

# BOWLING GREEN FIRE DEPARTMENT

## ANNUAL REPORT

### 2020





## **BOWLING GREEN FIRE DEPARTMENT COMMAND STAFF**

**JASON COLSON**, *FIRE CHIEF*

**JIM MORROW**, *DEPUTY CHIEF OPERATIONS*

**ROB GILLIAM**, *DEPUTY CHIEF PROFESSIONAL SERVICES*

**JASON BROOKS**, *ASSISTANT CHIEF PREVENTION*

**JUSTIN BROOKS**, *BATTALION CHIEF B SHIFT*

**TIM BUCHANON**, *BATTALION CHIEF C SHIFT*

**DOUG MORRIS**, *BATTALION CHIEF A SHIFT*

**SHANNON PARDUE**, *ASSISTANT CHIEF TRAINING*

### **ANNUAL REPORT PREPARED BY:**

**ELYSE JONKER**, *EXECUTIVE ASSISTANT*



## **CITY OF BOWLING GREEN ELECTED OFFICIALS**

**TODD ALCOTT**, *MAYOR*

**CARLOS BAILEY**, *COMMISSIONER*

**DANA BEASLEY-BROWN**, *COMMISSIONER*

**MELINDA HILL**, *COMMISSIONER*

**SUE PARRIGIN**, *COMMISSIONER*



# TABLE OF CONTENTS

From the Fire Chief .....	4
Department Overview .....	5
Public Protection Classification. ....	7
Fire Districts .....	8
Notable Incidents .....	15
COVID-19 Response .....	18
Fire Suppression .....	20
EMS .....	23
Technical Rescue .....	25
Hazardous Materials .....	29
ARFF .....	32
Community Risk Reduction .....	33
Public Education .....	35
Origin & Cause .....	37
Fixed Facilities & Frontline Fleet .....	40
Apparatus Maintenance .....	48
Occupational Health, Safety, & Risk Management .....	50
Wellness & Fitness .....	51
Communications .....	54
Training .....	55
Recognition .....	58
Performance Gap Analysis .....	59



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# FROM THE FIRE CHIEF

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On behalf of the members of the Bowling Green Fire Department, it gives me great pleasure to present our 2020 Annual Report. The professionalism and dedication of our personnel were fully demonstrated with their ability to adapt and meet the needs of the community as we navigated through one of the most challenging years in the history of this organization.

2020 was a difficult year for everyone, and most of our outreach programs were canceled or postponed due to the pandemic. Schools, public education programs, community events, and inspections were canceled and training opportunities were severely limited. As we focused on keeping our members safe, we maintained our operational capabilities and continued to have a positive impact on the community. I am extremely proud of the men and women of this Department and their commitment to serve the citizens of this community during difficult times.

I would like to commend the members of the Bowling Green Fire Department for their resiliency while faced with the unique challenges associated with 2020.

With the continued growth of our City, the Bowling Green Fire Department will continue to evaluate how to improve delivery of service to the community. We are committed to ensuring we maintain the resources and personnel necessary to provide immediate emergency services to the citizens of Bowling Green and surrounding areas. Future Department growth will be driven by efforts to meet the demands of this fast-growing and diverse population.

I would also like to take this opportunity to thank the Mayor, Board of Commissioners, City Manager, Senior Management, and all City departments that support the operations of the Bowling Green Fire Department. Your support contributes to the success of this organization.

**“WE UNDERSTAND THE CITIZENS OF  
BOWLING GREEN EXPECT THE BEST  
POSSIBLE SERVICE FROM OUR  
PERSONNEL AND WE WILL CONTINUE  
TO DEVELOP THE KNOWLEDGE,  
SKILLS, AND ABILITIES NECESSARY TO  
PROVIDE HIGH-QUALITY EMERGENCY  
SERVICES TO THE COMMUNITY.”**

**JIM MORROW  
INTERIM FIRE CHIEF**



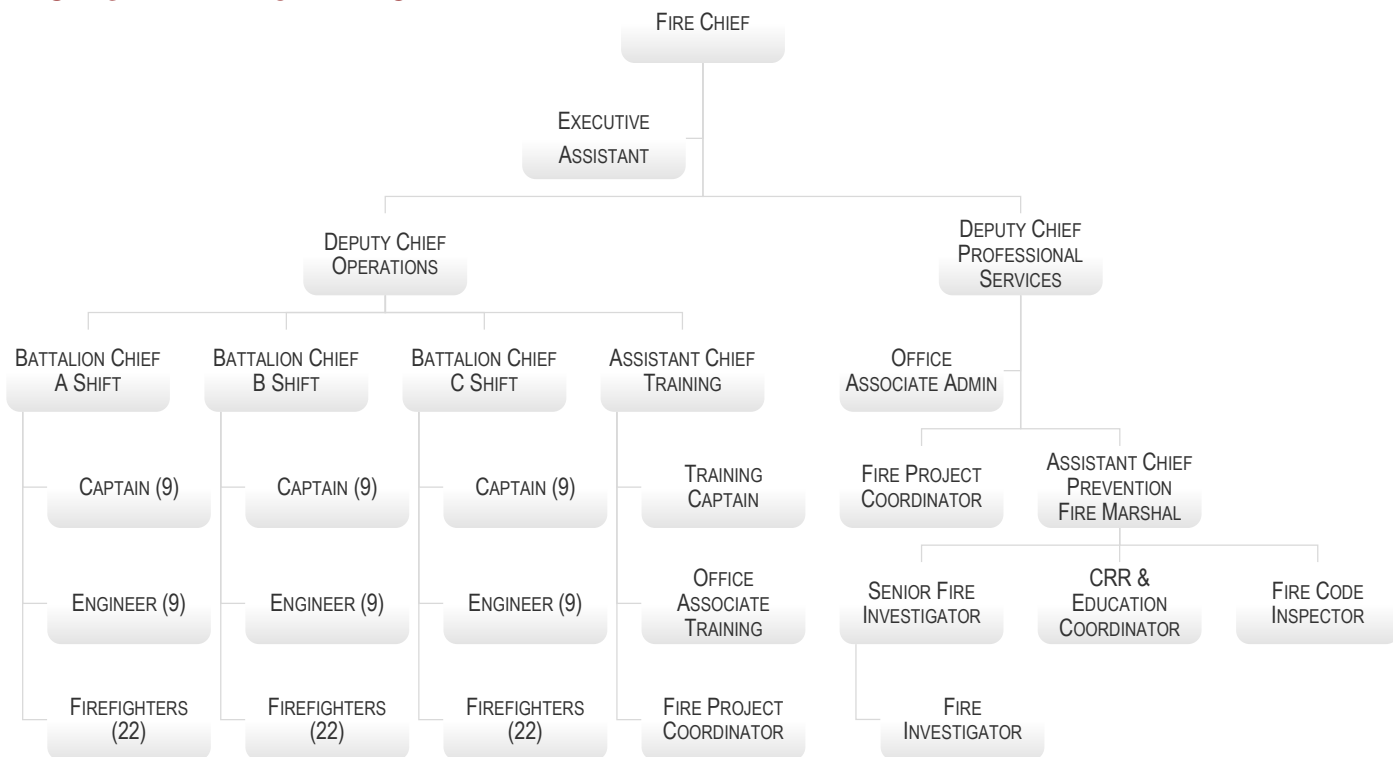


# DEPARTMENT OVERVIEW

The Bowling Green Fire Department is a fully-paid department that has achieved international accreditation in 2008, 2014, and most recently in 2018 through the Commission on Fire Accreditation International. As part of continuous improvement, a major goal of the Department is to create a safe community.

BGFD strives to reduce risks in the community by providing emergency response, educating the public, and enforcing applicable fire codes. The Department also provides Basic Life Support Services through its First Responder Program. The Department has a total of 136 employees working out of six stations and one administrative office building. BGFD's seventh station is currently under construction and is set to open in 2021.

## ORGANIZATIONAL CHART



# DEPARTMENT OVERVIEW

## VISION

Professional improvement through innovation and efficiency.

## MISSION

The Bowling Green Fire Department’s mission is to protect lives, property, and environment by providing a high level of professional fire and rescue services to the Bowling Green Community.

## VALUES

- Service Excellence – We will strive to deliver the best possible service to the community.
- Professional competence – We will develop our members by training for improvement, proficiency, and effectiveness.
- Teamwork – We will work and train as a team and recognize each member's contribution is important.
- Integrity – We value honest and ethical behavior at all times.
- Accountability – We will be accountable to each other for our competence, our attitude, and our actions.

**70,543**  
POPULATION SERVED  
ESTIMATE 2020

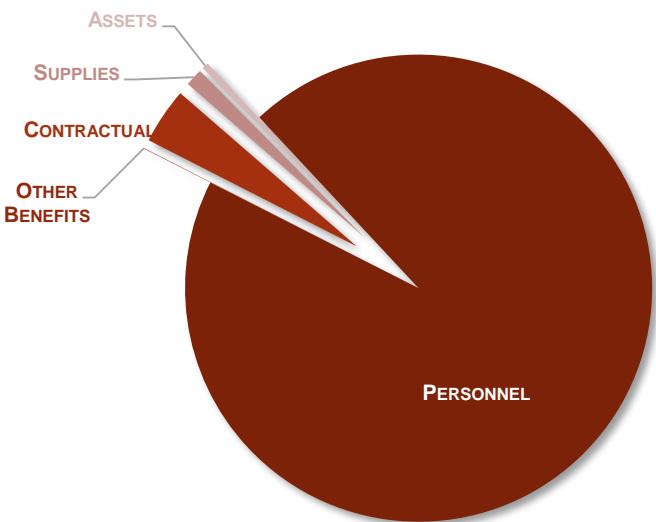
**40.76**  
SQUARE MILES  
PROTECTED

**\$15.7M**  
FY 2021  
OPERATING BUDGET

**\$180,000**  
FY 2021  
CAPITAL IMPROVEMENT

**\$222.57**  
COST PER CAPITA  
OPERATING BUDGET DIVIDED  
BY POPULATION

BREAK-EVEN DATE  
**MAY 30, 2020**  
PROPERTY SAVED EXCEEDS  
OPERATING BUDGET



DEPARTMENT GENERAL FUND EXPENDITURES



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# PUBLIC PROTECTION CLASSIFICATION

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**388**

**CLASS 1 AGENCIES IN  
THE UNITED STATES**

**105**

**ACCREDITED CLASS 1  
AGENCIES**

**12%**

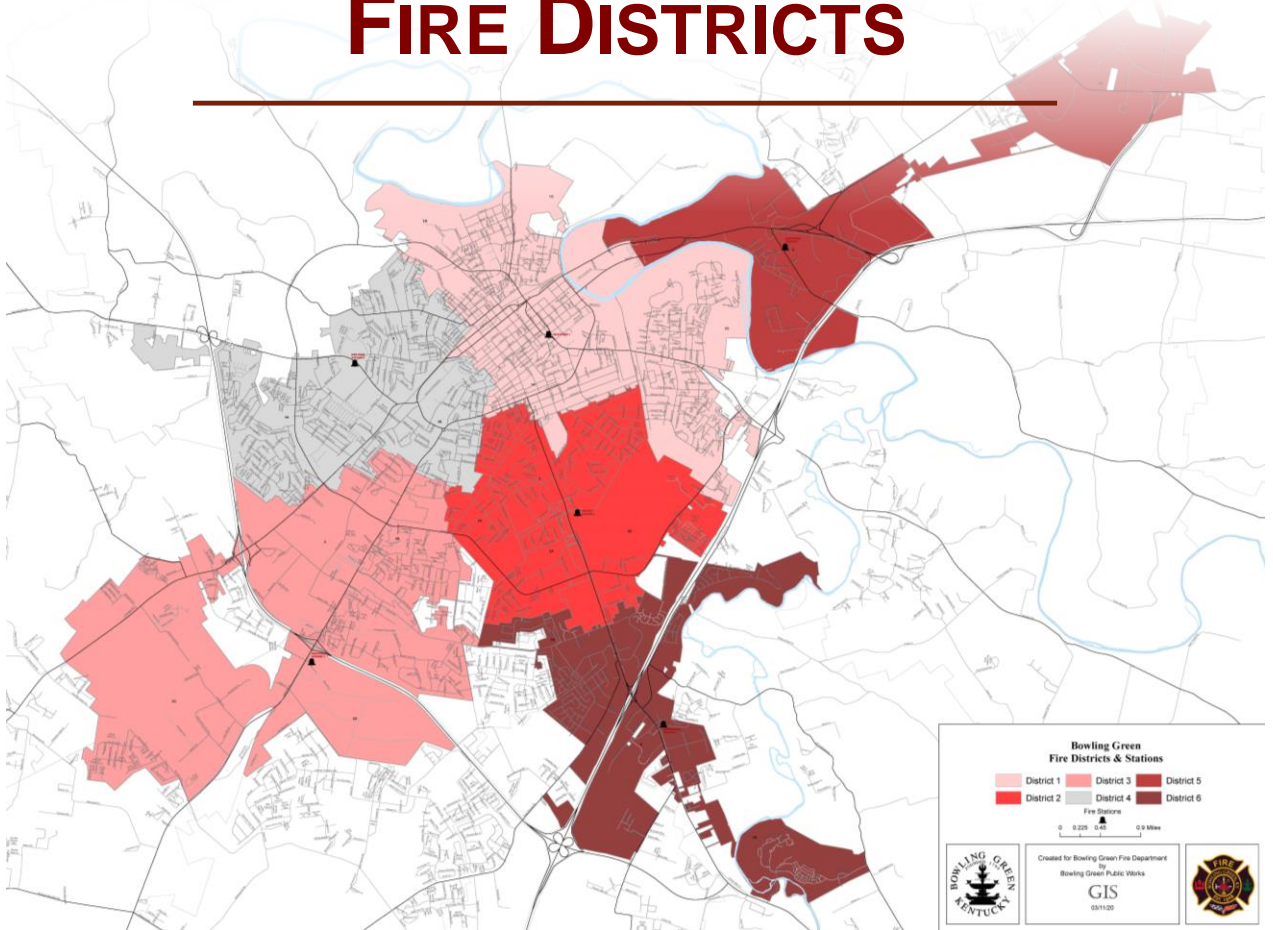
**US POPULATION  
PROTECTED BY  
ACCREDITED AGENCY**

The Bowling Green Fire Department has achieved their highest Insurance Services Office Public Protection Classification rating.

