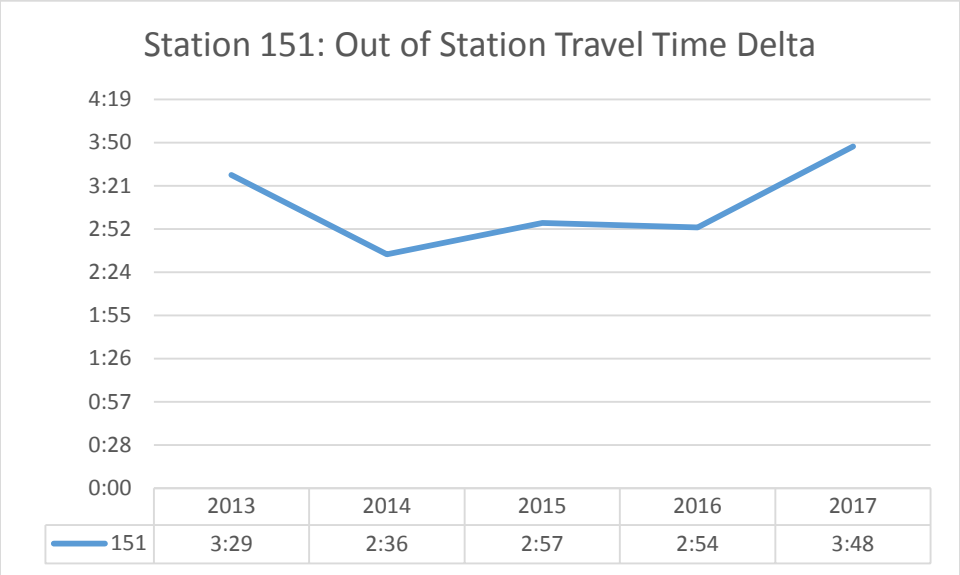
Engine 151 had an average reliability of 87.9% with an average UHU of 7.6% and average peak UHU of 8.2%. Engine 151's UHU has been increasing since 2013 (6.9% – 8.3%) as seen in Reliability Factors Table 4.0. Engine 151 receives primary support coming from Engines 153 and 154 when unavailable or committed. As seen in Section D: Distribution Factors, Station 151 had about 12% of its call occurring simultaneously. When Engine 151 is not the first apparatus to arrive, the response time delta is about three minutes (3:08) as seen in Reliability Factors Table 2.0.

Reliability Factor Table 1.0: E151 Reliability

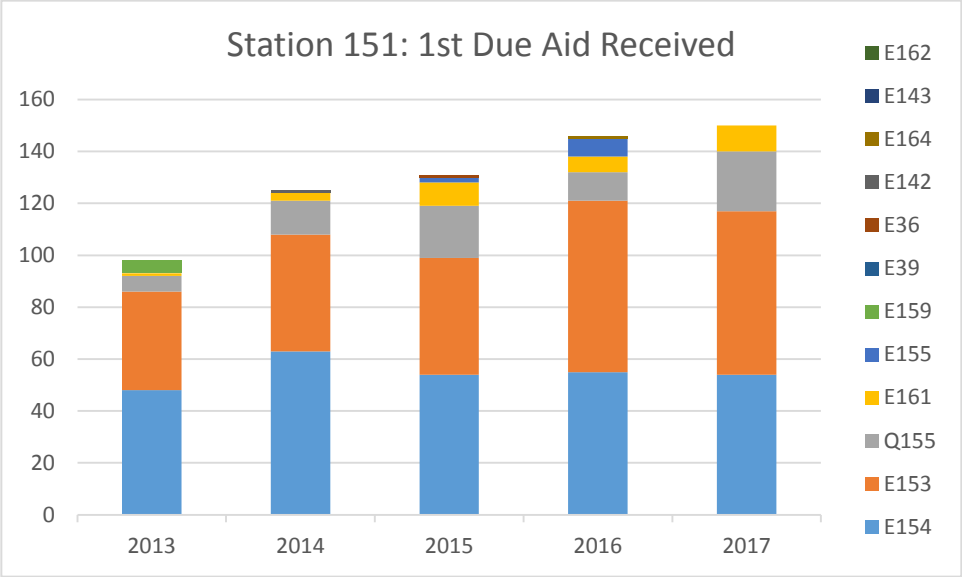
	2013	2014	2015	2016	2017	2013 - 2017
E151	87.2%	88.8%	86.6%	86.9%	86.8%	87.9%

Reliability Factor Table 2.0: Travel Time Delta

	2013	2014	2015	2016	2017	2013 - 2017
151	3:29	2:36	2:57	3:23	3:48	3:08



Reliability Factor Table 3.0



Reliability Table 4.0: E151 UHU

E151	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Overall	Responses
2013	3.9%	3.7%	9.0%	3.4%	1.6%	3.1%	4.4%	5.7%	10.4%	9.4%	7.6%	8.7%	9.5%	7.7%	9.3%	9.9%	7.2%	7.4%	8.5%	7.9%	6.8%	9.7%	6.0%	5.5%	6.9%	1,715
2014	4.5%	5.6%	4.6%	4.0%	3.4%	1.5%	4.1%	4.6%	7.3%	10.1%	8.2%	7.7%	10.5%	10.7%	9.4%	9.8%	11.8%	10.4%	9.6%	8.1%	7.3%	9.8%	6.9%	6.5%	7.3%	1,825
2015	5.4%	5.5%	3.3%	3.1%	3.6%	2.6%	4.0%	5.1%	6.9%	7.5%	8.6%	10.9%	9.0%	12.1%	9.3%	11.7%	9.1%	8.1%	9.4%	10.9%	8.8%	7.3%	9.9%	5.7%	7.4%	1,946
2016	4.2%	5.7%	3.4%	2.2%	2.6%	3.3%	5.0%	7.0%	13.0%	9.0%	9.3%	13.6%	14.6%	10.3%	12.1%	10.4%	9.7%	9.8%	9.8%	8.1%	8.0%	7.8%	5.1%	5.4%	7.9%	2,001
2017	5.6%	3.6%	3.6%	2.5%	2.6%	4.5%	4.5%	7.1%	8.2%	12.5%	11.0%	10.7%	10.5%	12.3%	11.4%	15.2%	10.7%	10.2%	11.6%	9.4%	10.0%	9.1%	7.4%	5.2%	8.3%	2,072
13' - 17'	4.7%	4.8%	4.8%	3.0%	2.8%	3.0%	4.4%	5.9%	9.2%	9.7%	9.0%	10.3%	10.8%	10.6%	10.3%	11.4%	9.7%	9.2%	9.8%	8.9%	8.2%	8.7%	7.1%	5.7%	7.6%	9,559

Engine 153

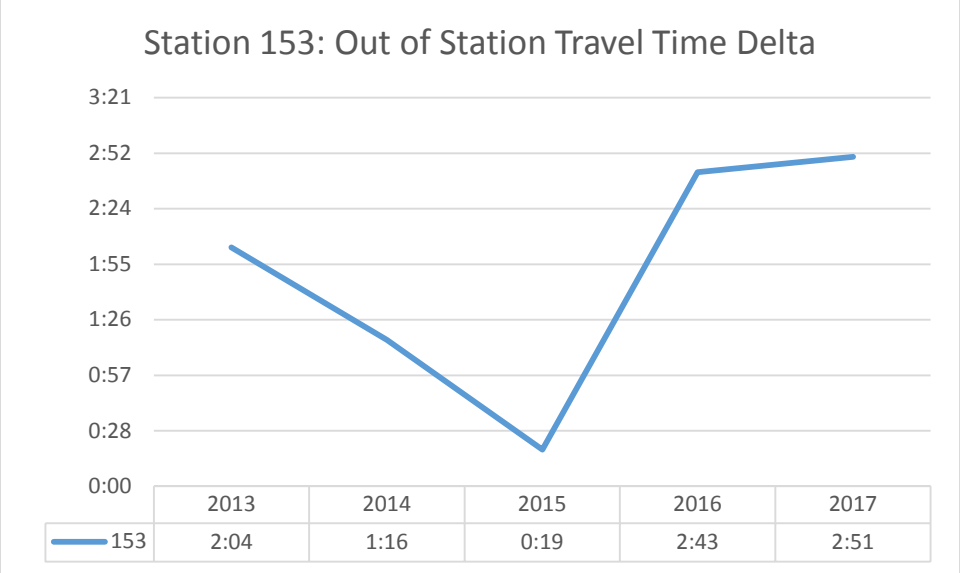
Engine 153 had an average reliability of 90.9% with an average UHU of 3.3% and average peak UHU of 4.4%. Engine 153's UHU has been increasing since 2013 (3.1% – 3.3%) as seen in Reliability Factors Table 8.0. Engine 153 receives primary support coming from Engine 151 when unavailable or committed. As seen in Section D: Distribution Factors, Station 153 had about 4% of its call occurring simultaneously. When Engine 153 is not the first apparatus to arrive, the response time delta is about two minutes (1:50) as seen in Reliability Factors Table 2.0.

Reliability Factor Table 5.0

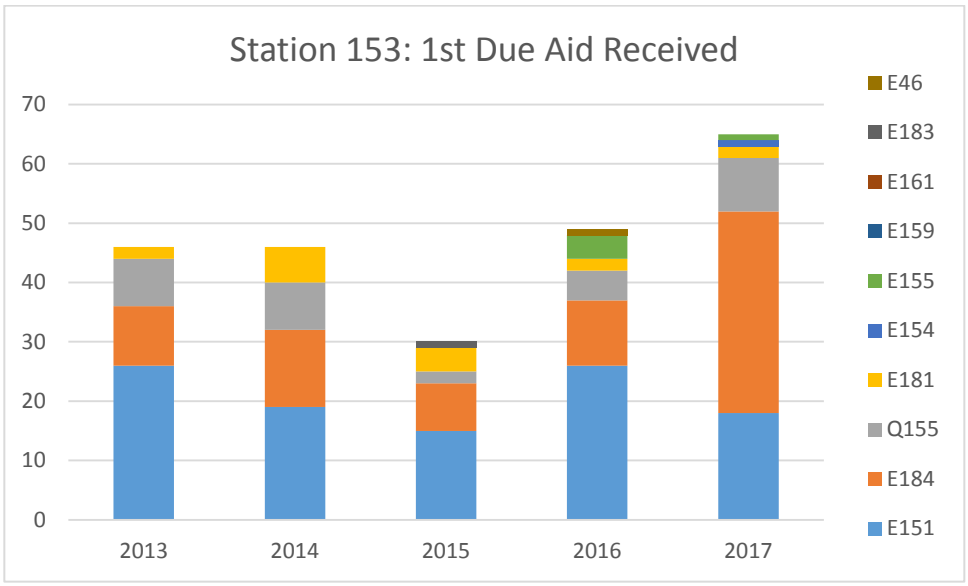
	2013	2014	2015	2016	2017	2013-2017
E153	83.9%	87.3%	89.5%	89.4%	84.4	90.9%

Reliability Factor Table 6.0: Travel Time Delta

	2013	2014	2015	2016	2017	2013 - 2017
153	2:04	1:16	0:19	2:43	2:51	1:50



Reliability Factor Table 7.0



Reliability Factor Table 8.0

E153	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Overall	Responses
2013	1.3%	1.0%	1.9%	4.0%	1.4%	0.8%	1.2%	2.4%	2.6%	4.3%	4.6%	2.9%	3.9%	3.3%	4.6%	5.4%	3.3%	4.0%	3.6%	3.4%	4.3%	4.5%	2.8%	1.6%	3.1%	686
2014	1.0%	1.9%	3.8%	1.6%	0.8%	0.7%	1.7%	1.9%	4.1%	3.9%	2.8%	4.7%	5.0%	3.2%	2.7%	3.4%	5.3%	4.4%	4.5%	4.1%	4.0%	3.9%	4.0%	2.5%	3.1%	708
2015	1.3%	1.7%	1.5%	1.1%	1.8%	1.2%	1.5%	2.4%	3.5%	2.5%	4.3%	4.3%	5.5%	6.7%	5.8%	4.7%	3.8%	4.1%	4.4%	5.1%	3.3%	4.7%	2.4%	1.6%	3.3%	767
2016	1.9%	1.4%	1.9%	0.2%	1.8%	2.5%	1.2%	2.4%	3.9%	4.4%	4.8%	6.3%	5.5%	4.7%	5.2%	5.0%	3.2%	6.5%	4.7%	3.3%	4.5%	2.5%	3.6%	2.4%	3.5%	785
2017	2.4%	1.4%	2.5%	0.6%	0.9%	1.6%	1.9%	1.5%	4.7%	5.4%	3.4%	4.7%	7.1%	4.3%	4.3%	4.0%	4.6%	4.2%	4.1%	4.0%	3.7%	4.1%	3.5%	1.2%	3.3%	798
13' - 17'	1.6%	1.5%	2.3%	1.5%	1.3%	1.4%	1.5%	2.1%	3.7%	4.1%	4.0%	4.6%	5.4%	4.4%	4.5%	4.5%	4.0%	4.6%	4.2%	3.9%	3.9%	3.9%	3.3%	1.9%	3.3%	3,744

Engine 154

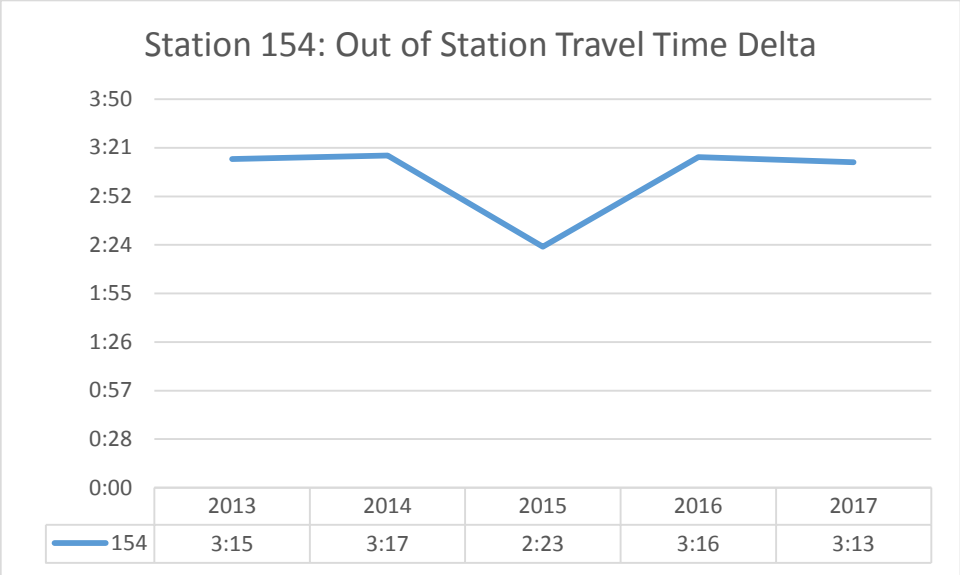
Engine 154 had an average reliability of 88.8% with an average UHU of 7.7% and average peak UHU of 10.3%. Engine 154's UHU has been increasing since 2013 (6.5% – 8.9%) as seen in Reliability Factors Table 12.0. Engine 154 receives primary support coming from Quint 155 when unavailable or committed. As seen in Section D: Distribution Factors, Station 154 had about 6% of its calls occurring simultaneously. When Engine 154 is not the first apparatus to arrive, the response time delta is about three minutes (3:04) as seen in Reliability Factors Table 10.0.

Reliability Factor Table 9.0: E154 Reliability

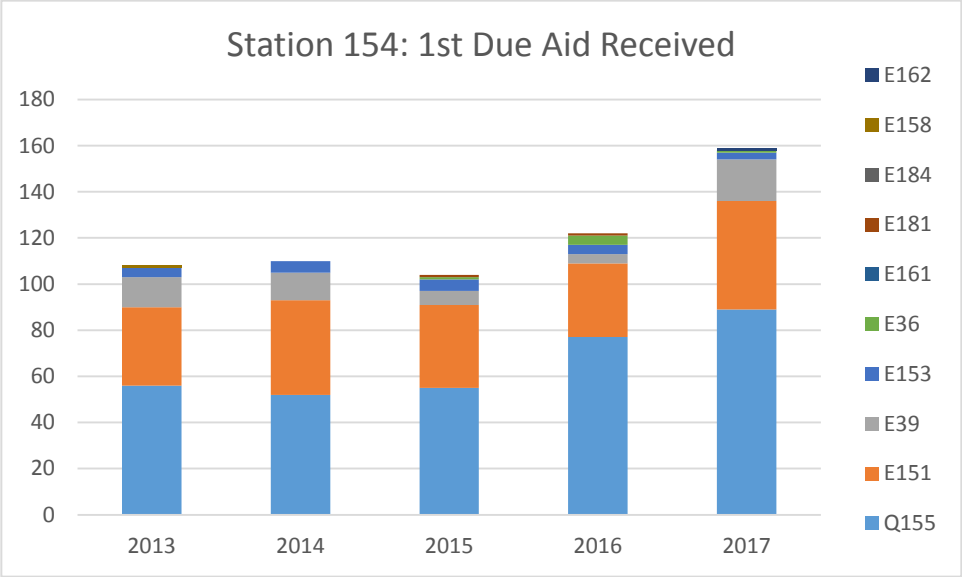
	2013	2014	2015	2016	2017	2013 - 2017
E154	86.7%	87.0%	88.8%	88.9%	85.6%	88.8%

Reliability Factor Table 10.0 E154 Travel Time Delta

	2013	2014	2015	2016	2017	2013 - 2017
154	3:15	3:17	2:23	3:16	3:13	3:04



Reliability Factor Table 11.0: E154 Aid



Reliability Factor Table 12.0: E154 UHU

E154	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Overall	Responses
2013	3.4%	3.4%	2.8%	3.8%	1.6%	2.6%	4.3%	5.4%	8.2%	8.9%	7.9%	9.8%	9.5%	7.8%	9.5%	8.4%	10.2%	8.7%	11.0%	7.7%	7.0%	7.9%	3.5%	3.6%	6.5%	1,561
2014	3.9%	3.5%	2.6%	4.6%	2.6%	2.3%	4.1%	5.2%	7.9%	7.7%	7.5%	10.2%	9.4%	8.7%	8.6%	11.1%	10.5%	9.1%	8.9%	9.4%	7.6%	5.3%	6.6%	6.2%	6.8%	1,687
2015	3.9%	10.3%	3.4%	3.4%	4.0%	3.1%	4.4%	5.5%	8.3%	9.5%	9.4%	10.9%	9.4%	11.3%	11.0%	11.5%	10.2%	9.4%	10.3%	10.3%	9.4%	8.4%	8.9%	5.2%	8.0%	1,919
2016	5.0%	4.3%	4.5%	4.7%	4.0%	3.5%	5.8%	7.6%	13.2%	9.8%	10.5%	11.2%	18.4%	10.1%	11.4%	12.1%	8.6%	10.0%	11.7%	8.3%	9.7%	6.1%	6.7%	5.2%	8.4%	1,981
2017	4.5%	4.0%	3.2%	3.7%	3.9%	3.6%	5.4%	7.6%	9.2%	11.1%	11.7%	12.5%	12.6%	12.7%	14.4%	17.7%	11.9%	9.9%	13.3%	10.4%	9.0%	8.3%	7.3%	4.6%	8.9%	2,006
13' - 17'	4.1%	5.1%	3.3%	4.0%	3.2%	3.0%	4.8%	6.3%	9.4%	9.4%	9.4%	10.9%	11.8%	10.1%	11.0%	12.1%	10.3%	9.4%	11.0%	9.2%	8.5%	7.2%	6.6%	5.0%	7.7%	9,154

Quint 155

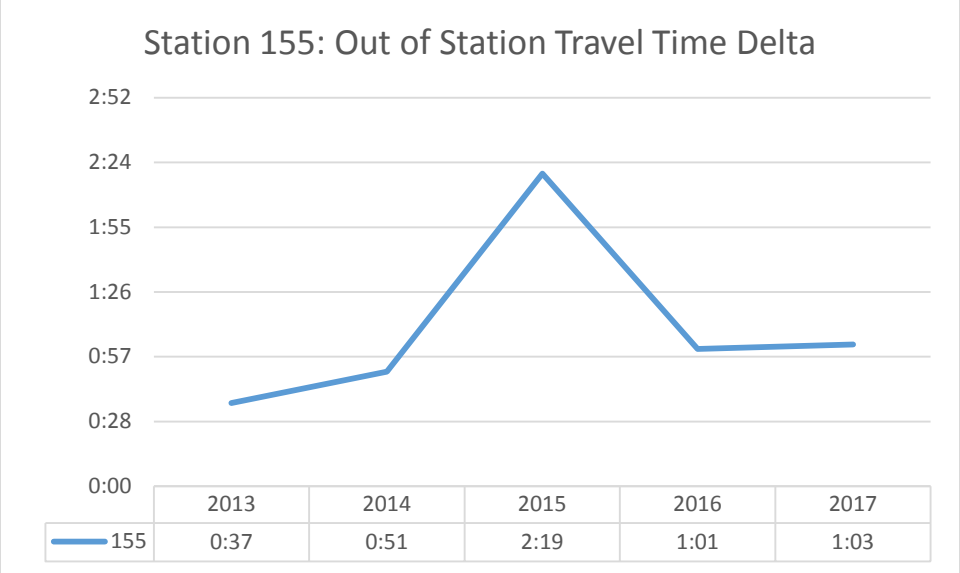
Quint 155 had an average reliability of 84.4% with an average UHU of 3.8% and average peak UHU of 5.5% as seen in Reliability Factors Table 16.0. Quint 155 receives primary support coming from Engine 154 when unavailable or committed. As seen in Section D: Distribution Factors, Station 155 had about 9% of its calls occurring simultaneously. When Quint 155 is not the first apparatus to arrive, the response time delta is about a minute and a half (1:10) as seen in Reliability Factors Table 14.0.

