



City of Bowling Green Public Works Department July 1, 2023 - June 30, 2024





MESSAGE FROM THE DIRECTOR

That's a wrap! My first year as the director has been full of learning, engagement and witnessing the department in action across the city. I could not be prouder of the team. Our 61 caretakers are silent professionals, often working behind the scenes to ensure Bowling Green is safe, clean, navigable, and accessible. We follow best practices from across the nation and were re-accredited by the American Public Works Association in August, the only Public Works Department in the state. For some, Public Works is an unknown. One might see the trucks or the high visibility vests on a roadway, but these small glimpses are only a tiny part of a much bigger and engaged effort impacting every citizen across the city.

Consider the Operations Division - caring for our city's 280 miles of roads (asphalt, curb, gutter, striping & markings, 11K signs, 23 stop lights and street sweeping). The team oversees 192 miles of sidewalk and greenways, conducts snow removal and leaf pick-up, removes storm debris and cleans out storm sewers in our right-of-ways.



ANDY SOUZA

PUBLIC WORKS DIRECTOR

The Environmental Compliance Division monitors our single-source of drinking water—Barren River. The dedicated staff educates contractors on erosion prevention and sediment control, teaches children about the importance of clean water and serves as our watchful eyes in the cave system and consults on sinkholes. They also respond to emergency spills, fire response mitigation, ensuring water runoff from a fire emergency doesn't pollute our soil or water, and coordinates with the county on hazardous household clean-up events.

The Planning and Design Division is home to the city engineer, surveyor and construction coordinators. They are the subject matter experts for roadway design and the annual street overlay, monitor traffic counts, plan for growth and inspect subdivisions from the driveways all the way to the connections with the rest of the city. These professionals oversee commercial developments and capital improvement programs.

Our Fleet Division maintains over 650 vehicles and major pieces of equipment. Everything from police cars and fire engines to heavy equipment, lawn mowers, generators and boats, our fleet mechanics keep the city moving.

Our Facilities Management team manages 18 buildings, including 8 fire stations, the Convention Center and even the historic Hobson House. As we plan for growth, facilities prepares for the long game and ensures the safety and comfort of every person entering our doors.

Finally, our front office team is the glue keeping it all together, running oversight of all budgetary issues, coordinating with external agencies and even watching our street lights. I'm proud to be the director and present this annual report for transparency and accountability. When in doubt, we get the call!



KEY PERSONNEL



ANDY SOUZA
PUBLIC WORKS
DIRECTOR



MELISSA CANSLER
CITY ENGINEER



RYAN JOHNSON OPERATIONS MANAGER



MATT POWELL ENVIRONMENTAL MANAGER



DENISE GILLAND
FLEET MANAGER



DAVID HEHNER FACILITIES MANAGER

MISSION

SAFELY, EFFICIENTLY, AND PROFESSIONALLY ENHANCE THE QUALITY OF LIFE FOR THE CITIZENS OF BOWLING GREEN.

VISION

MAKING THE CITY
BETTER EVERY DAY
THROUGH
TEAMWORK.

VALUES

INTEGRITY SERVICE EXCELLENCE

EMPLOYEE OVERVIEW & HIGHLIGHTS

RESIDENTS OF BOWLING GREEN

ENVIRONMENTAL COMPLIANCE

FACILITIES

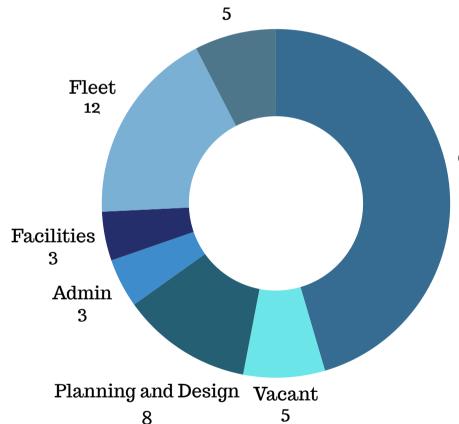
FLEET

PLANNING & **DESIGN**

OPERATIONS

DIRECTOR





Operations 30

ANNIVERSARIES

5 YEARS OF SERVICE

David Delp Matt White **Daniel Colter** Jagger Rone Denise Gilland Tyler Phelps Nick Lawhon Josh Minton

