

# Statesville Fire Department

## 2026 Community Risk Assessment / Standards of Cover



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## Introduction

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This document serves as the City of Statesville Fire Department's (SFD) Standards of Cover (SOC) and Community Risk Assessment. The Commission on Fire Accreditation International (CFAI) defines the process, known as deployment analysis, as "a written procedure which determines the distribution and concentration of fixed and mobile resources of an organization." The purpose of completing this document is to assist the agency in ensuring a safe and effective response for all-hazards. It is the intention of the SFD to meet the standards found in the 6th edition of the CFAI Standards of Cover Guidelines.

To update and create this document, the SFD Accreditation Manager assigned a team to research, study, and evaluate all aspects of the Department. The team's work produced a thorough and accurate report. This report will begin with an overview of both the community and the Department. Following this overview, the agency will discuss services provided, risk assessment, current deployment and performance, and the plan for maintaining and improving response capabilities.



## **Executive Summary**

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The Statesville Fire Department (SFD) is proud to present the 2026 Standard of Cover (SOC), a comprehensive document that highlights our unwavering commitment to delivering exceptional service to our community. Since achieving accreditation through the Center for Public Safety Excellence (CPSE) in 2014, the SFD has consistently demonstrated its dedication to operational excellence and community safety. In February 2024, we successfully achieved reaccreditation, further solidifying our commitment to the continuous improvement process.

Through the accreditation process, the SFD has achieved significant advancements, including enhanced operational efficiency, improved safety practices, and strengthened community engagement. These accomplishments, combined with the City of Statesville's dedication to excellence, contributed to the Department earning a Class 1 ISO rating. The 2026 SOC builds on these achievements, providing a strategic framework for future growth and service enhancement.

The SFD is a municipal fire department operating four fire stations, each station is staffed with an engine company, and one ladder company is located at Station One. The City of Statesville covers 31.07 square miles and serves an estimated population of 31,693, based on the 2024 U.S. Census QuickFacts estimates.

The SOC outlines the Department's capabilities, resources, and response strategies while assessing community risks and hazards. It establishes a comprehensive framework for understanding and addressing these risks, ensuring the Department's strategies align with the needs of the community. The SOC emphasizes that decisions about resource allocation and service levels must be grounded in a thorough and consistent risk assessment model, empowering community leaders to make informed decisions.

Our leadership team firmly believes that emergency service providers must base their strategies on detailed assessments of community risks. By applying a proven risk assessment methodology, the SFD ensures that its service delivery approach is strategic, effective, and focused on achieving the best outcomes for the community.

The SFD remains steadfast in its mission to serve and protect the residents and visitors of Statesville. Through continuous performance improvement, the Department evaluates service delivery, researches and tests new equipment, and engages in strategic planning. This ensures that the SFD remains a leader in fire suppression, emergency medical response, hazardous materials intervention, technical rescue, and community risk reduction.

Achieving the goals outlined in the SOC will require the support and collaboration of our entire Department, community partners, and stakeholders. Together, we will implement the strategies detailed in this document and strive to continuously improve every aspect of our service.

In closing, the City of Statesville Fire Department is fortunate to have the steadfast support of the Mayor, City Manager, and elected officials. Their backing allows us to evolve, enhance efficiency,



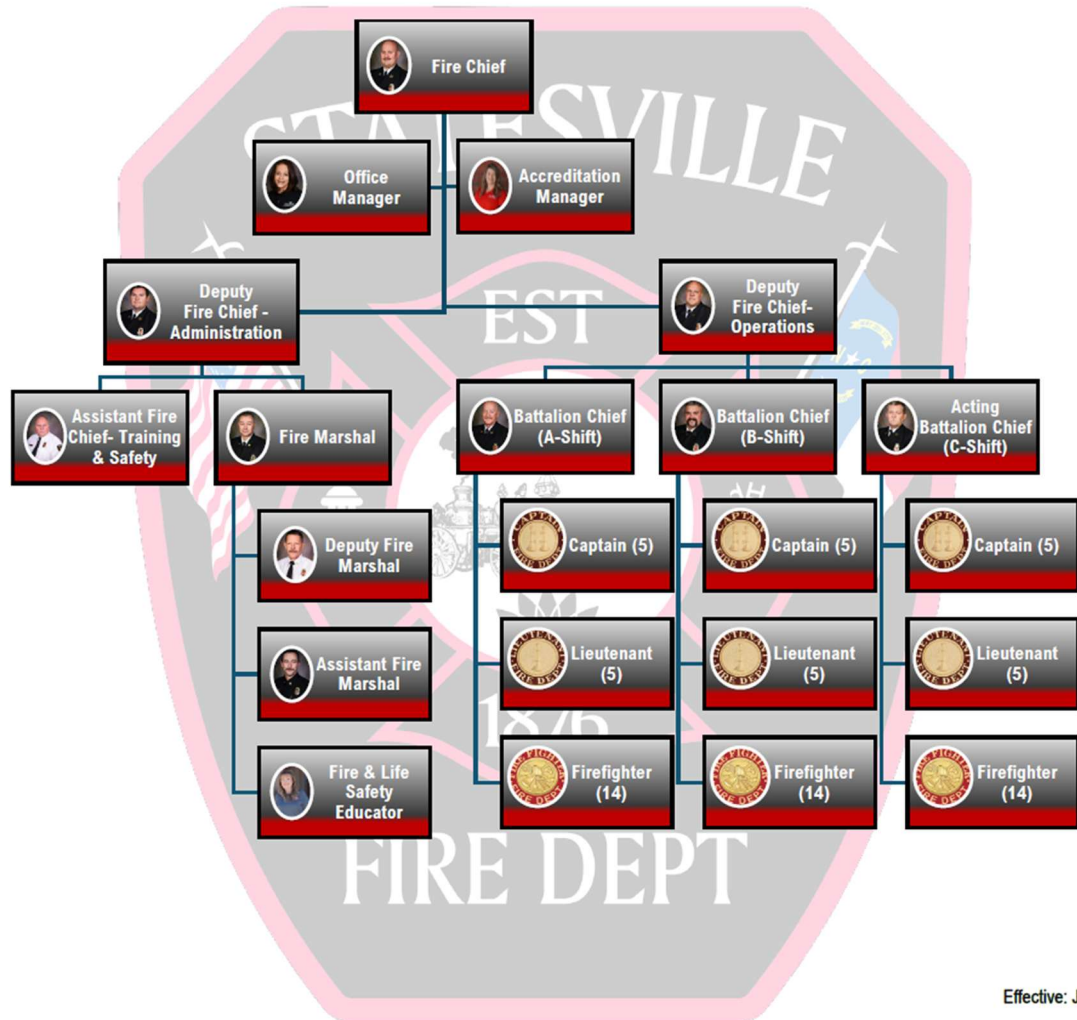
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and improve safety for both our community and our firefighters. Amidst ongoing advancements and changes, one constant remains: the SFD's unwavering dedication to serving the City of Statesville with excellence.

## Organizational Profile and Financial Basis

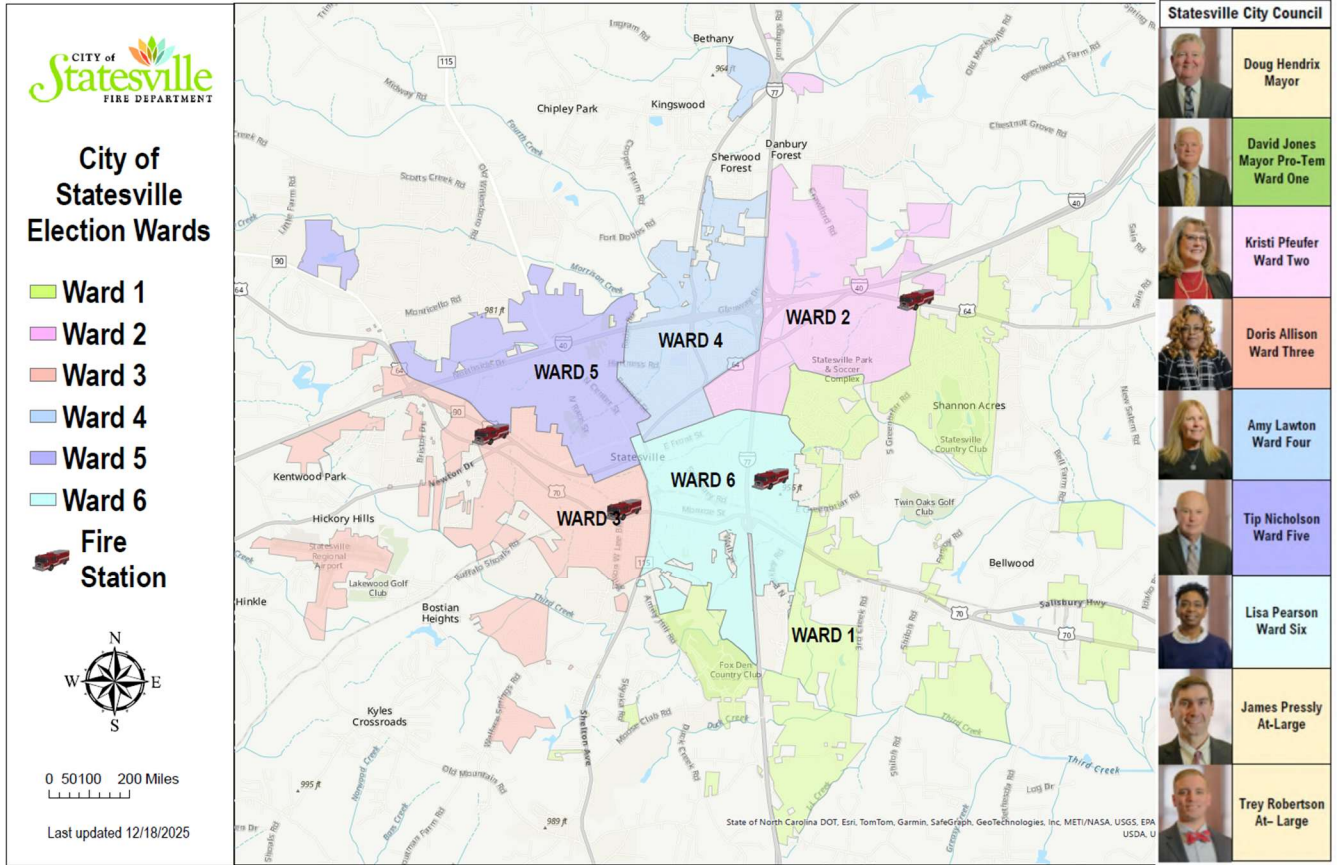
### Organizational Profile

*Chart 1: Fire Department Organization Chart*

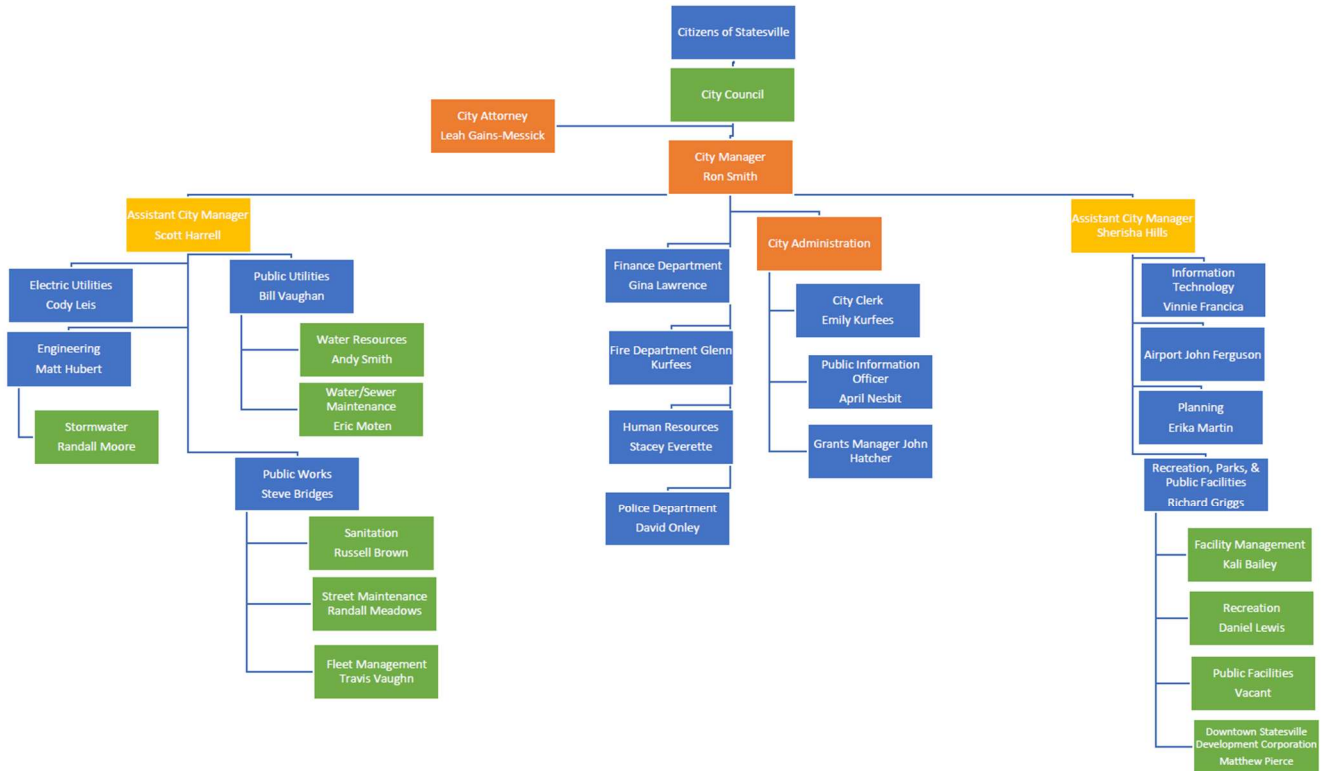


Effective: January 5, 2026

**Map 1: Election Wards**



**Chart 2: City Organization Chart**

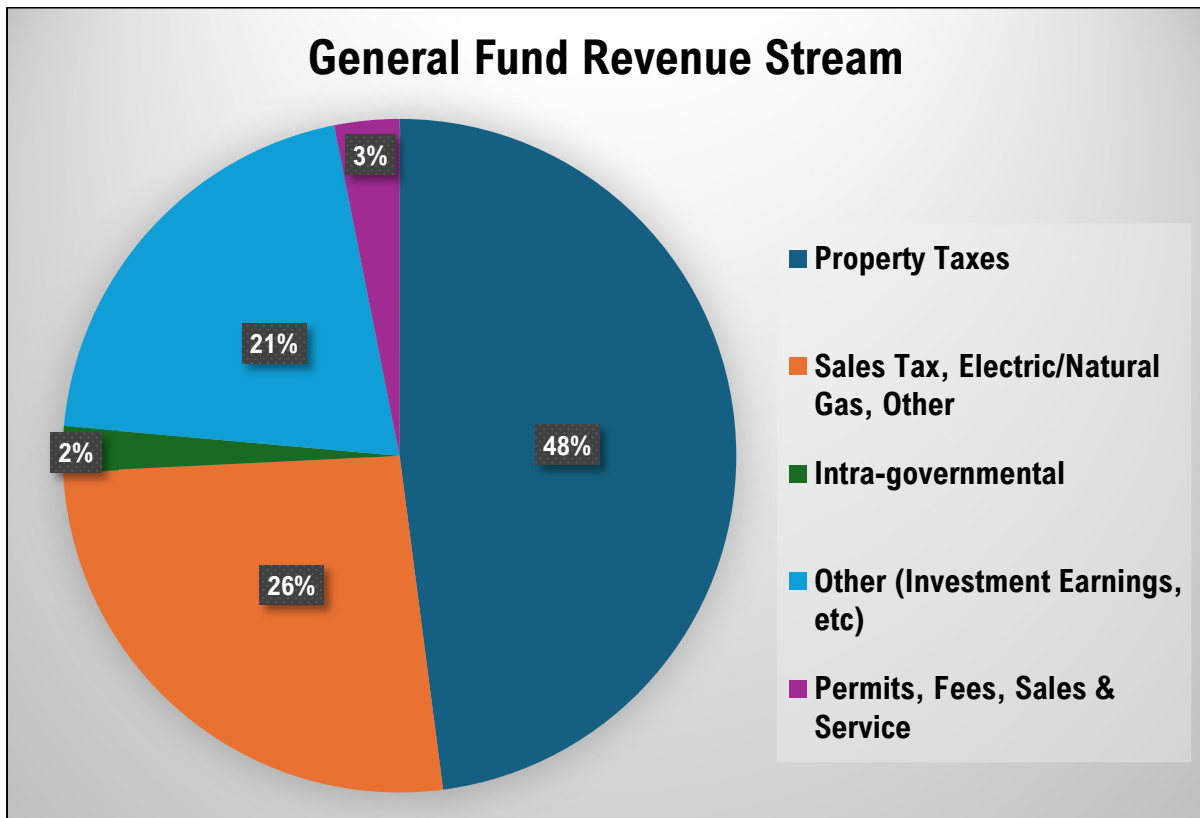


**Financial Basis**

The Statesville Fire Department is funded through the City of Statesville’s General Fund. The Fire Department receives 19% of the overall General Fund priorities. Public Safety receives 49% of the City of Statesville General Fund allotments. The current General Fund Budget total is \$58,328,679.

The City of Statesville has received the Government Finance Officer Association (GFOA) Certificate of Achievement for Excellence in Financial Reporting for 35 consecutive years. As well as the GFOA Distinguished Budget Presentation Award for its annual budget document for 24 consecutive years.

**Chart 3: General Fund**



*Updated by City of Statesville Finance 12/31/2025*

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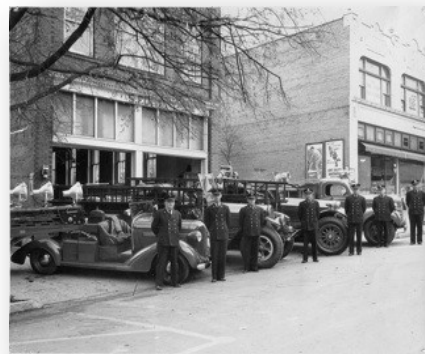
## Documentation of Area Characteristics

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### History of the City of Statesville Fire Department

The first settlers in the Statesville area arrived in 1753 and established a small settlement known as Fourth Creek Congregation. Two years later the Colonial Governor Arthur Dobbs commissioned a fort to be built in the area to serve as a garrison for troops and to provide protection for the settlers. In 1789, the settlement was designated as the county seat and the name was changed to Statesville.

The town grew steadily, and a downtown business district of predominately wooden structures was well established by 1850. The city's fire protection consisted of a citizen's bucket brigade that occasionally battled small residential fires. On December 18, 1854, a residential fire began spreading from rooftop to rooftop through the city and by the morning of the 19<sup>th</sup>, half of the buildings and residences in the downtown area had been destroyed.



As the city was rebuilt, a change in fire protection slowly followed. A hook and ladder company was formed in 1876 and a second company added in 1878 along with more community wells and cisterns built near the center of town. The town purchased its first steam fire engine from LaFrance in 1881, and in 1885 a new fire station was built that housed the engine and lodged the department's horses and other equipment. By 1890, the department consisted of 25 volunteers.



The department battled major fires almost monthly through the early eighteen-nineties and as a result plans were made to install a water supply system with a bond vote passing in 1897. After two years of construction, the City's first hydrant system was opened on January 20, 1899.

The city hired its first full-time firefighters in 1902 at a salary of \$25 per month and purchased its first motorized engine in 1913. The department retired its last horse in 1917 and added two new engines in the early 1920s. In 1952 the current Fire Station 1 was opened on S. Meeting St. with Fire Station 2 being added in 1962 and Station 3 opening in 1975. Fire Station 4 was opened in 2011. Fire Station 1 was relocated to 5<sup>th</sup> Street in 2024. The department now employs 83 personnel.









## History Timeline

1854	1869	1876	1881
<ul style="list-style-type: none"> <li>- December 18<sup>th</sup>, a fire destroyed nearly half the downtown area, including the courthouse</li> </ul> <p><b>Conflagration.</b>  <small>We learn that a destructive fire broke out in Statesville, Irwellcounty, N. C., on Monday night last, which consumed the principal part of the village. The Court House, Post Office, several fine new Dwellings, &amp;c., were consumed. The papers of the two Clerk's Offices were saved, but the books and contents of the Register's Office were destroyed. The fire originated in a wooden building in the west end of town, occupied as a Shoe shop and Ding store, and is supposed to have been accidental.</small></p>	<ul style="list-style-type: none"> <li>- The First formal attempt to organize a Fire Dept.</li> <li>- The Mayor was ordered by City Commissioners to purchase buckets and ladders for use by the volunteer fire dept.</li> </ul>	<ul style="list-style-type: none"> <li>- January 21<sup>st</sup>, a public meeting was held in the courthouse, presided by Lt. Gov. Armfield</li> <li>- A vote took place to organize a Hook &amp; Ladder company in which 28 names were enrolled as members</li> <li>- March 2, 1876, first meeting of the Statesville Hook &amp; Ladder Company</li> </ul>	<ul style="list-style-type: none"> <li>- A fire at McElwee's Tobacco Factory gave impetus to the drive for better fire equipment</li> </ul>

1882	1892	1894	1899
<ul style="list-style-type: none"> <li>- A horse drawn fire engine was purchased from the LaFrance Steam Fire Engine company for \$3,000</li> </ul> 	<ul style="list-style-type: none"> <li>- A third disastrous fire occurred on the southwestern corner of the city square</li> <li>- This led to the founder investing further in firefighting equipment</li> <li>- A hand pump &amp; hose reels were purchased and placed at different locations within the city</li> </ul>	<ul style="list-style-type: none"> <li>- A second fire company was organized by the black community</li> <li>- This second company would be known a Defiance Fire Comp No. 2</li> </ul> 	<ul style="list-style-type: none"> <li>- July 7<sup>th</sup>, the Statesville Fire Engine Company disbanded</li> <li>- They then resolved to reorganize as a Reel Company</li> <li>- The new Reel Company would be comprised of 12 members, split into 3 companies with a Foreman to lead each</li> <li>- The City ordered 1,000 feet of new hose, 3 reels, and other necessary equipment to put the Reel Company in first class shape</li> </ul>



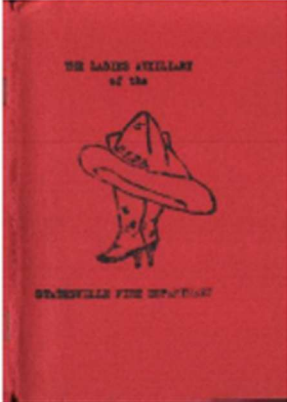






## History Timeline

1912	1913	1922	1923
<ul style="list-style-type: none"> <li>- The first fire station would be built on N. Center Street in the downtown area.</li> </ul> 	<ul style="list-style-type: none"> <li>- August 13<sup>th</sup>, the first motorized fire truck was purchased.</li> <li>- A 60 HP, 6 cylinder from White Motor Company (Cleveland, OH) for \$5,452</li> </ul> 	<ul style="list-style-type: none"> <li>- June 7<sup>th</sup>, the second motorized fire truck was purchased</li> <li>- A 6 cylinder, chain driven American LaFrance pumper with a 750 gallon tank for \$12,500</li> </ul> 	<ul style="list-style-type: none"> <li>- Statesville purchased a second American LaFrance pumper, similar to the previous truck.</li> </ul>
1936	1944	1952	1953
<ul style="list-style-type: none"> <li>- November 5<sup>th</sup>, Chief W.L. Neely became the 1<sup>st</sup> LODD at Statesville at age 53</li> <li>- Chief Neely was overcome by smoke at a house fire on Sharpe Street</li> </ul> 	<ul style="list-style-type: none"> <li>- June 7<sup>th</sup>, Bunch Furniture Store would catch fire around 1pm</li> </ul> 	<ul style="list-style-type: none"> <li>- April, a site was purchased for the future construction of a new Fire Station 1</li> <li>- The new location would be on S. Meeting Street within downtown</li> </ul>	<ul style="list-style-type: none"> <li>- New Fire Station 1 would be constructed for \$91,000</li> <li>- Fire Station 1 would house 7 total pieces of equipment               <ul style="list-style-type: none"> <li>- 5 Pumpers (1 served the county)</li> <li>- 1 Rescue</li> <li>- 1 Aerial (purchased for \$24,000)</li> </ul> </li> </ul> 



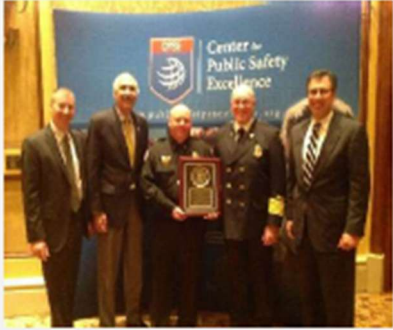


## History Timeline

1961	1963	1964	1967
<ul style="list-style-type: none"> <li>- October 1<sup>st</sup>, the first Fire Prevention Week in Statesville</li> </ul> 	<ul style="list-style-type: none"> <li>- March 4<sup>th</sup>, a second fire station would open on Security Drive</li> <li>- Fire Station 2 would house two 750 gallon pumpers                             <ul style="list-style-type: none"> <li>- 1957 American LaFrance</li> <li>- 1922 American LaFrance</li> </ul> </li> </ul> 	<ul style="list-style-type: none"> <li>- May, the Statesville Fire Dept. Ladies Auxiliary organized</li> </ul> 	<ul style="list-style-type: none"> <li>- November 22<sup>nd</sup>, Statesville would experience its second LODD at 7:05am</li> <li>- Captain Leeroy Horton would be killed in a car bombing in the parking area of Fire Station 2</li> </ul>  <p style="text-align: center; font-size: small;">Capt. Lee Roy Horton</p>
1975	1980	1995	
<ul style="list-style-type: none"> <li>- November 2<sup>nd</sup>, the third fire station would open on East Side Drive</li> <li>- Fire Station 3 would house two 1,000 gallon pumpers and an 85' aerial</li> <li>- 1923 American LaFrance</li> </ul> 	<ul style="list-style-type: none"> <li>- January 13<sup>th</sup>, a large fire occurred in the Dillon Building at 550 S. Center Street</li> <li>- May 16<sup>th</sup>, a fire occurred in the Greenbrier Apartments at 335 Davie Avenue</li> </ul> 	<ul style="list-style-type: none"> <li>- The first Sutphen Aerial Platform was purchased for \$565,865.51                             <ul style="list-style-type: none"> <li>- 105' Ladder</li> <li>- 200 Gallon</li> </ul> </li> </ul> 	



## History Timeline

2011	2013	2014
<ul style="list-style-type: none"> <li>- June 15<sup>th</sup>, a massive fire at the Old Furniture Factory, 607 Bond Street               <ul style="list-style-type: none"> <li>- 50 Firefighters fought the blaze for 12+ hours</li> </ul> </li> <li>- July 1<sup>st</sup>, the fourth fire station would open on Martin Lane</li> </ul> <div style="display: flex; flex-direction: column; gap: 5px;">   </div>	<ul style="list-style-type: none"> <li>- April 7<sup>th</sup>, a fire occurred after a dust explosion at Bartlett Milling Company</li> </ul> <div style="display: flex; flex-direction: column; gap: 5px;">  </div>	<ul style="list-style-type: none"> <li>- Statesville Fire Dept. would become Accredited for the first time</li> </ul> <div style="display: flex; flex-direction: column; gap: 5px;">  </div>



## History Timeline

2019	2021	2022	2023
<ul style="list-style-type: none"> <li>- Statesville would hire from a SAFER grant to fully staff the Department's Aerial</li> <li>- The Statesville Fire Dept. would be re-accredited</li> </ul>  	<ul style="list-style-type: none"> <li>- March 8th, a large fire occurred at Crazy Dave's Store at 1521 Shelton Avenue</li> <li>- Firefighters from Statesville and Troutman would battle the blaze</li> <li>- Engine 1 would receive substantial damage from the fire</li> </ul> 	<ul style="list-style-type: none"> <li>- August 12<sup>th</sup>, Statesville Fire would attend the NC Hazmat Challenge in Raleigh coming in 1<sup>st</sup></li> <li>- November 30<sup>th</sup>, groundbreaking for a new Fire Station 1 would take place on Wilson W Lee Boulevard</li> </ul>  	<ul style="list-style-type: none"> <li>- Statesville Fire Dept. would receive its first ISO 1 rating</li> <li>- The presentation was held by NC OSFM</li> </ul> 



## History Timeline

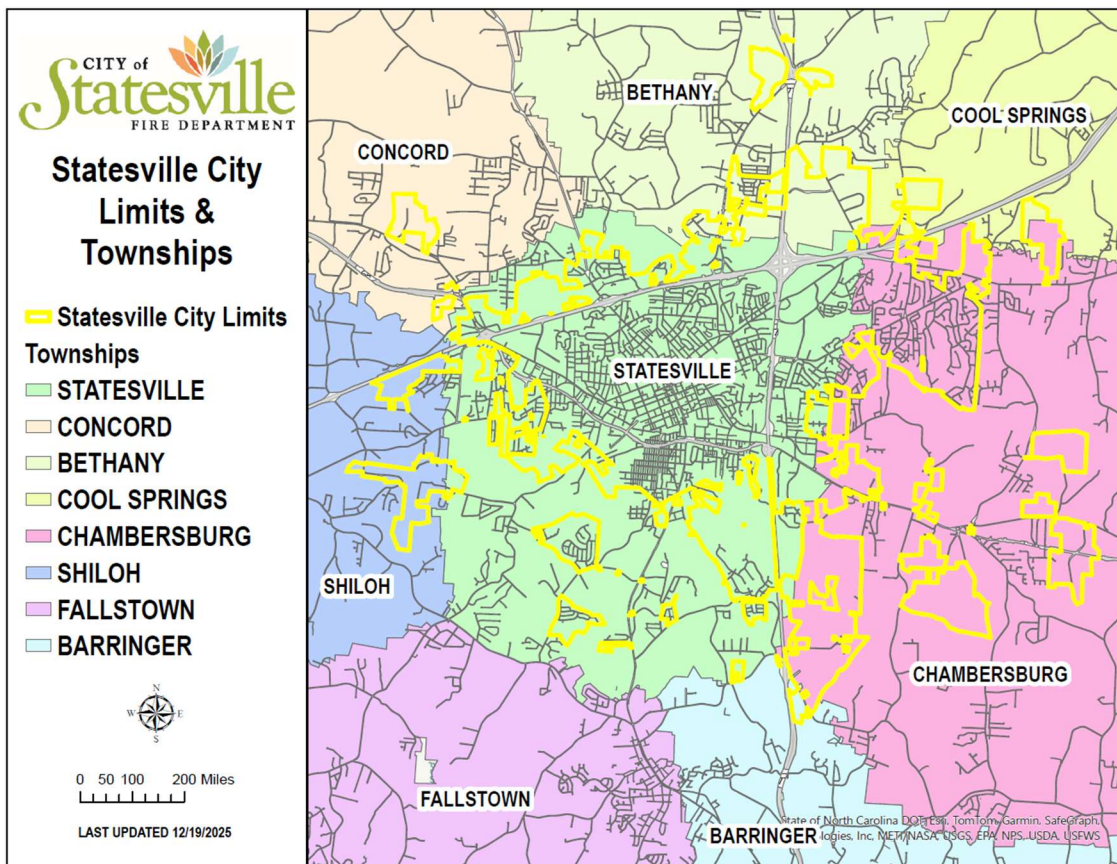
2024	2025
<ul style="list-style-type: none"> <li>- February 2024, SFD receives re-accreditation by the Commission on Fire Accreditation International &amp; the Center for Public Safety Excellence</li> <li>- May 14<sup>th</sup>, Statesville Fire would host City Council and members of the community for a ribbon cutting ceremony at the new Fire Station 1. The new station would house Battalion 1, Engine 1, Ladder 1, Ladder 2, Brush 1, and SFD Administration offices. The old Station 1 would still be used to house equipment on a temporary basis.</li> <li>- August, Statesville Fire would add a Fire &amp; Life Safety Educator (Heather Gessler) and in September, a new Accreditation Manager (Samantha Moose) to the administrative staff.</li> <li>- October, Statesville firefighters would be deployed to assist western North Carolina with Hurricane Helene rescue efforts.</li> </ul>	<ul style="list-style-type: none"> <li>- March, Statesville firefighters would be deployed to assist with wildfires in Polk County, North Carolina.</li> <li>- April-May, Statesville Fire Dept would add numerous vital pieces of equipment including a refurbished ARFF truck, a used rescue to replace HazMat 1, a mobile fan trailer, and Ballistic vests for every front out apparatus.</li> <li>- July, Statesville City Council approves the purchase of land and a house for the future development of Fire Station 5. The house, located at Gaither Rd &amp; Radio Rd, would be renovated to accommodate a company &amp; apparatus. The addition of Station 5 would also add an additional 15 members to the SFD with hiring expected in January 2026.</li> </ul>

## Location and Size

The City of Statesville is located in Iredell County in the western Piedmont of North Carolina. Iredell County is bordered on the north by Wilkes and Yadkin counties; on the east by Davie and Rowan counties; on the south by Cabarrus and Mecklenburg; and on the west by Lincoln, Catawba and Alexander counties. Iredell County is dissected by two interstates, I-40 & I-77 which intersect within the Statesville city limits, providing Statesville with easy access to other areas of the state and the entire east coast. Iredell County is in the North Carolina Division of Emergency Management Region 11 and FEMA Region IV.



**Map 2: Statesville City Limits and Townships**



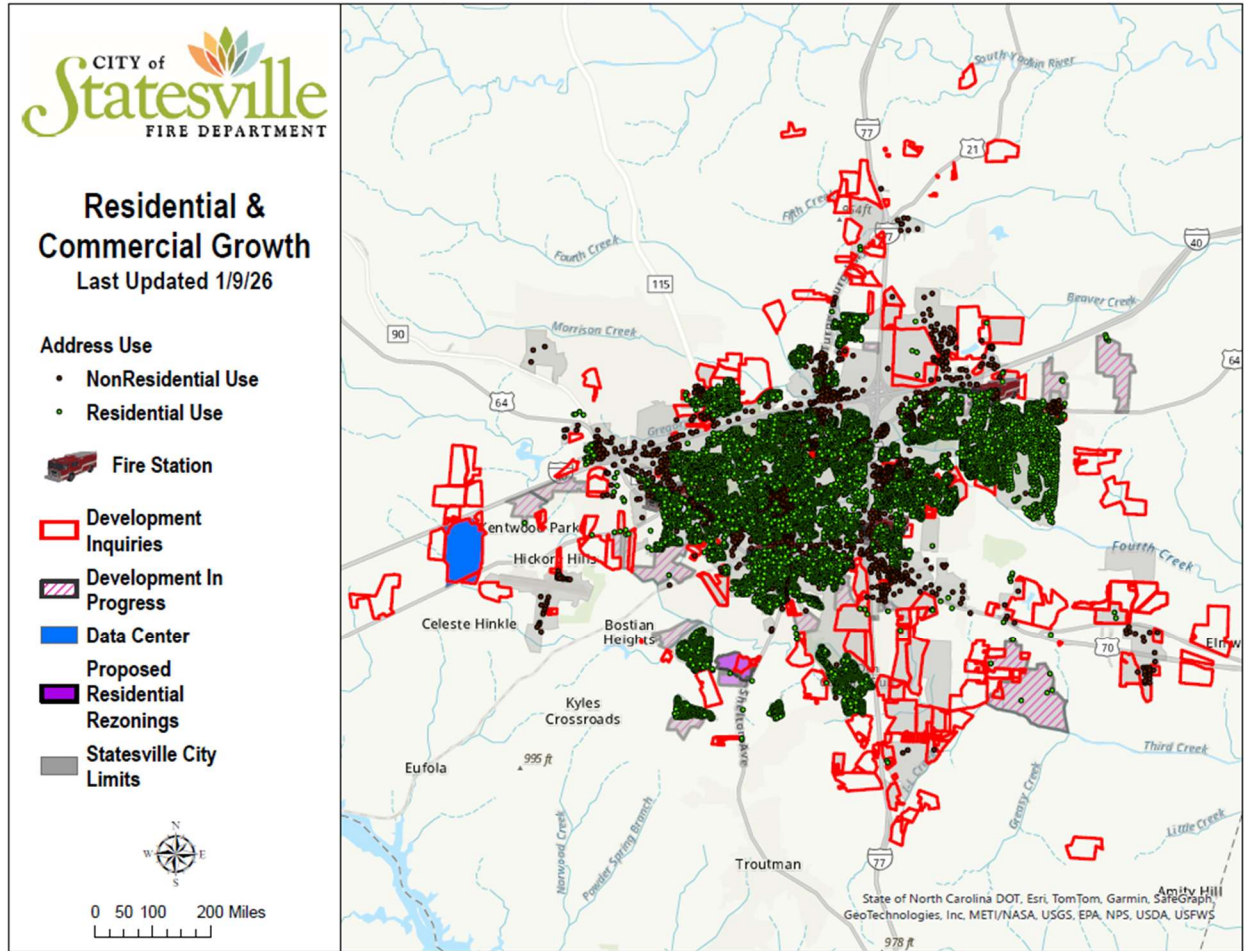
## **Development Trends and Projections**

The City of Statesville is made up of predominantly residential communities, 85% versus 15% commercial occupancies. Currently, 54% of the city's parcels are developed.(16.79 square miles)

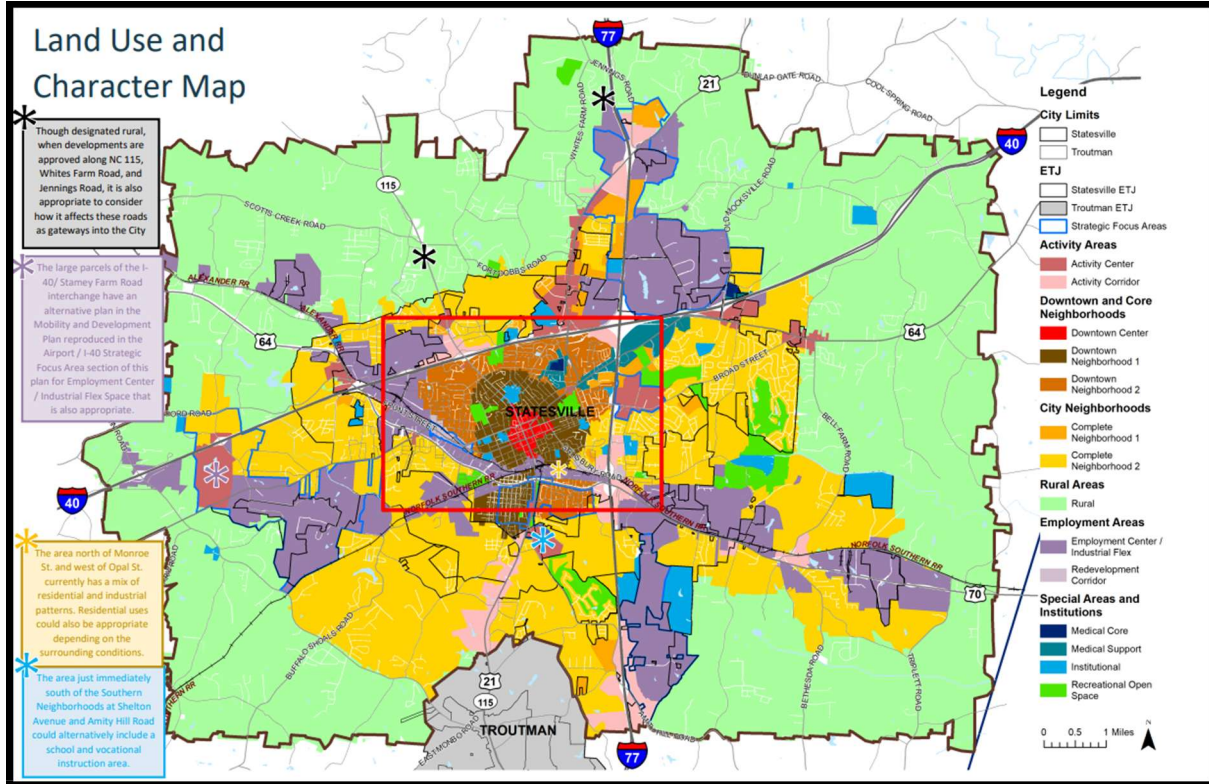
The County population has grown approximately 10.54% since 2020 and the City of Statesville has had an increase of 11.35% in the last four years. The County covers an area of approximately 574 square miles, while Statesville has 31.07 square miles.

The City of Statesville has a Land Development Plan that provides a statement of the vision for its future and a guide to achieve that vision through the year 2045. The Land Development Plan, Map 4, displays general ideas for future land use within the City of Statesville. It was adopted by the City Council in 2022 and is utilized by elected and appointed officials in making future development decisions. The overall strategy for land use includes a collection of policies and maps that serves as the city's blueprint for growth and is a fundamental element of land use management. The vision for the future of Statesville was developed through analysis of local planning trends, shaped by input from residents, and informed by insights from the Land Development Team and community stakeholders. The 2045 Land Development Plan sets out strategies to address immediate and long-term needs for the success of the City of Statesville.

**Map 3: Residential and Commercial Growth**



**Map 4: Land Use and Character Map**

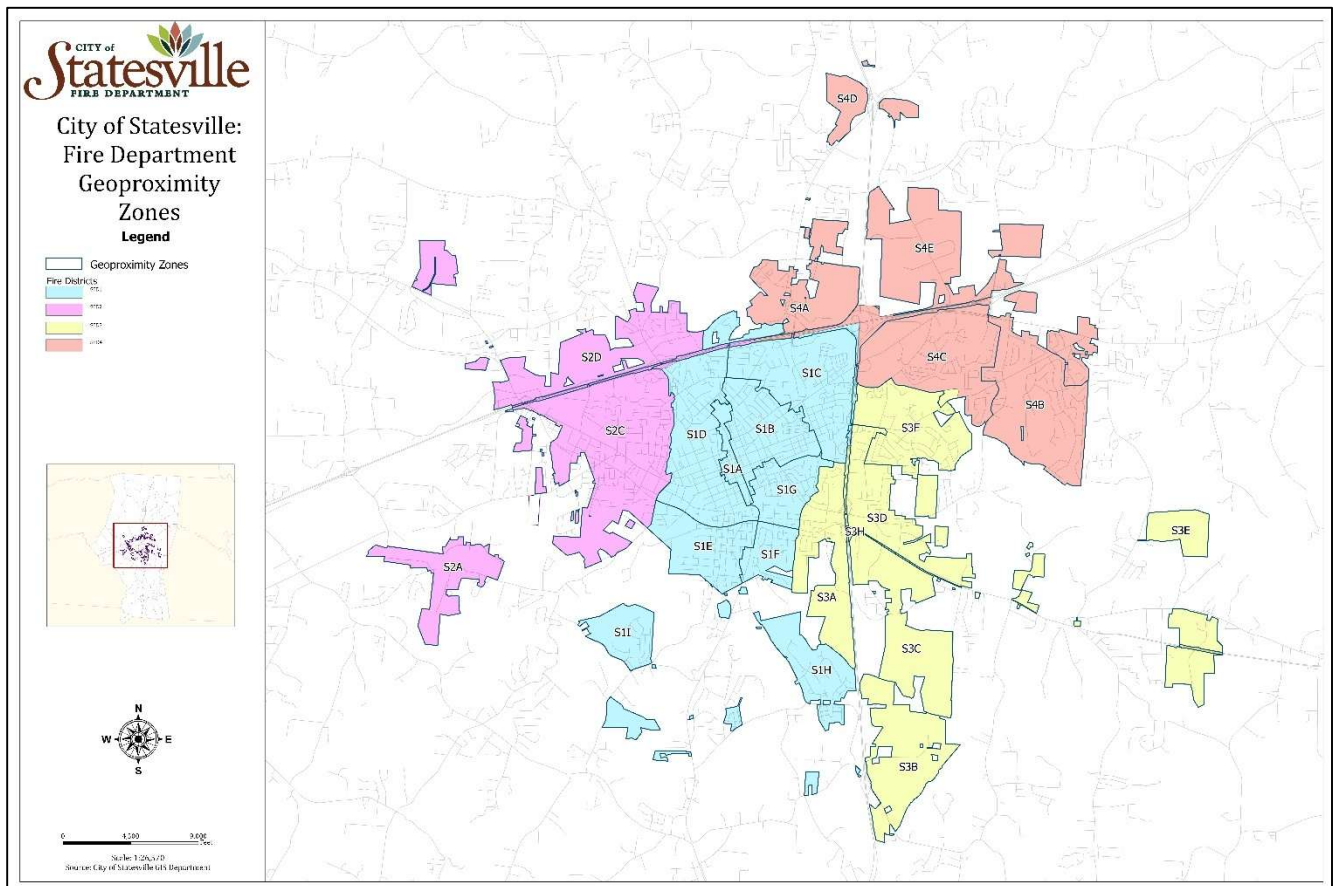


## Response Area Planning Zones

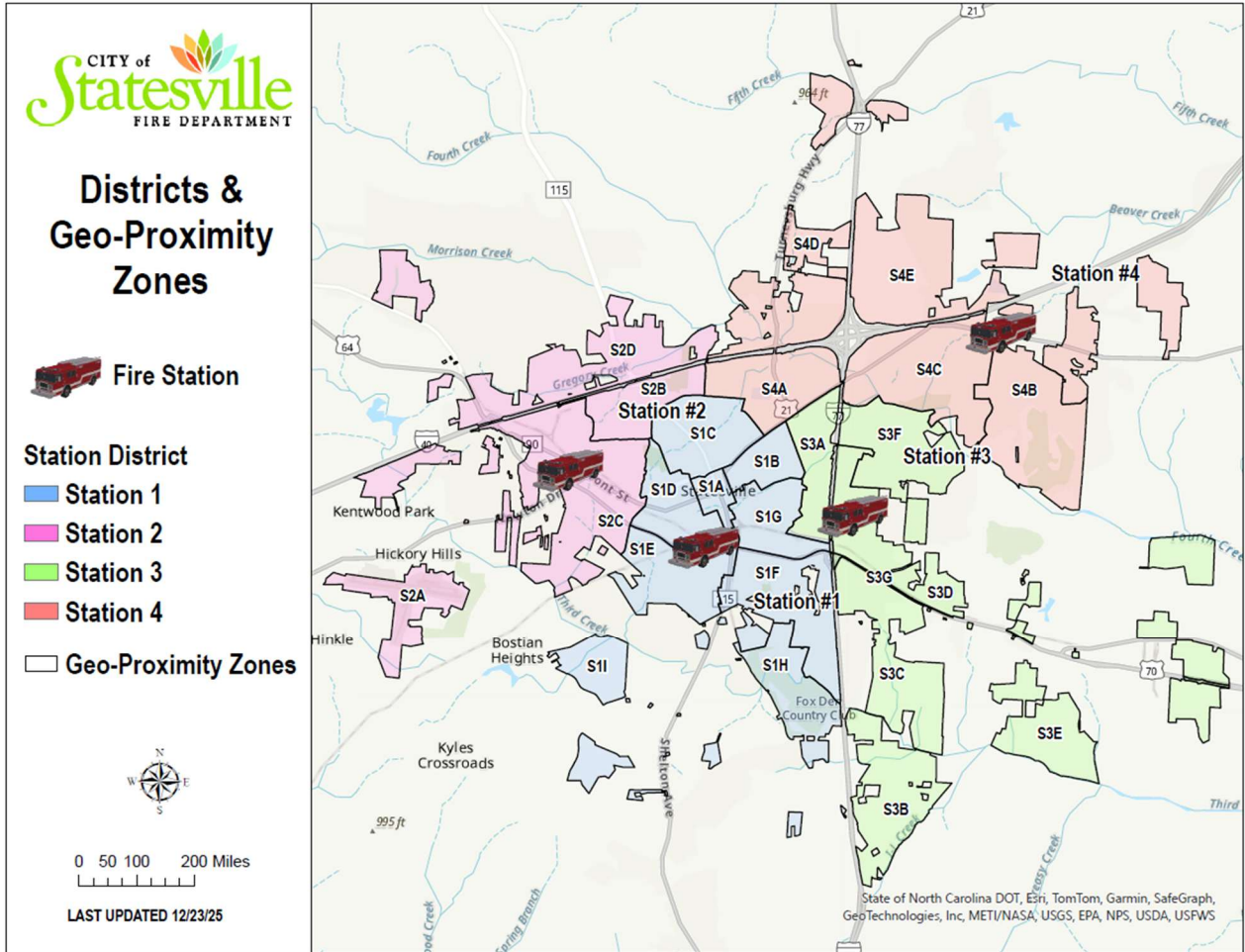
The Statesville Fire Department uses two different geographical planning zones. The first geographical planning zones are our four (4) Fire Station Districts. The second geographic planning zones are further refined into twenty-five (25) geo-proximity zones (GPZ). Fire Station #1 district is broken down into nine GPZs, Fire Station #2 district is broken-down into four GPZs, Fire Station #3 district is broken-down into seven GPZs, and Fire Station #4 district is broken-down into five GPZs. These GPZs were established by Iredell County’s Geographic Information System (GIS) department in conjunction with the CAD system (Sunguard OSSI) and implemented by the Iredell County Emergency Communication’s Center.

In 2017, the Fire Demand Zones were reduced from 212 Fire Demand Zones to 25 GPZs. In 2024, an additional GPZ was added to Station 2’ s District and response is categorized into one of 26 GPZs. In 2025, GPZ S3H was combined with S3G in Station 3’s District bringing the total of GPZs for Statesville Fire Department back to 25.

**Map 5: Legacy Fire Districts with 25 Geo-proximity Zones**



**Map 6: 2025 Fire Districts with Geo-proximity Zones**



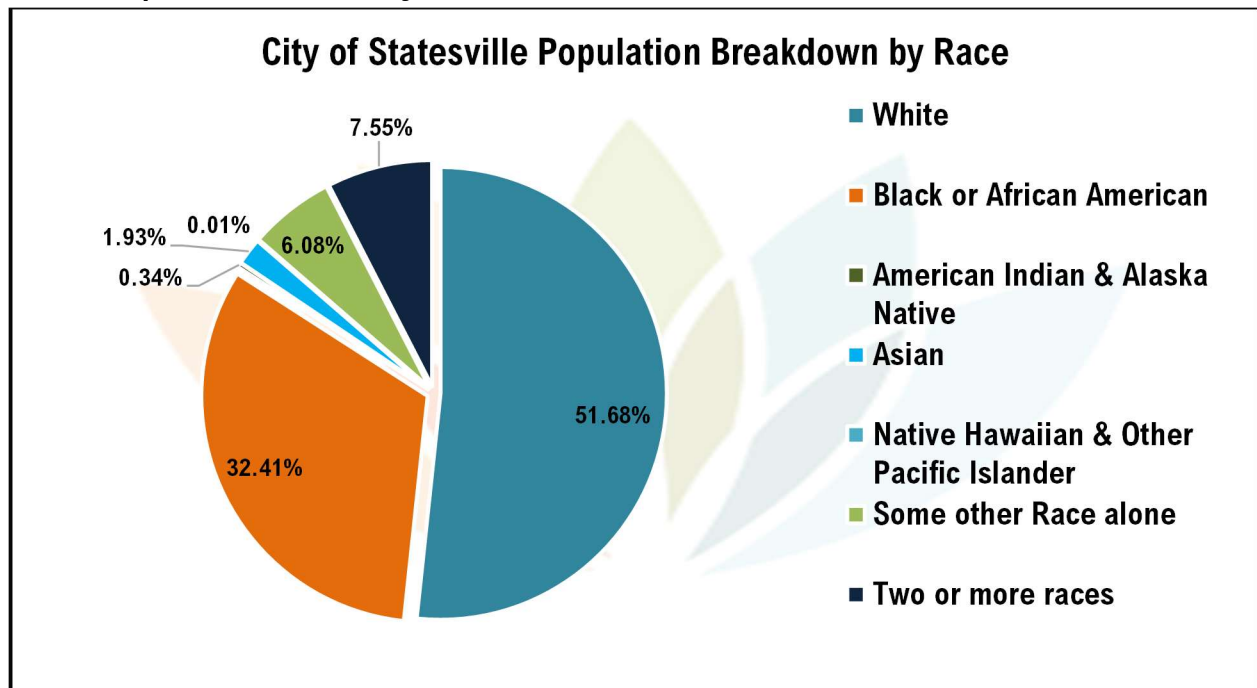
## Demographics

Iredell county's population is 186,693 and Statesville's population is 28,419 based on 2020 U.S. Census data. The estimated population of the City of Statesville from the 2024 Census Quick Facts is 31,693. Demonstrating a growing community with an estimated 11.52% increase of population in 4 years. Population density in the City of Statesville is approximately 1,020 persons per square mile. Statesville has a median house-hold income of \$55,492 and a poverty rate of 16.4% according to U.S. Census quick facts estimates 2019-2023. The City's residence with a disability, under the age of 65 years, is estimated at 9.3% and persons without health insurance, under the age of 65 years is estimated at 17.6%.

<https://data.census.gov/table?q=Statesville,+NC>

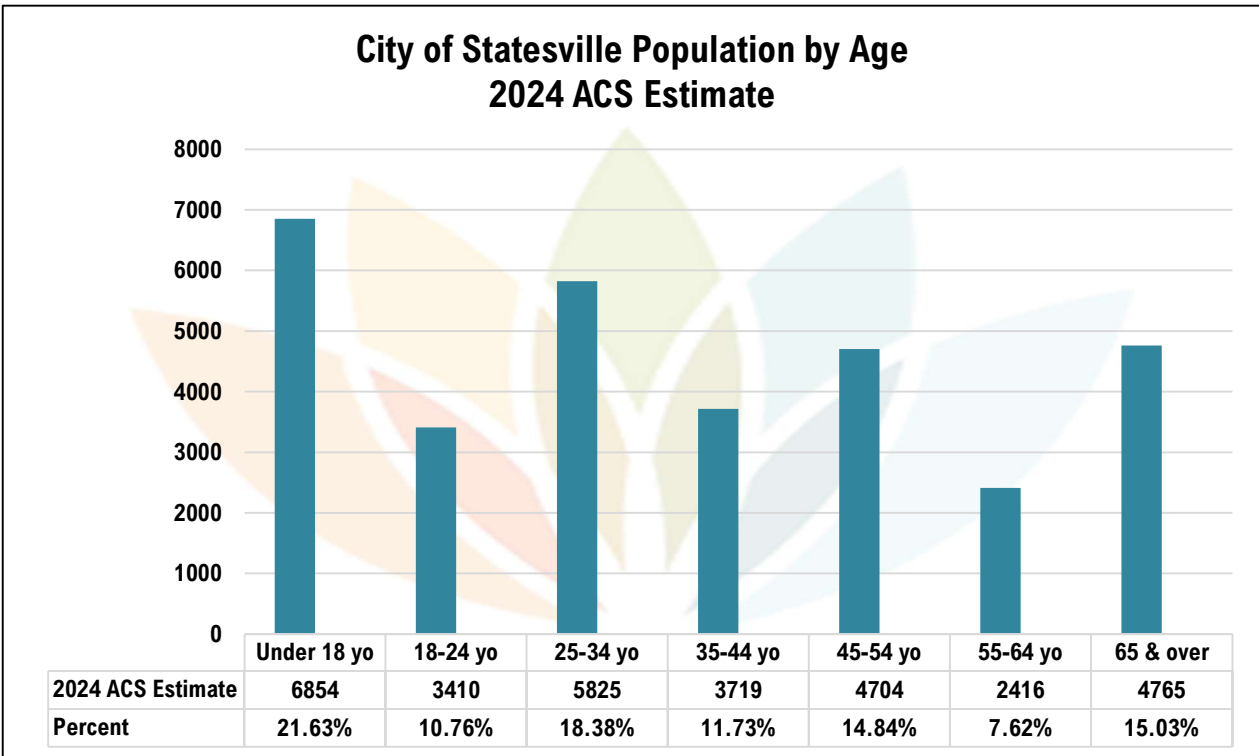
Statesville's population breakdown is shown in the following charts:

**Chart 4: Population Breakdown by Race**



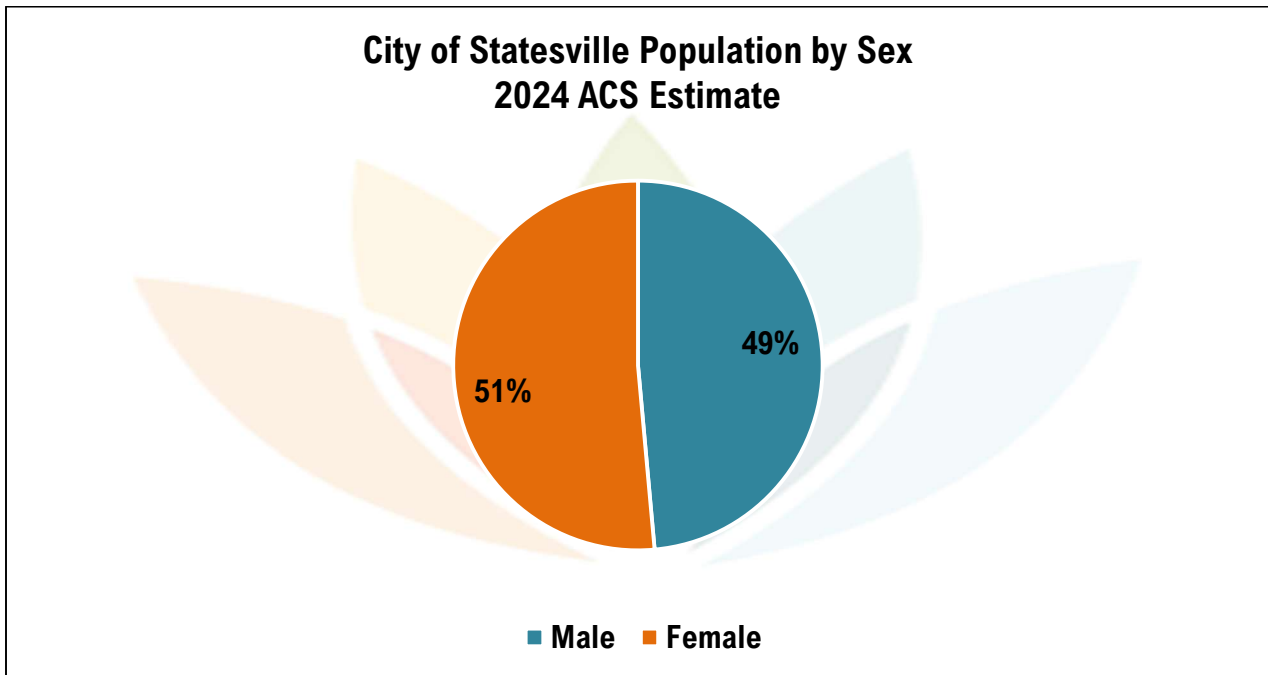
<https://data.census.gov/table/DECENNIALPL2020.P1?q=Statesville,+NC>

**Chart 5: Population Percentage by Age**



<https://data.census.gov/table/ACSSE2024.K200104?q=Statesville,+NC>

**Chart 6: Population by Sex**



<https://data.census.gov/table/ACSSE2024.K200101?q=Statesville,+NC>

**Table 1: Education population 25+ years and over**

Education Level of Population 25+ Years Old	Estimate	Percent
Less than 9th grade	1,016	4.74%
9th-12th grade, no diploma	2,408	11.24%
High school graduate	6,580	30.71%
Some college, no degree	3,891	18.16%
Associate's degree	1,732	8.08%
Bachelor's degree	4,165	19.44%
Graduate or professional degree	1,637	7.64%
<b>Total</b>	<b>21,429</b>	

\*Data has a +/- 3-5% margin of error

### Population Density

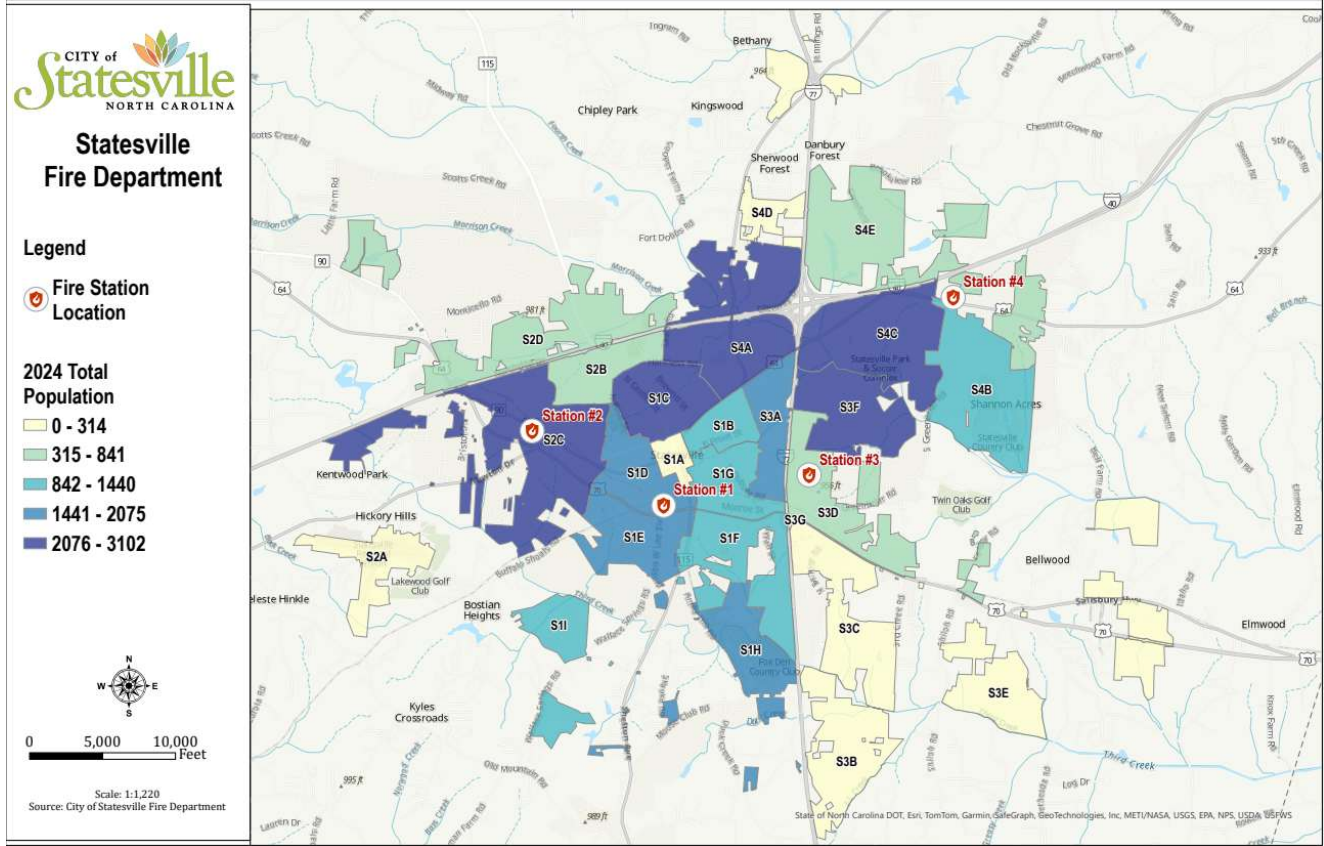
In 2010 the U.S. Census Bureau discontinued the use of suburban and metropolitan community classifications. Communities are now classified as either “Rural” (<50,000 persons) or “Urbanized” (>50,000 persons). Areas were broken down again into a classification of “Urban Clusters”. These are areas with a total population of less than 50,000 persons but have areas with 2,500 persons. In order for a census block to be qualified as “Urban” it must have a density of 1,000 persons per square mile (U.S. Census Bureau “Defining Rural” Michael Ratcliffe/ December 2016); SFD uses this rational for urban or rural classification.

The CFAI 11<sup>th</sup> Edition Accreditation Model Information Technology Specifications (September 2025) states *“Reporting in the performance data charts can be broken down by two population densities as outlined in the Quality Improvement for the Fire and Emergency Services book.*

1. *Urban – Census track/block that contains at least 2,500 people (at least 1,500 of which reside outside institutional group quarters)*
2. *Rural – Census track/block with less than 2,500 people”*

Calculations were compiled using data from the 2020 census. The data was applied to the census tracts to give us the population density per square mile. The City of Statesville is comprised predominately of urban areas with fringe areas meeting the requirements of rural according to CPSE classifications. The central Highway 115 (N. Center Street) corridor shows the highest population density.

**Map 7: Population Density**





**Table 2: Population per Square Mile & Geo-proximity Size**

GPZ	Population		Area in Sq Miles	Area in Acres	Shape_Leng
	Density	Population			
S1A	Urban	314	0.218762969	140.0083	12402.70521
S1B	Urban	1017	0.443167945	283.6274846	16248.71481
S1C	Urban	2853	0.939950063	601.5680401	20604.62249
S1D	Urban	2075	0.805241277	515.354417	24915.81563
S1E	Rural	1610	0.999416322	639.6264464	35029.4015
S1F	Rural	1395	1.259816289	806.2824249	60299.43674
S1G	Rural	1440	0.713193413	456.4437844	24399.59061
S1H	Rural	1847	1.03101845	659.8518079	58609.01145
S1I	Rural	1186	0.733969332	469.7403725	32811.39215
S2A	Rural	4	0.750500094	480.3200604	37282.4342
S2B	Rural	841	0.700811852	448.5195851	26184.68217
S2C	Urban	2745	2.712066102	1735.722305	119112.8293
S2D	Rural	774	1.912072807	1223.726597	105870.8894
S3A	Rural	1637	0.687985575	440.3107678	26081.06426
S3B	Rural	10	1.233010893	789.1269717	50822.77707
S3C	Rural	6	1.360978381	871.0261636	51207.6527
S3D	Rural	696	1.381740673	884.3140304	76071.66261
S3E	Rural	2	1.948475793	1247.024507	90145.49548
S3F	Urban	2817	1.17874378	754.3960194	37690.23252
S3G	Rural	0	0.051196248	32.76559883	29270.18722
S4A	Rural	2982	2.054849718	1315.103819	66485.71871
S4B	Urban	1282	1.760830622	1126.931598	40843.49584
S4C	Rural	3102	1.732523412	1108.814984	37615.99212
S4D	Rural	193	0.711990579	455.6739704	52844.35219
S4E	Rural	447	2.373398113	1518.974792	101476.467

## Housing

Transitional and post-modern designs, as well as traditional ranch homes line the streets of the community of Statesville. The city also has many Victorian homes listed on the National Register of Historic Places in the downtown area of the city. The 2024 American Community Survey <https://data.census.gov/table/ACSSE2024.K202502?q=Statesville,+NC>, estimated 12,886 housing units were within the city limits. Housing tenure presents owner-occupied housing units as 53.21% with 46.78% of the population living in rental properties.

**Table 3: Community Care Residential (Home Care/Nursing/Assisted Living) Facilities**

Facility Name	Facility Type	Address	Maximum Number of Residents
Autumn Care of Statesville	Skilled Nursing	2001 Van Haven Drive	103
Brookdale East Broad	Assisted Living	2441 E. Broad Street	58
Brookdale Peachtree	Assisted Living	2806 Peachtree Road	87
CenterWell Home Health	Home Health	1905 E Broad Street	N/A
Clare Bridge	Assisted Living (Memory Care)	2814 Peachtree Road	40
Crossroads Home Health Inc.	Home Health	1622 Davie Avenue	N/A
Home Care Helpers LLC	Home Health	211 S. Center Street	N/A
Home Instead Senior Care	Home Health	117 N. Center Street	N/A
Hospice & Palliative Care of Iredell County	Skilled Nursing & Home Health	2437 Simonton Road	15 inpatient beds and home health services across the City
Iredell Adult Day Services (ElderCenter Inc)	Adult Day Care	502 Brevard Street	N/A
Iredell Council on Aging	Senior Center	344 E Front Street	N/A
Iredell Health Systems	Skilled Nursing	557 Brookdale Drive	18
Iredell Home Health Care	Home Health	541 Gaither Road	N/A
Journey's	Assisted Living	1942 Van Haven Drive	60
Kings Grant Apartments	Retirement Community	495 Signal Hill Drive	N/A
Mill Creek Manor	Assisted Living	1902 Ora Drive	80
Mulberry School Apartments	Low Income Housing Tax Credit	501 Mulberry Street	N/A
Plaza Apartments	Retirement Community	120 Meeting Street	N/A
Samaritan Healthcare	Home Health	1433 Davie Avenue	N/A
Sherries In-Home Care LLC	Home Health	1835 Davie Avenue	N/A
The Gardens of Statesville	Assisted Living	2147 Davie Avenue	67
The Green's at Maple Leaf	Skilled Nursing	2640 Davie Avenue	94

## Climate & Weather

The City of Statesville falls within the Greenville Spartanburg weather forecast office. Below are charts and graphs that indicate typical climate information recorded through the National Weather Service. Statesville is located in the central part of Iredell County, in the western part of the Piedmont region of North Carolina.

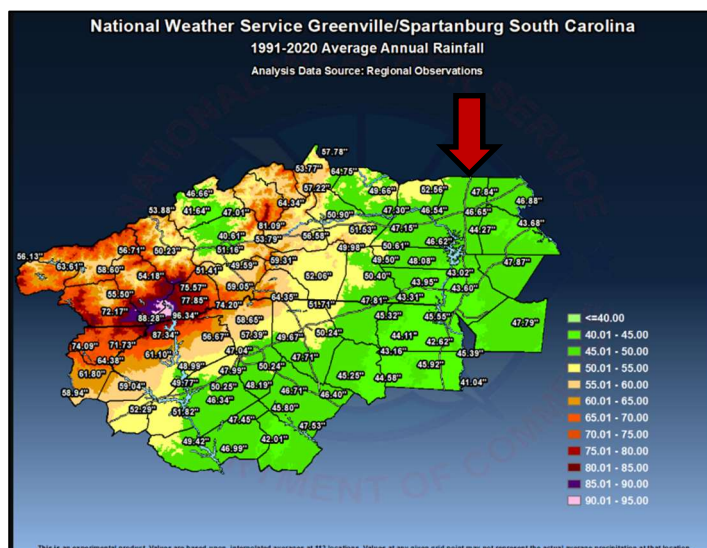
According to the U.S. Census Bureau, Statesville has a total area of 31.07 square miles of which 30.97 square miles are land and 0.1 square miles, or 0.48%, are water. The north side of Statesville is drained by Fourth Creek, while the south side is drained by Third Creek. Both creeks flow east, joining just before reaching the South Yadkin River near Coolemeemee.

## Climate

Statesville has a humid subtropical climate like most of the state of North Carolina, although its higher elevation leads to cooler temperatures than much of the Piedmont. Summers are generally hot and humid, with mild nights, while winters are usually cool with chilly nights and sporadic snowfall. Severe thunderstorms can be an issue during summer, with wind speeds of 60 mph and even gusts of 95 mph being recorded during these storms.

## Precipitation

A wet day is one with at least 0.04 inches of liquid or liquid-equivalent precipitation. The chance of wet days in Statesville varies throughout the year. The wetter season lasts 3.8 months, from May 4 to August 30, with a greater than 32% chance of a given day being a wet day. The month with the most wet days in Statesville is July, with an average of 13.5 days with at least 0.04 inches of precipitation. The drier season lasts 8.2 months, from August 30 to May 4. The month with the fewest wet days in Statesville is October, with an average of 6.4 days with at least 0.04 inches of precipitation. Among wet days, we distinguish between those that experience rain alone, snow alone, or a mixture of the two. The month with the most days of rain alone in Statesville is July, with an average of 13.5 days. Based on this categorization, the most common form of precipitation throughout the year is rain alone, with a peak probability of 45% on July 13.



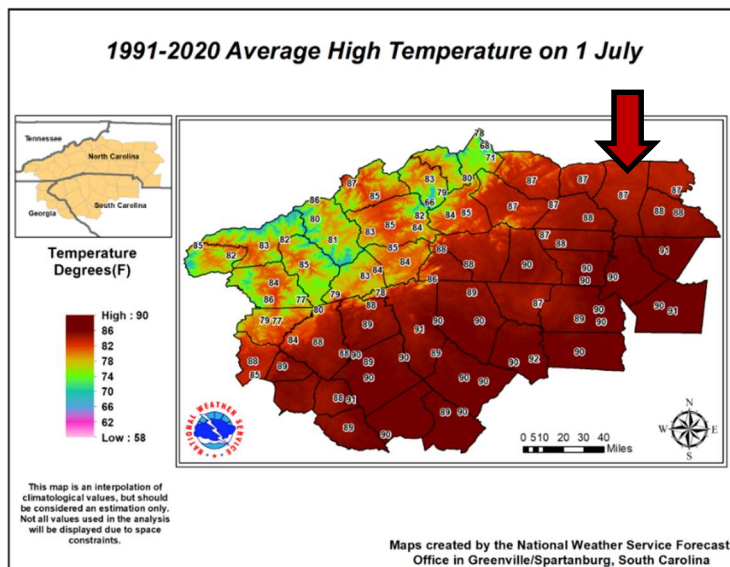
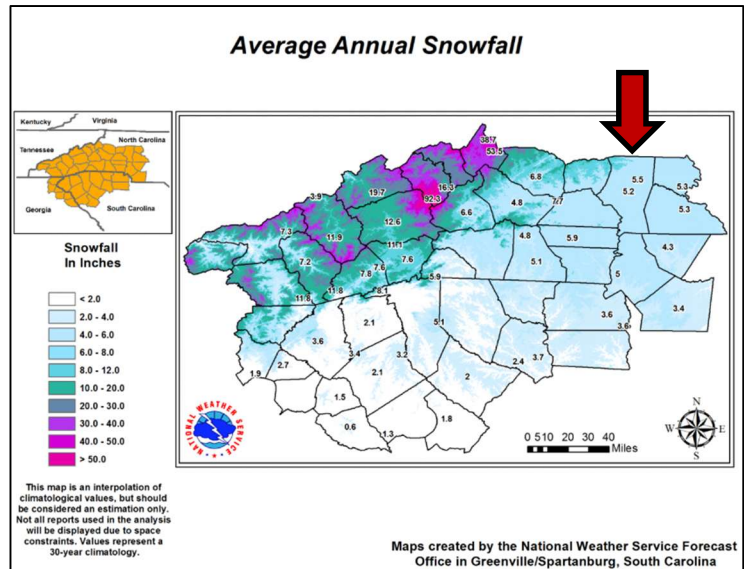
### Rainfall

Rain falls throughout the year in Statesville. The month with the most rain in Statesville is April, with an average rainfall of 3.4 inches. The month with the least rain in Statesville is February, with an average rainfall of 2.8 inches.

### Snowfall

The snowy period of the year lasts for 3.6 months, from November 30 to March 17, with a sliding 31-day snowfall of at least 1.0 inches. The month with the most snow in Statesville is February, with an average snowfall of 3.1 inches.

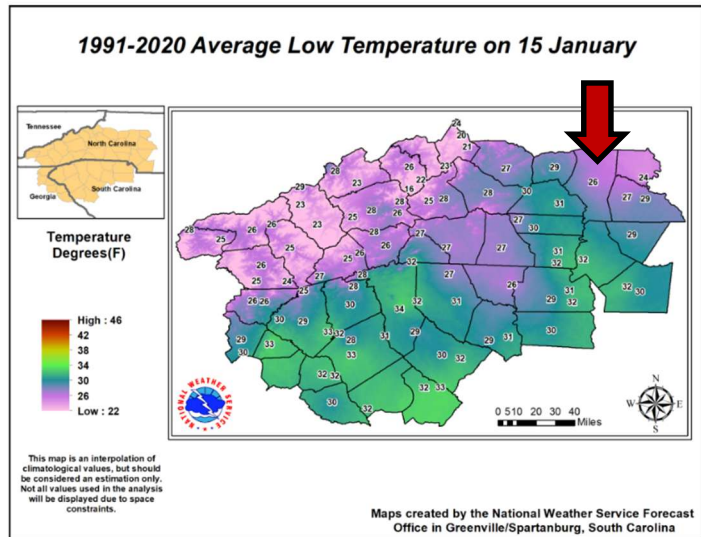
The snowless period of the year lasts for 8.4 months, from March 17 to November 30. The least snow falls around July 18, with an average total accumulation of 0.0 inches.



### Temperature

The hot season lasts for 3.7 months, from May 26 to September 15, with an average daily high temperature above 80°F. The hottest month of the year in Statesville is July, with an average high of 87°F and low of 68°F.

The cold season lasts for 3.0 months, from November 28 to February 28, with an average daily high temperature below 57°F. The coldest month of the year in Statesville is January, with an average low of 31°F and high of 50°F.



