



CITY OF
WHEATON
Illinois

ANNUAL REPORT

2023 | PUBLIC WORKS DEPARTMENT

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MESSAGE FROM THE DIRECTOR



I am pleased to submit the Department of Public Works' 2023 Annual Report. This annual report shares the Department's organizational structure, core operations, and service levels by summarizing the organized efforts and diverse functions of the Department. Our Department strives to inform the public of all that we do to beautify, maintain, and enhance the functionality of the city.

A few highlights of accomplishments from 2023 include:

- Through the efforts of the Forestry Division, the city was named Tree City USA for the 37th consecutive year and named Monarch City USA for the first time. The Division also planted 179 trees through the City's Shared Cost Tree Planting Program.
- The Street Division replaced 70 HPS streetlight fixtures with LED fixtures; replaced 800 faded, deteriorated, or damaged street and traffic signs; and replaced 900 squares of failed sidewalk. In 2023-24, the City's snow and ice control operations responded to 7 snow events totaling 16.3 inches of snow and used 1,105 tons of road salt.
- The Water Division in coordination with the Engineering Department replaced 4,100 feet of deteriorating water main pipe with ductile iron pipe. Crews removed and replaced 103 public lead services lines with copper pipe. In addition, crews inspected over 1,200 valves, replaced 6 valves, and painted 751 fire hydrants.
- The Sewer Division operations and maintenance crews accomplished and exceeded their operational goals for cleaning and inspection. Additionally, the crews installed 1,538 linear feet of new storm sewer pipe along with 36 new manhole structures.
- The Fleet Division Superintendent facilitated the addition of 17 hybrid vehicles across all City Departments, including 9 hybrid Police Patrol SUV's, which replaced traditional gasoline combustion vehicles that were due for replacement.

On behalf of the Department, we thank the community, elected officials, City Manager, and other City Departments and their staff for their support. The City of Wheaton Department of Public Works is truly dedicated to fulfilling our mission to "...practice integrity, tolerance, and respect to enhance the quality of life for the entire community by efficient management of infrastructure and resources through innovation and best practices."

Vincent-Jay G. Laoang, PE
Public Works Director



MISSION STATEMENT

The City of Wheaton Department of Public Works pledges to practice integrity, tolerance, and respect to enhance the quality of life for the entire community by efficient management of infrastructure and resources through innovation and best practices.

VISION

To uphold and accomplish our mission with dignity, humility, and transparency so that the citizens of Wheaton and professional peers view our Department as a model for premier and industry-leading municipal service.

CORE VALUES

Teamwork

We value our workforce and strive to ensure that they are well trained and well informed, respect our customers and fellow workers, and display commitment and professionalism.

Flexibility and Creativity

We seek innovative means to accomplish our mission, vision, and goals.

Communication

We practice active listening and encourage diverse points of view.

Accountability

We are dedicated to fiscal responsibility and transparency in the use of public funds and the delivery of municipal services.

1 TEAM

6 DIVISIONS



The City of Wheaton Public Works Department is responsible for providing public services to citizens in a variety of areas to ensure that Wheaton is a clean, safe, and enjoyable place to live.

To help maintain public safety during emergency situations, the Department also provides resources, heavy equipment, snowplows, barricades, pumps, generators, and personnel as needed.

The Department is divided into six divisions in order to efficiently deliver these services: the Administrative Division, the Street Division, the Forestry Division, the Sewer Division, the Water Division, and the Fleet Services Division.

ORGANIZATIONAL CHART

KEY PERSONNEL

Vince Laoang

Public Works Director

Sean Walsh

Sewers Superintendent

Jason Ackerlund

Forestry Superintendent

Nathan Plunkett

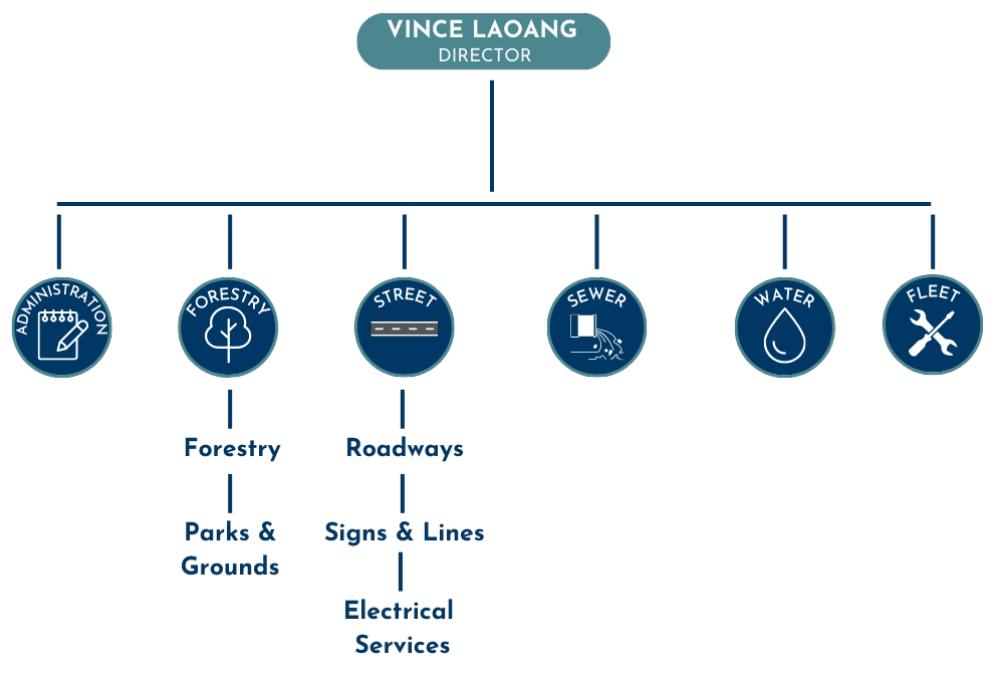
Street Superintendent

Al McMillen

Water Superintendent

Sam Webb

Fleet Services Superintendent



EMPLOYEE OVERVIEW & HIGHLIGHTS

54

FULL-TIME
UNION
EMPLOYEES

9

FULL-TIME
NON-UNION
EMPLOYEES

1

PART-TIME
EMPLOYEE

20

SEASONAL
EMPLOYEES

RETIREMENTS

John DeVaney

Mike Goist

Raul Rosalez

10 Years of Service

Jonathan Muir

Christopher Likeness

NEW HIRES

Jose Hernandez

Robert Houston

Sergio Mendoza

ANNIVERSARIES

5 Years of Service

Colton Kozlowski



CITY OF WHEATON

2020-2025

STRATEGIC PLAN

The City's Strategic Plan serves as a roadmap to guide decision-making by the City Council. It is comprised of priorities that reflect the desires of Wheaton residents and property owners and highlights the areas of focus that have been determined essential to preserving the City as a premier community in the region. Wheaton's plan for the future is based on the following five strategic priorities:

Financial Stability

- Control expenditure increases over a five-year period
- Maintain structurally balanced budgets, striking balance between operating expenditures and infrastructure investment
- Effectively communicate information about City finances to the community
- Maintain fund balance reserves based on established policy targets

Enhanced Infrastructure

- Decrease overland flooding into primary structures
- Decrease sanitary sewer backups
- Establish annual investment and operating targets to maintain City's infrastructure

Responsive & Efficient Service

- Prioritize essential services for the City of Wheaton
- Identify key performance indicators to track service delivery levels for operating departments

Community Safety

- Continue to prioritize the health, safety and welfare of the community
- Increase partnerships that focus on the health, welfare and safety of Wheaton residents
- Increase community outreach concerning safety and security issues

Environmental Sustainability

- Develop policies and create programs that preserve the natural environment



DEPARTMENT OPERATING BUDGET

The Public Works Department's operating budget for 2023 totaled \$29,235,109 with capital improvement projects included.

The City's General Fund finances the Administration, Street, and Forestry Divisions. The Water and Sewer Divisions are funded by revenue generated from metered water sales. Various departments fund the Fleet Services Division through vehicle usage fees.

FLEET: \$5,702,699

SEWER (STORM): \$2,135,753

SEWER (SANITARY): \$3,082,320

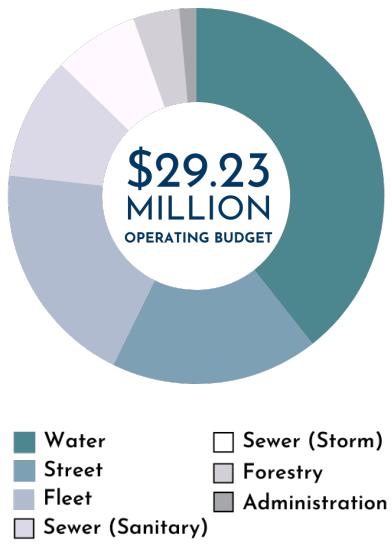
WATER: \$11,522,851

ADMINISTRATION: \$405,108

STREET: \$5,224,702

FORESTRY: \$1,161,676

TOTAL: \$29,235,109



CAPITAL IMPROVEMENT PROJECT BUDGET

Capital Improvement projects include scheduled maintenance activities, design and implementation of upgrades and improvements for optimum infrastructure sustainability.