Reliability Factor Table 13.0: Q155 Reliability

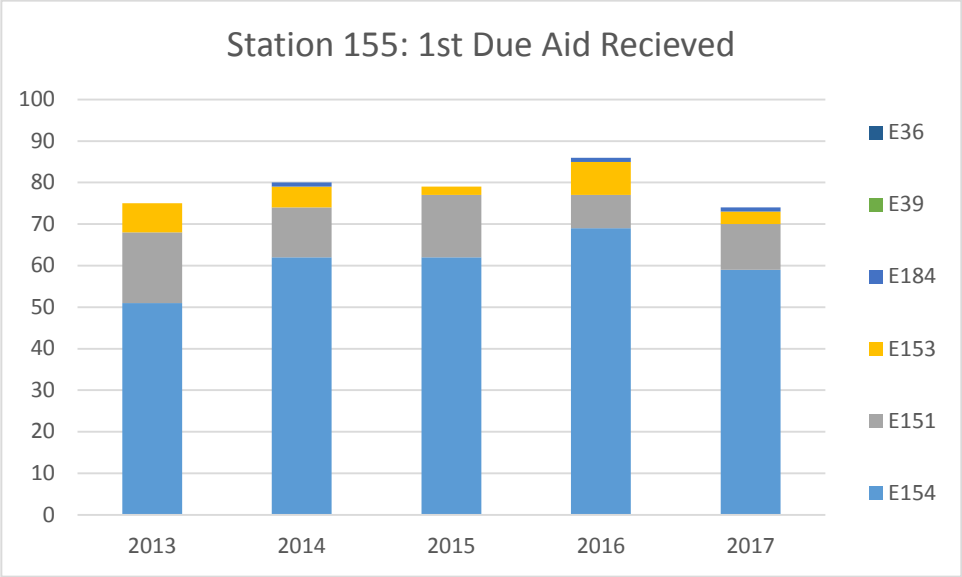
	2013	2014	2015	2016	2017	2013 - 2017
Q155	82.6%	85.5%	86.1%	83.2%	85.8%	84.4%

Reliability Factors Table 14.0: Q155 Travel Time Delta

	2013	2014	2015	2016	2017	2013 – 2017
155	0:37	0:51	2:19	1:01	1:03	1:10



Reliability Factor Table 15.0: Station 155 Aid



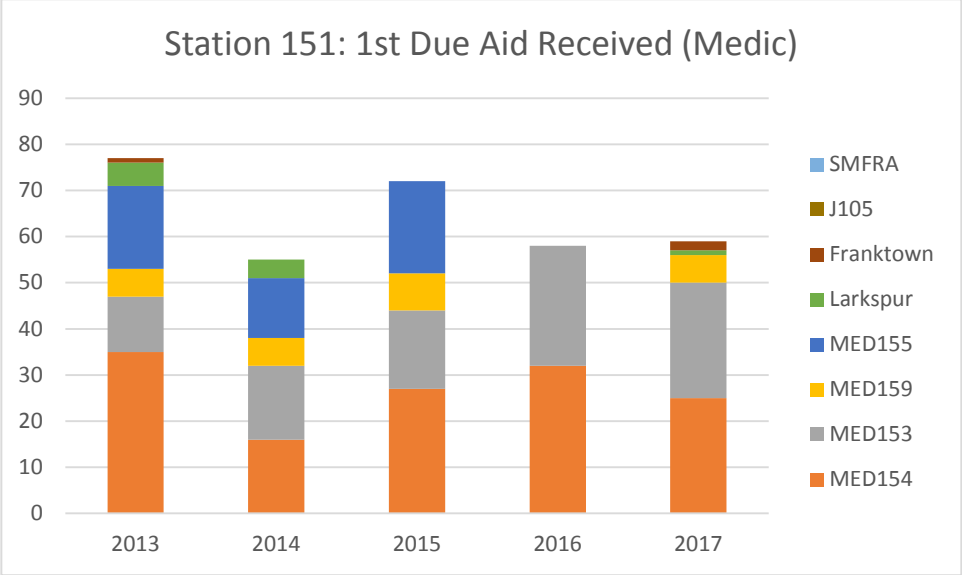
Reliability Factors Table 16.0: Q155 UHU

Q155	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Overall	Responses
2013	0.8%	1.3%	1.1%	1.7%	1.0%	1.4%	1.5%	2.2%	5.0%	4.6%	5.0%	6.1%	4.8%	5.2%	4.6%	5.5%	4.6%	5.2%	5.6%	4.5%	3.8%	4.4%	2.5%	2.2%	3.5%	861
2014	1.7%	1.5%	2.3%	2.4%	0.6%	0.8%	2.0%	2.1%	4.2%	4.7%	5.3%	5.8%	5.7%	5.3%	6.9%	6.5%	6.4%	5.3%	5.0%	5.6%	5.5%	4.1%	3.1%	3.1%	4.0%	973
2015	1.9%	1.9%	2.3%	0.7%	1.5%	1.9%	1.5%	3.4%	3.8%	4.9%	4.5%	4.6%	4.3%	5.5%	6.8%	7.8%	5.2%	5.0%	6.4%	4.1%	2.6%	3.2%	2.1%	1.2%	3.6%	942
2016	1.7%	1.0%	1.2%	0.4%	1.9%	2.3%	1.4%	3.7%	3.7%	3.4%	3.1%	6.8%	8.0%	5.4%	5.1%	6.0%	5.0%	4.5%	4.4%	3.0%	4.1%	2.3%	2.6%	1.7%	3.5%	835
2017	2.9%	0.9%	1.0%	0.9%	1.6%	2.0%	2.5%	2.8%	4.6%	7.5%	7.3%	6.7%	7.6%	7.1%	7.3%	7.7%	6.4%	7.4%	5.2%	6.2%	3.6%	3.9%	3.4%	3.3%	4.6%	1,115
13' - 17'	1.8%	1.3%	1.6%	1.2%	1.3%	1.7%	1.8%	2.8%	4.3%	5.0%	5.0%	6.0%	6.1%	5.7%	6.2%	6.7%	5.5%	5.5%	5.3%	4.7%	3.9%	3.6%	2.8%	2.3%	3.8%	4,726

Medic 151

Medic 151 had an average UHU of 13.0% with an average peak UHU of 17.7%. Medic 151's UHU immediately dropped (as expected) with the addition of Medic 153 in mid-2013. However, after the initial drop with the addition of Medic 153, Medic 151's UHU has continued to rise as seen in Reliability Factors Table 17.0. Medic 151 receives primary support coming from Medics 153 and 154 when unavailable or committed.

Reliability Factor Table 17.0 Medic 151 Aid



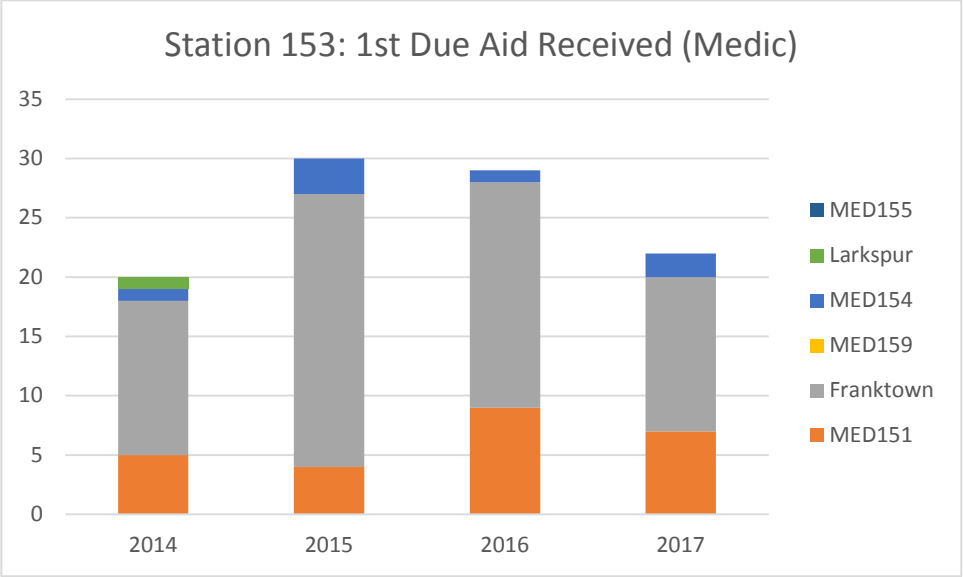
Reliability Factor Table 18.0 Medic 151 UHU

MED151	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Overall	Responses
2013	6.4%	7.5%	7.7%	5.3%	4.4%	7.3%	9.3%	11.8%	15.7%	16.8%	17.2%	16.9%	17.6%	18.0%	19.5%	19.0%	16.8%	13.6%	15.5%	15.9%	13.7%	15.0%	10.6%	8.2%	12.9%	1,440
2014	6.2%	9.7%	6.9%	6.9%	5.1%	4.0%	4.4%	8.3%	11.8%	17.3%	14.6%	15.3%	19.5%	13.8%	15.5%	16.1%	14.6%	18.4%	15.8%	13.8%	12.3%	16.4%	10.6%	9.6%	11.9%	1,418
2015	8.3%	8.9%	6.3%	5.5%	6.9%	5.4%	7.3%	10.2%	12.7%	17.2%	17.3%	18.6%	17.4%	18.5%	18.3%	18.2%	18.0%	15.6%	14.6%	18.0%	14.9%	10.5%	12.7%	9.7%	13.0%	1,617
2016	8.0%	8.8%	5.7%	3.5%	3.8%	6.1%	8.6%	13.8%	14.3%	14.2%	18.5%	19.8%	21.3%	17.0%	20.5%	19.5%	17.4%	17.3%	20.8%	14.9%	12.2%	14.4%	7.3%	8.2%	13.2%	1,626
2017	7.7%	6.7%	7.0%	4.0%	4.0%	6.0%	8.7%	11.9%	14.6%	18.8%	17.9%	24.6%	18.8%	19.7%	18.1%	23.2%	22.0%	16.6%	19.6%	19.2%	14.1%	14.3%	9.8%	8.4%	14.0%	1,708
13' - 17'	7.3%	8.3%	6.7%	5.0%	4.9%	5.8%	7.6%	11.2%	13.8%	16.8%	17.1%	19.0%	18.9%	17.4%	18.4%	19.2%	17.7%	16.3%	17.3%	16.3%	13.4%	14.1%	10.2%	8.8%	13.0%	7,809

Medic 153

Medic 153 had an average UHU of 5.3%, with an average peak UHU of 7.5%. Medic 153's UHU has been increasing since being placed in service in late 2013 (2.4% – 6.5%) as seen in Reliability Factors Table 4.0. Medic 153 receives primary support coming from Medic 151. The majority of incidents with Medic 184 occur in FMZ 15603, where CRFD utilizes a mutual medic unit due to distance from Station 153.

Reliability Factor Table 19.0 Medic 153 Aid



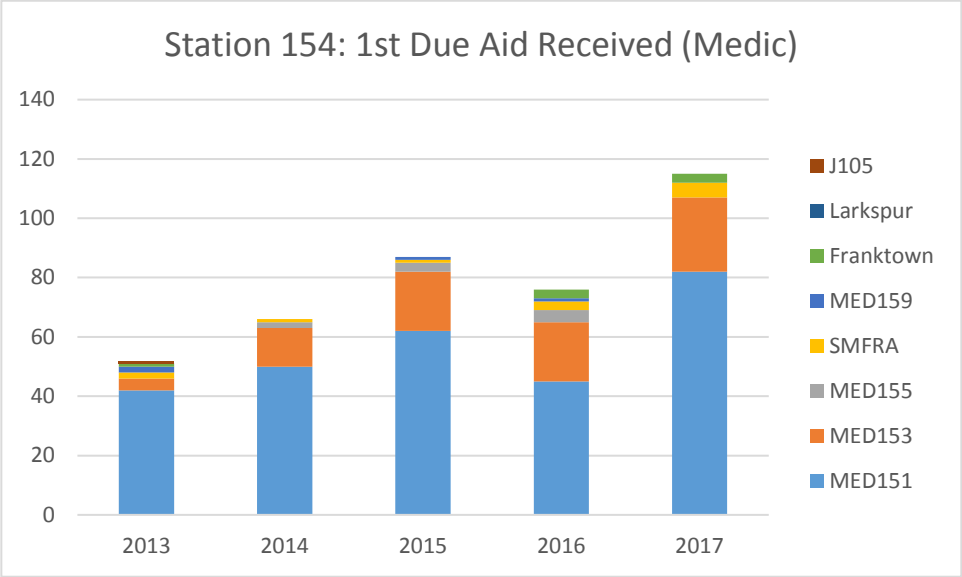
Reliability Factor Table 20.0 Medic 153 UHU

MED153	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Overall	Responses
2013	1.5%	1.2%	1.9%	1.5%	0.9%	0.1%	0.5%	5.3%	1.4%	3.0%	4.7%	2.5%	3.7%	3.3%	3.7%	3.3%	1.7%	3.1%	4.0%	3.0%	2.7%	2.2%	1.6%	1.4%	2.4%	239
2014	1.6%	3.8%	4.7%	1.8%	0.8%	1.0%	3.4%	3.8%	6.0%	7.2%	5.8%	8.3%	9.7%	7.2%	5.7%	5.9%	8.8%	6.7%	7.1%	9.5%	4.0%	7.0%	3.6%	7.4%	5.5%	532
2015	1.8%	2.8%	2.7%	2.3%	3.1%	2.3%	2.0%	5.0%	5.5%	4.4%	6.2%	9.3%	8.2%	8.2%	9.8%	7.6%	7.8%	6.4%	9.0%	8.4%	4.9%	9.0%	5.8%	1.4%	5.6%	624
2016	3.9%	2.4%	3.6%	1.3%	2.6%	4.4%	3.5%	3.9%	8.5%	9.2%	10.0%	11.7%	9.2%	7.5%	8.3%	9.8%	8.7%	9.3%	10.8%	6.6%	7.7%	4.0%	5.0%	3.0%	6.5%	654
2017	4.7%	2.7%	4.1%	2.2%	1.3%	2.6%	3.7%	4.1%	6.1%	11.0%	8.2%	10.6%	14.7%	12.4%	10.2%	6.8%	7.5%	7.4%	10.9%	9.1%	7.2%	6.4%	4.8%	3.4%	6.8%	767
13' - 17'	2.7%	2.6%	3.4%	1.8%	1.7%	2.1%	2.6%	4.4%	5.5%	7.0%	7.0%	8.5%	9.1%	7.7%	7.5%	6.7%	6.9%	6.6%	8.4%	7.3%	5.3%	5.7%	4.2%	3.3%	5.3%	2,577

Medic 154

Medic 154 had an average UHU of 13.0%, with an average peak UHU of 17.2%. Medic 154's UHU has been increasing since 2013 (12.4% – 14.8%) as seen in Reliability Factors Table 4.0. Medic 154 receives primary support coming from Medics 151 and 153 when unavailable or committed.

Reliability Factor Table 21.0 Medic 154 Aid



Reliability Factor Table 22.0 Medic 153 UHU

MED154	0:00	1:00	2:00	3:00	4:00	5:00	6:00	7:00	8:00	9:00	10:00	11:00	12:00	13:00	14:00	15:00	16:00	17:00	18:00	19:00	20:00	21:00	22:00	23:00	Overall	Responses
2013	5.0%	6.7%	6.0%	7.2%	3.1%	6.8%	6.3%	13.4%	12.9%	17.6%	15.0%	17.4%	16.4%	19.1%	25.0%	16.4%	19.0%	14.0%	17.1%	13.3%	10.9%	13.0%	9.2%	6.1%	12.4%	1,368
2014	5.0%	5.6%	4.9%	5.6%	4.4%	3.6%	6.4%	9.7%	14.8%	14.7%	11.4%	15.9%	16.1%	14.0%	12.8%	14.7%	14.7%	16.8%	12.2%	16.5%	14.0%	9.4%	10.5%	7.4%	10.9%	1,435
2015	8.0%	13.4%	7.0%	5.6%	6.3%	5.2%	7.4%	11.9%	11.7%	16.9%	17.7%	18.7%	14.9%	17.0%	17.9%	19.8%	19.7%	14.9%	13.9%	19.1%	13.5%	15.1%	10.7%	11.4%	13.2%	1,693
2016	8.5%	5.5%	7.2%	6.4%	6.7%	5.5%	10.0%	12.9%	20.2%	13.4%	18.4%	22.8%	19.6%	17.0%	18.2%	20.0%	17.7%	17.6%	19.1%	11.9%	16.2%	11.9%	10.7%	8.6%	13.6%	1,752
2017	7.2%	6.1%	5.1%	6.0%	5.9%	6.6%	9.7%	14.3%	16.4%	19.0%	21.1%	19.4%	20.3%	24.0%	25.9%	23.3%	18.5%	20.6%	20.6%	15.8%	15.0%	15.1%	12.0%	8.0%	14.8%	1,819
13' - 17'	6.7%	7.5%	6.0%	6.2%	5.3%	5.5%	8.0%	12.4%	15.2%	16.3%	16.7%	18.8%	17.5%	18.2%	20.0%	18.8%	17.9%	16.8%	16.6%	15.3%	13.9%	12.9%	10.6%	8.3%	13.0%	8,067

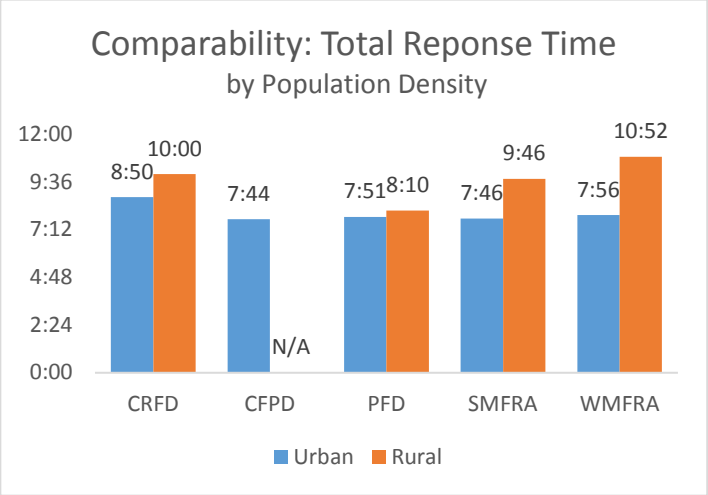
Comparability

Aside from tracking and reporting its own performance, CRFD compiled response data from four Internationally Accredited agencies within the region, Cunningham Fire Protection District (CFPD), Pueblo Fire Department (PFD), South Metro Fire and Rescue Authority (SMFRA), and West Metro Fire and Rescue Authority (WMFRA).

Comparability Factors Table 1.0						
Category		CRFD	CFPD	PFD	SMFRA	WMFRA
ISO Rating		2/9	4	2	3/10	3
2016 Budget		$12,800,000	$11,638,550	$16,285,917	$67,000,000	$49,800,000
Population		62,000	70,000	109,000	203,500	250,000
Area (miles^2)		66	14.6	46.5	178	130
Population Density (per miles^2)		939	4795	2344	1140	1923
Urban/Rural/Interstate		68.5%/30.5%/1%	100%/0%/0%	99%/0%/1%	Not Reported	98%/2%/0%
Stations		4	3	10	17	17
Front line Engines		3	2	10	12	14
Front line Ladders/Quint		1	1	1	4	3
Front line Medics		3	2	N/A	9	11
Minimum Daily staffing		19	13	36	78	91
Total Staffing		84	72	137	300	416
Total Incidents 2016		5349	5420	22537	19354	28239
Call Processing		2:23	1:00	1:20	0:48	1:58
Turnout		1:56	1:25	1:49	1:55	1:41
1st Due Travel	Urban	5:50	5:19	4:39	5:13	5:31
	Rural	7:20	N/A	6:06	6:54	8:23
1st Due Total Response Time	Urban	8:50	7:44	7:51	7:46	7:56
	Rural	10:00	N/A	8:10	9:46	10:52

As seen from Comparability Factors Table 1.0, CRFD's call processing time in 2016 is higher than the other agencies. However, as previously stated, DRCC strictly followed the ProQA medical priority dispatch system (MPDS) for four months (April through July) in 2016. During that time frame, the call processing time increase to 3:08, due to the call taker having to complete the MPDS card prior to dispatching units. Because of the protracted dispatch times, Douglas County Regional Communications Center (DRCC) moved to a pre-alert dispatch model where as soon as the location and type of incident is known, they dispatch units. The call processing time for this method was1:45 from August to December. Looking at DRCC's current process, call processing time are slightly longer than all but one of the comparable agencies. When looking at the comparable turnout times, CRFD again has the longest time (by one second), but is consistent with the other agencies. With respect to travel time, CRFD exceeds the comparable agencies average by about 30 seconds in urban populations and is about 30 seconds faster than the comparable average in the rural populations. CRFD's total response time (the time experienced by the customer) exceeds the comparable agencies average by about 1 minute in urban populations and is roughly 40 seconds faster than the comparable average in the rural populations. Overall, CRFD's performance is in line with, and in some cases, outperforms other local accredited agencies.

Comparability Factors Chart 1.0



F. Performance Objectives (Baselines and Benchmarks)

Baseline performance statements

As defined in the FESSAM, 9th edition, page 154, a baseline is "the measurement of actual performance in an organizational context; a usually initial set of critical observations or data used for comparison or a control. The activities that are currently in place to achieve the organization's goals and objectives". In short, a baseline is a statement of current performance objectives based on specific and relevant historical information or data.

The Department annually reviews and updates its baselines for call processing time, turnout time, and total response times for the 1st arriving apparatus, and EMS effective response force. As evident in the Concentration Factors, there are several service types that do not have sufficient call volume to provide a solid foundation for statically analysis. For these services, Fire, HAZMAT, Wildland, and Technical Rescue, baselines are evaluated every five years and adjusted when appropriate.

Performance Baselines: Call Processing and Turnout

For 90% of all emergent incidents, Douglas County Regional Communications Center (DRCC)'s call processing time is 1:39, and Castle Rock Fire and Rescue Department's turnout time is 1:52.

	2017 Baseline
Call Processing	1:39
Turnout	1:52

Performance Baselines: EMS

For 90 % of all emergency medical services (EMS) responses, the total response time for the arrival of the first-due unit, staffed with two firefighters, is: 8 minutes and 10 seconds in urban areas, 10 minutes in rural areas, and 11 minutes and 50 seconds on interstate calls. The first due unit is capable of: assessing scene safety and establishing command; sizing-up the situation; conducting initial patient assessment; obtaining vitals and patient's medical history; initiating Advanced Life Support (ALS) care; and assisting transport personnel with packaging the patient in accordance with both CRFD standard operating guidelines and current Denver Metropolitan EMS Protocols.

For 90 % of low risk emergency medical services (EMS) response incidents, the total response time for the arrival of the effective response force (ERF), consisting of a single medic unit staffed with two firefighters, is: 8 minutes and 20 seconds in urban areas, and 8 minutes and 30 seconds in rural areas. The ERF is capable of: continued Advanced Live Support (ALS) treatment; and transport to a facility capable of providing appropriate ongoing care in accordance with both CRFD standard operating guidelines and current Denver Metropolitan EMS Protocols.