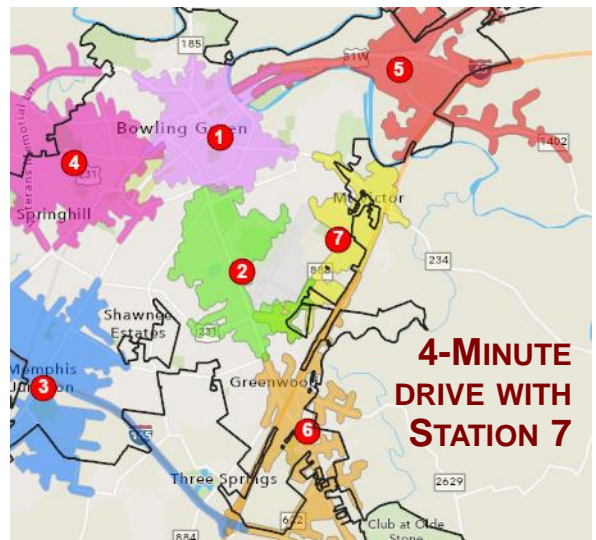
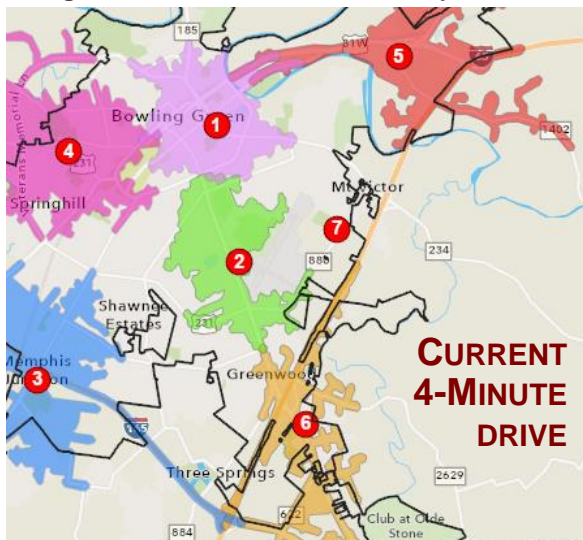
Following a review in January 2020, the Bowling Green Fire Department achieved a Class 01/1X Public Protection Classification (PPC) from the Insurance Services Office (ISO), which is the highest rating achieved in Department history. ISO collects and evaluates four primary categories of fire suppression – the fire department, water supply, emergency communications, and community risk reduction. This accomplishment has only been achieved by 388 fire departments in the nation.

Most insurance companies use ISO's PPC when calculating residential, commercial and industrial property premiums and an improved rating can lead to a reduction in insurance premiums. ISO analyzes data and assigns the PPC grade a number from 1 to 10. Class 1 represents an exemplary fire suppression program, and Class 10 indicates that the area's fire suppression program does not meet ISO's minimum criteria. The new rating became effective on September 1, 2020

# FIRE DISTRICTS



The City of Bowling Green is currently divided into six response districts. The seventh district will reduce the response area of Districts 1, 2, and 6. Station 7 will open in 2021. Below is a four-minute drive time analysis that demonstrates a service area gap within of the City of Bowling Green to be addressed by the addition of District 7.





# DISTRICT ONE

District One covers 7.88 square miles in the downtown area of Bowling Green, 19% of the City's square mileage. In 2020, there were 1,397 incidents in District One; of those were 28 structure fires and 641 medical assists.

Key areas include:

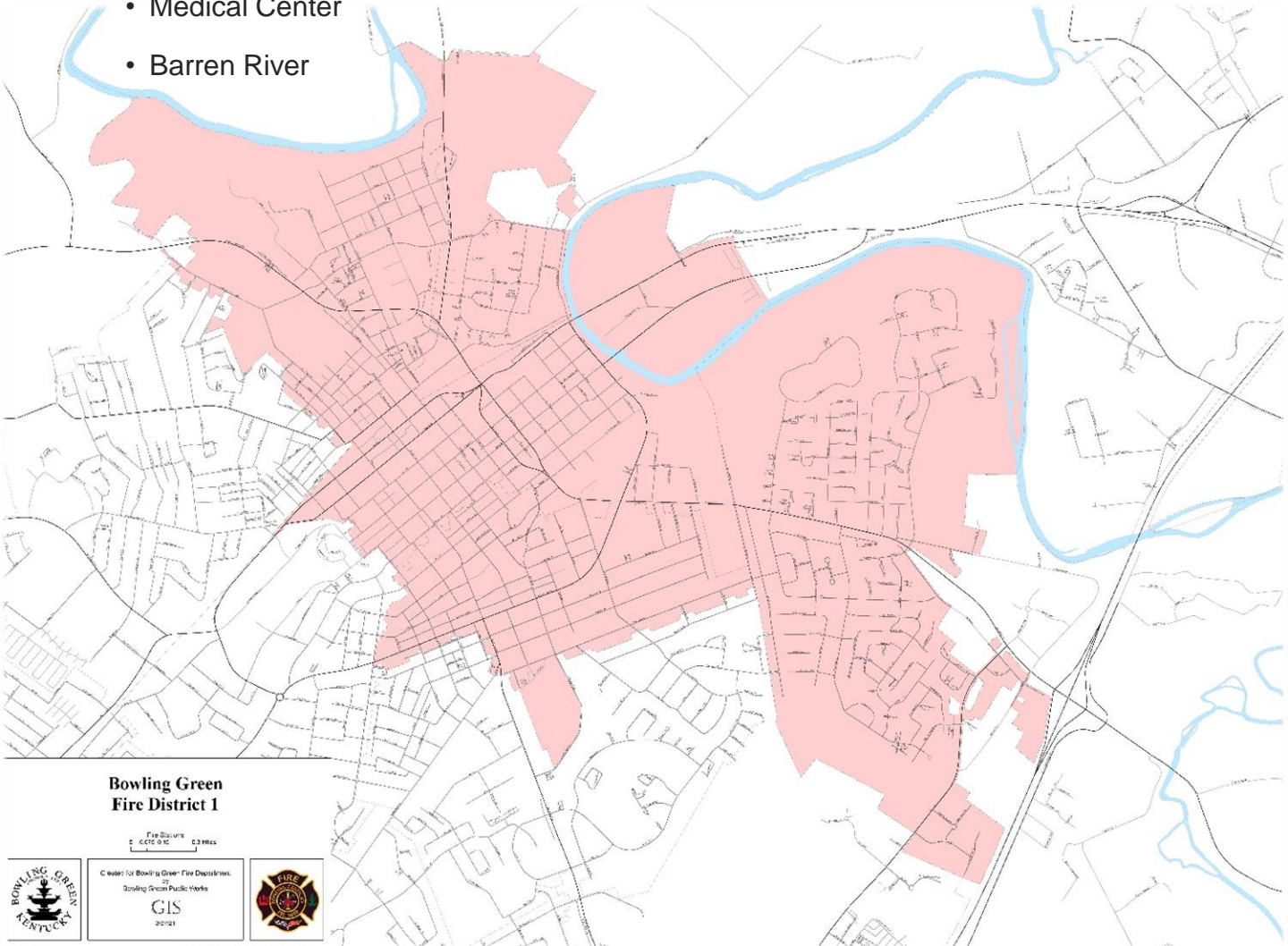
- Historic Downtown / Fountain Square
- Western Kentucky University Campus
- Medical Center
- Barren River

**19%**  
CITY SQUARE  
MILEAGE

**26%**  
TOTAL BGFD  
RESPONSES

**36%**  
TOTAL  
STRUCTURE  
FIRES

**24%**  
TOTAL MEDICAL  
ASSISTS



# DISTRICT Two

District Two covers 5.17 square miles of mixed commercial and residential area surrounding the Bowling Green-Warren County Regional Airport, 13% of the City's square mileage. In 2020, there were 683 incidents in District Two; of those were 2 structure fires and 330 medical assists.

Key areas include:

- Bowling Green-Warren County Regional Airport
- Greenview Regional Hospital
- Greenwood Mall and other large shopping centers

**13%**  
CITY SQUARE  
MILEAGE

**13%**  
TOTAL BGFD  
RESPONSES

**3%**  
TOTAL  
STRUCTURE  
FIRES

**12%**  
TOTAL MEDICAL  
ASSISTS



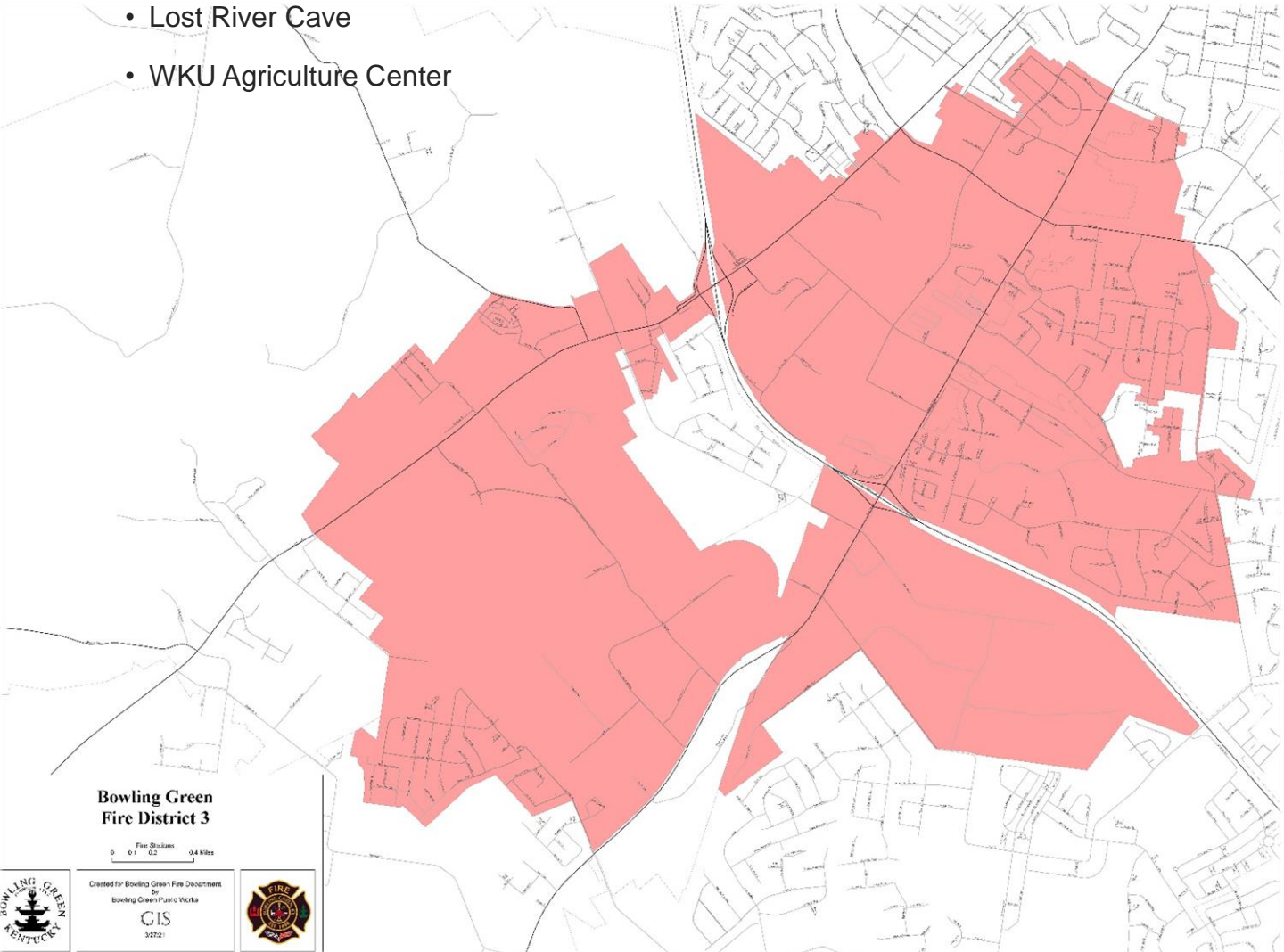
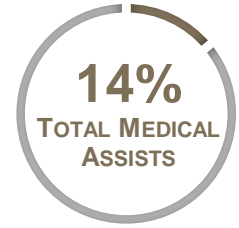
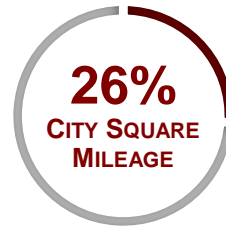


# DISTRICT THREE

District Three covers 10.51 square miles on Bowling Green's growing south side, 26% of the City's square mileage. In 2020, there were 797 incidents in District Three; of those were 8 structure fires and 382 medical assists.

Key areas include:

- Southern Industrial Park
- I-165 (formerly Natcher Parkway)
- Lost River Cave
- WKU Agriculture Center

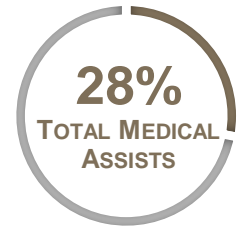


# DISTRICT FOUR

District Four covers 5.32 square miles of largely residential area on the west side of Bowling Green, 13% of the City's square mileage. In 2020, there were 1,248 incidents in District Four; of those were 28 structure fires and 732 medical assists.