10 YEARS OF SERVICE

Pam Hurt

RETIREMENTS

Joe Webb - 30 Years David Delp - 5 Years Pam Hurt - 10 Years

NEW HIRES

Paul Staubs

Rob Evans Titus Smith

Jesse James Caleb Houtchen

Jake Moore

Terry Roberts

Matt Wisenden

Journee Nickson Dara Price Laurie Epperson

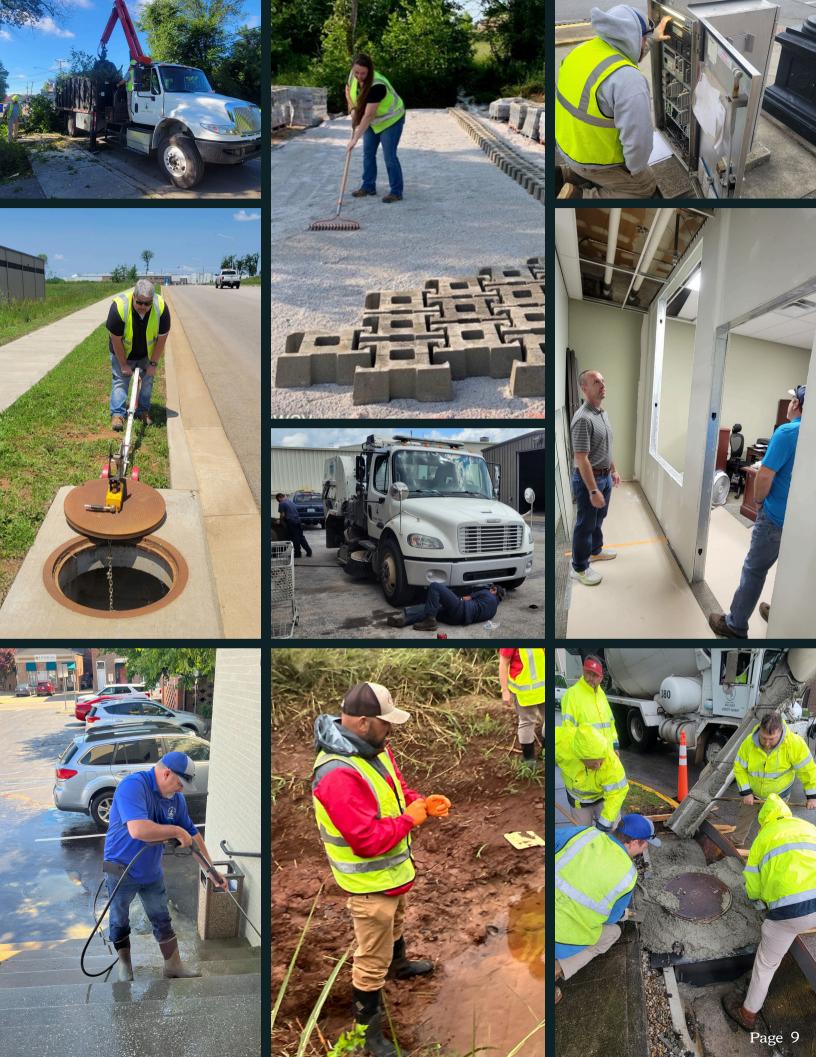
Full-Time **Employees**

Part-Time **Employees**

Vacant **Positions**

THE MANY FACES OF PUBLIC WORKS







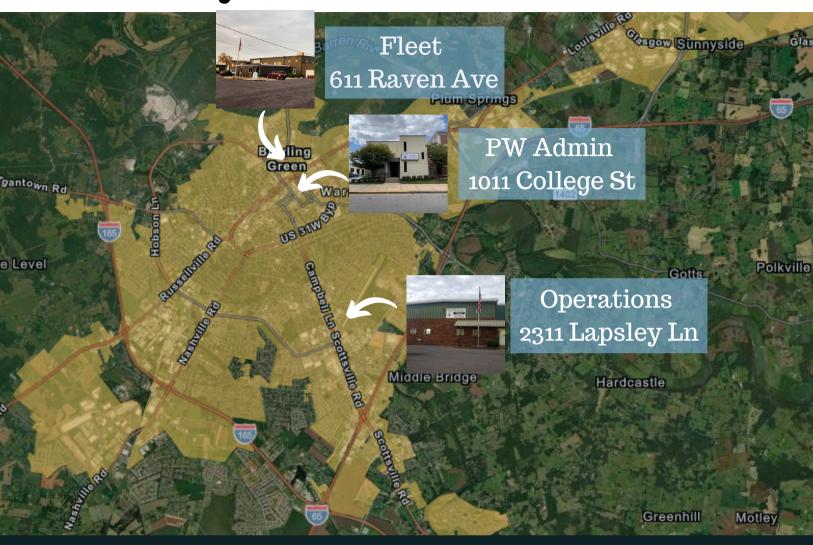








By The Numbers





75,000 Population Estimate



11,641 Traffic Signs



280 Miles of Streets



72 Miles of Storm Sewers



192 Miles of Sidewalks



931 Stormwater Injection Wells



23 Traffic Signals

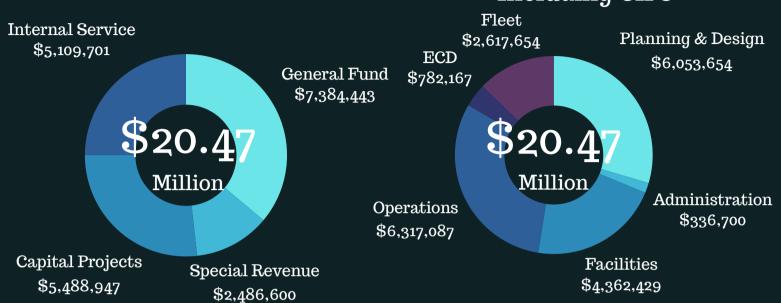


312 Pieces of Equipment, 357 Vehicles & 28 Leased Vehicles

Financial Overview

Funding Sources

FY24 Approved Budget Including CIPs



Public Works receives funding from a variety of sources. When tax dollars are allocated to the General Fund, for every dollar collected, 17¢ goes to Public Works and can be used for anything from pothole repairs to snow plowing and leaf pick-up, police car repairs or testing our drinking water! That's pretty impressive for a dime, a nickel and two pennies.



47 Cents Police & Fire (Public Safety) 17 Cents Public Works 16 Cents 13 Cents 7 Cents Parks& GenGov NCS Rec

Capital Improvement Projects Awarded Include:

\$2,000,000	Street Resurfacing	
\$200,000	Sidewalk Reconstruction	
\$812,835	Vehicle/Equipment Replacement /	
	Purchases	