For 90 % of moderate risk emergency medical services (EMS) response incidents, the total response time for the arrival of the effective response force (ERF), staffed with five firefighters and officers, is: 10 minutes in urban areas, and 11 minutes and 10 seconds in rural areas. The ERF is capable of: continued Advanced Live Support (ALS) treatment; and transport to a facility capable of providing appropriate ongoing care in accordance with both CRFD standard operating guidelines and current Denver Metropolitan EMS Protocols.

For 90 % of high risk emergency medical services (EMS) response incidents, the total response time for the arrival of the effective response force (ERF), staffed with five firefighters and officers, is: 15 minutes urban areas, and 13 minutes and 40 seconds in rural areas, and 14 minutes and 20 seconds on Interstate calls. The ERF is capable of continued Advanced Live Support (ALS) treatment and transport to a facility capable of providing appropriate ongoing care in accordance with both CRFD standard operating guidelines and current Denver Metropolitan EMS Protocols.

Performance Baselines: Fire Suppression

For 90 % of all non-wildland fires, the total response time for the arrival of the first-due unit, staffed with three firefighters, is: 8 minutes and 10 seconds in urban areas, 10 minutes in rural areas, and 11 minutes and 50 seconds on interstate calls. The first due unit is capable of: providing 300 gallons of water and a pumping capacity of 1250 gallons per minute (gpm), initiating command; establishing the primary attack line capable of flowing a minimum of 150 gpm; and establishing an uninterrupted water source.

For 90 % of all low risk non-wildland fires, the total response time for the arrival of the effective response force (ERF), staffed with six firefighters and officers, is: 8 minutes and 20 seconds in urban areas, 10 minutes in rural areas, and 18 minutes and 30 seconds on interstate calls. The ERF is capable of: establishing command, accountability and a safety officer; providing 2 in 2 out capability; investigate source; prepare for fire attack; providing an uninterrupted water supply; completing forcible entry; initiating ventilation; and providing triage, treatment and transport of victims if needed in accordance with CRFD standard operating guidelines.

For 90 % of all moderate risk non-wildland fires, the total response time for the arrival of the effective response force (ERF), staffed with 18 firefighters and officers, is: 12 minutes and 30 seconds in urban areas. No incidents were recorded in rural or interstate areas. The ERF is capable of: establishing command, accountability and a safety officer; providing 2 in 2 out capability; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control of equal or greater size than the primary attack line; completing forcible entry; completing utility control; conducting victim search; initiating ventilation; and providing triage, treatment, and transport of victims if needed in accordance with CRFD standard operating guidelines.

For 90 % of all high risk non-wildland fires, the total response time for the arrival of the effective response force (ERF), staffed with 21 firefighters and officers, is: 16 minutes and 40 seconds in urban areas. No incidents were recorded in rural or interstate areas. The ERF is capable of: establishing command, accountability and a safety officer; providing 2 in 2 out capability; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control of equal or greater size than the primary attack line; completing forcible entry; completing utility control; conducting victim search; initiating ventilation; and providing triage, treatment, and transport of victims if needed in accordance with CRFD standard operating guidelines.

Performance Baselines: HAZMAT

For 90 % of all hazardous materials response incidents, the total response time for the arrival of the first-due unit, staffed with three firefighters, is: 8 minutes and 10 seconds in urban areas, 10 minutes in rural areas, and 11 minutes and 50 seconds on interstate calls. The first due unit is capable of: establishing command; initial recon and atmospheric monitoring; determine the need for additional resources; begin establishing a hot, warm and cold zone; deny entry; isolate potential victims, in accordance with CRFD standard operating guidelines.

For 90 % of low risk hazardous materials response incidents, the total response time for the arrival of the effective response force (ERF), staffed with a minimum of six firefighters and officers, is: 12 minutes in urban areas, 12 minutes and 50 seconds in rural areas, and 13 minutes and 10 seconds on interstate calls. The ERF is capable of: providing equipment, technical expertise, knowledge, skills, and abilities to mitigate or initiate mitigation of a hazardous materials incident, dependant on the complexity on the incident, in accordance with CRFD standard operating guidelines.

For 90 % of moderate risk hazardous materials response incidents, the total response time for the arrival of the effective response force (ERF), staffed with a minimum of nine firefighters and officers, is: 14 minutes and 10 seconds in urban areas, 21 minutes and 40 seconds in rural areas. No incidents were recorded on the interstate. The ERF is capable of: provide equipment, technical expertise, knowledge, skills, and abilities to mitigate or initiate mitigation of a hazardous materials incident, dependant on the complexity on the incident, in accordance with CRFD standard operating guidelines.

For 90 % of high risk hazardous materials response incidents, the total response time for the arrival of the effective response force (ERF), staffed with a minimum of 12 firefighters and officers is: maximum of 12 minutes and 20 seconds in urban areas, and a maximum of 16 minutes and 40 seconds in rural areas. No incidents were recorded on the interstate. The ERF is capable of: providing equipment, technical expertise, knowledge, skills, and abilities to mitigate or initiate mitigation of a hazardous materials incident, dependant on the complexity on the incident, in accordance with CRFD standard operating guidelines.

Performance Baselines: Wildland

For 90 % of all wildland fires, the total response time for the arrival of the first-due unit, staffed with three firefighters, is: 8 minutes and 10 seconds in urban areas, 10 minutes in rural areas, and 11 minutes and 50 seconds on interstate calls. The first due unit is capable of: providing 300 gallons of water, and a pumping capacity of 110 gallons per minute; initiating command; determine the location, size and initial attack plan; and initiating initial attack in accordance with CRFD standard operating guidelines.

For 90 % of all low risk wildland fires, the total response time for the arrival of the effective response force (ERF), staffed with six firefighters and officers, is: 12 minutes and 20 seconds in urban areas, a maximum of 17 minutes and 30 seconds in rural areas, and a maximum of 12 minutes and 50 seconds on interstate calls. The ERF is capable of: establishing command providing for accountability; determining the need for additionally resources; establishing a lookout; identifying safety zones and escape routes; providing an initial water supply; supporting initial fire attack operations in accordance with CRFD standard operating guidelines.

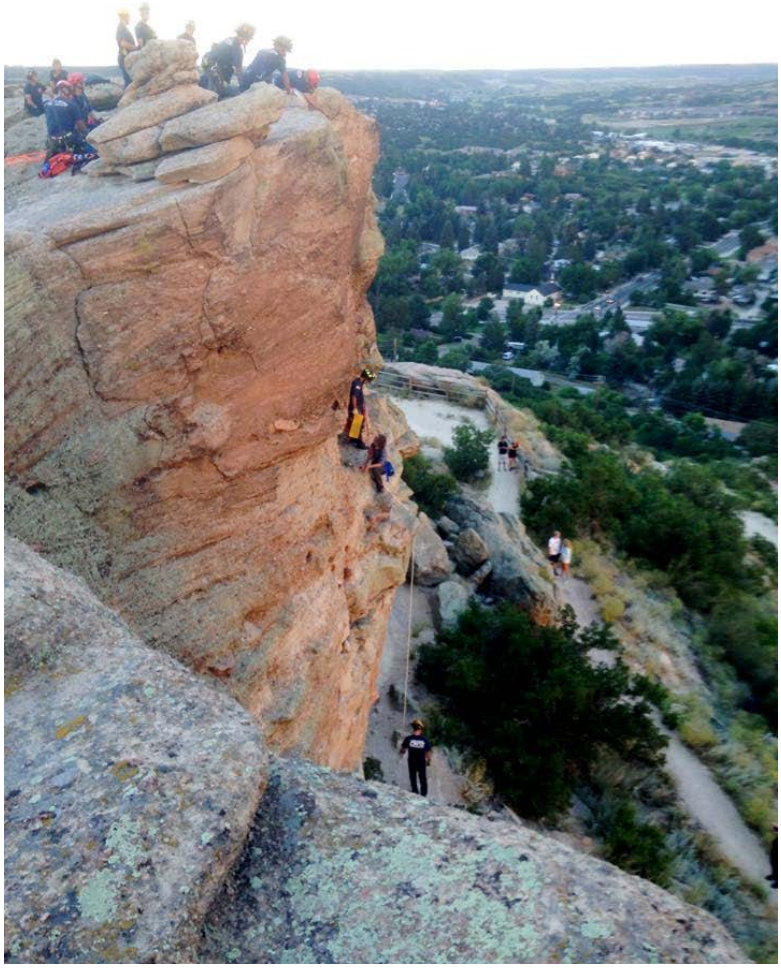
For 90 % of all moderate risk wildland fire response incidents, the total response time for the arrival of the effective response force (ERF), staffed with a minimum of 12 firefighters and officers, is: a maximum of 12 minutes and 20 seconds in urban areas, a maximum of 20 minutes and 40 seconds in rural areas, and a maximum of 17 minutes and 20 seconds on interstate calls. The ERF is capable of: establishing command providing for accountability; determining the need for additional resources; establishing a lookout; identifying safety zones and escape routes; providing an initial water supply; supporting initial fire attack operations in accordance with CRFD standard operating guidelines.

For 90 % of all high risk wildland fire response incidents, the total response time for the arrival of the effective response force (ERF), staffed with a minimum of 16 firefighters and officers, is: a maximum of 19 minutes and 40 seconds in urban areas. No incidents were recorded in rural areas or on the interstate. The ERF is capable of: establishing command; providing for accountability; determining the need for additional resources; establishing a lookout; identifying safety zones and escape routes; providing an initial water supply; supporting initial fire attack operations in accordance with CRFD standard operating guidelines.

Performance Baselines: Technical Rescue

For 90 % of all technical rescue incidents, the total response time for the arrival of the first-due unit, staffed with three firefighters, is: 8 minutes and 10 seconds in urban areas, 10 minutes in rural areas, and 11 minutes and 50 seconds on interstate calls. The first due unit is capable of: initiating command; determining the need for additional resources; denying entry; initial reconnaissance; atmospheric monitoring (if applicable); and providing triage and initial treatment of victims if needed without endangering response personnel in accordance with CRFD standard operating guidelines.

For 90 % of all technical rescue incidents, the total response time for the arrival of the effective response force (ERF), staffed with a minimum of six firefighters and officers, is a maximum of 12 minutes and 10 seconds in all response areas. The ERF is capable of: establishing patient contact; staging and apparatus set up; providing technical expertise, knowledge, skills and abilities during technical rescue incidents; and providing Advanced Life Support (ALS) treatment and transport medical care in accordance with CRFD standard operating guidelines.



Benchmark Performance Statements

As defined in the FESSAM, 9th edition, page 154, a benchmark is "…defined as a standard from which something can be judged. Searching for the benchmark, or best practice, will help define superior performance of a product, service or process". In short, a benchmark is a statement of ideal performance, or a goal the Department is striving to achieve.

The Department annually reviews its benchmarks for call processing time, turnout time, and total response times for the 1st arriving apparatus, and EMS effective response force and updates them as needed. As evident in the Concentration Factors, there are several service types that do not have sufficient call volume to provide a solid foundation for statically analysis. For these services, Fire, HAZMAT, Wildland, and Technical Rescue, benchmarks are evaluated every five years and adjusted when appropriate. While the baselines are based on the previous period's 90th percentile, the benchmarks are based on 2013 – 2017 data and 80th percentile. There are two exceptions to this methodology, call processing time and turnout time. The call processing benchmark was established based on the Commission on Accreditation for Law Enforcement Agencies (CALEA) performance guidelines and in cooperation with the Douglas County Regional Communication Center (DRCC). The benchmark for turnout time is based on the 80th percentile of all call from November 1st 2015 through December 31st 2017. In November 2015 the Department began using mobile data terminals (MDT) in all primary apparatus. The MDTs are used for direct communications with DRCC and are linked to the computer automated dispatch (CAD) system. This would represent a relative 10% increase in performance. In the absence of a physical change to its operations or deployment (additional resources, stations, companies, or new technology) CRFD believes that this measured approach keeps the benchmarks realistic and achievable through changes in behavior and attitude.

Performance Benchmark: Call Processing and Turnout

For 90% of all emergent incidents, DRCC's call processing time shall be 1:00, and Castle Rock Fire and Rescue Department's turnout time shall be 1:38.

	Benchmark
Call Processing	1:00
Turnout	1:38

Performance Benchmarks: EMS

For 90% of all moderate and high risk Emergency Medical Services (EMS) responses, the total response time for the arrival of the first-due unit, staffed with two firefighters, shall be: 7 minutes and 10 seconds in urban areas, 8 minutes and 10 seconds in rural areas, and 10 minutes and 10 seconds on interstate calls. The first due unit shall be capable of: assessing scene safety and establishing command; sizing-up the situation; conducting initial patient assessment; obtaining vitals and patient's medical history; initiating Advanced Life Support (ALS) care; and assisting transport personnel with packaging the patient in accordance with both CRFD standard operating guidelines and current Denver Metropolitan EMS Protocols.

For 90% of low risk Emergency Medical Services (EMS) response incidents, the total response time for the arrival of the effective response force (ERF) of a single medic unit, staffed with two firefighters, shall be: 7 minutes in all population densities. The ERF shall be capable of: continued Advanced Life Support (ALS) treatment; and transport to a facility capable of providing appropriate ongoing care in accordance with both CRFD standard operating guidelines and current Denver Metropolitan EMS Protocols.

For 90% of moderate risk Emergency Medical Services (EMS) response incidents, the total response time for the arrival of the effective response force (ERF), staffed with five firefighters and officers, shall be: 8 minutes and 40 seconds in urban areas, 10 minutes and 10 seconds in rural areas. The ERF shall be capable of: continued Advanced Life Support (ALS) treatment; and transport to a facility capable of providing appropriate ongoing care in accordance with both CRFD standard operating guidelines and current Denver Metropolitan EMS Protocols.

For 90% of high risk Emergency Medical Services (EMS) response incidents, the total response time for the arrival of the effective response force (ERF), staffed with six firefighters and officers, shall be: 12 minutes and 20 seconds in urban areas, 12 minutes and 30 seconds in rural areas, and 13 minutes and 30 seconds on interstate calls. The ERF shall be capable of: continued Advanced Life Support (ALS) treatment; and transport to a facility capable of providing appropriate ongoing care in accordance with both CRFD standard operating guidelines and current Denver Metropolitan EMS Protocols.

Performance Benchmarks: Fire Suppression

For 90% of all non-wildland fires, the total response time for the arrival of the first-due unit, staffed with three firefighters, shall be: 7 minutes and 10 seconds in urban areas, 8 minutes and 10 seconds in rural areas, and 10 minutes and 10 seconds on interstate calls. The first due unit shall be capable of: providing 300 gallons of water and a pumping capacity of 1250 gallons per minute (gpm), initiating command; establishing the primary attack line capable of flowing a minimum of 150 gpm; and establishing an uninterrupted water source.

For 90% of all low risk non-wildland fires, the total response time for the arrival of the effective response force (ERF), staffed with a minimum of six firefighters and officers, shall be: 6 minutes and 20 seconds in urban areas, 7 minutes and 30 seconds in rural areas, and 10 minutes and 40 seconds on interstate calls. The ERF shall be capable of: establishing command, accountability and a safety officer; providing 2 in 2 out capability; investigating the source; preparing for fire attack; providing an uninterrupted water supply; maintaining a fire flow of 1500 gpm; completing forcible entry; initiating ventilation; and providing triage, treatment, and transport of victims if needed in accordance with CRFD standard operating guidelines.

For 90% of all moderate risk non-wildland fires, the total response time for the arrival of the effective response force (ERF), staffed with 18 firefighters and officers, shall be: 12 minutes in urban areas, and 14 minutes in rural areas. The ERF shall be capable of: establishing command, accountability and a safety officer; providing 2 in 2 out capability; investigating the source; providing an uninterrupted water supply; maintaining a fire flow of 1500 gpm; advancing an attack line and a backup line for fire control of equal or greater size than the primary attack line; completing forcible entry; completing utility control; conducting victim search; initiating ventilation; providing an initial rapid intervention team (IRIT); and providing triage, treatment, and transport of victims if needed in accordance with CRFD standard operating guidelines.

For 90 % of all high risk non-wildland fires, the total response time for the arrival of the effective response force (ERF), staffed with 21 firefighters and officers, shall be: 16 minutes and 20 seconds in urban areas, and 14 minutes in rural areas. The ERF shall be capable of: establishing command, accountability and a safety officer; providing 2 in 2 out capability; investigating the source; providing an uninterrupted water supply; maintaining a fire flow of 1500 gpm; advancing an attack line and a backup line for fire control of equal or greater size than the primary attack line; completing forcible entry; completing utility control; conducting victim search; initiating ventilation; providing an initial rapid intervention team (IRIT); and providing triage, treatment, and transport of victims if needed in accordance with CRFD standard operating guidelines.

Performance Benchmarks: HAZMAT

For 90% of all hazardous materials response incidents, the total response time for the arrival of the first-due unit, staffed with three firefighters, shall be: 7 minutes and 10 seconds in urban areas, 8 minutes and 10 seconds in rural areas, and 10 minutes and 10 seconds on interstate calls. The first due unit shall be capable of: establishing command; initial recon and atmospheric monitoring; determining the need for additional resources; begin establishing a hot, warm and cold zone; denying entry; isolating potential victims, in accordance with CRFD standard operating guidelines.

For 90% of low risk hazardous materials response incidents, the total response time for the arrival of the effective response force (ERF), staffed with a minimum of six firefighters and officers, shall be: 10 minutes and 40 seconds in urban areas, 11 minutes and 20 seconds in rural areas and 12 minutes on interstate calls. The ERF shall be capable of: providing the equipment, technical expertise, knowledge, skills, and abilities to initiate mitigation of a hazardous materials incident, dependant on the complexity of the incident; in accordance with CRFD standard operating guidelines.

For 90% of moderate risk hazardous materials response incidents, the total response time for the arrival of the effective response force (ERF), staffed with a minimum of nine firefighters and officers ,shall be: 12 minutes and 20 seconds in urban areas, 13 minutes and 30 seconds in rural areas, and 12 minutes and 30 seconds on interstate calls. The ERF shall be capable of: providing the equipment, technical expertise, knowledge, skills, and abilities to initiate mitigation of a hazardous materials incident, dependant on the complexity of the incident, in accordance with CRFD standard operating guidelines.

For 90% of high risk hazardous materials response incidents, the total response time for the arrival of the effective response force (ERF), staffed with a minimum of 12 firefighters and officers, shall be: 13 minutes and 30 seconds in all population densities. The ERF shall be capable of: providing the equipment, technical expertise, knowledge, skills, and abilities to mitigate or initiate mitigation of a hazardous materials incident, dependant on the complexity of the incident, in accordance with CRFD standard operating guidelines.

Performance Benchmarks: Wildland

For 90 % of all wildland fire response incidents, the total response time for the arrival of the first-due unit, staffed with three firefighters, shall be: 7 minutes and 10 seconds in urban areas, 8 minutes and 10 seconds in rural areas, and 10 minutes and 10 seconds on interstate calls. The first due unit shall be capable of: providing 300 gallons of water and a pumping capacity of 100 gallons per minute (GPM); initiating command; providing size-up; identify life safety concerns, developing an incident action plan (IAP); determining resource needs; establish lookouts, communications, escape routes and safety zones (LCES); and implement the IAP in accordance with CRFD standard operating guidelines.

For 90 % of all low risk wildland fire response incidents, the total response time for the arrival of the effective response force (ERF), staffed with a minimum of six firefighters and officers, shall be: 10 minutes and 50 seconds in all population areas. The ERF shall be capable of: establishing command; providing for accountability; determining the need for additional resources; establish lookouts, communications plan, escape routes, and safety zones (LCES); providing a water supply; support the IAP in accordance with CRFD standard operating guidelines.

For 90 % of all moderate risk wildland fire response incidents, the total response time for the arrival of the effective response force (ERF), staffed with a minimum of 12 firefighters and officers, shall be: 10 minutes and 30 seconds in urban areas and 11 minutes and 30 seconds in rural areas and 16 minutes on interstate calls. The ERF shall be capable of: establishing command; providing for accountability; determining the need for additional resources; establish lookouts, communications plan, escape routes, and safety zones (LCES); providing a water supply; support the IAP in accordance with CRFD standard operating guidelines.

For 90 % of all high risk wildland fire response incidents, the total response time for the arrival of the effective response force (ERF), staffed with a minimum of 16 firefighters and officers, shall be: 13 minutes and 30 seconds in urban areas and 16 minutes and 40 seconds in rural. The ERF shall be capable of: establishing command; providing for accountability; determining the need for additional resources; establish lookouts, communications plan, escape routes, and safety zones (LCES); providing a water supply; support the IAP in accordance with CRFD standard operating guidelines.

Performance Benchmarks: Technical Rescue

For 90 % of all technical rescue incidents, the total response time for the arrival of the first-due unit, staffed with three firefighters, shall be: 7 minutes and 10 seconds in urban areas, 8 minutes and 10 seconds in rural areas, and 10 minutes and 10 seconds on interstate calls. The first due unit shall be capable of: initiating command; determining the need for additional resources; denying entry; initial reconnaissance; atmospheric monitoring (if applicable) and provide triage, initial treatment of victims (if needed) without endangering response personnel in accordance with CRFD standard operating guidelines.

For 90 % of all low risk technical rescue incidents, the total response time for the arrival of the effective response force (ERF), staffed with minimum of three firefighters and officers, shall be: 7 minutes and 10 seconds in urban areas, 8 minutes and 10 seconds in rural areas. The ERF shall be capable of: establishing patient contact; staging and apparatus set up; providing technical expertise, knowledge, skills and abilities during technical rescue incidents; and providing Advanced Life Support (ALS) treatment and transport medical care in accordance with CRFD standard operating guidelines.

For 90 % of all moderate and high risk technical rescue incidents, the total response time for the arrival of the effective response force (ERF), staffed with minimum of 9 firefighters and officers, shall be: 13 minutes and 30 seconds in urban areas rural and on interstate calls. The ERF shall be capable of: establishing patient contact; staging and apparatus set up; providing technical expertise, knowledge, skills and abilities during technical rescue incidents; and providing Advanced Life Support (ALS) treatment and transport medical care in accordance with CRFD standard operating guidelines.

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G. Evaluation and Compliance Methodology

Evaluation Methodology

The Department will monitor its performance and compliance monthly and annually in accordance with Administrative Directive 2011-05 Department Goals and Objectives Review. Monthly, the Department will review and report, at a minimum, the following performance factors;

- Call processing time (by service type)
- Turnout time (station/company)
- 1st due total response time by population
- Moderate Risk EMS ERF total response time by population

Monthly reports include the number of incidents, the 90th percentile and percent compliance to adopted benchmarks (performance goals). As previously stated, Section F Performance Objectives, the benchmarks are established at the 80th percentile from 2013-2017. Monthly performance reports are distributed internally for all members to review and available to the Public Safety Commission, Town Manager and Town Council for review and comment.