FLEET: \$139,600

SEWER (STORM): \$1,671,300

SEWER (SANITARY): \$1,397,981

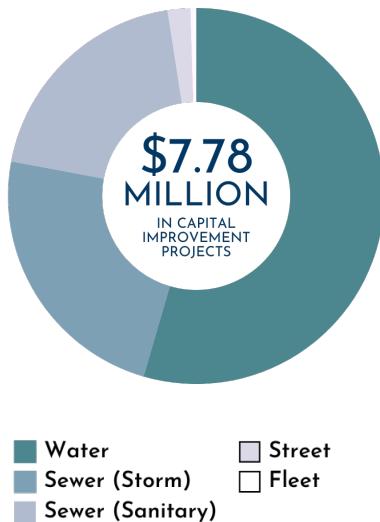
WATER: \$3,886,637

ADMINISTRATION: \$0

STREET: \$693,315

FORESTRY: \$0

TOTAL: \$7,788,833





31

training sessions
provided

12,249

invoices
processed

3,967

service requests
answered

The Administrative Division of Public Works oversees the administrative functions, long-range planning and resources allocation of the Public Works Department.

2023 ACCOMPLISHMENTS

Goal: Enhance department effectiveness through the development of personnel.

Status: All Public Works Supervisors are now OSHA 30 certified through in house OSHA authorized trainers

Goal: Remove lead public and private water services.

Status: Replaced 28 customer-side, 33 complete, and 60 City-side lead service lines.

ORGANIZATIONAL CHART



VINCE LAOANG
Director of Public Works

Dispatcher/
Assistant

Administrative
Assistant (Part-Time)





20,000+

trees maintained
in City's rights-of-way

24

acres of open spaces,
parks, & rights-of-way
routinely mowed

1,600+

street furniture
assets maintained

300+

seasonal flowerpots
& beds maintained in
downtown & gateways

The Forestry Division's staff of certified arborists (Forestry) and horticulturalists (Parks & Grounds) take pride in keeping Wheaton a safe and attractive place to live. Forestry crew maintains more than 20,000 trees in the City rights-of-ways and other public open spaces. They are responsible for planting, pruning, and scheduled removals of the urban tree canopy.

The Parks & Grounds crew cares for planting areas, flower pots, bushes, and turf in all City rights-of-way, public grounds and parking lots. Approximately 24 acres of landscaped areas require mowing, trimming, and planting. Many sites have landscape features to maintain. Adams Park is the only park owned and maintained by City crews.

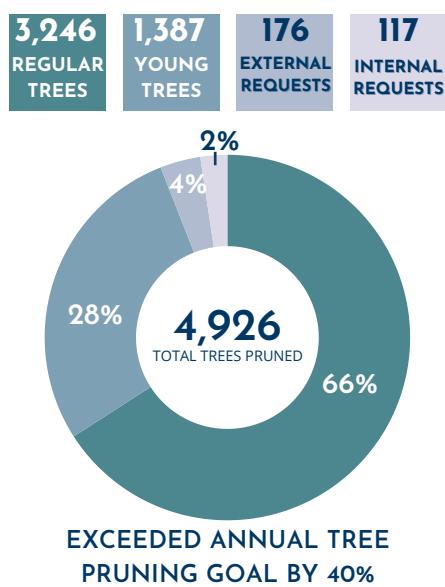
Other areas maintained include the Central Business District amenities, street furniture, planters, seasonal holiday lightings and decorations. The Division crews respond to storm-damaged trees after inclement weather and support the City-wide snow removal operations.

ORGANIZATIONAL CHART



TREE PRUNING

A total of 4,926 trees were pruned in 2023, including 293 trees were pruned by request, either by residents or other City Departments. 4,633 trees were addressed through a cyclical pruning cycle. It is the goal of the Forestry Division to inspect and prune all City-owned trees on a seven-year trim cycle. Routine pruning promotes proper growth habits and future development of the tree. Regular pruning ensures a healthier, safer urban forest.



TREE REMOVAL

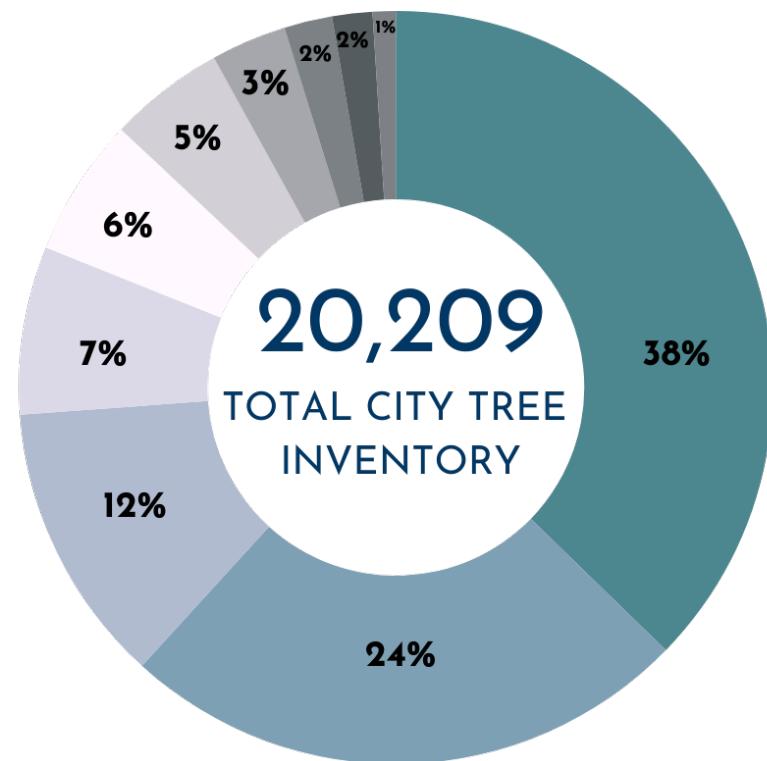
Staff removed 467 trees in 2023 that were either dead or diseased. A total of five infected Ash trees were removed through Public Works. The 193 remaining Ash trees may have been treated by the property owner or are considered healthy and will be monitored to determine if removal is warranted.



PARKS & GROUNDS

Staff maintains and enhances City owned properties to be both safe and aesthetically pleasing. In addition to the landscapes surrounding City parking lots, the division maintains 24.6 acres of open space and public rights-of-way. These areas include the Central Business District and Adams Park. Crews also provide the following services:

- Monitor and maintain the streetscape inventory of plants and trees
- Provide mulching
- Apply pesticide & herbicide at Adams Park, municipal owned parking lots, sewer lift stations and other areas
- Pick up trash and water plants in the CBD and citywide
- Mow lawns in Adams park, the CBD and City rights-of-ways



Maple: 7,535	Elm: 1,005
Other: 4,946	Linden: 655
Honeylocust: 2,444	Gallery Pear: 416
Oak: 1,456	Gingko: 349
Crabapple: 1,203	Ash: 200

2023 ACCOMPLISHMENTS

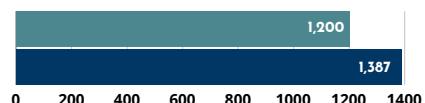
Goal: Tree Cycle Pruning Program established on a seven-year cycle for mature trees with an annual goal is to prune 1,600 trees.

Status: Pruned 2,501 trees in the cycle pruning programs. Contractor Services pruned 745 trees.



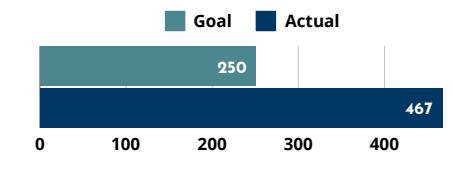
Goal: Young Tree Cycle Pruning established on a three-year cycle. Prune trees planted in 2017 and 2020 – estimate 1,200 trees.

Status: Young Tree Cycle Pruning reached 1,387 trees pruned.



Goal: Tree Removal Program to address dead, diseased, or hazardous trees from the City rights-of-way – estimate 250 trees to be removed.

Status: Removed 467 dead, diseased, or hazardous trees from City rights-of-way.



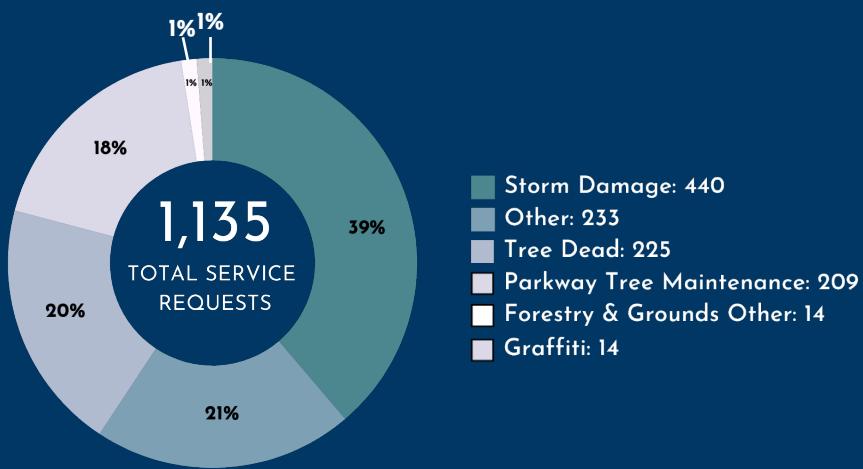
OTHER ACCOMPLISHMENTS

- Planted 179 trees through Shared Cost Tree Planting Program.
- Address maintenance and restoration needs in Public Works facility, parking lots, lift stations, generator areas, and open spaces.
- Holiday tree lighting installation completed by city crews.
- Named Tree City USA for the 37th consecutive year.
- Continued Certification training for Certified Arborists on staff (four).
- 252 new trees were planted throughout the City.
- 580 storm damage calls were addressed.

The Forestry Division annually hauls approximately 2,200 yards of mulch and 700 yards of logs.