**Table 4: Weather Records**

Record	Amount	Date
All Time Recorded High	106 °F	August 18, 1988
All Time Recorded Low	-8 °F	January 31, 1966
Highest Daily Low	80 °F	September 7, 1929
Lowest Daily High	18 °F	December 25, 1983
Most Daily Precipitation	8.3"	August 4, 2016
Most Daily Snowfall	18.5"	March 2, 1927
High Temperature ≥ 90 °F	22 days	July 16-August 6, 2002
High Temperature at or below freezing	8 days	January 1-8, 2018
Most Monthly Precipitation	13.7"	August 1913
Without Precipitation	39 days	September 27-November 4, 2000
Most Monthly Snow	20.5"	March 1960
Earliest Snowfall	November 10, 1968	
Latest Snowfall	March 31, 1915	

<https://www.extremeweatherwatch.com/cities/statesville>

**Table 5: Climate Data**

CLIMATE DATA FOR STATESVILLE- 2024												
<a href="https://www.usclimatedata.com/climate/statesville/north-carolina/united-states/usnc0661">https://www.usclimatedata.com/climate/statesville/north-carolina/united-states/usnc0661</a>												
	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
<b>Avg. high in °F</b>	49	53	60	70	77	84	87	85	80	71	60	52
<b>Avg. low in °F</b>	26	28	35	44	54	62	67	65	59	46	34	29
<b>Days with precipitation</b>	9	10	10	9	10	10	12	10	8	7	8	10
<b>Avg. precipitation in inches</b>	3.71	3.18	3.99	4.05	3.70	4.27	4.42	4.91	3.87	3.23	3.38	3.94
<b>Avg. snowfall in inches</b>	2	1	0	0	0	0	0	0	0	0	0	1

## **Transportation Network**

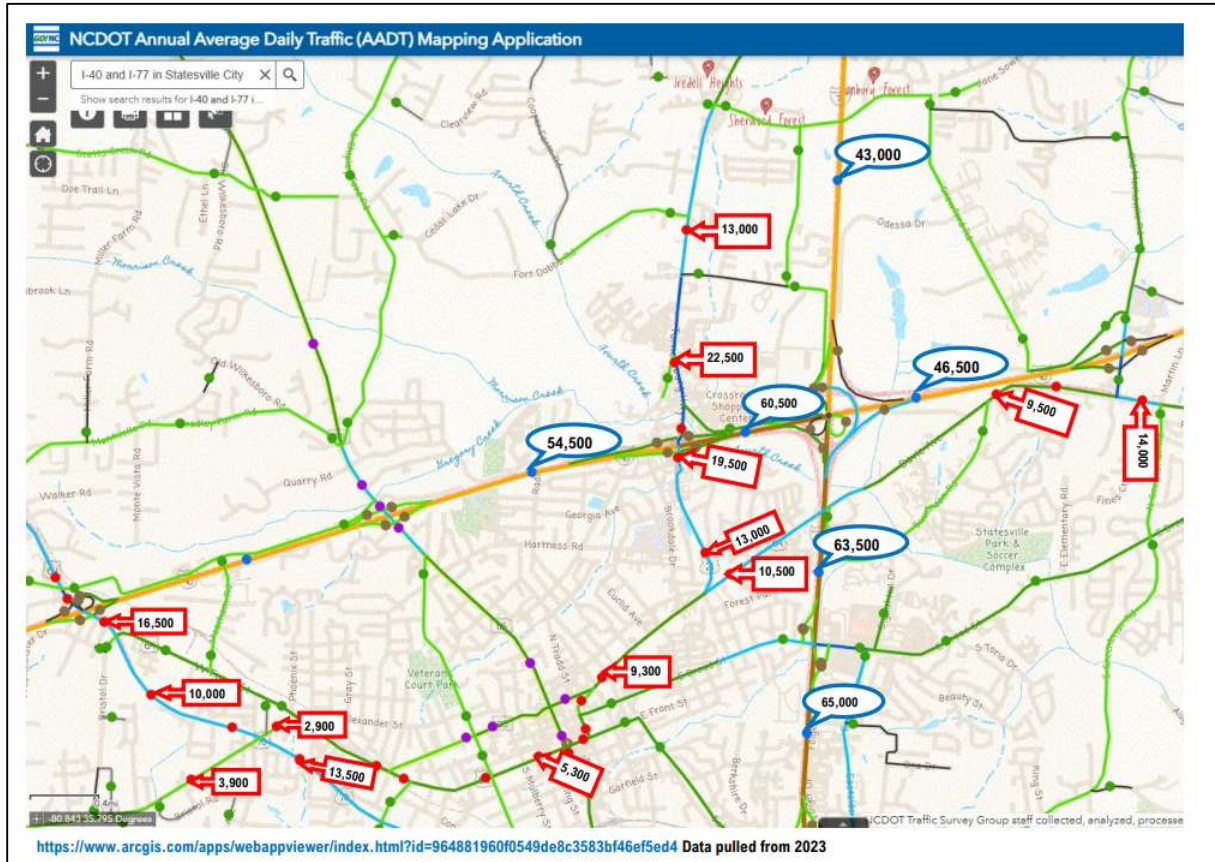
### **Highway**

The City of Statesville is divided into quadrants by Interstate 40 (running east/west) and Interstate 77 (running north/south). I-77 runs from Cleveland, Ohio to Columbia, South Carolina. Interstate I-40, stretching coast-to-coast from Wilmington, North Carolina to Barstow, California. US Hwy. 70 (Garner Bagnal Blvd) also bisects the city on the south (running east/west). US Hwy.115 (Center Street) bisects the city centrally (running north/south).

I-40, I-77, and US-21 multi-level interchange project has completed according to NCDOT as of January 29, 2018. I-40 has been widened from four lanes to six lanes between I-77 and the Radio Road Bridge. The previous interchange at US 21 and I-40 has been changed to a diverging diamond, with a new bridge constructed over US-21 and 4<sup>th</sup> Creek to meet current and future traffic needs. Additionally, a new bridge was constructed from Sunset Hill Road to Gaither Road. The new additions will improve the traffic flow. The interchange at Old US-64 has been eliminated. The I-40 & I-77 highway improvement project was completed in 2024 and confirmation was received from NC DOT at the 2024 Iredell County Local Emergency Planning Committee meeting. The projects of replacing the bridges on E. Broad St and Davie Ave where the roads cross I-77 were also completed in 2024.

The following map shows the average number of vehicles per day traveling on the two Interstates that cross in the Statesville City limits. (“AADT” annual average daily traffic):

**Map 9: Daily Travel Totals on Major Roadways**



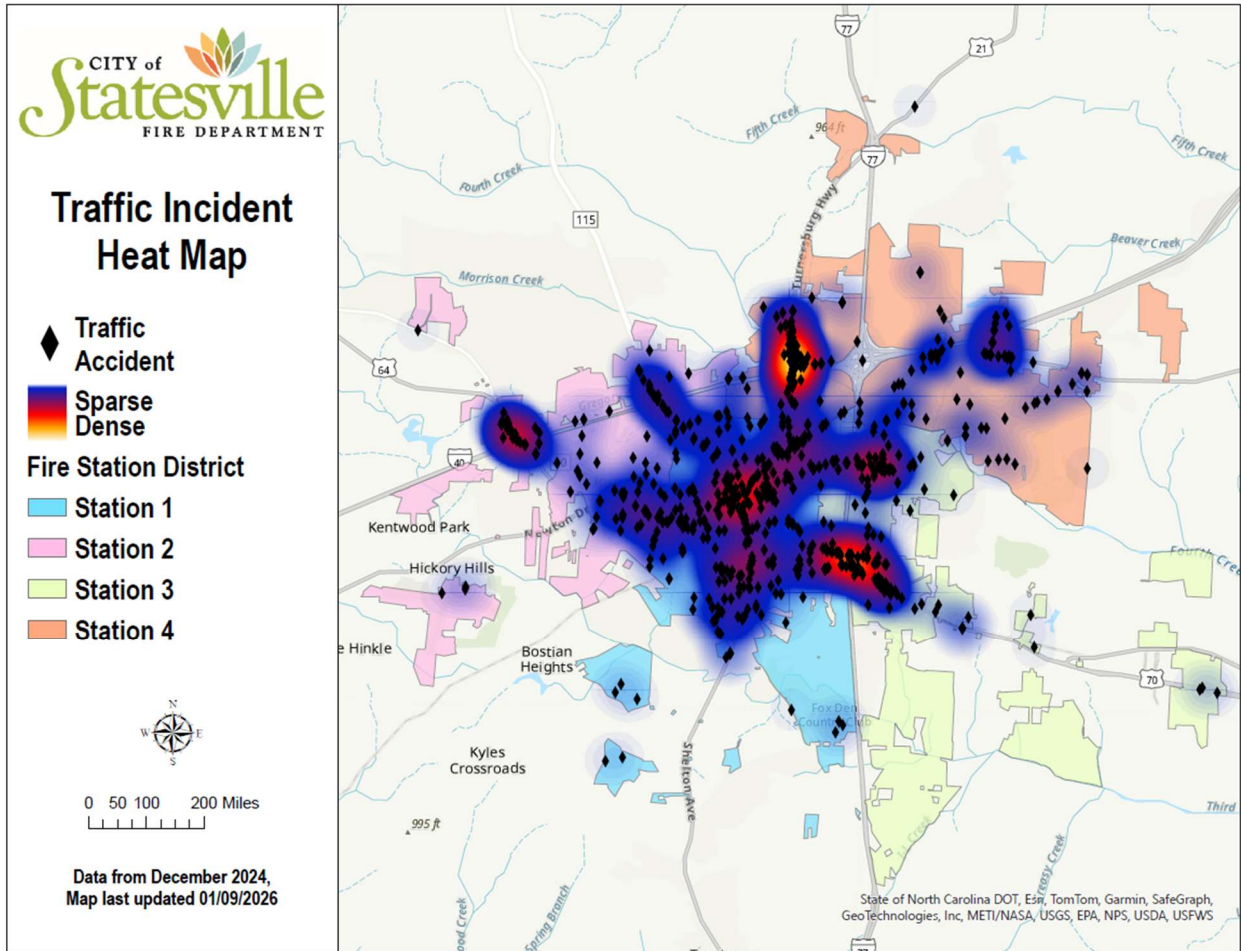
SFD reviewed NC DOT on 12/30/2025 and no new information for 2024 was released

**Map 10: Interstate Layout**



<https://www.ncdot.gov/projects/i40-i77-interchange/Pages/default.aspx>

Map 11: 2024 Traffic Incident Heat map



**Air**

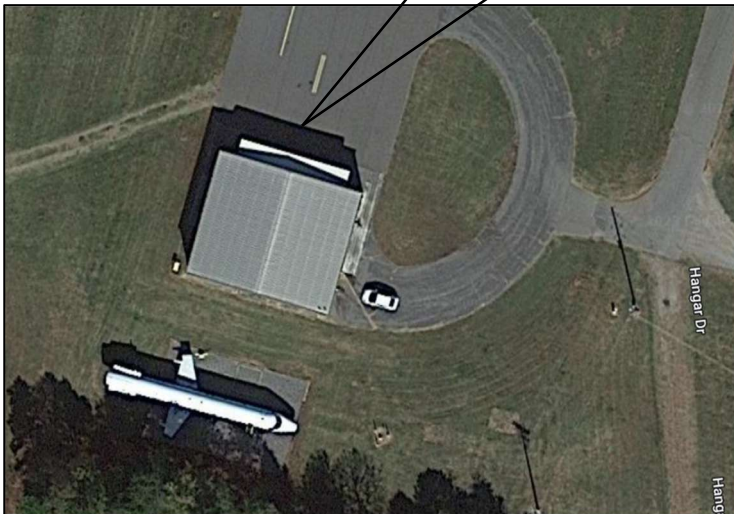
The Statesville Regional Airport is located just south of I-40 on the outermost western side of the city in Fire Station #2 response district. The 453-acre regional airport currently utilizes a single 7,003-foot runway that averages 20,000 passengers annually.

Growth at the Statesville Regional Airport has been steady within the last five years with the addition of some new flight services, one being Victory Air which utilizes Statesville as its home base for its nine 50 passenger aircraft and is currently building a large hanger on airport property. Flight Services such as Champion Air have also expanded their operations. In 2020, the Eastern portion of the south taxiway was finished allowing for better access to taxiway F. The runway safety area extension project is due to be completed in July 2023, adding an additional 1,000 feet to the runway. Many other projects are in the works with in the next 3-5 years which includes a new fuel farm, apron extension, and completion of the south side taxiway. A new terminal is also planned which will allow for additional office space and conference rooms, as the operations of the airport have outgrown the current terminal. The Statesville Regional Airport has also filed for FAA Part 139 classification and is in the process of meeting the requirements of the FAA to obtain that classification.

Statesville Regional Airport has been and continues to be one of the most important regional airports in the State of North Carolina. The North Carolina Department of Transportation Division of Aviation continues to support the Statesville Airport through the administration of grants for projects (such as the south parallel taxiway). Statesville Regional Airport is also an important site to the North Carolina Department of Commerce as it has been shown routinely to potential industrial tenants. The amount of land available for development and the addition of a south parallel taxiway combined will further enhance the appeal of the Statesville Regional Airport to potential tenants.

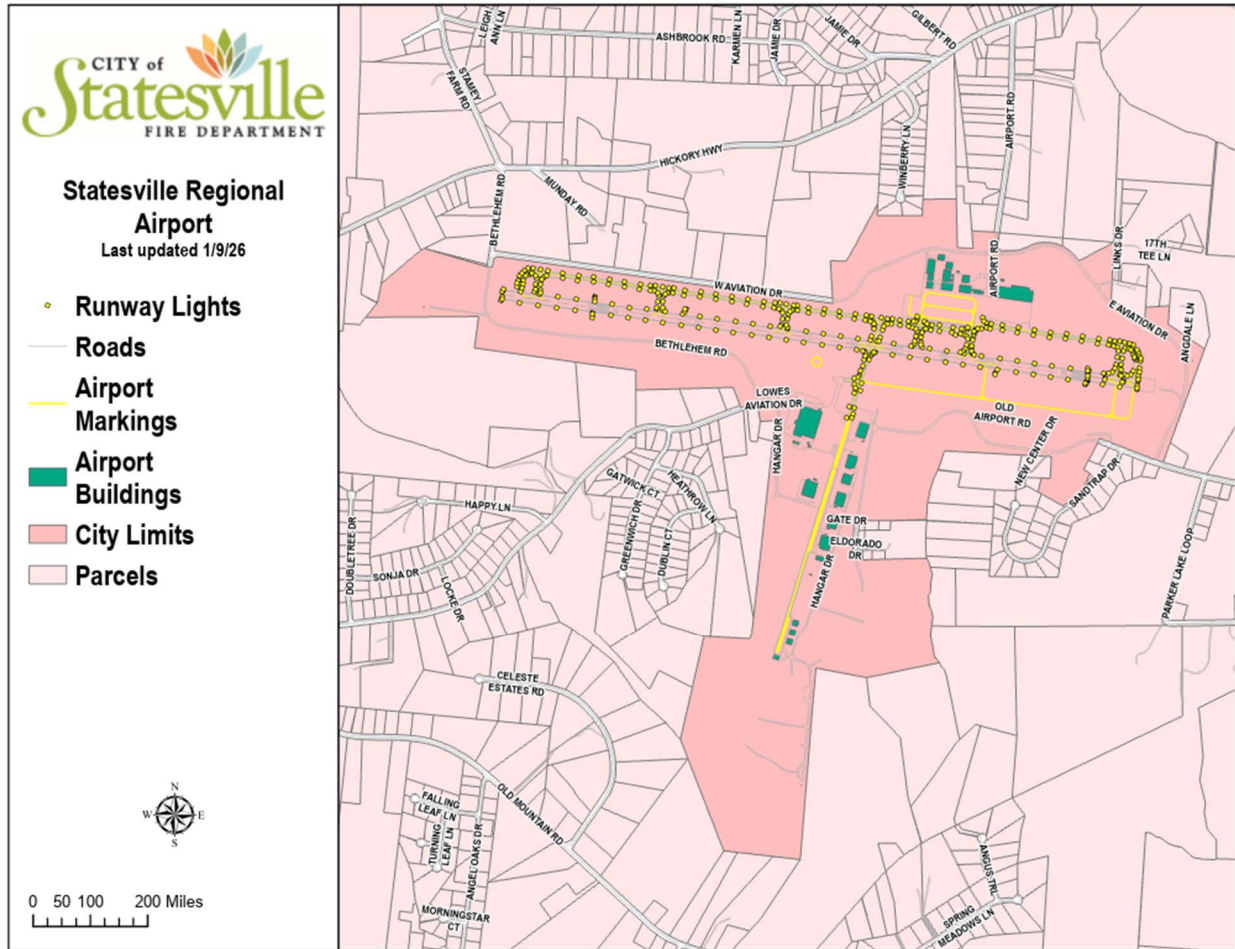
General Aviation Airport Impacts					
NC The State of Aviation January 2025 report: <a href="https://www.statesvillenc.net/airport/">https://www.statesvillenc.net/airport/</a>					
Airport & Name	City/Town	Jobs	Personal Income	State and Local Taxes	Economic Output
SVH Statesville Regional	Statesville	730	\$59,480,000	\$7,204,000	\$146,320,000

**Map 12: Airport/ Training prop**



The City of Statesville Fire Department continues to progress with ARFF capabilities. In 2025 assignments were given to continue upgrades to the existing ARFF prop to include fuel supply and NCOSFM requirements. There were no certification classes offered in 2025 outside of the normal in-service training.

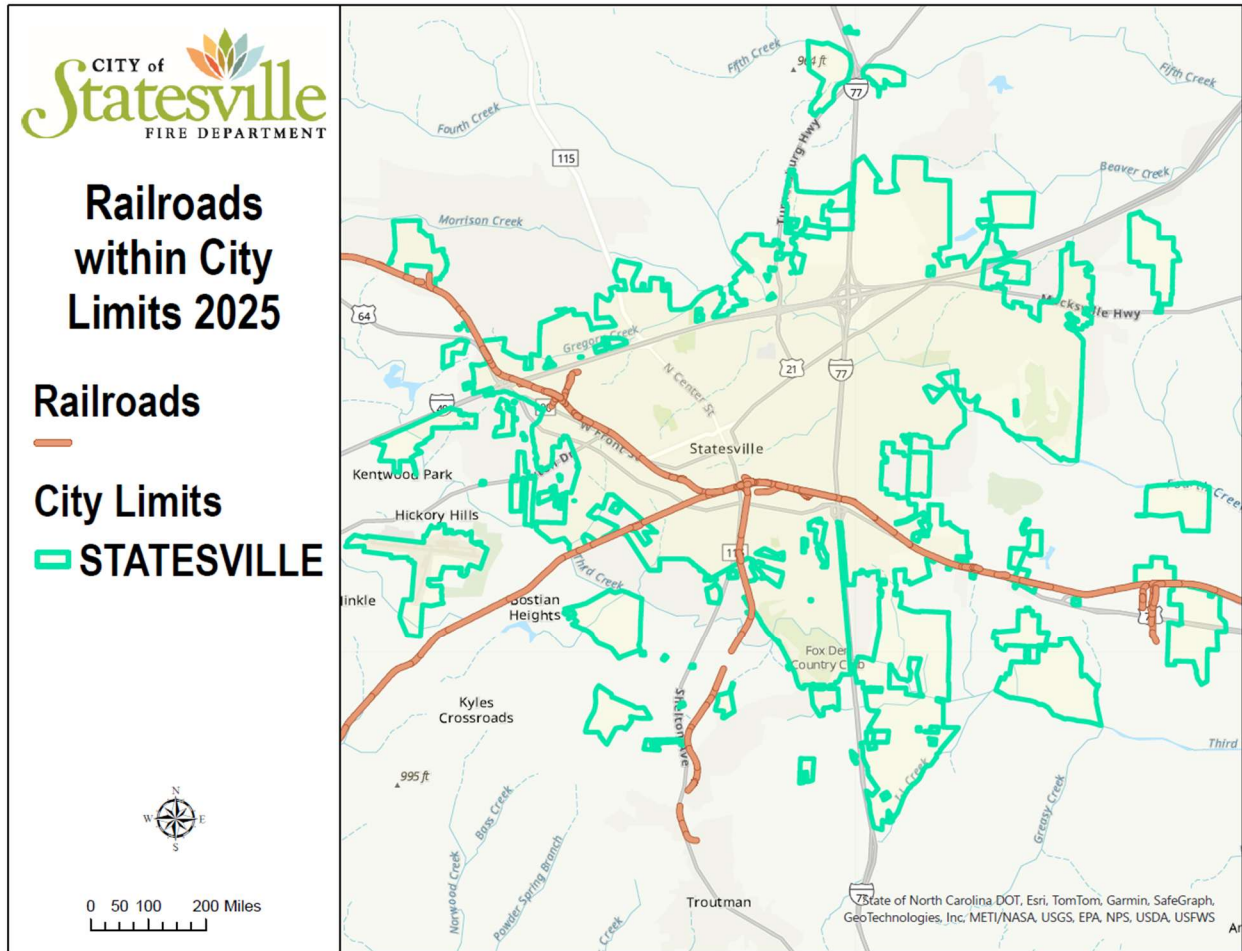
**Map 13: Statesville Regional Airport**



**Rail**

The Norfolk-Southern main line and Alexander Railroad short line system. Part of the 3,285-mile North Carolina track network that runs through the southern and western parts of the city. The Norfolk-Southern main line and Alexander Railroad short line, runs parallel with Hwy 70 (Garner Bagnal Blvd & Salisbury Hwy) to the south and Hwy 90 (Taylorsville Hwy) to the west. These rail lines are all commerce lines and do not include any passenger trains currently.

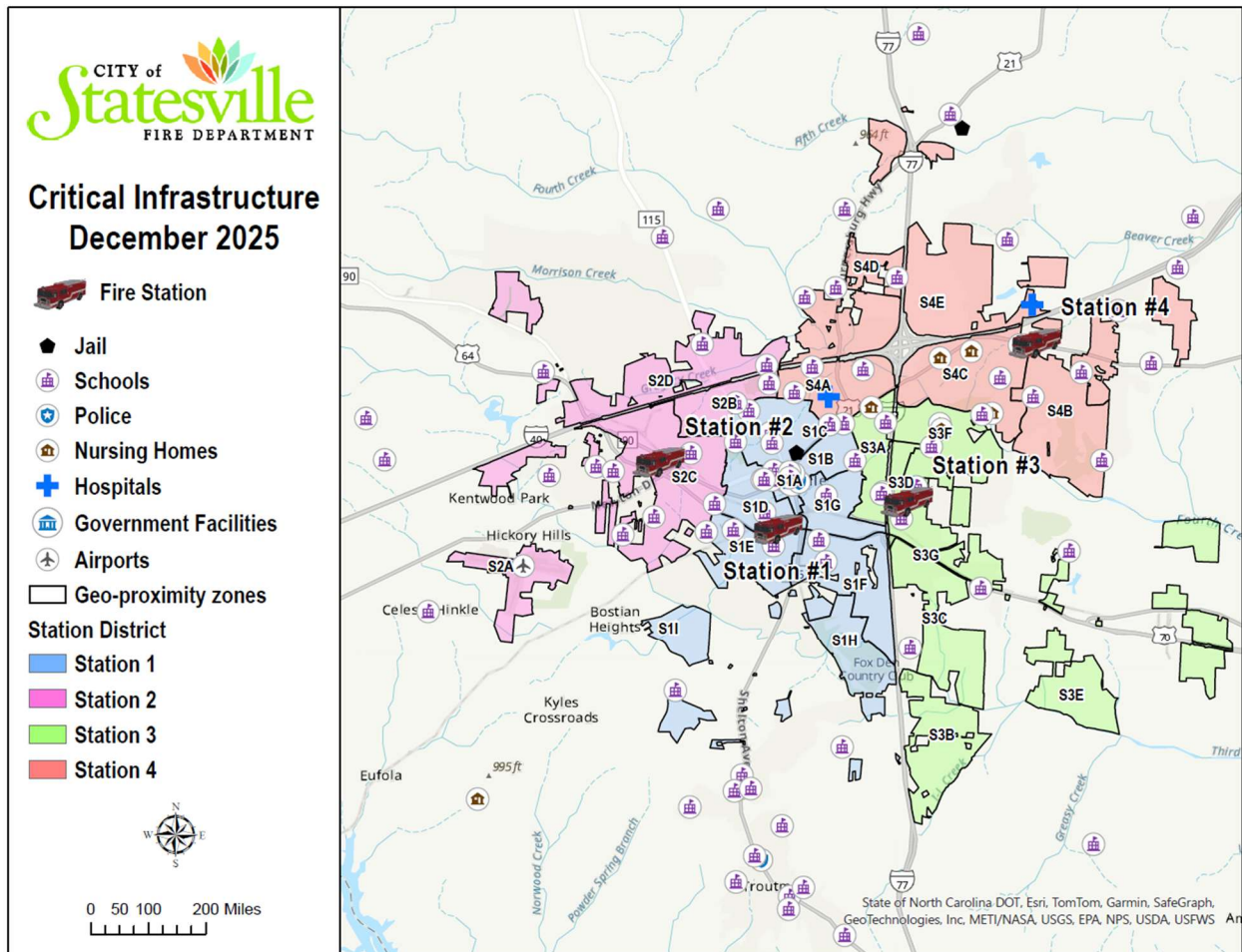
**Map 14: Railroads within City of Statesville**



## Critical Infrastructure

There are several physical assets that are critical to the functionality of the City of Statesville and surrounding areas. This includes government buildings, fire & police facilities, hospitals, schools/college, bridges, power stations, and water treatment facilities. There are also several facilities that are centres for large concentrations of citizens such as entertainment venues, places of worship, medical buildings, schools/colleges, and high-density housing. In addition to these, a large area of the city is classified as national and state historical districts.

**Map 15: City of Statesville Critical Infrastructure**



**Table 6: Hospitals**

Hospital	Location / Number of Beds
Iredell Memorial	557 Brookdale Drive (391 beds)
Iredell Davis – Behavioral Health Hospital	218 Old Mocksville Road (42 psychiatric beds)

**Table 7: Schools / Colleges**

School / College	Location
Academy of Excellence	612 S Race Street
American Renaissance Charter School	132 E. Broad Street
American Renaissance Middle School	217 S Center Street
American Renaissance School	212 Cooper Street
Cornerstone Christian Academy	650 Glover Street
Cornerstone Christian Academy (High School)	1668 E. Broad Street
ISS / East Iredell Elementary School	400 E. Elementary Road
ISS / EC Test Center	1147 Salisbury Road
ISS / N B Mills Elementary School	1410 Pearl Street
ISS / Northview Academy	625 Carolina Avenue N.
ISS / Oakwood IB School	321 Clegg Street
ISS / Virtual Academy (Pressly)	222 Knox Street
ISS / Statesville High School	474 N. Center Street
Redeemer Prep Academy	2200 E Broad Street
Statesville Christian School	1210 Museum Road
Statesville Christian School (Elementary)	1206 Museum Road #A
Statesville Montessori School	1012 Harmony Drive
Success Institute	1424 Rickert Street
Mitchell Community College	500 W. Broad Street
Mitchell Community College - Continuing Education	701 W. Front Street
Unity Center	1145 Salisbury Road

**Table 8: Historical District Locations**

<b>Historic District</b>	<b>Location</b>	<b>Size</b>
<b>Academy Hill</b>	Western Avenue, Bell, Mulberry, Wise, and Armfield Streets	350 acres with 40 buildings
<b>Center Street A.M.E. Zion Church</b>	537 S. Center Street	1 building
<b>East Broad St. / Davie Ave.</b>	Davie Avenue., Broad and Elm Street	350 acres and 65 buildings
<b>Iredell County Courthouse</b>	200 S. Center Street	1 building
<b>Key Memorial Chapel</b>	150 E. Sharpe Street	1 building
<b>Mitchell College, main building</b>	500 W. Broad St.	1 building
<b>Mitchell College Historic District</b>	Mulberry, Race, Cherry, Oak and Alexander Streets	300 acres and 87 buildings
<b>Morrison-Mott House</b>	332 N. Center Street	1 building
<b>Col. Silas Alexander Sharpe, House</b>	402 S. Center Street	1 building
<b>South Race Street Historic District</b>	S. Race, W. Armfield, W. Bell, W. Sharpe, S. Oak Streets, and Western Avenue	270 acres and 85 buildings
<b>Statesville Commercial Historic District</b>	Front, Meeting, Broad and Tradd Streets	300 acres and 54 buildings
<b>Statesville City Hall</b>	227 S. Center St.	1 building

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## Community Expectations and Performance Goals

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This section defines the expectations set by our community and outlines our performance goals set to meet the needs of the City of Statesville. This section includes details on strategic planning, the Department's mission, vision, values, current ISO rating schedule and current recommendations made at the last evaluation by the Office of State Fire Marshal in the Fall of 2022. Service level expectations are addressed and historical performance baselines are reviewed from the past five years.

### Strategic Planning

In 2008, our process of developing Performance Goals began with an in-depth look at the Department by developing a comprehensive Strategic Plan. The strategic planning process revolved around the model set by the Center for Public Safety Excellence (CPSE) and the Commission for Fire Accreditation International (CFAI).

In 2022, the Strategic Planning Team performed a complete 4<sup>th</sup> edition rewrite in accordance with guidelines set forth in the CFAI *Fire & Emergency Service Self-Assessment Manual 10<sup>th</sup> Ed.* with internal and external stakeholder viewpoints compiled through a series of meetings. In addition, a thorough survey was conducted for all current Fire Department employees. Once the survey was complete, the team met with suppression and fire prevention to seek follow-up information. The information ascertained through this process proved valuable and provided direction for this plan.

The original Strategic Plan identified 8 Strategic Initiatives and 64 Goals. Each goal had at least one action step with some more complex goals requiring multiple steps. Almost half of the action steps were related to SFD service delivery and training. After much deliberation, the team chose to keep those initiatives and goals intact but also added CPSE's recommended SWOT analysis.

The Strategic Plan is reviewed annually by the Strategic Planning Committee. During the 2023 re-accreditation process, the recommendation was made by CFAI, for SFD to evaluate goals and objectives for a more focused approach utilizing the S.M.A.R.T. methodology.

In 2024 and 2025, the Strategic Planning Committee conducted a SWOC analysis, surveyed internal and external stakeholders, revised the Department's mission and vision statements, held external stakeholder meetings, and took a deep dive into revising the Strategic Initiatives, Goals, and Objectives. When revising the Strategic Initiatives, the Goals and Objectives of the plan were made S.M.A.R.T. (specific, measurable, achievable, relevant, and time-bound) and aligned better with the City of Statesville stakeholder survey findings. The revised 2025-2030 Strategic Plan includes 6 Strategic Initiatives and provides S.M.A.R.T. goals, S.M.A.R.T. objectives, and tasks to move forward with enhancement of the Department. By reviewing the previous versions, one can see this plan is a working document and not 'set in stone'. Future versions will concentrate on steady and modern improvements.

**Table 9: Statesville Fire Department 2025-2030 Strategic Initiatives**

### **Strategic Initiative 1: Department Growth with City Council Support**

The City of Statesville is a growing suburban community. As the City grows, so does the need and demand for Fire Department services across the community to protect the safety and well-being of citizens and visitors. The Department's Strategic Planning Committee continuously reviews the Specific, Measurable, Achievable, Relevant, and Time-Bound (S.M.A.R.T.) goals and objectives of the Strategic Plan to ensure the Department is moving in the right direction to operate efficient fire and life safety services and achieve the mission of the Department. The strategies and tactics laid out in the Strategic Plan are not derived in a silo. Local, state, and national recommendations are incorporated into the Department's policies and procedures to guide decisions and management of operations. In addition, routine education and sharing information with the City of Statesville leaders and residents and solicitation for feedback from stakeholders about improving services are valued as essential components of the development and execution of the community driven Strategic Plan.

### **Strategic Initiative 2: Pay & Benefits Enhancements**

Recruitment and retainment of an exceptionally effective workforce is detrimental to the success of the Department's mission. The Fire Department, in collaboration with the City Human Resources Department, strives to be competitive in pay rates and benefits and regularly monitored promotion plans are in place. State certifications are encouraged for all levels in the organization to coincide with the City of Statesville Pay Plan. National training guidelines are followed, and performance-based skills evaluations are routinely conducted. The Fire Department works to provide many training opportunities and implements career development programs for all positions to build a team of well-trained, compensated personnel that can protect the community.

### **Strategic Initiative 3: Communications & Service Delivery**

Facilitating the exchange of critical information using reliable communication systems is vital for the safety and success of first responders. Current technology is being used by the Department to implement a quality fire records management system, EPR FireWorks. The Department has several internal and external operational systems in place that provide methods to meet the needs of the organization in an effective manner. Fire department personnel continue to partner with Iredell Emergency Communications Department (ECOM), Statesville Police Department, and other mutual aid agencies through formal agreements to effectively devise a crucial piece, communications, of the overall service delivery process. Shared computer server space and web space are used to provide information to all responding personnel in a timely manner. The Statesville Fire Department continues to progressively research and pursue new and improved technology for the safety and well-being of the City of Statesville.

#### **Strategic Initiative 4: Physical Health, Mental Health and Wellness Enrichments**

Emergency scenes can be uncertain environments where safety is challenging. The City of Statesville Fire Department prioritizes safety of all personnel by following national fire service recommendations and enacting safety procedures. The physical health, mental health, and overall wellness of each team member is the foundation of fostering a robust Department to achieve the safest workplace possible in emergency response. The Health and Wellness Committee of Statesville Fire Department provides direction to the programs to ensure physical health, mental health, and overall wellness of all personnel is taken seriously to ensure the most capable rapid response force is serving the City.

#### **Strategic Initiative 5: Strengthening Community Risk Reduction & Public Education Efforts**

There are many situations in life that involve exposure to danger, which are risks. The City of Statesville Fire Department accentuates the importance of prevention education, planning, inspection, and permitting to help the citizens of Statesville reduce their exposure to risks. Reducing the risks through knowledge and practice ultimately decreases occurrences of emergency incidents throughout the community. The Community Risk Reduction and Public Education Programs of the Department are data driven programs for all ages to promote behavior changes and implement preventative measures, thus protecting lives and property.

#### **Strategic Initiative 6: Technical Rescue Program Improvements**

The Department responds to many different emergency incidents: fire, medical emergencies, hazardous materials incidents, technical rescues, aircraft emergencies, and other life safety situations to meet the critical needs of the citizens and visitors of Statesville. Emergency response continues to evolve into more specialty areas of responsibility regarding hazardous materials, technical rescue, aircraft crash and rescue and medical care capabilities. The Department reviews each response class on an ongoing basis to strive for continuous improvements in all areas. Due to an increase in technical rescue calls in the jurisdiction over the last five years and the amplified occurrences of natural and man-made disasters throughout the state, the Technical Rescue Committee of Statesville Fire Department is focusing on enhancing the technical rescue personnel and equipment capabilities to meet the demand of life saving services.

**Table 10: Statesville Fire Department Mission, Vision, Values**

<b>Mission Statement</b>
<b>The City of Statesville Fire Department is a rapid response force committed to protecting the safety and well-being of the community from all hazards.</b>
<b>Vision Statement</b>
<b>The City of Statesville Fire Department strives for progression in service capabilities by adapting to continuous growth and providing constant professionalism to meet the needs of the community and organization.</b>
<b>Values Statement</b>
<b>The Statesville Fire Department achieves its mission and vision by building upon a system of values. We uphold professionalism as our core value. Our defining values also include: Integrity, Compassion, Service, Courtesy, and Accountability.</b>
<ul style="list-style-type: none"> <li>➤ <b><u>Professionalism</u></b>: Our core value of professionalism defines who we are. We believe our chosen career is an upstanding and sound service to the community we serve. We take our role seriously and do all that we can to be a positive role model to future generations.</li> <li>➤ <b><u>Integrity</u></b>: We believe in living by moral and ethical principles. We demonstrate our values by the way we live our lives in the public eye and in the confines of the fire station walls.</li> <li>➤ <b><u>Compassion</u></b>: We believe in caring for our community members who are suffering from tragic events in their lives and do all that is in our power to assist in stabilizing the situation with a merciful attitude.</li> <li>➤ <b><u>Service Excellence</u></b>: We believe in providing the best possible service to the community where we live and work and do all we can to meet the needs of our neighbors through a humble, competent, and well trained, efficient team.</li> <li>➤ <b><u>Courtesy</u></b>: We believe in being kind and polite to our fellow firefighters and the citizens we serve.</li> <li>➤ <b><u>Accountability</u></b>: We accept responsibility for accomplishing our missions. We are transparent in our decision-making and expect to be held accountable for the actions we take.</li> </ul>

## ISO Rating and Supporting Information

For many years the Insurance Services Office (ISO), a private corporation funded by the insurance industry, established public protection districts for the purpose of setting premium rates for homeowners' and property insurance. ISO visited fire districts and evaluated their fire abilities to respond to fires, as well as the quality of their equipment, and then set fire district ratings.

ISO's Public Protection Classification (PPC) system has been in use since the early 1900's and has been continuously modified and refined over that time. The manual, Fire Suppression Rating Schedule (FSRS) looks at a great deal of specific information about the fire department, the water supply, and the types of property in the community, and uses a complex process to evaluate that information. They then assign a PPC from 1 to 10. Class 1 generally represents superior property fire protection, and Class 10 indicates that the area's fire suppression program does not meet ISO's minimum criteria.

In 1987 the General Assembly gave the Commissioner of Insurance (Office of State Fire Marshal) the duty of rating the fire districts in rural areas of the State (HB 1696). This act simply gives the Commissioner the authority to rate fire districts in rural areas and in cities with populations of 100,000 or fewer. Therefore, the City of Statesville began being evaluated by the Office of State Fire Marshal (OSFM) in the 1990's.

ISO has extensive information on more than 44,000 fire response jurisdictions. In fact, until the national 'no-call' database was developed, it was the nation's largest database. The PPC program recognizes the efforts of communities to provide fire protection services for citizens and property owners. A community's investment in fire mitigation is a proven and reliable predictor of future fire losses. With that, insurance companies use PPC information to help establish fair premiums for fire insurance – generally lower premiums for communities with lower ISO ratings. By offering economic benefits for communities that invest in their firefighter services, the program provides a real incentive for improving and maintaining public fire protection.

To determine a community's PPC, OSFM conducts a field survey in conjunction with ISO standards. Trained OSFM staff visit the community to observe and evaluate features of the fire protection systems. Using the FSRS, OSFM objectively evaluates three major areas:

- **Water Supply** - A review of the water supply system accounts for 40% of the total classification and is the most important single factor. The FSRS compares the water supply available (hydrant size, type, inspection frequency, etc.) at representative areas of the community with the amount needed to fight a fire in the types of buildings there are at that location.

- **Fire Department** – A review of the fire department accounts for 50% of the total classification. OSFM focuses on first alarm response and initial attack to minimize potential loss. The review consists of areas such as engine companies, ladder companies, service companies, distribution of fire stations/companies, equipment carried on the apparatus, pumping capacity, reserve apparatus, departmental personnel (accounts for 24% of the total rating), and training.
- **Fire Alarm and Communications System** – A review of the fire alarm/dispatching system accounts for 10% of the total classification. The review focuses on the community’s facilities and support for handling and dispatching fire alarms.

The City of Statesville is amid growth, both residential and commercial, and the mission of the organization has expanded to include an all-hazards approach that plays a major role in deployment decisions. The city has completed an ISO review through the Office of State Fire Marshal in 2022 and received a rating of ISO Class 1. The city is now one of 125 nationwide and 16 statewide designated with an ISO Class 1 rating and accredited agencies as of December 2025. Several recommendations were made to improve the service levels and to strive towards retaining the superior rating in the following areas:

- Staffing
- Deployment
- Training
- Geographic Information System (GIS/AVL)
- Public Fire Safety and Education Programs and Qualifications

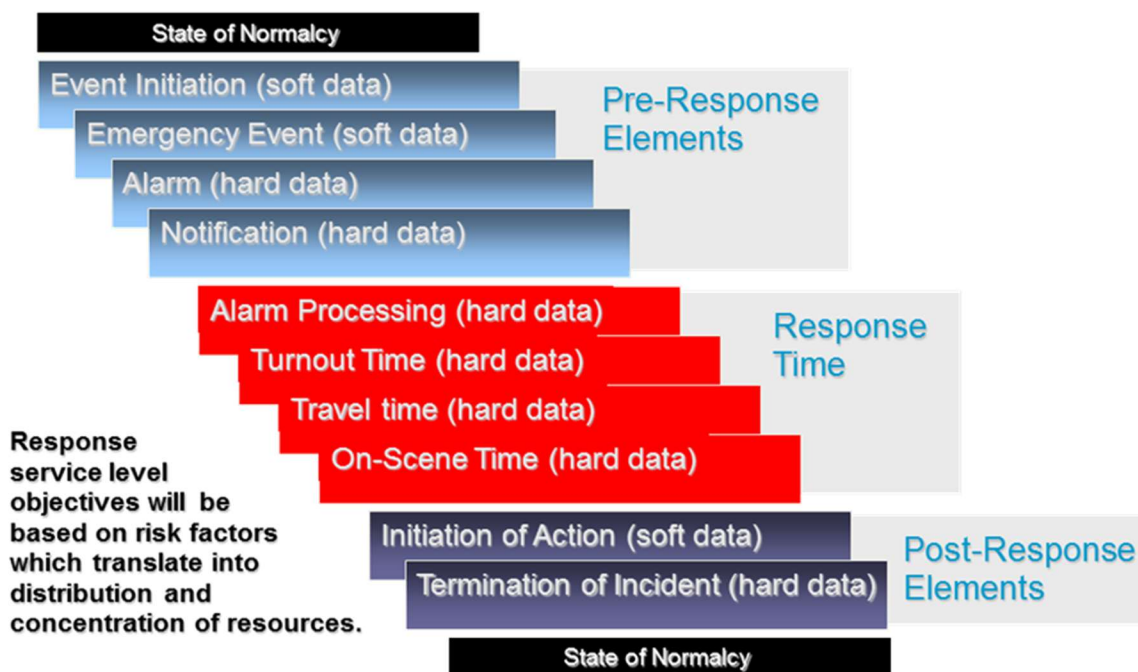
The Department received a 2008 SAFER Grant for 3 additional personnel, but those positions were lost due to the economy over the nine-year period. Those 3 SAFER Grant positions were recovered in January 2018 after the inspection from the awarding of FY16 SAFER. In addition, the SFD was recently awarded the FY17 SAFER for 6 additional personnel. The city applied for SAFER grants in all subsequent years but have not been awarded the funding. The department will continue to strive for staffing and comply with NFPA 1710. Training records have been divided into ISO categories to allow better record keeping, but proper documentation of training facilities’ use and documentation was noted. The Iredell County Dispatch Center (ECOM) has added personnel and consoles but a deficiency of (EDP) Emergency Dispatch Protocols and the lack of fully integrated GIS and AVL unit locating systems were noted. Finally, the deficiencies of Public Fire Safety Education Programs and Qualifications of Fire and Life Safety Educators were noted in the evaluation.

In summarization, the SFD received an overall point rating of 94.45 out of a possible 105.5 points in 2022.

## Deployment

There are four critical time segments in every response beginning with the moment the dispatch center receives a call from the public. These time segments are described below. Several other key definitions are included for total response time explanation.

- 1) Alarm or Call Processing
- 2) Turnout
- 3) Travel
- 4) On-Scene



## Definitions

### Baseline

The current measurement of 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.

### Benchmark

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.

### **Call Processing**

The time the dispatch center is notified from the public and includes the notification of specific emergency response units that are to respond. Call processing time ends at the beginning point of Turnout Time. (It should be noted that the Call Processing time includes the Alarm Handling Time which is the time interval the PSAP receives the call from the public and begins transmittal of the response information via voice or electronic means to emergency response units in the field).

### **Concentration**

Spacing of multiple resources arranged so that an initial “effective response force” can arrive on scene within the time frames outlined in the on-scene performance expectations.

### **Distribution**

Geographic location of all first-due resources for initial intervention. Generally measured from fixed response points, such as fire stations, and expressed as a measure of time.

### **Geo-proximity Zones (or Service Demand Zone)**

A geographic area of a jurisdiction that is classified according to one or more risk categories. The size and classification is based upon a specific area with like properties within the city and identifies a focal property in the zone to determine hazard level.

### **Fractile**

A term used to measure fractions of data, that added together, creates a whole. Used to support total response time which is composed of several elements such as alarm call processing, turnout time, and travel time.

### **Turnout Time**

The time interval that begins when the emergency service agency is notified by either an audible or visual annunciation or both and ends at the beginning point of travel time.

### **Travel Time**

The time interval that begins when a unit is enroute to the emergency and ends when the unit arrives at the scene. This can generally be interpreted as from wheels rolling to wheels stopped.

### **Total Response Time**

The time interval from the receipt of the alarm at the primary PSAP to when the first emergency response unit is initiating action or intervening to control the incident.

## Historical Performance

The objective of our performance is to evaluate the amount of time it takes the SFD to arrive on the scene. Data was collected for the five-year period 2021-2025. The times are broken down into four categories; call processing time, turnout time, travel time, and set up time, which allowed us to analyze our response to an emergency.

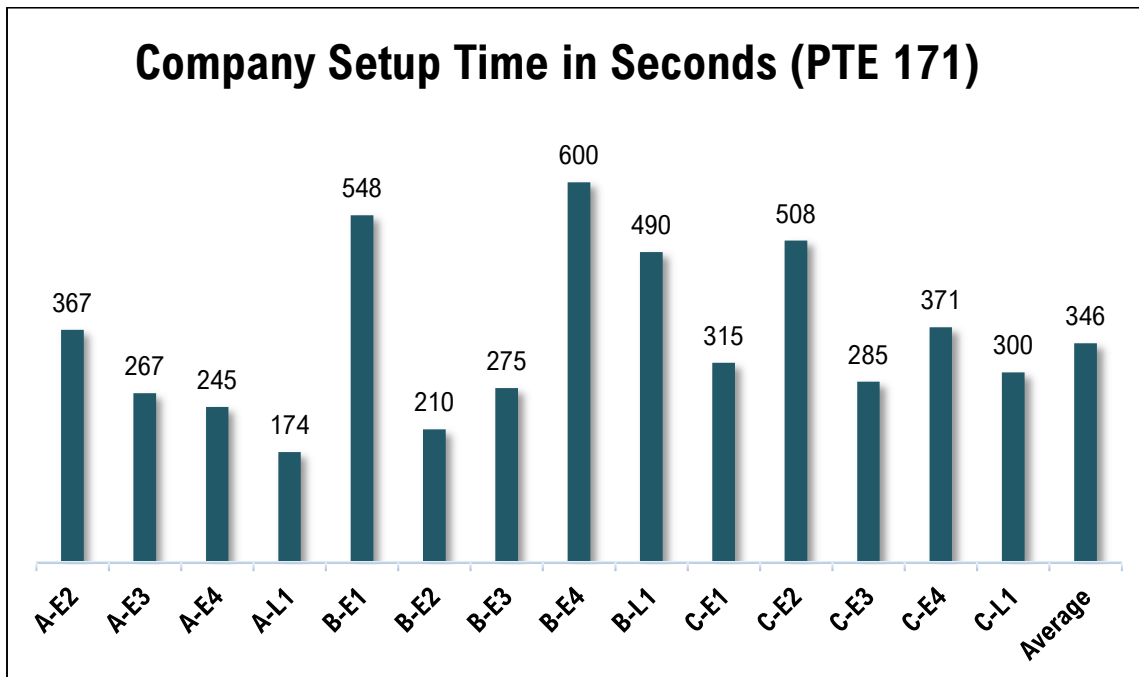
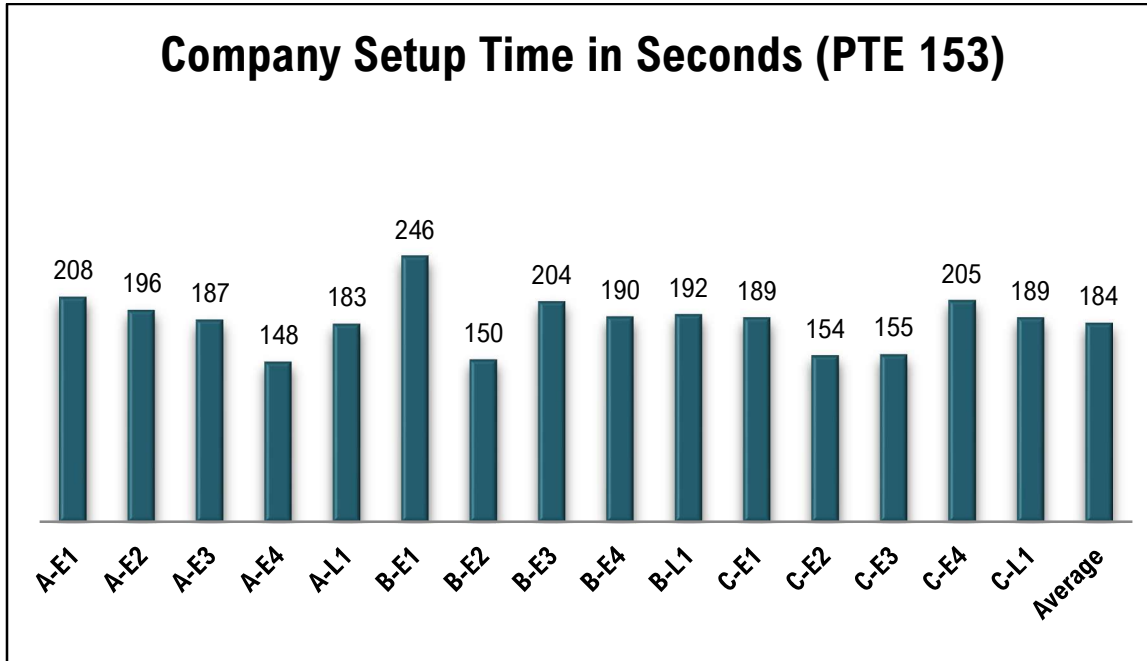
Fires will extend beyond the room of origin when flashover stage is reached (fire gases cause the room to become fully involved in flames). This stage of fire typically will occur in as little as 8 minutes of the onset of fire. The department has a response time goal of arriving on the scene, 90% of the time within 6 minutes, 20 seconds in urban geo-proximity zones and 7 minutes, 50 seconds in rural geo-proximity zones. This response time allows 1 minute for the call taker to obtain the information in urban or rural geo-proximity zones; 1 minute, 20 seconds for the firefighters to listen to the call in both urban and rural geo-proximity zones, don their gear, mount the apparatus with seat belts attached; and 4 minutes of travel time to urban geo-proximity zones and 5 minutes, 30 seconds in rural geo-proximity zones. This allows only two minutes for set-up and making the fire attack.

The Fire Department has worked closely with the City of Statesville's Engineering Department to obtain all of the GIS Data in this document. Through their assistance it was determined that the department is capable of 5-minute travel times 94% of the time with four fire stations.

The following chart illustrates the time it takes an engine company to deploy a 1 ¾ fire attack line in accordance with NFPA 1410. A 1 ¾ attack line is the most likely line to be deployed on a structure fire to deliver an adequate water supply to mitigate the incident. The chart indicates each crew and the number of seconds it will take each crew to deploy the fire attack line. All SFD crews comply with National standards. These times are taken from Performance Training Evolutions (PTE's) conducted in PTE 153 in 2022 PTE and PTE 171 in 2025. PTE 153 demonstrates the company's ability to deploy an appropriate length attack line on a single-family dwelling and apply an extinguishing agent to the fire. Chart 7's PTE 153 shows an average setup of three minutes fifty seconds to apply an extinguishing agent to the fire.

PTE 171 demonstrates the company's ability to deploy an appropriate attack line (dry) to the basement of a commercial facility, position the line, so that firefighters can charge the line then advance to the basement for the fire attack. Chart 7's PTE 171 shows an average setup of five minutes and forty-six seconds to apply an extinguishing agent to the fire.

**Chart 7: Setup Time (Attack Line Deployment) for PTE 153 and PTE 171**



**Table 11: Baseline Performance for 2025**

Response Analysis				
Percentage of 1 <sup>st</sup> Due Under Standard 90 <sup>th</sup> Percentile	% Call Processing Under 1 min.	% Turnout Time Under 1 min. 20 sec.	% Travel Time Urban Under 4 min. 00 sec.	% Total Response Urban Under 6 min. 20 sec.
<b>2025</b>	<b>79.98%</b>	<b>36.41%</b>	<b>92.44%</b>	<b>64.15%</b>

Response Analysis				
Percentage of 1 <sup>st</sup> Due Under Standard 90 <sup>th</sup> Percentile	% Call Processing Under 1 min.	% Turnout Time Under 1 min. 20 sec.	% Travel Time Rural Under 5 min. 30 sec.	% Total Response Rural Under 7 min. 50 sec.
<b>2025</b>	<b>77.19%</b>	<b>37.68%</b>	<b>73.79%</b>	<b>73.23%</b>

**Chart 8: Response Time Summary by Station 2021-2025**



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## Description of Agency Programs and Services

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### Services Provided

The City of Statesville provides an all-hazards approach to serving the citizens of the community. The services include fire protection and response, technical rescue response, emergency medical response, hazardous materials response, airport fire protection and response, and fire prevention, investigation, and inspection activities. The department provides these services from four (4) fire stations with the administration offices operating from Station 1. Four (4) front line engine companies are staffed daily with a minimum of four (4) individuals (1 company officer, 1 lieutenant/fire equipment operator, and 2 firefighters). One (1) aerial/tower (Fire Station 1) is staffed with a minimum of four (4) individuals (1 company officer, 1 lieutenant/fire equipment operator, and 2 firefighters) daily. The department operates three (3) shifts on a 24/48-hour shift schedule. All personnel assigned to the Operations Division function within those guidelines.

The department also maintains four (4) reserve engine companies (not staffed) for use by recalled personnel. The department purchased a 75' Quint in 2021 to function as a reserve aerial device. The reserve aerial device is housed at Station 3. Each of the stations maintains additional reserve engines. Each station is also equipped with a squad vehicle (passenger truck/car) for general daily use. The ladder truck is located at Fire Station 1 and contains specialized rescue equipment for confined space and high angle rescue. ARFF 1 is housed at a hangar at Statesville Regional Airport and is used for airport emergencies.

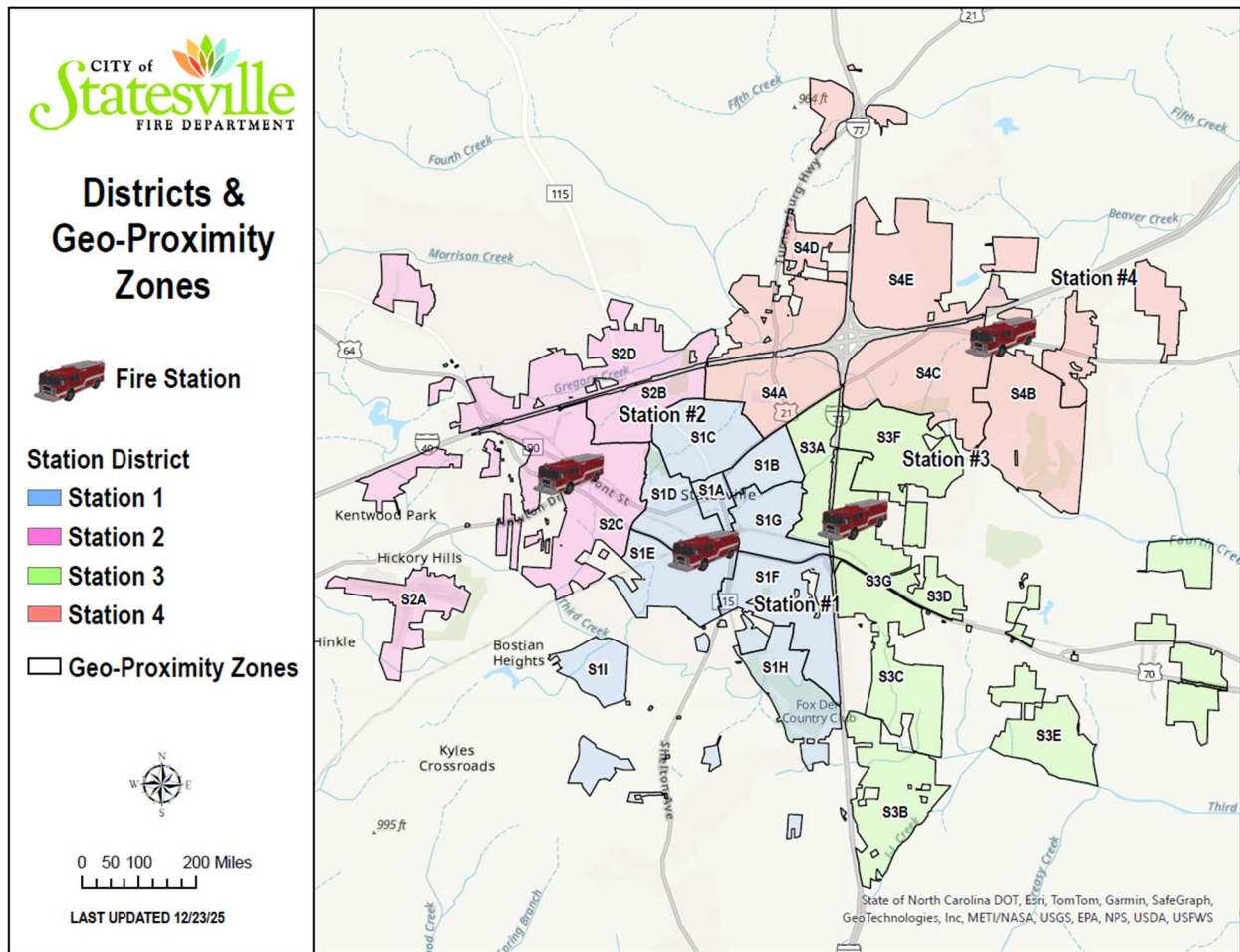
The SFD participates in various levels of a tiered response by cooperating with rural fire departments, Iredell County Rescue Squad, Iredell County Emergency Medical Services, and Iredell County Office of Emergency Management. SFD is certified through the North Carolina Association of Rescue and EMS (NCAREMS) as a Heavy Rescue, Confined Space, and High-Angle provider along with Medical Responder Certification. Rural fire protection contracts are in place to provide service from the closest fire station. Iredell County Rescue Squad provides support to the department in technical rescue and provides basic emergency medical service with Iredell County Emergency Medical Services. Iredell EMS provides paramedic service and provides convalescent and emergency medical transport. Additionally, the SFD provides hazardous materials technician level service in the city and the central and northern areas of Iredell County with support regionally from Mooresville Fire Department and Hazardous Materials Regional Response Team/RRT-7 (Charlotte Fire Department). The region is also supported by the Charlotte Fire Department in technical rescue operations. The USAR team in Charlotte is designated as North Carolina Task Force 3.

The majority of the City of Statesville falls into the CPSE density categories of urban and with a portion geographically encompassing rural density. However, due to the addition of Fire Station 4 in 2011 and the existing station locations, the Department has chosen to benchmark against the urban and rural density in relation to response throughout the city.

### Fire Station Locations

The City of Statesville has four fire stations protecting the 31.07 square mile. The oldest, Fire Station #2, was constructed in 1962 and the newest, Fire Station #1, was completed in May 2024. This equates to a fire station for every 7.77 square miles.

**Map 16: Fire Station Locations**



## **Training Facilities**

Training is a top priority for the City of Statesville Fire Department (SFD). Fire suppression personnel averaged over 205 hours of training in 2025. The department utilizes annual task books, performance training evolutions (PTEs), and special topics to maintain the professional requirements of our personnel. The department assigned Firefighter, Rescue, and HazMat task books for all firefighters to complete in the calendar year. In addition to the assigned task books, the agency created a HazMat Tech task book for the department's Hazmat Response Team. New recruits undergo a 6-12 week recruit program, and are assigned to complete a probationary task book within a six-month period upon being assigned to shift. All companies complete an assigned PTE monthly (quarterly fire, rescue, hazmat). Special topics in a multitude of areas are assigned throughout the year in addition to task book and PTE training. The SFD also utilizes a weekly Safety & Training Bulletin to highlight key issues and current events.

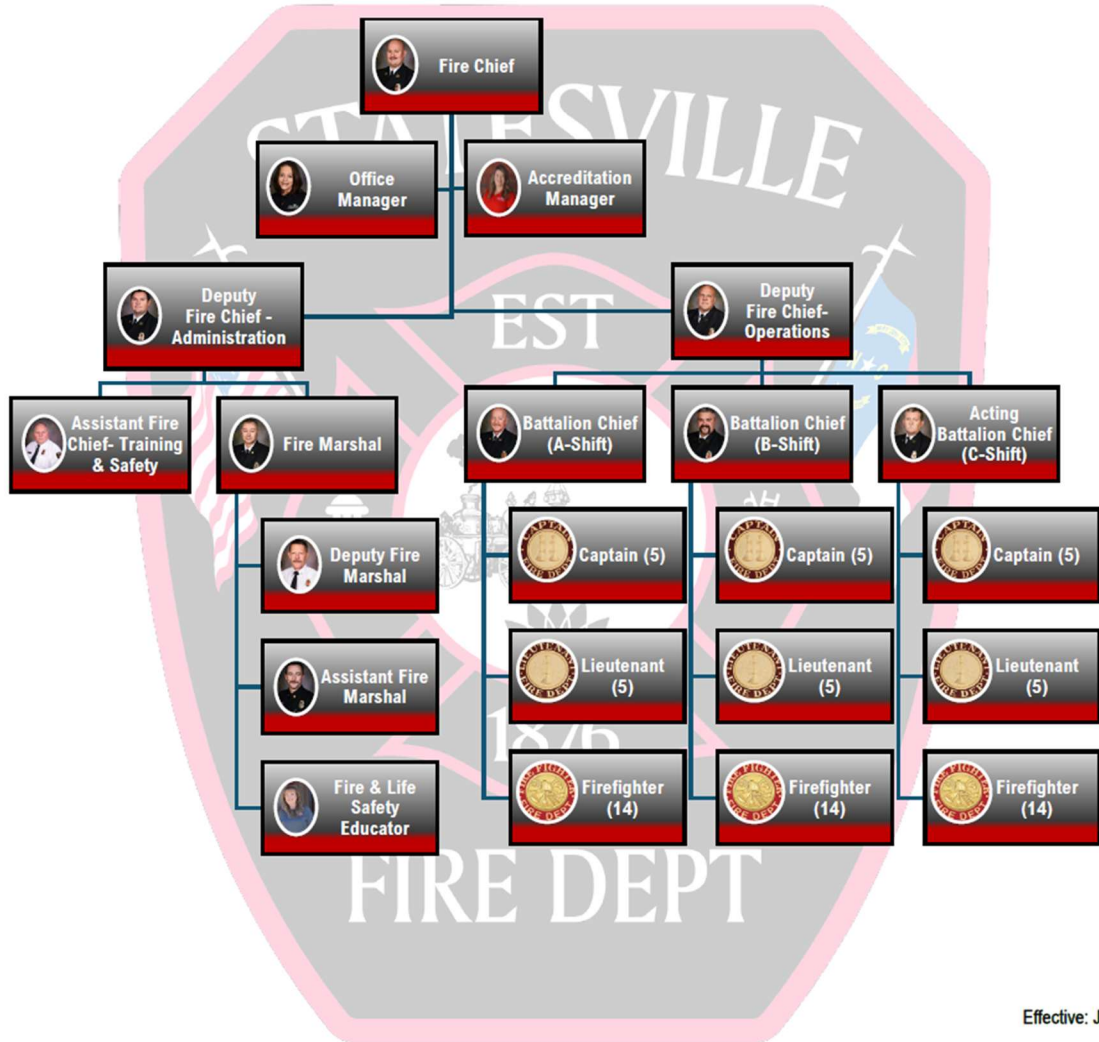
Currently, the SFD is without a fire training facility. In September of 2021, the SFD was informed by city administration that the land in which our training facility is located is being repurposed for expansion of the City's warehouse/garage. The SFD has partnered with Mitchell Community College (MCC) to construct a new Public Safety Training Facility on city property. As of December 2024, SFD continues to work closely with MCC in the planning stages of the training facility construction. The projected completion date of the Public Safety Training Facility is Spring 2028. In the meantime, the department is utilizing acquired structures and partnering with surrounding agencies to meet all training facility needs.

## **Administration**

The Fire Administration Office of the Fire Chief and the Fire & Life Safety Division operate from Station 1 at 822 Fifth Street. The Fire Chief, Deputy Chief of Administration, Deputy Chief of Operations, Assistant Fire Chief of Training & Safety, Accreditation Manager, Office Manager, Fire Marshals and Fire & Life Safety Educator staff this office.

The Fire & Life Safety Division is staffed by four full-time individuals and one part-time employee. The Fire Marshal coordinates all activities within the Division. A Deputy Fire Marshal serves as Fire Inspector and coordinates construction plans review. An Assistant Fire Marshal serves as a Fire Inspector and support. The Fire & Life Safety Educator coordinates all public fire education including schools and conducts fire inspections. The part time inspector conducts fire inspections.

**Chart 9: Organizational Structure**

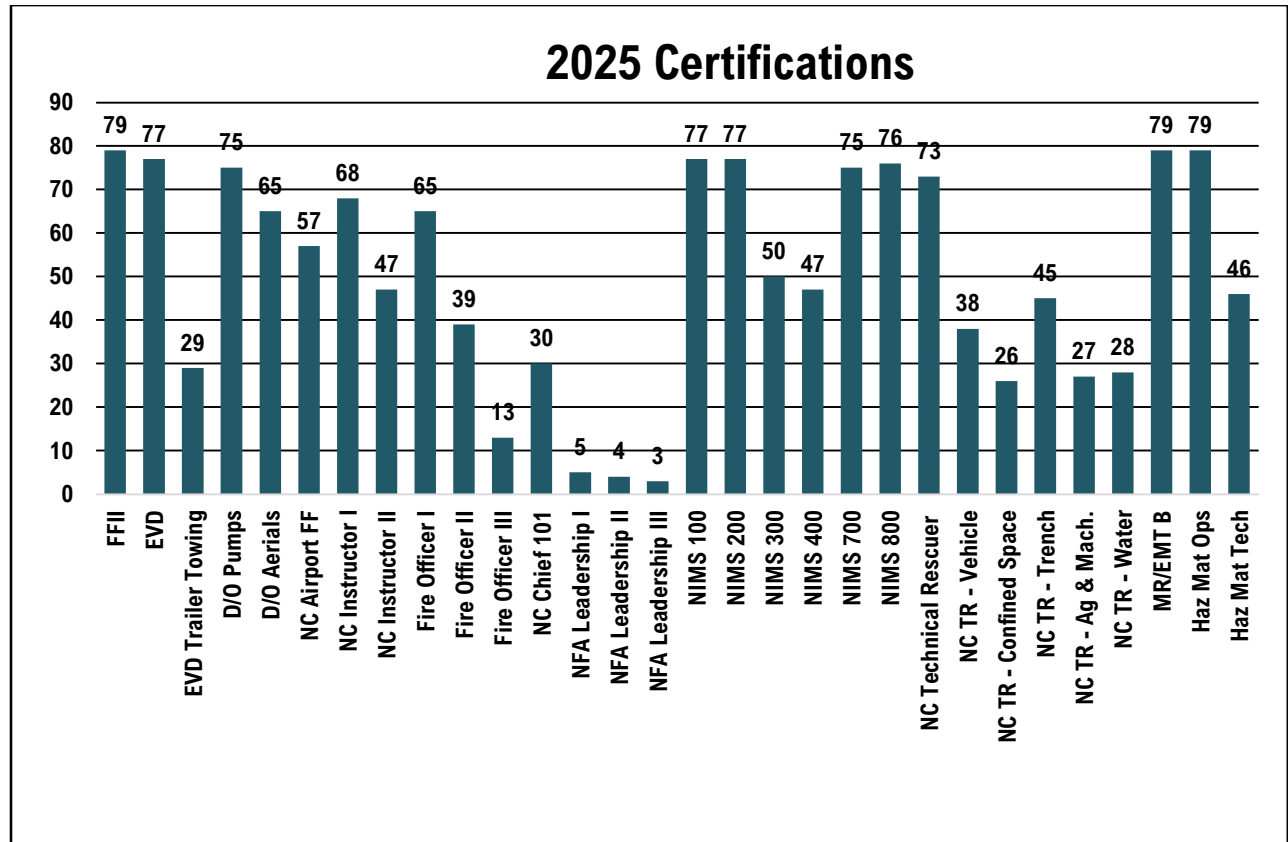


Effective: January 5, 2026

## Certifications

The SFD requires personnel to maintain many North Carolina Certifications. Firefighter I & II and, Medical Responder and EMT are held by all employees with most Officers also holding Fire Officer I & II certification.

**Chart 10: 2025 Certification Status**



## **All-Hazard Risk Assessment of the Community**

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The SFD is an all-hazards response agency and responds to an array of emergency and non-emergency incidents at differing levels of risk. A structured all-hazard risk assessment is the foundation to determining given hazards and risk within any agency's jurisdiction. Through a proper all-hazards risk assessment, a realistic appraisal of the hazards and risks the community is likely to face was achieved. The SFD used the probability and frequency of known or potential hazards to determine the potential consequence of these hazards. Identification of these hazards provides the risk to each hazard to be assessed. Then based on the level of risk, a determination of the appropriate level of service and resources to mitigate such events is made to better serve the community.

The SFD identified, assessed, and categorized risk in a method that allows for the most efficient and effective deployment of resources. Developed from a broad base of information, including:

- Current hazard classification, planning, and mitigation measures from various sources.
- Current and historical demand for service data (frequency and distribution).
- Specific information about target hazards and land use.
- Station response areas and Geo-proximity zones.

As such, it provides information to help the department:

- Identify hazards and risks by Geo-proximity zones within jurisdiction.
- Prioritize risks in order to develop a community risk reduction strategy.
- Determine the appropriate resources necessary to reduce risks and attain desired outcomes.

## Disaster Potential / Natural & Man-made Hazards

The SFD participates in planning efforts with Iredell County and assisted with the Iredell County Emergency Operations Plan (EOP) that was developed to address multiple hazards which threaten our jurisdiction and/or a municipality within the County.



Such as:

- Aircraft
- Major Fire
- Earthquake
- Major Power Failure
- Flooding
- Terrorist Event
- Fixed Chemical Facility Spill
- Tornado
- Transportation Chemical Spill
- Winter Storm
- Hurricane

## **Iredell County Emergency Operations Plan**

Through use of a functional format, the Emergency Operations Plan (EOP) encourages an Integrated Emergency Management system utilizing Incident Command System (ICS) and the National Incident Management System (NIMS) approach to disasters; and fosters prompt, efficient and coordinated emergency response. This plan requires a system-wide integration of skills, people and resources. NIMS recognizes that plans developed for one type of emergency are extremely useful for other emergency situations and a significant amount of emergency operational capability can be established by addressing broadly applicable functions. As part of the Integrated Emergency Management System, Iredell County has formally adopted NIMS and as such has incorporated the NIMS and ICS into all major emergency and disaster response. The NIMS, ICS and this EOP do not differentiate between crisis management and consequence management; however, our focus is on consequence management.

This EOP presents a basic outline that serves as a summary document to multiple functional annexes. The annexes, their associated attachments, and references, define who will do what and when in emergency/disaster situations, as well as the coordinating agency or agencies responsible and cooperating agencies. Defining the roles of response agencies/personnel reduces the confusion, chaos, and conflicts during an emergency; and significantly decreases vulnerability of the public and their property to hazardous threats.

This plan meets the legal requirements of North Carolina General Statutes, Chapter 166-A, and complies with current objectives of NIMS. Additionally, it provides the necessary elements to ensure that our local government can fulfill its legal responsibilities for emergency preparedness.

### **Additional Plans**

Technology has allowed the combination of other emergency plans and supplementary documents to be included as well. These plans have become an integral part of emergency response, preparedness, and mitigation efforts by the County. Each additional plan, while a separate document, is integrated seamlessly into this overall County EOP. The following additional plans are included.

- Rowan - Iredell Hazard Mitigation Plan (update began in 2025)
- City of Statesville Emergency Operations Plan (revision 2025/implementation 2026)
- Statesville Fire Department Continuity of Operations Plan (COOP)
- McGuire Nuclear Power Station - Radiological Emergency Response Plan (MNS-RERP)
- Response Plan for Aircraft Incidents
- Animal Disaster Response Plan

- State of North Carolina Hazard Mitigation Plan – 2018

Other plans for other agencies, departments or municipalities may be included when it is beneficial to do so or leads to more in-depth information that can be used to coordinate response forces. This plan is further supplemented by an integrated database that assists in resource management, local resource requests, damage assessment, shelter operations, vital facilities, and special needs as well as forms that are routinely used by responders, EOC management, Incident Commanders, Finance and others.

Certain parts of Iredell County, such as floodplains and steep slopes, are more prone to hazards. In addition, certain types of hazards are likely to produce only localized effects while others have widespread effects. Some natural hazards have extraordinary impacts but occur infrequently. Other hazards occur annually or several times a decade but cause little damage.

The total potential impact of each hazard on Iredell County, City of Statesville, and Towns of Mooresville, Troutman, Harmony, and Love Valley is projected in the table below. The projection is determined by combining the likely strength of the event with the size of area(s) affected and the density of human activity in the affected area. The table below depicts the composite index hazard rating for natural hazards affecting Iredell County:

**Table 12: Iredell County Hazard Index - Annualized Frequency Values**

Hazard Type	Annualized Frequency	Events on Record	Period of Record
Cold Wave	0 events per year	0	2005-2021 (16 years)
Drought	29 events per year	784	2000-2021 (22 years)
Earthquake	0.051% chance per year	n/a	2021 dataset
Hail	5.5 events per year	188	1986-2021 (34 years)
Heat Wave	0.1 events per year	1	2005-2021 (16 years)
Hurricane	0.1 events per year	11	East 1851-2021 (171 years) / West 1949-2021 (73 years)
Ice Storm	1.7 events per year	116	1946-2014 (67 years)
Landslide	0 events per year	0	2010-2021 (12 years)
Lightning	61.8 events per year	1,360	1991-2012 (22 years)
Riverine Flooding	0.8 events per year	20	1996-2019 (24 years)
Strong Wind	2.5 events per year	86	1986-2021 (34 years)
Tornado	0.2 events per year	17	1950-2021 (72 years)
Wildfire	0.002% chance per year	n/a	2021 dataset
Winter Weather	2.2 events per year	35	2005-2021 (16 years)

The hazard index rating of winter storms in Iredell County is “high,” based on a “highly likely” occurrence; “large” range of occurrence, and “limited” level of impact. The hazard index rating of “high” indicates that severe winter storms are a serious threat that should be addressed by local hazard mitigation initiatives where possible. Because of the regional impact of severe winter storms, however, many initiatives are more appropriately addressed and coordinated by the State and utility providers. The most likely non-fire hazard in Iredell County is winter storms.

### **Jurisdictional Hazard Risk Ranking**

In combination with the Iredell County EOP Hazard Index, based off recent events and historical data the SFD has comprised a risk ranking matrix for natural and man-made hazards. A probability and consequence value were given to hazards in relation to the likelihood of exposure, the magnitude of such an event, and the department’s ability to mitigate.

The highest risk identified for the City of Statesville is major fire. Based off community demographics and historical data, the hazard of a major fire has a greater probability and magnitude than other hazards. In 2025, the SFD responded to 163 fire related incidents in the 100 NFIRS series: resulting in \$2,746,213 of property loss. These 163 fire incidents also resulted in ten civilian casualties (8 deaths and 2 injuries).

The age, type of construction, and exposure potential of the City’s downtown area gives the event of a major fire a higher magnitude rating.

