

Executive Summary

Fire Transition

Gap Analysis and Strategic Planning Initiatives

Chatham County, GA



To Protect and Save



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Center for Public Safety Management

The ICMA [Center for Public Safety Management \(ICMA/CPSM\)](#) was launched by ICMA to provide support to local governments in the areas of police, fire, and Emergency Medical Services.

The Center also represents local governments at the federal level and has been involved in numerous projects with the Department of Justice and the Department of Homeland Security. In 2014 as part of a restructuring at ICMA, the Center for Public Safety Management (CPSM) spun out as a separate company and is now the exclusive provider of public safety technical assistance for ICMA. CPSM provides training and research for the Association's members and represents ICMA in its dealings with the federal government and other public safety professional associations such as CALEA, PERF, IACP, IFCA, IPMA-HR, DOJ, BJA, COPS, NFPA, etc.

We have conducted almost 500 such studies in 46 states and provinces and more than 450 communities ranging in population size 3,300 (Lewes, DE) to 800,000 (Indianapolis, IN).

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CONTENTS

Executive Summary	4
Strategic Initiatives	24
Recommendations	40
Conclusion	45

In this report, CPSM discusses Emergency Medical Services (EMS) in the context of a system of providers who render pre-hospital emergency care to individuals who are ill or injured. In Chatham County EMS is provided as follows:

- Emergency Medical Care First Tier Response: Chatham County Fire Department (unincorporated areas)
- Behavioral Health Unit/Community Paramedicine: Chatham County Fire Department
- EMS Ground Transportation: Chatham Emergency Services



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EXECUTIVE SUMMARY

The Center for Public Safety Management (CPSM) was retained by Chatham County, GA to complete a *Fire Transition Gap Analysis* for the County and the Chatham County Fire Department (CCFD). The purpose of this *Fire Transition Gap Analysis* document is to provide the County with an analysis of key administrative, operational, staffing, infrastructure, equipment, and programs the County is assuming administrative, operational, and fiscal responsibility for as a result of the transition of CES- Chatham Fire to Chatham County Fire Department. Additionally, CPSM has provided the County with five Strategic Initiatives and twenty-six recommendations, which are designed to be used as budgetary and planning guides as the Chatham Fire Department transitions to a County department and service delivery operation.

The key elements in this *Fire Transition Gap Analysis and Strategic Initiatives* document include:

- A community risk assessment identifying the population, building, transportation, environmental, Fire and EMS, and other risks in the community the CCFD serves is exposed to.
- Analysis of the levels of service provided to the areas protected by the CCFD.
- An analysis of the agency's current response capability in terms of staffing, equipment, and response time performance.
- Analysis of how department resources are and may be allocated and deployed to maximize emergency response efficiency and effectiveness.
- Analysis of the baseline and benchmark emergency response performance objectives.
- Analysis of future staffing and resource needs.
- Analysis of response times and workload of CCFD units and stations.
- Analysis of service delivery performance.
- Strategic Initiatives to be used for budgetary and overall department planning.

Our report includes comprehensive operational data and GIS analyses. The data and GIS analyses performed for this project provided technical support to recommendations and deployment strategies based on call demand, call type and station workload, current resource needs, and response travel times.

Throughout our analysis, and more specifically when analyzing the operational deployment of resources, CPSM utilized two national benchmarks: the *Insurance Services Office - Public Protection Classification (ISO-PPC)* rating system, and *NFPA 1710, Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations and Special Operations to the Public by Career Fire Departments*. Both are important national benchmarks for measuring and creating benchmarks and performance standards for fire departments.

- The Insurance Services Office (ISO), a subsidiary of Verisk Analytics is a national, not-for-profit organization that collects and evaluates information from communities across the United States regarding their capabilities to combat building fires. The Verisk hazard mitigation team collects and evaluates information from communities across the United States regarding their capabilities to provide municipal fire protection. This information is analyzed utilizing the Fire Suppression Rating System from which individual section credits and points are tabulated and

a Public Protection Classification for the community is assigned. Classifications range from 1 through 10, with one being the highest rating a community can achieve.¹

- Chatham County unincorporated area, through the Southside Fire Department (as referenced by the ISO) **has achieved a Class 3/3X rating**, which is an achievement the community should be proud of. It is also important to understand that the PPC is not just a fire department classification, but a compilation of community services that include the fire department, the emergency communications systems, and the water supply system. Together, these components are evaluated to determine the community's ability to combat building fires.
- NFPA 1710 outlines the organization and deployment of operations by career, and primarily career fire and rescue organizations.² This standard serves as a benchmark to measure staffing and deployment of resources to certain building types and emergencies. Specific components of NFPA 1710 that are germane to staffing and deployment of resources include the assembling of an Effective Response Force (staffing to perform Critical Tasks on the fireground) for certain building risks, and response times (call processing or dispatch time; turnout time; and travel time to the scene).

Critical tasking for fire and EMS operations is the minimum number of personnel needed to perform the tasks needed to effectively control and mitigate a fire, EMS, or other emergencies. To be effective, critical tasking must assign enough personnel so that all identified functions can be performed simultaneously. The specific number of people required to perform all the critical tasks associated with an identified risk or incident type is referred to as an *Effective Response Force* (ERF).

Chatham County Population and Growth

Chatham County is an Atlantic Ocean coastal county located in the southeastern region of the State of Georgia and is the northern most of the state's coastal counties. Geographically, Chatham County is contiguous with the Georgia counties of Bryan County to the west and southwest, Liberty County to the southwest, and Effingham County to the northwest. Chatham County is also adjacent to Jasper County, South Carolina (separated by the Savannah River).

Chatham County is 632 square miles, of which 433 square miles is land area. The County is bounded northeast by the Savannah River and in the southwest by the Ogeechee River. The southside of Chatham County includes several island areas and marshlands. Several of the island areas are built upon and densely populated. **Unincorporated Chatham County is approximately 196 square miles and represents the fire protection area for Chatham County Fire Department.**

The overall 2020 decennial population for Chatham County was 295,291. The unincorporated population was 92,034. The population of Chatham County grew significantly over the last 40 years, with the largest increase coming between 2000 and 2010, experiencing a 14% increase. Growth slowed slightly between 2010 and 2020 with an 11% increase.

Historically, Chatham County and the city of Savannah have served as the region's largest population center, commercial core, and industrial hub. Because of the growing network of the

1. Verisk's Community Hazard Mitigation Services (isomitigation.com)

2. NFPA 1710 is a nationally recognized standard, but it has not been adopted as a mandatory regulation by the federal government or the State of Georgia. It is a valuable resource for establishing and measuring performance objectives for the City of Sterling Heights but should not be the only determining factor when making local decisions about the town's fire and EMS services.

road transportation network in the County and available and relatively inexpensive land, growth has accelerated away from the denser urban core areas. This trend is projected to continue in the coming decades. By 2040, the population of Chatham County is predicted to be approximately 335,000 residents and the population of the Savannah MSA is predicted to be approximately 500,000. This equates to a population increase of approximately 15.5% in Chatham County over the next 20 years and an increase of approximately 27% in the Savannah MSA.³

CPSM assesses the population and demographics in Chatham County overall pose a moderate risk in totality. While not a high risk, a single call involving a vulnerable population (fire or EMS) poses a higher risk on that particular response. Through pre-fire planning and response district knowledge of residential and other structures housing a vulnerable population as identified above, the CCFD will have the necessary situational awareness and will be better prepared to mitigate the emergency once on the scene of the incident.

Overall, there will be continued growth in unincorporated Chatham County that Chatham Fire should continuously plan for. Population, demographic, and growth impacts must be included in any strategic master planning CCFD conducts in the near, mid, and long terms. Increases in development will increase call demand and will impact the deployment analysis in future ISO-PPC community ratings, and the ability of the CCFD to meet deployment benchmarks and community expectations. **Additionally, as the City of Savannah continues to annex the unincorporated areas, this may create duplicity in fire protection districts between Savannah and Chatham County resources beyond what occurs currently. This is addressed in this report.**

Chatham County Fire Department

The current CCFD is the former fire protection component of Chatham Emergency Services (CES)-Fire Division, a community-based not for profit Fire and EMS agency. CCFD is a primarily career fire department that employs full-time administrative services, training, infrastructure support staff, and operational officers and firefighters.

The CES – Chatham Fire component provided fire protection services to the unincorporated areas of Chatham County. CES-Chatham Fire was an evolution of the former Southside Fire Department. Southside Fire, which began as a volunteer fire department, was incorporated in 1961, and was originally created when five separate volunteer fire departments merged to better service unincorporated Chatham County. CES-Chatham Fire has been a subscription service fire department since its early beginnings.

On July 1, 2024, CES-Chatham Fire transitioned to a full Chatham County agency and became Chatham County Fire Department. Significant events that led to this transition include:

- 2020-2021: CES advises Chatham County government they have a \$3-million budget deficit and that this may create challenges in their ability to effectively provide varied public-safety functions countywide. This is due to 25 percent of property owners in the coverage area who are declining to pay the fire-service subscription fee. CES asked Chatham County for assistance.
- 2022: Chatham County Commission repeals a fire tax (adopted December 2021) and adopts a fire services fee ordinance (May 13, 2022). The fire services fee ordinance establishes a stable revenue source for CES-Chatham Fire (and the current CCFD).

3. U.S. Census Bureau, American Community Survey.

- 2023: Chatham County Commission approves a resolution to authorize Chatham County Staff to develop and implement a Chatham County Government Fire Department and to develop and implement a transition plan for fire services from Chatham Emergency Services, INC to Chatham County, GA.
- June 2024: Chatham County Commission approves three agreements with CES that includes: Termination of Services (terminates fire protection services between Chatham Emergency Services and Chatham County); Lease Agreement for Public Purposes (14-Fire Stations owned by Chatham Emergency Services and leased to Chatham County); Purchase Agreement for Public Purposes (Sale of certain fire protection assets and equipment from Chatham Emergency Services to Chatham County).

Since 2018, Chatham County has successfully created three County public safety agencies: Chatham County Police Department (2018); Chatham E911 Center (2018); and Chatham County Fire Department (2024).

As noted above, the CCFD responds with fire suppression apparatus and crews from fourteen stations that serve fire management zones throughout the unincorporated areas of Chatham County. As the first out staffing is a minimum of two on each engine, squad, and ladder, the CCFD relies heavily on units from multiple CCFD stations to collect the appropriate *Effective Response Force* for single family, multi-family, commercial, and other building type fire and fire related responses requiring increased staffing to mitigate the incident. **There is currently no automatic aid, or automatically shared resources from contiguous municipalities.**

Operationally, the CCFD deploys eleven Engine Companies, three Squad Companies, and four Truck Companies (aerial ladders). There is one operational District Chief on duty for each of the 24-hour shifts. The operational District Chief serves as the County-Wide on-duty operational command officer providing day-to-day operational supervision to each station and personnel, as well as serving as the incident commander on assigned incident responses.

Additionally, there is one Safety Captain on duty each operational shift, who is responsible for managing the department's health, safety, and wellness program, and responds to incidents and assumes the role of Incident Safety Officer. As the health and safety of firefighting is at the forefront of the national fire service, having an on-duty shift safety officer is a **national best practice**.

CCFD Max/Min Daily Staffing				
	Max		Min	
Engines (11):	2 Staff	(22)	2 Staff	(22)
Trucks (4):	3 Staff	(12)	2 Staff	(8)
Squads (3):	2 Staff	(6)	2 Staff	(6)
District Chief:	1 Staff	(1)	1 Staff	(1)
Safety Capt.:	1 Staff	(1)	1 Staff	(1)
Total:	42 Max Staff		38 Min Staff	

The CCFD operational deployment model includes normal daily staffing of two personnel assigned to each fire suppression Engine and Squad Company, three assigned to each Truck Company, and one assigned to the District Chief and Safety Captain units, which totals forty-two personnel and represents the maximum daily staffing model.

The minimum daily staffing is thirty-eight, which allows four daily staffing positions to be used to cover scheduled leave (four-line positions are floated to cover leave vacancies to minimize overtime).

Overall, the CCFD is budgeted for 152 positions of which 146 are directly assigned to

the CCFD. Six additional positions are assigned to other departments but provide direct services to the CCFD.

The CCFD also deploys four water tender apparatus, which carry large volumes of water to fires where there are no fire hydrants. The CCFD cross staffs these apparatus with engine or squad crews. When the tender apparatus is dispatched, the engine crew will place the engine out of service and respond the tender.

The current operational District Chief's span of control is fourteen stations, which includes eleven Engine Companies, four Truck companies, and three Squad Companies, spread out over 196 square miles. Typically, fire departments staff with one shift command officer (mid-level Chief officer) for every five to seven response units to align closer with the Federal Emergency Management Agency's incident command system span of control of 1:5 (one supervisor to five individuals—in this case company officers and stations).

