



ANNUAL REPORT

2021

CONTENTS

04

From the Chief's Desk
Mission, Vision, Values

22

Community Risk Reduction
Chapter 12

31

Training Division
Recruit Class

06

Department Overview
Organizational Chart

25

Investigations
Origin and Cause

34

Awards and Recognition
Promotions, Retirements

08

Year in Review
Leadership, BG Strong, Gap Analysis

26

HazMat
Gap Analysis

18

Fire Suppression
Gap Analysis

28

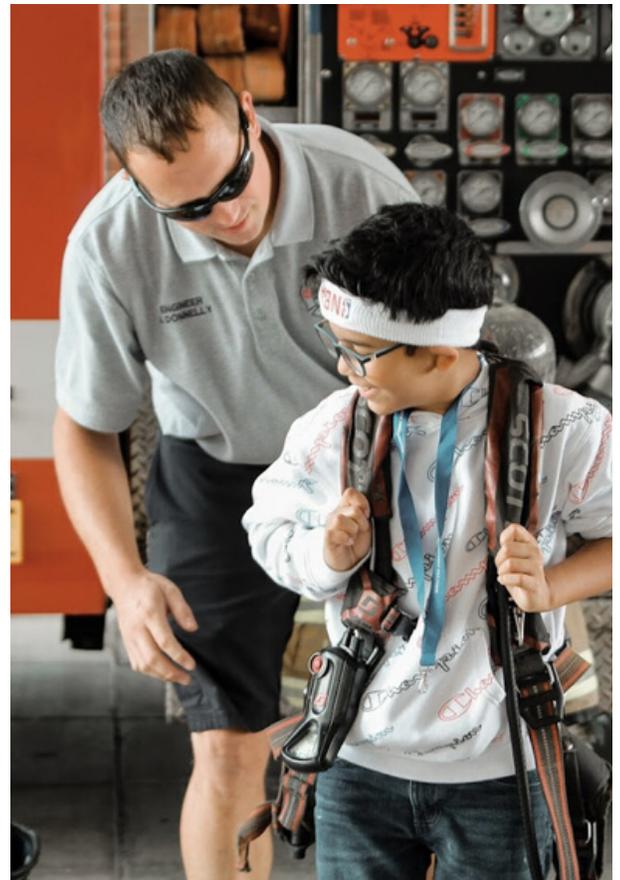
Technical Rescue
Gap Analysis

20

EMS
Gap Analysis

30

ARFF



Above: Engineer Donnelly interacts with eighth graders at SCK Launch Experience October 21, 2021
Cover photo: Bowling Green Firefighters respond to the Creekwood subdivision following the tornado events of December 11, 2021. Detail report on page 10

BOWLING GREEN FIRE DEPARTMENT COMMAND STAFF

JUSTIN BROOKS, FIRE CHIEF
BRET SMITH, DEPUTY CHIEF OPERATIONS
ROB GILLIAM, DEPUTY CHIEF LOGISTICS
JASON BROOKS, ASSISTANT CHIEF PREVENTION
TIM BUCHANON, BATTALION CHIEF C SHIFT
DOUG MORRIS, BATTALION CHIEF A SHIFT
SHANNON PARDUE, ASSISTANT CHIEF TRAINING
ERIC SCOTT, BATTALION CHIEF B SHIFT

CITY OF BOWLING GREEN ELECTED OFFICIALS

TODD ALCOTT, MAYOR
CARLOS BAILEY, COMMISSIONER
DANA BEASLEY-BROWN, COMMISSIONER
MELINDA HILL, COMMISSIONER
SUE PARRIGIN, COMMISSIONER

2021 ANNUAL REPORT PREPARED BY

ELYSE JONKER, EXECUTIVE ASSISTANT



Crews participate in Water Night at Parker Bennett Community Center on July 13, 2021.

FROM THE CHIEF'S DESK

"In 2021, we went through challenges that tested our mental and physical limits. We now find ourselves standing taller, stronger, and more importantly, we are standing together."

Fire Chief Justin Brooks

The mission of the Bowling Green Fire Department is to Serve, Save, and Protect. Make It Better. This report validates the efforts of the men and women of this organization. When the 911 call is made and the tones drop, we are prepared to go *Make It Better*. Whether it's our Prevention Division educating the public on fire safety, or our Suppression Division drilling daily for the next opportunity, all members of BGF D are invested in providing a service that is worthy of the City of Bowling Green and its people.

I have the greatest job in the world as Fire Chief of the BGF D. It's a *get* to verses *got* to for me. I get to work for some of the best people you could ever imagine. The people who wear the BGF D uniform that I get to work for have a servant's heart for others and realize this profession is about the betterment of others.

The BGF D is elite due to the people and the daily commitment it takes to stay elite. Our vision at the BGF D is, "Continuous improvement through intentional efforts for excellence." The vision keeps us moving towards a better version of ourselves than yesterday. Excellence, although unobtainable, gives us a goal to continue the climb for.

Without the support from our Board of Commissioners, City Manager, Senior Management team, and all of our City Departments, we would not be in the position we are in to provide the best service to our citizens. From the purchase of fire trucks to the acquisition of additional resources needed for the delivery of services, the support from everyone has never been stronger. The entire team was tested in December of 2021 when the City faced the aftermath of the tornados that devastated our community. Through tragedy comes triumph. The community rallied together to overcome each and every challenge presented.



FIRE CHIEF JUSTIN BROOKS

The great thing about having a city that is evolving in size and potential, is that you find a Fire Department that is growing alongside it. The BGF D is currently in the final design phase of a new training facility and a new fire station located on the north side of town in the Kentucky Transpark. The additional fire station will be number eight for the BGF D. By improving the training facility and adding an additional fire station, the BGF D will keep pace with the demands from the ever-evolving city.

To say we are living in an exciting time regarding the history of the BGF D is an understatement. The opportunities to serve, save, and protect have never been greater for our men and women. Although the responsibility is great, we look forward to delivering our best when called upon.

In 2021, a committee was formed to redefine the Department's Mission, Vision, and Values statements. The committee included 12 personnel from all ranks and all shifts. The first step was to ensure common ground and shared definitions. Hours were spent brainstorming, charting, crossing out, and prioritizing. Posters were printed and hung in each BGF D facility as well as Bowling Green City Hall.

Mission: To Serve, Save, and Protect. Make it Better.

Vision: Continuous Improvement through Intentional Efforts for Excellence

Values: Honor, Integrity, and Professionalism

MISSION: TO SERVE, SAVE, & PROTECT MAKE IT BETTER

VISION:
CONTINUOUS IMPROVEMENT
THROUGH INTENTIONAL EFFORTS
FOR EXCELLENCE

HONOR - INTEGRITY - PROFESSIONALISM



MISSION, VISION, VALUES

"As long as you're trying to make it better,
you're on the right track."