\$850,000	Westen Avenue Roundabouts	
\$150,000	Tomblinson Way Roundabout Desig	gn
\$2,900,000	Bluegrass Farms Boulevard	
	Extension	
\$30,000	College Street Storm Drainage	
	Improvements	
\$2,800,000	Energy Savings Project, Phase IV	
\$50,000	City Hall Annex Interior Remodel	
\$300,000	Multiple Fire Station Renovations	
\$48,000	Airport Fire Station Generator	
	Replacement	
\$95,000	Police Cadet Office Renovation	
\$80,000	Police Bulk Storage High Density	
	Shelving	
\$50,000	Fleet Parking Lot Overlay	
\$50,000	Convention Center Table	
	Replacements	13_

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Awards & Recognition



The City of Bowling Green Public Works Department is the only American Public Works Association accredited agency in the state of Kentucky and 1 of 204 agencies in the country. The department initially became accredited in 2007 and is up for review every 4 years for compliance with national standards. This year, across all 5 divisions, they examined 119 practices, 1/3 of the department's regulatory compliance. The department achieved reaccreditation status.



Matt Powell, Environmental Manager, was named the 2023 Kentucky Association Mitigation Manager of the Year.



Bowling Green City Commission proclaimed
May 19 -25 as Public Works Week.



Daniel Colter, Construction Coordinator, and Kyle Hunt, Assistant City Engineer, accepted awards at the 2023 APWA KY State Conference for Roadway Project of the Year and Bridge Project of the Year.



