



SFES

2015 STANDARDS OF COVER



Savannah Fire & Emergency Services

**Charles G. Middleton
Fire Chief**

Accreditation Manager

**Assistant Chief
Logistics Curtis Wallace**

Standards of Cover Task Force:

**Interim Assistant Chief Jeff Alberts
Captain Scott Boyd
Captain Eric Mckenna
Captain Ross Brigdon
Captain Thomas Leighty
Noel Perkins (GIS Representative)
Lara Hall (GIS Representative)**



Fire Chief Endorsement



This Standards of Cover provides a comprehensive analysis of Savannah Fire & Emergency Services administrative and operational capabilities. The community's risks are fully assessed within this document in order to maximize efficiency and effectiveness. Based on the community's risk assessment, SFES developed a series of performance measures in order to provide the highest levels of services to our customers. The objective of this Standards of Cover is to ensure that a safe and effective response is delivered in regards to Fire Suppression and special responses situations such as Technical Rescue, Hazardous Materials, Marine Response and events affecting homeland security. This Standards of Cover is consistent with the needs of the community and standards set forth by Savannah Fire & Emergency Services.

Charles G Middleton, CFO MIFireE
Fire Chief
Savannah Fire & Emergency Services

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Executive Summary

One of the most important aspects of the fire service is defining the levels of service for the community it serves. Savannah Fire & Emergency Services (SFES) has operated successfully with general response policies and procedures for many years. According to the Commission on Fire Accreditation International (CFAI), to receive accreditation, a department must prepare a Standards of Cover (SOC) Plan. The SOC is defined as those written policies and procedures that determine the distribution and concentration of fixed, mobile, and human resources in relation to the services that are provided by the department. This process includes reviewing community expectations, setting response goals and objectives, establishing a system of measuring performance, incorporating National Fire Protection Agency (NFPA) standards, the ISO (Insurance Service Office) grading schedule, Federal Emergency Management Agency (FEMA), and the CFAI accreditation model. The outcome is a comprehensive document based off of quantitative and qualitative data that outlines the present and future capabilities of SFES. This document is designed to provide elected officials, City administrators, as well as the community with information on fire service operations and integrated risk management planning. It is not intended to be a stand-alone document, but to be used in conjunction with the SFES Strategic Plan.

This internal evaluation will allow SFES to address a number of key issues that pertain to our level of service.

This SOC plan will provide:

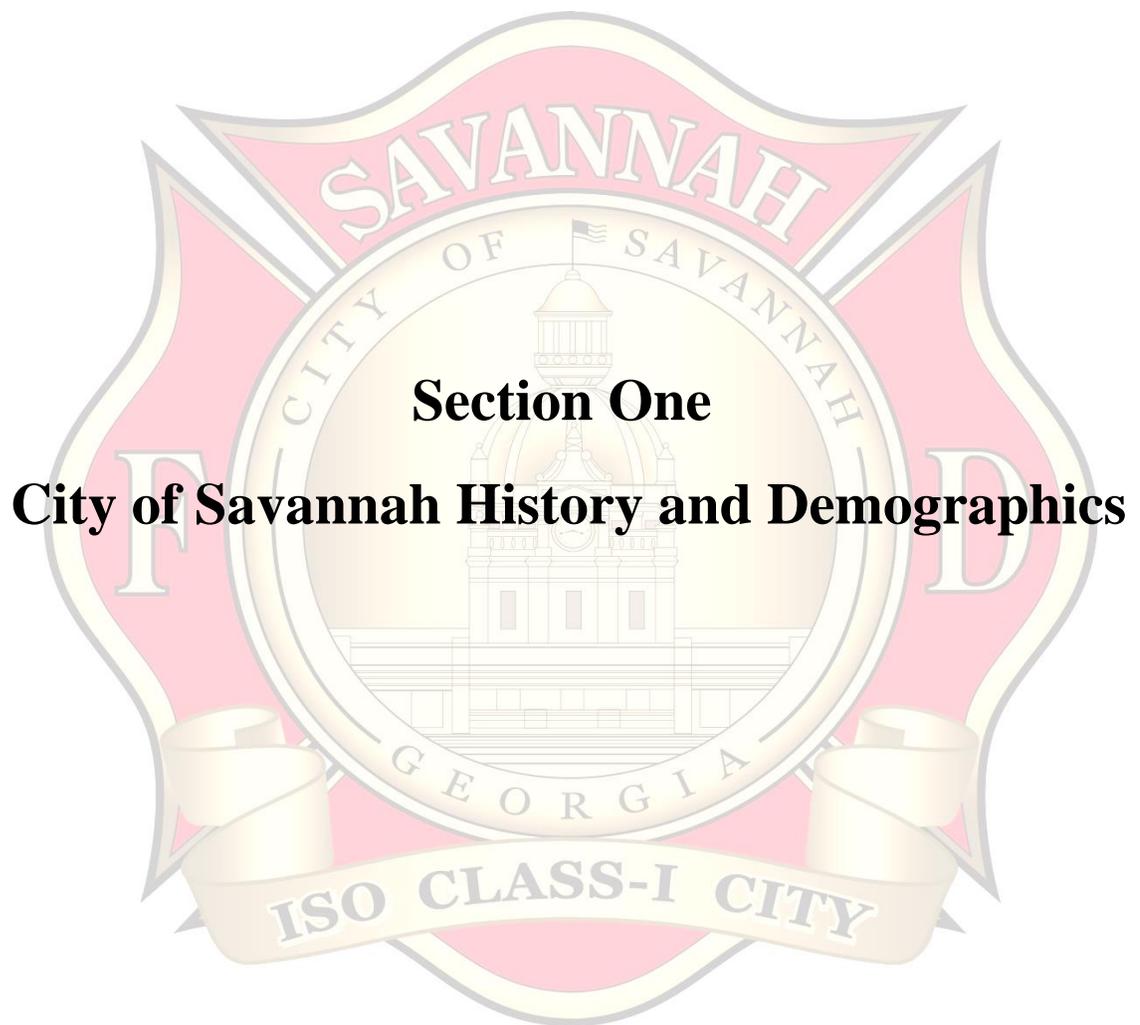
- i. A baseline tool for defining emergency response performance standards and goals.
- ii. A community risk summary (life safety, economic and environmental).
- iii. An analysis of critical emergency scene tasks, which should assume maximum utilization of all personnel under a “worst case” scenario [This analysis should be consistent with the department’s risk analysis, staffing levels and goals].
- iv. A basis for continually measuring performance over time.
- v. Guidelines for short-term and long-term policy decisions dealing with resource procurement and allocation.

The SOC is developed through a systematic evaluation of the department’s present policies, practices and historical response data. Within this process, the SOC will define Service Area classifications based on population densities (outlined below):

Metropolitan	Geography with populations of over 200,000 people in total and/or a population density of over 3,000 people per square mile. These areas are distinguished by mid-rise and high-rise buildings, often interspersed with smaller structures.
Urban	Geography with a population of 30,000 people and/or a population density of over 2,000 people per square mile.
Suburban	Geography with a population 10,000 to 29,999 and/or a population density of between 1,000 and 2,000 people per square mile.
Rural	Geography with a total population of less than 10,000 people or with a population density of less than 1,000 people per square mile.
Wilderness/Frontier/Undeveloped	Geography that is both rural and not readily accessible by a publicly or privately maintained road.

An analysis of the City of Savannah’s population density in regards to service areas reveals two types of population classifications: urban and suburban. *The City of Savannah however, has determined that its service area performance objectives should be uniform across the entire city, thus the city will be evaluated on the urban population criteria.*

The results of these analyses are then used to develop formal statements regarding the level of service the department can be expected to provide, along with recommendations to make changes in the way services are delivered for the purpose of improving the level of service to the community. SFES currently operates under a variety of documents to include; general orders, operational policies and procedures, as well as official memorandums from senior and operations level command staff. These documents provide guidance for operational and administrative functions, and are updated on both a scheduled and unscheduled basis.



Section One

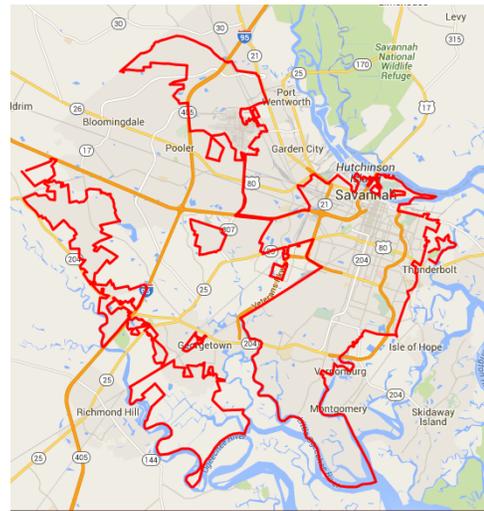
City of Savannah History and Demographics

Section One: Introduction

SFES is consistently striving to provide a more efficient and professional service to the residents, citizens and visitors to the City of Savannah (COS). To allocate their resources in the most proficient manner, a risk assessment must be utilized. Once the risks of a community have been identified, a department can mitigate a positive outcome for these incidents and provide a standard of cover that meets the community's needs. The information in this document demonstrates the past, present and future challenges this department has and will resolve. In resolving these current and future problems, the risk assessment will address probable high risk areas where attention and resources should be allocated.

Legal Basis and Jurisdictional Boundaries

On March 11, 1825, City Council appointed, by authority of the State Legislature, 20 persons to form the Savannah Fire Company. All engine houses, apparatus and equipment in the city were turned over to the Savannah Fire Company. Today, the State Code governs SFES: Title 25, Chapter 3, and Article 2. Under this code, SFES is authorized to legally organized and meet all Federal, State and Local laws. Currently, SFES covers 103 square miles within Chatham County, Georgia.



History of Savannah

General James Edward Oglethorpe and the 120 travelers of the good ship, "Anne" landed on a bluff high along the Savannah River in February 1733. Oglethorpe named the thirteenth and final American colony, Georgia, after England's King George II. Savannah became its first city. Upon settling, Oglethorpe was aided by the native Yamacraw Indian Chief, Tomo-chi-chi. Oglethorpe and



Tomo-chi-chi pledged their friendship and good-will, and the Yamacraw chief granted the new arrivals permission to settle Savannah on the bluff. The town flourished without warfare and hardship that stifled the beginnings of so many of America's early colonies. Savannah is credited as being America's first planned city. Oglethorpe laid the city out in a series of grids that allowed for wide open streets intertwined with shady public squares and parks that served as town meeting places and centers of business. Savannah had 24 original squares with 21 still in existence. Savannah's history has been captured over the years, numerous old buildings have survived and been restored including the Pirates' House (1754), an old seaman's inn mentioned in Stevenson's Treasure Island; the Herb House (1734), the oldest existing building in Georgia, and the Pink House (1789), site of Georgia's first bank. The mansion birthplace of Juliette Gordon Low, (built 1819-21) is owned and operated by the Girl Scouts of the U.S.A. as a memorial to their founder. The Telfair Academy of Arts and Sciences opened in Savannah as one of the South's first public museums. The many restored churches include the Lutheran Church of Ascension (dating from 1741); the Independent Presbyterian Church (1890) and the Cathedral of St. John the Baptist (1876), one of the largest Roman Catholic churches in the South, the First African Baptist Church whose congregation dates back to 1788 and Temple Mickeve Israel, the third oldest Synagogue in America. As the Millennium turned, Savannah experienced resurgence in tourism. The 1990's saw more than 50 million people visit our fair city. Visitors reveled in our elegant architecture, ornate ironworks, fountains and lush green squares. Savannah's natural beauty is rivaled only by the city's hospitable reputation, creating one of the country's most popular vacation spots. Visitors who visit the City of Savannah are truly captivated by our city's charm, the richness of our heritage and all the activities the city offers every day of the year.

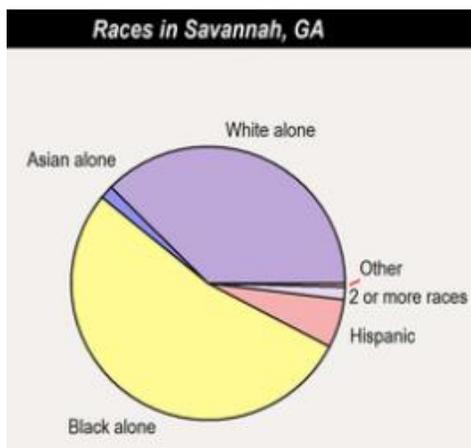
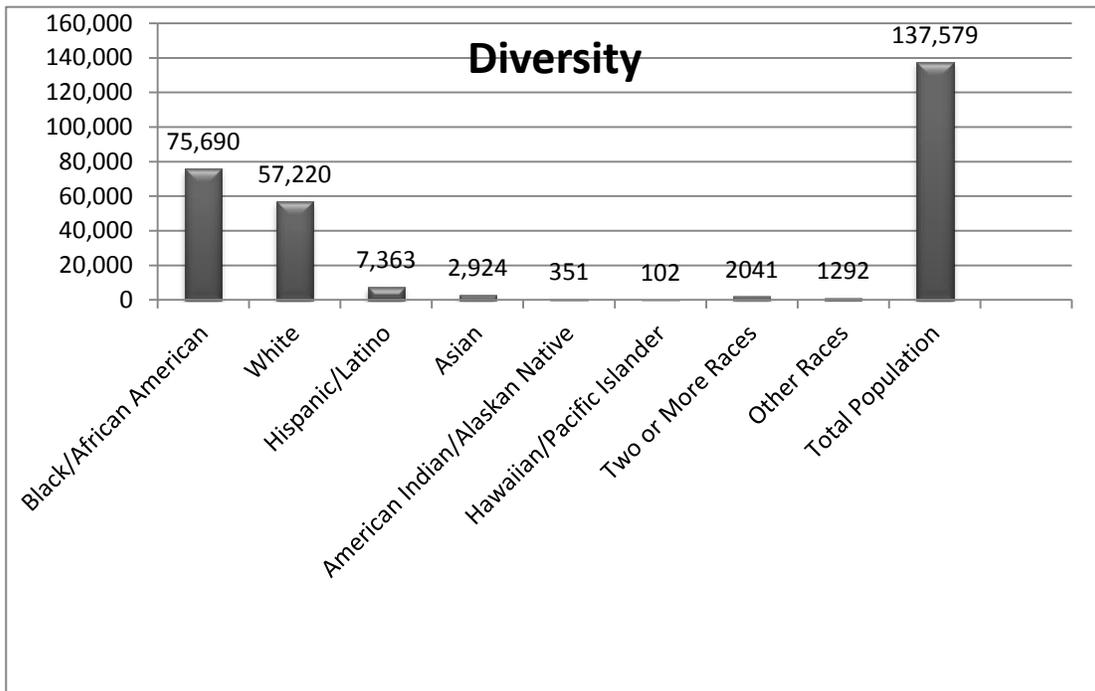


Demographics

The study of demographics plays an intricate role in the planning process for future services as well as enhancing the current services given by SFES. By analyzing the demographic shifts, SFES can change with the developing trends, which will allow the department to become

proactive and not reactive. Statistical information gained from population, income and economics, projected growth, weather, and more will support this effort. The collected data show the current population at approximately 137,579 with a median household income of \$54,939. All information gathered is collected from the US Census Bureau and Savannah Economic Development Authority in order to ensure a margin of error at +/-52.

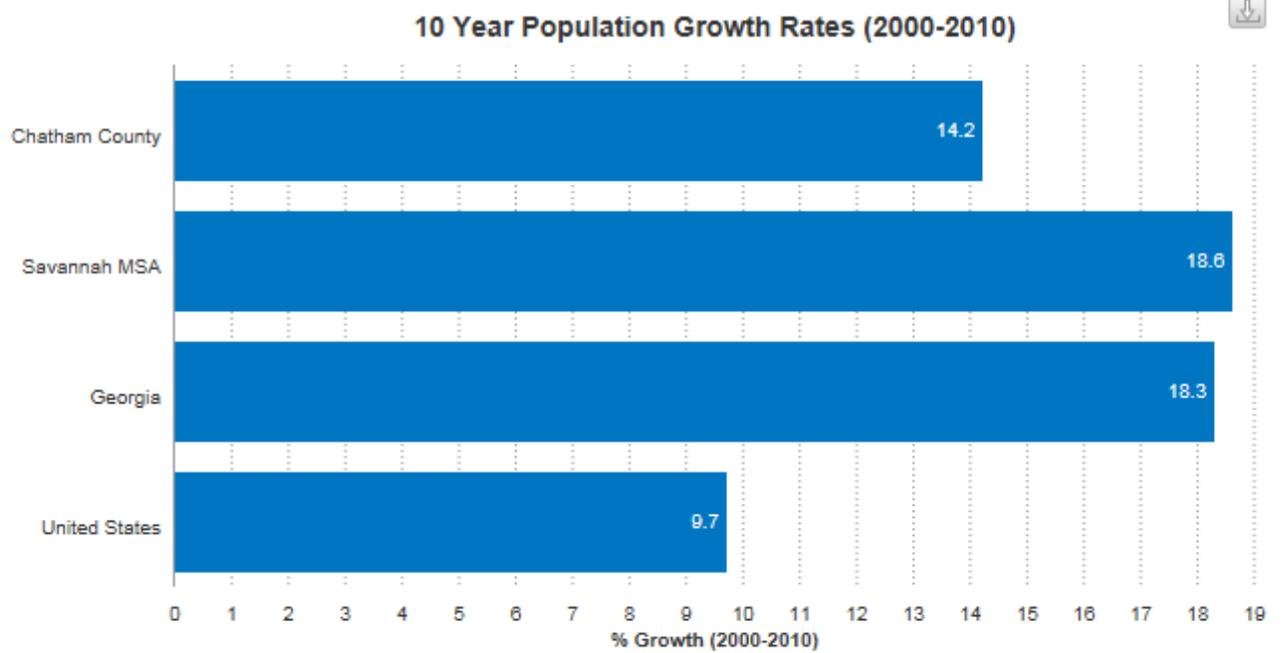
Population



Black alone	53.2%	76,144
White alone	37.6%	53,761
Hispanic	5.7%	8,209
Asian alone	1.6%	2,254
Two or more races	1.5%	2,188
American Indian alone	0.3%	466
Native Hawaiian and Other Pacific Islander alone	0.05%	70
Other race alone	0.03%	48

Area	2000	2010	2014
Chatham	232,048	265,128	283,379
Savannah MSA	293,000	347,611	372,708
Georgia	8,186,453	9,687,653	10,097,343
United States	281,421,906	308,745,528	318,857,056

U.S. Census Bureau, 2014 ACS 1-Year Estimates

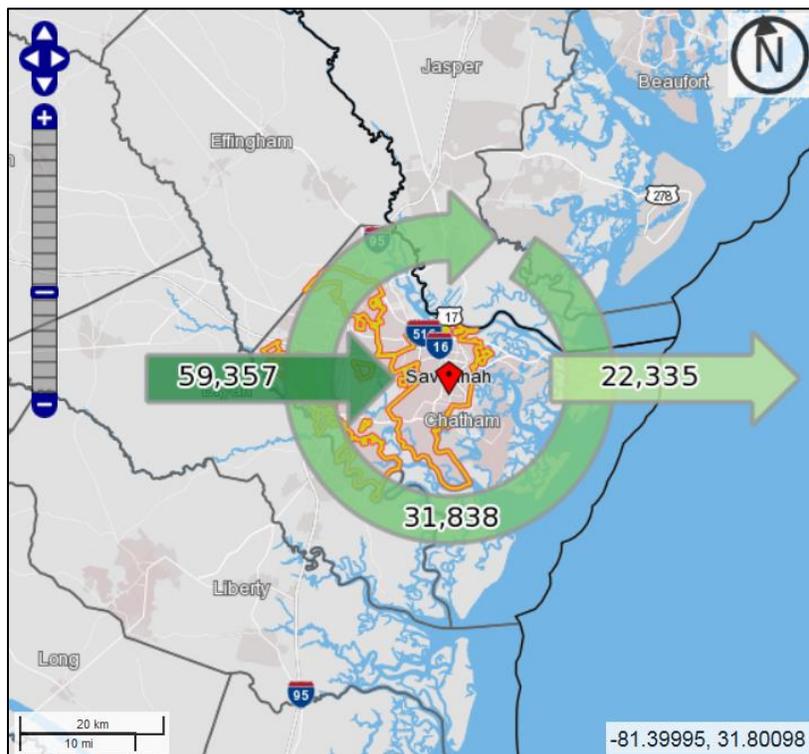


Savannah’s tourism numbers continued to grow to record levels in 2015. The total number of visitors for the year was 13.7 million, generating \$2.67 billion in visitor spending.

The balance of overnight visitors to the market again was distributed fairly evenly throughout the year, with 24% coming January-March, 26% in April-June, 26% in July-September and another 24% in October-December. The average length of stay is 2.7 nights, up from 2.3 nights in 2014.

Category	2012	2013	2014	2015	Variance 2014-2015
VISITATION					
Overnight Visitors	7m	7.3m	7.6m	7.8m	2.63%
Day-trip Visitors	5.4m	5.7m	5.8m	5.9m	1.72%
Total Number of Visitors	12.4m	13m	13.4m	13.7m	2.24%
Workforce	-	-	-	59.4t	-

According to Savannah Economic Development Authority, 59,357 people that are employed, commute into the City of Savannah daily. Between visitors and the daily work force these 2 dramatics have a major impact on the city’s population having approximately 200,000 people in the City during norming business hours.

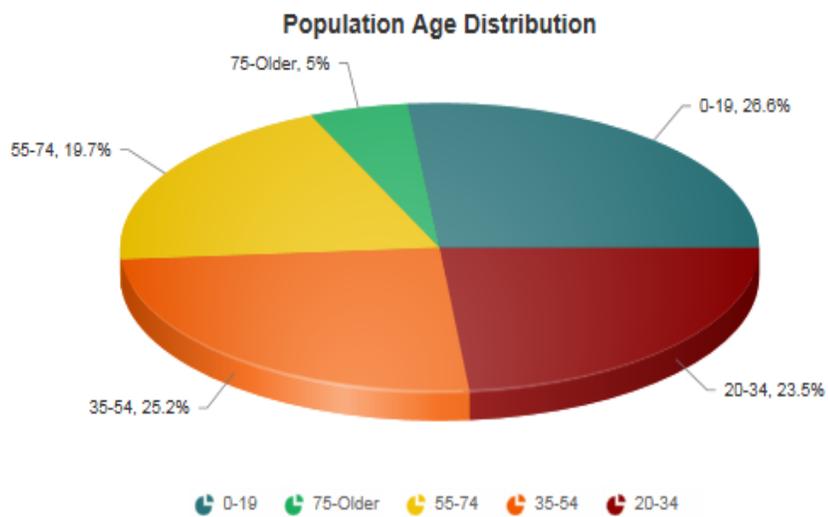


Population Age Distribution- Savannah MSA

Educational Attainment

Age Group	2014
0 - 19	26.6%
20 - 34	23.5%
35 - 54	25.2%
55 - 74	19.7%
75 - older	5.0%

U.S. Census Bureau, 2014 ACS 1-Year Estimates



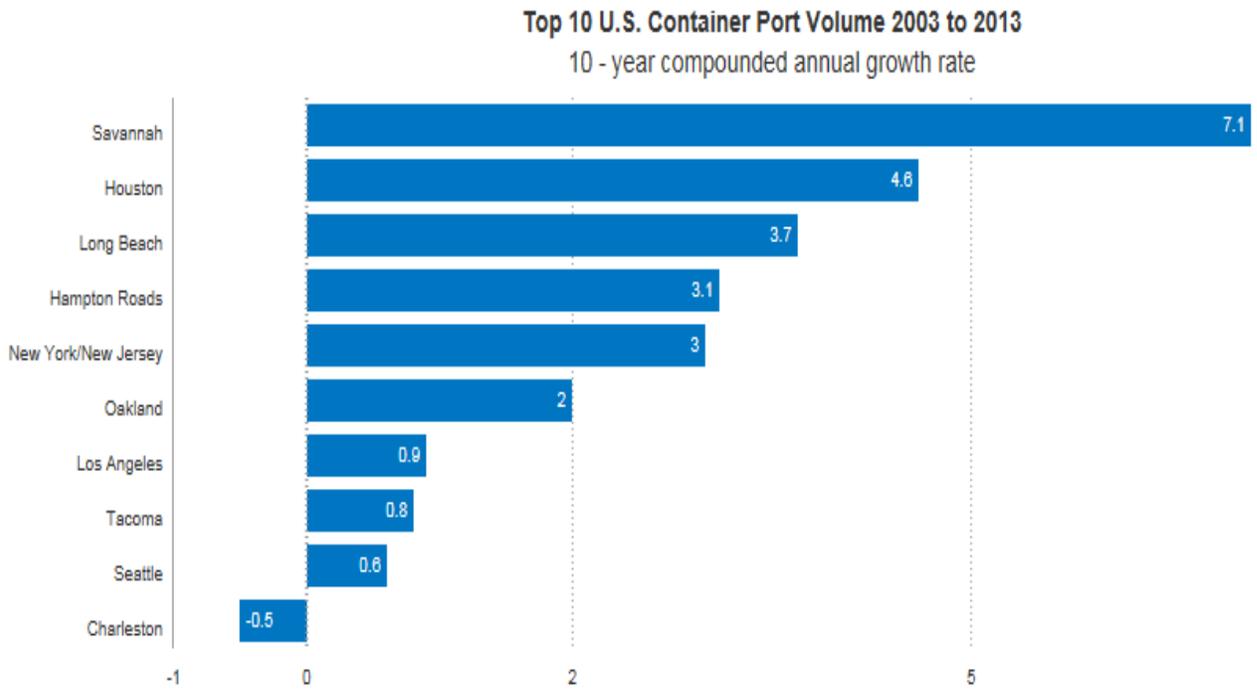
Savannah MSA - Population 25 years and older (243,040)

Educational Attainment	2014
Less than 9th grade	3.1%
9th to 12th grade, no diploma	7.6%
High school graduate (includes equivalency)	27.7%
Some college, no degree	23.7%
Associate's degree	6.6%
Bachelor's degree	19.6%
Graduate or professional degree	11.6%
Percent high school graduate or higher	89.3%
Associate's degree or higher	37.8%
Percent bachelor's degree or higher	31.2%

U.S. Census Bureau, 2014 ACS 1-Year Estimates

Transportation

Port of Savannah



Top 5 U.S. Container Ports 2013 Port Ranking by TEUs

Rank	Container Port	Container Volume (in TEUs)
1	Los Angeles	7,868,572
2	Long Beach	6,730,573
3	New York/New Jersey	5,467,345
4	Savannah	3,034,010
5	Oakland	2,346,460

2013 APPA survey (loads and empties)

Ground

Major 2 or 4 Lane Highways

Highway Type	Highway Name
Interstates (4-6 lane)	I-95 North/South
	I-16 East/West
	I-516
U.S. Primary (2-4 lane)	17, 17A, 80
Georgia Primary (2-4 lane)	21, 204, 307

SEDA

Distance to Nearest Metro Areas

Metro Area	State	Distance from Savannah (miles)
Atlanta-Sandy Springs-Marietta	GA	248
Charlotte-Gastonia-Concord	NC-SC	252
Jacksonville	FL	140
Charleston-North Charleston	SC	107
Macon	GA	166
Hinesville-Fort Stewart	GA	40

Rail

Rail Carriers

Carrier	Main or Branch	Shortline or National
Georgia Central	Main	Shortline
CSX	Main	National
Norfolk Southern	Main	National

Savannah Hilton Head International Airport

Commercial Airport

Specifications	Specifications
Distance from the community in miles	7 miles NW Savannah, Ga
Number of runways	2
Runway lengths	Runway 10/28 (9351 x 150ft / 2850 x 46m) Runway 1/19 (7002 x 150ft / 2134 x 46m)
Passenger carriers serving airport	Allegiant, American Airlines, Delta Airlines, JetBlue, Sun Country Airlines, United Airlines and US Airways
Charter carriers serving airport	Signature Flight Support and Sheltair Aviation
Air cargo	Delta Dash, US Airways, FedEx and DHL
Number of days closed to inclement weather for the last 3 years	0
Number of daily non-stop to all cities served	45+

Airport Commission, 2014

Economic Indicators and Budget Process

The economic indicators along with tax revenue collected from property and sales taxes outline the major funding resources for the budget. During the first quarter of the year SFES will begin formulating the following year’s budget proposal. Utilizing the Budget Resource and Guidebook (BRAG), SFES formulates a budget under current City policy. During the second and third quarters, budget meetings with department heads and project managers will begin to finalize the budget based on priorities and needs. Once the preliminary budget is approved at the Bureau level, it will then be submitted to Research and Budget for the City Manager’s recommendation(s) and presentation to Council for approval. This budgetary process has allowed the COS to receive the Certificate of Achievement for Excellence in Financial Reporting.

Manufacturing Employers-Chatham County - 100+ Employees Leading Employers

Company	Product/Service	Number of Employees
Gulfstream Aerospace Corporation	Jet aircraft, aerospace equipment	10,126
International Paper	Paper products, chemicals, corrugated containers	661
JCB Americas, Inc.	Construction equipment	540
Imperial Sugar	Refined sugar	450
Brasseler USA	Dental and medical instrumentation	405
Kerry Ingredients and Flavours	Formulation, manufacturing and containerization of technology-based ingredients, flavours and integrated solutions	344
Mitsubishi Hitachi Power Systems Americas, Inc.	Gas and steam turbines	320
Strength of Nature Global, LLC	Ethnic hair care products	300

Weyerhaeuser	Bleached pulp	285
Derst Baking Company	Bread, rolls, cakes	274
Diamond Crystal Brands	Salt, pepper and sugar packaging	250
Roger Wood Foods Inc.	Smoked sausage, meats	190
Arizona Chemical	Specialty resins, pine-based chemicals	188
Johnson Matthey Process Technologies Inc.	Catalyst production	160
Lummus Corporation	Cotton ginning equipment manufacturer	156
EMD Chemical	Industrial pigments	151
The Industrial Company (TIC) Southeast	Steel fabrication/machine shop and industrial maintenance	136
Coastal Concrete SE, LLC	Ready mix concrete	125
Fuji Vegetable Oil, Inc.	Cooking oils	106
Precision Machine of Savannah	Fabrication/machine shop supplying products to the business aviation, commercial aviation and defense industries	103
River Street Sweets	Gourmet foods	100

Distribution Employers- Chatham County (100+ Employees)

Company	Product/Service	Number of Employees
Colonial Group Inc.	Storage and distribution of petroleum product and petrochemicals	275
Dollar Tree	Distribution of various products	271
Chatham Steel Corporation	Steel service center	265
Target	Import center for various products	247
The Home Depot	Home improvement supplies distribution center	215
Coca-Cola Bottling Company United	Soft drink/water bottling warehouse	211
Pier 1 Imports	Household goods distribution	160
United Distributors Inc.	Beverage distribution	150
IKEA Wholesale, Inc.	Furniture distribution	150
California Cartage Company	Warehousing for K-Mart	140
Schneider Logistics	Warehousing, distribution and export packaging	120
Nordic Logistics and Warehousing LLC	Cold storage	112
Port City Logistics	Warehouse space and transportation services logistics company	103
Ameriwood	Office and home furnishings	100

Non-Manufacturing Employers-Chatham County

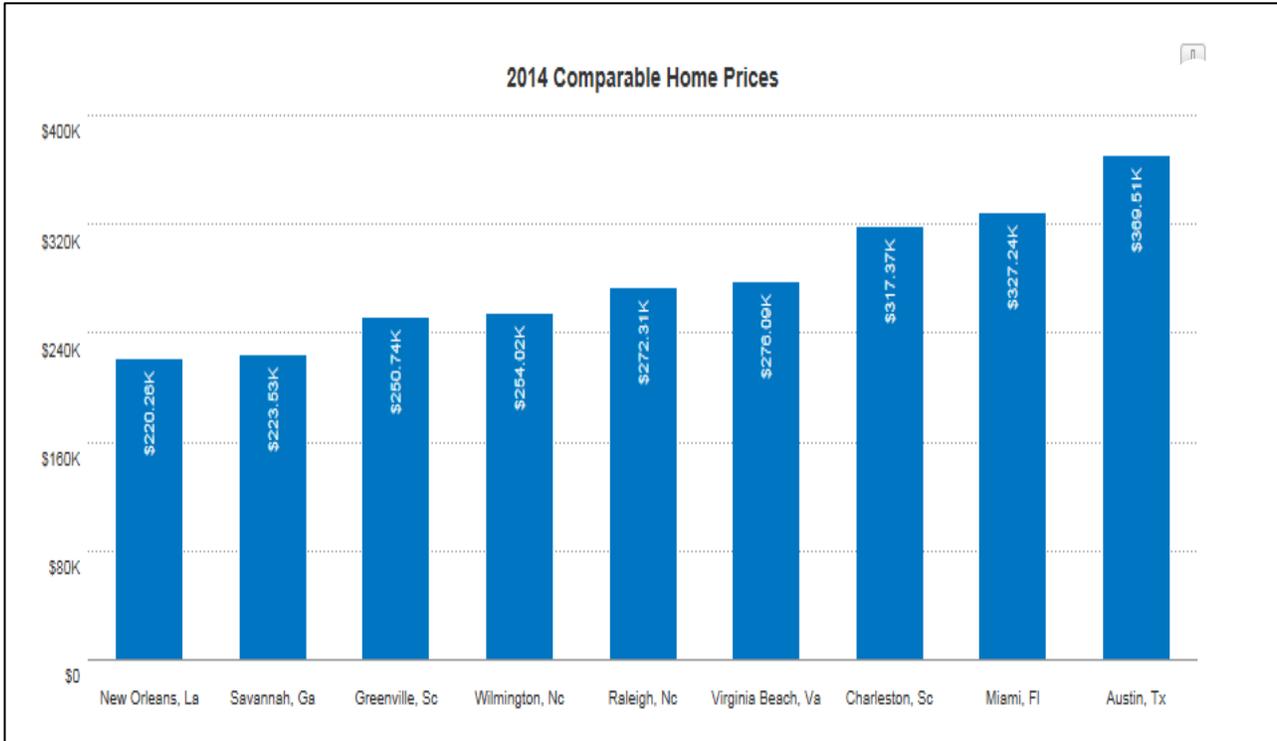
Company	Product/Service	Number of Employees
Memorial Health University Medical Center	Hospital	5,000
St. Joseph's/Candler Health System	Hospital	3,304
SouthCoast Medical Group	Medical Care	601
Goodwill Industries of the Coastal Empire	Adult vocational rehabilitation	560
Georgia Power Company - Coastal Region	Electric utility	473
The Landings Club	Private club	400
CSX	Railroad line	308
TMX Finance	Financial	302

Government, Military and Education Employers-Chatham County

Company	Product/Service	Number of Employees
Savannah-Chatham County Board of Education	Public schools	4,808
Ft. Stewart/Hunter Army Airfield	Civilian personnel	4,637
City of Savannah	Government	2,795
Savannah College of Art & Design	Education	1,590
Chatham County	Government	1,600
Georgia Ports Authority	Ship terminal operation	988
Armstrong State University	Education	602
US Army Corp of Engineers	Civil engineering	600
Savannah State University	Education	586

Quality of Life

HOUSING



Average Price of Homes Sold Savannah MSA

Year	Homes Sold	Sales Volume	Average Sales Price	Percent Change in Average Price
2008	3,785	\$867,995,011	\$229,325	-9.4%
2009	3,742	\$764,706,854	\$204,358	-10.9%
2010	3,633	\$736,615,670	\$203,307	-0.5%
2011	4,137	\$795,846,119	\$192,373	-5.4%
2012	4,620	\$881,334,621	\$190,765	-0.8%
2013	5,086	\$1,037,359,810	\$203,962	6.9%

Distribution of Homes Available-Savannah MSA

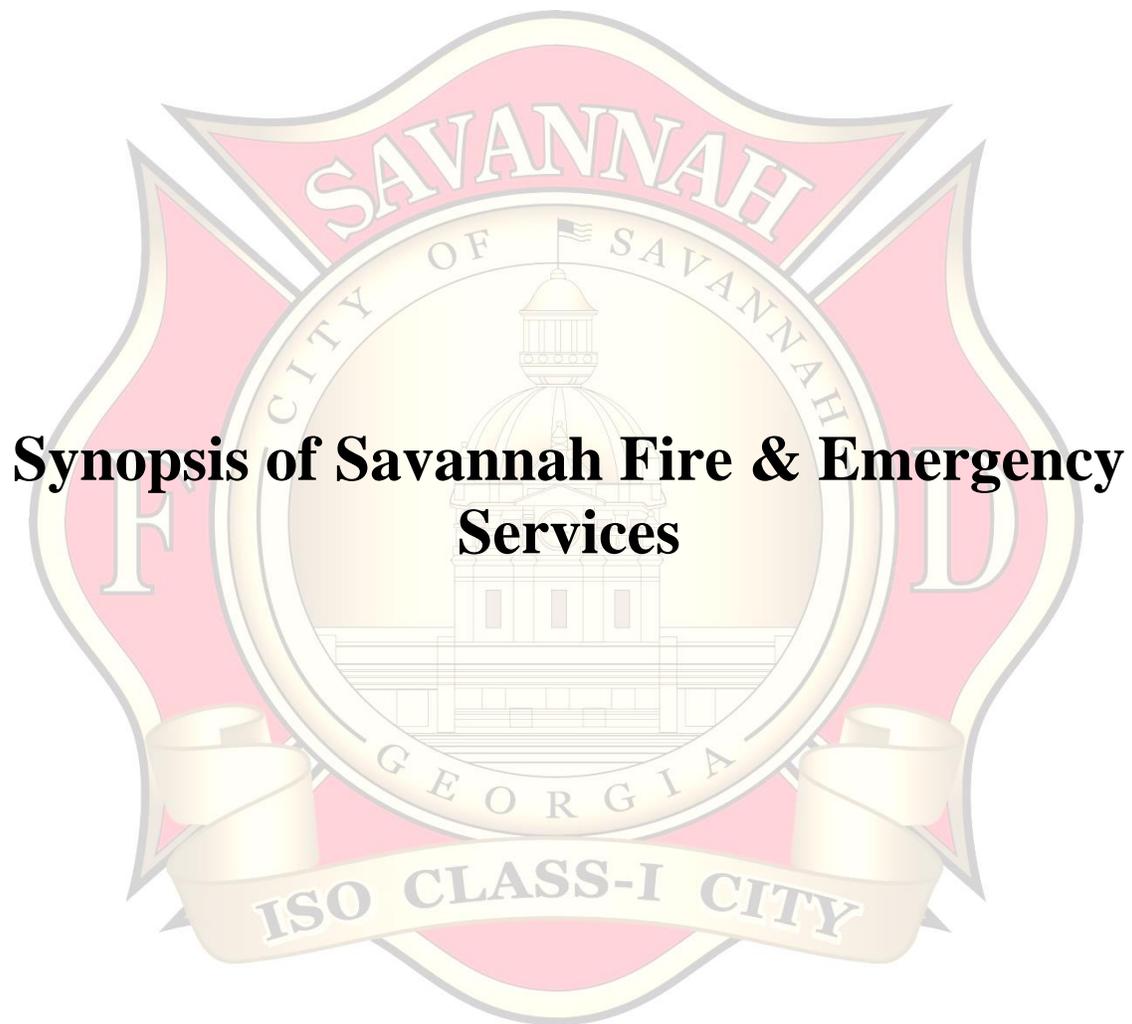
Price Range	Total	Historic District	Midtown	Southside	Islands	Skidaway Island	West Chatham	Chatham County (Other)	Bryan County (All)	Effingham County (All)
Less than \$59,900	92	1	72	7	0	0	0	8	1	3
\$60,000-\$89,000	158	0	61	19	14	0	5	13	2	13
\$90,000-\$119,000	183	0	37	83	12	0	24	17	11	32
\$120,000-\$149,000	365	2	41	105	16	0	56	36	34	74
\$150,000-\$249,000	1,039	9	108	184	109	4	226	67	104	229
\$250,000-\$500,000	972	32	88	87	181	78	192	10	180	124
Greater than \$500,000	477	55	34	28	174	104	30	4	40	8

Housing Market-Savannah MSA

	Total	Historic District	Midtown	Southside	Islands	Skidaway Island	West Chatham	Chatham County (Other)	Bryan County (All)	Effingham County (All)
Homes on the Market	3,286	99	441	513	506	186	533	155	372	483
New Homes on the Market*	544	11	15	34	9	11	136	25	93	190
Percent that are New	16.56%	11.11%	3.40%	6.63%	1.78%	5.91%	25.52%	16.13%	25.00%	39.34%

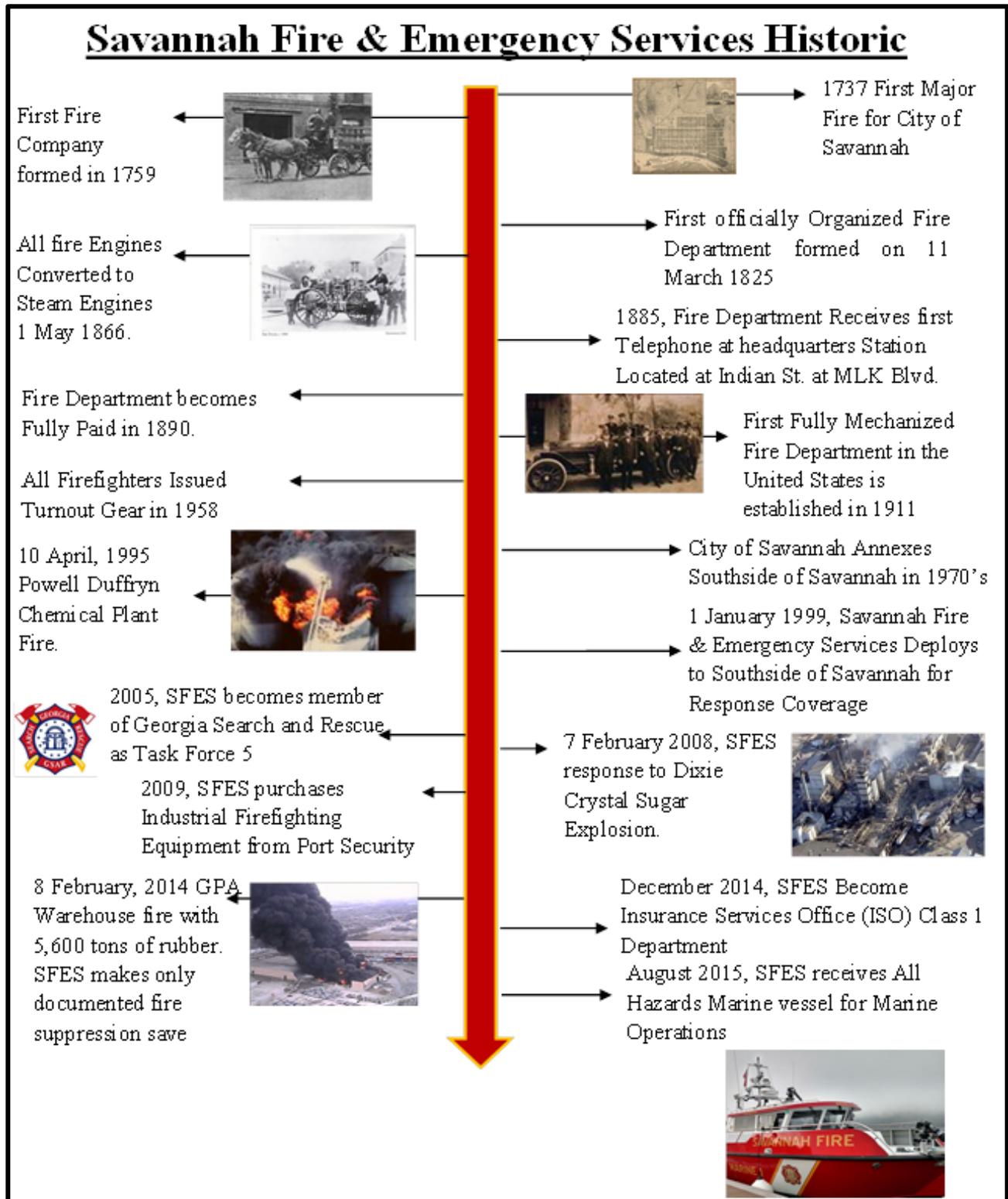
Taxes & Incentives

Personal Income Tax		State
Rate (Range)		Graduated from 1% of Georgia taxable net income to 6%
Earned Income		Paid on \$750 - \$7000 of earned income
<i>SEDA</i>		
Corporate Income Tax		
Corporate Income Tax	State	Local
Rate	6%	0
Formula (e.g. Sales, Property & Payroll)	Gross Receipts in Georgia/Total Gross Receipts	
<i>SEDA</i>		
Franchise Tax		
Franchise Tax	State	Local
Rate (range)	Maximum \$5000	0
Formula (e.g. Sales, Property & Payroll)	Property + Sales in Georgia / Total Property & Sales	
<i>SEDA</i>		



Synopsis of Savannah Fire & Emergency Services

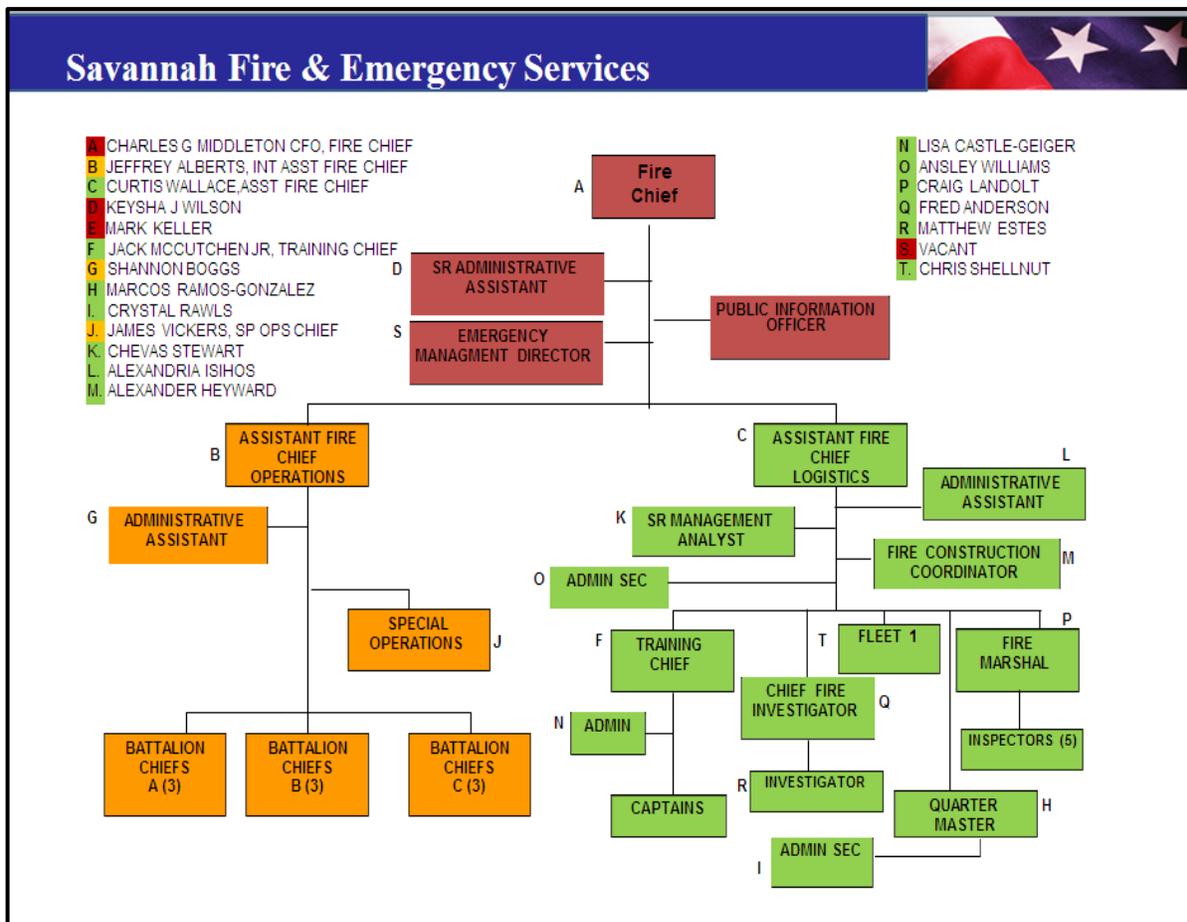
SFES Timeline



SFES Organizational Overview

SFES is an “All Hazards” career department that provides emergency services 24 hours a day. Currently, the Bureau is organized into two departments, Operations and Logistics. Operational services include: fire suppression, hazardous materials, technical rescues and assisting Emergency Medical Services (EMS). To support these services, SFES consists of 338 firefighters assigned to one of three shifts and working out of 15 stations. The Logistics department includes: fire education and prevention, fire investigations, training, facility maintenance, fleet and supply. In addition, the Logistics department also serves as the human resources and budget/finance sectors of SFES. Together these two departments make up the structure of SFES under the approval of the Mayor, City Council and City Manager.

SFES Organizational Chart



Minimum Daily Staffing

SFES utilizes a minimum staffing requirement of 90 personnel each shift. Currently, each shift is divided into three battalions with Battalion 1- 37 personnel, Battalion 2- 29 personnel and Battalion 3- 24 personnel. Staffing that exceeds the 90 personnel minimum will be placed in accordance by the above matrix.



Savannah Fire & Emergency Services Staffing Matrix



Minimum Daily Staffing is 90 Personnel

Number of Personnel on Duty	Engine 1	Engine 2	Engine 5	Engine 6	Engine 8	Engine 4	Engine 11	Engine 12	Engine 13	Engine 14	Engine 15	Truck 5	Truck 12	Rescue 1	Rescue 2	Engine 16	Truck 13	Engine 9	Truck 1	Engine 3	Truck 2	Engine 7	Engine 10	Battalion Chief 1	Battalion Chief 2	Battalion Chief 3	Haz Mat 2	Safety 1
90	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	3	1	1	1	1	1
91	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	3	1	1	1	1	1
92	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	3	1	1	1	1	1
93	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	3	1	1	1	1	1
94	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	3	1	1	1	1	1
95	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	3	1	1	1	1	1
96	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	1	1	1	1	1
97	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	1	1	1	1	1

Rank Structure

The rank structure begins as a firefighter recruit, while in a 14 week recruit school. Following completion of recruit school, firefighter trainee will be a probationary firefighter for the first year. All operational personnel are required as a minimum to be National Professional Qualifications (NPQ) certified as a Firefighter II, Hazardous Materials Operations Level, certified as a First Responder, attend Emergency Vehicle Operator Course, and completed NIMS 100, 200, and 700. Once successful completion of probation (one year of employment), firefighter trainee will automatically be moved to the rank of Advanced Firefighter (AFF). At the rank of AFF, members will be given the opportunity to become Fire Apparatus Operators (FAO). As a part of the FAO program, members are required to obtain NPQ Driver/Operator both in Pumper and Authority Having Jurisdiction (AHJ) Aerial certification. The first rank in the promotional structure is the rank of Master Firefighter (MFF). MFF's are responsible for driving, operating, maintaining the apparatus and its assigned equipment, and riding in charge of the company in the absence of the Fire Captain (FC). To obtain the rank of MFF, personnel are required to obtain NPQ Fire Officer I (FOI), Fire Instructor I, NIMS 300 and have an Associate's Degree or 60 credit hours in an approved Bachelor's Degree program. The next rank in the promotional structure is Fire Captain. Captains are responsible for the supervision and management of three to four crew members, incident management, and act in the capacity as Battalion Chief in their absence. To achieve the rank of Captain, individuals must obtain all MFF requirements, in addition to NPQ Fire Officer II (FO II), NIMS 400 and must have a Bachelor's degree starting in 2021. Following Captain, the next rank is Battalion Chief (BC). Battalion Chiefs are responsible for the supervision and management of a battalion (6-9 companies), incident management, and compliance with rules and regulations of the Bureau. To obtain the rank of BC, members are required to obtain NPQ Fire Officer III (FO III), NPQ Fire Instructor II (FI II) and must have a Bachelor's Degree starting in 2021. The rank of Assistant Chief and Fire Chief are required at a minimum to be certified as NPQ Fire Officer IV (FO IV) and a Master's Degree by 2021.

Training Program

SFES upholds the core values of protecting the lives and property of the citizens and visitors of Savannah by providing the highest level of fire and emergency services through professionalism and dedication. In order to demonstrate these core values, SFES has created a multi-faceted approach in identifying the training needs of the department. This approach to training has produced a department of firefighters and administrators who are well known for their aggressive firefighting capabilities and proactive approach to emergency response.

The training and educational needs for SFES reflect the mandatory requirements set forth by Georgia Fire Standards and Training Council (GFSTC), Insurance Services Office (ISO) and through course content reviews. To support these requirements SFES has upgraded and expanded the department's Training Center and educational resource centers to provide the necessary logistics for personnel to obtain the ISO requirements of:

- 192 hours of basic firefighting training
- 12 hours of Driver Operator training
- 12 hours of Company Officer training
- 6 hours of Hazardous Materials training
- 18 hours of Facility Use

Furthermore, the state of Georgia requires 24 hours of training to maintain a firefighter certification which is outlined in the "Rules" section of GFSTC. Lastly, the training programs provided by SFES are certified through GFSTC, Emergency Management Institute and/or Federal Emergency Management Agency or meet National Fire Protection Administration (NFPA)/ National Professional Qualifications (NPQ) to ensure legitimacy. Any training courses outside the realm of firefighting that supports personal and career development (college courses) are accredited through outside agencies such as the United States Department of Education. The outcome of the current training and educational programs provided by SFES demonstrates our "...Committed to those we serve".

SFES has one of the largest training departments in the state of Georgia. Currently, SFES Training Division consists of a Training Division Chief, three Training Captains and an Administrative Secretary, which reports to the Assistant Chief, Logistics. Each Training Captain

is assigned as a shift Training manger and is also responsible for approximately five internal projects. These projects include ensuring the classes that are instructed meet the most current standards, reviewing operational procedures for safety concerns and assisting the growth of our personnel through educational opportunities such as our partnership with Columbia Southern University and Gulfstream.

In the past three years, the Training Division has undergone a transformation to include updated training materials, new props and construction of a new training building. The Training Division will continue to employ new technologies and hands on training to develop highly professional firefighters. In the end, the goal of the Training Division is to continue updating the Training Center meeting the needs of our personnel and allowing them to properly mitigate the challenges they face in the Savannah basin.

Certifications

SFES has a number of members certified in the following certifications:

NPQ FFI & II-334	HAZMAT OPS-334
NPQ FOI-202	HAZMAT TECH-169
NPQ FOII-142	Rope Rescue-58
NPQ FOIII-20	Structural Collapse Tech-26
NPQ FOIV-14	Trench Rescue-18
Fire Instructor I-212	Confined Space Rescue-57
Fire Instructor II-36	Swift Water Rescue- 42
NIMS 100-334	Vehicle and Machinery Rescue-60
NIMS 200-334	Public Safety Diver- 36
Shipboard Firefighter-113	Marine Technician-13
NIMS 300-119	Health and Safety Officer-59
NIMS 400-86	Incident Safety Officer-63
NIMS 700-334	Emergency Medical Responder-334
Driver Operator Pumper-110	Driver Operator Aerial-136
Arson Investigator-4	Fire Inspector-19

Savannah Fire & Emergency Services Mission Statement and Goals

SFES holds true to its mission statement "...committed to those we serve". SFES lives up to this statement by identifying both short and long term goals in order to better serve its customers. Long term goals are identified in the Strategic Plan and are summarized as follows:

2016-2020 Strategic Goals

Strategic Goal 1

Ensure first arriving and effective response force units meet the established time requirements as determined in the Standard of Cover.

Strategic Goal 2

Increase staffing to meet the needs set forth by NFPA 1710 and the SFES Risk Assessment Model.

Strategic Goal 3

Continue development of the Health and Wellness Initiative. (NFPA 1500)

Strategic Goal 4

Increase service and deployment capabilities in existing and annexed Response Districts.

Strategic Goal 5

Analyze SFES's current policies to ensure they meet departmental needs, and compliance with current federal, state, and local standards.

Strategic Goal 6

Implement and evaluate Records Management System (RMS).

Strategic Goal 7

Maintain ISO classification and Accreditation Status. (Expected Summer 2016)

Strategic Goal 8

Increase employee development through training and education.

Strategic Goals and Objectives for 2016-2020

2016-2020 Strategic Plan Goals and Objectives		
Strategic Goal: 1	Ensure first Arriving and Effective Response Force units meet established SFES benchmarks outlined in the Standards of Cover.	
A Standards of Cover study does not just measure travel time to emergencies, but rather is a strategic planning tool for community loss control		
Objective 1.1	Develop and adhere to a SFES response time benchmarks outlined in the Standards of Cover.	
Chief Alberts	Completion Date	Fourth Quarter 2016
Objective 1.2	Improve data entry into Records management System (RMS) to provide measurable statistics through annual appraisals.	
Chief Wallace	Completion Date	Fourth Quarter 2016
Objective 1.3	Implement a proactive training program assisting 911 Telecommunicators and conduct a policy analysis of the 911 Dispatch center	
Chief Handy	Completion Date	Third Quarter 2016
Objective 1.4	Purchase Mobile Data Terminals (MDT's) in all apparatus	
Chief Wallace	Completion Date	Fourth Quarter 2017
Objective 1.5	Purchase Automatic Vehicle Locators (AVL's) in all apparatus	
Chief Wallace	Completion Date	Fourth Quarter 2017
Strategic Goal: 2	Increase staffing to meet the needs set forth by NFPA 1710 and the SFES Risk Assessment Model.	
The purpose of this standard is to specify the minimum criteria addressing the effectiveness and efficiency of career public fire suppression operations and special operations delivery in protecting the citizens of Savannah.		
Objective 2.1	Under the SAFER Grant implement 15 new firefighter positions into the response matrix	
Chief Wallace	Completion Date	Fourth Quarter 2016
Objective 2.2	Fill vacancies in order to maintain NFPA 1710 staffing compliance by conducting recruit schools.	
Chief Wallace	Completion Date	Fourth Quarter 2016
Objective 2.3	Under the SAFER Grant implement 10 new firefighter positions into the response matrix	
Chief Wallace	Completion Date	Fourth Quarter 2017
Objective 2.4	Promote SFES Brand through Recruitment Outreach Program	
Chief McCutchen	Completion Date	Fourth Quarter 2020

Strategic Goal 3	Continue development of the Health and Wellness Initiative. (NFPA 1500)	
The 1500 Standard includes safety requirements in regards to protective clothing and equipment, medical and physical requirements, and health and wellness programs for individuals involved in the following: fire suppression, rescue, emergency medical services, hazardous materials operations and special operations.		
Objective 3.1	Promote SFES Critical Incident Stress Management through member participation and training	
Chief McDaniel	Completion Date	Fourth Quarter Annual
Objective 3.2	Recognize employee achievements through annual award/recognition ceremony	
	Completion Date	Annual
Objective 3.3	Continue partnership with St. Joseph's Candler to provide annual bloodwork and physicals	
Chief Gaskill	Completion Date	Fourth Quarter Annual
Objective 3.4	Enhance and encourage the health and fitness of all employees by providing gym memberships and ensuring companies attend 1 hour of physical fitness per shift	
Chief Gaskill	Completion Date	Fourth Quarter Annual
Objective 3.5	Purchase a second nomex hood for all employees to reduce cancer risk of contaminated gear	
Chief Wallace	Completion Date	Third Quarter 2016
Objective 3.6	Creation of a second Safety Officer position	
Chief Wallace	Completion Date	Second Quarter 2018

Strategic Goal 4	Increase service and deployment capabilities in existing and annexed Response Districts.	
As the City of Savannah expands westward, the need for additional services will be required. The scope of services will be contingent of the Standards of Cover and Risk Analysis.		
Objective 4.1	Conduct SFES Risk Assessments through annual Pre Fire Plans and Fire Marshal's Office for accurate risk assessment in all Response Zones	
Chief McDaniel	Completion Date	Fourth Quarter Annual
Objective 4.2	Completion of Station 15 in the Sweetwater subdivision for increased service deliverability and coverage	
Chief Wallace	Completion Date	Third Quarter 2017
Objective 4.3	Complete construction of a new Training Academy for a modern facility to deliver training to enhance the knowledge, skills and abilities for fire department personnel	
Chief Wallace	Completion Date	Fourth Quarter 2016
Objective 4.4	Secure funding in capital improvement plan for a new fire station near Jimmy DeLoach Pkwy and I-95, which will contain an Engine/Rescue and personnel	
Chief Wallace	Completion Date	Second Quarter 2017
Objective 4.5	Complete construction of a Public Safety/Fire station on Hutchinson Island containing an Engine and Truck (Marine 1) and personnel	
Chief Wallace	Completion Date	Fourth Quarter 2018
Objective 4.6	Complete construction of a new station at New Hampstead East location, Engine/Rescue and 30 personnel	
Chief Wallace	Completion Date	Fourth Quarter 2019
Objective 4.7	Complete construction of a new station at New Hampstead West location Engine/Truck and 30 personnel	
Chief Wallace	Completion Date	Fourth Quarter 2020
Objective 4.8	SFES develops and maintains outside relationships that support its mission, operations, or cost effectiveness.	
Mark Keller	Completion Date	Third Quarter Annual
Objective 4.9	External agreements are current and support organizational objectives	
Chief Handy	Completion Date	Fourth Quarter Annual
Objective 4.10	Fire building maintenance	
Chief Wallace	Completion Date	First Quarter 2018

Strategic Goal 5	Analyze SFES's current policies to ensure they meet departmental needs, and compliance with current federal, state, and local standards	
Policy analysis is a means of synthesizing information through research in order to make data based policy decisions.		
Objective 5.1	Empower all employees to partake SFES policy and procedure development in order to drive the organization to the standard of "Excellence".	
Chief Alberts	Completion Date	Fourth Quarter Annual
Objective 5.2	Create a user-friendly library for employees to references all polices, rules, and regulations through a document software management program.	
Chief Rentiers	Completion Date	Second Quarter 2017

Strategic Goal 6	Implement and evaluate records management system.	
SFES relies on the accuracy of all data logged into the RMS for future planning, inventory, and data collection		
Objective 6.1	Allocate funding for an Administrative Secretary in the Training Division for record and data management	
Chief Wallace	Completion Date	First Quarter 2016
Objective 6.2	Complete a thorough review of all employee personnel and training files	
Chief McCutchen	Completion Date	Fourth Quarter 2016
Objective 6.3	Develop and deliver training to employees on effective data entry and correct use of the RMS	
Chief McCutchen	Completion Date	Fourth Quarter 2016
Objective 6.4	Utilize all modules of current RMS to its greatest potential	
Chief Wallace	Completion Date	Fourth Quarter 2016
Objective 6.5	Allocate funding for a Project Management position to assist with the management of data pertaining to SFES	
Chief Wallace	Completion Date	First Quarter 2017

Strategic Goal 7	Maintain ISO Classification and Accreditation Status.	
These outside agencies ensure the highest level of service is delivered to the citizens, business owners, and visitors of the City of Savannah.		
Objective 7.1	Organize an ISO & Accreditation Task Force	
Chief Alberts	Completion Date	First Quarter 2017
Objective 7.2	Send ISO & Accreditation Task Force members to training seminars for the most current standards and/or versions.	
Chief Alberts	Completion Date	Fourth Quarter 2017

Strategic Goal 8	Increase employee development through training and education.	
The fire service is a dynamic profession that requires firefighters to constantly learn new concepts and innovative skills.		
Objective 8.1	Develop the SFES Fire Officer Academy for all aspiring company officers	
Chief McCutchen	Completion Date	Fourth Quarter Annual
Objective 8.2	Additional specialized training in the fields of technical rescue, hazardous material, Industrial/Marine and Emergency Medical response.	
Chief Vickers	Completion Date	Fourth Quarter Annual
Objective 8.3	Obtain higher education through accredited universities outlined in the Career Development Plan.	
Chief McCutchen	Completion Date	Fourth Quarter Annual
Objective 8.4	Promote Executive level training for company and chief officers through Industry partnerships and the National Fire Academy.	
Chief Alberts	Completion Date	Fourth Quarter Annual
Objective 8.5	Select Master Firefighters to attend Management Development training through the City of Savannah.	
Chief Alberts	Completion Date	Fourth Quarter Annual
Objective 8.6	Completion of an All Hazards Container Training System to support the different levels and types of training.	
Chief McCutchen	Completion Date	Fourth Quarter 2019

Short Term Goals for 2016

Certifications

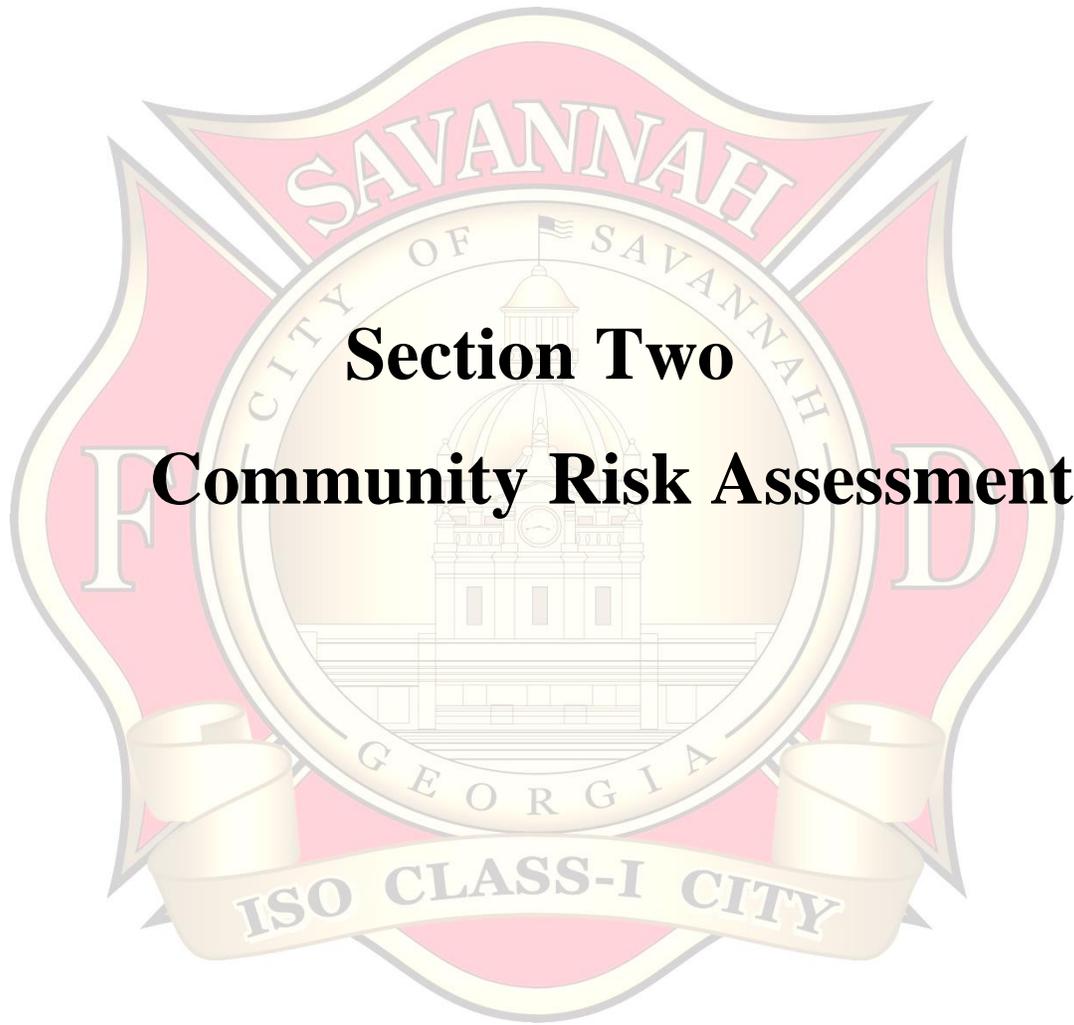
- Achieve Organizational Accreditation
- Certify 12 personnel to operate Marine 1 in Accordance with NASBLA requirements
- All Battalion Chief attend a class at the National Fire Academy within the two training cycle

Safety and Wellness

- Increase the number of NPQ Incident Safety Officers by 17%
- Develop a plan whereby all Incident Safety Officers also become certified Health and Safety Officers
- Reduce “At Fault” accidents and Workers Compensation Injuries by 10%

Organizational Accountability

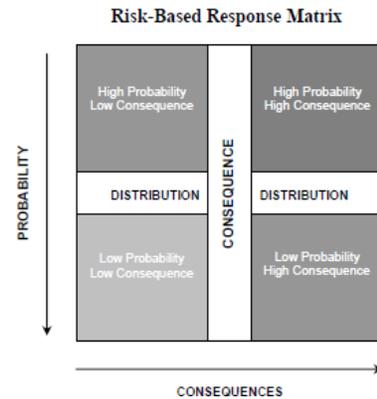
- Implement Phase 1 of NFPA 1710
- Ensure that at least 90% of City Personnel in Incident Command System Leadership positions are identified down to the Team Leader level
- Develop a Station Maintenance and Appliance/Equipment tracking system within our Records Management System
- Enhance the SFES Brand by emphasizing individual accountability
- Improve overall Turnout Time from 1 minute 29 seconds on building fires to 1 minute 20 seconds, 90% of the time



Section Two
Community Risk Assessment

Risk Assessment Methodology

Risk management is the analysis of the probability of an event occurring and the resulting damage that could occur as a result of the event. SFES must assess risks based upon the probability of an incident occurring and consequences it may impose, such as large loss of life or economic impact. In 2005, SFES initiated a comprehensive risk assessment of the city by utilizing the Risk, Hazard, and Value Evaluation (RHAVE) software. After two years of data collection, the data was categorized and placed on a series of maps to identify structures of high risk within the city limits. Incorporating that data from 2009 and utilizing the following three methodologies, SFES was able to reinitiate the risk analysis in 2013.