CPSM assesses the single District Chief/Shift Commander position operates beyond recommended span-of-control best practices. As such, the CCFD should plan for additional operational command officers (Battalion Chief level) and segregate the County, at a minimum, into east and west districts with the District Chief serving as the overall shift commander.

Fire stations are decentralized from the management and command staff, which are typically located together at fire administration. The role of a company officer ensures a first-line supervisor at each station that provides supervision of and holds assigned crew members accountable to established County and CCFD policies and guidelines; ensures the efficacy of CCFD training ensuring it translates to incident scene effectiveness; ensures that station, fleet, and equipment are maintained in a readiness state for response; manages and supervises all company assignments and activities to include training, pre-plan development, and target hazard reviews; and facilitates company communications to name a few of the more critical company officer functions.

CPSM assesses the CCFD does not have adequate company level first - line supervisory staff in place. As such, the CCFD should develop a staffing plan for additional company officers at the Lieutenant level for assignment to Engine Companies.

The CCFD also offers a Behavioral Health Unit (BHU), which is led by the Director of Fire-Med Services and staffed with two Community Paramedics. A Corporal from the Chatham Police Department also assists in the program. The goal of this program is to assist individuals who may be frequent utilizers of the 911 system, and /or assist individuals navigate the health and social programs that may be available, so that they can gain access to appropriate healthcare and other available social needs care they may not otherwise be able to accomplish on their own.

This program is a best practice and aligns with the Board adopted Chatham Community Blueprint visions: Health and Quality of Life.

The demand for the Behavioral Health Unit program should be evaluated on an annual basis as additional resources may be required. There is also the potential the program may need extension of the hours of service. Any additional staffing resources should be included in strategic planning sessions.

CCFD Volunteer Component

The CCFD currently includes a volunteer firefighter component. The current CCFD volunteer component includes eighteen volunteer members (as of this report) who have various levels of basic training and certifications. The volunteer component includes (not all positions may be filled) Volunteer Chief Officers and Volunteer Firefighters. All firefighters in Georgia, career, or

volunteer, are required to meet the same basic training in accordance with the Georgia Firefighter Standards and Training Council and the and as outlined in the Training and Education section of this report.

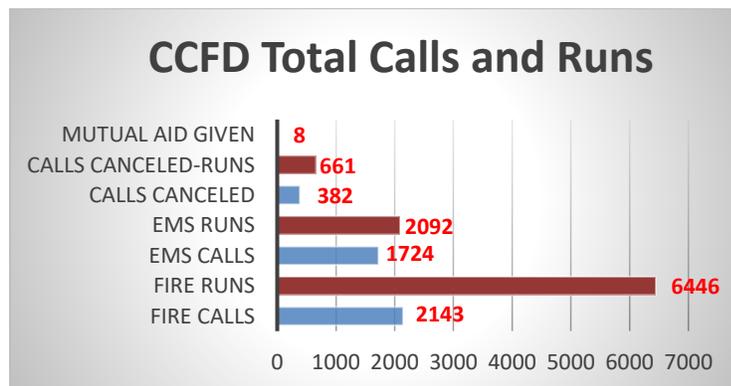
Volunteerism as a whole across the United States is in decline. This includes not-for profit volunteering (churches, schools, food banks etc.), some service groups, and volunteer Fire and EMS. A January 2023 report released by the U.S. Census Bureau reported that a smaller share of the U.S. population participates in volunteer opportunities than the previous two decades.

According to the report, the national annual volunteer hours took a sharp dip from fifty-two hours in 2002 to twenty-six hours annually in pre-pandemic 2019, or a 50-percent reduction in volunteer hours.⁴

- In the current day CCFD, volunteer members have a purpose. The purpose today is to augment career staffing on fire apparatus. To be able to meet this purpose, volunteer firefighters:
- Have to meet all entry and minimum training requirements according to the *Official Code of Georgia Annotated and as established by the CCFD.*
- Should participate at a CCFD station with CCFD career staff and respond to incidents on CCFD fire apparatus. **CPSM does not recommend the continuance of personal vehicle response any longer due to the potential liability a motor vehicle accident may create for the County.**
- Must complete all CCFD firefighter requirements such as entry and annualized medical physicals; annualized SCBA mask fit testing; meet annualized physical requirements as established by the CCFD; meet annualized training requirements as established; meet any other entry and annualized requirements as established for firefighters and officers of the CCFD.

CCFD Workload

The following information outlines CCFD historical Fire and EMS service incident analysis for the period October 1, 2022, to September 30, 2023. This information includes calls (a single call by Fire or EMS type) and runs (a single call that involves more than one unit response-or total workload).



- CCFD responded to an average of 11.7 calls, including 1.0 canceled calls, per day.
 - CCFD responded on 2,092 EMS Runs (multiple unit responses).
 - CCFD responded 6,446 Fire Runs (multiple unit responses).
- Overall, CCFR responded to 4,257 Calls and 9,230 Runs for the data analysis period:
October 1, 2022 – September 30, 2023.

4. Volunteering in America: New U.S. Census Bureau, AmeriCorps Research, January 2023.

Community Risk Reduction

Community Risk Reduction activities are important undertakings of a modern-day fire department. A comprehensive fire protection system in every jurisdiction should include, at a minimum, the key functions of fire prevention, code enforcement, inspections, and public education. Preventing fires before they occur, and limiting the impact of those that do, should be the priority objectives of every fire department.

Currently, the CCFD is not involved in a formal fire prevention inspection-code enforcement program. It is reported to CPSM by the CCFD and Chatham County Building Safety and Regulatory office that there are at least 1,800 buildings or occupancies in buildings that require fire prevention inspections. These include high hazards, occupancies with vulnerable population, residential buildings, places of public assembly, and all other occupancy types identified in the *Official Code of Georgia Annotated* and *Rules and Regulations of the State of Georgia*.

There are some fire prevention activities currently being managed by the Chatham County Building Official's Office. These include:

- New Construction - Plans Review related to fire and life safety, which includes fire review final inspection.
- Short Term Rental Inspections.
- New Business License Occupancy Tax Certificate Inspections.
- Inspections related to complaints.
- Inspections with the State Fire Marshal's Office when requested.

CPSM assess that Chatham County, based on the 2020 decennial census of 295,291 and pursuant to § 25-2-4 and § 25-2-12(a)(1) of the *Official Code of Georgia Annotated*, is authorized to enforce the state minimum fire safety standards on all buildings and structures except one-family and two-family dwellings and those buildings and structures listed in Code Section 25-2-13. CPSM further assesses Chatham County should continue to conduct fire investigations pursuant to § 25-2-12(a)(6), just as the former Chatham Emergency Services-Fire Division was prior to July 1, 2024. The creation of a Fire Marshal's Office should be included in any near-term strategic planning with a focus on enforcing the state minimum fire safety standards on all buildings and structures except one-family and two-family dwellings and those buildings and structures listed in State Code Section 25-2-13.

Training and Education

Training and educating the Fire and EMS workforce is one of the most important functions that a fire department should plan for and should be performing on a regular basis. Education and training programs help to create the character and culture of a Fire and EMS service organization. Agencies that place a real emphasis on their training tend to be more proficient in carrying out the successful mitigation of emergency and non-emergency calls events and calls for service. The prioritization of training fosters a culture of readiness, an image of professionalism, and instills pride in the organization.

Training in the CCFD is managed by the Division Chief of Training. Training and education programs in the CCFD include career and volunteer recruit and incumbent training programs designed to meet the minimum requirements of the Georgia Fire Standards and Training Council.

CPSM assesses the CCFD meets all mandatory Fire and EMS training to include Georgia Fire Standards and Training Council standards, Georgia Department of Public Health, and the Insurance Services Office Fire Suppression Rating Schedule requirements. CPSM further assesses the CCFD training programs and training program management for recruit and incumbent personnel is well organized and delivered to high standards. This includes digital, hands-on practical training, and task book standards for continuing education.

The training center complex is well maintained and well-managed. All training props and buildings are required for contemporary fire, EMS, and technical services practical training, to include multi-company training drills. **As department staff and programs increase there may be a need for additional training instructor staff.**

Facilities

CCFD has fourteen facilities that they use for front line response. Each building has issues and challenges due to age or original purpose. All facilities (with the exception of Station 13 which is leased through a third party) are owned by Southside Communities Fire Protection, INC. d/b/a Chatham Emergency Services and leased to the County for use as fire stations as a public purpose. Terms of the lease for each facility are *five (5) one-year terms that will automatically renew for an additional five (5) one-year lease term, or for as long as the County remains as the designated fire service provider for the areas of unincorporated Chatham County and needs the buildings.*⁵

Pursuant to the facility lease, Chatham County is responsible for all repairs, replacements, and maintenance of the leased real property (interior and exterior). Alterations and improvements must have written consent from Chatham Emergency Services. Additionally, Stations 1, 3, 8, and 12 will continue to share space with Chatham Emergency Services EMS division.

CPSM conducted an onsite review of each of the fourteen stations in April 2024 and reviewed the 2023 Facility Report conducted by CCFD staff. Facility visits included a walk-around of each facility with a focus on living space, safety features such as CO capture systems, decon areas, separation from living areas and the apparatus bays, and any visible issues. **This was not an engineering assessment of mechanical systems or building construction.**

Overall, the County is leasing aging fire facilities, which will require strategic and fiscal planning regarding needed and on-going renovations (interior and exterior) and maintenance as described in this report, and the potential relocation, movement of deployable assets, and/or new construction of fire facilities. Additionally, many facilities lack contemporary fire facility health and safety components such as vehicle CO capture systems, lack good separation from the apparatus bays to the living areas, and decon areas or separate decon rooms for equipment and personnel.

Fleet

Regarding the CCFD fleet, CPSM identified there is no consistency in fire apparatus manufacturers, and to some degree, fire pumps, motors, drivetrains, and chassis components. An additional point, which is currently being corrected, is that prior to 2020 CES-Fire was purchasing used apparatus in an effort to reduce costs. While admirable, CES-Fire was purchasing fire apparatus at a point in the vehicle's life cycle where it was more than halfway

5. Lease Agreement for Public Purposes (Fire stations and Attached Equipment) between Chatham County, GA and Southside Communities Fire Protection, INC. d/b/a Chatham Emergency Services.

through its service life. The current CCFD is building consistency into their current fleet procurement plan.

Overall, the CCFD has twenty-two heavy engine apparatus of which nineteen are in service (fourteen frontline and five reserve). Three of the frontline engines are Squads or rescue engines.

There are three engine apparatus that are out of service. Two are inoperative and based on their age or condition, it may not be cost efficient to repair. A third was involved in an accident and remains out of service (Former Engine 312).

The CCFD has four aerial ladder apparatus (trucks) that are used as front-line response vehicles. CCFD has two reserve aerials available. These two reserve apparatus are 18 and 23 years old. As the new aerial ladder apparatus arrives (three new aerial apparatus are on order), the CCFD will cycle out two aerial apparatuses based on recommendations from the fleet coordinator.

The CCFD has four apparatus that are considered Tenders. These CCFD apparatus carry from 3000 to 3,500 gallons of water and are used to transport water sources in unincorporated areas where there are no or limited fire hydrants. The vehicles range from 16 years old to 22 years old.

The aggregate fleet of the fourteen frontline pumpers, four tenders, and the four frontline aerials offers the CCFD a diverse complement of fire apparatus. The engines carry a diverse equipment cache for firefighting and vehicle/technical rescue, and are of varying sizes, with varying pump capacities, hose complements, and water tanks. This diversity is important and serves the CCFD well considering the varying building risks, street sizes, building setbacks, longer driveways to some structures, and areas where fire hydrants are of a considerable distance from the fire or are absent.

Overall, the fleet is maintained in-house and managed by the CCFD Fleet Coordinator, who does an outstanding job keeping Fire and EMS fleet in-service. This includes apparatus-specific work and annual preventive maintenance. There are times when a private vendor that specializes in heavy fire apparatus may be used.

CPSM has provided a recommendation and strategic initiative specific to fleet replacement that includes planning objectives focused on following the NFPA 1900 standard for heavy engines and aerial ladder fire apparatus fleet replacement as well as the grading point system the CCFD has implemented.

Self-Contained Breathing Apparatus

Self-contained breathing apparatus (SCBA) is an open-circuit respiratory device that allows trained firefighters to enter atmospheres that are immediately dangerous to life and health (IDLH), breathe atmospheric air containing 21% oxygen, and perform the critical tasks necessary to mitigate emergencies. The SCBA device is the most important piece of equipment firefighters will take into an IDLH atmosphere. Therefore, this equipment should be appropriately cared for and maintained and kept up to date.