Environmental Compliance Division's scarecrow at Lost River Cave Trail took home the 3 R's Award "Reduce, Reuse, Recycle."

2023 APWA KY State Projects of the Year

Awarded August 2023



Shive Lane Corridor Improvements Phase II

Roadway Project of the Year

Previously, the Kentucky Transportation Cabinet made improvements to the intersection of Scottsville Road/Cave Mill Road/Shive Lane to better accommodate left turns onto Cave Mill Road. Phase I of this project funded the design and construction of Shive Lane between Scottsville Road and Ken Bale Boulevard to a three lane section as well as the installation of a right turn lane at the intersection with Scottsville Road. Additionally, this project included design and construction of a single lane roundabout at the intersection of Ken Bale Boulevard to reduce morning and afternoon peak delays motorists were experiencing on Shive Lane.

Phase II included widening a portion of the existing Shive Lane from the roundabout at the intersection of Ken Bale Blvd. and Shive Lane extending to Middle Bridge Road. This included a typical section (three lanes with multi-use path, curb and gutter) and construction of a single-lane roundabout at the intersection with Middle Bridge Road. Also included was a three-lane section from the roundabout at Middle Bridge Road to the intersection of Lovers Lane across from Searcy Way, where a traffic signal was also installed.

College Street Pedestrian Bridge Rehabilitation

Bridge Project of the Year





The construction project involved several tasks to restore and improve the structural integrity of the structure, pier caps, piers and surrounding areas. These tasks included:

Removal and repair of unsound concrete in the pier caps.

Installation of a 15' form lined encasement wall around the stacked stone pier.

Minor scour mitigation to prevent erosion.

Repair of wind bracing.

Minor deck repair and sealing.

Lead abatement to ensure safety.

Repainting of all the structural steel.

It is worth noting that the stacked stone pier in the Barren River has historical significance, as it dates back to the previous wooden covered bridge that was erected at this location in 1838.

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The Operations Division is responsible for maintenance of streets and stormwater drainage infrastructure as well as emergency response like snow removal and storm debris cleanup.

Operations is divided into three crews; Concrete/Drainage, Street Maintenance, and Traffic Control. Often times, the season and weather play a large part in the type of maintenance necessary to keep the streets safe and functional for the community.

1,114 work orders with 16,026 tasks were completed by the Operations Division.

Concrete / **Drainage Crew**



1,265 Feet of Sidewalk Repaired/Replaced



3,653 Linear Miles of Streets Cleaned

Tons of Waste Removed by Sweeper





THE CITY IS **DIVIDED INTO** 10 WORKZONES

Not sure what work zone you live in? Enter your address here:

bgky.org/publicworks/leaf-pickup

Street Maintenance



289 Potholes Repaired





Tons of Leaves Picked Up and Recycled

11,270



Man-hours used for Mowing, Trimming, **Bush Hogging** City Right-Of-Ways

Traffic Control



857 Street Signs Repaired / Replaced



Signalized Intersections Upgraded

Smallhouse Road/Cave Mill Road, & E. 12th Avenue/Chestnut Street





















The Environmental Compliance Division's primary goals are to educate and involve the public in protecting their watershed, investigate reports of non-stormwater discharges into the environment, review and inspect new development for compliance with regulations, monitor water quality, manage the City's closed landfills and respond to environmental emergencies.

- 1 KY Stormwater Association Conference hosted in Bowling Green
- 18 Stormwater Presentations/Events
- 55 Contractors Certified in Erosion Prevention & Sediment Control
- 61 Stormwater Illicit Discharge Responses
- Erosion Prevention and Sediment Control Site Inspections Completed
- 707 Environmental Permit Reviews
- $985 \begin{array}{l} {\rm Vehicles\ moved\ through\ 2\ Household} \\ {\rm Hazardous\ Waste\ Days} \end{array}$



640 E Third Ave Bowling Green KY

46°SW (T) ● 36°59'48"N, 86°25'52"W ±459ft ▲ 504ft



\$1 Million

Won a million dollar Climate Pollution Reduction Program Planning Grant from the Inflation Reduction Act. Completed a Greenhouse Gas Inventory and Priority Climate Action Plan for the Bowling Green Metropolitan Statistical Area, (Warren, Allen, Butler, and Edmonson Counties). Submitted an individual application for \$50 million in implementation funding for the program and joined a four-state coalition led by Tennessee Valley Authority in a separate \$300 million application.