The SFD also experienced in 2016 a severe weather event in which 7 plus inches of rain fell within several hours. This resulted in significant flooding and required a multi-jurisdictional response into the city in which 21 water rescues were made. The city has experienced several severe storms since this time, resulting in multiple flooding events. In combination with a failing storm water drainage system within the city and increased likelihood of the event; severe weather/flooding is the next highest-ranking risk. In 2024 the SFD certified 5 Water Rescue Technicians, 5 SRTs, and 5 SRTAs to increase response capabilities, and have continued with additional certifications in 2025. The SFD utilizes policy (2.2.9 - Severe Weather Operations) to assist in mitigation efforts for severe weather operations. Below is the risk ranking for natural and man-made hazards in the City of Statesville:

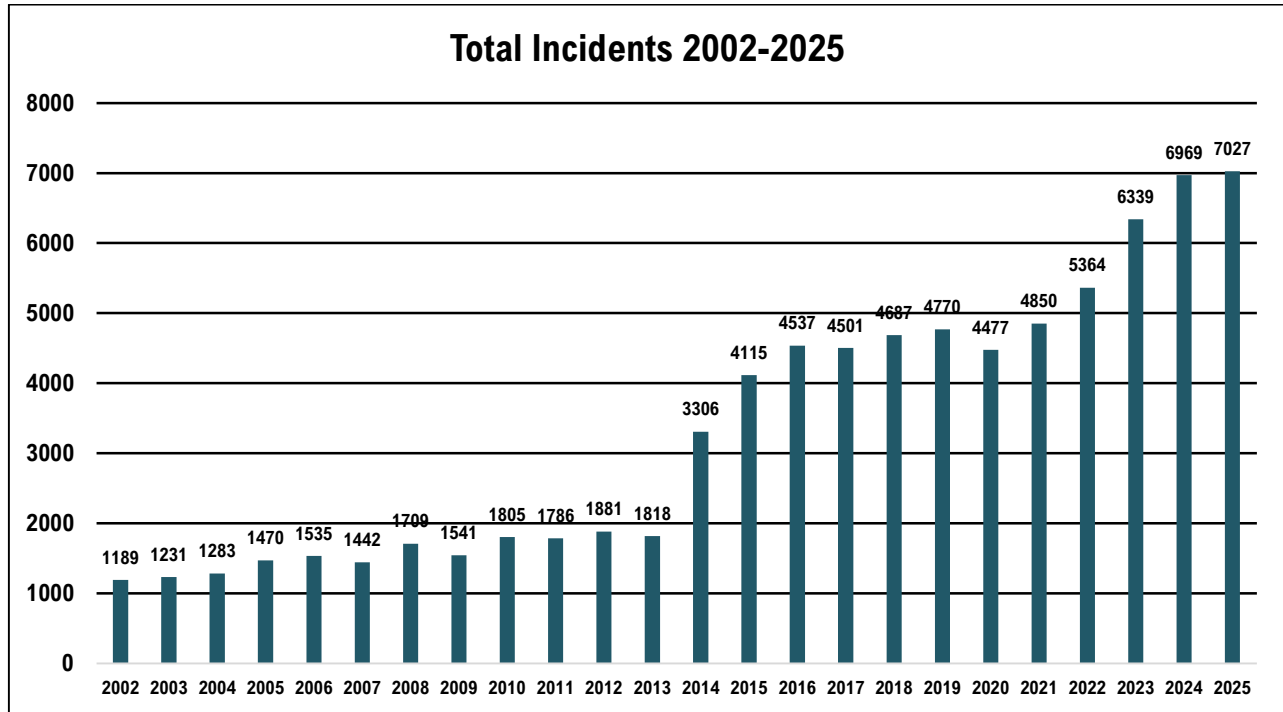
**Table 13: Jurisdiction Hazard Risk Ranking**

<b>Hazard</b>	<b>Probability (Unlikely 1 – Highly Likely 6)</b>	<b>Magnitude (Limited 1 – Catastrophic – 5)</b>	<b>Risk Ranking</b>
<b>Major Fire</b>	Highly Likely (6)	Critical (3)	1 (9)
<b>Flooding/Severe Weather &amp; Winter Storm</b>	Likely (5)	Limited to Critical (2)	2 (7)
<b>Fixed facility &amp; Transportation Chemical Spill</b>	Likely and Occasional (4)	Limited to Critical (2)	3 (6)
<b>Terrorist Event &amp; Earthquake</b>	Unlikely (1)	Critical to Catastrophic (5)	4 (6)
<b>Aircraft Emergencies &amp; Wildfire</b>	Occasional (3)	Limited to Critical (2)	5 (5)
<b>Tornado &amp; Major Power Failure</b>	Occasional to Unlikely (2)	Limited to Critical (2)	6 (4)
<b>Hurricane</b>	Unlikely (1)	Limited to Critical (2)	7 (3)

**Current and Historical Data / Demands for Service Risk Assessment**

A further determination of community risks can be made by evaluating historical data to determine the probability of an event in a particular property and the consequences of that event. Historical experience was determined by analyzing incident report data stored in the Fire Records Management System. Data ranges from total incidents by year, incidents by service type, incidents by occupancy type, and fire prevention activity.

**Chart 11: Total Incidents 2002-2025**



**Table 14: Incidents by Response Class 2025**

Response Class	Number of Incidents	Percent
Fire	942	13.41%
Medical	4,252	60.51%
HazMat	196	2.79%
Technical Rescue	477	6.79%
ARFF	6	0.09%
Other	1,154	16.42%
<b>Total Number of Incidents</b>	<b>7,027</b>	

Note:

- Non-Emergency Data merged with Other Response Class in 2023, Other Response Class revised in 2025 to ensure incidents were being put in more defined response classes
- Response Classes were modified on July 1, 2025, in the SFD RMS to reduce the number of incidents in the "Other" Response Class and better describe the incidents in a defined Response Class.

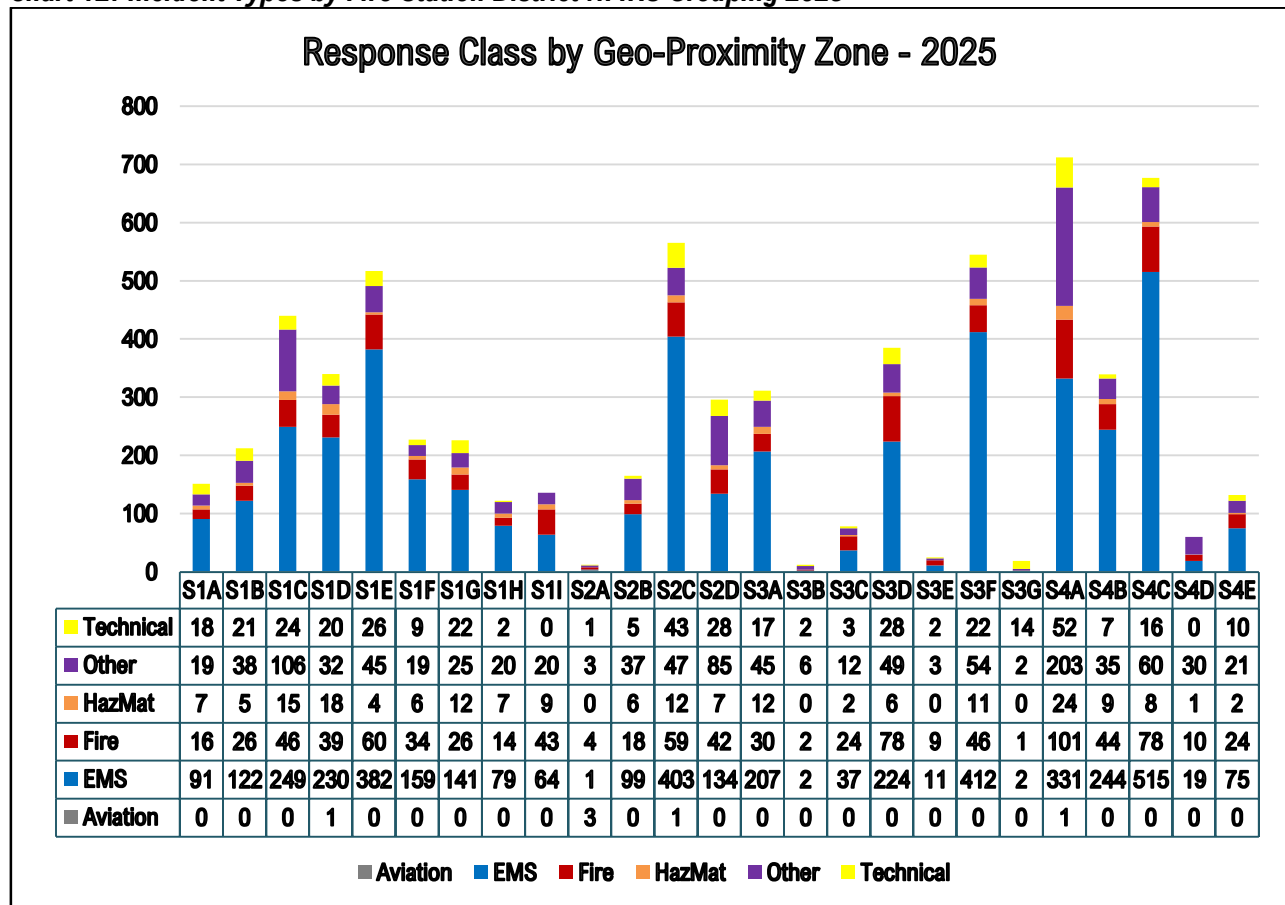
**Table 15: Incident Response by Incident Types 2021-2025**

Response Class/Year	2021	2022	2023	2024	2025	Totals
Fire	135	129	171	173	942	1,550
Medical	2,616	2,913	3,846	4,230	4,252	17,857
HazMat	96	110	126	126	196	654
Tech Rescue	396	505	522	530	477	2,430
ARFF	2	2	0	1	6	11
Non-Emergency	296	356	-	-	-	652
Other-Emergency	733	738	1,674	1,909	1,154	6,208
<b>TOTALS</b>	<b>4,274</b>	<b>4,753</b>	<b>6,339</b>	<b>6,969</b>	<b>7,027</b>	<b>29,362</b>

Note:

- Non-Emergency Data merged with Other Response Class in 2023, Other Response Class revised in 2025 to ensure incidents were being put in more defined response classes
- Response Classes were modified on July 1, 2025, in the SFD RMS to reduce the number of incidents in the "Other" Response Class and better describe the incidents in a defined Response Class.

**Chart 12: Incident Types by Fire Station District NFIRS Grouping 2025**



**Table 16: Demand for Service by Occupancy Type 2025 (based on commercial inspections)**

Occupancy Type - 2025	Total
Assembly 1	0
Assembly 2	129
Assembly 3	133
Assembly 4	2
Business	915
Educational	31
Factory 1	78
Factory 2	34
Foster Homes	60
High Hazard 1	0
High Hazard 2	5
High Hazard 3	3
High Hazard 4	3
Institutional 1	5
Institutional 2	12
Institutional 3	3
Institutional 4	13
Mercantile	291
Residential 1	22
Residential 2	32
Residential 3	4
Residential 4	10
Storage 1	317
Storage 2	34
U (Miscellaneous)	8

**Table 17: Fire & Life Safety Division Activity 2025**

Activity Report 2025	Activity 2025	Value
Inspections	Regular/New Construction	881
Investigations	Fire Casualties	10
	Total Investigations	124
	Cause/Determination - Intentional	23
	Cause/Determination - Failure of equipment or heat source	11
	Cause/Determination - Other	0
	Cause/Determination - Act of nature	1
	Cause/Determination - Undetermined after investigation	17
	Cause/Determination - Under investigation	6
	Cause/Determination - Unintentional	65
	Cause/Determination - Identification Percentage	81.30%
Planning Services	Plan Reviews	133

**Table 18: Fire & Life Safety Division Activity 2021-2025**

Activity Report 2021-2025	Description	2021	2022	2023	2024	2025
Inspections	Regular/New Construction	1162	1198	939	826	881
Investigations	Fire Casualties	19	7	5	5	10
	Total Investigations	154	128	145	173	124
	Cause/Determination - Intentional	21	21	19	17	23
	Cause/Determination - Failure of equipment or heat source	20	10	20	16	11
	Cause/Determination - Other	0	0	10	48	0
	Cause/Determination - Act of nature	1	1	0	1	1
	Cause/Determination - Undetermined after investigation	22	19	14	23	17
	Cause/Determination - Under investigation	8	8	8	6	6
	Cause/Determination - Unintentional	82	69	74	62	65
	Cause/Determination - Identification Percentage	80.5 2%	78.9 0%	84.8 3%	83.2 4%	81.3 0%
Planning Services	Plan Reviews	89	111	59	158	133

**Table 19: Community Education and Outreach 2025**

Age Groups/Life Safety Programs	Number of Participants/Programs
Seniors	433
Adults	4,425
Children	10,445
Number of Life Safety Programs	348
Number of Public Radio Programs	12
Number of Newspaper Articles	10
Smoke/CO Detector Installations	192
<b>TOTAL</b>	<b>15,865</b>

**Table 20: Community Education and Outreach 2021-2025**

Age Groups/Life Safety Programs	2021	2022	2023	2024	2025
Seniors	0	3	70	130	433
Adults	0	20	480	1,946	4,425
Children	20	1,278	3,039	4,217	10,445
Number of Life Safety Programs	2	58	114	175	348
Number of Public Radio Programs	CW	12	12	12	12
Number of Newspaper Articles	CW	1	2	4	10
Smoke/CO Detector Installations	83	83	102	123	192
<b>TOTAL</b>	<b>105</b>	<b>1,445</b>	<b>3,819</b>	<b>6,607</b>	<b>15,865</b>

*\*Fire & Life Safety programs were reduced in 2021 due to COVID-19 restrictions*

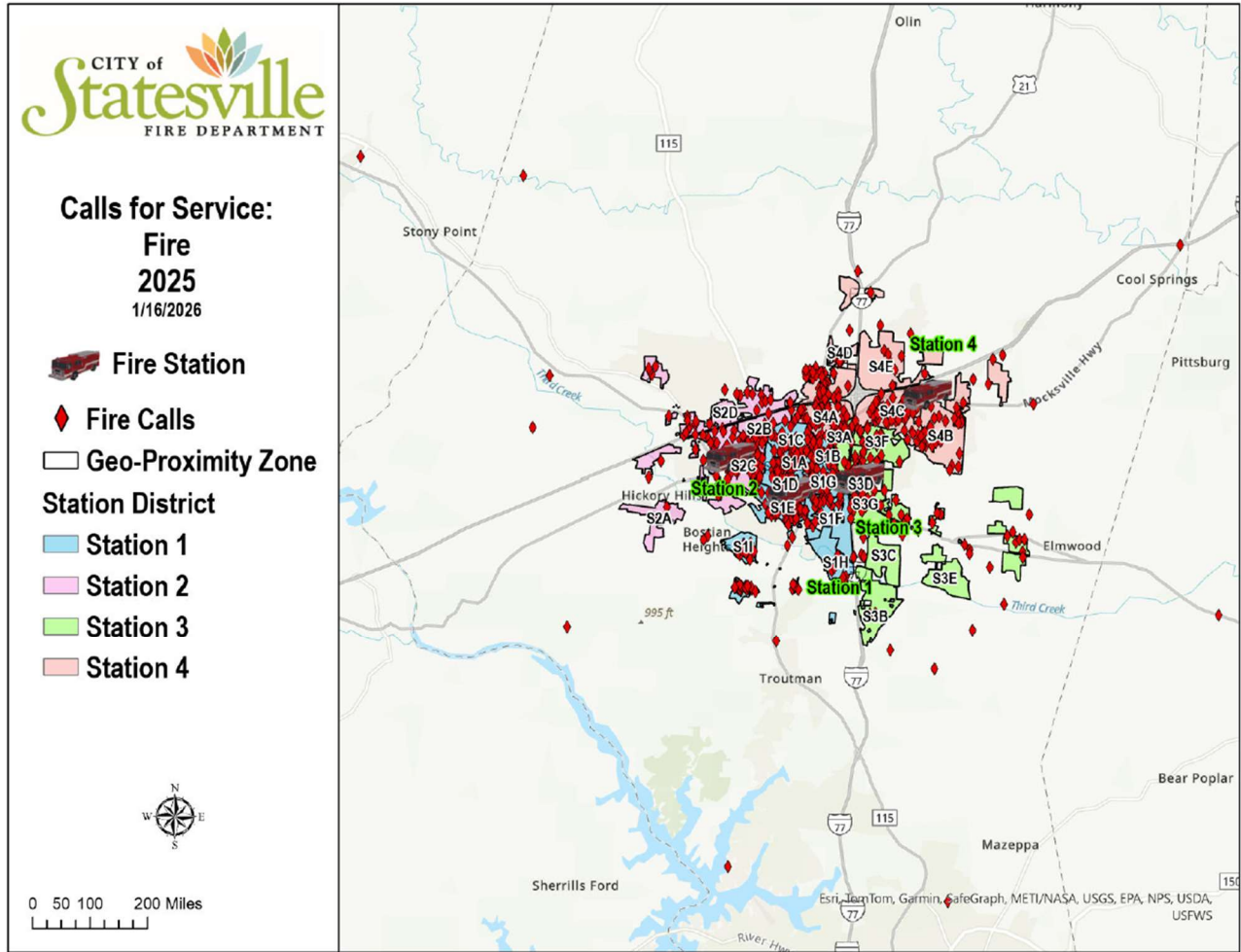
### **Service Level Risk Assessment**

The SFD looked at historical data, 2021-2025, to determine the service level risk. From 2018-2022, every call for service was analysed by incident type and placed into one of seven categories. Each category was further analyzed to determine given risk. Those categories for 2018-2022 were Fire, Medical, Hazmat, Technical Rescue, ARFF, Non-emergency and Other. In 2023, after re-evaluation and re-accreditation, SFD modified the response classes. The major change occurring with combining Non-Emergency and Other into one response class, Other. All service level risk data from 2023 and 2024 is placed into one of six response classes: Fire, Medical, HazMat, Technical Rescue, ARFF, or Other. The Response Classes were modified on July 1, 2025, in the SFD RMS to reduce the number of incidents in the “Other” Response Class and better describe the incidents in a defined Response Class. This affected all historical data in the SFD RMS, thus affecting the yearly counts, monthly counts starting with June, and the 2<sup>nd</sup> Quarter counts through the remainder of the year.

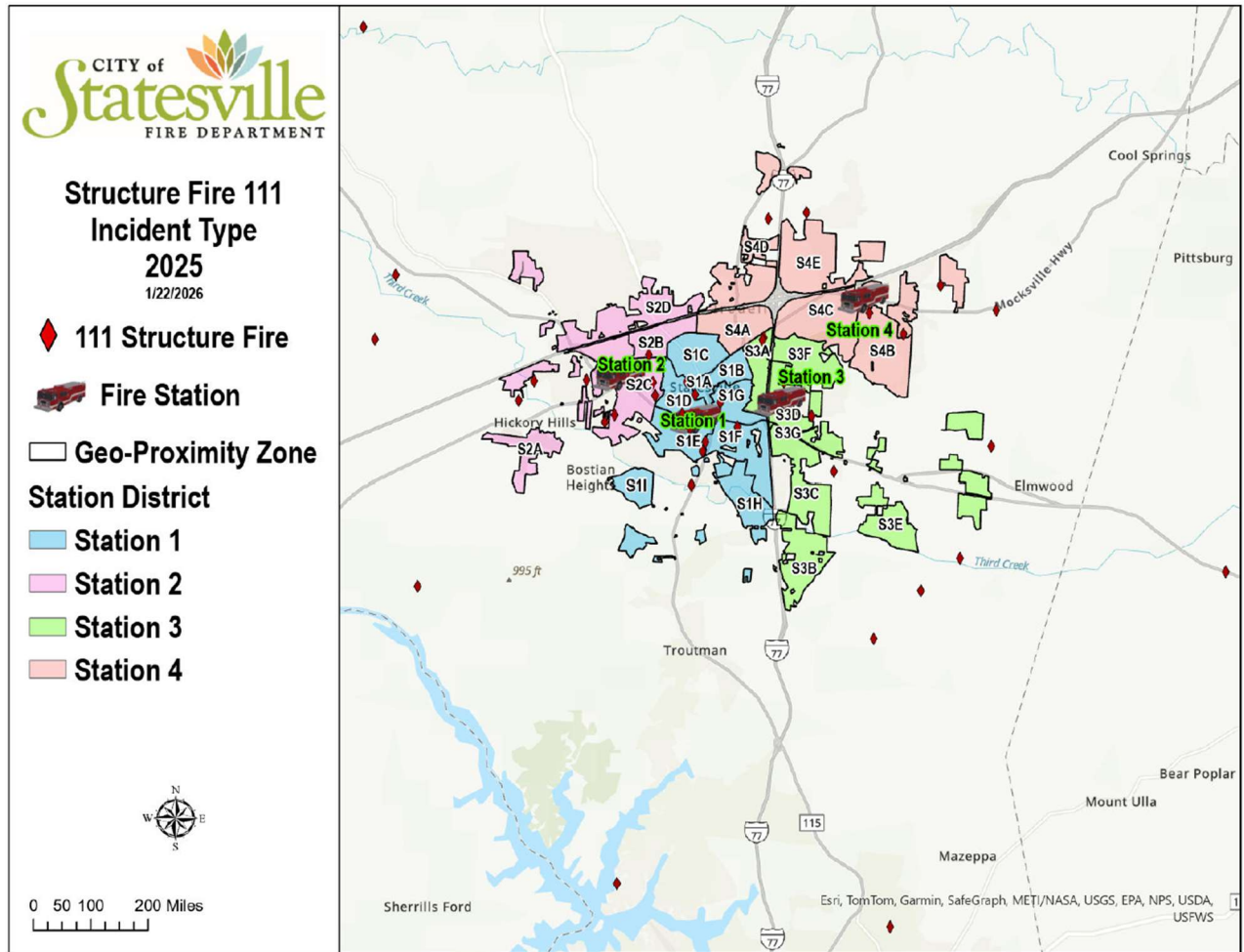
### **Fire Risk Assessment**

The fire risk assessment looked at several different areas to assess the risk of fire. This assessment looked at fire casualties (civilian and firefighter), property value/loss comparison, fires confined to room of origin, fire by type, and occupancy exposure. The SFD also applied an Occupancy Vulnerability Assessment Profile (OVAP) score to occupancies within response area. All areas assessed assisted in determining the level of risk (Low, Moderate, High, and Maximum).

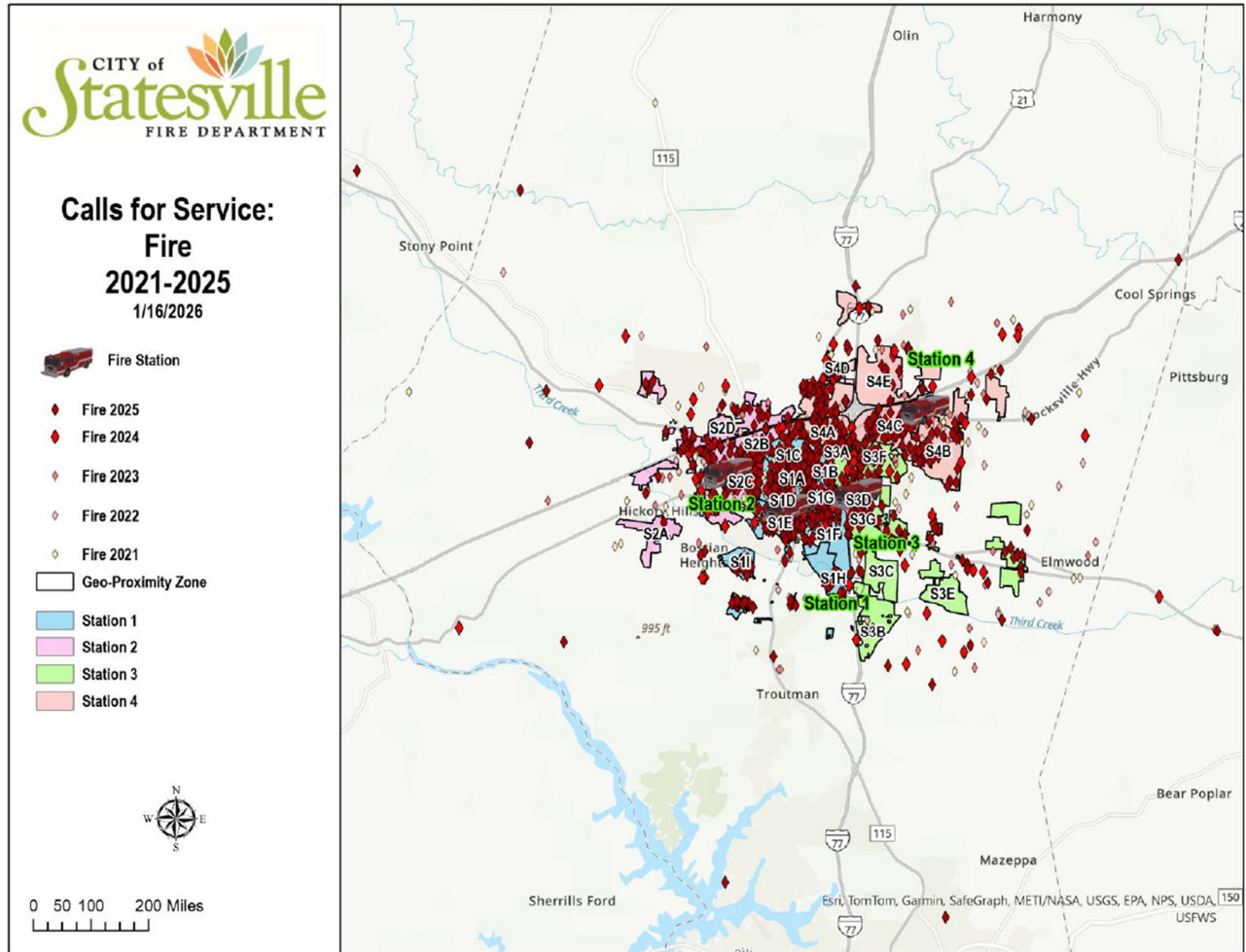
**Map 17: Fire Districts with Fires Maximum, High, Moderate & Low Risks – 2025**



**Map 18: Fire Districts with Incident Type 111, Structure Fires 2025**



**Map 19: Fire Districts with Fires Maximum, High, Moderate, & Low Risks – 2021-2025**



**Table 21: Civilian Fire Casualties**

Civilian Casualties 2021-2025	2021	2022	2023	2024	2025
Minor	4	6	3	3	2
Moderate	2	0	2	0	0
Severe	0	2	0	0	0
Life Threatening	0	0	0	1	0
Undetermined	0	0	0	0	0
Fatality	0	0	0	1	8
<b>Total</b>	<b>6</b>	<b>8</b>	<b>5</b>	<b>5</b>	<b>10</b>

**Table 22: Firefighter Fire Casualties**

Firefighter Casualties 2021-2025	2021	2022	2023	2024	2025	Total
Burns	1	1	1	0	0	3
Smoke or Gas Inhalation	0	0	1	0	0	1
Other Respiratory Distress	1	0	0	0	0	1
Burns and Smoke Inhalation	0	0	0	0	0	0
Wound, Cut, Bleeding, Bruise	0	1	1	1	0	3
Dislocation, Fracture	0	0	1	0	0	1
Heart Attack or Stroke	1	0	0	0	1	2
Strain, Sprain, Muscular Pain	0	0	3	1	2	6
Thermal Stress (frostbite, heat exhaustion)	0	0	2	0	0	2
Other	4	4	1	7	0	16
<b>Total</b>	<b>7</b>	<b>6</b>	<b>10</b>	<b>9</b>	<b>3</b>	<b>35</b>

**Table 23: Property Value / Loss Comparison 2021-2025**

Year	Property Value	Property Loss
<b>2021</b>	\$29,746,578	\$6,220,861
<b>2022</b>	\$13,695,846	\$3,293,348
<b>2023</b>	\$101,639,684	\$6,873,927
<b>2024</b>	\$392,668,134	\$2,435,373
<b>2025</b>	\$66,945,469	\$2,746,213
<b>Total</b>	<b>\$604,695,711</b>	<b>\$21,569,722</b>



**Table 24: Fires Confined to Room of Origin and Less than Room of Origin 2021-2025**

Year	Jan.	Feb.	Mar.	Apr.	May	Jun.
2021	75%	100%	33%	58%	No Fires	50%
2022	0%	100%	100%	100%	100%	50%
2023	67%	67%	75%	50%	40%	0%
2024	50%	40%	0%	0%	0%	66%
2025	100%	0%	No Fires	100%	100%	0%

Year	Jul	Aug	Sep	Oct	Nov	Dec
2021	33%	No Fires	0%	67%	67%	No Fires
2022	50%	0%	50%	No Fires	28%	50%
2023	50%	80%	100%	100%	33%	100%
2024	100%	50%	100%	25%	20%	50%
2025	100%	100%	0%	No Fires	50%	0%

**Table 25: Fire Incident Overview 2021-2025**

Fire Incident Types	2021	2022	2023	2024	2025	Totals
100 - Fire, other	7	6	1	2	0	<b>16</b>
111 - Building fire	66	48	50	31	41	<b>236</b>
112 - Fires in structure other than in a building	2	0	2	0	0	<b>4</b>
113 - Cooking fire, confined to container	18	17	22	15	15	<b>87</b>
114 - Chimney or flue fire, confined to chimney or flue	1	2	1	0	0	<b>4</b>
115 - Incinerator overload or malfunction, fire confined	0	1	0	0	0	<b>1</b>
116 - Fuel burner/boiler malfunction, fire confined	0	0	0	0	3	<b>3</b>
117 - Commercial Compactor fire, confined to rubbish	1	0	4	2	2	<b>9</b>
118 - Trash or rubbish fire, contained	11	5	8	13	8	<b>45</b>
120- In mobile property used as a fixed structure, other	-	-	-	-	0	<b>0</b>
121 - Fire in mobile home used as fixed residence	1	0	0	0	0	<b>1</b>
122 - Fire in motor home, camper, recreational vehicle	0	0	2	0	1	<b>3</b>
123- In a portable building, when used at a fixed location	-	-	-	-	1	<b>1</b>
130 - Mobile property (vehicle) fire, other	1	3	4	1	3	<b>12</b>
131 - Passenger vehicle fire	30	23	23	15	24	<b>115</b>
132 - Road freight or transport vehicle fire	6	3	2	2	1	<b>14</b>
133- Rail vehicle fire	-	-	-	-	0	<b>0</b>
134 - Water vehicle fire	0	0	0	0	0	<b>0</b>
135- Aircraft fire	-	-	-	-	0	<b>0</b>
136- Self-propelled motor home or RV	-	-	-	-	0	<b>0</b>
137- Camper or RV, not self-propelled, trailers	-	-	-	-	0	<b>0</b>
138 - Off-road vehicle or heavy equipment fire	1	1	1	2	0	<b>5</b>
140 - Natural vegetation fire, other	4	3	2	4	6	<b>19</b>
141 - Forest, woods or wildland fire	4	2	1	4	3	<b>14</b>
142 - Brush or brush-and-grass mixture fire	5	8	12	11	20	<b>56</b>
143 - Grass fire	7	18	10	7	9	<b>51</b>
150 - Outside rubbish fire, other	4	6	6	5	4	<b>25</b>
151 - Outside rubbish, trash or waste fire	12	7	13	9	10	<b>51</b>
152 - Garbage dump or sanitary landfill fire	1	2	0	0	0	<b>3</b>
153 - Construction or demolition landfill fire	1	1	0	0	0	<b>2</b>
154 - Dumpster or other outside trash receptacle fire	3	2	5	0	5	<b>15</b>
155- Outside stationary compactor/compacted trash fire	0	1	0	0	0	<b>1</b>

Fire Incident Types	2021	2022	2023	2024	2025	Totals
160 - Special outside fire, other	0	0	1	0	3	4
161 - Outside storage fire	1	0	0	0	1	2
162 - Outside equipment fire	3	0	1	0	2	6
163- Outside gas or vapor combustion explosion without sustained fire	-	-	-	-	0	0
164- Outside mailbox	-	-	-	-	0	0
170- Cultivated vegetation, crop fire, other	-	-	-	-	0	0
171 - Cultivated grain or crop fire	0	0	0	0	0	0
172- Cultivated orchard or vineyard	-	-	-	-	0	0
173 - Cultivated trees or nursery stock fire	2	0	0	1	0	3
210- Overpressure rupture from steam, other	-	-	-	-	0	0
211- Overpressure rupture of steam pipe or pipeline	-	-	-	-	0	0
212- Overpressure rupture of steam boiler	-	-	-	-	0	0
213- Overpressure rupture of pressure or process vessel from steam	-	-	-	-	0	0
222- Overpressure rupture of boiler from air or gas	-	-	-	-	0	0
223- Overpressure rupture of pressure or process vessel from air or gas, not steam	-	-	-	-	0	0
243- Fireworks explosion (no fire)	-	-	-	-	0	0
244- Dust explosion (no fire)	-	-	-	-	0	0
440- Electrical wiring/equipment problem, other	-	-	-	-	9	9
441- Heat from Short Circuit (Wiring)	-	-	-	-	0	0
442- Overheated motor or wiring	-	-	-	-	5	5
443- Breakdown of light ballast	-	-	-	-	1	1
444- Power line down	-	-	-	-	34	34
445- Arcing, shorted electrical equipment	-	-	-	-	15	15
480- Attempted burning, illegal action, other	-	-	-	-	9	9
481- Attempt to burn	-	-	-	-	0	0
482- Threat to burn	-	-	-	-	0	0
522- Water or steam leak	-	-	-	-	8	8
531- Smoke or odor removal	-	-	-	-	1	1
561- Unauthorized burning	-	-	-	-	22	22
571- Cover assignment, assist other fire agency	-	-	-	-	4	4
631- Authorized controlled burning	-	-	-	-	7	7
632- Prescribed fire	-	-	-	-	0	0
641- Vicinity alarm	-	-	-	-	0	0
650- Steam, other gas mistaken for smoke, other	-	-	-	-	0	0
651- Smoke scare, odor of smoke, not steam	-	-	-	-	62	62



Fire Incident Types	2021	2022	2023	2024	2025	Totals
652- Steam, vapor, fog, or dust thought to be smoke	-	-	-	-	4	4
653- Smoke from barbecue or tar kettle	-	-	-	-	1	1
710- Malicious, mischievous false alarm, other	-	-	-	-	1	1
711- Municipal alarm system, malicious false alarm	-	-	-	-	4	4
712- Direct tie to fire department, malicious false alarm	-	-	-	-	0	0
713- Telephone, malicious false alarm	-	-	-	-	0	0
714- Central station, malicious false alarm	-	-	-	-	3	3
715- Local alarm system, malicious false alarm	-	-	-	-	6	6
730- System or detector malfunction, other	-	-	-	-	2	2
731- Sprinkler activated due to failure or malfunction of sprinkler system	-	-	-	-	2	2
732- Extinguishing system activation due to malfunction	-	-	-	-	0	0
733- Smoke detector activation due to malfunction	-	-	-	-	24	24
734- Heat detector activation due to malfunction	-	-	-	-	3	3
735- Alarm system activation due to malfunction	-	-	-	-	96	96
740- Unintentional transmission of alarm, other	-	-	-	-	26	26
741- Sprinkler activation (no fire), unintentional	-	-	-	-	2	2
742- Extinguishing system activation	-	-	-	-	0	0
743- Smoke detector activation (no fire), unintentional	-	-	-	-	50	50
744- Detector activation (no fire), unintentional	-	-	-	-	26	26
745- Alarm system activation (no fire), unintentional	-	-	-	-	353	353
814- Lightning strike (no fire)	-	-	-	-	0	0
<b>Totals</b>	<b>192</b>	<b>159</b>	<b>171</b>	<b>124</b>	<b>942</b>	<b>1588</b>

Not in 2021-2024 SOC: 120, 123, 133, 135, 136, 137, 163, 164, 170, 172  
 210-213, 222, 223, 243, 244, 440-445, 480-482, 522, 531, 561, 571, 631, 632,  
 641, 650-653, 710-715, 730-735, 740-745 & 814 moved from Other to Fire  
 Response Class, July 2025

**Table 26: Water Flow Risk Assessment - 2025**

Station 1 GPZs	Sufficient	Insufficient	% Water Supply Met
S1A	266	2	99.25%
S1B	99	0	100.00%
S1C	87	0	100.00%
S1D	61	3	95.31%
S1E	56	0	100.00%
S1F	43	0	100.00%
S1G	56	1	98.25%
S1H	1	0	100.00%
S1I	2	0	100.00%
Station 2 GPZs	Sufficient	Insufficient	% Water Supply Met
S2A	24	0	100.00%
S2B	19	0	100.00%
S2C	229	2	99.13%
S2D	103	2	98.10%
Station 3 GPZs	Sufficient	Insufficient	% Water Supply Met
S3A	59	0	100.00%
S3B	1	0	100.00%
S3C	58	2	96.67%
S3D	137	1	99.28%
S3E	12	0	100.00%
S3F	115	0	100.00%
S3G	8	0	100.00%
S3H	0	0	N/A
Station 4 GPZs	Sufficient	Insufficient	% Water Supply Met
S4A	285	1	99.65%
S4B	22	0	100.00%
S4C	98	0	100.00%
S4D	2	1	66.67%
S4E	113	1	99.12%
All GPZs	Sufficient	Insufficient	% Water Supply Met
<b>Total - 2025</b>	<b>1956</b>	<b>16</b>	<b>99.19%</b>

**Table 27: Fire Protection Systems by Occupancy Type -2025**

Occupancy Type	Sprinkled	Not Sprinklered	Total	Percent
Assembly 1	0	0	0	N/A
Assembly 2	13	115	128	10.16%
Assembly 3	13	122	135	9.63%
Assembly 4	1	1	2	50.00%
Business	75	836	911	8.23%
Educational	7	23	30	23.33%
Factory 1	50	25	75	66.67%
Factory 2	16	18	34	47.06%
Foster Home	0	57	57	0.00%
High Hazard 1	0	0	0	N/A
High Hazard 2	3	2	5	60.00%
High Hazard 3	1	2	3	33.33%
High Hazard 4	1	2	3	33.33%
Institutional 1	0	5	5	0.00%
Institutional 2	12	0	12	100.00%
Institutional 3	2	1	3	66.67%
Institutional 4	0	13	13	0.00%
Mercantile	75	216	291	25.77%
Residential 1	9	13	22	40.91%
Residential 2	13	19	32	40.63%
Residential 3	1	3	4	25.00%
Residential 4	4	6	10	40.00%
Storage 1	90	228	318	28.30%
Storage 2	7	26	33	21.21%
U (Miscellaneous)	0	8	8	0.00%
<b>TOTAL -2025</b>	<b>393</b>	<b>1741</b>	<b>2134</b>	<b>18.42%</b>

**Table 28: Occupancy with Fire Protection Systems by GPZ - 2025**

GPZ 2025	Fire Protection In Place	No Fire Protection In Place	Total	Percent with Fire Protection System in Place
S1A	26	267	293	8.87%
S1B	1	102	103	0.97%
S1C	3	89	92	3.26%
S1D	17	54	71	23.94%
S1E	3	50	53	5.66%
S1F	4	44	48	8.33%
S1G	8	53	61	13.11%
S1H	0	5	5	0.00%
S1I	0	9	9	0.00%
<b>Totals</b>	<b>62</b>	<b>673</b>	<b>735</b>	<b>8.44%</b>
S2A	6	19	25	24.00%
S2B	1	21	22	4.55%
S2C	63	177	240	26.25%
S2D	30	85	115	26.09%
<b>Totals</b>	<b>100</b>	<b>302</b>	<b>402</b>	<b>24.88%</b>
S3A	5	57	62	8.06%
S3B	1	0	1	100.00%
S3C	15	44	59	25.42%
S3D	49	91	140	35.00%
S3E	6	13	19	31.58%
S3F	39	81	120	32.50%
S3G	2	6	8	25.00%
S3H	0	0	0	0.00%
<b>Totals</b>	<b>117</b>	<b>292</b>	<b>409</b>	<b>28.61%</b>
S4A	63	235	298	21.14%
S4B	3	26	29	10.34%
S4C	13	95	108	12.04%
S4D	3	6	9	33.33%
S4E	29	93	122	23.77%
<b>Totals</b>	<b>111</b>	<b>455</b>	<b>566</b>	<b>19.61%</b>
<b>All Zones</b>	<b>390</b>	<b>1722</b>	<b>2112</b>	<b>18.47%</b>

**Table 29: Square Footage of Commercial Buildings by GPZ - 2025**

GPZ - 2025	1-19999 Square Feet	20000-49999 Square Feet	50000-999999 Square Feet	1,000,000 + Square Feet	Total Square Feet
S1A	241	49	5	0	295
S1B	103	0	1	0	104
S1C	82	8	2	0	92
S1D	56	12	4	0	72
S1E	52	5	0	0	57
S1F	45	2	2	0	49
S1G	53	7	2	0	62
S1H	5	0	0	0	5
S1I	9	0	0	0	9
<b>Totals</b>	<b>646</b>	<b>83</b>	<b>16</b>	<b>0</b>	<b>745</b>
GPZ	1-19999	20000-49999	50000-999999	1,000,000 +	Total
S2A	22	3	1	0	26
S2B	21	1	0	0	22
S2C	182	41	21	0	244
S2D	89	9	19	0	117
<b>Totals</b>	<b>314</b>	<b>54</b>	<b>41</b>	<b>0</b>	<b>409</b>
GPZ	1-19999	20000-49999	50000-999999	1,000,000 +	Total
S3A	55	7	1	0	63
S3B	1	0	1	0	2
S3C	41	12	10	0	63
S3D	95	21	27	0	143
S3E	13	3	4	0	20
S3F	110	4	8	0	122
S3G	6	1	1	0	8
S3H	0	0	0	0	0
<b>Totals</b>	<b>321</b>	<b>48</b>	<b>52</b>	<b>0</b>	<b>421</b>
GPZ	1-19999	20000-49999	50000-999999	1,000,000 +	Total
S4A	254	27	17	1	299
S4B	29	0	0	0	29
S4C	99	9	2	0	110
S4D	5	3	0	1	9
S4E	83	25	14	0	122
<b>Totals</b>	<b>470</b>	<b>64</b>	<b>33</b>	<b>2</b>	<b>569</b>
All Zones	1-19999	20000-49999	50000-999999	1,000,000 +	Total
<b>Totals</b>	<b>1751</b>	<b>249</b>	<b>142</b>	<b>2</b>	<b>2144</b>

**Table 30: Commercial Building Stories**

GPZ	Stories 1	Stories 2	Stories 3	Stories 4	Stories 5	Stories 6	Stories 7	No Data	Total
S1A	89	191	8	4	1	1	1	-	295
S1B	61	42	-	-	-	1	-	-	104
S1C	49	40	3	-	-	-	-	-	92
S1D	42	27	3	-	-	-	-	-	72
S1E	52	4	1	-	-	-	-	-	57
S1F	42	6	1	-	-	-	-	-	49
S1G	58	4	-	-	-	-	-	-	62
S1H	2	3	-	-	-	-	-	-	5
S1I	4	5	-	-	-	-	-	-	9
<b>Totals</b>	<b>399</b>	<b>322</b>	<b>16</b>	<b>4</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>-</b>	<b>745</b>
S2A	23	2	1	-	-	-	-	-	26
S2B	20	2	-	-	-	-	-	-	22
S2C	225	19	-	-	-	-	-	-	244
S2D	109	6	2	-	-	-	-	-	117
<b>Totals</b>	<b>377</b>	<b>29</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>409</b>
S3A	52	9	1	1	-	-	-	-	63
S3B	2	-	-	-	-	-	-	-	2
S3C	56	7	-	-	-	-	-	-	63
S3D	136	3	2	2	-	-	-	-	143
S3E	20	-	-	-	-	-	-	-	20
S3F	109	9	4	-	-	-	-	-	122
S3G	6	2	-	-	-	-	-	-	8
S3H	-	-	-	-	-	-	-	-	-
S3I	-	-	-	-	-	-	-	-	-
<b>Totals</b>	<b>381</b>	<b>30</b>	<b>7</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>421</b>
S4A	262	28	6	2	1	-	-	-	299
S4B	28	1	-	-	-	-	-	-	29
S4C	98	11	-	1	-	-	-	-	110
S4D	8	-	1	-	-	-	-	-	9
S4E	116	4	1	-	1	-	-	-	122
<b>Totals</b>	<b>512</b>	<b>44</b>	<b>8</b>	<b>3</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>569</b>
<b>All Zones</b>	<b>1669</b>	<b>425</b>	<b>34</b>	<b>10</b>	<b>3</b>	<b>2</b>	<b>1</b>	<b>-</b>	<b>2144</b>

**Table 31: Commercial Building Status**

<b>Building Status</b>	<b>St. 1</b>	<b>St. 2</b>	<b>St. 3</b>	<b>St.4</b>	<b>No Data</b>	<b>Totals</b>
<b>Occupied and operating</b>	641	362	345	514	-	<b>1862</b>
<b>Under construction</b>	10	8	15	13	-	<b>46</b>
<b>Under major renovation</b>	5	2	2	1	-	<b>10</b>
<b>Undetermined</b>	-	-	-	-	-	<b>-</b>
<b>Vacant and secured</b>	47	21	35	22	-	<b>125</b>
<b>Vacant</b>	29	10	18	17	-	<b>74</b>
<b>Being Demolished</b>	6	2	3	1	-	<b>12</b>
<b>Tag</b>	2	2	1	1	-	<b>6</b>
<b>Unsafe</b>	5	2	1	-	-	<b>8</b>
<b>Totals - 2025</b>	<b>745</b>	<b>409</b>	<b>420</b>	<b>569</b>	<b>-</b>	<b>2143</b>

**Table 32: OVAP Risk Assessment by GPZ – 2025**

Risk Level	OVAP Score	Number Occupancies	Percent in Zone	Percent in District
<b>ZONE: S1A</b>				
Significant	59.99 - 40.00	7	2.37%	0.33%
Moderate	39.99 - 15.00	288	97.63%	13.60%
<b>ZONE: S1B</b>				
Significant	59.99 - 40.00	1	0.97%	0.05%
Moderate	39.99 - 15.00	102	99.03%	4.82%
<b>ZONE: S1C</b>				
Significant	59.99 - 40.00	1	1.09%	0.05%
Moderate	39.99 - 15.00	91	98.91%	4.30%
<b>ZONE: S1D</b>				
Significant	59.99 - 40.00	6	8.33%	0.28%
Moderate	39.99 - 15.00	66	91.67%	3.12%
<b>ZONE: S1E</b>				
Moderate	39.99 - 15.00	57	100.00%	2.69%
<b>ZONE: S1F</b>				
Moderate	39.99 - 15.00	49	100.00%	2.31%
<b>ZONE: S1G</b>				
Significant	59.99 - 40.00	4	6.56%	0.19%
Moderate	39.99 - 15.00	57	93.44%	2.69%
<b>ZONE: S1H</b>				
Moderate	39.99 - 15.00	5	100.00%	0.24%
<b>ZONE: S1I</b>				
Moderate	39.99 - 15.00	9	100.00%	0.43%
<b>ZONE: S2A</b>				
Moderate	39.99 - 15.00	25	100.00%	1.18%
<b>ZONE: S2B</b>				
Moderate	39.99 - 15.00	22	100.00%	1.04%
<b>ZONE: S2C</b>				
Maximum	60.00 +	1	0.41%	0.05%
Significant	59.99 - 40.00	4	1.65%	0.19%
Moderate	39.99 - 15.00	237	97.93%	11.20%
<b>ZONE: S2D</b>				
Significant	59.99 - 40.00	2	1.74%	0.09%
Moderate	39.99 - 15.00	113	98.26%	5.34%
<b>ZONE: S3A</b>				
Significant	59.99 - 40.00	1	1.59%	0.05%

Risk Level	OVAP Score	Number Occupancies	Percent in Zone	Percent in District
Moderate	39.99 - 15.00	62	98.41%	2.93%
<b>ZONE: S3B</b>				
Moderate	39.99 - 15.00	2	100.00%	0.09%
<b>ZONE: S3C</b>				
Significant	59.99 - 40.00	1	1.64%	0.05%
Moderate	39.99 - 15.00	60	98.36%	2.83%
<b>ZONE: S3D</b>				
Moderate	39.99 - 15.00	143	100.00%	6.75%
<b>ZONE: S3E</b>				
Moderate	39.99 - 15.00	14	100.00%	0.66%
<b>ZONE: S3F</b>				
Significant	59.99 - 40.00	3	2.50%	0.14%
Moderate	39.99 - 15.00	117	97.50%	5.53%
<b>ZONE: S3G</b>				
Moderate	39.99 - 15.00	8	100.00%	0.38%
<b>ZONE: S4A</b>				
Significant	59.99 - 40.00	4	1.35%	0.19%
Moderate	39.99 - 15.00	292	98.65%	13.79%
<b>ZONE: S4B</b>				
Moderate	39.99 - 15.00	28	100.00%	1.32%
<b>ZONE: S4C</b>				
Significant	59.99 - 40.00	2	1.83%	0.09%
Moderate	39.99 - 15.00	107	98.17%	5.05%
<b>ZONE: S4D</b>				
Significant	59.99 - 40.00	2	33.33%	0.09%
Moderate	39.99 - 15.00	4	66.67%	0.19%
<b>ZONE: S4E</b>				
Significant	59.99 - 40.00	2	1.67%	0.09%
Moderate	39.99 - 15.00	118	98.33%	5.57%
<b># Occupancies with OVAP Scores</b>		<b>2117</b>		

**Table 33: Heron Risk Assessment by GPZ – 2025**

Heron Risk Rating - 2025					
GPZ	Low	Moderate	Significant	Maximum	Total
S1A	26	5	226	13	270
S1B	22	0	76	0	98
S1C	17	2	66	2	87
S1D	9	0	49	5	63
S1E	15	0	41	0	56
S1F	9	1	34	0	44
S1G	7	0	50	1	58
S1H	0	0	0	1	1
S1I	2	0	0	0	2
S2A	0	0	24	0	24
S2B	2	0	17	0	19
S2C	25	2	193	8	228
S2D	9	0	95	1	105
S3A	7	3	49	0	59
S3B	0	0	0	1	1
S3C	5	1	52	2	60
S3D	19	4	110	5	138
S3E	3	0	7	2	12
S3F	15	0	98	2	115
S3G	2	0	6	0	8
S4A	27	3	249	6	285
S4B	3	0	19	0	22
S4C	14	2	80	2	98
S4D	0	0	3	0	3
S4E	12	0	99	2	113
<b>Total</b>	<b>250</b>	<b>23</b>	<b>1643</b>	<b>53</b>	<b>1969</b>

**Table 34: Fire Risk Categories**

FIRE RISK CATEGORY	GENERAL DESCRIPTION OF ASSOCIATED RISK
LOW	Car fires, dumpster fires, small outside fires. Fire incidents that only require a single engine response
MODERATE	Occupancy fires in residential 1 to 2 family structures
HIGH	Occupancy fires in Public Assembly Property, Educational Property, Institutional Property, Store and Office Property, Basic Industry, Storage Property, Special Property, Multi-Family Dwellings (Apartments, Hotels, and Dormitories)
MAXIMUM	Fires at Healthcare, Detention, and Correction Facilities with NFIRS Codes 311, 323, 331, and 361

**Table 35: Fire Critical Tasking**

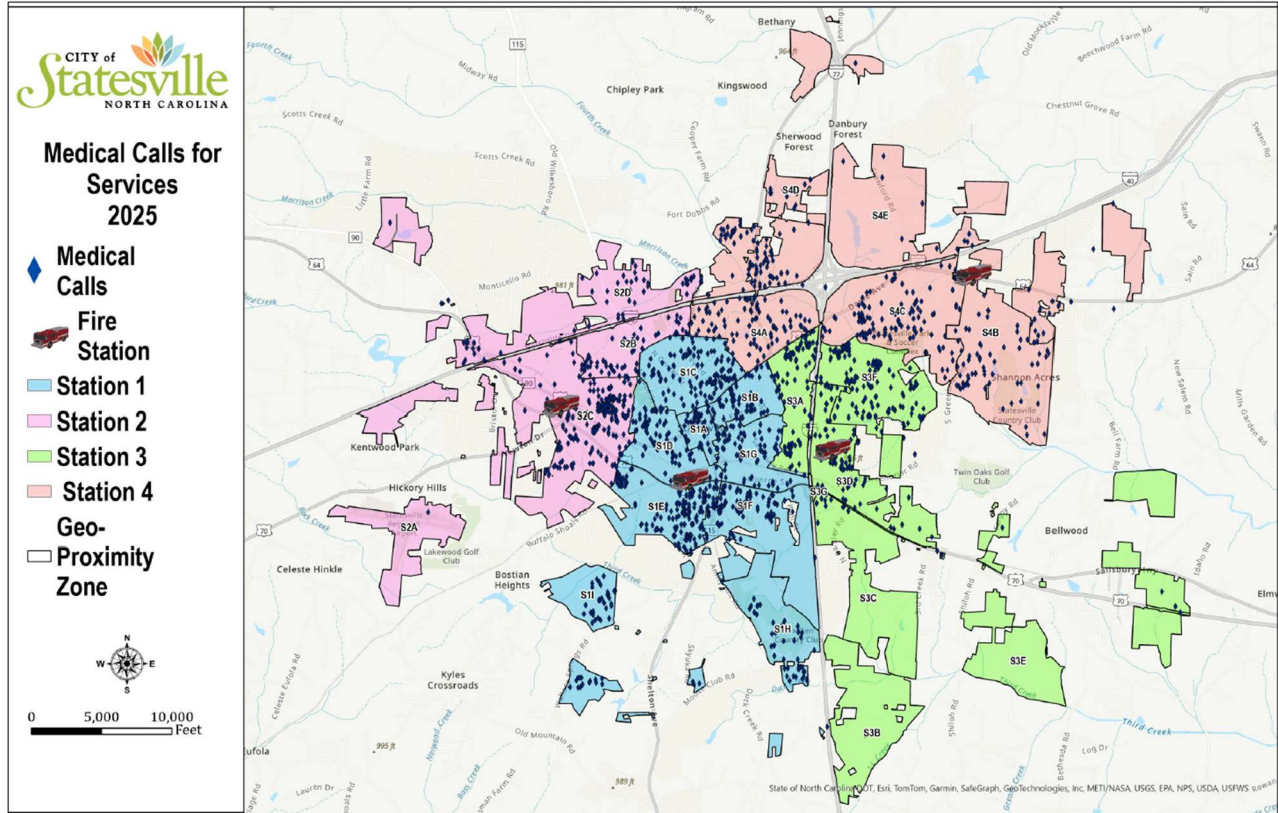
FIRE RESPONSE	CRITICAL TASKS	MAXIMUM HAZARD	HIGH HAZARD	MODERATE HAZARD	LOW HAZARD
1 <sup>ST</sup> ENGINE	<ul style="list-style-type: none"> <li>Establish command</li> <li>Perform size-up</li> <li>Pump operator</li> <li>Establish water supply</li> <li>Deploy attack line</li> </ul>	4	4	4	4
2 <sup>ND</sup> ENGINE	<ul style="list-style-type: none"> <li>Deploy back-up line</li> <li>Temporary RIT</li> <li>Search and Rescue</li> <li>Establish water supply if needed</li> </ul>	4	4	4	-
3 <sup>RD</sup> ENGINE	<ul style="list-style-type: none"> <li>Ventilation</li> <li>Salvage / Overhaul</li> <li>Provide Safety Officer</li> </ul>	4	4	4	-

FIRE RESPONSE	CRITICAL TASKS	MAXIMUM HAZARD	HIGH HAZARD	MODERATE HAZARD	LOW HAZARD
4 <sup>TH</sup> ENGINE (WORKING FIRE)	<ul style="list-style-type: none"> <li>Assume RIT</li> <li>Secure utilities</li> <li>Soften structure</li> <li>Air monitoring</li> </ul>	4	4	-	-
5 <sup>TH</sup> ENGINE (WORKING FIRE)	<ul style="list-style-type: none"> <li>Mutual-Aid</li> <li>Manpower</li> </ul>	3	-	-	-
6 <sup>TH</sup> ENGINE (WORKING FIRE)	<ul style="list-style-type: none"> <li>Mutual-Aid</li> <li>Manpower</li> </ul>	3	-	-	-
1 <sup>ST</sup> LADDER	<ul style="list-style-type: none"> <li>Ventilation</li> <li>Forcible entry</li> </ul>	4	4	4	-
2 <sup>ND</sup> LADDER (WORKING FIRE)	<ul style="list-style-type: none"> <li>Mutual-Aid</li> <li>Second Aerial Device</li> <li>Elevated Master stream</li> </ul>	3	-	-	-
1 <sup>ST</sup> CHIEF	<ul style="list-style-type: none"> <li>Incident Command</li> </ul>	1	1	1	-
2 <sup>ND</sup> CHIEF (WORKING FIRE)	<ul style="list-style-type: none"> <li>Accountability</li> <li>Division Operations</li> <li>Rehab</li> </ul>	1	1	-	-
3 <sup>RD</sup> CHIEF (WORKING FIRE)	<ul style="list-style-type: none"> <li>Safety Officer</li> </ul>	1	-	-	-
<b>TOTAL</b>		<b>31</b>	<b>21</b>	<b>17</b>	<b>4</b>

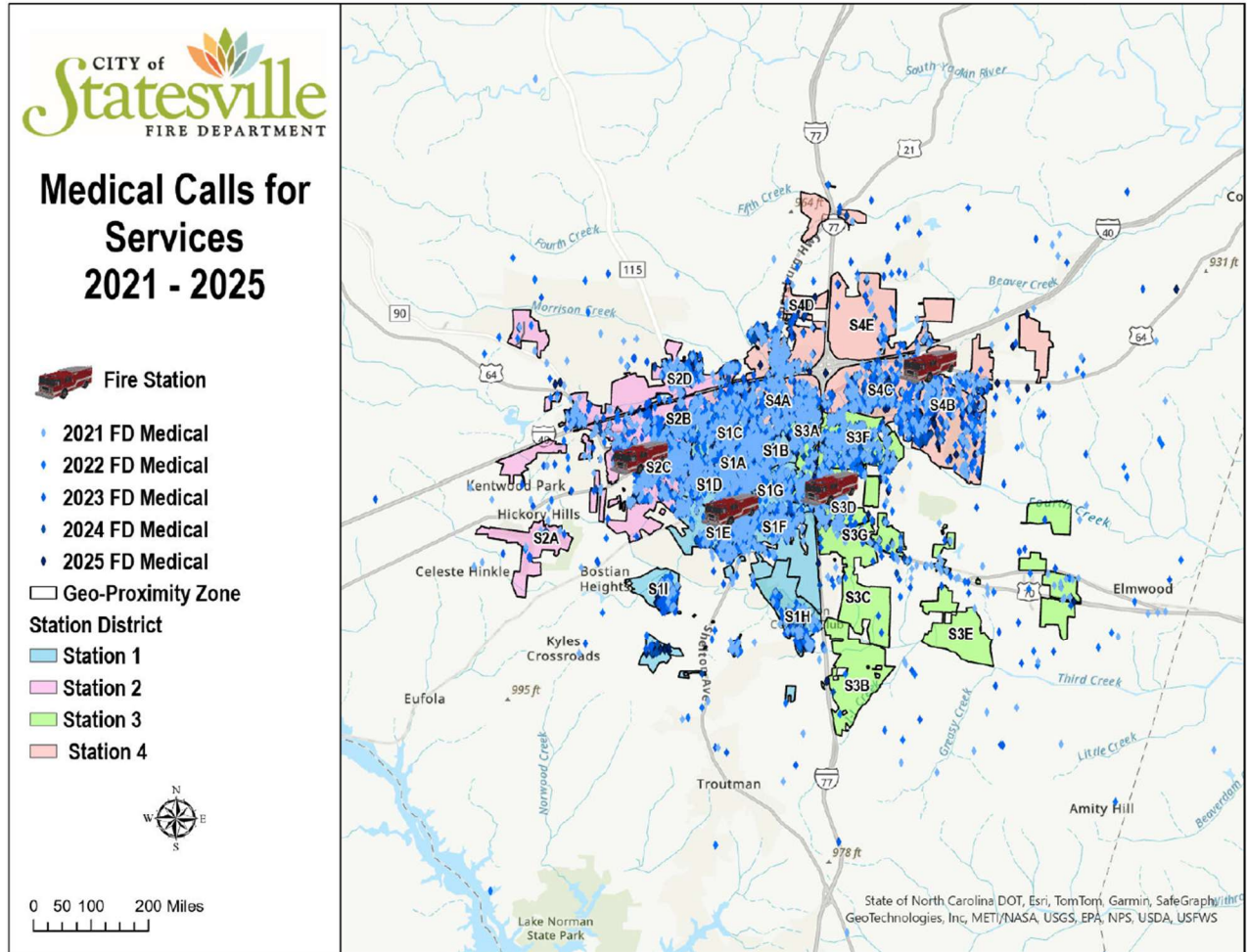
## Emergency Medical Service (EMS) Risk Assessment

The risk assessment for EMS involved a historical review of incidents by incident classification. All EMS calls have been determined low risk, as the SFD responds to medical emergencies as an assisting agency to Iredell County EMS. The potential for all levels were also assessed based of the type of event (Low, Moderate, or High).

**Map 20: Fire District with Medical Calls 2025**



**Map 21: Fire District with Medical Calls 2021-2025**



**Table 36: Medical Incident Overview 2021-2025**

Medical Incident Types	2021	2022	2023	2024	2025	Totals
300 - Rescue, EMS incident, other	0	1	331	569	32	933
311 - Medical assist, assist EMS crew	160	224	242	237	420	1,283
320 - Emergency medical service, other	3	2	10	17	28	60
321 - EMS call, excluding vehicle accident with injury	2,546	2,772	3,226	3,285	3,516	15,345
323- Motor vehicle/pedestrian accident (MV Ped)	N/A	N/A	N/A	N/A	12	12
554 – Assist Invalid	N/A	N/A	37	122	244	403
<b>TOTAL</b>	<b>2,709</b>	<b>2,999</b>	<b>3,846</b>	<b>4,230</b>	<b>4,252</b>	<b>18,036</b>

554 moved from Other (Non-emergency) Response Class in 2023 to EMS Response Class  
 323 moved from Technical Response Class in 2025 to EMS Response Class

**Table 37: EMS Risk Categories**

EMS RISK CATEGORY	GENERAL DESCRIPTION OF ASSOCIATED RISK
LOW	Alpha, Bravo, Charlie & Delta Determinantes
MODERATE	Echo Determinates
HIGH	Active Shooter/Mass Casualty

**Table 38: EMS Critical Tasking**

EMS RESPONSE	CRITICAL TASKS	HIGH HAZARD	MODERATE HAZARD	LOW HAZARD
1 <sup>ST</sup> ENGINE	<ul style="list-style-type: none"> <li>• Patient assessment</li> <li>• Initial treatment</li> <li>• Airway management</li> <li>• CPR</li> </ul>	4	4	2
2 <sup>ND</sup> ENGINE	<ul style="list-style-type: none"> <li>• Mass causality treatment</li> </ul>	4	-	-
CHIEF	<ul style="list-style-type: none"> <li>• Incident/Unified Command</li> </ul>	1	-	-
<b>TOTAL</b>		<b>9</b>	<b>4</b>	<b>2</b>

## **Hazardous Materials Risk Assessment**

The risk assessment for hazardous materials involved a historical review of incidents, probability / consequence, and need for outside resources. Hazardous Materials emergency operations are divided into three incident levels (I, II, & III) based on the degree of hazard, required skills and duties of the responders, needed resources, and the emergency conditions of the incident. The three incident level designations greatly assist emergency responders in predetermining the needs of the incident. The three incident levels are defined in the NC State Regional Response Team Standard, the National Fire Academy and are listed in the NFPA 470 as a guide for response and training. Tier II reporting, which is web-based, was also utilized to determine the location of facilities with hazardous materials on location. Transportation networks (Highway & Rail) were also noted as high risk areas.

**Level I:** A minor situation within the capabilities of first responders trained at the “operational” level. A Level I incident involves the release, or possible release, of a small amount of gas, liquid or solid of a known (identified) hazardous material less than 50 gallons or pounds. In addition, the agency on-scene has the expertise and proper equipment to safely mitigate the incident.

As a minimum, a command post and an exclusion zone should be established with all incidents. The Emergency Response Guide should be referenced for initial isolation and protective action distances. The incident commander should restrict movement of personnel into the exclusion zone. Only personnel entering for a specific reason and in the proper level of protective equipment should be allowed.

An incident should be immediately upgraded to Level II for the release or potential release of an unknown hazardous material or suspected hazardous material.

Typical Level I incidents include:

- Minor leaks or spills from a 55-gallon drum, cylinders up to one-ton capacity, bags or packages.
- Minor leaks or spills which can be handled with absorbent materials and resources readily available on-site.
- Release of chemicals which do not produce an environment which is immediately dangerous to life and health (IDLH) or above the Lower Explosion Limit (LEL) of a product.
- Containers that are involved in an accident that have no visible damage.
- Chemical releases that have minimal environmental impact that do not require outside resources.
- Leaking valves on containers which do not require the product to be immediately off-loaded.
- Evacuations limited to a single intersection or building.
- No life-threatening situation from materials involved.
- Suspicious packages that the threat and substance are considered non-hazardous.
- Natural gas leaks regardless of line diameter

**Level II:** These are incidents that are beyond the capabilities of an agency with jurisdictional responsibility and that require mitigation by a hazardous materials team. This can range from a small incident involving any amount of an unknown substance to a large incident involving multiple agencies and jurisdictions.

A Level II incident should be declared by the Incident Commander and the Initial Response Team if the incident involves a sufficient quantity of gas, liquid or solid of a known hazardous substance or any quantity of an unknown material that has been released or offers the potential for release.

A Level II incident should be declared for the release of any quantity of a known solid or liquid toxic material in a critical public area or for the release or potential release of any quantity of an unknown solid, liquid, or gaseous toxic material or suspected toxic material (all gases other than natural gas are considered toxic).

In a Level II incident, a formal and properly identified Command Post with a removed staging area, an Incident Safety Officer, and a Hazardous Materials Sector should be established. Control zones must be established and maintained as early as possible and evaluated and monitored throughout the incident. Localized evacuation may need to be implemented and outside agencies should be notified.

Typical Level II incidents include:

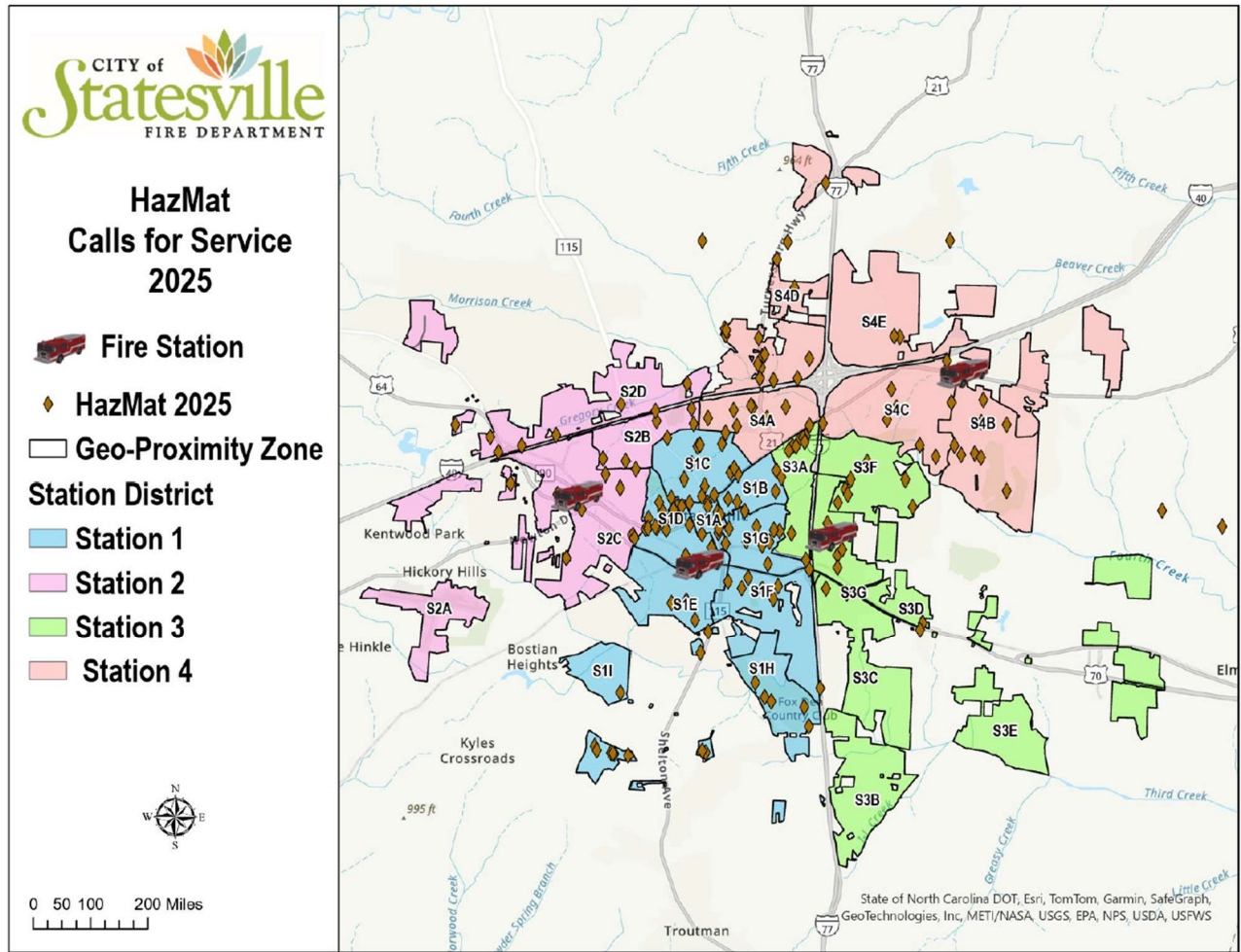
- One or more 55-gallon drums, one-ton cylinders, nurse tanks, totes, portable containers that are leaking considerable amounts of a known substance.
- A major, liquefied gas leak due to puncture, crack, or crease of a large tank where ignition sources are a real threat.
- Leaking containers, tank trucks or railroad tank cars with a hazardous material on board whose structural integrity is in question.
- Train derailments involving railroad tank cars filled with hazardous materials with leaks that can be controlled by local hazardous materials teams.
- A vehicle or train fire involving hazardous materials or hazardous wastes that pose a serious threat of a boiling liquid expanding vapor explosion (BLEVE).
- Incidents involving a fatality or serious injury attributed to hazardous substances.
- Evacuations consisting of an apartment complex, city block or large facility with many employees.
- Chemical releases that pose a moderate threat to the environment that require state agency involvement such as Department of Environment and Natural Resources (DENR), i.e., releases into a drinking water source or potential drinking water source.
- Suspicious package that has an unknown material but due to location is considered a credible threat. When the substance is identified and declared a WMD agent, the incident should be upgraded to a Level III incident. Incidents that involved non-hazardous substances should be downgraded to a Level I incident.

**Level III:** This includes any incident beyond the capabilities of the hazardous materials team and local resources. The incident may be quite lengthy in duration and may necessitate large-scale evacuations. It is likely a Level III incident will involve multiple agencies and jurisdictions, as well as resources from the private sector (including chemical manufacturers) and voluntary organizations.

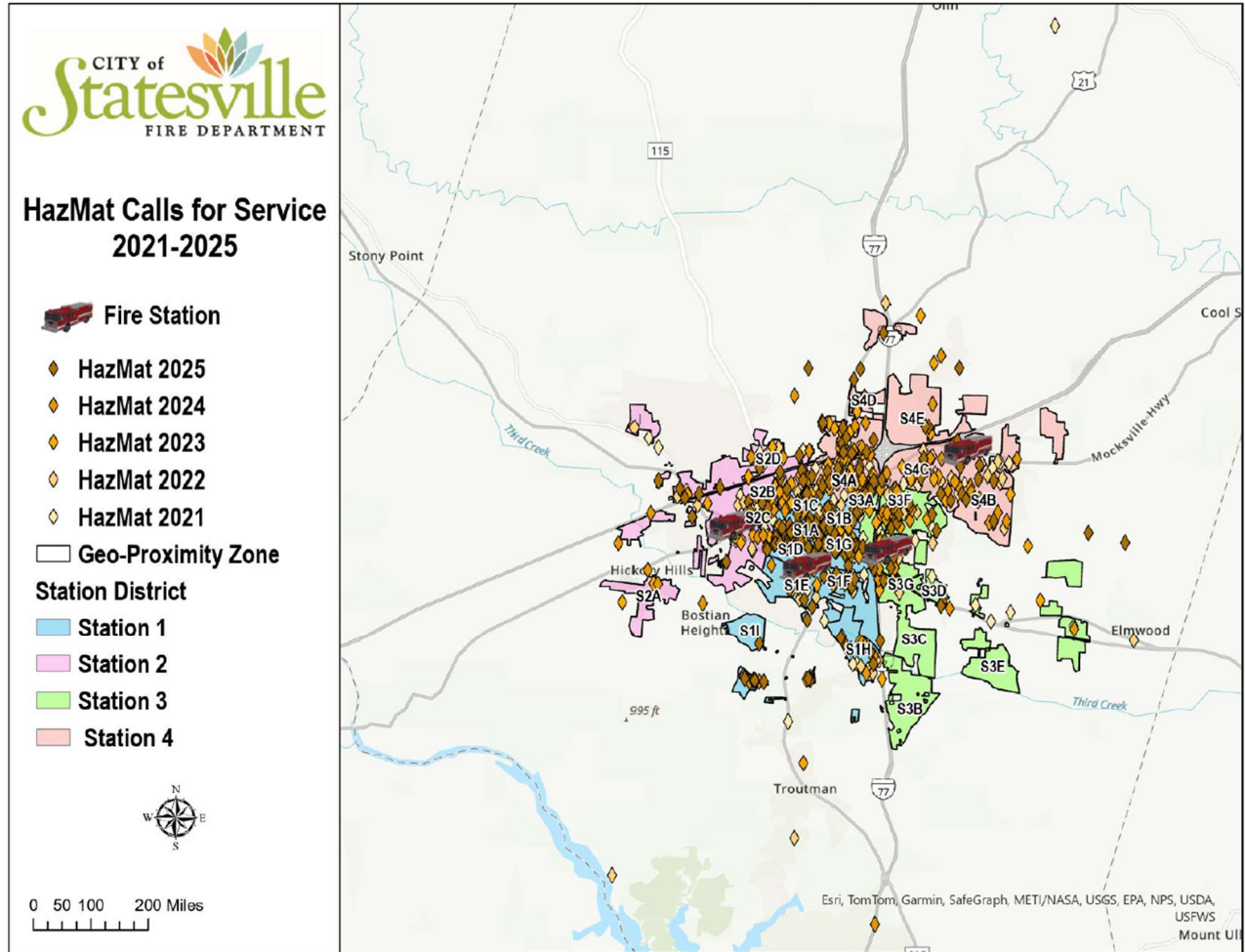
Examples of Level III incidents include:

- Large releases from tank cars, tank trucks, stationary tanks, or multiple medium containers.
- Incidents involving large-scale evacuations that may extend beyond jurisdictional boundaries.
- Any spill, leak or fire involving hazardous materials that has gone to greater alarms.
- Any incident beyond local capabilities and resources (including the hazardous materials team) to safely identify, contain and mitigate.
- Train derailments involving railroad tank cars containing hazardous materials that require specialized resources to mitigate.
- Major leaks of compressed or liquefied gas cargo tanks or railroad tank cars caused by puncture or major structural damage.
- A vehicle or train fire involving hazardous materials or hazardous wastes that pose a serious threat of a boiling liquid expanding vapor explosion (BLEVE).
- Suspicious packages, that due to location, identification of material as WMD agent, or verbal threat that requires state and federal resources.
- Large-scale or catastrophic releases of hazardous materials (e.g., radiation, biological agents).