Key areas include:

- Western Kentucky University Campus
- SKY Community Technical College
- Neighborhoods: Springhill, Whispering Hills, Preston Miller Park, Skyline

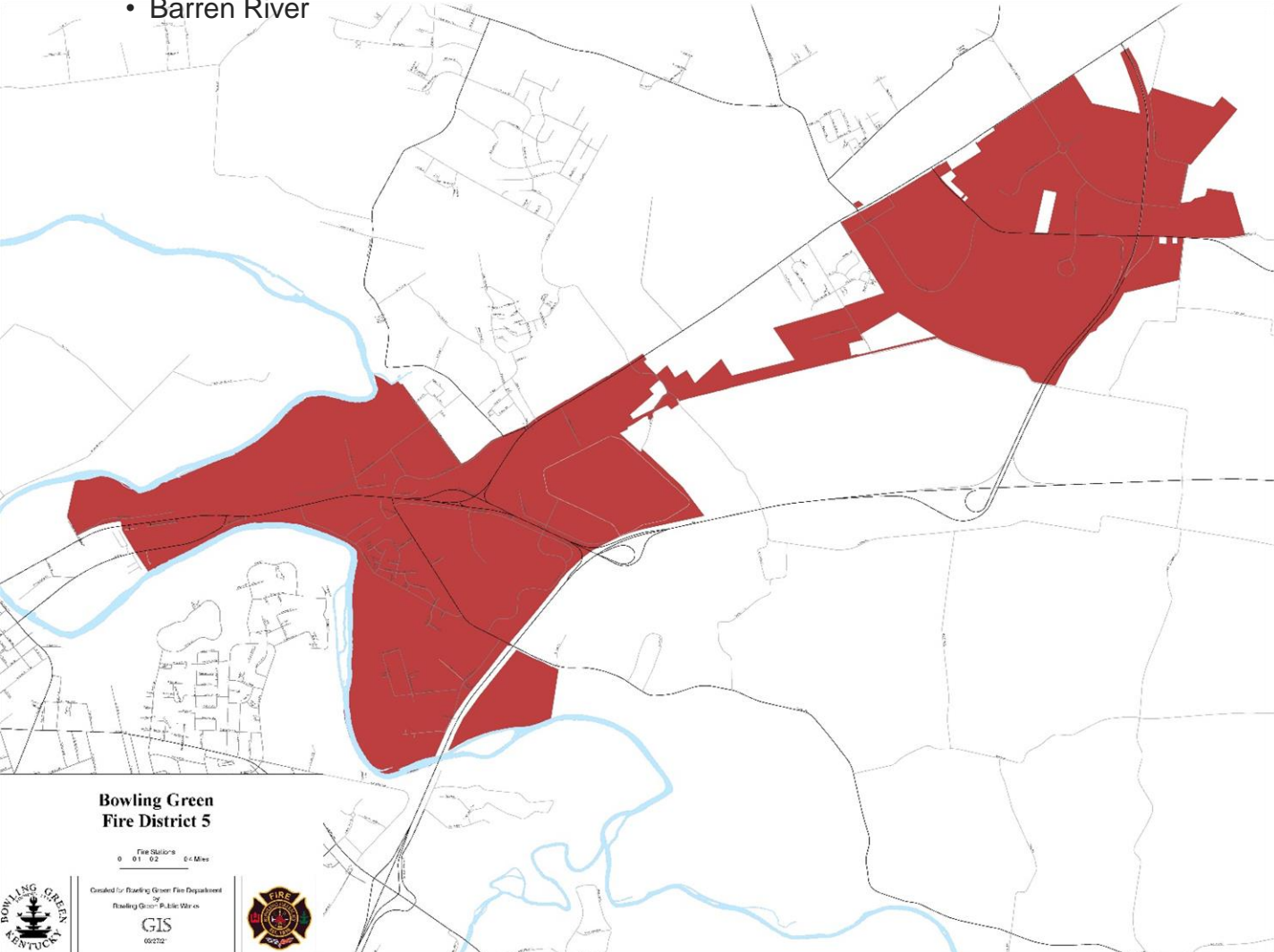
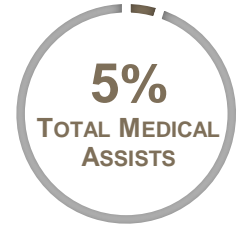


# DISTRICT FIVE

District Five covers 6.19 square miles on the north end of Bowling Green, 15% of the City's square mileage. In 2020, there were 361 incidents in District Five; of those were 4 structure fires and 129 medical assists.

Key areas include:

- Kentucky Transpark
- Corvette plant
- Barren River



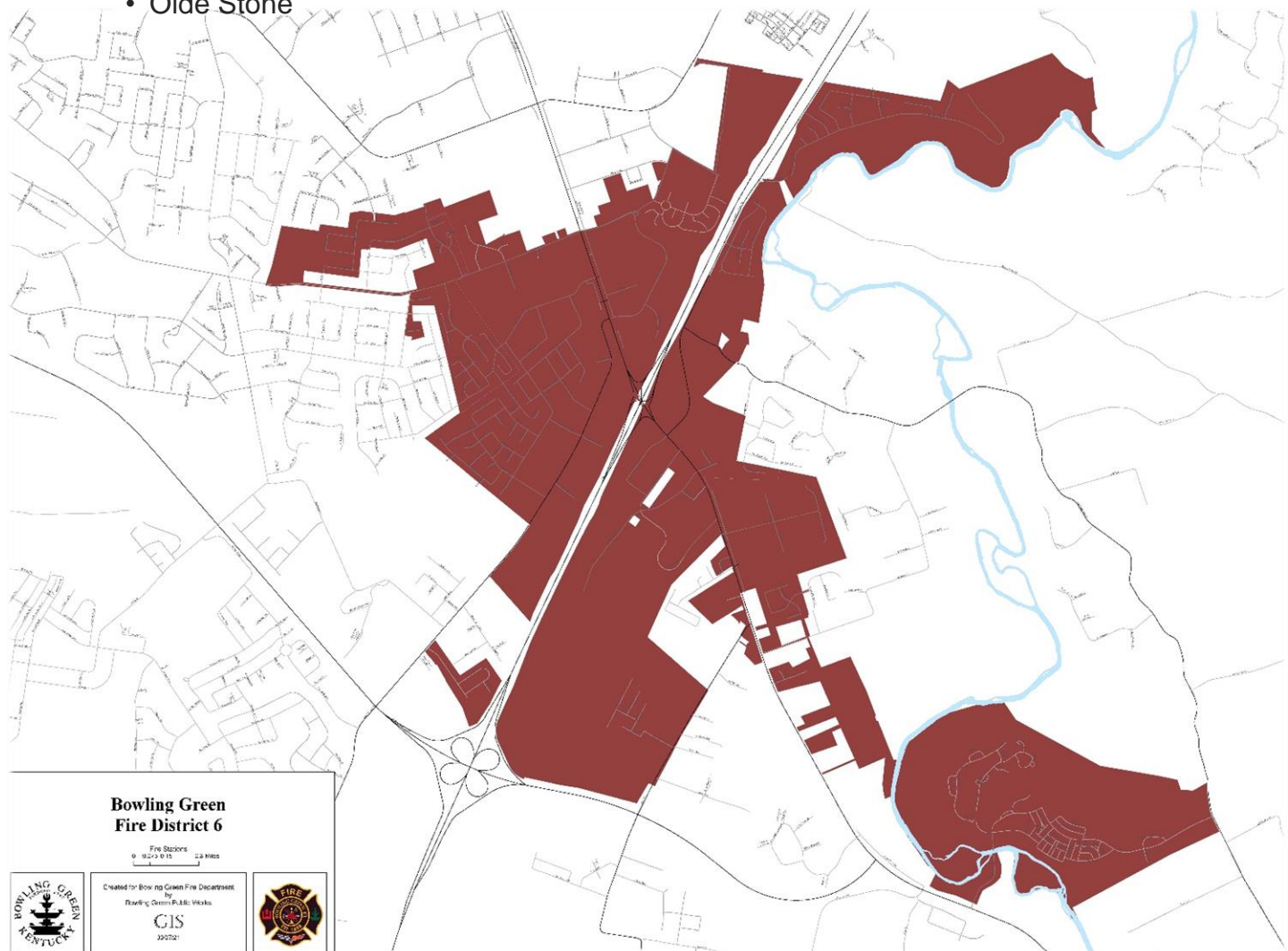
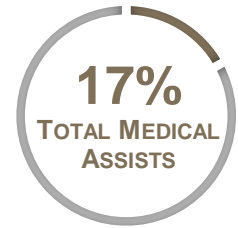


# DISTRICT SIX

District Six covers 5.06 square miles on the southeastern end of Bowling Green, 12% of the City's square mileage. In 2020, there were 832 incidents in District Six; of those were 7 structure fires and 444 medical assists.

Key areas include:

- Drakes Creek
- I-65 interchange at Scottsville Rd
- Olde Stone



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# NOTABLE INCIDENTS

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## 03.20.2020 EXTRICATION OF VICTIM FROM VEHICLE – WALMART ON MORGANTOWN RD

Engine 4 responded to a vehicle that hit a light pole in the Walmart parking lot. Dispatch advised one patient was trapped in the car with heavy front-end damage. Engine 4 crew removed the driver's-side door with the assistance of Truck 4 to make access to the patient. The patient's legs and feet were pinned underneath the dashboard of the vehicle. The motor of the vehicle had pushed through the firewall and pinned the patient. Rescue 1 also arrived and the patient was successfully removed from the vehicle.

## 03.22.2020 EXTRICATION OF VICTIM FROM VEHICLE IN WARREN CO – UPPER STONE AVE

Rescue 1 responded to assist Engine 5 and Warren Co Volunteer units for report of a trapped Warren County Sheriff's Deputy in a two-vehicle accident. The second vehicle needed to be pulled off the Sheriff's vehicle to gain access to the patient. Rescue 1 used Engine 5 as anchor point and used the grip hoist to pull the vehicle away. The patient was successfully extricated from the vehicle and transported to the hospital.

## 05.11.2020 SWIMMING / RECREATIONAL WATER AREA RESCUE – LOST RIVER CAVE

Crews responded to assist Western Kentucky University Police Department in locating a subject that had gone over the fence at Lost River Cave and was possibly in the water. Upon arrival, crews discovered it would be a body recovery; the victim was up against a drain pipe where the river flows down into the cave. Once the victim was out of the water, he was placed and secured onto a long spine board. Crews carried the victim to the ambulance for investigation by the coroner.





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# NOTABLE INCIDENTS

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## 06.02.2020 STRUCTURE FIRE – 728 CHESTNUT ST

An unknown passerby discovered and reported the structure fire to authorities. First due suppression crews arrived within three minutes of the 911 call and encountered heavy fire occupying the truss attic space. The structure was not equipped with a fire suppression system. Tenants evacuated the structure and no injuries were reported. The fire did not progress beyond the structure of origin, and estimated property loss was \$217,500. The BGFD Strike Team was activated as a result of this incident.

## 06.11.2020 FATAL STRUCTURE FIRE – 1424 LYNHURST DR

The Bowling Green Fire Department responded to a residential fire with the report of a victim. On arrival, crews worked to locate and attack the fire, as well as search the residence for occupants. The search was made difficult by limited visibility from smoke, heat from the fire, and crowded conditions within the house. After a brief period of time, a male victim was located. He was immediately removed from danger by fire crews to the care of EMS where he was transported to a local hospital. The man was later taken to a trauma center in Nashville, TN where he succumbed to his injuries on June 13, 2020.





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# NOTABLE INCIDENTS

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## 07.18.2020 INCENDIARY STRUCTURE FIRE – 1147 GRANT WAY

Crews responded to a structure fire at an apartment complex and reported a charred door and door mat at the residence. The fire had been extinguished prior to firefighters' arrival. A fire investigator was notified and responded to the scene. Located on the ground in the area around the front door were remnants of an apparent Molotov cocktail. An accelerant detection canine was deployed into the scene and alerted. Evidence was collected and sent to the Kentucky State Police Forensic Laboratory for analysis.

## 08.22.2020 – 09.06.2020 WATER RESCUE INCIDENTS – DRAKES CREEK

In late August and early September 2020, the Bowling Green Fire Department responded to several water rescues on Drakes Creek. In total, seven victims were rescued, including a 5-year-old that had been separated from their parent and an individual clinging to a tree. Water levels were high with moderately swift currents and many of the boaters were inexperienced.

## 11.09.2020 CONFINED SPACE RESCUE – 16 CHESTNUT ST

Rescue 1 responded for a reported fall with injury, possible confined space rescue at a Bowling Green Municipal Utilities construction site. The patient had fallen 20 feet into a below-grade vault. EMS was on-site but unable to get the patient out. The only means of access to the unconscious patient was a ladder. Rescue 1 crew brought the Durahoist to the area and set it up over the hole. A stokes basket and additional ropes were also brought. The crew secured the patient in the stokes basket, raised the patient, and assisted loading into the ambulance. At the time of this report, the patient was recovering well.

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# COVID-19 RESPONSE

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**6,986**

**SUPPRESSION PERSONNEL  
HOURS LOST DUE TO COVID**

**22**

**EMPLOYEES TESTED  
POSITIVE**

**\$4.9M**

**CITY OF BOWLING GREEN  
CARES GRANT**

On March 18, 2020, the Bowling Green Fire Department limited members' exposure to the public:

- Temporary halt to all fire safety inspections and public education
- Stations closed to the public
- Symptom screening for all employees entering BGFD facilities
- Social distancing encouraged among crews
- Some Admin and civilian personnel working remotely

On March 19, BGFD and Dispatch changed EMS protocols. BGFD no longer automatically responds to trouble breathing, chest pain, headache, or illness-related calls unless specifically requested by EMS. Trauma response remained the same. As a result, in 2020 BGFD responded to 40.8% fewer EMS calls than in 2019. Overall call volume decreased by 30.8%.

On March 20<sup>th</sup>, traveling to other stations, trades, and outside employment were limited.

On March 24, Dispatch temporarily relocated night crews to the secondary dispatch center at Greenwood Fire Station.