Annually, the Department completes a comprehensive review, evaluating all service types, risk levels and planning zones. This review will be conducted and presented as part of the Department's Annual Retreat and support the Annual Compliance Report (ACR) submitted to the Commission on Fire Accreditation International (CFAI). Annually, the Department reviews its performance, updates its baselines and reports on compliance to adopted benchmark statements based on the following criteria:

- Baselines based on the most current year's response data:
  - Call processing time
  - Turnout time
  - 1st due total response time
  - EMS ERF (moderate risk)
  - Performance thresholds: *as identified in the current Fire Master Plan*
- Performance compared to adopted benchmarks based on the 80th percentile from 2013 – 2017 response data:
  - Turnout time
  - 1st due total response time
  - EMS (low & high risk)
  - Fire ERF (all risk)
  - HAZMAT ERF (all risk)
  - Tech Rescue (all risk)
  - Wildland (all risk)
  - Call Processing (based on CALEA standard or 1:00)

The annual performance and compliance reports are distributed to all members for review, presented to the Department's strategic planning team (department retreat), Public Safety

Commission, Town Manager, and Town Council. The Standards of Cover will be amended annually to include the most recent year's performance and progress on any recommendations contained within this Standards of Cover Document. Beginning in 2018, the compliance team will provide an annual report to be presented to the Public Safety Commission, Town Manager and Town Council. This annual report will contain at a minimum;

- Call volumes and trends
  - Jurisdiction
  - Stations
  - Planning zones
- Updated baselines and benchmarks
  - Cause of any significant changes (greater than 10% change)
- Identified service gaps
  - Recommended action (if any)

If at any time the Accreditation Manager determines the need, based on trends or a single event, to perform a detailed or root cause analysis, the results of that analysis will be presented to the Deputy Chief and Fire Chief as necessary.

Compliance Team / Responsibility

The Department's compliance team will consist of the Accreditation Manager, and at least three line members. Ideally, the line members would represent each shift and rank, but this is not mandatory.

The compliance team will convene at least annually to review:

- Annual Performance and Compliance Report
- Performance thresholds: *as identified in the current Fire Master Plan*
- Post Incident Analysis (PIA) to determine:
  - Compliance to baseline performance standards
  - Adherence to SOGs
  - Effectiveness of critical task analysis
- Data trends: identify areas of concern or needing further investigation
- Annual Compliance Report to CFAI

Continuous Improvement Strategy

The continuous improvement strategy will be accomplished through the review of the data as provided by the compliance team to the command staff, executive staff, and members of the annual department retreat. These teams will recommend options or appropriate actions to be taken to address any deficiencies or forecasted change, growth or other identified external factors. These recommendations will be made to the Fire Chief for consideration and implementation based on the Standards of Cover, Community Risk Assessment, Strategic Plan, and Self-Assessment Manual.

Subsequently, the Fire Chief will determine the most appropriate actions to be implemented based upon these documents, the Vision and Mission of the Department and Town of Castle Rock. It is the expectation that these actions will result in improvements in the needed areas. When significant changes or actions are needed that may drastically change the level of service, the Fire Chief will provide this information to the Town Manager and, as necessary, Town Council, for review, consideration, and approval. The end result is that the Department's overall ability to provide service to the community and customers should improve.

H. Conclusion and Recommendations

Conclusions

For the evaluation period, the Department has maintained a relatively high compliance (high 80% to mid 90%) with its adopted baseline performance standards. Compliance to benchmarks is significantly lower, but expected due to the change in the benchmarking process, increasing the benchmark form the 85th percentile to the 80th percentile. As seen previously call processing times increased for 2016 as Douglas County Regional Communication Center's (DRCC) transitioned to ProQA Medical Priority Dispatch System (MPDS). For four months (April through August) DRCC strictly followed MPDS prior to dispatching units to a medical incident. Recognizing the dramatic increase in call processing times (1:20 increased to 3:24), In cooperation with CRFD, DRCC modifed their process to pre-alert units prior to completing the MPDS. This pre-alert, allows the call taker to continue the MPDS, however, as soon as the type of incident (medical, fire, rescue, etc) and location is determined, units are dispatched and any additional information is provided en-route via radio and/or CAD notes. With the implementation of the pre-alert, call processing times have improved to 1:39 for 2017. While times do not match the pre-ProQA performance due to system interoperability issues (CAD and ProQA), dispatchers must enter information in two mutually exclusive systems adding several seconds to the overall call processing time, the caller is receiving detailed instructions on how to care for the patient prior to the arrival of fire/EMS.

The Town of Castle Rock has experienced considerable growth over the last several years in both the commercial and residential sectors. This growth has translated into an increased call volume in all service categories and a 35% increase in call total volume since 2012. The increase in call volume is seen in the increasing unit hour utilization (UHU) of all apparatus since 2012. The only exception to this is Medic 151. This is due to the fact that in August 2013, Medic 153 was placed in service, reducing Medic 151's service area. However, since the addition of Medic 153, Medic 151's UHU has shown an increase of 18%. By evaluating responses by planning zones (PZ), CRFD has monitored increasing call volumes and extended response times in PZ 7. These two factors coupled with increased development and expected growth, CRFD forecasted the need for an additional fire station in the area. Station 152 is scheduled to open in the fall of 2018 providing an increased level of service for the residents in the southern portion of the jurisdiction.

Given the current and expected growth in the area, CRFD anticipates call volume to continue to increase over the next several years. With the exception of EMS, CRFD does not have sufficient call volume to generate a statistically valid sample size for trending or forecasting analysis.

Apparatus	2012 UHU		2017 UHU	Performance Threshold	Change (12' -17')	
Engine 151	6.9%		8.3%	14%	+ 20%	
Engine 153	3.1%		3.3%		+ 7%	
Engine 154	5.8%		8.9%		+ 53%	
Quint 155	3.4%		4.6%		+ 35%	
Medic 151	15.3% (12")	11.9% (14')	14.0%	26%	- 8% (12'-17')	+ 18% (14'-17')
Medic 153	5.5% (14')		6.8%		+ 60%	
Medic 154	11.8%		14.8%		+ 25%	

Recommendations – 2018 Update

The Department's vision is "To be the best at providing emergency and prevention services". While striving "to be the best", the Department must make changes, based on sound statistical data, that would allow for an improvement in the delivery of services and increased safety to the community as well as emergency responders. Understanding the current financial and political climate as well as the costs associated with any recommendation, the Department reviewed each of the following recommendations to ensure they; are consistent with community expectations, within the scope and reach of the Department, and achievable with existing resources or plans. Therefore, the following recommendations are made based the results of the Standards of Cover process:

- Continue with the planning, construction and staffing for Station 152 in the southern portion of the jurisdiction. **– Projected Opening no later than Fall 2018**
    - Consider redefining Station 151 & 154 boundaries to balance call distribution and ensure the best practical response times.
- *Closely monitor PZ6 for growth, increasing calls for service and performance.* ***Complete / On-going: reported as part of the Annual Department Retreat***
- *Closely monitor PZ9 for growth, increasing calls for service and performance.* ***Complete / On-going: reported as part of the Annual Department Retreat***
- *Implement the Critical Task Analysis team's recommended changes* - ***Complete***

Finally, the Department should provide an annual report to the Public Safety Commission, Town Manager and Town Council that details; call volumes and trends, updated baselines and benchmarks, and any service gaps and recommended action (if any).

Complete / On-going: reported as part of the Annual Department Retreat

Appendices, Exhibits and Attachments

Appendix A: Community Survey Definitions
Appendix B: 2016 Critical Task Analysis
Appendix C: Emergency Medical Services Data Table
Appendix D: Fire Suppression Data Tables
Appendix E: Hazardous Materials Data Tables
Appendix F: Wildland Fire Suppression Data Tables
Appendix G: Technical Rescue Data Tables

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Appendix A: Community Survey Definitions

Category	Definition
Community involvement	visibility, public image, approachability, involvement with community events
Core service	relates to core services, fire suppression, EMS, wildland, and special hazards
Cultural	ability to respond to a diverse community
Disaster Preparedness	ability to respond to large scale incidents, special hazard readiness, emergency management, etc.
EMS	EMS specific concerns and expectations
Equipment/Apparatus	expectations/concerns relating to equipment and apparatus
Fiscal Responsibility	our ability to be fiscally responsible
Funding	expectations/concerns relating to changes in funding
Growth/Development	expectations/concerns relating to growth and development
Prevention Services	expectations/concerns relating to prevention services
Public Education	expectations/concerns relating to public education
Qualities	community expectations as they relate to traits and qualities that our personnel ought to possess
Resources	expectations/concerns relating to physical, financial, and personnel needs
Response Time	expectations/concerns relating to timely responses to emergencies
Staffing	expectations/concerns relating to staffing
Training/Education	expectations/concerns relating to training and education for our members
Wildfire	expectations/concerns relating to wildfire and potential for wildfire

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Appendix B: 2016 Critical Task Analysis

This appendix details the 2016 review and update of CRFD's Critical Task Analysis (CTA). They are organized by service type (EMS, Fire, HAZMAT, Wildland, Technical Rescue, and Other Services) and risk level (low, moderate, and high).

Critical Task Analysis: EMS

Response Plan: Medical Assist; Clinic Response (Emergent) [Low]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Medic	2	Primary caregiver	1		2
		Documentation	1	*	
		Primary transporting medic driver	1		
Total # of Responding Personnel	2	Total # of Personnel Needed	2		

Response Plan: Medical Alarm [Low]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Incident Command	1		3
		Scene safety	1		
		Patient assessment	1		
1st Due Medic	2	Primary caregiver	1		2
		Documentation	1	*	
		Primary transporting medic driver	1		
Total # of Responding Personnel	5	Total # of Personnel Needed	5		

Response Plan: Medical Assist; Alpha (Non-Emergent) [Low]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Incident Command	1	*	3
		Scene safety	1	*	
		Documentation	1		
		Patient assessment	1		
		Outside scene safety	1		
1st Due Medic	2	Primary caregiver	1		2
		Documentation	1	*	
		Primary transporting medic driver	1		
Total # of Responding Personnel	5	Total # of Personnel Needed	5		

Response Plan: Medical Assist; Bravo, Charlie, Delta (Emergent) [Moderate]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Suppression Apparatus	3	Incident Command	1	*	3
		Scene safety	1	*	
		Documentation	1		
		Patient assessment	1		
		Outside scene safety	1		
1st Due Medic	2	Primary caregiver	1		2
		Documentation	1	*	
		Primary transporting medic driver	1		
Total # of Responding Personnel	5	Total # of Personnel Needed	5		

Response Plan: Train Accident [Moderate]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Suppression Apparatus	3	Incident Command	1		3
		Scene safety	1	*	
		Scene triage	1	*	
		Hazards mitigation	2		
1st Due Medic	2	Primary caregiver	1		2
		Documentation	1	*	
		Primary transporting medic driver	1		
1st Due Chief	1	Rail Safety	1		1
Total # of Responding Personnel	6	Total # of Personnel Needed	6		

Response Plan: MVA / Injury Accident [Moderate]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Suppression Apparatus	3	Incident Command	1		3
		Scene safety	1		
		Scene triage	1	*	
		Initial patient triage	1	*	
		Hazards mitigation	1		
1st Due Medic	2	Primary caregiver	1		2
		Documentation	1	*	
		Primary transporting medic driver	1		
Total # of Responding Personnel	5	Total # of Personnel Needed	5		

Response Plan: Auto Ped or Auto Bike MVA [Moderate]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Suppression Apparatus	3	Incident Command	1		3
		Scene safety	1	*	
		Scene triage	1	*	
		Extrication equipment operation	2		
		Hazards mitigation	1	*	
1st Due Medic	2	Primary caregiver	1		2
		Documentation	1	*	
		Primary transporting medic driver	1		
1st Due Chief	1	Incident command and safety officer	1		1
Total # of Responding Personnel	6	Total # of Personnel Needed	6		

Response Plan: Medical Assist; Echo [High]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Suppression Apparatus	3	Initial Incident Command	1	*	3
		Scene safety	1	*	
		Documentation	1		
		Patient assessment	1		
		Secondary caregiver	1		
1st Due Medic	2	Primary caregiver	1		2
		Documentation	1	*	
		Primary transporting medic driver	1		
1st Due Chief	1	Incident Command	1		1
		Scene safety	1	*	
Total # of Responding Personnel	6	Total # of Personnel Needed	6		

Response Plan: MVA I25 [High]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Suppression Apparatus	3	Incident Command	1		3
		Scene safety	1		
		Scene Triage	1	*	
		Initial patient triage	1	*	
		Hazards mitigation	1		
1st Due Medic	2	Primary caregiver	1		2
		Documentation	1	*	
		Primary transporting medic driver	1		
1st Due Chief	1	Advanced warning	1		1
Total # of Responding Personnel	6	Total # of Personnel Needed	6		

Response Plan: MVA: Multiple Injury / Extrication [High]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Suppression Apparatus	3	Initial Incident Command	1	*	3
		Scene safety	1		
		Scene triage	1	*	
		Initial patient triage	1		
		Hazards mitigation	1		
1st Due Advanced Extrication (E151)	3	Extrication equipment operation	3		3
1st Due Medic	2	Primary caregiver	1		2
		Documentation	1	*	
		Primary transporting medic driver	1		
2st Due Medic	2	Primary caregiver	1		2
		Documentation	1	*	
		Primary transporting medic driver	1		
1st Due Chief	1	Incident Command	1		1
		Safety Officer	1	*	
Total # of Responding Personnel	11	Total # of Personnel Needed	11		

Response Plan: MCI [High]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Suppression Apparatus	3	Initial Incident Command	1		3
		Scene triage	1	*	
		Extrication equipment operation	2	*	
		Hazards mitigation	2	*	
2nd Due Suppression Apparatus	3	Extrication group supervisor	1		3
		Safety line from engine	2		
3rd Due Suppression Apparatus	3	Assist with patient care and/or extrication	3		3
1st Due Medic	2	Patient triage	2		2
2nd Due Medic	2	Primary caregiver	1		2
		Documentation	1	*	
		Primary transporting medic driver	1		
3rd Due Medic	2	Primary caregiver	1		2
		Documentation	1	*	
		Primary transporting medic driver	1		
4th Due Medic	2	Primary caregiver	1		2
		Documentation	1	*	
		Primary transporting medic driver	1		
1st Due Chief	1	Incident Command and safety officer	1		1
2nd Due Chief	1	Scene safety or Division/Group Supervisor	1		1
Total # of Responding Personnel	19	Total # of Personnel Needed	19		

Critical Task Analysis: Fire Suppression

Response Plan: Down Power Lines [Low]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Initiate Command / Initial size-up	1		3
		Investigation for source	2		
Total # of Responding Personnel	3	Total # of Personnel Needed	3		

Response Plan: Residential Fire Alarm [Low]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression	3	Incident Command	1		3
		Safety Officer	1	*	
		Size up /determine need for additional resources	1	*	
		Investigation for Source	2		
Total # of Responding Personnel	3	Total # of Personnel Needed	3		

Response Plan: Alarm Reset [Low]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Incident Command / Determine Additional Resources	1		3
		Scene Safety	1		
		Patient Assessment	1		
Total # of Responding Personnel	3	Total # of Personnel Needed	3		

Response Plan: Arcing Transformer [Low]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Initiate Command / Initial size-up	1	*	3
		Investigation for source	1		
		Size-up/determine need for additional resources	1		
		Accountability	1		
Total # of Responding Personnel	3	Total # of Personnel Needed	3		

Response Plan: Lightning Strike [Low]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Initial size-up	1	*	3
		Investigation for damage/fire	2		
		Establishment of initial water supply (pump operator)	1		
		Prepare for initial attack	1	*	
2nd Due Suppression Apparatus	3	Assist with Investigation for damage/fire	2		2
		Establish uninterrupted water supply	1	*	
Total # of Responding Personnel	6	Total # of Personnel Needed	5		

Response Plan: Commercial Fire Alarm [Low]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Suppression Apparatus	3	Incident Command	1		3
		Safety Officer	1	*	
		Size up/determine need for additional resources	1	*	
		Investigation for source	2		
2nd Due Suppression Apparatus (Non-Emergent)	3	Support investigation and control panel	2		3
		Secure FDC	1		
Total # of Responding Personnel	6	Total # of Personnel Needed	6		

Response Plan: Smoke Investigation, Inside [Low]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Suppression Apparatus	3	Incident Command	1		3
		Safety Officer	1	*	
		Size Up/determine need for additional resources	1	*	
		Investigation for source	2		
		Prepare for fire attack	1	*	
2nd Due Suppression Apparatus	3	Secure water supply	1	*	3
		Assist with investigation for source	3		
Total # of Responding Personnel	6	Total # of Personnel Needed	6		

Response Plan: Unattached Outbuilding Fire, Hydranted [Low]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Suppression Apparatus	3	Initiate Command / Initial size-up	1	*	3
		Establishment of uninterrupted water supply (pump operator)	1		
		Establishment of primary attack line	2		
2nd Due Suppression Apparatus	3	Assist with primary attack line	2	*	3
		Establishment of secondary attack line	2		
		Establishment of secondary water supply (pump operator)	1	*	
		Exposure protection	2	*	
1st Due Medic Unit	2	Assist with primary attack line	2	*	2
		Search and rescue	2	*	
		Initial civilian EMS (triage, treatment, and transport)	2	*	
1st Due Chief	1	Incident Command	1		1
		Size up/determine need for additional resources	1	*	
		Accountability	1	*	
Total # of Responding Personnel	**9**	Total # of Personnel Needed	**9**		

Response Plan: Passenger Car / Pick-Up Fire [Low]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Initiate Command / Initial Size-up	1	*	3
		Establishment of initial water supply (pump operator)	1		
		Establishment of primary attack line	2		
		Position as attack engine	1	*	
2nd Due Suppression Apparatus	3	Assist with primary attack line	2		3
		Position as supply engine	1	*	
		Exposure protection	2	*	
Total # of Responding Personnel	6	Total # of Personnel Needed	6		

Response Plan: Commercial Carrier Fire [Moderate]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Initiate Command / Initial Size-up	1	*	3
		Establishment of initial water supply (pump operator)	1		
		Establishment of primary attack line	2		
		Position as attack engine	1	*	
2nd Due Suppression Apparatus	3	Assist with primary attack line	2		3
		Position as supply engine	1	*	
		Exposure protection	2	*	
1st Due Medic	2	Initial civilian EMS (triage, treatment, and transport)	2	*	2
		Assist with primary attack line	2	*	
1st Due Chief	1	Incident Command	1		1
		Size up/determine need for additional resources	1	*	
		Accountability	1	*	
		Advanced Warning (as needed)	1	*	
Total # of Responding Personnel	9	Total # of Personnel Needed	9		

Response Plan: Train Fire [Moderate]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Suppression Apparatus	3	Initiate Command / Initial Size-up	1	*	3
		Establishment of initial water supply (pump operator)	1		
		Establishment of primary attack line	2		
		Position as attack engine	1	*	
1st Due Aerial	3	Assist with primary attack line	2		3
		Aerial Operations (as required)	1	*	
		Exposure protection	2	*	
1st Due Tender	1	Position for nurse operations or Tender Shuttle as required	1		1
1st Due Medic	2	Assist with primary attack line	2	*	2
		Initial civilian EMS (triage, treatment, and transport)	2	*	
1st Due Chief	1	Incident Command	1		1
		Size up/determine need for additional resources	1	*	
		Accountability	1	*	
Total # of Responding Personnel	10	Total # of Personnel Needed	10		

Response Plan: Residential Structure Fire, Hydranted [Moderate]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Engine	3	Initiate Command / Initial Size-up	1	*	3
		Establishment of initial water supply (pump operator)	1		
		Establishment of primary attack line	2		
2nd Due Engine	3	Assist with primary attack line	2	*	3
		Establishment of secondary attack line	2		
		Establishment of secondary water supply (pump operator)	1	*	
		Exposure protection	2	*	
3rd Due Engine	3	IRIT/RIC	3		3
1st Due Aerial	3	Search and rescue or vertical ventilation	2	*	3
		Aerial device operator	1		
		Outside ventilation	1	*	
		Portable ground ladders	1	*	
1st Due Medic Unit	2	Assist with primary attack line	2	*	2
		Search and rescue	2	*	
		Initial civilian EMS (triage, treatment, and transport)	2	*	
2nd Due Medic Unit	2	Patient Care and Transport (as needed)	2		2
1st Due Chief	1	Incident Command	1		1
		Size up/determine need for additional resources	1	*	
		Accountability	1	*	
2nd Due Chief	1	Safety Officer or Division/Group Supervisor	1		1
Total # of Responding Personnel	18	Total # of Personnel Needed	18		

Response Plan: Residential Structure Fire, Unhydranted [Moderate]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Engine	3	Initiate Command / Initial Size-up	1	*	3
		Establishment of initial water supply (pump operator)	1		
		Establishment of primary attack line	2		
		Position as attack engine	1	*	
2nd Due Engine	3	Assist with primary attack line	2		3
		Position as supply engine	1	*	
		Exposure protection	2	*	
		Pump operator as Water Supply Group Supervisor	1	*	
3rd Due Engine	3	IRIT/RIC	3		3
1st Due Aerial	3	Search and rescue or vertical ventilation	2	*	3
		Aerial device operator	1		
		Outside ventilation	1	*	
		Portable ground ladders	1	*	
		Exposure protection	2	*	
1st Due Medic Unit	2	Assist with primary attack line	2	*	2
		Search and rescue	2	*	
		Initial civilian EMS (triage, treatment, and transport)	2	*	
2nd Due Medic	2	Patient Care and Transport (as needed)	2		2
1st Due Chief	1	Incident Command	1		1
		Size up/determine need for additional resources		*	
		Accountability		*	
2nd Due Chief	1	Safety Officer or Division/Group Supervisor	1		1
3rd Due Chief	1	Water Supply Group Supervisor	1		1
1st, 2nd, 3rd, and 4th Due Water Tenders	4	Uninterrupted water supply	4		4
Total # of Responding Personnel	23	Total # of Personnel Needed	23		