Battalion Chief Eric Scott

\$15.9M

Operating Budget

fiscal year 2022

2.18.21

Break-Even Date

Property saved exceeds
operating budget

The City of Bowling Green is the third largest and fastest-growing city in Kentucky. Established in 1898, the Bowling Green Fire Department is a fully-paid, all-hazard department serving a population estimated over 73,000 covering almost 42 square miles.

Bowling Green Fire Department services to the community include fire and rescue operations, emergency medical services, fire investigations, aircraft rescue firefighting, community risk reduction, and education programs. In 2021, daily minimum staffing was 33 personnel with eleven frontline apparatus in service daily: seven engines, three aerials, and one command vehicle.

91%

Personnel Costs

account for 91% of Bowling Green
Fire Department's operating budget

\$225

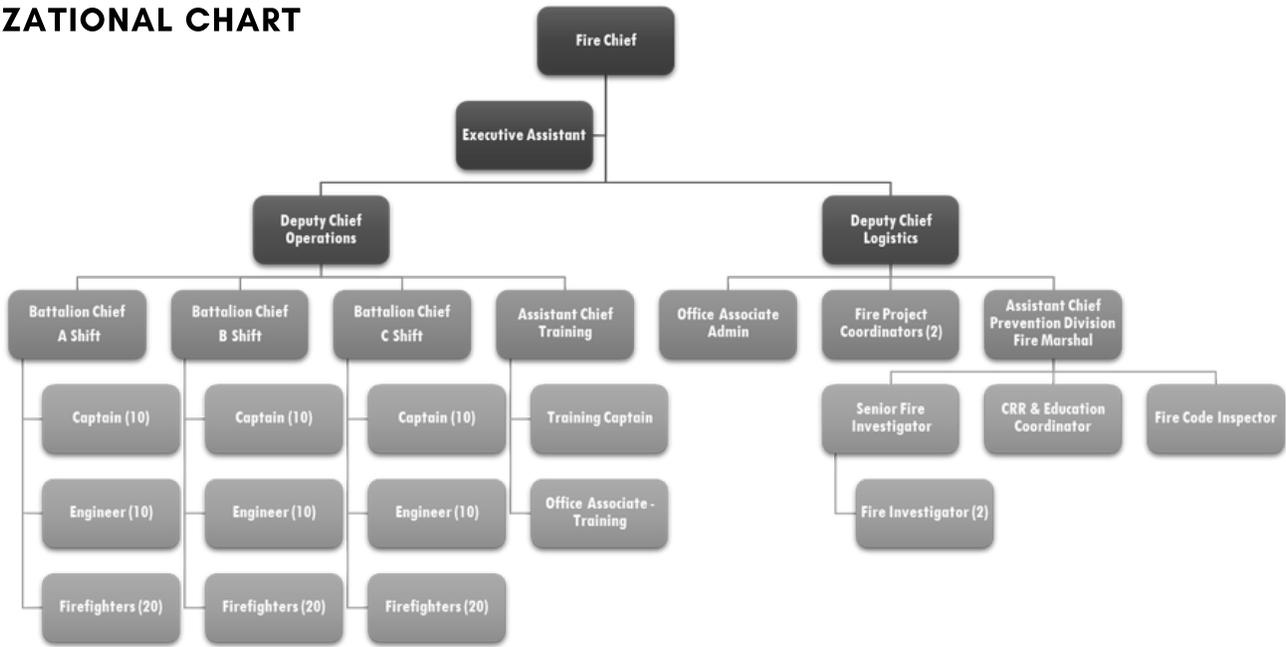
Cost Per Capita

fiscal year 2022 operating budget
divided by estimated population



Truck 4 - Pierce Velocity Ascendant 107'

ORGANIZATIONAL CHART



The Bowling Green Fire Department has seven strategically-located stations to provide adequate coverage to the City. In May 2021, the seventh station opened on Lovers Lane, addressing a previously-identified gap in service as well as current and anticipated growth to the area. Full report on Station 7, see page 12.

The Bowling Green Fire Department has been internationally accredited through the Commission on Fire Accreditation International (CFAI) since 2008. Following a review in January 2020, Insurance Services Offices (ISO) awarded BGF D the highest-available Public Protection Classification (PPC) for superior fire protection to the community. Only 114 departments in the United States are both accredited and have a PPC of 1.



12%

of the U.S. Population
is protected by an accredited agency



459

Departments in the U.S.
have a PPC of 1, placing BGF D in the top 1% nationwide

2021 brought a significant change in leadership to the Department with the retirements of Chief Colson and Interim Chief Morrow

LEADERSHIP

04.30

Fire Chief Jason Colson

retired after 26 years of service to the Bowling Green Fire Department



10.31

Interim Chief Jim Morrow

retired after 25 years of service to the Bowling Green Fire Department

After 26 years of service to the City of Bowling Green, Fire Chief Jason Colson submitted his letter of intent to retire effective April 30, 2021. Chief Colson gave advanced notice of his retirement and Deputy Chief Morrow was assigned the role of Interim Fire Chief beginning May 1, 2021, continuing throughout the selection process which concluded on August 3, 2021.

42

applications were
submitted for the Fire Chief
vacancy

6

internal and external
Fire Chief candidates were
interviewed in July 2021

08.03

Municipal Order 2021-127
approved the promotion of
Battalion Chief Justin Brooks to the
position of Fire Chief



The Fire Chief selection process began in April of 2021 and was open to internal and external applicants. After interviewing many qualified candidates, a new Chief was chosen.

Following interviews, background checks, polygraph exams, station tours, and lunch with shift captains, the decision to recommend Battalion Chief Justin Brooks to be Fire Chief was unanimous. While many of the candidates were highly qualified, Chief Brooks was selected as the next Fire Chief for the City of Bowling Green.

Chief Brooks began his career with the Bowling Green Fire Department in 2006 as a Firefighter/EMT. His first promotion to Engineer was in 2011, Captain in 2015, and promotion to Battalion Chief in 2019. Brooks attended Warren East High School. He has an Associate's degree from Southcentral Kentucky Community Technical College in Fire Science, a Bachelor's Degree from Western Kentucky University, and is currently pursuing an additional Associate's degree in Fire Science through Columbia Southern University. He also has several advanced leadership certificates from various professional institutes. Chief Brooks has a passion and devotion for the Fire Service and protecting the lives and property of the residents of Bowling Green.

Above: Interim Chief Morrow pins newly-appointed Fire Chief Brooks, August 3, 2021

WE ARE BG STRONG

"We are one; united by tragedy, and forged through love. We are coming out of this and are humbled by the overwhelming care by all."