FORESTRY DIVISION: SERVICE REQUESTS



- Storm Damage: 440
- Other: 233
- Tree Dead: 225
- Parkway Tree Maintenance: 209
- Forestry & Grounds Other: 14
- Graffiti: 14

27.3%

OF TOTAL PUBLIC WORKS DEPARTMENT SERVICE REQUESTS WERE FOR THE FORESTRY DIVISION



166.3

centerline miles of roadways maintained

10,000+

miles of roadways swept annually

4,000+

potholes repaired annually

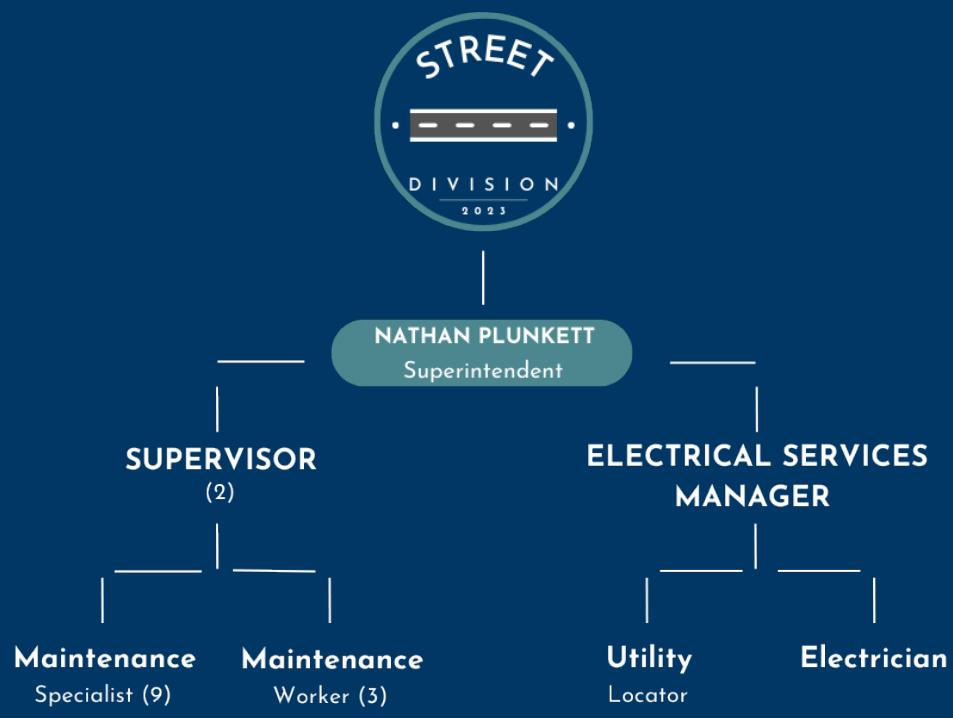
150+

residential & commercial driveway inspections

The Street Division is responsible for many maintenance activities related to the City's streets, rights-of-way, and public facilities. The City of Wheaton has 166.3 centerline miles of roadways. The Division also ensures compliance with federal, state and local regulations in all three of its sub-sections: Roadways, Signs and Lines, and Electrical.

The Roadways Section is charged with pavement maintenance, street sweeping, snow and ice control, alley maintenance, and miscellaneous waste disposal. The Signs and Lines Section installs and maintains all signs, pavement markings, and special event barricading. The Electrical Section maintains all pumps, generators, streetlights, civil defense sirens, and traffic signals. The Street Division also conducted inspections for 151 residential and commercial driveways in 2023.

ORGANIZATIONAL CHART



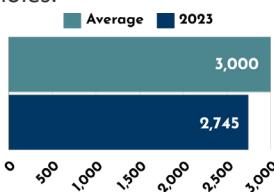
ROADWAY MAINTENANCE

Roadway maintenance in the City of Wheaton is truly a collaborative effort between Public Works and the City's Engineering Department. The Engineering Department evaluates and monitors the condition of the City's infrastructure, including streets, to then plan construction and capital improvement projects. The City's in-house Roadways Maintenance Program aims to maintain or increase the overall condition of City streets. Staff implements the recommendations from the Engineering Department and sets them into action. This is done by developing and implementing project management tools and allocating in-house resources to complete projects.

MAINTENANCE METHODS

Maintenance procedures are used to repair and prolong the life of the City's roadways.

Cold Patches: Potholes are filled in year-round both proactively and in response to resident reporting. The cold patch method is a temporary fix until a more extensive form of repair is scheduled for that portion of the street. An average of up to 3,000 potholes are repaired annually. In 2023, the Streets Division repaired 2,745 potholes.



Crack Fills: Filling or sealing cracks is important to roadway maintenance because it reduces the ability of water and other incompressible materials to enter the pavement surface that would otherwise accelerate deterioration. The application of hot-applied crack fill can extend pavement life from six months to four years.

Surface Sealing & Restoration: Gilsonite sealer-binder (GSB) is a sealing agent applied to roadways after they are constructed or repaired. Treating a roadway with GSB extends the life of the

pavement by reintroducing oils and resins lost to UV Rays, oxidization, temperature swings, and precipitation. Crews initially treat pavement one year after installation, and ideally reapply every five years.

Resurfacing/Overlay: From early May until late fall, a major component of street maintenance includes resurfacing roads throughout the City, which includes milling (grinding) street segments and re-paving them. The following criteria are used to prioritize streets for resurfacing each year.

- Date of last major rehabilitation
- Trends and observations of past road maintenance
- Location proximity to arterials, collectors, or school-adjacent streets
- PCI score
- Areas identified by staff and/or residents
- Conflicts with the Water Main Replacement Program

PROACTIVE PAVEMENT MANAGEMENT

Wheaton's roadways are assessed every three years to determine their, and the total street system's, pavement condition index (PCI). PCI scores provide an approximation of a street's physical condition and help to prioritize road maintenance. In 2023, the Streets Division performed 3.1 miles of asphalt overlays, and performed 0.9 miles of asphalt patching.

3.1
miles of
asphalt
overlays

0.9
miles of
asphalt
patching

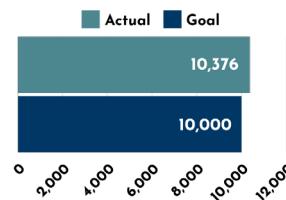
STREET SWEEPING

All City streets are swept monthly between May and September to control litter, leaves, and any environmental contaminants found in the gutter line. Concentrated sweeping occurs during the leaf season to address falling leaves and early spring to remove any debris buildup caused by snow removal efforts.

Street sweeping serves three important functions:

- Removes leaves and tree debris that naturally fall into the public right-of-way
- Improves water quality by reducing the pollutants that accumulate in the street and infiltrate stormwater
- Improves the appearance of streets and parking lots and contributes to the overall appearance of the City

The City's two mechanical sweepers perform all regularly scheduled street sweeping, while the vacuum sweeper is used primarily to clear millings during pavement resurfacing and reconstruction. The division maintains an aggressive sweeping program to ensure a minimum of 10,000 miles is swept each year. In 2023, the Streets Division swept 10,376 miles of the City's streets.



SNOW AND ICE CONTROL

The City of Wheaton maintains approximately 166 miles of streets along with 270 dead-end streets and cul-de-sacs divided into 16 specific snow plow routes as part of its snow removal operations.

In 2023, the Division responded to seven snow events that produced a total of 16.3 inches of snow. A total of 1,105 tons of treated salt was used on the City's streets.

7
snow events

16.3
inches of
snow

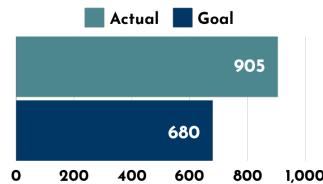
1,105
tons of salt
used

The Street Superintendent and five supervisors from the Street, Sewer, and Forestry divisions coordinate to ensure that snow is efficiently removed from roadways, parking lots, sidewalks, and facilities. Sidewalks and parking lots are cleaned with assistance from private contractors.

Staff utilize several salt reduction practices and annually calibrate vehicle salt spreaders to distribute the compounds efficiently. These materials and practices allow staff to respond effectively to the variety of weather conditions winter brings and use less salt overall.

SIGNS

The City maintains a total of 10,701 signs include roughly 6,054 regulatory signs, 1,392 warning signs, 2,017 guide signs, and 1,238 other signs. Maintenance includes the design and fabrication; installation; assessment of condition and reflectivity; and sign removal. In response to FHWA regulations requiring all municipalities develop a sign maintenance plan that maintains the minimum requirements for sign retro reflectivity, staff have implemented a 15-year cycle sign replacement program that aims to replace 680 signs annually. In 2023, the Streets Division replaced 905 signs.



PAVEMENT MARKINGS AND STRIPING

The City maintains approximately 78 miles of traffic lines, and more than 1,916 pavement markings. City crews and contractors maintain the traffic lines and

pavement markings. Pavement markings include arrows, stop bars, crosswalks, handicap parking, and text that are applied to the roadway. Roadway striping is typically replaced on either an annual or two-year cycle. These markings include roadway edge lines, lane lines, parking spaces, turning lanes, and centerlines that use a water-based, retroreflective latex paint.

SIDEWALK REPLACEMENT PROGRAM

The City of Wheaton is responsible for the maintenance and replacement of public sidewalks. The City systematically surveys public sidewalks to identify defective and deteriorated sections that create a potential hazard. These surveys are conducted in a different geographic area of the City each year to determine which portions of sidewalk in each area will be addressed with the funds available each year.

ELECTRICAL SERVICES

Staff maintains 2,872 streetlights, nine civil and defense and weather sirens, traffic signals at 14 intersections, six school zone warning flashers. Staff also inspect or maintain key electrical components of the City's emergency generators, sewer lift stations, and transfer switches. Staff are also responsible for replacing faulty underground cable, repairing controller issues, repairing damaged or knocked down streetlights, conducting JULIE

locates, and performing monthly testing of the City's generators, pumps, and civil defense sirens.