**Map 22: Hazardous Materials Incidents – 2025**



**Map 23: Hazardous Materials Incidents– 2021-2025**



**Table 39: Hazardous Conditions Incident Overview 2021-2025**

Hazardous Materials Incident Types 2021-2025	2021	2022	2023	2024	2025	TOTAL
200 - Overpressure rupture, explosion, overhear other	3	2	1	1	0	7
220 - Overpressure rupture from air or gas, other	0	0	-	0	0	0
221- Overpressure rupture of air or gas pipe or pipeline	-	-	-	-	0	0
231- Overpressure rupture of pressure or process vessel from chemical reaction	-	-	-	-	0	0
240 - Explosion (no fire), other	1	0	-	0	0	1
241- Munitions or bomb explosion (no fire)	-	-	-	-	0	0
242- Blasting agent explosion (no fire)	-	-	-	-	0	0
251 - Excessive heat, scorch burns with no ignition	12	20	10	2	8	52
400 - Hazardous condition, other	2	5	2	3	19	31
410 - Combustible/flammable gas/liquid condition, other	1	0	3	0	3	7
411 - Gasoline or other flammable liquid spill	3	10	9	7	11	40
412 - Gas leak (natural gas or LPG)	52	52	58	58	68	288
413 - Oil or other combustible liquid spill	5	5	2	1	3	16
420 - Toxic condition, other	0	1	0	0	0	1
421 - Chemical hazard (no spill or leak)	0	1	1	1	8	11
422 - Chemical spill or leak	4	2	2	1	1	10
423 - Refrigeration leak	1	0	0	0	1	2
424 - Carbon monoxide incident	12	13	7	5	14	51
430- Radioactive condition, other	-	-	-	-	0	0
431- Radiation leak, radioactive material	-	-	-	-	0	0
451- Biological hazard, confirmed or suspected	-	-	-	-	1	1
463- Vehicle accident, general cleanup	-	-	-	-	10	10
471- Explosive, bomb removal	-	-	-	-	0	0
671 - HazMat release investigation w/no HazMat	23	7	6	9	11	56
672 - Biological hazard investigation, none found	0	0	0	0	0	0
721- Bomb scare (no bomb)	-	-	-	-	0	0
736 – Carbon Monoxide detector, activation due to malfunction	-	-	14	13	21	48
746 – Carbon Monoxide detector, activation (no carbon monoxide detected)	-	-	11	16	17	44
751- Biological Hazard, malicious fake report	-	-	-	-	0	0
<b>Totals</b>	<b>119</b>	<b>118</b>	<b>126</b>	<b>117</b>	<b>196</b>	<b>676</b>

736 & 746 added in 2023

221, 231, 241, 242, 430, 431, 451, 463, 471, 721, and 751 added in 2025

**Table 40: Hazmat Risk Categories**

Hazmat Risk Category	General Description of Associated Risk
LOW	Residential CO alarms and small fuel spills. Entry into a toxic environment is not required. Specialized HazMat equipment and Technician level knowledge/skills not required. Atmospheric monitoring may be required. Operations level knowledge/skills required. Defensive strategy only. NFIRS Incident Codes: 200, 251, 400, 410, 413, 420, 424, 736 & 746
MODERATE	Larger flammable liquid spills, natural gas leaks, unknown substance investigation/spill. Air monitoring and possible other specialized HazMat equipment required. Technician level knowledge/skills required. Offensive strategy may be required. Level I & II incidents. NFIRS Incident Codes: 220, 240, 411, 412, 421, 671, & 672
HIGH	Large hazardous materials spill or release. Technician level entry required (offensive strategy). Large uncontained quantities of hazardous materials affect a large spatial area. Technician level knowledge/skills required. Level II & III incidents. NFIRS Incident Codes: 422, 423, & 430
MAXIMUM	Critical tasks exceed Department's resources to mitigate; includes WMD. Requires use of specialized personnel and equipment. Requires response of RRT or other specialized outside resources. Level III incidents. NFIRS Incident Codes: 431 & 451

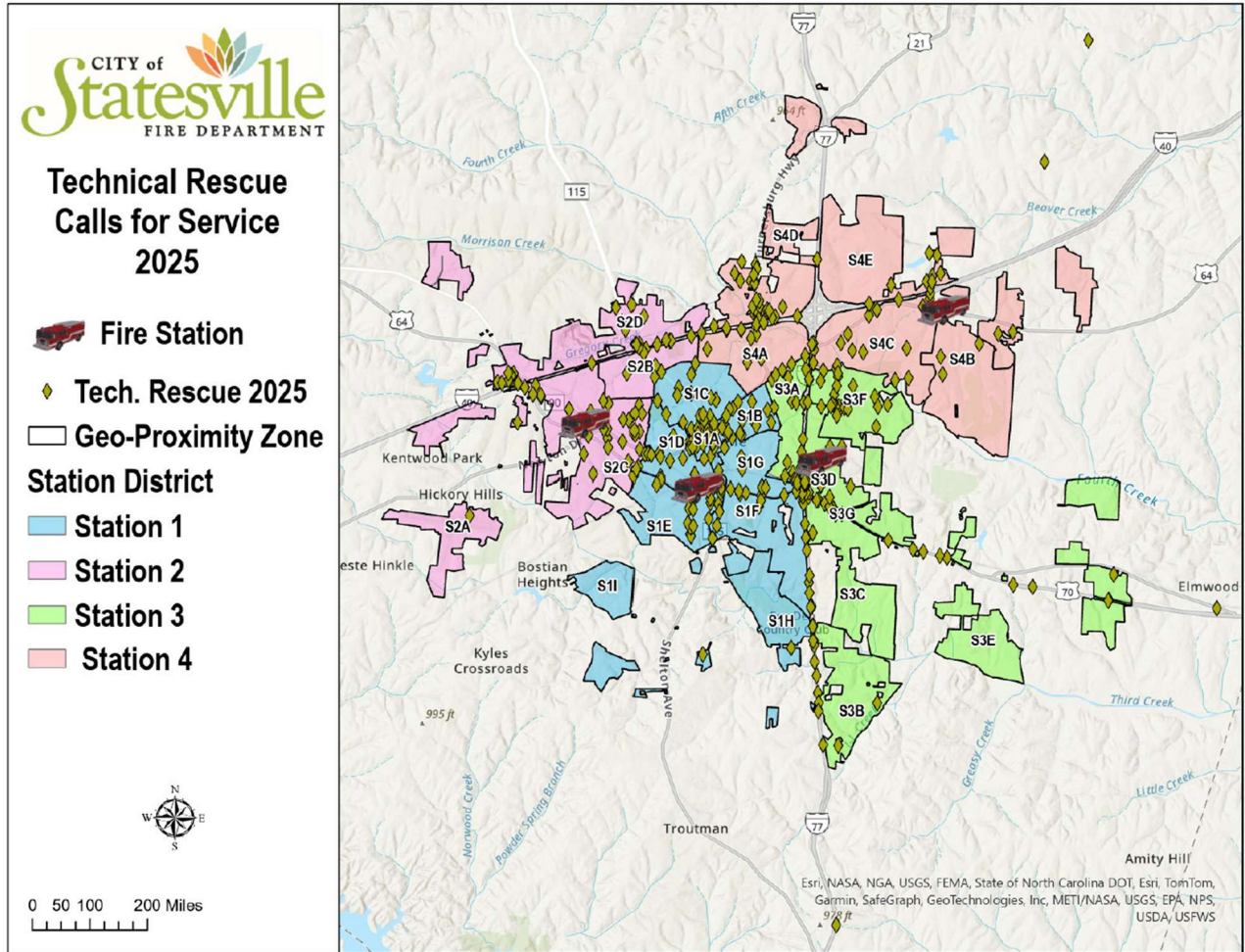
**Table 41: Hazmat Response Critical Tasking**

HAZMAT RESPONSE	CRITICAL TASKS	MAXIMUM HAZARD (LEVEL III)	HIGH HAZARD (LEVEL II & III)	MODERATE HAZARD (LEVEL I & II)	LOW HAZARD
1 <sup>ST</sup> ENGINE	<ul style="list-style-type: none"> <li>Establish command</li> <li>Perform size-up/Identify</li> <li>Isolate/Deny Entry</li> <li>Emergency decontamination</li> </ul>	4	4	4	4
ENGINE 4/HAZMAT 1	<ul style="list-style-type: none"> <li>Research</li> <li>Hazard mitigation</li> <li>Entry Team</li> <li>ICS Positions</li> </ul>	4	4	4	-
ENGINE 3	<ul style="list-style-type: none"> <li>Entry Team/Backup Team</li> <li>ICS Positions</li> <li>Assign as needed</li> </ul>	4	4	-	-
MOORESVILLE	<ul style="list-style-type: none"> <li>Assign as needed</li> </ul>	4	-	-	-
RRT/OTHER SPECIALIZED RESPONSE	<ul style="list-style-type: none"> <li>Assign as needed</li> </ul>	9	-	-	-
CHIEF	<ul style="list-style-type: none"> <li>Incident/Unified Command</li> </ul>	1	1	1	-
2 <sup>ND</sup> CHIEF	<ul style="list-style-type: none"> <li>Safety Officer / Unified Command</li> </ul>	1	1	-	-
3 <sup>RD</sup> CHIEF	<ul style="list-style-type: none"> <li>Assist with Unified Command</li> </ul>	1	-	-	-
<b>TOTAL</b>		<b>28</b>	<b>14</b>	<b>9</b>	<b>4</b>

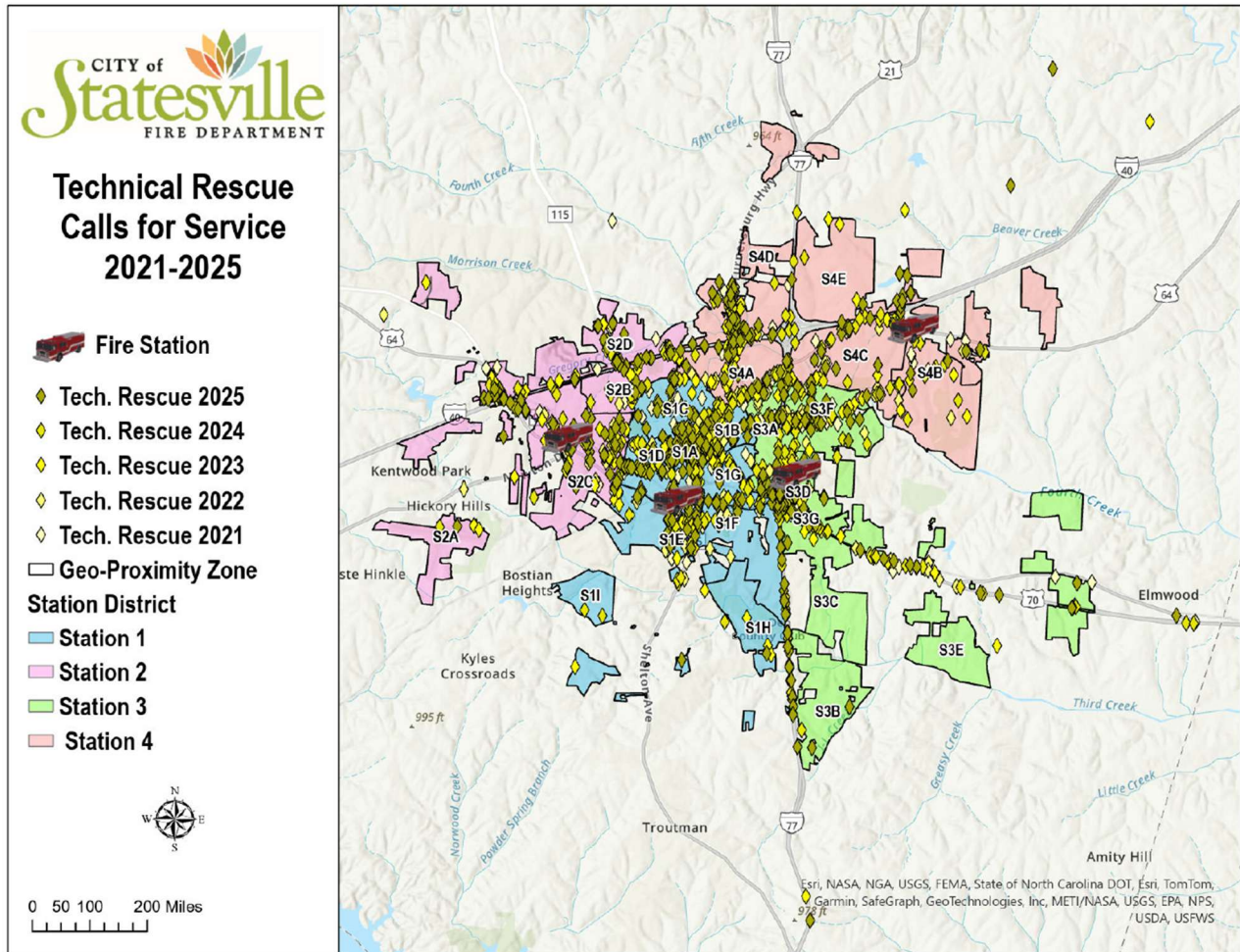
## Technical Rescue Risk Assessment

The risk assessment for technical rescue involved a historical review of incidents, probability / consequence, and need for outside resources. Technical rescue is broken down into six different classifications as the risks for each are different. The different classifications are extrications, low/high angle, Swiftwater, trench, confined space, structural collapse.

**Map 24: Technical Rescue – 2025**



**Map 25: Technical Rescue- 2021-2025**



**Table 42: Rescue Incident Overview 2021-2025**

Technical Rescue Incident Types 2021-2025	2021	2022	2023	2024	2025	Totals
322 - Motor vehicle accident with injuries	263	284	244	200	220	1211
324 - Motor vehicle accident with no injuries.	148	217	230	196	181	972
331 - Lock-in (if lock out, use 511 )	2	6	2	4	5	19
340- Search for lost person, other	-	-	-	-	0	0
341 - Search for person on land	0	0	0	1	0	1
342- Search for person in water	-	-	-	-	0	0
343- Search for person underground	-	-	-	-	0	0
350 - Extrication, rescue, other	3	2	2	5	0	12
351 - Extrication of victim(s) from building/structure	2	0	0	0	0	2
352 - Extrication of victim(s) from vehicle	7	6	5	9	6	33
353 - Removal of victim(s) from stalled elevator	7	3	8	6	4	28
354 - Trench/below-grade rescue	0	0	0	0	0	0
355 - Confined space rescue	0	0	0	0	0	0
356 - High-angle rescue	0	0	2	0	1	3
357 - Extrication of victim(s) from machinery	1	0	1	0	1	3
360 - Water & ice-related rescue, other	0	0	0	0	0	0
361- Swimming/Recreational water area rescue	-	-	-	-	0	0
362- Ice Rescue	-	-	-	-	0	0
363 - Swift water rescue	0	0	0	0	0	0
364- Surf Rescue	-	-	-	-	0	0
365- Watercraft Rescue	-	-	-	-	0	0
370- Electrical Rescue, Other	-	-	-	-	0	0
371- Electrocution or potential electrocution	-	-	-	-	0	0
372- Trapped by power lines	-	-	-	-	0	0
381 - Rescue or EMS standby	13	1	0	1	1	16
460- Accident, potential accident, other	-	-	-	-	0	0
461 – Building structure weakened or collapsed	N/A	N/A	6	3	3	12
510- Person in Distress, other	-	-	-	-	0	0
511- Lock-out	-	-	-	-	22	22
512- Ring or jewelry removal, without transport	-	-	-	-	0	0
540- Animal problem or rescue, other	-	-	-	-	0	0
541- Animal problem, includes person trapped by animal	-	-	-	-	1	1
542- Animal rescue	-	-	-	-	18	18
800- Severe weather or natural disaster, other	-	-	-	-	3	3
811- Earthquake assessment, no rescue or other service	-	-	-	-	0	0



Technical Rescue Incident Types 2021-2025	2021	2022	2023	2024	2025	Totals
812- Flood assessment excludes water rescue	-	-	-	-	0	0
813- Wind storm	-	-	-	-	11	11
815- Severe weather or natural disaster, standby	-	-	-	-	0	0
<b>Totals</b>	<b>453</b>	<b>532</b>	<b>511</b>	<b>437</b>	<b>477</b>	<b>2,410</b>

323 moved to Medical July 2025

340, 342, 343, 361, 362, 364, 365, 371, 372, 460, 510, 511, 512, 540, 541, 542, 800, 811, 812, 813, and 815 moved from Other to TR July 2025

**Table 43: Technical Rescue Categories**

TECHNICAL RESCUE CATEGORY	GENERAL DESCRIPTION OF ASSOCIATED RISK
LOW	Motor vehicle accident with injuries, motor vehicle/pedestrian accident, motor vehicle accident with no injuries, lock-in or lock-out, search for person on land, removal of victim(s) from stalled elevator
MODERATE	Extrication of victims(s) from building/structure, extrication of victims(s) from vehicle. Extrication of victim(s) from machinery, vehicle into a building without affecting any structural members, i.e. picture windows, glass doors, etc.
HIGH	Trench/below-grade rescue, confined space rescue, high-angle rescue, water and ice-related rescue, other, swift water rescue
MAXIMUM	Buildings with localized collapse, structural members are involved. High possibility of secondary collapse. Will require specialized equipment and Technician level knowledge/skills.

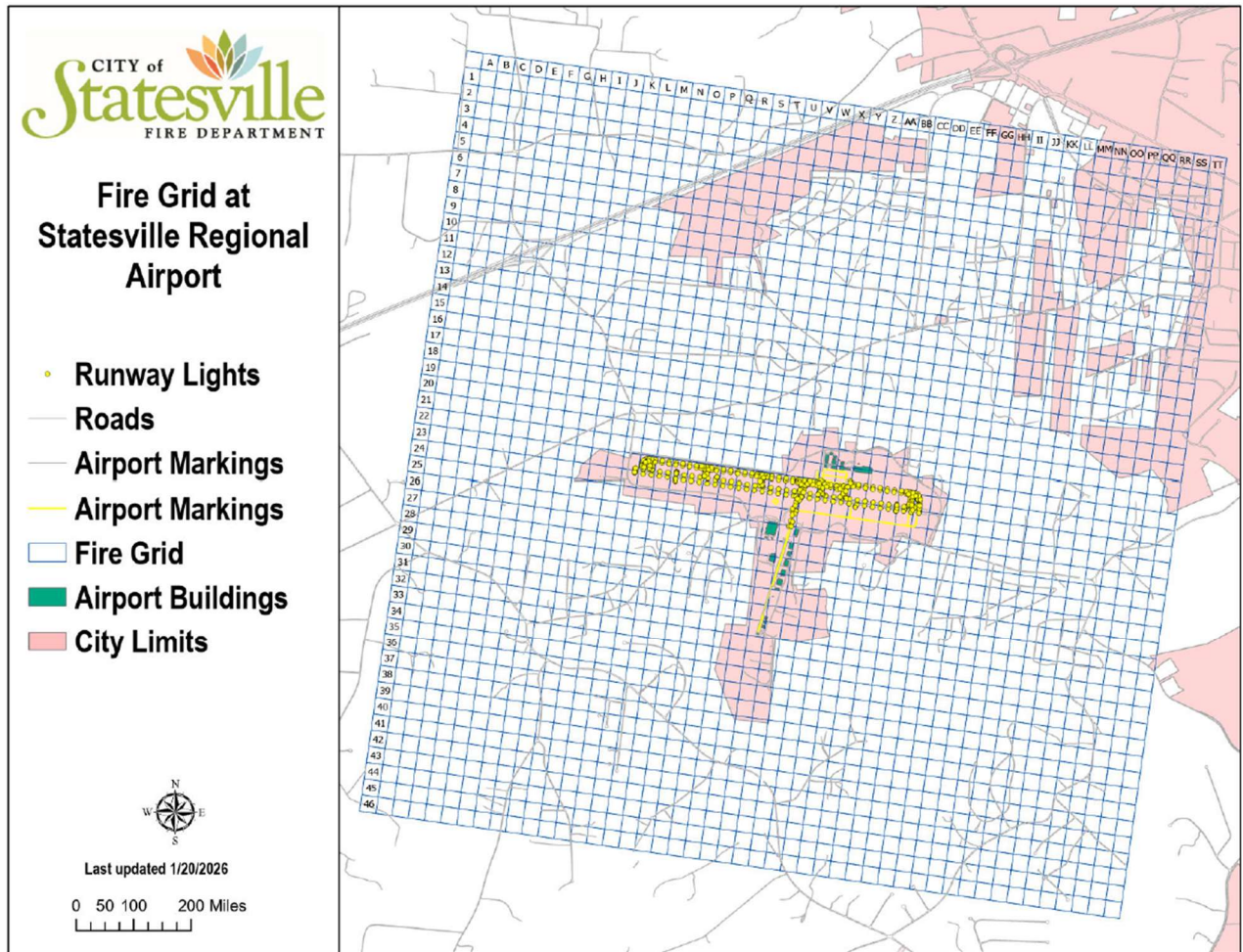
**Table 44: Technical Rescue Response Critical Tasking**

TECHNICAL RESPONSE	CRITICAL TASKS	MAXIMUM HAZARD	HIGH HAZARD	MODERATE HAZARD	LOW HAZARD
1 <sup>ST</sup> ENGINE	<ul style="list-style-type: none"> <li>Establish Command</li> <li>Perform size-up</li> <li>Hazard mitigation/rescue</li> </ul>	4	4	4	4
2 <sup>ND</sup> ENGINE/LADDER	<ul style="list-style-type: none"> <li>Hazard mitigation/rescue</li> <li>Assigned as needed</li> </ul>	4	4	-	-
1 <sup>ST</sup> LADDER	<ul style="list-style-type: none"> <li>Hazard Mitigation/rescue</li> <li>Assigned as needed</li> <li>Safety Officer</li> </ul>	4	-	-	-
RESCUE COMPANY (MUTUAL AID)	<ul style="list-style-type: none"> <li>Specialized Equipment and personnel</li> </ul>	4	-	-	-
CHIEF	<ul style="list-style-type: none"> <li>Incident/Unified Command</li> </ul>	1	1	1	-
2 <sup>ND</sup> CHIEF	<ul style="list-style-type: none"> <li>Unified Command</li> <li>Safety Officer</li> </ul>	1	-	-	-
<b>TOTAL</b>		<b>18</b>	<b>9</b>	<b>5</b>	<b>4</b>

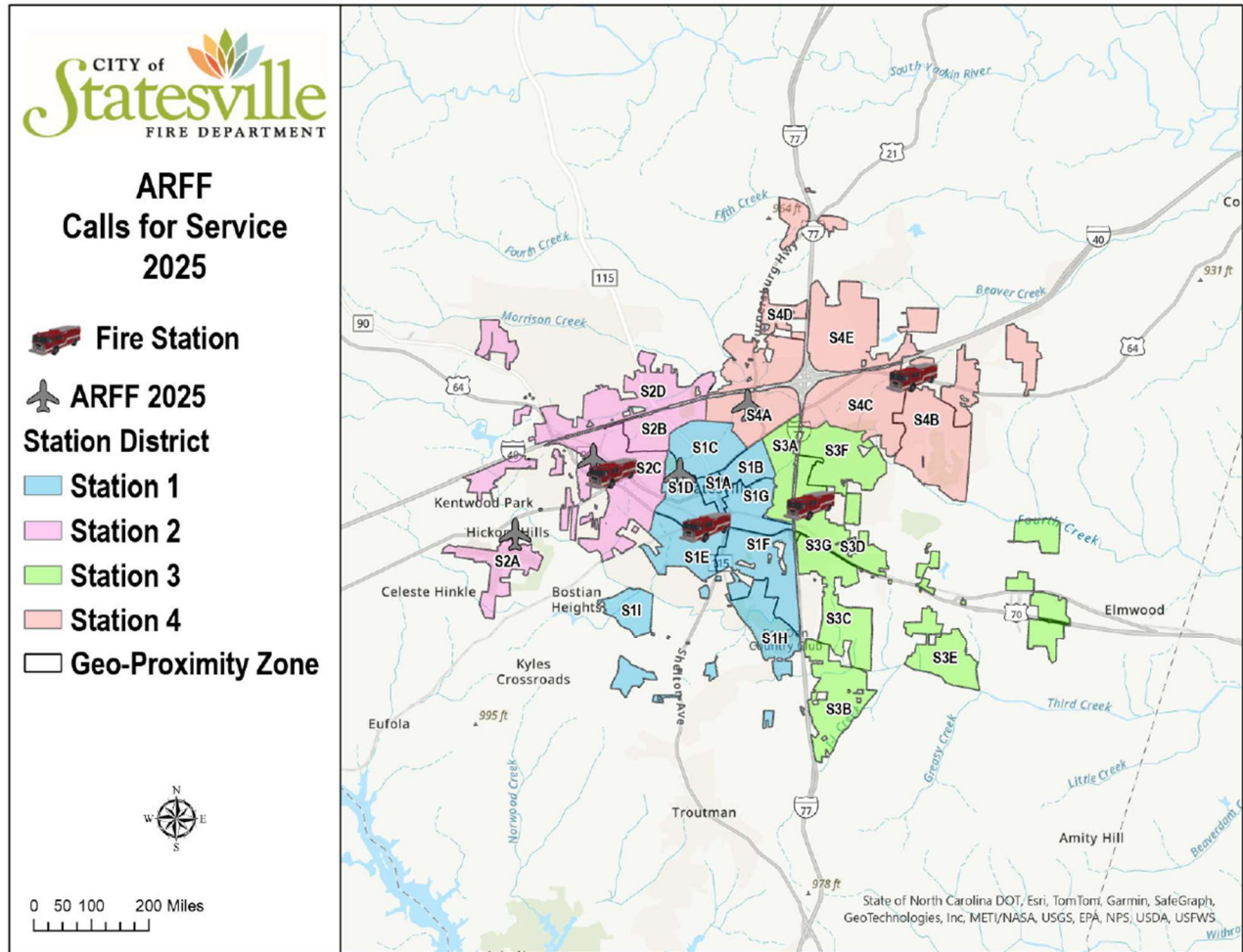
**ARFF Risk Assessment**

The risk assessment for Airport Rescue Fire Fighting (ARFF) involved a historical review of incidents, as well as probability / consequence. The typical risks associated with the Statesville Regional Airport are the same which would be associated with any airport. These risks include but are not limited to; landing undershoots / overshoots, takeoff overruns, aircraft crashes due to electrical or mechanical issues, and accidents which may occur to aircraft while taxiing (Alert 1, Alert 2, and Alert 3).

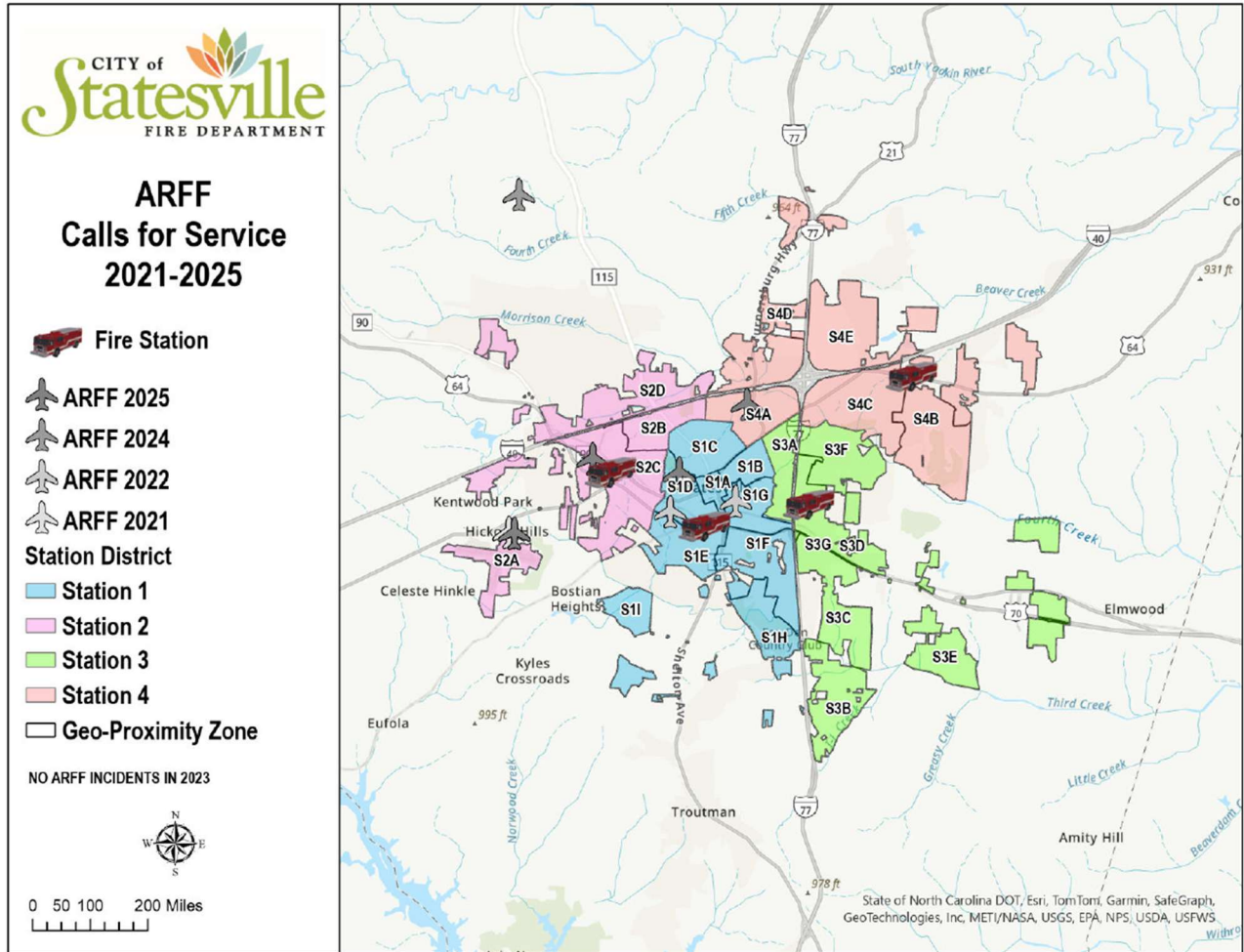
**Map 26: Fire Grid at Statesville Regional Airport**



**Map 27: Aviation Rescue Firefighting Incidents – 2025**



**Map 28: Aviation Rescue Firefighting Incidents – 2021-2025**



**Table 45: ARFF Incident Overview 2021-2025**

ARFF Incident Types	2021	2022	2023	2024	2025	Totals
462 - Aircraft standby	2	2	0	1	5	10
135- Aircraft Fire	-	-	-	-	1	1
<b>TOTAL</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>6</b>	<b>11</b>

135 moved to ARFF 2025

**Table 46: ARFF Risk Categories**

ARFF	General Description of Associated Risk
LOW	Alert 1 – An aircraft is having an issue without the likelihood of a crash
MODERATE	Alert 2 – An aircraft is having an issue with the likelihood of a crash
HIGH	Alert 3 – Aircraft has crashed

**Table 47: ARFF Response Critical Tasking**

ARFF RESPONSE	CRITICAL TASKS	HIGH HAZARD (ALERT 3)	MODERATE HAZARD (ALERT 2)	LOW HAZARD (ALERT 1)
1 <sup>ST</sup> ENGINE	<ul style="list-style-type: none"> <li>Establish command</li> <li>Perform size-up</li> <li>Hazard mitigation/rescue</li> <li>Patient care/triage</li> </ul>	3	3	3
ARFF 1	<ul style="list-style-type: none"> <li>Firefighting Operations</li> </ul>	1	1	1
2 <sup>ND</sup> ENGINE	<ul style="list-style-type: none"> <li>Hazard mitigation/rescue</li> <li>Water supply</li> <li>Assigned as needed</li> </ul>	4	4	
ENGINE 4/ HAZMAT 1	<ul style="list-style-type: none"> <li>Hazard Material containment/control</li> </ul>	4	4	
3 <sup>RD</sup> ENGINE	<ul style="list-style-type: none"> <li>Patient care/triage</li> <li>Assigned as needed</li> </ul>	4		
CHIEF	<ul style="list-style-type: none"> <li>Incident Command</li> </ul>	1	1	
2 <sup>ND</sup> CHIEF	<ul style="list-style-type: none"> <li>Unified Command</li> <li>Safety Officer</li> </ul>	1		
<b>TOTAL</b>		<b>18</b>	<b>13</b>	<b>4</b>

**Other Risks**

The Department combined Non-Emergency incidents into the Response Class, Other in 2023. Response Classes were modified on July 1, 2025, in the SFD RMS to reduce the number of incidents in the “Other” Response Class and better describe the incidents in a defined Response Class.

**Non-Emergency Risk Assessment- Legacy 2020-2022 Data**

The risk assessment for non-Emergency incidents involved a historical review of incidents, as well as probability / consequence for years 2020-2022. All incident types within the Non-Emergency Risk Category were determined as Low/Moderate risk given their nature of non-emergency events. Although these incidents are determined as non-emergency, they are a vital resource provided by the SFD. This category was combined with the Other Response Class in 2023.

**Table 48: Non-Emergency Incident Overview 2020-2022** (merged with Emergency, Other in 2023)

Non-Emergency Incident Types	2020	2021	2022	2023	2024	2020-2022 Totals
440 - Electrical wiring/equipment problem, other	10	5	14	<b>COMBINED WITH OTHER RESPONSE CLASS</b>		<b>50</b>
441 - Heat from short circuit (wiring), defective/worn	3	4	5		<b>25</b>	
442 - Overheated motor	4	6	4		<b>30</b>	
443 - Breakdown of light ballast	2	1	1		<b>8</b>	
444 - Power line down	37	17	37		<b>166</b>	
445 - Arcing, shorted electrical equipment	11	14	19		<b>86</b>	
460 - Accident, potential accident, other	2	2	1		<b>30</b>	
461 - Building or structure weakened or collapsed	6	3	7		<b>19</b>	
463 - Vehicle accident, general cleanup	16	13	7		<b>100</b>	
480 - Attempted burning, illegal action, other	0	0	1		<b>1</b>	
481 - Attempt to burn	0	1	0		<b>5</b>	
482 - Threat to burn	0	0	0		<b>1</b>	
510 - Person in distress, other	0	1	2		<b>13</b>	
511 - Lock-out	45	61	39		<b>215</b>	
520 - Water problem, other	10	10	15		<b>49</b>	
522 - Water or steam leak	14	18	22		<b>72</b>	
531 - Smoke or odor removal	8	8	2		<b>28</b>	
540 - Animal problem, other	0	0	1		<b>1</b>	
541 - Animal problem	0	2	1		<b>5</b>	
542 - Animal rescue	9	13	18		<b>52</b>	
700 - False alarm or false call, other	5	15	19		<b>92</b>	
710 - Malicious, mischievous false call, other	1	3	3		<b>12</b>	
711 - Municipal alarm system, malicious false alarm	2	1	0		<b>3</b>	
713 - Telephone, malicious false alarm	0	1	0		<b>1</b>	
714 - Central station, malicious false alarm	0	0	1		<b>2</b>	
715 - Local alarm system, malicious false alarm	0	2	2	<b>7</b>		

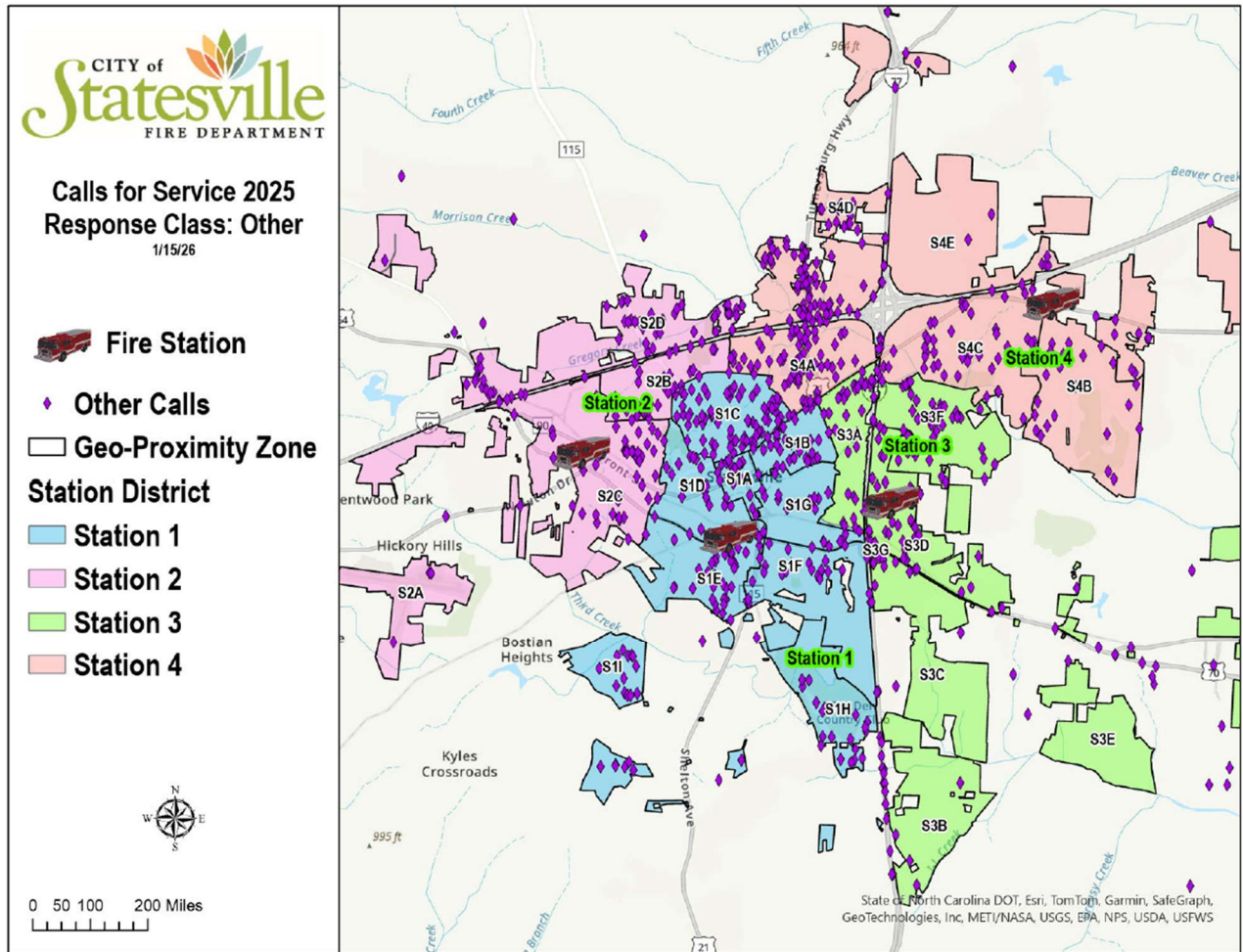


Non-Emergency Incident Types	2020	2021	2022	2023	2024	2020-2022 Totals
721 - Bomb scare - no bomb	0	0	2			2
730 - System malfunction, other	7	5	4			26
731 - Sprinkler activation due to malfunction	8	13	18			64
732 - Extinguishing system activation due to malfunction	2	0	1			11
733 - Smoke detector activation due to malfunction	30	53	32			182
734 - Heat detector activation due to malfunction	0	3	1			10
735 - Alarm system sounded due to malfunction	89	62	87			384
736 - CO detector activation due to malfunction	13	10	16			70
740 - Unintentional transmission of alarm, other	18	24	17			119
741 - Sprinkler activation, no fire - unintentional	17	7	14			62
742 - Extinguishing system activation	1	2	3			8
743 - Smoke detector activation, no fire - unintentional	65	104	81			394
744 - Detector activation, no fire - unintentional	36	42	31			190
745 - Alarm system activation, no fire - unintentional	190	250	264			1082
746 - Carbon monoxide detector activation, no CO	10	5	8			46
800 - Severe weather or natural disaster, other	6	3	0			22
812 - Flood assessment	5	0	0			9
813 - Wind storm, tornado/hurricane assessment	49	8	20			161
814 - Lightning strike (no fire)	3	1	1			8
815 - Severe weather or natural disaster standby	0	0	0			3
<b>TOTAL</b>	<b>734</b>	<b>793</b>	<b>821</b>			<b>3,926</b>

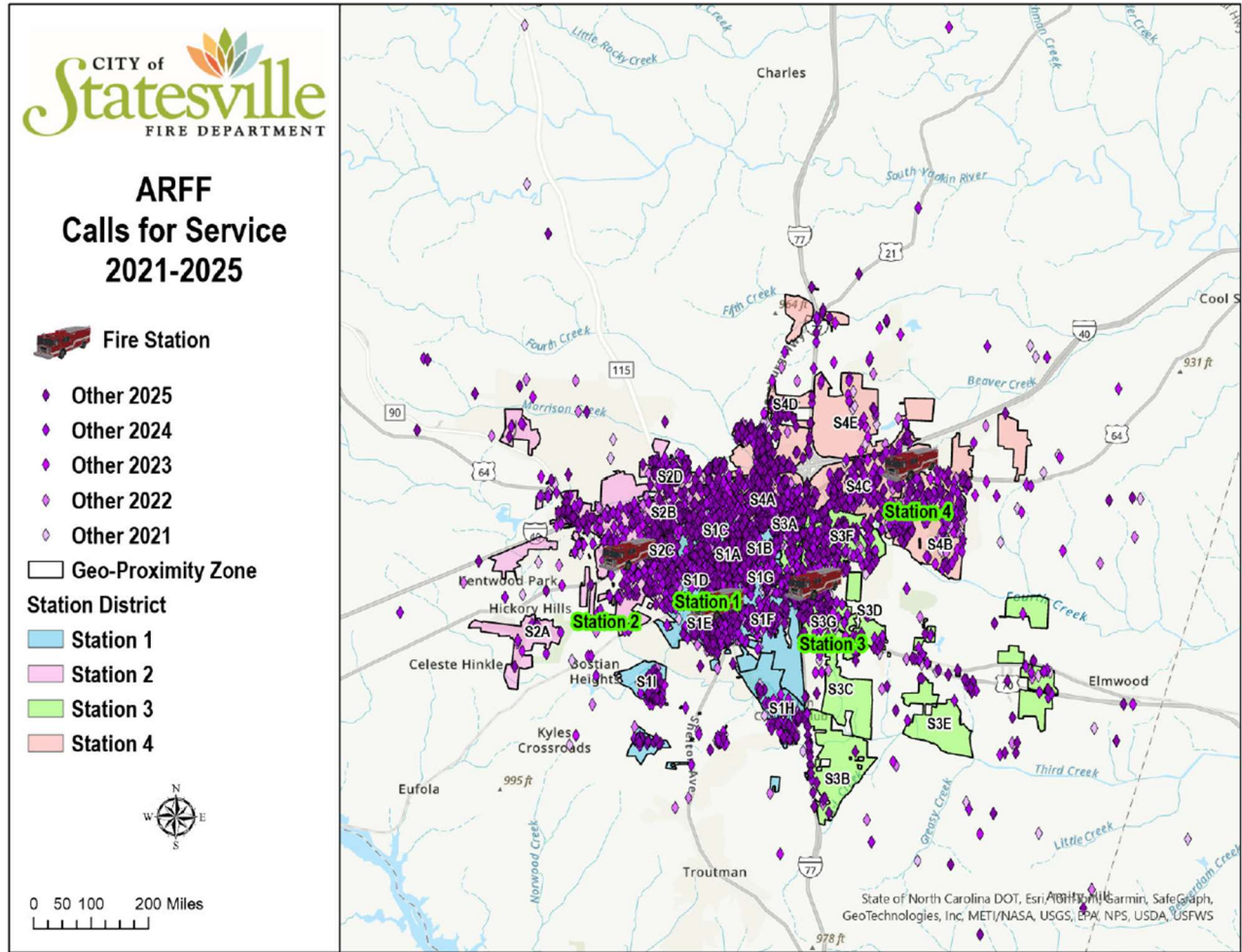
## Other Incidents Risk Assessment

The risk assessment for other incidents involved a historical review of incidents, as well as probability / consequence. All incident types within this category are determined as Low risk given the nature of the event. These incidents include alarm activations, investigations, and assessments.

**Map 29: Other Incidents – 2025**



**Map 30: Other Incidents – 2021-2025**



**Table 49: Other Incident Overview 2021-2025**

OTHER INCIDENT TYPES	2021	2022	2023	2024	2025	TOTALS
210 - Overpressure Rupture From Steam, Other	-	-	0	0	-	0
211 - Overpressure Rupture Of Steam Pipe Or Pipeline	-	-	0	0	-	0
212 - Overpressure Rupture Of Steam Boiler	-	-	0	0	-	0
213 - Overpressure Rupture Of Pressure Or Process Vessel From Steam	-	-	0	0	-	0
222 - Overpressure Rupture Of Boiler From Air Or Gas	-	-	0	0	-	0
223 - Overpressure Rupture Of Pressure Or Process Vessel From Air Or Gas, Not Steam	-	-	0	0	-	0
231 - Overpressure Rupture Of Pressure Or Process Vessel From Chemical Reaction	-	-	0	0	-	0
241 - Munitions Or Bomb Explosion (No Fire)	-	-	0	0	-	0
242 - Blasting Agent Explosion (No Fire)	-	-	0	0	-	0
243 - Fireworks Explosion (No Fire)	-	-	0	0	-	0
244 - Dust Explosion (No Fire)	-	-	0	0	-	0
340 - Search For Lost Person, Other	-	-	0	0	-	0
371 - Electrocutation Or Potential Electrocutation	-	-	0	0	-	0
440 - Electrical Wiring/Equipment Problem, Other	-	-	13	15	-	28
441 - Heat From Short Circuit (Wiring)	-	-	4	3	-	7
442 - Overheated Motor Or Wiring	-	-	13	10	-	23
443 - Breakdown Of Light Ballast	-	-	0	1	-	1
444 - Power Line Down	-	-	27	42	-	69
445 - Arcing, Shorted Electrical Equipment	-	-	24	13	-	37
460 - Accident, Potential Accident, Other	-	-	0	1	-	1
463 - Vehicle Accident, General Cleanup	-	-	9	16	-	25
471 - Explosive, bomb removal (for bomb scare, use 721)	0	1	0	0	-	1
480 - Attempted burning, illegal action, other	-	-	1	1	-	2
481 - Attempt to burn	-	-	1	0	-	1
482 - Threat to burn	-	-	0	0	-	0
500 - Service Call, other	18	26	14	45	59	162
510 - Person in distress, other	-	-	0	1	-	1
511 - Lock-out	-	-	0	50	-	50

OTHER INCIDENT TYPES	2021	2022	2023	2024	2025	TOTALS
512 – Ring or jewelry removal, without transport	-	-	0	1	-	1
520 – Water problem, other	-	-	13	9	13	35
521 – Water (not people) evacuation	-	-	0	0	0	0
522 – Water or steam leak	-	-	14	11	-	25
531 – Smoke or odor removal	-	-	2	4	-	6
550 - Public service assistance, other	36	18	32	54	50	190
551 - Assist police or other governmental agency	27	29	35	34	35	160
552 - Police matter	1	2	3	1	4	11
553 - Public service	56	91	86	101	113	447
554 - Assist invalid	14	16	N/A	N/A	N/A	30
555 - Defective elevator, no occupants	0	0	0	0	0	0
561 - Unauthorized burning	24	18	24	15	-	81
571 - Cover assignment, standby, moveup	6	1	10	4	-	21
600 - Good intent call, other	16	14	13	38	47	128
611 - Dispatched & cancelled en route	271	387	392	451	636	2137
621 - Wrong location	2	1	2	3	0	8
622 - No incident found on arrival at dispatch address	61	70	119	176	167	593
631 - Authorized controlled burning	3	7	7	2	-	19
641 - Vicinity alarm (incident in other location)	1	0	0	0	-	1
650 - Steam, other gas mistaken for smoke, other	1	1	3	1	-	6
651 - Smoke scare, odor of smoke	33	40	44	36	-	153
652 - Steam, vapor, fog or dust thought to be smoke	5	9	10	1	-	25
653 - Smoke from barbecue, tar kettle	2	1	4	1	-	8
661 - EMS call, party transported by non-fire agency	0	1	0	0	-	1
700 – False alarm or false call, other	-	-	10	43	30	83
710 – Malicious, mischievous false alarm, other	-	-	2	9	-	11
711 – Municipal alarm system, malicious false alarm	-	-	1	3	-	4
712 – Direct tie to Fire Department, malicious false alarm	-	-	0	0	-	0
713 – Telephone, malicious false alarm	-	-	1	0	-	1
714 – Central station, malicious false alarm	-	-	0	4	-	4

OTHER INCIDENT TYPES	2021	2022	2023	2024	2025	TOTALS
715 – Local alarm system, malicious false alarm	-	-	3	10	-	13
721 – Bomb scare (no bomb)	-	-	0	0	-	0
730 – System Or Detector Malfunction, Other	-	-	5	5	-	10
731 - Sprinkler Activated Due To Failure Or Malfunction Of Sprinkler System	-	-	24	8	-	32
732 - Extinguishing System Activation Due To Malfunction	-	-	3	1	-	4
733 - Smoke Detector Activation Due To Malfunction	-	-	38	20	-	58
734 - Heat Detector Activation Due To Malfunction	-	-	6	4	-	10
735 - Alarm System Activation Due To Malfunction	-	-	100	101	-	201
740 - Unintentional Transmission Of Alarm, Other	-	-	9	18	-	27
741 - Sprinkler Activation (No Fire), Unintentional	-	-	8	11	-	19
742 - Extinguishing System Activation	-	-	1	2	-	3
743 - Smoke Detector Activation (No Fire), Unintentional	-	-	116	95	-	211
744 - Detector Activation (No Fire), Unintentional	-	-	33	35	-	68
745 - Alarm System Activation (No Fire), Unintentional	-	-	239	311	-	550
751 - Biological Hazard, Malicious Fake Report	-	-	0	0	-	0
800 - Severe Weather Or Natural Disaster, Other	-	-	5	16	-	21
811 - Earthquake Assessment, No Rescue Or Other Service	-	-	0	0	-	0
812 - Flood Assessment, Excludes Water Rescue	-	-	0	1	-	1
813 - Wind Storm	-	-	42	50	-	92
814 - Lightning Strike (No Fire)	-	-	1	0	-	1
815 - Severe Weather Or Natural Disaster Standby	-	-	0	0	-	0
900 - Special type of incident, other	0	0	0	0	0	0
911 - Citizen complaint	1	0	0	1	0	2
<b>Totals</b>	<b>578</b>	<b>733</b>	<b>1566</b>	<b>1889</b>	<b>1154</b>	<b>5920</b>

Note: 2020-2022 data does not include non-emergency incidents, see Table 46.  
2023-2024 data includes all emergency and non-emergency incidents in the Other response class.

544 moved from Other (Non-emergency) incident type in 2023 to EMS response class

Note: Response Classes were modified on July 1, 2025, in the SFD RMS to reduce the number of incidents in the “Other” Response Class and better describe the incidents in a defined Response Class. This affected all historical data in the SFD RMS, thus affecting the yearly counts, monthly counts starting with June, and the 2nd Quarter counts through the remainder of the year. 210- 213, 222, 223, 231, 241-244, 340, 371, 440-445, 460, 463, 471, 480-482, 510-512, 522, 531, 540-542, 561, 571, 631, 632, 641, 650-653, 661, 710-715, 721, 730-735, 740-745, 751, 800, and 811-815 moved to more defined response classes

**Table 50: Other Risk Categories**

OTHER CATEGORY	GENERAL DESCRIPTION OF ASSOCIATED RISK
LOW	All non-emergency and other calls

**Table 51: Other Response Critical Tasking**

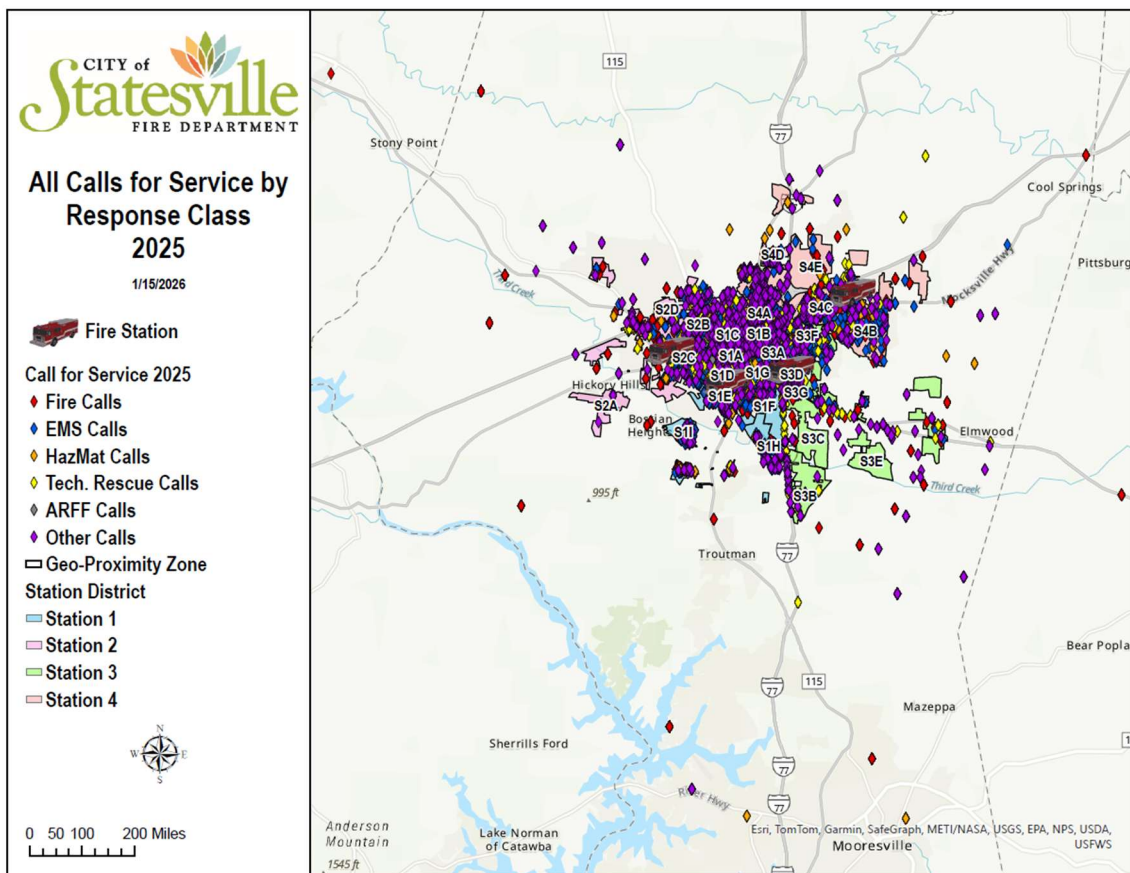
OTHER RESPONSE	CRITICAL TASKS	MAXIMUM HAZARD	HIGH HAZARD	MODERATE HAZARD	LOW HAZARD
1 <sup>ST</sup> ENGINE	<ul style="list-style-type: none"> <li>Establish Command</li> <li>Perform size-up</li> <li>Assess the situation</li> <li>Determine need for additional resources</li> <li>Estimate harm potential</li> <li>Mitigate</li> </ul>	-	-	-	4
<b>TOTAL</b>					<b>4</b>

## Geographic Planning Zone Risk Assessment

The geographic planning zones used by the SFD are the four Fire Station Districts. Each stations' response district presents its own unique risk of varying degree. The geographic planning zones are further refined into 25 geo-proximity zones (GPZs) to assist in determining more specific higher risk/demand areas. Station #1 geographic planning area is broken down into nine GPZs. Two geo-proximity zones (S1G & S1I) were added in 2021 that addressed mutual aid responses. Station #2 geographic planning area is broken-down into four GPZs; an additional GPZ (S2B) was added to the Station #2 district in 2024. The Station #3 geographic planning area is broken-down into seven GPZs, and Station #4 geographic planning area is broken-down into five GPZs. One geo-proximity zone was added in 2022 in Station #4's district (S4E) that addressed mutual aid responses. One geo-proximity zone was combined with S3G in 2024 in Station 3's district. The risk assessment by planning zones involved a historical review of incidents, as well as probability/consequence, availability, and individual risk associated with each zone.

## All Planning Zones Risk Assessment

**Map 31: Fire Districts with All Calls Maximum, High, Moderate, & Low Risks - 2025**



**Table 52: Risk Levels by Geo-Proximity Zones 2025**

Risk Level by Response Class by Geo-Proximity Zones - 2025						
Zone	Fire	Medical	HazMat	Technical Rescue	ARFF	Other
S1A	LOW	LOW	LOW	LOW	N/A	LOW
S1B	LOW	LOW	LOW	LOW	N/A	LOW
S1C	LOW	LOW	MODERATE	LOW	N/A	LOW
S1D	LOW	LOW	HIGH	LOW	LOW	LOW
S1E	LOW	LOW	LOW	LOW	N/A	LOW
S1F	LOW	LOW	LOW	LOW	N/A	LOW
S1G	LOW	LOW	MODERATE	LOW	N/A	LOW
S1H	LOW	LOW	LOW	LOW	N/A	LOW
S1I	LOW	LOW	LOW	N/A	N/A	LOW
S2A	LOW	LOW	N/A	LOW	HIGH	LOW
S2B	LOW	LOW	LOW	LOW	N/A	LOW
S2C	LOW	LOW	MODERATE	LOW	LOW	LOW
S2D	LOW	LOW	LOW	LOW	N/A	LOW
S3A	LOW	LOW	MODERATE	LOW	N/A	LOW
S3B	LOW	LOW	N/A	LOW	N/A	LOW
S3C	LOW	LOW	LOW	LOW	N/A	LOW
S3D	LOW	LOW	LOW	LOW	N/A	LOW
S3E	LOW	LOW	N/A	LOW	N/A	LOW
S3F	LOW	LOW	MODERATE	LOW	N/A	LOW
S3G	LOW	LOW	N/A	LOW	N/A	LOW
S4A	LOW	LOW	HIGH	MODERATE	LOW	LOW
S4B	LOW	LOW	LOW	LOW	N/A	LOW
S4C	LOW	MODERATE	LOW	LOW	N/A	LOW
S4D	LOW	LOW	LOW	N/A	N/A	LOW
S4E	LOW	LOW	LOW	LOW	N/A	LOW

**Table 53: Fire Gap Analysis 2023-2025**

Gap Analysis for Total Response Time 1st Due & ERF - Fire - 2023-2025																				
Low Risk Fires					Moderate Risk Fires					High Risk Fires					Maximum Risk Fires					
SFD Benchmarks																				
Urban	6:20	6:20	Urban	6:20	10:20	Urban	6:20	11:00	Urban	6:20	20:30	Rural	7:50	7:50	Rural	7:50	12:30	Rural	6:20	22:00
2023-2025 Baseline																				
GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap	
S1A	6:09	0:11	6:09	0:11	S1A	5:12	0:58	9:09	1:11	S1A	N/A	N/A	N/A	N/A	S1A	N/A	N/A	N/A	N/A	
S1B	7:54	1:34	7:54	1:34	S1B	4:43	1:37	7:58	2:22	S1B	7:14	0:54	12:54	1:54	S1B	N/A	N/A	N/A	N/A	
S1C	8:20	2:00	8:20	2:00	S1C	7:03	0:43	8:42	1:38	S1C	N/A	N/A	N/A	N/A	S1C	N/A	N/A	N/A	N/A	
S1D	6:36	0:16	6:36	0:16	S1D	5:25	0:55	12:16	2:04	S1D	2:57	3:23	N/A	N/A	S1D	N/A	N/A	N/A	N/A	
S1E	7:22	0:28	7:22	0:28	S1E	5:44	2:06	15:57	4:07	S1E	N/A	N/A	N/A	N/A	S1E	N/A	N/A	N/A	N/A	
S1F	8:20	0:30	8:20	0:30	S1F	5:54	1:56	9:08	2:42	S1F	N/A	N/A	N/A	N/A	S1F	N/A	N/A	N/A	N/A	
S1G	7:39	0:11	7:39	0:11	S1G	5:56	1:54	26:09	14:19	S1G	6:39	1:11	10:20	2:10	S1G	N/A	N/A	N/A	N/A	
S1H	11:56	4:06	11:56	4:06	S1H	9:27	1:37	9:48	2:02	S1H	N/A	N/A	N/A	N/A	S1H	N/A	N/A	N/A	N/A	
S1I	11:26	3:36	11:26	3:36	S1I	7:14	0:36	13:32	1:42	S1I	N/A	N/A	N/A	N/A	S1I	N/A	N/A	N/A	N/A	
S2A	10:34	2:44	10:34	2:44	S2A	N/A	N/A	N/A	N/A	S2A	N/A	N/A	N/A	N/A	S2A	N/A	N/A	N/A	N/A	
S2B	10:13	2:23	10:13	2:23	S2B	6:28	1:22	11:45	0:05	S2B	N/A	N/A	N/A	N/A	S2B	N/A	N/A	N/A	N/A	
S2C	7:39	1:19	7:39	1:19	S2C	5:20	1:00	10:17	0:03	S2C	5:03	1:17	6:04	4:56	S2C	N/A	N/A	N/A	N/A	
S2D	8:38	0:48	8:38	0:48	S2D	N/A	N/A	N/A	N/A	S2D	N/A	N/A	N/A	N/A	S2D	N/A	N/A	N/A	N/A	
S3A	8:26	0:36	8:26	0:36	S3A	5:01	2:49	ND	ND	S3A	N/A	N/A	N/A	N/A	S3A	N/A	N/A	N/A	N/A	
S3B	10:09	2:19	10:09	2:19	S3B	N/A	N/A	N/A	N/A	S3B	N/A	N/A	N/A	N/A	S3B	N/A	N/A	N/A	N/A	
S3C	6:55	0:55	6:55	0:55	S3C	N/A	N/A	N/A	N/A	S3C	N/A	N/A	N/A	N/A	S3C	N/A	N/A	N/A	N/A	
S3D	7:43	0:07	7:43	0:07	S3D	3:03	4:47	8:02	3:48	S3D	N/A	N/A	N/A	N/A	S3D	N/A	N/A	N/A	N/A	
S3E	11:33	3:43	11:33	3:43	S3E	N/A	N/A	N/A	N/A	S3E	N/A	N/A	N/A	N/A	S3E	N/A	N/A	N/A	N/A	
S3F	7:18	0:58	7:18	0:58	S3F	7:10	0:50	8:33	1:47	S3F	4:48	1:32	ND	ND	S3F	N/A	N/A	N/A	N/A	
S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A	
S4A	10:11	2:21	10:11	2:21	S4A	9:07	1:17	10:10	1:40	S4A	6:27	1:23	20:49	8:19	S4A	N/A	N/A	N/A	N/A	
S4B	8:51	2:31	8:51	2:31	S4B	7:50	1:30	12:23	2:03	S4B	N/A	N/A	N/A	N/A	S4B	N/A	N/A	N/A	N/A	
S4C	7:43	0:07	7:43	0:07	S4C	N/A	N/A	N/A	N/A	S4C	N/A	N/A	N/A	N/A	S4C	N/A	N/A	N/A	N/A	
S4D	12:25	4:35	12:25	4:35	S4D	N/A	N/A	N/A	N/A	S4D	N/A	N/A	N/A	N/A	S4D	N/A	N/A	N/A	N/A	
S4E	8:55	1:05	8:55	1:05	S4E	7:12	0:38	ND	ND	S4E	N/A	N/A	N/A	N/A	S4E	N/A	N/A	N/A	N/A	

Urban Geo-Zones are Identified in Bold Blue Font

**Table 54: Fire Gap Analysis 2025**

Gap Analysis for 1st Due Travel & Total Response Time - Fire - 2025																				
Low Risk Fires					Moderate Risk Fires					High Risk Fires					Maximum Risk Fires					
SFD Benchmarks																				
Urban	6:20	6:20	Urban	6:20	10:20	Urban	6:20	11:00	Urban	6:20	20:30	Rural	7:50	7:50	Rural	7:50	12:30	Rural	6:20	22:00
2025 Baseline																				
GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap	
S1A	6:04	0:16	6:04	0:16	S1A	3:25	2:55	8:55	1:25	S1A	N/A	N/A	N/A	N/A	S1A	N/A	N/A	N/A	N/A	
S1B	9:29	3:09	9:29	3:09	S1B	N/A	N/A	N/A	N/A	S1B	N/A	N/A	N/A	N/A	S1B	N/A	N/A	N/A	N/A	
S1C	8:22	2:02	8:22	2:02	S1C	N/A	N/A	N/A	N/A	S1C	N/A	N/A	N/A	N/A	S1C	N/A	N/A	N/A	N/A	
S1D	6:33	0:13	6:33	0:13	S1D	5:25	0:55	8:48	1:32	S1D	2:57	3:23	N/A	N/A	S1D	N/A	N/A	N/A	N/A	
S1E	7:21	0:29	7:21	0:29	S1E	4:42	3:08	12:35	0:45	S1E	N/A	N/A	N/A	N/A	S1E	N/A	N/A	N/A	N/A	
S1F	9:17	1:27	9:17	0:08	S1F	5:06	2:44	9:08	2:42	S1F	N/A	N/A	N/A	N/A	S1F	N/A	N/A	N/A	N/A	
S1G	8:04	0:14	8:04	0:14	S1G	5:05	2:45	ND	ND	S1G	N/A	N/A	N/A	N/A	S1G	N/A	N/A	N/A	N/A	
S1H	10:26	2:36	10:26	2:36	S1H	N/A	N/A	N/A	N/A	S1H	N/A	N/A	N/A	N/A	S1H	N/A	N/A	N/A	N/A	
S1I	11:26	3:36	11:26	3:36	S1I	N/A	N/A	N/A	N/A	S1I	N/A	N/A	N/A	N/A	S1I	N/A	N/A	N/A	N/A	
S2A	10:34	2:44	10:34	2:44	S2A	N/A	N/A	N/A	N/A	S2A	N/A	N/A	N/A	N/A	S2A	N/A	N/A	N/A	N/A	
S2B	10:13	2:23	10:13	2:23	S2B	6:28	1:22	11:45	0:05	S2B	N/A	N/A	N/A	N/A	S2B	N/A	N/A	N/A	N/A	
S2C	7:29	1:09	7:29	1:09	S2C	5:10	1:10	ND	ND	S2C	N/A	N/A	N/A	N/A	S2C	N/A	N/A	N/A	N/A	
S2D	8:43	0:53	8:43	0:53	S2D	N/A	N/A	N/A	N/A	S2D	N/A	N/A	N/A	N/A	S2D	N/A	N/A	N/A	N/A	
S3A	7:29	0:21	7:29	0:21	S3A	N/A	N/A	N/A	N/A	S3A	N/A	N/A	N/A	N/A	S3A	N/A	N/A	N/A	N/A	
S3B	10:09	2:19	10:09	2:19	S3B	N/A	N/A	N/A	N/A	S3B	N/A	N/A	N/A	N/A	S3B	N/A	N/A	N/A	N/A	
S3C	6:34	1:16	6:34	1:16	S3C	N/A	N/A	N/A	N/A	S3C	N/A	N/A	N/A	N/A	S3C	N/A	N/A	N/A	N/A	
S3D	7:32	0:18	7:32	0:18	S3D	N/A	N/A	N/A	N/A	S3D	N/A	N/A	N/A	N/A	S3D	N/A	N/A	N/A	N/A	
S3E	11:52	4:02	11:52	4:02	S3E	N/A	N/A	N/A	N/A	S3E	N/A	N/A	N/A	N/A	S3E	N/A	N/A	N/A	N/A	
S3F	7:54	1:34	7:54	1:34	S3F	3:46	2:34	ND	ND	S3F	N/A	N/A	N/A	N/A	S3F	N/A	N/A	N/A	N/A	
S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A	
S4A	10:39	2:49	10:39	2:49	S4A	N/A	N/A	N/A	N/A	S4A	N/A	N/A	N/A	N/A	S4A	N/A	N/A	N/A	N/A	
S4B	8:33	2:13	8:33	2:13	S4B	7:16	0:56	ND	ND	S4B	N/A	N/A	N/A	N/A	S4B	N/A	N/A	N/A	N/A	
S4C	8:27	0:37	8:27	0:37	S4C	N/A	N/A	N/A	N/A	S4C	N/A	N/A	N/A	N/A	S4C	N/A	N/A	N/A	N/A	
S4D	12:37	4:47	12:37	4:47	S4D	N/A	N/A	N/A	N/A	S4D	N/A	N/A	N/A	N/A	S4D	N/A	N/A	N/A	N/A	
S4E	9:47	1:57	9:47	1:57	S4E	7:12	0:38	ND	ND	S4E	N/A	N/A	N/A	N/A	S4E	N/A	N/A	N/A	N/A	

Urban Geo-Zones are Identified in Bold Blue Font

**Table 55: EMS Gap Analysis 2023-2025**

Gap Analysis for 1st Due & ERF Total Response Time - EMS- 2023-2025															
Low Risk EMS					Moderate Risk EMS					High Risk EMS					
SFD Benchmarks															
Urban		6:20	6:20	Urban		6:20	6:20	Urban		6:20	8:20	Rural		7:50	9:50
Rural		7:50	7:50	Rural		7:50	7:50	Rural		7:50	9:50	Rural		7:50	9:50
2023-2025 Baseline															
GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap	
<b>S1A</b>	6:26	0:06	6:26	0:06	<b>S1A</b>	6:21	0:01	6:21	0:01	<b>S1A</b>	N/A	N/A	N/A	N/A	
<b>S1B</b>	7:51	1:31	7:51	1:31	<b>S1B</b>	6:28	0:08	6:28	0:08	<b>S1B</b>	N/A	N/A	N/A	N/A	
<b>S1C</b>	8:55	2:35	8:55	2:35	<b>S1C</b>	8:20	2:00	8:20	2:00	<b>S1C</b>	N/A	N/A	N/A	N/A	
<b>S1D</b>	7:06	0:46	7:06	0:46	<b>S1D</b>	6:11	0:09	6:11	0:09	<b>S1D</b>	N/A	N/A	N/A	N/A	
S1E	7:42	0:08	7:42	0:08	S1E	8:31	0:41	8:31	0:41	S1E	N/A	N/A	N/A	N/A	
S1F	7:42	0:08	7:42	0:08	S1F	7:47	0:03	7:47	0:03	S1F	N/A	N/A	N/A	N/A	
S1G	7:36	0:14	7:36	0:14	S1G	8:16	0:26	8:16	0:26	S1G	N/A	N/A	N/A	N/A	
S1H	10:25	2:35	10:25	2:35	S1H	16:49	8:59	16:49	8:59	S1H	N/A	N/A	N/A	N/A	
S1I	10:25	2:35	10:25	2:35	S1I	7:41	0:09	7:41	0:09	S1I	N/A	N/A	N/A	N/A	
S2A	9:27	1:37	9:27	1:37	S2A	N/A	N/A	N/A	N/A	S2A	N/A	N/A	N/A	N/A	
S2B	8:06	0:16	8:06	0:16	S2B	6:51	0:59	6:51	0:59	S2B	N/A	N/A	N/A	N/A	
<b>S2C</b>	6:27	0:07	6:27	0:07	<b>S2C</b>	5:46	0:34	5:46	0:34	<b>S2C</b>	N/A	N/A	N/A	N/A	
S2D	8:39	0:49	8:39	0:49	S2D	8:20	0:30	8:20	0:30	S2D	N/A	N/A	N/A	N/A	
S3A	9:06	1:16	9:06	1:16	S3A	7:07	0:43	7:07	0:43	S3A	N/A	N/A	N/A	N/A	
S3B	8:06	0:16	8:06	0:16	S3B	N/A	N/A	N/A	N/A	S3B	N/A	N/A	N/A	N/A	
S3C	7:50	0:00	7:50	0:00	S3C	5:53	1:57	5:53	1:57	S3C	N/A	N/A	N/A	N/A	
S3D	7:51	0:01	7:51	0:01	S3D	7:57	0:07	7:57	0:07	S3D	N/A	N/A	N/A	N/A	
S3E	12:09	4:19	12:09	4:19	S3E	N/A	N/A	N/A	N/A	S3E	N/A	N/A	N/A	N/A	
<b>S3F</b>	7:50	1:30	7:50	1:30	<b>S3F</b>	6:35	0:15	6:35	0:15	<b>S3F</b>	N/A	N/A	N/A	N/A	
S3G	7:49	0:01	7:49	0:01	S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A	
S4A	9:54	2:04	9:54	2:04	S4A	9:46	1:56	9:46	1:56	S4A	N/A	N/A	N/A	N/A	
<b>S4B</b>	7:52	1:32	7:52	1:32	<b>S4B</b>	7:34	1:14	7:34	1:14	<b>S4B</b>	N/A	N/A	N/A	N/A	
S4C	7:35	0:15	7:35	0:15	S4C	6:48	1:02	6:48	1:02	S4C	N/A	N/A	N/A	N/A	
S4D	10:45	2:55	10:45	2:55	S4D	10:33	2:43	10:33	2:43	S4D	N/A	N/A	N/A	N/A	
S4E	7:48	0:02	7:48	0:02	S4E	10:29	2:39	10:29	2:39	S4E	N/A	N/A	N/A	N/A	

Urban Geo-Zones are Identified in Bold Blue Font

**Table 56: EMS Gap Analysis 2025**

Gap Analysis for 1st Due & ERF Total Response Time - EMS- 2025															
Low Risk EMS					Moderate Risk EMS					High Risk EMS					
SFD Benchmarks															
Urban		6:20		6:20		Urban		6:20		Urban		6:20		8:20	
Rural		7:50		7:50		Rural		7:50		Rural		7:50		9:50	
2025 Baseline															
GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap	
<b>S1A</b>	6:29	0:09	6:29	0:09	<b>S1A</b>	N/A	N/A	N/A	N/A	<b>S1A</b>	N/A	N/A	N/A	N/A	
<b>S1B</b>	8:08	1:48	8:08	1:48	<b>S1B</b>	6:28	0:08	6:28	0:08	<b>S1B</b>	N/A	N/A	N/A	N/A	
<b>S1C</b>	9:14	2:54	9:14	2:54	<b>S1C</b>	8:20	2:00	8:20	2:00	<b>S1C</b>	N/A	N/A	N/A	N/A	
<b>S1D</b>	6:49	0:29	6:49	0:29	<b>S1D</b>	5:42	0:38	5:42	0:38	<b>S1D</b>	N/A	N/A	N/A	N/A	
S1E	6:47	1:03	6:47	1:03	S1E	5:44	2:06	5:44	2:06	S1E	N/A	N/A	N/A	N/A	
S1F	7:14	0:36	7:14	0:36	S1F	7:47	0:03	7:47	0:03	S1F	N/A	N/A	N/A	N/A	
S1G	7:45	0:05	7:45	0:05	S1G	6:58	0:52	6:58	0:52	S1G	N/A	N/A	N/A	N/A	
S1H	9:47	1:57	9:47	1:57	S1H	8:43	0:53	8:43	0:53	S1H	N/A	N/A	N/A	N/A	
S1I	10:27	2:37	10:27	2:37	S1I	7:41	0:09	7:41	0:09	S1I	N/A	N/A	N/A	N/A	
S2A	12:45	4:55	12:45	4:55	S2A	N/A	N/A	N/A	N/A	S2A	N/A	N/A	N/A	N/A	
S2B	8:06	0:16	8:06	0:16	S2B	5:20	2:30	5:20	2:30	S2B	N/A	N/A	N/A	N/A	
<b>S2C</b>	6:46	0:26	6:46	0:26	<b>S2C</b>	6:46	0:26	6:46	0:26	<b>S2C</b>	N/A	N/A	N/A	N/A	
S2D	9:22	1:32	9:22	1:32	S2D	8:20	0:30	8:20	0:30	S2D	N/A	N/A	N/A	N/A	
S3A	9:55	2:05	9:55	2:05	S3A	7:07	0:43	7:07	0:43	S3A	N/A	N/A	N/A	N/A	
S3B	11:44	3:54	11:44	3:54	S3B	N/A	N/A	N/A	N/A	S3B	N/A	N/A	N/A	N/A	
S3C	7:50	0:00	7:50	0:00	S3C	5:25	2:25	5:25	2:25	S3C	N/A	N/A	N/A	N/A	
S3D	8:25	0:35	8:25	0:35	S3D	6:16	1:34	6:16	1:34	S3D	N/A	N/A	N/A	N/A	
S3E	13:06	5:16	13:06	5:16	S3E	N/A	N/A	N/A	N/A	S3E	N/A	N/A	N/A	N/A	
<b>S3F</b>	8:07	1:47	8:07	1:47	<b>S3F</b>	6:33	0:13	6:33	0:13	<b>S3F</b>	N/A	N/A	N/A	N/A	
S3G	7:49	0:01	7:49	0:01	S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A	
S4A	9:54	2:04	9:54	2:04	S4A	9:53	2:03	9:53	2:03	S4A	N/A	N/A	N/A	N/A	
<b>S4B</b>	7:11	0:51	7:11	0:51	<b>S4B</b>	12:25	6:05	12:25	6:05	<b>S4B</b>	N/A	N/A	N/A	N/A	
S4C	7:23	0:27	7:23	0:27	S4C	6:39	1:11	6:39	1:11	S4C	N/A	N/A	N/A	N/A	
S4D	12:02	4:12	12:02	4:12	S4D	ND	ND	ND	ND	S4D	N/A	N/A	N/A	N/A	
S4E	9:00	1:10	9:00	1:10	S4E	10:29	2:39	10:29	2:39	S4E	N/A	N/A	N/A	N/A	

Urban Geo-Zones are Identified in Bold Blue Font

**Table 57: HazMat Gap Analysis 2023-2025**

Gap Analysis for Total Response Time 1st Due & ERF - HazMat - 2023-2025																					
Low Risk HazMat					Moderate Risk HazMat					High Risk HazMat					Maximum Risk HazMat						
SFD Benchmarks																					
Urban		6:20		6:20		Urban		6:20		Urban		6:20		10:20		Urban		6:20		60:00	
Rural		7:50		7:50		Rural		7:50		Rural		7:50		11:50		Rural		7:50		60:00	
2023-2025 Baseline																					
GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap		
<b>S1A</b>	4:26	1:54	4:26	1:54	<b>S1A</b>	6:24	0:04	22:44	14:24	<b>S1A</b>	N/A	N/A	N/A	N/A	<b>S1A</b>	N/A	N/A	N/A	N/A		
<b>S1B</b>	28:28	22:08	28:28	22:08	<b>S1B</b>	7:54	1:34	21:52	13:32	<b>S1B</b>	N/A	N/A	N/A	N/A	<b>S1B</b>	N/A	N/A	N/A	N/A		
<b>S1C</b>	9:20	3:00	9:20	3:00	<b>S1C</b>	9:06	2:46	17:21	9:01	<b>S1C</b>	N/A	N/A	N/A	N/A	<b>S1C</b>	N/A	N/A	N/A	N/A		
<b>S1D</b>	6:51	0:31	6:51	0:31	<b>S1D</b>	7:10	0:50	12:49	4:29	<b>S1D</b>	N/A	N/A	N/A	N/A	<b>S1D</b>	N/A	N/A	N/A	N/A		
S1E	6:00	1:50	6:00	1:50	S1E	7:18	0:32	22:52	13:02	S1E	N/A	N/A	N/A	N/A	S1E	N/A	N/A	N/A	N/A		
S1F	8:33	0:43	8:33	0:43	S1F	6:46	1:04	18:16	8:26	S1F	N/A	N/A	N/A	N/A	S1F	N/A	N/A	N/A	N/A		
S1G	12:12	4:22	12:12	4:22	S1G	10:10	2:20	10:15	0:25	S1G	N/A	N/A	N/A	N/A	S1G	N/A	N/A	N/A	N/A		
S1H	15:53	8:03	15:53	8:03	S1H	10:28	2:38	16:16	6:26	S1H	N/A	N/A	N/A	N/A	S1H	N/A	N/A	N/A	N/A		
S1I	12:51	5:01	12:51	5:01	S1I	11:25	3:35	ND	ND	S1I	N/A	N/A	N/A	N/A	S1I	N/A	N/A	N/A	N/A		
S2A	14:15	6:25	14:15	6:25	S2A	N/A	N/A	N/A	N/A	S2A	N/A	N/A	N/A	N/A	S2A	N/A	N/A	N/A	N/A		
S2B	9:34	1:44	9:34	1:44	S2B	8:17	0:27	10:48	0:58	S2B	N/A	N/A	N/A	N/A	S2B	N/A	N/A	N/A	N/A		
<b>S2C</b>	7:45	1:25	7:45	1:25	<b>S2C</b>	6:39	0:19	15:13	6:53	<b>S2C</b>	N/A	N/A	N/A	N/A	<b>S2C</b>	N/A	N/A	N/A	N/A		
S2D	14:15	6:25	14:15	6:25	S2D	8:59	1:09	14:12	4:22	S2D	N/A	N/A	N/A	N/A	S2D	N/A	N/A	N/A	N/A		
S3A	8:24	0:34	8:24	0:34	S3A	8:27	0:37	10:15	0:25	S3A	N/A	N/A	N/A	N/A	S3A	N/A	N/A	N/A	N/A		
S3B	7:44	0:06	ND	ND	S3B	N/A	N/A	N/A	N/A	S3B	N/A	N/A	N/A	N/A	S3B	N/A	N/A	N/A	N/A		
S3C	5:54	1:56	5:54	1:56	S3C	10:04	2:14	15:05	6:15	S3C	N/A	N/A	N/A	N/A	S3C	N/A	N/A	N/A	N/A		
S3D	11:09	3:19	11:09	3:19	S3D	7:53	0:03	11:45	1:55	S3D	N/A	N/A	N/A	N/A	S3D	N/A	N/A	N/A	N/A		
S3E	15:53	8:03	15:53	8:03	S3E	N/A	N/A	N/A	N/A	S3E	N/A	N/A	N/A	N/A	S3E	N/A	N/A	N/A	N/A		
<b>S3F</b>	9:15	2:55	9:15	2:55	<b>S3F</b>	6:25	0:05	8:19	0:01	<b>S3F</b>	N/A	N/A	N/A	N/A	<b>S3F</b>	N/A	N/A	N/A	N/A		
S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A		
S4A	10:53	3:03	10:53	3:03	S4A	11:50	4:00	12:56	3:06	S4A	N/A	N/A	N/A	N/A	S4A	N/A	N/A	N/A	N/A		
<b>S4B</b>	10:22	4:02	10:22	4:02	<b>S4B</b>	11:01	4:41	12:46	4:26	<b>S4B</b>	N/A	N/A	N/A	N/A	<b>S4B</b>	N/A	N/A	N/A	N/A		
S4C	9:46	1:56	9:46	1:56	S4C	7:29	0:21	13:26	3:36	S4C	N/A	N/A	N/A	N/A	S4C	N/A	N/A	N/A	N/A		
S4D	15:49	7:59	15:49	7:59	S4D	N/A	N/A	N/A	N/A	S4D	N/A	N/A	N/A	N/A	S4D	N/A	N/A	N/A	N/A		
S4E	12:35	4:45	12:35	4:45	S4E	N/A	N/A	N/A	N/A	S4E	N/A	N/A	N/A	N/A	S4E	N/A	N/A	N/A	N/A		