Response Plan: Commercial Structure Fire, Hydranted [High]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Engine	3	Initiate Command / Initial Size-up	1	*	3
		Establishment of uninterrupted water supply (pump operator)	1		
		Establishment of primary attack line	2		
2nd Due Engine	3	Assist with primary attack line	2		3
		Establishment of secondary water supply (pump operator)	1	*	
		Supplement FDC (sprinkler/standpipe systems)	1	*	
3rd Due Engine	3	Establishment of secondary (backup) attack line	3		3
		Exposure protection	3	*	
4th Due Engine	3	IRIT/RIC	3		3
1st Due Aerial	3	Search and rescue or vertical ventilation	2		3
		Aerial device operator	1		
		Outside ventilation	1	*	
		Portable ground ladders	1	*	
1st Due Medic Unit	2	Assist with primary attack line	2	*	2
		Search and rescue	2	*	
		Initial civilian EMS (triage, treatment, and transport)	2	*	
2nd Due Medic	2	Patient Care and Transport (as needed)	2		2
1st Due Chief	1	Incident Command	1		1
		Size up/determine need for additional resources	1	*	
		Accountability	1	*	
2nd Due Chief	1	Safety Officer or Division/Group Supervisor	1		1
Total # of Responding Personnel	21	Total # of Personnel Needed	21		

Critical Task Analysis: HAZMAT

Response Plan: LP/Gas Leak, Outside [Low]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Initiate Command / Initial Size-up	1		3
		Investigation for source	2		
		Accountability	1	*	
Total # of Responding Personnel	3	Total # of Personnel Needed	3		

Response Plan: Environmental Alarm [Low]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Incident Command	1		3
		Scene Safety	1		
		Atmospheric Monitoring	1		
Total # of Responding Personnel	3	Total # of Personnel Needed	3		

Response Plan: CO Alarm Asymptomatic [Low]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Incident Command	1		3
		Scene Safety	1		
		Atmospheric Monitoring	1		
Total # of Responding Personnel	3	Total # of Personnel Needed	3		

Response Plan: CO Alarm Symptomatic [Moderate]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Incident Command	1	*	3
		Scene Safety	1		
		Patient Assessment	1		
		Atmospheric Monitoring	1		
1st Due Medic	2	Primary Caregiver	1		2
		Documentation	1	*	
		Primary Transporting Medic Driver	1		
Total # of Responding Personnel	5	Total # of Personnel Needed	5		

Response Plan: Chlorine Alarm [Moderate]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Suppression Apparatus	3	Incident Command	1	*	3
		Scene Safety	1	*	
		Patient Assessment	1		
		Outside Scene Safety	1		
		Atmospheric Monitoring	1		
1st Due Medic	2	Primary Caregiver	1		2
		Documentation	1	*	
		Primary Transporting Medic Driver	1		
1st Due HAZMAT	3	HAZMAT Investigation & Air Monitoring	3		3
Total # of Responding Personnel	8	Total # of Personnel Needed	8		

Response Plan: LP/Gas Leak, Inside [Low]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Suppression Apparatus	3	Initiate Command / Initial Size-up	1	*	3
		Interior investigation for source	2		
		Establishment of initial water supply (pump operator)	1		
2nd Due Suppression Apparatus	3	Secure water supply	1	*	3
		Prepare for Initial attack	2		
		Assist with investigation for source	1		
1st Due Medic	2	Initial civilian EMS (triage, treatment, and transport)	2		2
1st Due Chief	1	Incident Command	1		1
		Size up/determine need for additional resources	1	*	
		Accountability	1	*	
Total # of Responding Personnel	9	Total # of Personnel Needed	9		

Response Plan: Fuel Spill Less Than 25 Gallons [Low]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Suppression Apparatus	3	Initiate Command / Initial Size-up	1	*	3
		Investigation for source	1		
		Mitigation	2		
Total # of Responding Personnel	3	Total # of Personnel Needed	3		

Response Plan: Fuel Spill Greater Than 25 Gallons [Moderate]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Suppression Apparatus	3	Initiate Command / Initial Size-up	1	*	3
		Investigation for source	1	*	
		Containment	1		
		Assess need for emergency Decon	1	*	
		Area Isolation	1	*	
1st Due HAZMAT	3	Containment / Mitigation (as applicable)	1		3
		Emergency Decon / Decon	2		
		Equipment / Supplies	1	*	
1st Due Bureau / Investigator	1	Code Enforcement	1	*	1
		HAZMAT Billing	1	*	
1st Due Chief	1	Incident Command	1		1
		Size up/determine need for additional resources	1	*	
		Accountability	1	*	
Total # of Responding Personnel	8	Total # of Personnel Needed	8		

Response Plan: Gas Line Rupture [Moderate]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Suppression Apparatus	3	Initiate Command / Initial Size-up	1	*	3
		Investigation for source	2		
		Establishment of initial water supply (pump operator)	1		
2nd Due Suppression Apparatus	3	Secure water supply	1	*	3
		Prepare for Initial attack	2		
		Assist with investigation for source	1		
1st Due Medic	2	Initial civilian EMS (triage, treatment, and transport)	2		2
1st Due Chief	1	Incident Command	1		1
		Size up/determine need for additional resources	1	*	
		Accountability	1	*	
Total # of Responding Personnel	9	Total # of Personnel Needed	9		

Response Plan: Chemical / Biological Investigation [Moderate]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Initiate Command / Initial Size-up	1	*	3
		Investigation for source	1		
		Containment	1		
		Assess need for emergency Decon	1	*	
		Area Isolation	1		
1st Due HAZMAT	3	Containment / Mitigation (as applicable)	1		3
		Emergency Decon / Decon	2		
		Supplies and Equipment	1	*	
1st Due Bureau (non-emergent)	1	Determine need for investigation	1	*	1
		Evidence Collection	1	*	
		Law enforcement liaison	1		
Total # of Responding Personnel	7	Total # of Personnel Needed	7		

Response Plan: HAZMAT [High]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Initiate Command / Initial Size-up	1	*	3
		Product Identification	1	*	
		Recon / Atmospheric Monitoring	1		
		Victim Isolation	1		
		Area Isolation	1		
2nd Due Suppression Apparatus	3	Containment / Mitigation (as applicable)	1	*	3
		Emergency Decon / Decon	2		
		Establish Water Supply (as applicable)	1	*	
1st Due HAZMAT	3	Research	1		2
		Complexity Analysis	1	*	
		Recommend overall strategy	1	*	
1st Due Medic Unit	2	Initial civilian EMS (triage, treatment, and transport)	2	*	2
1st Due Chief	1	Incident Command	1		1
		Size up/determine need for additional resources	1	*	
		Accountability	1	*	
Total # of Responding Personnel	12	Total # of Personnel Needed	11		

Critical Task Analysis: Wildland Fire Suppression

Response Plan: Illegal/Controlled Burn [Low]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Incident Command	1		3
		Safety Officer	1	*	
		Size up/determine need for additional resources	1	*	
		Investigation source and extinguishment	2		
Total # of Responding Personnel	3	Total # of Personnel Needed	3		

Response Plan: Smoke Investigation, Outside [Low]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Incident Command	1		3
		Safety Officer	1	*	
		Size up/determine need for additional resources	1	*	
		Investigation for source	2		
Total # of Responding Personnel	3	Total # of Personnel Needed	3		

Response Plan: Brush Fire, Non-Threatening (NT) [Moderate]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Brush	3	Primary Investigation	1	*	3
		Determine location, size of fire and tactical plan	1	*	
		Fire attack	3		
2nd Due Brush	3	Fire attack	3		3
1st Due Engine	3	Water supply	1		3
		Additional personnel may be reassigned by I.C.	2	*	
1st Due Medic	2	Initial civilian EMS (triage, treatment, and transport)	2	*	2
		Lookout (as needed)	2	*	
1st Due Chief	1	Incident Command	1		1
		Size up/determine need for additional resources	1	*	
		Accountability	1	*	
		Safety Officer - LCES	1	*	
		Obtain spot weather	1	*	
Total # of Responding Personnel	12	Total # of Personnel Needed	12		

Response Plan: Brush Fire, Threatening (T) [High]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Engine	3	Structure protection (as needed)	3		3
		Water supply (as needed)	1	*	
		Additional personnel may be reassigned by I.C.	2	*	
2nd Due Engine or CAFS	3	Structure protection	3		3
1st Due Brush	3	Primary investigation	1	*	3
		Determine location, size of fire and tactical plan	1	*	
		Fire attack	3		
2nd Due Brush	3	Fire attack	3		3
1st Due Medic	2	Initial civilian EMS (triage, treatment, and transport)	2	*	2
		Lookout (as needed)	2	*	
1st Due Chief	1	Incident Command	1		1
		Size up/determine need for additional resources	1	*	
		Accountability	1	*	
		Safety Officer - LCES	1	*	
		Obtain spot weather	1	*	
2nd Due Chief	1	Safety Officer or Division/Group Supervisor	1		1
Total # of Responding Personnel	16	Total # of Personnel Needed	16		

Critical Task Analysis: Technical Rescue

Response Plan: Explosion [Low]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Initiate Command / Initial Size-up	1	*	2
		Investigation for source	2		
2nd Due Suppression Apparatus	3	Secure water supply (as applicable)	1	*	3
		Prepare for Initial attack	1		
		Assist with investigation for source	2		
Total # of Responding Personnel	6	Total # of Personnel Needed	5		

Response Plan: Hi/Lo Angle Rescue [Moderate]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Initiate command / size-up	1		3
		Patient location	1	*	
		Establish perimeter, isolate	1	*	
		Hazard analysis, create IAP	2	*	
		Litter team / Rescue Group	2		
1st Due Medic	2	Primary Caregiver	1		2
		Documentation	1	*	
		Primary transporting medic driver	1		
1st Due Squad	3	Equipment needs	1		3
		Rigging team	2		
1st Due Chief	1	Incident Command	1		1
		Size up/determine need for additional or specialized resources	1	*	
		Accountability	1	*	
Total # of Responding Personnel	9	Total # of Personnel Needed	9		

Response Plan: Entrapment [Moderate]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Initiate Command / Initial size-up	1	*	3
		Establish perimeter, isolate and deny entry	1	*	
		Patient location	1		
		Life safety, hazard analysis/control	2		
1st Due Medic	2	Patient care / triage / transport	2		2
1st Due Squad	3	Equipment needs	3		3
1st Due Chief	1	Incident Command	1		1
		Size up/determine need for additional or specialized resources	1	*	
		Accountability	1	*	
Total # of Responding Personnel	9	Total # of Personnel Needed	9		

Response Plan: Ice Rescue, Human Victim [Moderate]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Victim rescue	1		3
		Haul team	2		
		Equipment set-up / staging	1	*	
2nd Due Suppression Apparatus	3	Haul team	2		3
		Back-up	1		
1st Due Squad	3	Victim rescue	1		3
		Haul team	2		
		Gather additional equipment and personnel	1	*	
1st Due Medic	2	Primary caregiver	1		2
		Documentation	1	*	
		Primary transporting medic driver	1		
1st Due Dive Rescue	3	Victim rescue	3		3
1st Due Chief	1	Scene safety	1		1
		Incident Command	1	*	
		Determine need for additional resources	1	*	
2nd Due Chief	1	Scene safety	1		1
Total # of Responding Personnel	16	Total # of Personnel Needed	16		

Response Plan: Dive Recovery 2 [Moderate]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Victim location / contact	1		3
		Haul team	2		
		Equipment set-up / staging	1	*	
1st Due Squad	3	Victim rescue	1		3
		Haul team	2		
		Gather additional equipment and personnel	1	*	
1st Due Dive/Rescue	3	Victim rescue	3		3
1st Due Chief	1	Scene safety	1		1
		Incident Command	1	*	
		Determine need for additional resources	1	*	
Total # of Responding Personnel	10	Total # of Personnel Needed	10		

Response Plan: Building Collapse [High]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Engine	3	Initiate Command / Initial size-up	1	*	3
		Establish perimeter, isolate and deny entry	1	*	
		Atmospheric monitoring	1	*	
		Patient location	1	*	
		Life safety, hazard analysis / control	2	*	
2nd Due Engine	3	Search	2	*	3
		Building stabilization (if needed)	3	*	
3nd Due Engine	3	Rapid Intervention Team	3		3
1st Due Medic	2	Patient care / triage	2		2
1st Due Aerial	3	Position as needed for "High Point"	1		3
		Rope rescue / rigging	2		
1st Due Squad & Collapse Trailer	3	Equipment needs	1	*	3
		Set up cut table (if needed)	1	*	
1st Due Hazmat	3	HAZMAT investigation & air monitoring	3		3
1st Due Chief	1	Incident Command	1		1
		Size up / determine need for additional or specialized resources	1	*	
		Accountability	1	*	
2nd Due Chief	1	Safety Officer or Division/Group Supervisor	1		1
Total # of Responding Personnel	24	Total # of Personnel Needed	24		

Response Plan: Trench Collapse [High]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Squad & Collapse Trailer	3	Extraction & haul system	1		3
		Ventilation & temperature control	1		
		Equipment support	1		
1st Due HAZMAT	3	Ongoing atmospheric monitoring	1		3
		Equipment support	2		
1st Due Aerial	3	Position as needed for "High Point" * monitoring aerial for safety, angle, and maneuvering	1	*	3
		Extraction & haul system	1		
		Rope rescue / rigging	2		
1st Due Advanced Extrication (E151)	3	Trench box spotter	1	*	3
		Airbag set-up & operations	1	*	
		Life safety, hazard analysis / control	2	*	
2nd Due Engine	3	Initiate Command / Initial size-up	1	*	3
		Establish perimeter, isolate and deny entry (Ingress/Egress Control)	1		
		Initial atmospheric monitoring	1	*	
		Ladder access	1	*	
		Ground pad placement	1	*	
1st Due Rescue	3	Rescue Group Supervisor	1		3
		Equipment & Rescue Support	2		
1st Due Medic	2	Primary Caregiver	1		2
		Documentation	1	*	
		Primary Transporting Medic Driver	1		
2nd Due Medic	2	IRIT/RIC	2		2
1st Due Chief	1	Incident Command	1		1
		Size up/determine need for additional or specialized resources	1	*	
		Accountability	1	*	
2nd Due Chief	1	Safety Officer or Division/Group Supervisor	1		1
Total # of Responding Personnel	24	Total # of Personnel Needed	24		

Response Plan: Confined Space Rescue [High]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Engine	3	Initiate Command / Initial size-up	1	*	3
		Establish perimeter, isolate and deny entry	1	*	
		Atmospheric monitoring	1		
		Patient location	1	*	
		Life safety, hazard analysis / control	2		
2nd Due Engine	3	Entry	2	*	3
		Search	2	*	
		Rescue	2	*	
3nd Due Engine	3	Initial Rapid Intervention Team	3		3
1st Due Medic	2	Patient care / triage	2		2
1st Due Aerial	3	Position as need for "High Point"	1		3
		Rope rescue / rigging	2		
1st Due HAZMAT	3	Atmospheric monitoring	1	*	3
1st Due Chief	1	Incident Command	1		1
		Size up / determine need for additional or specialized resources		*	
		Accountability		*	
2nd Due Chief	1	Safety Officer	1		1
Total # of Responding Personnel	19	Total # of Personnel Needed	19		

Response Plan: Dive 3 Drowning [High]					
Unit	Crew Size	Task	Personnel needed	*part time task	
1st Due Suppression Apparatus	3	Initial Incident Command	1	*	3
		Victim locate / contact	1	*	
		Victim rescue	1		
		Haul team	2		
		Gather additional equipment and personnel	1	*	
2nd Due Suppression Apparatus	3	Haul team	2		3
		Back-up	1		
1st Due Squad	3	Initial search and rescue support	3		3
1st Due Dive Rescue	3	Victim rescue	3		3
1st Due Medic	2	Primary caregiver	1		2
		Documentation	1	*	
		Primary transporting medic driver	1		
1st Due Chief	1	Scene safety	1		1
		Incident Command	1	*	
		Determine need for additional resources	1		
2nd Due Chief	1	Scene Safety or Division/Group Supervisor	1		1
Total # of Responding Personnel	16	Total # of Personnel Needed	16		

Critical Task Analysis: Other

Response Plan: Lock-Out, In Non-Emergent Response [Low]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Incident Command	1		3
		Verify vehicle ownership	1	*	
		Unlock vehicle	2		
Total # of Responding Personnel	3	Total # of Personnel Needed	3		

Response Plan: Lock-Out, Immediate Response [Low]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Incident Command	1		3
		Verify vehicle ownership	1	*	
		Unlock vehicle	2		
Total # of Responding Personnel	3	Total # of Personnel Needed	3		

Response Plan: Water Shut-Off [Low]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Incident Command	1		3
		Scene safety	1	*	
		Determine need for additional resources	1	*	
		Investigate source & control	2		
Total # of Responding Personnel	3	Total # of Personnel Needed	3		

Response Plan: Aircraft Alert 1 or Alert 2 [Low]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Suppression Apparatus	3	Stand-By / Stage	3		3
1st Due Brush	3	Stand-by / Stage	3		3
Total # of Responding Personnel	6	Total # of Personnel Needed	6		

Response Plan: Aircraft Alert 3 [High]					
Unit	Crew Size	Task	Personnel needed *part time task		
1st Due Engine	3	Initial Incident Command	1	*	3
		Scene safety	1		
		Scene triage	1	*	
		Initial patient triage	1	*	
		Fire control/ hazards mitigation	2		
2nd Due Suppression Apparatus	3	Water supply	1		3
		Rescue support	2		
1st Due Brush	3	Remote access	1		3
		Fire control / hazard mitigation	2		
1st Due Medic	2	Primary caregiver	1		2
		Documentation	1	*	
		Primary transporting medic driver	1		
1st Due Chief	1	Incident Command	1		1
		Accountability	1	*	
2nd Due Chief	1	Safety Officer of Division/Group Supervisor	1		1
Red Leader One	3	Fire control	2		3
		Specialty apparatus	1		
Total # of Responding Personnel	16	Total # of Personnel Needed	16		

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Appendix C: Emergency Medical Services Data Tables

The following data tables detail the Department's Emergency Medical Service (EMS) performance from 2012 – 2016 against adopted standards by risk level (low, moderate, and high);

- Low Risk
  - Jurisdiction (CRFD)
  - Station (151, 153, 154, 155)
- Moderate Risk
  - Jurisdiction (CRFD)
  - Station (151, 153, 154, 155)
  - Planning Zone (PZ1, PZ2, PZ3, PZ4, PZ5, PZ6, PZ7, PZ8, PZ9)
- High Risk
  - Jurisdiction (CRFD)
  - Station (151, 153, 154, 155)

EMS Low Risk: CRFD

CRFD									
EMS: Low Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			1:29	1:21	2:22	1:02	1:04	1:09	1:00
			n= 214	n= 49	n= 38	n= 41	n= 36	n= 50	
Turnout			1:38	1:27	1:25	1:36	1:44	1:39	1:38
			n= 214	n= 48	n= 37	n= 44	n= 35	n= 50	
Travel Time	1st Due	Rural	6:50	6:50	6:50	7:30	7:10	5:50	4:22
			n= 83	n= 23	n= 15	n= 9	n= 17	n= 19	
		Urban	6:40	6:50	6:40	5:40	8:10	5:00	
			n= 133	n= 25	n= 23	n= 35	n= 18	n= 32	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	9:00	12:20	9:40	9:30	8:40	8:00	7:00
			n= 85	n= 24	n= 15	n= 10	n= 17	n= 19	
		Urban	8:20	8:30	9:40	7:00	11:50	7:00	
			n= 134	n= 25	n= 23	n= 35	n= 19	n= 32	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
* 6 records were ignored because of a zero time value.									

Station 151									
EMS: Low Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			1:15	2:24	2:33	0:57	0:56	1:00	1:25
			n= 78	n= 9	n= 13	n= 12	n= 21	n= 23	
Turnout			1:30	1:38	1:24	1:39	1:30	1:38	1:43
			n= 78	n= 9	n= 13	n= 12	n= 21	n= 23	
Travel Time	1st Due	Rural	6:50	10:40	6:50	7:30	7:10	5:50	5:22
			n= 61	n= 9	n= 13	n= 9	n= 17	n= 13	
		Urban	5:50	N/A	N/A	2:30	6:10	5:00	3:52
			n= 17	n= 0	n= 0	n= 2	n= 4	n= 11	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	8:40	12:20	9:40	9:30	8:40	8:00	8:30
			n= 62	n= 9	n= 13	n= 10	n= 17	n= 13	
		Urban	7:40	N/A	N/A	4:40	7:50	7:00	7:00
			n= 24	n= 0	n= 0	n= 6	n= 6	n= 12	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	

Station 153									
EMS: Low Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			N/A	N/A	N/A	N/A	N/A	N/A	1:25
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Turnout			N/A	N/A	N/A	N/A	N/A	N/A	1:43
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Travel Time	1st Due	Rural	N/A	N/A	N/A	N/A	N/A	N/A	5:22
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	3:52
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	N/A	N/A	N/A	N/A	N/A	N/A	8:30
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	7:00
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	

Station 154									
EMS: Low Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			1:15	1:15	0:49	1:01	2:04	1:42	1:25
			n= 36	n= 15	n= 2	n= 8	n= 5	n= 6	
Turnout			1:47	1:41	1:05	1:38	1:55	2:05	1:43
			n= 37	n= 15	n= 2	n= 10	n= 4	n= 6	
Travel Time	1st Due	Rural	5:50	6:50	5:50	N/A	N/A	2:10	5:22
			n= 22	n= 14	n= 2	n= 0	n= 0	n= 6	
		Urban	5:00	N/A	N/A	4:00	11:40	N/A	3:52
			n= 14	n= 0	n= 0	n= 10	n= 4	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	9:00	13:10	7:40	N/A	N/A	4:40	8:30
			n= 23	n= 15	n= 2	n= 0	n= 0	n= 6	
		Urban	6:40	N/A	N/A	5:40	14:30	N/A	7:00
			n= 15	n= 0	n= 0	n= 10	n= 5	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	

Station 155									
EMS: Low Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			1:33	1:33	1:55	1:11	0:43	1:09	1:25
			n= 99	n= 25	n= 23	n= 21	n= 10	n= 20	
Turnout			1:29	1:27	1:25	1:18	1:41	1:45	1:43
			n= 99	n= 24	n= 22	n= 22	n= 10	n= 21	
Travel Time	1st Due	Rural	N/A	N/A	N/A	N/A	N/A	N/A	5:22
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	6:50	6:50	6:40	6:10	6:50	4:40	3:52
			n= 102	n= 25	n= 23	n= 23	n= 10	n= 21	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	N/A	N/A	N/A	N/A	N/A	N/A	8:30
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	8:50	8:30	9:40	7:10	8:20	6:50	7:00
			n= 101	n= 24	n= 23	n= 23	n= 10	n= 21	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	