The first methodology is derived from GA Code Title 25-Fire Protection and Safety. This State law assists local and state fire marshals in identifying buildings of a high risk that would, by law need to be inspected. The second methodology used was a modified Federal Emergency Management Agency (FEMA) Risk Assessment Matrix. This matrix was another tool used to identify high hazard buildings based off of criteria such as life hazards, terrorism risk, and community impact. The third methodology involved the historical RHAVE Data.

Each year, SFES supports these methodologies listed above by conducting a series of Pre Fire Plans (PFP) and Hazardous Material Tier Two inspections. These PFP's and Tier Two's highlight growth throughout the Bureau's response area and identify any potential risks that SFES response personnel will encounter mitigating an incident. In order to identify these risk areas, SFES utilizes Geographical Information Systems (GIS) and an analysis of six key components. The six components include:

Fire Flow (water) – the amount of water required to both control and extinguishes a fire emergency, based on the contents, square footage, construction type, and the use of combustible materials.

Probability – the likelihood that a particular event will occur within a given period of time. An event that occurs daily is highly probable. An event that occurs only once in a

century is very unlikely. Probability is an estimate of how often an event will occur, based on local historical data.

Consequence – two primary components: life safety (risk to the lives of occupants and responders from life-threatening situations that include fire, rescue, hazardous substance and economic impact (the loss of property, income or irreplaceable assets).

Occupancy risk – An assessment of the relative risk to life and property resulting from a fire inherent in a specific occupancy or in generic occupancy classes

Fire Management Zones (FMZ) – Geographic areas within a response district where created in 2014 and were integrated with our Records Management System (RMS) to analyze risk in regards to call type and volume within a geographical area.

Community Profile – An analysis of the attributes of the community based on the unique mixture of demographics, socioeconomic factors, occupancy risk, demand zones, historical trends and level of service currently being provided

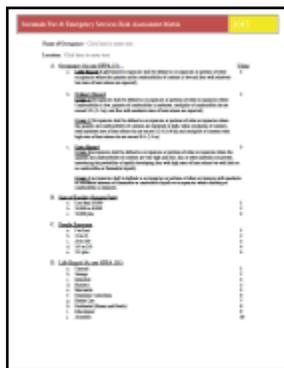
SFES rated 533 response zones in one of the following risk categories:

Special/Industrial Hazard: Marine terminals and industry requiring a special fire suppression, hazardous material, or technical rescue response.

High Risk Three or more stories, Two Stories with a basement, Hospitals, Daycares, Care Homes, Nursing Homes, Dormitories, Commercial Structures over 12,000 square feet with high fuel load, Parking Garages Hazardous Materials, Technical Rescues, Railroad Accidents, Aircraft Crashes, Maritime Incidents. This shall be identified in red.

Moderate Residential Structures less than two stories, no basements and under 12,000 square feet and may have historical significance. This shall be identified in yellow.

Low Risks (Vehicle Fires, Trash or Dumpster Fires, Unoccupied Outbuildings: Sheds, detached Garages).



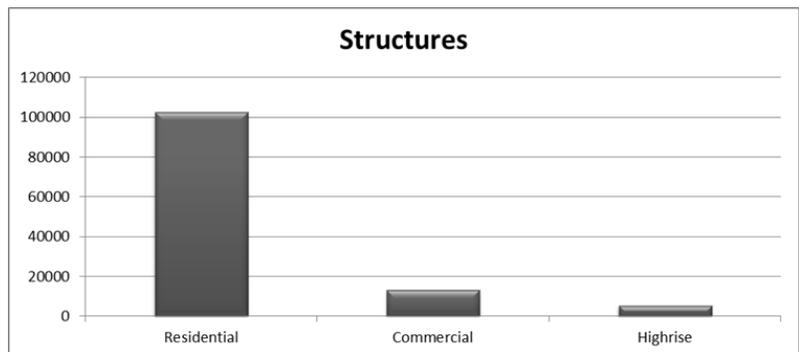
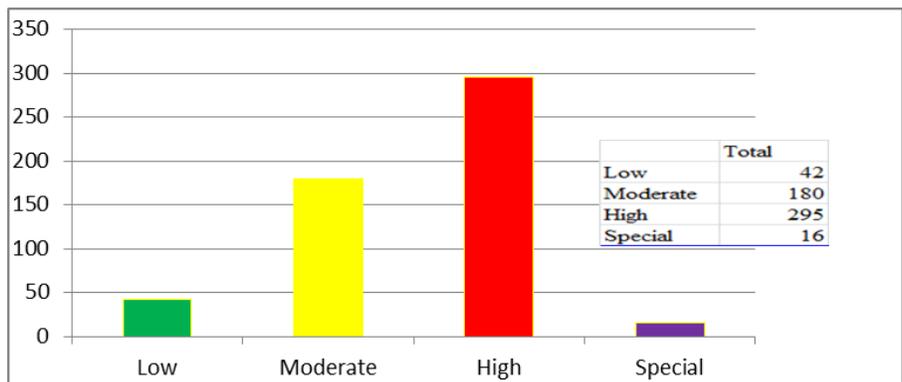
Utilizing these methodologies, site visits and historical data, SFES was able to identify areas of High, Moderate, Low and Special risk areas throughout the city. The risk is associated with the highest severity within that Fire management zone. For example, in Fire Management Zone 5025 a high risk building was identified which identified that entire zone as “High Risk”. Currently, incident data from 2014- 2016 (in regards to incident type of and volume) is being analyzed and plotted to ensure a comprehensive risk analysis for each zone and district.

The analyzed data indicated that the COS has 295 “High Risk” zones equaling 55% of the total response area. In the “Moderate Risk” category 180 zones were identified or 34% of the total response area. The “Low Risk” category makes up 8% of the city or 42 zones. Lastly, 3% or 16 zones within the total response area are deemed “Special Risk”.

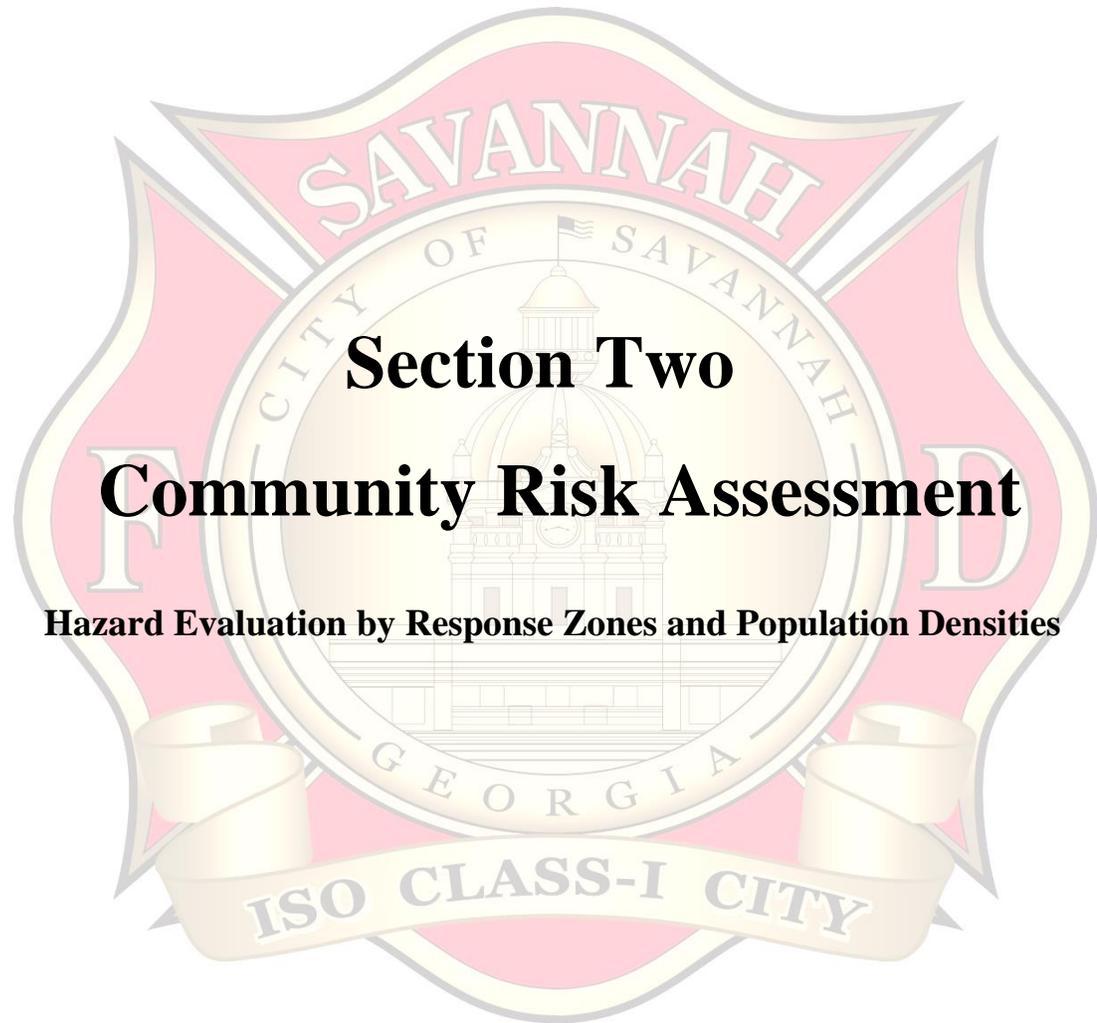
The goal of the risk assessment process was to create a foundation to build, identify and categorize risks based on consequence and frequency. SFES will utilize these methodologies, site visits and incident frequency to predict risk trends and to ensure resources are being deployed effectively and efficiently.

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Risk Assessment Totals for Response Zones



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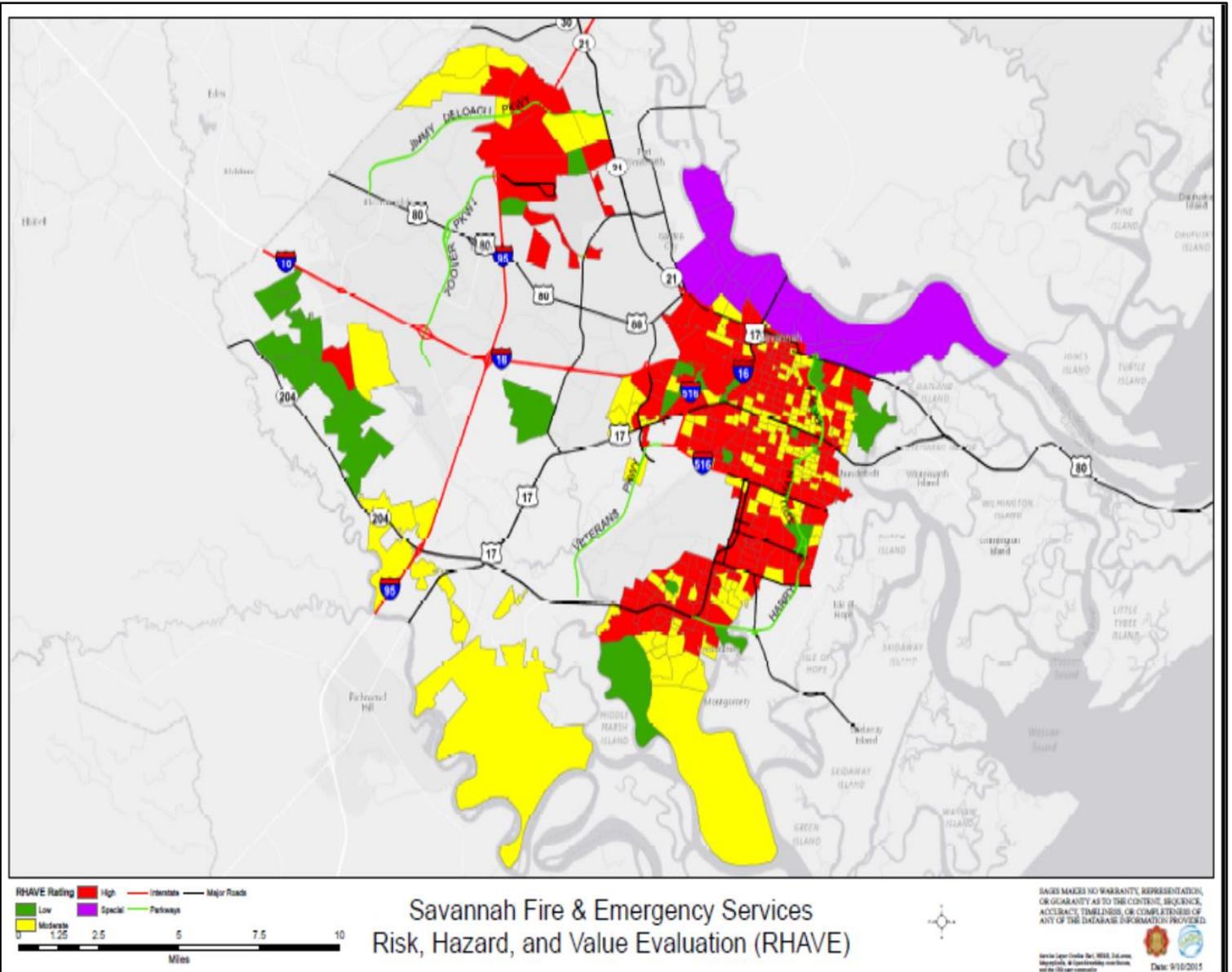


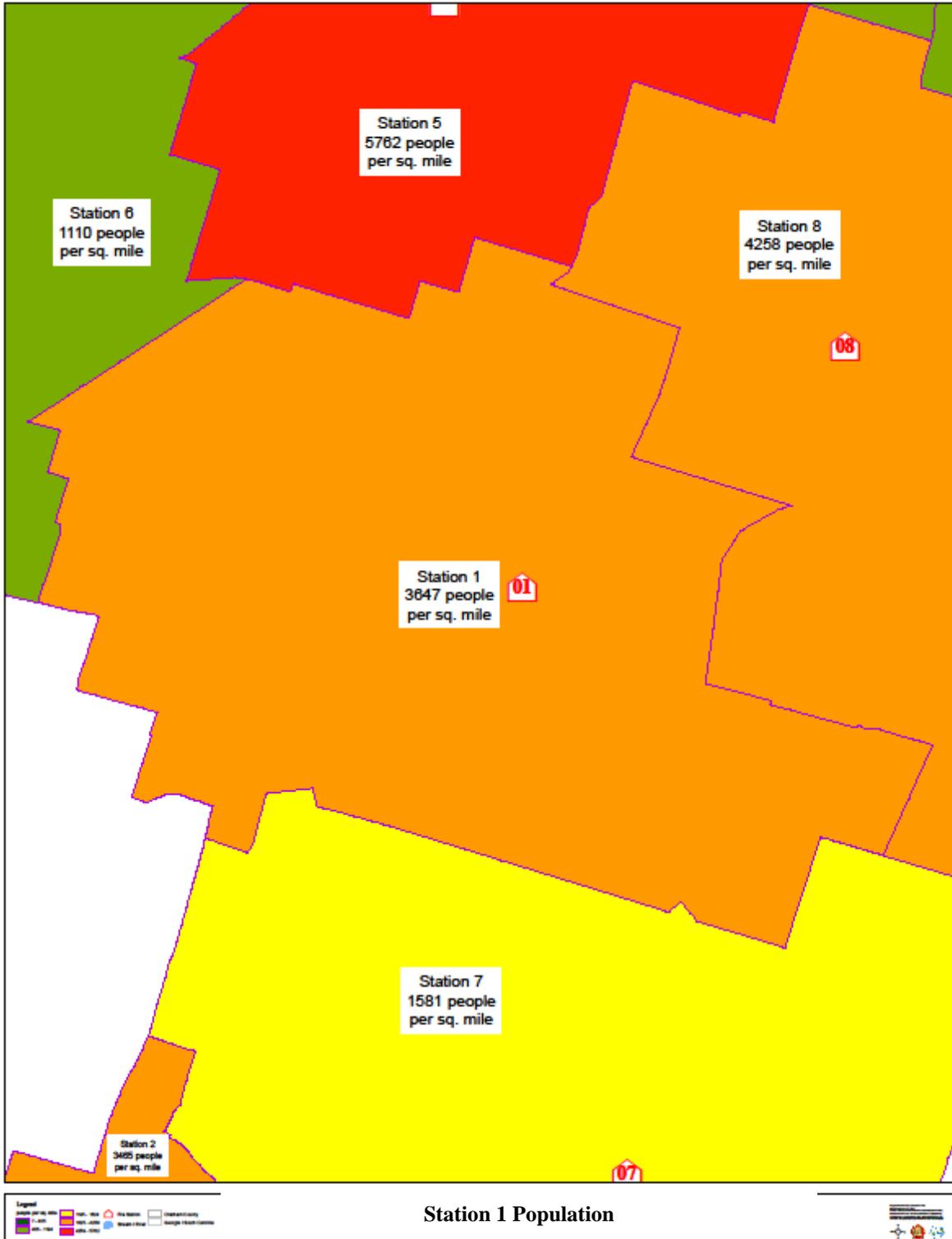
Section Two

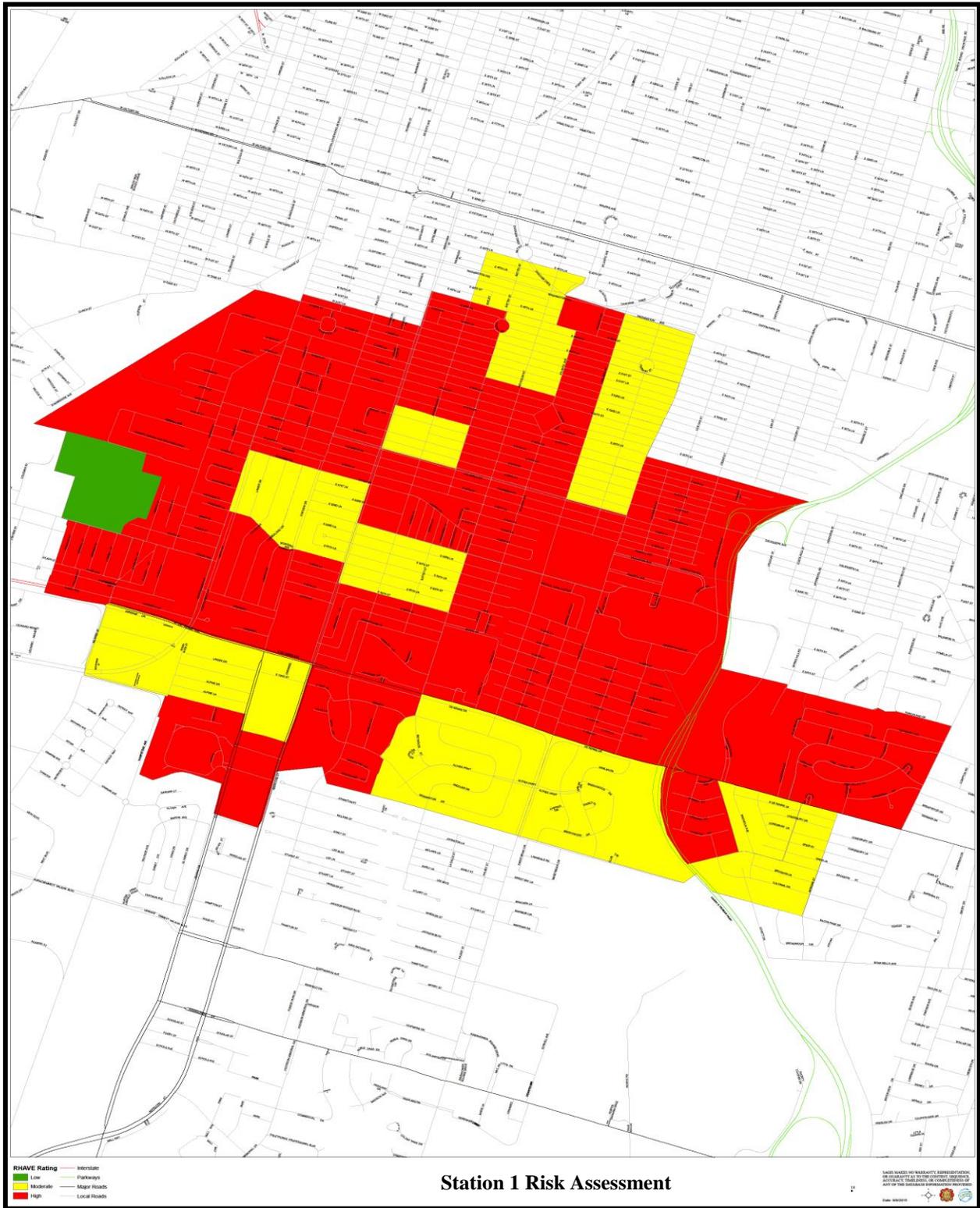
Community Risk Assessment

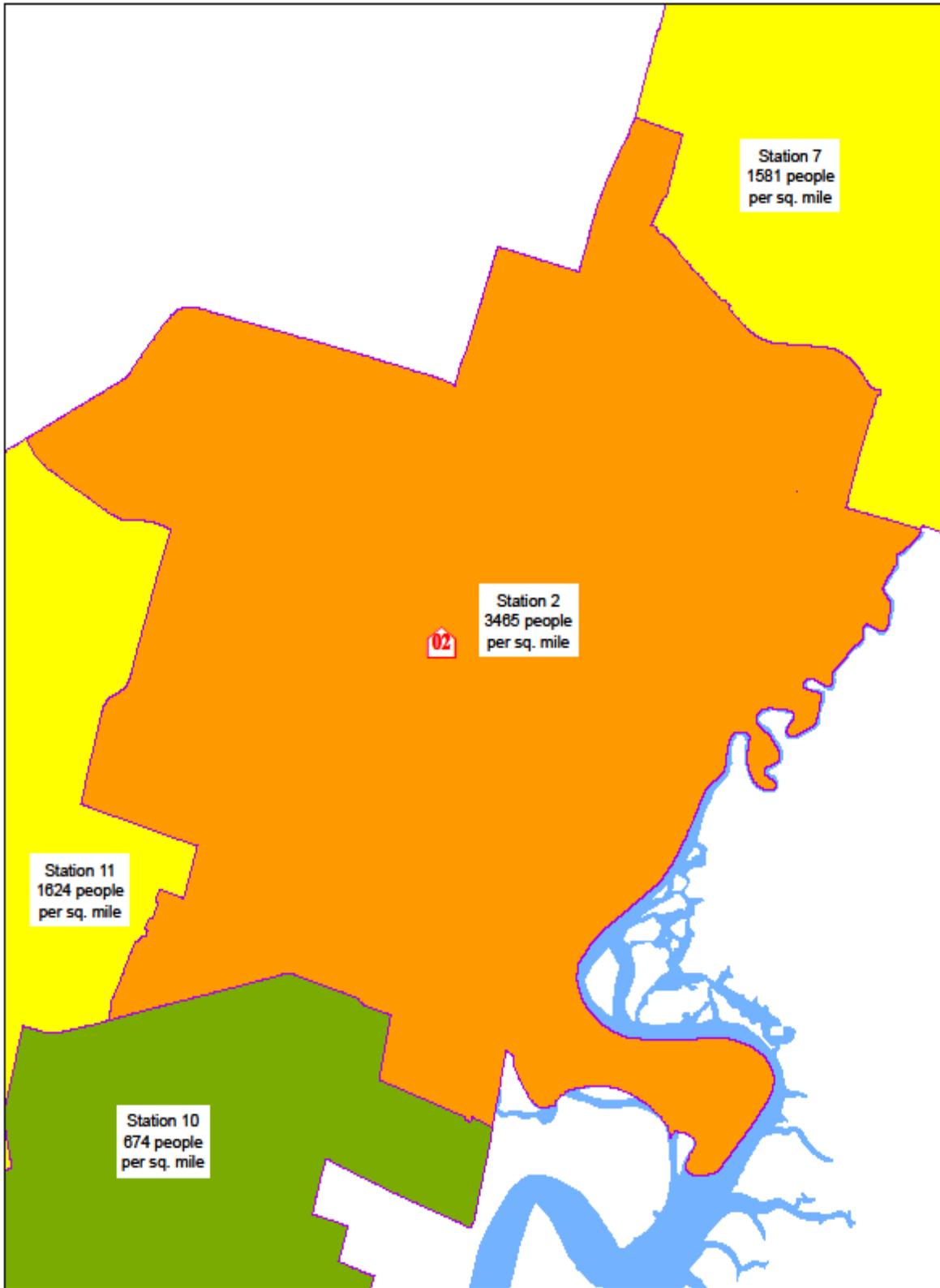
Hazard Evaluation by Response Zones and Population Densities

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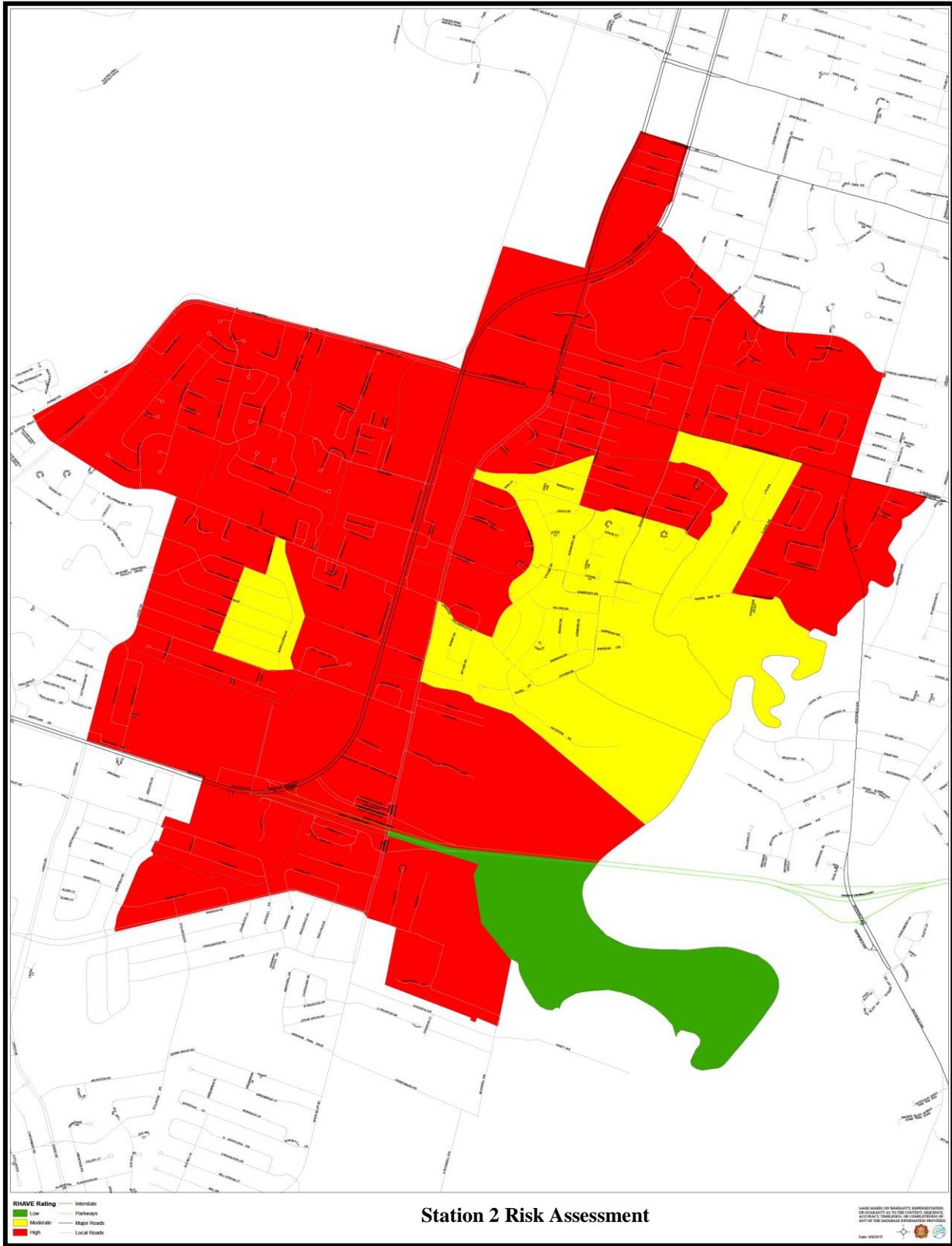


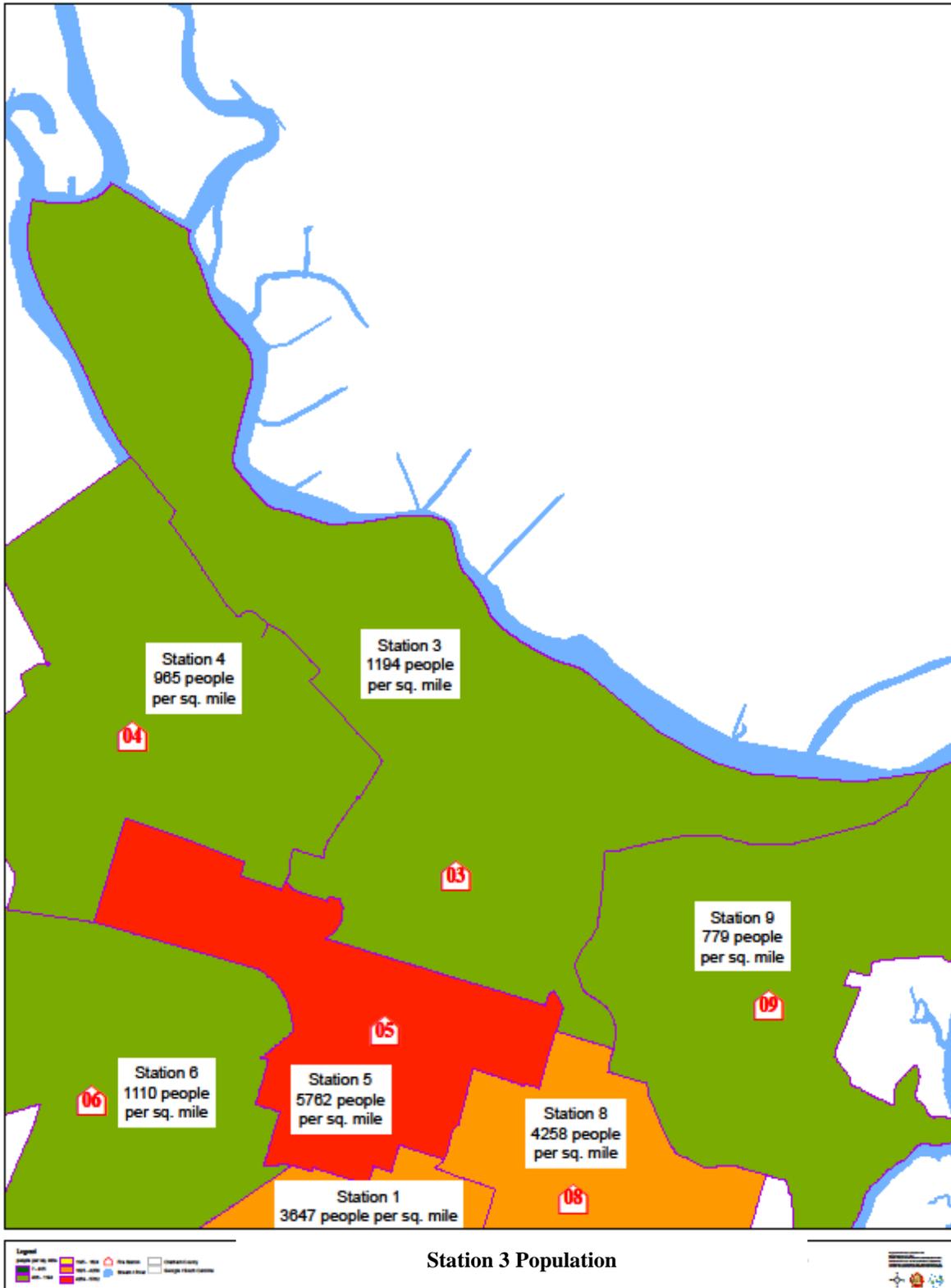
Station 2 Population

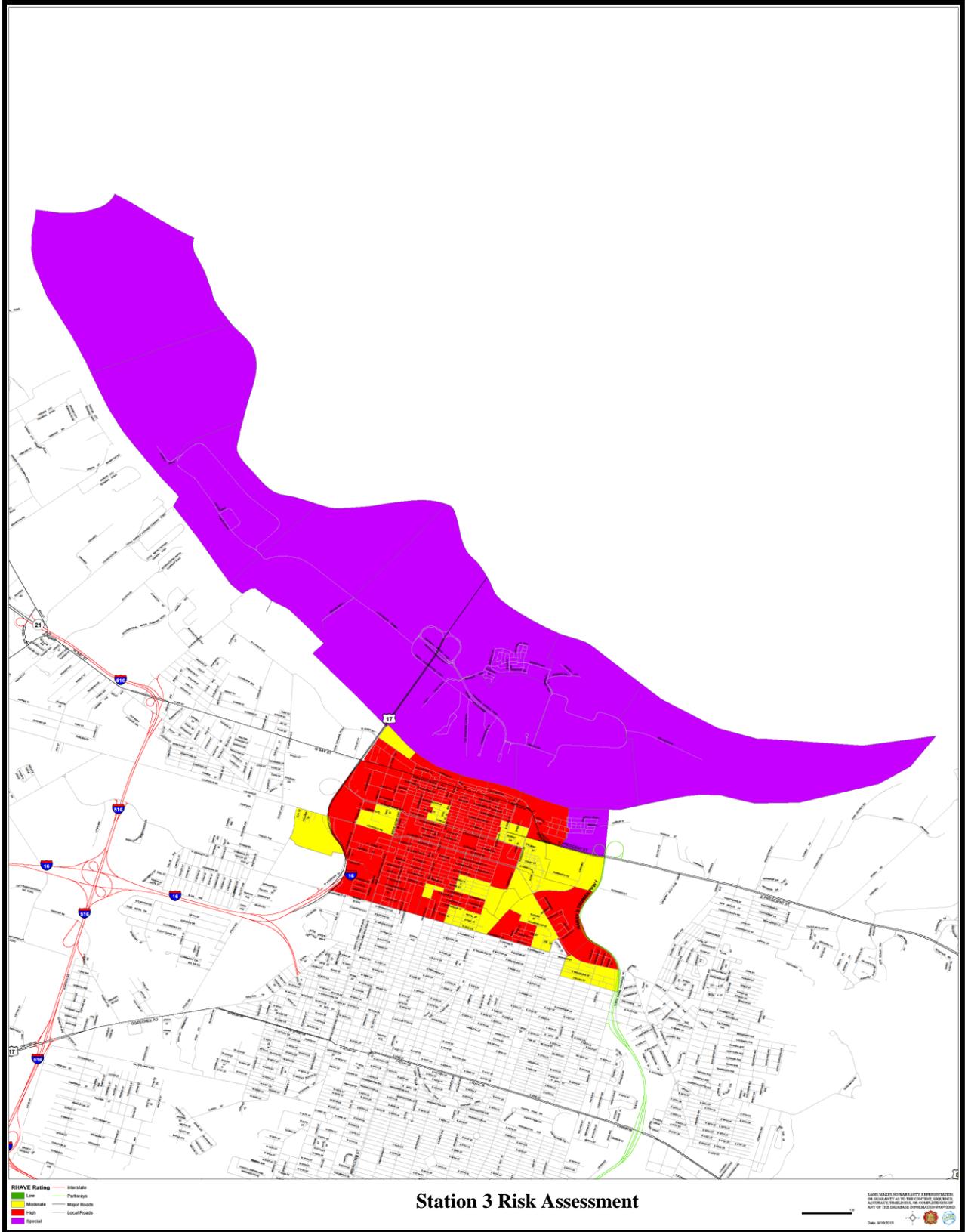
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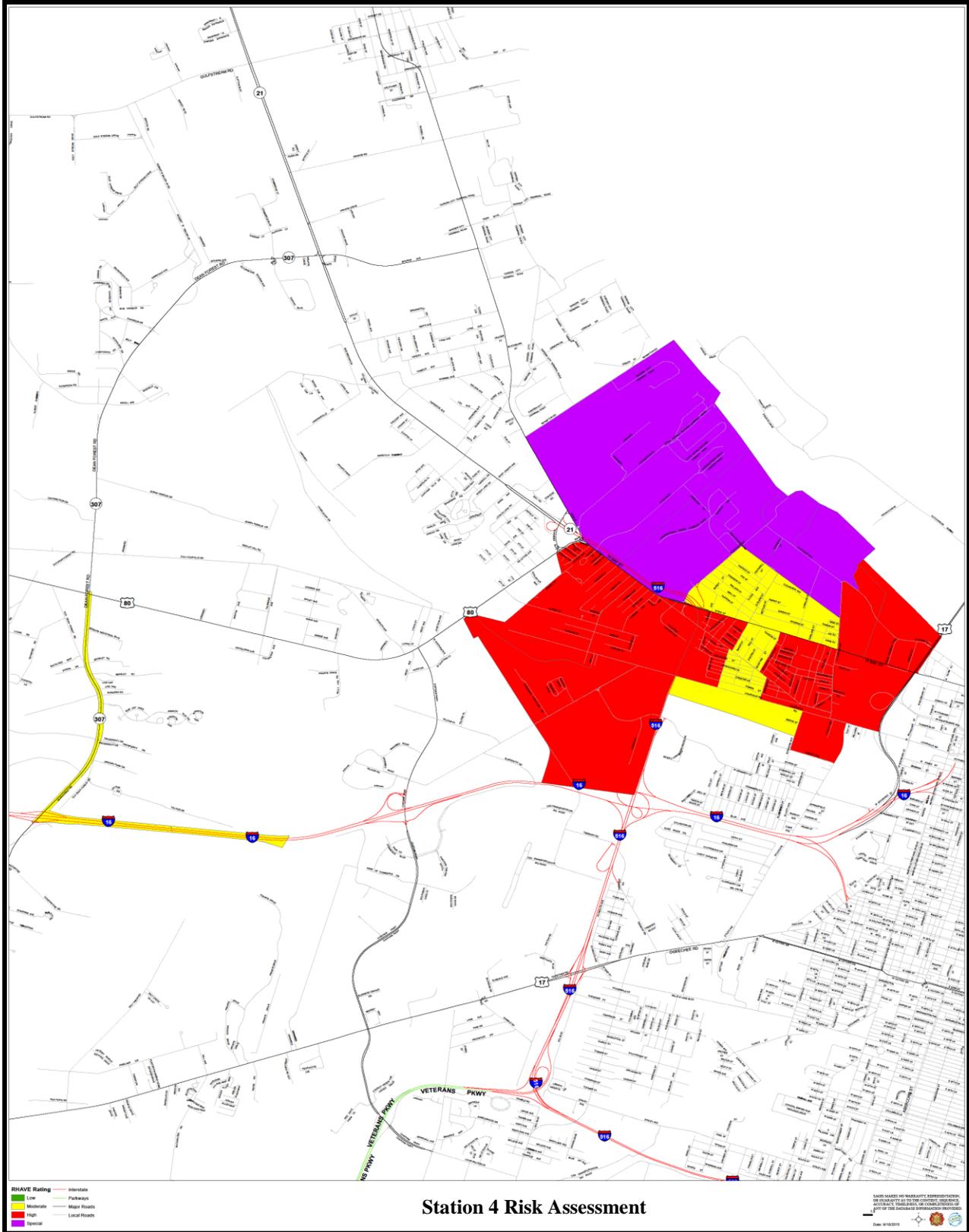
Station 2	Station 7	Station 10	Station 11	Fire Station	Fire Station	Fire Station
Orange	Yellow	Green	Light Yellow	Red circle with 02	Blue circle with 01	Blue circle with 03
3465 people per sq. mile	1581 people per sq. mile	674 people per sq. mile	1624 people per sq. mile	Station 2	Station 7	Station 10

City of Savannah

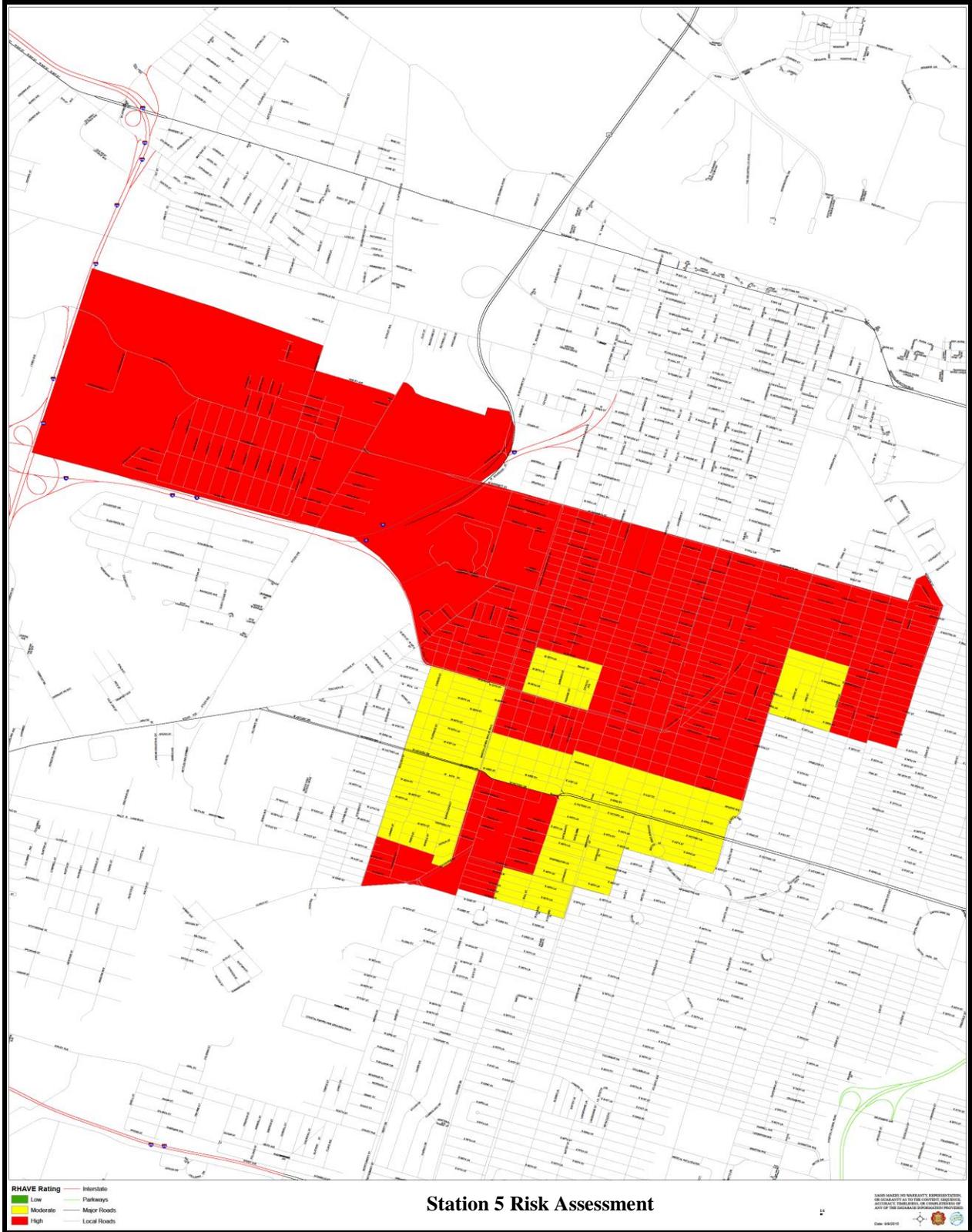


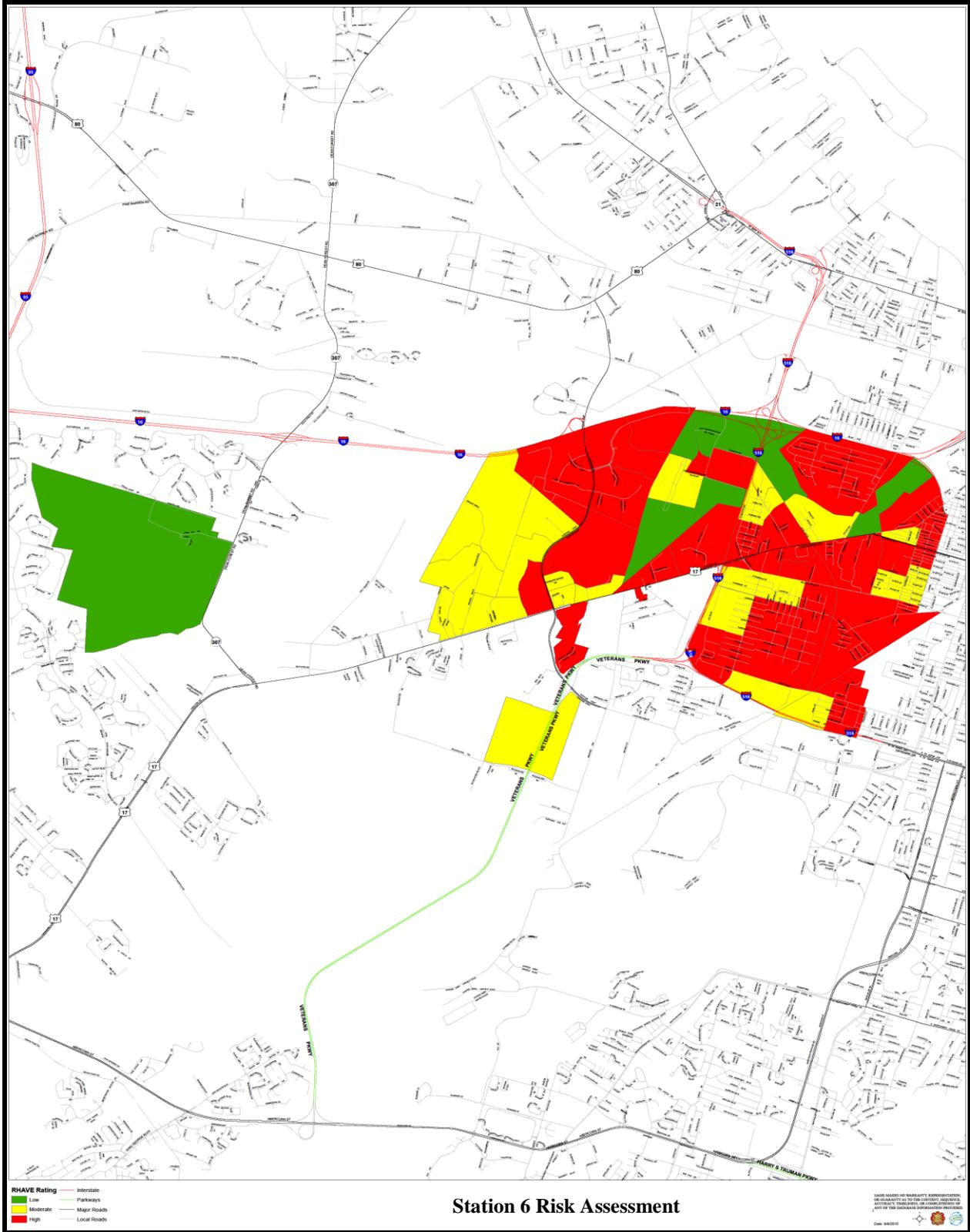


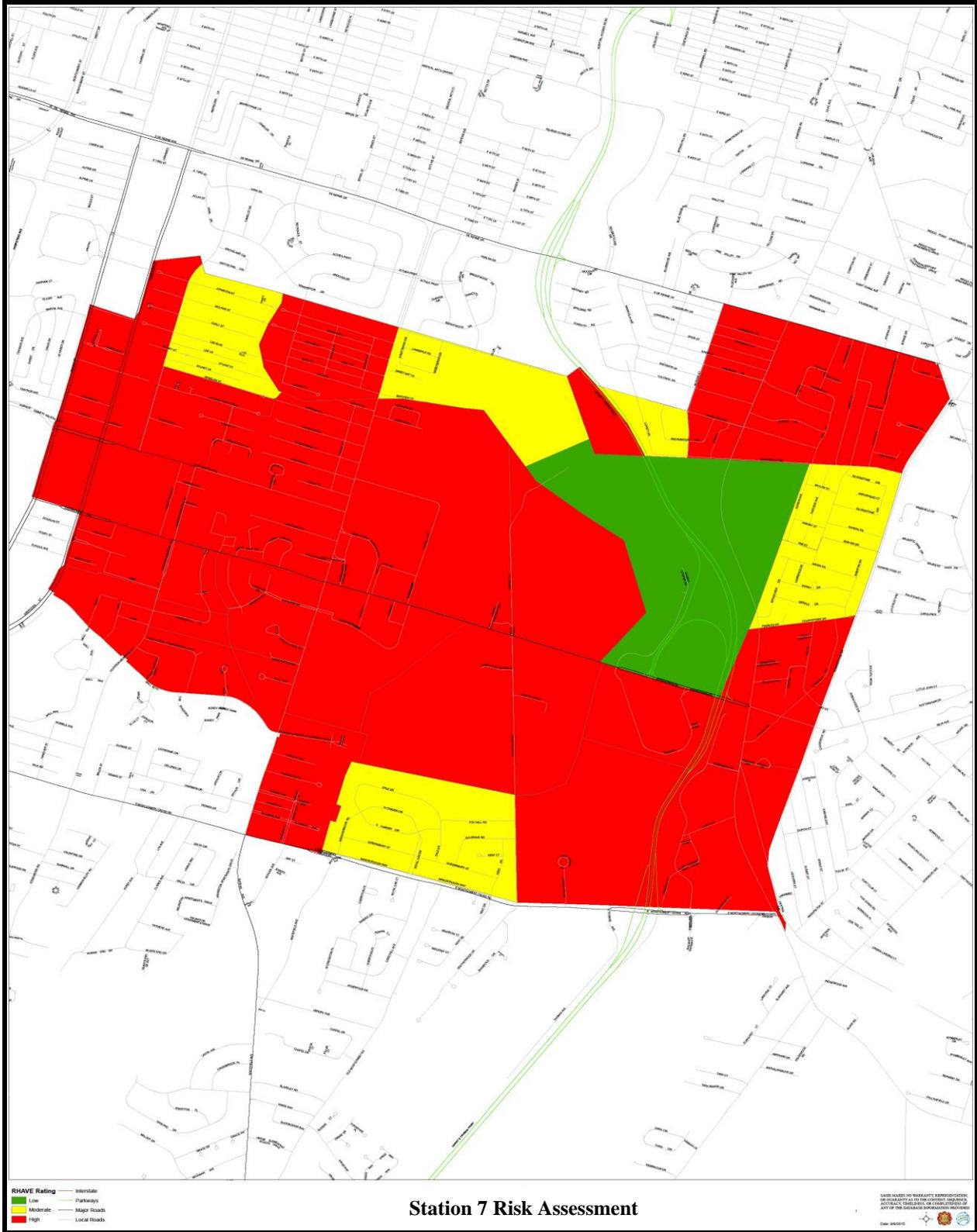




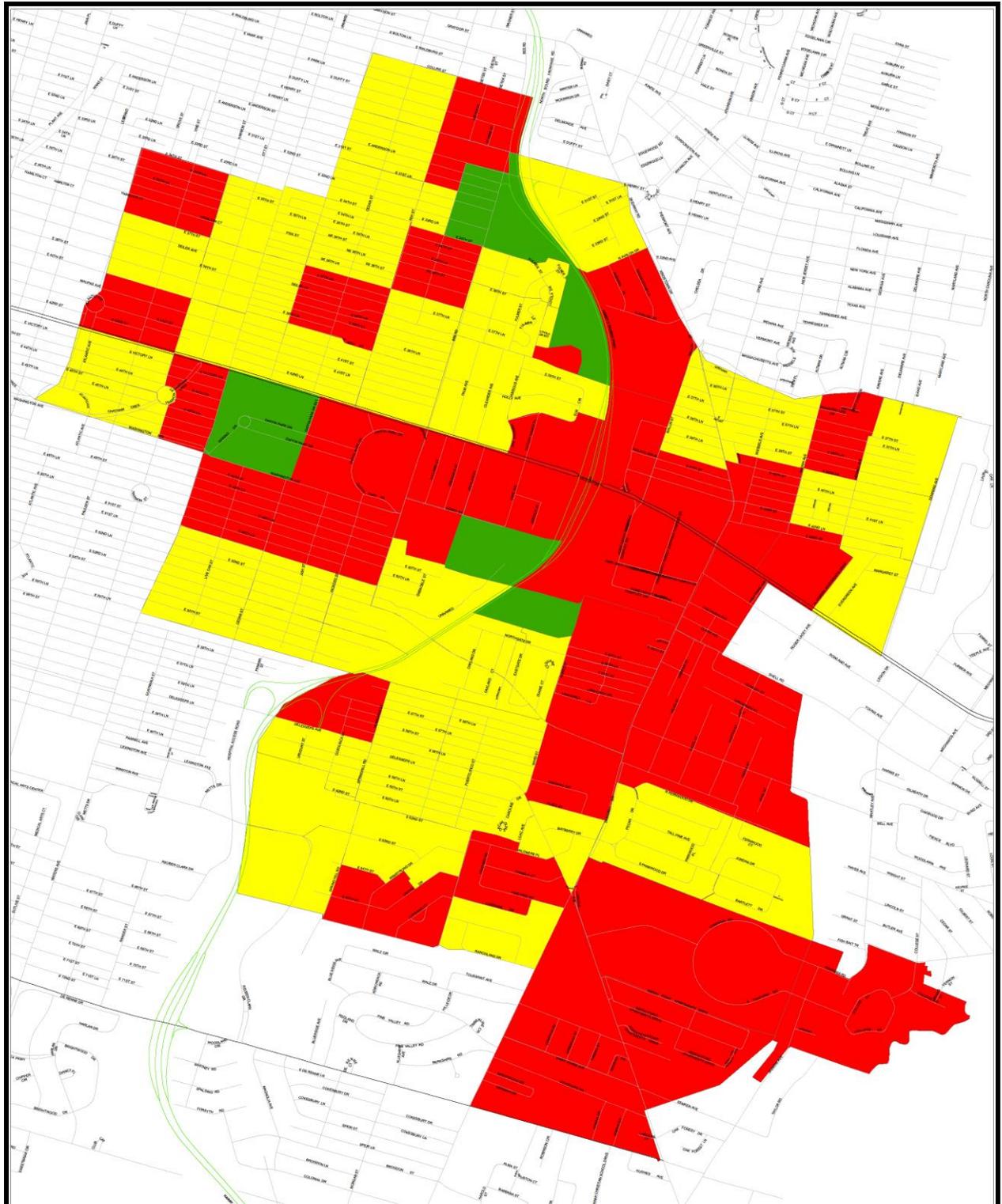








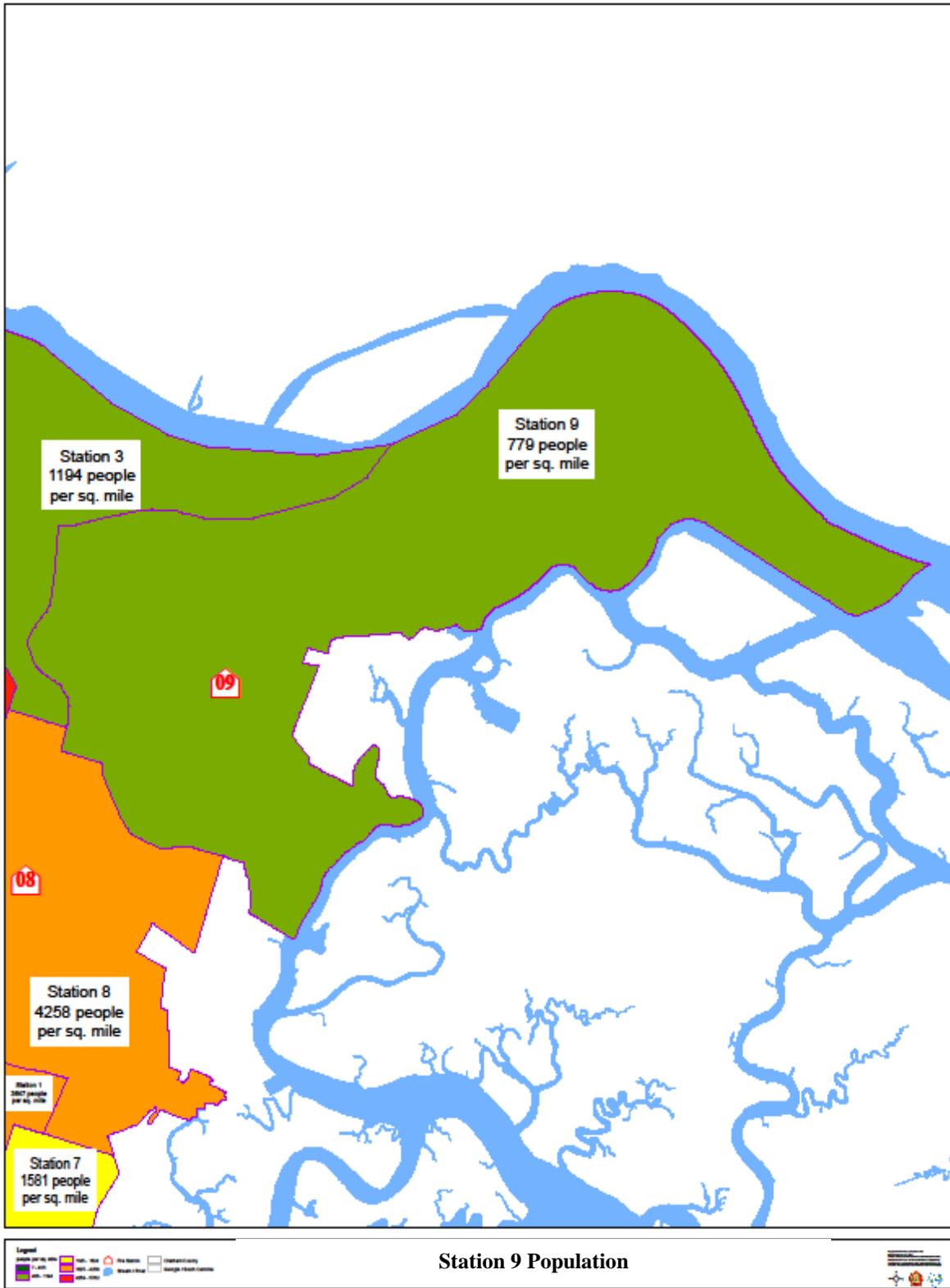


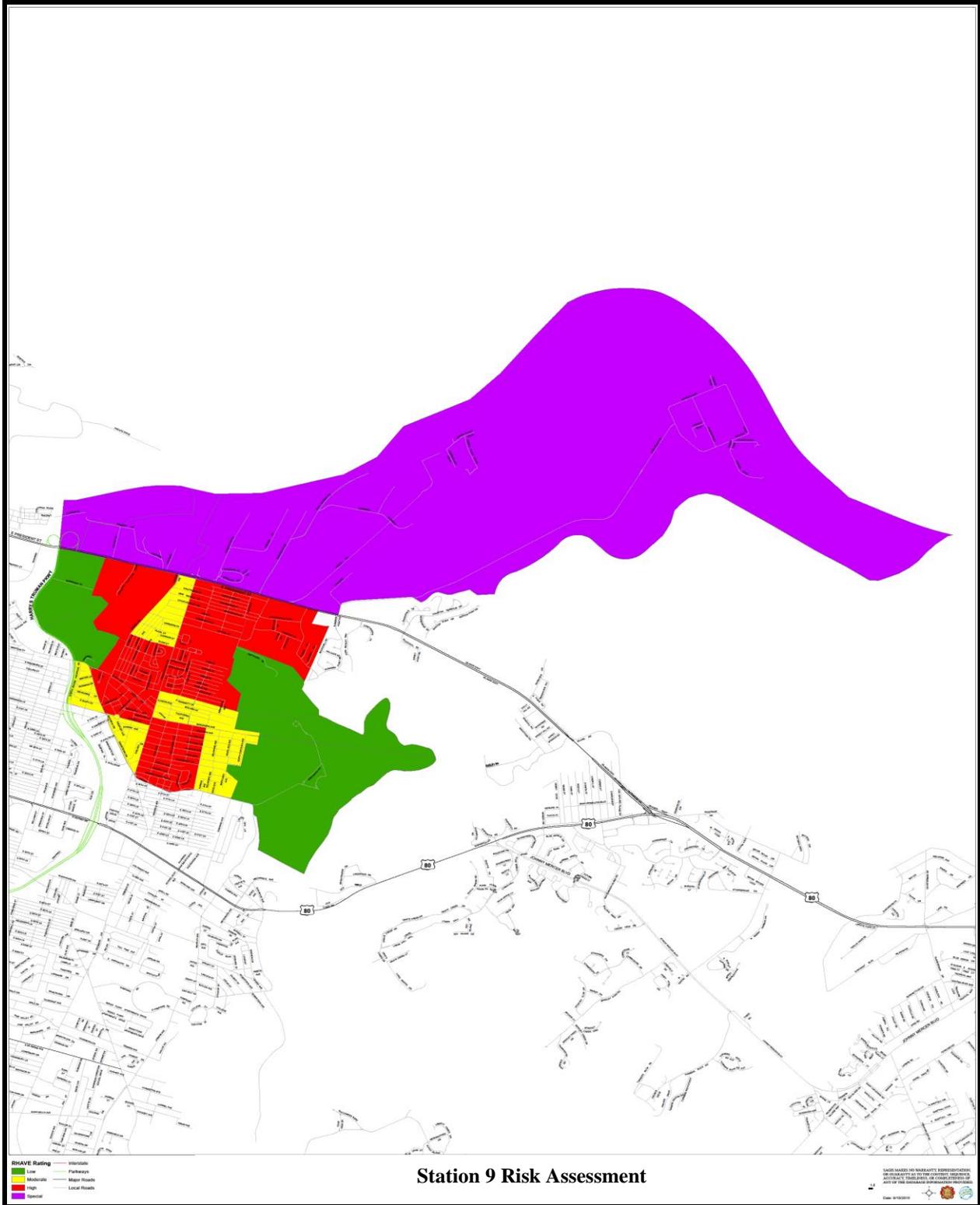


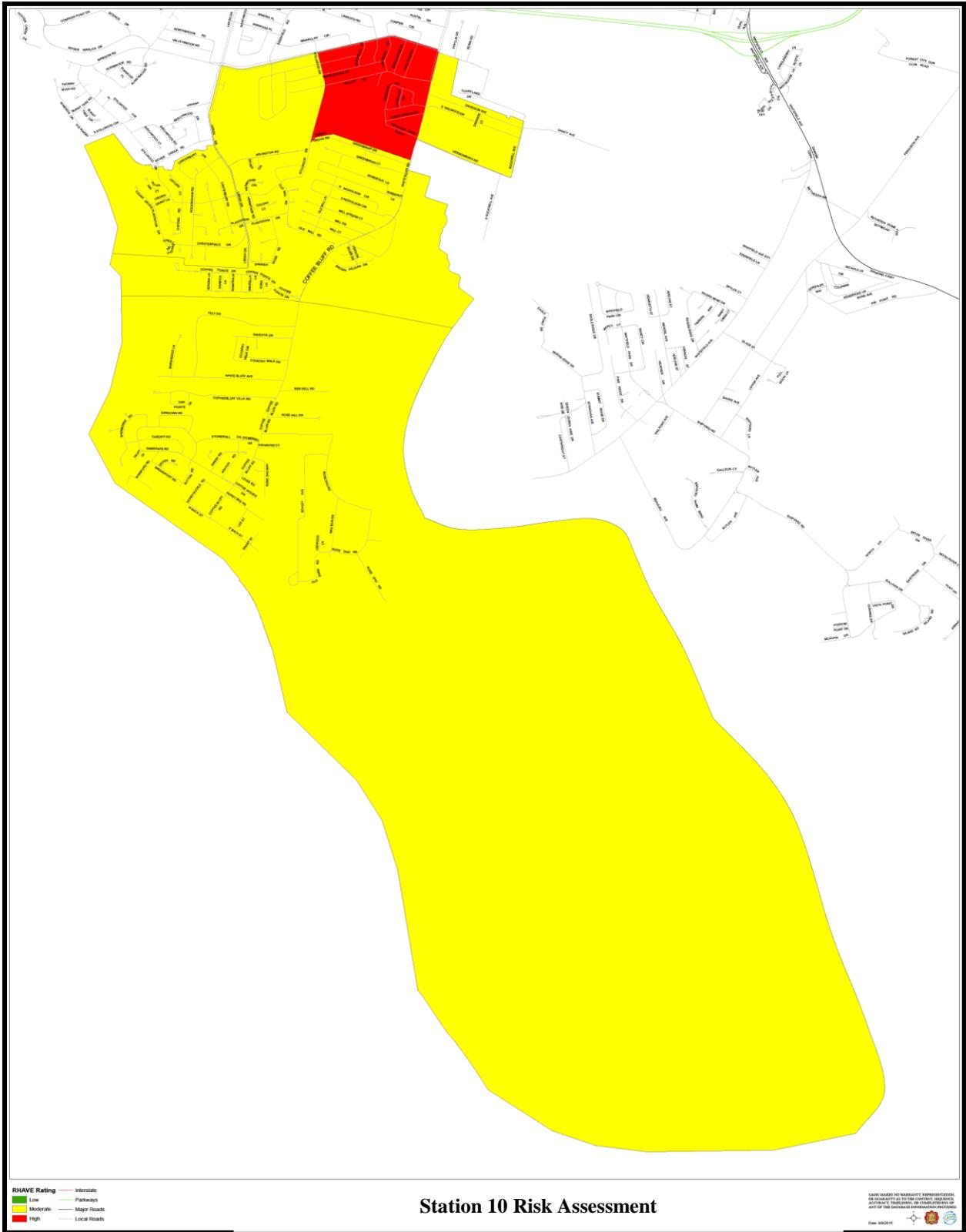
RHAVE Rating — Interstate
 Low — Parkways
 Moderate — Major Roads
 High — Local Roads