# COVID-19 RESPONSE

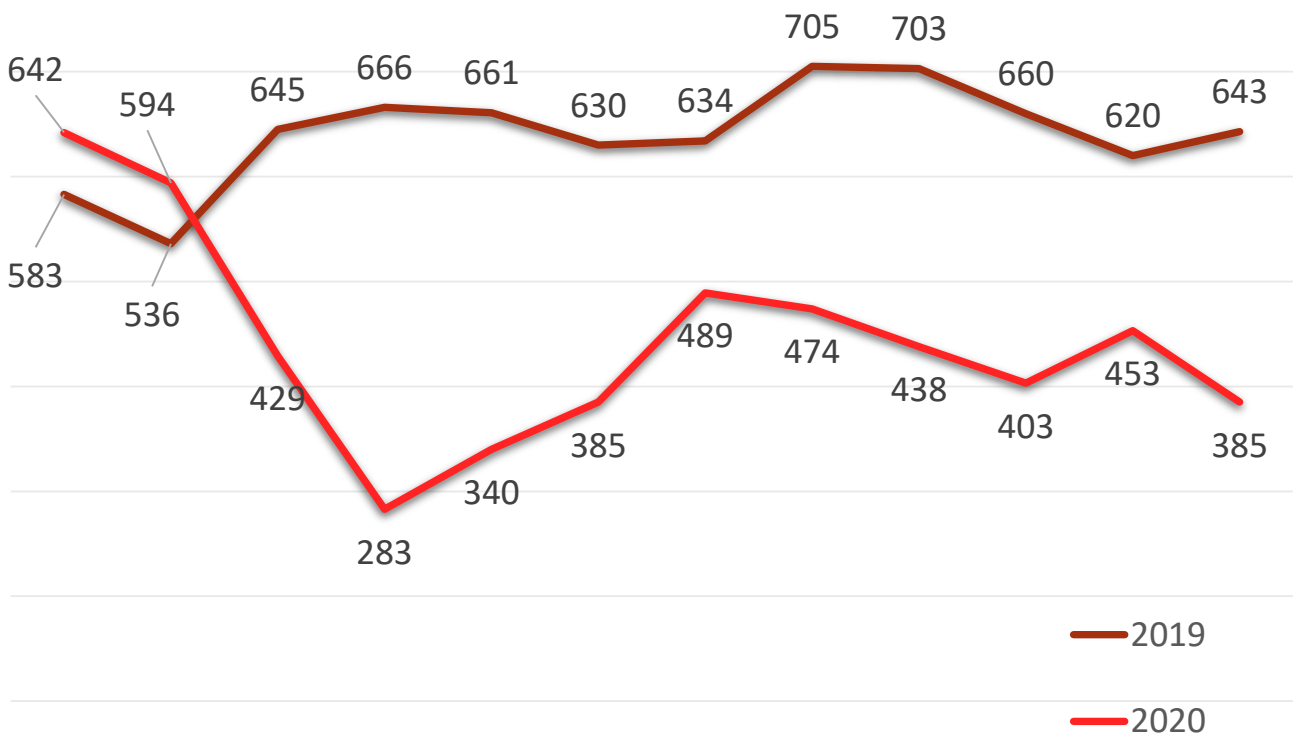
Also in March, installation of Lifesize video conferencing in all facilities was complete. This decision was made prior to the COVID outbreak but proved to be a critical component to Department operations.

For the remainder of 2020, precautionary COVID guidelines remained in place. Overall, 22 employees tested positive for COVID; all were community, not patient, exposures.

Quarantine, alternate schedules, and childcare concerns contributed to the 6,986 lost hours from Suppression members.

**30.8%**  
**TOTAL CALL VOLUME**  
**REDUCTION FROM 2019**

**40.8%**  
**EMS CALL VOLUME**  
**REDUCTION FROM 2019**



## TOTAL CALLS PER MONTH



# FIRE SUPPRESSION

The Fire Suppression Division includes 126 sworn personnel divided into three shifts providing full-time response to all categories of emergencies. Suppression Division is comprised of three Battalion Chiefs, 27 Fire Captains, 27 Fire Engineers, and 66 Firefighters.

Suppression operates around the clock, working on a 24/48-hour shift rotation. The Department has six stations strategically located to provide efficient coverage for the City.

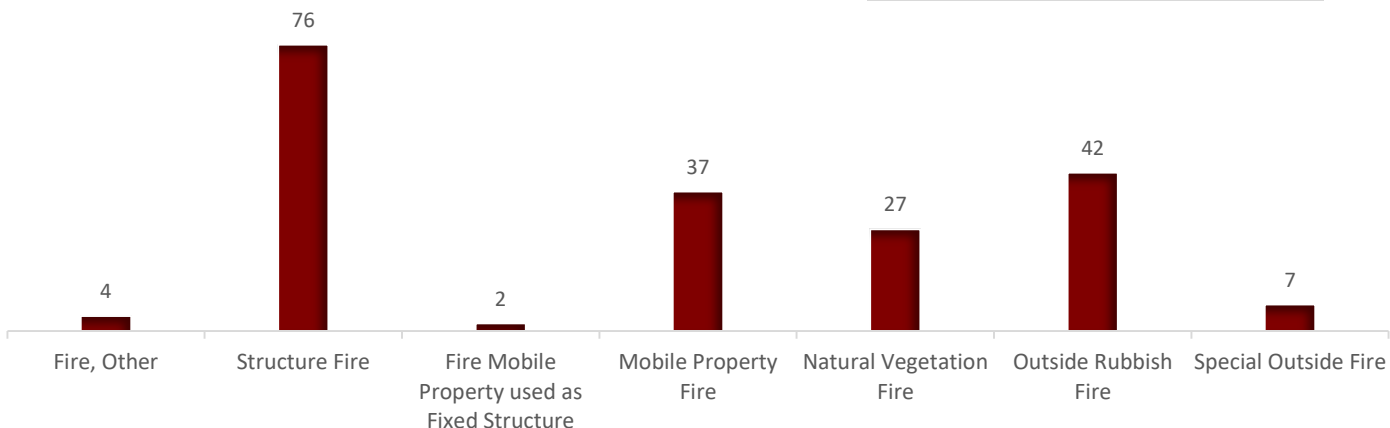
Fire Suppression personnel provide additional service to the community through many Specialty and Technical Rescue programs. These include: EMS first responder, hazardous materials mitigation, rope rescue, water rescue, confined space rescue, trench rescue, structural collapse, auto and machinery extrication, and loss control. Thousands of hours are logged annually to maintain proficiency in these disciplines.

## General Order 20-02 February 26, 2020

ESTABLISHED PROTOCOL FOR **STRIKE TEAM RESPONSE**. THE STRIKE TEAM SHALL BE COMPOSED OF BGFD MEMBERS ABLE TO **PROVIDE A QUICK RESPONSE**, AND SUPPLEMENTED BY ALVATON AND RICHARDSVILLE FIRE DEPARTMENTS.

### STRIKE TEAM APPARATUS:

- ENGINE 14
- ENGINE 15
- CAR 2



# FIRE SUPPRESSION

"2020 WAS A CHALLENGING YEAR FOR SUPPRESSION.

**MEMBERS MAINTAINED A HIGH LEVEL OF**

**PROFESSIONAL SERVICE TO THE CITIZENS WHILE**

ADJUSTING TO THE EXTRA CHALLENGES THAT WERE

BROUGHT ON BY THE COVID PANDEMIC.

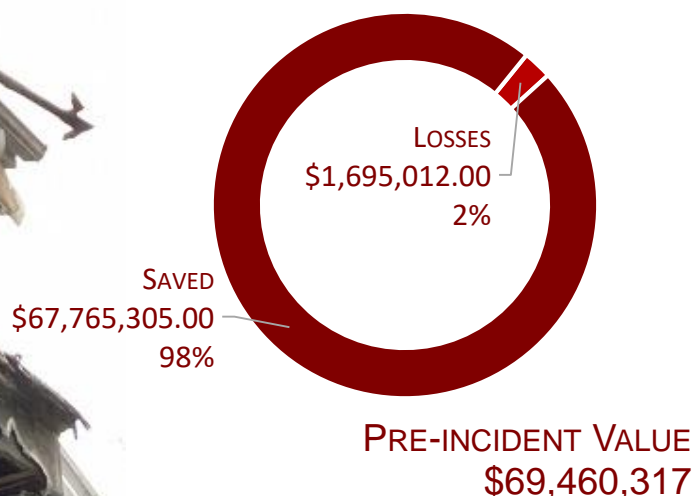
SUPPRESSION PERSONNEL WORKED WITH THE

COMMAND STAFF TO PROVIDE IDEAS AND

SOLUTIONS TO THE EXTRA CHALLENGES

CAUSED BY THE PANDEMIC."

**BATTALION CHIEF TIM BUCHANON**



# MEASURING PERFORMANCE

## FIRE SUPPRESSION BENCHMARK

FOR 90 PERCENT OF ALL MODERATE AND HIGH RISK STRUCTURE FIRE RESPONSES:

### FIRST-DUE UNIT

- TOTAL RESPONSE TIME – 06:20
- STAFFED WITH 3 FIREFIGHTERS
- FIRST-DUE UNIT CAPABILITIES:
  - Provide 500 gallons of water, 1,500 gallons per minute (gpm) pumping capacity
  - Establish command, complete initial size-up, request additional resources, initiate fire attack, establish and advance an attack line flowing a minimum of 150 gpm;
  - Establish an uninterrupted water supply; contain the fire; and rescue at-risk victims.



### EFFECTIVE RESPONSE FORCE

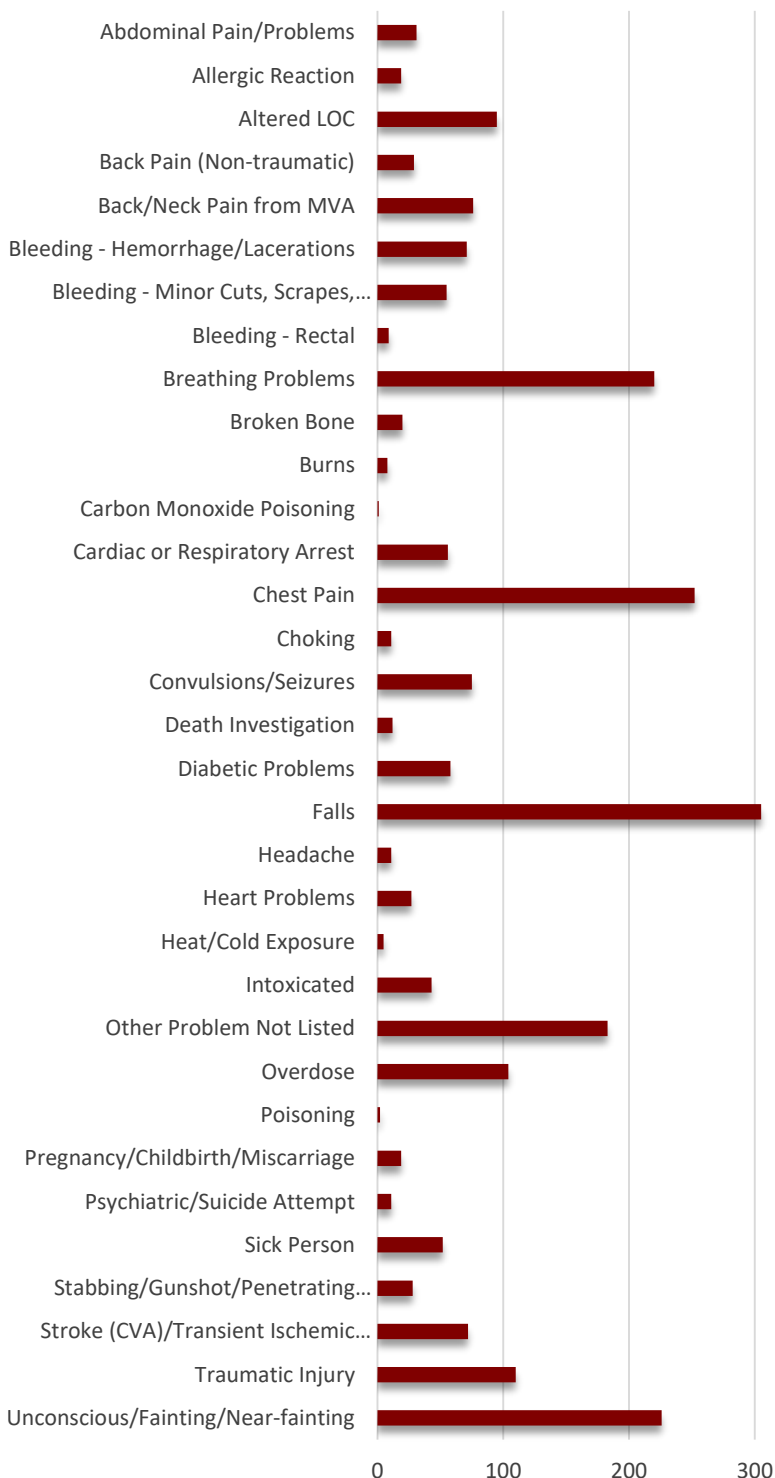
- TOTAL RESPONSE TIME – 10:20
- STAFFED WITH 14 FIREFIGHTERS
- ERF CAPABILITIES
  - Establish command, provide an uninterrupted water supply, advance an attack line and backup line for fire control
  - Comply with OSHA requirements of two in – two out
  - Complete forcible entry, search and rescue at-risk victims, ventilate the structure, control utilities, establish a 2-man RIT team
  - Place elevated master streams into service and perform salvage and overhaul

Medium-High Risk Fire 90th Percentile Times	2020	Benchmark	Gap
Alarm Handling (pickup to dispatch)	1:26	1:00	0:26
Turnout Time - 1st Unit	1:44	1:20	0:24
Travel Time - 1st Unit	4:20	4:00	0:20
Travel Time - ERF	8:37	8:00	0:37
Total Response Time - 1st Unit	7:07	6:20	0:47
Total Response Time - ERF	11:14	10:20	0:54



# EMS

## PATIENT COMPLAINT



The Bowling Green Fire Department's Emergency Medical Services program provides basic life support to the Bowling Green community through the first responder program. The EMS program includes 115 Emergency Medical Technicians; five are also certified as paramedics.