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Our stormwater infrastructure includes box culverts, pipes, inlets, junction boxes, and approximately 2,500 injection wells. Construction of this infrastructure has been occurring since the City's founding. Most of the underground system have been inaccessible for inspection. The condition of this critical infrastructure is mostly unknown. In 2023, the City contracted PipeCheck LLC to conduct robotic inspections of these systems. Their efforts revealed such widespread spalling concrete, corroded reinforcing, sediment accumulation, cross bored utilities, and walls caving in that FY25 will mark the City's inaugural year of an annual storm sewer rehabilitation capital project.







The division responded to the Valor Oil Explosion and fire in support of the Bowling Green Fire Department. Staff coordinated the efforts of other City departments, state agencies, and private companies to arrest the advance of a plume of racing fuels and oils. Approximately 6,500 gallons of racing fuel and 600 gallons of 2-cycle engine fuel was involved, impacting roughly 1.3 miles of storm sewer. Public Works crews created a temporary underflow dam. The effort successfully captured the plume several hundred feet short of the Barren River. The mayor coined 3 PW employees following this event for their quick and efficient work.







Staff conducted emergency repairs to the exposed geomembrane synthetic cap (EGSC) at the Butler County Landfill. Repairs were completed before the slope was further damaged by the exposure. The landfill encompasses 266 acres, including 14 acres protected from erosion with the EGSC. The damaged section was 225' by 80' wide.

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The City's surface water monitoring network detected a precipitous drop in oxygen at Jennings Creek, indicative of a pollutant release, which resulted in the death of most of the fish in the stream. The Environmental Compliance Division tracked the source to a local industry with a holding pond containing over 300 thousand gallons of polluted water leaking into a sinkhole drain. Staff initiated enforcement action against the company, which resulted in the spill being cleaned up within 72 hours. The company continues to work with the division to ensure all appropriate measures are taken to ensure the incident cannot reoccur.







The division collects a series of samples from local waterways each quarter and conducts periodic sampling of suspect discharges for enforcement of our illicit discharge detection program, as well as investigating complaints of pollutants in the river. In 2022 the failing Barren River Lock and Dam No. 1 at Greencastle was removed by the US Army Corps of Engineers. While this restored the natural flow of the river for the first time in over a century, it also dramatically reduced water levels upstream all the way to the River Street Bridge. The division traded a traditional prop driven boat for a jet drive outboard model that allows this work to continue in the shallower water.







Eleven sinkhole repairs were completed under the sinkhole repair contract for a total cost of \$175,446.84. Environmental Compliance Division responded to a further 31 sinkhole complaints, of which 14 were referred to Operations for repair and 17 were referred to other entities for repair.



Planning and Design consists of 3 engineers, a surveyor and 5 construction coordinators. Engineers conduct long range studies, prepare plans and recommendations concerning traffic issues, approve plans and specifications for construction projects, sidewalk construction, and drainage improvements. Construction Coordinators are responsible for overseeing the capital improvement projects, subdivision infrastructure inspections, and right-of- way permits.

53 Street Cut Permits Issued

65 Subdivision Inspections Completed

70 Plat Reviews

Development Plan Reviews Completed

(Permits, Comprehensive Development Plans, & Subdivision Plans)

428 Street Cut Inspections Completed

 $671\,$ Permitted Site Inspections Completed

902 Service Requests Completed



Completed Survey Projects

Annexation Advantage Way and US 68/80 (Glasgow Road)

Annexation 750 Lovers Lane- Next to Bowling Green Gardens

Boundary and Topographic survey @ 620 Nutwood Street for flood mitigation

Topographic Surveys for Jennings Creek Greenways, Tomblinson Way Roundabout, and Riverview Pedestrian Island

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Completed Design Projects

New Sidewalk Program -Approximately 5,777 (1.1 miles) of new sidewalk designed and bid for construction