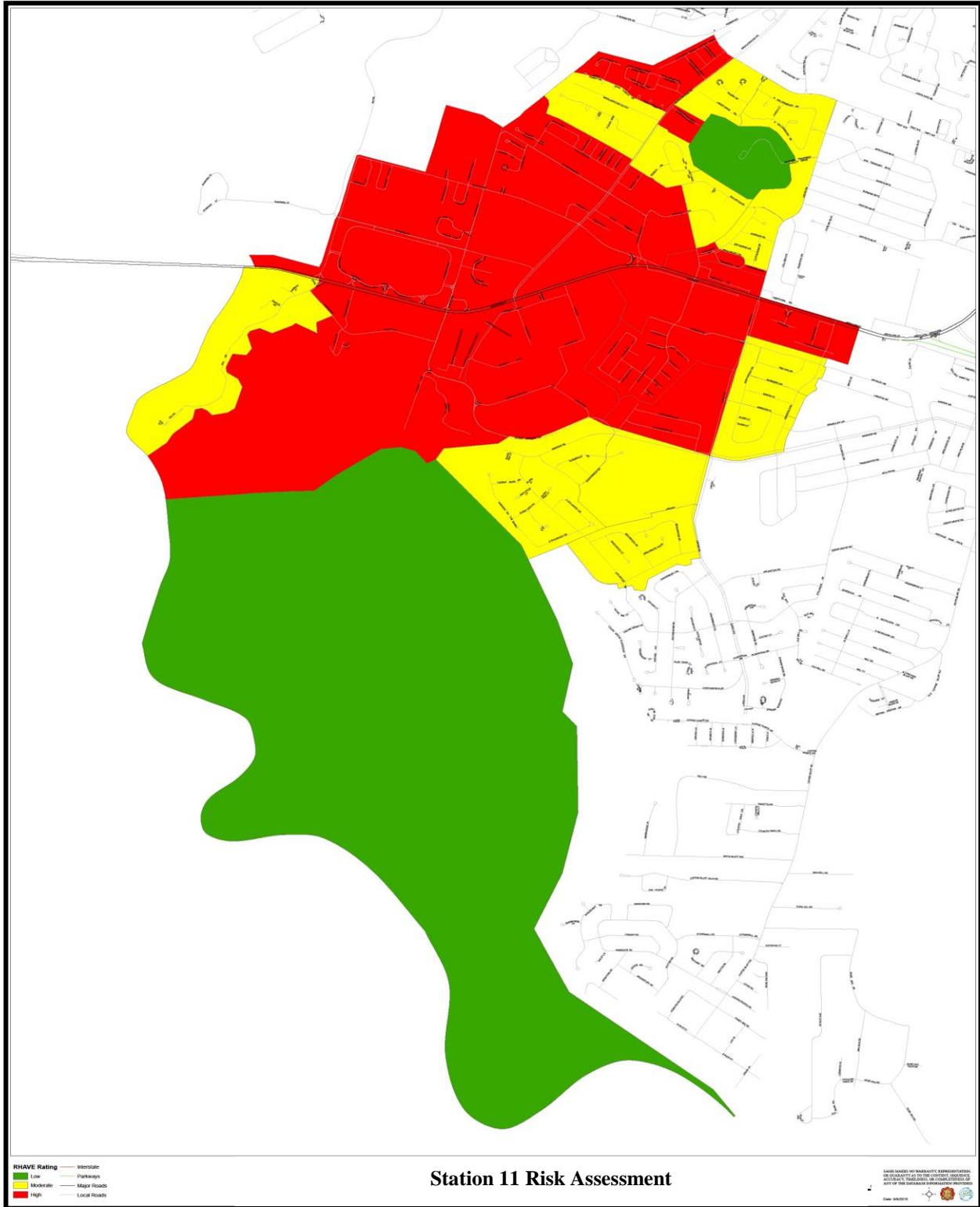
Station 8 Risk Assessment

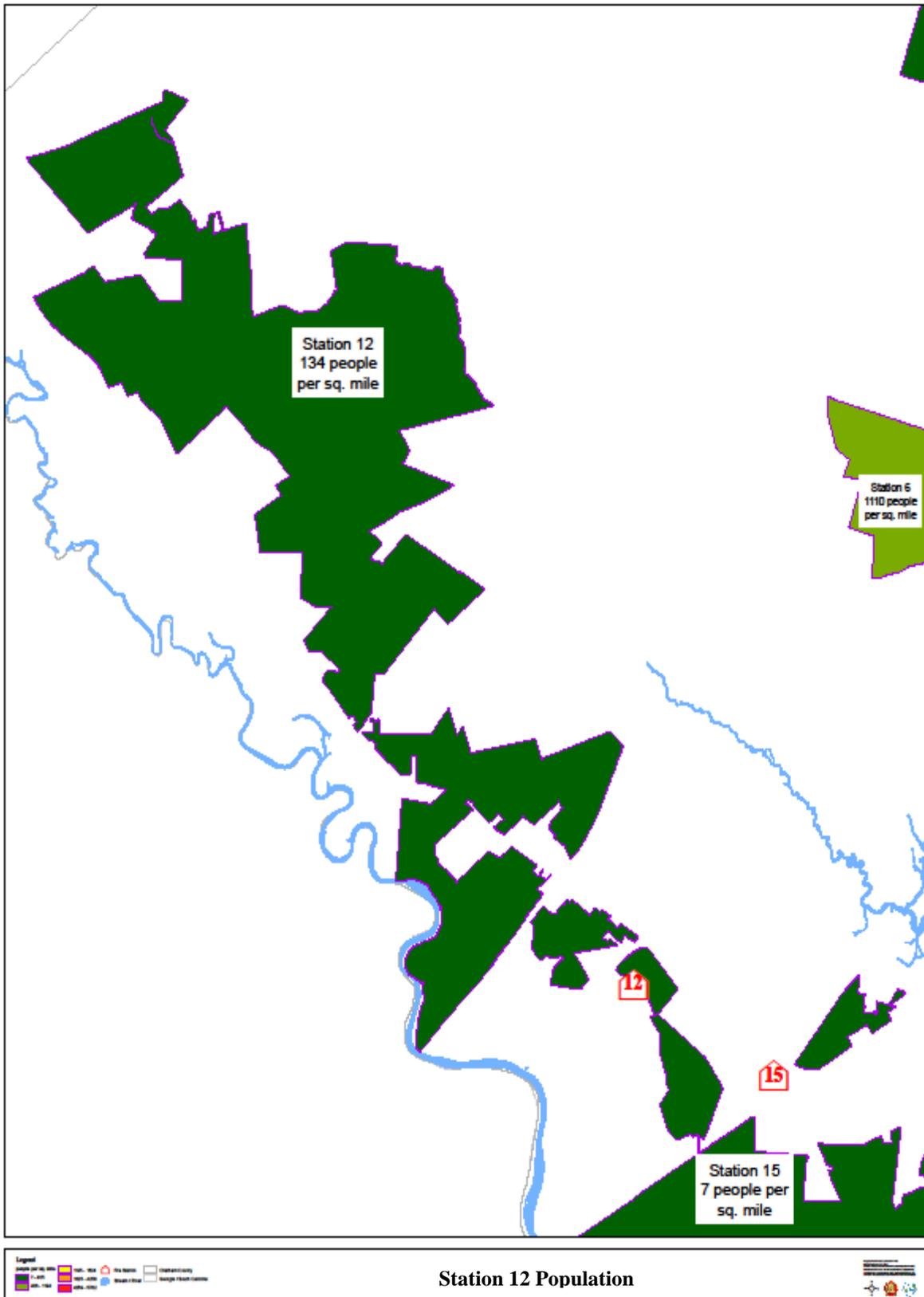
SAVANNAH FIRE & EMERGENCY SERVICES
 1000 W. BROADWAY, SAVANNAH, GA 31401
 912.438.2200
 WWW.SAVANNAHFIRE.COM

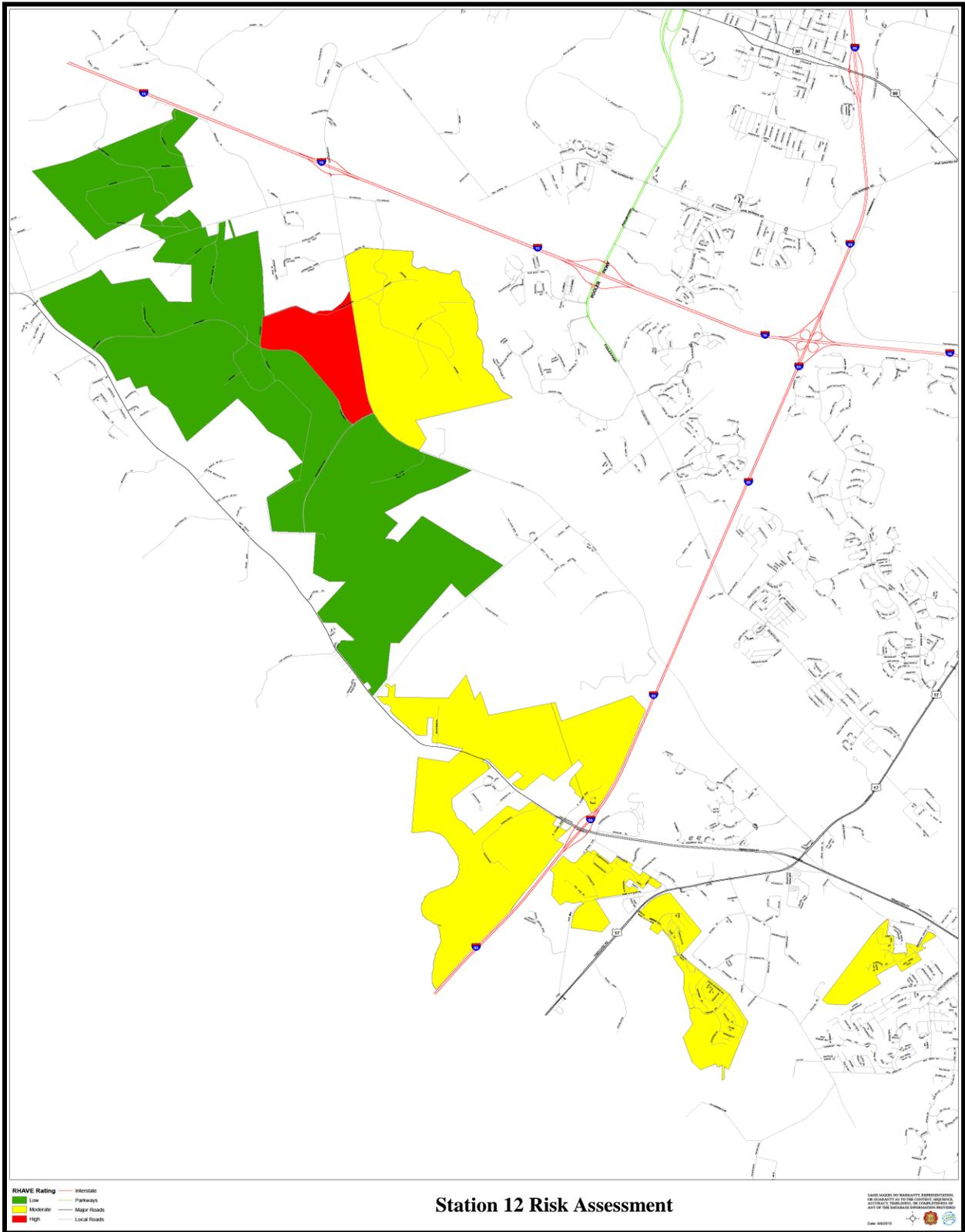




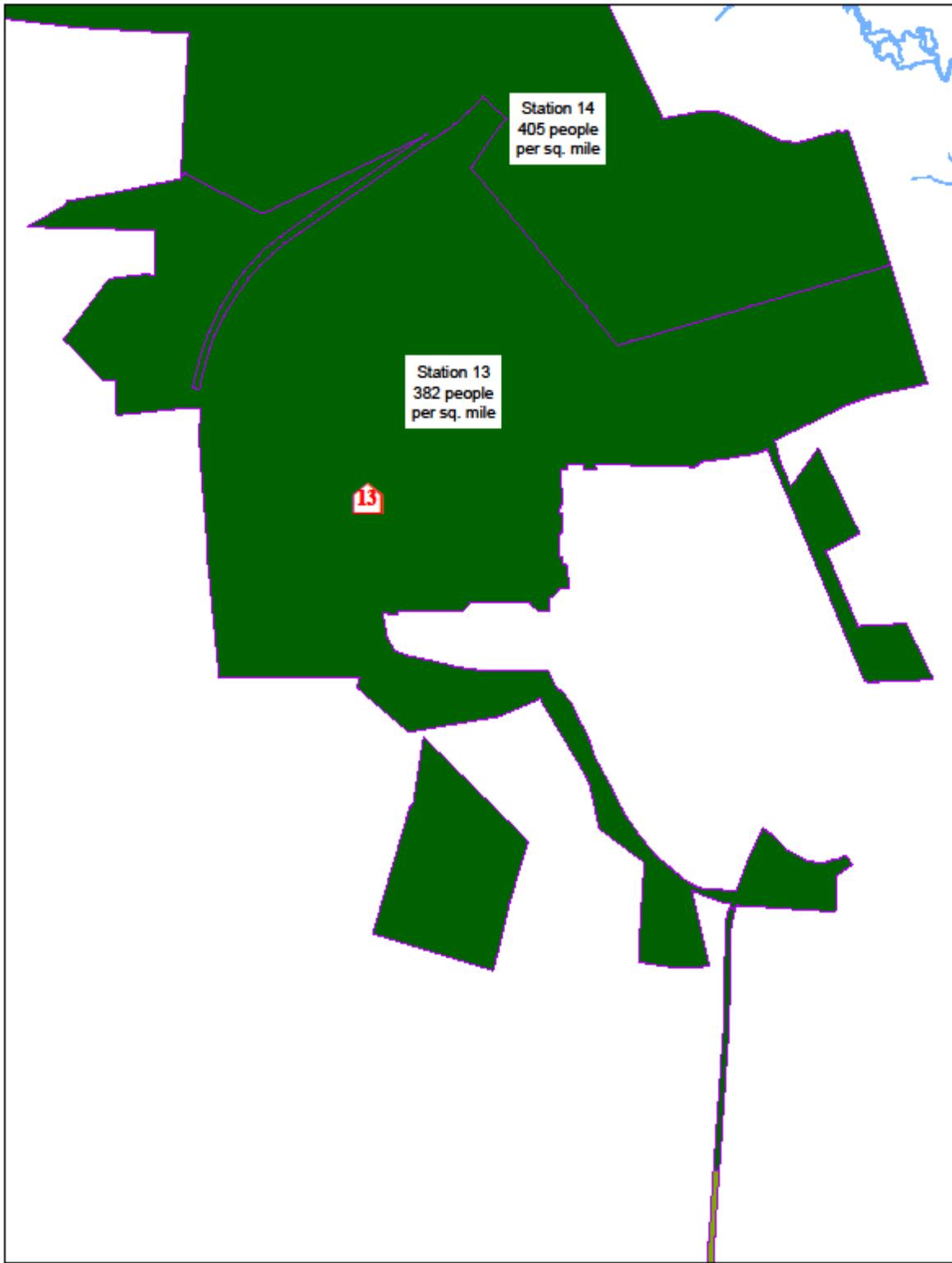








Station 12 Risk Assessment

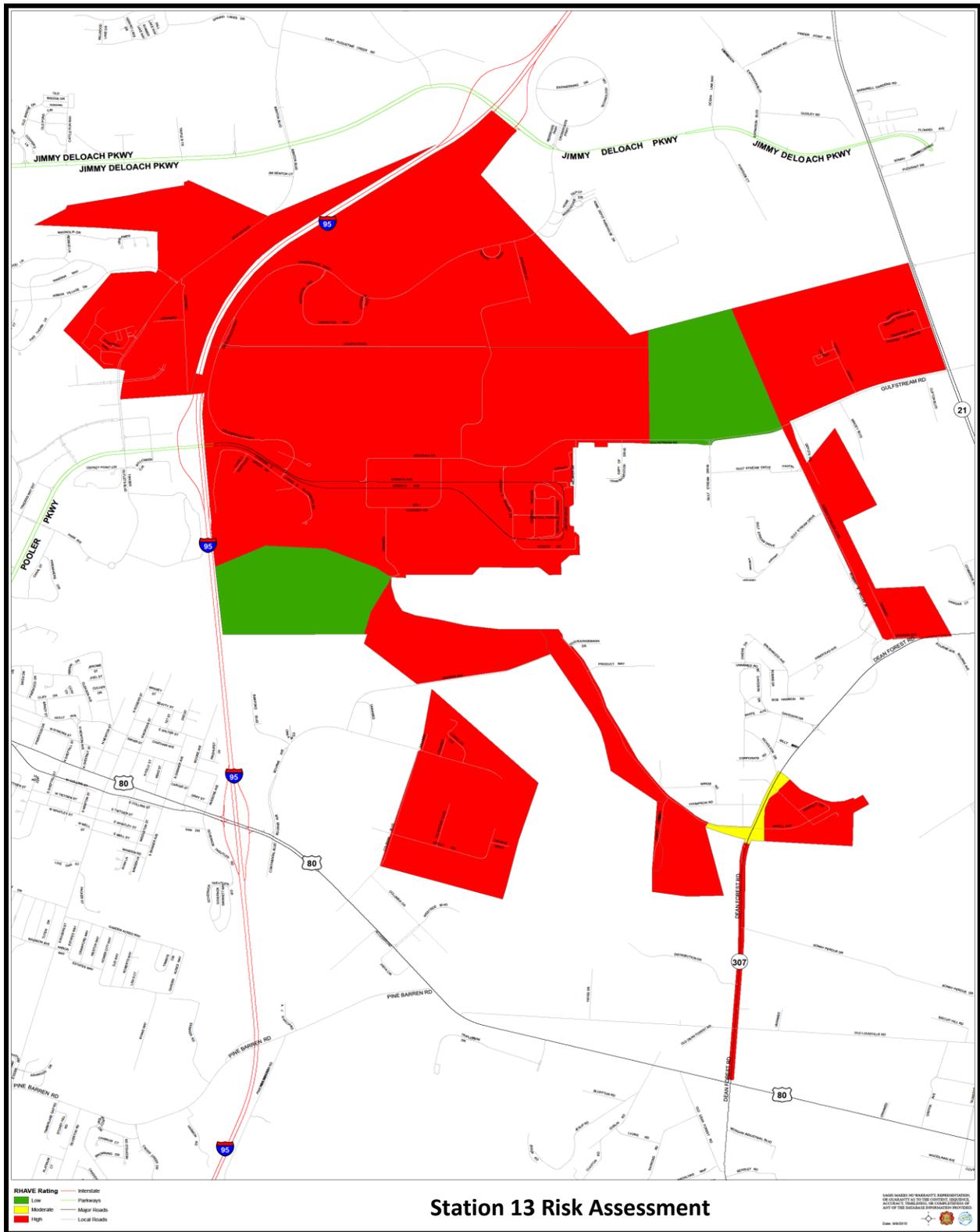


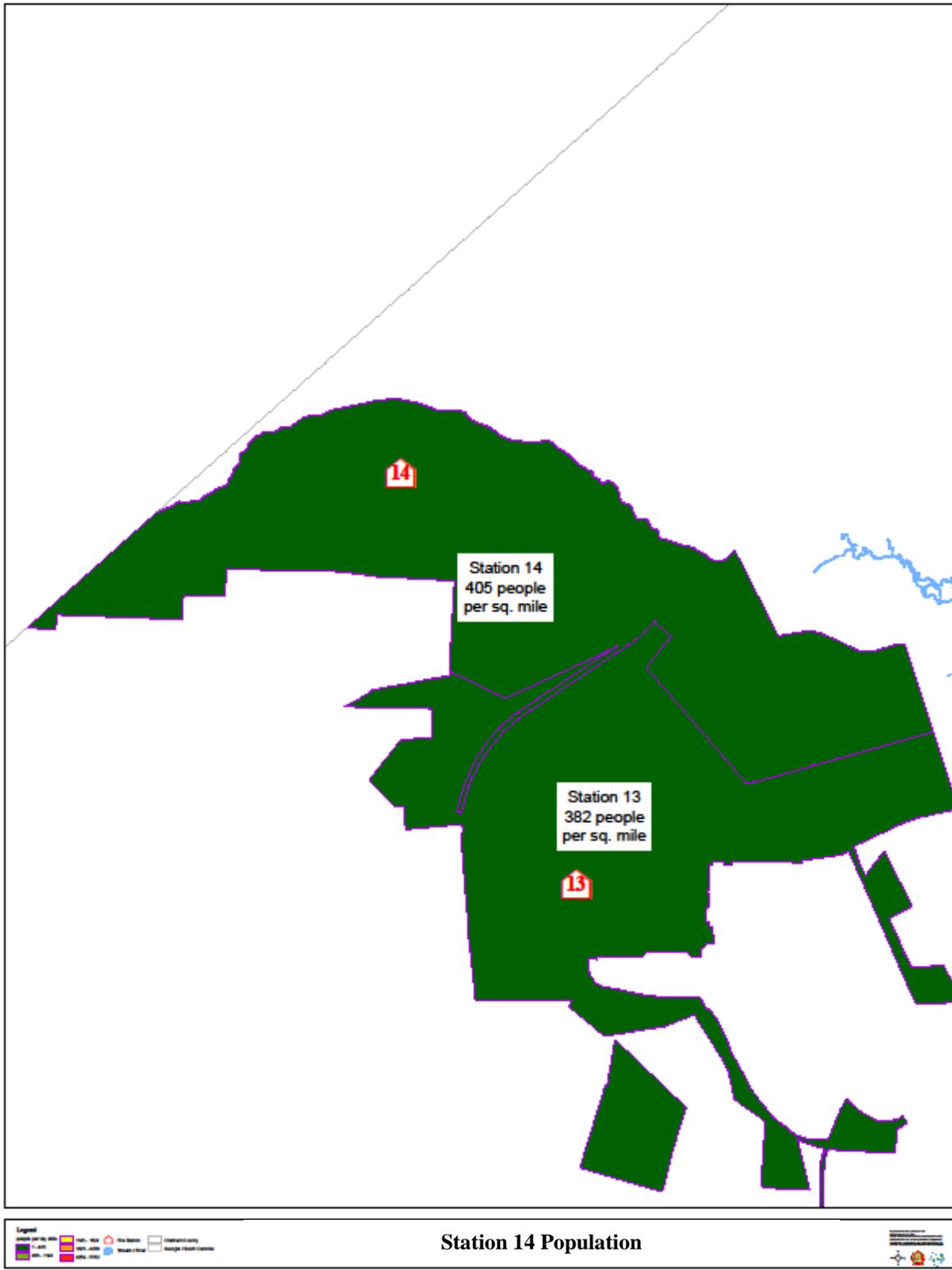
Station 13 Population

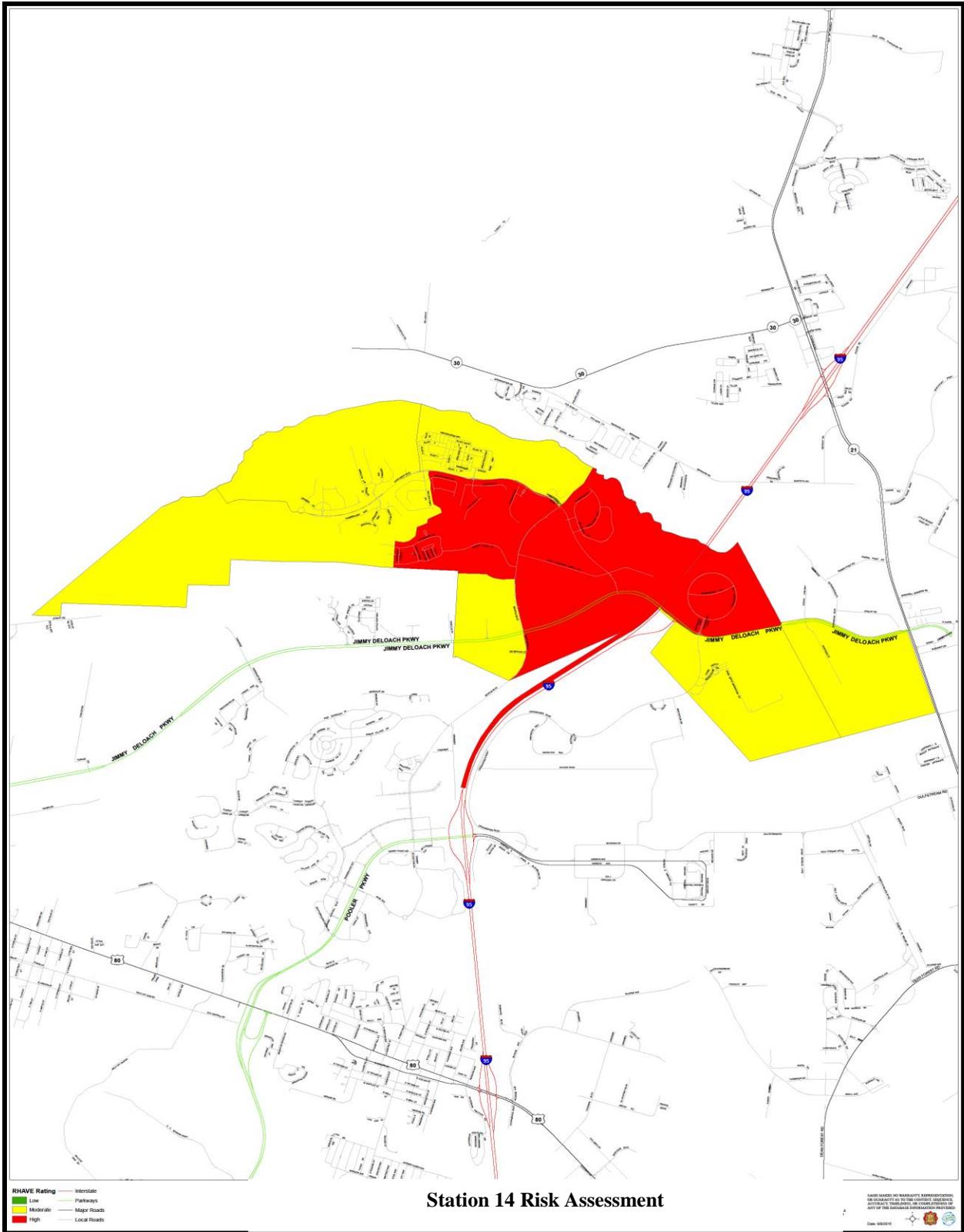
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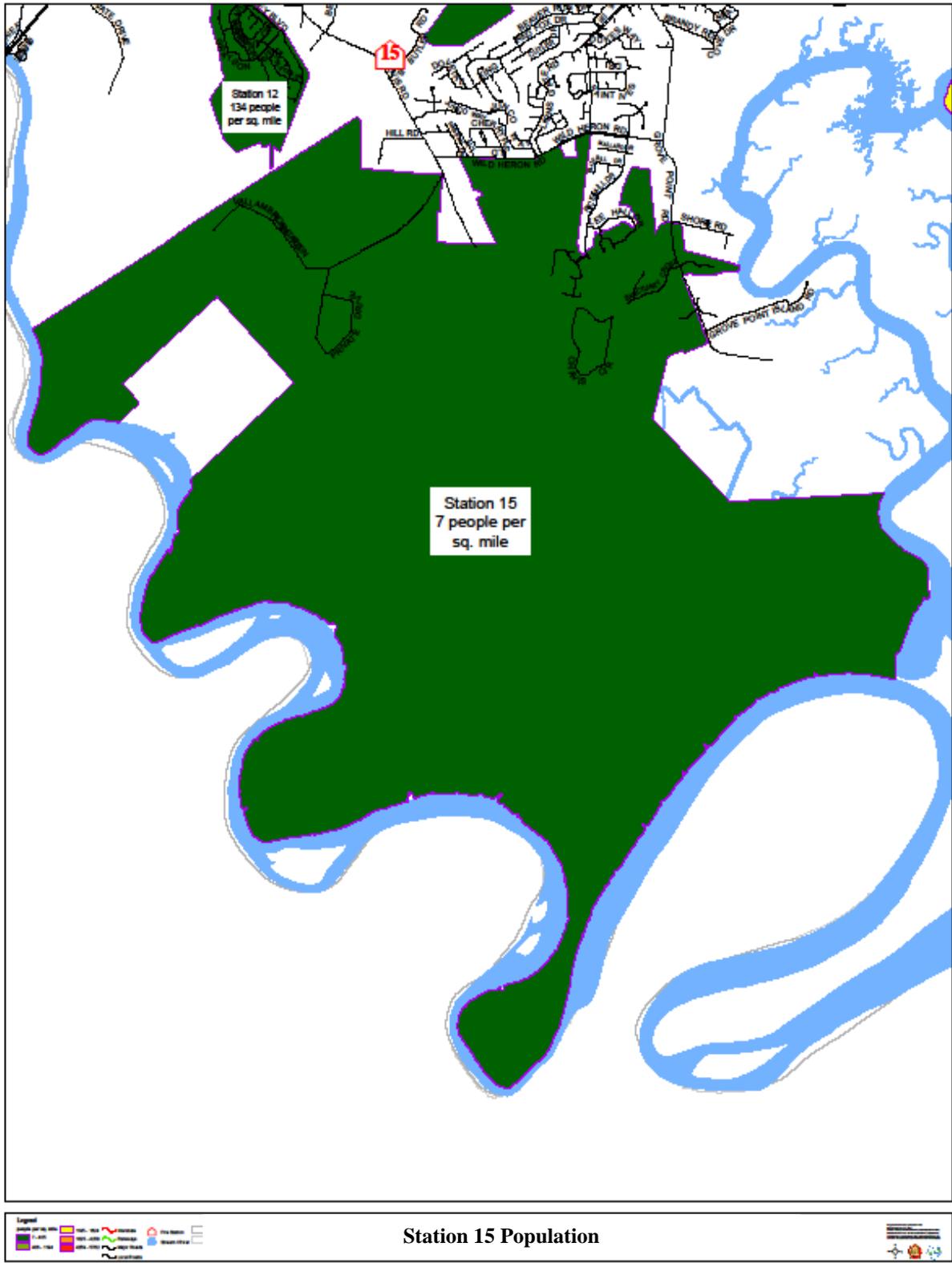
Station 13 (Green)	Station 14 (Yellow)	Station 15 (Red)	Station 16 (Blue)	City Boundary	County Boundary
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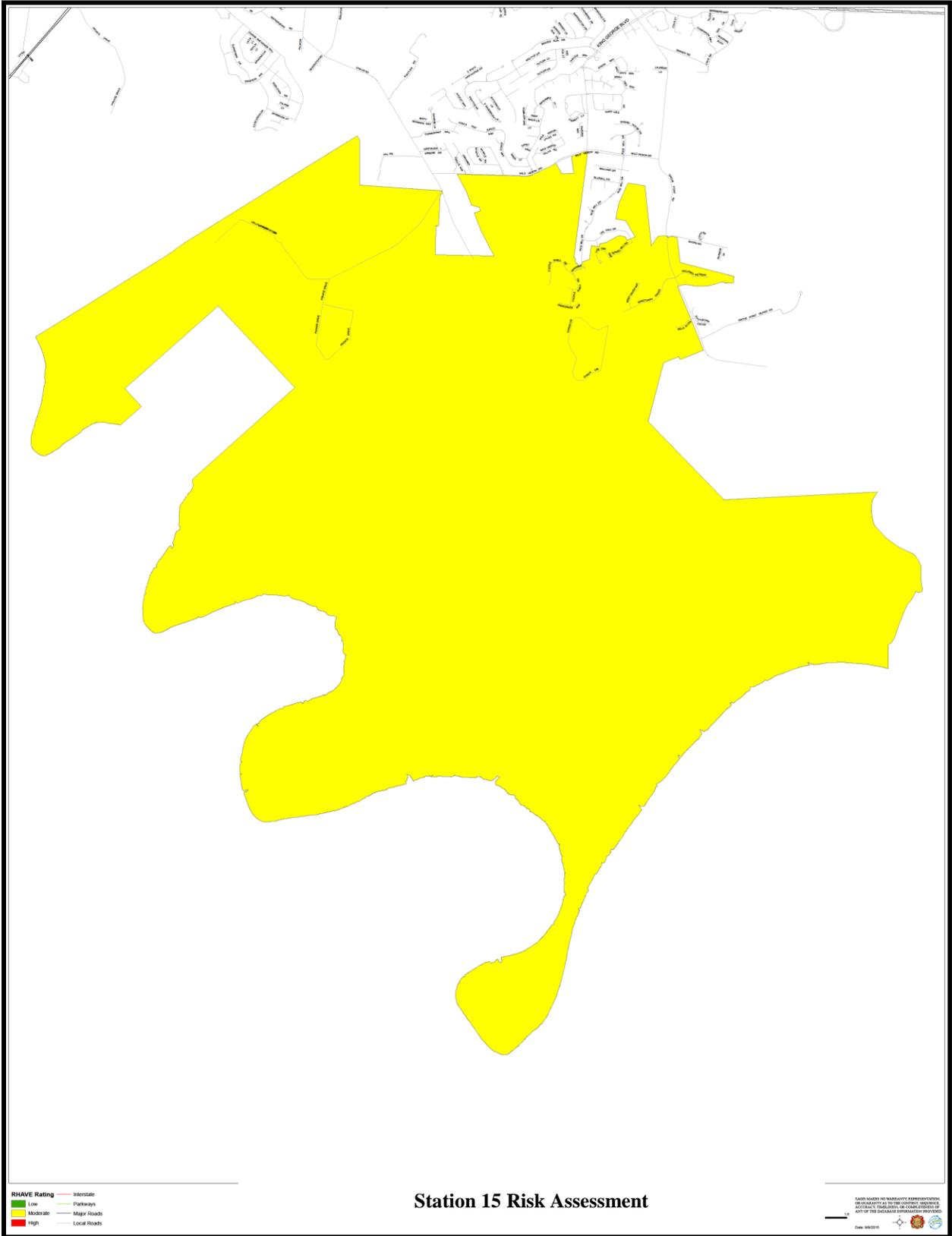
Map of Savannah, Georgia



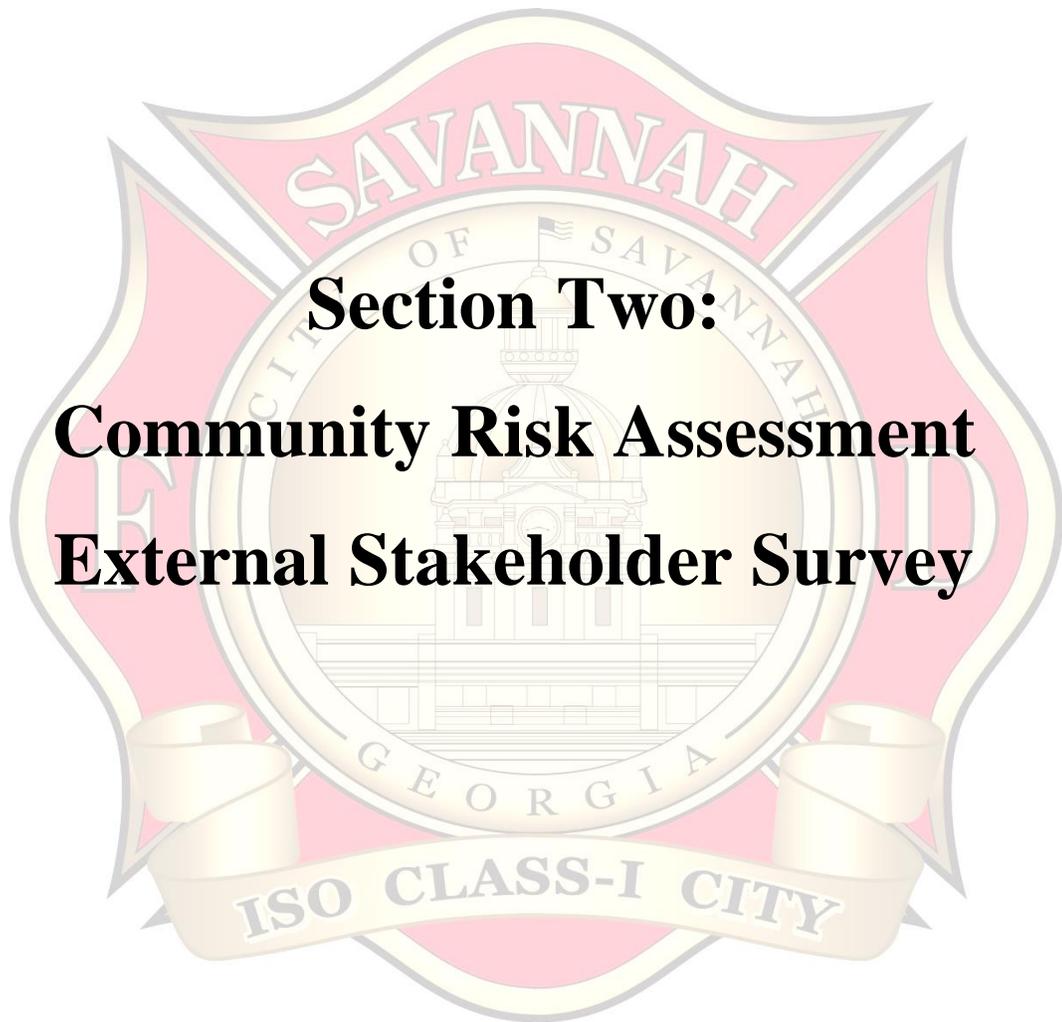








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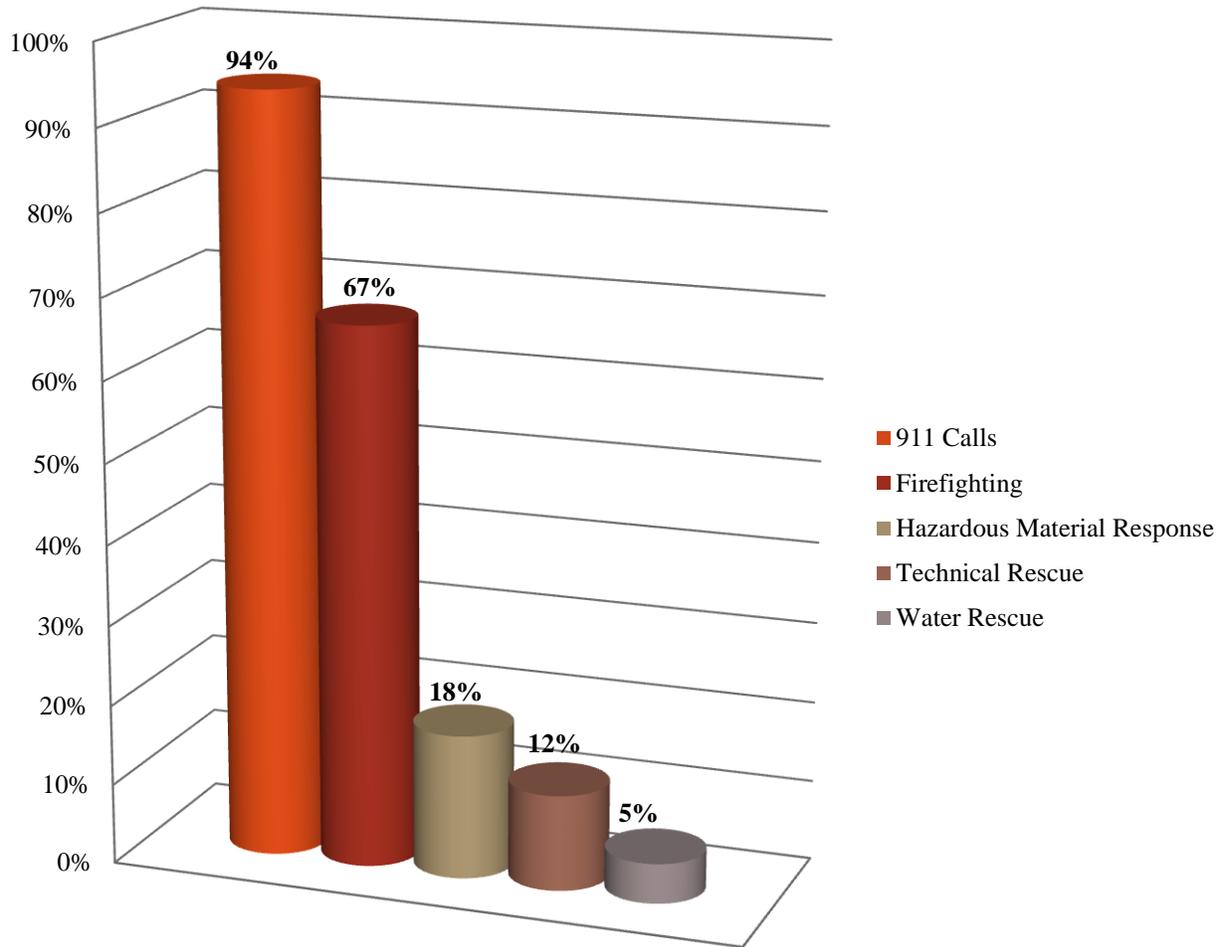
**Section Two:
Community Risk Assessment
External Stakeholder Survey**

External Stakeholder Group Findings

A key element of SFES's organizational philosophy is having a high level of commitment to customer satisfaction. Our external stakeholder's survey was developed in order to get feedback from our customers on how we rate in our service delivery. The targeted customers were from local industries, business, residents, and City of Savannah employees. The Bureau asked the community to participate in a survey which the City of Savannah hosted on the front page of its web site during the first and second quarter of 2015. The surveys were also printed, distributed, and collected at all Public Fire Safety Education (PFSE) events where SFES participated during that same period. The survey focused on reactions to the department's services as well as defining customer priorities and expectations for the department.

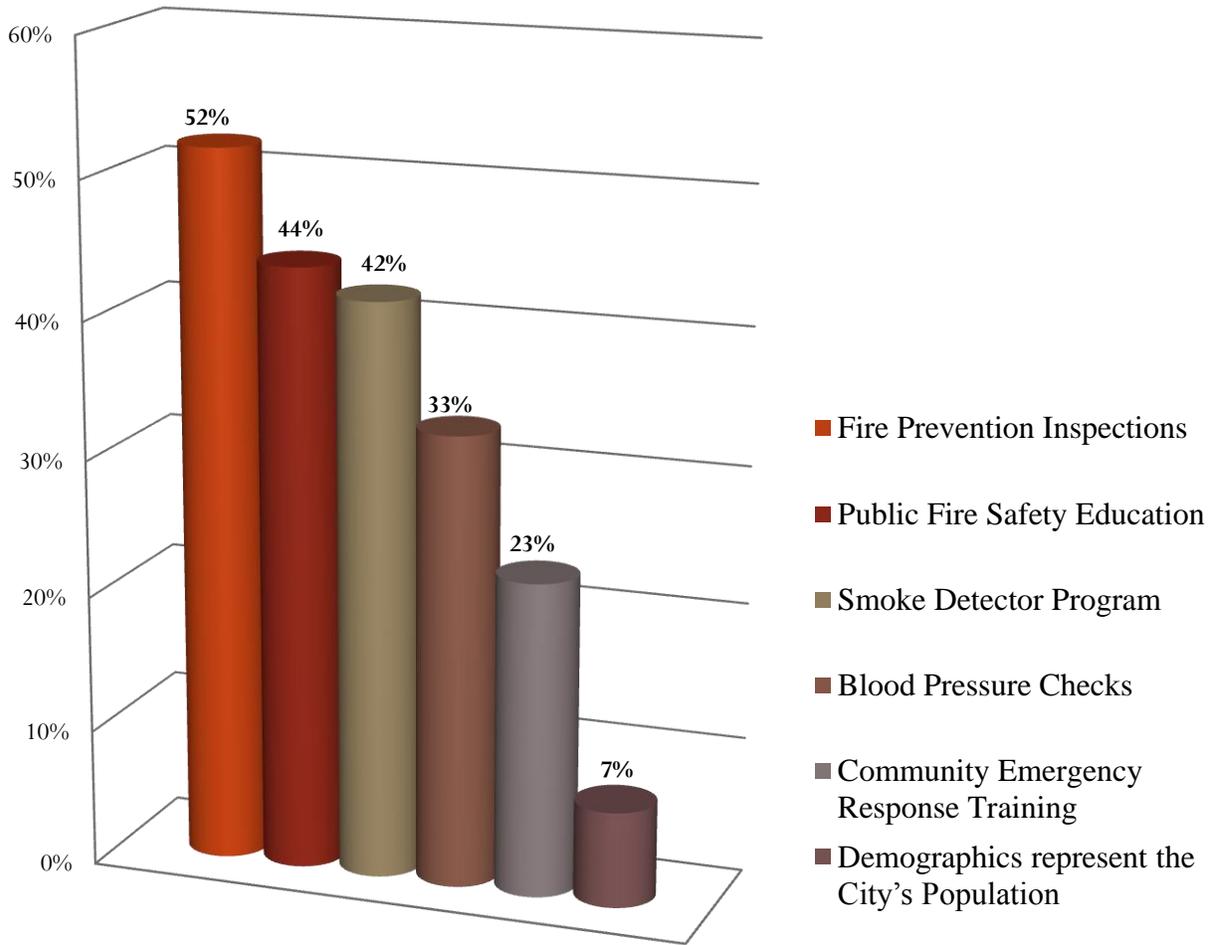
SFES conducted this survey to gain a better understanding of the needs of its external customers and how they view our service delivery. Six areas were studied including; emergency response and service delivery, community outreach programs, firefighter professional development, fire equipment and facilities, interaction with SFES, and rating the services of SFES. The external stakeholders were asked to prioritize the services offered by SFES through a process of direct comparison. Below you will find the results of the survey with a percentage ranking from highest priority to lowest priority.