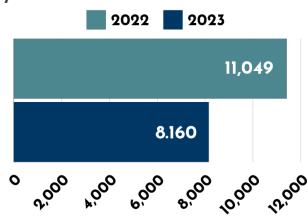
In 2023, Electrical Services re-lamped 91 streetlights, replaced 70 high pressure sodium (HPS) streetlight fixtures with energy efficient LED lights, and replaced nine streetlight poles that were knocked down.



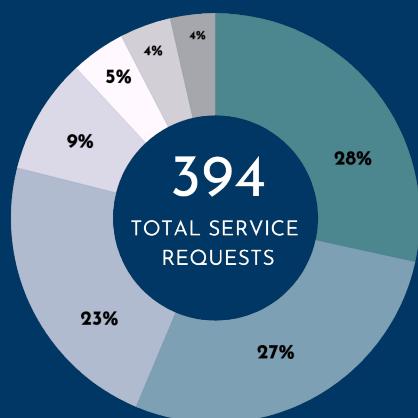
JULIE LOCATES

Performing JULIE (Joint Utility Locating Information for Excavators) locates is an essential customer service function. Locates are undertaken by Electrical with assistance from both Water and Sewer. When area residents or service providers plan to dig in Wheaton, they are required to call JULIE.

In 2023, staff responded to 8,160 JULIE requests by locating and marking underground City utilities in the right-of-way before excavation or other digging activities commence. The quantity of locates performed are dependent on annual construction and utility provider activity.



STREET DIVISION: SERVICE REQUESTS



- Signshop: 112
- Sidewalk Problems: 110
- Streetlight Out: 89
- Potholes: 36
- Accident w/ Damage to City Property: 17
- Other: 16
- Repair: 14

11.12%
OF TOTAL PUBLIC WORKS DEPARTMENT SERVICE REQUESTS WERE FOR THE STREET DIVISION



168.3

miles of sanitary
sewers maintained

175.4

miles of storm
sewers maintained

160+

retention ponds
maintained

5,870

catch basins
maintained

The Sewer Division is responsible for providing uninterrupted service to all residents served by the City's sanitary and storm sewer systems via proactive maintenance and repair programs. These services are maintained through investigation, inspection, evaluation, and analysis of the systems' long- and short-term needs. The Division maintains 168.3 miles of sanitary sewer, 175.47 miles of storm sewer, more than 160 retention ponds, six sanitary lift stations, two storm lift stations and 5,870 catch basins, and over 7 miles of creek channel. The Division performs limited maintenance of the creek channels within the City limits. The City is only responsible for maintaining the creek sections within public right of ways and drainage easements. The Division responded to over 159 emergency locates called into JULIE during the calendar year. In conjunction with the Road Program, the Division also inspects, repairs, and replaces manholes. Sewer personnel assist with snow removal operations, storm events, and other cross-divisional functions as needed.

ORGANIZATIONAL CHART



OPERATIONS & MAINTENANCE

The Wheaton Sewer Division conducts sewer cleaning and CCTV (Closed-Circuit Television) inspections to ensure the efficient operation and maintenance of the City's sanitary and stormwater management system. Regular sewer cleaning is essential to prevent blockages and backups that can lead to significant environmental and public health issues. Over time, sewer lines can accumulate debris, grease, roots, and other materials that restrict flow and cause clogs. By systematically cleaning the sewer lines, the Division helps maintain the proper functioning of the sewer system, reducing the risk of overflows and the subsequent contamination of local water bodies and residential areas.

CCTV inspections are a critical component of the Division's preventive maintenance

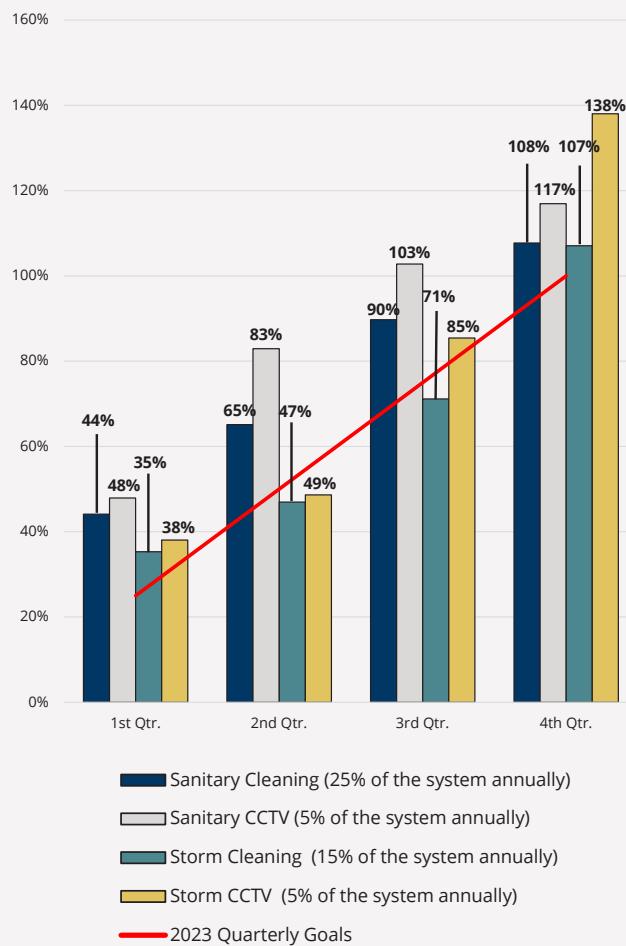
strategy. Using high-resolution cameras, the Division can visually inspect the interior of sewer pipes to identify potential problems that are not visible from the surface. These inspections allow for the early detection of issues such as cracks, corrosion, joint displacements, and blockages caused by roots or debris. By identifying these problems early, the Division can schedule timely repairs, which are often less costly and disruptive than emergency responses to system failures.

The combination of cleaning and CCTV inspections also supports the City's Strategic Priority of Enhanced Infrastructure. Data collected from these activities helps the Division to prioritize areas needing immediate attention and to develop comprehensive maintenance schedules. Our proactive approach ensures the longevity and reliability of the

sewer system, thereby safeguarding public health and protecting the environment. Additionally, routine sewer maintenance and inspections help the Sewer Division comply with regulatory requirements and environmental standards set forth by the Illinois Environmental Protection Agency.

Moreover, maintaining a clean and well-inspected sewer system can enhance community confidence in local public services. Residents and businesses rely on the efficient removal of wastewater for daily activities, and disruptions can have significant economic and social impacts. Effective sewer management demonstrates the Division's commitment to providing essential services, contributing to the overall well-being and quality of life in the community and Wheaton's Strategic Priority of Responsive and Efficient Services.

SEWER CLEANING & INSPECTION PROGRESS



2023 CATCH BASIN CLEANING



SANITARY SEWER IMPROVEMENT PROGRAM

The City of Wheaton's Overhead Sewer Reimbursement Program and Sanitary Sewer Service Replacement Program provide significant benefits to both the City and its residents. These programs aim to mitigate flooding, reduce private sewer backups, and enhance the overall resilience of the city's wastewater infrastructure.

The Overhead Sewer Reimbursement Program offers financial assistance to homeowners for installing overhead sewers, which are designed to prevent basement flooding during heavy rainfalls or sewer backups. By encouraging residents to upgrade to overhead sewers, the City reduces the likelihood of basement flooding, which can cause extensive property damage, health hazards, and financial strain on residents. For the City, fewer instances of sewer backups translate to reduced emergency response costs and less strain on the municipal sewer system during peak flow events.

The Sanitary Sewer Service Replacement Program focuses on replacing aging or deteriorating sewer service lines that connect individual properties to the City's main sewer lines. Over time, these service lines can develop cracks, leaks, or blockages, leading to sewer backups and potential environmental contamination. By replacing these old lines, the program helps ensure a more reliable and efficient sewer system. For residents, the program reduces the risk of sewer backups and the resulting property damage and health concerns. It also alleviates the financial burden of replacing these lines, which can be costly for individual homeowners.

From the City's perspective, upgrading service lines reduces the inflow and infiltration of groundwater into the sewer system, which can overwhelm the sanitary sewer system and lead to overflows. This proactive maintenance helps the City manage wastewater more effectively, ensuring compliance with environmental regulations and reducing the potential for costly repairs and fines.

CONSTRUCTION & CIP

In 2023, the City of Wheaton's Sewer Division replaced 1,538 feet of storm sewer and 41 assorted structures to address aging infrastructure and reduce overland flooding. The replacement of storm sewers and structures is critical to managing stormwater effectively, ensuring that water flows properly through the drainage system and reducing the risk of localized flooding during heavy rain events.