EMS: Moderate Risk

CRFD									
EMS: Moderate Risk			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Call Processing			1:32	1:31	2:23	1:12	1:04	1:12	1:00
			n= 11562	n= 2264	n= 2202	n= 2492	n= 2479	n= 2125	
Turnout			1:56	1:41	1:43	1:46	2:03	2:12	1:38
			n= 11715	n= 2241	n= 2197	n= 2692	n= 2436	n= 2149	
Travel Time	1st Due	Rural	6:50	7:10	7:10	6:40	6:40	6:20	5:32
			n= 2922	n= 572	n= 545	n= 575	n= 515	n= 715	
		Urban	5:30	5:30	5:30	5:50	5:20	5:10	4:32
			n= 8930	n= 1695	n= 1666	n= 2170	n= 1942	n= 1457	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	9:00	10:10	9:30	8:00	9:00	8:20	7:32
			n= 2838	n= 551	n= 526	n= 567	n= 503	n= 691	
		Urban	8:00	8:30	8:00	7:40	7:50	7:50	6:02
			n= 8744	n= 1648	n= 1627	n= 2140	n= 1904	n= 1425	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	9:00	9:30	9:50	8:30	8:50	8:40	8:10
			n= 2955	n= 573	n= 547	n= 584	n= 525	n= 726	
		Urban	7:50	7:50	8:40	7:40	7:50	7:40	7:10
			n= 8999	n= 1696	n= 1667	n= 2203	n= 1957	n= 1476	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	11:10	12:00	12:00	10:10	10:40	10:40	10:10
			n= 2932	n= 552	n= 527	n= 658	n= 503	n= 692	
		Urban	10:00	10:10	10:30	9:30	9:50	9:50	8:40
			n= 8755	n= 1648	n= 1627	n= 2145	n= 1907	n= 1428	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	

Station 151									
EMS: Moderate Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			1:34	1:32	2:22	1:15	1:03	1:10	1:00
			n= 4390	n= 832	n= 848	n= 912	n= 978	n= 820	
Turnout			2:02	1:45	1:53	1:57	2:10	2:15	1:38
			n= 4461	n= 824	n= 847	n= 994	n= 961	n= 835	
Travel Time	1st Due	Rural	7:40	8:00	7:50	7:30	6:50	8:30	5:32
			n= 1094	n= 220	n= 212	n= 254	n= 232	n= 176	
		Urban	5:20	5:30	5:20	5:30	5:20	5:00	4:32
			n= 3419	n= 614	n= 639	n= 762	n= 737	n= 667	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	10:10	10:40	10:20	9:30	9:10	11:10	7:32
			n= 1102	n= 220	n= 213	n= 256	n= 235	n= 178	
		Urban	7:40	7:40	8:20	8:20	7:50	7:30	6:02
			n= 3453	n= 615	n= 638	n= 776	n= 744	n= 680	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	10:00	10:50	10:40	8:30	9:30	10:40	8:10
			n= 1057	n= 214	n= 205	n= 248	n= 219	n= 171	
		Urban	7:40	8:30	7:40	7:30	7:30	6:50	7:10
			n= 3346	n= 596	n= 627	n= 746	n= 729	n= 648	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	12:20	13:00	13:10	10:50	11:00	13:00	10:10
			n= 1057	n= 214	n= 205	n= 248	n= 219	n= 171	
		Urban	9:40	10:30	10:10	9:20	9:30	9:00	8:40
			n= 3350	n= 596	n= 627	n= 749	n= 727	n= 651	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	

Station 153									
EMS: Moderate Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			1:31	1:25	2:30	1:06	1:09	1:18	1:00
			n= 1371	n= 266	n= 264	n= 276	n= 294	n= 271	
Turnout			1:52	1:39	1:36	1:39	2:04	2:08	1:38
			n= 1396	n= 264	n= 266	n= 304	n= 290	n= 272	
Travel Time	1st Due	Rural	9:30	11:00	9:10	7:20	10:50	9:10	5:32
			n= 247	n= 62	n= 36	n= 37	n= 41	n= 71	
		Urban	6:20	6:30	6:50	6:30	6:10	5:20	4:32
			n= 1161	n= 203	n= 227	n= 271	n= 250	n= 210	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	11:40	13:20	13:00	8:00	14:00	11:00	7:32
			n= 240	n= 62	n= 37	n= 34	n= 43	n= 64	
		Urban	8:50	8:20	9:10	8:00	8:50	10:10	6:02
			n= 1149	n= 200	n= 224	n= 273	n= 247	n= 205	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	12:30	14:30	12:10	9:20	15:20	11:30	8:10
			n= 250	n= 62	n= 36	n= 37	n= 43	n= 72	
		Urban	8:30	8:30	9:20	8:10	8:30	8:00	7:10
			n= 1168	n= 203	n= 227	n= 275	n= 252	n= 211	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	14:30	15:20	16:30	10:20	16:50	13:10	10:10
			n= 240	n= 62	n= 37	n= 34	n= 43	n= 64	
		Urban	10:50	10:10	11:10	9:30	10:40	12:00	8:40
			n= 1149	n= 200	n= 224	n= 273	n= 247	n= 205	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	

Station 154									
EMS: Moderate Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			1:32	1:34	2:20	1:12	1:04	1:11	1:00
			n= 3926	n= 768	n= 739	n= 936	n= 777	n= 706	
Turnout			1:48	1:38	1:39	1:38	1:53	2:10	1:38
			n= 3985	n= 762	n= 736	n= 1003	n= 768	n= 716	
Travel Time	1st Due	Rural	4:50	5:30	4:50	5:00	4:40	4:10	5:32
			n= 1071	n= 197	n= 188	n= 178	n= 131	n= 377	
		Urban	5:50	5:50	5:40	6:00	5:30	5:40	4:32
			n= 2951	n= 574	n= 554	n= 841	n= 643	n= 339	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	6:50	8:00	6:50	7:00	6:10	6:20	7:32
			n= 1047	n= 185	n= 182	n= 180	n= 129	n= 371	
		Urban	7:50	8:20	7:50	7:40	7:20	7:40	6:02
			n= 2892	n= 558	n= 538	n= 836	n= 628	n= 332	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	7:00	7:30	7:00	7:00	6:40	6:30	8:10
			n= 1085	n= 197	n= 189	n= 182	n= 133	n= 384	
		Urban	8:00	7:50	8:40	7:50	7:50	8:00	7:10
			n= 2970	n= 574	n= 555	n= 854	n= 645	n= 342	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	8:50	10:00	9:00	9:00	8:20	8:30	10:10
			n= 1050	n= 186	n= 183	n= 180	n= 129	n= 372	
		Urban	9:40	10:00	10:20	9:20	9:20	9:40	8:40
			n= 2896	n= 558	n= 538	n= 838	n= 630	n= 332	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	

Station 155									
EMS: Moderate Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			1:28	1:27	2:21	1:10	1:01	1:12	1:00
			n= 1873	n= 398	n= 350	n= 367	n= 430	n= 328	
Turnout			1:48	1:36	1:40	1:39	1:52	2:05	1:38
			n= 1871	n= 391	n= 347	n= 390	n= 417	n= 326	
Travel Time	1st Due	Rural	6:40	7:00	7:10	6:30	6:20	6:00	5:32
			n= 509	n= 93	n= 108	n= 106	n= 111	n= 91	
		Urban	4:50	5:00	5:10	4:50	4:50	4:30	4:32
			n= 1399	n= 304	n= 246	n= 296	n= 312	n= 241	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	8:40	9:20	9:00	8:10	8:40	8:30	7:32
			n= 493	n= 90	n= 101	n= 105	n= 112	n= 85	
		Urban	8:20	8:50	8:20	8:30	8:10	7:50	6:02
			n= 1360	n= 294	n= 238	n= 285	n= 303	n= 240	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	8:50	9:20	9:40	8:30	8:30	8:10	8:10
			n= 517	n= 94	n= 108	n= 109	n= 114	n= 92	
		Urban	7:10	7:10	8:10	6:50	7:00	7:00	7:10
			n= 1408	n= 304	n= 247	n= 298	n= 316	n= 243	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	10:50	12:00	11:10	10:10	10:00	10:40	10:10
			n= 494	n= 90	n= 101	n= 106	n= 112	n= 85	
		Urban	10:10	10:50	10:40	10:20	10:00	9:50	8:40
			n= 1460	n= 394	n= 238	n= 285	n= 303	n= 240	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	

Planning Zone 1									
EMS: Moderate Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			1:32	1:33	2:20	1:15	1:07	1:10	1:00
			n= 3715	n= 706	n= 686	n= 784	n= 854	n= 685	
Turnout			2:02	1:44	1:52	1:57	2:10	2:15	1:38
			n= 3745	n= 698	n= 688	n= 848	n= 837	n= 674	
Travel Time	1st Due	Rural	4:10	4:20	4:30	4:00	3:30	4:10	5:32
			n= 786	n= 155	n= 139	n= 192	n= 174	n= 126	
		Urban	5:20	5:40	5:20	5:30	5:20	5:00	4:32
			n= 3037	n= 553	n= 552	n= 677	n= 673	n= 582	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	6:50	6:50	9:10	6:20	6:30	6:30	7:32
			n= 754	n= 150	n= 135	n= 188	n= 160	n= 121	
		Urban	7:40	8:30	7:30	7:30	7:30	6:50	6:02
			n= 2969	n= 536	n= 541	n= 663	n= 663	n= 566	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	6:40	6:50	7:40	6:00	6:10	6:40	8:10
			n= 791	n= 155	n= 139	n= 194	n= 176	n= 127	
		Urban	7:40	7:40	8:20	7:20	7:50	7:30	7:10
			n= 3071	n= 554	n= 551	n= 691	n= 680	n= 595	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	9:00	9:00	10:40	7:50	8:20	9:30	10:10
			n= 754	n= 150	n= 135	n= 188	n= 160	n= 121	
		Urban	9:40	10:30	10:00	9:30	9:20	9:00	8:40
			n= 2976	n= 536	n= 541	n= 666	n= 664	n= 569	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	

Planning Zone 2									
EMS: Moderate Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			1:34	1:31	2:30	1:13	0:49	1:27	1:00
			n= 363	n= 61	n= 86	n= 70	n= 62	n= 84	
Turnout			2:00	1:48	1:57	1:44	2:06	2:15	1:38
			n= 372	n= 61	n= 85	n= 81	n= 62	n= 83	
Travel Time	1st Due	Rural	N/A	N/A	N/A	N/A	N/A	N/A	5:32
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	5:20	5:20	5:30	5:00	5:20	5:10	4:32
			n= 378	n= 61	n= 86	n= 83	n= 62	n= 86	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	N/A	7:32
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	8:00	8:30	8:20	7:40	8:20	7:40	6:02
			n= 370	n= 60	n= 86	n= 81	n= 61	n= 82	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	N/A	N/A	N/A	N/A	N/A	N/A	8:10
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	7:40	7:40	8:30	7:10	8:20	7:20	7:10
			n= 378	n= 61	n= 86	n= 83	n= 62	n= 86	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	N/A	10:10
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	9:50	10:40	10:50	8:50	10:00	9:40	8:40
			n= 370	n= 60	n= 86	n= 81	n= 61	n= 82	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	

Planning Zone 3									
EMS: Moderate Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			1:29	1:22	2:28	1:08	1:05	1:17	1:00
			n= 1165	n= 205	n= 226	n= 239	n= 254	n= 241	
Turnout			1:52	1:40	1:36	1:39	2:02	2:08	1:38
			n= 1188	n= 204	n= 228	n= 265	n= 251	n= 240	
Travel Time	1st Due	Rural	6:40	6:50	6:40	6:30	5:50	6:10	5:32
			n= 163	n= 36	n= 29	n= 30	n= 30	n= 38	
		Urban	5:10	5:10	5:20	4:50	4:50	5:20	4:32
			n= 1042	n= 170	n= 200	n= 238	n= 224	n= 210	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	7:50	7:50	9:10	7:20	7:20	7:20	7:32
			n= 153	n= 36	n= 28	n= 27	n= 29	n= 33	
		Urban	9:00	8:10	9:30	7:10	8:20	10:10	6:02
			n= 1031	n= 167	n= 197	n= 242	n= 220	n= 205	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	8:40	9:00	9:10	8:20	8:00	8:20	8:10
			n= 164	n= 35	n= 29	n= 30	n= 30	n= 40	
		Urban	7:50	7:10	8:40	7:10	7:20	8:00	7:10
			n= 1048	n= 170	n= 200	n= 242	n= 225	n= 211	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	10:30	11:30	12:00	9:20	9:50	10:30	10:10
			n= 153	n= 36	n= 28	n= 27	n= 29	n= 33	
		Urban	10:50	9:40	12:50	8:50	10:30	12:00	8:40
			n= 1031	n= 167	n= 197	n= 242	n= 220	n= 205	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	

Planning Zone 4									
EMS: Moderate Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			1:32	1:40	2:19	1:11	1:07	1:12	1:00
			n= 3018	n= 603	n= 562	n= 720	n= 586	n= 547	
Turnout			1:49	1:39	1:40	1:39	1:56	2:11	1:38
			n= 3058	n= 598	n= 562	n= 770	n= 576	n= 552	
Travel Time	1st Due	Rural	4:40	5:30	4:40	4:50	4:30	4:10	5:32
			n= 1057	n= 197	n= 185	n= 172	n= 128	n= 375	
		Urban	5:50	5:40	5:50	6:10	5:30	5:50	4:32
			n= 2040	n= 409	n= 380	n= 611	n= 456	n= 184	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	6:40	8:00	6:50	6:40	5:50	6:20	7:32
			n= 1035	n= 185	n= 179	n= 174	n= 126	n= 371	
		Urban	8:10	8:50	8:00	8:00	7:50	8:00	6:02
			n= 1990	n= 396	n= 367	n= 606	n= 442	n= 179	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	6:50	7:30	6:50	6:50	6:30	6:30	8:10
			n= 1072	n= 197	n= 186	n= 176	n= 130	n= 383	
		Urban	8:10	8:00	9:00	8:00	7:50	8:10	7:10
			n= 2057	n= 409	n= 381	n= 624	n= 457	n= 186	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	8:40	10:00	9:00	8:40	7:40	8:20	10:10
			n= 1038	n= 186	n= 180	n= 174	n= 126	n= 372	
		Urban	10:00	10:30	10:50	9:30	9:50	10:00	8:40
			n= 1994	n= 396	n= 367	n= 609	n= 443	n= 179	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	

Planning Zone 5									
EMS: Moderate Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			1:28	1:27	2:21	1:10	1:02	1:11	1:00
			n= 1879	n= 398	n= 350	n= 368	n= 433	n= 330	
Turnout			1:48	1:36	1:40	1:39	1:53	2:06	1:38
			n= 1878	n= 391	n= 347	n= 391	n= 420	n= 329	
Travel Time	1st Due	Rural	6:40	7:00	7:10	6:30	6:20	6:00	5:32
			n= 510	n= 93	n= 108	n= 106	n= 111	n= 92	
		Urban	4:50	5:00	5:10	4:40	4:50	4:30	4:32
			n= 1405	n= 304	n= 246	n= 297	n= 315	n= 243	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	8:40	9:20	9:00	8:10	8:40	8:30	7:32
			n= 494	n= 90	n= 101	n= 105	n= 112	n= 86	
		Urban	8:20	8:50	8:20	8:30	8:10	7:50	6:02
			n= 1367	n= 294	n= 238	n= 286	n= 306	n= 243	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	8:50	9:20	9:40	8:30	8:30	8:10	8:10
			n= 518	n= 94	n= 108	n= 109	n= 114	n= 93	
		Urban	7:10	7:10	8:10	6:50	7:00	7:00	7:10
			n= 1415	n= 304	n= 247	n= 299	n= 319	n= 246	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	10:50	12:00	11:10	10:10	10:00	10:40	10:10
			n= 495	n= 90	n= 101	n= 106	n= 112	n= 86	
		Urban	10:10	10:50	10:40	10:10	10:00	9:40	8:40
			n= 1367	n= 294	n= 238	n= 286	n= 306	n= 243	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	

Planning Zone 6									
EMS: Moderate Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			1:41	1:29	2:33	0:43	2:28	2:46	1:00
			n= 170	n= 54	n= 31	n= 35	n= 28	n= 22	
Turnout			1:50	1:37	1:40	1:41	2:16	1:50	1:38
			n= 171	n= 54	n= 31	n= 37	n= 27	n= 22	
Travel Time	1st Due	Rural	10:50	13:00	11:30	9:00	10:50	8:40	5:32
			n= 56	n= 20	n= 4	n= 5	n= 4	n= 23	
		Urban	8:10	7:40	8:10	8:30	8:50	N/A	4:32
			n= 114	n= 33	n= 26	n= 31	n= 24	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	12:10	13:30	12:50	9:20	10:50	9:30	7:32
			n= 55	n= 19	n= 4	n= 5	n= 4	n= 23	
		Urban	8:30	8:20	8:10	9:10	8:50	N/A	6:02
			n= 115	n= 33	n= 26	n= 31	n= 25	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	13:30	15:00	14:40	10:10	12:50	11:30	8:10
			n= 56	n= 20	n= 4	n= 5	n= 4	n= 23	
		Urban	10:40	10:00	10:40	10:00	11:10	N/A	7:10
			n= 117	n= 33	n= 26	n= 33	n= 25	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	14:40	15:50	16:30	10:30	12:50	13:30	10:10
			n= 55	n= 19	n= 4	n= 5	n= 4	n= 23	
		Urban	11:00	10:10	10:40	10:50	11:50	N/A	8:40
			n= 115	n= 33	n= 26	n= 31	n= 25	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	

Planning Zone 7									
EMS: Moderate Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			1:48	1:31	2:57	1:23	0:58	1:20	1:00
			n= 318	n= 69	n= 81	n= 53	n= 64	n= 51	
Turnout			2:06	1:51	1:47	2:03	2:09	2:25	1:38
			n= 325	n= 68	n= 79	n= 59	n= 64	n= 55	
Travel Time	1st Due	Rural	10:30	11:00	9:20	8:50	10:30	12:40	5:32
			n= 320	n= 68	n= 78	n= 59	n= 60	n= 55	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	4:32
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	13:20	14:10	13:50	10:50	14:00	14:00	7:32
			n= 317	n= 68	n= 76	n= 57	n= 64	n= 52	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	6:02
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	13:10	13:00	12:00	11:10	14:50	14:20	8:10
			n= 323	n= 69	n= 78	n= 59	n= 63	n= 54	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	7:10
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	15:20	15:20	15:40	12:50	16:50	16:00	10:10
			n= 317	n= 68	n= 76	n= 57	n= 64	n= 52	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	8:40
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	

Planning Zone 8									
EMS: Moderate Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			1:13	1:12	2:10	1:13	3:57	1:10	1:00
			n= 19	n= 3	n= 2	n= 6	n= 5	n= 3	
Turnout			1:42	1:42	1:52	1:02	1:40	2:25	1:38
			n= 19	n= 3	n= 2	n= 6	n= 5	n= 3	
Travel Time	1st Due	Rural	14:40	14:50	10:00	11:50	12:10	11:20	5:32
			n= 18	n= 3	n= 1	n= 6	n= 5	n= 3	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	4:32
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	16:00	17:00	16:00	13:50	12:10	11:20	7:32
			n= 19	n= 3	n= 2	n= 6	n= 5	n= 3	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	6:02
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	17:40	17:40	19:10	13:40	13:50	13:30	8:10
			n= 19	n= 3	n= 2	n= 6	n= 5	n= 3	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	7:10
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	18:30	18:30	19:10	15:50	13:50	14:20	10:10
			n= 19	n= 3	n= 2	n= 6	n= 5	n= 3	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	8:40
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	

Planning Zone 9									
EMS: Moderate Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			1:32	1:20	2:25	1:13	1:02	1:01	1:00
			n= 897	n= 165	n= 177	n= 215	n= 192	n= 148	
Turnout			1:45	1:31	1:32	1:35	1:48	2:00	1:38
			n= 919	n= 164	n= 174	n= 233	n= 193	n= 155	
Travel Time	1st Due	Rural	9:10	N/A	5:50	8:40	10:30	9:10	5:32
			n= 12	n= 0	n= 1	n= 5	n= 3	n= 3	
		Urban	5:20	5:30	5:10	5:20	5:20	5:30	4:32
			n= 912	n= 165	n= 176	n= 231	n= 188	n= 152	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	11:30	N/A	7:20	8:40	11:30	15:00	7:32
			n= 11	n= 0	n= 1	n= 5	n= 3	n= 2	
		Urban	6:40	6:50	6:30	6:50	6:20	6:20	6:02
			n= 902	n= 162	n= 172	n= 231	n= 187	n= 150	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	11:20	N/A	7:40	11:20	11:50	11:00	8:10
			n= 12	n= 0	n= 1	n= 5	n= 3	n= 3	
		Urban	7:50	7:50	8:20	7:30	7:40	8:00	7:10
			n= 913	n= 165	n= 176	n= 231	n= 189	n= 152	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	12:40	N/A	9:10	11:20	12:40	16:00	10:10
			n= 11	n= 0	n= 1	n= 5	n= 3	n= 2	
		Urban	8:50	9:00	9:10	8:30	8:40	8:50	8:40
			n= 902	n= 162	n= 172	n= 230	n= 188	n= 150	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	

EMS High Risk

CRFD									
EMS: High Risk			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Call Processing			2:18	2:03	2:31	2:22	1:52	2:05	1:00
			n= 1494	n= 367	n= 313	n= 308	n= 284	n= 222	
Turnout			2:03	1:50	1:54	1:57	2:26	2:28	1:38
			n= 1422	n= 360	n= 307	n= 298	n= 255	n= 202	
Travel Time	1st Due	Rural	6:50	6:10	7:40	5:30	6:10	6:50	5:32
			n= 248	n= 55	n= 52	n= 58	n= 34	n= 49	
		Urban	5:40	5:10	6:20	5:30	5:50	5:10	4:32
			n= 679	n= 165	n= 150	n= 144	n= 134	n= 86	
		Interstate	8:10	8:00	9:10	8:00	8:50	7:00	7:32
			n= 556	n= 148	n= 113	n= 120	n= 98	n= 77	
	ERF	Rural	12:10	12:10	11:30	15:40	11:00	15:40	10:02
			n= 120	n= 22	n= 25	n= 24	n= 22	n= 27	
		Urban	12:40	13:20	12:50	10:30	12:40	12:30	9:42
			n= 374	n= 84	n= 81	n= 74	n= 74	n= 61	
		Interstate	12:00	11:10	14:10	12:00	12:00	11:50	10:52
			n= 350	n= 116	n= 78	n= 80	n= 72	n= 4	
Total Response Time	1st Due	Rural	9:00	8:30	10:20	7:40	9:00	9:20	8:10
			n= 254	n= 56	n= 52	n= 60	n= 34	n= 52	
		Urban	8:10	7:40	9:20	7:40	8:20	7:40	7:10
			n= 701	n= 165	n= 151	n= 150	n= 141	n= 94	
		Interstate	11:00	11:00	11:10	10:50	11:50	10:50	10:10
			n= 588	n= 148	n= 115	n= 129	n= 112	n= 84	
	ERF	Rural	13:40	13:40	13:30	17:50	13:10	16:50	12:40
			n= 120	n= 22	n= 25	n= 24	n= 22	n= 27	
		Urban	15:00	15:30	15:30	12:50	14:20	14:30	12:30
			n= 376	n= 84	n= 81	n= 75	n= 74	n= 62	
		Interstate	14:20	14:00	16:00	13:40	15:10	13:40	13:30
			n= 395	n= 117	n= 78	n= 80	n= 72	n= 48	