### AIR-EVAC TRAINING

In February, Air-Evac hosted a 24-hour refresher training at BGFD. 12 members of BGFD attended with representatives from other EMS agencies.

**3274**  
EMS INCIDENTS

**142**  
CONTROL BLEEDING

**55**  
CPR PERFORMED

**52**  
MEDICATION  
ADMINISTERED

**147**  
OXYGEN APPLIED

# MEASURING PERFORMANCE

## EMS BENCHMARK

FOR 90 PERCENT OF ALL EMERGENCY MEDICAL SERVICES RESPONSES:

### FIRST-DUE UNIT

- TOTAL RESPONSE TIME – 06:45
- STAFFED WITH 3 FIREFIGHTERS
- FIRST-DUE UNIT CAPABILITIES:
  - Assess scene safety and establish command; size-up the situation, conduct initial patient assessment, initiate CPR, obtain vitals and patient's medical history
  - Initiate mitigation efforts within one minute of arrival, provide first responder medical aid including automatic external defibrillation
  - Assist transport personnel with packing the patient

Emergency Medical Services 90th Percentile Times	2020	Benchmark	Gap
Alarm Handling (pickup to dispatch)	1:14	1:45	-
Turnout Time - 1st Unit	1:42	1:00	0:42
Travel Time - 1st Unit	5:08	4:00	1:08
Total Response Time - 1st Unit	7:08	6:45	0:23

### EFFECTIVE RESPONSE FORCE

As BGFD provides EMS response only at the first responder level, in support of the local ambulance service, only one unit is sent to emergency medical calls. The remainder of the Effective Response Force, including Advanced Life Support, is supplied by The Medical Center at Bowling Green.



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# TECHNICAL RESCUE

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The Bowling Green Fire Department Technical Rescue Program is overseen by the Deputy Chief of Operations who reports directly to the Fire Chief.

The Department provides six technical rescue specialties to the City of Bowling Green: Structural Collapse, Trench Rescue, Vehicle and Machinery Extrication, Swiftwater Rescue, Confined Space Rescue, and Rope Rescue. Each program coordinator is assigned by the Battalion Chiefs, and is filled by one of the Technical Rescue Captains at Station One.

**“THE DEPARTMENT WILL CONTINUE  
TO ENHANCE CAPABILITIES TO  
BECOME ONE OF THE MOST  
HIGHLY-TRAINED AND WELL-  
EQUIPPED PROGRAMS IN THE  
REGION.”**

**CAPTAIN CRAIG WHITE**



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# TECHNICAL RESCUE

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The coordinator is responsible for:

- Training activities, coordinate with Training Division to schedule Department personnel and outside agencies
- Administer annual written and hands-on competency evaluations to keep all members at a minimum of awareness level
- Instruction of certification classes
- Liaison between the Fire Department and outside businesses relating to possible technical rescue incidents and pre-plans
- Oversee equipment, inventory, budget, and purchasing for the program, ensuring that capabilities match the agency's goals and objectives as well as the needs of the Bowling Green community

**20**

**CITY EXTRICATION  
INCIDENTS**

**25**

**COUNTY EXTRICATION  
INCIDENTS**

**1**

**TRENCH/BELOW-GRADE  
INCIDENT**

**1**

**CONFINED SPACED  
INCIDENT**

**3**

**SWIFT WATER INCIDENTS**



# TECHNICAL RESCUE

## TECHNICAL RESCUE TRAINING HOURS:

Vehicle Extrication	363
Structural Collapse	302
Trench Rescue	227
Confined Space	194
Water Rescue	589
Farm & Machinery Rescue	74
Rope Rescue	423
<b>Total</b>	<b>2,172</b>

## TECHNICAL RESCUE PERSONNEL

All recruits receive an awareness-level training during recruit class. All personnel maintain awareness-level training throughout the year.

	LEVEL 1 – OPERATIONS	LEVEL 2 – TECHNICIAN
CONFINED SPACE	30	3
TRENCH RESCUE	17	9
ROPE RESCUE	24	3
STRUCTURAL COLLAPSE	30	5
SWIFT WATER RESCUE	41	13
VEHICLE & MACHINERY EXTRICATION	13	2



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# MEASURING PERFORMANCE

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## TECHNICAL RESCUE BENCHMARK

FOR 90 PERCENT OF ALL TECHNICAL RESCUE RESPONSES:

### FIRST-DUE UNIT

- TOTAL RESPONSE TIME – 06:20
- STAFFED WITH 3 FIREFIGHTERS
- FIRST-DUE UNIT CAPABILITIES:
  - Establish command, size-up to determine if technical rescue response is required
  - Request additional resources
  - Provide basic life support to any victim without endangering response personnel



### EFFECTIVE RESPONSE FORCE

- TOTAL RESPONSE TIME – 10:20
- STAFFED WITH 14 FIREFIGHTERS
- ERF CAPABILITIES
  - Establish patient contact, stage and setup apparatus
  - Provide technical expertise, knowledge, skills, and abilities during technical rescue incidents
  - Perform trench, confined space, high angle, and swift water rescue
  - Provide first responder medical support

Technical Rescue 90th Percentile Times	2020	Benchmark	Gap
Alarm Handling (pickup to dispatch)	1:24	1:00	0:24
Turnout Time - 1st Unit	1:47	1:20	0:27
Travel Time - 1st Unit	5:30	4:00	1:30
Total Response Time - 1st Unit	9:55	6:20	3:35



# HAZARDOUS MATERIALS

The Bowling Green Fire Department Hazardous Materials Incident Mitigation specialty program is primarily housed at Station 3 and is overseen by three Station Captains. In 2020, the program was restructured with a Battalion Chief as director. Coordinators held quarterly meetings with the Battalion Chief to ensure consistent communication and compliance with the programs goals.

## TRAINING

Training opportunities were limited in 2020, and the HazMat program was unable to increase IFSAC certified members as planned. This will be the goal moving into 2021. Coordinators are working with the Training Division to find other opportunities that can assist in obtaining the certifications needed.

**248**

**TRAINING CLASSES**

**1456**

**TRAINING HOURS**

## Hazardous Materials Incident Types

221 - Overpressure rupture of air or gas pipe/pipeline	1
231 - Chemical reaction rupture of process vessel	1
410 - Combustible/flammable gas/liquid condition, other	2
411 - Gasoline or other flammable liquid spill	10
412 - Gas leak (natural gas or LPG)	20
420 - Toxic condition, other	1
422 - Chemical spill or leak	1
424 - Carbon monoxide incident	18
<b>Total</b>	<b>54</b>

**“WE STRIVE TO CONTINUALLY  
IMPROVE THE HAZMAT PROGRAM  
TO BENEFIT THE DEPARTMENT AND  
THE CITIZENS OF BOWLING GREEN.”**

**CAPTAIN MICHAEL WEBSTER**



# HAZARDOUS MATERIALS

## INVENTORY

During the first quarter of 2020, C shift updated the inventory records of the HazMat program. The goal of this was to more accurately and easily keep items on permanent record and maintain purchase dates, expiration dates and total lifespan of inventory.

A risk assessment was completed in November. This was a basic assessment that focused on Tier 2 facilities. The goal was to verify that the program's PPE and equipment is adequate based upon the most common substances that are known to be in Bowling Green. The assessment concluded that BGFD has the proper types of PPE and is adequately prepared for a Tier 2 response.

## Homeland Security Grant Obtained

A HOMELAND SECURITY GRANT IN THE AMOUNT OF \$14,190 WAS AWARDED IN JANUARY FOR THE PURCHASE OF HAZMAT PPE. GRANT FUNDING WAS UTILIZED TO IMPROVE PPE AND EQUIPMENT.



# MEASURING PERFORMANCE

## HAZMAT BENCHMARK

FOR 90 PERCENT OF ALL HAZARDOUS MATERIALS RESPONSES:

### FIRST-DUE UNIT

- TOTAL RESPONSE TIME – 06:20
- STAFFED WITH 3 FIREFIGHTERS
- FIRST-DUE UNIT CAPABILITIES:
  - Establish command, size-up and assess the situation to determine the presence of a potential hazardous material or explosive device
  - Determine the need for additional resources
  - Estimate the potential harm without intervention and begin establishing a hot, warm, and cold zone

### EFFECTIVE RESPONSE FORCE

- TOTAL RESPONSE TIME – 10:20
- STAFFED WITH 14 FIREFIGHTERS
- ERF CAPABILITIES
  - Provide the equipment, technical expertise, knowledge, skills and abilities to mitigate a hazardous materials incident in accordance with Department standard operating guidelines



HazMat 90th Percentile Times	2020	Benchmark	Gap
Alarm Handling (pickup to dispatch)	1:53	1:00	0:53
Turnout Time - 1st Unit	1:56	1:20	0:36
Travel Time - 1st Unit	4:57	4:00	0:57
Total Response Time - 1st Unit	7:31	6:20	1:11



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# ARFF

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**12**  
**AIRCRAFT STANDBY  
EVENTS**

**1**  
**AIRCRAFT INCIDENT**

**151**  
**TRAINING HOURS**

In 2020, the goal was to keep the ARFF program compliant with FAA guidelines and be response-ready. This goal was met with the following objectives:

- Maintain the training for Station 2 members to meet the required ARFF levels. This was accomplished by sending 12 members to ARFF live burn certification in Lexington in June
- Successful completion of FAA inspection; completed virtually

The third objective was to update/create a new BGWC Airport Map. At the time of this report, construction at the airport hasn't been completed so the map project was postponed.

## AIRCRAFT INCIDENT

On May 2, 2020, units responded emergency for a reported aircraft crash. ARFF 22 and Engine 2 arrived on scene at the same time to find a two-person aircraft crash landed in the approach area of runway 3; no visible smoke or fire. Upon arrival, the pilot had already exited the aircraft and no injuries were reported. Crews monitored the aircraft until Airport management arrived.



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# COMMUNITY RISK REDUCTION

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**2,054**  
**PRE-PANDEMIC**  
**ANNUAL INSPECTIONS**  
**PLANNED FOR 2020**

**726**  
**INSPECTIONS**  
**COMPLETED**

**75%**  
**FEWER INSPECTIONS**  
**THAN 2019**

The Bowling Green Fire Department Fire Prevention Division adjusted operations in accordance with the guidelines and requirements warranted by COVID-19. This resulted in the modification of many practices for Community Risk Reduction including Fire and Life Safety Inspections, Public Education, and Community Outreach events. In an effort to limit exposures to Department personnel as well as limiting the impact on local businesses, BGFD temporarily discontinued some services and modified others.

Changes to Community Risk Reduction program included:

- Implemented electronic review and signatures for all Plats and Plan reviews.
- Suspended all general business Fire Safety inspections for the duration of the pandemic response that limited and/or prohibited occupancy standards.
- State/City buildings, businesses, as well as mobile food vendors that required a fire Inspection for licensing purposes were completed by requested appointment only, in accordance with all social distancing and safety guidelines.

## REGULAR INSPECTION SCHEDULE:

INSPECTABLE OCCUPANCIES	5,397
ANNUAL	43%
EVERY 2 YEARS	8%
EVERY 3 YEARS	49%



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# COMMUNITY RISK REDUCTION

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“WE ARE ALWAYS LOOKING FOR  
WAYS TO BETTER SERVE BOWLING  
GREEN. FOR THIS REASON, WE  
ARE ROLLING OUT A NEW  
PROGRAM TO **PROTECT OUR  
RESIDENTS AND THEIR PROPERTY**  
IN THE MOST EFFECTIVE WAY  
POSSIBLE.”

**FIRE CHIEF JASON COLSON**



## COMMUNITY CONNECT

In April of 2020, the Bowling Green Fire Department partnered with First Due to launch Community Connect, a free, secure, easy-to-use online database that allows residents to provide critical information about their household to be available to emergency responders. Data entered into Community Connect is secure, and only used in emergency situations. Residents can enter information about their property, family members, special needs, pets, and emergency contacts to aid emergency response personnel when they respond to the residence or business.

Community Connect can also be used to self-report COVID-19 status for individuals that are high-risk or have tested positive.

Data entered by residents is available to members on-scene through First Due.

At the time of this report, 91 community household profiles have been created in Community connect



## Bowling Green Community Connect

Together, Building a Safer Community Through  
Prevention, Preparedness, & Response

Create an Account for Your Household



# PUBLIC EDUCATION



Efforts were made to continue public education and community outreach while following safety guidelines. These included:

- Virtual education opportunities
- Created a BGFD YouTube channel for posting educational videos with an attached survey for teachers to complete
- Enhanced usage of social media applications to include to promote the Department and to push out daily and weekly safety messages to the community.
- Smoke alarms were installed in homes by request only and followed all safety guidelines.

**27**

**PUBLIC EDUCATION CLASSES**

**3,575**

**COMMUNITY MEMBERS  
REACHED**

**90%**

**FEWER COMMUNITY MEMBERS  
REACHED THAN 2019**

# SOCIAL MEDIA

In March 2020, the Public Education program launched BGFD social media on three platforms: Facebook, Instagram, and Twitter. Previously, BGFD content was posted onto the City of Bowling Green's accounts.

## FACEBOOK

- Posts: 323
- Total Reach: 156.4k

## TWITTER

- Tweets: 239
- Tweet Impressions: 943.6k

## INSTAGRAM

- Posts: 205
- Total Reach: 2,115

BGFD also launched a YouTube channel in October 2020 to post Public Education content.