Tomblinson Way Roundabout

Bluegrass Farms Boulevard Extension

Greenhill Street Extension

In-Design Projects

Greenways

Cave Mill Rd Widening

Whispering Hills Stormwater Mitigation

Jackson St. Sidewalks

Scottsville Rd. Multi-use Path (8 feet)

Tomblinson Way Roundabout

Completed Construction Projects

Overlay Project - Approximately 11.3 miles paved and 18 handicap ramp upgraded complete

Sidewalk Rehabilitation Program - 1231 linear feet of sidewalk replaced and 1277 sidewalk safety hazards repaired with minimal disruption to pedestrians through the concrete cutting method

Census Block Group 102.1 Right-of-way Community Block Grant Project - 7155 linear feet of sidewalk 766 sidewalk safety replacements. repaired, road diet on College Street and decorative stop signs throughout census block

2 Roundabouts at Westen Street - Intersections at Ashley Circle and at Patrick Way

College Street Bridge Rehabilitation and Painting

College Street Streetscape completed between 7th Ave and 8th Ave.

Under Construction Projects

New Sidewalks on Morgantown Rd, Rockingham Dr, Riverwood Ave. Rhodes Dr. Creekwood Ave

Westen Street and Highland Way Roundabout

West End Greenways

12th Ave Safety Improvements

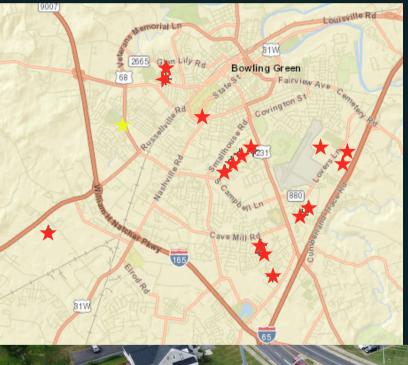


The Roundabout Way

According to the Kentucky Transportation Cabinet, studies in the United States show that roundabouts can dramatically improve safety and reduce delays at intersections.

A 2000 study by the Insurance Institute for Highway Safety evaluated changes in motor vehicle crashes following conversion of 24 intersections from stop sign and traffic control to modern roundabouts. The study found that after converting to roundabouts:

- Total crashes declined by 39%
- All injury crashes declined by 76%
- Serious injury/fatal crashes declined by 89% Sources: Kentucky Transportation Cabinet, Insurance Institute for Highway Safety





★Roundabouts in City Limits

- 1. University Dr. & U.S. 31 W Bypass
- 2. Ashley Cir. & Westen St.
- 3. Westen St. & Rockingham Ave.
- 4. Westen St. & Patrick Way
- 5. Westen St. & Highland Way*
- 6. Middle Bridge Rd. & Ken Bale Blvd.
- 7. Ken Bale Blvd. & Shive Ln.
- 8. Southern Parkway & Kobe Way
- 9. Fieldstone Blvd. & Cave Springs Ct.
- 10. Golden Autumn Way & New Towne Rd.
- 11. Old Towne Blvd. & Cave Springs Rd.
- 12. Parkside Dr. & Cove Dr.
- 13. Woodway St. & Cove Dr.
- 14. Crossing Blvd. & Chasefield Ave & Pointe Ct.
- 15. Hub Blvd.
- 16. Chasefield Ave. & Andover St.
 - *Under Construction

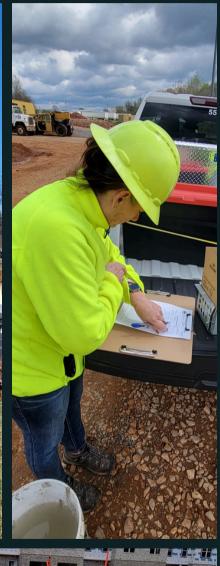
***** Future Roundabouts

1. Preston Miller Park & Tomblinson Way

















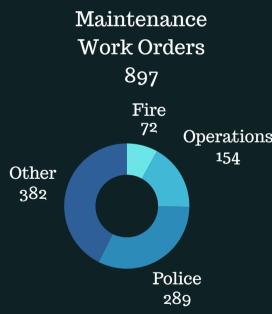
The Fleet Division is responsible for the acquisition and upkeep of over 670 City vehicles and major pieces of equipment for all City departments, including police cruisers and fire apparatus. This division is staffed with ASE certified technicians performing a broad range of repairs and maintenance on the City's diverse fleet. Although their work can go unnoticed by citizens, Fleet plays a vital role essential for the City to operate efficiently.