Currently, CCFD utilizes SCBA units and air cylinders manufactured by *Avon Protection* (formerly ISI). Specific models include the Deltair model (101 units) and the Viking Z Seven model (37 units). The oldest units are nearing 7 years old.

CPSM was advised by CCFD that Avon Products is no longer supporting the Deltair and Viking Z 7 models. As such, these units (mask, harness, and regulator components) will eventually have to be cycled out as they will no longer be able to be serviced. This should occur in the near term to avoid issues associated with non-supported equipment or components.

Breathing air compressors utilized to fill SCBA cylinders are located at Station 2, Station 3, and Station 14. All fixed compressors, however, are over 20 years old. CPSM was advised these compressors are not 100% reliable. It is recommended these units comply with NFPA 1989: *Standard on Breathing Air Quality for Emergency Services Respiratory Protection*, 2019 edition.

CPSM has provided recommendations specific to CCFD SCBA units and breathing air compressors in leased fire facilities to ensure CCFD staff maintains a high degree of safety for firefighting staff.

Mutual and Automatic Aid

Automatic aid is a system whereby fire, rescue, and EMS units respond automatically to another community through agreement based on proximity to the incident. In an automatic aid scenario, resources from neighboring jurisdictions are built into run cards in the home jurisdiction for again, an automatic response; this aid is designed to supplement and bolster the Effective Response Force of the home jurisdiction and provide a faster response of EMS ground transport units.

Mutual aid is a system whereby surrounding communities provide fire, rescue, and EMS resources to another community through agreement and specific request from the jurisdiction in need of resources (not automatically but case by case).

CES-Fire participated in automatic and mutual aid with contiguous and surrounding municipalities. As the CES-Fire mutual and automatic aid agreements did not transfer to the County and CCFD on July 1, 2024, CCFD has drafted reciprocal automatic and mutual aid agreements for fire protection and mitigation resources with the jurisdictions the former CES-Fire was signatory with. ***There were and currently are no true automatic aid agreements between the cities and the County to regularly share resources automatically, particularly on building fire and other multi-unit responses on the first alarm assignment of units.***

Overall, CCFD participates in very little automatic or mutual aid in a County that has eight municipal fire departments, and one additional volunteer fire department (Isle of Hope). In fact, during the one-year data analysis period, the CCFD provided mutual aid just eight times.

Additionally, one automatic aid agreement with the City of Savannah was never operationalized consistently after the signing of the agreement (agreement specifically mentions the Savannah Fire Department will cover first in fire response to the Vernonburg area and CES-Fire would assist Savannah Fire with response to the New Hampstead area).

There are several advantages to engaging surrounding jurisdictions in automatic aid. First, it can get the closest emergency units to the call for service faster as auto-aid can be based on the closest location to the request for service regardless of the jurisdiction. This is a force multiplier (supplemental response) as neighboring jurisdictions respond to multi-unit incident responses to the home jurisdiction and assist in bolstering the Effective Response Force (ERF) for the completion of critical fireground and EMS tasks.

Regardless of the reasons there is limited automatic aid and sharing of resources in Chatham County, the upshots to automatic aid outweigh the down shots. In fact, the down shots of not engaging automatic aid, when evaluated, outweigh the best interests of the community as a whole, as the potential for delayed response times, inefficient use of resources, inconsistent service levels, strained interdepartmental relationships, and a hinderance to further regional fire department planning and training have the potential to negatively impact any community in the County.

CPSM has provided recommendations and strategic initiatives specific to mutual and automatic aid.

In addition to automatic and mutual aid, CES-Fire and now the CCFD is also signatory to service agreements with the Town of Vernonburg and the City of Garden City for direct fire protection services. The CPSM analysis has determined the CCFD can continue to provide direct fire protection services to the City of Garden City. The CPSM analysis also suggests the County consider working with the Town of Vernonburg and the City of Savannah to transfer fire protection services to the City of Savannah (through a service agreement between the City and Town), so that the County can work towards a more efficient fire protection service delivery system.

Community Risk Assessment

A significant component of this report is the completion of an *All-Hazard Risk Assessment of the Community*. The *All-Hazard Risk Assessment of the Community* contemplates many factors that cause, create, facilitate, extend, and enhance risk in and to a community. The service demands of Chatham County are numerous for the fire department and include EMS first response, fire, technical rescue, hazardous materials, density challenges, transportation emergencies to include vehicle and rail traffic, and other non-emergency responses typical of urban, suburban, and rural County fire departments.

The greatest current building risk by number in Chatham County is a low-moderate hazard risk, which is single family dwellings of predominantly wood frame construction. Additionally, Chatham County does have high-risk/vulnerable population risks (nursing/assisted living facilities), schools and multifamily residential structures (apartments/condos), as well as mixed use occupancies and industrial/commercial buildings. Although the demographic and building risks in Chatham County pose a low-medium risk in totality, a single call involving a vulnerable population, or a high risk (Fire or EMS) poses a higher risk in that particular response. Planned future buildings include single family, multilevel multifamily residential buildings, and additional commercial development.

Additionally, Chatham County is prone to and will continue to be exposed to certain environmental hazards and risks that may impact the community. Chatham County is susceptible to a wide range of natural hazards, including but not limited to tropical systems, tornados, flooding, summer storms with lightning, and occasional winter weather including freezing temperatures and precipitation. These environmental hazards can destroy property, disrupt the economy, lower the overall quality of life for individuals, and create call demand for the CCFD.

Operational Analysis

When exploring staffing and deployment of fire departments it is prudent to design an operational strategy around the actual circumstances that exist in the community and the fire and risk problems that are identified. The strategic and tactical challenges presented by the varied hazards that a department protects against need to be identified and planned for through a community risk analysis planning and management process as completed in this report.

NFPA 1710 addresses recommended staffing in terms of four types of occupancies. The staff needed to accomplish the critical tasks for each specific occupancy are determined to be the *Effective Response Force (ERF)*. The ERF for each of these occupancies is detailed in the NFPA 1710 standard. OSHA and NFPA 1500 *Standard on Fire Department Occupational Safety and Wellness Programs* is specific to operating in immediately dangerous to life or health (IDLH) environments, where there is a requirement of two firefighters outside of the building or entry

point to the IDLH, while there are two firefighters operating inside the building or other vessel that has an IDLH.

As discussed earlier, the CCFD responds with two-person staffing on all heavy fire apparatus (*Engines, Squads, Ladders*). Also discussed is there are no company officers assigned to engines and squad units - only the ladders. The CCFD current response matrix to building fires (all types) is 2-Engines, 1-Squad, 1-Truck (ladder), the District Chief (1 staff), and the Safety Officer (1-staff).

The total CCFD Effective Response Force is 10 staff.

The four building types included in the NFPA 1710 standard (all of which are in Chatham County) are discussed next in terms of the minimum staff required to accomplish the critical tasks to mitigate fire emergencies in these buildings.

Single-Family Dwelling

The initial full alarm assignment (ERF) to a structural fire in a typical 2,000 square-foot, two-story, single-family dwelling without a basement and with no exposures must provide for a minimum of 16 members (17 if an aerial device is used). **Single family dwellings represent the majority of building risk in Chatham County. CCFD Effective Response Force: 10 staff.**

Open-Air Strip Mall/Commercial Building

The initial full alarm assignment (ERF) to a structural fire in a typical open-air strip center/commercial building ranging from 13,000 square feet to 196,000 square feet in size must provide for a minimum of 27 members (28 if an aerial device is used). **CCFD Effective Response Force: 10 staff.**

Apartment Building

The initial full alarm assignment (ERF) to a structural fire in a typical 1,200 square-foot apartment within a three-story, garden-style apartment building must provide for a minimum effective response force (ERF) of 27 members (28 if an aerial device is used). **CCFD Effective Response Force: 10 staff.**

High Rise

Chatham County does have high rise buildings. The initial full alarm assignment to a fire in a building where the highest floor is greater than 75 feet above the lowest level of fire department vehicle access must provide for a minimum of 42 members (43 if the building is equipped with a fire pump). **CCFD Effective Response Force: 10 staff.**

CPSM assesses that the CCFD is unable to, as a single responding agency, assemble an Effective Response Force for single-family dwellings, strip mall/commercial buildings, apartment and condominium building fires, and for a high-rise fire without the response of automatic/mutual aid companies on the initial alarm, which is allowed under the NFPA 1710 standard.

For building fires, the CCFD would be able to deploy one attack line (including primary engine operator), one backup line with personnel merging the task of primary search and rescue (after three units arrive), a two-person rapid intervention team (when the fourth unit arrives), safety officer (outside tasks and overall safety), and incident command. These are the basic fireground tasks to begin an initial attack. Obviously, tasks are altered depending on the conditions and challenges encountered by initial arriving crews. In any case, the CCFD will be challenged to accomplish critical tasks with very minimal staffing when benchmarked against NFPA 1710.

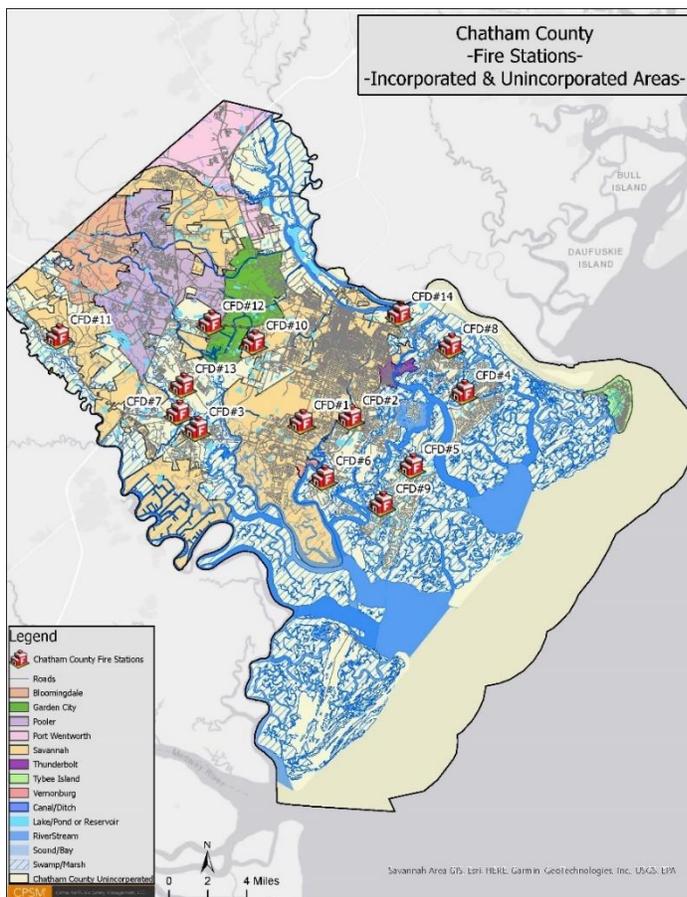
CPSM has provided recommendations specifically for enhancing the CCFD Effective Response Force, which includes increasing staffing on all heavy fire apparatus (*Engines, Squads, Ladders*) to a minimum of three to include a company officer on all heavy fire apparatus over the near and midterms. Additional staffing complements are offered as well in the applicable strategic initiative.

Station Distribution Analysis

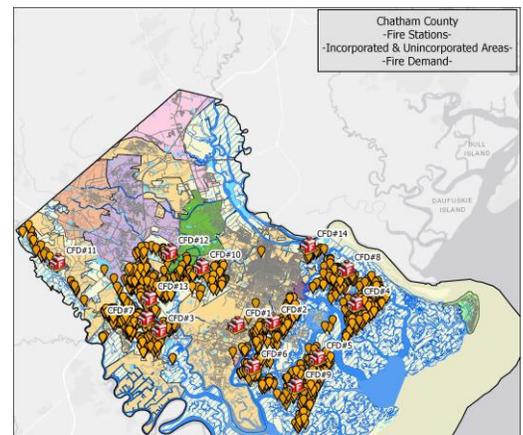
Station distribution analysis provides information on district response patterns and demand by station district. Sound community fire-rescue protection requires the strategic distribution of an adequate number of station facilities and deployment resources to ensure effective service area coverage is achieved, that predicted response travel times satisfy prevailing community goals and national best practices, and that the facilities are capable of supporting mission-critical personnel and vehicle-oriented requirements and needs. As discussed herein, the CCFD responds from fourteen fire facilities.

During the CPSM 12-month study period, there was a total of 4,249 calls in the County (excludes 8 mutual aid and includes 383 canceled calls). Call demand is more concentrated in the Station 2, 3, 4, 7, and 13 districts.