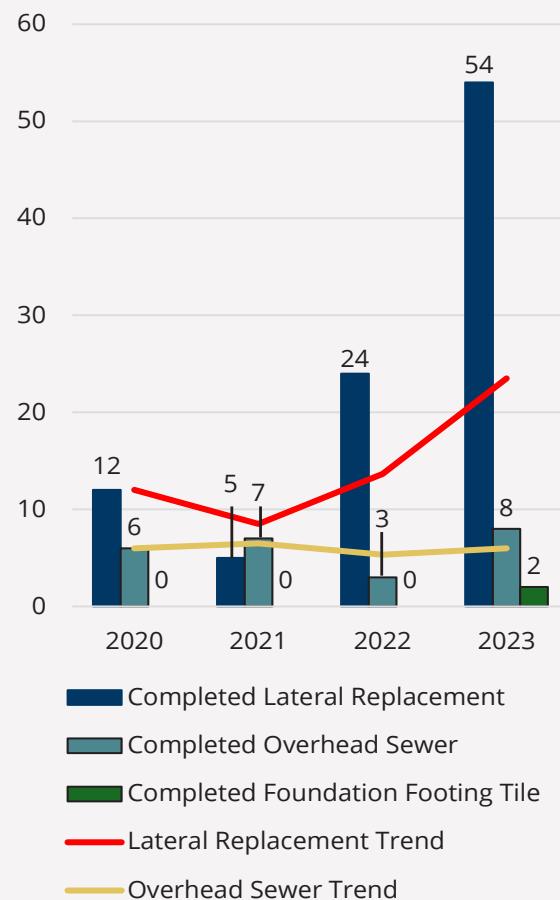
Replacing these elements also helps mitigate potential failures that could lead to costly emergency repairs and service disruptions. By proactively addressing infrastructure needs, the City ensures the long-term reliability and efficiency

of its stormwater management system, ultimately safeguarding the community's well-being and reducing the financial burden on both the City and its residents.

Additionally, the construction crew's repair of over 100 structures and 15 pipes identified with defects during CCTV inspections highlights the City's commitment to maintaining its sewer system in optimal condition. CCTV inspections are an integral part of the City's preventive maintenance strategy, allowing for the detailed examination of sewer lines and structures to detect issues such as cracks, blockages, and structural weaknesses that are not visible from the surface.

When defects are found, timely repairs

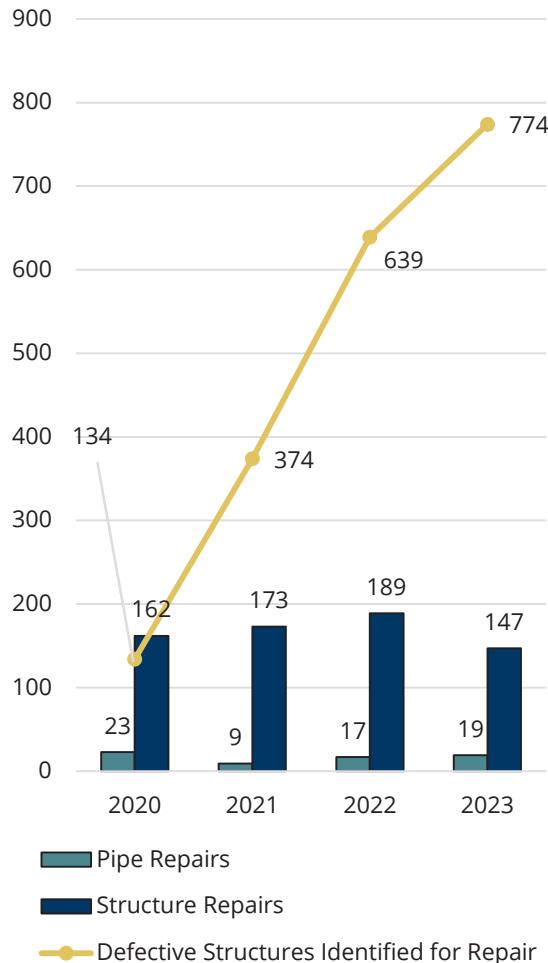
SANITARY SEWER SERVICE LINE REIMBURSEMENT PROGRAM



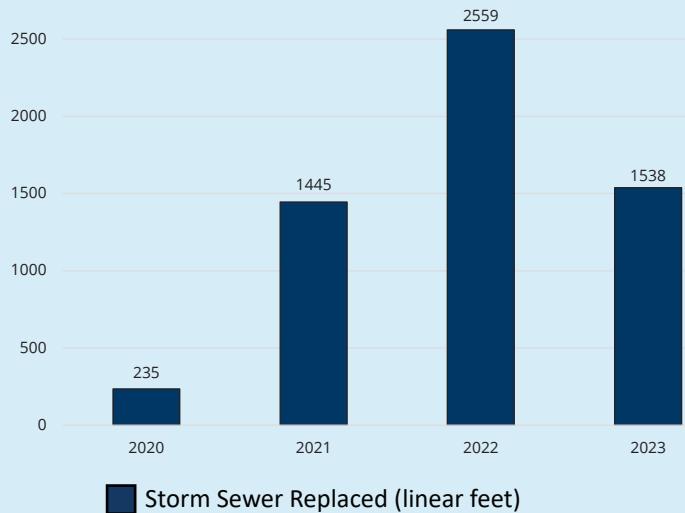
are crucial to preventing minor issues from escalating into major problems that can disrupt service and require more extensive and expensive fixes. By addressing these defects promptly, the construction crew helps to maintain the functionality and safety of the sewer system, ensuring continuous and efficient service for the community.

This comprehensive approach to infrastructure maintenance, encompassing both proactive replacements and timely repairs, reflects the City's dedication to providing reliable and resilient public utilities. It minimizes the risk of sewer and stormwater system failures, enhances public safety, and promotes environmental stewardship by preventing untreated water discharges.

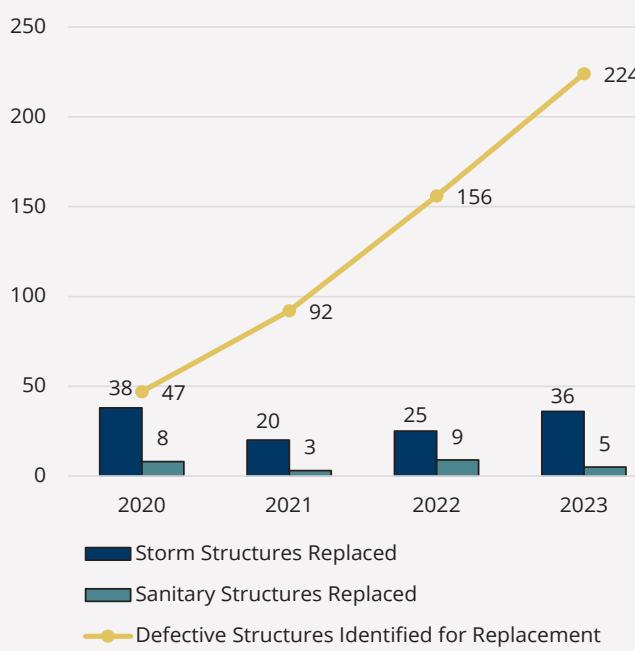
SEWER INFRASTRUCTURE REPAIRS



STORM SEWER PIPE REPLACEMENT



SEWER STRUCTURE REPLACEMENT



2023 SANITARY SEWER ACCOMPLISHMENTS

Enhanced Infrastructure

Goal: Promote participation in the shared cost programs.

Action Item: Track and record shared cost approvals & participation and perform restoration post completion.

Status:

- Pre-Approvals issued in 2023: 124

- Participants paid out in 2023: 54
- Participants paid out in 2022: 7
- Participants paid out in 2021: 10

Goal: Visually inspect 10% of the sanitary sewer system using CCTV. Visually inspect 5% of the sanitary sewer structures.

Action Item: Repair and/or replace sanitary sewer assets found to have

significant defects.

Status:

- Structures: 1,617 Inspected
- Repaired: 29
- Replaced: 6
- Pipe CCTV: 16% inspected
- Cleaned: 27%
- Repairs made: 60 feet

2023 STORM SEWER ACCOMPLISHMENTS

Enhanced Infrastructure

Goal: Replace unserviceable storm sewer assets.

Action Item: Through CCTV inspection, 2,000 feet of storm sewer was identified as unserviceable in 2022.

Status: The Sewer Division replaced over 1,600 feet of storm sewer in five separate locations.

25 structures were also replaced in conjunction with those projects.

Responsive & Efficient Services

Goal: Decrease street flooding calls by an aggressive catch basin cleaning schedule.

Action Item: Track debris removed from catch basins and correlate with storm data.

Status: Over 1,800 catch basins are

cleaned annually.

Goal: Rapid response to service calls for storm sewer related issues.

Action Item: Respond to residential calls for service within 24 hours.

Status: The Sewer Division responded to over 100 service calls in 2023. 91% of those service calls had a crew on location within an hour of the initial call.



SEWER DIVISION: SERVICE REQUESTS



- Sanitary-related: 436
- Storm-related: 139
- Non Sewer-related: 10

13.97%

OF TOTAL PUBLIC
WORKS DEPARTMENT
SERVICE REQUESTS
WERE FOR THE
SEWER DIVISION



230

miles of water lines maintained

4.5

million gallons of water supplied per day

53,000+

residents, businesses, and visitors

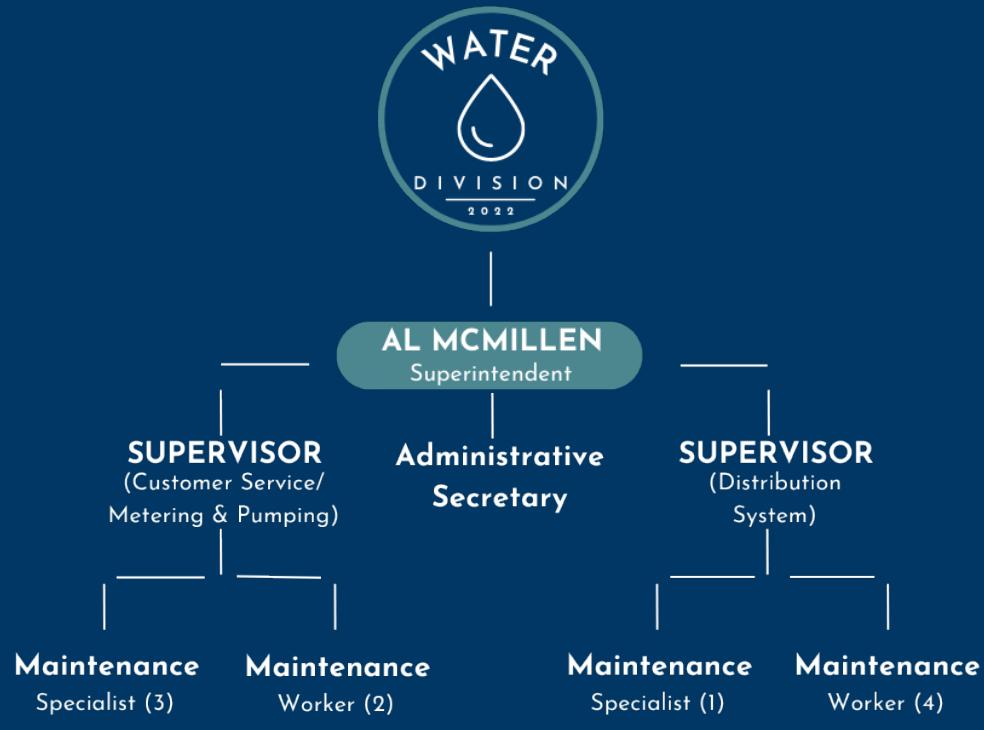
24/7

Water Division staff are available 24/7 for emergencies

The Water Division ensures the reliable operation of the City's waterworks system and provides a high-quality supply of drinking water at sufficient pressure and affordable prices. This is done by balancing cost-effective services with sound environmental responsibility.