Urban Geo-Zones are Identified in Bold Blue Font

**Table 58: HazMat Gap Analysis 2025**

Gap Analysis for Total Response Time 1st Due & ERF - HazMat - 2025																							
Low Risk HazMat					Moderate Risk HazMat					High Risk HazMat					Maximum Risk HazMat								
SFD Benchmarks																							
Urban		6:20		6:20		Urban		6:20		8:20		Urban		6:20		10:20		Urban		6:20		60:0	
Rural		7:50		7:50		Rural		7:50		9:50		Rural		7:50		11:50		Rural		7:50		60:0	
2025 Baseline																							
GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap				
S1A	ND	ND	ND	ND	S1A	6:24	0:04	22:44	14:24	S1A	N/A	N/A	N/A	N/A	S1A	N/A	N/A	N/A	N/A				
S1B	ND	ND	ND	ND	S1B	8:55	2:35	21:52	13:32	S1B	N/A	N/A	N/A	N/A	S1B	N/A	N/A	N/A	N/A				
S1C	9:20	3:00	9:20	3:00	S1C	10:10	3:50	30:45	22:45	S1C	N/A	N/A	N/A	N/A	S1C	N/A	N/A	N/A	N/A				
S1D	6:44	0:24	6:44	0:24	S1D	8:22	2:02	13:22	5:02	S1D	N/A	N/A	N/A	N/A	S1D	N/A	N/A	N/A	N/A				
S1E	6:00	1:50	6:00	1:50	S1E	7:18	0:32	22:52	13:02	S1E	N/A	N/A	N/A	N/A	S1E	N/A	N/A	N/A	N/A				
S1F	8:08	0:18	8:08	0:18	S1F	6:46	1:04	ND	ND	S1F	N/A	N/A	N/A	N/A	S1F	N/A	N/A	N/A	N/A				
S1G	12:12	4:22	12:12	4:22	S1G	10:10	2:20	10:15	0:25	S1G	N/A	N/A	N/A	N/A	S1G	N/A	N/A	N/A	N/A				
S1H	15:53	8:03	15:53	8:03	S1H	10:28	2:38	ND	ND	S1H	N/A	N/A	N/A	N/A	S1H	N/A	N/A	N/A	N/A				
S1I	12:51	5:01	12:51	5:01	S1I	N/A	N/A	N/A	N/A	S1I	N/A	N/A	N/A	N/A	S1I	N/A	N/A	N/A	N/A				
S2A	N/A	N/A	N/A	N/A	S2A	N/A	N/A	N/A	N/A	S2A	N/A	N/A	N/A	N/A	S2A	N/A	N/A	N/A	N/A				
S2B	9:34	1:44	9:34	1:44	S2B	4:29	3:21	ND	ND	S2B	N/A	N/A	N/A	N/A	S2B	N/A	N/A	N/A	N/A				
S2C	6:21	0:01	6:21	0:01	S2C	7:24	1:04	15:13	6:53	S2C	N/A	N/A	N/A	N/A	S2C	N/A	N/A	N/A	N/A				
S2D	14:15	6:25	14:15	6:25	S2D	8:59	1:09	14:12	4:22	S2D	N/A	N/A	N/A	N/A	S2D	N/A	N/A	N/A	N/A				
S3A	N/A	N/A	N/A	N/A	S3A	8:27	0:37	10:15	0:25	S3A	N/A	N/A	N/A	N/A	S3A	N/A	N/A	N/A	N/A				
S3B	N/A	N/A	N/A	N/A	S3B	N/A	N/A	N/A	N/A	S3B	N/A	N/A	N/A	N/A	S3B	N/A	N/A	N/A	N/A				
S3C	N/A	N/A	N/A	N/A	S3C	N/A	N/A	N/A	N/A	S3C	N/A	N/A	N/A	N/A	S3C	N/A	N/A	N/A	N/A				
S3D	N/A	N/A	N/A	N/A	S3D	7:42	0:08	11:45	1:55	S3D	N/A	N/A	N/A	N/A	S3D	N/A	N/A	N/A	N/A				
S3E	N/A	N/A	N/A	N/A	S3E	N/A	N/A	N/A	N/A	S3E	N/A	N/A	N/A	N/A	S3E	N/A	N/A	N/A	N/A				
S3F	5:31	0:49	5:31	0:49	S3F	7:18	0:58	7:20	1:00	S3F	N/A	N/A	N/A	N/A	S3F	N/A	N/A	N/A	N/A				
S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A				
S4A	10:53	3:03	10:53	3:03	S4A	11:25	3:35	13:28	3:38	S4A	N/A	N/A	N/A	N/A	S4A	N/A	N/A	N/A	N/A				
S4B	8:34	2:14	8:34	2:14	S4B	11:01	4:41	10:30	2:10	S4B	N/A	N/A	N/A	N/A	S4B	N/A	N/A	N/A	N/A				
S4C	9:46	1:56	9:46	1:56	S4C	7:25	0:25	11:13	1:23	S4C	N/A	N/A	N/A	N/A	S4C	N/A	N/A	N/A	N/A				
S4D	15:49	7:59	15:49	7:59	S4D	N/A	N/A	N/A	N/A	S4D	N/A	N/A	N/A	N/A	S4D	N/A	N/A	N/A	N/A				
S4E	12:35	4:45	12:35	4:45	S4E	N/A	N/A	N/A	N/A	S4E	N/A	N/A	N/A	N/A	S4E	N/A	N/A	N/A	N/A				

Urban Geo-Zones are Identified in Bold Blue Font

**Table 59: Technical Rescue Gap Analysis 2023-2025**

Gap Analysis for Total Response Time 1st Due & ERF - Technical Rescue - 2023-2025																							
Low Risk Technical Rescue					Moderate Risk Technical Rescue					High Risk Technical Rescue					Maximum Risk Technical Rescue								
SFD Benchmarks																							
Urban		6:20		6:20		Urban		6:20		8:20		Urban		6:20		8:20		Urban		6:20		20:20	
Rural		7:50		7:50		Rural		7:50		7:50		Rural		7:50		9:50		Rural		7:50		21:50	
2023-2025 Baseline																							
GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap				
S1A	7:51	1:31	7:51	1:31	S1A	10:41	4:21	ND	ND	S1A	N/A	N/A	N/A	N/A	S1A	N/A	N/A	N/A	N/A				
S1B	8:42	2:22	8:42	2:22	S1B	9:24	3:04	38:48	32:28	S1B	N/A	N/A	N/A	N/A	S1B	N/A	N/A	N/A	N/A				
S1C	8:58	2:38	8:58	2:38	S1C	N/A	N/A	N/A	N/A	S1C	N/A	N/A	N/A	N/A	S1C	N/A	N/A	N/A	N/A				
S1D	7:21	1:01	7:21	1:01	S1D	5:35	0:45	10:58	4:38	S1D	N/A	N/A	N/A	N/A	S1D	N/A	N/A	N/A	N/A				
S1E	7:44	0:06	7:44	0:06	S1E	7:13	0:37	7:15	0:35	S1E	N/A	N/A	N/A	N/A	S1E	N/A	N/A	N/A	N/A				
S1F	8:08	0:18	8:08	0:18	S1F	N/A	N/A	N/A	N/A	S1F	N/A	N/A	N/A	N/A	S1F	N/A	N/A	N/A	N/A				
S1G	7:50	0:00	7:50	0:00	S1G	2:47	5:03	3:16	4:34	S1G	N/A	N/A	N/A	N/A	S1G	N/A	N/A	N/A	N/A				
S1H	8:00	0:10	8:00	0:10	S1H	N/A	N/A	N/A	N/A	S1H	N/A	N/A	N/A	N/A	S1H	N/A	N/A	N/A	N/A				
S1I	8:16	0:26	8:16	0:26	S1I	N/A	N/A	N/A	N/A	S1I	N/A	N/A	N/A	N/A	S1I	N/A	N/A	N/A	N/A				
S2A	12:10	4:20	12:10	4:20	S2A	N/A	N/A	N/A	N/A	S2A	N/A	N/A	N/A	N/A	S2A	N/A	N/A	N/A	N/A				
S2B	11:11	3:21	11:11	3:21	S2B	N/A	N/A	N/A	N/A	S2B	N/A	N/A	N/A	N/A	S2B	N/A	N/A	N/A	N/A				
S2C	8:54	2:34	8:54	2:34	S2C	5:53	0:27	5:57	0:23	S2C	N/A	N/A	N/A	N/A	S2C	N/A	N/A	N/A	N/A				
S2D	8:56	1:06	8:56	1:06	S2D	N/A	N/A	N/A	N/A	S2D	N/A	N/A	N/A	N/A	S2D	N/A	N/A	N/A	N/A				
S3A	7:02	0:48	7:02	0:48	S3A	6:20	1:30	6:33	1:17	S3A	N/A	N/A	N/A	N/A	S3A	N/A	N/A	N/A	N/A				
S3B	10:14	2:24	10:14	2:24	S3B	N/A	N/A	N/A	N/A	S3B	N/A	N/A	N/A	N/A	S3B	N/A	N/A	N/A	N/A				
S3C	7:42	0:08	7:42	0:08	S3C	5:52	1:58	5:52	1:58	S3C	N/A	N/A	N/A	N/A	S3C	N/A	N/A	N/A	N/A				
S3D	8:28	0:38	8:28	0:38	S3D	7:38	0:12	8:45	0:55	S3D	N/A	N/A	N/A	N/A	S3D	N/A	N/A	N/A	N/A				
S3E	19:01	11:11	19:01	11:11	S3E	N/A	N/A	N/A	N/A	S3E	N/A	N/A	N/A	N/A	S3E	N/A	N/A	N/A	N/A				
S3F	6:50	0:30	6:50	0:30	S3F	3:54	2:26	5:14	1:06	S3F	N/A	N/A	N/A	N/A	S3F	N/A	N/A	N/A	N/A				
S3G	9:23	1:33	9:23	1:33	S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A				
S4A	9:11	1:21	9:11	1:21	S4A	7:33	0:17	9:48	1:58	S4A	N/A	N/A	N/A	N/A	S4A	N/A	N/A	N/A	N/A				
S4B	9:21	3:01	9:21	3:01	S4B	5:15	1:05	12:17	5:57	S4B	N/A	N/A	N/A	N/A	S4B	N/A	N/A	N/A	N/A				
S4C	7:59	0:09	7:59	0:09	S4C	6:48	1:02	12:12	4:22	S4C	N/A	N/A	N/A	N/A	S4C	N/A	N/A	N/A	N/A				
S4D	N/A	N/A	N/A	N/A	S4D	N/A	N/A	N/A	N/A	S4D	N/A	N/A	N/A	N/A	S4D	N/A	N/A	N/A	N/A				
S4E	9:33	1:43	9:33	1:43	S4E	N/A	N/A	N/A	N/A	S4E	N/A	N/A	N/A	N/A	S4E	N/A	N/A	N/A	N/A				

Urban Geo-Zones are Identified in Bold Blue Font

**Table 60: Technical Rescue Gap Analysis 2025**

Gap Analysis for Total Response Time 1st Due & ERF – Technical Rescue - 2025																							
Low Risk Technical Rescue					Moderate Risk Technical Rescue					High Risk Technical Rescue					Maximum Risk Technical Rescue								
SFD Benchmarks																							
Urban		6:20		6:20		Urban		6:20		6:20		Urban		6:20		8:20		Urban		6:20		20:20	
Rural		7:50		7:50		Rural		7:50		7:50		Rural		7:50		9:50		Rural		7:50		21:50	
2025 Baseline																							
GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap				
S1A	9:20	3:00	9:20	3:00	S1A	N/A	N/A	N/A	N/A	S1A	N/A	N/A	N/A	N/A	S1A	N/A	N/A	N/A	N/A				
S1B	10:25	4:05	10:25	4:05	S1B	9:24	3:04	5:39	0:41	S1B	N/A	N/A	N/A	N/A	S1B	N/A	N/A	N/A	N/A				
S1C	8:27	2:07	8:27	2:07	S1C	N/A	N/A	N/A	N/A	S1C	N/A	N/A	N/A	N/A	S1C	N/A	N/A	N/A	N/A				
S1D	7:30	1:10	7:30	1:10	S1D	5:04	1:16	5:04	1:16	S1D	N/A	N/A	N/A	N/A	S1D	N/A	N/A	N/A	N/A				
S1E	6:56	0:54	6:56	0:54	S1E	N/A	N/A	N/A	N/A	S1E	N/A	N/A	N/A	N/A	S1E	N/A	N/A	N/A	N/A				
S1F	8:51	1:01	8:51	1:01	S1F	N/A	N/A	N/A	N/A	S1F	N/A	N/A	N/A	N/A	S1F	N/A	N/A	N/A	N/A				
S1G	8:50	1:00	8:50	1:00	S1G	N/A	N/A	N/A	N/A	S1G	N/A	N/A	N/A	N/A	S1G	N/A	N/A	N/A	N/A				
S1H	8:00	0:10	8:00	0:10	S1H	N/A	N/A	N/A	N/A	S1H	N/A	N/A	N/A	N/A	S1H	N/A	N/A	N/A	N/A				
S1I	N/A	N/A	N/A	N/A	S1I	N/A	N/A	N/A	N/A	S1I	N/A	N/A	N/A	N/A	S1I	N/A	N/A	N/A	N/A				
S2A	12:10	4:20	12:10	4:20	S2A	N/A	N/A	N/A	N/A	S2A	N/A	N/A	N/A	N/A	S2A	N/A	N/A	N/A	N/A				
S2B	8:37	0:47	8:37	0:47	S2B	N/A	N/A	N/A	N/A	S2B	N/A	N/A	N/A	N/A	S2B	N/A	N/A	N/A	N/A				
S2C	7:45	1:25	7:45	1:25	S2C	5:40	0:40	ND	ND	S2C	N/A	N/A	N/A	N/A	S2C	N/A	N/A	N/A	N/A				
S2D	11:43	3:53	11:43	3:53	S2D	N/A	N/A	N/A	N/A	S2D	N/A	N/A	N/A	N/A	S2D	N/A	N/A	N/A	N/A				
S3A	7:50	0:00	7:50	0:00	S3A	N/A	N/A	N/A	N/A	S3A	N/A	N/A	N/A	N/A	S3A	N/A	N/A	N/A	N/A				
S3B	10:14	2:24	10:14	2:24	S3B	N/A	N/A	N/A	N/A	S3B	N/A	N/A	N/A	N/A	S3B	N/A	N/A	N/A	N/A				
S3C	7:16	0:34	7:16	0:34	S3C	N/A	N/A	N/A	N/A	S3C	N/A	N/A	N/A	N/A	S3C	N/A	N/A	N/A	N/A				
S3D	7:23	0:27	7:23	0:27	S3D	N/A	N/A	N/A	N/A	S3D	N/A	N/A	N/A	N/A	S3D	N/A	N/A	N/A	N/A				
S3E	10:14	2:24	10:14	2:24	S3E	N/A	N/A	N/A	N/A	S3E	N/A	N/A	N/A	N/A	S3E	N/A	N/A	N/A	N/A				
S3F	8:25	2:05	8:25	2:05	S3F	N/A	N/A	N/A	N/A	S3F	N/A	N/A	N/A	N/A	S3F	N/A	N/A	N/A	N/A				
S3G	10:16	2:26	10:16	2:26	S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A				
S4A	10:06	2:16	10:06	2:16	S4A	7:33	0:17	7:44	0:06	S4A	N/A	N/A	N/A	N/A	S4A	N/A	N/A	N/A	N/A				
S4B	3:27	2:53	3:27	2:53	S4B	4:53	1:27	12:17	5:57	S4B	N/A	N/A	N/A	N/A	S4B	N/A	N/A	N/A	N/A				
S4C	9:16	1:26	9:16	1:26	S4C	6:48	1:02	12:12	4:22	S4C	N/A	N/A	N/A	N/A	S4C	N/A	N/A	N/A	N/A				
S4D	N/A	N/A	N/A	N/A	S4D	N/A	N/A	N/A	N/A	S4D	N/A	N/A	N/A	N/A	S4D	N/A	N/A	N/A	N/A				
S4E	10:19	2:29	10:19	2:29	S4E	N/A	N/A	N/A	N/A	S4E	N/A	N/A	N/A	N/A	S4E	N/A	N/A	N/A	N/A				

Urban Geo-Zones are Identified in Bold Blue Font

**Table 61: ARFF Gap Analysis 2023-2025**

Gap Analysis for Total Response Time 1st Due & ERF – Aircraft Response Firefighting (ARFF) - 2023-2025																	
Low Risk ARFF					Moderate Risk ARFF					High Risk ARFF							
SFD Benchmarks																	
Urban		6:20		6:20		Urban		6:20		8:20		Urban		6:20		10:20	
Rural		7:50		7:50		Rural		7:50		9:50		Rural		7:50		11:50	
2023-2025 Baseline																	
GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap			
S1A	N/A	N/A	N/A	N/A	S1A	N/A	N/A	N/A	N/A	S1A	N/A	N/A	N/A	N/A			
S1B	N/A	N/A	N/A	N/A	S1B	N/A	N/A	N/A	N/A	S1B	N/A	N/A	N/A	N/A			
S1C	N/A	N/A	N/A	N/A	S1C	N/A	N/A	N/A	N/A	S1C	N/A	N/A	N/A	N/A			
S1D	N/A	N/A	N/A	N/A	S1D	N/A	N/A	N/A	N/A	S1D	N/A	N/A	N/A	N/A			
S1E	N/A	N/A	N/A	N/A	S1E	N/A	N/A	N/A	N/A	S1E	N/A	N/A	N/A	N/A			
S1F	N/A	N/A	N/A	N/A	S1F	N/A	N/A	N/A	N/A	S1F	N/A	N/A	N/A	N/A			
S1G	N/A	N/A	N/A	N/A	S1G	N/A	N/A	N/A	N/A	S1G	N/A	N/A	N/A	N/A			
S1H	N/A	N/A	N/A	N/A	S1H	N/A	N/A	N/A	N/A	S1H	N/A	N/A	N/A	N/A			
S1I	N/A	N/A	N/A	N/A	S1I	N/A	N/A	N/A	N/A	S1I	N/A	N/A	N/A	N/A			
S2A	N/A	N/A	N/A	N/A	S2A	N/A	N/A	N/A	N/A	S2A	7:25	0:25	11:34	0:16			
S2B	N/A	N/A	N/A	N/A	S2B	N/A	N/A	N/A	N/A	S2B	N/A	N/A	N/A	N/A			
S2C	N/A	N/A	N/A	N/A	S2C	N/A	N/A	N/A	N/A	S2C	N/A	N/A	N/A	N/A			
S2D	N/A	N/A	N/A	N/A	S2D	N/A	N/A	N/A	N/A	S2D	N/A	N/A	N/A	N/A			
S3A	N/A	N/A	N/A	N/A	S3A	N/A	N/A	N/A	N/A	S3A	N/A	N/A	N/A	N/A			
S3B	N/A	N/A	N/A	N/A	S3B	N/A	N/A	N/A	N/A	S3B	N/A	N/A	N/A	N/A			
S3C	N/A	N/A	N/A	N/A	S3C	N/A	N/A	N/A	N/A	S3C	N/A	N/A	N/A	N/A			
S3D	N/A	N/A	N/A	N/A	S3D	N/A	N/A	N/A	N/A	S3D	N/A	N/A	N/A	N/A			
S3E	N/A	N/A	N/A	N/A	S3E	N/A	N/A	N/A	N/A	S3E	N/A	N/A	N/A	N/A			
S3F	N/A	N/A	N/A	N/A	S3F	N/A	N/A	N/A	N/A	S3F	N/A	N/A	N/A	N/A			
S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A			
S4A	N/A	N/A	N/A	N/A	S4A	N/A	N/A	N/A	N/A	S4A	N/A	N/A	N/A	N/A			
S4B	N/A	N/A	N/A	N/A	S4B	N/A	N/A	N/A	N/A	S4B	N/A	N/A	N/A	N/A			
S4C	N/A	N/A	N/A	N/A	S4C	N/A	N/A	N/A	N/A	S4C	N/A	N/A	N/A	N/A			
S4D	N/A	N/A	N/A	N/A	S4D	N/A	N/A	N/A	N/A	S4D	N/A	N/A	N/A	N/A			
S4E	N/A	N/A	N/A	N/A	S4E	N/A	N/A	N/A	N/A	S4E	N/A	N/A	N/A	N/A			

Urban Geo-Zones are Identified in Bold Blue Font



**Table 62: ARFF Gap Analysis 2025**

Gap Analysis for Total Response Time 1st Due & ERF – Aircraft Response Firefighting (ARFF) - 2025														
Low Risk ARFF					Moderate Risk ARFF					High Risk ARFF				
SFD Benchmarks														
Urban	6:20	6:20	Urban	6:20	8:20	Urban	6:20	10:20	Rural	7:50	7:50	Rural	7:50	11:50
2025 Baseline														
GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap	GPZ	1st Due	1st Due Gap	ERF	ERF Gap
S1A	N/A	N/A	N/A	N/A	S1A	N/A	N/A	N/A	N/A	S1A	N/A	N/A	N/A	N/A
S1B	N/A	N/A	N/A	N/A	S1B	N/A	N/A	N/A	N/A	S1B	N/A	N/A	N/A	N/A
S1C	N/A	N/A	N/A	N/A	S1C	N/A	N/A	N/A	N/A	S1C	N/A	N/A	N/A	N/A
S1D	N/A	N/A	N/A	N/A	S1D	N/A	N/A	N/A	N/A	S1D	N/A	N/A	N/A	N/A
S1E	N/A	N/A	N/A	N/A	S1E	N/A	N/A	N/A	N/A	S1E	N/A	N/A	N/A	N/A
S1F	N/A	N/A	N/A	N/A	S1F	N/A	N/A	N/A	N/A	S1F	N/A	N/A	N/A	N/A
S1G	N/A	N/A	N/A	N/A	S1G	N/A	N/A	N/A	N/A	S1G	N/A	N/A	N/A	N/A
S1H	N/A	N/A	N/A	N/A	S1H	N/A	N/A	N/A	N/A	S1H	N/A	N/A	N/A	N/A
S1I	N/A	N/A	N/A	N/A	S1I	N/A	N/A	N/A	N/A	S1I	N/A	N/A	N/A	N/A
S2A	N/A	N/A	N/A	N/A	S2A	N/A	N/A	N/A	N/A	S2A	3:40	4:10	11:34	0:16
S2B	N/A	N/A	N/A	N/A	S2B	N/A	N/A	N/A	N/A	S2B	N/A	N/A	N/A	N/A
S2C	N/A	N/A	N/A	N/A	S2C	N/A	N/A	N/A	N/A	S2C	N/A	N/A	N/A	N/A
S2D	N/A	N/A	N/A	N/A	S2D	N/A	N/A	N/A	N/A	S2D	N/A	N/A	N/A	N/A
S3A	N/A	N/A	N/A	N/A	S3A	N/A	N/A	N/A	N/A	S3A	N/A	N/A	N/A	N/A
S3B	N/A	N/A	N/A	N/A	S3B	N/A	N/A	N/A	N/A	S3B	N/A	N/A	N/A	N/A
S3C	N/A	N/A	N/A	N/A	S3C	N/A	N/A	N/A	N/A	S3C	N/A	N/A	N/A	N/A
S3D	N/A	N/A	N/A	N/A	S3D	N/A	N/A	N/A	N/A	S3D	N/A	N/A	N/A	N/A
S3E	N/A	N/A	N/A	N/A	S3E	N/A	N/A	N/A	N/A	S3E	N/A	N/A	N/A	N/A
S3F	N/A	N/A	N/A	N/A	S3F	N/A	N/A	N/A	N/A	S3F	N/A	N/A	N/A	N/A
S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A	S3G	N/A	N/A	N/A	N/A
S4A	N/A	N/A	N/A	N/A	S4A	N/A	N/A	N/A	N/A	S4A	N/A	N/A	N/A	N/A
S4B	N/A	N/A	N/A	N/A	S4B	N/A	N/A	N/A	N/A	S4B	N/A	N/A	N/A	N/A
S4C	N/A	N/A	N/A	N/A	S4C	N/A	N/A	N/A	N/A	S4C	N/A	N/A	N/A	N/A
S4D	N/A	N/A	N/A	N/A	S4D	N/A	N/A	N/A	N/A	S4D	N/A	N/A	N/A	N/A
S4E	N/A	N/A	N/A	N/A	S4E	N/A	N/A	N/A	N/A	S4E	N/A	N/A	N/A	N/A

Urban Geo-Zones are Identified in Bold Blue Font

**Table 63: Other Incidents Gap Analysis 2023-2025**

Gap Analysis for 1st Due & ERF Total Response Time - Other- 2023- 2025				
Low Risk Other				
SFD Benchmarks				
Urban	6:20		6:20	
Rural	7:50		7:50	
2023-2025 Baseline				
GPZ	1st Due	1st Due Gap	ERF	ERF Gap
<b>S1A</b>	<b>8:40</b>	<b>2:20</b>	<b>8:40</b>	<b>2:20</b>
<b>S1B</b>	<b>8:21</b>	<b>2:01</b>	<b>8:21</b>	<b>2:01</b>
<b>S1C</b>	<b>10:14</b>	<b>3:54</b>	<b>10:14</b>	<b>3:54</b>
<b>S1D</b>	<b>7:34</b>	<b>1:14</b>	<b>7:34</b>	<b>1:14</b>
S1E	7:38	0:12	7:38	0:12
S1F	5:51	1:59	5:51	1:59
S1G	8:07	0:17	8:07	0:17
S1H	12:45	4:55	12:45	4:55
S1I	11:12	3:22	11:12	3:22
S2A	7:54	0:04	7:54	0:04
S2B	8:52	1:02	8:52	1:02
<b>S2C</b>	<b>7:19</b>	<b>0:59</b>	<b>7:19</b>	<b>0:59</b>
S2D	8:27	0:37	8:27	0:37
S3A	8:43	0:53	8:43	0:53
S3B	11:53	4:03	11:53	4:03
S3C	7:24	0:26	7:24	0:26
S3D	7:47	0:03	7:47	0:03
S3E	13:29	5:39	13:29	5:39
<b>S3F</b>	<b>7:53</b>	<b>1:33</b>	<b>7:45</b>	<b>1:25</b>
S3G	13:02	5:12	13:02	5:12
S4A	11:04	3:14	11:04	3:14
<b>S4B</b>	<b>7:55</b>	<b>1:35</b>	<b>7:55</b>	<b>1:35</b>
S4C	7:53	0:03	7:53	0:03
S4D	11:43	3:53	11:43	3:53
S4E	10:40	2:50	10:40	2:50

Urban Geo-Zones are Identified in Bold Blue Font

**Table 64: Other Incidents Gap Analysis 2025**

Gap Analysis for 1st Due & ERF Total Response Time - Other- 2025				
Low Risk Other				
SFD Benchmarks				
Urban	6:20		6:20	
Rural	7:50		7:50	
2025 Baseline				
GPZ	1st Due	1st Due Gap	ERF	ERF Gap
<b>S1A</b>	9:25	3:05	9:25	3:05
<b>S1B</b>	7:34	1:14	7:34	1:14
<b>S1C</b>	8:19	1:59	8:19	1:59
<b>S1D</b>	7:12	0:52	7:12	0:52
S1E	9:05	1:15	9:05	1:15
S1F	5:51	1:59	5:51	1:59
S1G	7:04	0:46	7:04	0:46
S1H	12:45	4:55	12:45	4:55
S1I	9:03	1:13	9:03	1:13
S2A	7:54	0:04	7:54	0:04
S2B	9:44	1:54	9:44	1:54
<b>S2C</b>	6:05	0:15	6:05	0:15
S2D	9:51	2:01	9:51	2:01
S3A	12:50	5:00	12:50	5:00
S3B	11:53	4:03	ND	ND
S3C	7:24	0:26	7:24	0:26
S3D	8:57	1:07	8:57	1:07
S3E	ND	ND	13:29	5:39
<b>S3F</b>	8:09	1:49	8:09	1:49
S3G	5:15	2:35	5:15	2:35
S4A	11:06	3:16	11:06	3:16
<b>S4B</b>	7:55	1:35	7:55	1:35
S4C	9:54	2:04	9:54	2:04
S4D	11:43	3:53	11:43	3:53
S4E	9:45	1:55	9:45	1:55

Urban Geo-Zones are Identified in Bold Blue Font

**Table 65: 2021 Demands for Service / Availability**

FY - 2021	1st Due	Total Calls	Station Availability
Station 1	1676	1934	86.66%
Station 2	604	656	92.07%
Station 3	833	958	86.95%
Station 4	630	721	87.38%

**Table 66: 2022 Demands for Service / Availability**

FY - 2022	1st Due	Total Calls	Station Availability
Station 1	2052	2234	91.85%
Station 2	604	673	89.75%
Station 3	811	923	87.87%
Station 4	683	838	81.50%

**Table 67: 2023 Demands for Service / Availability**

FY - 2023	1st Due	Total Calls	Station Availability
Station 1	2237	2440	91.68%
Station 2	720	813	88.56%
Station 3	961	1102	87.21%
Station 4	1010	1198	84.31%

**Table 68: 2024 Demands for Service / Availability**

FY - 2024	1st Due	Total Calls	Station Availability
Station 1	2038	2268	89.86%
Station 2	826	979	84.37%
Station 3	1161	1429	81.25%
Station 4	1351	1693	79.80%

**Table 69: 2025 Demands for Service / Availability**

FY - 2025	1st Due	Total Calls	Station Availability
Station 1	2150	2371	90.68%
Station 2	884	1038	85.16%
Station 3	1116	1375	81.16%
Station 4	1561	1920	81.30%

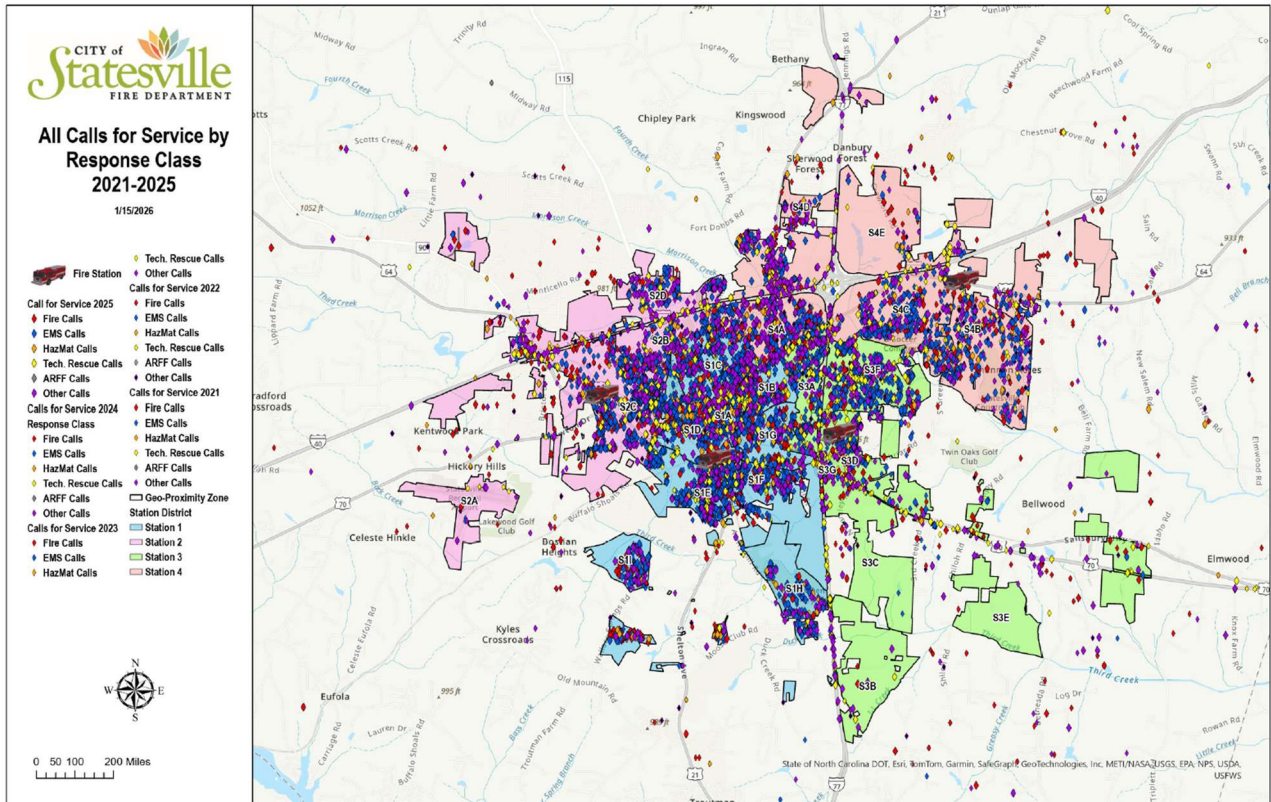
**Table 70: 2021-2025 Call Distribution**

Station	Calls	Distribution
<b>Station 1</b>	12,008	39.90%
<b>Station 2</b>	4,575	15.20%
<b>Station 3</b>	6,643	22.07%
<b>Station 4</b>	6,858	22.82%

**Table 71: Total Response by Station District 2021-2025**

Geo-Zones	2021	2022	2023	2024	2025	Totals	% by district	Prior Year Growth	Avg. Growth
<b>S1A</b>	124	151	210	164	151	800	2.85%	-8%	3.94%
<b>S1B</b>	316	334	386	275	212	1523	5.42%	-23%	-7.98%
<b>S1C</b>	366	446	405	448	440	2105	7.49%	-2%	3.68%
<b>S1D</b>	435	514	538	401	340	2228	7.93%	-15%	-4.93%
<b>S1E</b>	352	435	526	540	517	2370	8.44%	-4%	7.69%
<b>S1F</b>	123	113	131	195	227	789	2.81%	16%	12.26%
<b>S1G</b>	161	205	183	230	226	1005	3.58%	-2%	6.78%
<b>S1H</b>	34	64	66	93	122	379	1.35%	31%	42.59%
<b>S1I</b>	26	34	47	77	136	320	1.14%	77%	55.15%
<b>S2A</b>	7	11	45	13	12	88	0.31%	-8%	10.78%
<b>S2B</b>				77	165	242	0.86%	114%	38.11%
<b>S2C</b>	493	512	604	696	565	2870	10.22%	-19%	2.73%
<b>S2D</b>	159	161	172	230	296	1018	3.62%	29%	12.43%
<b>S3A</b>	145	156	182	247	311	1041	3.71%	26%	15.26%
<b>S3B</b>	33	22	15	17	12	99	0.35%	-29%	-20.23%
<b>S3C</b>	71	87	113	76	78	425	1.51%	3%	1.88%
<b>S3D</b>	278	287	366	502	385	1818	6.47%	-23%	6.51%
<b>S3E</b>	25	14	15	28	25	107	0.38%	-11%	0.00%
<b>S3F</b>	389	345	415	593	545	2287	8.14%	-8%	6.74%
<b>S3G</b>	0	0	1	18	19	38	0.14%	6%	98.15%
<b>S3H</b>	17	25	9	7	N/A	58	0.21%	Merged with	Zone S3G
<b>S4A</b>	290	351	374	574	712	2301	8.19%	24%	17.96%
<b>S4B</b>	161	161	211	378	339	1250	4.45%	-10%	14.89%
<b>S4C</b>	264	267	462	618	677	2288	8.15%	10%	18.83%
<b>S4D</b>	5	24	19	68	60	176	0.63%	-12%	49.70%
<b>S4E</b>		34	144	151	132	461	1.64%	-13%	33.91%
<b>Totals</b>	<b>4274</b>	<b>4753</b>	<b>5639</b>	<b>6716</b>	<b>6704</b>	<b>28086</b>		<b>10%</b>	<b>9.00%</b>

**Map 32: Fire Districts with All Calls Maximum, High, Moderate, & Low Risks – 2021-2025**



**Fire Station #1 Planning Zone Risk Assessment**

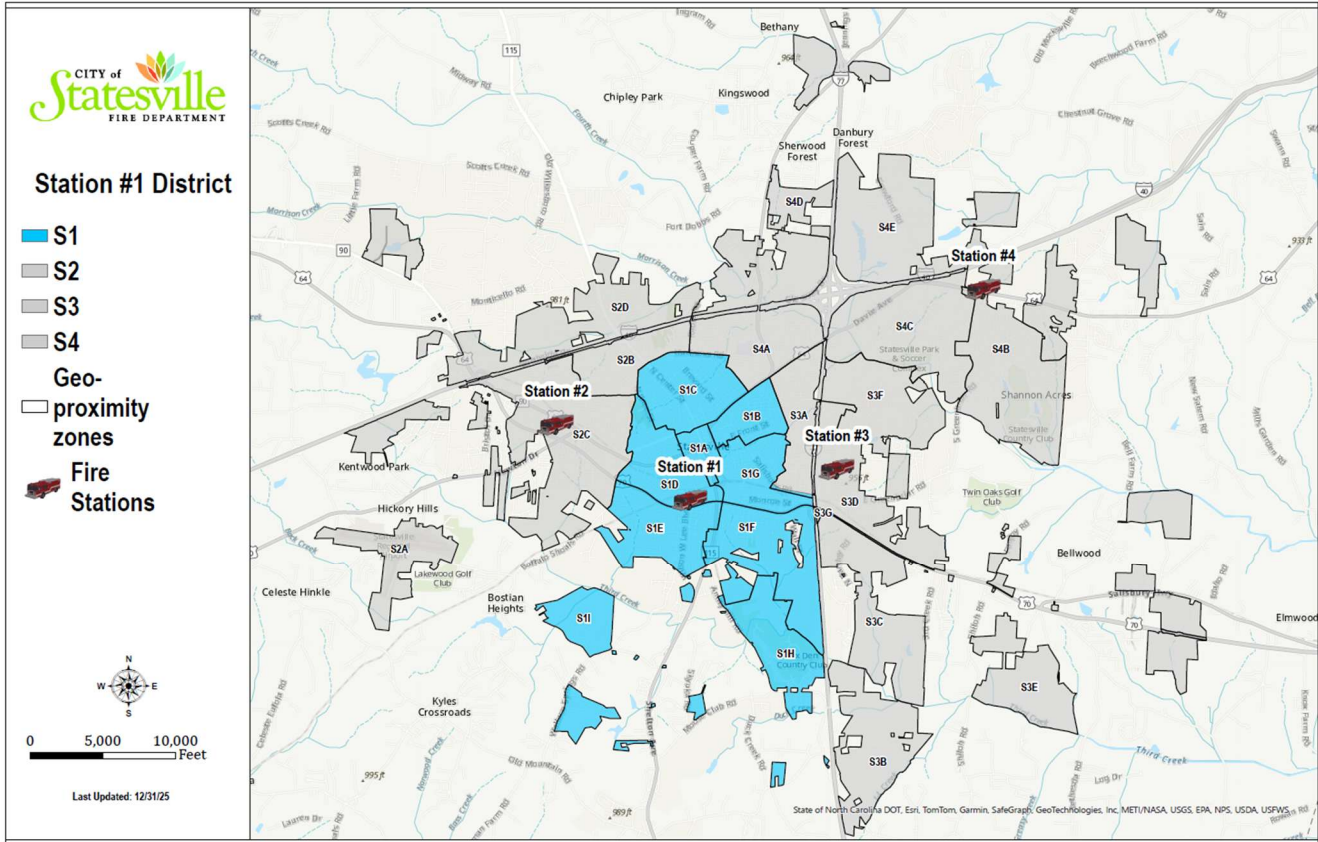


The newest Station, Fire Station #1, was constructed in 2024 and is located at 822 Fifth Street. Fire Station #1 has the highest demand for service out of the four fire stations and is located near the downtown area of Statesville. Station #1 is classified as a high-angle and confined space specialty station. Engine 1, Ladder 1, Battalion 1, Squad 1, and Reserve Engine 11 respond from this station. The Fire Marshal Division and Administration also operate out of Station #1. The service area includes residential, high occupancy buildings, commercial, government buildings, facilities with hazardous materials, and historical downtown.


**Table 72: Fire Risk Category Station #1**

FIRE RISK CATEGORY	GENERAL DESCRIPTION OF ASSOCIATED RISK
LOW	Car fires, dumpster fires, small outside fires. Fire incidents that only require a single engine response
MODERATE	Occupancy fires in residential 1 to 2 family structures
HIGH	Occupancy fires in Public Assembly Property, Educational Property, Institutional Property, Store and Office Property, Basic Industry, Storage Property, Special Property, Multi-Family Dwellings (Apartments, Hotels, and Dormitories)
MAXIMUM	Fires at Healthcare, Detention, and Correction Facilities with NFIRS Codes 311, 323, 331, and 361

**Map 33: Fire Station #1 District**



**Table 73: Fire Station #1 Concentration – Mobile Assets**

<p style="text-align: center;"><b>Engine 1</b></p> 	<p>Engine 1 is a 2021 Marion Body Works Custom Rescue Pumper. Staffing of 4 per day. It is equipped with a Cummins ISX Engine and a Hale 1500 gpm pump. Engine 1 carries a 750-gallon booster tank. It is equipped with a full complement of Amkus Hydraulic Rescue tools as well as a Harrison Hydraulic Generator. The cab configuration allows for a total of 6 occupants and is equipped with the most up to date safety features on the market including airbags.</p>
--	--

**Ladder 1**



Ladder 1 is a 2019 Sutphen SPH 100 aerial tower with a 4 door, 6-person full tilt cab and 10" raised roof. The 252" wheelbase carries a 100' aluminum ladder platform and a 300-gallon custom fiber tank and 115' of ground ladders. The power comes from a Cummins X12 500hp engine and an Allison EVS 400 automatic transmission. The Hale QMAX200-23R pump delivers 1500 gpm and has 444 cubic ft. breathing air system @ 4500psi. Auxiliary power comes from a 10 KW PTO powered generator. Ladder 1 is dispatched on all structure fires, high angle rescue, and confined space incidents and is operated accordingly as needed. Minimum staffing of 4 firefighters per day.

**Battalion 1**



Battalion 1 is 2022 Chevrolet Tahoe 4X4 equipped with two 800 MHz radios which enable communication with not only SFD units but with Emergency Services county wide. Staffing of 1 per day.

**Brush 1**



Brush 1 is a repurposed 2008 F-250 with a 70 gpm pump and 150 gal. tank capacity skid unit. The design of this apparatus was to repurpose an existing squad truck to meet the department's need for wildland/urban interface.

**Squad 1**



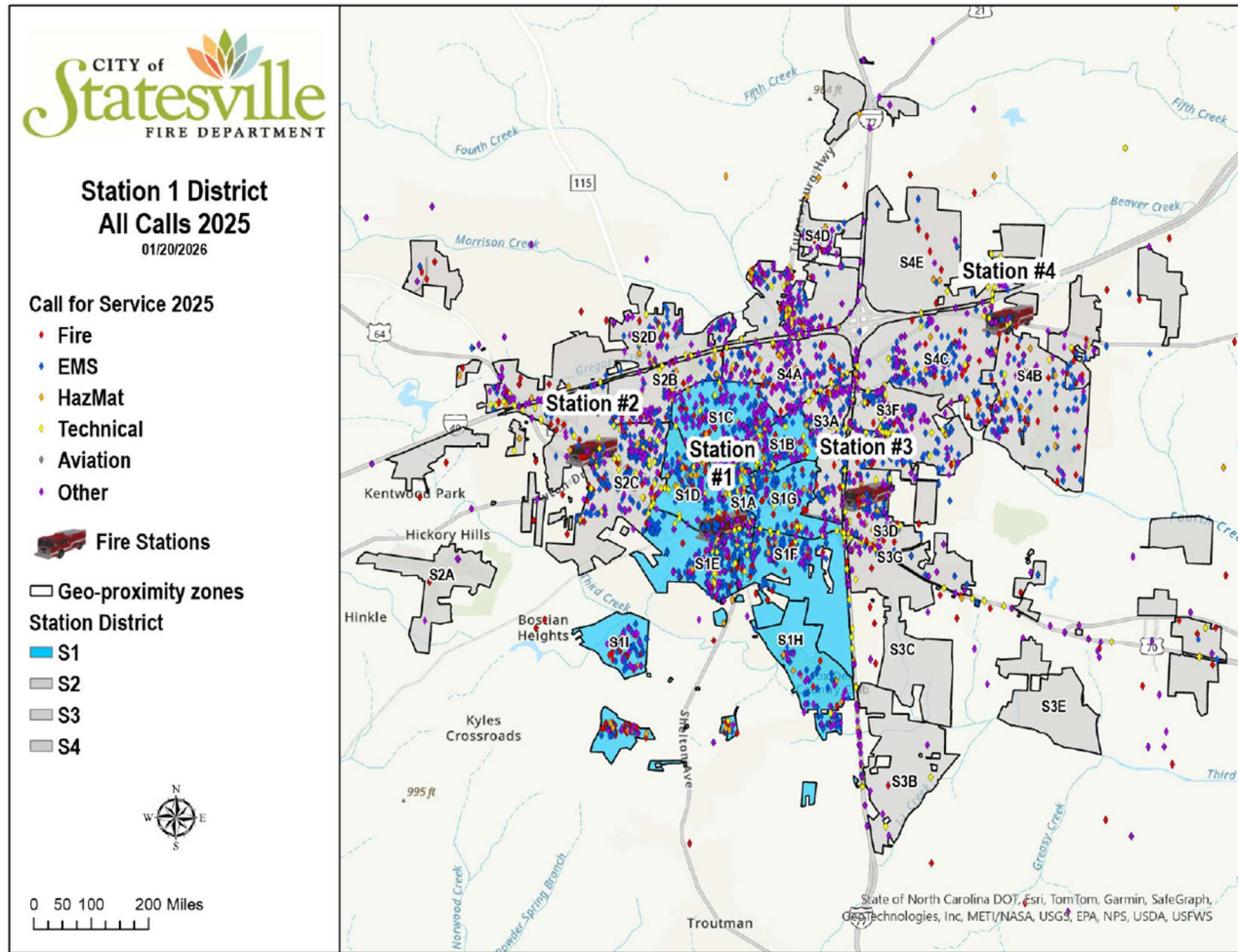
2023 Chevrolet Silverado 1500 crew cab.

### Ladder 2



Ladder 2 is a 2001 Marion Body Works Aerial Quint. Ladder 2 is equipped with a 75ft Aerial Device, 120 ft of Ground Ladders, as well as an on-board generator.

**Map 34: Fire Station #1 All Calls Maximum, High, Moderate, & Low Risks – 2025**



**Table 74: Fire Station 1 Response Class 2025**

Response Class - 2025	Number of Incidents
Fire	321
Medical	1521
HazMat	87
Technical Rescue	166
ARFF	1
Other	360
<b>Total Number of Incidents</b>	<b>2,456</b>

**Table 75: Fire Station #1 Availability 2021-2025**

Year	Station #1 District Calls	Station Responses	Station Availability
2021	1934	1676	86.66%
2022	2234	2052	91.85%
2023	2440	2237	91.68%
2024	2,268	2038	89.86%
2025	2371	2150	90.68%

**Table 76: Total Incidents by GPZ 2025**

Station #1 GPZs	Number of Incidents
S1A	151
S1B	212
S1C	440
S1D	340
S1E	517
S1F	227
S1G	226
S1H	122
S1I	136
<b>TOTAL</b>	<b>2,371</b>

**Table 77: Incidents by Type Station #1 GPZs 2021**

Incident Type	S1A	S1B	S1C	S1D	S1E	S1F	S1G	S1H	S1I	Total
Fire	4	8	9	13	12	8	8	0	0	62
HazMat	0	6	16	11	2	3	2	4	0	44
Medical	75	195	222	268	271	85	106	23	19	1,264
Technical Rescue	16	28	34	34	21	3	7	0	0	143
ARFF	0	0	0	0	0	0	0	0	0	0
Non-Emergency	10	30	22	48	22	3	8	1	3	147
Other Incidents	19	49	63	61	24	21	30	6	4	277
<b>Total - 2021</b>	<b>124</b>	<b>316</b>	<b>366</b>	<b>435</b>	<b>352</b>	<b>123</b>	<b>161</b>	<b>34</b>	<b>26</b>	<b>1,937</b>

**Table 78: Incidents by Type Station #1 GPZs 2022**

Incident Type	S1A	S1B	S1C	S1D	S1E	S1F	S1G	S1H	S1I	Total
Fire	1	7	10	13	12	3	4	0	1	51
HazMat	6	6	13	12	3	1	4	3	0	48
Medical	104	209	248	330	346	81	152	43	20	1,533
Technical Rescue	16	38	35	46	18	6	12	1	0	172
ARFF	0	0	0	0	1	0	1	0	0	2
Non-Emergency	8	27	45	58	25	5	8	7	5	188
Other Incidents	16	47	95	55	30	17	24	10	8	302
<b>Total - 2022</b>	<b>151</b>	<b>334</b>	<b>446</b>	<b>514</b>	<b>435</b>	<b>113</b>	<b>205</b>	<b>64</b>	<b>34</b>	<b>2,296</b>

**Table 79: Incidents by Type Station #1 GPZs 2023**

Incident Type	S1A	S1B	S1C	S1D	S1E	S1F	S1G	S1H	S1I	Total
Fire	3	10	11	10	12	6	7	0	0	59
HazMat	4	8	15	15	2	4	3	4	2	57
Medical	107	255	250	345	436	90	126	32	33	1,674
Technical Rescue	8	38	31	48	18	10	17	4	1	175
ARFF	0	0	0	0	0	0	0	0	0	0
Other Incidents	48	112	171	157	102	32	37	32	24	715
<b>Total - 2023</b>	<b>170</b>	<b>423</b>	<b>478</b>	<b>575</b>	<b>570</b>	<b>142</b>	<b>190</b>	<b>72</b>	<b>60</b>	<b>2,680</b>

**Table 80: Incidents by Type Station #1 GPZs 2024**

Incident Type	S1A	S1B	S1C	S1D	S1E	S1F	S1G	S1H	S1I	Total
Fire	3	2	6	10	10	5	6	3	1	46
HazMat	3	5	11	7	2	4	4	5	3	44
Medical	95	154	252	252	416	140	139	54	33	1,535
Technical Rescue	17	35	26	32	21	6	23	0	2	162
ARFF	0	0	0	0	0	0	0	0	0	0
Other Incidents	46	79	153	100	91	40	58	31	38	636
<b>Total - 2024</b>	<b>164</b>	<b>275</b>	<b>448</b>	<b>401</b>	<b>540</b>	<b>195</b>	<b>230</b>	<b>93</b>	<b>77</b>	<b>2,423</b>

**Table 81: Incidents by Type Station #1 GPZs 2025**

Incident Type	S1A	S1B	S1C	S1D	S1E	S1F	S1G	S1H	S1I	Total
Fire	16	26	46	39	60	34	26	14	43	304
HazMat	7	5	15	18	4	6	12	7	9	83
Medical	91	122	249	230	382	159	141	79	64	1,517
Technical Rescue	18	21	24	20	26	9	22	2	0	142
ARFF	0	0	0	1	0	0	0	0	0	1
Other Incidents	19	38	106	32	45	19	25	20	20	324
<b>Total - 2025</b>	<b>151</b>	<b>212</b>	<b>440</b>	<b>340</b>	<b>517</b>	<b>227</b>	<b>226</b>	<b>122</b>	<b>136</b>	<b>2,371</b>

**Table 82: Incidents by Type Station #1 GPZs 2021-2025**

Incident Type	S1A	S1B	S1C	S1D	S1E	S1F	S1G	S1H	S1I	Total
Fire	27	53	82	85	106	56	51	17	45	522
HazMat	19	30	65	58	12	17	23	21	14	259
Medical	486	921	1,208	1,419	1,833	552	664	231	167	7,481
Technical Rescue	75	159	150	178	103	33	81	7	3	789
ARFF	0	0	0	1	1	0	1	0	0	3
Non-Emergency	18	57	67	106	47	8	16	8	8	335
Other Incidents	175	303	533	381	268	123	169	95	83	2,130
<b>Total – 2021-2025</b>	<b>800</b>	<b>1,523</b>	<b>2,105</b>	<b>2,228</b>	<b>2,370</b>	<b>789</b>	<b>1,005</b>	<b>379</b>	<b>320</b>	<b>11,519</b>

Non-Emergency merged with Other Incidents in 2023

**Table 83: Calls by Day of Week by Hour of Day 2021-2025**

Station 1: 2021-2025	00:00-05:59	06:00-11:59	12:00-17:59	18:00-23:59	Total
Sunday	230	396	511	436	<b>1,573</b>
Monday	218	479	629	461	<b>1,787</b>
Tuesday	190	473	619	437	<b>1,719</b>
Wednesday	197	477	664	422	<b>1,760</b>
Thursday	197	467	630	456	<b>1,750</b>
Friday	198	464	614	433	<b>1,709</b>
Saturday	218	380	600	512	<b>1,710</b>
<b>Total</b>	<b>1,448</b>	<b>3,136</b>	<b>4,267</b>	<b>3,157</b>	<b>12,008</b>
<b>Percent</b>	<b>12.06%</b>	<b>26.12%</b>	<b>35.53%</b>	<b>26.29%</b>	

**Table 84: Incident by Occupancy Type Station 1 GPZs 2025**

Occupancy Type	S1A	S1B	S1C	S1D	S1E	S1F	S1G	S1H	S1I	Totals
Assembly 1	1									1
Assembly 2	21	2	2	1	3	2		1		32
Assembly 3	18	9	10	7	13	10	6	1	2	76
Assembly 4		1								1
Business	186	70	56	28	15	9	17			381
Educational	2	3	1	2	1	3				12
Factory 1		1		3			6			10
Factory 2				3		1				4
Foster Homes		1	3	4		3		3	6	20
High Hazard 1										
High Hazard 2	1									1
High Hazard 3										
High Hazard 4										
Institutional 1			3							3
Institutional 2										
Institutional 3			1							1
Institutional 4	2	1	3		2					8
Mercantile	46	11	10	4	5	10	5			91
Residential 1	1				1	1				3
Residential 2	4		1	4						9
Residential 3	1				1					2
Residential 4				1						2
Storage 1	13	3	2	14	13	9	26			80
Storage 2		1		1	3		1			6
U (Miscellaneous)		1					1	1		3
<b>Totals - 2025</b>	<b>293</b>	<b>104</b>	<b>92</b>	<b>72</b>	<b>57</b>	<b>49</b>	<b>61</b>	<b>5</b>	<b>9</b>	<b>745</b>

**Table 85: Commercial Building Stories**

GPZ	Stories 1	Stories 2	Stories 3	Stories 4	Stories 5	Stories 6	Stories 7	No Data	Total
S1A	89	191	8	4	1	1	1		295
S1B	61	42				1			104
S1C	49	40	3						92
S1D	42	27	3						72
S1E	52	4	1						57
S1F	42	6	1						49
S1G	58	4							62
S1H	2	3							5
S1I	4	5							9
<b>Totals</b>	<b>399</b>	<b>322</b>	<b>16</b>	<b>4</b>	<b>1</b>	<b>2</b>	<b>1</b>		<b>745</b>

**Table 86: Commercial Building Status**

Building Status	S1A	S1B	S1C	S1D	S1E	S1F	S1G	S1H	S1I	Totals
<b>Occupied and operating</b>	255	93	80	65	45	42	48	5	8	641
<b>Under construction</b>	2	2			4		1		1	10
<b>Under major renovation</b>	2		1	1	1					5
<b>Undetermined</b>										
<b>Vacant and secured</b>	16	7	10	3	3	4	4			47
<b>Vacant</b>	15	2		1	2	3	6			29
<b>Being Demolished</b>	3				1		2			6
<b>Tag</b>	1		1							2
<b>Unsafe</b>	1			2	1		1			5
<b>Totals - 2025</b>	<b>295</b>	<b>104</b>	<b>92</b>	<b>72</b>	<b>57</b>	<b>49</b>	<b>62</b>	<b>5</b>	<b>9</b>	<b>745</b>

**Fire Station #2 Planning Zone Risk Assessment**

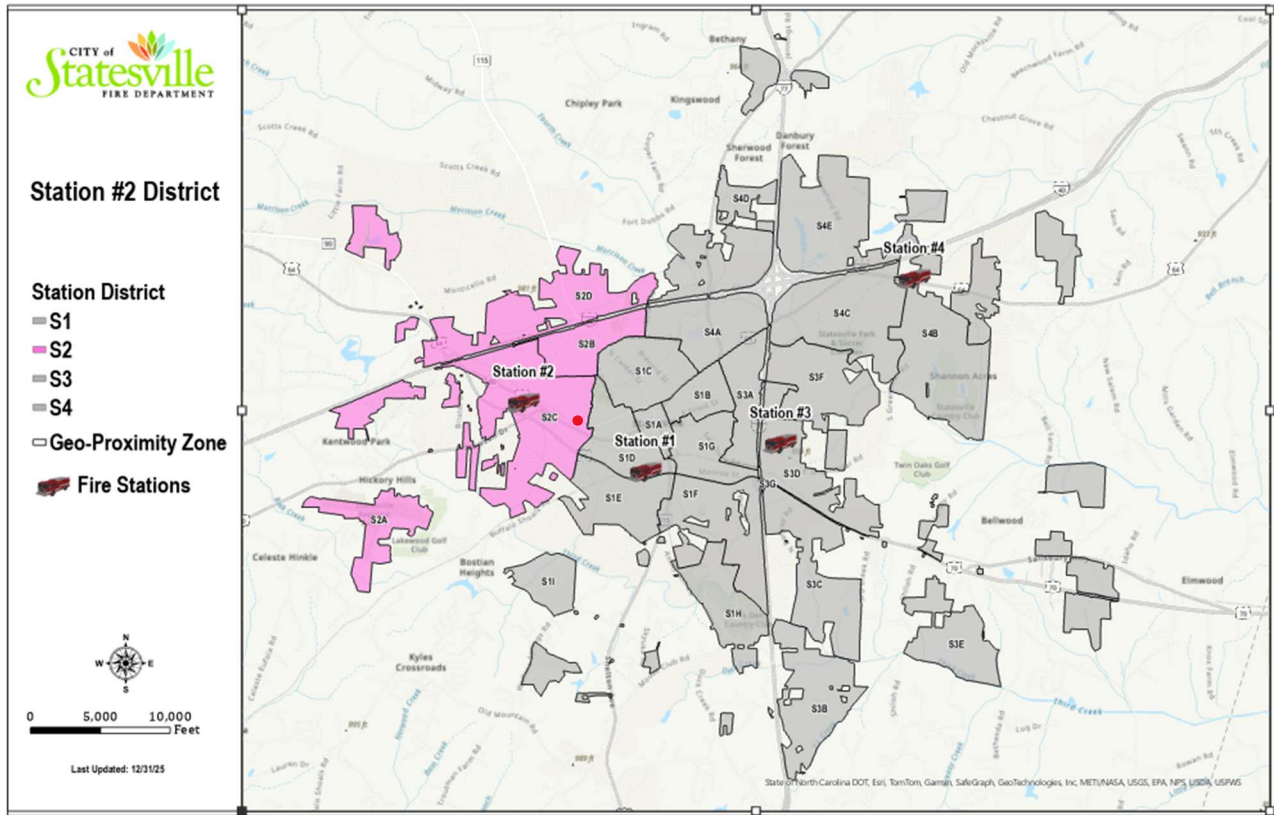
Fire Station #2 was constructed in 1962 and is located at 110 Security Drive. It is the oldest Fire Station in the Department. Fire Station #2 response district is in the western part of the city and includes the Statesville Regional Airport. Engine 2, Squad 2, and Reserve Engine 12 respond from this station. This station also responds ARFF 1 from its location at the airport. Service area includes residential, commercial, schools, and facilities with hazardous materials. In 2024, with the relocation of Station #1, the geo-proximity zones (GPZs) were reevaluated and GPZ S2B was added to Station #2’s fire district.




**Table 87: Fire Risk Category Station #2**

FIRE RISK CATEGORY	GENERAL DESCRIPTION OF ASSOCIATED RISK
LOW	Car fires, dumpster fires, small outside fires. Fire incidents that only require a single engine response
MODERATE	Occupancy fires in residential 1 to 2 family structures
HIGH	Occupancy fires in Public Assembly Property, Educational Property, Institutional Property, Store and Office Property, Basic Industry, Storage Property, Special Property, Multi-Family Dwellings (Apartments, Hotels, and Dormitories)
MAXIMUM	Fires at Healthcare, Detention, and Correction Facilities with NFIRS Codes 311, 323, 331, and 361

**Map 35: Fire Station #2 District**



**Table 88: Fire Station #2 Concentration – Mobile Assets**

Engine 2	
	<p>Engine 2 is a 2018 Marion Body Works Custom Rescue Pumper. It is designed on a Spartan Metro Star Cab and Chassis and equipped with a Cummins ISL 9 Engine. It is complete with a 1250 gallon per minute Hale fire pump, 700-gallon water tank, (2) 20-gallon foam tanks, and a Foam Pro 2001 Dual Agent Foam System. The lighting system, all LED, and hydraulic pumps are powered by a Harrison 10kw hydraulic generator, with a full complement of Amkus Rescue tools. The cab configuration allows for a total of 6 occupants and is equipped with the most up to date safety features on the market including airbags. Staffing of 4 per day and is one 2 new apparatus.</p>

**ARFF 1**



The City of Statesville Fire Department placed into service a 2006 E-One Titan 1250 gpm pump, 1500 gal. water tank, 200 gal. foam tank, and 450 lbs. dry chemical capabilities in 2025; replacing an obsolete truck that was in use since 2012. ARFF 1 is housed at Fire Statesville Regional Airport.

**Squad 2**



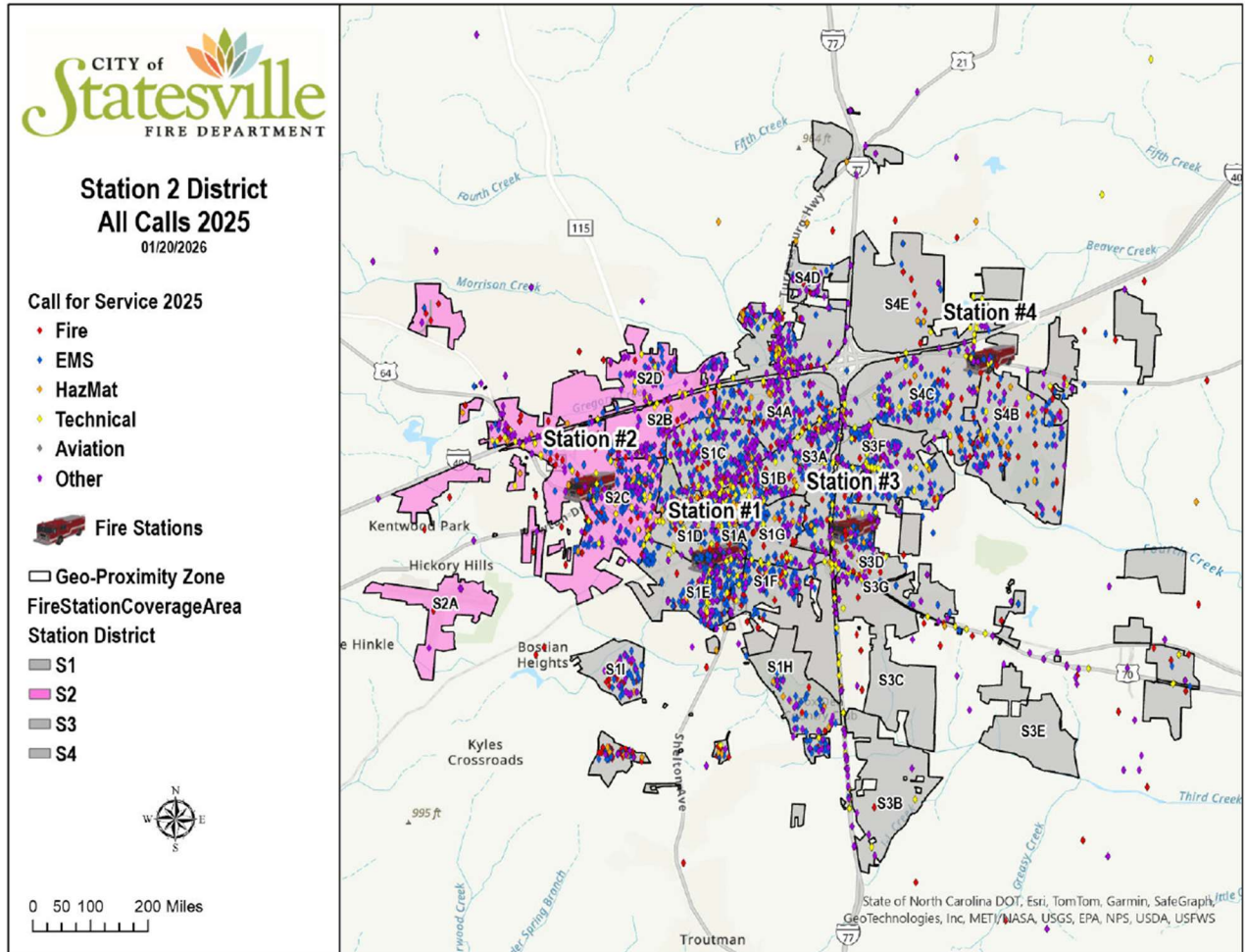
2023 Chevrolet Silverado 1500 crew cab.

**Reserve Engine 12**



Engine 12 is a 1998 Sutphen apparatus equipped with a 4 door, 5-person cab and has a 15" raised roof and a 181" wheelbase. The power comes from a 400 HP 60 Series Detroit with a HD 4060 Allison transmission. The Hale QSMG 150 delivers 1500 gpm water flow. E-2 has a 750-gallon poly tank, an M-8 Smart Power PTO generator with a full complement of Amkus Rescue tools, and a Zico hydraulic ladder rack.

**Map 36: Fire Station #2 All Calls Maximum, High, Moderate, & Low Risks 2025**



**Table 89: Fire Station #2 Incidents by Type 2025**

Incidents Type - 2025	Number of Incidents
Fires	137
HazMat	27
Medical	644
Technical Rescue	85
ARFF	4
Other	193
<b>Total Number of Incidents</b>	<b>1,090</b>

Non-Emergency merged with Other Incidents

**Table 90: Fire Station #2 Availability 2021-2025**

Year	Station #2 District Calls	Station Responses	Station Availability
2021	656	604	92.07%
2022	673	604	89.75%
2023	813	720	88.56%
2024	979	826	84.37%
2025	1038	884	85.16%

**Table 91: Total Incidents by GPZ 2025**

GPZ	Number of Incidents
S2A	12
S2B	165
S2C	565
S2D	296
<b>Total – 2025</b>	<b>1038</b>

S2B GPZ added in 2024

**Table 92: Incidents by Type Station #2 GPZs 2021**

Incident Type	S2A	S2C	S2D	Total
Fire	0	18	3	21
HazMat	0	9	4	13
Medical	0	347	71	418
Technical Rescue	2	37	25	64
ARFF	2	0	0	2
Non-Emergency	1	27	13	41
Other Incidents	2	55	43	100
<b>Total – 2021</b>	<b>7</b>	<b>493</b>	<b>159</b>	<b>659</b>

**Table 93: Incidents by Type Station #2 GPZs 2022**

Incident Type	S2A	S2C	S2D	Total
Fire	3	12	5	20
HazMat	0	12	5	17
Medical	2	335	61	398
Technical Rescue	0	59	27	86
ARFF	0	0	0	0
Non-Emergency	1	35	17	53
Other Incidents	5	59	46	110
<b>Total - 2022</b>	<b>11</b>	<b>512</b>	<b>161</b>	<b>684</b>

**Table 94: Incidents by Type Station #2 GPZs 2023**

Incident Type	S2A	S2C	S2D	Total
Fire	0	15	5	20
HazMat	1	9	4	14
Medical	10	385	82	477
Technical Rescue	2	37	24	63
ARFF	0	0	0	0
Other Incidents	14	152	74	240
<b>Total – 2023</b>	<b>27</b>	<b>598</b>	<b>189</b>	<b>814</b>

**Table 95: Incidents by Type Station #2 GPZs 2024**

Incident Type	S2A	S2B	S2C	S2D	Total
Fire	1	1	18	3	<b>23</b>
HazMat	1	5	6	3	<b>15</b>
Medical	1	35	453	111	600
Technical Rescue	1	5	38	19	<b>63</b>
ARFF	0	0	0	0	<b>0</b>
Other Incidents	9	31	181	94	<b>315</b>
<b>Total - 2024</b>	<b>13</b>	<b>77</b>	<b>696</b>	<b>230</b>	<b>1,016</b>

Non-Emergency merged with Other Incidents in 2023. S2B GPZ added in 2024

**Table 96: Incidents by Type Station #2 GPZs 2025**

Incident Type	S2A	S2B	S2C	S2D	Total
Fire	4	18	59	42	123
HazMat	0	6	12	7	25
Medical	1	99	403	134	637
Technical Rescue	1	5	43	28	77
ARFF	3	0	1	0	4
Other Incidents	3	37	47	85	172
<b>Total - 2025</b>	<b>12</b>	<b>165</b>	<b>565</b>	<b>296</b>	<b>1,038</b>

**Table 97: Incidents by Type Station #2 GPZs 2021-2025**

Incident Type	S2A	S2B	S2C	S2D	Total
Fire	8	19	122	58	207
HazMat	2	11	48	23	84
Medical	14	134	1,923	459	2,530
Technical Rescue	6	10	214	123	353
ARFF	5	0	1	0	6
Non-Emergency	2	0	62	30	94
Other Incidents	33	68	494	342	937
<b>Total – 2021-2025</b>	<b>70</b>	<b>242</b>	<b>2,864</b>	<b>1,035</b>	<b>4,211</b>

Non-Emergency merged with Other Incidents in 2023. S2B GPZ added in 2024

**Table 98: Calls by Day of Week by Hour of Day 2021-2025**

Station 2: 2021-2025	00:00-05:59	06:00-11:59	12:00-17:59	18:00-23:59	Total
<b>Sunday</b>	86	115	165	158	<b>524</b>
<b>Monday</b>	73	198	252	181	<b>704</b>
<b>Tuesday</b>	83	180	263	166	<b>692</b>
<b>Wednesday</b>	79	187	235	147	<b>648</b>
<b>Thursday</b>	76	183	220	183	<b>662</b>
<b>Friday</b>	76	227	250	183	<b>736</b>
<b>Saturday</b>	71	160	205	173	<b>609</b>
<b>Total</b>	<b>544</b>	<b>1,250</b>	<b>1,590</b>	<b>1,191</b>	<b>4,575</b>
<b>Percent</b>	<b>11.89%</b>	<b>27.32%</b>	<b>34.75%</b>	<b>26.03%</b>	

**Table 99: Incidents by Occupancy Type Station #2 GPZs 2025**

Occupancy Type	S2A	S2B	S2C	S2D	Totals
Assembly 1					
Assembly 2		1	10	11	22
Assembly 3		3	18	3	24
Assembly 4					
Business	1	7	57	40	105
Educational		1	4	2	7
Factory 1			25	7	32
Factory 2			7	5	12
Foster Homes		3	4	1	8
High Hazard 1					
High Hazard 2			2	1	3
High Hazard 3					
High Hazard 4				1	1
Institutional 1			1		1
Institutional 2					
Institutional 3					
Institutional 4		1	2		3
Mercantile		4	30	21	55
Residential 1			1	1	2
Residential 2				2	2
Residential 3					
Residential 4					
Storage 1	25	1	71	19	116
Storage 2		1	10	2	13
U (Miscellaneous)			2	1	3
<b>Totals - 2025</b>	<b>26</b>	<b>22</b>	<b>243</b>	<b>117</b>	<b>409</b>

**Table 100: Commercial Building Stories**

GPZ	Stories 1	Stories 2	Stories 3	Stories 4	Stories 5	Stories 6	Stories 7	No Data	Total
<b>S2A</b>	23	2	1						26
<b>S2B</b>	20	2							22
<b>S2C</b>	225	19						1	244
<b>S2D</b>	109	6	2						117
<b>Totals</b>	<b>377</b>	<b>29</b>	<b>3</b>					<b>1</b>	<b>409</b>

**Table 101: Commercial Building Status**

Building Status	S2A	S2B	S2C	S2D	Totals
<b>Occupied and operating</b>	25	20	211	106	<b>362</b>
<b>Under construction</b>	1	1	1	5	<b>8</b>
<b>Under major renovation</b>			1	1	<b>2</b>
<b>Undetermined</b>					
<b>Vacant and secured</b>		1	18	2	<b>21</b>
<b>Vacant</b>			7	3	<b>10</b>
<b>Being Demolished</b>			2		<b>2</b>
<b>Tag</b>			2		<b>2</b>
<b>Unsafe</b>			2		<b>2</b>
<b>Totals - 2025</b>	<b>26</b>	<b>22</b>	<b>244</b>	<b>117</b>	<b>409</b>

**Fire Station #3 Planning Zone Risk Assessment**

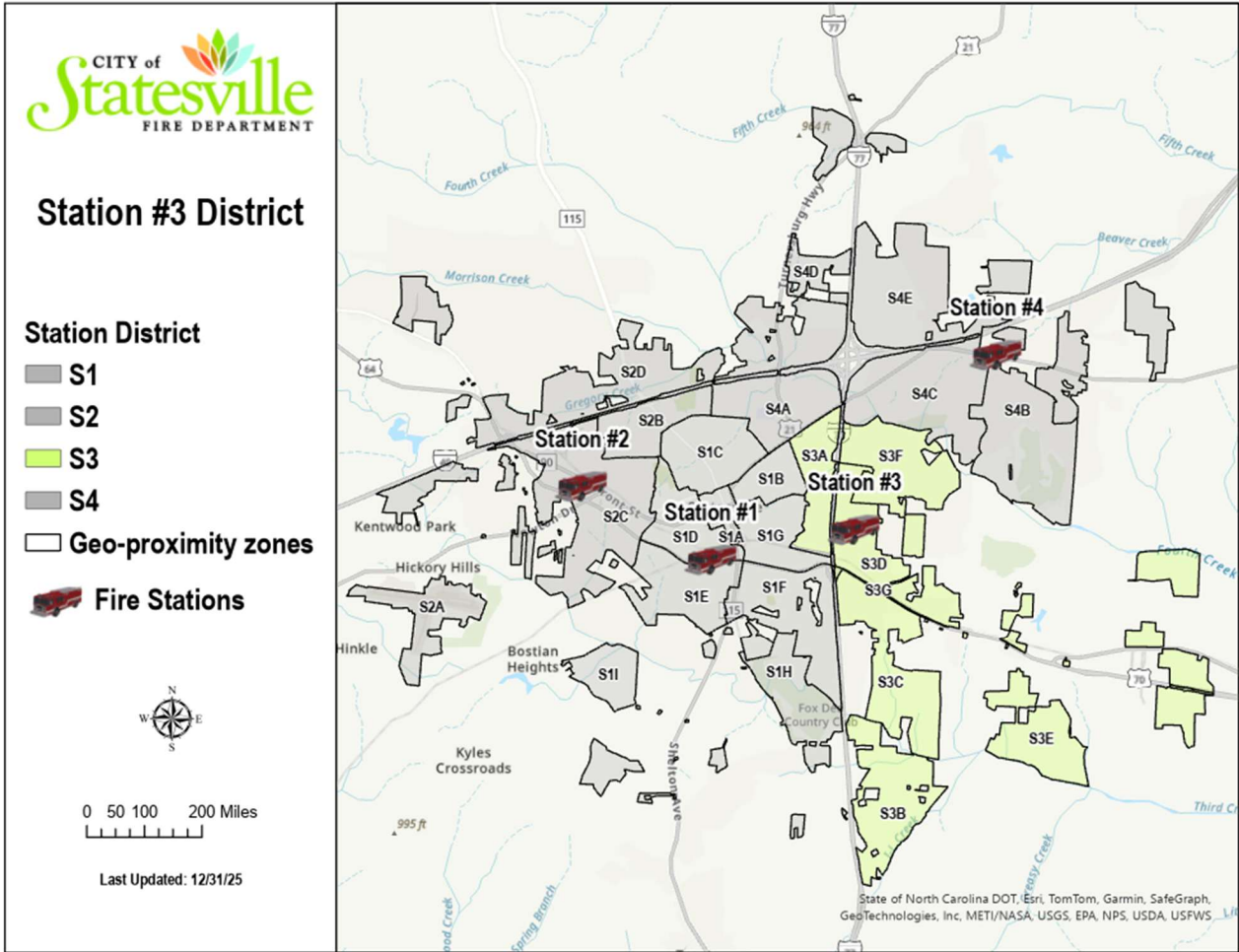
Fire Station #3 was constructed in 1975 and is located at 779 Eastside Drive. Fire Station #3 is centrally located within the city and has easy access to major highways (I-77 and Hwy 70). Fire Station #3 has the second highest call volume out of the four fire stations. Engine 3, Ladder 2, and Squad 3 respond from this station. Service areas include residential, high occupancy buildings, commercial, government buildings, and facilities with hazardous materials.