Emergency Response and Service Delivery



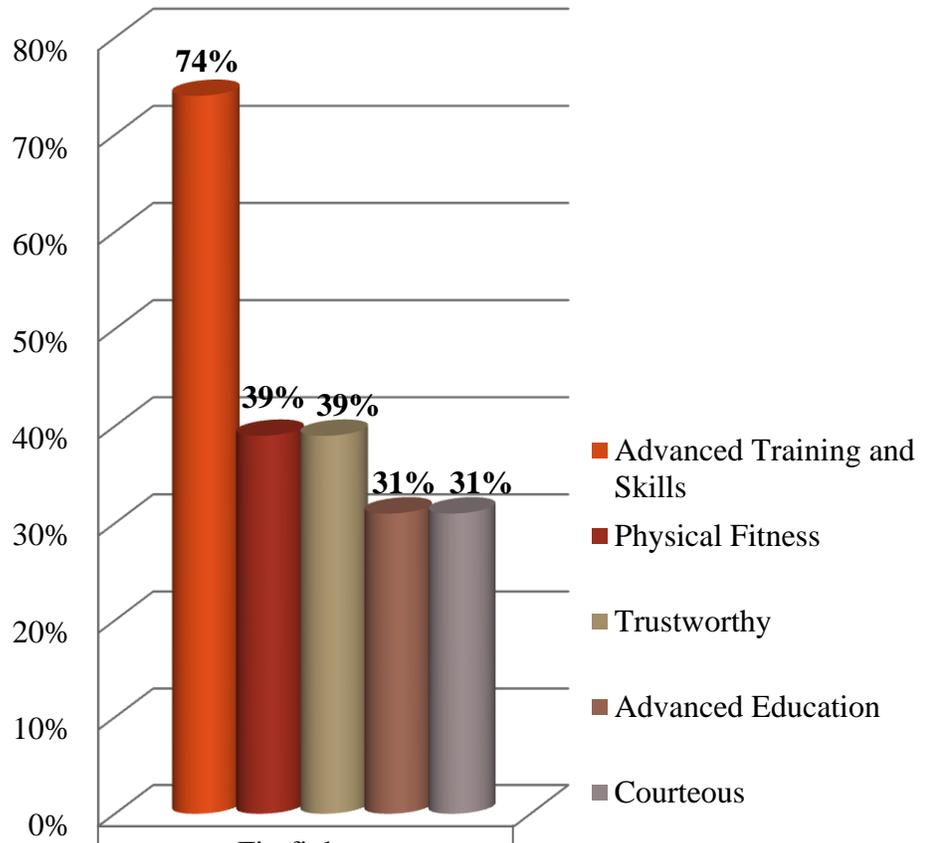
Emergency Response and Service Delivery	
■ 911 Calls	94%
■ Firefighting	67%
■ Hazardous Material Response	18%
■ Technical Rescue	12%
■ Water Rescue	5%

Community Outreach Programs



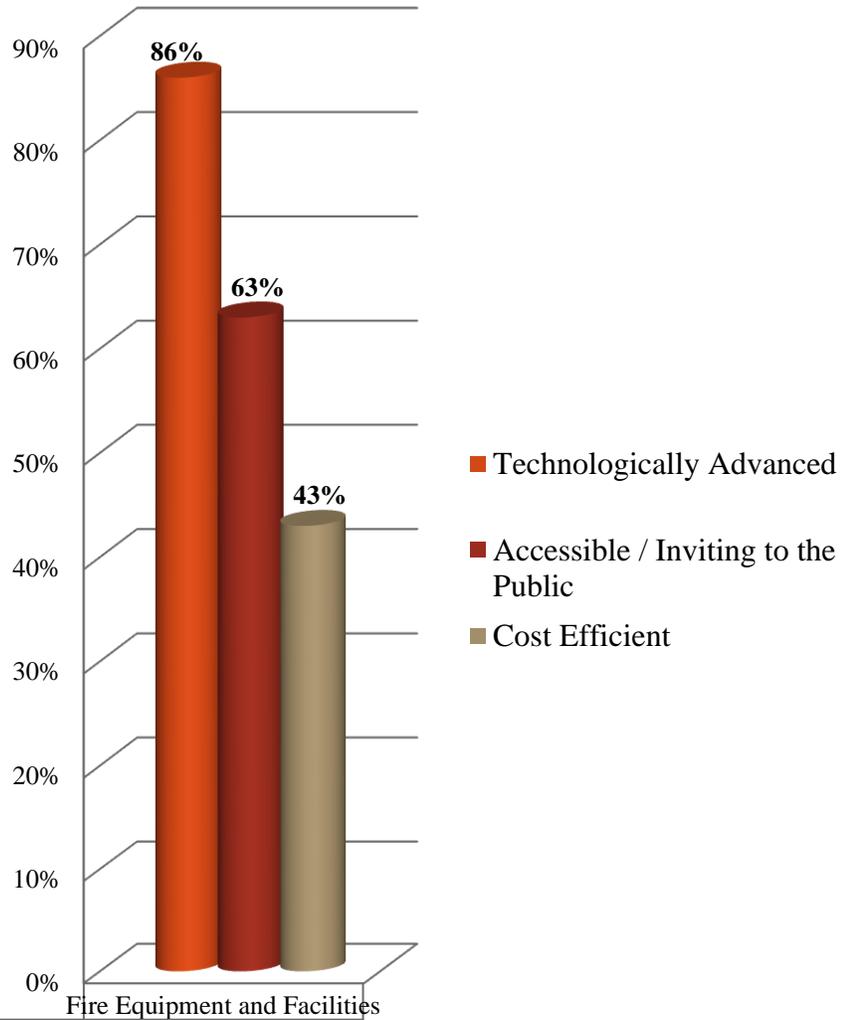
Community Outreach Programs	
■ Fire Prevention Inspections	52%
■ Public Fire Safety Education	44%
■ Smoke Detector Program	42%
■ Blood Pressure Checks	33%
■ Community Emergency Response Training	23%
■ Demographics represent the City's Population	7%

Firefighter Professional Development



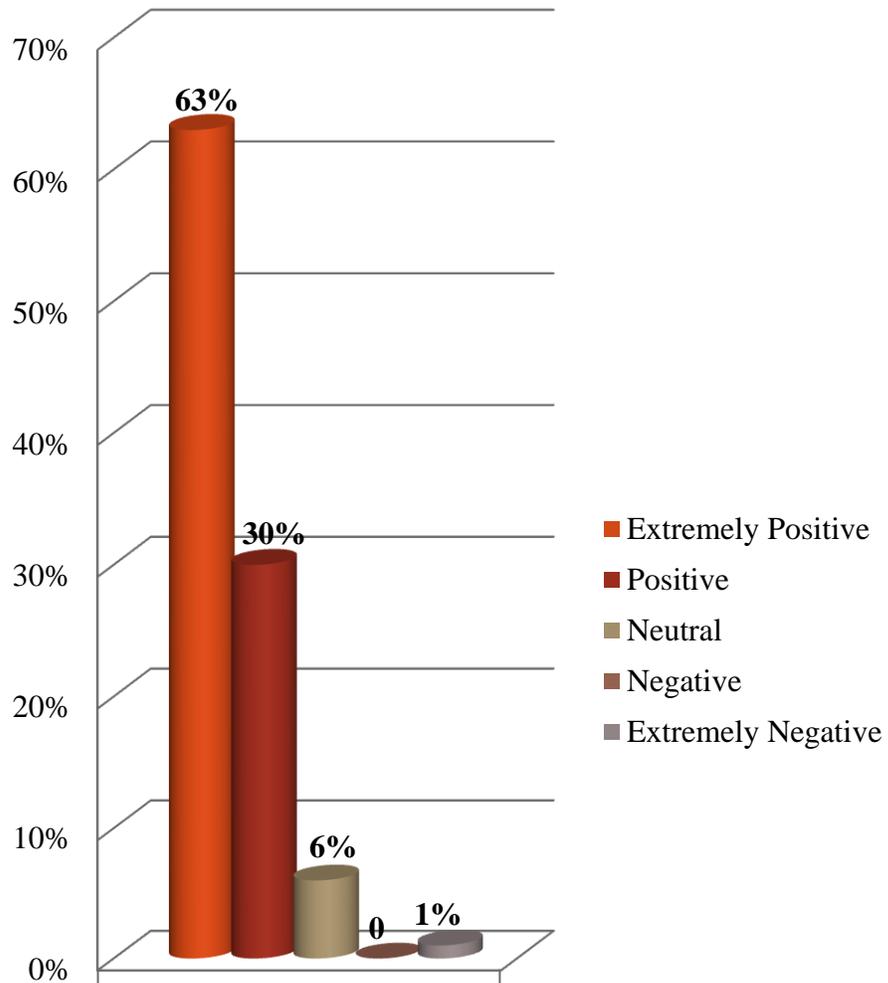
Firefighter Professional Development	
Advanced Training and Skills	74%
Physical Fitness	39%
Trustworthy	39%
Advanced Education	31%
Courteous	31%

Fire Equipment and Facilities



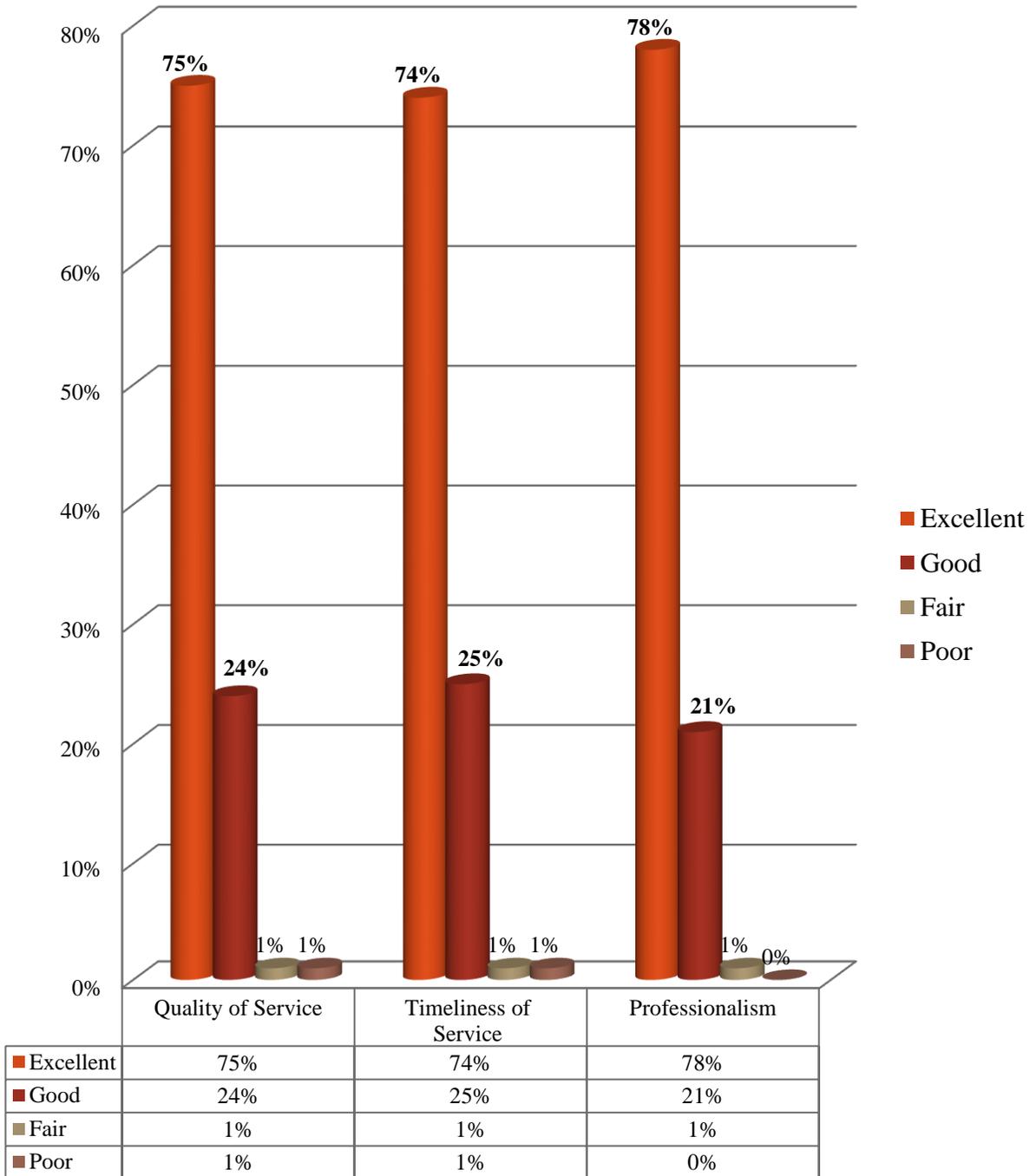
Technologically Advanced	86%
Accessible / Inviting to the Public	63%
Cost Efficient	43%

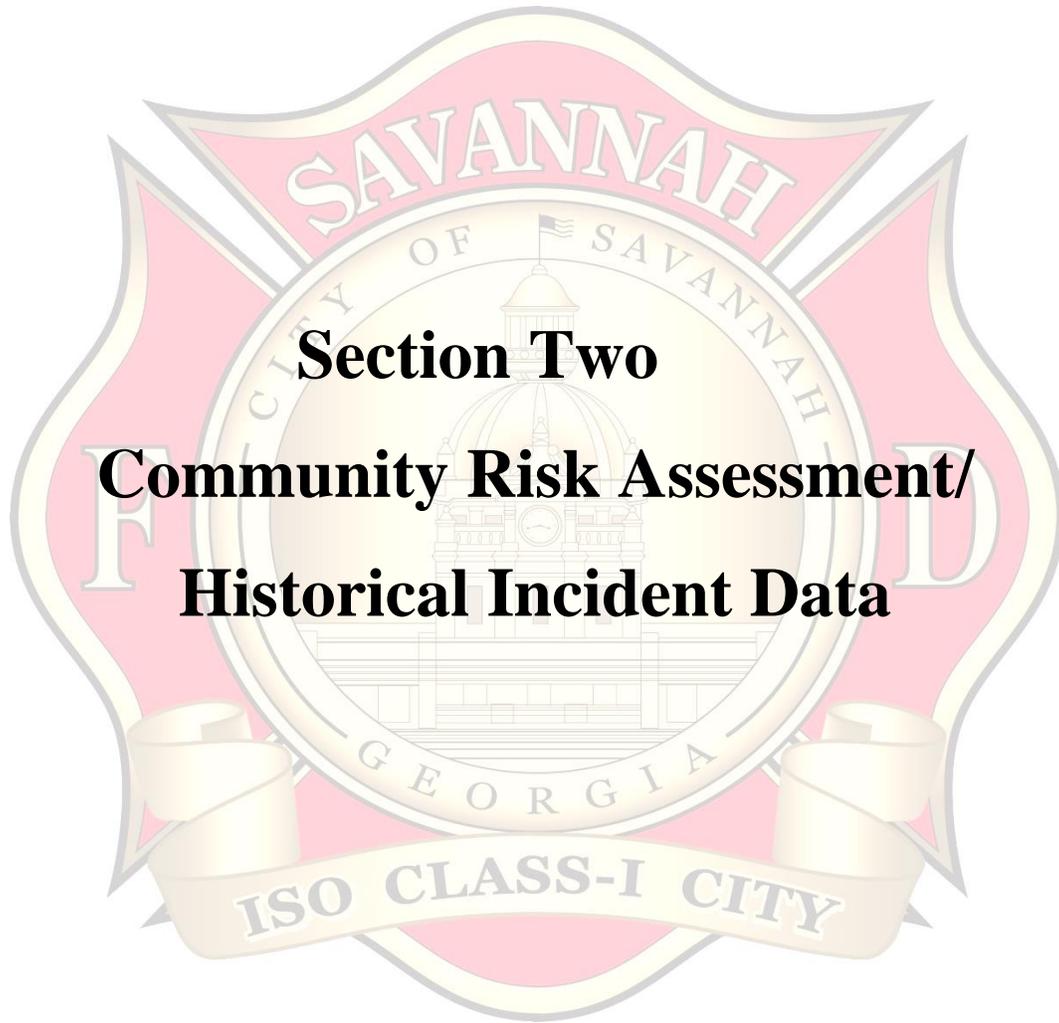
Interaction with SFES



Interaction with SFES	
Extremely Positive	63%
Positive	30%
Neutral	6%
Negative	0
Extremely Negative	1%

Rate Services of SFES





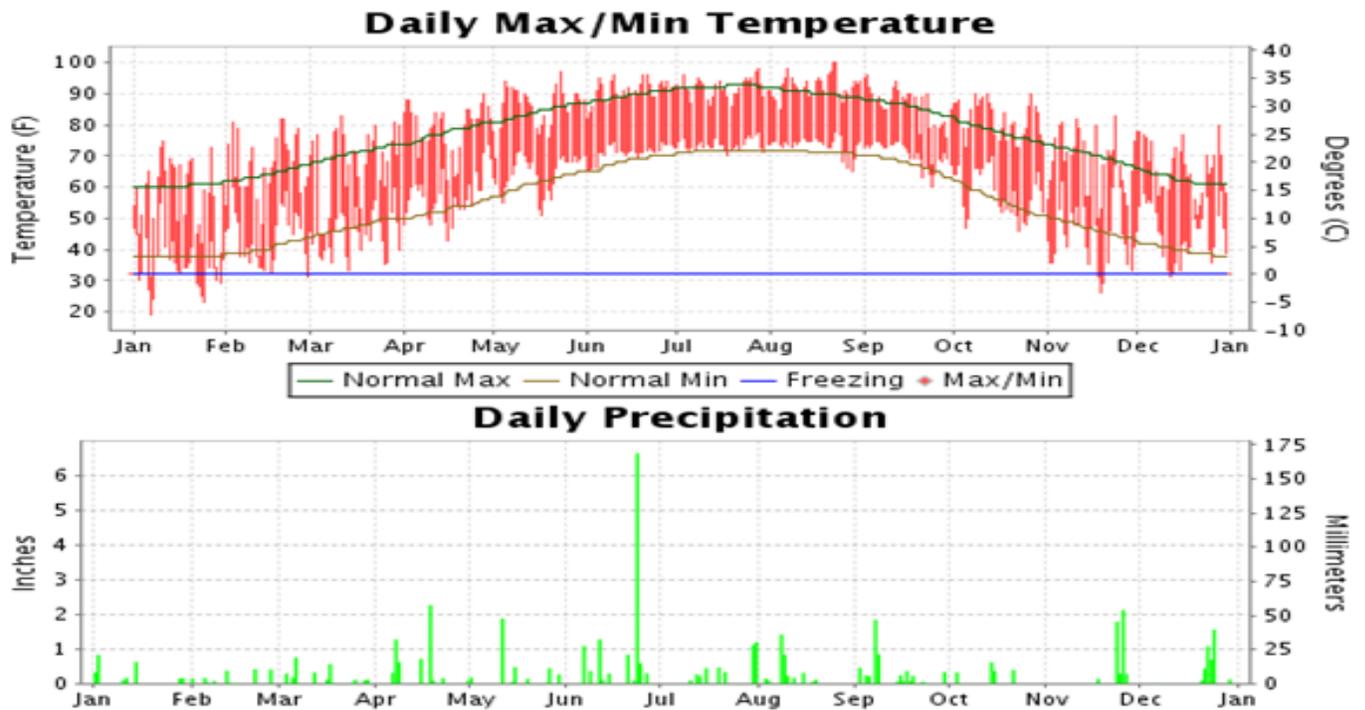
Section Two
**Community Risk Assessment/
Historical Incident Data**

Section Two: Community Risk Analysis

Natural and Manmade Threats

Savannah regularly faces many types of natural disasters including hurricanes, tornadoes, severe storms, wildfires and floods. In addition, man-made disasters (such as terrorist attacks and transportation accidents involving hazardous materials) and disease threats (such as pandemic outbreaks) pose a threat to the citizens and visitors of Savannah. For this reason the COS has utilized the Threat Hazard Identification Risk Assessment (THIRA) to develop the Emergency Operation Plan (2014) for the city.

Weather



Tornado Activity

Over the past 50 years, more than 1,430 tornadoes were reported in Georgia, including 17 in 2012. While the months of March, April and May are historically the most active period for tornado activity in the state, tornadoes can occur at any time of the year, even during winter months.

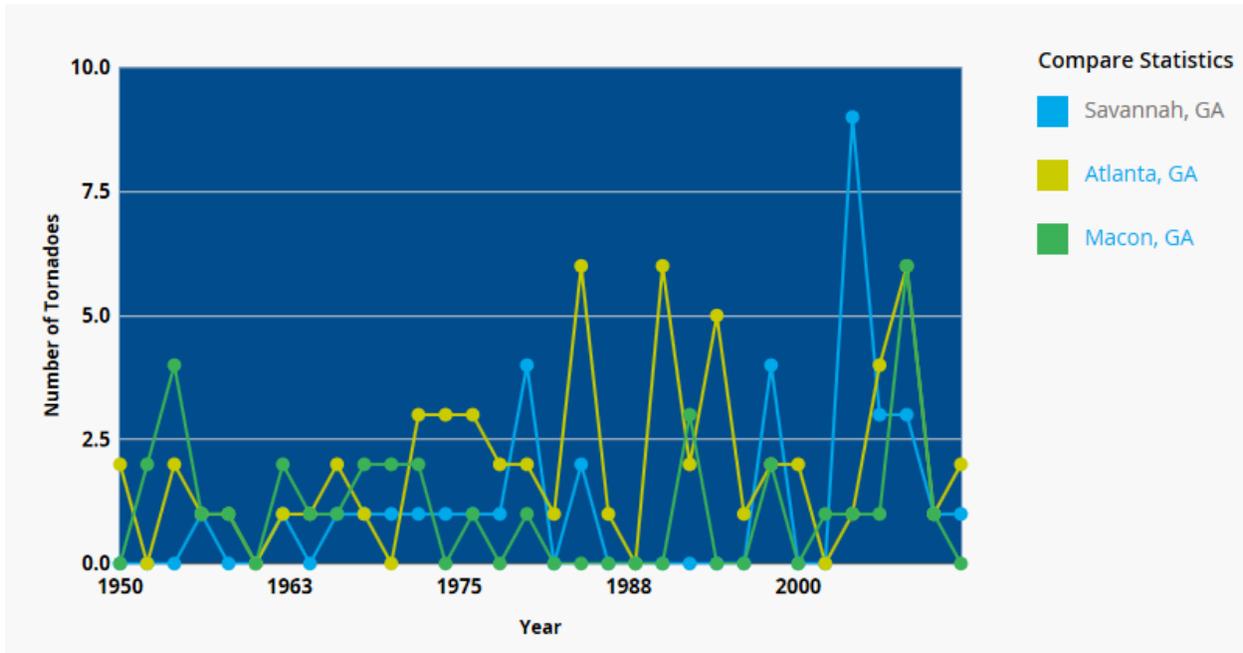


In January 2013, parts of north Georgia were hit hard by an EF3 tornado, injuring 17 people. In March of 2012, eight tornadoes crossed the state over the course of three days, resulting in \$12.64 million in property and crop damage. In March 2008, a total 45 tornadoes were confirmed over the 24-hour period from eastern Alabama to the Carolina coast, with most of the activity concentrated in the metro Atlanta area, the Central Savannah River Area and the Midlands of South Carolina.

- Savannah-area historical tornado activity is significantly below Georgia state average. It is 43% smaller than the overall U.S. average.
- On 4/9/1998, a category F3 (max. wind speeds 158-206 mph) tornado 16.9 miles away from the Savannah city center killed 2 people and injured 17 people and caused \$3 million in damages.
- On 5/11/2008, a category F4 (max. wind speeds 207-260 mph) tornado 49.0 miles away from the city center injured 9 people and caused \$13 million in damages.

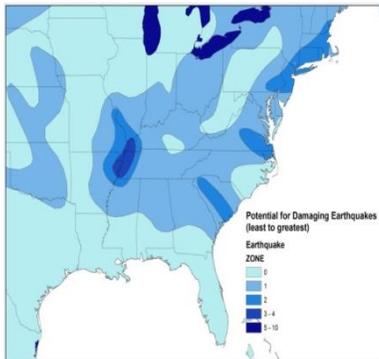


Tornadoes in Savannah, GA since 1950



Earthquake Activity

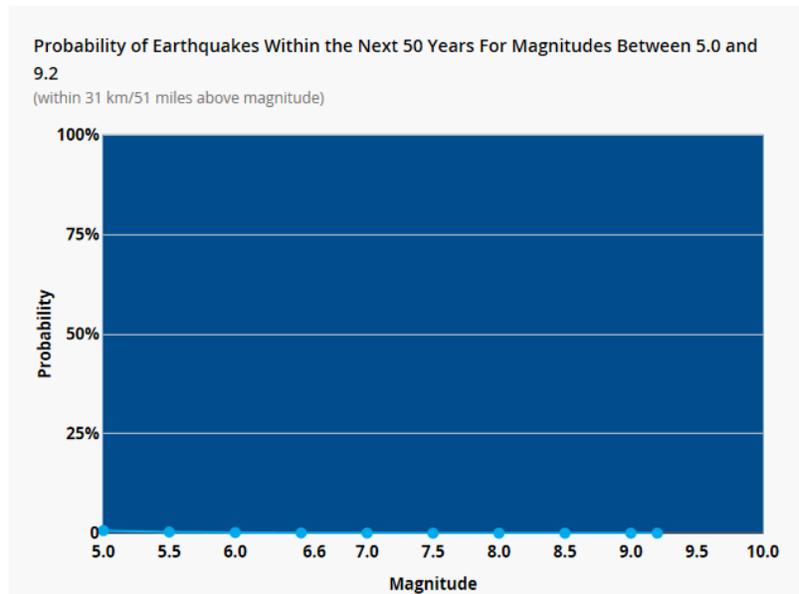
- Savannah-area historical earthquake activity is slightly below Georgia state average. It is 88% smaller than the overall U.S. average.
- On 11/11/2002 at 23:39:29, a magnitude 4.4 (4.0 MB, 4.4 LG, Depth: 1.5 mi) earthquake occurred 72.6 miles away from the city center.
- On 7/13/2003 at 20:15:16, a magnitude 3.6 (3.6 LG, Depth: 3.1 mi) earthquake occurred 64.0 miles away from the city center.



Total Number of Earthquakes in Savannah since 1931 within 30 miles	Probability of A 5.0 Earthquake within next 50 years
1	0.63%

Earthquake Probability for Savannah, GA

View the probability of a major earthquake within the next 50 years in Savannah, GA.



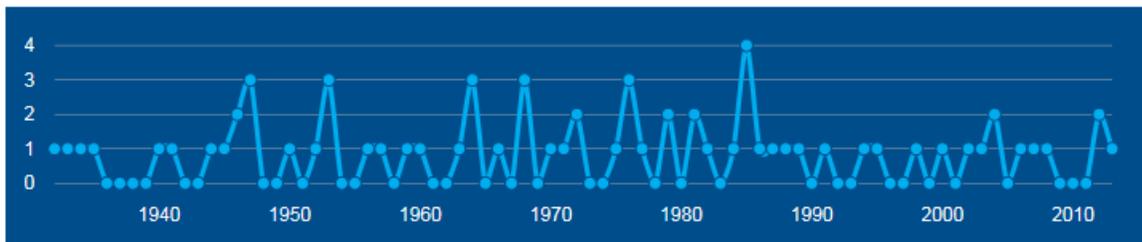
Tropical Storms and Hurricanes

Georgia is vulnerable to storms and hurricanes that form in the Atlantic Ocean and the Gulf of Mexico. In addition, the price of gasoline shot up dramatically due to the impact of these storms, reaching as high as \$6 per gallon, due to consumer panic after. In September 1999, Georgia, Florida, South Carolina and North Carolina, experienced the largest evacuation effort in American history in the face of Hurricane Floyd. An estimated three million people took to the highways to flee Floyd's wrath, jamming interstates in search of safety and shelter. On July 4, 1994, Tropical Storm Alberto stalled over Georgia, bringing up to 25 inches of rain in less than 24 hours. Thirty-four people were killed, more than 50,000 were displaced from their homes and at least 400 coffins were forced from water-logged graves into flooded streets.





Yearly Hurricane Records for Savannah, GA



Severe Thunderstorms and Flooding

The most common types of natural disasters in Georgia are thunderstorms that can cause widespread damage, crippling communities across the city. In September 2009, continuous rain caused 500-year floods. In spring 2009, floods in southern Georgia brought federal disaster declarations to 46 counties. Regardless of the year, Severe Storms and flooding are common occurrence in the COS. With peak elevation of approximately 45 feet and a tide change of 7-9 feet heavy rains can cause flash flooding and damage to the community in an instant.



Winter Storms

Winter storms, which often affect north Georgia, result in extreme cold, downed power lines and blocked roads and highways. In January 2011, a single storm sent a thick layer of snow and ice that shut down transportation in parts of the state for five days, eventually affecting 70 percent of Georgia. For the COS winter storms are mainly in the form of ice. During extremely cold temperatures, mix with the high humidity, ice can form having a devastating effect on our transportation system. The lack and ability to mitigate this type of event can cause loss to life and property



Wildfires

Wildfires spread quickly and change direction rapidly, igniting brush, trees and homes. On April 16, 2007, a downed power line ignited drought-parched forest floor south of Savannah which led to the largest and most devastating wildfires in state history. Nearly 564,000 acres were consumed in Georgia and Florida, and 18 homes were destroyed. More than 3,300 firefighters from 44 states, Canada and Puerto Rico came in to battle the blazes.



Terrorist Attacks

Savannah is at risk for terrorist attacks. While Savannah has not experienced a large-scale attack, they can occur without warning. COS, has numerous military bases surrounding the city, one of the largest street festivals in the county (St. Patrick's Day Festival) and numerous vital industries, making the COS to an elevated risk. As the events of September 11, 2001, demonstrated, terrorist attacks can occur quickly and unexpectedly. During the 1996 Olympics, a bombing occurred at Centennial Olympic Park, killing four and injuring 111.



Pandemic Flu

Pandemics can spread rapidly; leaving little time to prepare once an outbreak starts. In June 2009, the World Health Organization declared H1N1 influenza a pandemic. Nearly 50 people died and more than 800 were hospitalized in Georgia because of the virus.



The Centers for Disease Control and Prevention has already noted cases of avian flu in humans in the United States. Georgia ranks as the nation’s leading producer of poultry products.

Industrial Incidents

The COS has a large concentration of industry along the Savannah River Basin. The industries include the Port of Savannah, Colonial Oil, International Paper and Elba Island (LNG plant). Since 1995, the COS has experienced three major industrial accidents: Powell Duffryn, Dixie Crystal Sugar Refinery explosion (2008) and the Georgia Ports Authority (GPA) fire in 2014.



Approximately every seven years, the COS experiences a large scale industrial accident causing millions in property damage and high probability of a mass casualty event. In addition to fixed facilities, the transportation network that support GPA had to the increased probability of having an incident involving fire, hazardous materials and heavy machinery extrication.

Additional Risk Information

Type Count	Type Count	Type Count	Type Count	Type Count
Avalanche: 0	Blizzard: 0	Cold: 12	Dense Fog: 2	Drought: 37
Dust Storm: 0	Flood: 171	Hail: 503	Heat: 19	Heavy Snow: 2
High Surf: 6	Hurricane: 4	Ice Storm: 0	Landslide: 0	Strong Wind: 11
Thunderstorm Winds: 1,258	Tropical Storm: 17	Wildfire: 0	Winter Storm: 2	Winter Weather: 0
Other: 98				

Historic Incident Data (2012-2015)

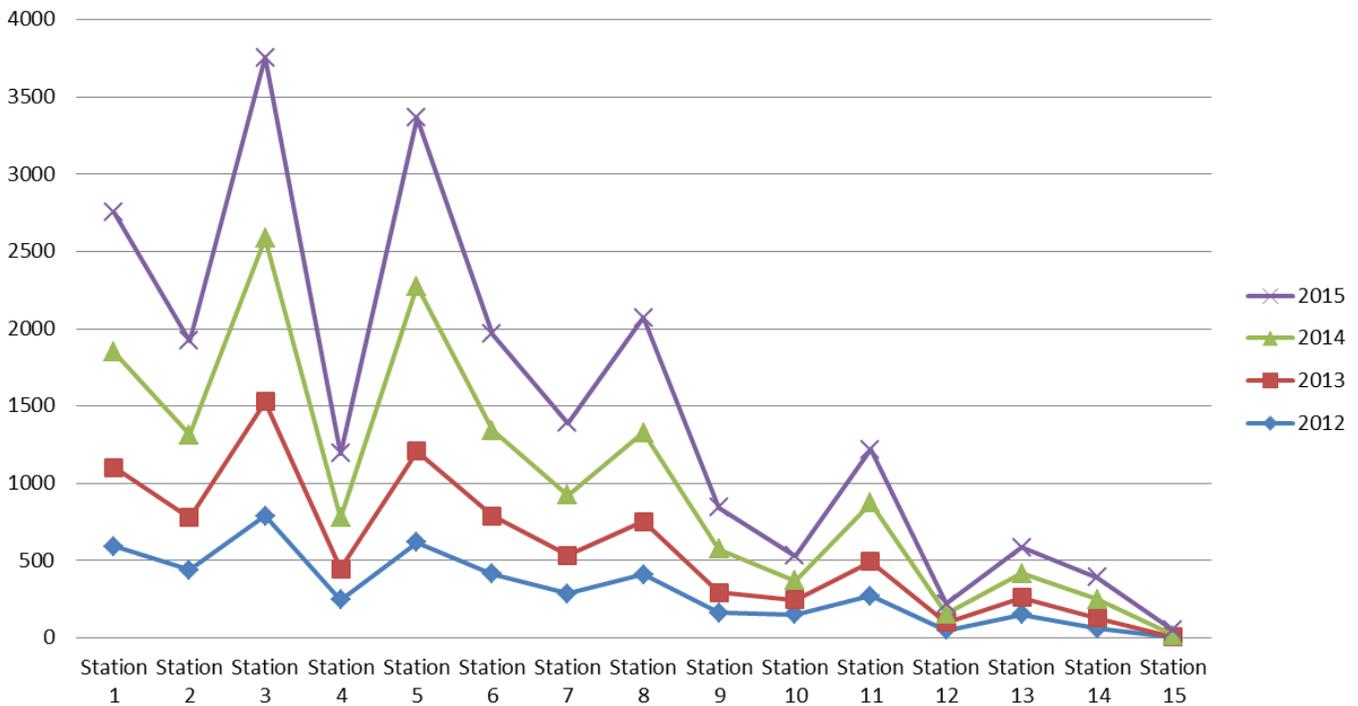
In this section, SFES conducted an incident response analysis for the last 4 years (2012-2015). The goal of the analysis was to compare previous year's responses in order to find trends and service area improvements for more effective and efficient emergency service delivery. Each year that was researched includes the following information: a breakdown of call volume by battalion and response district, a percentage breakdown of the different types of responses, a call distribution by month, day and hour. Lastly, there is a graph showing the number of structure fire calls along with civilian and firefighter injuries as well as calculated property loss for that year from the National Fire Incident Records database.

Analyzing multiple years of data allows the department to make decisions based on quantitative and qualitative information, resulting in better resource management and fiscal responsibility. The analysis will be used to verify if SFES is in line with the national trends in regards to emergency incident response and industry best practices. The goal was to demonstrate to the community our ability to provide our services and identify what services can be established by SFES to support our community risks; and whether these services will need an increase in resources or a reallocation.

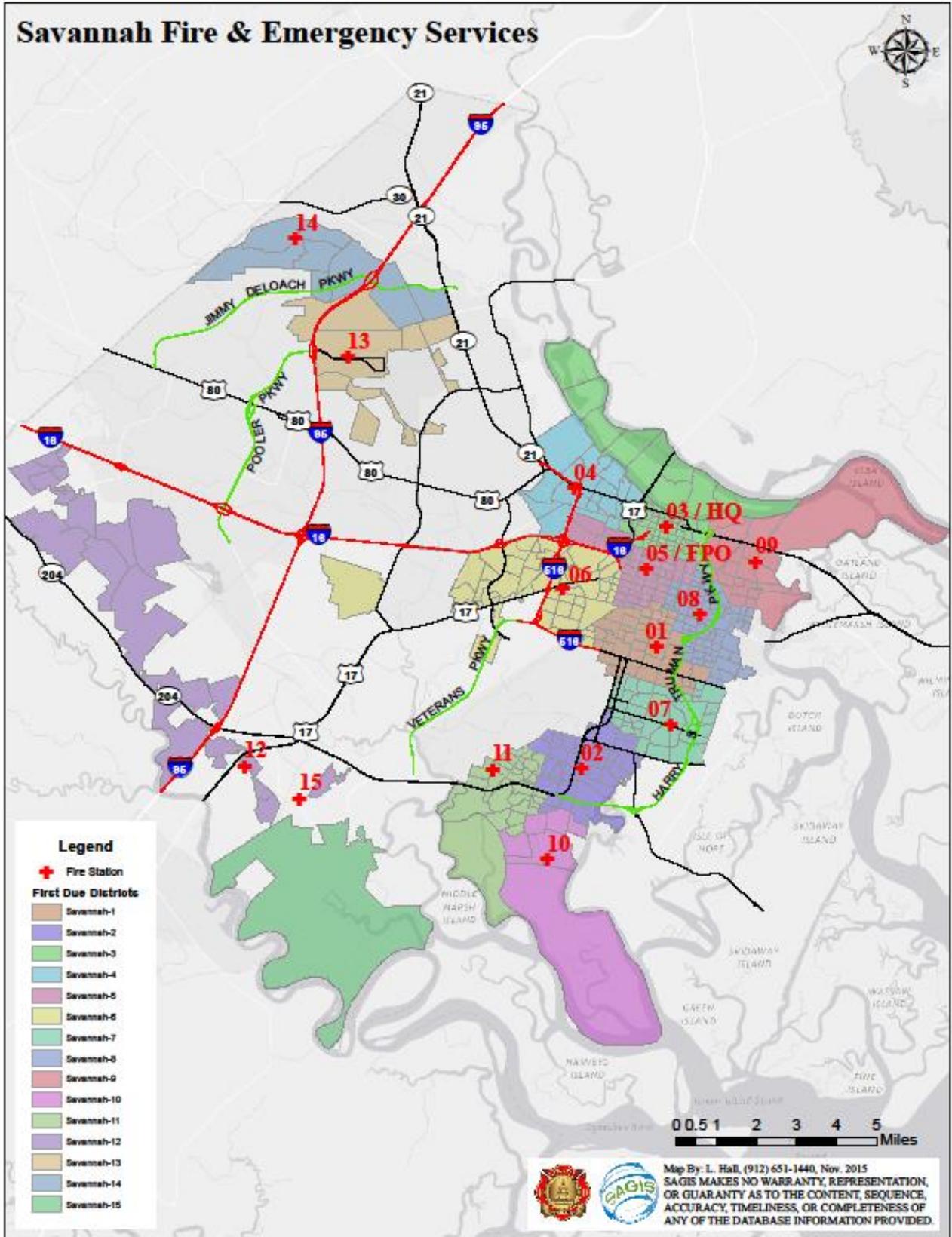
SFES Incident Data by Response District

	2012	2013	2014	2015	Call Totals
Station 1	590	513	747	903	2753
Station 2	437	342	535	608	1922
Station 3	790	737	1060	1169	3756
Station 4	247	198	333	415	1193
Station 5	616	590	1069	1091	3366
Station 6	412	377	554	624	1967
Station 7	286	246	391	468	1391
Station 8	411	341	577	741	2070
Station 9	162	130	281	269	842
Station 10	150	95	123	162	530
Station 11	270	222	379	346	1217
Station 12	48	53	54	66	221
Station 13	151	108	159	167	585
Station 14	59	71	120	141	391
Station 15	5	1	10	34	50
Yearly Totals	4634	4024	6392	7204	22254

2012- 2015 Incident Volume by Response Districts



Savannah Fire & Emergency Services



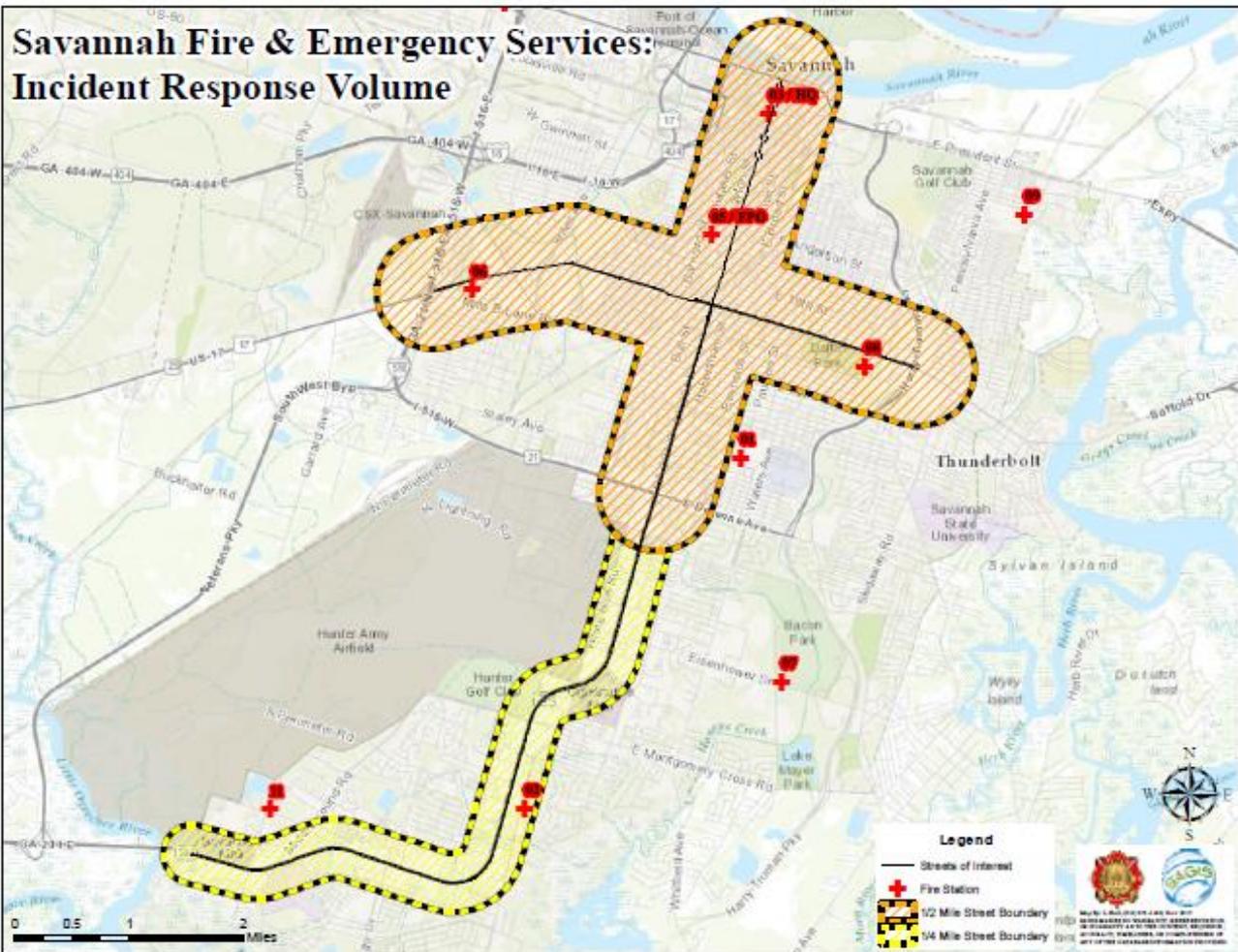
Legend

- + Fire Station
- Fire Due Districts**
- Savannah-1
- Savannah-2
- Savannah-3
- Savannah-4
- Savannah-5
- Savannah-6
- Savannah-7
- Savannah-8
- Savannah-9
- Savannah-10
- Savannah-11
- Savannah-12
- Savannah-13
- Savannah-14
- Savannah-15

0 0.5 1 2 3 4 5 Miles

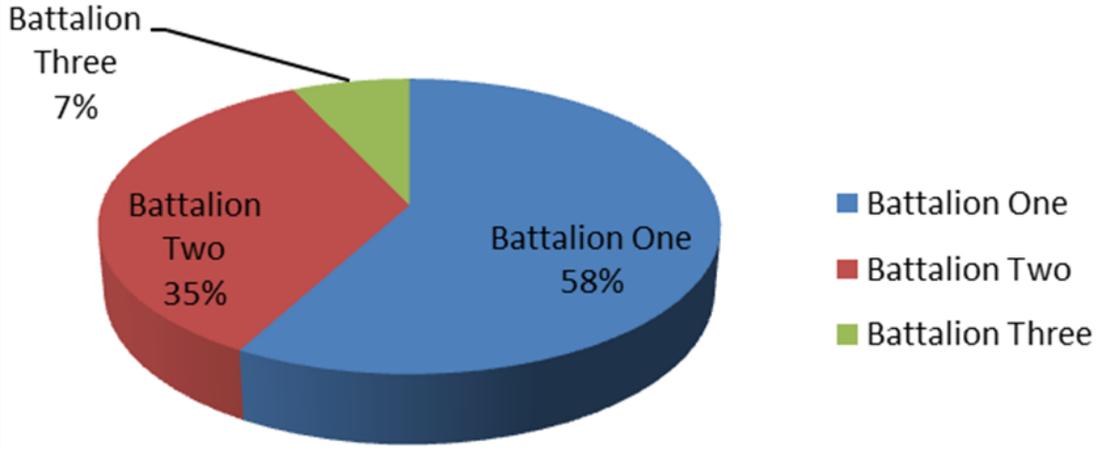


Map By: L. Hall, (912) 651-1440, Nov. 2015
 SAGIS MAKES NO WARRANTY, REPRESENTATION, OR GUARANTY AS TO THE CONTENT, SEQUENCE, ACCURACY, TIMELINESS, OR COMPLETENESS OF ANY OF THE DATABASE INFORMATION PROVIDED.



The above graphic represents the areas where majority of our response calls have been located. Using two major roadways (Abercorn Street running north and south and Victory Drive running east and west) the data outlined two areas of incident concentrations. In the Northern part of the city 1/2 mile on either side of Abercorn and Victory and in the southern portion of the city 1/4 mile on either side of Abercorn.

2013 Call Volume by Battalion

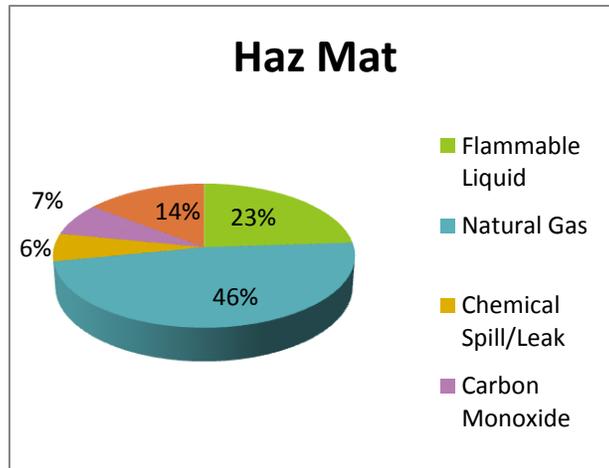
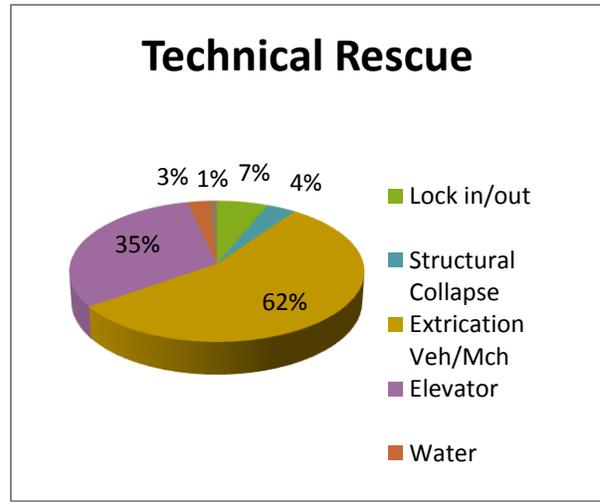
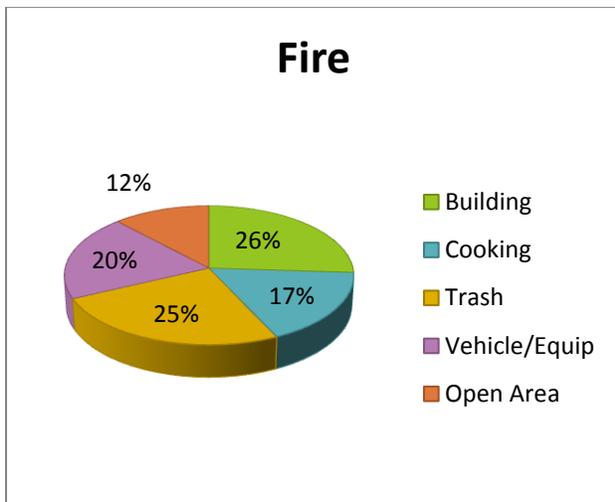
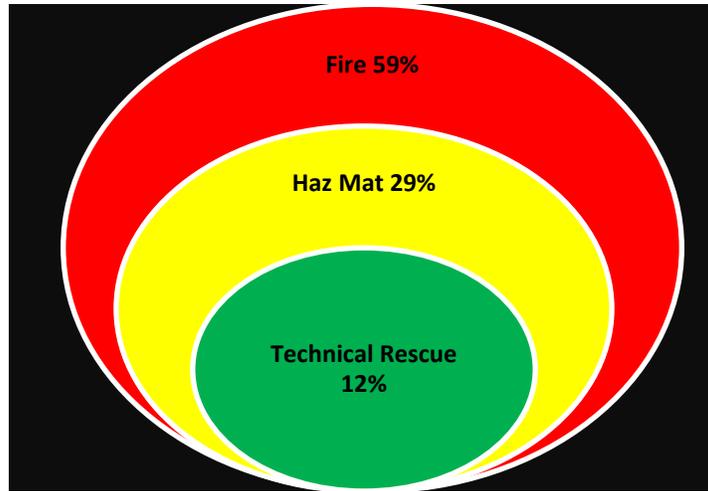


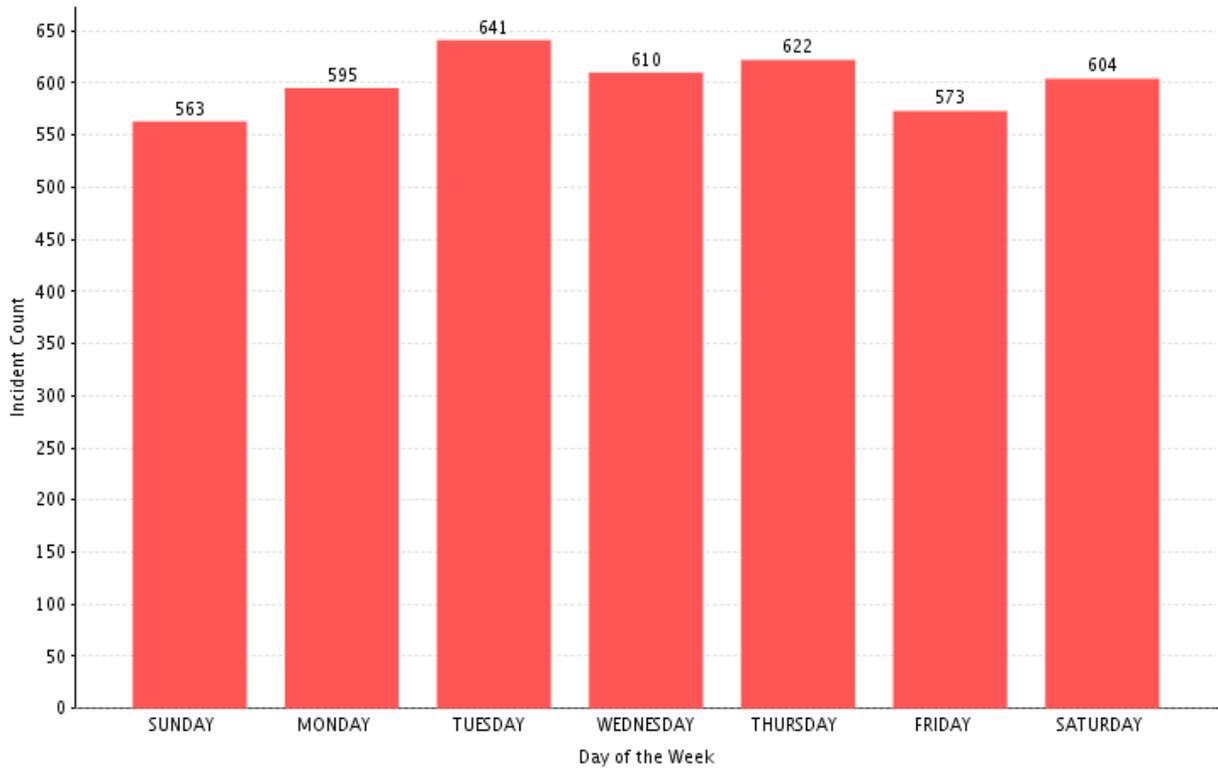
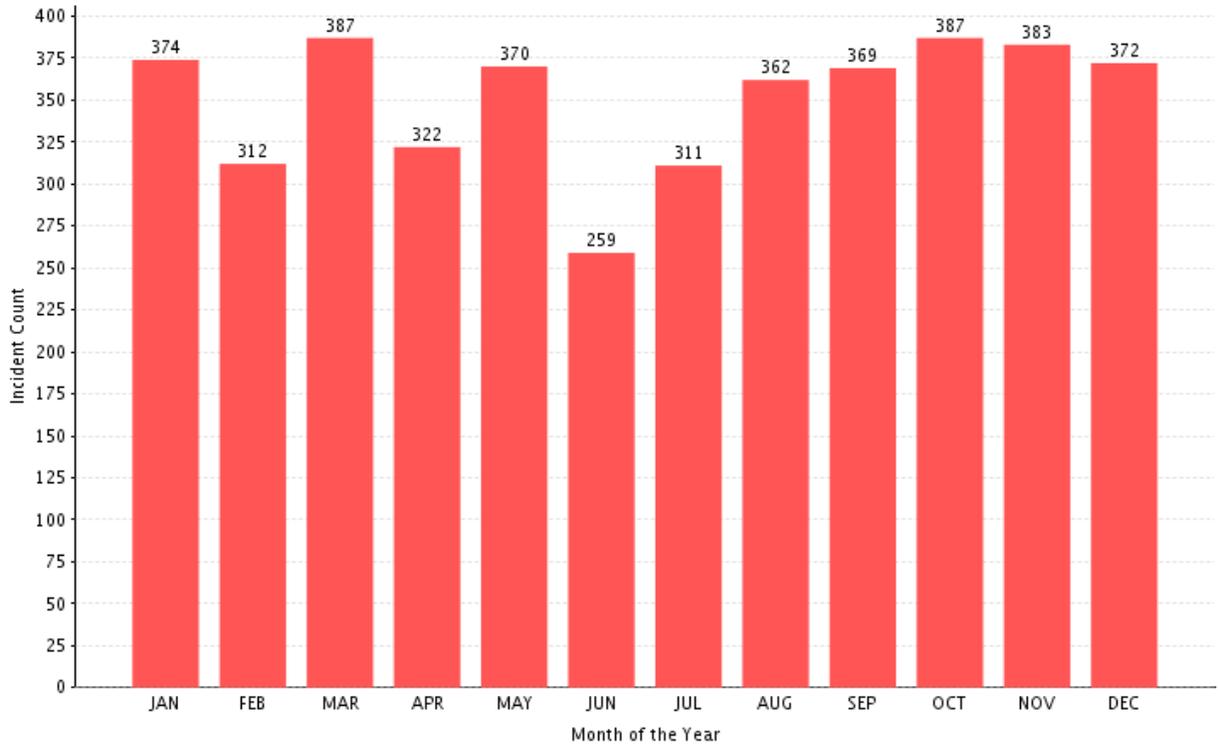
2013 Call Distribution by Station		
	Calls	Call Volume by Station
Station 1	513	13%
Station 2	242	8%
Station 3	737	18%
Station 4	198	5%
Station 5	590	15%
Station 6	377	9%
Station 7	246	6%
Station 8	341	8%
Station 9	130	3%
Station 10	95	2%
Station 11	222	6%
Station 12	53	1.00%
Station 13	108	3%
Station 14	71	2.00%
Station 15	1	1.00%
	4024	100%

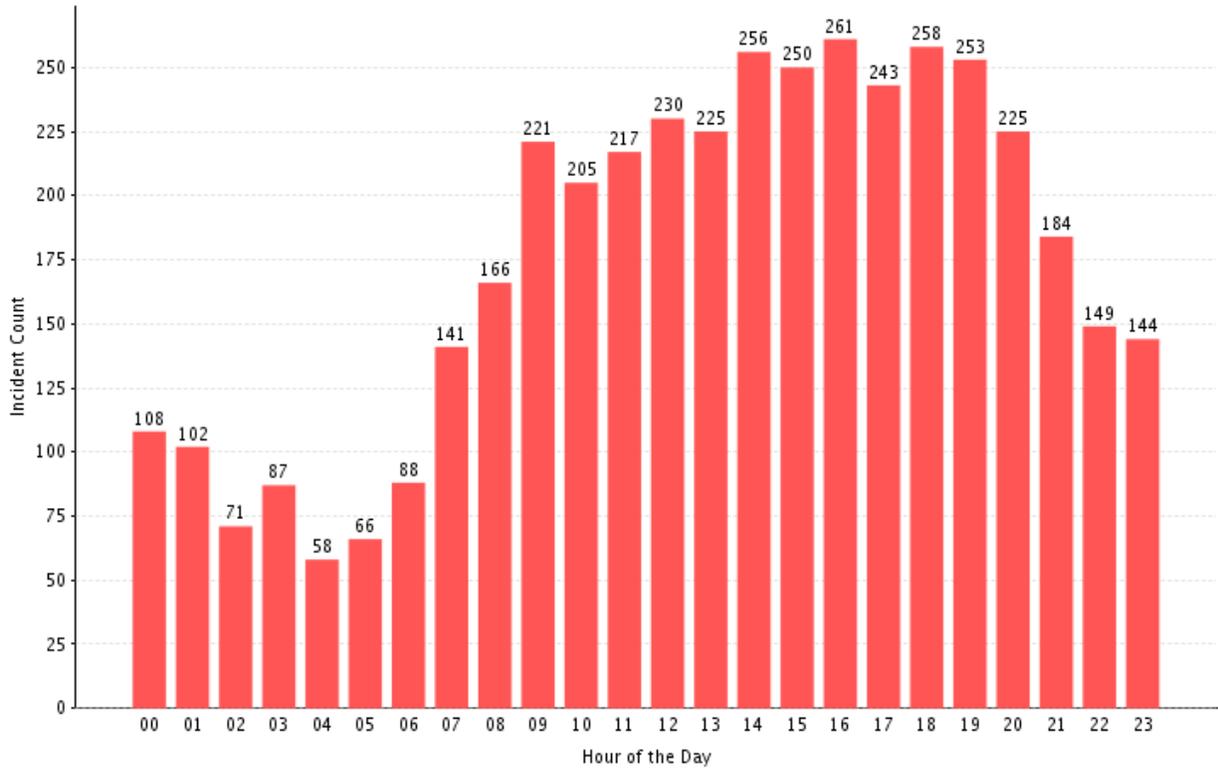
Call Volume by Battalion	
Battalion One	58%
Battalion Two	35%
Battalion Three	7%

Call Distribution 2013

2013

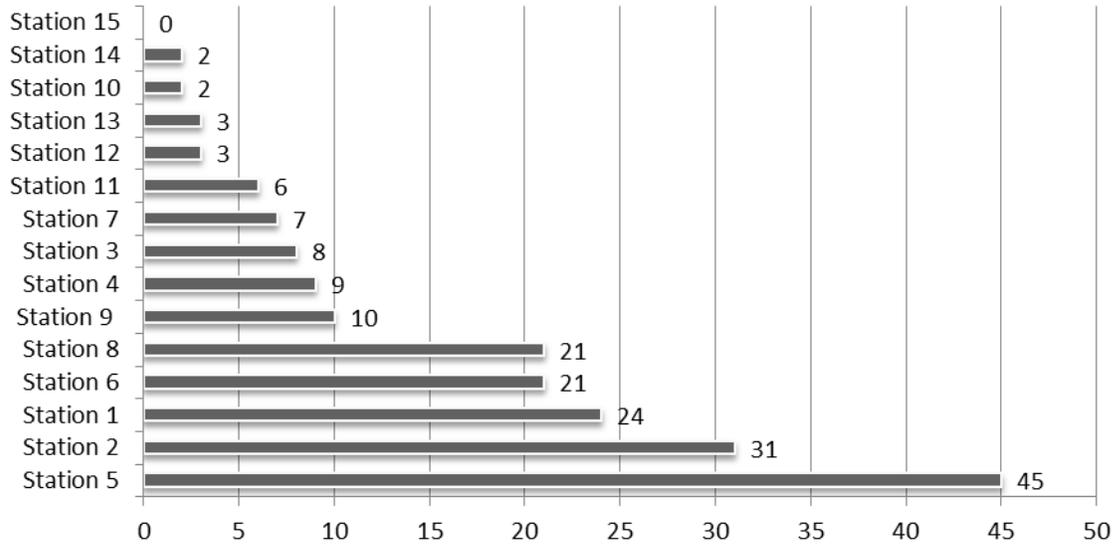




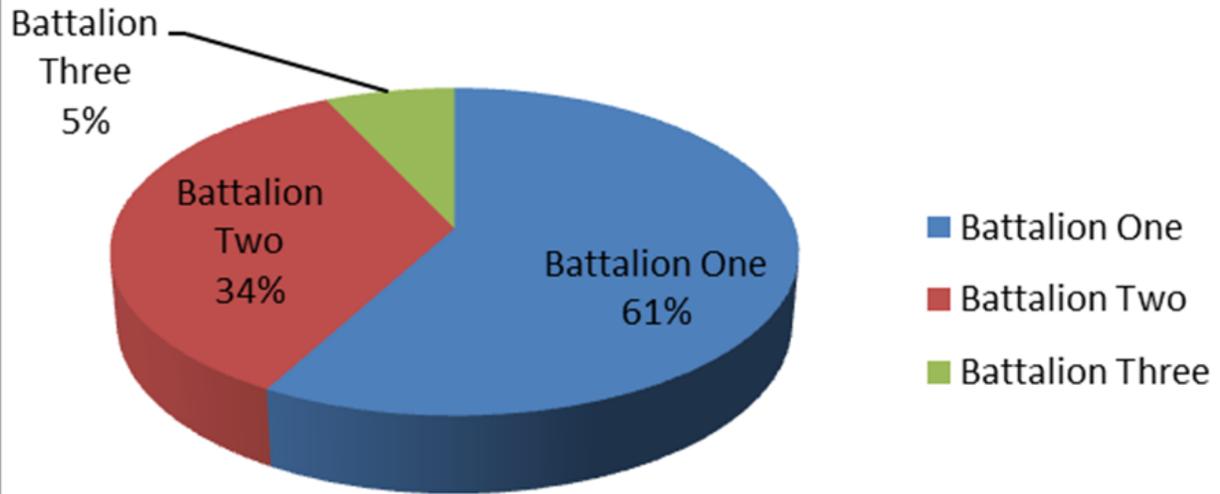


CODE	Description	FREQ	FREQ %	EXPs	CIV DTHS	CIV DTHS %	CIV INJS	CIV INJS %	FF DTHS	FF DTHS %	FF INJS	FF INJS %	PROP LOSS	PROP LOSS %	CONT LOSS	CONT LOSS %	TOTAL LOSS	TOT LOSS %
0	Structure type, other	4	2.9%	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	800	0.03%	10,200	0.65%	11,000	0.26%
1	Enclosed building	171	93.44%	3	0	0.00%	5	100.00%	0	0.00%	4	100.00%	2,442,625	93.36%	1,532,411	97.85%	3,975,036	95.04%
2	Fixed portable or mobile structure	4	2.9%	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	162,500	6.21%	2,000	0.13%	164,500	3.93%
3	Open structure	2	1.09%	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	10,500	0.40%	6,500	0.42%	17,000	0.41%
8	Connective structure	2	1.09%	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	15,000	0.96%	15,000	0.36%
Totals		183	100%	3	0	0%	5	100%	0	0%	4	100%	2,616,425	100%	1,566,111	100%	4,182,536	100%
Mutual Aid Given Incidents		1																

Building Fires 2013



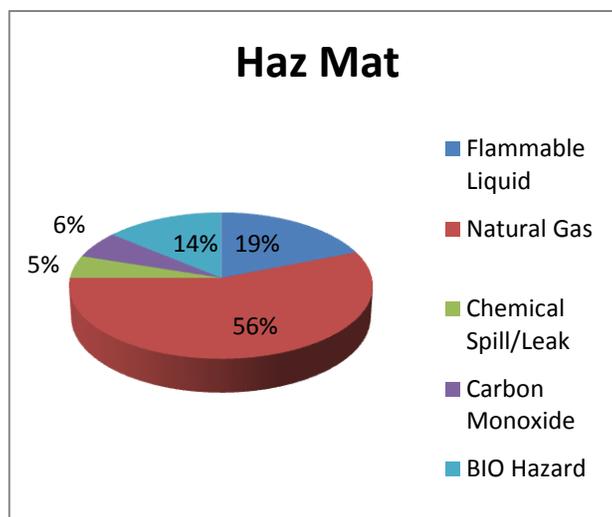
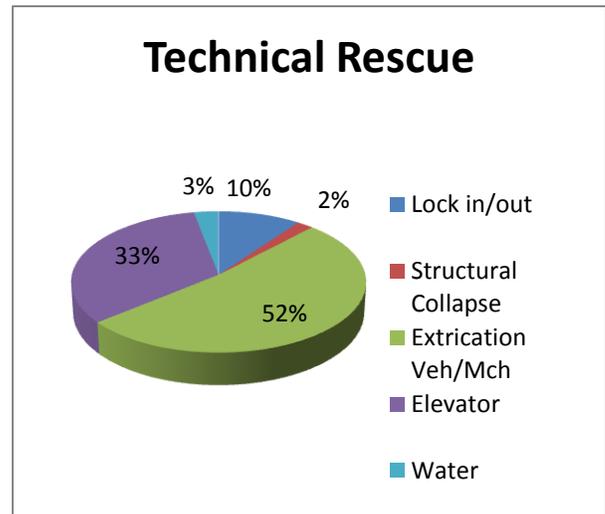
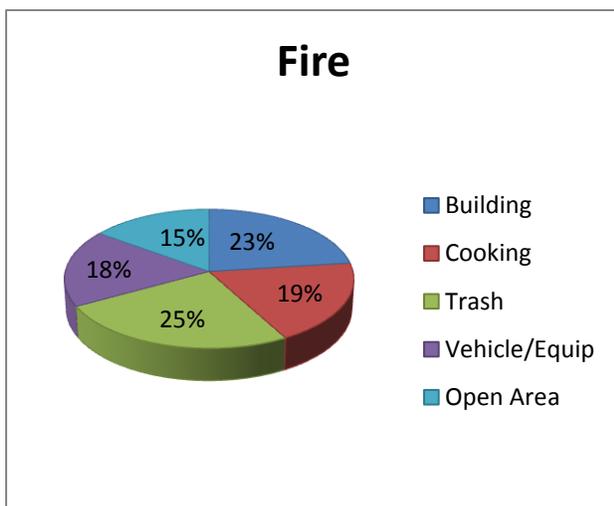
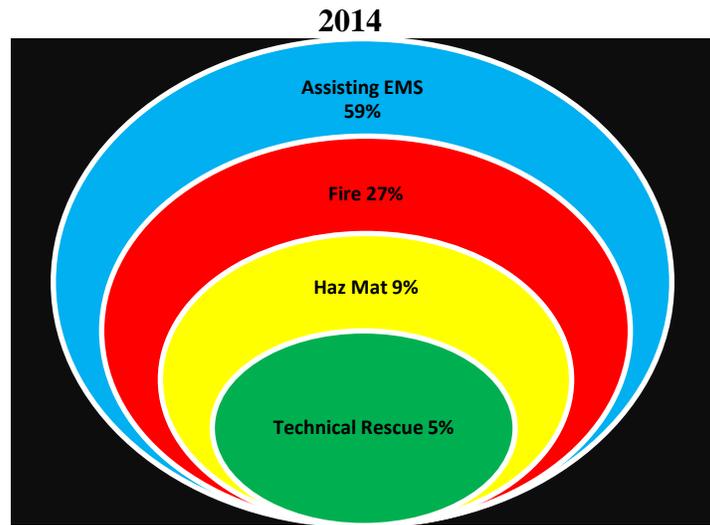
2014 Call Volume by Battalion