Todd Alcott, Bowling Green City Mayor

400

calls received to dispatch
within the first hour after the storm

48,000

without power in Warren Co
Power was restored to all of Warren County within 17 days. 180 BGMU poles were down as a result of the storm



On Friday, December 10, 2021, the atmosphere deteriorated throughout the day, and at 0100 on Saturday morning the 11th, the first of three tornadoes crossed into Warren Co. at the Logan Co. line; this was an EF-3. The second tornado hit the Russellville Road area, proceeded south of Western Kentucky University's campus, parallel to Interstate 65; this was also an EF-3. The third tornado started at the Bowling Green - Warren County Regional airport, crossed Interstate 65 and caused damage to the Corvette track; this was an EF-2. Three significant tornadoes hit Warren County that morning, resulting in 17 casualties. The storm system that hit Kentucky caused over 70 casualties statewide.

BGFD activated Storm Mode in anticipation of severe weather to prioritize emergency resources. Deputy Chief Smith responded to the Dispatch Center to assist with prioritizing incident calls and effectively managing pending calls for service. Emergency Operations Center was established within one hour with additional phone lines to field calls away from the Dispatch Center. The Command Post was established at Jennings Creek Elementary School on Sunday, December 13th. The school's proximity to ground zero operations provided a large area for staging, accountability, and rehab.

Above: BGFD crews perform search and rescue operations on the morning of Saturday, December 11th.

160

Search and Rescue Volunteers

assisted BGFD throughout the five-day search operation

244

Missing persons cases

worked by BGD, narrowed to zero after the final victim was located on Thursday, December 16th

The Strike Team was activated and an all-call was issued at 0139 on December 11th. 33 personnel were on shift that night, and between 0130 and 0700, 65 additional members of BGFD responded. BGFD units performed search and rescue in the Creekwood area through the night, rescuing multiple victims trapped in debris. Rescue efforts were only needed in the Creekwood neighborhood, although other areas of Bowling Green were severely affected. No injuries or fatalities were reported in other affected areas despite significant property damage.

Over the five days following the tornado events, BGFD was assisted by 160 additional search and rescue volunteers, including seven canines and the FEMA Urban Search and Rescue Task Force Type 3 Team of 45 personnel.

While the devastation was like no other, it allowed the Department to grow and develop additional outreach opportunities. The Prevention Division has created tornado shelter handouts and has held multiple tornado safety presentations throughout the community. Plans are in place to include this safety message in presentations, when appropriate, as part of Community Risk Reduction efforts.

Below: Chief Brooks addresses 68 BGFD personnel, active and retired, assigned to search crews at briefing on the morning of Wednesday, December 15th, the final day of BGFD search operations.



STATION 7 LOVERS LN

First-arriving unit travel times to the Lovers Ln area improved by 46 seconds

90th percentile travel time for the first arriving unit in 2020 was 5:14, after Station 7 opened, travel time improved to 4:28

06.07

Ribbon Cutting

hosted by the Bowling Green Area Chamber of Commerce



ENGINE 7

Heat map of all incidents after May 2021 when Engine 7 was the first arriving unit

Previous gap analyses identified response times to the Lovers Ln area were in excess of established deployment standards, and the area had great anticipated growth. Construction began on the new station in February 2020. On May 23, 2021, crews occupied Station 7 and raised the flag. The Lovers Ln Fire Station is the seventh fire station to serve the City of Bowling Green. The opening of Station 7 created a new district to redistribute runs from the edges of Station 1, 2, and 6 districts, reducing response times in these areas. Seen in the heat map above, call load in Station 1, 2, and 6 districts were alleviated by the addition of Engine 7. Outliers may be due to coverage of other districts and/or other abnormalities.

PUMPER 2 TURNED 90

Pumper 2 was purchased by the BGFD in April of 1931 and turned 90 years old in April of 2021. Since the original purchase, it has been restored by several active and retired BGFD personnel. It is now on display in the Administration Building at 625 E. 6th Ave.

In 2021, Pumper 2 was used for multiple community events including transporting Santa Claus to Downtown Lights Up.

At Right: BGFD Veterans ride Pumper 2 in the Veteran's Day Parade November 6, 2021.



FACILITIES, FLEET, AND CAPITAL IMPROVEMENT PROJECTS

FACILITIES UPDATES

Station 1
 Installed bay doors
 Replaced Plymovent motor

Station 2
 Retrofit LED lights
 Replaced last bay door

Station 3
 Retrofit LED lights
 Replaced water heater

Station 4
 Retrofit LED lights
 Gate repaired

Station 5
 Installed water meter to reduce utility costs
 Rebuilt breathing air compressor

Station 6
 Retrofit LED lights
 Replaced water heater

FLEET

Wheels and Tires for Battalion 1
 Sold Reserve Trucks 1 and 4

CAPITAL IMPROVEMENT

Purchased 10 additional SCBA
 Architectural services for joint Public Safety Training Center with BGPD, Station 5, and Station 8



9/11 STAIR CLIMB

Each year, on the anniversary of September 11th, members of the Bowling Green Fire Department attend the Nashville 9/11 Memorial Stair Climb at the Tennessee Tower. Members climb 110 flights of stairs while wearing tags to represent and honor one of the 343 firefighters who lost their lives that day in the attack on the World Trade Center.

LAWRENCE CO. DEPLOYMENT

In February 2021, the Kentucky Fire Commission received a request from Kentucky Emergency Management to assist Eastern Kentucky counties with debris clearance missions. BGFD deployed three teams to Lawrence County, Kentucky to assist the National Guard in clearing roadways for utility companies following severe weather events.

Right: Eric Brogli, Chris Buchanon, Bryan Fulkerson, Greg Hollis, Brett Pitchford, and Craig White deployed February 20, 2021



COUNTY INVESTIGATIONS

Mutual aid agreement establishing response and investigative protocols to provide assistance to the Warren Co. Sheriff's Office for fires occurring in Warren County, outside of City limits, which are deemed suspicious in nature. City Ordinance 2021-46 was approved in December 2021. BGFD Investigators spent 18.5 hours at County fire investigations in 2021.



AUTOMATIC AID

Established Interlocal Cooperation Agreements for Automatic Aid with the Warren County Sheriff's Office and County Fire Departments for Active Shooter / Hostile Event Responses and Technical Rescue Responses in the Bowling Green and Warren County community. Ordinances 2021-7 and 2021-8 were approved in March 2021.

Left: BGFD Crews attend joint active shooter training with local law enforcement agencies and EMS at Western Kentucky University in July 2021.