**Table 102: Fire Risk Category Fire Station #3**

FIRE RISK CATEGORY	GENERAL DESCRIPTION OF ASSOCIATED RISK
LOW	Car fires, dumpster fires, small outside fires. Fire incidents that only require a single engine response
MODERATE	Occupancy fires in residential 1 to 2 family structures
HIGH	Occupancy fires in Public Assembly Property, Educational Property, Institutional Property, Store and Office Property, Basic Industry, Storage Property, Special Property, Multi-Family Dwellings (Apartments, Hotels, and Dormitories)
MAXIMUM	Fires at Healthcare, Detention, and Correction Facilities with NFIRS Codes 311, 323, 331, and 361

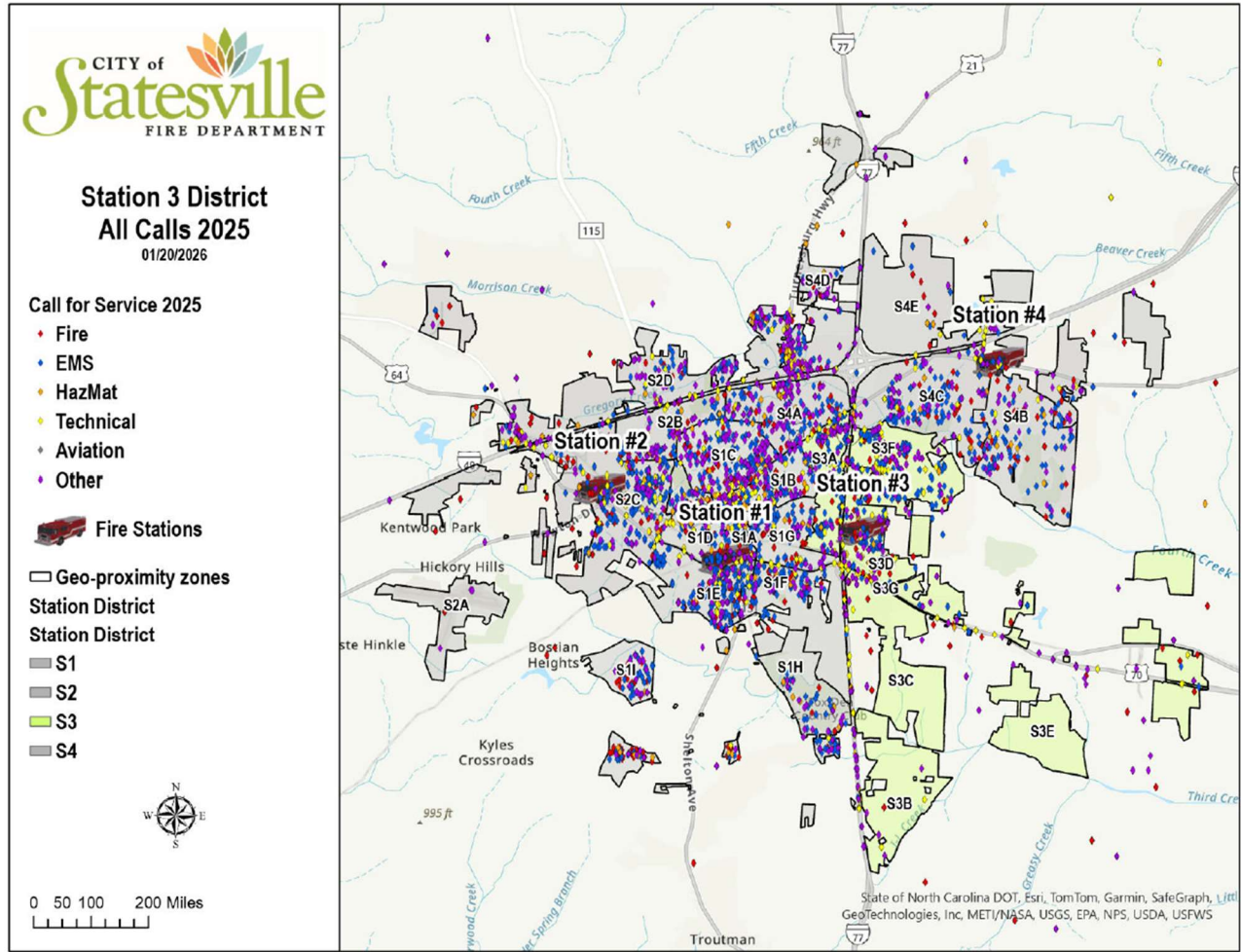
**Map 37: Fire Station #3 District**



**Table 103: Fire Station #3 Concentration – Mobile Assets**

<p><b>Engine 3</b></p> 	<p>Engine 3 is a 2011 Rosenbauer CT 4 door, 6-person cab with a 20” raised roof. This engine is powered by a Cummins ISX 500 hp engine with an Allison Gen IV-E transmission and has a Hale 1250 QMax pump with a Williams A and B foam system. This apparatus is equipped with a 700-gallon poly tank and (2) 20-gallon foam tanks. Electrical power is provided by a Smart Power 10kw generator with a full complement of Amkus Rescue tools. Staffing of 4 per day.</p>
<p><b>Reserve Engine 11</b></p> 	<p>Engine 11 is a 2001 Sutphen 4 door, 5-person cab with a 15 ¾” raised roof. It has a 181" wheelbase and is powered by a Detroit Series 60 430 hp engine and a HD 4060 Allison World transmission. Engine 3 has a Hale QSMG 150 pump which delivers 1500 gpm and a 750-gallon tank and is equipped with a 10 KW Smart Power hydraulic generator with a full complement of Amkus Rescue tools. It also has a Zico hydraulic ladder rack.</p>
<p><b>Squad 3</b></p> 	<p>2021 F250 Super Duty 4x4. The truck is equipped with a crew cab and a covered bed for storage.</p>

**Map 38: Fire Station #3 All Calls Maximum, High, Moderate, & Low Risks – 2025**



**Table 104: Fire Station #3 Incidents by Type 2025**

Incident Type	Number of Incidents
Fire	218
HazMat	31
Medical	901
Technical Rescue	124
ARFF	0
Other Incidents	229
<b>Total Number of Incidents</b>	<b>1,503</b>

Non-Emergency merged with Other Incidents

**Table 105: Fire Station #3 Availability 2021-2025**

Year	Station #3 District Calls	Station Responses	Station Availability
2021	958	833	86.95%
2022	923	811	87.87%
2023	1102	961	87.21%
2024	1429	1161	81.25%
2025	1375	1116	81.16%

**Table 106: Total Incidents by GPZ 2025**

Station #3 GPZs	Number of Incidents
S3A	311
S3B	12
S3C	78
S3D	385
S3E	25
S3F	545
S3G	19
<b>Total – 2025</b>	<b>1,375</b>

S3G & S3H, combined in 2024, to only be S3G

**Table 107: Incidents by Type Station #3 GPZs 2021**

Incident Type	S3A	S3B	S3C	S3D	S3E	S3F	S3G	S3H	Total
Fire	9	2	1	8	0	10	0	0	30
HazMat	8	0	0	12	1	1	0	1	23
Medical	80	13	40	128	9	273	0	1	544
Technical Rescue	20	8	8	59	1	13	0	11	120
ARFF	0	0	0	0	0	0	0	0	0
Non-Emergency	9	5	2	10	1	25	0	3	55
Other Incidents	19	5	20	61	13	67	0	1	186
<b>Total – 2021</b>	<b>145</b>	<b>33</b>	<b>71</b>	<b>278</b>	<b>25</b>	<b>389</b>	<b>0</b>	<b>17</b>	<b>958</b>

**Table 108: Incidents by Type Station #3 GPZs 2022**

Incident Type	S3A	S3B	S3C	S3D	S3E	S3F	S3G	S3H	Total
Fire	7	2	0	14	0	6	0	0	29
HazMat	7	1	4	6	0	5	0	2	25
Medical	74	1	52	128	8	254	0	2	519
Technical Rescue	28	17	10	71	1	15	0	19	161
ARFF	0	0	0	0	0	0	0	0	0
Non-Emergency	16	0	0	22	0	18	0	1	57
Other Incidents	24	1	21	46	5	47	0	1	145
<b>Total – 2022</b>	<b>156</b>	<b>22</b>	<b>87</b>	<b>287</b>	<b>14</b>	<b>345</b>	<b>0</b>	<b>25</b>	<b>936</b>

**Table 109: Incidents by Type Station #3 GPZs 2023**

Incident Type	S3A	S3B	S3C	S3D	S3E	S3F	S3G	S3H	Total
Fire	8	0	1	9	0	8	0	1	27
HazMat	1	1	2	1	0	5	0	0	10
Medical	89	2	67	189	10	271	1	1	630
Technical Rescue	33	11	8	51	1	21	0	6	131
ARFF	0	0	0	0	0	0	0	0	0
Other Incidents	51	1	35	116	4	110	0	1	318
<b>Total – 2023</b>	<b>182</b>	<b>15</b>	<b>113</b>	<b>366</b>	<b>15</b>	<b>415</b>	<b>1</b>	<b>9</b>	<b>1,116</b>

**Table 110: Incidents by Type Station #3 GPZs 2024**

Incident Type	S3A	S3B	S3C	S3D	S3E	S3F	S3G	S3H	Total
Fire	5	0	0	11	2	9	0	0	27
HazMat	5	0	3	8	1	9	0	1	27
Medical	149	8	40	304	10	451	2	1	965
Technical Rescue	19	3	5	39	4	18	11	5	104
ARFF	0	0	0	0	0	0	0	0	0
Other Incidents	69	6	28	140	11	106	5	0	365
<b>Total - 2024</b>	<b>247</b>	<b>17</b>	<b>76</b>	<b>502</b>	<b>28</b>	<b>593</b>	<b>18</b>	<b>7</b>	<b>1,488</b>

**Table 111: Incidents by Type Station #3 GPZs 2025**

Incident Type	S3A	S3B	S3C	S3D	S3E	S3F	S3G	S3H	Total
Fire	30	2	24	78	9	46	1	0	190
HazMat	12	0	2	6	0	11	0	0	31
Medical	207	2	37	224	11	412	2	0	895
Technical Rescue	17	0	3	28	2	22	14	0	88
ARFF	0	0	0	0	0	0	0	0	0
Other Incidents	45	6	12	49	3	54	2	0	171
<b>Total - 2025</b>	<b>311</b>	<b>12</b>	<b>78</b>	<b>385</b>	<b>25</b>	<b>545</b>	<b>19</b>	<b>0</b>	<b>1,375</b>

**Table 112: Incidents by Type Station #3 GPZs 2021-2025**

Incident Type	S3A	S3B	S3C	S3D	S3E	S3F	S3G	S3H	Total
<b>Fire</b>	59	6	26	120	11	79	1	1	<b>303</b>
<b>HazMat</b>	33	2	11	33	2	31	0	4	<b>116</b>
<b>Medical</b>	599	26	236	973	48	1,661	5	5	<b>3,553</b>
<b>Technical Rescue</b>	117	41	34	248	9	89	25	41	<b>604</b>
<b>ARFF</b>	0	0	0	0	0	0	0	0	<b>0</b>
<b>Non-Emergency</b>	25	5	2	32	1	43	0	4	<b>112</b>
<b>Other Incidents</b>	208	19	116	412	36	384	7	3	<b>1185</b>
<b>Total – 2021-2025</b>	<b>1,041</b>	<b>99</b>	<b>425</b>	<b>1,818</b>	<b>107</b>	<b>2,287</b>	<b>38</b>	<b>58</b>	<b>5,873</b>

**Table 113: Calls by Day of Week by Hour of Day 2021-2025**

Station 3: 2021-2025	00:00-05:59	06:00-11:59	12:00-17:59	18:00-23:59	Total
<b>Sunday</b>	125	210	281	234	<b>850</b>
<b>Monday</b>	104	275	331	231	<b>941</b>
<b>Tuesday</b>	120	282	346	236	<b>984</b>
<b>Wednesday</b>	110	275	356	208	<b>949</b>
<b>Thursday</b>	110	271	384	236	<b>1,001</b>
<b>Friday</b>	115	287	356	241	<b>999</b>
<b>Saturday</b>	132	233	267	287	<b>919</b>
<b>Total</b>	<b>816</b>	<b>1,833</b>	<b>2,321</b>	<b>1,673</b>	<b>6,643</b>
<b>Percent</b>	<b>12.28%</b>	<b>27.59%</b>	<b>34.94%</b>	<b>25.18%</b>	

**Table 114: Incident by Occupancy Type Station #3 GPZs 2025**

Occupancy Type	S3A	S3B	S3C	S3D	S3E	S3F	S3G	Totals
Assembly 1				1				1
Assembly 2			1	13		14	1	29
Assembly 3	2			8		9		19
Assembly 4								
Business	41		16	47	2	44	1	151
Educational	2			4		1		7
Factory 1	1		3	14	1		1	20
Factory 2			2	3	2			7
Foster Homes	3			1		5		10
High Hazard 1								
High Hazard 2					1			1
High Hazard 3		1	1					2
High Hazard 4								
Institutional 1						1		1
Institutional 2	1			1		2		4
Institutional 3								
Institutional 4								
Mercantile	2		7	30		34	1	74
Residential 1	1		4	4		1		10
Residential 2	4					6		10
Residential 3								
Residential 4						2		2
Storage 1	5		25	15	13	3	4	65
Storage 2			4	3	1			8
U (Miscellaneous)	1							1
<b>Totals - 2025</b>	<b>63</b>	<b>2</b>	<b>63</b>	<b>142</b>	<b>20</b>	<b>122</b>	<b>8</b>	<b>421</b>

**Table 115: Commercial Building Stories**

GPZ	Stories 1	Stories 2	Stories 3	Stories 4	Stories 5	Stories 6	Stories 7	No Data	Total
<b>S3A</b>	52	9	1	1					63
<b>S3B</b>	2								2
<b>S3C</b>	56	7							63
<b>S3D</b>	136	3	2	2					143
<b>S3E</b>	20								20
<b>S3F</b>	109	9	4						122
<b>S3G</b>	6	2							8
<b>Totals</b>	<b>381</b>	<b>30</b>	<b>7</b>	<b>3</b>					<b>421</b>

**Table 116: Commercial Building Status**

Building Status	S3A	S3B	S3C	S3D	S3E	S3F	S3G	Totals
<b>Occupied and operating</b>	56		60	117	12	94	7	<b>345</b>
<b>Under construction</b>		1	1	1	8	3	1	<b>15</b>
<b>Under major renovation</b>				1		1		<b>2</b>
<b>Undetermined</b>								
<b>Vacant and secured</b>	3			18		14		<b>35</b>
<b>Vacant</b>	4	1	1	4		7		<b>18</b>
<b>Being Demolished</b>				1		2		<b>3</b>
<b>Tag</b>						1		<b>1</b>
<b>Unsafe</b>				1				<b>1</b>
<b>Totals - 2025</b>	<b>63</b>	<b>2</b>	<b>63</b>	<b>143</b>	<b>20</b>	<b>122</b>	<b>8</b>	<b>421</b>

**Fire Station #4 Planning Zone Risk Assessment**

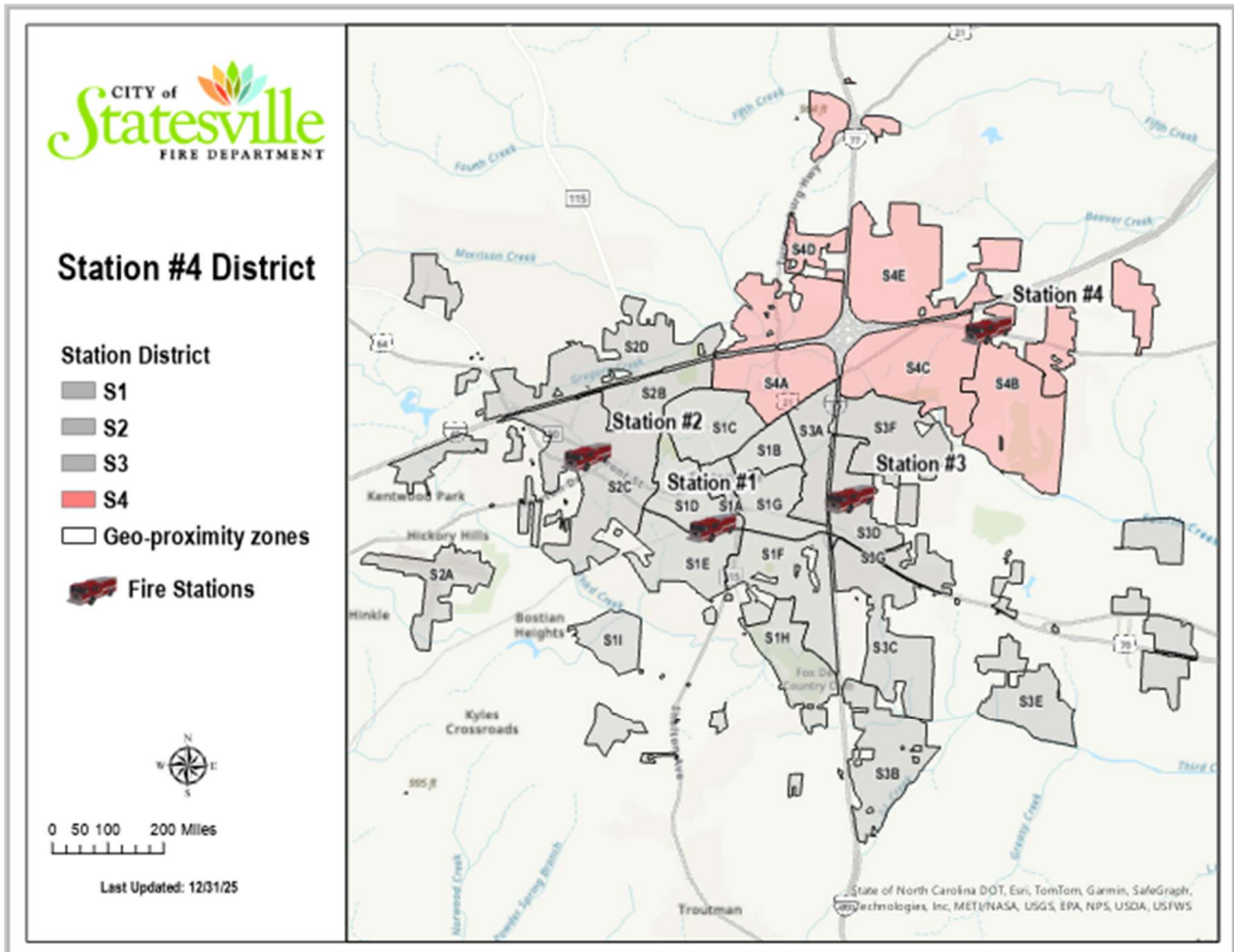
Fire Station #4 was constructed in 2011 and is located at 115 Martin Lane. Fire Station #4 is located on the eastern edge of the city with easy access to I-40. Engine 4, Squad 4, Hazmat 1, and Reserve Engine 14 respond from this station. Service area includes residential, high occupancy buildings, commercial, and facilities with hazardous materials.





**Table 117: Fire Risk Category Fire Station #4**

FIRE RISK CATEGORY	GENERAL DESCRIPTION OF ASSOCIATED RISK
LOW	Car fires, dumpster fires, small outside fires. Fire incidents that only require a single engine response
MODERATE	Occupancy fires in residential 1 to 2 family structures
HIGH	Occupancy fires in Public Assembly Property, Educational Property, Institutional Property, Store and Office Property, Basic Industry, Storage Property, Special Property, Multi-Family Dwellings (Apartments, Hotels, and Dormitories)
MAXIMUM	Fires at Healthcare, Detention, and Correction Facilities with NFIRS Codes 311, 323, 331, and 361

**Map 39: Fire Station #4 District**



**Table 118: Fire Station #4 Concentration – Mobile Assets**

<p><b>Engine 4</b></p> 	<p>Engine 4 is a 2018 Marion Body Works Custom Rescue Pumper. It is designed on a Spartan Metro Star Cab and Chassis and equipped with a Cummins ISL 9 Engine. It is complete with a 1250 gallon per minute Hale fire pump, 700-gallon water tank, (2) 20-gallon foam tanks, and a Foam Pro 2001 Dual Agent Foam System. The lighting system, all LED, and hydraulic pumps are powered by a Harrison 10kw hydraulic generator with a full complement of Amkus Rescue tools. The cab configuration allows for a total of 6 occupants and is equipped with the most up to date safety features on the market including airbags. Staffing of 4 per day and is the second of 2 new apparatus.</p>
<p><b>Squad 4</b></p> 	<p>2019 F350 Super Duty 4x4 crewcab. This truck is also utilized to haul Hazmat-2 (Trailer) and USAR-1 (Trailer).</p>

**HazMat 1**



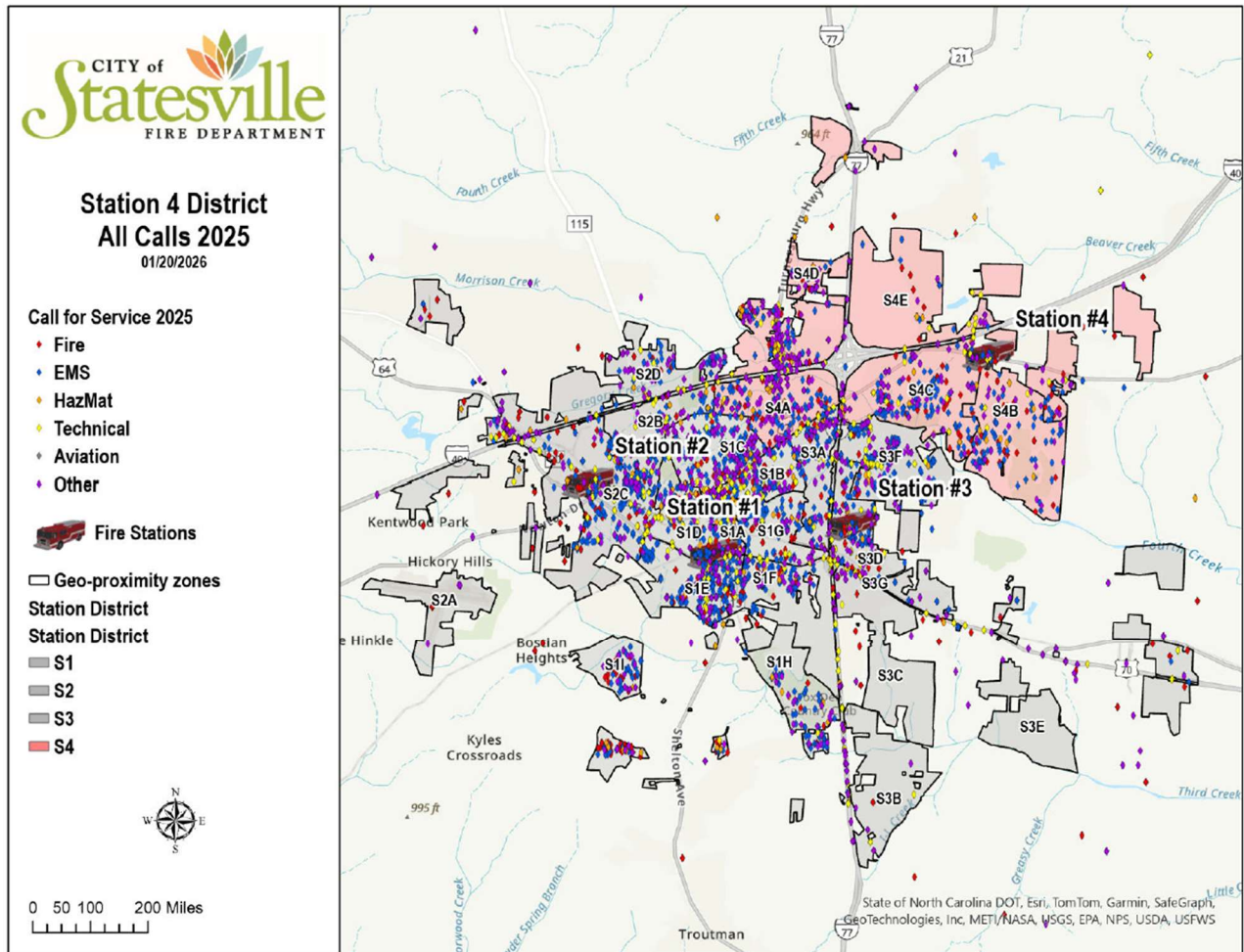
HazMat 1 is a 2003 Spartan Gladiator with rescue body. This apparatus carries equipment to supplement Engine 4 with equipment to operate on any Hazardous Materials incident. Staffed with personnel from Engine 4.

**Reserve Engine 14**



Reserve Engine 14 is a 2007 Sutphen Custom Engine that operates out of the downtown station and is powered by a 500 hp Caterpillar C-12 engine with an Allison Automatic transmission. The apparatus has a 6 person cab with a 16" raised roof; this fire fighting force comes from Hale QMAX 1500 GPM pump and has a 750 gallon booster tank. The vehicle also has a Williams Foam System with a 20 gallon Class A tank and a 20 Gallon Class B tank that can place foam on any discharge of the truck. It carries a full complement of Amkus Hydraulic Rescue tools that are pre-plumbed to hose reels on the passenger side and front bumper. The apparatus also carries a 10 kW Smart Power Generator that operate Scene lights and other electric equipment.

**Map 40: Fire Station #4 All Calls Maximum, High, Moderate, & Low Risks – 2025**



**Table 119: Fire Station #4 Incidents by Type 2025**

Incident Type	Number of Incidents
Fire	266
HazMat	51
Medical	1186
Technical Rescue	102
ARFF	1
Other Incidents	372
<b>Total Number of Incidents</b>	<b>1978</b>

Non-Emergency merged with Other Category in 2023

**Table 120: Fire Station #4 Availability 2021-2025**

Year	Station #4 District Calls	Station Responses	Station Availability
2021	721	630	87.38%
2022	838	683	81.50%
2023	1198	1010	84.31%
2024	1693	1351	79.80%
2025	1920	1561	81.30%

**Table 121: Total Incidents by GPZ 2025**

Station #4 GPZs	Number of Incidents
S4A	712
S4B	339
S4C	677
S4D	60
S4E	132
<b>Total - 2025</b>	<b>1,920</b>

**Table 122: Incidents by Type Station #4 GPZs 2021**

Incident Type	S4A	S4B	S4C	S4D	Total
Fire	11	3	7	1	22
HazMat	9	4	3	0	16
Medical	134	79	177	0	390
Technical Rescue	46	14	9	0	69
ARFF	0	0	0	0	0
Non-Emergency	20	10	21	2	53
Other Incidents	70	51	47	2	170
<b>Total – 2021</b>	<b>290</b>	<b>161</b>	<b>264</b>	<b>5</b>	<b>720</b>

**Table 123: Incidents by Type Station #4 GPZs 2022**

Incident Type	S4A	S4B	S4C	S4D	S4E	Total
Fire	16	6	4	1	2	29
HazMat	6	3	8	1	2	20
Medical	150	93	181	13	26	463
Technical Rescue	60	7	14	1	4	86
ARFF	0	0	0	0	0	0
Non-Emergency	28	12	17	1	0	58
Other Incidents	91	40	43	7	0	181
<b>Total - 2022</b>	<b>351</b>	<b>161</b>	<b>267</b>	<b>24</b>	<b>34</b>	<b>837</b>

**Table 124: Incidents by Type Station #4 GPZs 2023**

Incident Type	S4A	S4B	S4C	S4D	S4E	Total
Fire	14	4	6	0	4	28
HazMat	9	4	4	0	1	18
Medical	179	99	287	13	75	653
Technical Rescue	63	11	22	0	5	101
ARFF	0	0	0	0	0	0
Other Incidents	109	93	143	6	59	410
<b>Total - 2023</b>	<b>374</b>	<b>211</b>	<b>462</b>	<b>19</b>	<b>144</b>	<b>1,210</b>

Non-Emergency merged with Other Category in 2023

**Table 125: Incidents by Type Station #4 GPZs 2024**

Incident Type	S4A	S4B	S4C	S4D	S4E	Total
Fire	13	3	7	3	3	29
HazMat	15	8	6	0	2	31
Medical	270	287	444	25	97	1,123
Technical Rescue	69	12	18	0	9	108
ARFF	0	0	0	0	0	0
Other Incidents	207	68	143	40	40	498
<b>Total - 2024</b>	<b>574</b>	<b>378</b>	<b>618</b>	<b>68</b>	<b>151</b>	<b>1,789</b>

**Table 126: Incidents by Type Station #4 GPZs 2025**

Incident Type	S4A	S4B	S4C	S4D	S4E	Total
Fire	101	44	78	10	24	257
HazMat	24	9	8	1	2	44
Medical	331	244	515	19	75	1,184
Technical Rescue	52	7	16	0	10	85
ARFF	1	0	0	0	0	1
Other Incidents	203	35	60	30	21	349
<b>Total - 2025</b>	<b>712</b>	<b>339</b>	<b>677</b>	<b>60</b>	<b>132</b>	<b>1,920</b>

**Table 127: Incidents by Type Station #4 GPZs 2021-2025**

Incident Type	S4A	S4B	S4C	S4D	S4E	Total
Fire	155	60	102	15	33	365
HazMat	63	28	29	2	7	129
Medical	1,064	802	1,604	70	273	3,813
Technical Rescue	290	51	79	1	28	449
ARFF	1	0	0	0	0	1
Non-Emergency	48	22	38	3	0	111
Other Incidents	680	287	436	85	120	1,608
<b>Total – 2021-2025</b>	<b>2,301</b>	<b>1,250</b>	<b>2,288</b>	<b>176</b>	<b>461</b>	<b>6,476</b>

Merged Non-Emergency with Other in 2023

**Table 128: Calls by Day of Week by Hour of Day 2021-2025**

Station 4: 2021-2025	00:00-05:59	06:00-11:59	12:00-17:59	18:00-23:59	Total
Sunday	146	213	304	201	<b>864</b>
Monday	114	312	358	220	<b>1,004</b>
Tuesday	102	306	352	228	<b>988</b>
Wednesday	114	291	355	233	<b>993</b>
Thursday	105	290	384	244	<b>1,023</b>
Friday	111	279	368	267	<b>1,025</b>
Saturday	125	251	320	275	<b>971</b>
<b>Total</b>	<b>817</b>	<b>1,942</b>	<b>2,441</b>	<b>1,668</b>	<b>6,868</b>
<b>Percent</b>	<b>11.90%</b>	<b>28.28%</b>	<b>35.54%</b>	<b>24.29%</b>	

**Table 129: Incident by Occupancy Type Station #4 GPZs 2025**

Occupancy Type	S4A	S4B	S4C	S4D	S4E	Totals
<b>Assembly 1</b>						
<b>Assembly 2</b>	36	3	3		4	<b>46</b>
<b>Assembly 3</b>	5	2	4		3	<b>14</b>
<b>Assembly 4</b>				1		<b>1</b>
<b>Business</b>	163	6	67		42	<b>278</b>
<b>Educational</b>	1	1	1		1	<b>4</b>
<b>Factory 1</b>	2			1	13	<b>16</b>
<b>Factory 2</b>	1		1		9	<b>11</b>
<b>Foster Homes</b>	6	8	7	1	1	<b>23</b>
<b>High Hazard 1</b>						
<b>High Hazard 2</b>						
<b>High Hazard 3</b>					1	<b>1</b>
<b>High Hazard 4</b>	1		1			<b>2</b>
<b>Institutional 1</b>						
<b>Institutional 2</b>	1	2	4		1	<b>8</b>
<b>Institutional 3</b>			2			<b>2</b>
<b>Institutional 4</b>	1	1				<b>2</b>
<b>Mercantile</b>	54	1	4	2	10	<b>71</b>
<b>Residential 1</b>	6		1			<b>7</b>
<b>Residential 2</b>	6		3	1	1	<b>11</b>
<b>Residential 3</b>		1		1		<b>2</b>
<b>Residential 4</b>	2	2	1		1	<b>6</b>
<b>Storage 1</b>	13	2	9	2	30	<b>56</b>
<b>Storage 2</b>			2		5	<b>7</b>
<b>U (Miscellaneous)</b>	1					<b>1</b>
<b>Totals - 2025</b>	<b>299</b>	<b>29</b>	<b>110</b>	<b>9</b>	<b>122</b>	<b>569</b>

**Table 130: Commercial Building Stories**

GPZ	Stories 1	Stories 2	Stories 3	Stories 4	Stories 5	Stories 6	Stories 7	No Data	Total
<b>S4A</b>	262	28	6	2	1			3	299
<b>S4B</b>	28	1						1	29
<b>S4C</b>	98	11		1					110
<b>S4D</b>	8		1					2	9
<b>S4E</b>	116	4	1		1				122
<b>Totals</b>	<b>512</b>	<b>44</b>	<b>8</b>	<b>3</b>	<b>2</b>			<b>6</b>	<b>569</b>

**Table 131: Commercial Building Status**

Building Status	S4A	S4B	S4C	S4D	S4E	Totals
<b>Occupied and operating</b>	277	25	97	5	110	<b>514</b>
<b>Under construction</b>	3	1	2	4	3	<b>13</b>
<b>Under major renovation</b>	1					<b>1</b>
<b>Undetermined</b>						
<b>Vacant and secured</b>	9	2	5		6	<b>22</b>
<b>Vacant</b>	8	1	5		3	<b>17</b>
<b>Being Demolished</b>	1					<b>1</b>
<b>Tag</b>			1			<b>1</b>
<b>Unsafe</b>						
<b>Totals - 2025</b>	<b>299</b>	<b>29</b>	<b>110</b>	<b>9</b>	<b>122</b>	<b>569</b>

## Internal Fire Station Analysis 2021

### Executive Summary

This report summarizes the results of a station location, staffing, and emergency vehicle travel time analysis conducted for the Statesville Fire Department. The department currently operates four staffed fire stations and provides emergency response services to the City of Statesville, including fire prevention and suppression, first response basic life support emergency medical services, technical rescue, airport/aircraft suppression, and hazardous materials response.

The Statesville Fire Department typically staffs fire suppression apparatus with four firefighters, which is in accordance with the minimum staffing levels outlined in the industry standard. The National Fire Protection Agency (NFPA) Standard 1710, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments* requires that fire suppression apparatus be staffed with a minimum crew size of four firefighters. As a result of a SAFER Grant, one fire suppression apparatus, Ladder 1 previously staffed with one firefighter now has a minimum of three firefighters assigned and often meets NFPA 1710 standard of four firefighters.

For several years, the City of Statesville has planned a fire station at 1707 Shelton Avenue. The idea was to relocate Fire Station 1, currently located at 316 South Meeting Street, to 1707 Shelton Avenue. This relocation was planned due to an increase in development south of Garner-Bagnal. The growth was slow to come, and the project was postponed. City growth, increased call volume, and an aging Fire Station 1 have created the need to reevaluate fire station locations and overall fire protection.

### Background and Significance

The City of Statesville has four fire stations protecting 31.07 square miles. The oldest, Fire Station 1, was constructed in 1952 and the newest, Fire Station 4, was completed in 2011. Fire Station 1 is the station responsible for protecting areas south of Garner-Bagnal Boulevard, downtown, and Historic Mitchell Community College. Engine 1, Ladder 1, Battalion 1, Squad 1, and Reserve Engine 13 respond from this station. In 2010, the City of Statesville began looking at plans to move Fire Station 1 further south. During this time, the thought was a relocation south would protect the downtown area and the newly proposed Larkin development. The proposed relocation never came to fruition. This station is now sixty-eight years old and is experiencing structural deterioration.



Fire Station 2 was constructed in 1962 and is located at 110 Security Drive. Fire Station 2 response district is in the western part of the city and includes the Statesville Regional Airport. Engine 2, Squad 2, and Reserve Engine 11 respond from this station. This station also responds ARFF 1 (Airport Rescue Fire Fighting Apparatus) from its location at the airport. Service areas include residential, commercial, schools, and facilities with hazardous materials. This station is not in disrepair, but it does need significant upgrades.



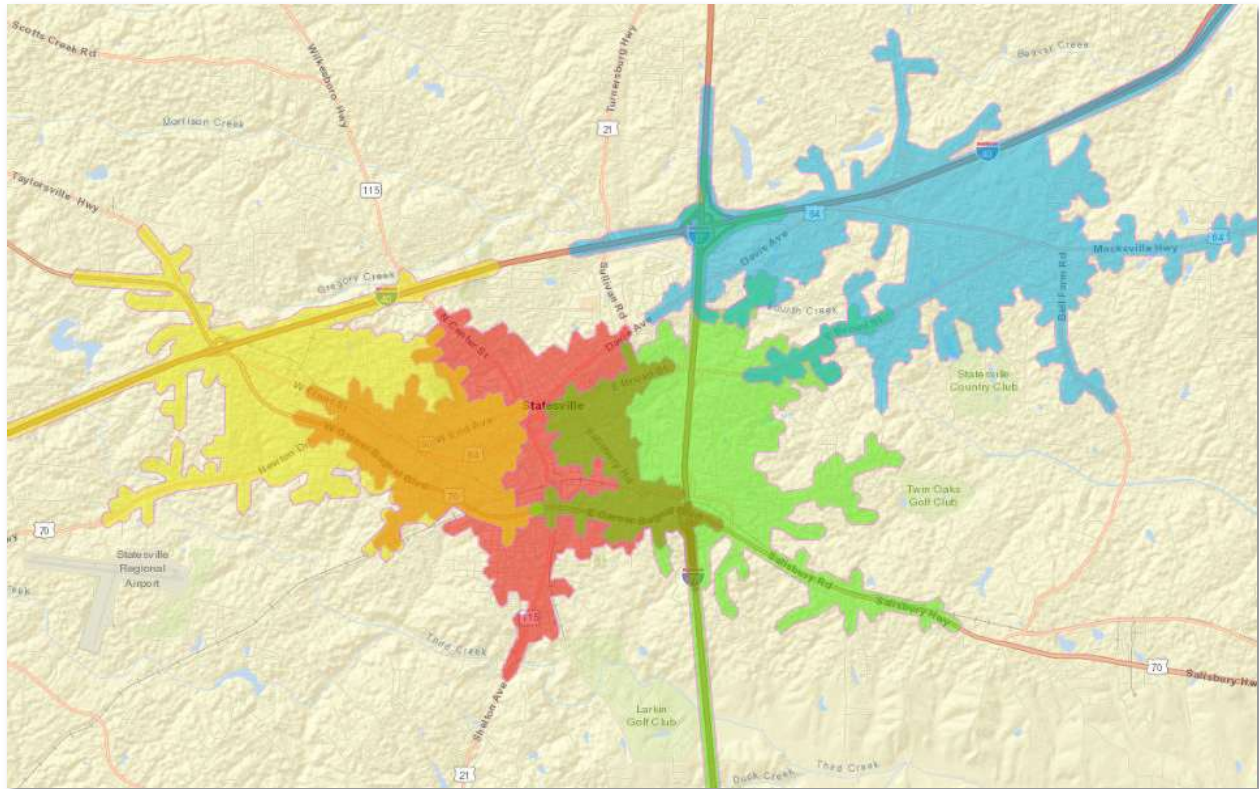
Fire Station 3 was constructed in 1975 and is located at 779 Eastside Drive. Fire Station 3 is centrally located within the city and has easy access to major highways (I-77 and Hwy 70). Fire Station 3 has the second highest call volume out of the four fire stations. Engine 3, HazMat 1 (mutual aid assistance in the county for hazmat), and Squad 3 respond from this station. Service area includes residential, high occupancy buildings, commercial, government buildings, and facilities with hazardous materials. Fire Station 3 is in good condition but due to SFD's ever expanding hazardous materials program, additional storage is needed.



Fire Station 4 was constructed in 2011 and is located at 115 Martin Lane. Fire Station 4 is the newest fire station in the city and is located on the eastern edge of the city with easy access to I-40. Engine 4, Squad 4, Reserve Engine 12, and Reserve Engine 14 respond from this station. Service area includes residential, high occupancy buildings, commercial, and facilities with hazardous materials.



**Map 41: Current Fire Station Coverage**



Fire station location is an important component in the SFD's ability to mitigate all emergencies, especially structural fires. Fires will extend beyond the room of origin when flashover stage is reached (fire gases cause the room to become fully involved in flames). This stage of fire typically will occur in as little as 8 minutes of the onset of fire. The department has a response time goal of arriving on the scene within 6 minutes, 20 seconds 90% of the time. This response time allows 1 minute for the call taker to obtain the information; 1 minute, 20 seconds for the firefighters to listen to the call, don their gear, mount the apparatus with seat belts attached; and 4 minutes of travel time. This allows only two minutes for set up and making the fire attack. Considering these scientific facts and our department goals, fire station location is an important component of the fire departments ability to mitigate fires.

Fire station location models and methodology vary. This study was conducted internally by our department's accreditation team. Before choosing a methodology, the team met with several accredited jurisdictions to determine a model that would not only work for our current situation but assist all city departments with future fire suppression planning. It was also important for this study to assist the City Manager and elected officials with future locations and methods for dealing with growth. This model used incident data, travel time, and future growth to determine best location for fire stations. The team was assisted by City of Statesville GIS department and their system, ArcGIS.

## Key Findings

The Statesville Fire Department currently meets staffing objectives outlined by industry standards but does not meet response time goals. This increases risk to the citizens of, and visitors to, City of Statesville. Findings highlighted:

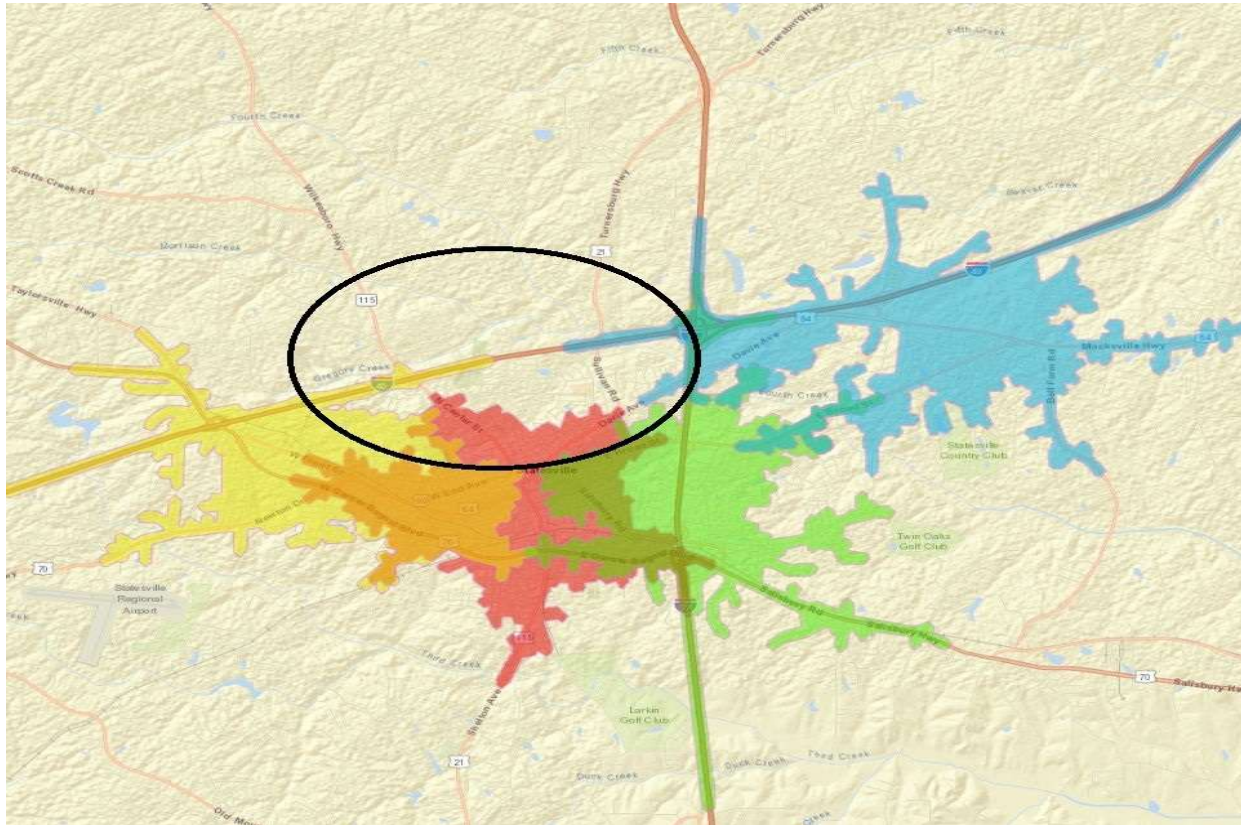
- Current fire station location reveals unacceptable service gaps.
- Results show the need for a fifth fire station.
- A relocation of Fire Station 1 would increase coverage while also replacing the deteriorating structure of its current location.
- Modifying Security Drive will increase response capability to Statesville Regional Airport and far West Statesville.
- While fire stations geographical locations are important, equally important is the staffing. An addition of Station 5 would require the City of Statesville to continue funding current SAFER grant employees and add an additional five firefighters.

This study was designed with continuous growth and improvement in mind. As the City of Statesville expands, so does our ability to add fire stations and continue to provide adequate fire protection for all citizens.

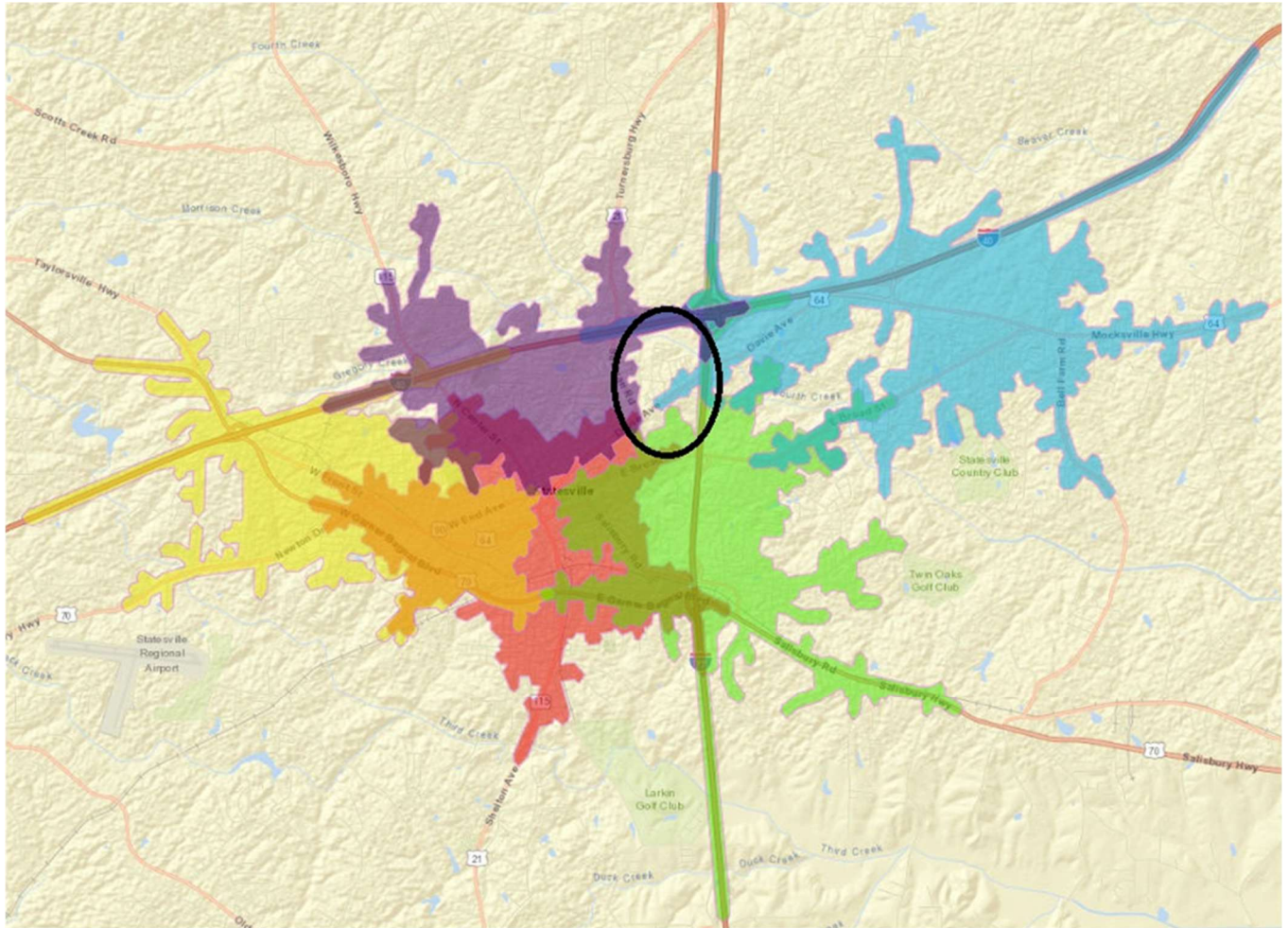
### **Current Service Gaps 2021 Internal Study**

A service gap is identified as an area that cannot be reached within a five-minute travel time or an overall response time of 6 minutes and 20 seconds. This example is illustrated in *Map 36: Existing Service Gap* and identified by the black circle. While SFD wants to avoid all service gaps, we have identified acceptable service gaps. These gaps are areas where access points, neighborhoods, and speed limits drastically reduce our ability to reach an incident. An acceptable service gap is an area such as the Statesville County Club, Valley Brook, and Tara's Trace Development. An example of this type of service gap is illustrated in *Map 40: Acceptable Service Gap*.

**Map 42: Existing Service Gap**



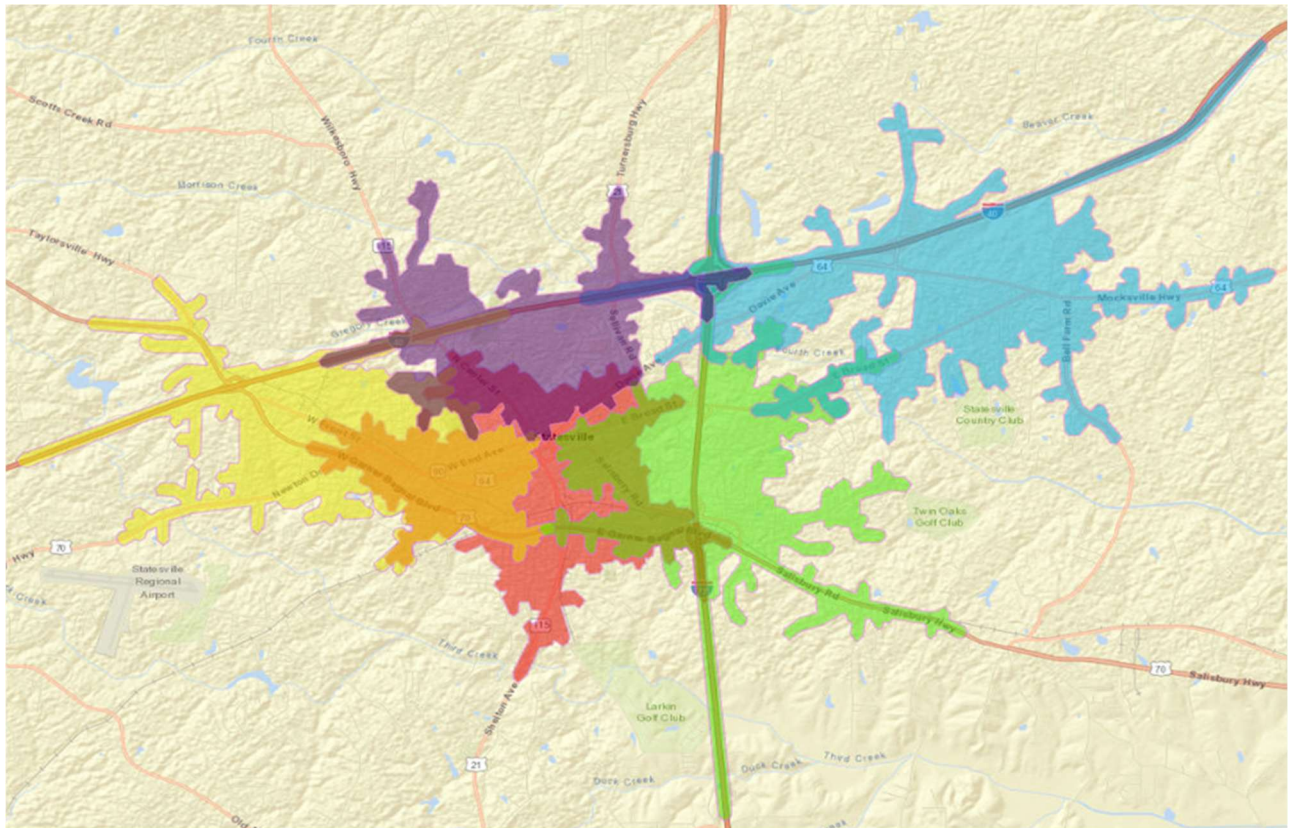
**Map 43: Acceptable Service Gap Example**



### **Proposed Station 5**

This study identified a clear service gap in the Hwy 21 North and Hwy 115 North areas, along with Iredell Memorial Hospital, and surrounding area. A proposed fire station in the Gaither Road and Radio Road intersection would not only close this gap but allow for increased growth in the existing Hwy 21 North corridors. Adding Fire Station 5 closes most service gaps and leaves only a few acceptable service gaps. The addition of Fire Station 5 is illustrated in *Map 41: Proposed Fire Station 5*.

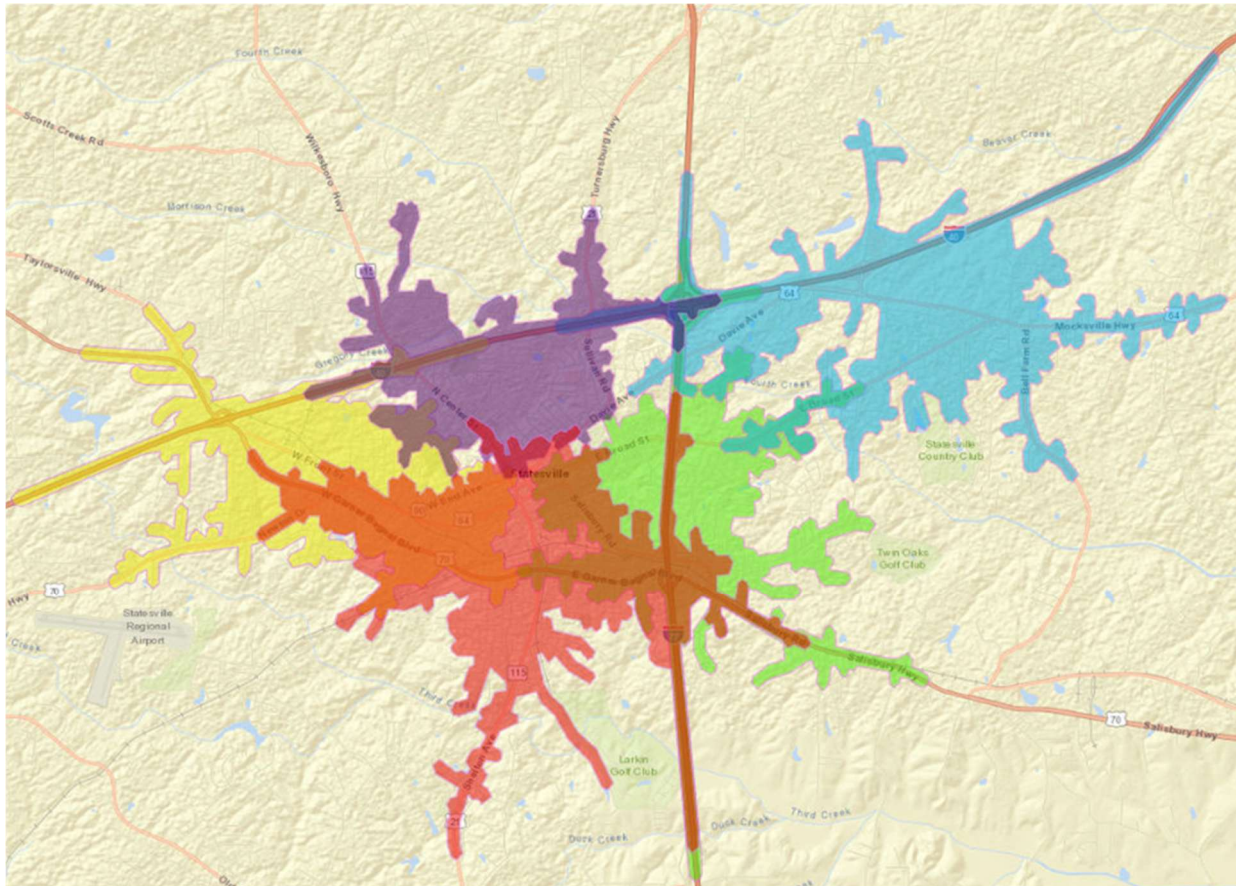
**Map 44: Proposed Station 5**



### Relocation of Station 1

Fire Station 1, built in 1952, is currently a functioning fire station which houses between 8 and 10 firefighters daily. This station needs extensive repair or an entirely new facility. Relocation and building a new facility is the best option and increases the department's ability to meet response time goals. It is recommended Fire Station 1 relocate in area of Gardner-Bagnal Blvd and Shelton Avenue

**Map 45: Proposed Fire Station 5 and Relocation of Fire Station 1**



## Modification of Access Points Station 2

Fire Station 2 was built in 1962 and is currently in need of upgrades. Though upgrades are needed, the station is functioning and could be remodeled. At a minimum, a remodel should be considered in the next three years. This facility needs additional storage, a workout facility, and accommodations for female firefighters. The current geographical location is adequate but could be enhanced by opening Security Drive, presently a dead-end street.

Opening Security Drive provides two clear advantages. First, it decreases response time to the Statesville Regional Airport. In fact, it allows the SFD to reach the airport in less than five minutes. Now owned by the City of Statesville, the general aviation facility possesses typical risks associated any airport. These risks include but are not limited to; landing undershoots / overshoots, takeoff overruns, aircraft crashes due to electrical or mechanical issues, and accidents which may occur to aircraft while taxiing. Recently, ARFF 1 was placed at the airport to assist with any aircraft

emergencies and provide a firefighter unit on the property. As the airport continues to expand, the department with continue to assess risk levels and provide recommendations for future growth.

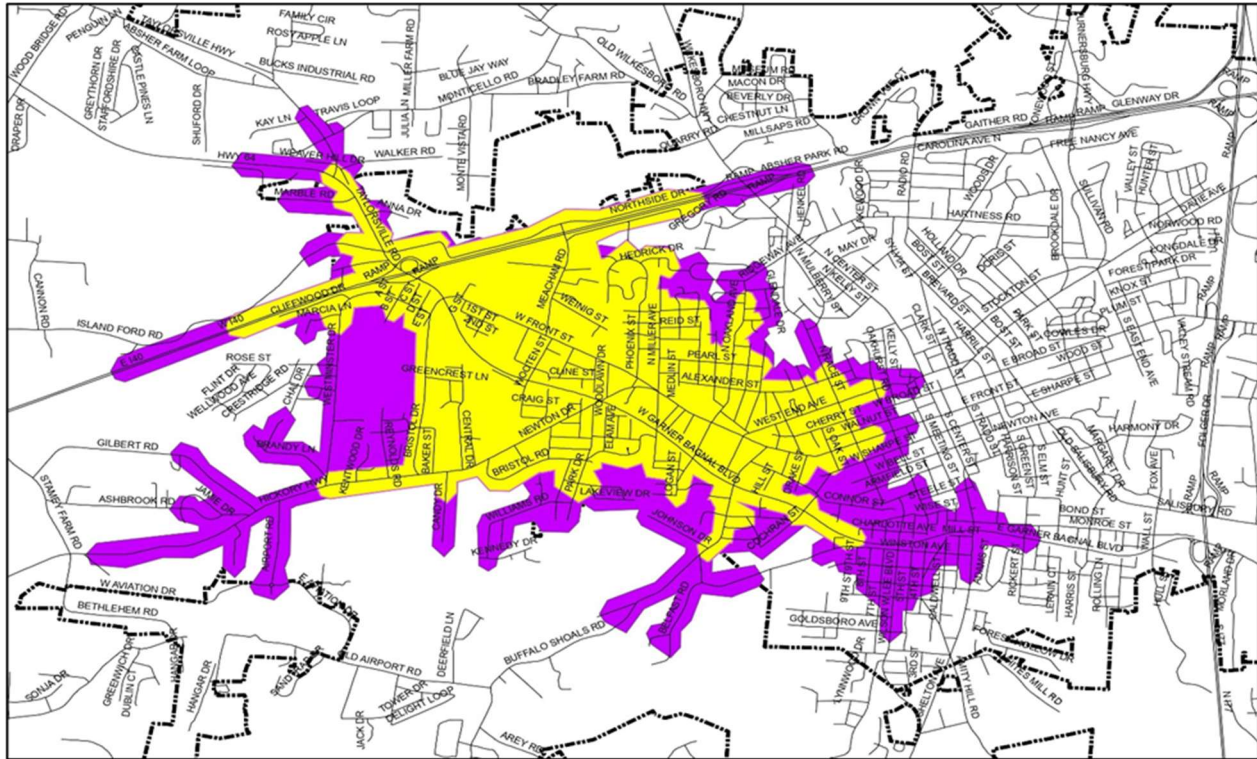


Second, opening Security Drive drastically reduces the response time to South and West

Statesville area. In addition, this increases the effective response force (ERF) efficiency. Essentially, this means more firefighters will arrive on the scene in less time. This creates a positive increase in fire protection and suppression abilities in the South and West corridors of the City.

In summary, Fire Station 2 is geographically located in an optimal spot. Upgrades to this station should be considered. Opening Security Drive will decrease response time to Statesville Regional Airport and areas South and West. The improved response times are illustrated in *Map 43: Current Fire Station 2 Coverage and Overlay of Security Dr. Opening Coverage*. It is worth noting this change would need NCDOT approval. Initial inquiries have been made but final approval has not been received by City of Statesville

**Map 46: Current Fire Station 2 Coverage and Overlay of Security Dr. Opening Coverage**



**Personnel and Effective Response Force**

Fire station location is an important component to provide adequate fire protection for City of Statesville; however, it is not the only component. Firefighters are needed to extinguish fires and mitigate emergencies. Much like the importance of geographical locations, the number of firefighters on scene is equally important. The National Fire Protection Agency (NFPA) Standard 1710, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments* requires that fire suppression apparatus be staffed with a minimum crew size of four firefighters.

NFPA 1710 also requires an ERF (Effective Response Force) of 17 firefighters for a single-family residential structure fire, 28 firefighters for a multi-family residential or commercial structure fire, and 43 firefighters for a high-rise structure fire. These requirements are also an expectation of our accrediting body Center for Public Safety Excellence (CPSE). Staffing will be a continued priority for the Statesville Fire Department. It is essential that each apparatus maintain four personnel. The addition of Fire Station 5 will require maintaining 9 SAFER Grant firefighters and adding an additional 5 personnel. This will ensure NFPA standards are met, CPSE expectations are accounted for, and all most importantly that our fire fighting force remains safe.

In addition to ERF, overall response time for the appropriate firefighter force needed must also be considered. For 90 percent of all fire suppression incidents, the total response time for the arrival of the first due unit, staffed with 4 firefighters and 1 officer, shall be: 6 minutes and 20 seconds in urban areas; and 6 minutes and 20 seconds in rural areas. The first due unit shall be capable of: providing 750 gallons of water and 1,250 gallons per minute (gpm) pumping capacity; initiating command; requesting additional resources; establishing and advancing an attack line flowing a minimum of 150gpm; establishing an uninterrupted water supply; containing the fire; rescuing at-risk victims; and performing salvage operations. These operations shall be done in accordance with departmental standard operating procedures while providing for the safety of responders and the public.

For 90 percent of all low/moderate risk fires, an effective response force (ERF) arrives within 10 minutes, 20 seconds total response time. For 90 percent of all fire suppression incidents, the total response time for the arrival of the ERF, staffed with 14 firefighters and officers, shall be: 10 minutes and 20 seconds in urban areas; and 10 minutes and 20 seconds in rural areas.

The ERF shall be capable of: establishing command; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control; complying with the Occupational Safety and Health Administration (OSHA) requirements of two in-two out; completing forcible entry; searching and rescuing at-risk victims; ventilating the structure; controlling utilities; and performing salvage and overhaul. The ERF for high and maximum risk fires shall also be capable of placing elevated streams into service from aerial ladders. These operations shall be done in accordance with departmental standard operating procedures while providing for the safety of responders and the public.

### **Considerations for the Future**

One important goal of this study was to create a model that expands as the city grows. Through this process, we identified a significant service gap in North/West corridor of the city and a Station 5 is recommended to address this gap. It is reasonable to assume future fire stations will be needed as the city grows. For example, it appears current growth trends are showing increased development in the Hwy 21 North area. Using this model, we can show as future growth occurs in the area between North Point Boulevard and I-77 at Exit 54 will need an additional station. The same methodology can be used in future growth or growth that City of Statesville is considering. In addition, this will assist council in predicting real cost for providing fire protection for proposed areas.

While geographic location of stations is important, we must also consider the cost of personnel and equipment. Personnel are a continued annual cost but necessary to maintain NFPA standards, CPSE expectations, firefighter safety, current ISO Class 2 rating, and to provide adequate services to the citizens. Like other city services, growth creates the need for additional personal to maintain the excellent fire protection for our citizens. Through staffing data and requirements, we can also provide a cost of the additional personnel.

In addition to personal, the city will need to add an additional ladder truck. This truck will likely be smaller, and thus more economical, than the recently purchased truck but it will increase our firefighting capability throughout the city. In the past, ISO has recommended an additional aerial and if received would move SFD closer to ISO Class I rating. In most cases, the initial cost is figured into the construction cost. The recommendation is Station 5 plan also include the cost of a quint aerial device.

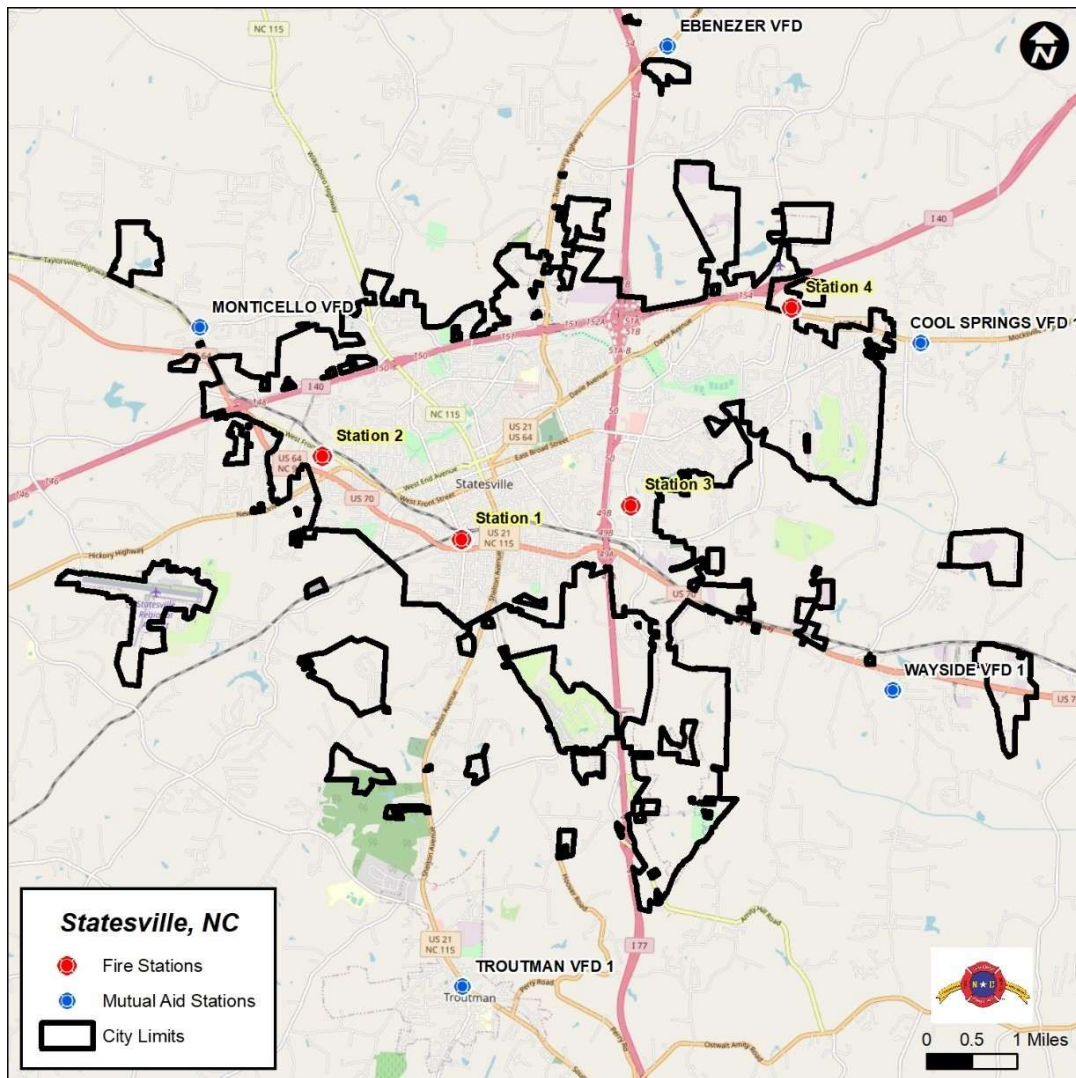
**External Station Location Study 2022(NC Fire Chief Consulting)**

The NC Fire Chief Consulting agency is finalizing the 2025 SFD Station Location Study and SFD will incorporate the findings of the 2025 into strategic planning for the future. The NC Fire Chief Consulting agency also completed a fire service analysis for Iredell County Fire Services in 2025, the complete report can be found here: <https://www.iredellcountync.gov/m/newsflash/home/detail/1819>

**Introduction and Scope**

The City of Statesville is located north of the City of Charlotte, west of Winston-Salem, and east of Asheville, North Carolina. Interstate 77 and Interstate 85 along with a railroad bisect parts of the city, limiting road access. The fire department operates from four stations across the 25 square mile city area. There is a regional airport on the west side of the city. The mutual aid fire agencies that surround the city are not simultaneously dispatched and response level is not consistent. The following map shows the fire station locations within the current fire service area.

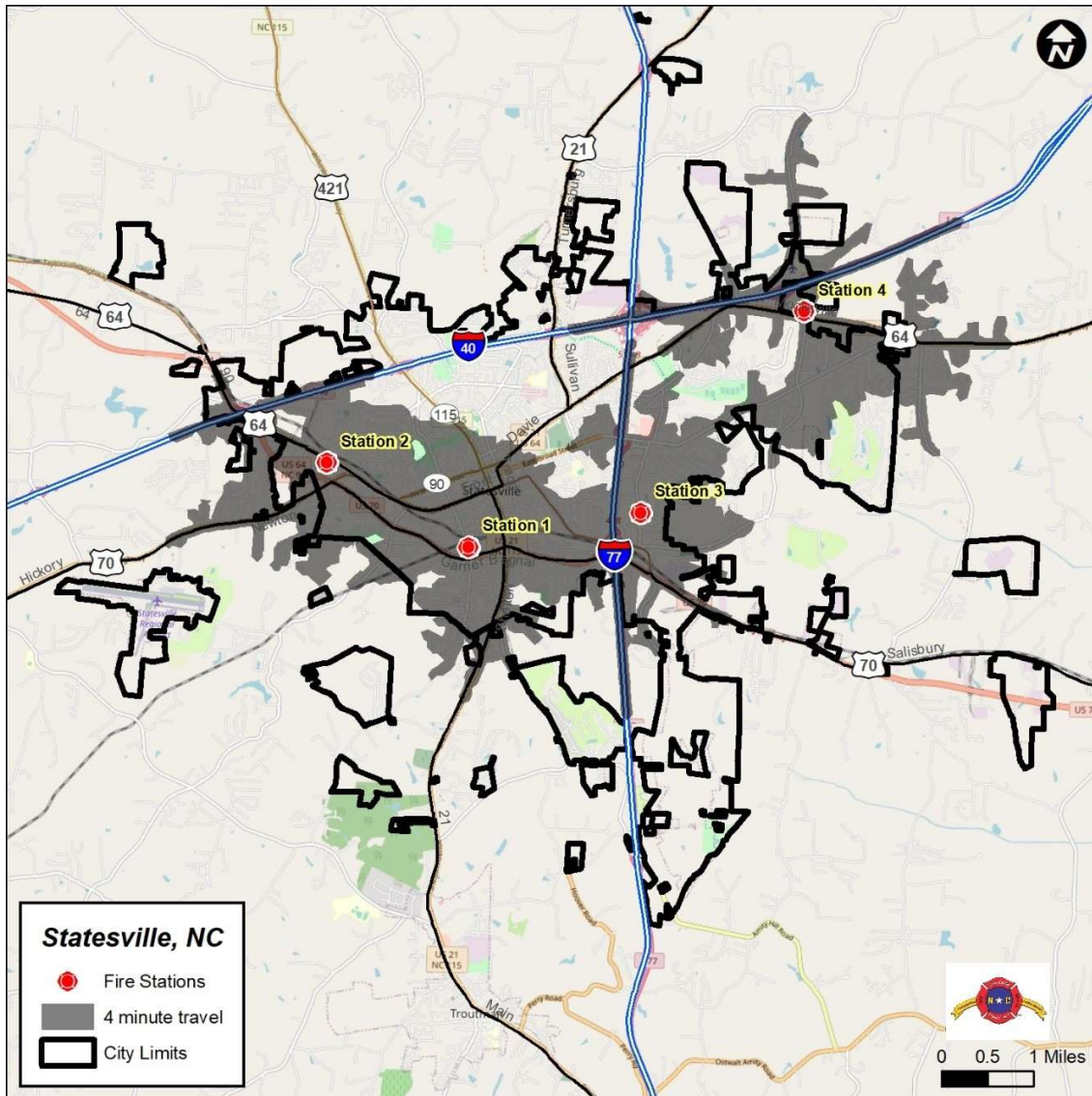
*FIGURE 1: Current Fire Service Area & Fire Stations*



This analytic study is conducted to select optimal locations for a total of seven stations except for Station 1 and Station 4 without consideration of any mutual and automatic aid station locations. Station 1 is being constructed and will be relocated from further north in the heart of downtown and taken into consideration. Station 4 is 12 years old. These scenarios will be evaluated against the current and former deployment coverage using a four-minute travel time model as directed by the fire department.

The most important element to the citizens is the time it takes to receive help in an emergency. The fire department adheres to the National Fire Protection Association's (NFPA) Standard 1710 that it uses a four-minute travel time to evaluate part of its response performance. The following map represents the extent of a modelled travel time using the street network, posted speed limits, and the restrictions in place, if any. While turns, intersection crossings, and at-grade railroad crossings are time reduced, uncontrollable events such as weather, detours, and traffic congestion are not.

FIGURE 2: Travel Time Extent



There are several areas of the city outside of the four-minute travel reach from a fire station. Residents and property owners will likely wait longer for arrival of fire crews to their emergency than recommended by national standard consensus.