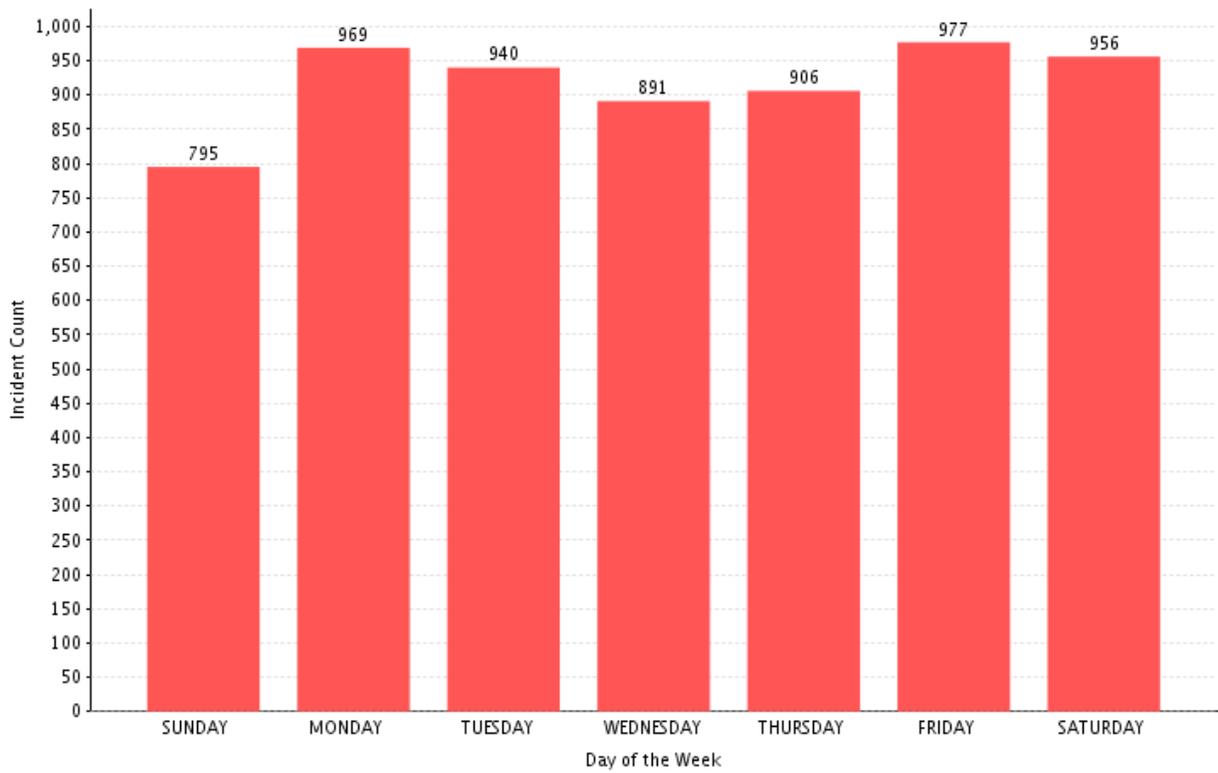
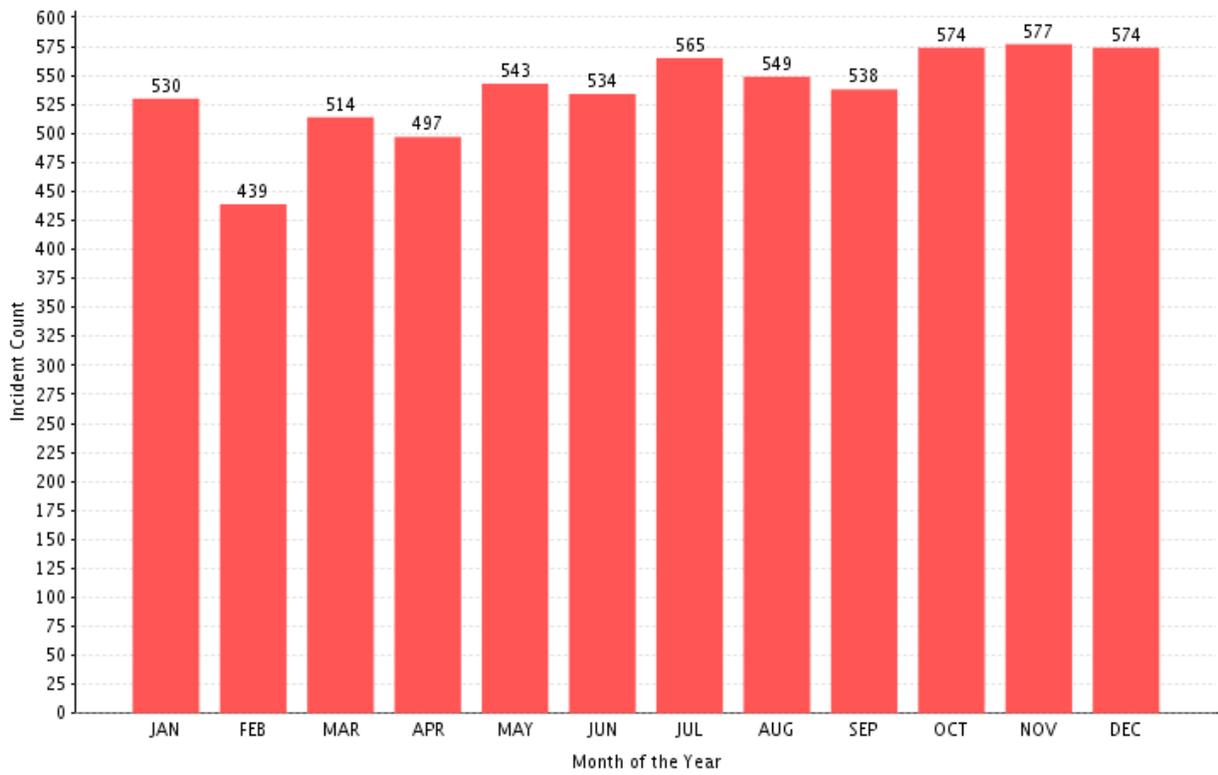


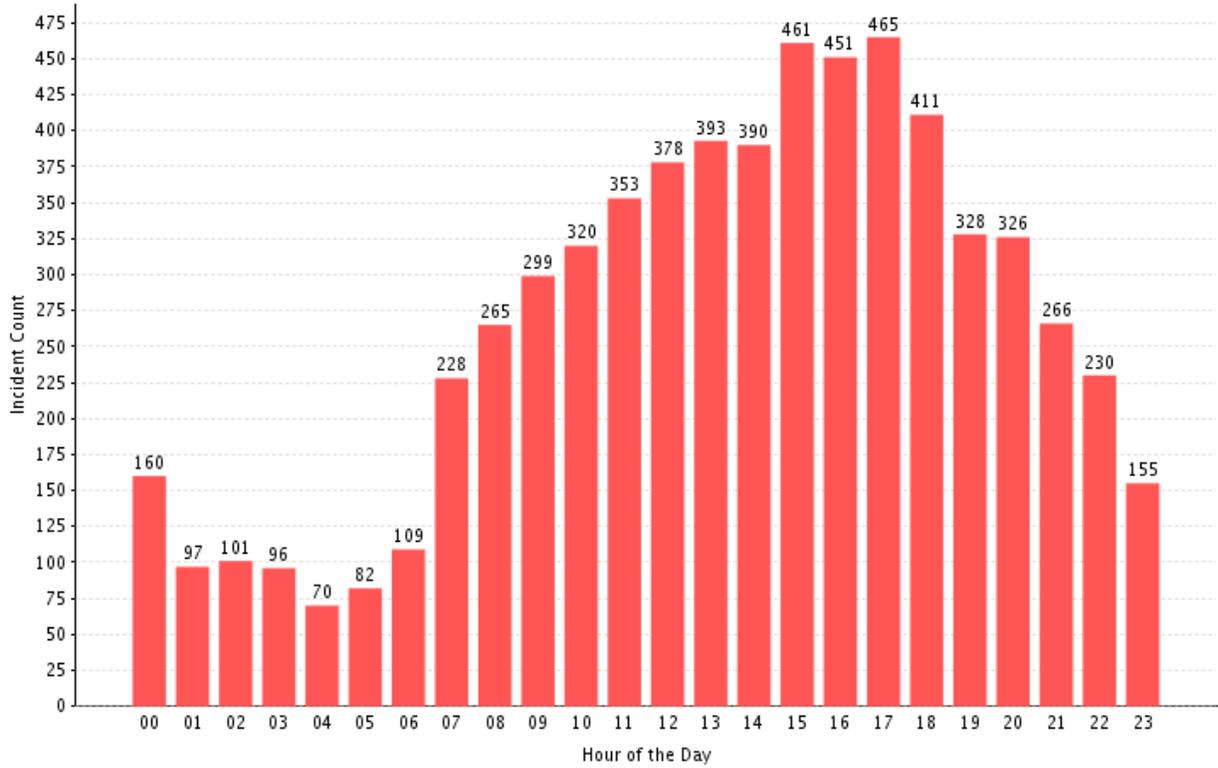
2014 Call Distribution by Station		
	Calls	Call Volume by Station
Station 1	747	12%
Station 2	535	8%
Station 3	1060	17%
Station 4	333	5%
Station 5	1069	17%
Station 6	554	9%
Station 7	391	6%
Station 8	577	9%
Station 9	281	4%
Station 10	123	2%
Station 11	379	6%
Station 12	54	0.70%
Station 13	159	2%
Station 14	120	2.00%
Station 15	10	0.30%
	6392	100%

Call Volume by Battalion	
Battalion One	61%
Battalion Two	34%
Battalion Three	5%

Call Distribution 2014

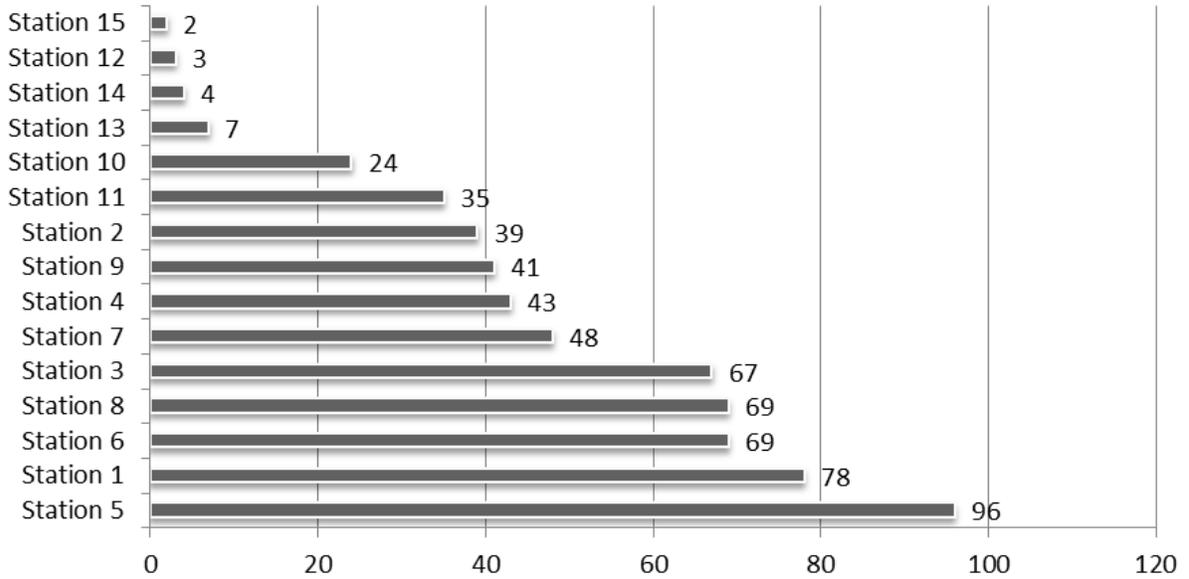




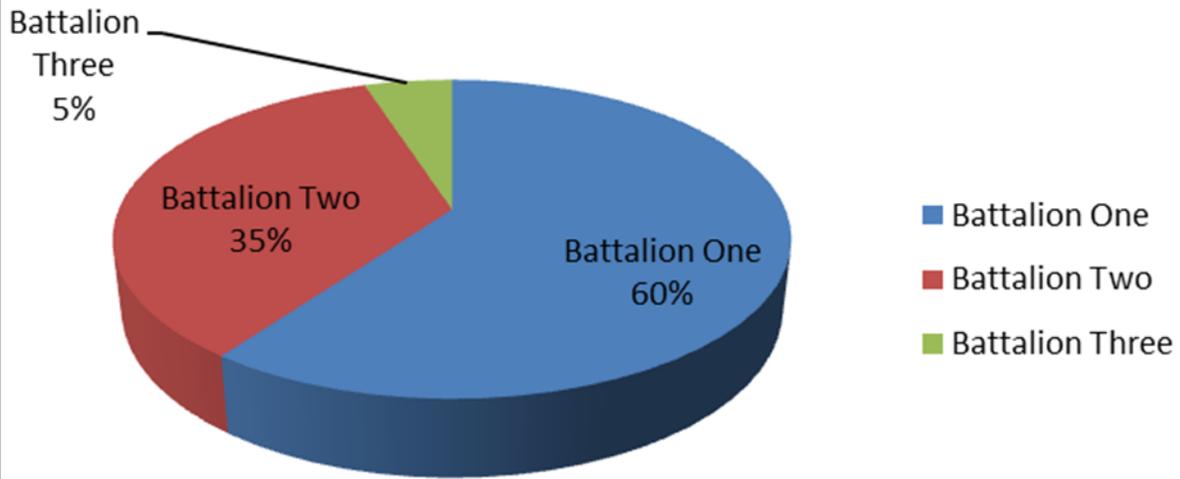


CODE	Description	FREQ	FREQ %	EXPs	CIV DTHS	CIV DTHS %	CIV INJS	CIV INJS %	FF DTHS	FF DTHS %	FF INJS	FF INJS %	PROP LOSS	PROP LOSS %	CONT LOSS	CONT LOSS %	TOTAL LOSS	TOT LOSS %
0	Structure type, other	3	145%	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1,001	0.01%	75	0.00%	1,076	0.01%
1	Enclosed building	194	93.72%	6	2	100.00%	2	100.00%	0	0.00%	7	100.00%	8,187,683	97.88%	5,896,531	99.14%	14,084,214	98.41%
2	Fixed portable or mobile structure	4	193%	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	156,000	186%	40,000	0.67%	196,000	137%
3	Open structure	4	193%	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	15,000	0.18%	6,000	0.10%	21,000	0.15%
4	Air supported structure	1	0.48%	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	5,000	0.06%	5,000	0.08%	10,000	0.07%
8	Connective structure	1	0.48%	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	100	0.00%	0	0.00%	100	0.00%
Totals		207	100%	6	2	100%	2	100%	0	0%	7	100%	8,364,784	100%	5,947,606	100%	14,312,390	100%
Mutual Aid Given Incidents		1																

Building Fires 2014



2015 Battalion Call Volume



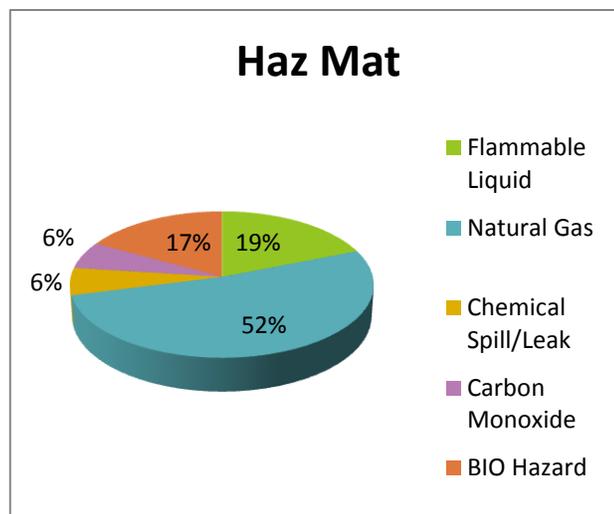
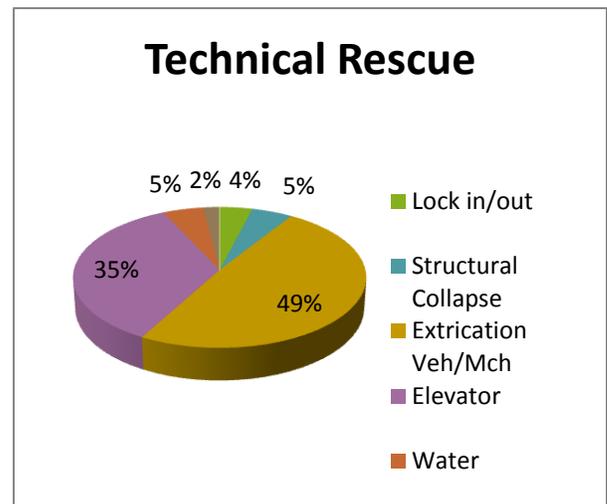
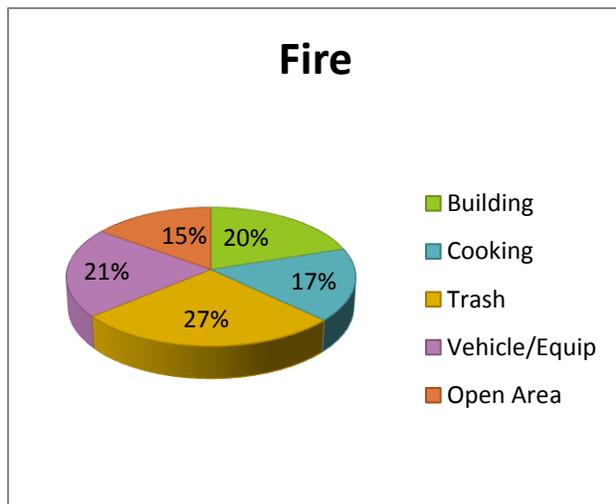
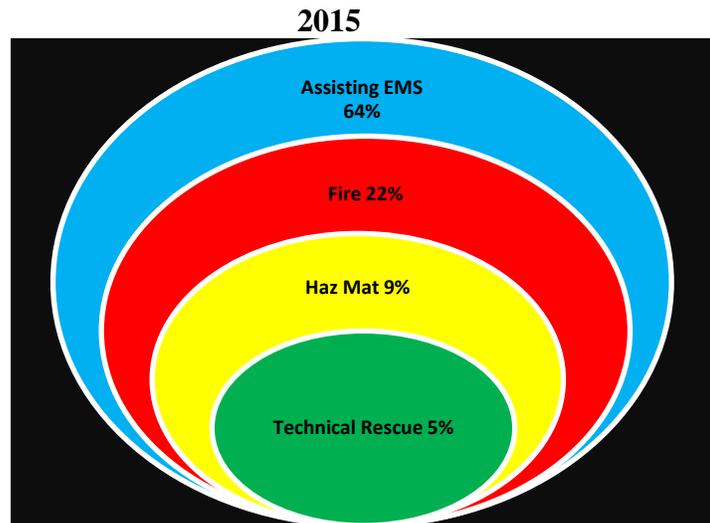
2015 Call Distribution by Station

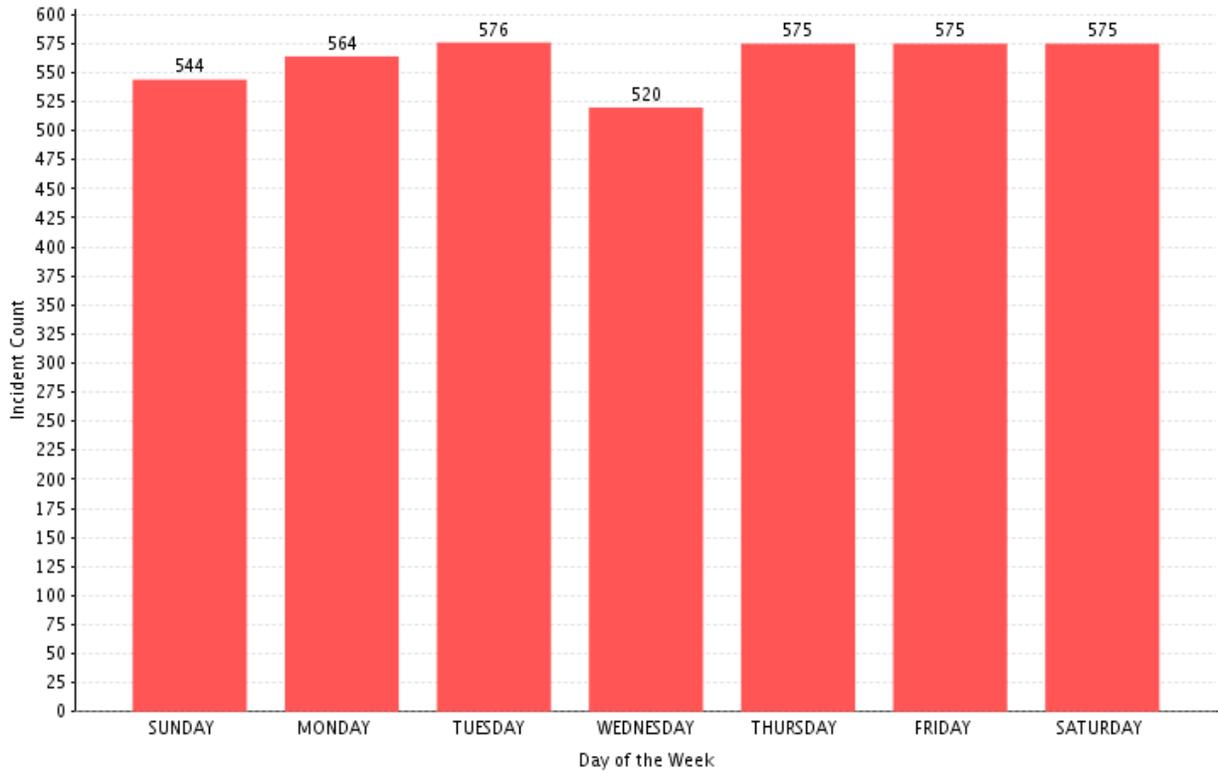
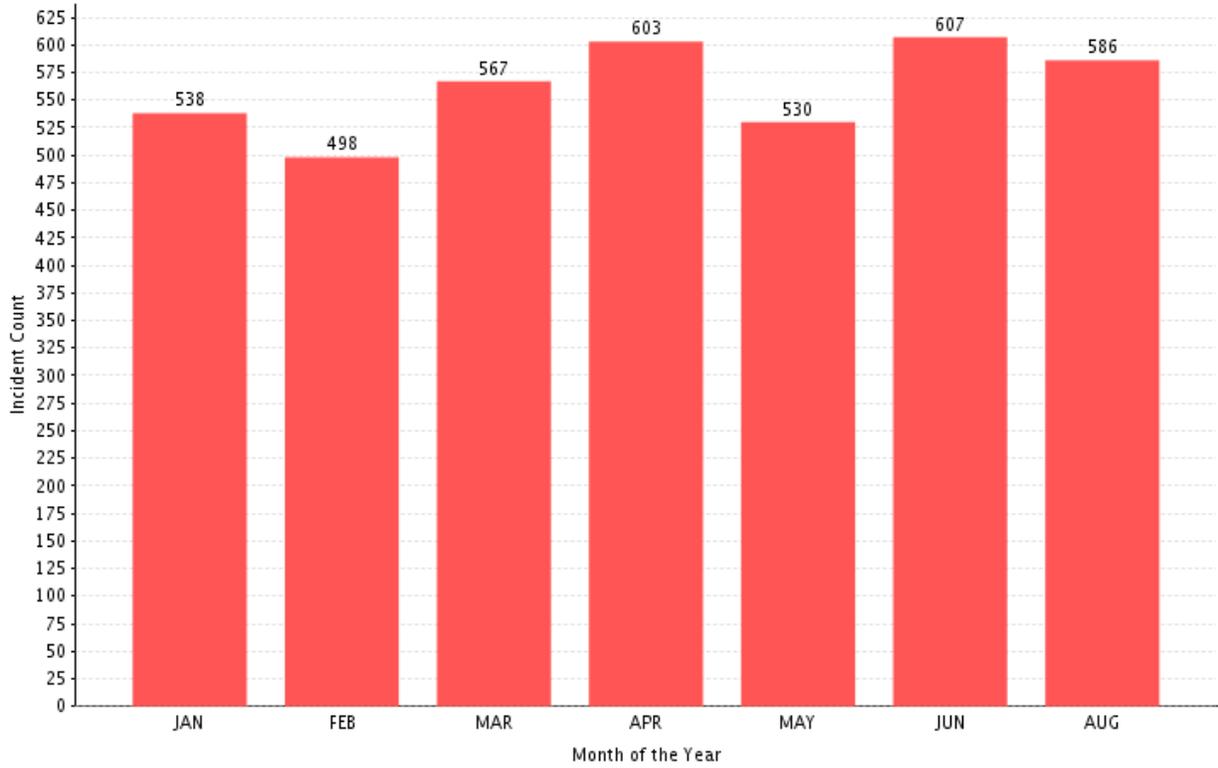
	Calls	Call Volume by Station
Station 1	903	13%
Station 2	608	8%
Station 3	1169	16%
Station 4	415	6%
Station 5	1091	15%
Station 6	624	9%
Station 7	468	7%
Station 8	741	10%
Station 9	269	4%
Station 10	162	2%
Station 11	346	5%
Station 12	66	0.80%
Station 13	167	2%
Station 14	141	2%
Station 15	34	0.20%
	7204	100%

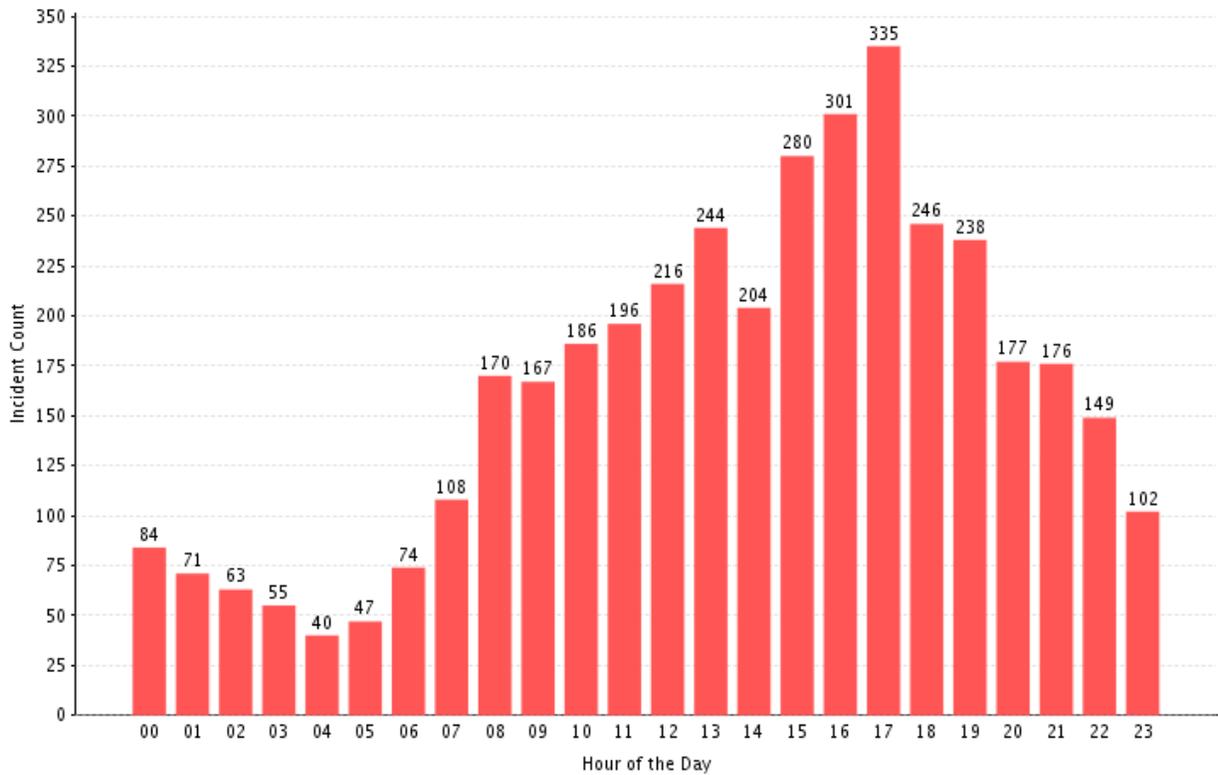
Call Volume by Battalion

Battalion One	60%
Battalion Two	35%
Battalion Three	5%

Call Distribution 2015







CODE	Description	FREQ	FREQ %	EXPs	CIV DTHS	CIV DTHS %	CIV INJS	CIV INJS %	FF DTHS	FF DTHS %	FF INJS	FF INJS %	PROP LOSS	PROP LOSS %	CONT LOSS	CONT LOSS %	TOTAL LOSS	TOT LOSS %
0	Structure type, other	2	2.00%	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1400	0.11%	0	0.00%	1400	0.10%
1	Enclosed building	93	93.00%	2	0	0.00%	0	0.00%	0	0.00%	2	100.00%	1242,569	99.21%	19,928	98.97%	1434,497	99.18%
2	Fixed portable or mobile structure	3	3.00%	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	7,500	0.60%	2,000	103%	9,500	0.66%
3	Open structure	1	100%	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%	0	0.00%
6	Open platform	1	100%	0	0	0.00%	0	0.00%	0	0.00%	0	0.00%	1000	0.08%	0	0.00%	1000	0.07%
Totals		100	100%	2	0	0%	0	0%	0	0%	2	100%	1252,469	100%	19,928	100%	1,446,397	100%
Mutual Aid Given Incidents		0																

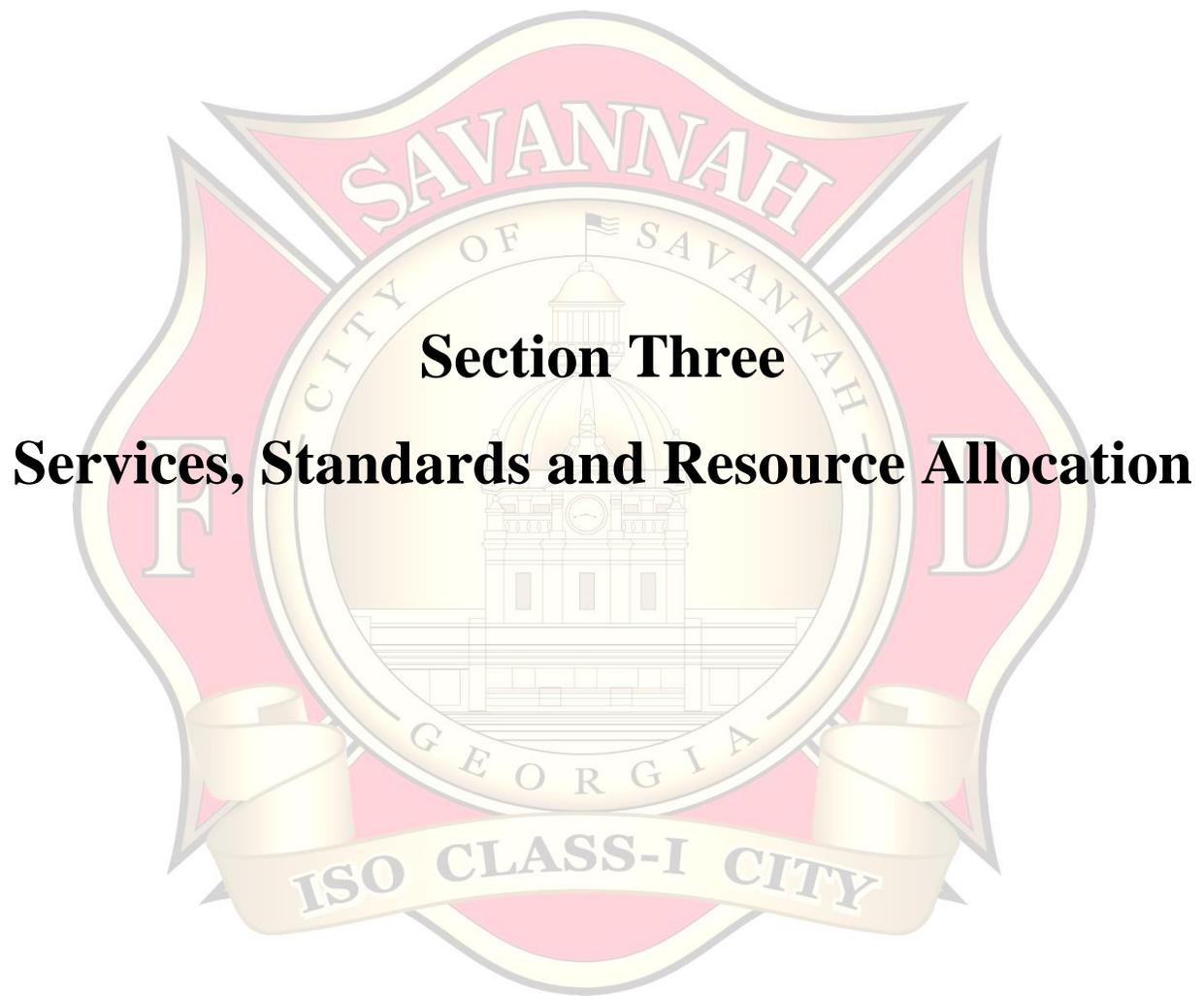
Section Summary

SFES is constantly monitoring the bureau's efficiency and effectiveness. One method used in this monitoring process was the analyzation of call volume. Reviewing incidents over the course of a timeframe can reveal certain trends and service gaps. It also provides a basis for opening dialog in regards to adaptive change where areas of concern have been identified. As demonstrated in the previous pages, SFES conducted an analysis of the last 4 years. The results of this research revealed substantial amounts information in regards to our service delivery.

The analysis of call volume identified trends and high volume areas by response district. Response districts 5, 1, 8, and 6 (in order) remained the busiest districts for building fires, followed closely by districts 2 and 3. This pattern shows a band of heavy fire load that runs the middle of the COS. This band starts on Savannah's East side on Victory Drive and runs West until it turns into Ogeechee Road.

Other information found was that in 2012 and 2014 the busiest day was Friday. While in 2013 and 2015 that day changed to Tuesday. The time of incidents remained constant over the 4 years, occurring between 1500 and 1800 hours. The average number of calls per month did not vary dramatically from month to month. November had the most calls in 2013 and 2014, while July had the most in 2012 and June led in 2015.

In regards to incident reporting on fire loss in monetary values, the analysis found that the reports contained inaccuracies. Under current SFES procedures, the Incident Commander would identify the property value through the Tax Assessor's office and SAGIS. However, the fire loss was determined with certain levels of bias, since the incident commander made a judgement on the percentage of loss. The identification of this problem has led SFES to begin looking for more accurate models for determining fire loss and property saved.



Section Three
Services, Standards and Resource Allocation

Section Three: Services Deliverables and Resource Allocation

The completion of the COS Risk Assessment determined not only the risks within the COS but also identified the services our customers wanted SFES to delivery and SFES's ability to perform these services. The results of the Community Risk Assessment found that SFES has focused on four major types of responses and the necessary tasks in order to contribute to the city's loss reduction program. These types of responses include: Fire suppression (to include Marine for land based firefighters and Industrial), Hazardous Materials, Technical Rescue, and Assisting Emergency Medical Services.

SFES Services Deliverables

- **Working Fires**
 - Residential Fires
 - Commercial/Industrial Fires
 - Ship/Harbor Fires
 - Vehicle Fires
 - Trash/Dumpster Fires
 - Open Area (Grass) Fires
 - Dumpster

- **False Alarms**
 - Verify False Alarms
 - System Malfunctions
 - Accidental Activation
 - Weather

- **Hazardous Materials Incidents**
 - Combustible/Noncombustible Gas Releases
 - Combustible/Noncombustible Liquid Spills
 - Clandestine Drug Laboratories
 - Industrial Incidents
 - Biohazard Clean-up
 - Transportation Incidents
 - Chemical Incidents
 - Biological Incidents
 - Nuclear Incidents
 - Radiological Incidents
 - Explosive Incidents

} CBRNE Incidents



- **Working Technical Rescue Incidents**
 - Vehicle and Heavy Machinery Extrications
 - High Angle Rescues
 - Trench Rescues
 - Confined Space Rescues
 - Elevator Rescues
 - Structural Collapse
 - Wide Area Search and Rescues
 - Marine/Water Operations
 - Boat Operations
 - Georgia Search and Rescue Task Force 8



- **Emergency Medical Response**
 - Accident with Injuries
 - Medical Lift Assist

- **Community Assistance**
 - Smoke Detector Installations and Checks
 - Operation Clean Sweep
 - Public Relations Activities
 - Learn Not To Burn
 - Community Meeting
 - Chatham County Youth Collaborative
 - Woodville Tompkins Public Safety Pathway
 - Blood Pressure Checks
 - Safety Awareness Announcements



- **Special Event Incidents**
 - VIP Events
 - Natural and Manmade Disasters
 - Civil Disturbances
 - Saint Patrick's Day Festival
 - Mass Causality Incidents
 - First Responder
 - Helicopter Operations
 - Triage Tagging



- **Fire Investigations (Law Enforcement Unit)**

- Investigate fire and explosion scenes to determine the cause and origin.
- Conduct pre-employment background investigation.
- Department's Professional Standards Unit.
 - Duties of the PSU are to conduct internal investigation as directed by the Fire Chief.

- **Fire Marshals**

- Building Inspections
- Complaint Inspections
- Knox Box Key Safe Program
- Gated Community Ordinance Program
- Underground/ Aboveground Storage Tanks
- Burn Permits
- Fireworks Permits
- Fire Lanes

Response Standards

In all emergency responses, time is the standard of measurement that defines a department's effectiveness and efficiency. During the self-evaluation SFES found a series of time measurements that were failing to capture our response capabilities. The result of this find led to numerous administrative and operational policy changes that would allow SFES to quantify our response times in order to improve effectiveness and efficiency. During 2012 and 2013, SFES collected incident data that captured the Total Response time for the four response categories. However, the incident data was timed stamped to the next minute which caused errors and did not accurately reflect the true breakdown of the Total Response time. Within the Total Response time a call has the following criteria:

Alarm Processing Time

Alarm processing time, or process time, is the time that transpires from receipt of a request for assistance until a unit is dispatched. Generally speaking, process time consists of when a dispatcher receives the data at the terminal which indicates the incident location, type of incident, and the appropriate response. Time is stopped when the dispatcher verbally begins to transmit the incident to responding units.

The *NFPA 1221* standard and SFES benchmark for process time is 60 seconds for 90% of the calls. Savannah Fire & Emergency Services cannot directly impact the Alarm Processing Time because the dispatch center is operated by the Savannah Chatham Metro Police Department. SFES does have indirect influence on the dispatch center through a 9-1-1 Communications Committee.

Turnout Time

Turnout time is the first of the response phases controlled by SFES. This phase begins at the notification of an emergency in progress by the dispatch center and ends when personnel and apparatus begin movement towards the incident location. Personnel must don appropriate equipment, assemble on the response vehicle, and begin travel to the incident. The allotted time for SFES operational personnel is 1 minute and 20 seconds 90% of the time.

Response Time

Response time is the second controllable response phase for SFES. During this time measurement, time is measured from the turnout time to the arrival on scene. Regardless of location within the city limits SFES has adopted the policy that supports the urban response times. Under this policy, SFES will have the first responding apparatus arrive in 4 minutes 90% of the time with the rest of the response compliment arriving within 8 minutes 90% of the time.

Total Response Time

Total Response time is the Alarm Processing, Turnout and Response times added together. Under this time measurement, SFES responses need to have the first responding apparatus arrive in 6 minutes and 20 seconds 90% of the time with the rest of the response compliment arriving within 10 minutes and 20 seconds 90% of the time.

As stated above, the *First Due company* will have a total response time of 6 minutes and 30 seconds at or above the 90 percentile. Each responding company will have a minimum staffing of three firefighters (1 Fire Officer, 1 Apparatus Operator and 1 to 2 Firefighters). The first arriving unit shall be capable of establishing command, conduct a size up and assign additional resources. Each responding engine company will have the capability of establishing a water supply with an initial tank capacity of at least 500 gallons and a pumping capacity of at least

1250gpm, for initiating the firefighting critical tasks. The remaining responding units, known as the *Effective Response Force (ERF)* – will have a total response time of 11 minutes and 50 seconds at or above the 90 percentile. Each ERF will have pre-identified resources assigned, depending on the type of emergency. The ERF shall be capable of completing the 22 Critical Firefighting Tasks outlined by the National Institute of Science and Technology (NIST). Listed below are the incidents that SFES’s utilizes in order to measure effectiveness and efficiency which is computed through a baseline and benchmark comparison:

- a) *First Due* – Refers to the first apparatus arriving on the scene of an incident.
- b) *Effective Response Force (ERF)* – The minimum amount of staffing and equipment that must reach a specific location within maximum prescribed response time.
- c) *Balance* – Refers to any resources outside of the ERF that is needed to mitigate an emergency.
- d) *Baseline*- The data used (years 2013- 2015) as a reference with which to compare future observations or results
- e) *Benchmark* – provide a means by which the Department can evaluate its service and response through the Standards of Cover.

Response and Tasking

Assisting Emergency Medical Services: All Units Respond in Emergency Mode

Vehicle Accident with Injuries:

1 Engine - (If the closest Engine is unavailable, then the next closest unit will be dispatched. If that unit is a Rescue or Truck, then the next closest Engine will also be dispatched).

Note: *A response to a divided highway requires an Engine to be dispatched from both directions (i.e. Truman Parkway, I-16, I-516, Veterans Parkway and I-95).*

Medical Lift Assist:

1 Engine

Fire Suppression Responses: All Units Respond in Emergency Mode

Vehicle/ Open Area/Dumpster Fires:

1 Engine

Vehicle Fires in Parking Garages (above and below grade):

**3 Engines, (RIT included) 1 Truck, 1 Rescue, Safety Officer, Battalion Chief
Command Aide**

Building Fire/Airport, Aircraft (Moderate Risk):

**3 Engines, (RIT included), 1 Truck, 1 Rescue or Additional Truck,
Safety Officer, BC, Command Aide**

High Rise/Target Hazard Fire (High Risk)

**4 Engines (RIT included), 1 Truck, 1 Rescue or Additional Truck,
Safety Officer, BC, Command Aide**

Calls for Additional Resources or Balance of Resources

Rapid Intervention Team:	1 Engine
Task Force 1:	1 Engine, 1 Truck
Task Force 2:	1 Engine, 1 Rescue
Second Alarm:	Same as 1st alarm + Rehab-1
Third Alarm:	2 Engines, 1 Truck or Rescue

Hazardous Materials Responses: All Units Respond in Emergency Mode

Minor Hydrocarbon Release < 10 Gallons: **1 Engine**

IED/Assist Law Enforcement ECO:

1 Engine, Haz-Mat 2, Safety Officer, Battalion Chief, and notify Special Operations Chief (SOC)

Assist Law Enforcement/Clandestine Drug Labs:

1 Engine, Haz-Mat 2, Safety Officer, BC, SOC

Haz-Mat Release (Small) 10-55 Gallons

2 Engines (1 Haz-Mat Engine and 1 Engine), Safety Officer, Haz-Mat 2, BC, SOC

Carbon Monoxide Detector Activation: (No Signs and or Symptoms of Exposure)

2 Engines (1 Haz-Mat Engine and 1 Engine)

Carbon Monoxide Detector Activation: (Signs and or Symptoms of Exposure Exist)

2 Engines (1 Haz-Mat Engine and 1 Engine), Safety Officer, BC

Bio-Hazard:

2 Engines, (1 Haz-Mat Engine, 1 Engine) and a Safety Officer

Natural Gas Leaks (Outside a Structure)

2 Engines (1 Haz-Mat Engine and 1 Engine), —Safety Officer

Natural Gas Leaks (Inside a Structure)

3 Engines (1 Haz-Mat Engine and 2 Engines), 1 Truck, 1 Rescue, Safety Officer, Command Aide, BC

Haz-Mat Release > 56 Gallons

4 Engines (3 Haz-Mat Engines, 1 Engine) 1 of the Haz-Mat Engines will respond in the HMRV with all assigned personnel, 1 Rescue, Safety Officer, BC, Haz-Mat 2, and notify SOC

Fire with Haz-Mat Involved:

4 Engines (3 Haz-Mat Engines, 1 Engine), 1 of the Haz-Mat Engines will respond in HMRV with all assigned personnel, 1 Rescue, Safety Officer, Battalion Chief, Haz-Mat 2, and notify SOC

Suspicious Powder:

4 Engines (3 Haz-Mat Engines and 1 Engine), 1 of the Haz-Mat Engines will respond in the HMRV with all assigned personnel, Safety Officer, Haz-Mat 2, Battalion Chief, and notify SOC

Technical Rescue Response: Extrication Response:

A Level I response for extrication is dispatched upon notification of a vehicle accident with reported multiple entrapments or an accident involving a heavy commercial vehicle with Entrapment (i.e. Tractor trailer, Train vs vehicle, etc.).

Elevator Rescue:

1 Engine, 1 Rescue or Truck, Safety Officer

Vehicle Extrication:

1 Engine, 1 Rescue or Truck, Safety Officer

Heavy Vehicle/Machinery Extrication Responses:

1 Engine, 2 Rescues, 1 Truck, Safety Officer, Battalion Chief, and notify Special OPS 1

Swift/Flood/Dive Water Rescue:

Engine 16, 2 Rescues, 1 TRT Truck, Safety Officer, Battalion Chief, and notify Special OPS 1

All Other Technical Rescues

3 Engines, (2 TRT Engines, and 1 Engine), 1 Technical Rescue Truck, 2 Rescues, Safety Officer, Command Aid, Battalion Chief, and notify Special OPS 1

Note: All other TRT Response includes Structural Collapse, Trench Collapse, Confined Space, and High Angle.

Maritime Response:

Marine Level I Response:

Engine 16

Incidents would involve a fire on a recreational or small vessel (< 50'), dock, wharf, or pier. Non-fire incidents would involve a recreational or small vessel (< 50'), vessel in distress (including a listing or endangered vessel), potential jumper, CO detector activation on a vessel underway, and to assist requesting agencies. A Level I response is marine response for recreational boat fire, boating accident, vessel in distress, or 1-2 persons in the water.

Maritime Level II

Engine 16, 2 Engines (1 Haz-Mat Engine and 1 Engine), Safety Officer, Haz-Mat 2, Rehab 1, Battalion Chief, and notify Special Ops

Incidents would involve hazardous materials releases, or (CBRNE) in the Savannah River or other navigable waterway. If release is away from land Marine 1 will respond the location and other units would go to designated level 2 staging area.

Maritime Level III Response

Engine 16, 1 Engine, 2 Rescues, Truck 5, Safety Officer, Rehab 1, Battalion Chief, Command Aide, and notify Special Ops

Incidents would involve an over turned vessel, plane or vehicle crash with potential victims in the Savannah River or other navigable waterway. If victims are away from land, Marine 1 will respond to reported location of victims and other units would go to designated level 2 staging area until further directions are received. If weather permits, the County Helicopter would be requested for diver transport to the incident location.

Marine Level IV Response

Engine 16, 3 Engines (RIT included), 1 Truck, 1 Rescue, Safety Officer, 1 Rehab unit, Battalion Chief, Command Aide, and notify SOC

Incidents would involve a ship, marina, and port, barge fires on the Savannah River or other navigable waterway. If ship is underway Marine 1 will respond to the ship and other units would go to designated level 2 staging area.

Special Response Zones

Along the Savannah River Basin numerous local industries have established their base of operations. Under the City ordinance:

Section 9-102. - Additional areas created; boundaries described; taxation.

Be it further resolved that in consideration of the said taxes to be paid within said industrial areas that it is mandatory that the Mayor and Aldermen of the City of Savannah furnish the following city services, to wit: water service at prevailing industrial rates and services of the fire department

Hazardous Materials Response (Battalion Chiefs coordinate with Special OPS 1)

SFES Haz-Mat team is a regional response team and if the Hazardous Materials Response Team (HMRT) is needed for mutual aid then the Battalion Chief or Special Operations Chief will contact the Operations Chief for guidance.

Georgia Search & Rescue Team

Request for this team can be made by any department in the state of GA through their Emergency Management Agency to the Georgia Emergency Management Agency. GEMA will make the request to SFES.



Critical Task Analysis

Every emergency is a dynamic event and is unique in its own way. While every emergency is in fact different, the one constant that SFES always battles is time. Time is considered the greatest challenge that emergency responders face every day. It may be a building that is rapidly deteriorating due to exposure to fire, or it may be an individual suffering from a traumatic injury resulting from a vehicle accident. In order to successfully mitigate emergencies SFES has established a set of critical tasks that need to be accomplished for an effective response

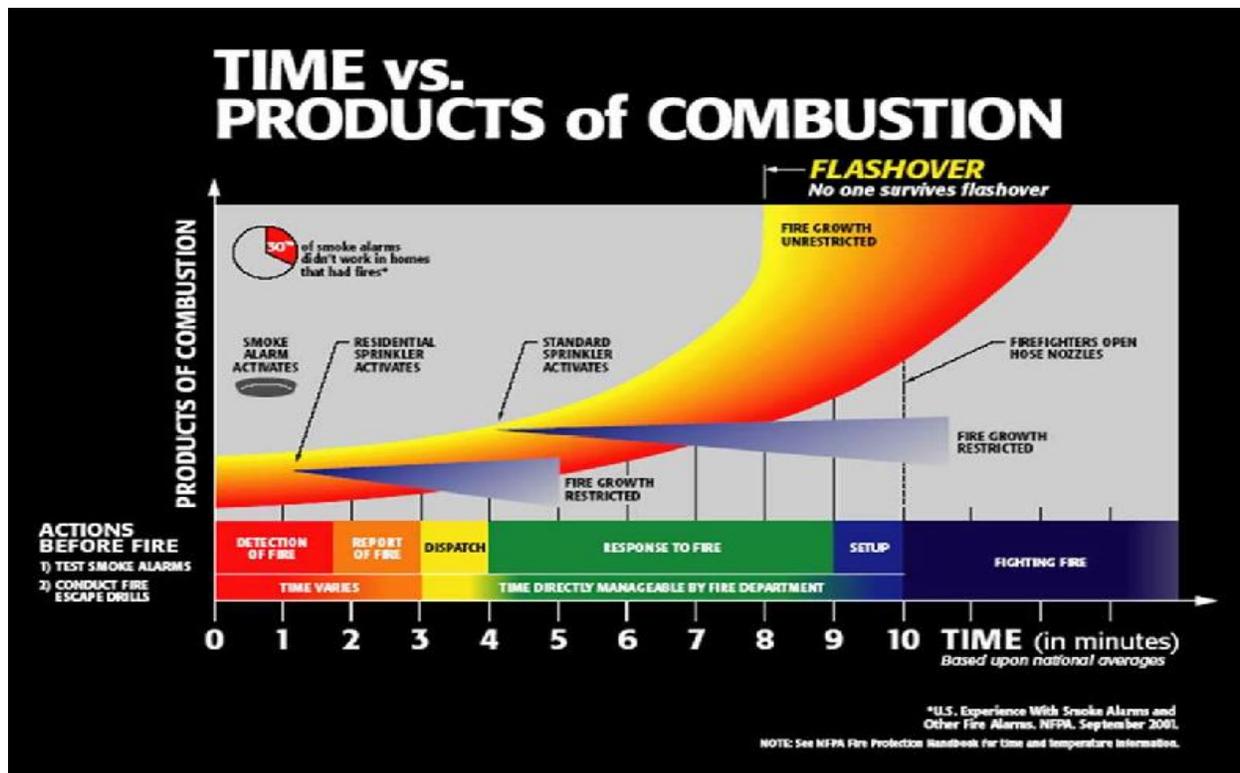
Fire Suppression

To meet the COS's fire risks, SFES has strategically placed 15 fire stations throughout the community. Within these stations are a wide spectrum of apparatuses to include engines, ladder trucks and rescues. Furthermore, this compliment of apparatus has allowed SFES to place a minimum of 15 firefighters on a building fire at or below the national response time requirements. In conjunction with this rapid response, SFES personnel utilize industry best practices outlined in NFPA, OSHA and NIST to mitigate these types of incidents effectively, efficiently and safely. The results of our fire suppression services and resource allocation have sustained the nations walking historical district which is vital to the city's tourism industry.

The fire scene is a dynamic environment. While it is possible to state what critical tasks must be accomplished in order to extinguish the fire, it is not always possible to predict how many firefighters it will take to accomplish those tasks. The number of personnel and the amount of equipment necessary to accomplish the critical tasks listed will vary due to the following factors:

- Delayed response
- Building construction and built-in fire protection features
- Number and condition of occupants
- Extent of fire upon arrival and area of fire involvement
- Firefighter or civilian injuries
- Equipment failure

The need for more personnel may arise on any fire scene at any time. Fire conditions dictate the required response for any given fire, even if that response exceeds the standards listed in this document. Our department relies on the experience and professional judgment of company and chief fire officers to request additional resources during the initial stages of an incident. We have determined that the following types of emergencies require commonly accepted tasks that are critical to a successful outcome. An example of a response such as this can be viewed by utilizing the illustration below. As stated above time is crucial during an emergency response. By the time notification of fire is initiated, responders have a small window of opportunity to effectively manage an emergency scene and save lives.



Critical Tasks – Building Fire Response

National Institute of Standards and Technology 22 Critical Firefighting Tasks

- | | |
|---|--|
| 1. Stop at Hydrant, Wrap Hose-1 | 13. Conduct Primary Search-2 |
| 2. Position Engine-1 | 14. Place Ground ladders-2 |
| 3. Conduct Size-up/Establish Command-1 | 15. Horizontal Ventillation-2 |
| 4. Engage Pump-1 | 16. Vertical Ventillation-2 |
| 5. Position Attack Lines-3 | 17. Control Interior Utilities-2 |
| 6. Establish “2 in 2 out”-4 | 18. Control Exterior Utilities-2 |
| 7. Supply Attack Engine-1 | 19. Conduct Secondary Search-2 |
| 8. Establish R.I.C-3 | 20. Check For Extension (roof)-2 |
| 9. Force Entry-2 | 21. Check For Extension (ceilings and walls)-2 |
| 10. Advance Attack Lines-3 | 22. Mechanical Ventilation-2 |
| 11. Advance Back-Up Line (front door)-3 | |
| 12. Advance Back-up Line (interior)-3 | |

NOTE 1: Any or all of these functions may have to be performed simultaneously by the same crews to be effective.

Low Risk Fire Suppression Incident		
Vehicle (131), Dumpster (154), Open Area (143) Fires		
Tasking	Personnel	Effective Response Force Units
Incident Command/ Safety	1	1 Engine Company
Water Supply/ Pump Operations	1	
Fire Suppression	1	
Effective Response Force	3	

Moderate Risk Fire Suppression Incident		
Structure and Airport Terminal (111), Parking Garages Above and Below Grade (112) Fires		
Tasking	Personnel	Effective Response Force Units
Incident Command	1	1 Battalion Chief
Safety/ Decon Officer	1	Safety Officer
Water Supply/ Pump Operations	1	3 Engine Company
Forcible Entry	2	1 Rescue Companies
Attack Line	2	1 Truck Company
Backup Line	2	(Minimum Staffing 3 per Company)
Primary Search	2	<i>(Taskings can be accomplished by assigning a company more than one task)</i>
Secondary Search	2	
Ventilation	2	
Overhaul	3	
Exposure Protection	2	
Rapid Intervention Crew	3	
Command Aide (Optional)	1	
Effective Response Force	17	

High Risk Fire Suppression Incident		
Fires in Known Target Hazard Structures (111)		
Tasking	Personnel	Effective Response Force Units
Incident Command	1	1 Battalion Chief
Safety/ Decon Officer	1	Safety Officer
Water Supply/ Pump Operations	1	4 Engine Company
Forcible Entry	2	1 Rescue Companies
Attack Line	2	1 Truck Company
Backup Line	2	Command Aide
Primary Search	2	(Minimum Staffing 3 per Company)
Secondary Search	2	<i>(Taskings can be accomplished by assigning a company more than one task)</i>
Ventilation	2	
Overhaul	3	Note: Second Alarm doubles above compliment
Exposure Protection	2	
Rapid Intervention Crew	3	
Command Aide	1	
Staging Officer	1	
Division Officer	1	
Effective Response Force	21	

Hazardous Materials Standards

The hazardous materials risk involves some unknown elements within our jurisdiction; specifically in Station 2, 4, 6, 9, and 13's response zones and involves the potential of any type of legally transported hazardous material via the interstate. We also have hazardous materials shipments occurring by rail and water. To meet response requirements for risk/incidents associated with accidental or intentional release of hazardous materials, SFES identified six Hazardous Materials Response Companies. These companies are located throughout the City, and dispatched accordingly to meet response times and risk. These Companies are staffed with three (3) to four (4) personnel certified at the Hazardous Materials Technicians level. If additional resources are required, personnel and equipment are available in other fire companies. In addition all other fire personnel are at a minimum certified at the Hazardous Materials Operations level. To ensure the safety of personnel and the public, staffing, training, personnel qualifications and incident response procedures are all consistent with Occupational Health & Safety Administration (OSHA) and National Fire Protection Association (NFPA) requirements.

Low Risk Hazardous Materials Incident		
Carbon Monoxide Activation (424), Gas Leak Outside of the Structure (412)		
Tasking	Personnel	Effective Response Force Units
Incident Command/ Safety	1	
Information Gathering	1	Safety Officer
Meters/ Monitoring	2	2 Engine Companies
Water Supply/ Pump Operations	1	(Minimum Staffing 3 per Company)
Hazard Mitigation	2	
Effective Response Force	7	

Minor Hydrocarbon Release Incident (Less than 10 gallons)		
Flammable Liquid Spill (411) and Accident Cleanup (463)		
Tasking	Personnel	Effective Response Force Units
Incident Command/ Safety	1	
Water Supply/ Pump Operations	1	1 Engine Company
Hazard Mitigation	1	(Minimum Staffing 3 per Company)
Effective Response Force	3	

Moderate Risk Hazardous Materials Incident		
Gas Leak Inside the Structure (412), Combustible Liquid Spill (413)		
Tasking	Personnel	Effective Response Force Units
Incident Command/ Safety	1	1 Battalion Chief
Information Gathering	1	Safety Officer
Meters/ Monitoring	3	3 Engine Company
Water Supply/ Pump Operations	1	1 Rescue Company
Hazard Mitigation/ Rescue	3	1 Truck Company
Hazard Mitigation/ Entry Team	2	(Minimum Staffing 3 per Company)
Exposure Protection	2	<i>(Taskings can be accomplished by</i>
Rapid Intervention Crew	3	<i>assigning a company more than one task)</i>
Establish Response Zones	1	
Command Aide (Optional)	1	
Effective Response Force	17	

High Risk Hazardous Materials Incident		
Flammable Liquid Spill (411) and Combustible Liquid Spill (413)		
Tasking	Personnel	Effective Response Force Units
Incident Command/ Safety	1	1 Battalion Chief
Information Gathering	1	Safety Officer
Meters/ Monitoring	3	4 Engine Company
Water Supply/ Pump Operations	1	1 Rescue Companies
Hazard Mitigation/ Rescue	3	Hazardous Materials Response Vehicle
Hazard Mitigation/ Entry Team	2	Hazardous Materials Specialist
Exposure Protection	2	Special Operations Chief
Rapid Intervention Crew	3	
Establish Response Zones	1	(Minimum Staffing 3 per Company)
Decontamination Unit	2	<i>(Taskings can be accomplished by</i>
Command Aide (Optional)	1	<i>assigning a company more than one task)</i>
Effective Response Force	19	

NOTE 1: Our role is to provide command and control, rescue, extinguishment, and containment actions. Neutralization, recovery, clean up and disposition of the chemical is not a fire department function. We may be required in a support role during these functions.

NOTE 2: Any or all of these functions may have to be performed simultaneously to be effective.

Technical Rescue

SFES provides a great number of technical rescue services (i.e. trench, confined space, structural collapse, heavy machinery extrication, water rescue). With an interstate, major waterways, and industrial facilities located within the city, SFES has technical rescue units stationed throughout the city to be able to arrive on scene promptly and begin mitigating the situation. To meet response requirements for risk/incidents associated in the industrial, construction, and vehicle crash, as well as other rescue environments, SFES identified six Technical Rescue Companies. These companies are located throughout the City, and dispatched accordingly to meet response times and risk. These Companies are staffed with three (3) to four (4) personnel who receive specific training to respond to incidents involving high angles, confined space, vehicle and machinery victim extrication, trench collapse, structural collapse, and person in the water incidents. To ensure the safety of personnel and the public, staffing, training, personnel qualifications and incident response procedures are all consistent with Occupational Health & Safety Administration (OSHA) and National Fire Protection Association (NFPA) requirements.

Low Risk Technical Rescue Incident		
Passenger Vehicle Extrication (352)		
Tasking	Personnel	Effective Response Force Units
Incident Command	1	1 Engine Company
Safety*	1	1 Rescue Company
Victim Care (per)	1	1 Truck Company
Suppression Standby	2	Safety Officer
Secure/Stabilize/Extrication/Extraction	5	(Minimum Staffing 3 per Company)
Effective Response Force	10	
Stalled Elevator Removal (353)		
Tasking	Personnel	Effective Response Force Units
Incident Command	1	1 Engine Company
Safety*	1	1 Rescue Company
Elevator Secure/Stabilization	4	1 Truck Company
Victim Communication	1	Safety Officer
Victim Removal	2	(Minimum Staffing 3 per Company)
Elevator Rescue Support	1	
Effective Response Force	10	
Flood Water Rescue (360)		
Tasking	Personnel	Effective Response Force Units
Incident Command	1	1 Engine Company
Safety*	1	1 Rescue Company
TRT Safety Officer	1	1 Truck Company
Victim Care (per)	1	Safety Officer
Rescue Coordinator	1	(Minimum Staffing 3 per Company)
Water Rescuers	3	
Water Rescue Support	2	
Effective Response Force	10	

Moderate Risk Technical Rescue Incident		
Heavy Vehicle-Machinery Rescue (357)		
Tasking	Personnel	Effective Response Force Units
Incident Command*	1	1 Battalion Chief
Safety*	1	Safety Officer
TRT Safety Officer	1	1 Engine Company
Victim Care (per)	1	2 Rescue Companies
Suppression Standby	2	1 Truck Company
Secure/Stabilize/Extrication/Extraction	8	(Minimum Staffing 3 per Company)
Effective Response Force	14	
Swift/Dive Water Rescue (363)		
Tasking	Personnel	Effective Response Force Units
Incident Command*	1	1 Battalion Chief
Safety*	1	Safety Officer
TRT Safety Officer	1	Engine 16
Victim Care (per)	1	2 Rescue Companies
Rescue Coordinator	1	1 Truck Company
Water Rescuers	6	(Minimum Staffing 3 per Company)
Water Rescue Support	3	
Effective Response Force	14	

High Risk Technical Rescue Incident		
Rope/ High Angle (356)		
Tasking	Personnel	Effective Response Force Units
Incident Command	1	1 Battalion Chief
Command Aid*	1	Command Aide
Safety*	1	Safety Officer
TRT Safety Officer	1	3 Engine Company
Victim Care (per)	1	2 Rescue Companies
Rescue Coordinator	1	1 Truck Company
Rope Rescuers	2	(Minimum Staffing 3 per Company)
Rope System Operators	6	
Edge Support	1	
Rope Rescue Support	6	
Effective Response Force	21	
Confined Space (355)		
Tasking	Personnel	Effective Response Force Units
Incident Command*	1	1 Battalion Chief
Command Aid*	1	Command Aide
Safety*	1	Safety Officer
TRT Safety Officer	1	3 Engine Company
Victim Care (per)	1	2 Rescue Companies
CS Rescuers	8	1 Truck Company
Confine Space Commication System Operators	1	(Minimum Staffing 3 per Company)
Confine Space Air System Operators	1	
Confine Space Rope System Operators	4	
Confine Space Rescue Support	2	
Effective Response Force	21	
Trench Rescue (354)		
Tasking	Personnel	Effective Response Force Units
Incident Command*	1	1 Battalion Chief
Command Aid	1	Command Aide
Safety*	1	Safety Officer
TRT Safety Officer	1	3 Engine Company
Victim Care (per)	1	2 Rescue Companies
Rescue Coordinator	1	1 Truck Company
Trench Secure/Stabilization	6	(Minimum Staffing 3 per Company)
Shoring	4	
Trench Rescuers	2	
Trench Rescue Support	3	
Effective Response Force	21	
Structural Collapse Rescue (351)		
Tasking	Personnel	Effective Response Force Units
Incident Command*	1	1 Battalion Chief
Command Aid*	1	Command Aide
Safety*	1	Safety Officer
TRT Safety Officer	1	3 Engine Company
Victim Care (per)	1	2 Rescue Companies
Rescue Coordinator	1	1 Truck Company
Shoring	8	(Minimum Staffing 3 per Company)
Rescuers	4	
Rescue Support	3	
Effective Response Force	21	

Marine Response for Fire, Hazardous Materials and Technical Rescue

Due to a large portion of the response area touching bodies of water, SFES has been creating a Marine response capability for Land Based Firefighters since 2015, when SFES received the All Hazards vessel, Marine 1. Utilizing an engine company that operates in a dual role, this engine company responds to marine fires as land based firefighters or in Marine 1 (fire suppression vessel) to assist with firefighting capabilities from the water. All 4 members of this company have current certifications from with National Association of State Boating Law Administrators (NASBLA) and have the ability to conduct dive and hazardous materials operations in accordance with NAUI and NFPA.

Tasking requirements for these types of incidents include a Level I- IV. Level I incidents require the dispatching of a single marine resource which is a single engine company response. Marine Levels II-IV are more complex and mandates a variety of resources to mitigate. To meet these response/risk requirements associated with a marine environment, personnel and equipment are available in other companies to assist in the response. To ensure the safety of personnel and the public, personnel qualifications and incident response procedures are all consistent with NASBLA and NFPA requirements outlined in NFPA 1005. In the fall of 2016, Marine 1 will have full response capabilities.