HONORARY FIREFIGHTER

BGFD raised \$28,000 for MDA, a record for the Department. On September 10th, Cooper Waid was posthumously named the first honorary Bowling Green Firefighter. 2021 was the first year the Department participated in the "Fill the Boot" campaign without the help of Cooper, who passed away in December 2019 at the age of 17. (Above: Cooper's mother accepts a certificate and helmet)



SUPERHERO 5K

Chief Brooks accepted a challenge from Maj. Matt Edwards with BGD to assemble a team of superheroes to support CASA in their annual 5k on September 25th (Top Right)

POLICE & FIRE SOFTBALL

On September 28th, BGFD and BGD, Warren Co. Sheriff's Office, and WKU PD participated in a charity softball game to benefit a local law enforcement officer battling cancer (Bottom Right)



SAFETY STAND DOWN

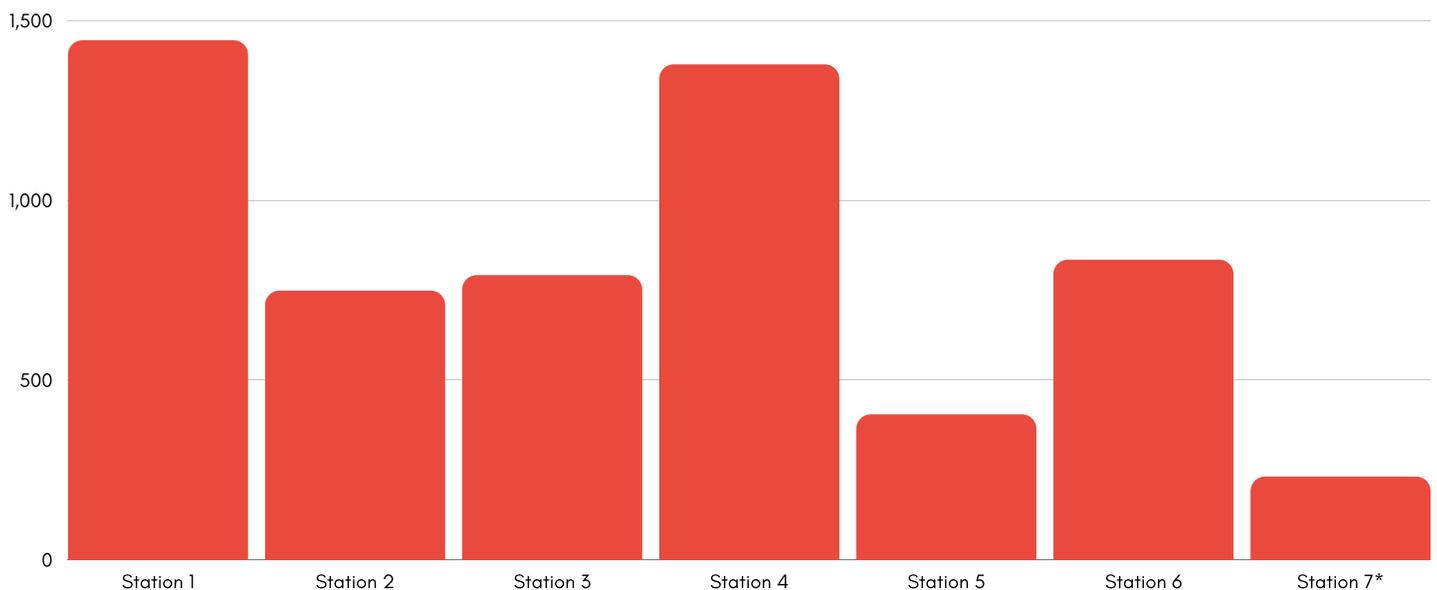
BGFD hosted Jo Terry of the Chip Terry Fund for First Responders August 29 - September 1 to present *Trauma and its Effect on First Responders and Their Family* to all BGFD personnel and a special class for spouses and family members (pictured above). The calendar was cleared for three days as the Department focused on the mental health of members.

INCIDENT DATA

Major Incident Types	Station 1	Station 2	Station 3	Station 4	Station 5	Station 6	Station 7*	Total
Fires	95	30	25	76	25	36	7	294
Overpressure Rupture, Explosion, Overheat (no fire)	6	7	4	1	0	4	2	24
Rescue and EMS	728	397	457	887	204	532	151	3356
Hazardous Condition (no fire)	53	45	26	34	9	21	10	198
Service Call	112	32	25	75	17	21	3	285
Good Intent Call	229	64	111	154	41	67	21	687
False Alarm and False Call	218	173	140	146	107	150	37	971
Severe Weather and Natural Disaster	0	0	0	2	0	1	0	3
Special Incident Type	3	0	3	2	1	2	0	11
Total	1444	748	791	1377	404	834	231	5829

CALL VOLUME ANALYSIS

The Bowling Green Fire Department responded to a total of 5,829 calls for service in 2021. Approximately 57% of calls were for emergency medical service; 5% of calls were fire. Stations 1 and 4 respond to the greatest percentage of incidents compared to all other stations. These have traditionally been the Department's busiest districts. Station 7 and future plans for Station 9 hope to alleviate the call load and utilization of units assigned to these districts. *Station 7 data only covers the seven months of 2021 it was open.



GAP ANALYSIS - FUTUER STATIONS

4:00

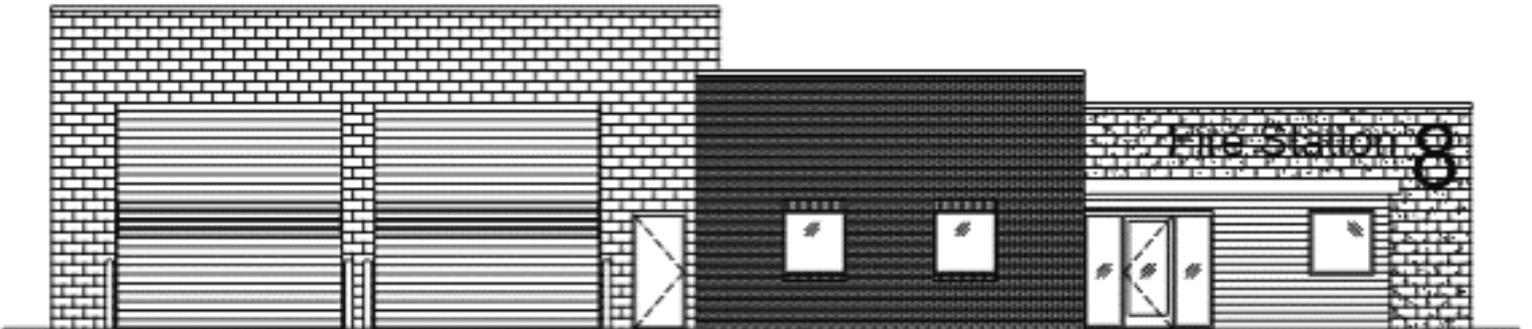
Travel time goal 90%
first arriving unit to the Transpark area

8:23

Travel time actual 90%
first arriving unit to the Transpark area in 2021. **Performance gap 4:23**

There is a significant response time to the Kentucky Transpark in northern Bowling Green. As the Transpark continues to grow and city limits stretch farther north, response times from the nearest station have also grown. 90th percentile response time to this area is 2021 was 8 minutes 23 seconds. The need for a fire station in this area was identified several years ago, and 1.52 acres of land was acquired by the City in January of 2019. This is the future location of Station 8. A station design committee has been formed and architects have begun work on plans. Anticipated opening will be early 2024. Fifteen additional personnel are needed to staff a four-person crew at Station 8. Grant funding has been sought for these positions, to be added over two fiscal years. An additional engine will also be needed and is budgeted for fiscal year 2023.