- Videos Uploaded: 4
- Views: 232

# @bgkyfire

## 2,521

FACEBOOK  
FOLLOWERS

## 1,237

FOLLOWERS ON  
TWITTER

## 985

FOLLOWERS ON  
INSTAGRAM

## 19

YOUTUBE  
SUBSCRIBERS

## facebook



Bowling Green Fire  
Department  
@bgkyfire



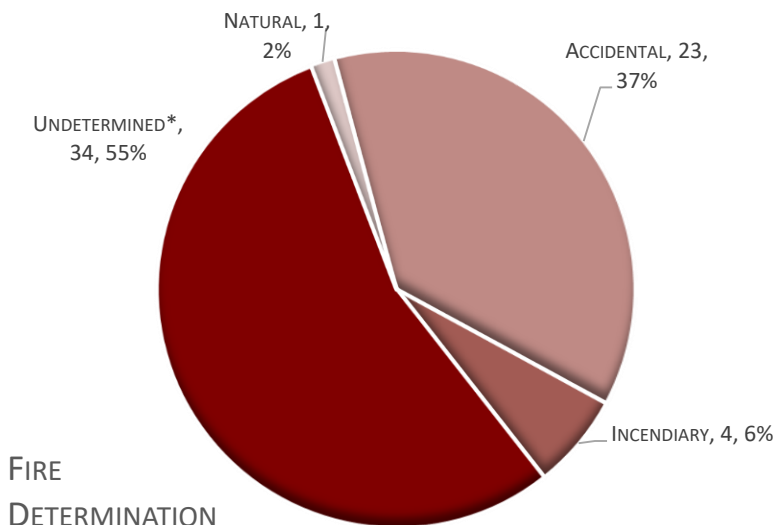
# ORIGIN & CAUSE

## FIRE INVESTIGATION

The Bowling Green Fire Department strives to determine origin and cause of all fire incidents that fall under Kentucky Revised Statute 95.500. Investigations fall under the Prevention Division. 62 fire incidents were investigated in 2020.

Prevention Division personnel work Monday through Friday, 40 hours per week. In 2020, it was determined that 70% of investigations occur outside of normal business hours, resulting in an investigator responding off-duty.

In November 2020, an investigator was moved to a rotating 24-on 48-off shift schedule on a trial basis to allow the investigator quicker response, better access to witnesses, and reduced on-call time. The trial extended into 2021, it will be evaluated and a permanent determination will be made upon completion.



## Memorandum of Understanding

A MEMORANDUM OF UNDERSTANDING BETWEEN THE BOWLING GREEN FIRE DEPARTMENT AND THE BOWLING GREEN POLICE DEPARTMENT WAS SIGNED BY THE FIRE CHIEF, POLICE CHIEF, AND CITY MANAGER IN OCTOBER OF 2020. THE MEMORANDUM ESTABLISHES A CRIMINAL INVESTIGATION AGREEMENT IN WHICH BGPD DETECTIVES WILL WORK ALONGSIDE BGFD FIRE INVESTIGATORS IN THE PROSECUTION OF ARSON CASES.

\*Undetermined includes fires with known causes but lacking sufficient evidence to prove it to the degree of certainty required by NFPA 921 to classify it differently, and includes fires still under investigation.



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# ORIGIN & CAUSE

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## TRAINED PERSONNEL:

The Fire Investigation Branch has three investigators. All three investigators are Certified Fire Investigation Technicians (CFIT) through the International Association of Arson Investigators (IAAI). All three investigators are members of the Joint ATF Arson Task Force.

## EQUIPMENT STATUS:

The Investigations Branch consists of one Dodge 2500 truck and one Ford F-250 truck.

- 2016 Dodge 2500 – fully equipped with the hand tools and supplies to process most fire scenes as well as collect any evidence. The truck is also equipped with a built-in kennel and extreme temperature alert system for ADC Millie.
- 2019 Ford F-250 – equipped with an assortment of hand tools and scene processing supplies.

## CAPABILITIES:

The Bowling Green Fire Department's Investigators are equipped and trained to handle most fire and explosive incidents likely to occur in Bowling Green and the surrounding areas if requested.

## STAFFING:

- Assistant Chief Prevention
- Senior Fire Investigator with the rank of Captain
- Fire Investigator with the rank of Sergeant
- Accelerant Detection Canine (ADC)



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# ORIGIN & CAUSE

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## ACCELERANT DETECTION CANINE MILLIE

In 2020, Millie was requested by multiple agencies including the Bureau of Alcohol, Tobacco, Firearms, and Explosives (ATF), Kentucky State Police and Louisville Metro Arson Bureau. In total, Millie responded to 15 fire scenes and indicated the presence of accelerants at 6.

At the time of this report, Millie has a 100% confirmation rate from the Kentucky State Police Forensic Laboratory for the presence of accelerants in the evidence provided.

## CIVIL UNREST

Millie was requested by the ATF to respond to civil unrest in Louisville, KY in September 2020. During this time, Millie was deployed 6 times (pictured at right).

## ADC MILLIE

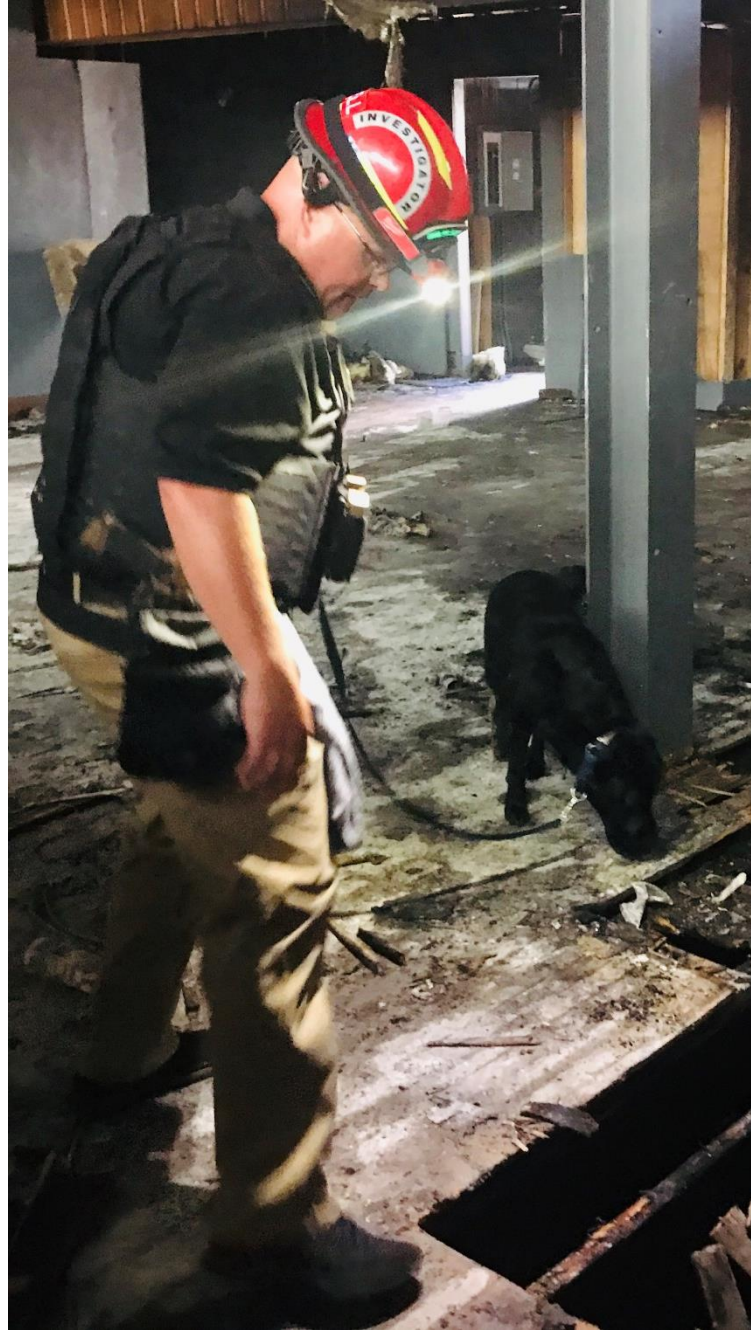
BREED    LABRADOR RETRIEVER

SPECIALTY    ACCELERANT DETECTION

DATE OF BIRTH    MAY 16, 2016

ATF TRAINING COMPLETED    DECEMBER 2019

2020 RECERTIFICATION POSTPONED



# STATION ONE

## 701 E 7<sup>TH</sup> AVE



YEAR BUILT 1981

AGE 39

LAST REMODEL OR RENOVATION 2009

SQUARE FOOTAGE 12,554

PROPERTY ACREAGE 1.37 (INCL. ADMIN)

CAPITAL IMPROVEMENTS FY'21 \$18,000

CAPITAL IMPROVEMENT DESCRIPTION KITCHEN CABINETS

OPERATIONAL COST JAN-DEC 2020 \$29,891  
(GENERAL FUND)

## FRONTLINE FLEET

APPARATUS	TRUCK 1	RESCUE 1	CAR 1 COMMAND VEHICLE
MAKE	PIERCE	PIERCE	FORD
MODEL	VELOCITY 100' MIDMOUNT AERIAL	VELOCITY RESCUE PUMPER	F250 ¾ TON CREW CAB 4x4
YEAR	2019	2019	2019
MAINTENANCE COST FY '21	\$19,590	\$19,590	\$3,580

### PERFORMANCE TESTING COMPLETED

PUMP	08/06/2020	08/05/2020	N/A
LADDER	12/2/2020	12/01/2020	N/A



# STATION TWO



1101 WOODHURST ST

YEAR BUILT 1981

AGE 39

LAST REMODEL OR RENOVATION 2011

SQUARE FOOTAGE 7,134

PROPERTY ACREAGE 3.54

CAPITAL IMPROVEMENTS FY'21 \$4,500

CAPITAL IMPROVEMENT DESCRIPTION LED LIGHTING UPGRADE

OPERATIONAL COST JAN-DEC 2020 \$15,863  
(GENERAL FUND)



## FRONTLINE FLEET

APPARATUS ENGINE 2 ARFF 22

MAKE PIERCE FORD

MODEL ENFORCER F550 RC DANKO AIR  
PUMPER RESCUE

YEAR 2019 2009

MAINTENANCE COST \$19,590 \$7,580  
FY '21

### PERFORMANCE TESTING COMPLETED

PUMP 08/06/2020 N/A

LADDER 12/1/2020 N/A



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# STATION THREE

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## 150 BENNETT LN



YEAR BUILT 2001

AGE 19

LAST REMODEL OR RENOVATION N/A

SQUARE FOOTAGE 12,481

PROPERTY ACREAGE 1.68

CAPITAL IMPROVEMENTS FY'21 \$7,500

CAPITAL IMPROVEMENT DESCRIPTION LED LIGHTING UPGRADE

OPERATIONAL COST JAN-DEC 2020 \$25,533  
(GENERAL FUND)

## FRONTLINE FLEET

APPARATUS ENGINE 3

HAZMAT 3

MAKE PIERCE

GMC

MODEL ENFORCER  
PUMPER

C5500 CREW CAB WITH  
44' ENCLOSED TRAILER

YEAR 2019

2004

MAINTENANCE COST \$19,590  
FY '21

\$8,895

### PERFORMANCE TESTING COMPLETED

PUMP 08/06/2020

N/A

LADDER 12/01/2020

N/A

# STATION FOUR



835 MORGANTOWN RD

YEAR BUILT 2001

AGE 19

LAST REMODEL OR RENOVATION N/A

SQUARE FOOTAGE 12,481

PROPERTY ACREAGE 2.83

CAPITAL IMPROVEMENTS FY'21 \$7,500

CAPITAL IMPROVEMENT DESCRIPTION LED LIGHTING UPGRADE

OPERATIONAL COST JAN-DEC 2020 \$26,359  
(GENERAL FUND)



## FRONTLINE FLEET

APPARATUS	TRUCK 4	ENGINE 4	ENGINE 14 STRIKE TEAM
MAKE	PIERCE	PIERCE	PIERCE
MODEL	VELOCITY 107' ASCENDANT AERIAL	ENFORCER PUMPER	DASH PUMPER
YEAR	2020	2019	2007
MAINTENANCE COST FY '21	\$19,590	\$19,590	\$15,100

### PERFORMANCE TESTING COMPLETED

PUMP	08/06/2020	08/05/2020	08/05/2020
LADDER	12/2/2020	11/30/2020	11/30/2020





# STATION FIVE & TRAINING CENTER

## 250 PORTER PIKE



YEAR BUILT 1987

AGE 33

LAST REMODEL OR RENOVATION 1999

SQUARE FOOTAGE 12,630

PROPERTY ACREAGE 9.37 (INCL PSTC)

CAPITAL IMPROVEMENTS FY'21 \$8,000

CAPITAL IMPROVEMENT DESCRIPTION REPLACE CARPET  
STATUS: ON HOLD

OPERATIONAL COST JAN-DEC 2020 \$29,638  
(GENERAL FUND)

## FRONTLINE FLEET

APPARATUS	ENGINE 5	ENGINE 15 STRIKE TEAM	BRUSH 5
MAKE	PIERCE	SUTPHEN	CHEVROLET
MODEL	ENFORCER PUMPER	SHIELD PUMPER	K3500 CREW CAB BRUSH TRUCK
YEAR	2020	2009	2009
MAINTENANCE COST FY '21	\$19,590	\$15,100	\$5,755

### PERFORMANCE TESTING COMPLETED

PUMP	08/05/2020	08/07/2020	N/A
LADDER	12/01/2020	11/30/2020	N/A

# STATION SIX



## 201 CHERRY FARM LN

YEAR BUILT 2008

AGE 12

LAST REMODEL OR RENOVATION N/A

SQUARE FOOTAGE 13,831

PROPERTY ACREAGE 1.09

CAPITAL IMPROVEMENTS FY'21 \$7,500

CAPITAL IMPROVEMENT DESCRIPTION LED LIGHTING UPGRADE

OPERATIONAL COST JAN-DEC 2020 \$29,638  
(GENERAL FUND)



## FRONTLINE FLEET

APPARATUS	TRUCK 6	ENGINE 6
MAKE	PIERCE	PIERCE
MODEL	ARROW XT	ENFORCER PUMPER
YEAR	2010	2019
MAINTENANCE COST FY '21	\$19,590	\$19,590

### PERFORMANCE TESTING COMPLETED

PUMP	08/06/2020	08/05/2020
LADDER	12/02/2020	11/30/2020



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# STATION SEVEN

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RENDERING

## 385 LOVERS LN

GROUNDBREAKING	FEBRUARY 2020
SQUARE FOOTAGE	9,131
PROPERTY ACREAGE	68.87 (INCL SOCCER COMPLEX)
CONSTRUCTION COST	\$4,134,000
ANTICIPATED OPENING	MAY 2021