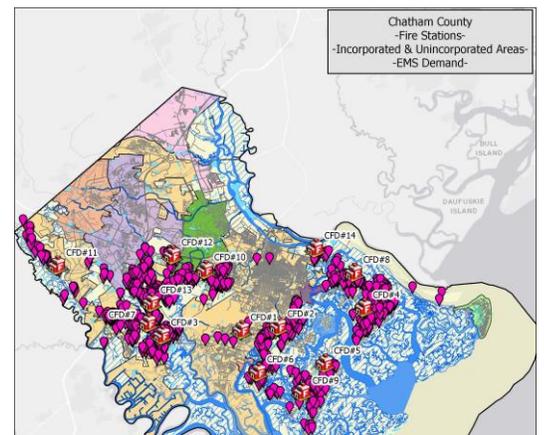
Station Locations with Fire and EMS Demand



All Fire Demand



EMS Demand



Station by station workload (by station area or district) is illustrated next. The Station 7 district is the busiest (15.1% of all work). Stations 4 (14.0%), and 13 (10.9%) are similarly as busy in terms of workload. Stations 1 and 14 are the least busy, handling 0.2% and 1.0% respectively of the work.

Station Area	Calls	Percent Calls	Runs	Runs Per Day	Percent Work
1	8	0.2	28	0.1	0.2
2	498	11.7	986	2.7	9.5
3	407	9.6	857	2.3	7.1
4	554	13.0	1,150	3.2	14.0
5	141	3.3	372	1.0	3.6
6	224	5.3	470	1.3	7.7
7	662	15.6	1,371	3.8	15.1
8	321	7.5	761	2.1	9.3
9	257	6.0	625	1.7	7.2
10	228	5.4	547	1.5	5.8
11	109	2.6	190	0.5	2.8
12	167	3.9	342	0.9	3.2
13	554	13.0	1,286	3.5	10.9
14	42	1.0	86	0.2	1.0
Other	85	2.0	159	0.4	2.4
Total	4,257	100.0	9,230	25.3	100.0

The next table examines response times by station as average and at the 90th percentile (NFPA benchmark).

Station Area	Average Response Time				90th Percentile Response Time				Call Count
	Dispatch	Turnout	Travel	Total	Dispatch	Turnout	Travel	Total	
1	1.4	0.8	5.2	7.4	2.4	1.8	8.0	10.5	8
2	1.3	1.3	3.9	6.5	2.8	2.6	7.1	9.8	367
3	1.2	1.2	3.9	6.3	2.4	2.3	7.3	10.0	292
4	1.2	1.4	4.5	7.1	2.4	2.8	7.8	10.5	375
5	1.6	1.0	4.6	7.2	3.5	1.9	7.2	10.1	96
6	1.0	1.2	3.6	5.9	2.1	2.5	7.3	9.6	162
7	1.1	1.2	4.4	6.7	2.4	2.6	7.2	9.7	528
8	1.2	1.4	3.1	5.8	2.4	2.8	6.2	8.8	238
9	1.8	1.2	4.1	7.1	3.6	2.3	6.5	10.3	134
10	1.3	1.1	4.4	6.8	2.4	2.0	7.6	10.8	178
11	1.4	1.4	4.7	7.5	2.4	3.6	10.1	13.1	90
12	1.3	1.1	3.9	6.3	2.4	2.1	7.4	9.5	122
13	1.1	1.1	4.2	6.5	2.3	2.2	7.6	10.0	421
14	0.9	2.3	4.3	7.5	2.1	2.9	7.2	12.9	23
Total	1.2	1.3	4.1	6.6	2.5	2.5	7.3	10.0	3,034

Overall, the 12-month data analysis tells us:

- The 90th percentile dispatch time (alarm handling) was 2.5 minutes (**150 seconds**).
 - The NFPA 1710 dispatch time or call processing time standard is 64 seconds, 90 percent of the time, and not more than 106 seconds, 95 percent of the time. For special calls, the dispatch time or call processing is 90 seconds, 90 percent of the time, and not more than 120 seconds, 95 percent of the time. The greatest majority of CCFD calls for service are outside of the special call type.
- The 90th percentile turnout time was 2.5 minutes (**150 seconds**).
 - The NFPA 1710 turnout time is 60 seconds for EMS response and 80 seconds for fire and special call responses.

The 90th percentile travel time was 7.3 minutes (**438 seconds**).

- The NFPA 1710 travel time is:
 - ≤ 240 seconds for the first arriving engine company to a fire suppression incident 90 percent of the time.
 - ≤ 240 seconds for the first arriving engine company to an EMS incident with automated external defibrillator (AED) or higher-level capability.

CPSM assesses that CCFD response times do not meet the NFPA 1710 benchmark standards.

CPSM recommends the CCFD adopt a performance benchmark for turnout time of ≤ 80 seconds for fire and special operations and ≤ 60 seconds for EMS responses at the 90th percentile. **CPSM further recommends** the CCFD work with Chatham County 911 Center regarding call processing performance standards of 64-seconds at the 90th percentile for identified higher acuity calls (structure fires and high acuity technical fire related calls as outlined in the NFPA 1710 standard. **Response travel time performance benchmarks are better identified through the completion of a Standards of Cover operational analysis.**

An additional station distribution benchmark is the ISO Public Protection Classification rating system. Under this system, one element a jurisdiction is graded on is the distribution of fire assets within built-upon areas with a focus on engine companies and ladder companies (deployment analysis). For full credit in the Fire Suppression Rating Schedule (FSRS), a jurisdiction's fire protection area with residential and commercial properties will have a first-due engine company within 1.5 road miles (which is the ISO estimate for 240 second travel time as a comparable to the NFPA 1710 standard) and a ladder or service company within 2.5 road miles of built upon land.⁶

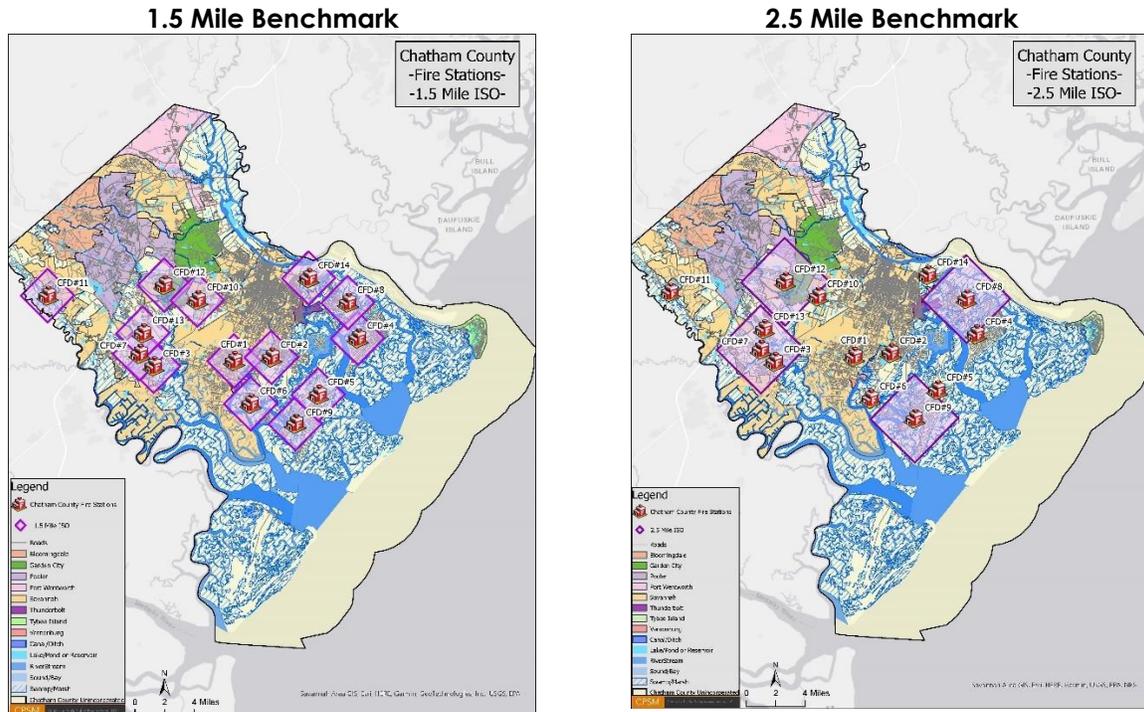
As engine and ladder companies both respond from fire facilities, and because engine companies are the more prevalent fire suppression company, fire facilities are predictably sited based on the response needs of engine companies first, with ladder companies then placed on a broader geographic footprint.

The next figure illustrates the County's coverage of built-upon areas with existing engine and ladder companies when measured against the ISO benchmarks.

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6. Insurance Services Office, ISO Mitigation, Deployment Analysis.

Chatham County Engine and Ladder Coverage-ISO Benchmark



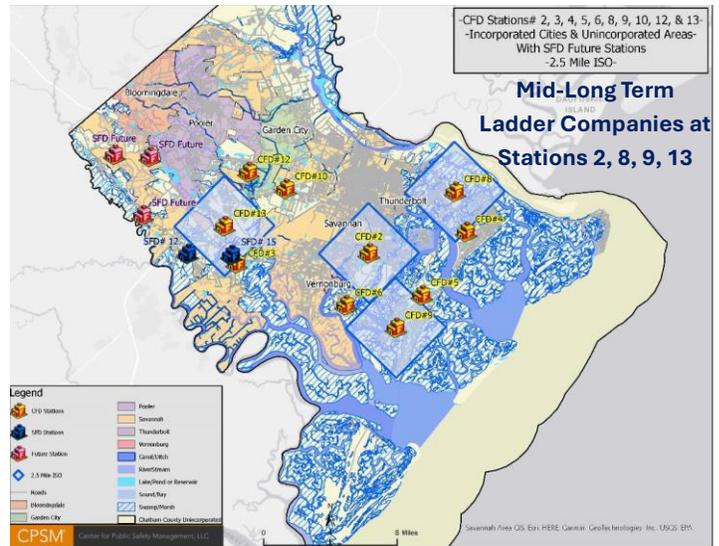
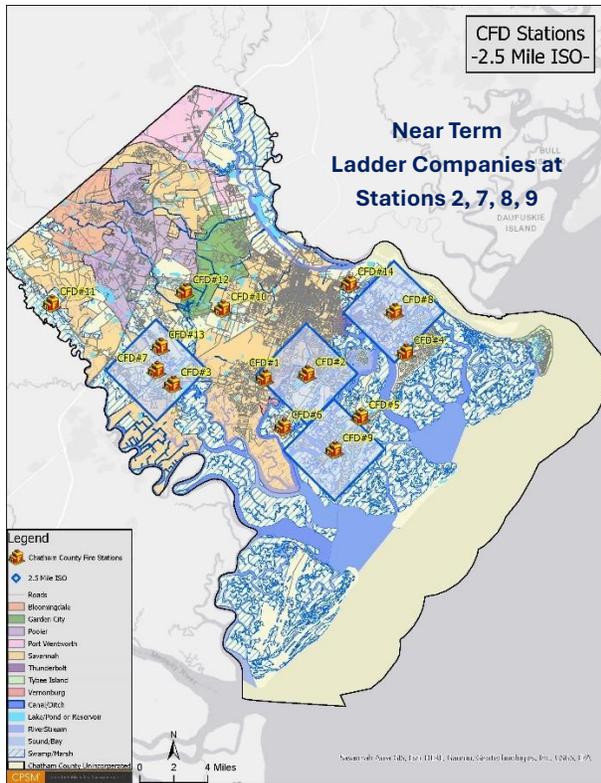
In review of the 1.5-mile ISO-PPC map, the first observation is the built-upon area of the unincorporated County has good coverage by a staffed first due engine company within 1.5 miles of built upon land. There are minor gaps east and west of Station 11; west of Station 12; north of Station 13; east of Station 2; South of Station 9; North of Station 4. **In the current ISO-PPC report, Chatham County received 6.00/6.00 Credits for Engine Companies.**

The County does not have overlapping ladder resource company coverage. The ladder company resource is also graded on the number of response areas within the County with five buildings that are three or more stories (or 35 or more feet in height), or with five buildings that have a needed fire flow greater than 3,500 gallons per minute, or a combination of these two criteria. Generally, and from a first due ladder company perspective, the greatest percentage of these are covered. There are some ladder company gaps east and south of Station 4 (Truck 8 response area); Stations 2 and 6 districts; Station 10 district. **In the current ISO-PPC report, Chatham County received 2.49/4.00 Credits for Ladder Companies.**

A more effective alignment of ladder companies the CCFD should consider in the **near term** includes the reassignment of Truck 12 to Station 2. This closes the gap in the Stations 2 and 6 districts and locates three of the four ladder companies on the east side of Savannah where the majority of the buildings 35' or more are located.