Special Projects: 148
Equipment Failure: 108
Leaf Equipment Prep &
Repair: 40
Snow Prep & Repair: 59
Recalls & Warranty: 28
Other: 177

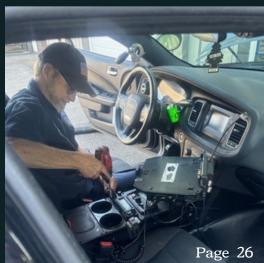
69 Equipment Units Outfitted or Added to the Service Program and 41 Equipment Units Decommissioned

2,679 Days Without a Lost Time Accident









Special Project Requests:

Prepped 36 Enterprise vehicles for service

<u>Fire Department:</u>

- Prepped two new fire engines for service serving Stations 7 and 8
- Performed in-house up fitting on 2 vehicles used in Fire Suppression and Fire Training

Police Department:

- Prepped 29 police vehicles for service
- Axon in-car camera units: performed 7 inhouse installations and hosted vendor installations of 92 camera systems
- Installed and removed Drive Cams 31 units

Operations:

 Added a backup camera system to 2 knuckle boom trucks

Parks Maintenance/Parks Recreation:

- Prepped 1 SandPro and 1 Toro Mower for service
- Performed in-house up fitting on Parks Ranger truck



Enterprise Fleet Management

This initiative was implemented in order to diversify the maintenance and acquisition of the City's light-duty vehicles. some Enterprise has acquired 8 vehicles for the city and leased 28. With leased vehicles being serviced at any approved service vendor, this will allow much needed capacity for fleet's mechanics to focus on preventative and routine maintenance. Especially for first responder vehicles and niche equipment such sweepers, de-icing trucks, leaf machines, bush hogs and pavers. It will also allow for a more timely procurement for hard to find vehicles. \$156,520 is the total net proceeds for 22 city vehicles sold through Enterprise in FY 2024.





Fire Equipment Technician Jordan Stice completed a series of important inspections and consultations. He traveled to Appleton, Wisconsin and Sarasota, Florida to consult on apparatus construction and perform final inspections with Pierce Manufacturing for Engine 7 and Truck 6 ahead of its delivery. Additionally, Jordan visited Bradenton, FL to inspect Engine 8, preparing it for its new assignment at the Transpark Station. At one of the inspections, Jordan discovered missing motor mounts, a major issue, which had been previously missed several times by the vendor.

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Facilities Division is responsible for monitoring daily operations and ongoing functions within most City buildings, including Police and Fire. The Facilities Technicians perform minor repairs, stock supplies, keep the grounds tidied, and insure our City buildings provide employees with the necessary utilities within 18 city buildings and Paxton Lot. Facilities Manager also oversees the construction of new City buildings.



Assumed maintenance responsibilities of all fire stations, bringing the total to 19 facilities maintained.

Added a 3rd position to the division.

Started using a work order system to track daily work by types and locations.

Completed approximately 800 work orders.







Completed implementation of the energy savings program-Performance Agreement for Comfort from Trane (PACT) Phase 3.

Completed construction Station #8 located at 756 Glasgow Road near the Transpark.

Managed a contract change for citywide sanitation services to Blue Moon Sanitation.

Managed the Fleet and Parks and Recreation Parking Lot Overlay contract.

Completed bathroom renovations at the Sloan Convention Center.

Completed Phase 2 of City Hall Annex Window Replacements.

Projects in Progress

Trane PACT Phase 4

Fire Station 3 Kitchen Remodel

New Construction of the joint Police and Fire Training Complex (Station 5) on Porter Pike

Police Department Cadet Office Renovations



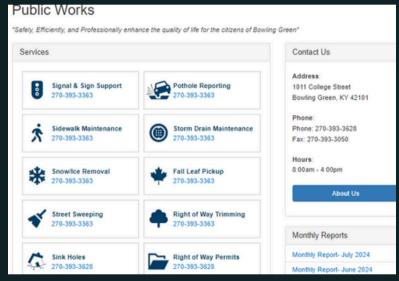




Completed a long overdue greenways assessment of all city maintained greenways. Finds were reported to MPO, Parks and Recreation Department, and Operations Division for in house repairs.