Below: Station 8 rendering



1

STATION 8 - PROPOSED FRONT ELEVATION

4:00

Travel time goal 90%
first arriving unit to the Russellville Rd area

6:01

Travel time actual 90%
first arriving unit to the Russellville Rd area. **Performance gap: 2:01**

The Command Staff is carefully monitoring the Russellville Rd area. Response heat maps also indicate a weakness in this area. The City is expanding in this area and response times continue to fall outside of compliance with 90%.

310

Hours spent at Fires

Suppression crews spent a total of 310 hours at fire incidents in 2021

52%

Increase in number of Fires

Fire incidents increased from 194 in 2020 to 294 in 2021.



STATION 7

The opening of Station 7 in May added an additional company to the Suppression Division's operations, and increased daily minimum staffing to 33 from 30.

TRUCK COMPANIES

In 2021, it was decided truck companies and engine companies stationed at the same location would be dedicated to their apparatus to allow better consistency of fireground operations and apparatus knowledge. Truck Ops Tuesdays brought all three truck companies together at the Training Center to hone their skills each Tuesday for Training.

Above: Suppression crews on scene at a structure fire on E. 12th Ave. on March 19, 2021.



Turnout Time Compliance

with 1:20 benchmark for first arriving unit on structure fire incidents



Travel Time Compliance

with 4:00 benchmark for first arriving unit on structure fire incidents



Response Time Compliance

with 6:20 benchmark for first arriving unit for structure fire incidents

BENCHMARK

For 90% of all moderate and high-risk structure fire responses, the total response time for the arrival of the first-due unit, staffed with 3 firefighters shall be: 6 minutes and 20 seconds in all districts. Components of the benchmark - 1:00 call processing, 1:20 turnout time, 4:00 travel time

Below: Suppression Crews on scene at a structure fire on River St. on January 4, 2021

2:08

actual 90% Turnout Time

Performance gap of 0:48

4:26

actual 90% Travel Time

Performance gap of 0:26

6:30

actual 90% Response Time

Performance gap of 0:10



1,050

42%

Hours spent on EMS calls
Crews spent a total of 1,050 hours at EMS incidents in 2021

of the time, BGFD arrives before Med Center EMS

The Bowling Green Fire Department provides emergency medical care as first responders at the EMT-Basic level to serve citizens and visitors. BGFD has an agreement with Med Center Health EMS to provide assistance on certain calls as dictated by agreed-upon standard operating guidelines and procedures. BGFD's Medical Director is Dr. Robert Wasson, who provides oversight to the Department's EMS program. The majority of members are certified to the EMT-Basic level, with several members being certified at the EMT-Paramedic level. Although BGFD does not provide ALS care, paramedics provide continuing education to basic providers.

In 2021, the Department worked closely with partners at Med Center Health to respond safely and efficiently to calls involving possible Covid-19 cases. This has proven to be challenging, but nonetheless BGFD has continued to provide high-quality care to the sick and injured. Protocols were amended to require providers to wear additional PPE on certain calls where exposure to Covid-19 was possible, and to prevent members from exposing a patient in the event one was asymptotically positive.

Below: Joint active shooter training with local law enforcement agencies and EMS at Western Kentucky University in July 2021

EMS Incident Data	2021	2020*	2019
Total EMS calls	2614	2658	4782
Assisted with lifting	1341	1230	2604
Checked vital signs	670	596	1722
Applied oxygen	176	142	434
Administered other medications	64	52	106
Performed CPR, applied AED	76	51	67
Controlled bleeding	123	84	169

*EMS response protocols were adjusted in 2020 to reduce exposure risk and reduce response to non-emergency incidents. Call volumes greatly reduced in 2020 and following as a result





Turnout Time Compliance

with 1:00 benchmark for first arriving unit on EMS incidents



Travel Time Compliance

with 4:00 benchmark for first arriving unit on EMS incidents



Response Time Compliance

with 6:45 benchmark for first arriving unit for EMS incidents

BENCHMARK

For 90% of all emergency medical services (EMS) responses, the total response time for the arrival of the first-due unit, staffed with 3 firefighters shall be: 6 minutes and 45 seconds in all districts. Components of the benchmark - 1:45 call processing, 1:00 turnout time, 4:00 travel time

Below: Suppression Crews and EMS treat a dog for smoke inhalation following a structure fire at Cameron Park Apartments on July 20, 2021

1:36

actual 90% Turnout Time

Performance gap of 0:36

5:03

actual 90% Travel Time

Performance gap of 1:03

6:37

actual 90% Response Time

Compliant - no gap in performance



COMMUNITY RISK REDUCTION

In 2021, the Bowling Green Fire Department shifted a greater focus to Community Risk Reduction efforts with the addition of Katie McKee, the Community Risk Reduction Coordinator, to plan, develop, and implement fire and life safety education programs to increase emergency preparedness in at-risk populations.

Public relations and outreach events in 2021 included nursing home visits, media interviews, parades, and community block parties. BGFD continues to provide up-to-date fire safety education through community risk reduction efforts including: station tours, classroom education programs, and community smoke alarm/fire extinguisher drives. Annually, the Fire Department hosts a Firehouse Festival in October in observance of National Fire Prevention Month. Community members are given an opportunity to see firefighting equipment, receive valuable fire safety information through handouts and demonstrations,

"The Bowling Green Fire Department is intentional in our efforts to be involved with events within our community."

Assistant Chief Jason Brooks

and watch displays of the types of emergency response services the Department provides.

In an effort to reach and educate as many citizens as possible, the BGFD disseminates fire safety education regularly on social media platforms including Facebook, Twitter, Instagram and YouTube, as well as periodic interviews broadcasted on both radio and television outlets. BGFD participated in many public education and community outreach events throughout the City of Bowling Green, local schools, and the campus of WKU. The Prevention Division's goal is to interact with all demographic areas and identify specific needs for groups in the community. BGFD works with the Neighborhood Community Services Department to identify refugees moving to Bowling Green and work on translating fire safety handout material.