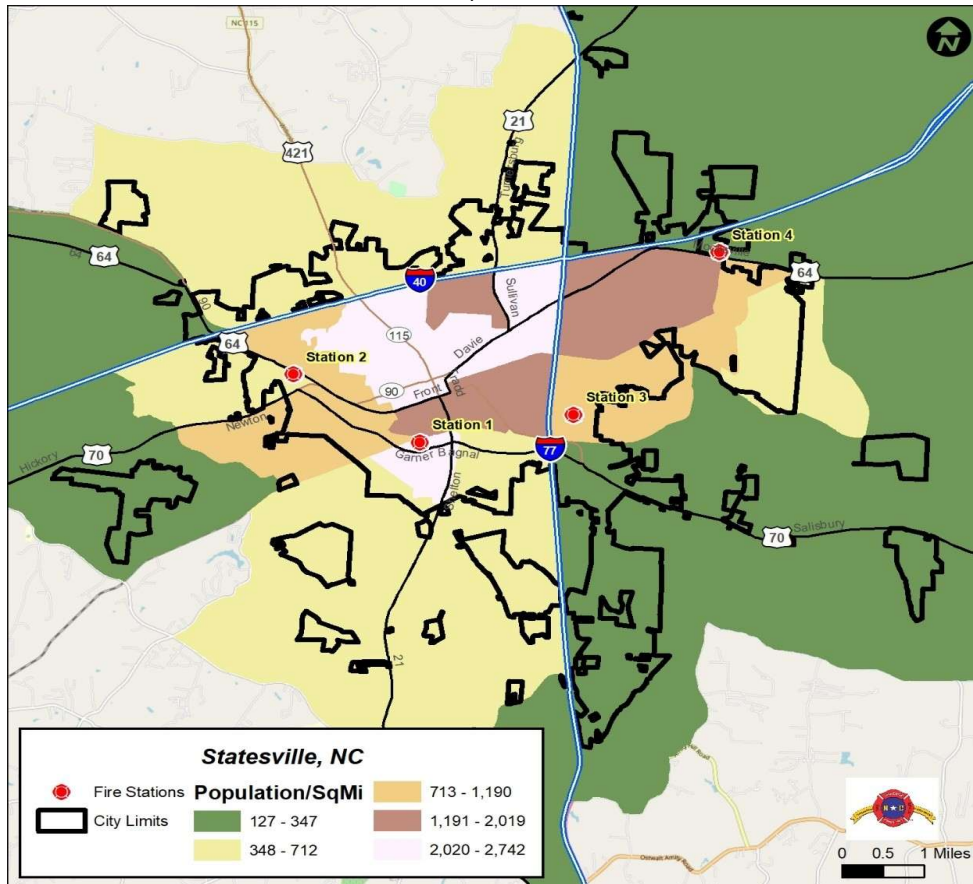
### Coverage Analysis Methodology

To assess the coverage of the current locations of the fire stations, many measures can be tabulated from street mileage to square miles, population, events, address points, property use, traffic volume counts, etc. These multiple results would vary upon the measure and the impact on the fire service. For instance, mileage assumes development. This is not true; streets simply provide a means to the development. There are miles of open fields along a roadway which is why area coverage is also discouraged. What is needed is one methodology that levels the playing field of measures that impact the fire service the most and create an index of vulnerability to evaluate coverage. The goal is to provide the most risk coverage.

### Population

There are three elements that impact the fire service the most. First is population because areas of higher amounts correlate with more demand for services. Additionally, these are residential taxpayers funding the fire department services. The following map shows the census block group areas with the 2020 estimated population.

FIGURE 3: Population Densi



The higher concentrations of population surround the central core of the fire district. A drawback of examining population coverage alone is that it does not consider the risk that commercial and industrial properties (with no residential population) pose to a community.

## Land Use Risk

Secondly, the use of land related to the structures and stockpiles vary in size and type. Some uses of land pose more risk to a community than others, such as a single-family home versus a chemical storage facility. Because of the myriad of uses, a macro analysis of risk based upon future land use is employed in the methodology. The study team was supplied with a zoning code attribute for each area within the fire city limits as well as extending outward into the current unincorporated county area.

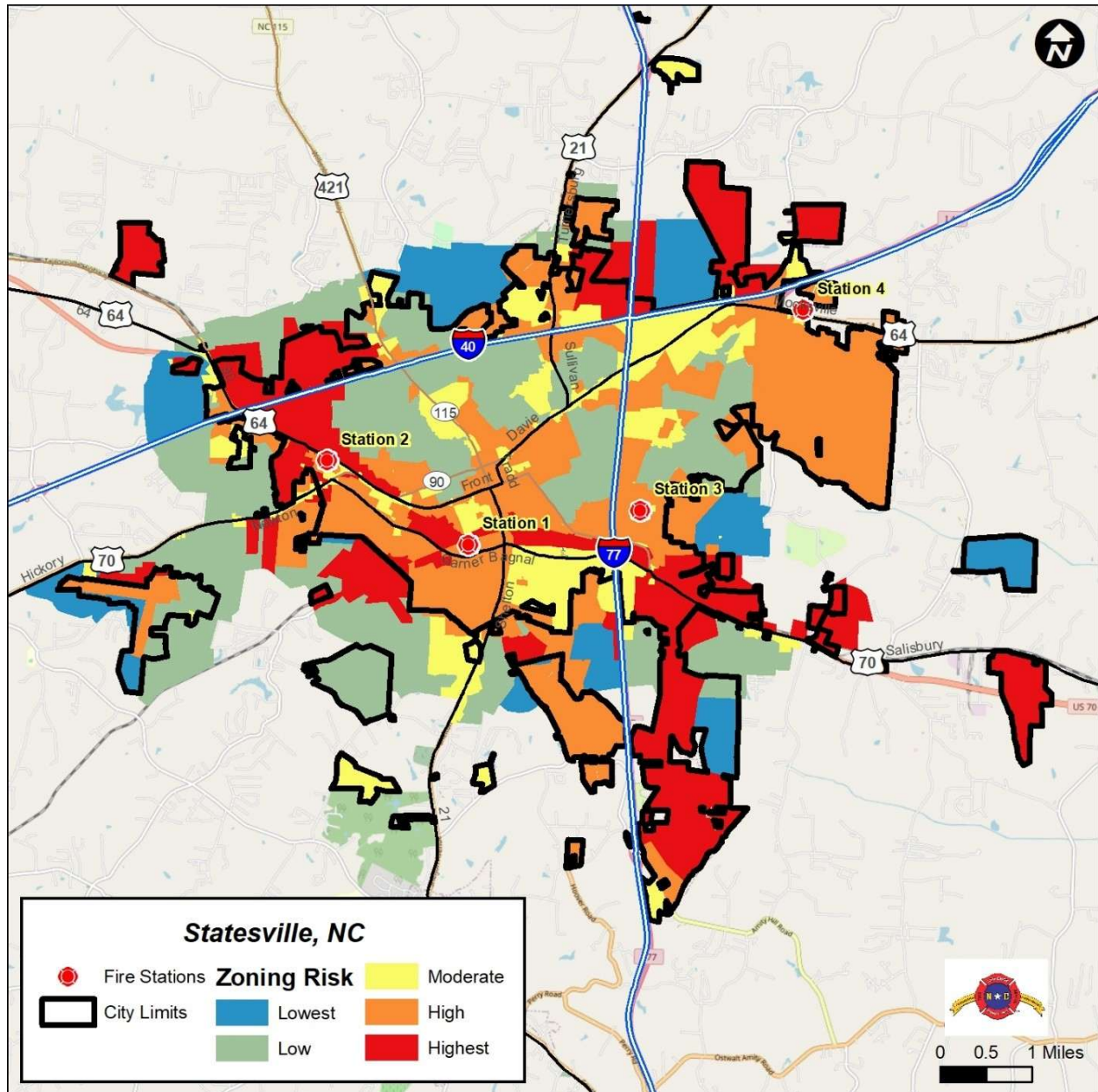
The types of uses pose differing risks to a community. Some may be a point of public assembly; others may be a facility that contains hazardous materials for its processes. Others are homes, that if lost to a fire is tragic to the owner and family. A loss of a structure that employs 300 residents is a greater overall impact loss to the community. The study team defines risk level as follows with some examples noted:

### Risk Category Criteria

1. Lowest - Wide separation of single-family dwellings and farmland.
2. Low - Single-family dwellings with a separation of at least 100 feet between buildings.
3. Moderate - Commercial and light industrial facilities, small shopping centers, and high-density, low-rise residential buildings.
4. High - High-rise hotels and residential buildings, large shopping centers, and industrial complexes.
5. Highest - Refineries, large industry, lumber yards, and propane storage facilities.

These risk levels were applied to the zoning data provided in the resulting map.

FIGURE 4: Land Use Risk Map

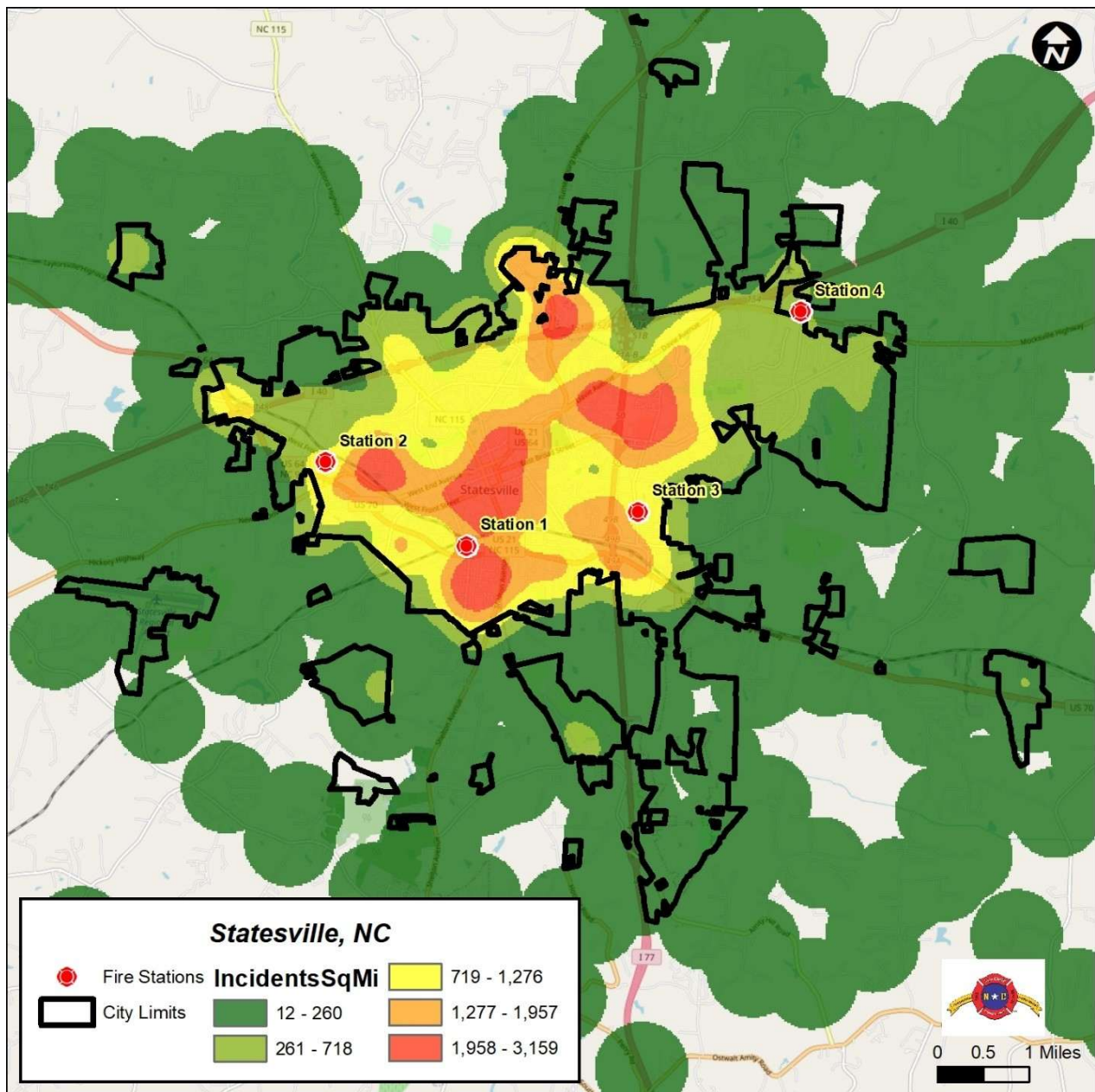


Most of the district has moderate or higher risk levels. Higher risk can be seen along the arterial roadways and along the rail lines.

## Demand for Services

Thirdly, the demand for services although do correlate with higher population, can also be driven by non-residential commercial facilities like nursing homes, higher educational, and public facilities such as airports, and transportation terminals. Highly congested and unimproved intersections can also drive service demand for the fire service. Because of these factors, the demand for services is also a major element in coverage analysis. The following map demonstrates where the demand for services is the most intense based upon the fire department's raw incident data provided.

*FIGURE 5: Service Demand Density*

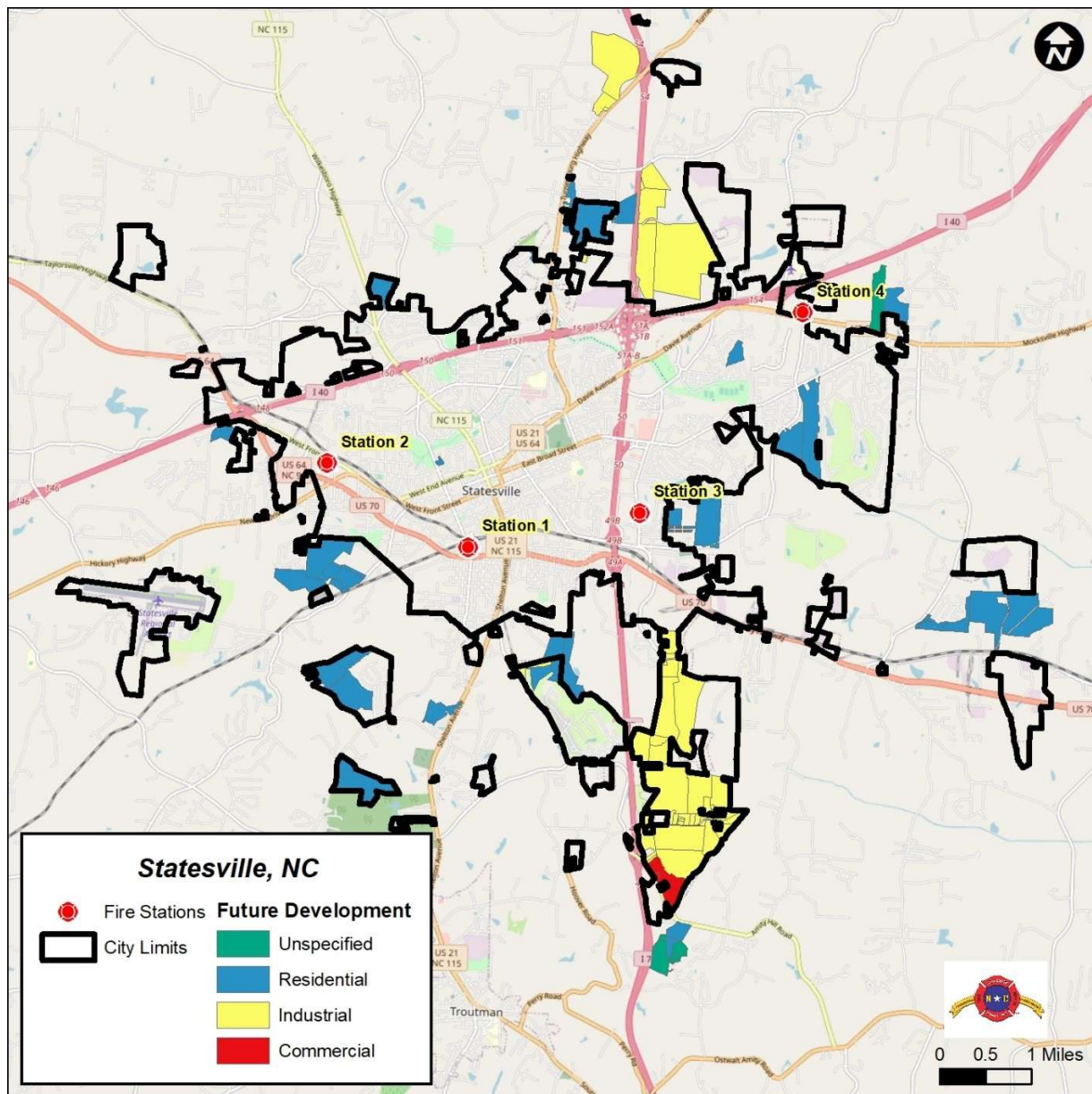


Much of the demand is concentrated where higher population density is located. The highest demand is near downtown area.

**Future Development**

There is planned development in several areas of the fire service area as seen in the following figure. Most of it is for residential developments which included the number of units expected and future roadways. It is expected by the fire department that developments outside the city will be annexed into the city.

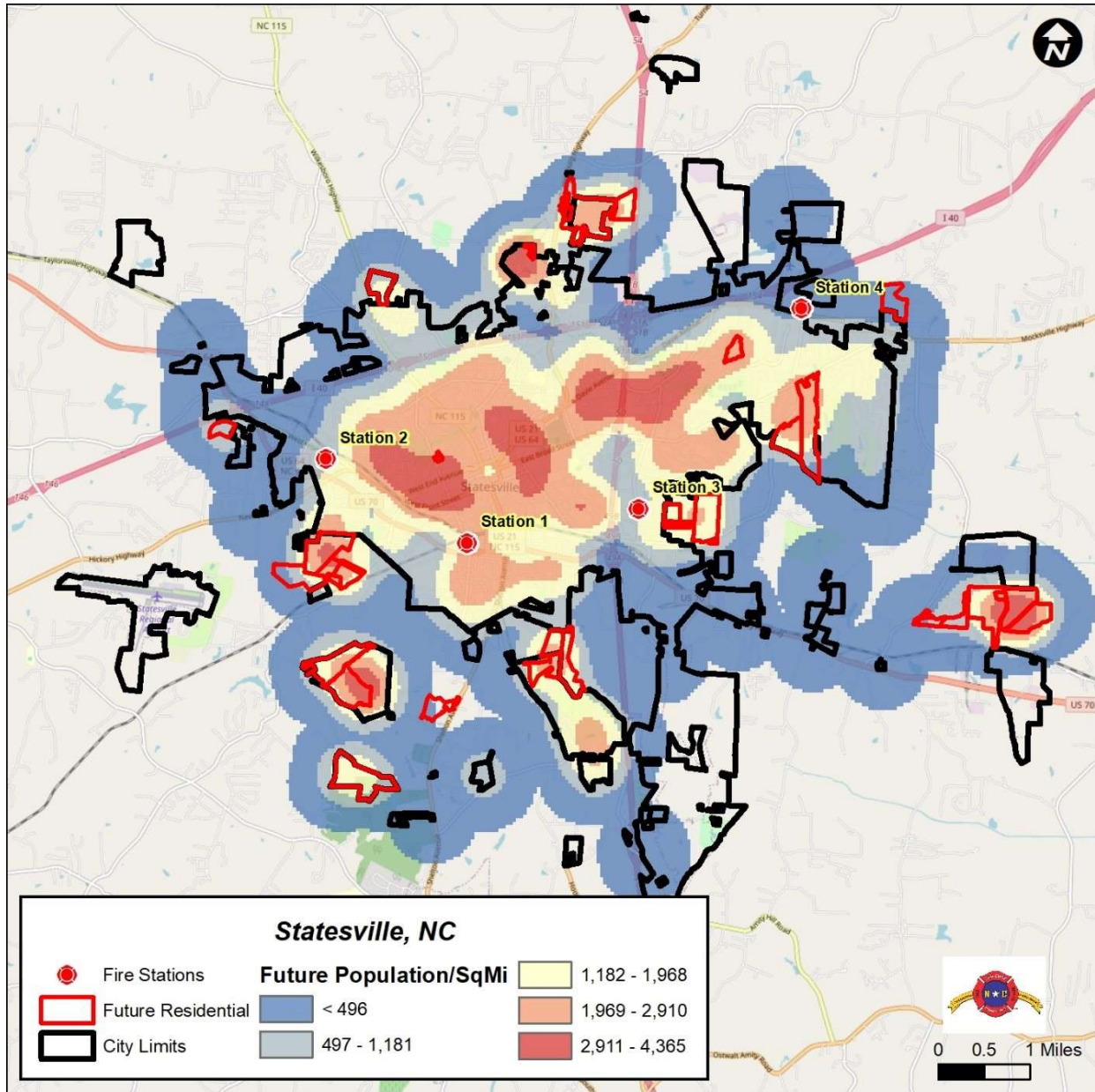
*FIGURE 6: Future Development*



**Population Changes**

The number of units (4,865) were multiplied by the overall persons per household from the US census Bureau (2.44) to estimate the population within each development. 11,871 additional residents are expected at buildout. These figures were added to existing residential population to create a population density of future development.

*FIGURE 7: Future Population*

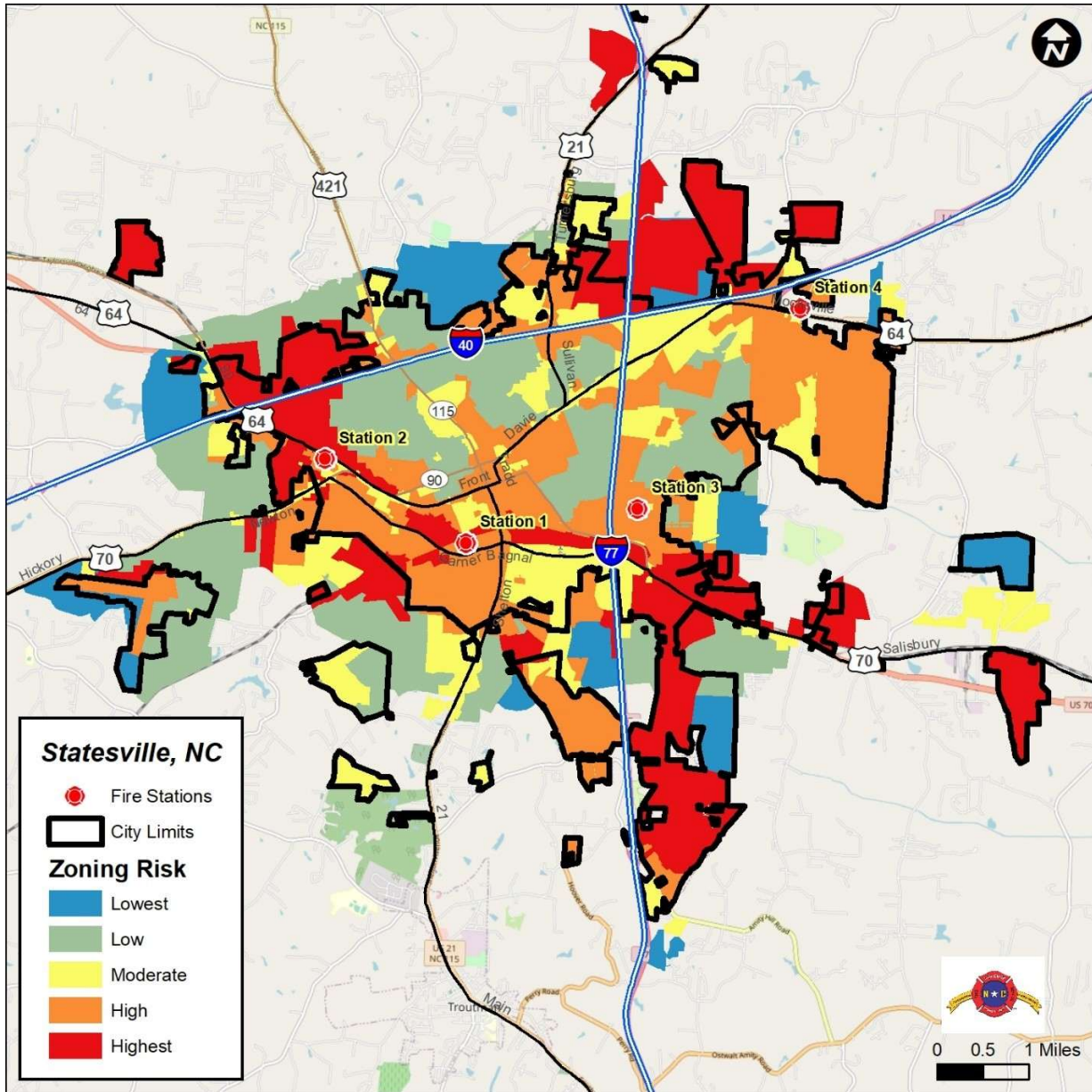


Noticeable changes can be noted in areas where the residential developments are planned. The impact depends upon the number of planned units and negatively influenced by the scattered locations of the development.

**Structural Risk Changes**

The City of Statesville has identified the future developments. These were translated into the same categories used for the city zoning data earlier.

*FIGURE 8: Future Land Use Risk*

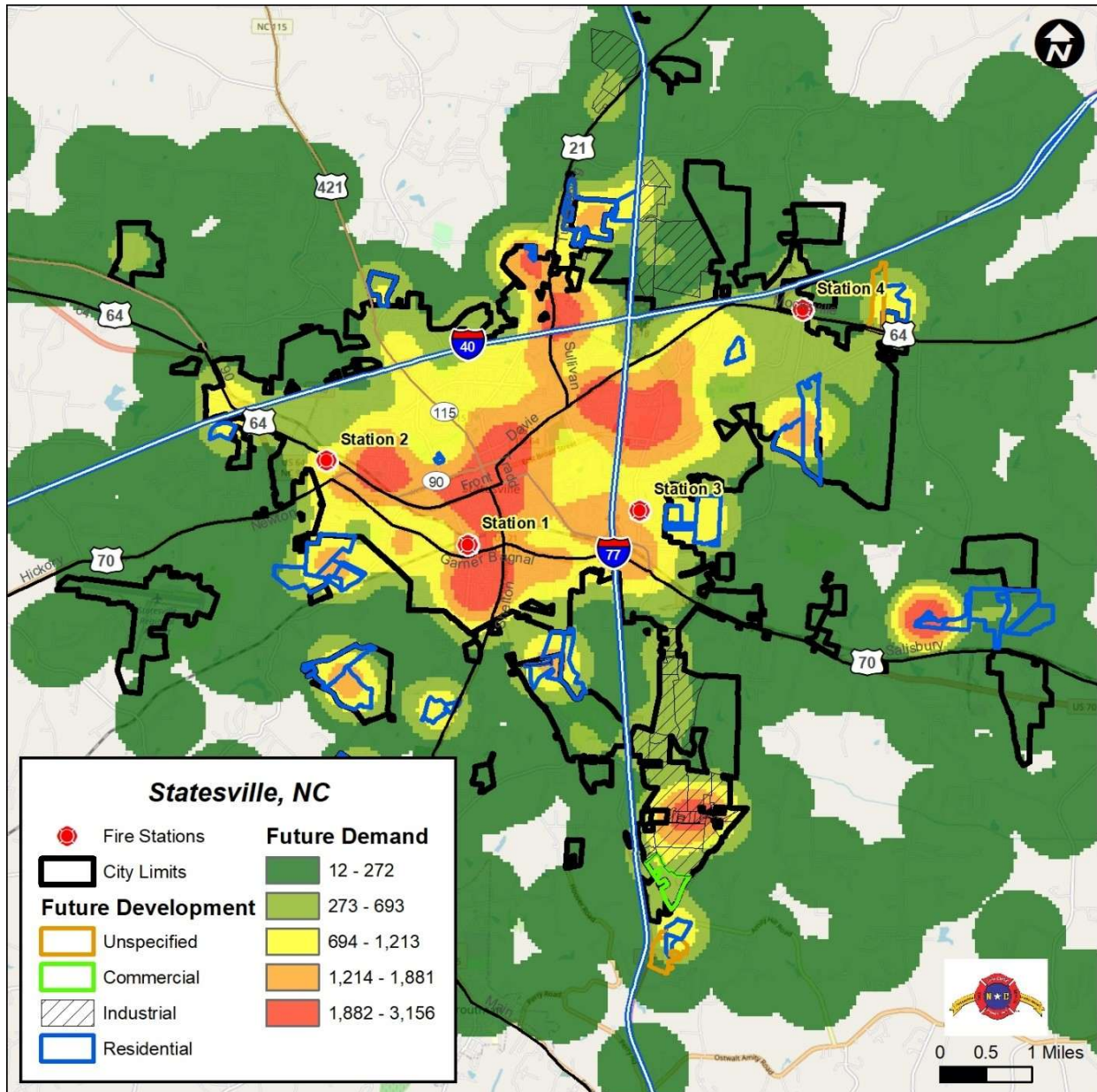


Compared to the current zoning, structural risk increases in the northern, eastern areas and south of US 70.

**Service Demand Changes**

With the change in population and the changes in structural risk, the demand for services changes due to development. The rate of incidents per population were applied to the projected new residential developments. Similarly, the incidents per acre for non-residential properties were applied to new non-residential developments. This created a different pattern of demand for services as seen in the following map.

*FIGURE 9: Future Service Demand*



Compared to the previous service demand map, increased demand can be seen south of US 70, southwest of Station 7, northeast of Station 4, and south of Station 2.

## Vulnerability Risk Index

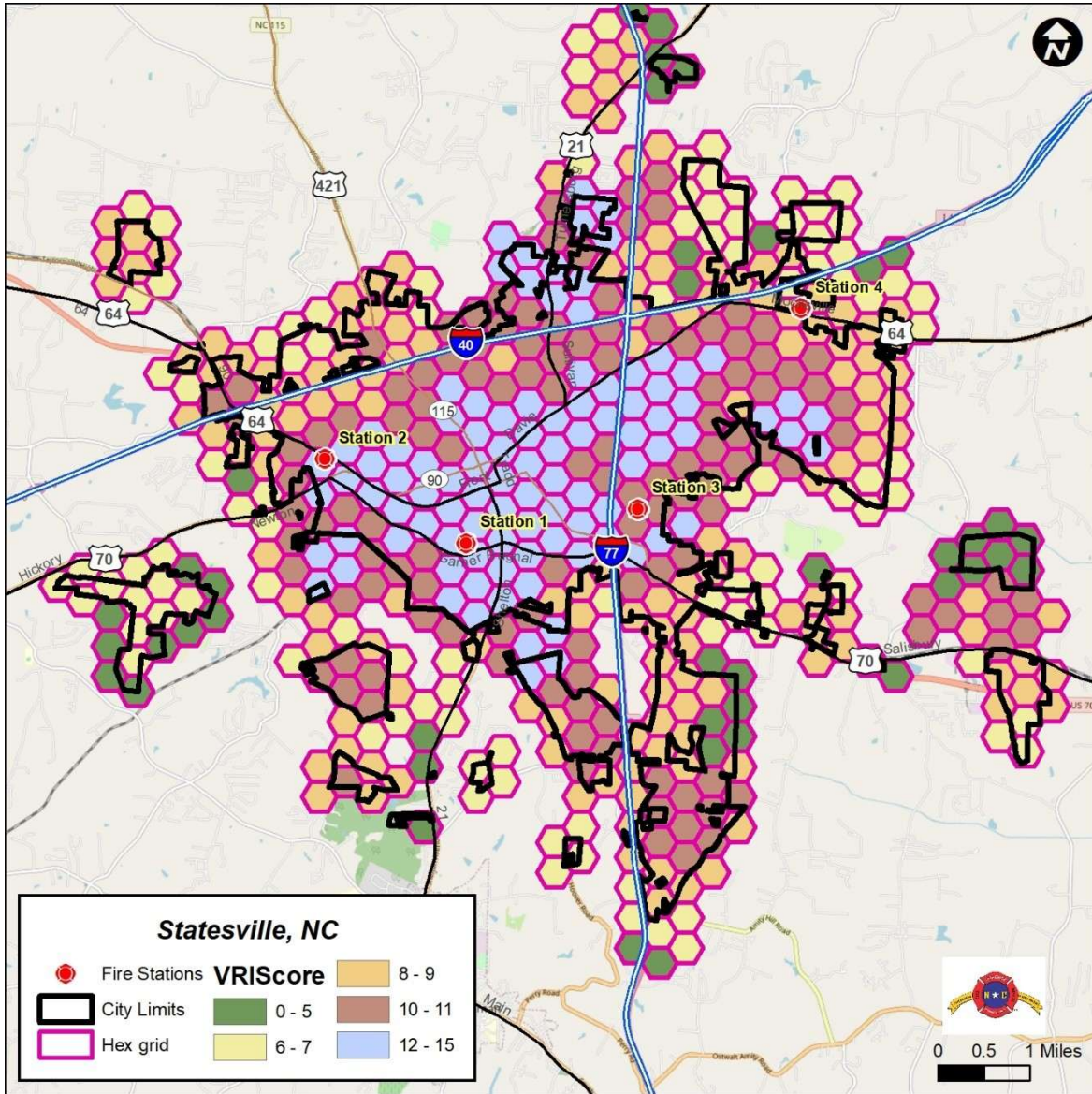
To measure the coverage adequacy by the fire station’s travel time extents, the elemental aspects of future population, future land use risk, and future demand for services are combined after equalizing each aspect into five sets of data from least to most (1-5). A 1/2-mile hexagonal grid was digitally constructed and overlaid atop the fire service area. The combined elemental scores were applied to the hexagonal areas to create a Vulnerability Risk Index (VRI). The lowest score would be a 3, while the highest score possible would be a 15.

*FIGURE 10: VRI Scoring*

Population per Sqmi	Score	Zoning Risk	Score	Service Demand per Sqmi	Score	Total Score
>2911	5	Highest	5	1882-3156	5	15
1969-2910	4	High	4	1214-1881	4	12
1182-1968	3	Moderate	3	694-1213	3	9
497-1181	2	Low	2	273-693	2	6
<496	1	Lowest	1	12-272	1	3

The following map shows geographically where the scores are higher or lower.

FIGURE 11: VRI Score Map

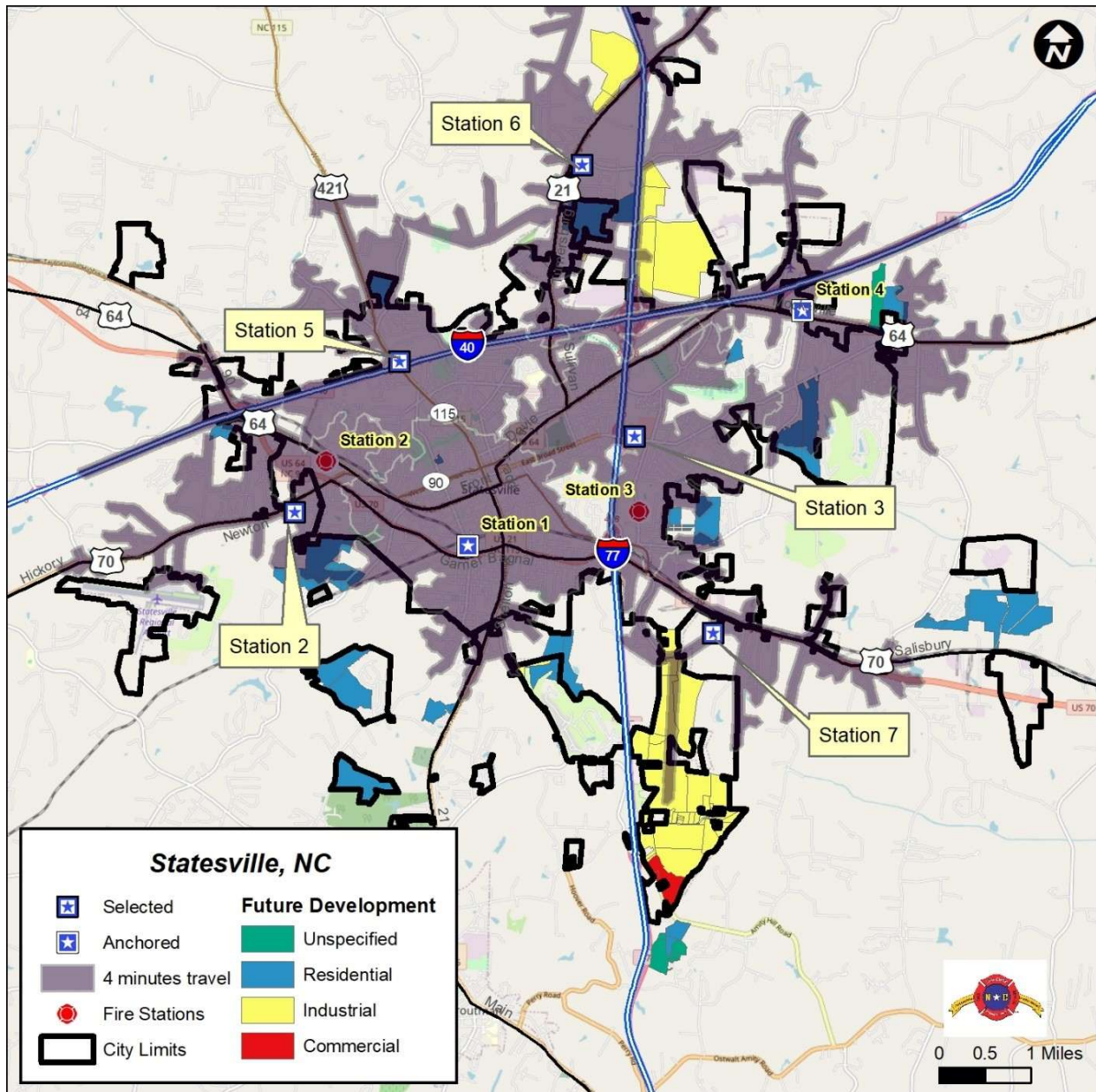


512 Hexagonal cells were retained with a total VRI score of 4,656. For the current four station locations, the coverage of the VRI score using the travel time model was 40.8% of the total. This serves as the benchmark to compare with any station renovations or relocations in this report.

### Optimal Station Locations

In the following scenario, the geographic intelligent technology attempts to optimize/improve the VRI score from the current conditions by siting best locations using the travel time model to reach the hexagons. The fire department elected to “anchor” Station 1 in place, and out of consideration for relocation as it is the newest constructed station. It also “anchored Station 4 as it too is a recent construction. The following figure shows where the locations of the fire stations ought to be to optimize the total VRI score with seven stations within a four-minute travel time.

FIGURE 12: Scenario Coverage



The area of stations selected is as follows:

\*\*Note that these station numbers are for this study only for ease of reader understanding and can be altered as seen fit by the fire department.

- Station 2: Newton Dr & Spiegel Ln. (reaches Airport)
- Station 3: E. Broad St & I-77
- Station 5: NC 115 & I-40
- Station 6: US 21 & Jane Sowers Rd
- Station 7: US 70 & Barkley Rd. East

The timing of the developments between future station 6 and future station 7 may alter the order in which these are constructed. Future Station 5 is needed imminently due to the current gap in coverage that exist with established development. Stations 2 and 3 can operate until the future locations can be secured for relocation.

## Summary

These relocations of Station 2, 3, and new stations 5, 6, and 7 increased to total VRI score coverage from 40.8% to 65.5%, an 24.7 % improvement. Each additional station represents an over 8% improvement in score coverage. The following chart demonstrate the coverage share between the current station deployment and the scenario station locations.

*FIGURE 13: Station Coverage Share Summary*

Current		
Station	Count	%Share
1	546	11.7%
2	435	9.3%
3	449	9.6%
4	471	10.1%
Scenario		
Station	Count	%Share
1	545	11.7%
2	386	8.3%
3	505	10.8%
4	439	9.4%
5	447	9.6%
6	368	7.9%
7	362	7.8%

## Recommendations:

1. Build Station 5 now to alleviate the current coverage gap in the northwest.
2. Build Station 6 and 7 in order depending upon development progress.
3. Relocate Station 2 & 3 when land secured.
4. Consider adding ladder apparatus in Station 6 and Station 7 as only the westside of the city is covered by the Station 1 Ladder ISO distance.
5. Reassess growth and development at five years or sooner as conditions dictate to assess future station location needs and changes in VRI score coverage.

## Mutual and Automatic Aid Risk Assessment

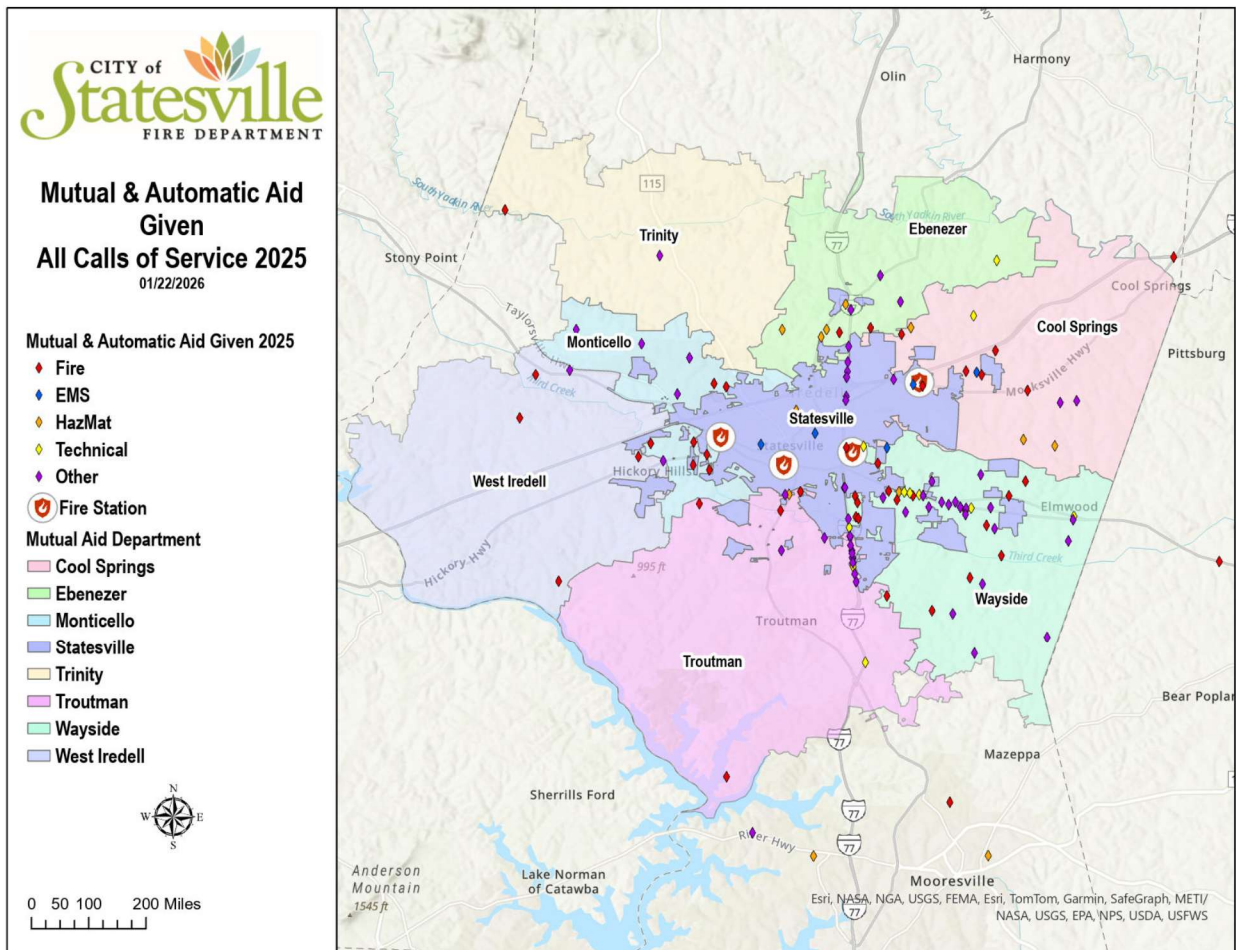
The SFD has established an external relationship that assists our agency in meeting our vision and mission statements. Automatic and mutual aid agreements have been established with other agencies within Iredell County which will provide continuity of service during large/multiple incidents. The department has six contracts for automatic aid in place that provides coverage by the closest fire station to areas near the periphery of Statesville City limits. The department also operates under the North Carolina Statewide Emergency Management Mutual Aid and Assistance Agreement which coordinates mutual aid assistance throughout the state. The mutual and automatic aid agreements allow for continuity of services in fire, medical, technical rescue, Hazmat, and aircraft incidents. The list contains local fire departments that our agency has automatic aid and mutual aid agreements with:

- Cool Springs VFD
- Ebenezer VFD
- Monticello VFD
- Troutman VFD
- Wayside VFD
- West Iredell VFD

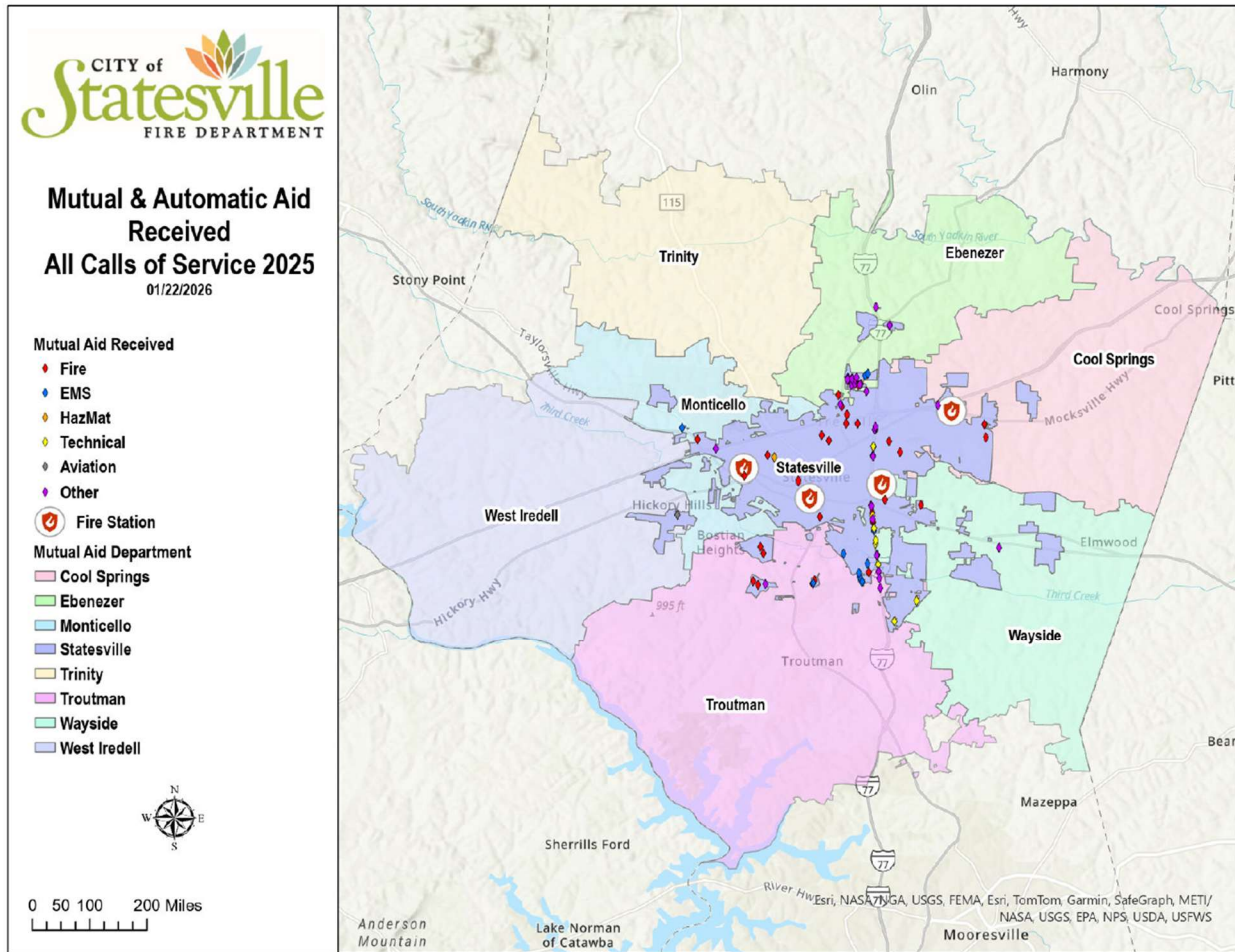
**Table 132: Mutual and Automatic Aid Given and Received 2021-2025**

Aid Type	Number of Incidents	Percent of Aid Given or Received
Mutual aid received	65	6.97%
Automatic aid received	285	30.58%
Mutual aid given	150	16.09%
Automatic aid given	432	46.35%
<b>Total</b>		<b>932</b>

**Map 47: Mutual and Automatic Aid Given to Departments**



**Map 48: Mutual and Automatic Aid Received from Departments**



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## Critical Task Analysis

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Critical task analysis is identifying the critical tasks that must be accomplished to successfully mitigate an emergency incident. The resources necessary to accomplish critical tasks are established based upon the different service levels provided by the SFD.

### Critical Task Analysis Structure Fires

The typical risk for the SFD is a one/two family residential structure with less than 1800 square feet of living space. The department has adequate resources and staffing to deal with these emergencies the majority of the time. A task analysis of the typical hazards indicates the following as critical tasks for the effective response force.

**Fire Attack** – Usually a 1 3/4” hose line used for offensive/interior extinguishment of the fire. Should conditions necessitate, a defensive/exterior extinguishment would be accomplished using a 2 1/2” hose line or master stream appliance. A back-up line, of appropriate size, will also be deployed by the fire attack group for the protection of personnel on the primary attack line should an emergency condition occur.

**Search and Rescue** – The checking of the interior of a structure for anyone who may be trapped or remain in such structure in the event of an emergency or fire; obtain an “All Clear”.

**Ventilation** – Opening of a structure to remove smoke or other toxic gases so as to reduce the danger to life and/or damage to property and to facilitate firefighting operations. Ventilation can be natural, positive pressure ventilation (PPV), or by smoke ejector. At most incidents, the third-in engine is assigned this task. Another duty of this crew is to turn off utilities, which include water, gas, or electricity.

**Water Supply** – The available water used for a fire attack. This water can be a positive source (hydrant), static source (creek, river, drop tank, or lake), or tanker apparatus. In the typical scenario, the water source is established quickly by the first-arriving or second-arriving unit. Personnel accomplishing this task can then be reassigned to another duty. Each apparatus is assigned a Lieutenant. This individual is responsible for the operation of the apparatus whether it be a pumper or aerial ladder.

**Salvage** – Actions related to the protection and preserving of property from the effects of fire and firefighting operation. These actions include the removal of water and covering merchandise or furniture with tarps.

**Incident Command** – Individual ultimately responsible for incident and control activities and establishing an effective emergency scene management structure. The incident commander is responsible for the overall safety of units working at the scene, the accountability of firefighters in the hazard zones, and ensuring that the fire is properly investigated.

**Safety** – Individual assigned to monitor all aspects of safety in accordance with SFD standard operating guidelines. On the typical event, the driver of the third in engine performs this task. A policy for personnel accountability establishes responsible parties at various levels of operations.

**Rapid Intervention Team** – A dedicated company, positioned outside the fire area, that is available for immediate deployment in the fire area for the purpose of rescuing firefighters in the case that they may become trapped, lost, or in distress. This company may also be tasked with softening the structure, throwing exterior ladders, and assisting with securing of utilities.

**Table 133: Critical Tasking for Structure Fires**

FIRE RESPONSE	CRITICAL TASKS	MAXIMUM HAZARD	HIGH HAZARD	MODERATE HAZARD	LOW HAZARD
1 <sup>ST</sup> ENGINE	<ul style="list-style-type: none"> <li>Establish command</li> <li>Perform size-up</li> <li>Pump operator</li> <li>Establish water supply</li> <li>Deploy attack line</li> </ul>	4	4	4	4
2 <sup>ND</sup> ENGINE	<ul style="list-style-type: none"> <li>Deploy back-up line</li> <li>Temporary RIT</li> <li>Search and Rescue</li> <li>Establish water supply if needed</li> </ul>	4	4	4	-
3 <sup>RD</sup> ENGINE	<ul style="list-style-type: none"> <li>Ventilation</li> <li>Salvage / Overhaul</li> <li>Provide Safety Officer</li> </ul>	4	4	4	-
4 <sup>TH</sup> ENGINE (WORKING FIRE)	<ul style="list-style-type: none"> <li>Assume RIT</li> <li>Secure utilities</li> <li>Soften structure</li> <li>Air monitoring</li> </ul>	4	4	-	-
5 <sup>TH</sup> ENGINE (WORKING FIRE)	<ul style="list-style-type: none"> <li>Mutual-Aid</li> <li>Manpower</li> </ul>	3	-	-	-



FIRE RESPONSE	CRITICAL TASKS	MAXIMUM HAZARD	HIGH HAZARD	MODERATE HAZARD	LOW HAZARD
6 <sup>TH</sup> ENGINE (WORKING FIRE)	<ul style="list-style-type: none"> <li>Mutual-Aid</li> <li>Manpower</li> </ul>	3	-	-	-
1 <sup>ST</sup> LADDER	<ul style="list-style-type: none"> <li>Ventilation</li> <li>Forcible entry</li> </ul>	4	4	4	-
2 <sup>ND</sup> LADDER (WORKING FIRE)	<ul style="list-style-type: none"> <li>Mutual-Aid</li> <li>Second Aerial Device</li> <li>Elevated Master stream</li> </ul>	3	-	-	-
1 <sup>ST</sup> CHIEF	<ul style="list-style-type: none"> <li>Incident Command</li> </ul>	1	1	1	-
2 <sup>ND</sup> CHIEF (WORKING FIRE)	<ul style="list-style-type: none"> <li>Accountability</li> <li>Division Operations</li> <li>Rehab</li> </ul>	1	1	-	-
3 <sup>RD</sup> CHIEF (WORKING FIRE)	<ul style="list-style-type: none"> <li>Safety Officer</li> </ul>	1	-	-	-
<b>TOTAL</b>		<b>31</b>	<b>21</b>	<b>17</b>	<b>4</b>

## Critical Task Analysis EMS

The SFD responds in conjunction with Iredell County EMS and Iredell Rescue Squad to provide basic and advanced life support services. Tasks performed by SFD personnel are done under the direction of Iredell County Medical Protocols. The typical task performed by SFD companies on EMS scenes is performing initial assessment/treatment and CPR efforts. Patient care is transferred to Iredell County EMS upon arrival and continued assistance is provided as needed. Engine company personnel may be asked to accompany paramedics to the hospital by assisting the paramedic or driving the ambulance.

**Table 134: Critical Tasking for EMS**

EMS RESPONSE	CRITICAL TASKS	HIGH HAZARD	MODERATE HAZARD	LOW HAZARD
1 <sup>ST</sup> ENGINE	<ul style="list-style-type: none"> <li>• Patient assessment</li> <li>• Initial treatment</li> <li>• Airway management</li> <li>• CPR</li> </ul>	4	4	2
2 <sup>ND</sup> ENGINE	<ul style="list-style-type: none"> <li>• Mass causality treatment</li> </ul>	4	-	-
CHIEF	<ul style="list-style-type: none"> <li>• Incident/Unified Command</li> </ul>	1	-	-
<b>TOTAL</b>		<b>9</b>	<b>4</b>	<b>2</b>

## **Critical Task Analysis Hazardous Materials**

The SFD provides a FEMA Type III hazardous materials response to the City of Statesville and surrounding jurisdictions. In the event of a hazardous material (HazMat) incident in the City of Statesville assistance from Mooresville Fire Department and the NC Regional Response Team (RRT-7) located in the Charlotte Fire Department can be requested through local Emergency Management. The SFD has developed and implemented to handle anticipated Hazardous Material operations prior to the commencement of emergency response operations. Hazardous Materials emergency operations are divided into three incident levels based on the degree of hazard, required skills and duties of the responders, needed resources, and the emergency conditions of the incident (Level I, II, & III). A task analysis of the typical hazards indicates the following as critical tasks for the effective response force.

### **HazMat Level I Incidents**

The SFD's emergency response and operations at a Level I incident will utilize the first due fire suppression companies. All SFD fire suppression personnel are trained at the minimum to the First Responder Operations level as defined by OSHA 29 CFR 1910.120 (q) (6) (vi) and EPA 40 CFR 311. In addition, this response level closely parallels recommended response standards outlined by NFPA 470. First Responders at the Operations level are individuals who respond to releases or potential releases of hazardous substances as part of the initial response to the site for the purpose of protecting persons, property, or the environment from the effects of the release. They are trained to respond primarily in a defensive fashion, to control the release from a safe distance with no intentional contact to the material, keep it from spreading, and prevent exposures. Offensive operations are permitted on hydrocarbon fuel tank leaks for the purpose of stopping the release of hydrocarbon fuels used to propel the vehicle for highway, industrial, agricultural and construction use. The SFD provides splash protection garments to all engine companies to minimize hydrocarbon fuel exposure to personnel and turn out gear. The SFD also provides all Engine companies with containment pools to be used for hydrocarbon fuel leaks.

### **HazMat Level II Incidents**

Level II incidents are limited emergency conditions which pose a potential threat to life and the environment. This is a more serious situation than a Level I incident due to a greater quantity or higher degree of hazardous materials involved. Normally a limited evacuation will be necessary. Level II incidents will require a Technician Level Response with specialized chemical protective clothing and specialized control equipment for control and/or stabilization of the incident.

The SFD has set parameters for emergency response and operations at Level II incidents by utilizing the SFD Hazardous Materials Response Team, and the Mooresville Fire/Rescue (MFR) Hazardous Materials Team based on the severity of the incident.

A Hazardous Materials Response Team is defined by OSHA 29 CFR 1910.120 as an organized group of employees, designated and expected to perform work to handle and control actual or potential leaks or spills of hazardous substances requiring possible close approach to the substance. All SFD and MFR HazMat team members are trained to or are receiving training at the Hazardous Materials Technician Level as defined by OSHA 29 CFR 1910.120 (q)(6)(iii) and EPA 40 CFR 311. In addition, this response level closely parallels the recommended response standards outlined in NFPA 470. Hazardous Materials Technicians are individuals who respond to releases or potential releases for the purpose of stopping the release, control or stabilization of the incident. They assume a more aggressive role than the first responder at the operations plus level in that they will approach the point of release in order to plug, patch or otherwise stop the release of a hazardous substance.

### **HazMat Level III Incidents**

Level III incidents are large-scale emergency conditions which are beyond the controlling capabilities of local resources. Level III incidents pose a major threat to life, property, and /or the environment. Level III incidents may include large quantities of extremely hazardous, toxic substances released with the potential for massive fire, explosions, and/or severe environmental and property damage over a large area. These incidents may require a large-scale evacuation and a greater commitment of equipment and personnel.

Under SARA Title III Section 303 “Emergency Planning and Community Right to Know Act,” Iredell County has developed an Emergency Response Plan to handle an incident of this magnitude. Under this plan the SFD along with assistance by the MFD will continue to be the first line of defense in a HazMat emergency and will play a critical role in implementing the Iredell County Emergency Response Plan for Level III incidents. The IC with input from the Iredell County Emergency Management Director will determine the need for activating the Iredell County Emergency Response Plan and the Iredell County Emergency Operations Center (EOC). Activation of the EOC will help provide the transition of administrative functions between the IC and the EOC staff. The EOC will also provide a better control and coordination between other agencies and the emergency scene. When local resources are depleted the EOC would request additional resources from State or Federal agencies such as HazMat Regional Response Teams, SERC, NRC, FEMA, EPA, State and Local DOT, private contractors, etc.

## **HazMat Critical Tasking**

Critical tasks for hazmat incidents fall into four general responsibilities as defined by the National Fire Academy and the National Fire Protection Association.

### **1. Recognition and Identification**

- Survey the incident to identify the containers and materials involved, whether hazardous materials have been released, and the surrounding conditions.
- Collect hazard and response information (the SFD supplies a North American ERG and the NFPA Fire Protection Guide to Hazardous Materials to all suppression companies).
- Analyze the magnitude of the incident and predict the likely behavior of the material.
- Estimate the potential harm to life, property, and the environment.

### **2. Notification**

- Notify proper agencies as required by the department's HazMat General Operating Guideline (i.e. Iredell County Environmental Health, Iredell County, Emergency Management, etc.)
- Evaluate incident and provide updates (i.e. critical emergency conditions).

### **3. Isolation**

- Set safety perimeters, establish control zones, and determine isolation and evacuation distances utilizing the North American Emergency Response Guidebook.
- Establish scene control and deny entry within the endangered area.
- Identify and initiate evacuation and/or in place protection.

### **4. Protection**

- Initiate the ICS. On Level I incidents the Incident Commander (Company Officer) may also serve as the Incident Safety Officer.
- Determine appropriate personnel protective equipment.
- Vapor suppression and dispersion.
- Elimination of ignition sources.
- Provide water supply and/or exposure lines if needed.
- Diking or diverting to keep product in a confined area.
- Product control by remote or emergency shut-off.
- Perform emergency decontamination procedures.

**Table 137: Critical Tasking for HazMat**

HAZMAT RESPONSE	CRITICAL TASKS	MAXIMUM HAZARD (LEVEL III)	HIGH HAZARD (LEVEL II & III)	MODERATE HAZARD (LEVEL I & II)	LOW HAZARD
1 <sup>ST</sup> ENGINE	<ul style="list-style-type: none"> <li>Establish command</li> <li>Perform size-up/Identify</li> <li>Isolate/Deny Entry</li> <li>Emergency decontamination</li> </ul>	4	4	4	4
ENGINE 4/HAZMAT 1	<ul style="list-style-type: none"> <li>Research</li> <li>Hazard mitigation</li> <li>Entry Team</li> <li>ICS Positions</li> </ul>	4	4	4	-
ENGINE 3	<ul style="list-style-type: none"> <li>Entry Team/Backup Team</li> <li>ICS Positions</li> <li>Assign as needed</li> </ul>	4	4	-	-
MOORESVILLE	<ul style="list-style-type: none"> <li>Assign as needed</li> </ul>	4	-	-	-
RRT/OTHER SPECIALIZED RESPONSE	<ul style="list-style-type: none"> <li>Assign as needed</li> </ul>	9	-	-	-
CHIEF	<ul style="list-style-type: none"> <li>Incident/Unified Command</li> </ul>	1	1	1	-
2 <sup>ND</sup> CHIEF	<ul style="list-style-type: none"> <li>Safety Officer / Unified Command</li> </ul>	1	1	-	-
3 <sup>RD</sup> CHIEF	<ul style="list-style-type: none"> <li>Assist with Unified Command</li> </ul>	1	-	-	-
<b>TOTAL</b>		<b>28</b>	<b>14</b>	<b>9</b>	<b>4</b>

### Critical Task Analysis Technical Rescue

The SFD provides technical rescue response on vehicle/machinery extrications, trench/structural collapse, high-angle, Swiftwater, and confined space emergencies. Iredell Rescue Squad, Troutman Fire/Rescue, and Mooresville Fire/Rescue respond under mutual and automatic aid agreements on heavy vehicle extrications, trench, structural collapse, and Swiftwater emergencies. The SFD primarily handles vehicle extrication, high-angle and confined space emergencies within the city limits. A task analysis of the typical hazards indicates the following as critical tasks for the effective response force.

**Table 135: Critical Tasking for Technical Rescue**

TECHNICAL RESPONSE	CRITICAL TASKS	MAXIMUM HAZARD	HIGH HAZARD	MODERATE HAZARD	LOW HAZARD
1 <sup>ST</sup> ENGINE	<ul style="list-style-type: none"> <li>Establish Command</li> <li>Perform size-up</li> <li>Hazard mitigation/rescue</li> </ul>	4	4	4	4
2 <sup>ND</sup> ENGINE/LADDER	<ul style="list-style-type: none"> <li>Hazard mitigation/rescue</li> <li>Assigned as needed</li> </ul>	4	4	-	-
1 <sup>ST</sup> LADDER	<ul style="list-style-type: none"> <li>Hazard Mitigation/rescue</li> <li>Assigned as needed</li> <li>Safety Officer</li> </ul>	4	-	-	-
RESCUE COMPANY (MUTUAL AID)	<ul style="list-style-type: none"> <li>Specialized Equipment and personnel</li> </ul>	4	-	-	-
CHIEF	<ul style="list-style-type: none"> <li>Incident/Unified Command</li> </ul>	1	1	1	-
2 <sup>ND</sup> CHIEF	<ul style="list-style-type: none"> <li>Unified Command</li> <li>Safety Officer</li> </ul>	1	-	-	-
<b>TOTAL</b>		<b>18</b>	<b>9</b>	<b>5</b>	<b>4</b>

## **Critical Task Analysis ARFF**

The SFD is responsible for incident coverage at the Statesville Regional Airport. The typical hazards associated with the Statesville Regional Airport are the same which would be associated with any airport. These hazards include landing undershoots/overshoots, takeoff overruns, accidents which may occur to aircraft while taxiing, and aircraft crashes. A task analysis of the typical hazards indicates the following as critical tasks for the effective response force.

**Fire Suppression / Rescue** – The initial units responding to a low impact crash will clear and maintain a rescue path to the aircraft. If the aircraft is involved in fire, the attack crew will gain and maintain control of escape exits. This will be accomplished with the use of 1 ¾” attack lines, water supply, and Aqueous Film Forming Foam. Rescue is an ongoing activity within the crash site until all passengers and crew are accounted for.

**Water / Foam Supply** – The water supply for the Statesville Regional Airport is maintained by the City of Statesville. This water supply can be easily accessed from the airport property. The water supply can also be relay pumped and transported via tanker truck if needed. Each initial responding unit will carry at least a twenty-gallon supply of Aqueous Film Forming Foam. ARFF contains ninety-six gallons of foam. An additional eighty-five gallons of foam is stored at Fire Station 1. Other foam resources can be obtained through mutual aid contacts.

**Safety** – Individual assigned to monitor all aspects of safety in accordance with SFD operational guidelines. On the typical event, the driver of the third in engine performs this task. A policy for personnel accountability establishes responsible parties at various levels of operations.

**Incident Command** – The incident commander is responsible for the overall incident, management structure / task, and safety / accountability of units working at the scene.

**Table 136: Critical Tasking for ARFF**

ARFF RESPONSE	CRITICAL TASKS	HIGH HAZARD (ALERT 3)	MODERATE HAZARD (ALERT 2)	LOW HAZARD (ALERT 1)
1 <sup>ST</sup> ENGINE	<ul style="list-style-type: none"> <li>Establish command</li> <li>Perform size-up</li> <li>Hazard mitigation/rescue</li> <li>Patient care/triage</li> </ul>	3	3	3
ARFF 1	<ul style="list-style-type: none"> <li>Firefighting Operations</li> </ul>	1	1	1
2 <sup>ND</sup> ENGINE	<ul style="list-style-type: none"> <li>Hazard mitigation/rescue</li> <li>Water supply</li> <li>Assigned as needed</li> </ul>	4	4	
ENGINE 4/ HAZMAT 1	<ul style="list-style-type: none"> <li>Hazard Material containment/control</li> </ul>	4	4	
3 <sup>RD</sup> ENGINE	<ul style="list-style-type: none"> <li>Patient care/triage</li> <li>Assigned as needed</li> </ul>	4		
CHIEF	<ul style="list-style-type: none"> <li>Incident Command</li> </ul>	1	1	
2 <sup>ND</sup> CHIEF	<ul style="list-style-type: none"> <li>Unified Command</li> <li>Safety Officer</li> </ul>	1		
<b>TOTAL</b>		<b>18</b>	<b>13</b>	<b>4</b>

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## **Performance Objectives and Performance Measurements**

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The SFD plans to limit the risks to our community and citizens from fire, injury, death, and property damage associated from fires, accidents, serious illness, explosions, hazardous materials, and other natural and manmade emergencies through prevention, education, and mitigation.

Performance level objectives follow to show the commitment of the SFD in meeting pre-established objectives regarding and effective response to five key call type classifications: Fire, Medical, Hazardous Materials, Technical Rescue, and Aircraft Response Firefighting (ARFF). Each risk has been thoroughly analyzed based on historical data to determine the future likelihood of the incident occurring again. Specific performance measures have been established based on analysis and the mission/vision of the SFD.

### **Benchmark Objectives and Baseline Performances for Fire Suppression**

#### **Low Fire Response Risk Benchmarks**

For 90 percent of low risk fire suppression incidents, the total response time for the arrival of the first due unit, staffed with 3 firefighters and 1 officer, shall be: 06 minutes and 20 seconds in urban geo-proximity zones: and 07 minutes and 50 seconds in rural geo-proximity zones. The first due unit shall be capable of: providing 750 gallons of water and 1,250 gallons per minute (gpm) pumping capacity; initiating command; requesting additional resources; establishing and advancing an attack line flowing a minimum of 150 gpm; establishing an uninterrupted water supply; containing the fire; rescuing at-risk victims; and performing salvage operations. These operations shall be done in accordance with departmental standard operating procedures while providing for the safety of responders and the general public.

For 90 percent of low fire suppression incidents, the total response time for the arrival of the ERF, staffed with 4 firefighters and officers, shall be: 06 minutes and 20 seconds in urban geo-proximity zones: and 07 minutes and 50 seconds in rural geo-proximity zones. The ERF is capable of: establishing command; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control; complying with the OSHA requirements of two in and two out; completing forcible entry; searching and rescuing at-risk victims; ventilating the structure; controlling utilities; performing salvage and overhaul. The ERF for moderate, high, and maximum risk fires is also capable of placing elevated streams into service from aerial ladders. These operations are done in accordance with department standard operating procedures while providing for the safety of responders and the general public.

**Low Fire Response Risk Baseline 2023-2027**

For 90 percent of low risk fire suppression incidents, the total response time for the arrival of the first due unit, staffed with 3 firefighters and 1 officer is 07 minutes and 58 seconds in urban geo-proximity zones: and 09 minutes and 41 seconds in rural geo-proximity zones. The first due unit shall be capable of: providing 750 gallons of water and 1,250 gallons per minute (gpm) pumping capacity; initiating command; requesting additional resources; establishing and advancing an attack line flowing a minimum of 150 gpm; establishing an uninterrupted water supply; containing the fire; rescuing at-risk victims; and performing salvage operations. These operations shall be done in accordance with departmental standard operating procedures while providing for the safety of responders and the general public.

For 90 percent of low fire suppression incidents, the total response time for the arrival of the ERF, staffed with 4 firefighters and officers is 07 minutes and 58 seconds in urban geo-proximity zones: and 09 minutes and 41 seconds in rural geo-proximity zones. The ERF is capable of: establishing command; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control; complying with the OSHA requirements of two in and two out; completing forcible entry; searching and rescuing at-risk victims; ventilating the structure; controlling utilities; performing salvage and overhaul. The ERF for moderate, high, and maximum risk fires is also capable of placing elevated streams into service from aerial ladders. These operations are done in accordance with department standard operating procedures while providing for the safety of responders and the general public.

**Table 137: Low Fire Suppression Risk Benchmark Objectives**

<b>Low Fire Suppression Risk Benchmark Objectives</b>		
	<b>Urban</b>	<b>Rural</b>
<b>Alarm Handling</b>	01:00	01:00
<b>Turnout Time 1st Unit</b>	01:20	01:20
<b>Travel Time - 1st Unit</b>	04:00	05:30
<b>Travel Time – ERF</b>	04:00	05:30
<b>Response Time 1st Unit on Scene</b>	05:20	06:50
<b>Response Time ERF</b>	05:20	06:50
<b>Total Response Time 1st Unit on Scene</b>	06:20	07:50
<b>Total Response Time ERF</b>	06:20	07:50

**Table 138: 90<sup>th</sup> Percentile Baseline Performance Low Fire Suppression**

(Low Risk) Fire Suppression - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2023-2027	2027	2026	2025	2024	2023	
<b>Alarm Handling</b>	Pick-up to Dispatch	Urban	6:20	1:49			2:19	1:53	1:26	
		Rural		1:22			1:41	1:54	1:30	
<b>Turnout Time</b>	Turnout Time 1st Unit	Urban		2:19			2:16	2:01	2:13	
		Rural		2:17			2:14	1:56	2:06	
<b>Travel Time</b>	Travel Time 1st Unit Distribution	Urban		5:16			5:14	3:55	4:12	
		Rural		7:05			7:31	7:06	5:35	
	Travel Time ERF Concentration	Urban		5:16			5:14	5:14	4:32	
		Rural		7:05			7:31	7:33	6:16	
<b>Total Response Time</b>	Total Response Time 1st Unit on Scene Distribution	Urban		6:20	7:58			7:59	7:18	6:44
					n=734	n=	n=	n=181	n=34	n=35
	Rural	9:41					10:00	10:14	8:35	
					n=1,197	n=	n=	n=445	n=56	n=56
	Total Response Time ERF Concentration	Urban	6:20		7:58			7:59	7:36	6:57
					n=734	n=	n=	n=181	n=34	n=33
Rural	9:41				10:00	10:45	8:49			
		n=1,197		n=	n=	n=445	n=53	n=55		

ND=No data available

The City of Statesville Fire Department adopted the recommendation from the November 2023 site visit, to establish total response time standards within rural geo-proximity zones. The Department went back and applied this recommendation to 2023 data and will continue to use this methodology moving forward.

### Moderate Fire Response Risk Benchmarks

For 90 percent of moderate risk fire suppression incidents, the total response time for the arrival of the first due unit, staffed with 3 firefighters and 1 officer, shall be: 06 minutes and 20 seconds in urban geo-proximity zones: and 07 minutes and 50 seconds in rural geo-proximity zones. The first due unit shall be capable of: providing 750 gallons of water and 1,250 gallons per minute (gpm) pumping capacity; initiating command; requesting additional resources; establishing and advancing an attack line flowing a minimum of 150 gpm; establishing an uninterrupted water supply; containing the fire; rescuing at-risk victims; and performing salvage operations. These operations shall be done in accordance with departmental standard operating procedures while providing for the safety of responders and the general public.

For 90 percent of moderate fire suppression incidents, the total response time for the arrival of the ERF, staffed with 17 firefighters and officers, shall be: 10 minutes and 20 seconds in urban geo-proximity zones: and 11 minutes and 50 seconds in rural geo-proximity zones. The ERF is capable of: establishing command; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control; complying with the OSHA requirements of two in and two out; completing forcible entry; searching and rescuing at-risk victims; ventilating the structure; controlling utilities; performing salvage and overhaul. The ERF for moderate, high, and maximum risk fires is also capable of placing elevated streams into service from aerial ladders. These operations are done in accordance with department standard operating procedures while providing for the safety of responders and the general public.

#### Moderate Fire Response Risk Baseline 2023-2027

For 90 percent of moderate risk fire suppression incidents, the total response time for the arrival of the first due unit, staffed with 3 firefighters and 1 officer is 07 minutes and 10 seconds in urban geo-proximity zones: and 09 minutes and 01 seconds in rural geo-proximity zones. The first due unit shall be capable of: providing 750 gallons of water and 1,250 gallons per minute (gpm) pumping capacity; initiating command; requesting additional resources; establishing and advancing an attack line flowing a minimum of 150 gpm; establishing an uninterrupted water supply; containing the fire; rescuing at-risk victims; and performing salvage operations. These operations shall be done in accordance with departmental standard operating procedures while providing for the safety of responders and the general public.

For 90 percent of moderate fire suppression incidents, the total response time for the arrival of the ERF, staffed with 17 firefighters and officers, is 09 minutes and 36 seconds in urban geo-proximity zones: and 13 minutes and 32 seconds in rural geo-proximity zones. The ERF is capable of: establishing command; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control; complying with the OSHA requirements of two in and two out; completing forcible entry; searching and rescuing at-risk victims; ventilating the structure; controlling utilities; performing salvage and overhaul. The ERF for moderate, high, and maximum risk fires is also capable of placing elevated streams into service from aerial ladders. These operations are done in accordance with department standard operating procedures while providing for the safety of responders and the general public.



**Table 139: Moderate Fire Suppression Risk Benchmark Objectives**

Moderate Fire Suppression Risk Benchmark Objectives		
	Urban	Rural
<b>Alarm Handling</b>	01:00	01:00
<b>Turnout Time 1st Unit</b>	01:20	01:20
<b>Travel Time - 1st Unit</b>	04:00	05:30
<b>Travel Time – ERF</b>	08:00	09:30
<b>Response Time 1st Unit on Scene</b>	05:20	06:50
<b>Response Time ERF</b>	09:20	10:50
<b>Total Response Time 1st Unit on Scene</b>	06:20	07:50
<b>Total Response Time ERF</b>	10:20	11:50

**Table 140: 90<sup>th</sup> Percentile Baseline Performance Moderate Fire Suppression**

(Moderate Risk) Fire Suppression - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2023-2027	2027	2026	2025	2024	2023	
<b>Alarm Handling</b>	Pick-up to Dispatch	Urban	[Redacted]	1:01			0:54	0:43	1:09	
		Rural		1:27			2:25	0:59	0:32	
<b>Turnout Time</b>	Turnout Time 1st Unit	Urban		2:10			2:18	2:25	1:59	
		Rural		2:27			2:27	2:29	1:42	
<b>Travel Time</b>	Travel Time 1st Unit Distribution	Urban		4:56			3:03	5:26	4:31	
		Rural		5:11			4:26	6:33	2:54	
	Travel Time ERF Concentration	Urban		7:43			6:50	7:13	10:25	
		Rural		11:11			9:49	15:00	5:05	
<b>Total Response Time</b>	Total Response Time 1st Unit on Scene Distribution	Urban		6:20	7:10			7:16	7:50	5:20
					n=26	n=	n=	n=7	n=9	n=9
		Rural		7:50	9:01			7:12	9:48	5:01
					n=22	n=	n=	n=6	n=14	n=3
	Total Response Time ERF Concentration	Urban	10:20	9:36			8:55	8:42	12:16	
				n=15	n=	n=	n=3	n=6	n=7	
	Rural	11:50	13:32			12:35	15:57	7:02		
			n=14	n=	n=	n=4	n=9	n=1		

ND=No data available

The City of Statesville Fire Department adopted the recommendation from the November 2023 site visit, to establish total response time standards within rural geo-proximity zones. The Department went back and applied this recommendation to 2023 data and will continue to use this methodology moving forward.