Low Risk Marine Incident		
Recreation Vessel Fires (134) and Vessel in Distress		
Tasking	Personnel	Effective Response Force Units
Incident Command/ Safety	1	Marine 1 (Engine 16)
Water Supply/ Pump Operations	1	
Fire Suppression	2	
Effective Response Force	4	

Moderate Risk Fire Suppression Incident		
Commerical Vessel Fires (134) and Commerical Vessel in Distress		
Tasking	Personnel	Effective Response Force Units
Incident Command	1	1 Battalion Chief
Safety/ Decon Officer	1	Safety Officer
Water Supply/ Pump Operations	1	3 Engine Companies
Support Vessel Fire Systems	2	1 Rescue Company
Marine Firefighting Response	6	1 Truck Company
Vessel Evacuation	2	Command Aide
Dewatering Group	2	Marine 1 (Engine 16)
Rapid Intervention Crew	3	Special Operations Chief
Command Aide	1	
		(Minimum Staffing 3 per Company)
		<i>(Taskings can be accomplished by assigning a company more than one task)</i>
Effective Response Force	19	

High Risk Fire Suppression Incident		
Over-Turned Vessel, Plane, Vehical(s) and/or Haz Mat in Navigable Waterway		
Tasking	Personnel	Effective Response Force Units
Incident Command	1	1 Battalion Chief
Safety/ Decon Officer	1	Safety Officer
Water Supply/ Pump Operations	1	2 Engine Companies
Support Vessel Fire Systems	2	2 Rescue Companies
Marine Firefighting Response	6	1 Truck Company
Vessel Evacuation	2	Command Aide
Dewatering Group	2	Marine 1 (Engine 16)
Rapid Intervention Crew	3	Special Operations Chief
Command Aide	1	
Staging Officer	1	
Division Officer	1	(Minimum Staffing 3 per Company)
Haz Mat Mitigation	3	<i>(Taskings can be accomplished by assigning a company more than one task)</i>
Effective Response Force	22	

External Relationships

SFES over the years has developed a wide spectrum of external relationships in order to provide the level of service our customers expect. In order to meet these expectations, SFES has external relationships in the following categories: Private Sector (Local Industry), Governmental (Neighboring Jurisdictions) and Non-Governmental Organizations (NGO's such as the Red Cross). These external relationships assist SFES in our ability to provide effective and efficient emergency service delivery while being fiscally responsible. In regards to emergency service delivery, SFES utilizes Automatic Aid, Mutual Aid and City Ordinances to contribute in our response capabilities. Currently, SFES has an Automatic Aid agreement with Southside Fire, EMS and Security in regards to the Truman Parkway Bridge that extends over the Vernon River. All Mutual Aid request should originate from the requesting department's Incident Commander (IC) or Fire Chief.

- Automatic Aid: Southside Fire, EMS and Security
- Mutual Aid
 - Pooler Fire Rescue Department
 - Port Wentworth Fire Rescue Department
 - Hunter Army Airfield Fire Department
 - Southside Fire, EMS and Security
 - Thunderbolt Fire Rescue Department
 - Garden City Fire Department
 - Bloomingdale Fire Rescue Department
 - Tybee Island Fire Rescue Department
 - 165th National guard Air wing
- Georgia Emergency Management Agency
- Chatham Emergency Management Agency
- Georgia Public Safety Training Center
- Georgia Fire Standards and Training Council
- National Fire Academy
- Savannah Metro Police Department
- City Bureau's

Resource Allocation

A critical element in the assessment of any emergency service delivery system is the ability to provide adequate resources and effective response force for incidents. Properly trained and equipped response companies must arrive, deploy, and mitigate the event within specific timeframes if successful emergency event strategies and tactical objectives are to be met, thus ensuring compliance with the standards set forth by NFPA 1710. SFES is required to provide the same coverage independent of area within the COS. SFES has strategically placed companies throughout the city to provide this coverage. An example is having a hazardous material response company located in different areas of the city in order to decrease the response time for such incidents. Another example is controlling a fire before it has reached its maximum intensity requires a rapid deployment of resources within a given timeframe. The higher the risk, the more resources needed. More resources are required for the rescue of persons trapped within a high-risk building with a high-occupant load, than for a low-risk building with a low-occupant load. As is the case concerning a multi-story, multi-family residential building versus a single story single family dwelling. History can also relay that more resources are required to control fires in large, heavily loaded structures than in small buildings with limited contents. Creating a level of service requires that SFES makes decisions regarding the distribution and concentration of resources in relation to the potential demand placed upon them by the level of risk in the community based off quantitative and qualitative research. The objective is to have a distribution of resources that are able to reach the majority of the fire events in the timeframe based off of Baseline and Benchmark data. Below are pictures of each station along with the response zone. Also a summary of personnel, apparatus, and any specialties a company may have.

Station 1

- Engine 1- 2000 gpm Pumper
- Staffed with a minimum of 4 personnel (1 officer 3 firefighters) each shift
- Truck 1- 100' Aerial Ladder
- Staffed with a minimum of 3 personnel (1 officer & 2 firefighters) each shift



535 East 63rd Street

Station 2

- Engine 2- 1500 gpm Pumper
- Staffed with a minimum of 4 personnel (1 officer & 3 firefighters). E2 is a designated Hazmat engine. Personnel assigned to E2 are required to be a minimum of NPQ Hazmat Technician
- Truck 2- 100' Platform Aerial
- Staffed with a minimum of 3 personnel (1 officer & 2 firefighters) each shift



5 Skyline Drive

Station 3

- Engine 3- 1500 gpm Pumper
- Staffed with a minimum of 3 personnel (1 officer 2 firefighters) each shift
- Rescue 1- Heavy Rescue Unit
- Staffed with 4 personnel (1 officer & 3 firefighters) each shift. R1 is designated as a technical rescue team (TRT) unit. Personnel assigned to R1 are required to be a minimum of a Rescue Technician 1D
- Marine 1- 8,000 gpm 50' All Hazards vessel (1 officer & 3 firefighters). Personnel assigned to Marine 1 are required to be Marine technician 1



121 East Oglethorpe Avenue



Marine 1

Station 4

- Engine 4- 1250 gpm Pumper
- Staffed with a minimum of 3 personnel (1 officer & 2 firefighters) each shift. E4 is a designated Hazmat engine. Personnel assigned to E4 are required to be a minimum of NPQ Hazmat Technician.



2401 Augusta Avenue



Industrial Fire Equipment (Located at Georgia Ports Warehouse 12)

Station 5

- Engine 5- 2000 gpm Pumper
- Staffed with a minimum of 4 personnel (1 officer & 3 firefighters) each shift
- Truck 5- 100' Tiller Aerial
- Staffed with a minimum of 4 personnel (1 officer & 3 firefighters) each shift. T5 is a designated TRT unit. Personnel assigned to T5 are required to be certified are required to be a minimum of a Rescue Technician 1
- Battalion Chief 1- BC1 is
- Staffed by one person (Battalion Chief) each shift. Rides out of a Ford Explorer



10 West 33rd Stree

Battalion One



Station 6

- Engine 6- 1500 gpm Pumper
 - Staffed with a minimum of 4 personnel (1 officer & 3 firefighters) each shift. E6 is a designated Hazmat engine. Personnel assigned to E6 are required to be a minimum of NPQ Hazmat Technician
 - Haz-Mat 1- HM1 is a mobile hazardous materials command vehicle staffed by the hazmat companies. Whichever company responds as HM1 will not utilize their apparatus.
 - Safety 1- S1 is staffed by one person (1 officer) each shift; riding in a pickup truck. Personnel riding as S1 must have completed and passed NPQ Incident Safety Officer Course.
 - Command Aid/HazMat 2- Staffed by one person each shift; riding in a pickup truck. Personnel riding as CA/HM2 must be a minimum of NPQ Hazmat Technician.



3000 Liberty Parkway

Station 7

- Engine 7- 2000 gpm Pumper
- Staffed with a minimum of 3 personnel (1 officer & 2 firefighters) each shift
- Rescue 2- Heavy Rescue
- Staffed with a minimum of 4 personnel (1 officer & 3 firefighters) each shift. R2 is a designated TRT unit. Personnel assigned to R2 are required to be a minimum of a Rescue Technician 1D
- Battalion Chief 2- BC2
- Staffed by one person (Battalion Chief) each shift. Rides out of a Ford Explorer



6902 Sallie Mood Drive

Station 8

- Engine 8- 1500 gpm Pumper
- Staffed with a minimum of 4 personnel (1 officer & 3 firefighters) each shift



2824 Bee Road

Station 9

- Engine 9- 1500 gpm Pumper
- Staffed with a minimum of 3 personnel (1 officer & 2 firefighters) each shift. E9 is a designated Hazmat engine. Personnel assigned to E9 are required to be a minimum of NPQ Hazmat Technician
- Georgia Search & Rescue (GSAR) response unit.



2235 Capital Street

Station 10

- Engine 10- 1500 gpm Pumper
- Staffed with a minimum of 3 personnel (1 officer & 2 firefighters) each shift



13710 Coffee Bluff Road

Station 11

- Engine 11- 2000 gpm Pumper
- Staffed with a minimum of 4 personnel (1 officer & 3 firefighters) each shift
- Rehab 1- Upon request or protocol, a person from E11 will man Rehab unit and deliver it to incidents.



11844 Apache Avenue

Station 12

- Engine 12- 1500 gpm Pumper
- Staffed with a minimum of 4 personnel (1 officer & 3 firefighters) each shift. E12 is a designated Hazmat engine. Personnel assigned to E12 are required to be a minimum of NPQ Hazmat Technician
- Truck 12- 100' Aerial
- Staffed with a minimum of 4 personnel (1 officer & 3 firefighters) each shift



1205 Bradley Boulevard

Station 13

- Engine 13-1500 gpm Pumper
- Staffed with a minimum of 4 personnel (1 Officer & 3 firefighters) each shift. E13 is a designated Hazmat engine. Personnel assigned to E13 are required to be a minimum of NPQ Hazmat Technician
- Truck 13- 100' Platform Aerial
- Staffed with a minimum of 3 personnel (1 Officer & 2 firefighters)
- Battalion Chief 3- BC3
- Staffed by one person (Battalion Chief) each shift. Rides out of a Ford Explorer



11 McKenna Drive

Station 14

- Engine 14- 1500 gpm Pumper
- Staffed with a minimum of 4 personnel (1 officer & 3 firefighters) each shift



480 Highlands Boulevard

Station 15

- Engine 15-1250 gpm Pumper
- Staffed with a minimum of 4 personnel (1 officer & 3 firefighters) each shift.



740 Chevis Road

Sweetwater Fire Station (Completion Date 2017)



Fire Station



Training Center

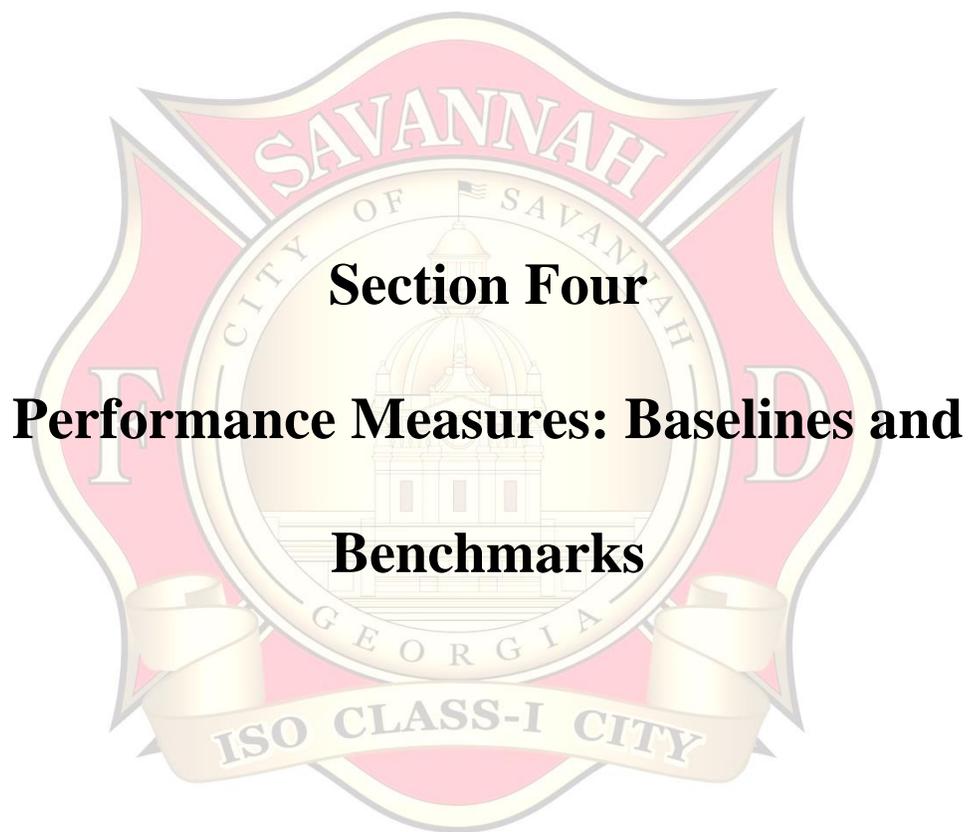
- Training Tower (5 Stories)
- Training Warehouse
- Burn Building
- Training Classrooms/ Offices (2016)
- Gas Props
- DO Trailer Props
- Collapse Props
- Trench Simulator



208 Agonic Road

Completion Date 2016

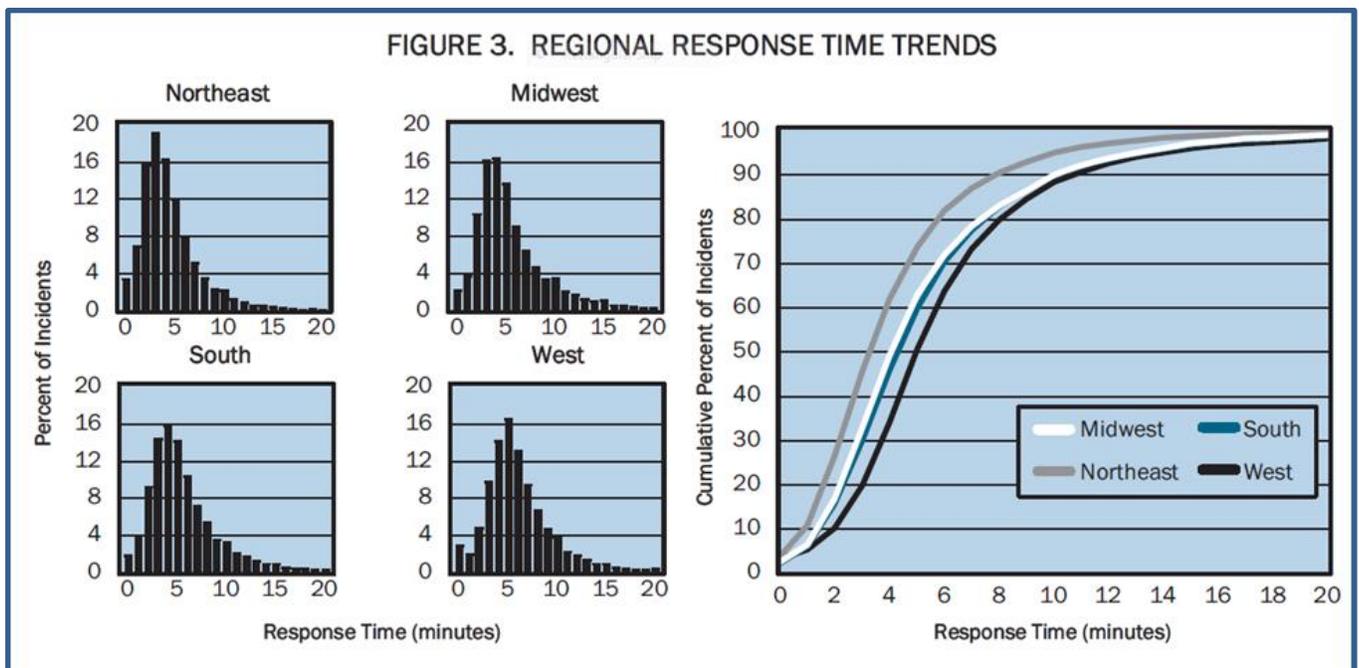




Section Four
Performance Measures: Baselines and
Benchmarks

Performance Baselines and Benchmarks

Distribution is the geographical location of first-due resources. In order to have an effective distribution, resources must be located in such a way that first-due units will arrive on scene within the adopted service level objectives at a certain percentage of the time. For SFES, the distribution benchmark objective for all incidents is 6 minutes, 20 seconds total response time at the 90th percentile. (All benchmark and baseline objectives will be discussed in-depth in the section below.) As distribution is an evaluation of first-due units, concentration is an evaluation of all resources needed on the scene in order to accomplish incident stabilization. Concentration, then, is the effectiveness with which the ERF arrives on scene within the adopted service level objectives at a certain percentage of the time. Using the example above SFES's concentration baseline objective is 10 minutes, 20 seconds travel time at the 90th percentile.



Fire Suppression 2013-2015

The Bureau's response and deployment standards are based upon the urban population density and the fire demands associated within our community. Fifteen fire stations and 26 units providing citywide coverage. The current staffing matrix is 90 personnel per shift which is based on station location, incident type, and frequency. The targeted service level objectives in the standards of cover benchmark statements are based on industry best practices. These benchmarks have been approved by the Fire Chief and Command Staff of SFES.

The department's benchmark service level objectives are as follows:

For 90 percent of all low, moderate, high and special risk building fires, the total response time for the arrival of the first-due unit, staffed with a minimum of 1 Fire Officer and 2 firefighters shall arrive on scene with a Total Response Time of 6 minutes and 20 seconds. The first-due unit for all risk levels shall be capable of providing 500 gallons of water and 1,250 gallons per minute (gpm) pumping capacity; providing a scene size-up, establishing incident command and assigning resources.

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 risk building fires, the Total Response Time for the arrival of the Effective Response Force (ERF), staffed with a minimum combination of 17 firefighters and officers, shall be: 11 minutes and 50 seconds under the urban response zone; For 90 percent of all High Risk and Special Risk fires, the Total Response Time for the arrival of the ERF, staffed with a minimum combination of 19 firefighters and officers, shall be: 11 minutes and 50 seconds in the urban response zone. The ERF shall be capable of completing the 22 critical fire ground tasks outlined by the National Institute of Science and Technology (NIST).

The Bureau's baseline statements reflect actual performances during 2012 to 2015. The bureau does not rely on the use of automatic aid or mutual aid from neighboring fire departments to provide its ERF complement of personnel. These resources are immediately available as part of the bureau's daily response system.

The department's actual baseline service level performances are as follows:

For 90 percent of all building fires, the total response time for the arrival of the first-due unit, staffed with a minimum of 2 firefighters and 1 officer, was: 8 minutes and 15 seconds in the urban response zone. The first-due unit for all risk levels is capable of providing 500 gallons of water and 1,250 gallons per minute (gpm) pumping capacity; providing a scene size-up, establishing incident command and assigning resources.

These operations were done in accordance with departmental standard operating procedures while providing for the safety of responders and the general public.

For 90 percent of all building fires, the total response time for the arrival of the ERF, staffed with a minimum combination of 17 firefighters and officers, is: 13 minutes and 02 seconds in urban areas; The ERF shall be capable of completing the 22 critical fire ground tasks outlined by the National Institute of Science and Technology (NIST). These operations shall be done in accordance with departmental standard operating procedures while providing for the safety of responders and the general public.

Fire Suppression Data 2012-2015

SFES Fire Suppression- 90th Percentile Times- Baseline Performance		SFES Benchmarks	2013	2014	2015	2013- 2015Aggregate
Alarm Handling	Pick-up to Dispatch	1 min	0:03:25	0:03:08	0:02:42	0:02:59
Turnout Time	Turnout Time 1st Unit	1:20	0:01:14	0:01:17	0:01:21	0:01:17
Travel Time	Travel Time 1st Unit Distribution	4:00	0:03:30	0:03:37	0:04:03	0:03:38
Total Travel	Travel Time 1st Unit Concentration	6:20	0:08:09	0:08:02	0:08:06	0:08:05
Total Travel	Travel Time ERF Concentration	10:20	0:11:57	0:12:08	0:10:54	0:11:29
Total Response Time	1st Unit on Scene Distribution	6:30	0:08:19	0:08:12	0:08:16	0:08:15
Total Response Time	ERF on Scene Distribution	11:50	0:13:42	0:13:53	0:12:39	0:13:02
	Total Calls		136	114	112	362

Hazardous Material Response 2012-2015

The department's response and deployment standards are based upon urban population densities, and the hazardous materials response demands of the community. Fifteen fire stations provide citywide coverage; with 6 companies and 1 unit specializing in hazardous materials response. Staffing is based upon station location, incident type, and frequency. The targeted service level objectives in the standards of cover benchmark statements are based on industry standards and best practices. These benchmarks have been approved by the Fire Chief and Command Staff of SFES.

The department's benchmark service level objectives are as follows:

For 90 percent of all hazardous materials response incidents, the total response time for the arrival of the first-due unit, staffed with 2 firefighters and 1 officer, shall be: 6 minutes and 30 seconds in urban areas. The first-due unit shall be capable of: establishing incident command, providing a scene size-up, attempt product identification, intelligence gathering and establishing a containment zone.

For 90 percent of all hazardous materials response incidents, the total response time for the arrival of the Effective Response Force (ERF) including the hazardous materials response team, staffed with 6- 20 firefighters and officers shall be: 13 minutes and 50 seconds urban areas. The ERF shall be capable of: providing equipment, technical expertise, knowledge, skills, and abilities to mitigate a hazardous materials incident in accordance with department standard operating guidelines.

The department's baseline statements reflect actual performance during 2012 to 2015. The department does not rely on the use of automatic aid or mutual aid from neighboring fire departments to provide its Effective Response Force complement of personnel. These resources are immediately available as part of a seamless response system.

The department's actual baseline service level performance is as follows:

For 90 percent of all hazardous materials response incidents, the total response time for the arrival of the first-due unit, staffed with 2 firefighters and 1 officer, is: 8 minutes and 40 seconds in urban areas. The first-due unit is capable of: establishing incident command, providing a scene size-up, attempt product identification, intelligence gathering, and establishing a containment zone.

For 90 percent of all hazardous materials response incidents, the total response time for the arrival of the ERF, staffed with 6-18 firefighters and officers is: 15 minutes and 43 seconds in urban areas. The ERF shall be capable of: providing the equipment, technical expertise, knowledge, skills, and abilities to mitigate a hazardous materials incident in accordance with department standard operating guidelines.

Hazardous Material Data 2012-2015

SFES Hazardous Materials- 90th Percentile Times- Baseline Performance		SFES Benchmarks	2013	2014	2015	2013-2015 Aggregate
Alarm Handling	Pick-up to Dispatch	1 min	0:03:02	0:03:10	0:03:01	0:03:04
Turnout Time	Turnout Time 1st Unit	1:20	0:01:18	0:01:24	0:01:22	0:01:21
Travel Time	Travel Time 1st Unit Distribution	4:00	0:04:14	0:04:04	0:03:56	0:04:07
Total Travel	Travel Time 1st Unit Concentration	6:20	0:08:34	0:08:38	0:08:19	0:08:30
Total Travel	Travel Time ERF Concentration	10:20	0:12:35	0:12:23	0:11:56	0:12:22
Total Response Time	1st Unit on Scene Distribution	6:30	0:08:44	0:08:48	0:08:29	0:08:40
Total Response Time	ERF on Scene Distribution	13:50	0:16:05	0:15:53	0:15:26	0:15:43
	Total Calls		86	183	293	562

Technical Rescue Response 2012-2015

The Bureau's response and deployment standards are based upon the urban population densities and the technical rescue demands of the community. 15 fire stations provide district wide coverage; with 7 companies specializing in advanced technical rescue capabilities. Staffing for technical rescue companies are based upon station location, incident type, and frequency. The targeted service level objectives in the standards of cover benchmark statements are based on industry standards and best practices. These benchmarks have been approved by the Fire Chief and Command Staff of SFES.

The department's benchmark service level objectives are as follows:

For 90 percent of all technical rescue incidents, the total response time for the arrival of the first-due unit, staffed with a minimum of 2 firefighters and 1 officer, shall be: 6 minutes and 30 seconds in urban areas. The first-due unit shall be capable of: establishing incident command, providing scene size-up, securing the scene, intelligence gathering and ordering additional resources as necessary.

For 90 percent of all technical rescue incidents, the total response time for the arrival of the Effective Response Force (ERF), staffed with a minimum combination of 7-21 firefighters and officers shall be: 13 minutes and 20 seconds in urban areas. The ERF shall be capable of: providing for stabilization of applicable vehicles or equipment; deploying specialized equipment for incidents involving: high angle rope, confine space, trench, swift water, dive, heavy machinery extrication and structural collapse.

The department's baseline statements reflect actual performance during 2012 to 2015. The department does not rely on the use of automatic aid or mutual aid from neighboring fire departments to provide its Effective Response Force complement of personnel. These resources are immediately available as part of the daily response system.

The department's actual baseline service level performance is as follows:

For 90 percent of all technical rescue incidents, the total response time for the arrival of the first-due unit, staffed with a minimum of 2 firefighters and 1 officer, is: 8 minutes and 23 seconds in

urban areas. The first-due unit is capable of: establishing incident command, providing scene size-up, intelligence gathering, securing the scene, and ordering additional resources as necessary.

For 90 percent of all technical rescue incidents, the total response time for the arrival of the Effective Response Force (ERF), staffed with a minimum combination of 7-21 firefighters and officers is: 15 minutes and 06 seconds in urban areas. The ERF shall be capable of: providing for stabilization of applicable vehicles or equipment; deploying specialized equipment for incidents involving: high angle rope, confine space, trench, swift water, dive, heavy machinery extrication and structural collapse.

Technical Rescue Data 2012-2015

Technical Rescue- 90th Percentile Times- Baseline Performance		SFES Benchmarks	2013	2014	2015	2013-2015 Aggregate
Alarm Handling	Pick-up to Dispatch	1 min	0:03:07	0:03:23	0:03:01	0:03:11
Turnout Time	Turnout Time 1st Unit	1:20	0:01:15	0:01:13	0:01:23	0:01:17
Travel Time	Travel Time 1st Unit Distribution	4:00	0:03:49	0:03:54	0:03:57	0:03:53
Total Travel	Travel Time 1st Unit Concentration	6:20	0:08:11	0:08:08	0:08:21	0:08:13
Total Travel	Travel Time ERF Concentration	10:20	0:11:28	0:11:50	0:11:36	0:11:38
Total Response Time	1st Unit on Scene Distribution	6:30	0:08:21	0:08:18	0:08:31	0:08:23
Total Response Time	ERF on Scene Distribution	13:30	0:14:58	0:15:20	0:15:06	0:15:06
	Total Calls		45	89	91	225

Marine Firefighting 2014-2015

The geography of the City of Savannah (COS) encompasses numerous marine environments. These marine environments have strong link to the economy of the COS and present many unique challenges to Savannah Fire & Emergency Services (SFES). To overcome these challenges, Savannah Fire & Emergency Services' Marine Fire and Rescue (MFR) responses encompass both land-based and water-based response components. Both the land and water-based components meet nationally recognized standards outlined in National Fire Protection Association (NFPA) 1005, Professional Qualifications for Marine Firefighting for Land-based Firefighters and by the National Association of State Boating Law Administrators (NASBLA).

The land-based response component consist of day to day firefighting response resources (apparatus and equipment) however, personnel have received additional training and certifications to handle these types of marine emergencies through NFPA 1005. Over the last 3 years, SFES has trained 80 personnel to the Marine Firefighter II Level through the ProBoard certification process. These personnel have been staffed evenly across all three shifts to ensure personnel are available for a marine firefighting response.

The water-based response component consists of two response vessels. In May 2015, an engine company (Engine 16) was created to function as a dual response company, functioning as the crew for the marine vessels and as a firefighting engine company. Personnel assigned to Engine 16 have received additional training and certification based on the NASBLA Boat Operations and Training (BOAT) Program. Over the last year, SFES has trained 16 personnel as Boat Crew Members (BCM), 15 Boat Operators, and 6 NASBLA certified Instructors in order to operate the department's marine vessels.

Marine Firefighting 2014-2015

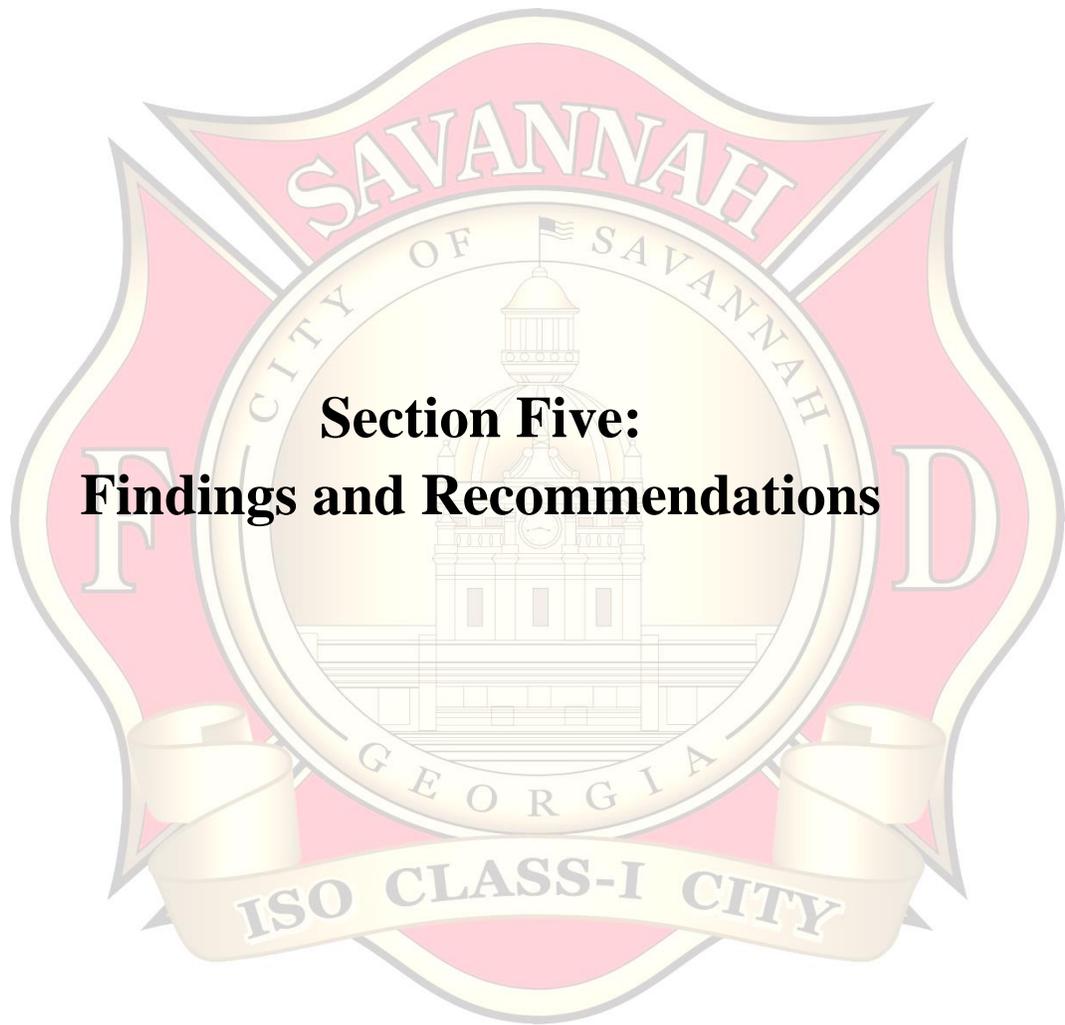
Marine Firefighting- 90th Percentile Times- Baseline Performance		SFES Benchmarks	2013	2014	2015 (2 Calls)	2013- 2015Aggregate
Alarm Handling	Pick-up to Dispatch	1 min	No Data	No Data	No Data	0:00:00
Turnout Time	Turnout Time 1st Unit	1:20	No Data	No Data	No Data	0:00:00
Travel Time	Travel Time 1st Unit Distribution	4:00	No Data	No Data	No Data	0:00:00
Total Travel	Travel Time 1st Unit Concentration	6:20	No Data	No Data	No Data	0:00:00
Total Travel	Travel Time ERF Concentration	10:20	No Data	No Data	No Data	0:00:00
Total Response Time	1st Unit on Scene Distribution	11:30	No Data	No Data	No Data	0:00:00
Total Response Time	ERF on Scene Distribution	16:30	No Data	No Data	No Data	0:00:00
	Total Calls		0	0	2	

Section Summary

The four year aggregated response data identified some pertinent issues for SFES to investigate. It was apparent from the data that our alarm processing times that are handled at the County Dispatch center were well above the SFES and national recommended time allotment. The investigation into this disparity found that the alarm processing times were not in accordance with national guidelines. Under the CFAI definition of alarm processing the end of this processing time is at the verbal dispatching of the call. However, the alarm processing times during this analysis were found to be completed after the verbal dispatching of the units.

In regards to Fire Suppression, the data demonstrated that our resource allocation reflects the risk associated with building fires throughout the community. Moreover, the data represented the response times are within seconds of the desired benchmarks except for the call processing time. The data also reaffirmed the need for another hazardous materials unit in the southern part of the city which was a major factor in regards to travel times. The Bureau's technical response times also demonstrated the need for a personnel and resource allocation adjustment in order to lower the Total Response Times of the ERF. By analyzing the responds trends from these 90th percentile aggregates, SFES has been able to conclude that increased call volumes and providing new services also has had a major impact on response times.

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**Section Five:
Findings and Recommendations**

Identification of Organizational Critical Issues and Service Gaps

The goals of the organization are included in the Department's Strategic Plan. They are also incorporated where appropriate in the annual budget process. The goals are developed after input is received from all levels of the organization. SFES participates in annual surveys with National Fire Academy (NFA), National Fire Protection Agency (NFPA), International Association of Fire Chiefs (IAFC), Federal Emergency Management Agency (FEMA), International City County Managers Association (ICMA), and the State of Georgia. The NFPA in partnership with the IAFC has launched the 2015 U.S. Needs Assessment Survey. The survey captures the level of resources and staffing among U.S. fire departments and identifies where departments are meeting the needs of their communities and where gaps exist. SFES completed this survey to help with our community needs, and assist the nation with a clear understanding of the challenges our department is facing and what tools, support and resources are necessary to better serve our communities. SFES has also completed the 2014 ICMA Survey of current programs and practices providing useful data analysis to local decision makers. Lastly, an internal tool SFES uses is the SFES Operations Committee, which meets as required to focus on improving the organization's Standards of Cover and service capabilities. Some areas that have been adjusted to meet these needs include review of station allocations, placement of apparatus distribution; maintain staffing levels, and effects of response time. This helps with the identification and mitigations of any critical issues or service gaps.

Strengths, Weaknesses, Opportunities and Threats (SWOT)

The Strengths, Weaknesses, Opportunities and Threats (SWOT) Analysis is designed to have the department's internal stakeholders candidly identify their positive and less-than-desirable attributes. The department participated in this analysis and recognized its strengths and weaknesses, as well as the possible opportunities and potential threats.

During November 2014 – August 2015, members of the SFES Strategic Planning Taskforce performed a Strength, Weakness, Opportunity and Threat (SWOT) analysis to determine what inside and/or outside forces were having an effect on our vision and mission. The results of that inquiry formed the following critical issues and service gaps where identified.

Bureau Strengths

- Maintains large specialized equipment cache for all hazards emergency response
- Maintains its own core of certified instructors in all job related disciplines
- Conducts and maintains hazardous material facility (Tier 2) inspections and inventory of extremely hazardous material in our response areas
- Signed Memorandums of Agreement (MOAs) with authorities having jurisdiction (AHJ)
- Bureau's training division is able to develop and deliver state / nationally certified training courses, maintain the bureaus fire-training academy (FTA), and oversee recruitment of diverse candidates
- Maintains records management system (RMS) to provide efficient management and tracking of all bureau related programs and services
- Immediate access to City of Savannah apparatus repair facilities which includes three maintenance shops: Shop 1 (Light Vehicles), Shop 2 (Heavy Vehicles), Shop 3 (Minor Repairs)
- All emergency response apparatus within the bureau meets Insurance Services Office (ISO) standards regarding equipment and function
- Maintains own Georgia Peace Officer Standards and Training Council (POST) certified Fire Investigators Unit
- Maintains state certified fire inspectors assigned to fire prevention division
- Maintains certified personnel for managing repairs and testing programs (SCBA, Hose, Pump/appliance testing, turnout gear)
- Continuous improvement through self-assessment as an ISO Class 1 organization working toward accreditation
- Maintains the City of Savannah Emergency Management funding and oversees the emergency management plan
- Maintains a well-designed Emergency Command Center (ECC)

Bureau Weaknesses

- No structural collapse rescue or trench rescue courses were delivered over the last seven years due to the lack of a safe training simulator
- Lack of local technical rescue courses and inability of personnel to travel to offsite courses has led to a decrease in Technical Rescue Team (TRT) qualified members
- Industrial Firefighting Equipment (IFE) that is assigned to an outside agency needs improved maintenance/testing programs (Regain possession of IFE in 2016)
- Additional advanced IFE training is required to increase the number of qualified personnel
- Employee buy-in into the critical incident stress management (CISM) process to increase the health and wellbeing of the employee
- Inadequate training space and outdated equipment at the training facility, this condition of training grounds and lack of a permanent building housed at the FTA creates an unwelcoming training environment (New facility being constructed in 2016)
- No dedicated dispatchers specifically assigned to Savannah Fire. Dispatchers are trained using SFES Standard Operating Procedures (SOPs) to ensure the correct units are dispatched for all-hazards response
- Insufficient number of certified emergency vehicle technicians (EVTs) needed to work on fire apparatus
- Increased repair times causing increased apparatus out of service time
- No SFES response units utilize Mobile Data Terminals (MDT)/Automatic Vehicle Location (AVL) technology
- Improve efforts to recruit female firefighters
- Bureau in need of new stations to cover the growing city landscape and must maintain existing aging stations

Department Opportunities

- Haz-mat specialist and rescue technician level training course funding opportunities available through state and federal grants
- Technology and equipment funding opportunities available through state and federal grants
- The City of Savannah's (COS) Employee Assistance Program (EAP) has numerous programs aimed at helping the employees as well as training for CISM members
- Increased development and implementation of standard operating procedures (SOP) for vehicle maintenance
- Manufacturer training provided for bureau related service and repair technicians
- SFES maintains its own fire recruit academy dedicated to the training of newly hired firefighters

Department Threats

- The ability to maintain and increase the number of certified employees for all hazards response
- Service area expansion is greater than yearly financial budget allocations
- Vehicle Maintenance is challenged with meeting the needs of an expanding apparatus fleet
- Budget constraints for Capital Improvement Plan and growing service demand in western portions of the City of Savannah
- The current growth of the city is placing a demand on all Bureau support services

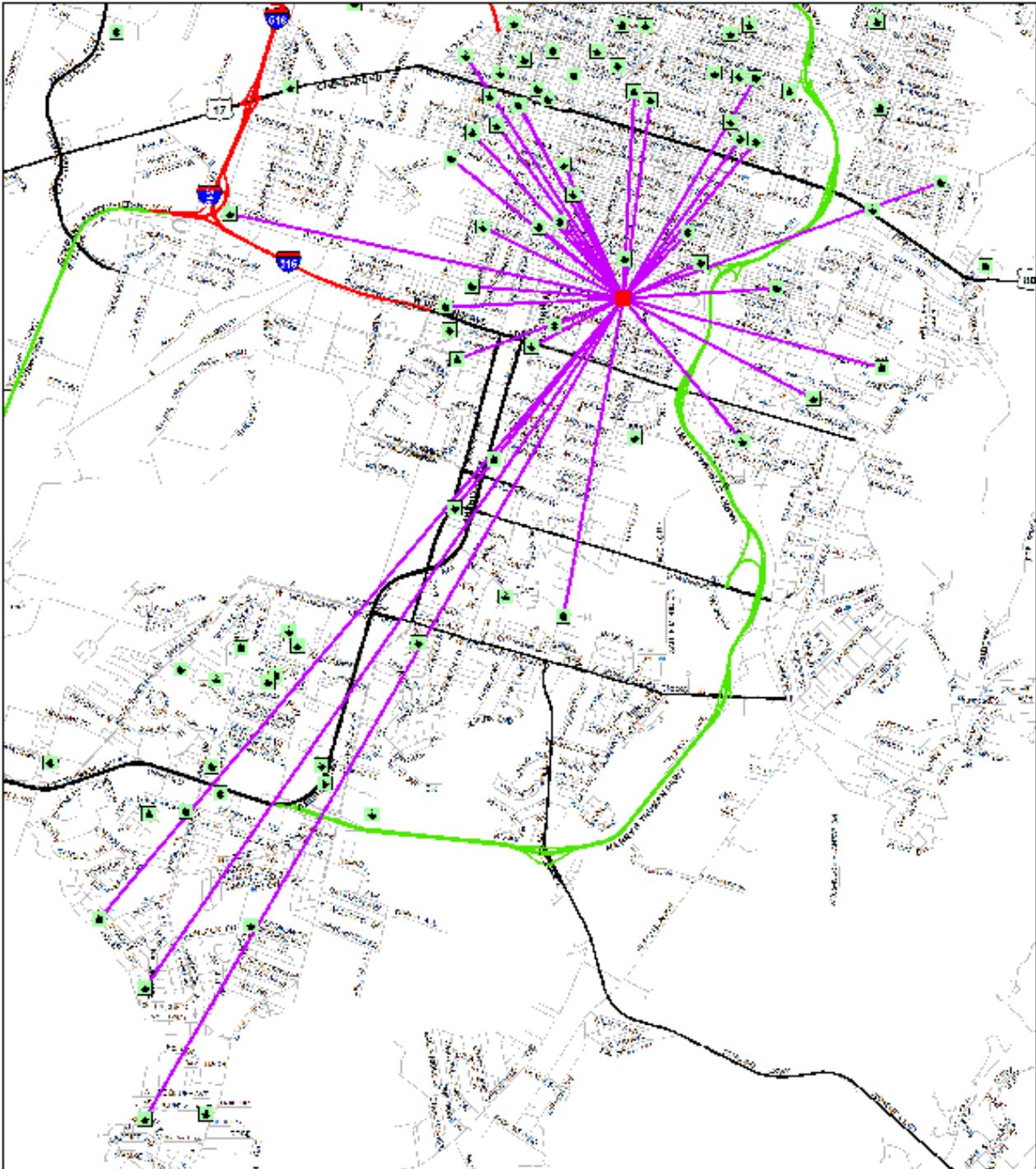
Recommendations

SFES is true to its mission statement "...committed to those we serve". By utilizing the Standards of Cover document the citizens and visitors of Savannah will have full transparency of the services we provide and the efficiency and effectiveness in the way we provide those services. Through this document the following recommendations are being made to support the findings in the Community Risk Analysis and improve any service gaps found in the bureau's service delivery.

- I. Construction and staffing of new stations in the western portions of COS to meet new development and port expansion
- II. Increase training in Industrial Firefighting
- III. Increase training in Marine Firefighting and Boat Operations
- IV. Increase staffing among existing units to meet NFPA 1710
- V. Promote "All Hazards" training by planning and acquiring a new multi-story container prop
- VI. Revise SOP management to be more inclusive and streamlined
- VII. Change policy in regards to alarm processing
- VIII. Conduct annual training with Communications Center to address Fire Service
- IX. To assist with Hazardous Material Total Response Times research the creation of another Hazardous Materials team on the south side of the COS or re-appropriate a current unit to hazardous materials response
- X. Increase accuracy of Community Risk Assessment by conducting a city wide assessment every two years
- XI. Automatic Aid with Pooler Fire Rescue to assist with demand on the west side of the COS
- XII. Relocate Station 7 to Habersham between Eisenhower and Mall Blvd. for improved response capabilities
- XIII. Modify daily schedules to ensure units are available during High Peak hours of call volume
- XIV. Establish an Emergency Response Force in Battalion 3 that is self-sufficient

Appendix A

2015 Spider Maps for Building Fires



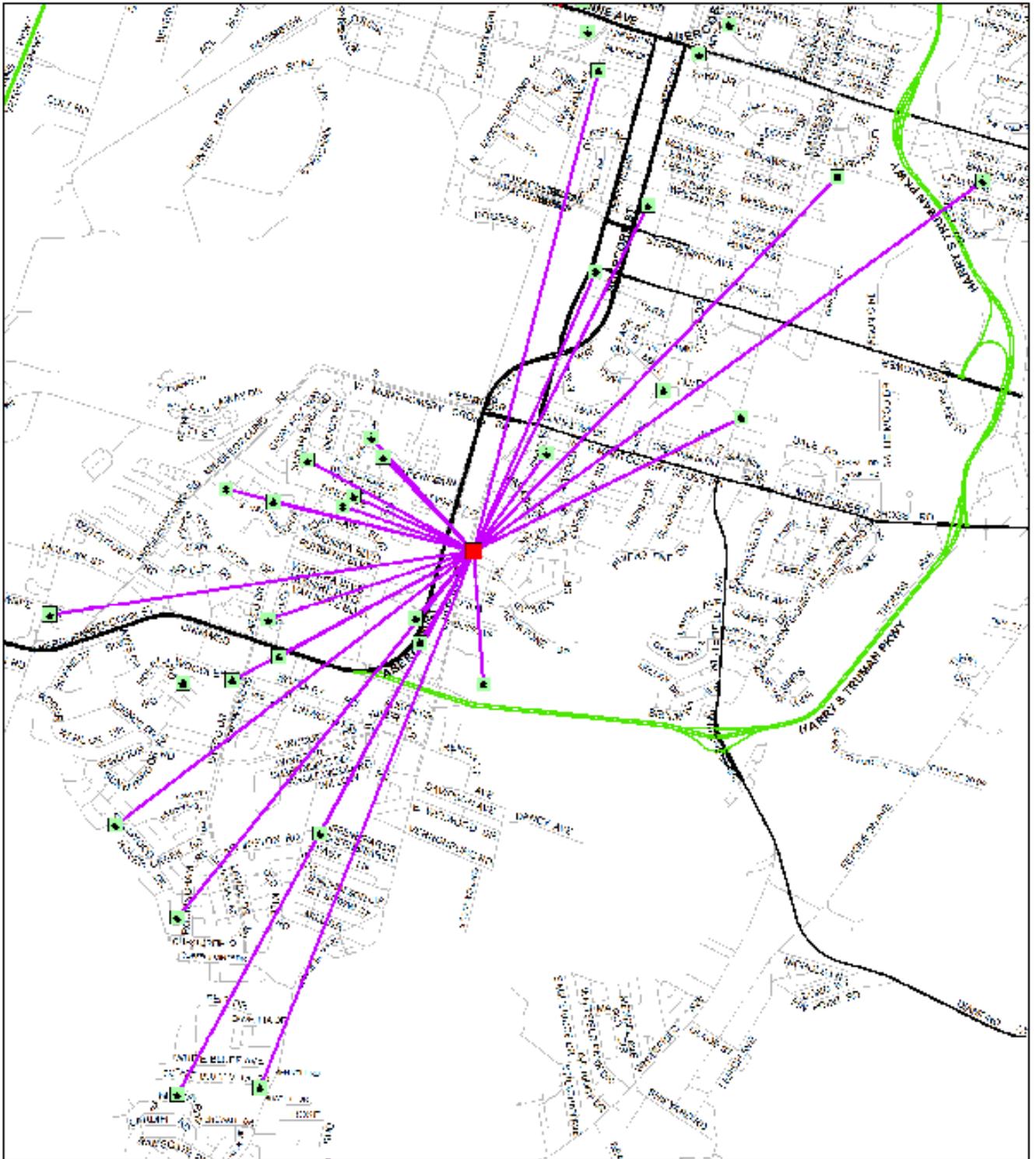
Legend

-  2015 Structure Fires
-  Fire Stations
-  2015 Structure Fires Response
-  Interstate
-  Parloways
-  Major Roads
-  Local Roads

Station 1 Structure Fires 2015

SAGIS MAKES NO WARRANTY, REPRESENTATION, OR GUARANTY AS TO THE CONTENT, SEQUENCE, ACCURACY, TIMELINESS, OR COMPLETENESS OF ANY OF THE DATABASE INFORMATION PROVIDED.





Legend

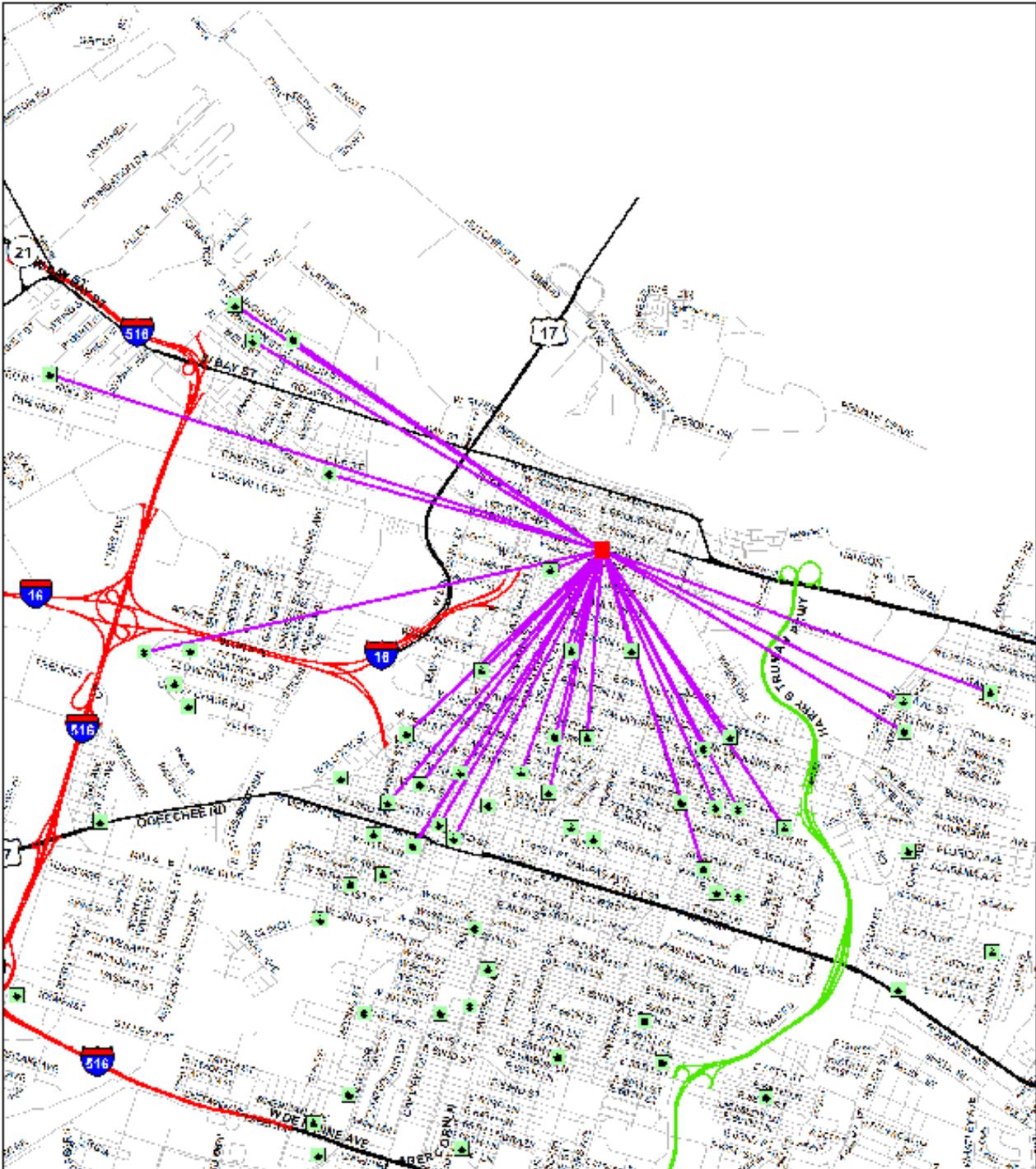
-  2015 Structure Fires
-  Fire Stations
-  2015 Structure Fires Response
-  Interstate
-  Parloways
-  Major Roads
-  Local Roads



Station 2 Structure Fires 2015

SAGIS MAKES NO WARRANTY, REPRESENTATION, OR GUARANTY AS TO THE CONTENT, SEQUENCE, ACCURACY, TIMELINESS, OR COMPLETENESS OF ANY OF THE DATABASE INFORMATION PROVIDED.





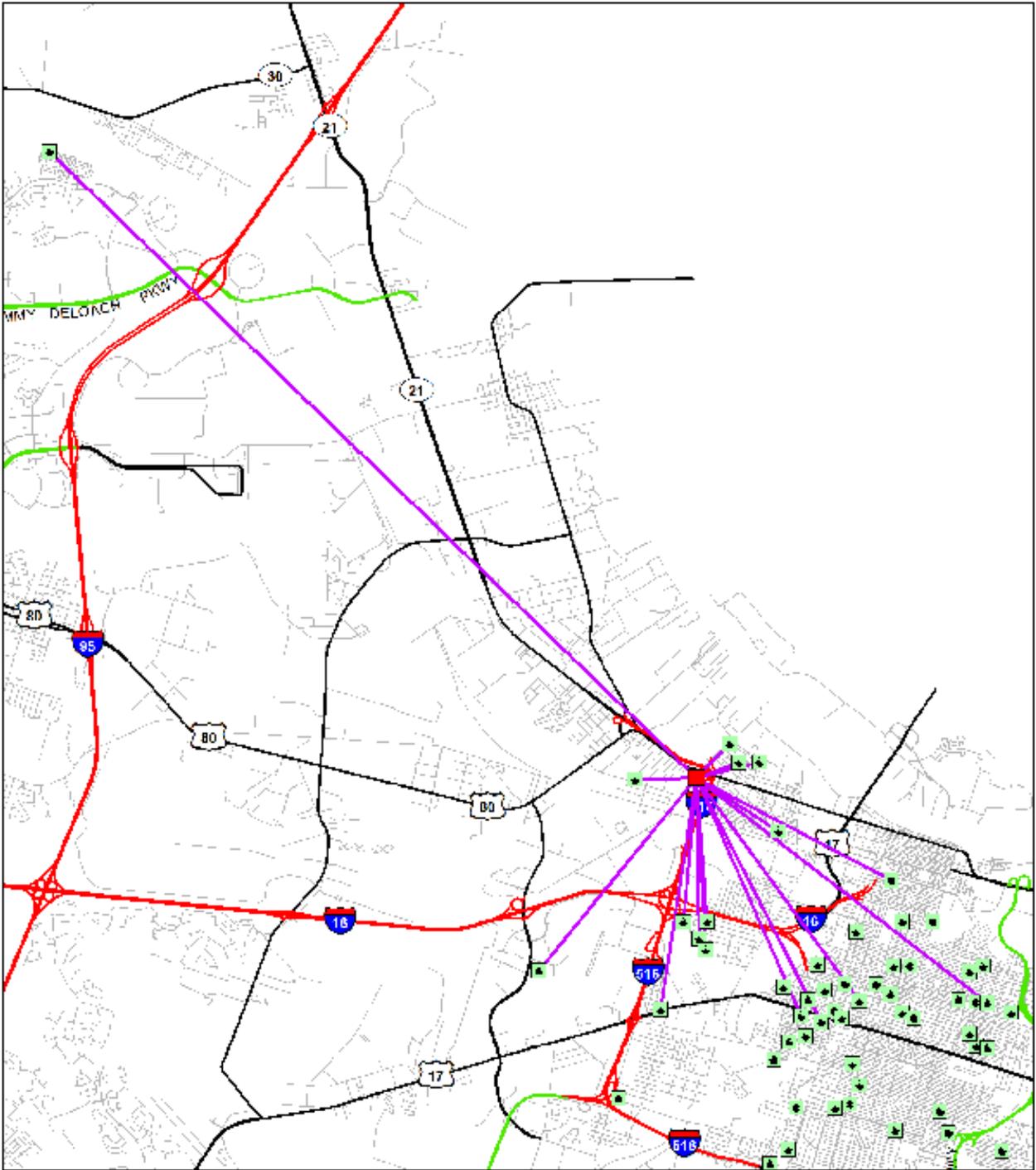
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-  2015 Structure Fires
 -  Fire Stations
 -  2015 Structure Fires Response
 -  Interstate
 -  Parways
 -  Major Roads
 -  Local Roads
- 0 0.15 0.3 0.6 0.9 1.2
Miles

Station 3 Structure Fires 2015

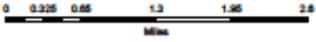
SAGIS MAKES NO WARRANTY, REPRESENTATION, OR GUARANTY AS TO THE CONTENT, SEQUENCE, ACCURACY, TIMELINESS, OR COMPLETENESS OF ANY OF THE DATABASE INFORMATION PROVIDED.





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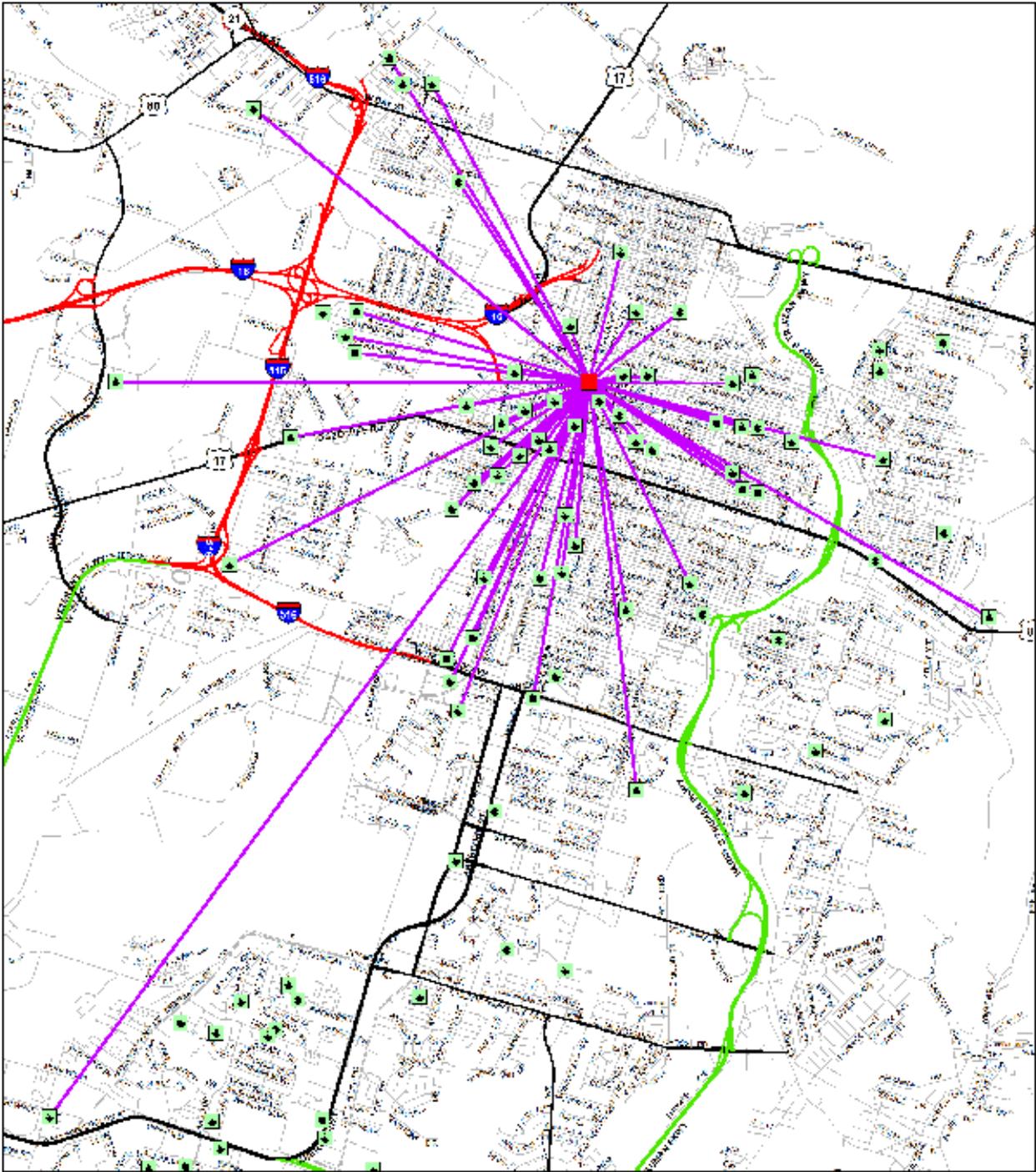
-  2015 Structure Fires
-  Fire Stations
-  2015 Structure Fires Response
-  Interstate
-  Parkways
-  Major Roads
-  Local Roads



Station 4 Structure Fires 2015

SAGIS MAKES NO WARRANTY, REPRESENTATION, OR GUARANTY AS TO THE CONTENT, SEQUENCE, ACCURACY, TIMELINESS, OR COMPLETENESS OF ANY OF THE DATABASE INFORMATION PROVIDED.