DECEMBER 2020 PROGRESS

## FRONTLINE FLEET

APPARATUS	ENGINE 7 (PREVIOUSLY ENGINE 5)
MAKE	PIERCE
MODEL	IMPEL PUMPER
YEAR	2010
MAINTENANCE COST FY '21	\$19,590

### PERFORMANCE TESTING COMPLETED

PUMP	08/07/2020
LADDER	12/01/2020





# ADMINISTRATION

## 625 E 6<sup>TH</sup> AVE



YEAR BUILT 2010

AGE 10

LAST REMODEL OR RENOVATION N/A

SQUARE FOOTAGE 9,242

PROPERTY ACREAGE 1.37 (INCL STATION 1)

CAPITAL IMPROVEMENTS FY'21 N/A

OPERATIONAL COST JAN-DEC 2020 \$8,063  
(GENERAL FUND)

## STAFF VEHICLES



DESIGNATION	CHIEF 1, DC1	DC2	FP2, FP3
MAKE	DODGE	DODGE	NISSAN
MODEL	DURANGO	CHARGER	ROGUE
YEAR	2019	2007	2013
MAINTENANCE COST FY '21	\$3,580 EA	\$3,580	\$3,580 EA



DESIGNATION	FP1	FI1	FI2
MAKE	FORD	DODGE	FORD
MODEL	F250 4x4 CREW CAB	¾ TON 2500 4x4 CREW CAB	¾ TON F250 4x4 CREW CAB
YEAR	2015	2016	2019
MAINTENANCE COST FY '21	\$3,580	\$3,580	\$3,580

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# APPARATUS MAINTENANCE

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The City of Bowling Green Public Works Fleet Division provides vehicle and equipment support for all City Departments, as well as professional services and tracking information for all City vehicles and equipment, including fire apparatus. This includes preventative maintenance, repairs, graphic design, tires, alignment, emergency lighting, and police equipment installs. Fleet Division maintains an on-site parts inventory for City use - filters, oils, brakes, tires, and special supplies needed for seasonal events. Fleet Division also prepares, files, and maintains title registration and insurance cards for all City vehicles.

Fleet Division provides a dedicated mechanic to the Fire Department. Jordan Stice has 14 years of auto repair experience, including 6 years on fire apparatus, and holds several Emergency Vehicle Technician Certifications and Automotive Service Excellence certifications. Matt Johnson also holds many certifications and can fill in on fire apparatus as needed.

## **FIRE APPARATUS MAINTENANCE SCHEDULE:**

**400  
HOURS**

**7,500  
MILES**



*"We're Proud of our Blue Seal Team"*

# APPARATUS MAINTENANCE

Mechanic Certifications	Stice	Johnson
<b>Emergency Vehicle Technician Certifications</b>		
F-1 Maintenance, Inspection, and Testing	✓	✓
F-2 Design and Performance	✓	✓
F-3 Fire Pumps and Accessories	✓	
F-4 Electrical Systems	✓	✓
F-5 Aerial Fire Apparatus	✓	
<b>Automotive Service Excellence Certifications</b>		
A1 Engine Repair	✓	✓
A2 Automatic Transmission/Transaxle	✓	✓
A3 Manual Drive Train and Axles	✓	✓
A4 Suspension and Steering	✓	✓
A5 Brakes	✓	✓
A6 Electrical/Electronic Systems	✓	✓
A7 Heating and Air Conditioning	✓	✓
A8 Engine Performance	✓	✓
A9 Light Vehicle Diesel Engines	✓	✓
T1 Gasoline Engines	✓	✓
T2 Diesel Engines	✓	✓
T3 Drive Train	✓	✓
T4 Brakes	✓	✓
T5 Suspension and Steering	✓	✓
T6 Electrical/Electronic Systems	✓	✓
T7 Heating, Ventilation, and Air Conditioning	✓	✓
T8 Preventative Maintenance Inspection	✓	✓



# OCCUPATIONAL HEALTH, SAFETY, & RISK MANAGEMENT

The Safety Committee meets with the City of Bowling Green Safety and Risk Manager quarterly to review all vehicle losses, injuries, and safety and risk concerns.

New members to the safety committee for 2020 were the chair of the Health and Wellness committee, as well as the president of the Bowling Green Firefighters Association.

In 2020, there were 18 total injuries reported; 12 resulted in modified duty. Two were emergency-response related. The Safety Committee reviews all injuries and makes recommendations to prevent injury in the future.

Six vehicle losses were reported in 2020; four were preventable. The non-preventable losses were a collision with a bay door and contact with another vehicle (mirror-to-mirror).

**18**  
TOTAL INJURIES

**12**  
MODIFIED DUTY

**2**  
EMERGENCY RESPONSE

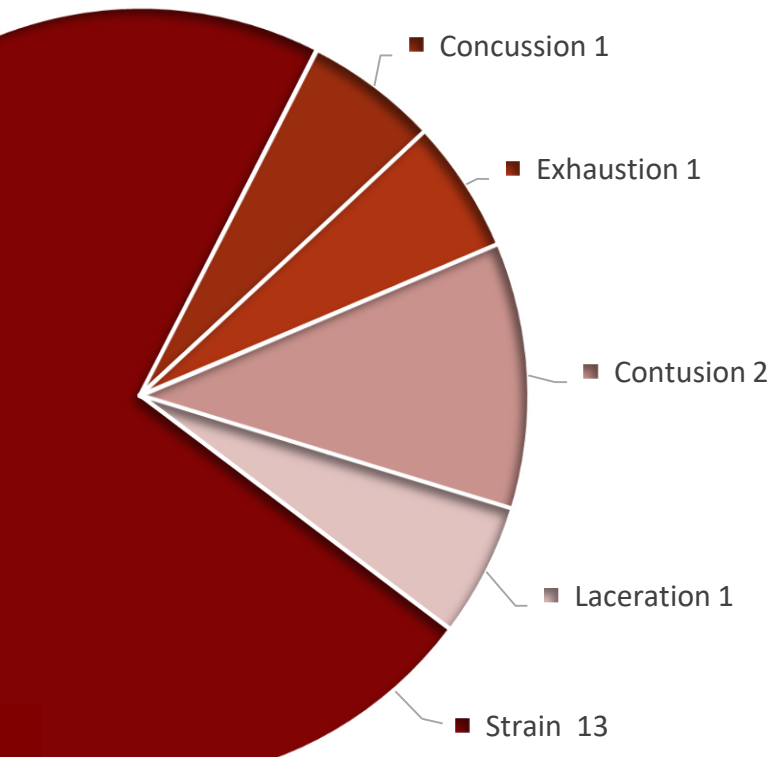
**8**  
TRAINING-RELATED

**5**  
FITNESS-RELATED

**6 VEHICLE LOSSES:**

**66%**  
PREVENTABLE

**50%**  
INVOLVED BACKING



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# WELLNESS & FITNESS

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The Bowling Green Fire Department has a comprehensive health and wellness program overseen by the Deputy Chief of Operations who is designated as the Department's Health and Safety Officer (HSO). The Department uses the current version (2018) of NFPA 1500, Standard on Fire Department Occupational Safety, Health, and Wellness Program, as the guide; under which falls NFPA 1582, Standard on Comprehensive Occupational Medical Program for Fire Departments, 2018, and NFPA 1583, Standard on Fire Department Occupational Safety, Health, and Wellness, 2015.

The HSO works closely with the Human Resources department and the City's CareHere Clinic (third party operated, city-provided doctor office) to conduct annual physical exams annually around April. The HSO also works closely with the Health and Fitness Committee (HFC); a committee comprised of seven members with degrees, certifications, and backgrounds in physical education, fitness, exercise, wellness, and/or physical training to complete various other needs concerning the health and wellness of members.



**HEALTH & FITNESS COMMITTEE MISSION:**

**“LIFELONG HEALTH AND WELLNESS THROUGH PARTICIPATION, EDUCATION, AND SUPPORT.”**

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# WELLNESS & FITNESS

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## **BGFD Policy 15-4 Implemented June 2020**

IN AN EFFORT TO BE FULLY COMPLIANT WITH NFPA 1500, THE INDIVIDUAL PHYSICAL ABILITY TEST WAS ADDED IN 2020. THE IPAT WILL BE REQUIRED IN THE FALL OF EACH YEAR. AT THE TIME OF THIS REPORT, ALL MEMBERS HAVE BEEN EXPOSED TO THE TEST AND IT WILL GO INTO EFFECT FALL 2021.

The Annual Fitness Test (1582) is conducted in February by the HFC so the data collected can be reviewed during each members' annual physical exam by the physician.

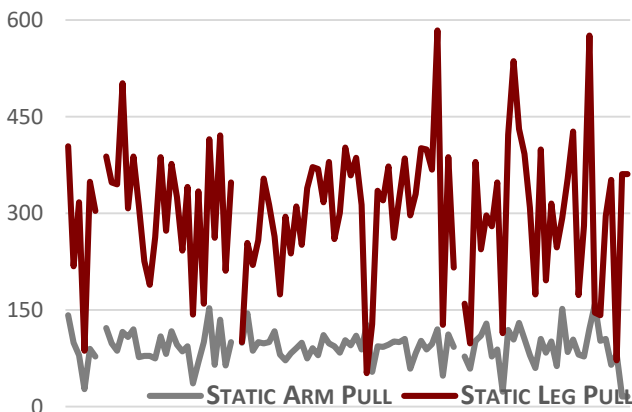
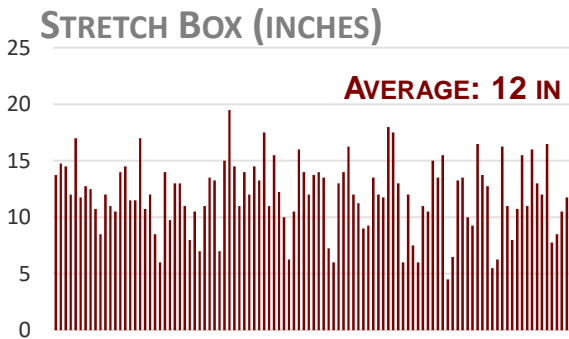
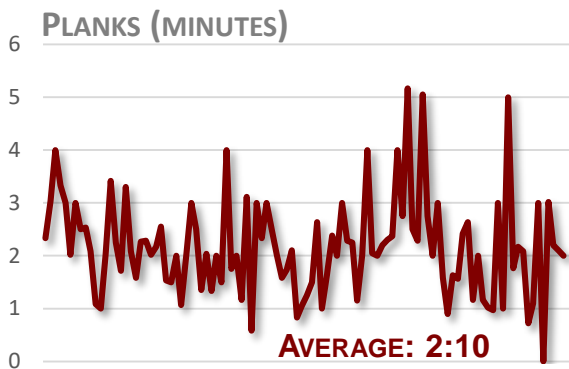
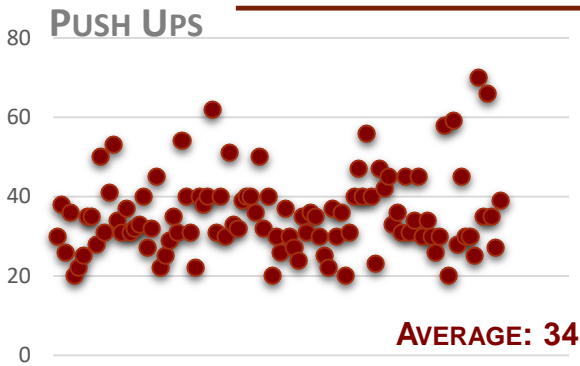
The Kentucky State Fire/Rescue Training Center provides Candidate Physical Ability Testing (CPAT) around the State for potential hires; the BGFD HFC provides a CPAT orientation for candidates to better prepare them for the CPAT. The HFC also provides a day of health and fitness training to recruits at the beginning of each recruit class.

The BGFD has a modern exercise room in each station. Exercise equipment includes cardiovascular equipment (treadmills, step-mills, ellipticals, rowers, stationary bicycles), strength training (barbells, dumbbells, kettle bells), and functional training (box jumps, sand bags, GHD machines, medicine balls, physioballs, bands). In 2020, the BGFD received a grant for nearly \$100,000 to upgrade and update aging fitness equipment around the Department. Cardio and weight training equipment was replaced at every station.

For all city employees, the HR department offers wellness initiatives and the city provides an Employee Assistance Program to assist with a variety of issues that could affect a member's wellbeing.



# WELLNESS & FITNESS



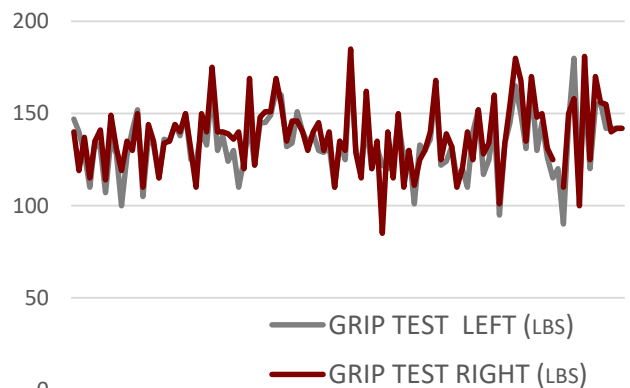
## FITNESS EVALUATIONS ALL SWORN PERSONNEL

**37.9**  
AVERAGE AGE

**19%**  
AVERAGE BODY FAT

**204**  
AVERAGE WEIGHT

PERSONAL TRAINING THROUGH  
THE HFC IS AVAILABLE UPON  
REQUEST TO ANY MEMBER OF THE  
DEPARTMENT



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# COMMUNICATIONS

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## PUBLIC SAFETY ANSWERING POINT

The Bowling Green Police Department Communications Center is the public safety answering point (PSAP). They answer 911 and non-emergency calls around-the-clock. Telecommunicators dispatch police, fire, animal control, and county fire calls for the Bowling Green and Warren County communities. The Center is equipped with the latest technology in order to maintain Bowling Green's commitment to quality service. The main components include Enhanced 911, Computer Aided Dispatch with mapping, and a computerized telephone system.