Below: Crews participate in Fiestaval at La Perlita on September 18, 2021.



SOUND OFF

The Bowling Green Fire Department was chosen as one of the pilot departments to implement the Sound Off program in the Kentucky school system. This program is targeted toward 2nd and 3rd graders. The decision to choose Dishman McGinnis Elementary as the first school was based on several risk factors such as the location and run concentration in the area. The goal next year is to expand the program to more schools within city limits.



SMOKE ALARM DRIVE

During a response at a local apartment complex, a tenant confided in the crew with concerns about the lack of working smoke alarms in their building. With the help of now-retired Captain Ron Renner, the Prevention Division developed a fire extinguisher/smoke alarm drive for local apartment complexes throughout the city. Local volunteers and gracious donors made it possible for the Department to provide tenants of these apartments with a free fire extinguisher, install up to two free smoke alarms, and provide a free lunch. The goal is to expand this outreach to other at-risk communities within Bowling Green.

Left: Engineer McKee and Retired Captain Renner install smoke alarms at Garden Apartments on May 22, 2021



FIRE SAFETY INSPECTIONS

With the continued growth of the City of Bowling Green, fire code inspection and enforcement remain a top priority for the Prevention Division. With over 3,500 annual inspections, the Bowling Green Fire Department strives to protect citizens, responders, and their property with a proactive approach in Fire and Life Safety Inspections. Safety is the Division's number one priority. Reducing property damage is also as important to BGFDF as it is to business owners. BGFDF strives to keep Bowling Green businesses operating to limit the negative economic impacts of being closed for lengthy periods and employees being out of work. The Department desires to maintain a safe environment for citizens and to find and address solvable problems before they become emergencies. 1,734 Fire Safety Inspections were completed in 2021.

BOWLING GREEN CITY ORDINANCE CHAPTER 12

On May 4, 2021, the new Chapter 12 of the BG Code of Ordinances, was approved by the Board of Commissioners as Ordinance No. BG2021-15. Chapter 12 was originally adopted in 1980 and updated in the 1990's with the Burn Victims Fund being added in 2003. Being extensively outdated, the original Ordinance was repealed, and the new Chapter 12, which is a conglomeration of Codes and Standards through the Kentucky Building Code, Kentucky Administrative Regulations, Kentucky Revised Statutes, Kentucky Standards of Safety, International Building Codes, and NFPA Standards, was adopted. Through this new Ordinance, revisions were made that include:



- Adopting the Kentucky Standards of Safety as the basis for the BGFD to conduct fire safety inspections and enforce applicable fire codes.
- Adopt various sections of NFPA 1, 2012 edition, to allow access to buildings, ensure the BGFD has adequate water supply, hydrants, and accessible connections to fight fires based on building size, construction and contents. Since then, the State adopted NFPA 1, 2018 edition, on March 1, 2022, which is automatically adopted by the City under language in the Ordinance.
- Implements a firefighter safety building marking system to identify types of construction that are known to fail rapidly under fire conditions that are used in building (pictured above).
- Updates the burning regulations, adding fines for violations without permits and improper burning.
- Updates language regarding Hazardous Materials response, fire alarms, and mutual aid.
- Updates language and processes related to the BGFD Burn Victims Fund.



ORIGIN & CAUSE INVESTIGATIONS

Below: Investigator Graves

photographs the scene of an incendiary fire incident resulting in a fatality on Vine St. on November 3, 2021

116
Investigations completed

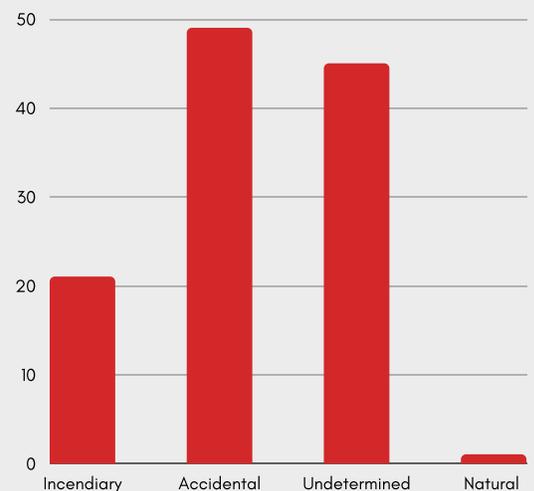
178%
increase in investigations over 5-year average

17
Canine activations in 2021
ADC Millie has 100% confirmation rate from Kentucky State Police Forensic Lab



BGFD investigators, with the assistance of Accelerant Detection Canine (ADC) Millie, conduct all origin and cause investigations. In 2020, an internal study was done to review the on-call investigator position's efficiency. It was determined that 70% of fire origin and cause investigations occurred outside of normal business hours. In November 2020, a fire investigator was moved to a rotating 24-on, 48-off shift schedule on a trial basis to allow for quicker response, better access to witnesses, and reduced on-call time. This change was made permanent in May 2021. BGFD Prevention Division added one additional investigator in September 2021, a role previously filled by Assistant Chief Jason Brooks in a fill-in capacity. This allowed each shift to have a dedicated, assigned investigator on duty at all times. This transition was needed to keep up with the demands of the growing number of investigations, without sacrificing the quality of the investigation.

FIRE DETERMINATION



266

480

HazMat Training Classes

Total Class Hours

In 2021, the HazMat program developed a SWOT assessment and strategic plan to strive for continuous improvement. The strategic plan serves as a guideline for the leadership of the program but will also be flexible enough to change when needed. As officers change stations, retire, or promote, this plan will be able to continue offer guidance for the maintenance and improvement of the program. In March, a near full-scale HazMat drill was completed and identified gaps in the program and areas of needed improvement. In May, WKU hosted a cave/karst workshop that was attended by Captain Webster and Battalion Chief Buchanon. The HazMat program began utilizing inventory capabilities of Emergency Reporting software to adequately track, monitor, and maintain supplies and equipment.

Below: HazMat multi-company training March 2021

Incident Types	2021	2020	2019
Overpressure rupture of air or gas pipe/pipeline	2	1	2
Chemical reaction rupture of process vessell	1	1	0
Hazardous condition, other	1	2	0
Gasoline or other flammable liquid spill	14	10	15
Gas leak (natural gas or LPG)	69	20	52
Oil or other combustibile liquid spill	2	0	3
Chemical hazard (no spill or leak)	1	0	3
Chemical spill or leak	3	1	1
Carbon monoxide incident	15	18	10





Turnout Time Compliance
with 1:20 benchmark for first arriving unit on HazMat incidents



Travel Time Compliance
with 4:00 benchmark for first arriving unit on HazMat incidents



Response Time Compliance
with 6:45 benchmark for first arriving unit for HazMat incidents

BENCHMARK

For 90% of all hazardous materials responses, the total response time for the arrival of the first-due unit, staffed with 3 firefighters shall be: 6 minutes and 20 seconds in all districts. Components of the benchmark - 1:00 call processing, 1:20 turnout time, 4:00 travel time

Below: Gas line rupture incident on E. 8th in downtown Bowling Green July 20, 2021

2:08

actual 90% Turnout Time
Performance gap of 0:48

6:15

actual 90% Travel Time
Performance gap of 2:15

8:21

actual 90% Response Time
Performance gap of 2:01



TECHNICAL RESCUE

"During the tornado response, our eyes were opened to the fact we need to spend more time on US&R techniques."