Station 151									
EMS: High Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			2:20	1:52	2:46	2:19	1:35	2:38	1:00
			n= 790	n= 201	n= 173	n= 167	n= 145	n= 104	
Turnout			2:09	1:56	2:02	2:06	2:24	2:28	1:38
			n= 737	n= 199	n= 169	n= 154	n= 129	n= 86	
Travel Time	1st Due	Rural	7:00	4:50	7:40	4:50	5:40	8:00	5:32
			n= 98	n= 27	n= 26	n= 22	n= 12	n= 11	
		Urban	5:30	5:20	5:20	5:30	5:50	5:30	4:32
			n= 259	n= 63	n= 67	n= 57	n= 45	n= 27	
		Interstate	8:30	8:20	9:10	8:10	9:30	8:10	7:32
			n= 403	n= 113	n= 80	n= 90	n= 74	n= 46	
	ERF	Rural	15:40	12:20	11:30	15:40	11:10	19:40	10:02
			n= 47	n= 8	n= 12	n= 10	n= 9	n= 8	
		Urban	11:10	12:00	11:10	9:50	12:50	9:00	9:42
			n= 167	n= 42	n= 37	n= 31	n= 29	n= 28	
		Interstate	12:00	10:40	15:00	12:30	12:00	11:50	10:52
			n= 297	n= 89	n= 61	n= 61	n= 56	n= 30	
Total Response Time	1st Due	Rural	9:30	6:20	11:10	7:00	7:20	11:40	8:10
			n= 101	n= 27	n= 26	n= 23	n= 12	n= 13	
		Urban	8:10	8:00	8:10	7:50	8:20	7:40	7:10
			n= 276	n= 63	n= 67	n= 58	n= 49	n= 39	
		Interstate	11:40	12:30	11:50	10:50	11:50	12:30	10:10
			n= 429	n= 113	n= 82	n= 97	n= 85	n= 52	
	ERF	Rural	16:40	14:10	13:50	17:50	13:10	22:10	12:40
			n= 47	n= 8	n= 12	n= 10	n= 9	n= 8	
		Urban	13:30	13:40	14:00	11:50	14:00	12:20	12:20
			n= 167	n= 42	n= 37	n= 31	n= 29	n= 28	
		Interstate	14:30	13:40	17:20	14:20	15:10	13:30	13:30
			n= 298	n= 90	n= 61	n= 61	n= 56	n= 30	

Station 153									
EMS: High Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			2:18	1:40	2:40	0:53	3:53	1:29	1:00
			n= 97	n= 23	n= 22	n= 11	n= 24	n= 17	
Turnout			1:56	1:42	1:33	1:42	2:03	2:37	1:38
			n= 96	n= 22	n= 21	n= 14	n= 21	n= 18	
Travel Time	1st Due	Rural	9:10	7:10	11:30	6:30	9:30	15:00	5:32
			n= 30	n= 9	n= 5	n= 3	n= 5	n= 8	
		Urban	6:20	5:00	7:00	6:20	6:30	4:00	4:32
			n= 71	n= 14	n= 17	n= 11	n= 18	n= 11	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	7:32
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	10:40	8:40	16:30	8:00	10:40	7:50	10:02
			n= 18	n= 4	n= 4	n= 2	n= 4	n= 4	
		Urban	14:10	10:50	12:40	17:30	9:10	17:20	9:42
			n= 43	n= 10	n= 12	n= 6	n= 11	n= 4	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	10:52
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	11:10	10:30	14:40	9:20	12:30	10:10	8:10
			n= 29	n= 9	n= 5	n= 3	n= 5	n= 7	
		Urban	8:40	7:10	9:50	7:10	8:00	8:30	7:10
			n= 75	n= 14	n= 17	n= 13	n= 20	n= 11	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	10:10
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	12:50	11:30	17:50	10:40	12:50	10:40	12:40
			n= 18	n= 4	n= 4	n= 2	n= 4	n= 4	
		Urban	17:20	12:30	16:10	29:10	12:10	18:40	12:20
			n= 44	n= 10	n= 12	n= 7	n= 11	n= 4	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	13:30
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	

Station 154									
EMS: High Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			2:11	2:03	2:10	2:49	2:00	1:34	1:00
			n= 387	n= 88	n= 74	n= 82	n= 76	n= 67	
Turnout			1:57	1:37	1:54	1:39	2:08	2:14	1:38
			n= 383	n= 87	n= 74	n= 86	n= 71	n= 65	
Travel Time	1st Due	Rural	5:20	4:10	4:00	5:20	5:50	5:10	5:32
			n= 76	n= 12	n= 10	n= 21	n= 10	n= 23	
		Urban	6:00	6:00	6:20	6:00	5:40	4:40	4:32
			n= 230	n= 57	n= 45	n= 52	n= 50	n= 26	
		Interstate	7:20	7:40	7:20	7:20	8:00	5:20	7:32
			n= 88	n= 19	n= 20	n= 16	n= 15	n= 18	
	ERF	Rural	12:00	12:00	6:20	13:10	18:50	10:50	10:02
			n= 34	n= 6	n= 4	n= 8	n= 6	n= 10	
		Urban	13:20	13:30	13:20	10:30	12:10	14:30	9:42
			n= 98	n= 16	n= 20	n= 24	n= 20	n= 18	
		Interstate	11:50	11:50	11:10	10:30	9:10	15:20	10:52
			n= 56	n= 16	n= 11	n= 8	n= 10	n= 11	
Total Response Time	1st Due	Rural	7:20	6:40	6:20	7:10	8:30	7:30	8:10
			n= 79	n= 12	n= 10	n= 22	n= 10	n= 25	
		Urban	8:10	7:40	9:00	7:40	8:40	7:30	7:10
			n= 234	n= 57	n= 45	n= 54	n= 50	n= 28	
		Interstate	9:50	9:50	10:20	9:50	12:10	10:00	10:10
			n= 91	n= 19	n= 20	n= 17	n= 17	n= 18	
	ERF	Rural	13:10	13:10	8:40	16:20	21:20	13:10	12:40
			n= 34	n= 6	n= 4	n= 8	n= 6	n= 10	
		Urban	15:00	15:40	15:30	11:40	14:10	16:50	12:20
			n= 98	n= 16	n= 20	n= 24	n= 20	n= 18	
		Interstate	15:00	14:00	15:00	13:10	12:00	17:20	13:30
			n= 56	n= 16	n= 11	n= 8	n= 10	n= 11	

Station 155									
EMS: High Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			2:22	2:26	2:47	3:01	1:51	1:14	1:00
			n= 220	n= 55	n= 44	n= 48	n= 39	n= 34	
Turnout			2:00	1:49	1:43	1:57	2:10	2:37	1:38
			n= 206	n= 52	n= 43	n= 44	n= 34	n= 33	
Travel Time	1st Due	Rural	6:00	8:20	5:40	6:50	5:50	5:10	5:32
			n= 44	n= 7	n= 11	n= 12	n= 7	n= 7	
		Urban	5:00	4:40	5:40	4:30	5:00	5:10	4:32
			n= 112	n= 31	n= 21	n= 24	n= 21	n= 15	
		Interstate	7:30	7:30	9:30	8:40	6:30	5:50	7:32
			n= 65	n= 16	n= 13	n= 14	n= 9	n= 13	
	ERF	Rural	15:00	15:00	8:50	19:00	11:00	8:10	10:02
			n= 21	n= 4	n= 5	n= 4	n= 3	n= 5	
		Urban	12:40	13:00	12:40	10:30	22:40	15:30	9:42
			n= 66	n= 16	n= 12	n= 13	n= 14	n= 11	
		Interstate	10:22	12:40	9:00	10:20	14:00	8:50	10:52
			n= 41	n= 11	n= 6	n= 11	n= 6	n= 7	
Total Response Time	1st Due	Rural	9:00	10:10	8:30	9:00	9:00	7:40	8:10
			n= 45	n= 8	n= 11	n= 12	n= 7	n= 7	
		Urban	7:40	7:10	9:50	7:30	8:00	7:30	7:10
			n= 116	n= 31	n= 22	n= 25	n= 22	n= 16	
		Interstate	9:40	10:20	12:30	12:00	8:30	9:40	10:10
			n= 68	n= 16	n= 13	n= 15	n= 10	n= 14	
	ERF	Rural	16:40	16:40	11:50	21:00	13:20	10:00	12:40
			n= 21	n= 4	n= 5	n= 4	n= 3	n= 5	
		Urban	15:30	16:20	15:30	12:20	24:50	17:10	12:20
			n= 67	n= 16	n= 12	n= 13	n= 14	n= 12	
		Interstate	13:20	14:30	10:20	13:20	16:10	11:20	13:30
			n= 41	n= 11	n= 6	n= 11	n= 6	n= 7	

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Appendix D: Fire Suppression Data Tables

The following data tables detail the Department's fire suppression performance from 2012 – 2016 against adopted standards by risk level (low, moderate, and high) and three different planning levels;

- Low Risk:
  - Jurisdiction (CRFD)
  - Station (151, 153, 154, 155)
- Moderate Risk:
  - Jurisdiction (CRFD)

    NOTE: Insufficient data for station or planning zone analysis

- High Risk:
  - Jurisdiction (CRFD)

    NOTE: Insufficient data for station or planning zone analysis

Fire: Low Risk

CRFD									
Fire: Low Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			1:55	2:13	2:28	1:15	1:26	2:06	1:00
			n= 112	n= 19	n= 28	n= 21	n= 18	n= 26	
Turnout			1:59	1:59	1:55	1:44	1:58	3:00	1:38
			n= 111	n= 19	n= 26	n= 22	n= 19	n= 25	
Travel Time	1st Due	Rural	8:30	8:40	6:00	9:20	2:20	8:30	5:32
			n= 24	n= 5	n= 6	n= 5	n= 2	n= 6	
		Urban	4:30	4:50	4:30	6:30	3:20	3:50	4:32
			n= 37	n= 5	n= 10	n= 9	n= 7	n= 6	
		Interstate	5:40	9:20	5:40	7:50	4:10	4:50	7:32
			n= 54	n= 9	n= 12	n= 10	n= 10	n= 13	
	ERF	Rural	7:50	6:30	7:40	5:20	2:40	7:50	4:52
			n= 9	n= 2	n= 3	n= 1	n= 1	n= 2	
		Urban	6:10	N/A	6:00	6:10	7:40	4:50	3:42
			n= 14	n= 0	n= 4	n= 3	n= 3	n= 4	
		Interstate	16:30	16:30	9:00	6:20	8:20	18:00	8:02
			n= 21	n= 3	n= 6	n= 3	n= 2	n= 7	
Total Response Time	1st Due	Rural	11:00	11:00	8:20	11:50	5:20	12:10	8:10
			n= 25	n= 5	n= 7	n= 5	n= 2	n= 6	
		Urban	7:20	7:20	7:10	8:20	5:40	7:30	7:10
			n= 37	n= 5	n= 10	n= 9	n= 7	n= 6	
		Interstate	9:50	12:40	9:00	9:50	6:50	12:30	10:10
			n= 56	n= 9	n= 12	n= 10	n= 10	n= 15	
	ERF	Rural	10:00	8:40	8:50	7:10	5:30	10:00	7:30
			n= 9	n= 2	n= 3	n= 1	n= 1	n= 2	
		Urban	8:20	N/A	7:30	8:20	9:20	6:50	6:20
			n= 14	n= 0	n= 4	n= 3	n= 3	n= 4	
		Interstate	18:30	18:30	11:10	8:00	10:30	22:00	10:40
			n= 21	n= 3	n= 6	n= 3	n= 2	n= 7	
If Incident count (n=) is less than 10, a maximum time is reported									

Station 151									
Fire: Low Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			2:13	2:13	4:03	1:08	1:26	3:11	1:00
			n= 64	n= 15	n= 13	n= 10	n= 13	n= 13	
Turnout			1:59	1:59	1:55	1:44	1:58	2:37	1:38
			n= 60	n= 15	n= 12	n= 9	n= 13	n= 11	
Travel Time	1st Due	Rural	8:40	8:40	3:20	1:50	0:10	4:00	5:32
			n= 9	n= 4	n= 2	n= 1	n= 1	n= 1	
		Urban	6:30	2:40	7:10	6:30	2:50	1:30	4:32
			n= 17	n= 4	n= 4	n= 4	n= 3	n= 2	
		Interstate	7:00	9:20	7:30	8:10	7:00	5:00	7:32
			n= 37	n= 7	n= 7	n= 6	n= 9	n= 8	
	ERF	Rural	7:40	6:30	7:40	N/A	2:40	N/A	4:52
			n= 5	n= 2	n= 2	n= 0	n= 1	n= 0	
		Urban	8:40	5:20	6:00	8:40	N/A	4:50	3:42
			n= 8	n= 1	n= 3	n= 2	n= 0	n= 2	
		Interstate	16:30	16:30	9:00	5:30	11:50	16:30	8:02
			n= 16	n= 2	n= 3	n= 3	n= 3	n= 5	
Total Response Time	1st Due	Rural	6:00	11:00	5:50	3:40	3:00	6:00	8:10
			n= 10	n= 4	n= 3	n= 1	n= 1	n= 1	
		Urban	8:20	5:00	9:10	8:20	5:20	5:10	7:10
			n= 17	n= 4	n= 4	n= 4	n= 3	n= 2	
		Interstate	10:30	12:40	10:50	10:30	9:00	12:30	10:10
			n= 39	n= 7	n= 7	n= 6	n= 9	n= 10	
	ERF	Rural	8:50	8:40	8:50	N/A	5:30	N/A	7:30
			n= 4	n= 1	n= 2	n= 0	n= 1	n= 0	
		Urban	10:30	7:10	7:40	10:30	N/A	7:20	6:20
			n= 8	n= 1	n= 3	n= 2	n= 0	n= 2	
		Interstate	18:30	18:30	11:00	8:00	13:40	19:00	10:40
			n= 16	n= 2	n= 3	n= 3	n= 3	n= 5	
If Incident count (n=) is less than 10, a maximum time is reported									

Station 153									
Fire: Low Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			0:59	N/A	0:44	1:15	0:59	0:18	1:00
			n= 9	n= 0	n= 2	n= 4	n= 2	n= 1	
Turnout			1:45	N/A	1:43	1:45	1:42	1:49	1:38
			n= 9	n= 0	n= 2	n= 4	n= 2	n= 1	
Travel Time	1st Due	Rural	9:20	N/A	6:00	9:20	N/A	4:40	5:32
			n= 4	n= 0	n= 2	n= 1	n= 0	n= 1	
		Urban	3:40	N/A	N/A	3:40	3:10	N/A	4:32
			n= 5	n= 0	n= 0	n= 3	n= 2	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	7:32
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	11:50	N/A	8:20	11:50	N/A	6:00	4:52
			n= 3	n= 0	n= 1	n= 1	n= 0	n= 1	
		Urban	6:30	N/A	N/A	6:30	5:40	N/A	3:42
			n= 5	n= 0	n= 0	n= 3	n= 2	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	8:02
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	14:10	N/A	6:00	14:10	N/A	7:50	8:10
			n= 3	n= 0	n= 1	n= 1	n= 0	n= 1	
		Urban	6:10	N/A	N/A	6:10	4:50	N/A	7:10
			n= 2	n= 0	n= 0	n= 1	n= 1	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	10:10
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	16:40	N/A	7:40	16:40	N/A	10:00	7:30
			n= 3	n= 0	n= 1	n= 1	n= 0	n= 1	
		Urban	8:20	N/A	N/A	8:20	7:30	N/A	6:20
			n= 2	n= 0	n= 0	n= 1	n= 1	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	10:40
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
If Incident count (n=) is less than 10, a maximum time is reported									

Station 154									
Fire: Low Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			1:40	1:33	1:43	0:51	1:31	2:03	1:00
			n= 27	n= 4	n= 8	n= 5	n= 2	n= 8	
Turnout			2:19	1:46	2:53	1:53	1:27	3:09	1:38
			n= 29	n= 4	n= 7	n= 7	n= 2	n= 9	
Travel Time	1st Due	Rural	4:10	3:10	2:50	2:40	2:20	8:30	5:32
			n= 10	n= 1	n= 2	n= 2	n= 1	n= 4	
		Urban	4:50	4:50	2:30	3:40	N/A	3:50	4:32
			n= 7	n= 1	n= 2	n= 2	n= 0	n= 2	
		Interstate	4:50	4:10	4:50	7:50	3:10	4:10	7:32
			n= 13	n= 2	n= 4	n= 3	n= 1	n= 3	
	ERF	Rural	8:30	3:50	N/A	N/A	N/A	8:30	4:52
			n= 3	n= 1	n= 0	n= 0	n= 0	n= 2	
		Urban	8:20	N/A	8:20	4:00	N/A	4:40	3:42
			n= 4	n= 0	n= 1	n= 2	n= 0	n= 1	
		Interstate	18:00	6:00	9:00	6:20	4:20	18:00	8:02
			n= 8	n= 1	n= 3	n= 1	n= 1	n= 2	
Total Response Time	1st Due	Rural	9:20	6:30	5:30	4:50	5:20	12:10	8:10
			n= 10	n= 1	n= 2	n= 2	n= 1	n= 4	
		Urban	7:30	7:20	4:30	5:00	N/A	7:30	7:10
			n= 7	n= 1	n= 2	n= 2	n= 0	n= 2	
		Interstate	8:50	6:10	8:50	9:50	4:40	6:10	10:10
			n= 13	n= 2	n= 4	n= 3	n= 1	n= 3	
	ERF	Rural	12:20	6:50	N/A	N/A	N/A	12:20	7:30
			n= 3	n= 1	n= 0	n= 0	n= 0	n= 2	
		Urban	10:20	N/A	10:20	5:20	N/A	6:50	6:20
			n= 4	n= 0	n= 1	n= 2	n= 0	n= 1	
		Interstate	22:00	7:30	11:10	7:40	6:00	22:00	10:40
			n= 8	n= 1	n= 3	n= 1	n= 1	n= 2	
If Incident count (n=) is less than 10, a maximum time is reported									

Station 155									
Fire Low Risk			2013 - 2017	2017	2016	2015	2014	2013	Benchmark
Call Processing			1:33	N/A	1:12	3:40	0:24	1:33	1:00
			n= 13	n= 0	n= 5	n= 2	n= 2	n= 4	
Turnout			1:56	N/A	1:29	1:08	1:58	1:56	1:38
			n= 13	n= 0	n= 5	n= 2	n= 2	n= 4	
Travel Time	1st Due	Rural	4:20	N/A	N/A	4:20	N/A	N/A	5:32
			n= 1	n= 0	n= 0	n= 1	n= 0	n= 0	
		Urban	4:30	N/A	4:30	N/A	3:20	3:40	4:32
			n= 7	n= 0	n= 3	n= 0	n= 2	n= 2	
		Interstate	4:00	N/A	3:30	1:00	N/A	4:00	7:32
			n= 4	n= 0	n= 1	n= 1	n= 0	n= 2	
	ERF	Rural	5:20	N/A	N/A	5:20	N/A	N/A	4:52
			n= 1	n= 0	n= 0	n= 1	n= 0	n= 0	
		Urban	7:40	N/A	5:00	N/A	7:40	3:40	3:42
			n= 6	n= 0	n= 2	n= 0	n= 2	n= 2	
		Interstate	5:00	N/A	N/A	N/A	N/A	5:00	8:02
			n= 2	n= 0	n= 0	n= 0	n= 0	n= 2	
Total Response Time	1st Due	Rural	6:10	N/A	N/A	6:10	N/A	N/A	8:10
			n= 1	n= 0	n= 0	n= 1	n= 0	n= 0	
		Urban	7:10	N/A	7:10	N/A	5:10	6:30	7:10
			n= 6	n= 0	n= 2	n= 0	n= 2	n= 2	
		Interstate	6:00	N/A	N/A	N/A	N/A	6:00	10:10
			n= 2	n= 0	n= 0	n= 0	n= 0	n= 2	
	ERF	Rural	7:10	N/A	N/A	7:10	N/A	N/A	7:30
			n= 1	n= 0	n= 0	n= 1	n= 0	n= 0	
		Urban	9:20	N/A	7:10	N/A	9:20	6:50	6:20
			n= 6	n= 0	n= 2	n= 0	n= 2	n= 2	
		Interstate	7:10	N/A	N/A	N/A	N/A	7:10	10:40
			n= 2	n= 0	n= 0	n= 0	n= 0	n= 2	
If Incident count (n=) is less than 10, a maximum time is reported									

Fire: Moderate Risk

CRFD											
Fire: Moderate Risk			2013 - 2017	2017[2] Nov - Dec	2017[2] Jan - Oct	2016	2015	2014	2013[1] April - Dec	2013[1] Jan - April	2018 - 2022 Benchmark
Call Processing			1:41	1:49		1:38	1:12	1:08	2:14		1:00
			n= 83	n= 19		n= 18	n= 17	n= 16	n= 13		
Turnout			2:15	2:02		2:03	1:42	2:41	2:36		1:38
			n= 80	n= 19		n= 18	n= 17	n= 14	n= 12		
Travel Time	1st Due	Rural	7:20	7:40		6:00	7:20	6:50	5:20		5:32
			n= 17	n= 4		n= 2	n= 4	n= 1	n= 5		
		Urban	5:10	5:10		4:50	4:00	5:10	6:10		4:32
			n= 64	n= 15		n= 16	n= 12	n= 13	n= 8		
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	13:40	N/A	13:10	11:22
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 1	n= 0	n= 2	
		Urban	11:10	11:10	17:00	12:30	10:40	16:10	11:00	25:00	9:22
			n= 2	n= 2	n= 1	n= 1	n= 3	n= 4	n= 1	n= 2	
Total Response Time	1st Due	Rural	9:20	10:00		8:40	9:20	9:10	8:50		8:10
			n= 17	n= 4		n= 2	n= 5	n= 1	n= 5		
		Urban	7:20	7:00		8:00	7:00	7:20	8:20		7:10
			n= 67	n= 15		n= 16	n= 13	n= 15	n= 8		
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	15:50	N/A	16:30	14:00
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 1	n= 0	n= 2	
		Urban	12:30	12:30	18:50	15:30	13:00	18:50	13:00	27:10	12:00
			n= 2	n= 2	n= 1	n= 1	n= 2	n= 3	n= 1	n= 2	
Note 1: April 1, 2013 response plans were updated to reflect the 2011 Standards of Cover Critical Task Analysis, adding an additional medic unit to all structure fire responses to serve as an initial rapid intervention team (IRIT).											
Note 2: July 1, 2017 response plans were updated to include an additional (3rd) engine company to fulfill the RIT function											
If Incident count (n=) is less than 10, a maximum time is reported											