## COMMUNICATIONS SYSTEM

The communications system in use by the Bowling Green Fire Department is the Motorola P25 Digital Audio Trunking System. This was put into service in 2016 as a joint collaboration between the City of Bowling Green (BGPD/BGFD), Warren County Emergency Management, Medical Center EMS, and the Warren County Volunteer Fire Departments. Each department utilizes an individual talk group which allows the members of that agency to communicate within their own group of selected users. In addition to individual talk groups, mutual aid channels are assigned to multiple agencies giving the ability to operate jointly during times of need such as natural disasters or other large-scale events. Currently, the BGFD has channels programmed into each user radio to communicate with all of the Warren County Volunteer Departments, as well as Medical Center EMS, BGPD, and Warren County Sheriff's Office for monitoring purposes and for safety on scenes.

**70,700**  
**EMERGENCY CALLS**  
**PER YEAR**

**7,760**  
**CALLS DISPATCHED TO FIRE**  
**DEPARTMENTS**

**1:16**  
**90<sup>TH</sup> PERCENTILE CALL**  
**PROCESSING FOR ALL**  
**BGFD INCIDENTS**

**23**  
**TELECOMMUNICATORS**

**5**  
**TOWERS**  
**(4 SIMULCAST, 1 REPEATER)**

**93%**  
**COVERAGE RATE IN**  
**WARREN COUNTY**

# TRAINING

The BGFD Training Division is comprised of an Assistant Chief, a Captain, and an Office Associate. The Training Division oversees the Department's annual training regimen. This includes all national, state, local, and ISO compliance training for fires, natural and manmade disasters, technical rescues, and emergency medical treatment. The Training Division is additionally responsible for ensuring any City-level compliance training is accomplished in coordination with the City Human Resources Risk Manager.

In January 2020, Office Associate Buffy Watt moved from Fire Administration into a new position in the Training Division, and 11 new recruits started the 12-week academy. After completing the 12-week academy, four recruits who were previously EMT-certified began shift work. The remaining seven recruits, along with five shift personnel, participated in a six-week EMT certification class at KCTCS.

## Land Acquisition

IN JANUARY 2020, THE 5.7 ACRE PROPERTY ADJACENT TO STATION 5 WAS PURCHASED BY THE CITY FOR **PUBLIC SAFETY TRAINING CENTER EXPANSION AND RENOVATION** — A PROPOSED JOINT FACILITY WITH THE POLICE DEPARTMENT.



**2020  
RECRUIT  
CLASS**



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# TRAINING

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## **TRAINING DIVISION 2020 HIGHLIGHTS:**

- FAO Testing— 14 personnel
- Annual SCBA Functional Testing and Skills Evaluation
- EMT Class
- Recruit Class
- BGWC Airport Training Audit & Night Drills
- Multi-Company Drills
- RIT Training
- Acquired Structure Training

## **NEW TO THE TRAINING DIVISION IN 2020:**

- Station Supplies
- EMS Supplies
- Uniforms
- AFFF and ARFF Foam
- PPE/Turnout Replacement and Repairs
- Office Associate Buffy Watt (January)
- Assistant Chief Shannon Pardue (November)



# TRAINING

Training Category	Class Count	Total Man Hours
Facility Training (PSTC)	489	6,738.25
Company Training	2,431	9,972.00
Officer Training	171	1,743.50
Driver Operator Training	673	3,227.25
Hazardous Materials Training	248	1,456.75
Officers Meeting	31	709.50
Physical Fitness	3,341	9,384.08
Preplanning	53	192.25
Weekly Apparatus Familiarization	323	887.73
EMS	231	2,394.08
Technical Rescue and Specialty	212	1,636.75
Fire Prevention, Code Inspector Training	6	21.00
ARFF	22	151.75
<b>Totals</b>	<b>8,231</b>	<b>38,514.90</b>

**THE DEPARTMENT SAW AN INCREASE IN  
ON-SHIFT TRAINING CLASSES WITH  
FEWER PEOPLE IN ATTENDANCE DUE TO  
COVID-RELATED ABSENCES**

**26%**  
**INCREASE IN TRAINING  
CLASSES FROM 2019**

**900**  
**MORE CLASS HOURS  
THAN 2019**

**535**  
**FEWER TRAINING MAN  
HOURS THAN 2019**





# RECOGNITION



## 2020 PROMOTIONS

### ASSISTANT CHIEF OF TRAINING

Shannon Pardue  
(November)



### CAPTAIN

John Ballance (January)  
Chris Durbin (January)  
Ron Renner (January)



### ENGINEER

Jeremy Abell (July)  
Chad Ennis (January)  
Esmir Ferizovic (January)  
Chase McKee (January)



## 2020 RETIREMENTS

Todd Brannon (March)  
Todd Combs (March)  
Theresa Kendall (January)  
Jett Miller (October)





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# PERFORMANCE GAP ANALYSIS

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**“IT IS THE RESPONSIBILITY OF ALL  
SUPPRESSION PERSONNEL TO  
RESPOND QUICKLY AND SAFELY  
TO LIFE-THREATENING  
EMERGENCIES.”**

## **BGFD STANDARD OF RESPONSE COVERAGE, 2018**



The Standard of Response Coverage declares the Bowling Green Fire Department's service level, defines the basic resources necessary to meet the stated objectives, and identifies the current effectiveness of these objectives.

This Standard was developed to ensure the citizens of Bowling Green receive an adequate emergency response from the Bowling Green Fire Department.

The Standard of Cover provides for emergency response determined by the nature and type of incident and assigns Department resources accordingly.

It is the duty of the Bowling Green Fire Department senior staff members to monitor incident data to ensure the requirements for this standard are met. When any non-conforming trends are identified, Bowling Green Fire Department senior staff members shall make recommendations to bring response times within compliance. It is the duty of each officer to adhere to the staffing requirements of this standard.

The Performance Gap Analysis provides a summary review of all 2020 Bowling Green Fire Department incidents based upon the Standard of Response Coverage. Gaps in performance are reported according to this Standard.

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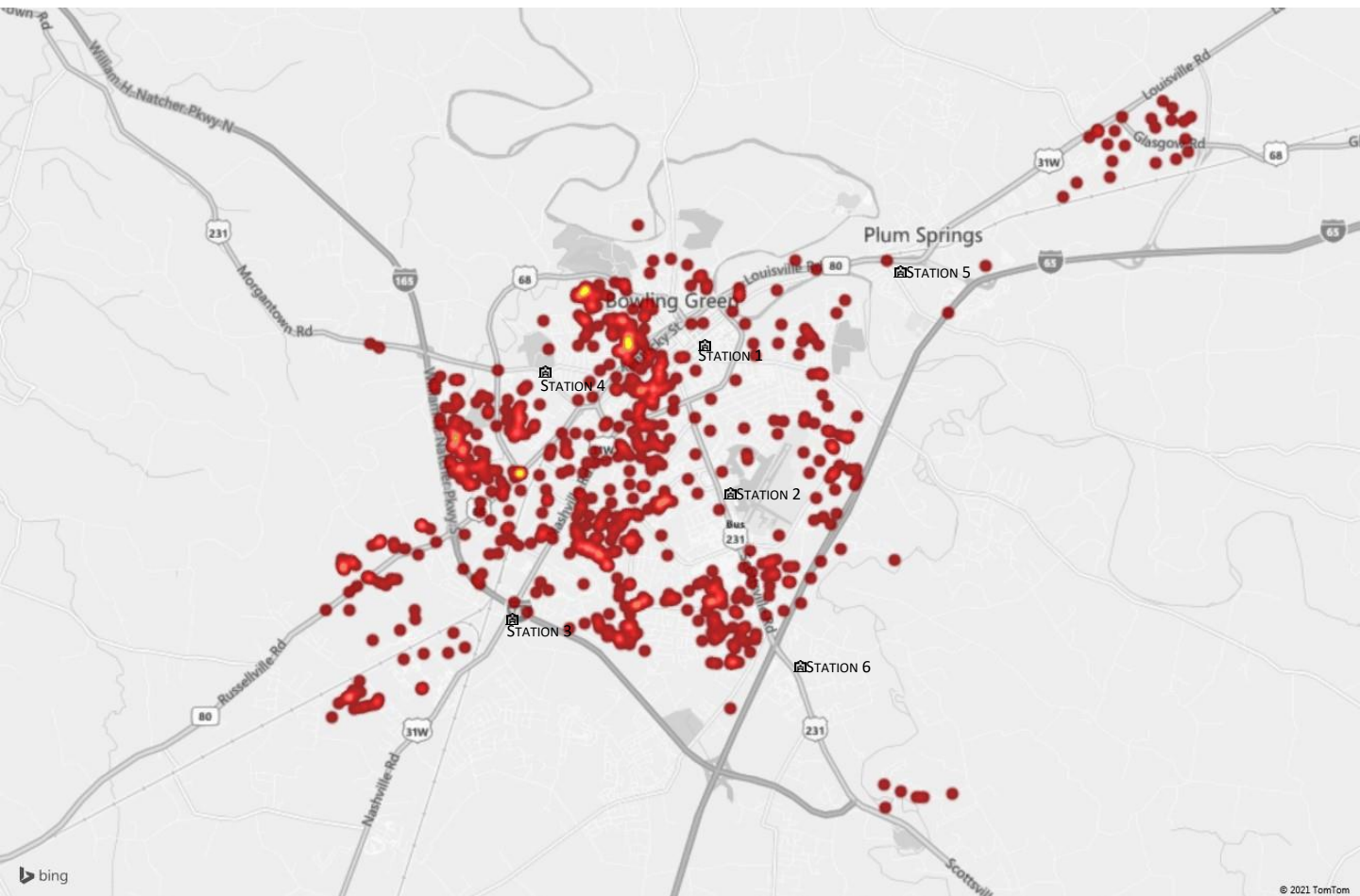
# PERFORMANCE GAP ANALYSIS

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## TRAVEL TIME ANALYSIS METHODOLOGY

Travel time for 2020 incidents was analyzed with the following parameters:

- In-District responses only
- All incident types
- Response mode: Emergency, lights and sirens only
- Order of arrival: first only
- Travel Time: greater than 4 minutes
- Heat map is displayed as a sum of all travel times for each incident at the given location



## PERFORMANCE GAP ANALYSIS

Anticipated growth in the Transpark and travel times outside of the industry standard have led the Bowling Green Fire Department to identify the Transpark as an area for a future station. Four facilities have been announced in the Transpark and are set to employ an additional 500.

Map of District 5 in the City of Columbus, Georgia. The district is shaded in red and includes areas around Plum Springs, Bristow, and Old Porter Pike. Major roads shown include Yearling Ave, Girkin, 526, 957, 31W, 446, 1402, 65, and Red Pond Rd. The map also shows the Chattahoochee River and surrounding areas like Woodnor.

**2,680**  
EMPLOYED BY  
TRANSPARK FACILITIES

**Transpark**  
**2020 Emergency Responses**  
**(90th Percentile)**

**1st Unit Travel Time: 08:02**  
**Performance Objective: 04:00**  
**Performance Gap: 04:02**

ANNUAL REPORT 2020 – 61



# PERFORMANCE GAP ANALYSIS

## RUSSELLVILLE RD / CAMPBELL LN AREA

The Command Staff has been carefully monitoring the Russellville Rd and Campbell Ln area for some time. It has been an identified performance gap in recent years. The drive time analysis below shows gaps in the Whispering Hills and Shawnee neighborhoods, as well as the City's expanding area southwest on Russellville Rd. Travel times and incident volumes have further identified this area as a gap.

Early in 2021, Chief Colson presented the information below to the Board of Commissioners to garner support to purchase property in this area. The Bowling Green Fire Department has also requested blocked roadways to be opened in the Shawnee neighborhood to assist emergency response.

**Whispering Hills – Station 4**  
**2020 Emergency Responses**  
**(90th Percentile)**

**1st Unit Travel Time: 06:31**  
**Performance Objective: 04:00**  
**Performance Gap: 02:31**

**Russellville Rd – Station 3**  
**2020 Emergency Responses**  
**(90th Percentile)**

**1st Unit Travel Time: 06:02**  
**Performance Objective: 04:00**  
**Performance Gap: 02:02**

**Shawnee – Station 3**  
**2020 Emergency Responses**  
**(90th Percentile)**

**1st Unit Travel Time: 05:19**  
**Performance Objective: 04:00**  
**Performance Gap: 01:19**

**DISTRICTS 3 AND 4**  
**CURRENT 4-MINUTE DRIVE**

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# PERFORMANCE GAP ANALYSIS

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Bowling Green Fire Department senior staff members monitor incident data to determine the effectiveness of the fire suppression program and impact on meeting the Department's goals and objectives. The results from this evaluation have revealed areas where performance gaps exist, and Bowling Green Fire Department senior staff members have made recommendations with the following objectives in mind:

- Bring response times within compliance by evaluating future stations
- Focus public education efforts to at-risk areas and populations

The need for additional stations is continuously evaluated and prioritized using incident data and GIS technology.

Below are five areas with identified gaps in performance. Proposed solutions are provided for the gap area.

Gap Area	Performance Gap Identified	Proposed Solution
District 1	26% of total run volume, 36% of structure fires	Station #7 Lovers Ln will supplement the run volume
District 4	23% of total run volume, 36% of structure fires	Focus area for public education and fire prevention; planning for a station in the Russellville Rd/Campbell Ln area
District 5	Travel time to Kentucky Transpark for first unit 08:02, 90 <sup>th</sup> percentile	Planning for Station 8 in the Transpark. FY'22 budgeted for architecture service
Turnout Times	Turnout times are in excess of industry standards	Transition to Motorola CAD in January 2021; units will push responding, rather than by radio to Dispatch
Travel Times	Travel times are in excess of industry standards. Specific target areas include: Whispering Hills, Shawnee and Russellville Rd	Command Staff continuously monitors travel and response times to assess the need for growth and expansion



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