Captain Daniel Ashley

2,744

Training hours logged
across all technical rescue
specialties

45

Incidents requiring
technical rescue or, at a minimum,
consideration of technical rescue



In 2021, the Technical Rescue program was able to complete operations-level classes in structural collapse and trench rescue (pictured above, Trench Operations Class in November 2021). Most of Station 1 personnel were able to attend the classes. BGF D replaced Boat 1, all the seams gave way leaving it with large, unrepairable holes. Truck 4 and Truck 6 were brought into the program for ropes and water to broaden the program's reach throughout the City. A full complement of rope gear was purchased for both trucks. Water rescue services improved with the addition of Boat 6 to Greenwood Fire Station.

Along with the move to include additional truck companies, the City formed a technical rescue mutual aid agreement with eight of the nine Warren

County volunteer fire departments. Coordinated technical rescue training installments with county departments are set to begin monthly in 2022.

During the tornado response, almost every discipline of technical rescue was utilized. Although this was just one large-scale response, there were multiple buildings partially and completely collapsed, vehicles laying everywhere, a creek that needed to be thoroughly searched, and multiple urban search and rescue (US&R) missions carried out. Nearly every member of the Department became part of the technical rescue program on that night and the week to follow. Gaps in technical rescue service were identified through lack of US&R training. Plans are in place to improve upon US&R techniques.



Turnout Time Compliance
with 1:20 benchmark for first arriving unit on technical rescue incidents



Travel Time Compliance
with 4:00 benchmark for first arriving unit on technical rescue incidents



Response Time Compliance
with 6:45 benchmark for first arriving unit for technical rescue incidents

BENCHMARK

For 90% of all technical rescue responses, the total response time for the arrival of the first-due unit, staffed with 3 firefighters shall be: 6 minutes and 20 seconds in all districts. Components of the benchmark - 1:00 call processing, 1:20 turnout time, 4:00 travel time

Below: Crews were dispatched to an animal rescue on the bank of the Barren River on May 6, 2021.

2:08

actual 90% Turnout Time
Performance gap of 0:48

4:03

actual 90% Travel Time
Performance gap of 0:03

7:54

actual 90% Response Time
Performance gap of 1:34



936.5

**ARFF Training Hours
logged**

23

**Aircraft Standbys
Completed**

The Bowling Green Fire Department Aircraft Rescue and Fire Fighting (ARFF) program had a successful 2021 in conjunction with the Bowling Green/Warren County Regional Airport (BGWCRA).

Part of the program's annual evaluation is to ensure all 12 members (4 per shift) stationed at Station 2 - Airport Fire Station cover all FAA Part 139 required subject areas of training throughout the year, including first aid; this training is documented in Emergency Reporting records management system and is provided to the FAA Inspector by the Assistant Chief of Training to ensure requirements are met and the airport can maintain its certification.

In late April and early May, crews at Station 2 completed annual BGFD airport refresher training that the airport crews conduct for their respective shifts. During the week of May 10-14, crews participated in an airport night drill. In June, crews went to Bluegrass Airport in Lexington to complete the annual ARFF certification burn.

Twenty-three aircraft standbys were completed throughout the year, primarily in the fall due to the WKU football team and their opponents utilizing charter aircraft to fly in and out of BGWCRA. There were no incidents to report at the BGWCRA during 2021.



AIRPLANE DONATION

In the Spring of 2021, the BGWCRA donated a small, experimental private jet they acquired to the BGFD to utilize for training. With the assistance of public works, a concrete pad was poured by the Airway Court Hangers so the aircraft could be utilized for training and then anchored. The aircraft has been used for training throughout the year and is budgeted for cleaning, replacement paint, and Department decals identifying it as a training prop in 2022.

Left: ARFF night drills in May 2021

RECRUIT CLASS

On December 28, 2020, the recruit class of 2021 began basic training as scheduled.

Plans were made to ensure recruits and instructors were socially distanced as practical. When it was not possible, masks were utilized.

04.01

Recruit Class 2021
graduated from basic training



2020

Recruit Class was sworn in
on April 1, 2021 with the 2021 recruits. The class was not able to have a graduation ceremony upon completion of their training in 2020.

Following recruitment efforts in 2020, 243 applications were received for the position of Firefighter. 160 applicants completed the written test, and 77 were granted initial interviews. Long interviews took place in September of 2020; the panel interviewed 34 candidates. 15 individuals moved on to polygraph and psychological exams.

Finally, 8 background checks, pre-employment physicals and conditional job offers were made. On December 15, 2020, the Bowling Green Board of Commissioners approved the probationary appointment of 8 firefighter recruits. During the second week of recruit class, one recruit resigned. His replacement was hired on January 25, 2021.

TRAINING DIVISION

2021 began with concerns about how to conduct training in a socially-distant environment. Outside training opportunities were very limited at the beginning of the year. As the year progressed, restrictions began lifting and training opportunities became more available. Multi-company fire training drills resumed after being on hold for a year. During the summer months of 2021, Assistant Chief Shannon Pardue stepped away from the Training Division to fill the role as Interim Deputy Chief. Captain Matt Ferguson accepted the role of Interim Assistant Training Chief until Pardue's return in early August.

○ FEBRUARY

- SCBA Fit Testing
- Blue Card Simulation Lab

○ APRIL

- Recruit Graduation
- EMT Class
- FAA Insepection
- IFSAC Fire Officer 1
- Company Drills
- HazMat Rail Car Class
- Evaluation Training

○ JUNE

- Extrication Class
- Elevator Training

○ JANUARY

- Installation of heating unit in storage building to enable social distancing in recruit class
- 8 recruits begin basic training
- Company drills

○ MARCH

- Multi-company drills resume
- Structural Collapse Class
- PPE Inspection Training
- Ventilation Training (pictured below)
- Recruits to NRPC

○ MAY

- VFIS Driver Recertification
- Hose Advancement Class
- IFSAC Pumper Class
- Airport Night Drills
- ARFF Burn Recertification



76

Personnel attended 30 training opportunities outside of BGF D

AUGUST

- Hydraulic Calculations Class
- Preparations for Engineer promotional testing
- KLC Leadership Conference
- *Trauma and Its Effect on First Responders and Their Family* with Jo Terry

OCTOBER

- Company Drills
- IPAT Evaluations
- Preparations for next recruit class
- CPAT Testing

DECEMBER

- Fire Attack Drills
- Mass Casualty Training
- Recruit Class Begins

JULY

- Company Drills
- Promotional Preparation Classes
- Active Shooter Training at WKU
- *What Do You Even Do?*

SEPTEMBER

- Promotional Testing
- Engineer Practical Evaluations
- IFSAC Aerial Class
- CPAT Testing

NOVEMBER

- Preparation for next recruit class
- Ropes Awareness Training
- CSX Railway Class

WHAT DO YOU EVEN DO?