Fire: High Risk

CRFD									
Fire: High Risk			2013 - 2017	2017[1] Nov - Dec	2017 Jan - Oct	2016	2015	2014	2013	2018 - 2022 Benchmark
Call Processing			2:03	1:23		1:00	2:03	1:52	2:20	1:00
			n= 55	n=	9	n= 1	n= 6	n= 14	n= 15	
Turnout			2:16	2:08		2:16	3:26	2:25	2:12	1:38
			n= 56	n=	10	n= 12	n= 7	n= 13	n= 14	
Travel Time	1st Due	Rural	2:50	5:00		3:10	3:20	2:50	3:50	5:32
			n= 13	n=	1	n= 0	n= 0	n= 1	n= 2	
		Urban	5:10	6:10		5:40	5:10	3:50	4:00	4:32
			n= 43	n=	9	n= 6	n= 6	n= 11	n= 11	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	10:00	N/A	11:22
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 1	n= 0	
		Urban	14:50	14:50	11:30	10:00	9:00	21:40	11:00	13:42
			n= 2	n= 2	n= 2	n= 1	n= 2	n= 5	n= 1	
Total Response Time	1st Due	Rural	7:00	8:00		6:00	5:00	6:50	7:00	8:10
			n= 14	n=		n= 6	n= 1	n= 2	n= 2	
		Urban	7:40	8:30		8:40	10:10	7:20	7:30	7:10
			n= 46	n=	9	n= 7	n= 6	n= 10	n= 14	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	12:20	N/A	14:00
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 1	n= 0	
		Urban	16:40	16:40	13:40	11:10	11:00	25:20	28:10	16:20
			n= 2	n= 2	n= 2	n= 2	n= 2	n= 5	n= 2	
If Incident count (n=) is less than 10, a maximum time is reported										
Note 1: July 1, 2017 response plans were updated to include an additional (4th) engine company to fulfill the RIT function										
All 2013-2017 ERF time reported are based on the updated ERF										

Appendix E: Hazardous Materials Data Tables

The following data tables detail the Department's hazardous materials performance from 2012 – 2016 against adopted standards by risk level (low, moderate, and high) and three different planning levels;

- HAZMAT Risk: Low
  - Jurisdiction (CRFD)

    NOTE: Insufficient data for station or planning zone analysis

- HAZMAT Risk: Moderate
  - Jurisdiction (CRFD)

    NOTE: Insufficient data for station or planning zone analysis

- HAZMAT High: High
  - Jurisdiction (CRFD)

    NOTE: Insufficient data for station or planning zone analysis

HAZMAT Risk: Low

CRFD									
HAZMAT: Low Risk			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Call Processing			1:38	1:24	2:04	1:39	1:43	1:24	1:00
			n= 455	n= 91	n= 85	n= 78	n= 118	n= 83	
Turnout			2:15	1:58	2:04	2:01	2:27	2:28	1:38
			n= 464	n= 92	n= 85	n= 82	n= 118	n= 87	
Travel Time	1st Due	Rural	6:50	7:00	7:50	6:20	7:20	5:00	5:32
			n= 135	n= 30	n= 22	n= 20	n= 34	n= 29	
		Urban	6:10	5:30	6:10	6:10	6:30	6:20	4:32
			n= 331	n= 61	n= 65	n= 64	n= 84	n= 57	
		Interstate	8:20	8:20	N/A	8:10	0:40	3:20	7:32
			n= 7	n= 2	n= 0	n= 3	n= 1	n= 1	
	ERF	Rural	10:30	11:20	10:00	8:40	11:50	8:30	8:42
			n= 79	n= 10	n= 17	n= 10	n= 22	n= 20	
		Urban	9:40	10:00	9:50	10:10	9:20	10:00	8:02
			n= 222	n= 38	n= 40	n= 41	n= 62	n= 41	
		Interstate	10:40	N/A	N/A	11:40	N/A	N/A	9:22
			n= 2	n= 0	n= 0	n= 2	n= 0	n= 0	
Total Response Time	1st Due	Rural	10:00	10:00	10:20	8:10	9:50	7:30	8:10
			n= 136	n= 30	n= 22	n= 20	n= 35	n= 29	
		Urban	9:00	7:40	9:20	9:10	9:20	9:00	7:10
			n= 332	n= 61	n= 65	n= 65	n= 84	n= 57	
		Interstate	10:40	10:40	N/A	9:40	3:30	7:10	10:10
			n= 7	n= 2	n= 0	n= 3	n= 1	n= 1	
	ERF	Rural	12:50	12:50	12:10	10:40	14:00	11:00	11:20
			n= 79	n= 10	n= 17	n= 10	n= 22	n= 20	
		Urban	12:00	11:30	12:20	12:10	11:10	12:30	10:40
			n= 222	n= 38	n= 40	n= 41	n= 62	n= 41	
		Interstate	13:10	N/A	N/A	13:10	N/A	N/A	12:00
			n= 2	n= 0	n= 0	n= 2	n= 0	n= 0	
If the incident count (n=) is less than 10, a maximum time is reported									

HAZMAT Risk: Moderate

CRFD									
HAZMAT: Moderate Risk			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Call Processing			1:33	1:31	1:54	1:31	1:11	1:50	1:00
			n= 104	n= 28	n= 19	n= 19	n= 20	n= 18	
Turnout			2:34	2:36	1:58	2:30	2:44	2:46	1:38
			n= 106	n= 28	n= 21	n= 18	n= 20	n= 19	
Travel Time	1st Due	Rural	7:40	8:00	8:20	10:50	6:10	5:40	5:32
			n= 28	n= 4	n= 7	n= 7	n= 4	n= 6	
		Urban	6:00	5:20	4:50	6:40	6:30	5:40	4:32
			n= 75	n= 23	n= 14	n= 12	n= 15	n= 11	
		Interstate	5:10	N/A	N/A	N/A	5:10	N/A	7:32
			n= 1	n= 0	n= 0	n= 0	n= 1	n= 0	
	ERF	Rural	19:20	11:40	12:30	23:20	10:50	19:20	10:52
			n= 15	n= 2	n= 3	n= 4	n= 2	n= 4	
		Urban	11:40	11:40	11:40	9:50	10:50	21:00	9:42
			n= 43	n= 13	n= 8	n= 5	n= 11	n= 6	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	9:52
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	10:40	11:10	10:40	15:40	14:30	8:40	8:10
			n= 30	n= 5	n= 7	n= 7	n= 4	n= 7	
		Urban	9:10	9:10	8:00	8:20	9:30	8:40	7:10
			n= 76	n= 23	n= 14	n= 12	n= 16	n= 11	
		Interstate	7:20	N/A	N/A	N/A	7:20	N/A	10:10
			n= 1	n= 0	n= 0	n= 0	n= 1	n= 0	
	ERF	Rural	21:40	13:20	13:50	28:00	13:20	21:40	13:30
			n= 15	n= 2	n= 3	n= 4	n= 2	n= 4	
		Urban	14:10	14:10	13:50	10:30	13:30	25:20	12:20
			n= 43	n= 13	n= 8	n= 5	n= 11	n= 6	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	12:30
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
If the incident count (n=) is less than 10, a maximum time is reported									

HAZMAT Risk: High

CRFD									
HAZMAT: High Risk			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Call Processing			2:04	1:48	3:28	1:44	N/A	1:38	1:00
			n= 16	n= 6	n= 4	n= 2	n= 0	n= 4	
Turnout			2:04	2:04	1:52	1:35	N/A	3:54	1:38
			n= 14	n= 6	n= 4	n= 2	n= 0	n= 2	
Travel Time	1st Due	Rural	6:40	2:50	6:40	3:40	N/A	3:20	5:32
			n= 5	n= 2	n= 1	n= 1	n= 0	n= 1	
		Urban	5:20	5:00	5:20	4:50	N/A	0:20	4:32
			n= 9	n= 4	n= 3	n= 1	n= 0	n= 1	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	7:32
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	13:30	N/A	N/A	11:50	N/A	13:30	10:52
			n= 3	n= 0	n= 0	n= 1	n= 0	n= 2	
		Urban	9:50	N/A	9:50	N/A	N/A	N/A	
			n= 1	n= 0	n= 1	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	12:00	6:10	12:00	6:30	N/A	8:10	8:10
			n= 6	n= 2	n= 1	n= 1	n= 0	n= 2	
		Urban	8:10	7:50	8:10	7:50	N/A	3:50	7:10
			n= 10	n= 4	n= 3	n= 1	n= 0	n= 2	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	10:10
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	16:40	N/A	N/A	14:10	N/A	16:40	13:30
			n= 3	n= 0	n= 0	n= 1	n= 0	n= 2	
		Urban	12:20	N/A	12:20	N/A	N/A	N/A	
			n= 1	n= 0	n= 1	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
If the incident count (n=) is less than 10, a maximum time is reported									

Appendix F: Wildland Fire Suppression Data Tables

The following data tables detail the Department's wildland fire suppression performance from 2012 – 2016 against adopted standards by risk level (low, moderate, and high) and three different planning levels;

- Wildland: Low Risk
  - Jurisdiction (CRFD)

    NOTE: Insufficient data for station or planning zone analysis

- Wildland: Moderate Risk
  - Jurisdiction (CRFD)

    NOTE: Insufficient data for station or planning zone analysis

- Wildland: High Risk
  - Jurisdiction (CRFD)

    NOTE: Insufficient data for station or planning zone analysis

Wildland: Low Risk

CRFD										
Wildland: Low Risk			2013 - 2017	2017	2016	2015	2014	2013	2012	2018 - 2022 Benchmark
Call Processing			2:21	1:44	2:17	1:57	2:19	2:43	2:45	1:00
			n= 110	n= 20	n= 25	n= 15	n= 18	n= 32	n= 50	
Turnout			2:15	2:08	1:49	2:16	2:07	2:56	2:39	1:38
			n= 115	n= 22	n= 26	n= 16	n= 18	n= 33	n= 40	
Travel Time	1st Due	Rural	7:40	10:30	6:30	7:40	6:10	6:50	8:30	5:32
			n= 27	n= 9	n= 6	n= 4	n= 2	n= 6	n= 19	
		Urban	7:30	5:40	7:30	8:40	10:30	6:30	7:00	4:32
			n= 85	n= 11	n= 20	n= 12	n= 17	n= 25	n= 28	
		Interstate	8:50	4:10	5:20	N/A	N/A	8:50	N/A	7:32
			n= 5	n= 1	n= 1	n= 0	n= 0	n= 3	n= 0	
	ERF	Rural	14:40	8:40	N/A	N/A	N/A	14:40	10:50	8:12
			n= 2	n= 2	n= 0	n= 0	n= 0	n= 1	n= 2	
		Urban	9:10	6:40	9:10	N/A	9:10	22:10	7:10	8:12
			n= 10	n= 1	n= 2	n= 0	n= 2	n= 5	n= 6	
		Interstate	9:50	N/A	N/A	N/A	N/A	9:50	N/A	8:12
			n= 2	n= 0	n= 0	n= 0	n= 0	n= 2	n= 0	
Total Response Time	1st Due	Rural	10:30	10:30	11:20	10:20	8:30	10:30	12:40	8:10
			n= 27	n= 9	n= 6	n= 4	n= 2	n= 6	n= 20	
		Urban	11:10	9:10	11:40	11:40	11:20	9:00	9:20	7:10
			n= 88	n= 11	n= 21	n= 12	n= 17	n= 27	n= 32	
		Interstate	18:40	18:40	8:10	7:30	N/A	12:50	N/A	10:10
			n= 6	n= 1	n= 1	n= 1	n= 0	3 0	n= 0	
	ERF	Rural	17:30	10:30	N/A	N/A	N/A	17:30	13:30	10:50
			n= 3	n= 2	n= 0	n= 0	n= 0	n= 1	n= 2	
		Urban	12:20	9:00	12:10	N/A	12:20	28:40	10:40	10:50
			n= 10	n= 1	n= 2	n= 0	n= 2	n= 5	n= 6	
		Interstate	12:50	N/A	N/A	N/A	N/A	12:50	N/A	10:50
			n= 2	n= 0	n= 0	n= 0	n= 0	n= 2	n= 0	

Wildland: Moderate Risk

CRFD										
Wildland: Moderate Risk			2013 - 2017	2017	2016	2015	2014 (Post CTA Update)	2014 (Pre CTA Update)	2013	2018 - 2022 Benchmark
Call Processing			2:38	3:01	2:45	2:01	1:53		2:54	1:00
			n= 74	n= 20	n= 15	n= 16	n=	13	n= 10	
Turnout			2:44	2:17	2:12	2:49	3:08		4:07	1:38
			n= 71	n= 19	n= 15	n= 15	n=	13	n= 9	
Travel Time	1st Due	Rural	7:00	9:20	6:50	6:20	11:20		4:30	5:32
			n= 27	n= 8	n= 7	n= 4	n=	4	n= 4	
		Urban	5:00	6:10	5:00	3:10	5:20		3:50	4:32
			n= 38	n= 12	n= 5	n= 10	n=	7	n= 4	
		Interstate	5:30	4:10	3:50	8:10	5:30		2:40	7:32
			n= 10	n= 1	n= 3	n= 2	n=	3	n= 1	
	ERF	Rural	18:20	9:50	13:10	9:10	18:20	N/A	N/A	8:52
			n= 9	n= 2	n= 4	n= 2	n= 1	n= 0	n= 0	
		Urban	10:00	7:00	7:20	10:00	8:00	N/A	N/A	7:52
			n= 9	n= 2	n= 2	n= 3	n= 2	n= 0	n= 0	
		Interstate	13:20	N/A	N/A	13:20	5:50	N/A	N/A	13:22
			n= 2	n= 0	n= 0	n= 1	n= 1	n= 0	n= 0	
Total Response Time	1st Due	Rural	11:50	11:50	8:40	10:40	14:00		9:30	8:10
			n= 26	n= 7	n= 7	n= 4	n=	4	n= 4	
		Urban	8:50	9:20	9:00	6:30	9:20		7:30	7:10
			n= 39	n= 12	n= 5	n= 10	n=	7	n= 5	
		Interstate	9:10	7:10	6:30	12:10	9:10		8:50	10:10
			n= 11	n= 1	n= 3	n= 3	n=	3	n= 1	
	ERF	Rural	20:40	13:00	15:30	12:10	20:40	N/A	N/A	11:30
			n= 9	n= 2	n= 4	n= 2	n= 1	n= 0	n= 0	
		Urban	12:20	10:10	8:30	12:20	11:30	N/A	N/A	10:30
			n= 9	n= 2	n= 2	n= 3	n= 2	n= 0	n= 0	
		Interstate	17:20	N/A	N/A	17:20	9:10	N/A	N/A	16:00
			n= 2	n= 0	n= 0	n= 1	n= 1	n= 0	n= 0	

Note 1: April 1, 2014 response plans were updated to reflect the 2011 Standards of Cover Critical Task Analysis, adding a medic unit to serve as lookout or Medic Group as determined by the IC.

If Incident count (n=) is less than 10, a maximum time is reported

Wildland: High Risk

CRFD										
Wildland: High Risk			2013 - 2017	2017	2016	2015	2014 (Post CTA Update)	2014 (Pre CTA Update)	2013	2018 - 2022 Benchmark
Call Processing			1:24	1:18	3:45	1:24	1:16		1:36	1:00
			n= 30	n= 8	n= 8	n= 2	n=	4	n= 8	
Turnout			2:48	2:15	2:48	2:32	4:40		2:28	1:38
			n= 30	n= 8	n= 8	n= 3	n=	4	n= 7	
Travel Time	1st Due	Rural	9:40	N/A	7:30	N/A	7:50		9:40	5:32
			n= 8	n= 0	n= 3	n= 0	n=	1	n= 4	
		Urban	5:50	9:00	5:50	2:50	5:50		5:50	4:32
			n= 19	n= 6	n= 5	n= 2	n=	3	n= 3	
		Interstate	5:10	5:10	N/A	N/A	N/A		N/A	7:32
			n= 2	n= 2	n= 0	n= 0	n=	0	n= 0	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14:02
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	18:10	N/A	18:10	N/A	N/A	N/A	15:10	10:52
			n= 1	n= 0	n= 1	n= 0	n= 0	n= 0	n= 1	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	13:30	N/A	9:40	N/A	13:50		12:00	8:10
			n= 8	n= 0	n= 3	n= 0	n=	1	n= 4	
		Urban	10:50	12:00	7:00	6:00	10:50		13:40	7:10
			n= 21	n= 6	n= 5	n= 3	n=	3	n= 4	
		Interstate	7:50	7:50	N/A	N/A	N/A		N/A	10:10
			n= 2	n= 2	n= 0	n= 0	n=	0	n= 0	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16:40
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	19:40	N/A	19:40	N/A	N/A	N/A	16:30	13:30
			n= 1	n= 0	n= 1	n= 0	n= 0	n= 0	n= 1	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	

Note 1: April 1, 2014 response plans were updated to reflect the 2011 Standards of Cover Critical Task Analysis, adding a medic unit to serve as lookout or Medic Group as determined by the IC.

If Incident count (n=) is less than 10, a maximum time is reported

Appendix G: Technical Rescue Data Tables

The following data tables detail the Department's technical rescue performance from 2012 – 2016 against adopted standards by risk level (low, moderate, and high) and three different planning levels;

- Tech Rescue: Low Risk
  - Jurisdiction (CRFD)

    NOTE: Insufficient data for station or planning zone analysis

- Tech Rescue: Moderate Risk
  - Jurisdiction (CRFD)

    NOTE: Insufficient data for station or planning zone analysis

- Tech Rescue: High Risk
  - Jurisdiction (CRFD)

    NOTE: Insufficient data for station or planning zone analysis

Technical Rescue: Low Risk

CRFD									
Tech Rescue: Low Risk			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Call Processing			1:57	N/A	0:53	1:52	1:31	2:00	1:00
			n= 11	n= 0	n= 11:27	n= 4	n= 4	n= 2	
Turnout			2:00	N/A	0:19	2:05	1:49	2:00	1:38
			n= 10	n= 0	n= 1	n= 3	n= 4	n= 2	
Travel Time	1st Due	Rural	10:40	N/A	N/A	4:40	10:40	2:00	5:32
			n= 9	n= 0	n= 0	n= 4	n= 4	n= 1	
		Urban	3:20	N/A	3:20	N/A	N/A	2:00	4:32
			n= 2	n= 0	n= 1	n= 0	n= 0	n= 2	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	7:32
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	12:40	N/A	N/A	7:50	12:40	6:00	8:10
			n= 9	n= 0	n= 0	n= 4	n= 4	n= 1	
		Urban	5:40	N/A	4:30	N/A	N/A	5:40	7:10
			n= 2	n= 0	n= 1	n= 0	n= 0	n= 2	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	10:10
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	N/A	N/A
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
If the incident count (n=) is less than 10, a maximum time is reported									

Tech Rescue: Moderate Risk

CRFD									
Tech Rescue: Moderate Risk			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Call Processing			1:41	1:49	1:38	1:12	1:08	2:14	1:00
			n= 83	n= 9	n= 18	n= 17	n= 16	n= 13	
Turnout			2:15	2:02	2:03	1:42	2:41	2:36	1:38
			n= 80	n= 19	n= 18	n= 17	n= 14	n= 12	
Travel Time	1st Due	Rural	7:20	7:40	6:00	7:20	6:50	5:20	6:42
			n= 17	n= 4	n= 2	n= 5	n= 1	n= 5	
		Urban	5:10	5:10	4:50	4:00	5:10	6:10	5:12
			n= 64	n= 15	n= 16	n= 12	n= 13	n= 8	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	7:52
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	N/A	10:52
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	10:50	N/A	N/A	10:50	N/A	N/A	
			n= 1	n= 0	n= 0	n= 1	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	9:20	10:00	8:40	9:20	9:10	8:50	9:20
			n= 17	n= 4	n= 2	n= 5	n= 1	n= 5	
		Urban	7:20	7:00	8:00	7:00	7:20	8:20	7:50
			n= 67	n= 15	n= 16	n= 13	n= 15	n= 8	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	10:30
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	N/A	13:30
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	12:10	N/A	N/A	12:10	N/A	N/A	
			n= 1	n= 0	n= 0	n= 1	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
If the incident count (n=) is less than 10, a maximum time is reported									

Tech Rescue: High Risk

CRFD									
Tech Rescue: High Risk			2013 - 2017	2017	2016	2015	2014	2013	2018 - 2022 Benchmark
Call Processing			3:01	1:16	0:56	0:45	3:01	2:07	1:00
			n= 5	n= 1	n= 1	n= 1	n= 1	n= 1	
Turnout			1:41	0:20	0:00	1:00	1:32	1:41	1:38
			n= 4	n= 1	n= 1	n= 1	n= 1	n= 1	
Travel Time	1st Due	Rural	4:00	4:00	N/A	N/A	N/A	3:30	5:32
			n= 2	n= 1	n= 0	n= 0	n= 0	n= 1	
		Urban	4:30	N/A	0:10	4:30	0:10	N/A	4:32
			n= 3	n= 0	n= 1	n= 1	n= 1	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	7:32
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	N/A	10:52
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
Total Response Time	1st Due	Rural	7:20	5:40	N/A	N/A	N/A	7:20	8:10
			n= 2	n= 1	n= 0	n= 0	n= 0	n= 1	
		Urban	6:20	N/A	1:00	6:20	4:40	N/A	7:10
			n= 3	n= 0	n= 1	n= 1	n= 1	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	10:10
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
	ERF	Rural	N/A	N/A	N/A	N/A	N/A	N/A	13:30
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Urban	N/A	N/A	N/A	N/A	N/A	N/A	
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
		Interstate	N/A	N/A	N/A	N/A	N/A	N/A	
			n= 0	n= 0	n= 0	n= 0	n= 0	n= 0	
If the incident count (n=) is less than 10, a maximum time is reported									