Additionally, and for a better alignment of resources as discussed in the next section, and if the County considers constructing a new Station 13, the optimum location for a west side ladder company is in the Station 13 district. **The suggested mid-longer-term realignment of ladder company resources is illustrated in the next figure.**

Chatham County Realigned Ladder Coverage (Near and Mid-Longer Term) - ISO Benchmark



A More Efficient Station Distribution

In terms of response travel times and as benchmarked against ISO-PPC engine and ladder company distribution and taking into consideration the fragmented unincorporated areas in the western region of the County due to municipal annexation, CES-Fire and now Chatham County fire station distribution and response travel times are reasonable.

That said, continued annexation in western Chatham County will further fragment unincorporated areas making it difficult to efficiently provide fire protection. Additionally, as municipalities annex unincorporated land, they very well may also be planning new fire stations creating situations where a municipal fire station is within blocks of a sometimes-long-standing County fire station or stations. As unincorporated areas shrink, so do the cost-effectiveness of a fire station that may have once served a larger fire district.

CPSM looked at several models that may create a more efficient CCFD and at the same time redeploy assets to make the current CCFD more effective. Any efficiency models are dependent on continued annexation, when municipal fire stations will be built, and the willingness of municipalities to participate in service area and automatic aid agreements with the County. Additionally, while western Chatham County annexation will continue, when and where is speculative as of this report. However, planning now is prudent.

Efficiency models include:

- **Near Term:** Decommission CCFD Stations 1 and 14 and contract with the City of Savannah (if the city is agreeable) to cover the small first due areas these stations currently cover. These include:

- The Town of Vernonburg. CCFD Station 1 is situated inside the City of Savannah and primarily services the Town. Savannah Fire Station 10 is in closer proximity to the Town. CCFD Station 1 has the lowest workload of all CCFD stations (0.2% of in-district workload).
- Engine 14's district is relatively small. Savannah Fire Station 9 is in close proximity to CCFD Station 14. CCFD Station 14 has the second lowest workload of all CCFD stations (1.0% of in-district workload).
 - Redeploy Engine 1 staffing (2 per shift) as designated by the Fire Chief to increase staffing to a minimum of 3/Shift on two companies. Redeploy engine apparatus to a station that has an older apparatus-redeploy older apparatus to reserve status.
 - Redeploy Engine 14 staffing (2 per shift) as designated by the Fire Chief to increase staffing to a minimum of 3/Shift on two companies. Redeploy engine apparatus to a station that has an older apparatus-redeploy older apparatus to reserve status. Redeploy the Tender as determined by the Fire Chief.

As a note, the County will likely lose fire fee assessment revenue from these two areas as remuneration for the City of Savannah providing fire protection service.

- **Near Term:** Decommission Station 7 and contract with the City of Savannah (if the city is agreeable) to have Savannah Fire Department Station 12 cover calls in the Station 7 district (that CCFD Stations 3 and 13 cannot) and also provide automatic aid response in Station 3's district from Savannah Fire Department Station 15 on structure and other multi-unit responses.
 - Redeploy Engine 7 staffing as determined by the Fire Chief to increase staffing to 3/shift where needed. Redeploy Engine 7 apparatus to another station with an older apparatus or to reserve.
 - Redeploy Truck 7 apparatus and staffing to Station 3 as a temporary measure until a new Station 13 can be constructed.

As a note, the County will likely lose fire fee assessment revenue from the Station 7 district or a portion thereof that CFD Stations 3 and 13 cannot cover as remuneration for the City of Savannah providing fire protection service.

- **Mid-Longer Term:** Decommission Station 11 once the City of Savannah completes either temporary or permanent stations (two in the New Hampstead area of the city and one along the SR 204 corridor west of I-95). Contract with the City of Savannah (if the city is agreeable) to cover the Station 11 first due area, which currently includes the SR 204 corridor west of I-95 to the Effingham County line.
 - Redeploy Engine 11 staffing where needed as determined by the Fire Chief to increase staffing to 3/Shift. Redeploy Engine 11 to another station with an older apparatus or to reserve.

As a note, the County will likely lose fire fee assessment revenue from this area as remuneration for the City of Savannah providing fire protection service.

- Mid-Long term: Close Station 10 should the City of Savannah annex the area east and south of Buckhalter Road. Redeploy Engine 10 staffing where needed as designated by the Fire Chief to increase staffing to 3/Shift on two units. Redeploy Engine 10 to another station with an older apparatus or to reserve.
- Mid-Long Term: Relocate Station 2 to the area of Winterberry Road and Ferguson Ave. This station borders the City of Savannah to the north and west and is out of position for response to its primary district. Additional planning and consideration should be given to relocating CCFD administration and program staff to this County facility.

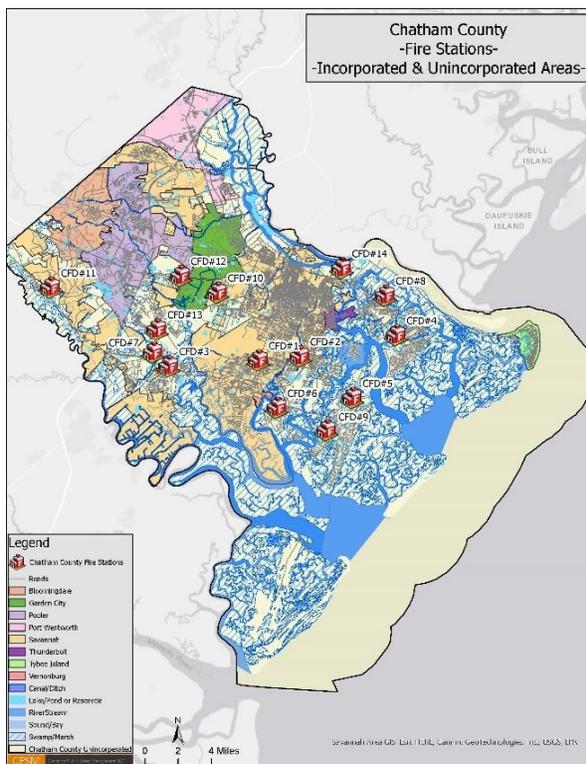
The County and CCFD can realize a more efficient response model over the near and mid-term should the City of Savannah be willing to enter into service area agreements for the CCFD Station 7, 11, and 14 response areas, and an automatic aid agreement for the Station 7 area that Station 3 and 13 areas.

Additional efficiency can be gained if the City of Savannah and the Town of Vernonburg are willing to work together and have the Savannah Fire Department provide fire protective services to the Town, which is currently served by the CCFD from CCFD Station 1.

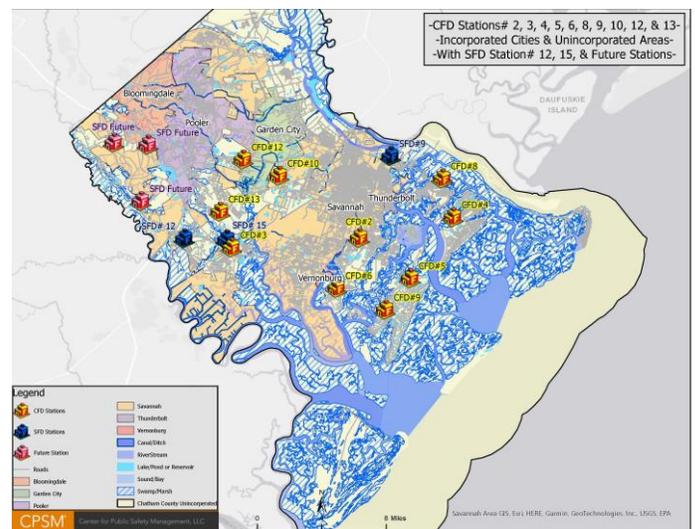
Should these service agreements be successful, the CCFD can decommission fire services from Stations 1, 7, 11, and 14, and redeploy staffing, apparatus, and equipment assets to other CCFD stations, or place apparatus and equipment assets in reserve, and also modify the facility lease agreement between Chatham Emergency Services and the County.

Ten Station Footprint Considerations

Current CCFD 14-Station Footprint



Ten Station Footprint with CCFD Stations 2, 3, 4, 5, 6, 8, 9, 10, & 13 and SFD Stations 9, 12, 15, and Future SFD Stations
This scenario considers the decommissioning of CCFD Stations 1, 7, 11, and 14.



The ten-station CCFD footprint, utilizing a 360 second travel time benchmark, and with service area agreements with the City of Savannah for the Station 7, 11, and 14 districts, provides effective coverage for unincorporated Chatham County. With the agreements and the ten CCFD stations, there are only nominal differences when compared to a fourteen-station CCFD footprint.

- The ten-station footprint reduces staffed heavy fire apparatus from eighteen to fourteen.
 - 14 station model: 11 Engines; 3 Squads; 4 Ladders
 - 10 station model: 7 engines; 3 squads; 4 ladders

- The Garden City service area contract is sustained with Stations 10 and 12. If the City of Savannah continues to annex unincorporated area in the Station 10 district and there is no longer a need for Station 10, the Garden City contract is still sustained with Station 12.
- The redeployment of staffing from the decommissioning of Engines 1, 7, 11, and 14 can be utilized elsewhere in the CCFD system to increase staffing on seven response units as outlined herein.
- The redeployment of decommissioned engines to other stations where there may be older apparatus or to reserve should reduce the size of the overall engine fleet.

An additional consideration for an eleven-station model that includes the relocation of CCFD Station 14 to the Talahi, Whitemarsh, and Wilmington Island region of the County. Currently this region is served by Stations 4, 8, and 14. As an island region of unincorporated Chatham County, access is limited to US Highway 80E and the Islands Expressway. In comparison the southern region of unincorporated Chatham County that includes Skidaway and Montgomery Islands is served by four fire stations.

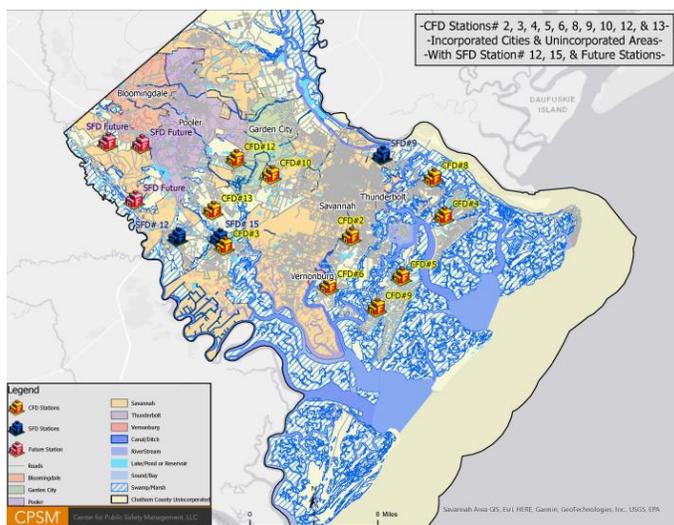
The relocation of Station 14 increases the CCFD model to an eleven-station model (a reduction from 14 to 11) and reduces staffed apparatus from eighteen to fifteen as follows:

- 14 station model: 11 Engines; 3 Squads; 4 Trucks (Ladder Apparatus)
- **11 station model: 8 Engines; 3 Squads; 4 Trucks (Ladder Apparatus)**

Eleven Station Footprint Considerations

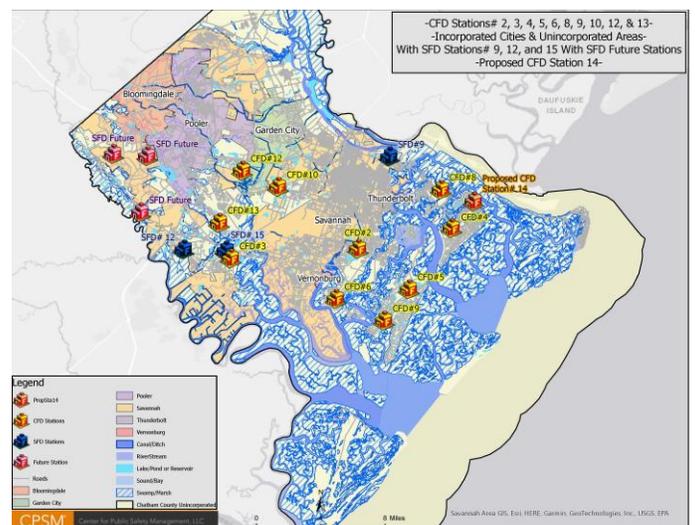
Ten Station Footprint with CCFD Stations 2, 3, 4, 5, 6, 8, 9, 10, & 13 and SFD Stations 9, 12, 15, and Future SFD Stations

This scenario considers the decommissioning of CCFD Stations 1, 7, 11, and 14.