The Water Division is responsible for the operation, maintenance, and repair of City-owned waterworks infrastructure and the supply, treatment, storage, distribution, and testing of the drinking water. The City supplies an average of 4.5 million gallons of water per day to more than 53,000 residents, businesses, and visitors. The Water Division staff is available 24 hours a day, 7 days a week for emergency response to water main breaks, emergency utility locates, and any other water-related emergencies.

ORGANIZATIONAL CHART



WATER DISTRIBUTION

Staff are responsible for the maintenance and repair of the water distribution system. There are approximately 230 miles of water main, 2,600 fire hydrants, 3,100 valves, and 16,800 services in the system. activity.



- Inspected 1,236 valves
- Repaired four valves
- Replaced six valves



- Flushed 2,637 fire hydrants
- Replaced one fire hydrant
- Painted 751 fire hydrants



- Replaced 97 curb stops

PUMPING & STORAGE

Staff are responsible for the operation and maintenance of the pumping and storage systems. Staff maintains two elevated tanks that each have a capacity of 1.5 million gallons of water, five ground storage reservoirs that have a total capacity of 4.27 million gallons, three pumping stations with 21 high-service pumps, six emergency backup wells, and three standby electrical generators.

Staff also performs monthly testing, preventative maintenance, and repairs on this equipment. In 2023, total of 1,667,465,000 gallons of metered water was pumped through the system. In 2019, the Illinois Department of Natural Resources reduced the allowable nonrevenue water from 12% to 10%. In 2023, Wheaton was at 11% non-revenue water.

WATER QUALITY

In 2023, the Division collected the following samples:

Distribution System Samples:

- 32 Stage II Disinfectant By-Product Rule
- 40 Distribution Water Quality
- 720 Coliform
- 78 Entry Point Water Quality
- Quarterly USEPA UCMR5 samples

Emergency Back-up Well Samples:

- 72 Coliform
- Five Inorganic Compounds
- Four Volatile Organic Compound
- Two Synthetic Organic Compound
- Two Nitrate and Nitrite
- Four Radiological Elements

WATER MAIN BREAKS

The City experienced an average of 57 water main breaks annually from 2014 to 2023. In 2023, Water Division crews repaired 55 water main breaks. Additionally, 10 water service leaks were repaired.



2023 ACCOMPLISHMENTS

Maintain Water Quality and Comply with Regulatory Agency Requirements

Goal: Continue to improve upon leak detection programs to comply with the IDNR's Lake Michigan water allocation requirement of maintaining non-revenue water below 10%.

Status: Through in-house leak detection survey of 1,634 fire hydrants and 1,605 valves, five leaks were found and repaired, saving 3,942,000 gallons annually. Non-revenue water loss for 2023 was 11%.

Goal: To protect water consumers through the Cross-Connection Control Program, check for cross-connections in an effective manner.

Status: Maintained records for over 1,700 backflow prevention device tests in 2023.

Ensure Fairness, Accuracy, and Consistency of Billing for Water Use

Goal: Field test and calibrate 100% of 2-inch and larger non-disc meters according to an annual schedule. Field test and calibrate 50% of 2-inch and larger non-disc meters according to a 2-year schedule.

Status: Field testing was completed on 34 large meters.

Goal: Increase the number of public and private lead service lines replaced.

Status: Lead Service Line Replacement Program implemented in 2023. Replaced 103 lead service lines.

Maintain Quality Infrastructure

Goal: Continue on-going program of fire hydrant inspection, pressure-testing, and replacement to ensure adequate availability of water for firefighting purposes.

Status: Inspected and pressure-tested

1,090 fire hydrants, repaired 37 fire hydrants and replaced one fire hydrant.

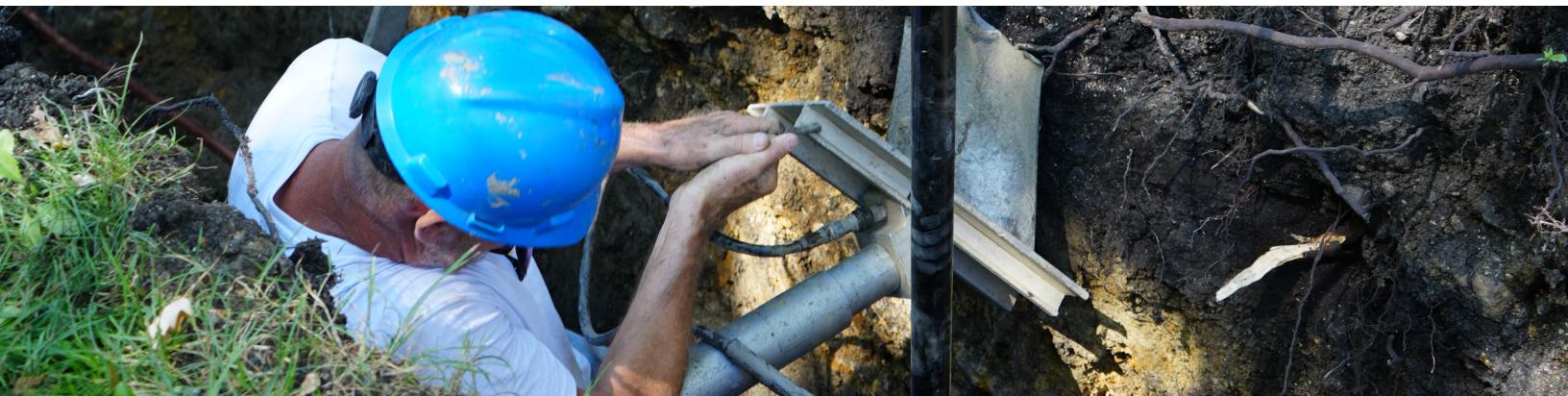
Goal: Replace water mains in accordance with the recommended replacement schedule of the 2013 Water Distribution System Hydraulic Analysis.

Status: Replaced 4,100 feet of deteriorating water main.

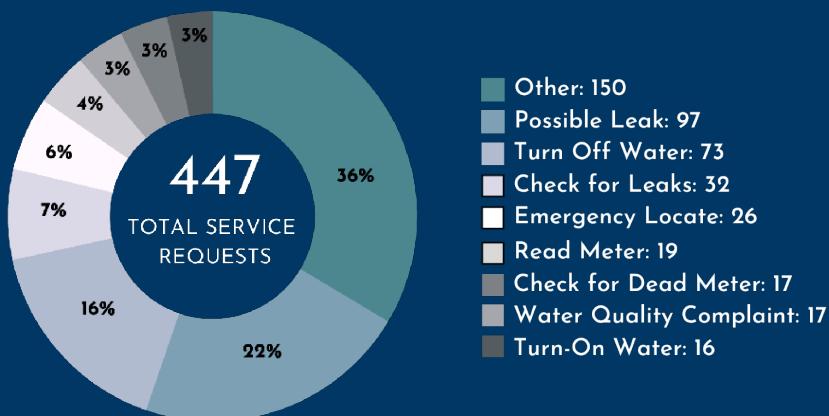
Efficient and Effective Services

Goal: Continue staff education at training courses, conferences, and seminars.

Status: Two employees attended the ISAWWA Annual Conference. Seven renewed forklift certification, one renewed flagger certification, and four attended the ISAWWA Water Distribution Conference. One employee attained Illinois Environmental Protection Agency Class C Public Water Supply Operator certification.