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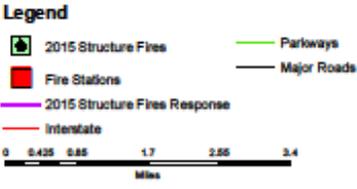
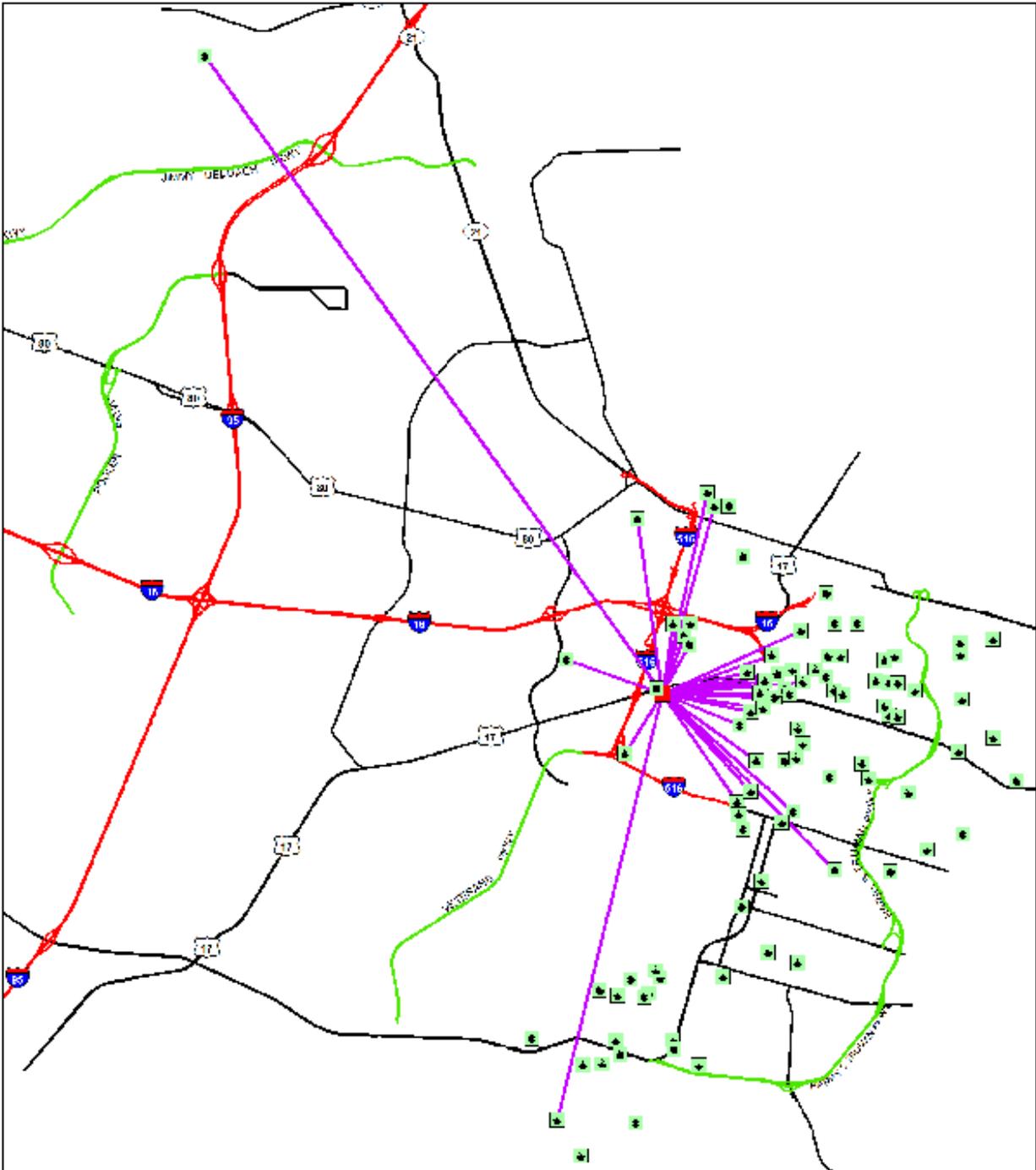
-  2015 Structure Fires
-  Fire Stations
-  2015 Structure Fires Response
-  Interstate
-  Parkways
-  Major Roads
-  Local Roads



Station 5 Structure Fires 2015

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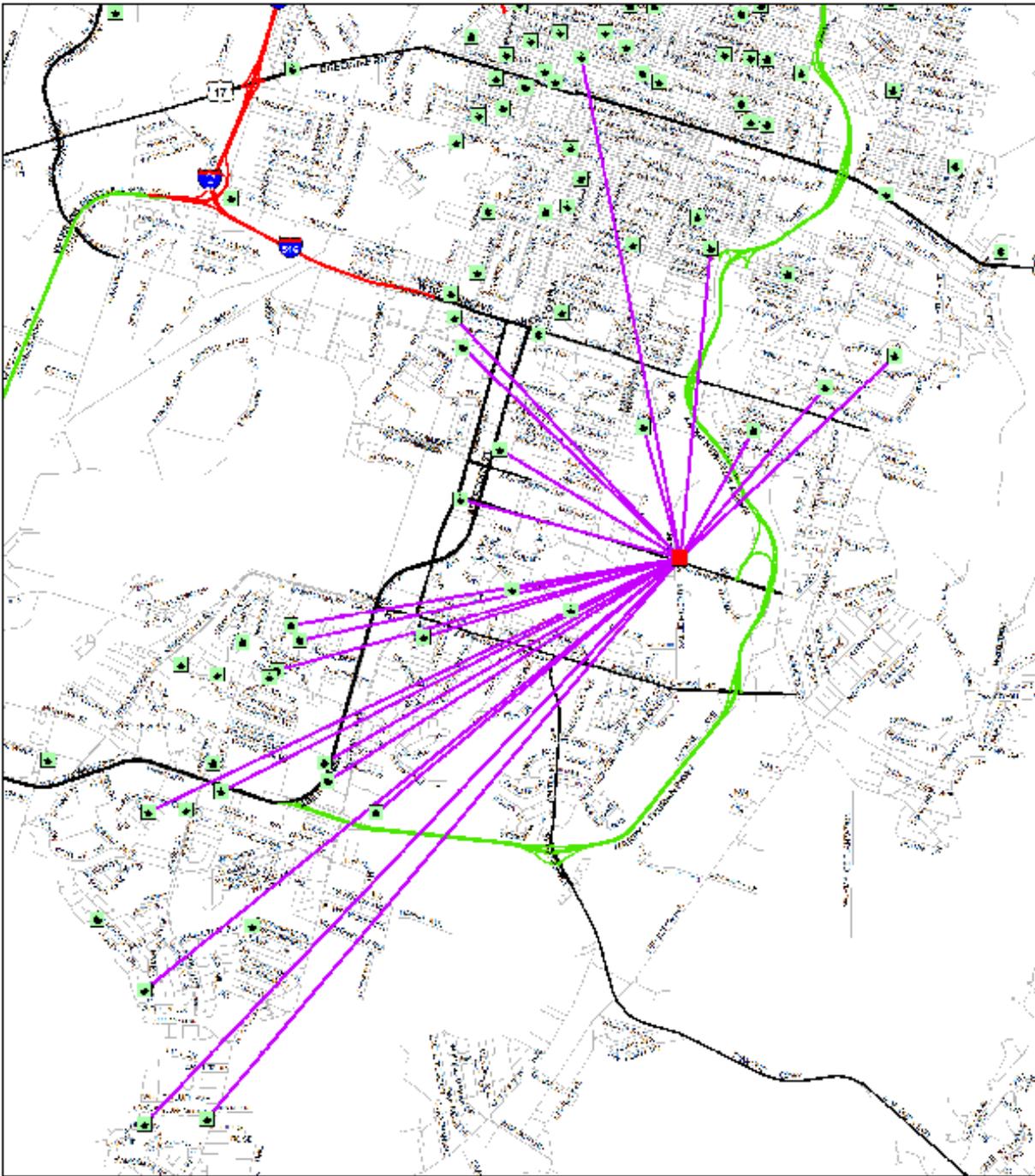




Station 6 Structure Fires 2015

SAGIS MAKES NO WARRANTY, REPRESENTATION, OR GUARANTY AS TO THE CONTENT, SEQUENCE, ACCURACY, TIMELINESS, OR COMPLETENESS OF ANY OF THE DATABASE INFORMATION PROVIDED.





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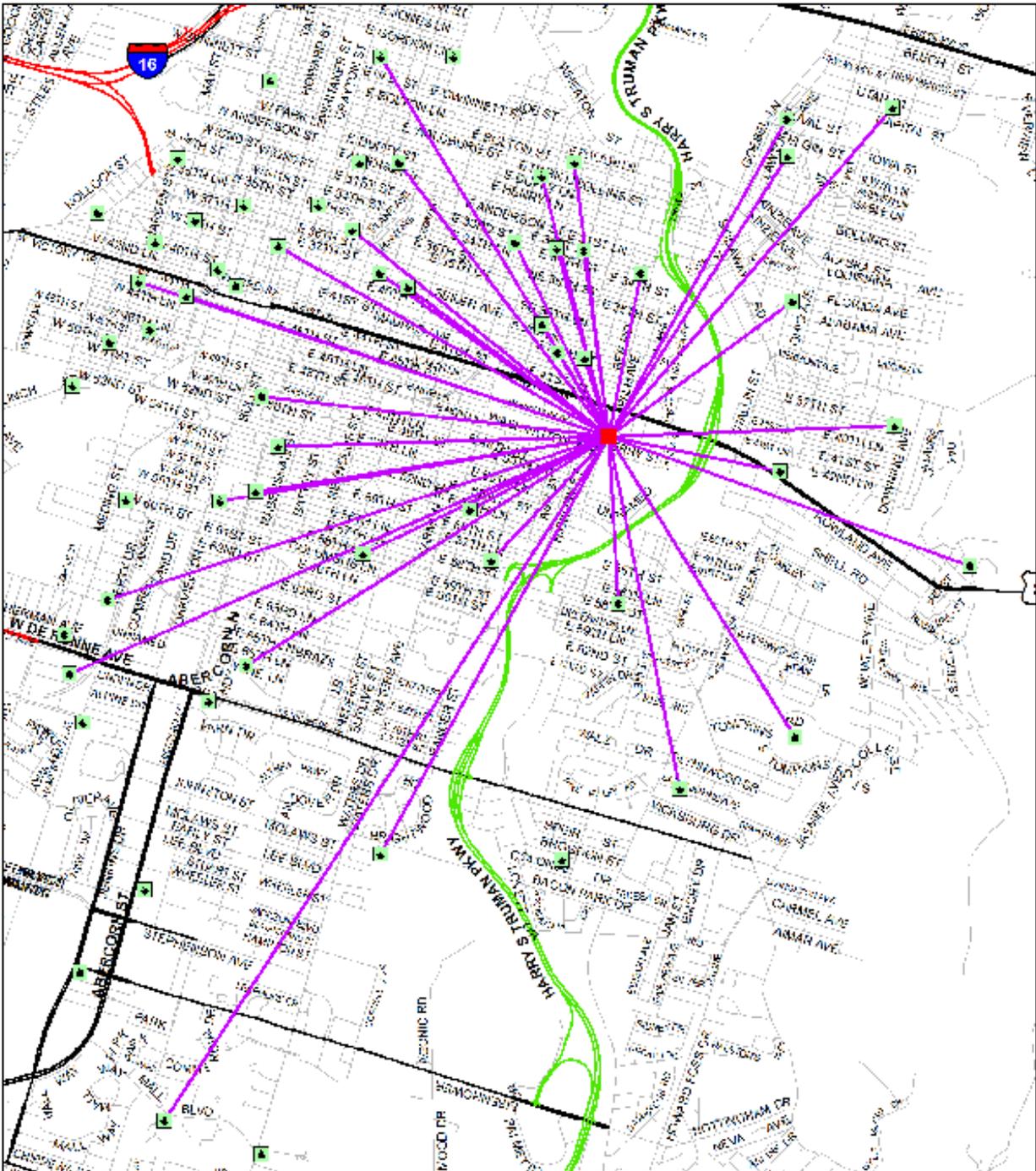
-  2015 Structure Fires
-  Fire Stations
-  2015 Structure Fires Response
-  Interstate
-  Parkways
-  Major Roads
-  Local Roads



Station 7 Structure Fires 2015

SAGIS MAKES NO WARRANTY, REPRESENTATION, OR GUARANTY AS TO THE CONTENT, SEQUENCE, ACCURACY, TIMELINESS, OR COMPLETENESS OF ANY OF THE DATABASE INFORMATION PROVIDED.





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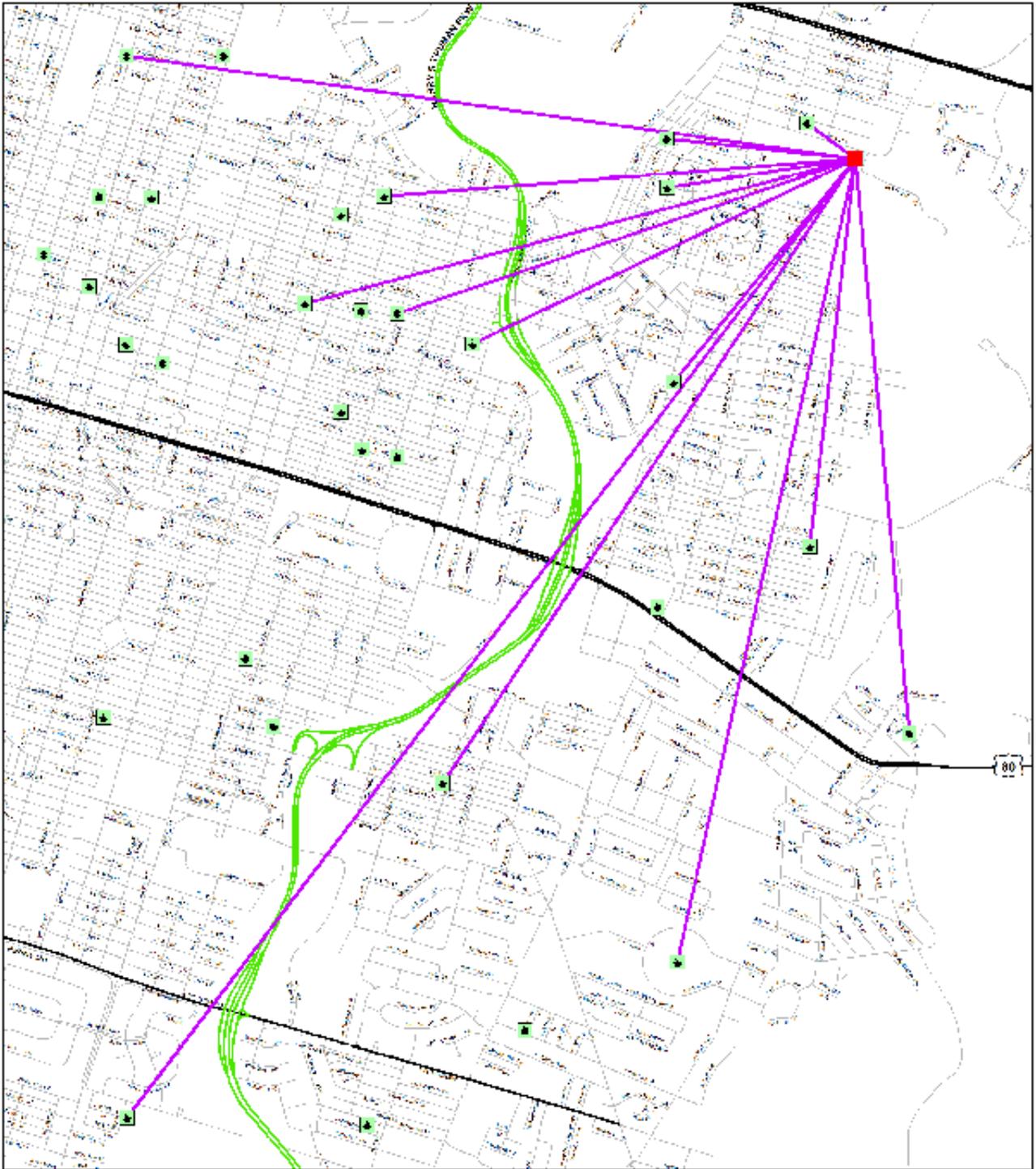
-  2015 Structure Fires
-  Fire Stations
-  2015 Structure Fires Response
-  Interstate
-  Parways
-  Major Roads
-  Local Roads



Station 8 Structure Fires 2015

SAGIS MAKES NO WARRANTY, REPRESENTATION, OR GUARANTEE AS TO THE CONTENT, SEQUENCE, ACCURACY, TIMELINESS, OR COMPLETENESS OF ANY OF THE DATABASE INFORMATION PROVIDED.





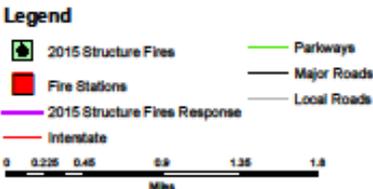
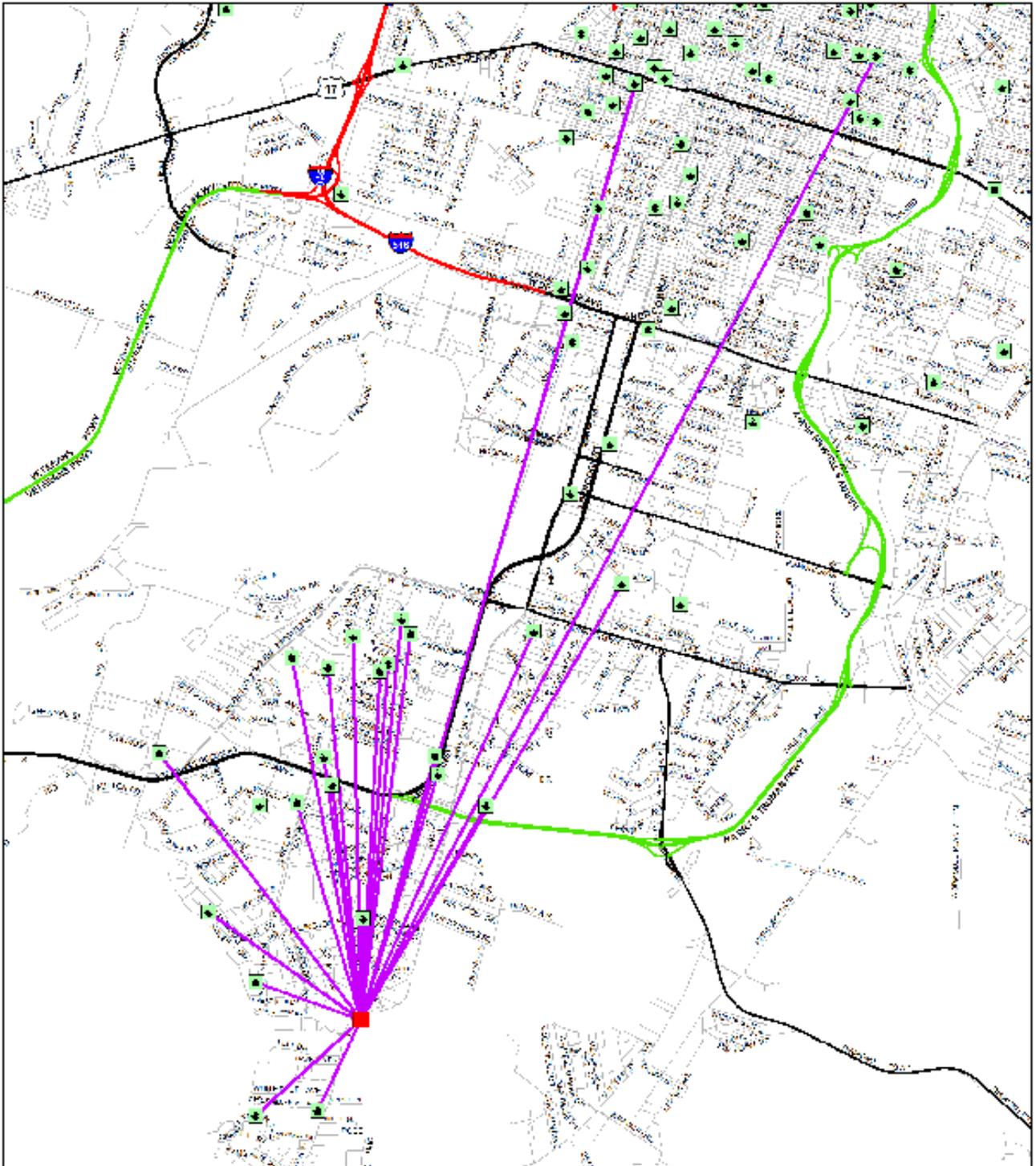
Legend

-  2015 Structure Fires
-  Fire Stations
-  2015 Structure Fires Response
-  Interstate
-  Parkways
-  Major Roads
-  Local Roads

Station 9 Structure Fires 2015

SAGIS MAKES NO WARRANTY, REPRESENTATION, OR GUARANTY AS TO THE CONTENT, SEQUENCE, ACCURACY, TIMELINESS, OR COMPLETENESS OF ANY OF THE DATABASE INFORMATION PROVIDED.

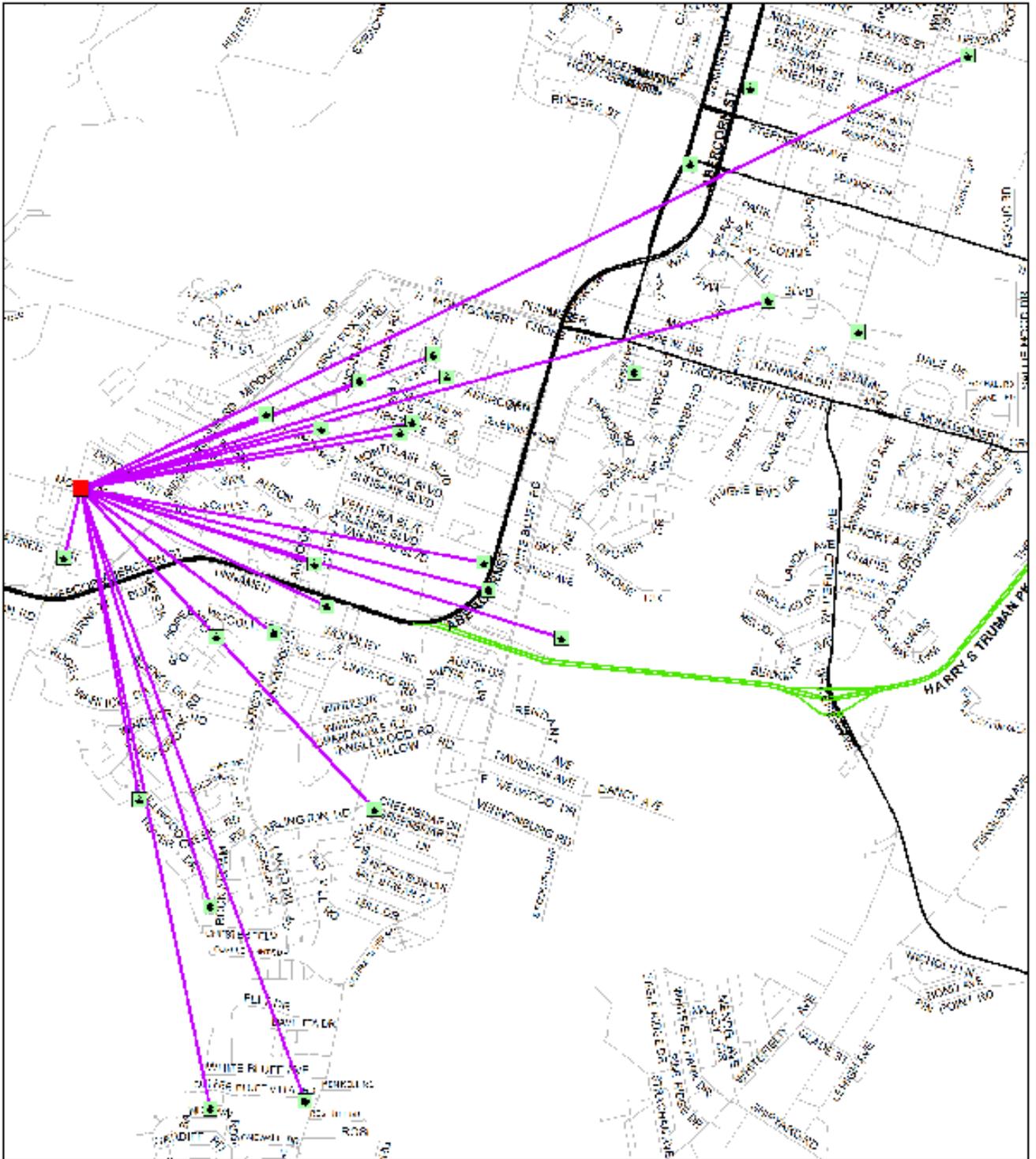




Station 10 Structure Fires 2015

SAGIS MAKES NO WARRANTY, REPRESENTATION, OR GUARANTY AS TO THE CONTENT, SEQUENCE, ACCURACY, TIMELINESS, OR COMPLETENESS OF ANY OF THE DATABASE INFORMATION PROVIDED.





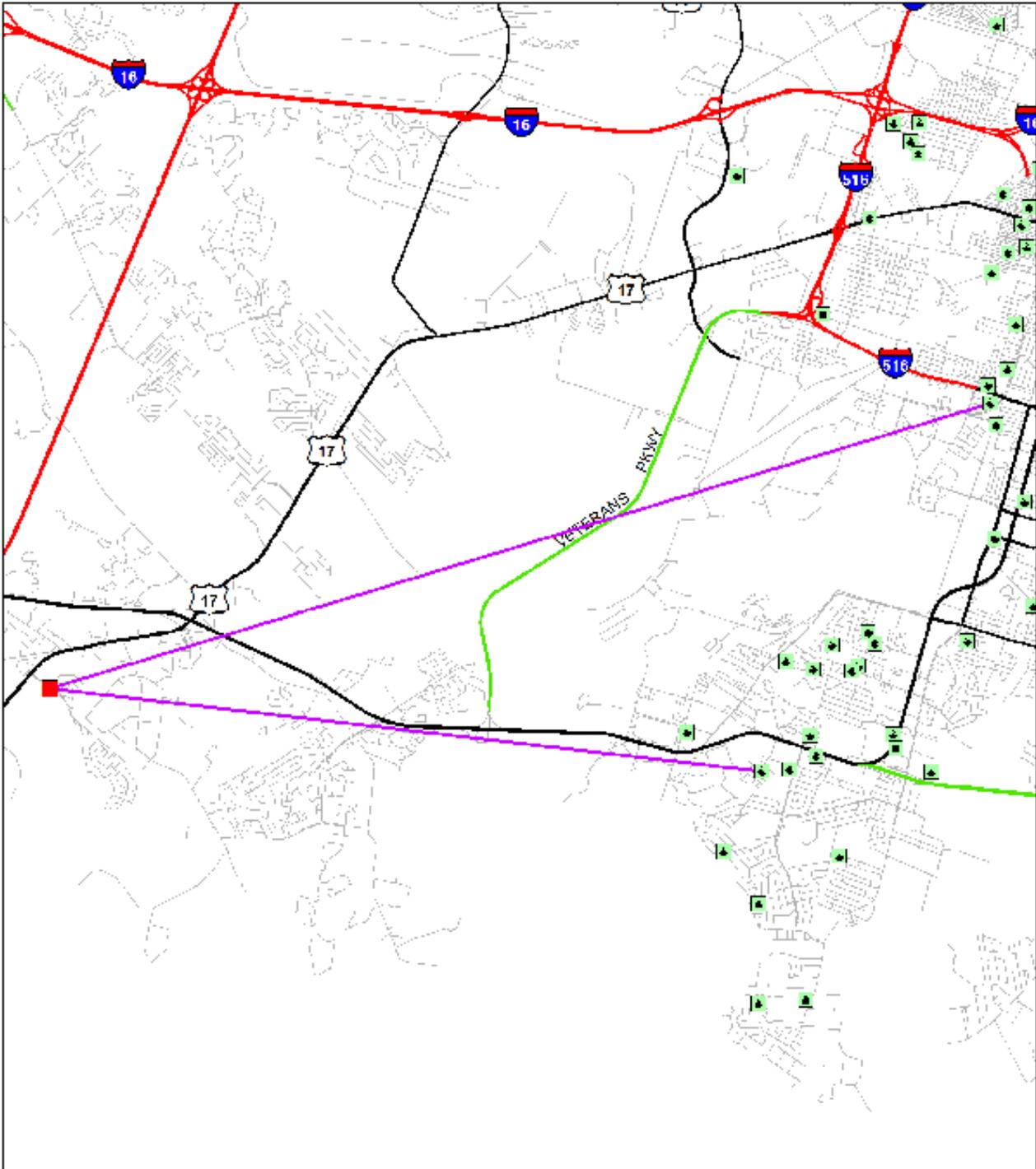
Legend

-  2015 Structure Fires
-  Fire Stations
-  2015 Structure Fires Response
-  Interstate
-  Parways
-  Major Roads
-  Local Roads

Station 11 Structure Fires 2015

SAGIS MAKES NO WARRANTY, REPRESENTATION, OR GUARANTY AS TO THE CONTENT, SEQUENCE, ACCURACY, TIMELINESS, OR COMPLETENESS OF ANY OF THE DATABASE INFORMATION PROVIDED.





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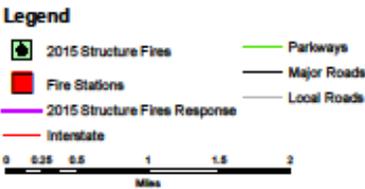
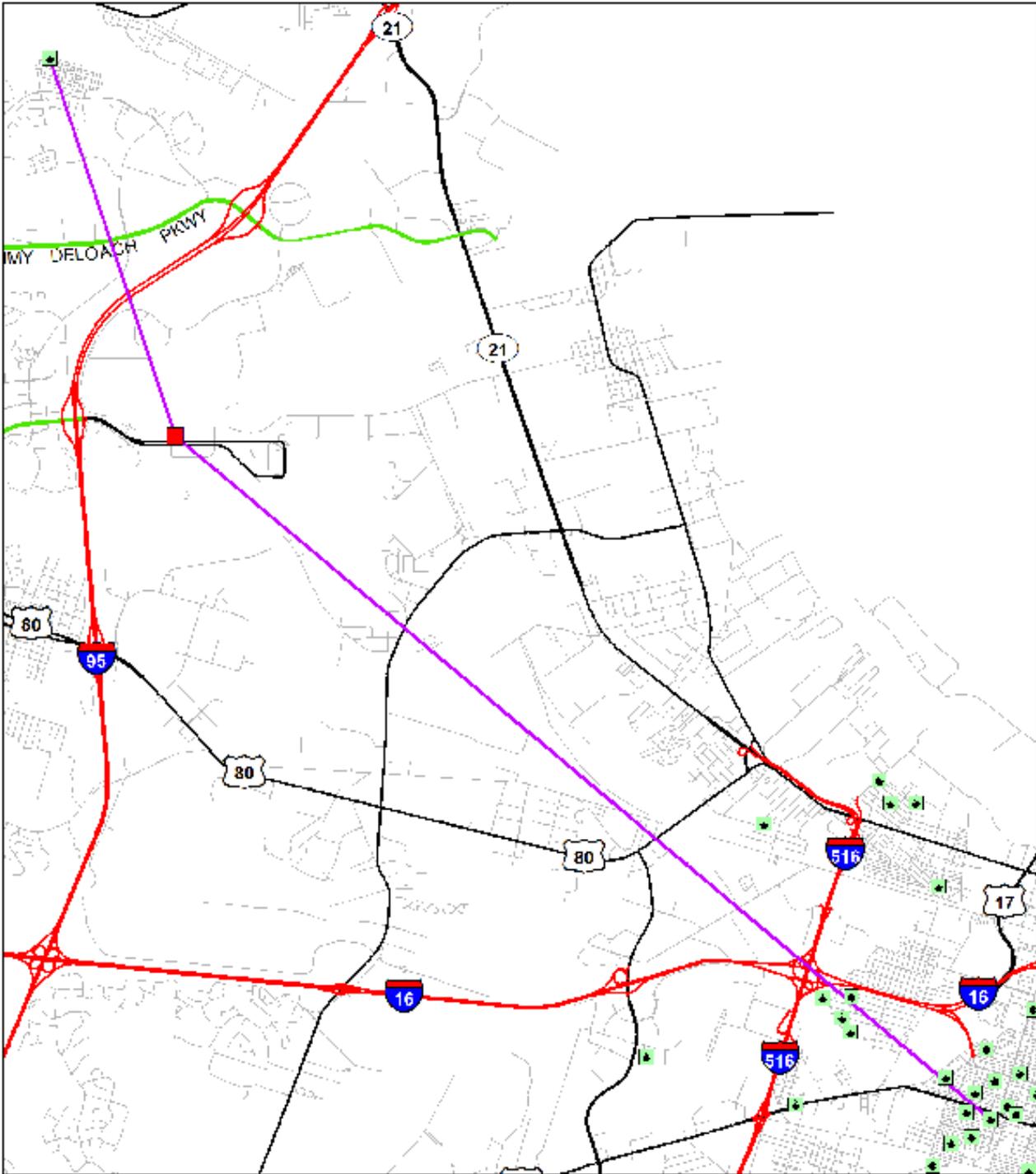
-  2015 Structure Fires
-  Fire Stations
-  2015 Structure Fires Response
-  Interstate
-  Parloways
-  Major Roads
-  Local Roads



Station 12 Structure Fires 2015

SAGIS MAKES NO WARRANTY, REPRESENTATION, OR GUARANTY AS TO THE CONTENT, SEQUENCE, ACCURACY, TIMELINESS, OR COMPLETENESS OF ANY OF THE DATABASE INFORMATION PROVIDED.

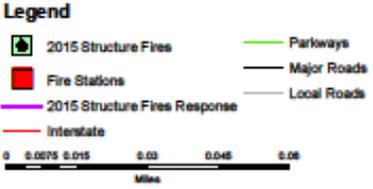
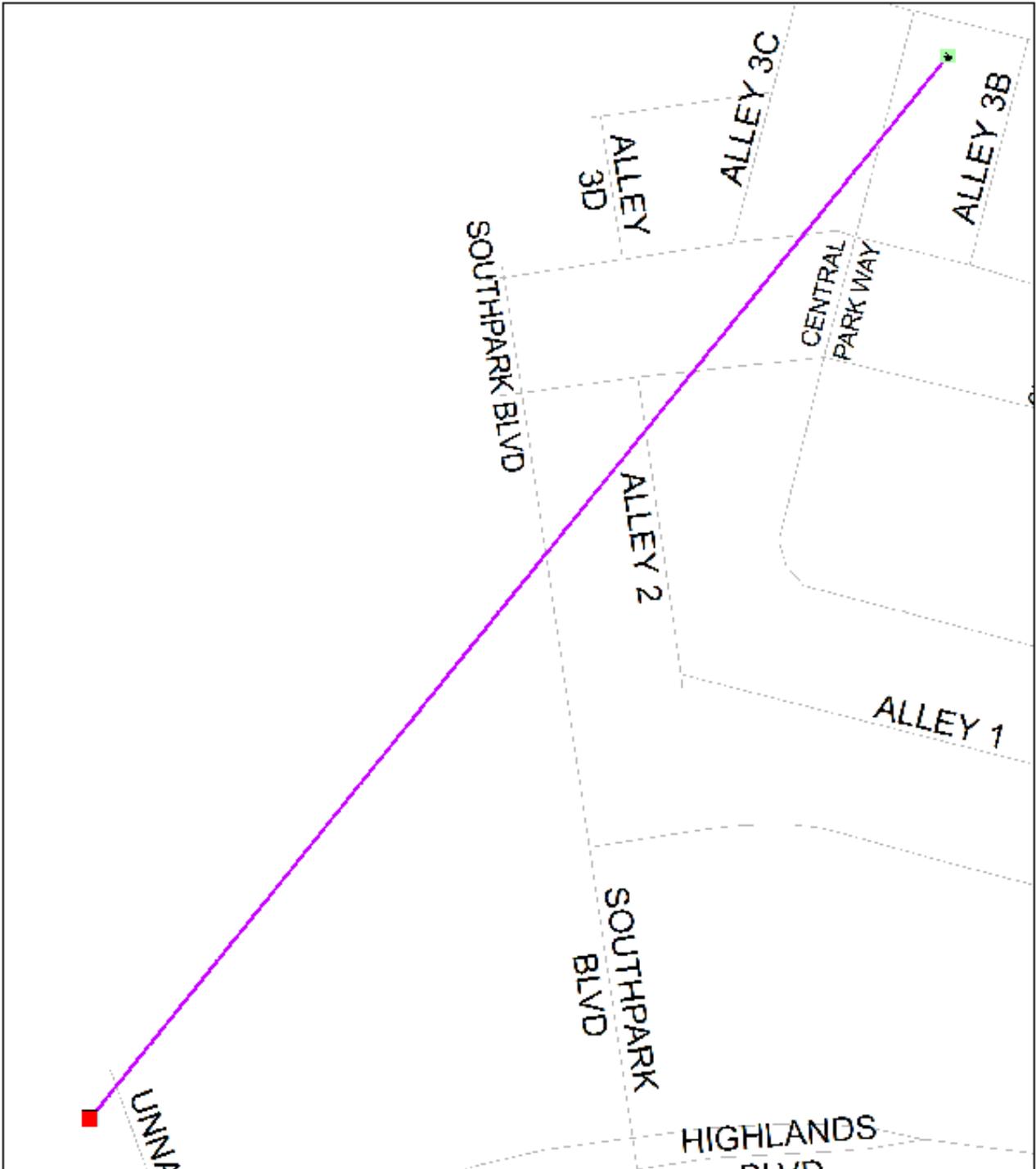




Station 13 Structure Fires 2015

SAGIS MAKES NO WARRANTY, REPRESENTATION, OR GUARANTY AS TO THE CONTENT, SEQUENCE, ACCURACY, TIMELINESS, OR COMPLETENESS OF ANY OF THE DATABASE INFORMATION PROVIDED.

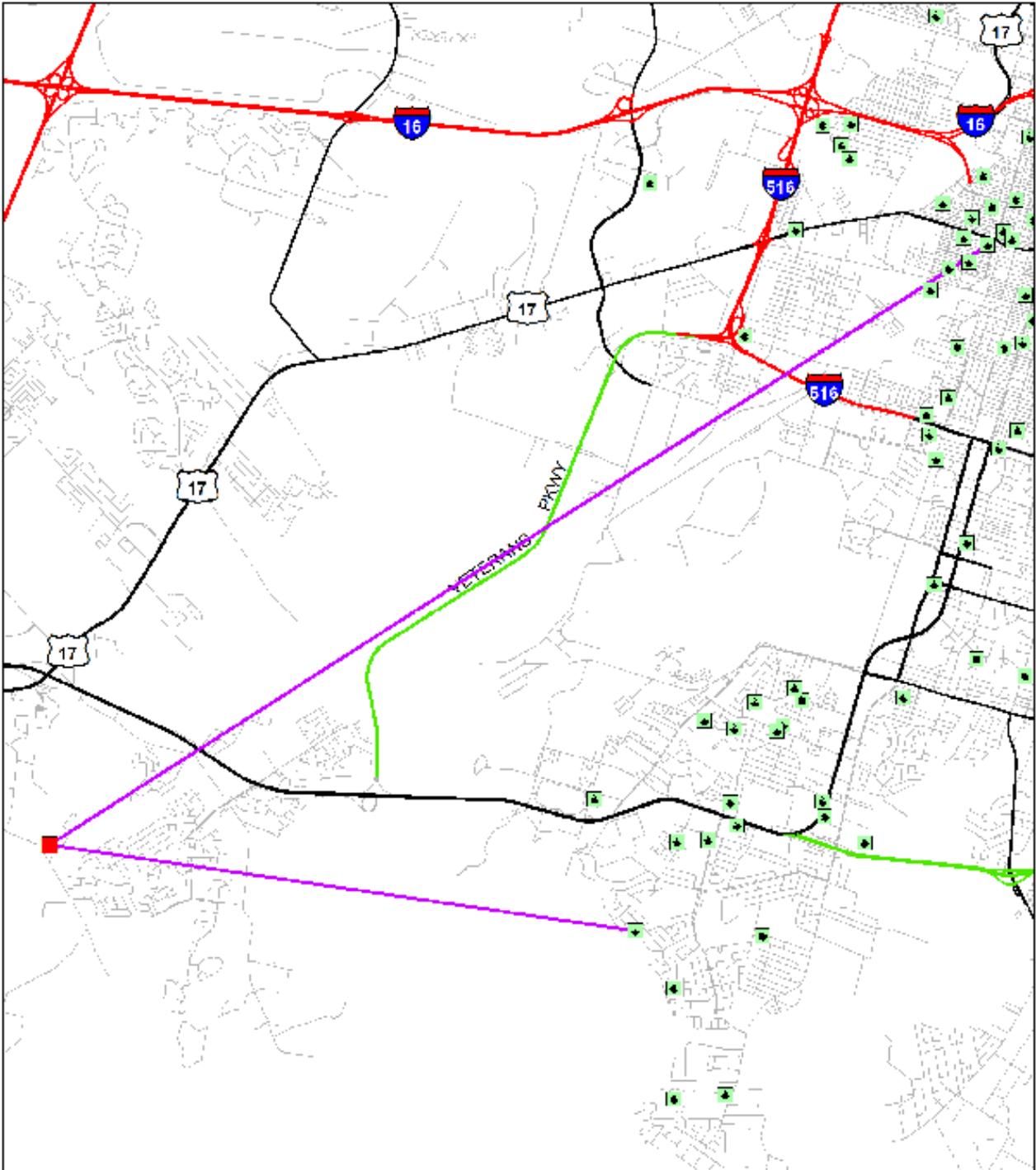




Station 14 Structure Fires 2015

SAGIS MAKES NO WARRANTY, REPRESENTATION, OR GUARANTY AS TO THE CONTENT, SEQUENCE, ACCURACY, TIMELINESS, OR COMPLETENESS OF ANY OF THE DATABASE INFORMATION PROVIDED.





Legend

- 2015 Structure Fires
 - Fire Stations
 - 2015 Structure Fires Response
 - Interstate
 - Parloways
 - Major Roads
 - Local Roads
- 0 0.25 0.5 1 1.5 2
Miles

Station 15 Structure Fires 2015

SAGIS MAKES NO WARRANTY, REPRESENTATION, OR GUARANTY AS TO THE CONTENT, SEQUENCE, ACCURACY, TIMELINESS, OR COMPLETENESS OF ANY OF THE DATABASE INFORMATION PROVIDED.



Appendix B

Fire Management Zones Data 2014-2016 (YTD)

Table of Content of Codes

111	Building Fire	451	Biohazard
112	Fires in Structures not Buildings	461	Building or structured weakened or collapse
113	Cooking Fire	463	Vehicle Accident General Cleanup
114	Chimney Fire	481	Attempt to burn
115	Incinerator Malfunction	511	Lock Out- In Person in Distress
118	Trash/ Rubbish Fire	521	Water Evacuation
122	Fire in Motor Home, Camper, recreational	522	Water or Steam Leak
130	Mobile Property vehicle fire, other	531	Smoke or Odor Removal
131	Passenger Vehicle Fire	551	Assist Police/ Agency
132	Freight Vehicle Fire	552	Police Matter
137	Camper or recreational vehicle Fire	553	Public Service
138	Off road vehicle or heavy equipment fire	554	Assist Invalid
141	Wildland Fire	555	Defective Elevator, No Occupants
142	Brush Fire	561	Unauthorized Burning
143	Grass Fire	611	Cancelled En Route
151	Outside Rubbish Fire	621	Wrong Location
152	Garbage dump or sanitary landfill fire	622	No Incident Found
154	Dumpster Fire	631	Authorized Control Burning
155	Outside stationary compactor/compacted	641	Vicinity Alarm
161	Outside Storage Fire	651	Smoke Scare
162	Outside Equipment Fire	652	Steam/Vapor though to be Smoke
211	Overpressure Rupture	653	Barbecue
240	Excessive Heat, No Ignition	661	EMS Call, Transported not by Fire
311	Medical Assist	671	Haz Mat Investigations, No Haz Mat
321	EMS Call, excluding Vehicle Accident w/ injury	711	Malicious False Call
322	Vehicle Accident with Injuries	712	Direct Tie to FD, Malicious
323	Vehicle and Pedestrian Accident	713	Telephone, Malicious False Call
324	Vehicle Accident with No Injuries	714	Central Station, Malicious False Call
331	Lock In	715	Local Alarm, Malicious False Call
351	Extrication from Building	721	Bomb scare- no bomb
352	Extrication from Vehicle	731	Sprinkler Activation due to Malfunction
353	Removal from Stalled Elevator	733	Smoke Detector Activation due to Malfunction
363	Swift Water Rescue	734	Heat detector activation due to malfunction
381	Rescue Standby	735	Alarm Sounded due to Malfunction
411	Flammable Liquid Spill	736	CO Activation due to Malfunction
412	Gas Leak	741	Sprinkler Activation, No Fire
413	Combustible Liquid Spill	743	Smoke Detector Activation, No fire, Unintentional
421	Chemical Hazard, No Spill/ Leak	744	Detector Activation, No fire, Unintentional
424	Carbon Monoxide	745	Alarm System Sounded, No Fire Unintentional
441	Wiring, Short Circuit	746	CO Detector Activation, No CO
442	Overheated Motor	751	Biological Hazard, malicious false report
443	Light Ballast	911	Citizen Complaint
444	Powerline Down		
445	Arcing Equipment		

2016 Fire Zone Data for Building Fires

Incident Type	Incident Count	District
111	1	1003
111	1	1005
111	1	1020
111	1	1021
111	1	1044
<hr/>		
	5	

Incident Type	Incident Count	District
111	1	2009
111	1	2018
111	1	2019
111	1	2029
111	2	2039
<hr/>		
	6	

Incident Type	Incident Count	District
111	2	3034
111	1	3068
<hr/>		
	3	

Incident Type	Incident Count	District
111	1	4010
111	3	4016
<hr/>		
	4	

Incident Type	Incident Count	District
111	1	5001
111	1	5009
111	3	5010
111	1	5011
111	1	5012
111	1	5013
111	2	5019
111	1	5020
111	4	5021
111	1	5027
111	1	5031
111	1	5040
111	1	5041
111	2	5048
<hr/>		
	21	

Incident Type	Incident Count	District
111	1	6027
<hr/>		
	1	

Incident Type	Incident Count	District
111	1	7007
<hr/>		
	1	

Incident Type	Incident Count	District
111	1	8010
111	1	8012
111	1	8037
<hr/>		
	3	

Incident Type	Incident Count	District
111	2	10003
<hr/>		
	2	

Incident Type	Incident Count	District
111	2	11001
111	1	11007
111	1	11020
111	1	11023
<hr/>		
	5	

Incident Type	Incident Count	District
111	1	14002
<hr/>		
	1	

2015 Fire Zone Data for Building Fires

Incident Type	Incident Count	District									
111	1	1002	111	1	2001	111	1	3044	111	1	4004
111	1	1003	111	1	2003	111	1	3063	111	2	4008
111	1	1011	111	2	2004	111	1	3065	111	1	4010
111	1	1012	111	1	2009	111	1	3068	111	1	4014
111	1	1016	111	1	2022		4		111	1	4015
111	1	1018	111	1	2029				111	2	4016
111	1	1021	111	1	2031				111	1	4020
111	2	1023	111	2	2032					9	
111	1	1024	111	2	2036						
111	1	1029	111	2	2039						
111	1	1031	111	1	2040						
111	1	1037		15							
111	1	1042									
111	1	1043									
111	1	1044									
	16										

Incident Type	Incident Count	District									
111	1	5002	111	1	6009	111	1	7011	111	1	8005
111	2	5004	111	1	6021	111	1	7016	111	2	8007
111	1	5010	111	5	6027		2		111	1	8019
111	1	5011	111	1	6039				111	1	8024
111	3	5012	111	1	6054				111	1	8033
111	2	5013	111	2	6057				111	1	8035
111	1	5014		11					111	1	8036
111	1	5016							111	1	8048
111	1	5018							111	1	8058
111	2	5019							111	1	8072
111	1	5020							111	1	8077
111	1	5021							111	1	8084
111	2	5026							111	1	8086
111	3	5027								14	
111	2	5033									
111	1	5034									
111	1	5036									
111	1	5037									
111	1	5038									
111	1	5039									
111	2	5040									
111	4	5041									
111	2	5043									
111	2	5044									
111	1	5049									
	40										

Incident Type	Incident Count	District									
111	1	9007	111	2	10001	111	1	11002	111	1	12026
111	2	9008	111	1	10003	111	1	11003		1	
111	2	9012	111	3	10004	111	1	11008			
111	1	9018		6		111	2	11022			
111	2	9022				111	1	11023			
	8					111	1	11033			
							7				

2014 Fire Zone Data for Building

IncidentType	IncidentCount	AreaID									
111	1	1002	111	2	2002	111	2	3012	111	1	4003
111	1	1006	111	2	2003	111	1	3013	111	1	4006
111	1	1007	111	3	2007	111	1	3015	111	1	4007
111	1	1014	111	1	2009	111	1	3040	111	1	4008
111	1	1017	111	1	2012	111	1	3045	111	1	4014
111	1	1018	111	1	2015	111	1	3054	111	6	4015
111	1	1021	111	2	2017	111	1	3056	111	4	4016
111	2	1023	111	1	2026	111	1	3067	111	1	4019
111	1	1024	111	1	2030	111	1	3069	111	1	4020
111	1	1027	111	2	2031		<u>10</u>		111	<u>1</u>	4021
111	1	1028	111	1	2035					<u>18</u>	
111	2	1030	111	1	2037						
111	1	1041	111	1	2041						
111	2	1042	111	<u>1</u>	2042						
111	1	1043		<u>20</u>							

IncidentType	IncidentCount	AreaID									
111	1	5001	111	1	6021	111	1	7018	111	1	8007
111	1	5003	111	1	6027	111	1	7020	111	1	8013
111	2	5004	111	1	6044	111	1	7024	111	1	8024
111	1	5005	111	1	6045	111	1	7026	111	1	8037
111	2	5006	111	1	6049	111	1	7031	111	2	8038
111	1	5008	111	1	6050	111	<u>1</u>	7035	111	1	8039
111	2	5010	111	1	6051		<u>6</u>		111	1	8049
111	1	5011	111	1	6058				111	1	8053
111	2	5013	111	<u>1</u>	6059				111	1	8058
111	1	5014		<u>9</u>					111	1	8060
111	1	5016							111	1	8065
111	2	5019							111	2	8072
111	2	5021							111	2	8084
111	2	5022							111	<u>2</u>	8094
111	2	5025								<u>18</u>	
111	1	5026									
111	5	5028									
111	2	5033									
111	1	5036									
111	1	5039									
111	1	5040									
111	1	5042									
111	3	5043									
111	1	5044									
111	1	5047									
111	1	5048									
111	<u>1</u>	5049									
	<u>42</u>										

IncidentType	IncidentCount	AreaID									
111	1	9006	111	1	10003	111	1	11002	111	<u>1</u>	12023
111	2	9007	111	<u>1</u>	10004	111	1	11012		<u>1</u>	
111	2	9008		<u>2</u>		111	1	11017			
111	1	9009				111	1	11021			
111	2	9011				111	<u>2</u>	11033			
111	1	9016					<u>6</u>				
111	1	9017									
111	2	9021									
111	2	9022									
111	<u>1</u>	9023									
	<u>15</u>										

IncidentType	IncidentCount	AreaID	IncidentType	IncidentCount	AreaID
111	2	13010	111	<u>1</u>	14001
111	1	13011		<u>1</u>	
111	<u>1</u>	13014			
	<u>4</u>				

2016 Technical Rescue Training Data

Incident Type	Incident Count	District
351	1	1016
353	2	1017
511	1	1020
352	1	1025
5		

Incident Type	Incident Count	District
352	1	2003
1		

Incident Type	Incident Count	District
353	2	3012
363	1	3012
353	1	3015
353	1	3020
353	1	3022
353	1	3024
353	1	3028
353	1	3029
353	1	3035
353	1	3043
331	1	3054
331	1	3068
13		

Incident Type	Incident Count	District
353	3	4005
511	1	4010
381	1	4016
5		

2016 FIRE ZONE DATA FOR TRT

Incident Type	Incident Count	District
352	1	5010
352	1	5014
352	1	5017
352	1	5019
511	1	5020
352	1	5025
381	1	5028
352	1	5039
511	1	5040
352	1	5041
352	1	5043
352	1	5047
12		

Incident Type	Incident Count	District
511	1	7014
511	1	7019
2		

Incident Type	Incident Count	District
381	1	11019
1		

Incident Type	Incident Count	District
352	1	13010
353	1	13010
2		

2016 Hazmat Data

Incident Type	Incident Count	District
671	1	1001
412	1	1002
412	1	1004
412	1	1008
671	1	1010
736	1	1011
671	1	1012
412	1	1014
412	1	1016
671	1	1016
424	1	1019
671	1	1019
451	1	1020
671	1	1021
112	1	1023
671	1	1026
412	1	1031
736	1	1035
412	1	1038
412	1	1039
746	1	1042
413	1	1044
671	2	1044
24		

Incident Type	Incident Count	District
421	1	2006
671	1	2006
411	1	2008
736	1	2022
412	1	2032
746	1	2036
412	3	2040
671	1	2042
10		

Incident Type	Incident Count	District
421	1	3011
412	1	3013
413	1	3013
671	1	3014
413	1	3015
451	1	3022
412	1	3024
424	1	3024
412	1	3025
671	1	3025
422	1	3027
412	1	3028
671	1	3028
412	1	3031
451	1	3034
463	1	3034
421	1	3035
451	1	3035
412	1	3038
411	1	3039
671	1	3039
412	1	3040
671	2	3040
671	1	3043
463	1	3045
671	1	3045
746	1	3046
412	1	3050
671	1	3054
463	1	3055
424	2	3056
412	1	3059
671	1	3059
671	1	3060
671	1	3063
37		

Incident Type	Incident Count	District
463	1	4006
412	1	4007
461	1	4011
671	3	4014
424	1	4015
411	1	4016
412	2	4016
451	3	4016
463	1	4016
671	1	4016
422	1	4024
16		

Incident Type	Incident Count	District
746	1	5001
671	1	5002
412	1	5004
424	1	5004
451	1	5004
412	1	5005
424	1	5006
412	1	5010
736	1	5011
412	1	5014
412	1	5018
671	1	5018
412	1	5019
412	1	5023
451	1	5025
451	1	5028
451	1	5029
412	1	5030
736	1	5030
746	1	5033
736	1	5035
671	1	5036
421	1	5039
451	1	5041
412	2	5043
413	1	5045
671	1	5048
28		

Incident Type	Incident Count	District
671	1	6026
412	2	6027
424	1	6027
671	1	6027
746	1	6049
746	1	6051
412	1	6053
412	1	6054
9		

Incident Type	Incident Count	District
463	1	7001
412	1	7007
463	1	7010
671	2	7014
451	1	7016
671	1	7016
671	1	7018
671	1	7020
671	1	7030
10		

Incident Type	Incident Count	District
412	1	8001
671	1	8001
746	1	8001
463	1	8007
412	2	8010
671	1	8011
736	1	8011
671	1	8013
463	1	8020
411	2	8029
412	1	8037
671	1	8037
412	1	8040
671	1	8042
463	1	8049
463	2	8053
412	1	8057
412	1	8058
671	1	8058
412	1	8059
412	1	8068
24		

Incident Type	Incident Count	District
412	1	10004
424	1	10004
736	1	10004
3		

Incident Type	Incident Count	District
412	2	11014
671	1	11022
411	1	11023
671	1	11023
412	1	11025
671	1	11028
221	1	11033
424	1	11033
9		

Incident Type	Incident Count	District
424	1	14004
1		

Incident Type	Incident Count	District
352	1	5002
352	1	5004
381	1	5004
511	1	5010
352	1	5011
357	1	5011
381	1	5012
351	1	5014
352	2	5019
331	1	5027
352	1	5028
352	1	5029
352	1	5030
352	1	5034
352	1	5036
351	1	5040
352	1	5040
352	1	5041
331	1	5043
352	1	5043
511	1	5043
357	1	5045
23		

Incident Type	Incident Count	District	Incident Type	Incident Count	District	Incident Type	Incident Count	District
<u>331</u>	<u>1</u>	<u>6027</u>	352	1	7006	352	1	8032
	1		351	1	7013	381	1	8032
			353	2	7013	352	1	8043
			352	1	7019	352	2	8053
			511	1	7022	352	1	8057
			381	1	7026	352	1	8071
			7			7		

Incident Type	Incident Count	District									
511	1	9007	351	1	10003	352	2	11023	331	2	12024
352	1	9011	331	1	11008	352	1	11029	381	1	12025
352	1	9015		2		352	1	11031		3	
<hr/>						<hr/>			<hr/>		
	3						4				

Incident Type	Incident Count	District	Incident Type	Incident Count	District
311	1	13014	381	1	14005
	1		324	1	14007
<hr/>			<hr/>		
				2	

Incident Type	Incident Count	District	Incident Type	Incident Count	District
422	1	5001	411	1	5047
671	2	5001	451	1	5047
412	2	5002	412	1	5048
412	1	5003	451	1	5049
671	1	5003	451	1	5046
412	1	5004	736	2	5049
412	3	5005		69	
451	1	5005			
412	2	5009			
451	1	5009			
451	1	5010			
419	1	5011			
451	4	5011			
412	1	5012			
451	1	5014			
413	1	5015			
412	1	5016			
412	1	5018			
422	1	5018			
671	1	5019			
671	1	5020			
412	1	5021			
451	1	5021			
412	1	5023			
412	1	5024			
424	1	5024			
411	1	5025			
412	1	5025			
736	1	5025			
671	1	5026			
412	1	5028			
671	2	5028			
412	1	5029			
451	1	5033			
671	1	5033			
412	1	5035			
412	2	5036			
421	1	5037			
412	1	5038			
736	1	5038			
412	1	5039			
671	1	5039			
412	1	5040			
412	1	5041			
422	1	5041			
671	1	5041			
412	2	5042			
413	1	5043			
451	1	5043			
671	1	5044			
412	1	5046			

Incident Type	Incident Count	District
671	1	6006
412	1	6010
671	3	6010
424	1	6014
671	1	6014
412	2	6021
412	3	6027
746	1	6027
746	1	6031
412	1	6045
412	1	6046
412	1	6047
412	1	6049
412	1	6050
736	1	6090
671	1	6051
451	1	6054
412	1	6057
413	1	6057
412	1	6058
	25	

Incident Type	Incident Count	District
412	2	7006
671	1	7009
671	1	7013
412	2	7014
736	1	7017
412	1	7018
411	1	7019
424	2	7020
736	1	7020
413	1	7022
412	1	7029
736	1	7029
411	1	7037
	16	

Incident Type	Incident Count	District	Incident Type	Incident Count	District
671	1	8001	411	1	9002
412	1	8003	411	1	9006
671	1	8003	411	1	9007
412	1	8004	671	1	9008
412	1	8004	412	2	9009
412	1	8005	671	1	9009
671	1	8009	451	1	9011
451	1	8010	671	1	9011
671	1	8011	671	1	9012
412	1	8014	412	1	9017
412	1	8019	412	4	9021
746	1	8024	412	2	9022
412	1	8026	671	1	9022
412	1	8027	412	1	9023
411	2	8029	671	1	9023
412	1	8031	736	1	9023
412	1	8032	412	1	9024
671	1	8034		22	
412	2	8037			
451	1	8037			
671	3	8037			
412	1	8039			
451	1	8039			
412	2	8040			
671	1	8040			
412	1	8041			
671	1	8046			
412	1	8047			
671	1	8047			
671	1	8049			
671	1	8051			
412	1	8052			
671	1	8052			
671	1	8053			
412	2	8058			
671	1	8058			
412	1	8059			
412	2	8065			
671	1	8065			
412	1	8067			
671	1	8079			
412	1	8080			
411	1	8085			
671	1	8088			
412	1	8094			

62

Incident Type	Incident Count	District
671	2	10001
736	1	10002
412	1	10003
421	1	10003
671	3	10003
746	1	10003
183	1	10004
412	1	10004
424	1	10005
671	1	10005
746	1	10005
411	1	10007
412	1	10007
<hr/>		
	16	

Incident Type	Incident Count	District
671	1	11001
412	1	11007
736	2	11008
671	1	11010
671	1	11012
671	1	11013
671	2	11014
451	1	11016
671	1	11017
412	3	11020
412	1	11021
671	1	11022
411	1	11023
412	1	11023
671	1	11026
746	1	11026
411	1	11030
411	1	11031
412	1	11033

23

Incident Type	Incident Count	District	Incident Type	Incident Count	District
Incident Type	Incident Count	District	741	1	13001
424	1	12022	321	1	13002
412	1	12024	322	1	13010
<hr/>			322	1	13012
	2		412	1	13013
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				5	

Incident Type	Incident Count	District
733	1	14003
733	1	14003
735	1	14004
<hr/>		
	3	

2014 Technical Rescue Training Data

2104 Fire Zone Data for Technical Rescues

IncidentType	Incident Count	AreaID	IncidentType	Incident Count	AreaID	IncidentType	Incident Count	AreaID	IncidentType	IncidentCount	AreaID
511	1	1001	352	1	2001	342	1	3011	357	2	4003
350	1	1002	381	2	2003	353	2	3012	353	1	4005
381	1	1003	352	1	2019	357	1	3012	352	1	4009
352	1	1005	352	1	2023	353	1	3020	352	1	4016
352	1	1016	352	1	2027	353	2	3022	352	1	4017
352	1	1017	351	1	2028	353	3	3027	360	1	4017
352	1	1019	352	1	2033	353	2	3028	511	1	4020
352	2	1020	381	1	2033	381	1	3028			
331	1	1025		9		353	2	3029		43	
352	1	1032				331	1	3034			
300	1	1042				300	1	3035			
300	1	1043				352	2	3035			
352	1	1043				300	1	3036			
352	3	1044				353	1	3036			
	17					672	1	3038			
						352	1	3041			
						353	2	3043			
						352	1	3045			
						351	1	3046			
						352	1	3046			
						331	3	3054			
						511	1	3058			
						353	1	3060			
						351	1	3066			
						353	1	3068			

IncidentType	IncidentCount	AreaID									
360	1	5001	352	1	6010	352	1	7006	331	1	8002
331	1	5004	352	1	6049	352	1	7016	353	1	8004
331	1	5005	511	1	6054	353	3	7016	352	1	8010
331	1	5010		3		331	1	7021	352	1	8036
352	1	5011				352	1	7025	511	1	8040
352	1	5015				381	1	7030	352	1	8050
352	1	5018					8		352	1	8086
352	1	5019								7	
352	1	5020									
381	1	5022									
331	1	5025									
300	1	5026									
352	1	5027									
331	1	5028									
352	2	5028									
352	1	5029									
352	1	5031									
331	1	5034									
381	1	5035									
353	1	5036									
363	1	5036									
352	1	5041									
353	1	5041									
357	1	5041									
381	1	5044									
352	1	5047									
	27										

IncidentType	IncidentCount	AreaID	IncidentType	IncidentCount	AreaID	IncidentType	IncidentCount	AreaID
511	1	10002	511	1	11017	352	2	13010
	1		352	1	11017	353	1	13010
			352	1	11019		3	
			352	2	11031			
				5				