On July 22, 2021, Jen Edwards, interim PIO for the City, came to Training Division to film her series highlighting Departments in City Government



EMPLOYEE AWARDS

"The awards ceremony is part of a tradition that once was, and is now back. A tradition of coming together to reflect on a year's worth of sacrifice and elite service."

Fire Chief Justin Brooks



01.14.22

Employee Awards Ceremony
for awards given in 2020 and 2021

Pictured at left: award recipients

MEDAL OF VALOR - Awarded for a conspicuous act of valor and heroism by a member or unit under hazardous conditions in which the person is placed in a life-threatening position to save the life of another.
Awarded to: John Ballance, Dylan Bohn, Joe Harbin, Larry Wehr, Travis Keown and Mason Michael

MEDAL OF HONOR - Awarded to a member or unit who has performed outstanding service to the Department or to the public safety of the community with regard to fire and emergency service.
Awarded to: Michael Bean, Chad Ennis, Brennan Elsas, Sean Martin, Corey Mahaney, and Alan Bush

AWARD OF MERIT - Awarded to a member or unit based on performance of duties which have been carried out in an outstanding manner such as to merit recognition.
Awarded to: Michael Bean and Lee Hatcher

SAFETY AWARD - Awarded for an outstanding and/or exemplary acts of service and dedication with regard to the safety of Department members.
Awarded to: Steve Coleman

SERVICE EXCELLENCE AWARD - Awarded for an outstanding and/or exemplary act of accomplishment by a member or unit.
Awarded to: Travis Keown and Nick Tutor for exemplary service to this country

COMMUNITY SERVICE AWARD - Awarded to a member who has donated considerable time and/or effort toward the betterment of the community.
Awarded to: Jason Brooks and Ron Renner

FITNESS AWARD - Awarded to a member whose commitment to their own fitness and the fitness of their fellow firefighters is outstanding.
Awarded to: Sean Hamilton and Shathan McCoy

CHIEF'S AWARD - Designated by the Chief of the Fire Department.
Awarded to: Matt Ferguson for his commitment to selfless sacrifice for the Department and its members
Awarded to: Buffy Watt for commendable time and effort given toward the betterment of the Department



**CAPTAIN
ISAAC ANTHONY**



**ENGINEER MERV
HOCHSTETLER**



**FIREFIGHTER
DUSTIN JONES**

OFFICER, ENGINEER, AND FIREFIGHTER OF THE YEAR

Awarded to the member of each rank whose performance throughout the year has shown exceptional commitment to outstanding service and professionalism



PROMOTIONS

JANUARY

OFFICE ASSOCIATE II
Buffy Watt

APRIL

ENGINEER
Justin Donnelly

JUNE

FIRE INVESTIGATOR (ENGINEER)
Dennis Wolf

AUGUST

FIRE CHIEF
Justin Brooks

OCTOBER

ENGINEER
Ketler Calixte

MAY

CAPTAIN
Andy Embry
Scotty Shehan
Jeff Woosley
ENGINEER
Bryan Fulton
Brandon Gilliam
Ross Graves
Sean Hamilton
Mario Ibarra
Billy Meinhardt

SEPTEMBER

BATTALION CHIEF
Eric Scott
CAPTAIN
Steve Candela
Andy Crawford
ENGINEER
Don Brod
William Moore

NOVEMBER

DEPUTY CHIEF
Bret Smith
CAPTAIN
Chris Cartas
Merv Hochstetler
ENGINEER
Dustin Jones
Kyle Hampton



Pinning ceremony November 2, 2021

RETIREMENTS

APRIL

FIRE CHIEF
Jason Colson
26 years of service

AUGUST

CAPTAIN
Melvin Norris
20 years of service

OCTOBER

DEPUTY CHIEF
Jim Morrow
25 years of service

CAPTAIN
Ron Renner
16 years of service

ENGINEER
Evan Henderson
20 years of service

JANUARY

PUBLIC EDUCATION SPECIALIST
Marlee Boenig
32 years of service

MARCH

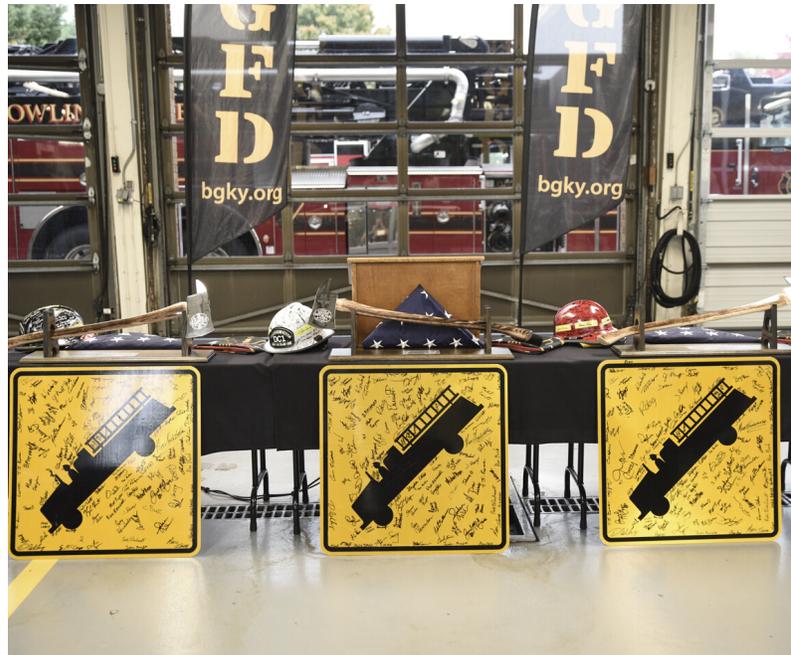
ENGINEER
Billy Daniels
20 years of service

JULY

FIREFIGHTER
Eric Brogli
21 years of service

Roger Greer
21 years of service

Bill Jones
21 years of service



Retirement celebration October 29, 2021



#MakeItBetter
@BGKYFire