WATER DIVISION: SERVICE REQUESTS



8.04%

OF TOTAL PUBLIC
WORKS DEPARTMENT
SERVICE REQUESTS
WERE FOR THE
WATER DIVISION



160

City-owned vehicles maintained

88

large pieces of primary & ancillary equipment maintained

17

stationary power generators maintained

141

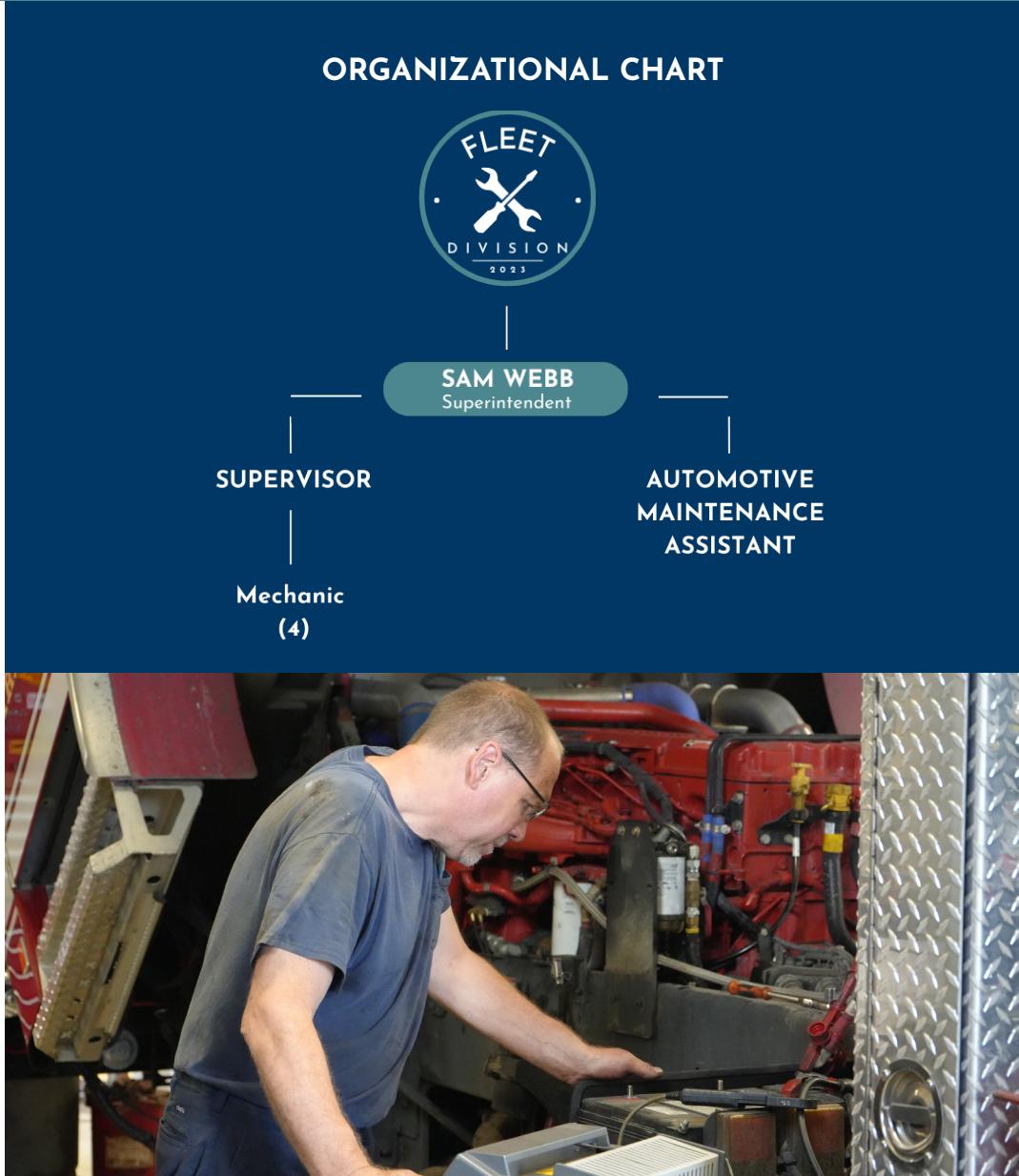
smaller pieces of ancillary equipment maintained

The Fleet Services Division is charged with providing maintenance, repair, and fueling services to all City-owned vehicles and equipment. City-owned assets include 160 licensed vehicles, 88 large pieces of primary and ancillary equipment, including 17 stationary power generators, and 141 smaller pieces of ancillary equipment. Ancillary equipment includes salt spreaders, snowplows, de-icing and anti-icing equipment, mowers, asphalt pavers, and rollers among other items. The Fleet Division also specifies and acquires replacement vehicles and equipment; disposes of retired assets; administers a central parts and supplies inventory; ensures that National Fire Protection Agency (NFPA) and Public Works safety standards are met for various equipment.

Division personnel utilize Computerized Fleet Analysis (CFA) software to track and manage these assets. To stay up to date with best practices and safety standards, Division staff maintain the following specialty certifications:

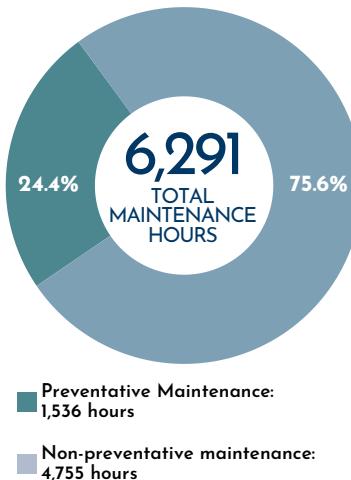
- Automotive Service Excellence (ASE)
- Emergency Vehicle Technician (EVT) IL
- Underground Storage Tank (UST)
- IL DOT Certified Safety Tester

ORGANIZATIONAL CHART



PREVENTATIVE & NON-PREVENTATIVE VEHICLE MAINTENANCE

To ensure the continued operation of City vehicles, staff perform both preventative and non-preventative maintenance on City vehicles and equipment. Staff performed 4,755 hours of non-preventative maintenance and 1,536 hours on preventative maintenance in 2023.



Staff responded to 898 service requests for mechanical jobs in 2023. Much of Fleet's mechanical jobs addressed Public Works equipment with the remaining addressing Police, Fire, and other equipment in that order.

VEHICLE REPLACEMENT PROGRAM

Fleet oversees the City's Vehicle Replacement Program, using equipment life expectancy data and internal usage statistics to plan for the acquisition, reassignment, and resale of City vehicles and large equipment. Vehicles sold by the Division in 2023 created \$49,600 in revenue, and there was \$159,500 generated in vehicles traded in 2023.

FUEL CONSUMPTION

Wheaton implemented a Green Fleet policy in 2012 with the goal of reducing the carbon footprint of its vehicles over time. The City's 160 licensed vehicles used 120,592 gallons of fuel in 2023, a 2% increase from 2022. In 2023, City vehicles

logged 825,513 miles and 22,850 fleet engine hours, an 11% increase from 2022.

\$49,600

vehicles sold in 2023

\$159,500

vehicles traded in 2023

HYBRID VEHICLES

There were no additional hybrid vehicles added in 2023 due to supply chain issues.

- The non-hybrid Police SUV averaged 8.23 miles per gallon, and the hybrid Police SUV averages 14.1 miles per gallon.
- The City's other hybrids average 26 miles per gallon, with the lowest vehicle averaging 18.84 miles per gallon, and the highest being 38.2 miles per gallon.

2023 ACCOMPLISHMENTS

Strategic Priority 1: Financial Stability

Goal: Reduce costs while maintaining service levels.

Action Item: Reduce costs where possible through extending the service life of vehicles and equipment.

Status: All vehicles that were requested for replacement during 2023 had surpassed age and/or usage requirements.

Strategic Priority 3: Responsive and Efficient Services

Goal: Provide comprehensive vehicle, equipment, and standby power services to support operations.

Action Item: Provide safe, reliable, and

efficient transportation and equipment for City personnel and operations.

Status: Implemented thorough preventative maintenance procedures, safety inspections, and developed new vehicle specifications, provided safe, reliable, and efficient transportation and equipment for City personnel and operations.

Action Item: Continue to perform Department of Transportation safety inspections in-house to save staff time and reduce inspection costs.

Status: Training and certification has been attained by four Fleet staff members. In-house Safety lane was re-certified by the state of Illinois during 2023.

Action Item: Manage compliance with

NFPA 1911-1914 standards for Fire Pumpers. Comply with Illinois Department of Transportation safety inspection requirements, aerial equipment testing and certification.

Status: Complied with all applicable regulations.

Action Item: Manage the replacement of Public Works Generator 7.

Status: The project is on schedule for completion in 2024.

Action Item: Manage the construction and installation of two heavy vehicle lifts in the Fleet facility which will support other department's services.

Status: The project is on schedule for completion in 2024.

2023 ACCOMPLISHMENTS

Action Item: Manage the construction of a new fueling facility at Public Works.

Status: The project is in the engineering design phase. Construction will begin in 2025 if approved.

Strategic Priority 5: Environmental Sustainability

Goal: Reduce vehicle emissions and comply with regulations without compromising service levels

Action Item: Purchase vehicles and equipment with increased emphasis on fuel savings and environmental impact.

Status: Fuel savings and environmental impact influenced all vehicle replacement decisions.

Action Item: Develop specifications, assist in applying for grant funding, and manage construction of electric vehicle charging stations if the City is awarded grant funding.

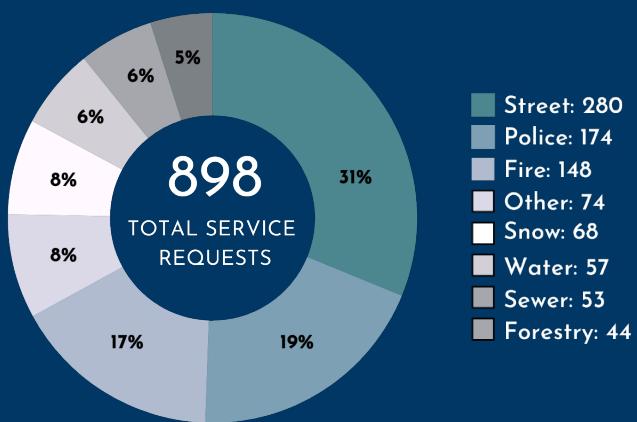
Status: No funding was available for the proposed projects. Seeking funding opportunities is ongoing through the Finance Department.