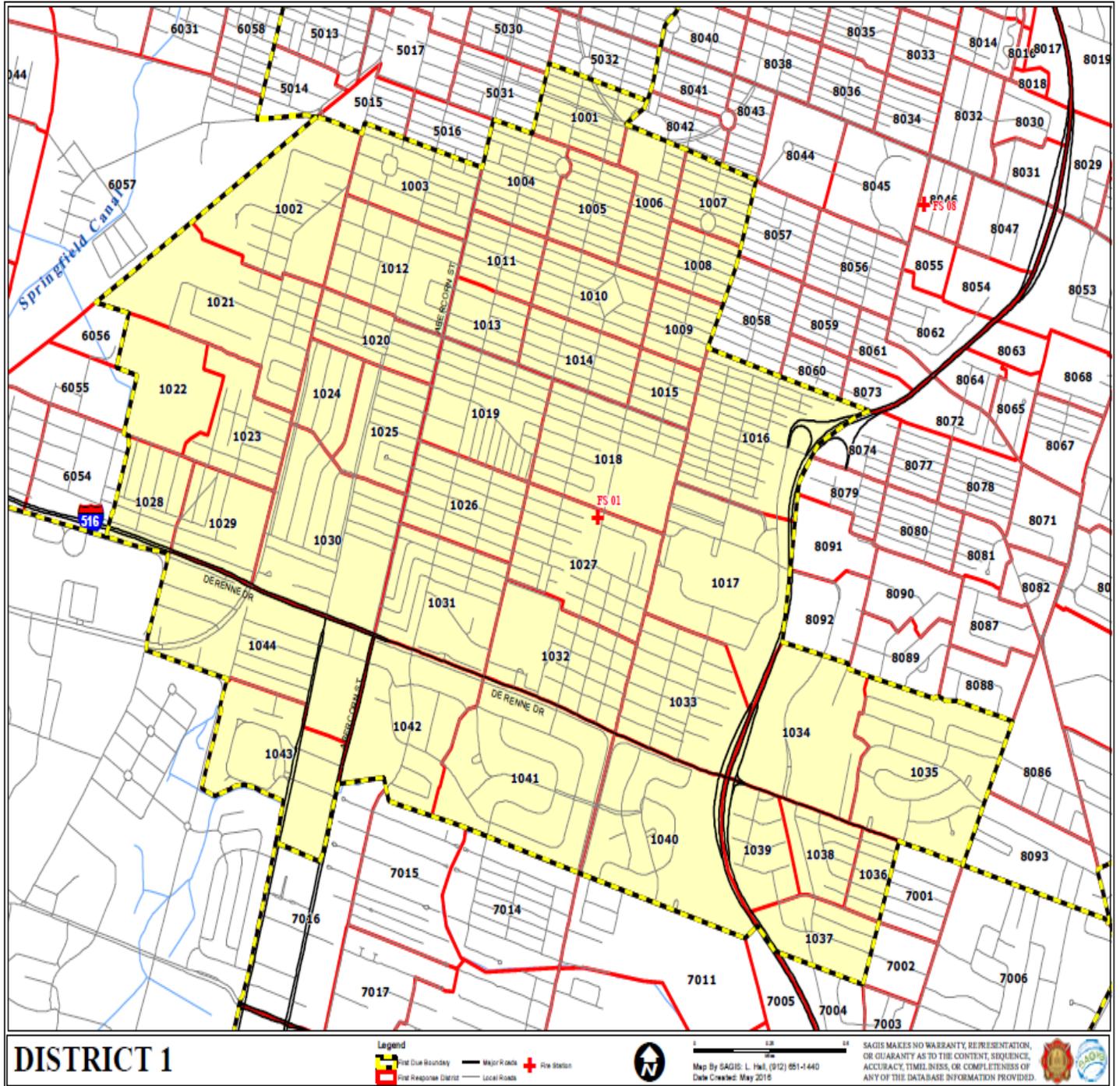
2014 Hazmat Data

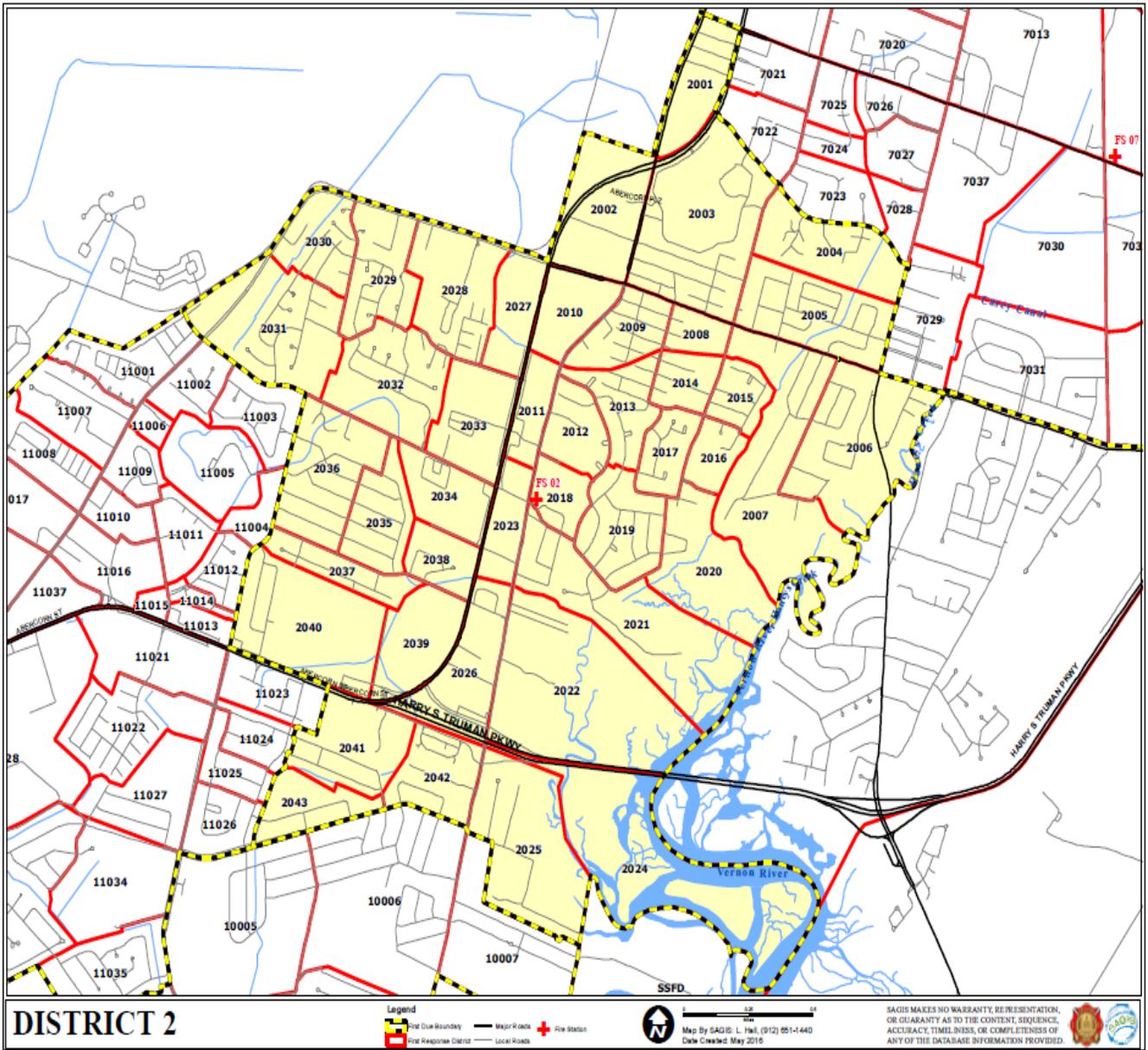
IncidentType	Incident Count	AreaID									
412	1	1002	412	1	2002	463	2	3011	411	2	3042
412	1	1003	463	1	2002	424	1	3012	411	1	3043
412	1	1004	412	1	2003	451	2	3012	463	1	3043
412	1	1005	463	1	2003	411	1	3013	413	1	3044
412	1	1007	412	1	2006	412	2	3013	412	1	3045
412	1	1010	424	1	2006	451	1	3013	463	1	3045
412	1	1011	463	1	2009	413	1	3015	412	2	3046
411	1	1012	746	1	2009	463	1	3015	451	1	3054
451	1	1013	746	1	2011	411	2	3020	412	1	3055
412	1	1014	412	1	2013	451	4	3022	412	1	3056
412	1	1016	412	1	2021	412	1	3023	412	2	3058
451	1	1017	463	1	2023	424	1	3023	424	1	3058
412	1	1018	413	1	2034	424	1	3024	463	1	3059
412	1	1019	412	1	2035	424	2	3025	451	1	3060
451	1	1020	412	1	2037	424	2	3025	412	1	3062
412	2	1021	411	1	2038	451	1	3025	463	1	3063
412	1	1023	451	1	2041	746	2	3025	412	1	3066
736	1	1026	746	1	2043	412	2	3026	424	1	3066
412	1	1029		18		451	1	3026	412	1	3067
413	1	1030				746	1	3026	463	1	3068
463	1	1030				411	1	3028		68	
412	1	1031				412	1	3028			
412	1	1035				412	1	3029			
411	1	1037				463	1	3029			
400	1	1041				412	1	3031			
412	1	1042				463	1	3031			
413	1	1042				412	2	3034			
463	1	1042				411	1	3035			
413	1	1044				412	1	3035			
451	1	1044				412	1	3036			
463	1	1044				412	2	3040			
	32					463	1	3040			

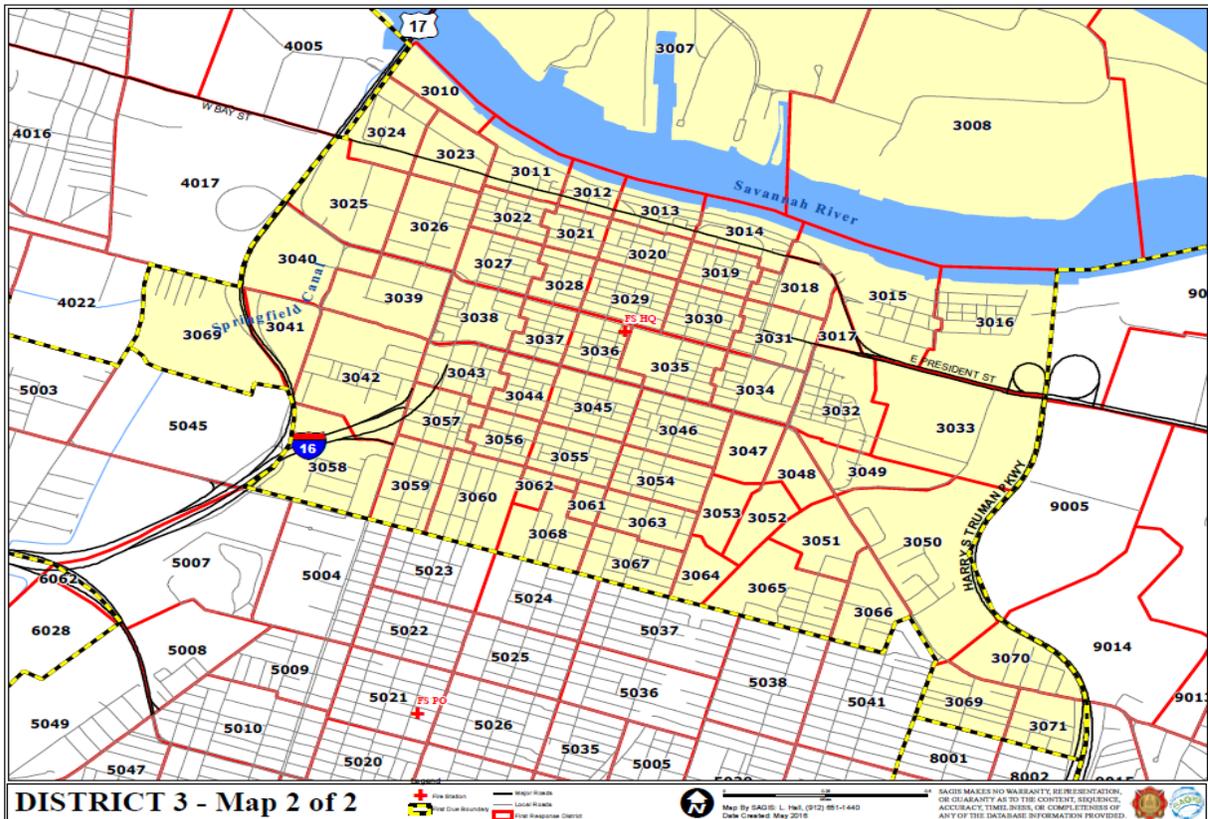
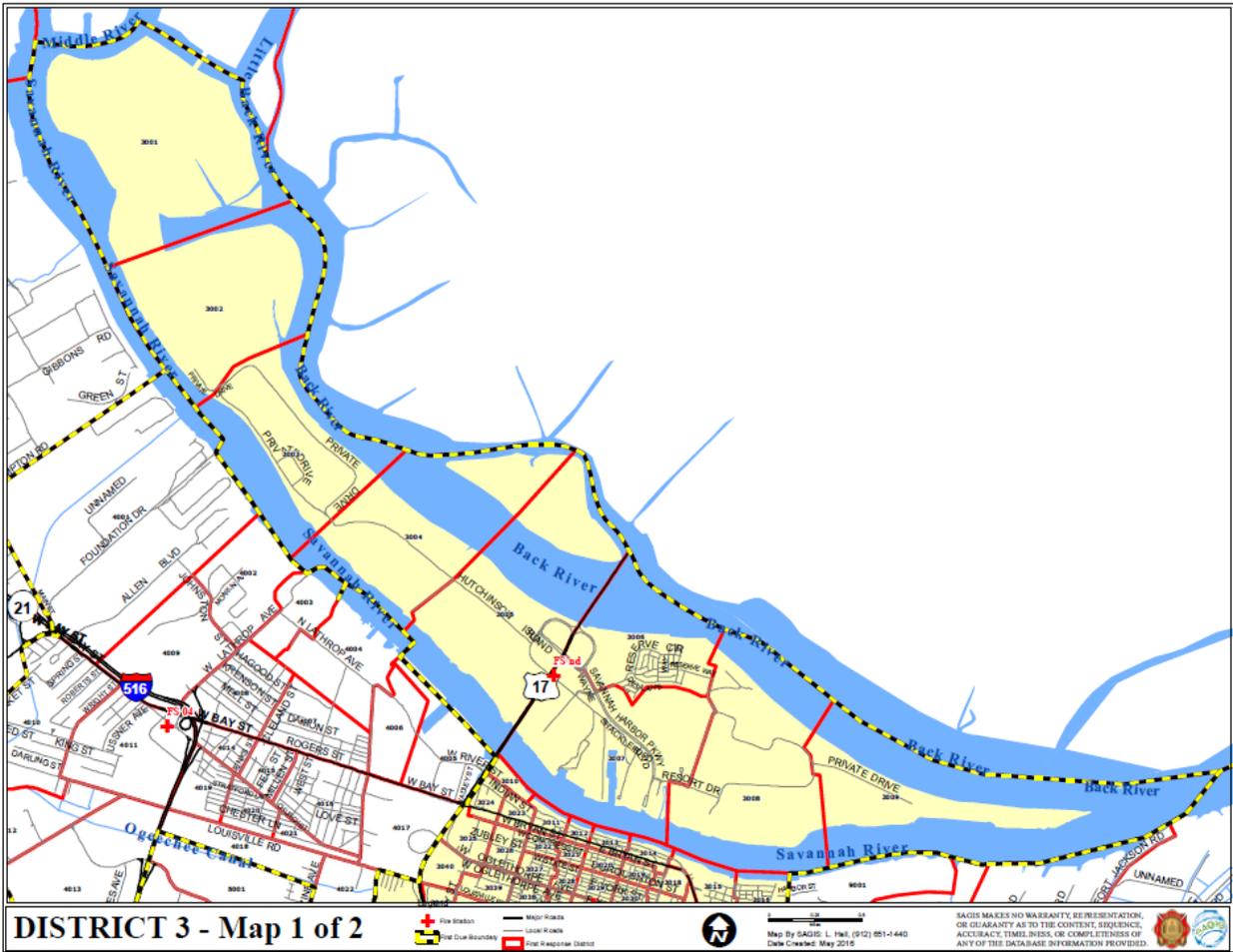
IncidentType	Incident Count	AreaID	IncidentType	Incident Count	AreaID	IncidentType	Incident Count	AreaID
412	1	7006	412	1	8009	422	1	9003
746	1	7006	412	1	8010	412	2	9007
746	1	7008	451	1	8010	451	1	9008
736	1	7009	412	3	8011	463	1	9008
412	2	7014	412	1	8012	412	1	9009
463	1	7014	412	1	8014	411	1	9011
412	1	7018	412	1	8019	412	1	9011
411	2	7019	412	2	8024	736	1	9011
422	1	7019	411	1	8029	412	2	9012
411	1	7024	412	1	8031	746	1	9012
412	1	7025	463	1	8031	411	1	9016
451	1	7026	451	1	8032	412	1	9016
400	1	7027	451	1	8035	412	1	9021
412	1	7032	412	1	8037	412	1	9022
412	1	7035	451	2	8037	451	1	9022
	<u>17</u>		412	1	8038	412	<u>1</u>	9024
			412	1	8039		18	
			451	1	8039			
			413	1	8041			
			424	1	8041			
			412	1	8045			
			463	1	8046			
			221	1	8053			
			424	1	8067			
			412	1	8082			
			451	<u>1</u>	8082			
				30				

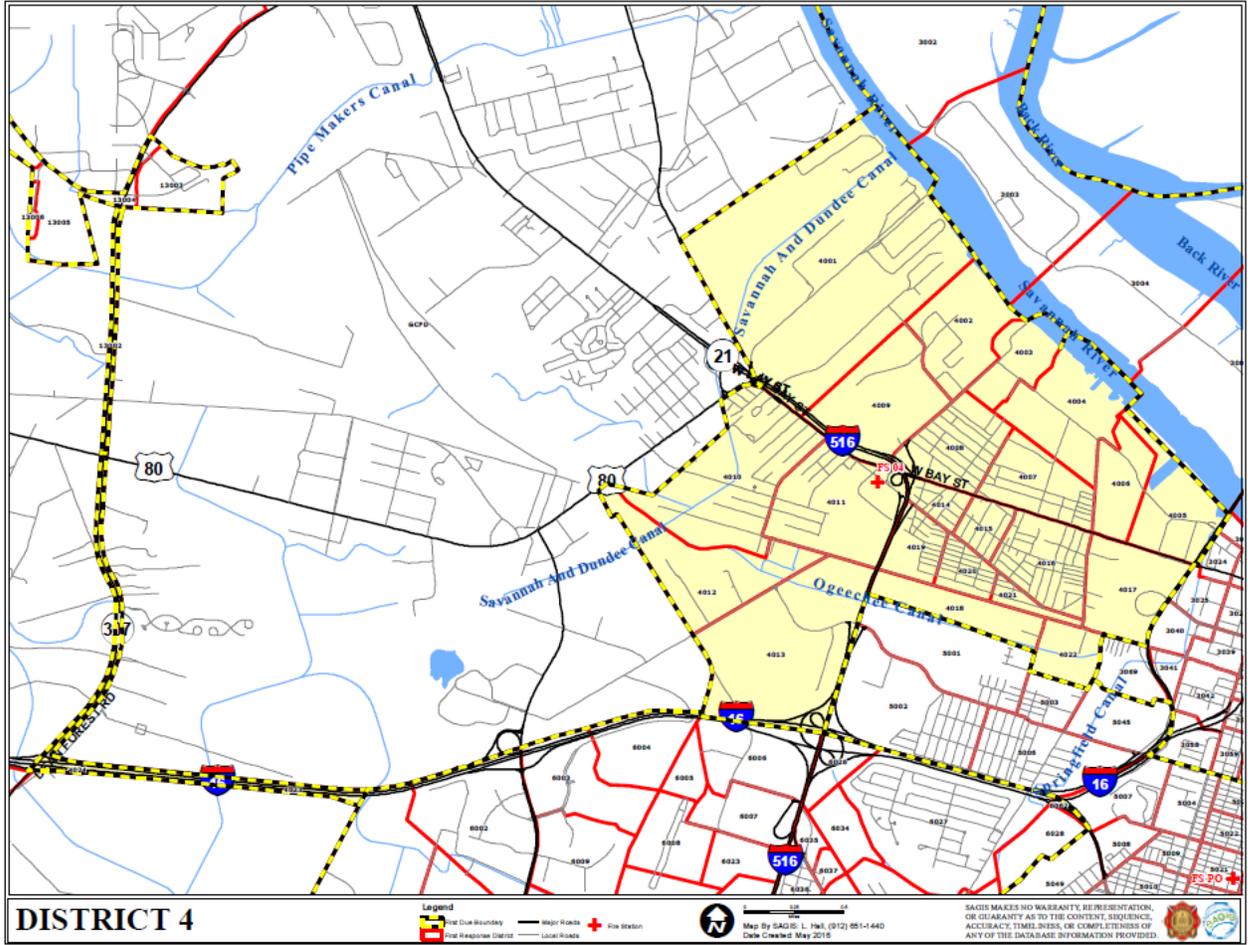
IncidentType	Incident Count	AreaID	IncidentType	Incident Count	AreaID
463	1	13004	746	1	14001
463	1	13010	163	2	14005
463	<u>1</u>	13012	463	2	14006
	3		412	<u>1</u>	14007
				6	

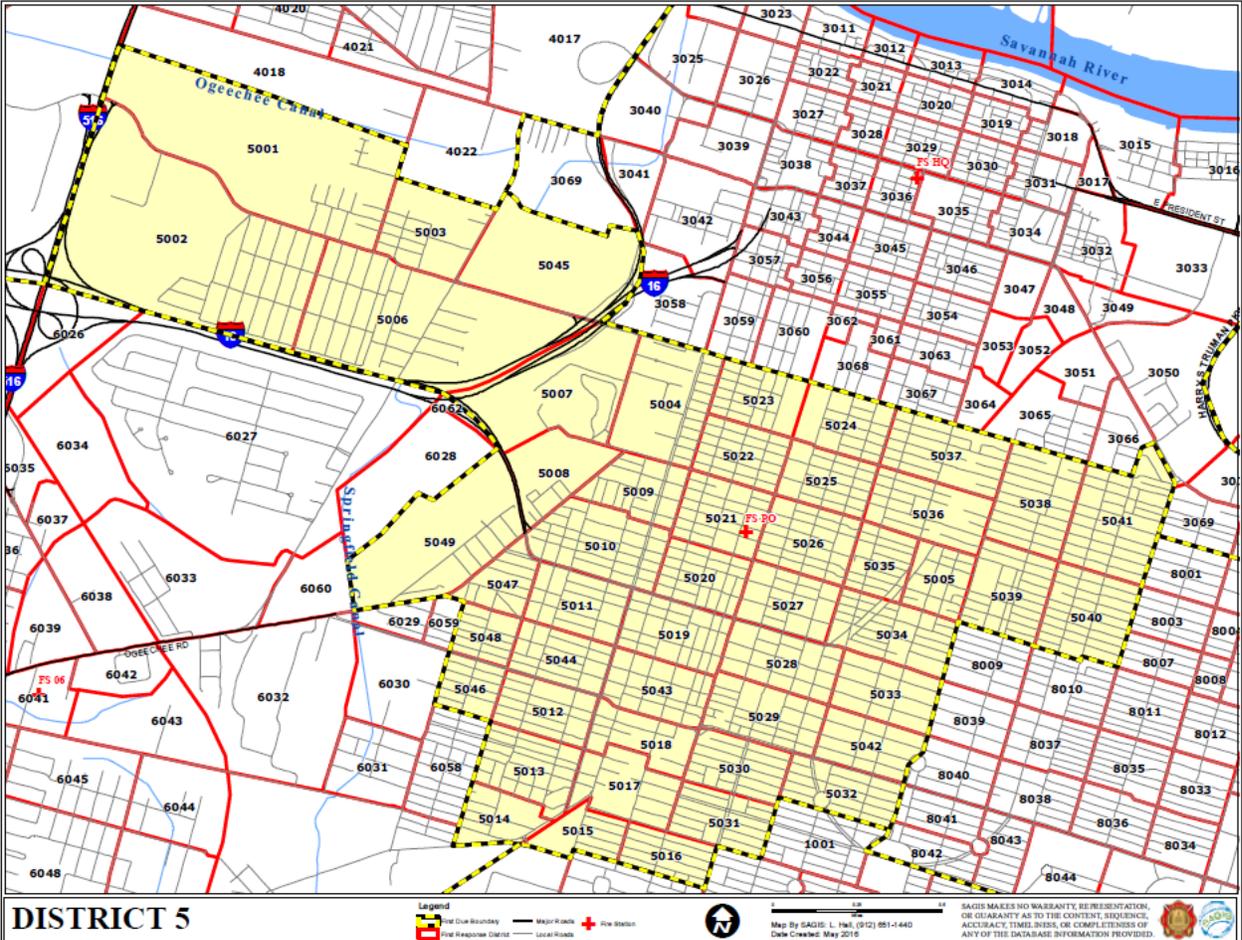
District Maps with Fire Zones

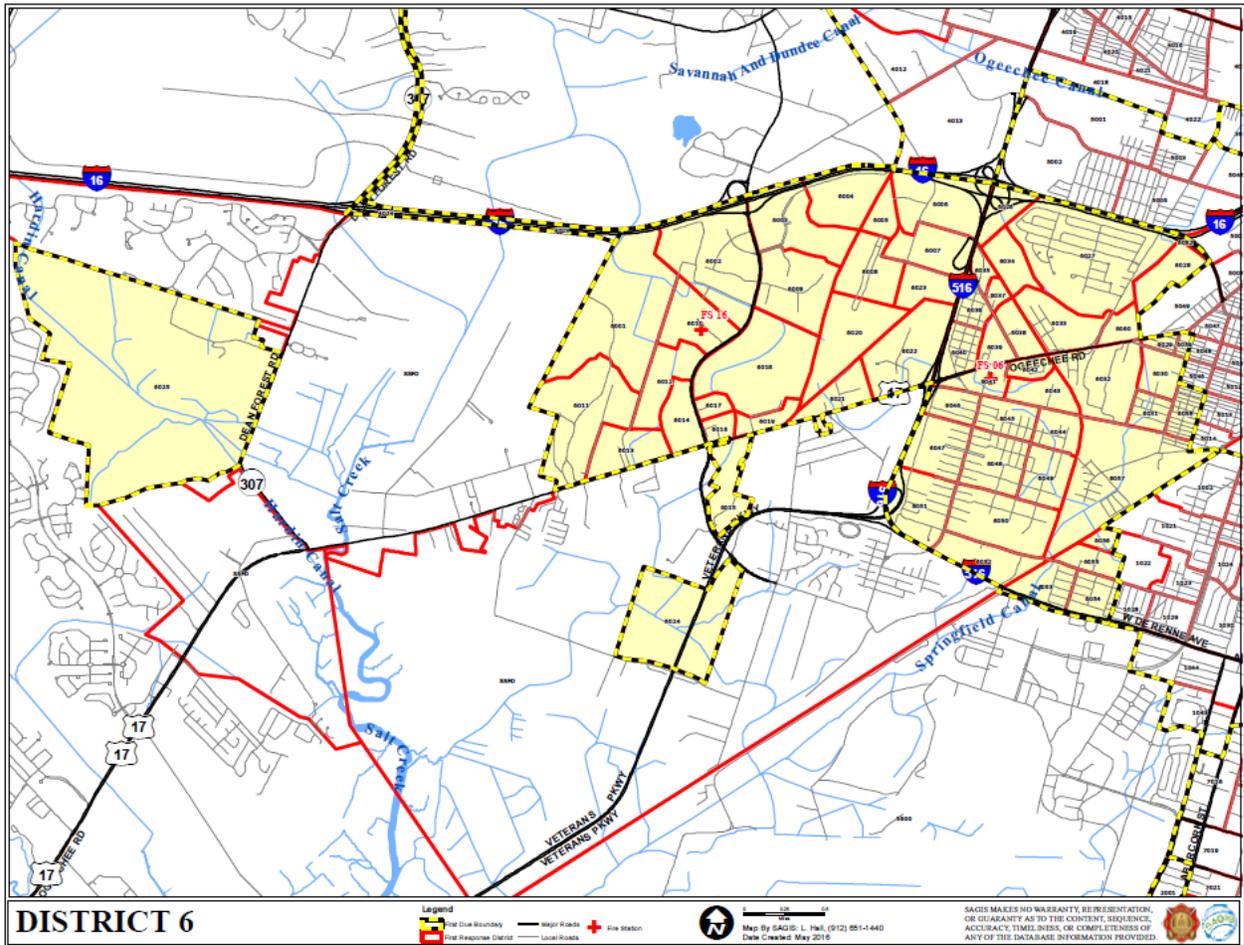


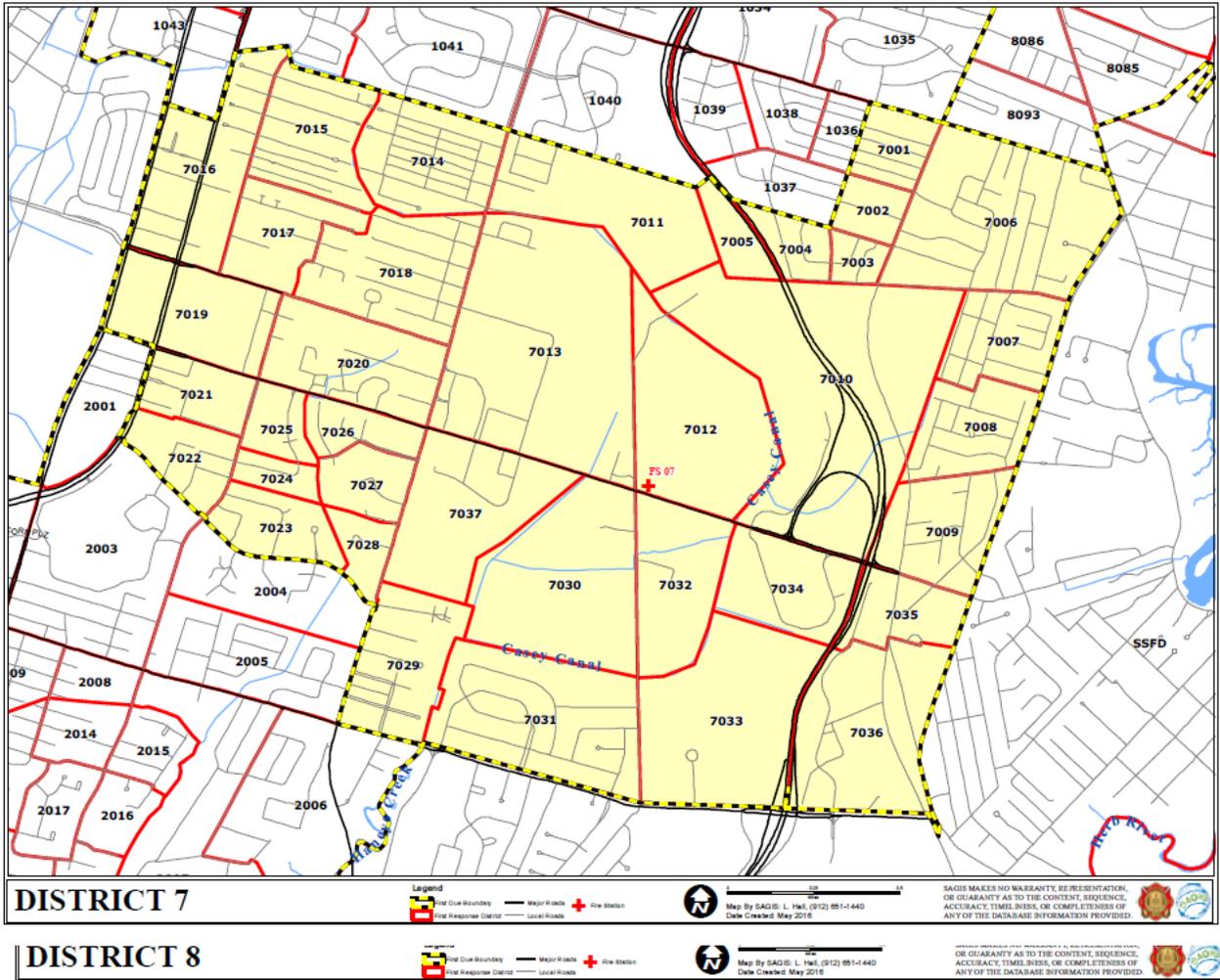


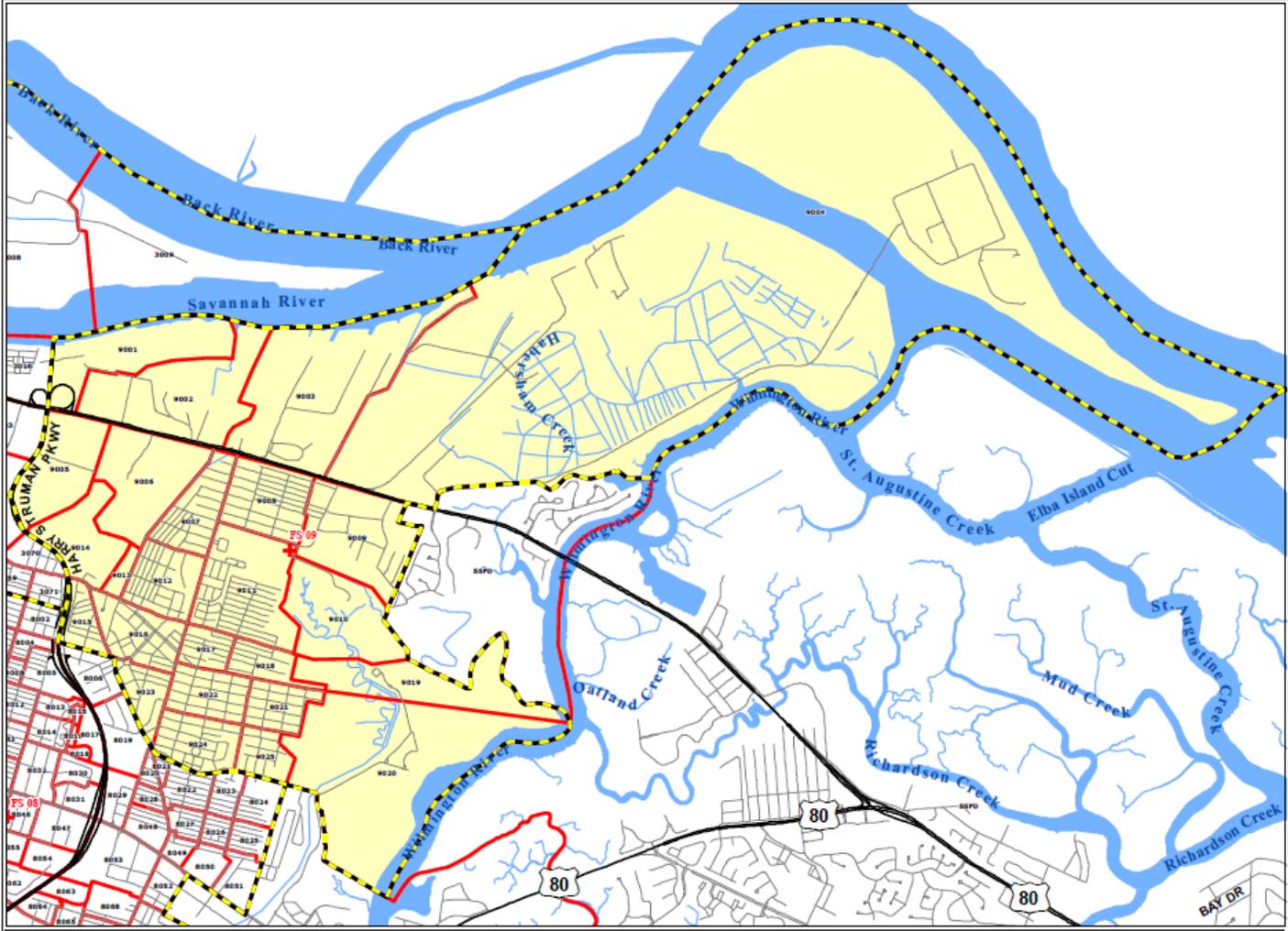










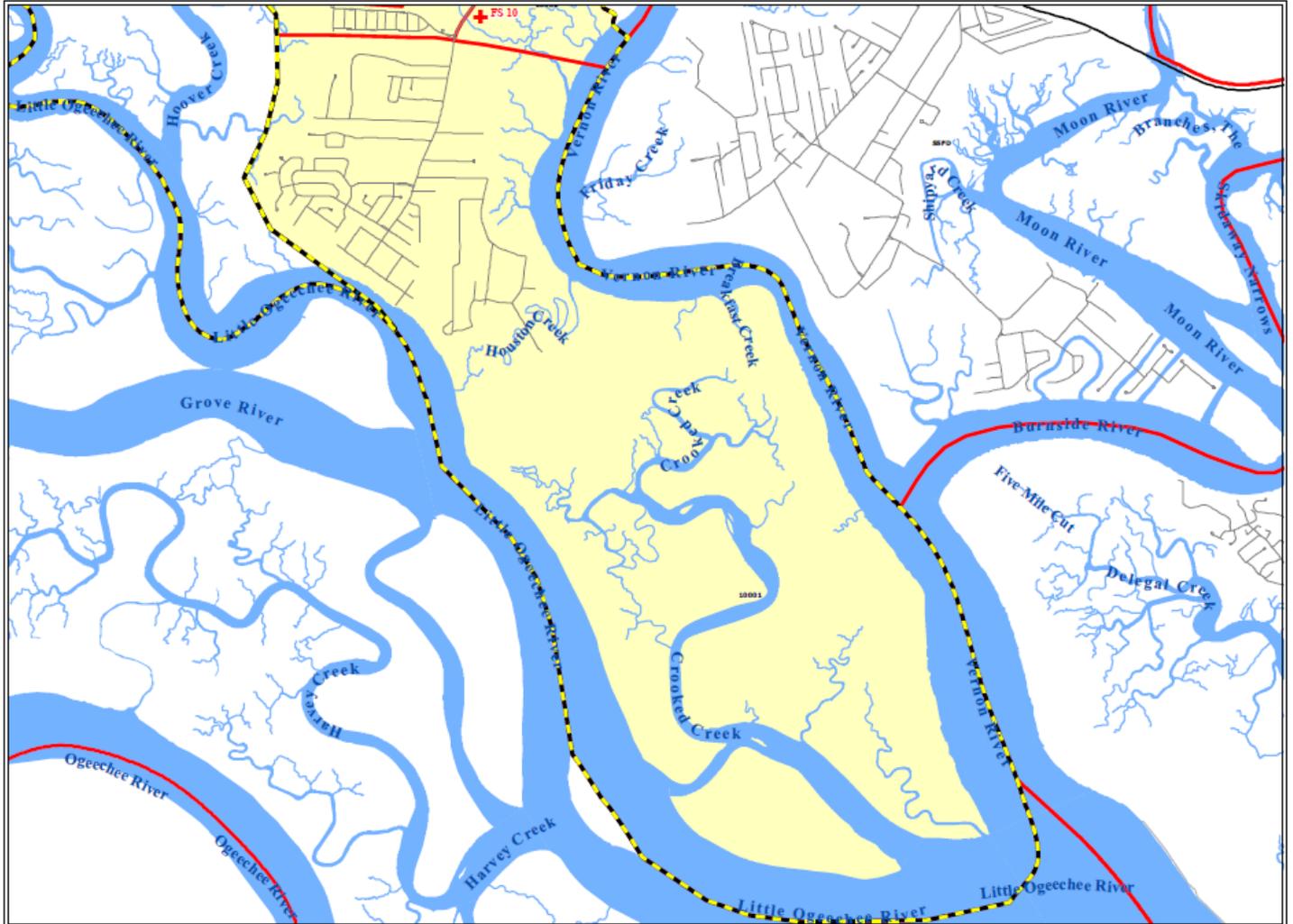


DISTRICT 9

Fire District Boundary	Major Roads	Fire Station
Fire Response District	Local Roads	

Map By SAGIS: L. Hall, (912) 851-1440
Date Created: May 2018

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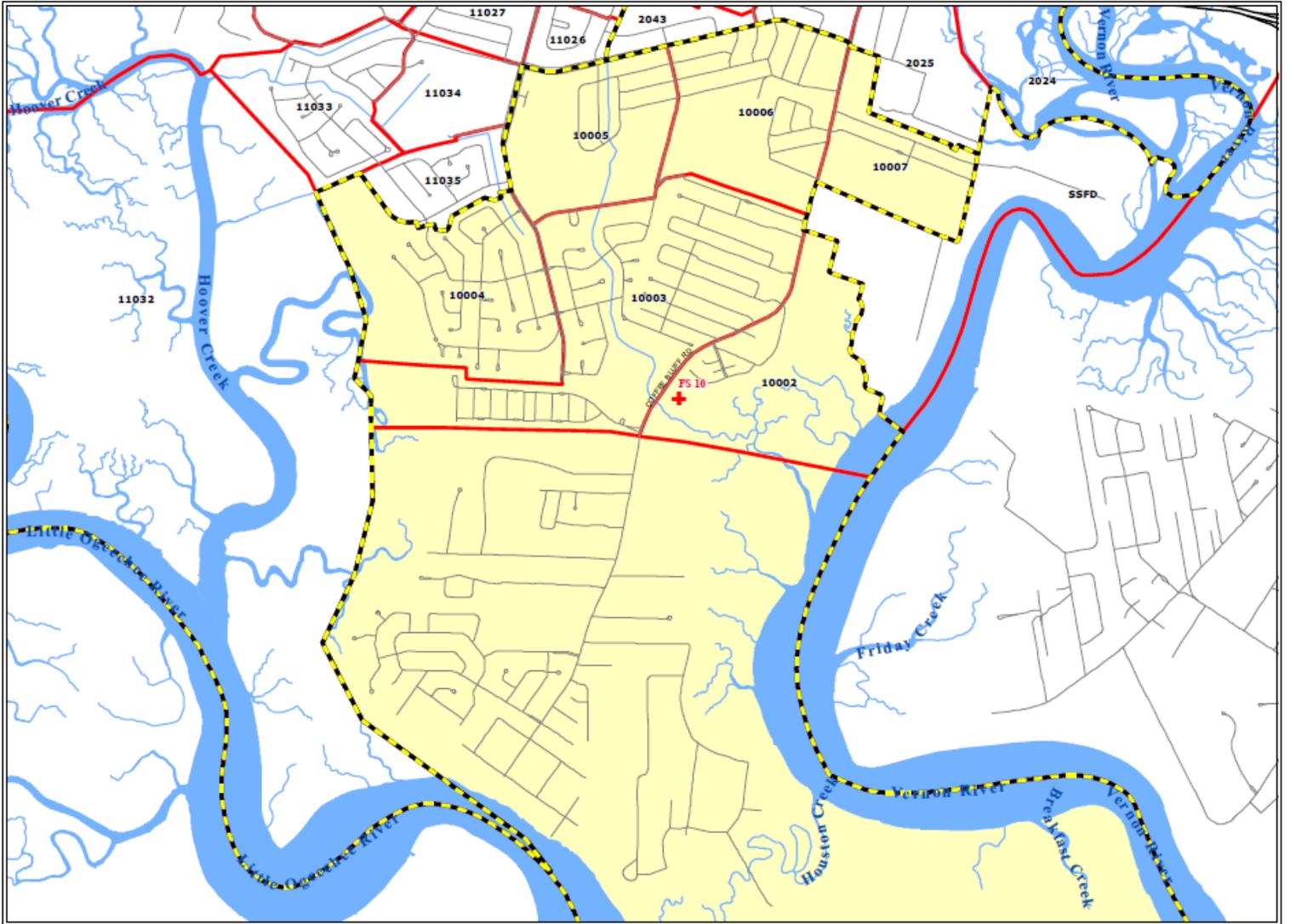
DISTRICT 10 - Map 1 of 2

Legend
 Fire District Boundary
 Major Roads
 Local Roads
+ Fire Station

Map By SAG IS: L. FWL (912) 551-1440
 Date Created: May 2018

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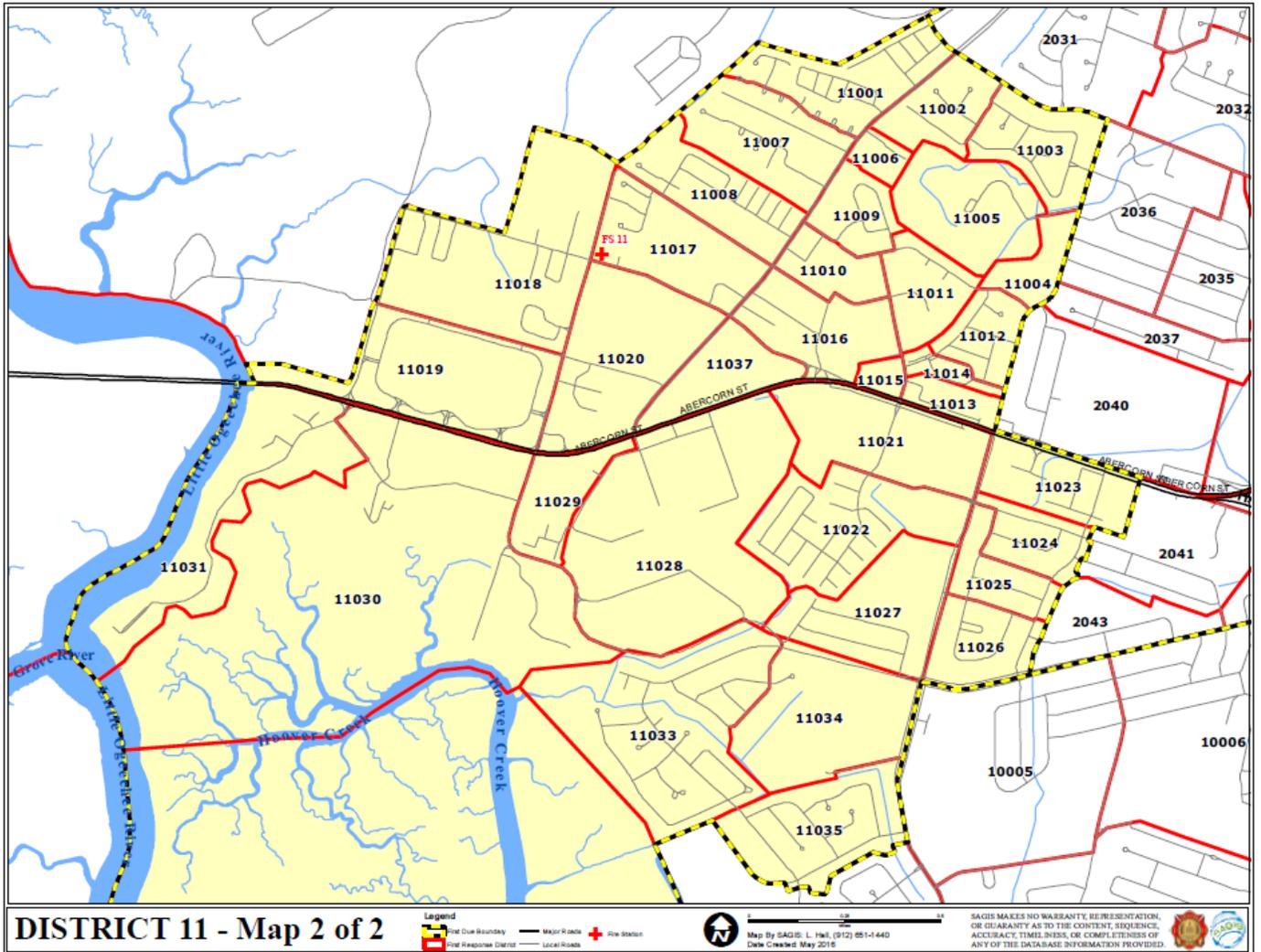
DISTRICT 10 - Map 2 of 2

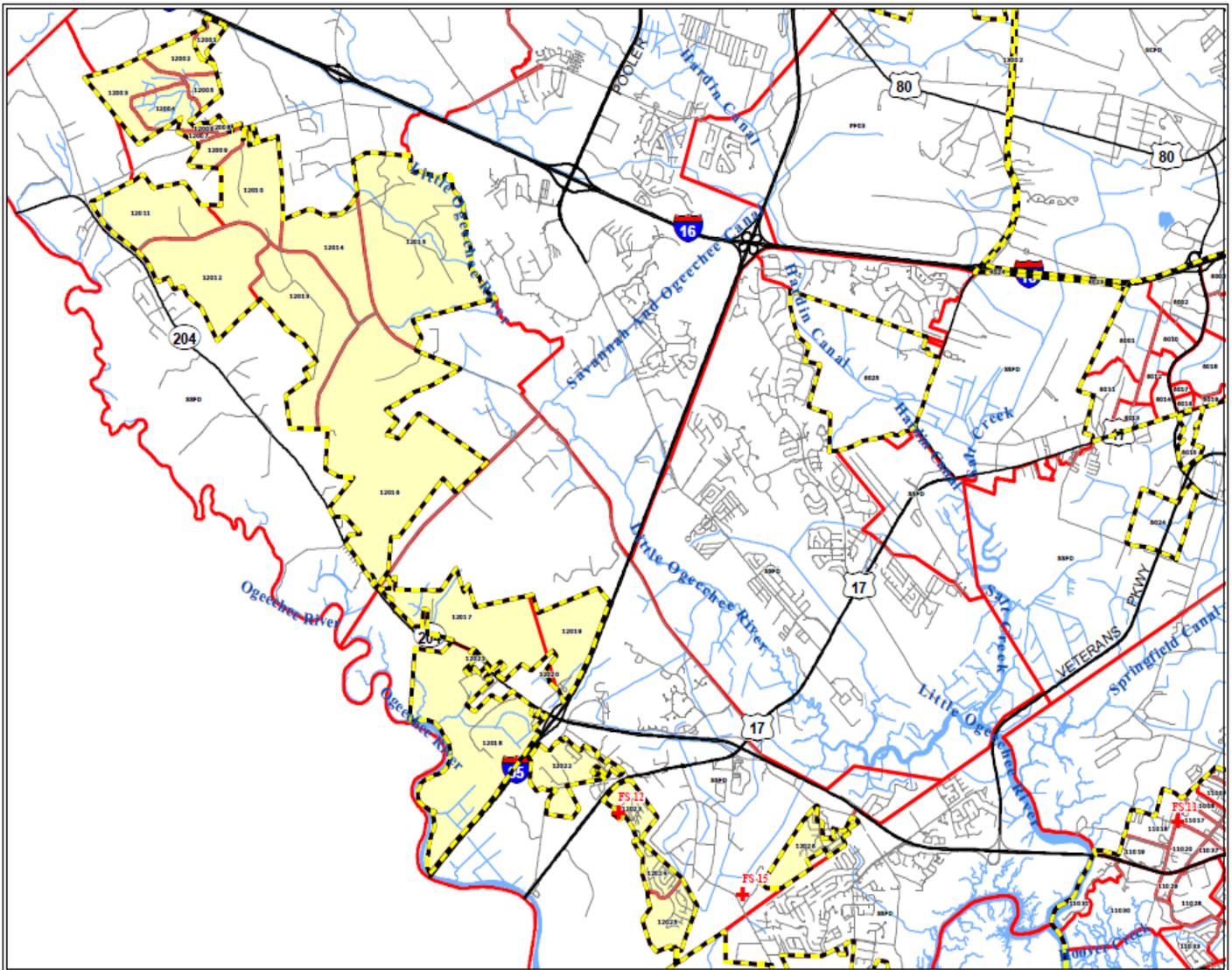
- Legend**
- Fire District Boundary
 - Major Roads
 - Fire Station
 - Fire Response District
 - Local Roads

Map By SAGIS: L. Hall, (912) 951-1440
 Date Created: May 2016

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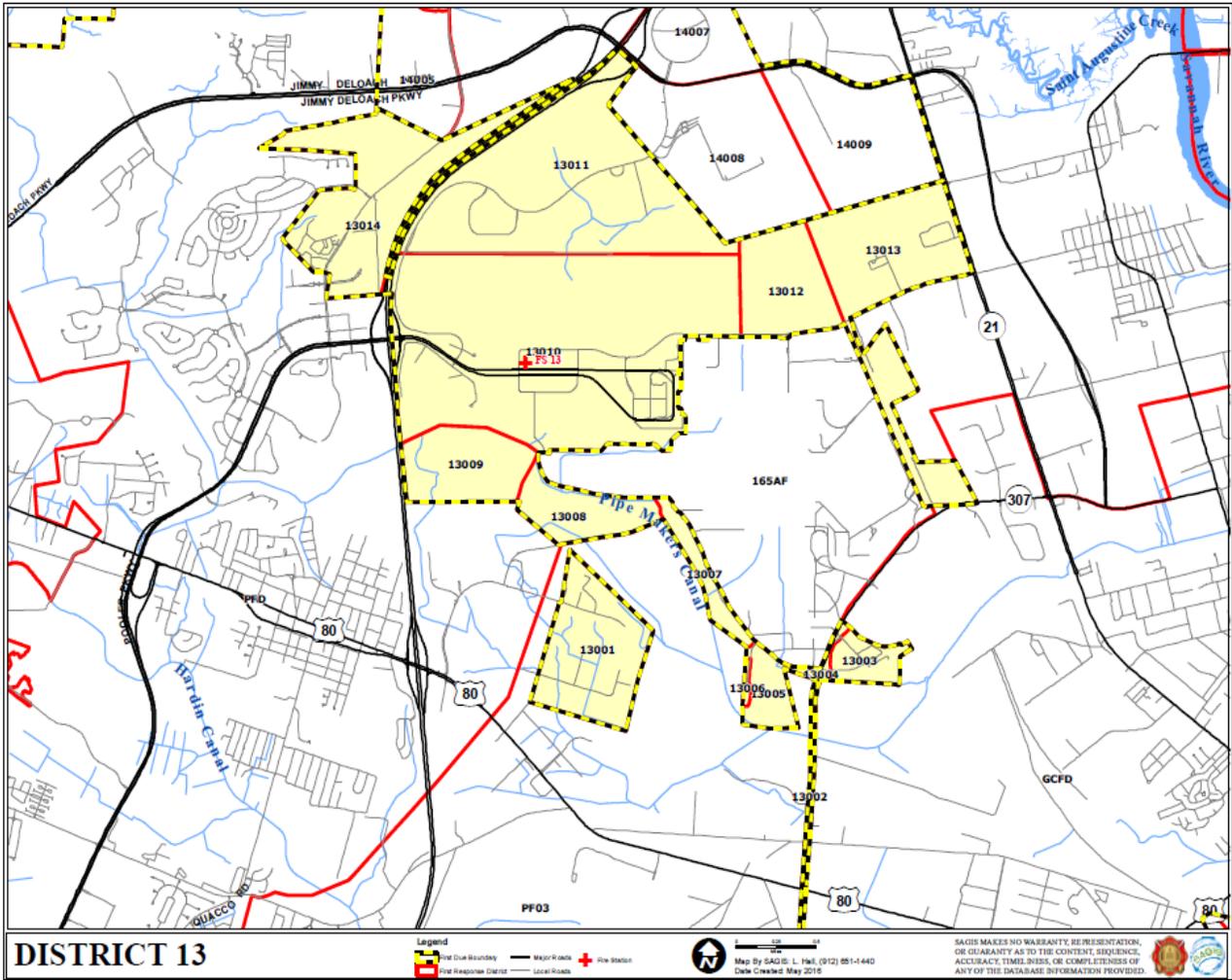
DISTRICT 12

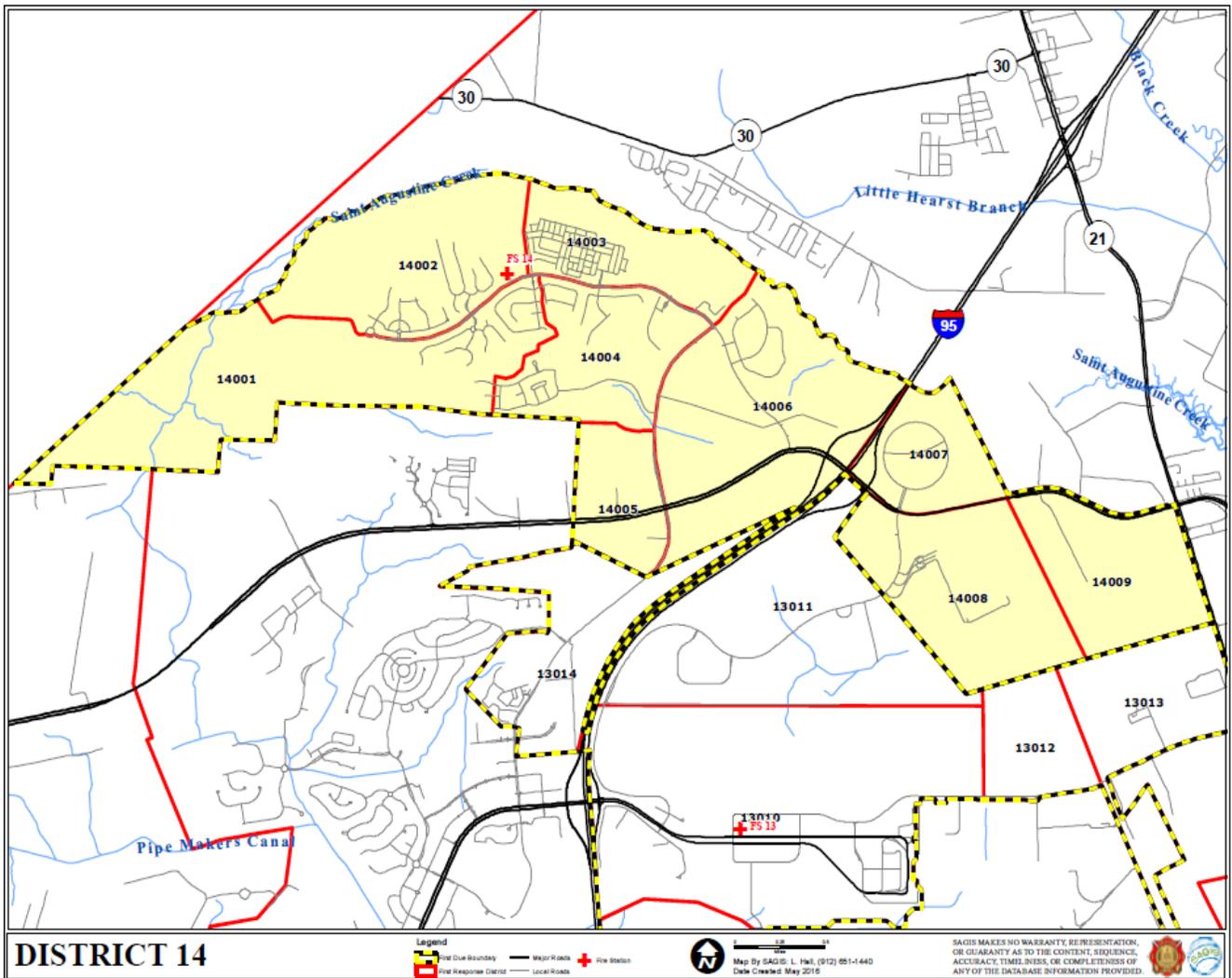
- Legend**
- Fire Response Areas
 - Major Roads
 - + Fire Station
 - Local Roads

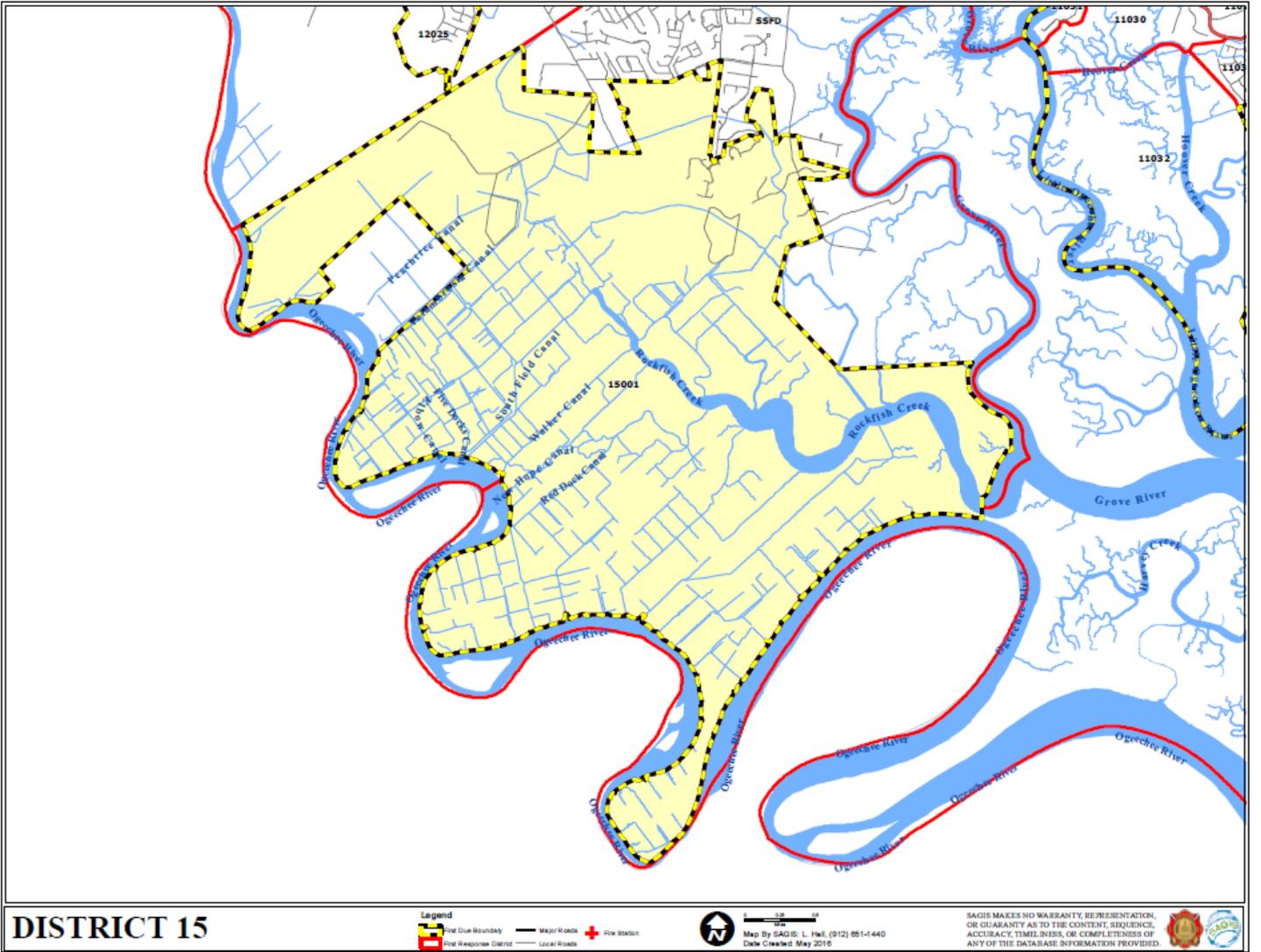
Map By SAGIS: L. Hall, (912) 651-1440
Date Created: May 2016

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Appendix C

Savannah Fire & Emergency Services Survey



Savannah Fire & Emergency Services request your assistance as we address our priorities. Please take a few minutes to complete this Customer Survey. Your help will allow us to better serve the Community.

1. Which of the following best describes you? (Choose all that apply)

- City of Savannah Resident (Taxpayer)
- Business Owner
- Industrial Facility
- Visitor
- Military

2. Please review all the choices listed in each category, and select two (2) from each category that are most important to you.

Firefighter Professional Development	Fire Equipment and Facilities	Emergency Response and Service Delivery	Community Outreach Programs
<ul style="list-style-type: none"> <input type="checkbox"/> Advanced Education <input type="checkbox"/> Advanced Training and Skills <input type="checkbox"/> Courteous <input type="checkbox"/> Trustworthy <input type="checkbox"/> Physically Fit <input type="checkbox"/> Other 	<ul style="list-style-type: none"> <input type="checkbox"/> Technologically advanced <input type="checkbox"/> Cost Efficient <input type="checkbox"/> Accessible/inviting to the public 	<ul style="list-style-type: none"> <input type="checkbox"/> Quick Response to 911 Calls <input type="checkbox"/> Firefighting <input type="checkbox"/> Technical Rescue <input type="checkbox"/> Hazardous Materials Response <input type="checkbox"/> Water Rescue 	<ul style="list-style-type: none"> <input type="checkbox"/> Fire Prevention Inspections <input type="checkbox"/> Public Fire Safety Education <input type="checkbox"/> Smoke Detector Program <input type="checkbox"/> Blood Pressure Checks <input type="checkbox"/> Community Emergency Response Training <input type="checkbox"/> Demographics represent the City's Population

3. How was your interaction with Savannah Fire & Emergency Services? (Select one)

- Extremely Positive
 Positive
 Neutral
 Negative
 Extremely Negative

4. Rate Savannah Fire & Emergency Services

	Excellent	Good	Fair	Poor
Quality of Service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Timeliness of Service	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Professionalism	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. Which Contact Method do you prefer for receiving outreach information

- Email
 Postal mail
 TV / Radio/Newspaper
 Community Canvassing
 Telephone
 City Website
 Organization Presentations
 Community Meetings



“...committed to those we serve”