Outfitted 47 Public Works vehicles with dashcams and GPS tracking.



Worked with IT Department to update the Public Works web page and focused on ease of use.



Equipped the Vactor Truck with disinfection spray capability, the first in Bowling Green.

Unveiled a <u>new department logo</u>, which embodies the essence of our entire department and highlights each of our distinct divisions. This design integrates elements that represent the diverse functions of our team, showcasing our collective strength and unity.

Introduced the <u>Shining Star of the Month Award</u>. Nominated by peers, this is awarded to individuals who consistently go above and beyond for our team and citizens.

The <u>Golden Leaf Award</u> at Operations made its return. This award is also peer nominated and is given out annually to an OMT in recognition of outstanding performance demonstrated throughout leaf season.



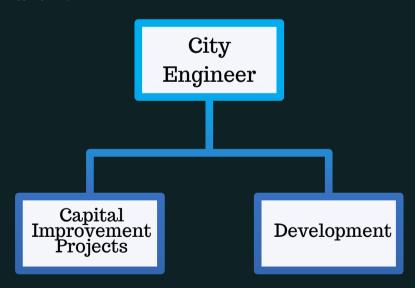
Promotions

Chad Doughty, Assistant City Engineer Kenny Woods, Maintenance Technician II Doug Hoots, OMT II Farah Wallace, Office Associate II Ryan Johnson, Operations Manager Matt Barrow, OMT III Derrick Sanders, Crew Leader Josh Johnson, Fire Equipment Technician



Planning & Design Reorganization:

The restructure of the division allows for dedicated support to both Private Development and Capital Improvement Projects. This helped oversee buildouts and enforce regulations given the City's rapid growth. Public Works Technicians were reclassified to Construction Coordinators I and II.



<u>Facilities Management Reorganization:</u> With the addition of a new full time position

and all the fire stations, a restructure was completed to reclassify personnel into Maintenance Technicians I and II.













Sandra Street Neighbors

The Sandra Street Neighbors are one of THE longest-tenured (25+ years), consistently active volunteer neighborhood groups in the City of Bowling Green. They consist of a single block (1900 block of Sandra Street) of mostly resident senior homeowners who own attached patio homes, with rental duplexes and townhouses mixed in throughout. They are small, but they are mighty!

Over their tenure, they have participated as mentors for other neighborhood groups through their involvement in the founding of Bowling Green Coalition of Active Neighborhoods, helped collect resident survey data for the original Greenway paths on Veterans Memorial and connecting their neighborhood to Walmart on Morgantown Road, have regularly hosted government officials for neighborhood social events, have been proactive and positive in finding ways to connect with new neighbors in the area and working to voice concerns and find ways to address complex issues in the neighborhood.

Last fall the neighborhood group reached out to Public Works and other City agencies regarding speeding concerns along Sandra Street and safety concerns from overgrown vegetation along the greenways trail. Planning and Design Division conducted traffic counts using a radar counter to study the traffic along Sandra Street and provide a report to City Police to coordinate enhanced enforcement in the area. A follow-up study resulted in a decrease in the number of vehicles speeding along the roadway. Our Operations Division also installed thermoplastic rumble strips and "SLOW" pavement markings near the greenways trail crossing to increase driver awareness along that section of Sandra Street.

Public Works Operations Division with the help of other department volunteers conducted an extensive cleanup of the wooded area along the Greenways trail near the Sandra Street Neighborhood. Trash and debris was removed and the overgrowth was cleared from among the trees along that section of greenways trail from Walmart to Sandra Street.









In The Community





















Connect
With Us:

VISIT:

Public Works
Administration
1011 College Street
Bowling Green, KY 42101

Follow & Interact @cityofbgky



bgky.org/publicworks bgky.org/stormwater underbgky.org



CALL: Operations Office

270-393-3363



Public Works Administration

270-393-3628

Sink Holes Right of Way Permits*



Storm Water Management*





FY24 Annual Report Prepared By
Lizette Garcia, Executive Assistant