Eleven Station Footprint with CCFD Stations 2, 3, 4, 5, 6, 8, 9, 10, 13, and Relocated 14 and SFD Stations 9, 12, 15 and Future SFD Stations

This scenario considers the decommissioning of CCFD Stations 1, 7, 11



Strategic Initiatives

The Chatham County *Fire Transition Gap Analysis and Strategic Initiatives* report contains five strategic initiatives with goals and objectives that focus on priority areas of the Chatham County Fire Department transition as a County department, and also the unincorporated area in terms of Fire Protection and EMS first response service delivery.

The five strategic initiatives and goals include: (details of each initiative begin on the next page)

Strategic Initiative 1: CCFD Organizational Resiliency
<p>Goal 1.1: Health, Safety, and Wellness: Alignment with NFPA 1500: Standard on Fire Department Occupational Safety and Wellness Programs and NFPA 1582 Standard on Comprehensive Occupational Medical Program for Fire Departments.</p> <p>Goal 1.2: Sustain a highly trained and prepared workforce capable of responding effectively and safely to a wide range of emergencies.</p> <p>Goal 1.3: Ensure staffing levels are sustained and effective recruitment aligns with organizational expansion.</p>
Strategic Initiative 2: Organizational Growth and Excellence
<p>Goal 2.1: Expand Operational Officer Corps.</p>
Strategic Initiative 3: Sustainable Infrastructure
<p>Goal 3.1: Continue Maintaining and Renovating CCFD Leased Facilities.</p> <p>Goal 3.2: Rebuild and purchase CCFD facilities to ensure sustainable facility infrastructure.</p> <p>Goal 3.3: Sustain CCFD Fire Operational Fleet.</p> <p>Goal 3.4: Sustain CCFD Structural Firefighting Equipment.</p>
Strategic Initiative 4: Ensuring a Resilient Community
<p>Goal 4.1: Develop and Implement a Community Risk Reduction Program.</p> <p>Goal 4.2: Sustain ISO-PPC Community Rating.</p> <p>Goal 4.3: Sustain and Enhance the Behavioral Health Unit Program.</p> <p>Goal 4.4: Engage in a robust Automatic Aid response initiative with contiguous jurisdictions.</p>
Strategic Initiative 5: Resource Optimization and Effective Deployment
<p>Goal 5.1: Increase deployable assets aimed at enhancing the CCFD's ability to assemble an Effective Response Force for building fires.</p> <p>Goal 5.2: Create greater efficiencies in resource location and distribution. Initial Phase.</p> <p>Goal 5.3: Create greater efficiencies in resource location and distribution. Secondary Phase.</p>

Strategic Initiative 1 – CCFD Organizational Resiliency	
Initiative Manager(s): As assigned.	
Goal 1.1: Health, Safety, and Wellness: Alignment with NFPA 1500: Standard on Fire Department Occupational Safety and Wellness Programs and NFPA 1582 Standard on Comprehensive Occupational Medical Program for Fire Departments.	
Objectives	Term (Near/Mid/Long)
1. Continuance of a health, safety, and wellness committee, including the Chatham County Human Resources and Risk Management, with a goal of sustaining a comprehensive health, safety, and wellness initiative program that aligns with NFPA 1500, <i>Standard on Fire Department Occupational Safety and Wellness Programs</i> , (current and future editions).	All Terms
2. Conduct an annualized department-wide health, safety, and wellness needs assessment.	All Terms
3. Maintenance of and continual updating of department policies, procedures, and guidelines that link or should link to health, safety, and wellness while members are engaged in emergency and non-emergency activities.	All Terms
4. Ensure the current health and wellness program encompasses proactive mental health and individual assistance, and the minimization of carcinogen and other occupational exposures.	All Terms
5. Continuance of candidate and incumbent occupational medical program components that align with <i>NFPA 1582 Standard on Comprehensive Occupational Medical Program for Fire Departments</i> (current and future editions).	All Terms

Strategic Initiative 1 – CCFD Organizational Resiliency	
Initiative Manager(s): As assigned.	
Goal 1.2: Sustain a highly trained and prepared workforce capable of responding effectively and safely to a wide range of emergencies.	
Objectives	Term (Near/Mid/Long)
1. Continuance of training curriculums for new hires and incumbents that align with the Georgia Fire Standards and Training Council standards, Georgia Department of Public Health, and the Insurance Services Office Fire Suppression Rating Schedule requirements. Regularly update current curriculums and training materials and position task books to reflect current best practices and emerging technologies.	All Terms
2. Enhance skill retention and training accessibility through the continuance of frequent digital training and scenario-based hands-on practical training opportunities.	All Terms
3. Foster professional development for incumbent personnel through adequate funding for regional, state, and national training opportunities that include the National Fire Academy, National Emergency Management Institute, and professional conferences.	All Terms
4. Ensure adequate funding to maintain the CCFD training center infrastructure, training props, and training equipment.	All Terms
5. Ensure there is adequate training instructor staff to meet the needs of new-hire and incumbent training requirements and organizational needs. Provide adequate funding to expand the training staff as organizational staff and needs expand.	All Terms

Strategic Initiative 1 – CCFD Organizational Resiliency	
Initiative Manager(s): As assigned.	
Goal 1.3: Ensure staffing levels are sustained and effective recruitment aligns with organizational expansion.	
Objectives	Term (Near/Mid/Long)
<p>1. Assess and develop a recruitment program for the CCFD that includes firefighter and officer ranks.</p> <ul style="list-style-type: none"> The recruitment program should recognize that expanding the officer ranks (Lieutenant, Captain, Battalion Chief) may include internal promotional processes and external recruitment and assessing processes to ensure the best candidate(s) are selected. 	All Terms
<p>2. Ensure CCFD salary and benefits remain competitive when benchmarked against regional fire departments and that both align with recruitment and retention efforts of operational staff.</p>	All Terms
<p>3. Continue to recruit and retain volunteer members to augment career staffing on fire apparatus.</p> <ul style="list-style-type: none"> Ensure volunteer members meet all entry and minimum training requirements according to the <i>Official Code of Georgia Annotated and as established by the CCFD.</i> Ensure retention programs are guided to retain volunteers and recognize their value to the fire department and to the county. 	All Terms

Strategic Initiative 2 – Organizational Growth and Excellence

Initiative Manager(s): As assigned.

Goal 2.1: Expand Operational Officer Corps.

Objectives	Term (Near/Mid/Long)
<p>1. The single District Chief/Shift Commander position operates beyond recommended span-of-control best practices.</p> <ul style="list-style-type: none"> • Create the Battalion Chief level position as the district command officer and supervisor and segregate the CCFD fire coverage area into east and west districts with one Battalion Chief in overall command of each district (six FTEs). Can be phased in - one additional Battalion Chief per shift, per budget year (3 FTEs). • Maintain the current District Chief/Shift Commander position as the overall shift manager and day-to-day shift commander. • Expand the Battalion Chief districts to east, central, and west (one additional Battalion Chief per shift - 3 FTEs) when needed and as determined by the Fire Chief due to response distance challenges and as company level staffing and incident demand increases. 	<p>Term funding is available.</p> <p>Long Term</p>
<p>2. CCFD does not have adequate company level first - line supervisory staff in place to provide day-to-day supervision of CCFD programs, incident response, and staff at the company level.</p> <ul style="list-style-type: none"> • Develop a staffing plan for additional company officers at the Lieutenant level for assignments to Engine and Squad Companies. <ul style="list-style-type: none"> ➤ Phase I: Add Lieutenant positions to the three Squad Companies - Squads 6, 8, and 13 as funding is available (9 new FTEs). ➤ Phase II: Add Lieutenant positions to six Engine Companies as determined by the Fire Chief as funding is available (18 FTEs). ➤ Phase III: Add Lieutenant positions to five Engine Companies as determined by the Fire Chief as funding is available (15 FTEs). 	<p>Near Term</p> <p>Near term</p> <p>Term funding is available.</p> <p>Term funding is available.</p>
<p>3. CCFD does not have consistency in rank amongst the Truck Company officers (Trucks 7 & 9 have Captain positions; Trucks 8 & 12 have Lieutenant positions). The job functions and responsibilities are consistent across the four Truck companies.</p> <ul style="list-style-type: none"> • Create two Captain positions for Trucks 8 & 12 (6 new FTEs). • Transfer the six Lieutenant FTEs to either Squad or Engine companies that are designated to receive Lieutenant positions. 	<p>Near term as funding is available.</p>

Strategic Initiative 3 – Sustainable Infrastructure	
Initiative Manager(s): As assigned.	
Goal 3.1: Continue Maintaining and Renovating CCFD Leased Facilities.	
Objectives	Term (Near/Mid/Long)
<p>1. Contract with an engineering firm who specializes in facility assessments and inspections to conduct a facility assessment on all leased facilities that are in the age seventeen to fifty plus year range, to include all structural and mechanical systems, for the purpose of identifying structural, roof, and mechanical system issues that require repair and/or replacement so that major facility issues can be prioritized and properly funded.</p>	Near Term
<p>2. Ensure that all stations are equipped with carbon monoxide (CO) capture systems to reduce carcinogen exposure to station crews and visitors.</p> <ul style="list-style-type: none"> • Apply for grant funding through the Federal Emergency Management Agency's Assistance to Firefighters Grant program for this project. 	Near Term
<p>3. Develop a plan for the renovation of existing stations to ensure all facilities have adequate bunking, showering, bathroom, and locker room areas for a diverse workforce and that are gender separated or can be separated through reasonable and best-practice methods; decon areas; adequate storage; non-porous kitchen counter tops; smoke and carbon monoxide detectors; separation between living and apparatus bay spaces; structural gear storage racks or cages that are open and allow adequate air-flow; adequate physical fitness equipment (cardio and strength conditioning) separated from apparatus area when possible. Renovation budgets should include life-cycle replacement of structural, mechanical, plumbing, and equipment components.</p>	Near Term Renovation(s) to occur as funding is available.

Strategic Initiative 3 – Sustainable Infrastructure	
Initiative Manager(s): As assigned.	
Goal 3.2: Rebuild and purchase CCFD facilities to ensure sustainable facility infrastructure.	
Objectives	Term (Near/Mid/Long)
<p>1. Conduct an analysis in the initial five years of the current <i>Lease Agreement for Public Purposes (Fire Stations and attached equipment)</i> between Chatham County and Southside Communities Fire Protection, INC., d/b/a Chatham Emergency Service , INC., to rebuild stations 4, 6, and 8 either in proximity to the station's current site, or in a more advantageous location to better serve unincorporated Chatham County.</p> <ul style="list-style-type: none"> • Conduct a cost-benefit analysis of significant renovation to a leased facility versus rebuilding and ownership of the new facility. • Conduct a land availability analysis to build a new Station 13 (this facility is a leased building from a private vendor and is not conducive to the delivery of contemporary fire services). 	<p>Analysis-Near Term</p> <p>Facility Rebuilding- as funding is available.</p> <p>Near Term</p> <p>Near Term</p>
<p>2. Conduct an analysis in the second five year term of the of the current <i>Lease Agreement for Public Purposes (Fire Stations and attached equipment)</i> between Chatham County and Southside Communities Fire Protection, INC., d/b/a Chatham Emergency Service , INC., that will assist the County with making a determination of maintaining the agreement (and all maintenance and upkeep of CES facilities) or purchasing the facilities that remain as active fire stations in the CCFD footprint.</p> <ul style="list-style-type: none"> • At a minimum, the County considers the purchase of Station 3 and all training props from CES as this facility serves as the central facility for all CCFD recruit and incumbent training. 	<p>Mid-Long Term</p> <p>Mid Term</p>

Strategic Initiative 3 – Sustainable Infrastructure	
Initiative Manager(s): As assigned.	
Goal 3.3: Sustain CCFD Fire Operational Fleet.	
Objectives	Term (Near/Mid/Long)
<p>1. Continue to include in all capital budgeting the following planning objectives to sustain the current and future fleet:</p> <ul style="list-style-type: none"> • Follow the NFPA 1900 standard for heavy engine, aerial ladder, and tender fire apparatus fleet replacement and the CCFD vehicle evaluation point system. <ul style="list-style-type: none"> ➤ Engines: 10 years front-line (Additional 2-5 years as reserve status based on condition). ➤ Aerial: 12 years front line (Additional 3-5 years as reserve status based on condition). ➤ Tender: 20 years front line based on condition. (If the tenders become a staffed responding unit the life cycle will be adjusted). ➤ Heavy fire apparatus no longer considered for frontline or reserve status once the apparatus reaches the 25-year age ceiling. ➤ Commercial chassis are only considered for water tender apparatus. 	<p>All Terms</p> <p>All Terms</p> <p>All Terms</p> <p>All Terms</p> <p>All Terms</p> <p>All Terms</p>