Action Item: Manage compliance with EPA emissions inspections and State Fire Marshal fuel dispensing and storage requirements and regulations for two locations. Properly dispose of shop waste.

Status: Complied with all applicable regulations.



FLEET DIVISION: SERVICE REQUESTS



■ Street: 280
■ Police: 174
■ Fire: 148
■ Other: 74
■ Snow: 68
■ Water: 57
■ Sewer: 53
■ Forestry: 44

38.16%

OF TOTAL PUBLIC WORKS DEPARTMENT SERVICE REQUESTS WERE FOR THE FLEET DIVISION



ADMINISTRATIVE DIVISION

- Continually work on improving operations through identifying opportunities to enhance performance and reduce costs.
- Enhance department effectiveness through the development of personnel.

FORESTRY DIVISION

- Continually work on improving operations through identifying opportunities to enhance performance and reduce costs.
- Enhance department effectiveness through the development of personnel.
- Tree Cycle Pruning Program established on a seven-year cycle for mature trees with an annual goal is to prune 1,700 trees.
- Young Tree Cycle Pruning established on a three-year cycle. Prune trees planted in 2018 and 2021 – estimate 1,104 trees.
- Tree Removal Program to address dead, diseased, or hazardous trees from the City rights-of-way – estimate 250 trees to be removed.
- Address maintenance and restoration needs in public works facility, parking lots, lift stations, generator areas, and open spaces.
- To reduce the City's carbon footprint.

SEWER DIVISION (SANITARY)

- Maintain sanitary sewer infrastructure to meet expected and appropriate level of service and comply with State and Federal EPA regulations.

- Continue to track participation in both the Overhead Sewer Private Property Protection Program and Sanitary Sewer Service Line Reimbursement Program to acquire data to understand the magnitude and locations of residential sewer backups in order to assess program effectiveness and provide supporting data for potential capital improvement projects. Maintain sanitary sewer system capacity, reduce infiltration and inflow.

- Continue to identify and quantify infiltration and inflow sources using structure inspection, dyed water flooding, lateral TV inspection with dye flooding, and flow monitoring to identify and develop strategies to remediate the private sector extraneous flows caused by illegal connections and their associated sewer backup problems within the City and their associated costs and liabilities. Continue ongoing inspections, evaluation, and repair of the public sector, City-owned sanitary sewers.
- Continue efforts to comply with Federal EPA regulations regarding sanitary sewer overflows and NPDES Phase II Storm water requirements.

Maintain Quality Infrastructure

- Maintain public infrastructure including ongoing cleaning, repairing, and inspecting sanitary sewers.
- Revise 60,000 feet of sanitary sewer.
- Clean 240,000 feet of sanitary sewers system annually.
- Continue to maintain and make structural improvements to sanitary sewer system, repair and replace manholes, laterals, and sewers where appropriate and necessary.

- Operate at peak efficiency employing state-of-the-art energy efficient technology, and sound mechanical practices to provide uninterrupted service.
- Continue to contract rehabilitate deep manholes with epoxy lining to restore structural and watertight integrity.
- Purchase new equipment and tools to increase our work quality and limit maintenance in future years.

Efficient and Effective Services

- Conduct employee training in areas such as trench safety, IDOT Flagger Training, and other industry specific topics that provide needed skills for safe effective operations. Attend locally sponsored workshops and seminars.

Implement "Green Practices" when possible

- Investigate environmentally neutral technologies for sewer system maintenance "Good Practices," and Best Management Practices.

SEWER DIVISION (STORM)

- Maintain Storm Sewer infrastructure to meet expected and appropriate level of service.
- Continue to ensure compliance with Stormwater National Pollutant Discharge Elimination System (NPDES) | US EPA NPDES permit requirements and periodic IEPA inspections.
- Maintain public infrastructure including cleaning, repair, and inspection of storm sewers.
- Continue efforts to comply with Federal EPA regulations regarding NPDES Phase II Storm water

requirements.

- Televise 64,712 feet of storm sewer annually.
- Clean 10% of storm sewers system and catch basins on a 7-year cycle and 1,800 catch basins annually.
- Continue efforts to comply with Federal EPA regulations regarding MS4 Permit ad directed by the City's Storm Water Engineer.
- Identify structural issues within the system and tag them for lining or replacement.
- Identify obstructions and pipe failures in order to reduce flooding.

Efficient and Effective Services

- Maintain and report storm cleaning quantities, debris removed, and system repairs, maintaining and updating the database and the GIS system atlases.
- Continue to update inventory records to accurately establish supply and material quantities.
- Follow the cleaning plan to eliminate cleaning redundancy.

Implement "Green Practices" when possible

- Investigate environmentally neutral technologies for sewer system maintenance "Good Practices", and Best Management Practices.

FLEET DIVISION

Financial Stability

- **Goal:** Reduce costs while maintaining service levels.
- **Action Item:** Reduce costs where possible through extending the service life of vehicles and equipment.

Responsive and Efficient Services

- **Goal:** Provide comprehensive vehicle, equipment, and standby power services to support operations.
- **Action Item:** Provide safe, reliable, and efficient transportation and equipment for City personnel and operations.
- **Action Item:** Continue to perform Department of Transportation safety

inspections in-house to save staff time and reduce inspection costs.

- **Action Item:** Manage compliance with NFPA 1911-1914 standards for Fire Pumpers. Comply with Illinois Department of Transportation safety inspection requirements, aerial equipment testing and certification.
- **Action Item:** Manage the engineering and replacement of Public Works Generator 7.
- **Action Item:** Manage the installation of two heavy vehicle lifts in the Fleet facility.
- **Action Item:** Manage the engineering and construction of a new fueling facility at Public Works.
- **Action Item:** Manage the development of engineering specifications for the replacement of the Police Department Generator.

Environmental Sustainability

- **Action Item:** Purchase vehicles and equipment with continued emphasis on fuel savings and environmental impact.
- **Action Item:** Develop specifications, assist in applying for grant funding, and manage construction of electric vehicle charging stations if the City is awarded grant funding.
- **Action Item:** Manage compliance with EPA emissions inspections and State Fire Marshal fuel dispensing and storage requirements and regulations for two locations. Properly dispose of shop waste.

WATER DIVISION

Financial Stability

- **Goal:** Ensure fairness, accuracy, and consistency of billing for water use.
- **Action Item:** Field test and calibrate 2-inch and larger non-disc meters according to testing schedules.
- **Action Item:** Read customers' water meters on a consistent monthly cycle.

Enhanced Infrastructure

- **Action Item:** Replace water mains in accordance with the recommended replacement schedule of the 2013 Water Distribution System Hydraulic Analysis.

• **Action Item:** Replace Reber St. standby generator to maintain in emergency pumping operations.

- **Action Item:** Continue on-going program of fire hydrant inspection, pressure-testing, and replacement to ensure adequate availability of water for firefighting purposes.
- **Goal:** Remove lead Public and Private Water Services
- **Action Item:** Increase the number of public and private lead service lines replaced.

Responsive and Efficient Services

- **Action Item:** Continue to collect GPS information and develop GIS maps to improve efficiency of water distribution system maintenance activities.
- **Action Item:** Continue staff education at training courses, conferences, and seminars.

Community Safety

- **Goal:** Continue to prioritize the health, safety, and welfare of the community.
- **Action Item:** Evaluate strategies to reduce Non-Revenue water to comply with the Illinois Department of Natural Resources' Lake Michigan water allocation requirement of maintaining non-revenue water below 10%.
- **Action Item:** Compile information and publish Water Quality Report by July 1, in accordance with Illinois Environmental Protection Agency requirements.
- **Action Item:** To protect water consumers through the Cross-Connection Control Program, check for crossconnections in an effective manner.
- **Action Item:** Maintain 100% of distribution water samples reported bacteriologically safe to comply with Illinois Environmental Protection Agency Coliform Rule requirements.

Environmental Sustainability

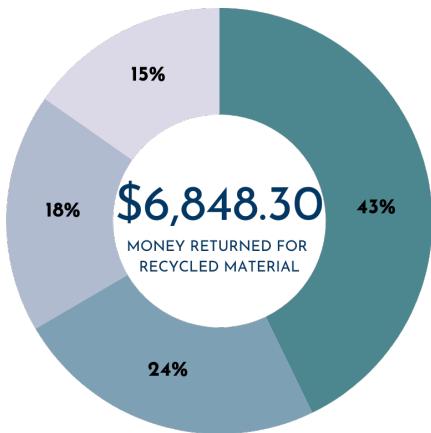
- **Action Item:** Investigate green initiatives/alternatives and implement if feasible.
- **Action Item:** Continue recycling of used cast iron, steel, and brass.

SUSTAINABILITY INITIATIVES

ANNUAL
REPORT
2023

SCRAP METALS RECYCLING

The Public Works Department tries to recycle any materials that are able to be recycled. In 2023, the Department was able to recycle 69,600 lbs of scrap metal, 6,140 lbs of aluminum, 5,835 lbs of brass/yellow brass, and 65 lbs of copper. In total the Department was able to acquire \$6,848.30 in reimbursement funds.



SCRAP METAL: 69,600 LBS
ALUMINUM: 6,140 LBS
BRASS/YELLOW BRASS: 5,835 LBS
COPPER: 65 LBS

Scrap Metal: \$2,932.20
Yellow Brass/Brass: \$1,625.90
Copper: \$1,244.10
Aluminum: \$1,046.10

OTHER

Apart from scrap metal, the Public Works Department also does its part to recycle other items that can be recycled including light bulbs, holiday lights, tires, and used vehicle oil.

1,566 pounds of crushed bulbs	2,306 pounds of holiday lights
525 gallons of vegetable oil	192 vehicle tires