#### High Fire Response Risk Benchmarks

For 90 percent of high risk fire suppression incidents, the total response time for the arrival of the first due unit, staffed with 3 firefighters and 1 officer, shall be: 06 minutes and 20 seconds in urban geo-proximity zones: and 07 minutes and 50 seconds in rural geo-proximity zones. The first due unit shall be capable of: providing 750 gallons of water and 1,250 gallons per minute (gpm) pumping capacity; initiating command; requesting additional resources; establishing and advancing an attack line flowing a minimum of 150 gpm; establishing an uninterrupted water supply; containing the fire; rescuing at-risk victims; and performing salvage operations. These operations shall be done in accordance with departmental standard operating procedures while providing for the safety of responders and the general public.

For 90 percent of high fire suppression incidents, the total response time for the arrival of the ERF, staffed with 21 firefighters and officers, shall be: 11 minutes and 00 seconds in urban geo-proximity zones: and 12 minutes and 30 seconds in rural geo-proximity zones. The ERF is capable of: establishing command; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control; complying with the OSHA requirements of two in and two out; completing forcible entry; searching and rescuing at-risk victims; ventilating the structure; controlling utilities; performing salvage and overhaul. The ERF for moderate, high, and maximum risk fires is also capable of placing elevated streams into service from aerial ladders. These operations are done in accordance with department standard operating procedures while providing for the safety of responders and the general public.

#### High Fire Response Risk Baseline 2023-2027

For 90 percent of high risk fire suppression incidents, the total response time for the arrival of the first due unit, staffed with 3 firefighters and 1 officer is 07 minutes and 14 seconds in urban geo-proximity zones: and 06 minutes and 39 seconds in rural geo-proximity zones. The first due unit shall be capable of: providing 750 gallons of water and 1,250 gallons per minute (gpm) pumping capacity; initiating command; requesting additional resources; establishing and advancing an attack line flowing a minimum of 150 gpm; establishing an uninterrupted water supply; containing the fire; rescuing at-risk victims; and performing salvage operations. These operations shall be done in accordance with departmental standard operating procedures while providing for the safety of responders and the general public.

For 90 percent of high fire suppression incidents, the total response time for the arrival of the ERF, staffed with 21 firefighters and officers is 12 minutes and 54 seconds in urban geo-proximity zones: and 20 minutes and 49 seconds in rural geo-proximity zones. The ERF is capable of: establishing command; providing an uninterrupted water supply; advancing an attack

line and a backup line for fire control; complying with the OSHA requirements of two in and two out; completing forcible entry; searching and rescuing at-risk victims; ventilating the structure; controlling utilities; performing salvage and overhaul. The ERF for moderate, high, and maximum risk fires is also capable of placing elevated streams into service from aerial ladders. These operations are done in accordance with department standard operating procedures while providing for the safety of responders and the general public.

**Table 141: High Fire Suppression Risk Benchmark Objectives**

<b>High Fire Suppression Risk Benchmark Objectives</b>		
	<b>Urban</b>	<b>Rural</b>
<b>Alarm Handling</b>	01:00	01:00
<b>Turnout Time 1st Unit</b>	01:20	01:20
<b>Travel Time - 1st Unit</b>	04:00	05:30
<b>Travel Time - ERF</b>	08:40	10:10
<b>Response Time 1st Unit on Scene</b>	05:20	07:30
<b>Response Time ERF</b>	10:00	11:30
<b>Total Response Time 1st Unit on Scene</b>	06:20	07:50
<b>Total Response Time ERF</b>	11:00	12:30

**Table 142: 90<sup>th</sup> Percentile Baseline Performance High Fire Suppression**

(High Risk) Fire Suppression - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2023-2027	2027	2026	2025	2024	2023	
<b>Alarm Handling</b>	Pick-up to Dispatch	Urban	[Redacted]	2:45			0:03	2:45	0:07	
		Rural		1:11			N/A	1:11	N/A	
<b>Turnout Time</b>	Turnout Time 1st Unit	Urban		3:30			ND	1:32	3:30	
		Rural		1:28			N/A	1:28	N/A	
<b>Travel Time</b>	Travel Time 1st Unit Distribution	Urban		2:27			ND	2:27	1:08	
		Rural		4:48			N/A	4:48	N/A	
	Travel Time ERF Concentration	Urban		8:01			N/A	8:01	N/A	
		Rural		19:19			N/A	19:19	N/A	
<b>Total Response Time</b>	Total Response Time 1st Unit on Scene Distribution	Urban		6:20	7:14			2:57	7:14	4:48
					n=4	n=	n=	n=1	n=2	n=1
	Rural	7:50		6:39			N/A	6:39	N/A	
				n=2	n=	n=	n=0	n=2	n=0	
	Total Response Time ERF Concentration	Urban	11:00	12:54			N/A	12:54	N/A	
				n=2	n=	n=	n=0	n=2	n=0	
Rural	12:30	20:49			N/A	20:49	N/A			
		n=2	n=	n=	n=0	n=2	n=0			

ND=No data available The City of Statesville Fire Department adopted the recommendation from the November 2023 site visit, to establish total response time standards within rural geo-proximity zones. The Department went back and applied this recommendation to 2023 data and will continue to use this methodology moving forward.

**Maximum Fire Response Risk Benchmarks**

For 90 percent of maximum risk fire suppression incidents, the total response time for the arrival of the first due unit, staffed with 3 firefighters and 1 officer, shall be: 06 minutes and 20 seconds in urban geo-proximity zones: and 07 minutes and 50 seconds in rural geo-proximity zones. The first due unit shall be capable of: providing 750 gallons of water and 1,250 gallons per minute (gpm) pumping capacity; initiating command; requesting additional resources; establishing and advancing an attack line flowing a minimum of 150 gpm; establishing an uninterrupted water supply; containing the fire; rescuing at-risk victims; and performing salvage operations. These operations shall be done in accordance with departmental standard operating procedures while providing for the safety of responders and the general public.

For 90 percent of maximum fire suppression incidents, the total response time for the arrival of the ERF, staffed with 31 firefighters and officers, shall be: 20 minutes and 30 seconds in urban geo-proximity zones: and 22 minutes and 00 seconds in rural geo-proximity zones. The ERF is capable of: establishing command; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control; complying with the OSHA requirements of two in and two out; completing forcible entry; searching and rescuing at-risk victims; ventilating the structure; controlling utilities; performing salvage and overhaul. The ERF for moderate, high, and maximum risk fires is also capable of placing elevated streams into service from aerial ladders. These operations are done in accordance with department standard operating procedures while providing for the safety of responders and the general public.

Maximum Fire Response Risk Baseline 2023-2027: The department did not respond to any fire Maximum risk hazards from 2023-2027.

For 90 percent of maximum risk fire suppression incidents, the total response time for the arrival of the first due unit, staffed with 3 firefighters and 1 officer is non-applicable in urban geo-proximity zones: and non-applicable in rural geo-proximity zones. The first due unit shall be capable of: providing 750 gallons of water and 1,250 gallons per minute (gpm) pumping capacity; initiating command; requesting additional resources; establishing and advancing an attack line flowing a minimum of 150 gpm; establishing an uninterrupted water supply; containing the fire; rescuing at-risk victims; and performing salvage operations. These operations shall be done in accordance with departmental standard operating procedures while providing for the safety of responders and the general public.

For 90 percent of maximum fire suppression incidents, the total response time for the arrival of the ERF, staffed with 31 firefighters and officers is non-applicable in urban geo-proximity zones: and non-applicable in rural geo-proximity zones. The ERF is capable of: establishing command; providing an uninterrupted water supply; advancing an attack line and a backup line for fire control; complying with the OSHA requirements of two in and two out; completing forcible entry; searching and rescuing at-risk victims; ventilating the structure; controlling utilities; performing salvage and overhaul. The ERF for moderate, high, and maximum risk fires is also capable of placing elevated streams into service from aerial ladders. These operations are done in accordance with department standard operating procedures while providing for the safety of responders and the general public.

**Table 143: Maximum Fire Suppression Risk Benchmark Objectives**

Maximum Fire Suppression Risk Benchmark Objectives		
	Urban	Rural
<b>Alarm Handling</b>	01:00	01:00
<b>Turnout Time 1st Unit</b>	01:20	01:20
<b>Travel Time - 1st Unit</b>	04:00	05:30
<b>Travel Time - ERF</b>	18:10	19:40
<b>Response Time 1st Unit on Scene</b>	05:20	06:50
<b>Response Time ERF</b>	19:30	21:00
<b>Total Response Time 1st Unit on Scene</b>	06:20	07:50
<b>Total Response Time ERF</b>	20:30	22:00

**Table 144: 90<sup>th</sup> Percentile Baseline Performance Maximum Fire Suppression**

(Maximum Risk) Fire Suppression - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2023-2027	2027	2026	2025	2024	2023	
<b>Alarm Handling</b>	Pick-up to Dispatch	Urban	[Redacted]	N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
<b>Turnout Time</b>	Turnout Time 1st Unit	Urban		N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
<b>Travel Time</b>	Travel Time 1st Unit <b>Distribution</b>	Urban		N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
	Travel Time ERF <b>Concentration</b>	Urban		N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
<b>Total Response Time</b>	Total Response Time 1st Unit on Scene <b>Distribution</b>	Urban		6:20	N/A			N/A	N/A	N/A
					n=0	n=	n=	n=0	n=0	n=0
		Rural		7:50	N/A			N/A	N/A	N/A
					n=0	n=	n=	n=0	n=0	n=0
	Total Response Time ERF <b>Concentration</b>	Urban		20:30	N/A			N/A	N/A	N/A
						n=0	n=	n=	n=0	n=0
Rural		22:00	N/A			N/A	N/A	N/A		
				n=0	n=	n=	n=0	n=0	n=0	

ND=No data available The City of Statesville Fire Department adopted the recommendation from the November 2023 site visit, to establish total response time standards within rural geo-proximity zones. The Department went back and applied this recommendation to 2023 data and will

Table 145: Effective Response Force Staffing Benchmarks Fire

<b>Fire Effective Response Force Staffing Benchmarks</b>	
<b>Fire - Low</b>	4
<b>Fire - Moderate</b>	17
<b>Fire - High</b>	21
<b>Fire - Maximum</b>	31

## **Benchmark Objectives and Baseline Performances for Medical**

### EMS Low Risk Benchmark:

For 90 percent of all low risk EMS responses, the total response time for the arrival of the first-due unit, staffed with 2 firefighters, shall be: 06 minutes and 20 seconds in urban geo-proximity zones and 07 minutes and 50 seconds in rural geo-proximity zones. The first-due unit shall be capable of: assessing scene safety and establishing command; sizing up the situation; conducting an initial patient assessment; obtaining vitals and patient's medical history; initiating mitigation efforts within one minute of arrival; providing first responder medical aid and assisting transport personnel with packaging the patient.

For 90 percent of all low risk EMS response incidents, the total response time for the arrival of the ERF, staffed with 2 firefighters shall be: 06 minutes and 20 seconds in urban geo-proximity zones and 07 minutes and 50 seconds in rural geo-proximity zones. The ERF shall be capable of: assessing scene safety and establishing command; sizing up the situation; conducting an initial patient assessment; obtaining vitals and patient's medical history; initiating mitigation efforts within one minute of arrival; providing first responder medical aid and assisting transport personnel with packaging the patient.

### EMS Low Risk Baseline: 2023-2027

For 90 percent of all low risk EMS responses, the total response time for the arrival of the first-due unit, staffed with 2 firefighters is: 07 minutes and 39 seconds in urban geo-proximity zones and 08 minutes and 49 seconds in rural geo-proximity zones. The first-due unit is capable of: assessing scene safety and establishing command; sizing up the situation; conducting an initial patient assessment; obtaining vitals and patient's medical history; initiating mitigation efforts within one minute of arrival; providing first responder medical aid and assisting transport personnel with packaging the patient.

For 90 percent of all low risk EMS response incidents, the total response time for the arrival of the ERF, staffed with 2 firefighters is: 07 minutes and 39 seconds in urban geo-proximity zones and 08 minutes and 49 seconds in rural geo-proximity zones. The ERF shall be capable of: assessing scene safety and establishing command; sizing up the situation; conducting an initial patient assessment; obtaining vitals and patient's medical history; initiating mitigation efforts within one minute of arrival; providing first responder medical aid and assisting transport personnel with packaging the patient.

**Table 146: Low EMS Risk Benchmark Objectives**

<b>Low EMS Risk Benchmark Objectives</b>		
	<b>Urban</b>	<b>Rural</b>
<b>Alarm Handling</b>	01:00	01:00
<b>Turnout Time 1st Unit</b>	01:20	01:20
<b>Travel Time - 1st Unit</b>	04:00	05:30
<b>Travel Time - ERF</b>	04:00	05:30
<b>Response Time 1st Unit on Scene</b>	05:20	06:50
<b>Response Time ERF</b>	05:20	06:50
<b>Total Response Time 1st Unit on Scene</b>	06:20	07:50
<b>Total Response Time ERF</b>	06:20	07:50

**Table 147: 90<sup>th</sup> Percentile Baseline Performance Low EMS**

(Low) EMS - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2023-2027	2027	2026	2025	2024	2023	
<b>Alarm Handling</b>	Pick-up to Dispatch	Urban	6:20	0:40			0:39	0:41	0:38	
		Rural		0:39			0:40	0:40	0:36	
<b>Turnout Time</b>	Turnout Time 1st Unit	Urban		2:14			2:10	2:14	2:20	
		Rural		2:19			2:10	2:23	2:25	
<b>Travel Time</b>	Travel Time 1st Unit <b>Distribution</b>	Urban		5:27			5:43	5:29	5:05	
		Rural		6:41			7:00	6:35	6:26	
	Travel Time ERF <b>Concentration</b>	Urban		5:27			5:43	5:31	5:07	
		Rural		6:41			7:00	6:33	6:28	
<b>Total Response Time</b>	Total Response Time 1st Unit on Scene <b>Distribution</b>	Urban		6:20	7:39			7:44	7:47	7:19
				n=4,134	n=	n=	n=1,294	n=1,362	n=1,461	
	Rural	7:50		8:49			9:03	8:48	8:36	
		n=4,870		n=	n=	n=1,839	n=1,571	n=1,446		
	Total Response Time ERF <b>Concentration</b>	Urban	6:20	7:39			7:44	7:47	7:22	
			n=4,134	n=	n=	n=1,294	n=1,361	n=1,461		
	Rural	7:50	8:49			9:03	8:45	8:36		
		n=4,870	n=	n=	n=1,839	n=1,568	n=1,444			

ND=No data available The City of Statesville Fire Department adopted the recommendation from the November 2023 site visit, to establish total response time standards within rural geo-proximity zones. The Department went back and applied this recommendation to 2023 data and will continue to use this methodology moving forward.

**EMS Moderate Risk Benchmark:**

For 90 percent of all moderate risk EMS responses, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be: 06 minutes and 20 seconds in urban geo-proximity zones and 07 minutes and 50 seconds in rural geo-proximity zones. The first-due unit shall be capable of: assessing scene safety and establishing command; sizing up the situation; conducting an initial patient assessment; obtaining vitals and patient’s medical history; initiating mitigation efforts within one minute of arrival; providing first responder medical aid and assisting transport personnel with packaging the patient.

For 90 percent of all moderate risk EMS response incidents, the total response time for the arrival of the ERF, staffed with 3 firefighters and 1 officer shall be: 06 minutes and 20 seconds in urban geo-proximity zones and 07 minutes and 50 seconds in rural geo-proximity zones. The ERF shall be capable of: assessing scene safety and establishing command; sizing up the situation; conducting an initial patient assessment; obtaining vitals and patient's medical history; initiating mitigation efforts within one minute of arrival; providing first responder medical aid; performing AED; and initiating cardiopulmonary resuscitation (CPR); assisting transport personnel with packaging the patient; and producing related documentation.

#### EMS Moderate Risk Baseline: 2023-2027

For 90 percent of all moderate risk EMS responses, the total response time for the arrival of the first-due unit, staffed with 4 firefighters and officers is: 06 minutes and 44 seconds in urban geo-proximity zones and 08 minutes and 18 seconds in rural geo-proximity zones. The first-due unit is capable of: assessing scene safety and establishing command; sizing up the situation; conducting an initial patient assessment; obtaining vitals and patient's medical history; initiating mitigation efforts within one minute of arrival; providing first responder medical aid and assisting transport personnel with packaging the patient.

For 90 percent of all moderate risk EMS response incidents, the total response time for the arrival of the ERF, staffed with 4 firefighters and officers is: 06 minutes and 44 seconds in urban geo-proximity zones and 08 minutes and 18 seconds in rural geo-proximity zones. The ERF shall be capable of: assessing scene safety and establishing command; sizing up the situation; conducting an initial patient assessment; obtaining vitals and patient's medical history; initiating mitigation efforts within one minute of arrival; providing first responder medical aid; performing AED; and initiating cardiopulmonary resuscitation (CPR); assisting transport personnel with packaging the patient; and producing related documentation.

**Table 148: Moderate EMS Risk Benchmark Objectives**

Moderate EMS Risk Benchmark Objectives		
	Urban	Rural
<b>Alarm Handling</b>	01:00	01:00
<b>Turnout Time 1st Unit</b>	01:20	01:20
<b>Travel Time - 1st Unit</b>	04:00	05:30
<b>Travel Time - ERF</b>	04:00	05:30
<b>Response Time 1st Unit on Scene</b>	05:20	06:50
<b>Response Time ERF</b>	05:20	06:50
<b>Total Response Time 1st Unit on Scene</b>	06:20	07:50
<b>Total Response Time ERF</b>	06:20	07:50

**Table 149: 90<sup>th</sup> Percentile Baseline Performance Moderate EMS**

(Moderate) EMS - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2023-2027	2027	2026	2025	2024	2023	
<b>Alarm Handling</b>	Pick-up to Dispatch	Urban	6:20	0:34			0:30	0:36	0:33	
		Rural		0:34			0:33	0:39	0:28	
<b>Turnout Time</b>	Turnout Time 1st Unit	Urban		2:12			1:48	2:12	2:24	
		Rural		2:17			2:20	2:11	2:20	
<b>Travel Time</b>	Travel Time 1st Unit Distribution	Urban		4:33			5:09	4:11	4:28	
		Rural		6:02			5:38	6:02	5:59	
	Travel Time ERF Concentration	Urban		4:33			5:09	4:11	4:57	
		Rural		6:02			5:38	6:02	6:35	
<b>Total Response Time</b>	Total Response Time 1st Unit on Scene Distribution	Urban		6:20	6:44			6:46	6:35	6:11
				n=93	n=	n=	n=20	n=31	n=48	
		Rural		7:50	8:18			8:04	8:18	8:16
		n=143		n=	n=	n=66	n=35	n=55		
	Total Response Time ERF Concentration	Urban	6:20	6:44			6:46	6:35	6:21	
			n=93	n=	n=	n=20	n=31	n=43		
Rural		7:50	8:18			8:04	8:18	8:16		
	n=143	n=	n=	n=66	n=31	n=46				

ND=No data available

The City of Statesville Fire Department adopted the recommendation from the November 2023 site visit, to establish total response time standards within rural geo-proximity zones. The Department went back and applied this recommendation to 2023 data and will continue to use this methodology moving forward.

EMS High Risk Benchmark:

For 90 percent of all high risk EMS responses, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be: 06 minutes and 20 seconds in urban geo-proximity zones and 07 minutes and 50 seconds in rural geo-proximity zones. The first-due unit shall be capable of: assessing scene safety and establishing command; sizing up the situation; conducting an initial patient assessment; obtaining vitals and patient's medical history; initiating mitigation efforts within one minute of arrival; providing first responder medical aid and assisting transport personnel with packaging the patient.

For 90 percent of all high risk EMS response incidents, the total response time for the arrival of the ERF, staffed with 9 firefighters and officers shall be: 08 minutes and 20 seconds in urban geo-proximity zones and 09 minutes and 50 seconds in rural geo-proximity zones. The ERF shall be capable of: assessing scene safety and establishing command; sizing up the situation; conducting an initial patient assessment; obtaining vitals and patient's medical history; initiating mitigation efforts within one minute of arrival; providing first responder medical aid; performing AED; and initiating cardiopulmonary resuscitation (CPR); assisting transport personnel with packaging the patient; and producing related documentation.

EMS High Risk Baseline: 2023-2027 The department did not respond to any EMS high risk hazards from 2023-2027.

For 90 percent of all high risk EMS responses, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer is: non-applicable in urban geo-proximity zones and non-applicable in rural geo-proximity zones. The first-due unit is capable of: assessing scene safety and establishing command; sizing up the situation; conducting an initial patient assessment; obtaining vitals and patient's medical history; initiating mitigation efforts within one minute of arrival; providing first responder medical aid and assisting transport personnel with packaging the patient.

For 90 percent of all high risk EMS response incidents, the total response time for the arrival of the ERF, staffed with 9 firefighters and officers is: non-applicable in urban geo-proximity zones and non-applicable in rural geo-proximity zones. The ERF shall be capable of: assessing scene safety and establishing command; sizing up the situation; conducting an initial patient assessment; obtaining vitals and patient's medical history; initiating mitigation efforts within one minute of arrival; providing first responder medical aid; performing AED; and initiating cardiopulmonary resuscitation (CPR); assisting transport personnel with packaging the patient; and producing related documentation.

**Table 150: High EMS Risk Benchmark Objectives**

High EMS Risk Benchmark Objectives		
	Urban	Rural
<b>Alarm Handling</b>	01:00	01:00
<b>Turnout Time 1st Unit</b>	01:20	01:20
<b>Travel Time - 1st Unit</b>	04:00	05:30
<b>Travel Time - ERF</b>	06:00	07:30
<b>Response Time 1st Unit on Scene</b>	05:20	06:50
<b>Response Time ERF</b>	07:20	08:50
<b>Total Response Time 1st Unit on Scene</b>	06:20	07:50
<b>Total Response Time ERF</b>	08:20	09:50

**Table 151: 90<sup>th</sup> Percentile Baseline Performance High EMS**

(High) EMS - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2023-2027	2027	2026	2025	2024	2023	
<b>Alarm Handling</b>	Pick-up to Dispatch	Urban	[Redacted]	N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
<b>Turnout Time</b>	Turnout Time 1st Unit	Urban		N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
<b>Travel Time</b>	Travel Time 1st Unit Distribution	Urban		N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
	Travel Time ERF Concentration	Urban		N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
<b>Total Response Time</b>	Total Response Time 1st Unit on Scene Distribution	Urban		6:20	N/A			N/A	N/A	N/A
					n= 0	n=	n=	n= 0	n= 0	n=0
		Rural		7:50	N/A			N/A	N/A	N/A
					n=0	n=	n=	n=0	n=0	n=0
	Total Response Time ERF Concentration	Urban		8:20	N/A			N/A	N/A	N/A
						n=0	n=	n=	n=0	n=0
Rural		9:50	N/A			N/A	N/A	N/A		
				n=0	n=	n=	n=0	n=0	n=0	

ND=No data available The City of Statesville Fire Department adopted the recommendation from the November 2023 site visit, to establish total response time standards within rural geo-proximity zones. The Department went back and applied this recommendation to 2023 data and will continue to use this methodology moving forward.

**Table 152: Effective Response Force Staffing Benchmarks EMS**

<b>EMS Effective Response Force Staffing Benchmarks</b>	
<b>EMS - Low</b>	<b>2</b>
<b>EMS - Moderate</b>	<b>4</b>
<b>EMS - High</b>	<b>9</b>

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## **Benchmark Objectives and Baseline Performances for Hazardous Materials**

### Hazmat Low Risk Benchmark:

For 90 percent of low risk hazardous materials response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be: 06 minutes and 20 seconds in urban geo-proximity zones and 07 minutes and 50 seconds in rural geo-proximity zones. The first-due unit shall be capable of: establishing command; sizing up and assessing the situation to determine the presence of a potential hazardous material or explosive device; determining the need for additional resources; estimating the potential harm without intervention; and begin establishing a hot, warm, and cold zone.

For 90 percent of all low risk hazardous materials response incidents, the total response time for the arrival of the ERF, staffed with 3 firefighters and 1 officer shall be: 06 minutes and 20 seconds in urban geo-proximity zones and 07 minutes and 50 seconds in rural geo-proximity zones. The ERF is capable of: appointing a site safety officer; and providing the equipment, technical expertise, knowledge, skills, and abilities to mitigate a hazardous materials incident in accordance with department standard operating guidelines.

### Hazmat Low Risk Baseline 2023-2027:

For 90 percent of low risk hazardous materials response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, is: 08 minutes and 34 seconds urban geo-proximity zones and 11 minutes and 09 seconds and in rural geo-proximity zones. The first-due unit is capable of: establishing command; sizing up and assessing the situation to determine the presence of a potential hazardous material or explosive device; determining the need for additional resources; estimating the potential harm without intervention; and begin establishing a hot, warm, and cold zone.

For 90 percent of all low risk hazardous materials response incidents, the total response time for the arrival of the ERF, staffed with 3 firefighters and 1 officer is: 08 minutes and 34 seconds in urban geo-proximity zones and 11 minutes and 09 seconds in rural geo-proximity zones. The ERF is capable of: appointing a site safety officer; and providing the equipment, technical expertise, knowledge, skills, and abilities to mitigate a hazardous materials incident in accordance with department standard operating guidelines.

**Table 153: Low HazMat Risk Benchmark Objectives**

Low HazMat Risk Benchmark Objectives		
	Urban	Rural
<b>Alarm Handling</b>	01:00	01:00
<b>Turnout Time 1st Unit</b>	01:20	01:20
<b>Travel Time - 1st Unit</b>	04:00	05:30
<b>Travel Time - ERF</b>	04:00	05:30
<b>Response Time 1st Unit on Scene</b>	05:20	06:50
<b>Response Time ERF</b>	05:20	06:50
<b>Total Response Time 1st Unit on Scene</b>	06:20	07:50
<b>Total Response Time ERF</b>	06:20	07:50

**Table 154: 90<sup>th</sup> Percentile Baseline Performance Low HazMat**

(Low) HazMat - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2023-2027	2027	2026	2025	2024	2023	
<b>Alarm Handling</b>	Pick-up to Dispatch	Urban	6:20	1:45			1:45	2:17	1:15	
		Rural		1:59			2:46	1:21	1:28	
<b>Turnout Time</b>	Turnout Time 1st Unit	Urban		2:14			2:11	2:16	2:20	
		Rural		2:19			2:25	2:25	2:10	
<b>Travel Time</b>	Travel Time 1st Unit Distribution	Urban		6:19			6:06	6:19	6:38	
		Rural		8:14			8:18	5:07	8:57	
	Travel Time ERF Concentration	Urban		6:19			6:06	5:12	6:38	
		Rural		8:14			8:18	5:07	8:57	
<b>Total Response Time</b>	Total Response Time 1st Unit on Scene Distribution	Urban		6:20	8:34			8:34	9:15	9:04
				n=37	n=	n=	n=13	n=7	n=16	
		Rural		7:50	11:09			12:26	8:33	11:09
				n=51	n=	n=	n=22	n=10	n=11	
	Total Response Time ERF Concentration	Urban	6:20	8:34			8:34	7:45	9:04	
			n=37	n=	n=	n=13	n=6	n=15		
	Rural	7:50	11:09			12:26	8:33	11:09		
		n=51	n=	n=	n=22	n=10	n=11			

ND=No data available The City of Statesville Fire Department adopted the recommendation from the November 2023 site visit, to establish total response time standards within rural geo-proximity zones. The Department went back and applied this recommendation to 2023 data and will continue to use this methodology moving forward.

Hazmat Moderate Risk Benchmark:

For 90 percent of moderate risk hazardous materials response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be: 06 minutes and 20 seconds in urban geo-proximity zones and 07 minutes and 50 seconds in rural geo-proximity zones. The first-due unit shall be capable of: establishing command; sizing up and assessing the situation to determine the presence of a potential hazardous material or explosive device; determining the need for additional resources; estimating the potential harm without intervention; and begin establishing a hot, warm, and cold zone.

For 90 percent of all moderate risk hazardous materials response incidents, the total response time for the arrival of the ERF, staffed with 9 firefighters and officers shall be: 08 minutes and 20 seconds in urban geo-proximity zones and 09 minutes and 50 seconds in rural geo-proximity zones. The ERF is capable of: appointing a site safety officer; and providing the equipment, technical expertise, knowledge, skills, and abilities to mitigate a hazardous materials incident in accordance with department standard operating guidelines.

Hazmat Moderate Risk Baseline 2023-2027:

For 90 percent of moderate risk hazardous materials response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, is: 08 minutes and 43 seconds urban geo-proximity zones and 10 minutes and 48 seconds and in rural geo-proximity zones. The first-due unit is capable of: establishing command; sizing up and assessing the situation to determine the presence of a potential hazardous material or explosive device; determining the need for additional resources; estimating the potential harm without intervention; and begin establishing a hot, warm, and cold zone.

For 90 percent of all moderate hazardous materials response incidents, the total response time for the arrival of the ERF, staffed with 9 firefighters and officers is: 14 minutes and 22 seconds in urban geo-proximity zones and 15 minutes and 53 seconds in rural geo-proximity zones. The ERF is capable of: appointing a site safety officer; and providing the equipment, technical expertise, knowledge, skills, and abilities to mitigate a hazardous materials incident in accordance with department standard operating guidelines.

**Table 155: Moderate HazMat Risk Benchmark Objectives**

Moderate HazMat Risk Benchmark Objectives		
	Urban	Rural
<b>Alarm Handling</b>	01:00	01:00
<b>Turnout Time 1st Unit</b>	01:20	01:20
<b>Travel Time - 1st Unit</b>	04:00	05:30
<b>Travel Time - ERF</b>	06:00	07:30
<b>Response Time 1st Unit on Scene</b>	05:20	06:50
<b>Response Time ERF</b>	07:20	08:50
<b>Total Response Time 1st Unit on Scene</b>	06:20	07:50
<b>Total Response Time ERF</b>	08:20	09:50

**Table 156: 90<sup>th</sup> Percentile Baseline Performance Moderate HazMat**

(Moderate) HazMat - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2023-2027	2027	2026	2025	2024	2023	
<b>Alarm Handling</b>	Pick-up to Dispatch	Urban	[Redacted]	2:03			2:35	1:46	1:21	
		Rural		2:18			2:37	2:12	1:52	
<b>Turnout Time</b>	Turnout Time 1st Unit	Urban		2:06			2:04	2:04	2:07	
		Rural		2:29			2:36	2:24	2:29	
<b>Travel Time</b>	Travel Time 1st Unit <b>Distribution</b>	Urban		4:43			4:23	4:35	5:23	
		Rural		6:45			6:24	6:45	6:52	
	Travel Time ERF <b>Concentration</b>	Urban		11:42			14:34	9:43	10:45	
		Rural		12:55			9:38	10:42	16:52	
<b>Total Response Time</b>	Total Response Time 1st Unit on Scene <b>Distribution</b>	Urban		6:20	8:43			8:55	6:56	8:43
				n=109	n=	n=	n=38	n=28	n=41	
		Rural	7:50	10:48			10:48	10:58	11:50	
			n=97	n=	n=	n=39	n=36	n=24		
	Total Response Time ERF <b>Concentration</b>	Urban	8:20	14:22			17:21	12:46	13:50	
			n=66	n=	n=	n=20	n=19	n=26		
Rural	9:50	15:53			12:56	14:15	18:34			
	n=62	n=	n=	n=22	n=24	n=14				

ND=No data available The City of Statesville Fire Department adopted the recommendation from the November 2023 site visit, to establish total response time standards within rural geo-proximity zones. The Department went back and applied this recommendation to 2023 data and will continue to use this methodology moving forward.

**Hazmat High Risk Benchmark:**

For 90 percent of high risk hazardous materials response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be: 06 minutes and 20 seconds in urban geo-proximity zones and 07 minutes and 50 seconds in rural geo-proximity zones. The first-due unit shall be capable of: establishing command; sizing up and assessing the situation to determine the presence of a potential hazardous material or explosive device; determining the need for additional resources; estimating the potential harm without intervention; and begin establishing a hot, warm, and cold zone.

For 90 percent of all high risk hazardous materials response incidents, the total response time for the arrival of the ERF, staffed with 14 firefighters and officers shall be: 10 minutes and 20 seconds in urban geo-proximity zones and 11 minutes and 50 seconds in rural geo-proximity zones. The ERF is capable of: appointing a site safety officer; and providing the equipment, technical expertise, knowledge, skills, and abilities to mitigate a hazardous materials incident in accordance with department standard operating guidelines.

**Hazmat High Risk Baseline 2023-2027:** The department did not respond to any hazmat high risk hazards from 2023-2027.

For 90 percent of high risk hazardous materials response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, is: non-applicable in urban geo-proximity zones and non-applicable in rural geo-proximity zones. The first-due unit is capable of: establishing command; sizing up and assessing the situation to determine the presence of a potential hazardous material or explosive device; determining the need for additional resources; estimating the potential harm without intervention; and begin establishing a hot, warm, and cold zone.

For 90 percent of all high risk hazardous materials response incidents, the total response time for the arrival of the ERF, staffed with 14 firefighters and officers is: non-applicable in urban geo-proximity zones and non-applicable in rural geo-proximity zones. The ERF is capable of: appointing a site safety officer; and providing the equipment, technical expertise, knowledge, skills, and abilities to mitigate a hazardous materials incident in accordance with department standard operating guidelines.

**Table 157: High HazMat Risk Benchmark Objectives**

High HazMat Risk Benchmark Objectives		
	Urban	Rural
<b>Alarm Handling</b>	01:00	01:00
<b>Turnout Time 1st Unit</b>	01:20	01:20
<b>Travel Time - 1st Unit</b>	04:00	05:30
<b>Travel Time - ERF</b>	08:00	09:30
<b>Response Time 1st Unit on Scene</b>	05:20	06:50
<b>Response Time ERF</b>	09:20	10:50
<b>Total Response Time 1st Unit on Scene</b>	06:20	07:50
<b>Total Response Time ERF</b>	10:20	11:50

**Table 158: 90<sup>th</sup> Percentile Baseline Performance High HazMat**

(High) HazMat - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2023-2027	2027	2026	2025	2024	2023	
<b>Alarm Handling</b>	Pick-up to Dispatch	Urban	[Redacted]	N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
<b>Turnout Time</b>	Turnout Time 1st Unit	Urban		N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
<b>Travel Time</b>	Travel Time 1st Unit Distribution	Urban		N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
	Travel Time ERF Concentration	Urban		N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
<b>Total Response Time</b>	Total Response Time 1st Unit on Scene Distribution	Urban		6:20	N/A			N/A	N/A	N/A
					n=0	n=	n=	n=0	n=0	n=0
		Rural		7:50	N/A			N/A	N/A	N/A
					n=0	n=	n=	n=0	n=0	n=0
	Total Response Time ERF Concentration	Urban		10:20	N/A			N/A	N/A	N/A
						n=0	n=	n=	n=0	n=0
Rural		11:50	N/A			N/A	N/A	N/A		
				n=0	n=	n=	n=0	n=0	n=0	

ND=No data available The City of Statesville Fire Department adopted the recommendation from the November 2023 site visit, to establish total response time standards within rural geo-proximity zones. The Department went back and applied this recommendation to 2023 data and will continue to use this methodology moving forward.

#### Hazmat Maximum Risk Benchmark:

For 90 percent of maximum risk hazardous materials response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be: 06 minutes and 20 seconds in urban geo-proximity zones and 07 minutes and 50 seconds in rural geo-proximity zones. The first-due unit shall be capable of: establishing command; sizing up and assessing the situation to determine the presence of a potential hazardous material or explosive device; determining the need for additional resources; estimating the potential harm without intervention; and begin establishing a hot, warm, and cold zone.

For 90 percent of all maximum risk hazardous materials response incidents, the total response time for the arrival of the ERF, staffed with 28 firefighters and officers shall be: 60 minutes and 00 seconds in urban geo-proximity zones and 60 minutes and 00 seconds in rural geo-proximity zones. The ERF is capable of: appointing a site safety officer; and providing the equipment, technical expertise, knowledge, skills, and abilities to mitigate a hazardous materials incident in accordance with department standard operating guidelines.

Hazmat Maximum Risk Baseline 2023-2027: The department did not respond to any hazmat Maximum risk hazards from 2023-2027.

For 90 percent of maximum risk hazardous materials response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, is: non-applicable in urban geo-proximity zones and non-applicable in rural geo-proximity zones. The first-due unit is capable of: establishing command; sizing up and assessing the situation to determine the presence of a potential hazardous material or explosive device; determining the need for additional resources; estimating the potential harm without intervention; and begin establishing a hot, warm, and cold zone.

For 90 percent of all maximum risk hazardous materials response incidents, the total response time for the arrival of the ERF, staffed with 28 firefighters and officers is: non-applicable in urban geo-proximity zones and non-applicable in rural geo-proximity zones. The ERF is capable of: appointing a site safety officer; and providing the equipment, technical expertise, knowledge, skills, and abilities to mitigate a hazardous materials incident in accordance with department standard operating guidelines.

**Table 159: Maximum HazMat Risk Benchmark Objectives**

Maximum HazMat Risk Benchmark Objectives		
	Urban	Rural
<b>Alarm Handling</b>	01:00	01:00
<b>Turnout Time 1st Unit</b>	01:20	01:20
<b>Travel Time - 1st Unit</b>	04:00	05:30
<b>Travel Time - ERF</b>	57:40	57:40
<b>Response Time 1st Unit on Scene</b>	05:20	07:30
<b>Response Time ERF</b>	59:00	59:00
<b>Total Response Time 1st Unit on Scene</b>	06:20	07:50
<b>Total Response Time ERF</b>	60:00	60:00

**Table 160: 90<sup>th</sup> Percentile Baseline Performance Maximum HazMat**

(Maximum) HazMat - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2023-2027	2027	2026	2025	2024	2023	
<b>Alarm Handling</b>	Pick-up to Dispatch	Urban	[Redacted]	N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
<b>Turnout Time</b>	Turnout Time 1st Unit	Urban		N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
<b>Travel Time</b>	Travel Time 1st Unit Distribution	Urban		N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
	Travel Time ERF Concentration	Urban		N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
<b>Total Response Time</b>	Total Response Time 1st Unit on Scene Distribution	Urban		6:20	N/A			N/A	N/A	N/A
					n=0	n=	n=	n=0	n=0	n=0
		Rural		7:50	N/A			N/A	N/A	N/A
					n=0	n=	n=	n=0	n=0	n=0
	Total Response Time ERF Concentration	Urban	60:00	N/A			N/A	N/A	N/A	
				n=0	n=	n=	n=0	n=0	n=0	
	Rural	60:00	N/A			N/A	N/A	N/A		
			n=0	n=	n=	n=0	n=0	n=0		

ND=No data available The City of Statesville Fire Department adopted the recommendation from the November 2023 site visit, to establish total response time standards within rural geo-proximity zones. The Department went back and applied this recommendation to 2023 data and will continue to use this methodology moving forward.

**Table 161: Effective Response Force Staffing Benchmarks HazMat**

<b>HazMat Effective Response Force Staffing Benchmarks</b>	
<b>HazMat - Low</b>	<b>4</b>
<b>HazMat - Moderate</b>	<b>9</b>
<b>HazMat - High</b>	<b>14</b>
<b>HazMat - Maximum</b>	<b>28</b>

## **Benchmark Objectives and Baseline Performances for Technical Rescue**

Technical Rescue Low Risk Benchmark:

For 90 percent of low risk technical rescue incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be: 06 minutes and 20 seconds in urban geo-proximity zones and 07 minutes and 50 seconds in rural geo-proximity zones. The first-due unit shall be capable of: establishing command; sizing up to determine if a technical rescue response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all low risk technical rescue incidents, the total response time for the arrival of the ERF, staffed with 3 firefighters and 1 officer, shall be: 06 minutes and 20 seconds in urban geo-proximity zones and 07 minutes and 50 seconds in rural geo-proximity zones. The ERF is capable of: appointing a site safety officer; establishing patient contact; staging and apparatus set up; providing technical expertise, knowledge, skills, and abilities during technical rescue incidents, mitigate a technical rescue incident in accordance with department standard operating guidelines; and providing first responder medical support.

Technical Rescue Low Risk Baseline 2023-2027:

For 90 percent of low risk technical rescue response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer is: 08 minutes and 38 seconds in urban geo-proximity zones and 09 minutes and 16 seconds in rural geo-proximity zones. The first-due unit shall be capable of: establishing command; sizing up to determine if a technical rescue response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all low risk technical rescue response incidents, the total response time for the arrival of the ERF, staffed with 4 firefighters and officers is: 08 minutes and 38 seconds in urban geo-proximity zones and 09 minutes and 16 seconds in rural geo-proximity zones. The ERF is capable of: appointing a site safety officer; establishing patient contact; staging and apparatus set up; providing technical expertise, knowledge, skills, and abilities during technical rescue incidents, mitigate a technical rescue incident in accordance with department standard operating guidelines; and providing first responder medical support.

**Table 162: Low Technical Rescue Risk Benchmark Objectives**

Low Technical Rescue Risk Benchmark Objectives		
	Urban	Rural
<b>Alarm Handling</b>	01:00	01:00
<b>Turnout Time 1st Unit</b>	01:20	01:20
<b>Travel Time - 1st Unit</b>	04:00	05:30
<b>Travel Time - ERF</b>	04:00	05:30
<b>Response Time 1st Unit on Scene</b>	05:20	06:50
<b>Response Time ERF</b>	05:20	06:50
<b>Total Response Time 1st Unit on Scene</b>	06:20	07:50
<b>Total Response Time ERF</b>	06:20	07:50

**Table 163: 90<sup>th</sup> Percentile Baseline Performance Low Technical Rescue**

(Low) Technical Rescue - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2023-2027	2027	2026	2025	2024	2023	
<b>Alarm Handling</b>	Pick-up to Dispatch	Urban	6:20	2:02			2:42	0:56	0:50	
		Rural		2:18			3:26	1:11	0:46	
<b>Turnout Time</b>	Turnout Time 1st Unit	Urban		2:19			2:30	2:05	2:21	
		Rural		2:24			2:22	2:25	2:27	
<b>Travel Time</b>	Travel Time 1st Unit Distribution	Urban		5:34			4:48	4:29	4:49	
		Rural		6:27			6:24	5:46	5:50	
	Travel Time ERF Concentration	Urban		5:34			4:48	5:13	4:49	
		Rural		6:27			6:24	6:09	6:16	
<b>Total Response Time</b>	Total Response Time 1st Unit on Scene Distribution	Urban		6:20	8:38			8:47	6:52	7:09
				n=375	n=	n=	n=89	n=129	n=164	
	Rural	7:50		9:16			10:14	8:16	8:10	
				n=669	n=	n=	n=209	n=249	n=223	
	Total Response Time ERF Concentration	Urban	6:20	8:38			8:47	6:53	7:16	
			n=375	n=	n=	n=89	n=115	n=144		
Rural	7:50	9:16			10:14	8:32	8:28			
	n=669	n=	n=	n=209	n=239	n=210				

ND=No data available The City of Statesville Fire Department adopted the recommendation from the November 2023 site visit, to establish total response time standards within rural geo-proximity zones. The Department went back and applied this recommendation to 2023 data and will continue to use this methodology moving forward.

Technical Rescue Moderate Risk Benchmark:

For 90 percent of moderate risk technical rescue incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be: 06 minutes and 20 seconds in urban geo-proximity zones and 07 minutes and 50 seconds in rural geo-proximity zones. The first-due unit shall be capable of: establishing command; sizing up to determine if a technical rescue response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all moderate risk technical rescue incidents, the total response time for the arrival of the ERF, staffed with 5 firefighters and officers, shall be: 06 minutes and 20 seconds in urban geo-proximity zones and 07 minutes and 50 seconds in rural geo-proximity zones. The ERF is capable of: appointing a site safety officer; establishing patient contact; staging and apparatus set up; providing technical expertise, knowledge, skills, and abilities during technical rescue incidents, mitigate a technical rescue incident in accordance with department standard operating guidelines; and providing first responder medical support.

Technical Rescue Moderate Risk Baseline 2023-2027:

For 90 percent of moderate risk technical rescue response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer is: 09 minutes and 24 seconds in urban geo-proximity zones and 07 minutes and 33 seconds in rural geo-proximity zones. The first-due unit shall be capable of: establishing command; sizing up to determine if a technical rescue response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all moderate risk technical rescue response incidents, the total response time for the arrival of the ERF, staffed with 5 firefighters and officers is: 10 minutes and 58 seconds in urban geo-proximity zones and 09 minutes and 48 seconds in rural geo-proximity zones. The ERF is capable of: appointing a site safety officer; establishing patient contact; staging and apparatus set up; providing technical expertise, knowledge, skills, and abilities during technical rescue incidents, mitigate a technical rescue incident in accordance with department standard operating guidelines; and providing first responder medical support.

**Table 164: Moderate Technical Rescue Risk Benchmark Objectives**

Moderate Technical Rescue Risk Benchmark Objectives		
	Urban	Rural
<b>Alarm Handling</b>	01:00	01:00
<b>Turnout Time 1st Unit</b>	01:20	01:20
<b>Travel Time - 1st Unit</b>	04:00	05:30
<b>Travel Time - ERF</b>	04:00	05:30
<b>Response Time 1st Unit on Scene</b>	05:20	06:50
<b>Response Time ERF</b>	05:20	06:50
<b>Total Response Time 1st Unit on Scene</b>	06:20	07:50
<b>Total Response Time ERF</b>	06:20	07:50

**Table 165: 90<sup>th</sup> Percentile Baseline Performance Moderate Technical Rescue**

(Moderate) Technical Rescue - 90 <sup>th</sup> Percentile Times - Baseline Performance			Benchmark (Target)	2023-2027	2027	2026	2025	2024	2023	
<b>Alarm Handling</b>	Pick-up to Dispatch	Urban	6:20	1:06			1:08	0:39	0:35	
		Rural		1:16			1:16	1:02	2:43	
<b>Turnout Time</b>	Turnout Time 1st Unit	Urban		2:02			2:39	1:55	1:51	
		Rural		2:56			2:25	2:56	3:00	
<b>Travel Time</b>	Travel Time 1st Unit Distribution	Urban		5:24			5:37	2:15	3:46	
		Rural		4:52			4:13	4:52	4:55	
	Travel Time ERF Concentration	Urban		8:20			9:09	8:20	11:36	
		Rural		7:57			8:31	7:09	7:57	
<b>Total Response Time</b>	Total Response Time 1st Unit on Scene Distribution	Urban		6:20	9:24			5:40	5:35	10:41
				n=19	n=	n=	n=6	n=6	n=6	
		Rural	7:50	7:33			7:33	7:31	7:38	
		n=13	n=	n=	n=2	n=7	n=5			
	Total Response Time ERF Concentration	Urban	6:20	10:58			12:17	10:58	14:48	
			n=14	n=	n=	n=5	n=5	n=5		
Rural		7:50	9:48			12:12	9:48	9:53		
	n=13	n=	n=	n=2	n=7	n=5				

ND=No data available

The City of Statesville Fire Department adopted the recommendation from the November 2023 site visit, to establish total response time standards within rural geo-proximity zones. The Department went back and applied this recommendation to 2023 data and will continue to use this methodology moving forward.

Technical Rescue High Risk Benchmark:

For 90 percent of high risk technical rescue incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be: 06 minutes and 20 seconds in urban geo-proximity zones and 07 minutes and 50 seconds in rural geo-proximity zones. The first-due unit shall be capable of: establishing command; sizing up to determine if a technical rescue response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all high risk technical rescue incidents, the total response time for the arrival of the ERF, staffed with 9 firefighters and officers, shall be: 08 minutes and 20 seconds in urban geo-proximity zones and 09 minutes and 50 seconds in rural geo-proximity zones. The ERF is capable of: appointing a site safety officer; establishing patient contact; staging and apparatus set up; providing technical expertise, knowledge, skills, and abilities during technical rescue incidents, mitigate a technical rescue incident in accordance with department standard operating guidelines; and providing first responder medical support.

Technical Rescue High Risk Baseline 2023-2027: The department did not respond to any technical rescue high risk hazards from 2023-2027.

For 90 percent of high risk technical rescue response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer is: non-applicable in urban geo-proximity zones and non-applicable in rural geo-proximity zones. The first-due unit shall be capable of: establishing command; sizing up to determine if a technical rescue response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all high risk technical rescue response incidents, the total response time for the arrival of the ERF, staffed with 9 firefighters and officers is: non-applicable in urban geo-proximity zones and non-applicable in rural geo-proximity zones. The ERF is capable of: appointing a site safety officer; establishing patient contact; staging and apparatus set up; providing technical expertise, knowledge, skills, and abilities during technical rescue incidents, mitigate a technical rescue incident in accordance with department standard operating guidelines; and providing first responder medical support.

**Table 166: High Technical Rescue Risk Benchmark Objectives**

High Technical Rescue Risk Benchmark Objectives		
	Urban	Rural
Alarm Handling	01:00	01:00
Turnout Time 1st Unit	01:20	01:20
Travel Time - 1st Unit	04:00	05:30
Travel Time - ERF	06:00	07:30
Response Time 1st Unit on Scene	05:20	06:50
Response Time ERF	07:20	08:50
Total Response Time 1st Unit on Scene	06:20	07:50
Total Response Time ERF	08:20	09:50

**Table 167: 90<sup>th</sup> Percentile Baseline Performance High Technical Rescue**

(High) Technical Rescue - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2023-2027	2027	2026	2025	2024	2023	
Alarm Handling	Pick-up to Dispatch	Urban	[Redacted]	N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
Turnout Time	Turnout Time 1st Unit	Urban		N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
Travel Time	Travel Time 1st Unit Distribution	Urban		N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
	Travel Time ERF Concentration	Urban		N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban		6:20	N/A			N/A	N/A	N/A
					n=0	n=	n=	n=0	n=0	n=0
		Rural		7:50	N/A			N/A	N/A	N/A
				n=0	n=	n=	n=0	n=0	n=0	
	Total Response Time ERF Concentration	Urban	8:20	N/A			N/A	N/A	N/A	
				n=0	n=	n=	n=0	n=0	n=0	
Rural		9:50	N/A			N/A	N/A	N/A		
		n=0	n=	n=	n=0	n=0	n=0			

ND=No data available The City of Statesville Fire Department adopted the recommendation from the November 2023 site visit, to establish total response time standards within rural geo-proximity zones. The Department went back and applied this recommendation to 2023 data and will continue to use this methodology moving forward.

Technical Rescue Maximum Risk Benchmark:

For 90 percent of maximum risk technical rescue incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be: 06 minutes and 20 seconds in urban geo-proximity zones and 07 minutes and 50 seconds in rural geo-proximity zones. The first-due unit shall be capable of: establishing command; sizing up to determine if a technical rescue response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all maximum risk technical rescue incidents, the total response time for the arrival of the ERF, staffed with 18 firefighters and officers, shall be: 20 minutes and 20 seconds in urban geo-proximity zones and 21 minutes and 50 seconds in rural geo-proximity zones. The ERF is capable of: appointing a site safety officer; establishing patient contact; staging and apparatus set up; providing technical expertise, knowledge, skills, and abilities during technical rescue incidents, mitigate a technical rescue incident in accordance with department standard operating guidelines; and providing first responder medical support.

Technical Rescue Maximum Risk Baseline 2023-2027: The department did not respond to any technical rescue Maximum risk hazards from 2023-2027.

For 90 percent of maximum risk technical rescue response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer is: non-applicable in urban geo-proximity zones and non-applicable in rural geo-proximity zones. The first-due unit shall be capable of: establishing command; sizing up to determine if a technical rescue response is required; requesting additional resources; and providing basic life support to any victim without endangering response personnel.

For 90 percent of all maximum risk technical rescue response incidents, the total response time for the arrival of the ERF, staffed with 18 firefighters and officers is: non-applicable in urban geo-proximity zones and non-applicable in rural geo-proximity zones. The ERF is capable of: appointing a site safety officer; establishing patient contact; staging and apparatus set up; providing technical expertise, knowledge, skills, and abilities during technical rescue incidents, mitigate a technical rescue incident in accordance with department standard operating guidelines; and providing first responder medical support.



**Table 168: Maximum Technical Rescue Risk Benchmark Objectives**

Maximum Technical Rescue Risk Benchmark Objectives		
	Urban	Rural
<b>Alarm Handling</b>	01:00	01:00
<b>Turnout Time 1st Unit</b>	01:20	01:20
<b>Travel Time - 1st Unit</b>	04:00	05:30
<b>Travel Time - ERF</b>	18:00	19:30
<b>Response Time 1st Unit on Scene</b>	05:20	06:50
<b>Response Time ERF</b>	19:20	20:50
<b>Total Response Time 1st Unit on Scene</b>	06:20	07:50
<b>Total Response Time ERF</b>	20:20	21:50

**Table 169: 90<sup>th</sup> Percentile Baseline Performance Maximum Technical Rescue**

(Maximum) Technical Rescue - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2023-2027	2027	2026	2025	2024	2023	
<b>Alarm Handling</b>	Pick-up to Dispatch	Urban	[Redacted]	N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
<b>Turnout Time</b>	Turnout Time 1st Unit	Urban		N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
<b>Travel Time</b>	Travel Time 1st Unit Distribution	Urban		N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
	Travel Time ERF Concentration	Urban		N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
<b>Total Response Time</b>	Total Response Time 1st Unit on Scene Distribution	Urban		6:20	N/A			N/A	N/A	N/A
					n=0	n=	n=	n=0	n=0	n=0
		Rural		7:50	N/A			N/A	N/A	N/A
					n=0	n=	n=	n=0	n=0	n=0
	Total Response Time ERF Concentration	Urban	20:20	N/A			N/A	N/A	N/A	
				n=0	n=	n=	n=0	n=0	n=0	
	Rural	21:50	N/A			N/A	N/A	N/A		
			n=0	n=	n=	n=0	n=0	n=0		

ND=No data available The City of Statesville Fire Department adopted the recommendation from the November 2023 site visit, to establish total response time standards within rural geo-proximity zones. The Department went back and applied this recommendation to 2023 data and will continue to use this methodology moving forward.

**Table 170: Effective Response Force Staffing Benchmarks Technical Rescue**

<b>Technical Rescue Effective Response Force Staffing Benchmarks</b>	
<b>Technical Rescue - Low</b>	4
<b>Technical Rescue - Moderate</b>	5
<b>Technical Rescue - High</b>	9
<b>Technical Rescue - Maximum</b>	18

## **Benchmark Objectives and Baseline Performances for Aviation Rescue and Suppression**

### ARFF Low Risk Benchmark:

For 90 percent of all low risk aviation rescue and firefighting response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be 06 minutes and 20 seconds in urban geo-proximity zones and 07 minutes and 50 seconds in rural geo-proximity zones. The first-due unit shall be capable of: assessing the situation; requesting additional resources; controlling the hazards; and if possible, beginning basic life support of victims and hazard mitigation.

For 90 percent of all low risk aviation rescue and firefighting response incidents, the total response time for the arrival of the ERF, staffed with 3 firefighters and officer 1 shall be: 06 minutes and 20 seconds in urban geo-proximity zones and 07 minutes and 50 seconds in rural geo-proximity zones. The ERF shall be capable of: conducting rescue operations and fire suppression in accordance with department policies and directives.

### ARFF Low Risk Baseline 2023-2027:

For 90 percent of all low ARFF response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer is non-applicable in urban geo-proximity zones and 07 minutes and 25 seconds in rural geo-proximity zones for pre-announced airfield emergencies. The first-due unit is capable of: assessing the situation; requesting additional resources; controlling the hazards; and if possible, beginning basic life support of victims and hazard mitigation.

For 90 percent of all low risk aviation rescue and firefighting response incidents, the total response time for the arrival of the ERF, staffed with 3 firefighters and 1 officer is: non-applicable in urban geo-proximity zones and 07:25 minutes in rural geo-proximity zones for pre-announced airfield emergencies. The ERF is capable of: providing incident command; appointing a site safety officer; and conducting rescue operations and fire suppression in accordance with department policies and directives.

**Table 171: Low ARFF Risk Benchmark Objectives**

Low ARFF Risk Benchmark Objectives		
	Urban	Rural
Alarm Handling	01:00	01:00
Turnout Time 1st Unit	01:20	01:20
Travel Time - 1st Unit	04:00	05:30
Travel Time - ERF	04:00	05:30
Response Time 1st Unit on Scene	05:20	06:50
Response Time ERF	05:20	06:50
Total Response Time 1st Unit on Scene	06:20	07:50
Total Response Time ERF	06:20	07:50

**Table 172: 90<sup>th</sup> Percentile Baseline Performance Low ARFF**

(Low) ARFF - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2023-2027	2027	2026	2025	2024	2023	
Alarm Handling	Pick-up to Dispatch	Urban	6:20	N/A			N/A	N/A	N/A	
		Rural		1:43			N/A	1:43	N/A	
Turnout Time	Turnout Time 1st Unit	Urban		N/A			N/A	N/A	N/A	
		Rural		1:55			N/A	1:55	N/A	
Travel Time	Travel Time 1st Unit Distribution	Urban		N/A			N/A	N/A	N/A	
		Rural		3:47			N/A	3:47	N/A	
	Travel Time ERF Concentration	Urban		N/A			N/A	N/A	N/A	
		Rural		3:47			N/A	3:47	N/A	
Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban		6:20	N/A			N/A	N/A	N/A
					n=0	n=	n=	n=0	n=0	n=0
	Rural	7:50		7:25			N/A	7:25	N/A	
				n=1	n=	n=	n=0	n=1	n=0	
	Total Response Time ERF Concentration	Urban	6:20	N/A			N/A	N/A	N/A	
				n=0	n=	n=	n=0	n=0	n=0	
Rural	7:50	7:25			N/A	7:25	N/A			
		n=1	n=	n=	n=0	n=1	n=0			

ND=No data available The City of Statesville Fire Department adopted the recommendation from the November 2023 site visit, to establish total response time standards within rural geo-proximity zones. The Department went back and applied this recommendation to 2023 data and will continue to use this methodology moving forward.

**ARFF Moderate Risk Benchmark:**

For 90 percent of all moderate risk aviation rescue and firefighting response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be 06 minutes and 20 seconds in urban geo-proximity zones and 07 minutes and 50 seconds in rural geo-proximity zones. The first-due unit shall be capable of: assessing the situation; requesting additional resources; controlling the hazards; and if possible, beginning basic life support of victims and hazard mitigation.

For 90 percent of all moderate risk aviation rescue and firefighting response incidents, the total response time for the arrival of the ERF, staffed with 13 firefighters and officers shall be: 08 minutes and 20 seconds in urban geo-proximity zones and 09 minutes and 50 seconds in rural geo-proximity zones. The ERF shall be capable of: conducting rescue operations and fire suppression in accordance with department policies and directives.

**ARFF Moderate Risk Baseline 2023-2027:** The department did not respond to any ARFF Moderate risk hazards from 2023-2027.

For 90 percent of all moderate ARFF response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer is non-applicable in urban geo-proximity zones and non-applicable in rural geo-proximity zones for pre-announced airfield emergencies. The first-due unit is capable of: assessing the situation; requesting additional resources; controlling the hazards; and if possible, beginning basic life support of victims and hazard mitigation.

For 90 percent of all moderate risk aviation rescue and firefighting response incidents, the total response time for the arrival of the ERF, staffed with 13 firefighters and officers is: non-applicable in urban geo-proximity zones and non-applicable in rural geo-proximity zones for pre-announced airfield emergencies. The ERF is capable of: providing incident command; appointing a site safety officer; and conducting rescue operations and fire suppression in accordance with department policies and directives.

**Table 173: Moderate ARFF Risk Benchmark Objectives**

Moderate ARFF Risk Benchmark Objectives		
	Urban	Rural
<b>Alarm Handling</b>	01:00	01:00
<b>Turnout Time 1st Unit</b>	01:20	01:20
<b>Travel Time - 1st Unit</b>	04:00	05:30
<b>Travel Time - ERF</b>	06:00	07:30
<b>Response Time 1st Unit on Scene</b>	05:20	06:50
<b>Response Time ERF</b>	07:20	08:50
<b>Total Response Time 1st Unit on Scene</b>	06:20	07:50
<b>Total Response Time ERF</b>	08:20	09:50

**Table 174: 90<sup>th</sup> Percentile Baseline Performance Moderate ARFF**

(Moderate) ARFF - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2023-2027	2027	2026	2025	2024	2023	
<b>Alarm Handling</b>	Pick-up to Dispatch	Urban	[Redacted]	N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
<b>Turnout Time</b>	Turnout Time 1st Unit	Urban		N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
<b>Travel Time</b>	Travel Time 1st Unit Distribution	Urban		N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
	Travel Time ERF Concentration	Urban		N/A			N/A	N/A	N/A	
		Rural		N/A			N/A	N/A	N/A	
<b>Total Response Time</b>	Total Response Time 1st Unit on Scene Distribution	Urban		6:20	N/A			N/A	N/A	N/A
					n=0	n=	n=	n=0	n=0	n=0
		Rural		7:50	N/A			N/A	N/A	N/A
					n=0	n=	n=	n=0	n=0	n=0
	Total Response Time ERF Concentration	Urban	8:20	N/A			N/A	N/A	N/A	
					n=0	n=	n=	n=0	n=0	n=0
Rural		9:50	N/A			N/A	N/A	N/A		
				n=0	n=	n=	n=0	n=0	n=0	

ND=No data available The City of Statesville Fire Department adopted the recommendation from the November 2023 site visit, to establish total response time standards within rural geo-proximity zones. The Department went back and applied this recommendation to 2023 data and will continue to use this methodology moving forward.

**ARFF High Risk Benchmark:**

For 90 percent of all high risk aviation rescue and firefighting response incidents, the total response time for the arrival of the first-due unit, staffed with 3 firefighters and 1 officer, shall be 06 minutes and 20 seconds in urban geo-proximity zones and 07 minutes and 50 seconds in rural geo-proximity zones . The first-due unit shall be capable of: assessing the situation; requesting additional resources; controlling the hazards; and if possible, beginning basic life support of victims and hazard mitigation.

For 90 percent of all high risk aviation rescue and firefighting response incidents, the total response time for the arrival of the ERF, staffed with 18 firefighters and officers shall be 10 minutes and 20 seconds in urban geo-proximity zones and 11 minutes and 50 seconds in rural geo-proximity zones. The ERF shall be capable of: providing incident command; appointing a site safety officer; and conducting rescue operations and fire suppression in accordance with department policies and directives.

**ARFF High Risk Baseline 2023-2027:**

For 90 percent of all high risk aviation rescue and firefighting response incidents, the total response time for the arrival of the first-due unit, staffed with 4 firefighters, is non-applicable in urban geo-proximity zones and 03 minutes and 40 seconds in rural geo-proximity zones for airfield emergencies. The first-due unit is capable of: assessing the situation; requesting additional resources; controlling the hazards; and if possible, beginning basic life support of victims and hazard mitigation.

For 90 percent of all high risk aviation rescue and firefighting response incidents, the total response time for the arrival of the ERF, staffed with 18 firefighters and officers is: non-applicable in urban geo-proximity zones and 11 minutes and 34 seconds in rural geo-proximity zones. The ERF is capable of: providing incident command; appointing a site safety officer; and conducting rescue operations and fire suppression in accordance with department policies and directives.

**Table 175: High ARFF Risk Benchmark Objectives**

High ARFF Risk Benchmark Objectives		
	Urban	Rural
Alarm Handling	01:00	01:00
Turnout Time 1st Unit	01:20	01:20
Travel Time - 1st Unit	04:00	05:30
Travel Time - ERF	08:00	09:30
Response Time 1st Unit on Scene	05:20	06:50
Response Time ERF	09:20	10:50
Total Response Time 1st Unit on Scene	06:20	07:50
Total Response Time ERF	10:20	11:50

**Table 176: 90<sup>th</sup> Percentile Baseline Performance High ARFF**

(High) ARFF - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2023-2027	2027	2026	2025	2024	2023
Alarm Handling	Pick-up to Dispatch	Urban		N/A			N/A	N/A	N/A
		Rural		1:07			1:07	N/A	N/A
Turnout Time	Turnout Time 1st Unit	Urban		N/A			N/A	N/A	N/A
		Rural		ND			ND	N/A	N/A
Travel Time	Travel Time 1st Unit Distribution	Urban		N/A			N/A	N/A	N/A
		Rural		ND			ND	N/A	N/A
	Travel Time ERF Concentration	Urban		N/A			N/A	N/A	N/A
		Rural		10:10			10:10	N/A	N/A
Total Response Time	Total Response Time 1st Unit on Scene Distribution	Urban	6:20	N/A			N/A	N/A	N/A
				n=0	n=	n=	n=0	n=0	n=0
		Rural	7:50	3:40			3:40	N/A	N/A
				n=1	n=	n=	n=1	n=0	n=0
	Total Response Time ERF Concentration	Urban	10:20	N/A			N/A	N/A	N/A
				n=0	n=	n=	n=0	n=0	n=0
	Rural	11:50	11:34			11:34	N/A	N/A	
			n=1	n=	n=	n=1	n=0	n=0	

ND=No data available The City of Statesville Fire Department adopted the recommendation from the November 2023 site visit, to establish total response time standards within rural geo-proximity zones. The Department went back and applied this recommendation to 2023 data and will continue to use this methodology moving forward.

**Table 177: Effective Response Force Staffing Benchmarks ARFF**

<b>ARFF Effective Response Force Staffing Benchmarks</b>	
<b>ARFF - Low</b>	<b>4</b>
<b>ARFF - Moderate</b>	<b>13</b>
<b>ARFF - High</b>	<b>18</b>

## **Benchmark Objectives and Baseline Performances for Other Responses**

Other Low Response Risk Benchmark:

For 90 percent of all low risk other incidents, the total response time for the arrival of the first due unit, staffed with 3 firefighters and 1 officer, shall be: 06 minutes and 20 seconds in urban geo-proximity zones: and 07 minutes and 50 seconds in rural geo-proximity zones. The first due unit shall be capable of: establishing command; sizing up and assessing the situation; determining the need for additional resources; estimating the potential harm without intervention; mitigate the incident in accordance with department standard operating guidelines while providing for the safety of responders and the general public.

For 90 percent of all low risk other incidents, the total response time for the arrival of the ERF, staffed with 4 firefighters and officers, shall be: 06 minutes and 20 seconds in urban geo-proximity zones: and 07 minutes and 50 seconds in rural geo-proximity zones. The ERF is capable of: establishing command; sizing up and assessing the situation; determining the need for additional resources; estimating the potential harm without intervention; mitigate the incident in accordance with department standard operating guidelines while providing for the safety of responders and the general public.

Other Low Response Risk Baseline 2023-2027:

For 90 percent of all low risk other incidents, the total response time for the arrival of the first due unit, staffed with 3 firefighters and 1 officer is 08 minutes and 08 seconds in urban geo-proximity zones: and 09 minutes and 46 seconds in rural geo-proximity zones. The first due unit shall be capable of: establishing command; sizing up and assessing the situation; determining the need for additional resources; estimating the potential harm without intervention; mitigate the incident in accordance with department standard operating guidelines while providing for the safety of responders and the general public.

For 90 percent of all low risk other incidents, the total response time for the arrival of the ERF, staffed with 4 firefighters and officers is 08 minutes and 08 seconds in urban geo-proximity zones: and 09 minutes and 46 seconds in rural geo-proximity zones. The ERF is capable of: establishing command; sizing up and assessing the situation; determining the need for additional resources; estimating the potential harm without intervention; mitigate the incident in accordance

with department standard operating guidelines while providing for the safety of responders and the general public.

**Table 178: Low Other Risk Benchmark Objectives**

<b>Low Other Risk Benchmark Objectives</b>		
	<b>Urban</b>	<b>Rural</b>
<b>Alarm Handling</b>	01:00	01:00
<b>Turnout Time 1st Unit</b>	01:20	01:20
<b>Travel Time - 1st Unit</b>	04:00	05:30
<b>Travel Time - ERF</b>	04:00	05:30
<b>Response Time 1st Unit on Scene</b>	05:20	06:50
<b>Response Time ERF</b>	05:20	06:50
<b>Total Response Time 1st Unit on Scene</b>	06:20	07:50
<b>Total Response Time ERF</b>	06:20	07:50

**Table 179: 90<sup>th</sup> Percentile Baseline Performance Low Other**

(Low) Other - 90th Percentile Times - Baseline Performance			Benchmark (Target)	2023-2027	2027	2026	2025	2024	2023	
<b>Alarm Handling</b>	Pick-up to Dispatch	Urban	[REDACTED]	1:09			1:18	1:21	1:34	
		Rural		1:19			1:35	1:14	1:15	
<b>Turnout Time</b>	Turnout Time 1st Unit	Urban		2:23			2:28	2:23	2:17	
		Rural		2:16			2:09	2:18	2:22	
<b>Travel Time</b>	Travel Time 1st Unit <b>Distribution</b>	Urban		5:10			5:13	4:57	5:03	
		Rural		7:17			7:38	6:58	6:04	
	Travel Time ERF <b>Concentration</b>	Urban		5:10			5:13	5:05	6:05	
		Rural		7:17			7:38	7:02	6:30	
<b>Total Response Time</b>	Total Response Time 1st Unit on Scene <b>Distribution</b>	Urban		6:20	8:08			8:03	7:55	7:54
					n=191	n=	n=	n=66	n=330	n=342
	Rural	7:50		9:46			10:22	9:40	8:47	
				n=338	n=	n=	n=144	n=502	n=395	
	Total Response Time ERF <b>Concentration</b>	Urban	6:20	8:08			8:03	7:57	8:17	
				n=191	n=	n=	n=66	n=303	n=311	
Rural	7:50	9:46			10:22	9:50	8:47			
		n=338	n=	n=	n=144	n=456	n=362			

ND=No data available The City of Statesville Fire Department adopted the recommendation from the November 2023 site visit, to establish total response time standards within rural geo-proximity zones. The Department went back and applied this recommendation to 2023 data and will continue to use this methodology moving forward.

**Table 180: Effective Response Force Staffing Benchmarks Other**

Other Effective Response Force Staffing Benchmarks	
<b>Other – Low</b>	4

## **Resiliency**

The definition of resiliency, according to the *10<sup>th</sup> Edition Fire and Emergency Services Self-Assessment Manual (FESSAM)*, is the organization's ability to quickly recover from an incident or event, or to adjust easily to changing needs or requirements. It lists the system components as resistance, absorption, and restoration. The SFD accomplishes these in several different ways.

Resistance, the ability to deploy only the necessary resources, is addressed through the department's critical task analysis. This analysis identifies the critical tasks that must be accomplished to successfully mitigate an incident in the most effective and efficient manner. The department's critical task analysis shown in the Critical Task Analysis section of this document represents the resources needed to mitigate each type of incident. Note, officers retain the ability to call for additional resources as needed.

Absorption, the ability to quickly add or duplicate resources, is addressed through several different policies and through the use of mutual and automatic aid agreements. SFD Administrative Directive 1.4.5, Recall of Personnel, defines how personnel will be added in order to maintain normal service delivery during a large-scale event that depletes departmental resources. SFD Administrative Directive 1.4.1, Work Time Procedure section 2, defines how personnel will be replaced in order to maintain minimum staffing and provide normal service delivery on a typical day. Surrounding agencies in which the SFD has mutual aid or automatic aid agreements with are used to supplement SFD resources during large-scale incidents.

Restoration, the rapid return of resources to normal capabilities, is addressed through general practices. Medical supplies are restocked on scene from Iredell County EMS, or from stocked inventory located at Fire Station 1 and Fire Station 4. Air cylinders can be refilled on scene by the counties mobile air unit or from one of two fill stations located at Fire Stations 3 and 4. The SFD also keeps a stocked inventory of spare air cylinders at all stations. Every member of the SFD is issued two sets of turnout gear to maintain a state of operational readiness while a given set of gear is being decontaminated at Fire Station 1 and/or Station 3 where the department's gear cleaning equipment is located. The SFD can quickly repair and maintenance SCBA's through an annual contract with MSA distributor Newton's Fire & Safety, and spare SCBA at Fire Station 3. The department can also quickly restore an apparatus down due to maintenance from its inventory of four reserve apparatus (3 engines and 1 Ladder).

The SFD utilizes the City of Statesville Emergency Operations Plan. This plan is used in conjunction with the Iredell County Emergency Operations Plan. The plan ensures the continuity of all city department functions under any unusual circumstances that may disrupt normal business operations. The plan lists primary contacts for all city officials, assigns fire department officials to specific areas of responsibilities and tasks, incident complexity types and readiness levels, and designates orders of succession for city leaders.

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## **Plan for Maintaining and Improving Response Capabilities**

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### **Statesville Fire Department Compliance Model**

Compliance is best achieved through a systematic approach. The SFD has identified the following six-step compliance model:

#### **Step 1 – Update Data & Review Performance Measures**

The Community Risk Assessment / Standard of Cover will be updated annually with the previous year's data. A review of the performance measures will be conducted annually to review and validate:

- Risk Assessment
- Standard of Cover
- Service level objectives
- Performance objectives and measures

#### **Step 2 – Evaluate Performance**

Performance measures are applied to actual services provided:

- Activity and performance by fire station district.
- Activity and performance by GPZ.
- Overall performance by incident category.

#### **Step 3 – Develop Compliance Strategies**

Determine strengths, weaknesses, opportunities, and threats annually:

- Determine what needs to be done to address service gaps.
- Determine if resources can be/should be reallocated.
- Seek/research alternative methods to provide services at desired level.
- Develop budget estimates as necessary to determine projected cost.

#### **Step 4 – Communicate Expectations to Organization and Governing Body**

Communicate expectations:

- Explain methods of measuring compliance to personnel who are expected to perform the services.
- Explain reasoning/importance of compliance to governing body.
- Provide feedback mechanisms.

Train personnel:

- Provide appropriate levels of training/direction for all affected personnel.
- Modify (remediate) response processes, application systems, and technical infrastructure as necessary to comply.

#### **Step 5 – Revalidate Compliance**

- Annual review of performance with senior staff and chief officers to ensure revalidation of CRA/SOC.
- Determine whether independent validation and verification techniques will be used to measure performance.
- Solicit external assistance as necessary.

#### **Step 6 – Make Adjustments/Repeat Process**

- Annually review changes to ensure that service levels have been maintained or improved.
- Develop and implement a review program to ensure ongoing compliance.
  - Annual review and evaluation (Annual Compliance Report, monthly Performance Reports, Work Plans)
  - Annual update of standards to ensure department is prepared for reaccreditation.

#### **Performance Reporting Methods**

Performance data is extracted on a regular basis, and reports are provided to Administration on a daily, weekly, monthly, quarterly, and annual basis. Data included in these reports include demands for service total and distribution, response time performance, and reliability. On July 1, 2017, SFD implemented a records management software (RMS), Emergency Reporting (ER), to develop reporting methods to easily extract the necessary data for analysis. In June 2024, the Department adopted a more robust RMS, EPR FireWorks. The EPR FireWorks RMS is a comprehensive platform for the Department operations that enhances data collection and analysis. Moving to a different RMS has presented some challenges. The SFD currently uses EPR FireWorks, StatsFD, and Essential Personnel to collect and analyze data.

## **Strategic Plan for Continuous Improvement**

The SFD regularly assesses performance data and addresses gaps in service delivery. A written continuous improvement strategic plan is developed to establish time frames for addressing existing gaps and variations, specific actions for remediation, and proposed new benchmark targets to ensure quality improvement. The Department has a Strategic Planning Committee that meets regularly and reviews the strategic plan as part of the continuous improvement process.

## **Overall Evaluation/Conclusion**

It is recommended that the City of Statesville City Manager and Council adopt by reference the SFD's Community Risk Assessment / Standards of Cover (CRA/SOC) by Resolution. SFD's CRA/SOC has been reviewed in detail and developed to conform to the *6<sup>th</sup> ed. of the CFAI Community Risk Assessment: Standard of Cover guidelines and 10<sup>th</sup> ed. Commission on Fire Accreditation Fire & Emergency Service Self-Assessment Manual*. A critical analysis was conducted of the risk assessment, distribution, concentration, and reliability of the SFD's services provided.

It is vital that the CRA/SOC process be integrated into the SFD's strategic and budget planning process. To accomplish this, the SFD will continue to utilize a vision centered management process that incorporates team participation and input of personnel from all levels both vertically and horizontally within the structure of the organization. Through this team approach, the CRA/SOC provides a set of deployment objectives that assure responder and citizen safety, enhances the community service, is fiscally responsible, and provides a method for measurement and reporting.