Strategic Initiative 3 – Sustainable Infrastructure	
Initiative Manager(s): As assigned.	
Goal 3.4: Sustain CCFD Structural Firefighting Equipment.	
Objectives	Term (Near/Mid/Long)
1. CCFD continues to utilize NFPA 1971 and NFPA 1851 (or successor standards) as guideline documents for the design, performance, testing, certification, care, maintenance, storage, lifecycle, and selection when procuring structural firefighting ensemble components and inspecting current components in use by CCFD members or in storage.	All Terms
2. The County continues to support the plan to procure and issue a second set of structural turnout gear for each operational member of the department to align with national best practice protective and preventive health measures for operational members and enhanced operational readiness.	All Terms
3. CCFD establishes a replacement schedule that considers SCBA ensemble replacement every other NFPA 1981 update (future NFPA 1970 standard) unless there are substantive updates to a standard update where it is in the best interest of the health and safety of firefighters to consider updating all units of the SCBA ensemble earlier.	All Terms

Strategic Initiative 4 – Ensuring a Resilient Community	
Initiative Manager(s): As assigned.	
Goal 4.1: Develop and Implement a Community Risk Reduction Program.	
Objectives	Term (Near/Mid/Long)
The County currently performs minimal fire prevention inspections through the Building Safety and Regulatory Services Department on existing inspectable occupancies.	
1. Develop and implement a Fire Marshal's Office as a division in the Chatham Fire Department. <ul style="list-style-type: none"> Recruit and hire a Fire Marshal certified in accordance with State of Georgia standards as a fire inspector, fire investigator, and life safety educator. Develop and implement a County approved community risk reduction plan for unincorporated Chatham County that includes fire prevention, fire investigation, and life safety education program work. 	Near Term Near Term Near Term
2. Determine the number of fire inspectors, fire investigators, and educators based on current and projected inspectable properties and workload.	Near term
3. Inspect and enforce the Minimum Fire Safety Standards established through Rule 120-3-3-.04 <i>State Minimum Fire Safety Standards with Modifications of the Rules and Regulations of the State of Georgia</i> .	All Terms
4. Conduct building and site plans review related to fire protection systems and life safety.	All Terms
5. Investigate and determine the origin and cause of fires and determine if a crime has been committed regarding the origin and cause of a fire.	All Terms
6. Conduct related fire and life safety inspections to include short-term rental inspections and new Business License Occupancy Tax Certificate Inspections.	All Terms

Strategic Initiative 4 – Ensuring a Resilient Community	
Initiative Manager(s): As assigned.	
Goal 4.2: Sustain ISO-PPC Community Rating.	
Objectives	Term (Near/Mid/Long)
1. Measure any new development or the aggregate of new developments for the potential impacts on the CCFD regarding densification created by multi-family/multi-story buildings and/or residential development(s), increase in call demand, and impact on the current deployment model (apparatus type, staffing, deployment locations) of the CCFD.	All Terms
3. Continually monitor all components of the ISO-PPC analysis (Emergency Communications; Fire Department; Water Supply) to ensure current credits earned are not destabilized and result in a reduction in earned credit points.	All Terms
4. To the extent possible and as funding allows, address any deficiencies in the current ISO-PPC analysis to sustain optimum service deliverables and the ISO-PPC community rating of 3/3X and improve earned credit points where feasible.	All Terms

Strategic Initiative 4 – Ensuring a Resilient Community	
Initiative Manager(s): As assigned.	
Goal 4.3: Sustain and Enhance the Behavioral Health Unit Program.	
Objectives	Term (Near/Mid/Long)
1. Continue to align the CCFD with national best practices related to community based Mobile Integrated Health - Community Paramedicine and Behavioral Health response programs.	All Terms
2. Continuous monitoring of Behavioral Health Unit staff workload as it relates to the expanding population of the County that has or develops increased social determinants of health and socio needs issues and challenges.	All Terms
3. Expand Behavioral Health Unit staff as needed to meet community and program workload demands.	Mid-Longer Terms

Strategic Initiative 5 – Resource Optimization and Effective Deployment	
Initiative Manager(s): As assigned.	
Goal 5.1: Increase deployable assets aimed at enhancing the CCFD's ability to assemble an Effective Response Force for building fires.	
Objectives	Term (Near/Mid/Long)
<p>The CCFD is unable to, as a single responding agency, assemble an Effective Response Force for single-family dwellings, strip mall/commercial buildings, apartment and condominium building fires, and for a high-rise fire.</p> <ul style="list-style-type: none"> ➤ Utilize the single-family dwelling response force benchmark of 16-17 personnel as an initial building fire deployment goal (largest building risk in the unincorporated county). ➤ Increase CCFD unit response by one additional Truck (ladder apparatus) and two additional engines (or combination engine/squad) to the initial alarm for building fires, or a combination of resources as determined by the Fire Chief. ➤ Add company officers to Engine and Squad Companies as outlined in Strategic Goal 2.1, which will increase staffing on these units to 3/shift. ➤ Maintain minimum staffing of three on Truck companies. Increase staffing as necessary to achieve this objective. ➤ Engage as many municipal fire departments as possible in automatic aid agreements on structure fire responses in unincorporated Chatham County to bolster the Effective Response Force, particularly for open air/strip mall buildings and apartment and condominium buildings, which require a greater number of Effective Response Force staff. ➤ Increase staffing on Truck and Squad Companies to a minimum of four. 	<p>Near Term</p> <p>Near Term</p> <p>Terms outlined in Goal 2.1</p> <p>All Terms-funding availability</p> <p>All Terms</p> <p>Long Term-funding availability</p>

Strategic Initiative 5 – Resource Optimization and Effective Deployment

Initiative Manager(s): As assigned.

Goal 5.2: Create greater efficiencies in resource location and distribution. Initial Phase.

Objectives	Term (Near/Mid/Long)
<p>As municipalities continue to annex unincorporated land (particularly the City of Savannah), duplication of fire protection services will potentially be duplicated. This potentially conflicts with the <i>Georgia Service Delivery Act's</i> intent "To minimize any duplication or completion among local governments and authorities providing local services."</p> <p>1. Decommission CCFD Stations 1 and 14 and contract with the City of Savannah (if the city is agreeable) to cover the small first due areas these stations currently cover. These include:</p> <ul style="list-style-type: none"> • The Town of Vernonburg. CCFD Station 1 is situated inside the City of Savannah and primarily services the Town. Savannah Fire Station 10 is in closer proximity to the Town. <ul style="list-style-type: none"> ➤ Facilitate discussions between the Town and City for the City to contract with the Town for fire protection services. ➤ Assess loss of revenue to the County. ➤ Redeploy staffing and equipment as determined by the Fire Chief. • CCFD Engine 14's district. Savannah Fire Station 9 is in close proximity to CCFD Station 14 and can adequately cover this County district. <ul style="list-style-type: none"> ➤ Contract with the City for SFD Station 9 to cover the County Station 14 district. ➤ Assess loss of revenue to the County. ➤ Decommission Station 14. ➤ Redeploy staffing and equipment as determined by the Fire Chief. <p>2. Decommission CCFD Station 7 and contract with the City Savannah to cover the CCFD Station 7 district.</p> <ul style="list-style-type: none"> • Contract with the City for SFD Station 12 to cover the County Station 7 district. • Assess loss of revenue to the County. • Decommission Station 7. • Redeploy staffing and equipment as determined by the Fire Chief. • Consider redeployment of Truck 7 to CCFD Station 3 temporarily until a new CCFD Station 13 is constructed (Goal 3.2-Near Term). Engage in an area specific automatic aid agreement with the City that includes SFD Station 15 responding into the CCFD Station 3 district with CCFD providing reciprocal automatic aid to the City. 	<p>Near Term</p> <p>Near Term</p> <p>Near Term</p> <p>Near Term</p>

Goal 5.2: Create greater efficiencies in resource location and distribution. Initial Phase (continued).	
<p>3. Decommission CCFD Station 11 and contract with the City Savannah to cover the CCFD Station 11 district.</p> <ul style="list-style-type: none"> Contract with the City for future SFD stations (two in the New Hampstead area of the city and one along the SR 204 corridor west of I-95) to cover the Station 11 district. Assess loss of revenue to the County. Redeploy staffing and equipment as determined by the Fire Chief. 	<p>Mid-Long Term</p> <p>Near Term</p>
<p>4. Relocate Truck 12 and staffing from Station 12 to Station 2 to bolster ladder company response on the east and south side of the County where the greatest percentage of buildings 35' or greater is.</p>	<p>Term funding is available.</p>
<p>5. Relocate Truck 7 to a new Station 13 facility to serve as a westside CCFD ladder company (links to Goal 3.2).</p>	

Strategic Initiative 5 – Resource Optimization and Effective Deployment	
Initiative Manager(s): As assigned.	
Goal 5.3: Create greater efficiencies in resource location and distribution. Secondary Phase.	
Objectives	Term (Near/Mid/Long)
<p>As municipalities continue to annex unincorporated land (particularly the City of Savannah), duplication of fire protection services will potentially be duplicated. This potentially conflicts with the <i>Georgia Service Delivery Act's</i> intent "To minimize any duplication or completion among local governments and authorities providing local services."</p>	
<p>1. Close Station 10 should the City of Savannah annex the area east and south of Buckhalter Road. Redeploy Engine 10 staffing where needed as designated by the Fire Chief to increase staffing to 3/Shift on two units. Redeploy Engine 10 to another station with an older apparatus or to reserve.</p>	<p>Mid-Long Term</p>
<p>2. Relocate Station 2 to the area of Winterberry Road and Ferguson Ave. This station borders the City of Savannah to the north and west and is out of position for response to its primary district.</p> <ul style="list-style-type: none"> Additional planning and consideration should be given to relocating CCFD administration and program staff to this County facility. 	<p>Mid-Long Term</p>
<p>3. Relocate Station 14 to Johnny Mercer Blvd. and Highway 80E to optimize and enhance response resources in the Talahi, Whitemarsh, and Wilmington Island region.</p>	<p>Mid-Long Term</p>
<p>4. Maintain the Garden City fire protection contract.</p>	<p>All Terms</p>

Strategic Initiative 5 – Resource Optimization and Effective Deployment	
Initiative Manager(s): As assigned.	
Goal 5.4: Dispatch, Turnout, and Response Travel Times of System Resources	
Objectives	Term (Near/Mid/Long)
1. Work with the Chatham Emergency Communication 911-Center to close the gap of call processing times (to the extent possible) to align closer to NFPA 1710 performance standards of 64-seconds at the 90 th percentile for identified higher acuity calls (structure fires and high acuity technical fire related calls, and high acuity medical calls).	Near Term
2. Adopt a performance benchmark for turnout time of ≤ 80 seconds for fire and special operations and ≤ 60 seconds for EMS responses at the 90 th percentile, which aligns with NFPA 1710 performance standard.	Near Term
3. Conduct a Standards of Cover and Community Risk Assessment that aligns with the Commission of Fire Accreditation International standards and format, and NFPA and ISO-PPC standards and benchmarks to determine a response travel time performance benchmark based on station distribution and resource concentration.	Near Term

As discussed herein, although the County will likely lose fire fee assessment revenue from unincorporated service areas the County may contract with the City of Savannah to provide fire protection service to, the decision to proceed with this service delivery model and subsequent action would follow the Georgia Service Delivery Act's intent "To minimize any duplication or completion among local governments and authorities providing local services."⁷

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7. Georgia Department of Community Affairs.

Recommendations (listed next in the order in which they appear in the report)

ISO-PPC Analysis Report: Effective January 1, 2024

1. CPSM recommends that all deficiencies in the current ISO-PPC analysis be included in any strategic planning the County and CCFD conduct in all future planning terms. This should include assessment of the dispatch circuits (911 Center and CCFD stations), current engine and ladder company distribution, staffing (company personnel), and water distribution. Any strategy should include the goal of sustaining optimum service deliverables and the ISO-PPC community rating of 3/3X and improve earned credit points where feasible.

Organizational Analysis

2. As Trucks 8 & 12 have Lieutenant positions assigned as company officers, CPSM recommends the County consider assigning Captains to Trucks 8 & 12 (6 Captain positions-new FTEs). The purpose of this upgrade is to establish consistency in rank amongst the Truck Company officers (Trucks 7 & 9 have Captain positions) as the job functions and responsibilities are consistent across the four Truck companies.
3. CPSM recommends the County consider phasing in the Lieutenant position on Engine and Squad Companies. The purpose of this recommendation is to establish first-line supervisors on engine and squad apparatus (and in stations) where there is no supervisory staff to ensure day-to-day supervision of CCFD programs, incident response, and staff at the company level. Implementing these positions aligns with national best practices and with municipal fire departments in the County.
4. CPSM recommends, when managing the volunteer firefighter program, the CCFD ensure that all volunteer members who engage in incident response and operational activities:
 - Meet all entry and minimum training requirements according to the *Official Code of Georgia Annotated* and as established by the CCFD.
 - Participate at a CCFD station with CCFD career staff and respond to incidents on CCFD fire apparatus. While in the station and operating on a CCFD fire apparatus, a volunteer member operates under the station officer or senior crew leader in the absence of an officer.
 - Discontinue personal vehicle response due to the potential liability a motor vehicle accident may create for the County.
 - Complete all CCFD firefighter requirements such as entry and annualized medical physicals; annualized SCBA mask fit testing; meet annualized physical requirements as established by the CCFD; meet annualized training requirements; meet any other entry and annualized requirements as established for firefighters and officers of the CCFD.
5. CPSM recommends the reorganization of the volunteer officer rank structure and retitle volunteer chief officer title(s) to that of Volunteer Captain. The purpose of this recommendation is to organize the volunteers into regional companies, with each to be supervised by a Volunteer Captain. This aligns with the current CCFD career company officer rank structure. CPSM further recommends that the Volunteer Captain have supervisory responsibilities over assigned volunteers in his/her company only and not career staff. Further, volunteer Captains must meet and maintain the requirements of a career Captain or as established by the CCFD Fire Chief. The number of volunteer companies to be decided by the CCFD Fire Chief.

6. CPSM does not recommend assigning or reassigning take home vehicles to volunteer officer positions as these are not emergency response/incident command positions. This will help to alleviate any future liability issues.

Community Risk Reduction

7. CPSM recommends over the near term the County develop and implement a Fire Marshal's Office as a division in the Chatham Fire Department that has the responsibility to:
 - Inspect and enforce the Minimum Fire Safety Standards established through Rule 120-3-3-.04 *State Minimum Fire Safety Standards with Modifications of the Rules and Regulations of the State of Georgia*;
 - Conduct building and site plans review related to fire protection systems and life safety;
 - Investigate and determine the origin and cause of fires, and determining if a crime has been committed regarding the origin and cause of a fire;
 - Conduct related fire and life safety inspections to include short-term rental inspections and new Business License Occupancy Tax Certificate Inspections.
8. CPSM recommends the initial hiring of a Fire Marshal (near term), certified in accordance with State of Georgia standards as a fire inspector, fire investigator, and life safety educator. The Fire Marshal's initial charge should be to develop and implement a County approved community risk reduction plan for unincorporated Chatham County that includes fire prevention, fire investigation, and life safety education program work. The number of fire inspectors, investigators, and educators to be determined based on current and projected inspectable properties and workload.

Training and Education

9. As the CCFD organization expands with operational personnel, the CCFD should continually monitor training staff resource allocation to ensure there is adequate training instructor staff to meet the needs of new-hire and incumbent training requirements and organizational needs. Therefore, CPSM recommends that the expansion of training instructor staff be included in annual strategic planning needs assessment sessions to ensure organizational staff and training needs/requirements are adequately maintained.

Facilities

10. CPSM recommends the CCFD contract with an engineering firm who specializes in facility assessments and inspections to conduct a facility assessment on all leased facilities that are in the age seventeen to fifty plus range, to include all structural and mechanical systems, for the purpose of identifying structural, roof, and mechanical system issues that require repair and/or replacement so that major facility issues can be prioritized and properly funded.
11. CPSM recommends as a priority that all stations be equipped with carbon monoxide (CO) capture systems to reduce carcinogen exposure to station crews and visitors. CPSM further recommends the CCFD apply for grant funding through the Federal Emergency Management Agency's Assistance to Firefighters Grant program for this project.
12. CPSM recommends the County fund the renovation of existing stations to ensure all facilities have adequate bunking, showering, bathroom, and locker room areas for a diverse workforce and that are gender separated or can be separated through reasonable and best-practice methods; decon areas; adequate storage; non-porous kitchen counter tops; smoke and carbon monoxide detectors; separation between living and apparatus bay spaces; structural gear storage racks or cages that are open and allow adequate air-flow; adequate physical fitness equipment (cardio and strength conditioning) separated from

apparatus area when possible. Renovation budgets should include life-cycle replacement of structural, mechanical, plumbing, and equipment components.

13. CPSM recommends that strategically, the County should consider, in the initial five years of the current *Lease Agreement for Public Purposes (Fire Stations and attached equipment)* between Chatham County and Southside Communities Fire Protection, INC., d/b/a Chatham Emergency Service , INC., to rebuild the following stations either in proximity to the station's current site, or in a more advantageous location to better serve unincorporated Chatham County:

- Station 13 near term (this is a leased building that CES does not own).
- Stations 4, 6, and 8.

Consideration to rebuild should include the cost-benefit analysis of significant renovation to a leased facility versus rebuilding and ownership of new facility, potential future municipal annexation around station location, availability of a municipality to service unincorporated areas through service agreements, and automatic aid agreements with municipalities.

- In the second five year term of the of the current *Lease Agreement for Public Purposes (Fire Stations and attached equipment)* between Chatham County and Southside Communities Fire Protection, INC., d/b/a Chatham Emergency Service , INC., the County should conduct an analysis and make a determination on whether to maintain the current agreement (and all maintenance and upkeep of CES facilities) or purchasing the facilities that remain as active fire stations in the Chatham County Fire Department footprint. **At a minimum, CPSM recommends the County purchase Station 3 and all training props from CES as this facility serves as the central facility for all CCFD recruit and incumbent training.**

Fleet

14. CPSM recommends that the County should continue to include in all CCFD capital budget planning over the near, mid, and long terms, planning objectives that consider the NFPA 1900 standard for heavy engine, aerial ladder, and tender fire apparatus fleet replacement and the CCFD vehicle evaluation point system as outlined herein. CPSM further recommends planning objectives that include not utilizing heavy fire apparatus once the apparatus reaches the 25-year age ceiling. Additionally, the CCFD should continue its current evaluation system for staff, light vehicles and trailers and replace these vehicles based on age, mileage, maintenance costs, downtime, resale value, and overall condition and functionality.

Self-Contained Breathing Apparatus

15. CPSM recommends the CCFD continues to provide annual testing of all the components of the SCBA ensemble and document results, maintenance, and repair in a records management program.
16. CPSM recommends the CCFD should evaluate all current SCBA manufacturers, ensuring future SCBA ensembles include:
 - Compliance with NFPA 1981, current edition - *Standard on Open-Circuit Self-Contained Breathing Apparatus (SCBA) for Emergency Services.*
 - Compliance with NFPA 1982, current edition - *Standard of Personal Alert Safety Systems (PASS).*

- Bluetooth components that allow fireground accountability and data transmission to the incident command post.
 - Comfort and ergonomics.
 - Ability to easily clean.
 - Ability to easily service.
 - Length of Warranty.
 - The length of vendor support for parts and services extends the life of the SCBA ensemble (harness and harness components, regulator and regulator components, air cylinder, PASS device, and mask).
 - Compatibility with Chatham County municipal fire departments.
17. CPSM recommends the CCFD establish a replacement schedule that considers SCBA ensemble replacement every other NFPA 1981 update (future NFPA 1970 standard) unless there are substantive updates to a standard update where it is in the best interest of the health and safety of firefighters to consider updating all units of the SCBA ensemble earlier.
18. CPSM recommends all breathing air compressors in CCFD inventory either owned or leased comply with NFPA 1989: *Standard on Breathing Air Quality for Emergency Services Respiratory Protection*, 2019 edition.
19. CPSM recommends the CCFD apply for grant funding through the Federal Emergency Management Agency's Assistance to Firefighters Grant program for the current and any future (federal funding availability) SCBA update and replacement project(s).

Structural Turnout Gear

20. CPSM recommends the CCFD continue to utilize NFPA 1971 and NFPA 1851 as guideline documents for the design, performance, testing, certification, care, maintenance, storage, lifecycle, and selection when procuring structural firefighting ensemble components and inspecting current components in use by CCFD members or in storage.
21. CPSM recommends, following national best practice, the County continue to support the plan to procure and issue a second set of structural turnout gear for each operational member of the department to align with protective and preventive health measures for operational members and enhanced operational readiness.

Automatic and Mutual Aid

22. CPSM recommends Chatham County and the CCFD continue current discussions regarding automatic aid with those municipalities that are contiguous with unincorporated areas of the County. These discussions should include:
- What each jurisdiction is willing to provide in terms of automatic aid?
 - What each jurisdiction expects in return for providing automatic aid?
 - What staffing levels are required for a jurisdiction to engage in automatic aid?
 - What training levels for officers is required to assume the responsibility of incident commander?
 - Will automatic aid be specific to certain areas of each jurisdiction participating in the agreement, or will the agreement expand to all areas of the signatory jurisdictions?
 - Will the agreement require multi-jurisdictional training and drills?

- Will common response protocols and guidelines be developed and included in the agreement?
- It is recommended that automatic and mutual aid decisions be made as soon as possible to initiate many of the immediate recommendations needed. CPSM further recommends that Chatham County engage as many jurisdictions as possible in automatic aid agreements for the sole purpose of sharing resources and enhancing service deliverables for the betterment of signatory jurisdictions.

Fire Ground Operations

23. CPSM recommends the CCFD consider the following to increase the Effective Response Force to building fires, utilizing the single-family dwelling benchmark as an initial goal (sixteen staff-seventeen if aerial device utilized), as these buildings represent the largest building risk in the County:
- Increasing CCFD unit response by one additional Truck (ladder apparatus) and two additional engines (or combination engine/squad) to the initial alarm for building fires, which would increase the Effective Response Force to sixteen total.
 - Engage as many municipal fire departments as possible in automatic aid agreements on structure fire responses in unincorporated Chatham County to bolster the Effective Response Force, particularly for open air/strip mall buildings and apartment and condominium buildings, which require a greater number of Effective Response Force staff.
 - Increase staffing for Truck Companies (ladder apparatus) and Squad Companies to a minimum of three in the near term, with a goal of achieving a minimum of three staff on all CCFD engines over the midterm. An additional goal/consideration to bolster staffing over the longer term is an increase in staffing on Truck Companies to four initially, and then Squad Companies to four staff as funding allows.

Response Times

24. CPSM assesses that CCFD response times do not meet the NFPA 1710 benchmark standards. **CPSM recommends the** CCFD adopt a performance benchmark for turnout time of ≤ 80 seconds for fire and special operations and ≤ 60 seconds for EMS responses at the 90th percentile. **CPSM further recommends** the CCFD work with Chatham County 911 Center regarding call processing performance standards of 64-seconds at the 90th percentile for identified higher acuity calls (structure fires and high acuity technical fire related calls as outlined in the NFPA 1710 standard. **Response travel time performance benchmarks are validated through the completion of a Standards of Cover operational analysis, which the CCFD should conduct.**

Ladder Company Realignment

25. CPSM recommends the CCFD consider relocating Truck 12 and staffing to Station 2 to bolster ladder company response on the east side of the County where the greatest percentage of buildings 35' or greater is.
26. CPSM recommends that if the County considers constructing a new Station 13, then Truck 7 and staffing be relocated to Station 13 to serve as the westside CCFD ladder company.

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Conclusion

The CPSM team members recognize the magnitude of undertaking a fire department and commend the Chatham County Board of Commissioners, the County Administrator and County leadership team, and the new Chatham County Fire Department for their efforts in transitioning the former Chatham Emergency Services Fire Department to the Chatham County Fire Department.

Overall, CPSM found Chatham County Fire Department staff to be knowledgeable in contemporary Fire and EMS programs and program delivery, the organization of a fire department, and in the provision of basic, fundamental services of a fire department. With the current staffing levels of two per apparatus, the CCFD delivers emergency services well.

This report provides a considerable amount of technical data, much of which was provided by the Chatham County Fire Department. Additional information was provided by the County's Building Official's Office, County Engineering, and the Chatham County Resilience Program Administrator. The comprehensive approach of this document allows the reader to gain a clear understanding of the fire department's infrastructure, staffing levels, the community risk, and programs a contemporary fire department should be involved in.

This document is not intended to be a critical evaluation of the organization, but rather provide the fire department, County leadership, and Board of Commission members with information relevant to the transition of the private fire department to a County fire department and make recommendations and offer considerations to create a more efficient and effective fire department.

It is CPSM's hope that the information contained within this document is found to be useful and will provide the County with the information necessary to meet current and future fire protection and community risk reduction services as efficient and effective as possible.

End of Executive Summary Report

