# Annual Report 2022

**Public Works** 

Parks & Cemeteries

**Planning** 

Preservation

IT







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#### **City of Newton**

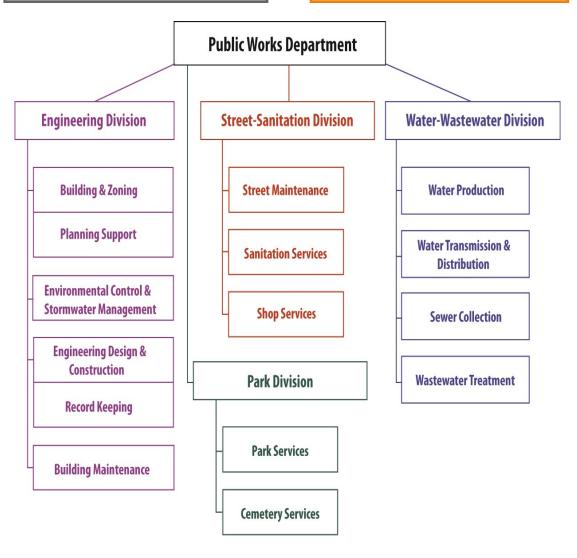
#### **Park & Public Works Department Goals**

Communicate in a compassionate and professional manner, treating everyone the way we would like to be treated, with honesty and respect.

Be good stewards of public dollars.

Hire, train, and retain excellent employees who care about our community and want to serve.

Plan, design, and maintain quality and safe public infrastructure.



#### **Words from the Department Director**

How do you determine the **value** of your city?

Waterlines, sewer mains, streets, traffic signals, water supply & towers, public buildings, playground equipment, green spaces, signage, lift stations, treatment plants, safe structures, drainage systems—these are all items that are of **value** and important to a city. They are crucial to a viable community. They need to be functioning and working well for a city to thrive, have pleased citizens, and to attract new residents and businesses. But, without good people, good public servants, to build, operate, and maintain these items, it is just a list of infrastructure with **value** determined by replacement costs.

The true worth of the city organization is found in those who manage, maintain, and operate the infrastructure. Those employees who care enough to work hard each day for Newton. Without these people the **value** of the community assets decreases.

2022 was a year of major maintenance, gearing up for residential, commercial & industrial growth, & reorganizing within our department to assure the best service possible to our community with the staff available. Those employees who worked throughout the year to achieve all mentioned in this report are truly regarded as **valuable**.

Suzanne Loomis, P. E.

City Engineer/Director Public Works

## Engineering Division





The Engineering Division is responsible for managing the vital infrastructure that supports our community's way of life. This includes engineering design, infrastructure construction, planning support, stormwater management, building inspection, zoning, public building maintenance and environmental control.

Engineering services provided by city staff are wide ranged and vary depending on the year and the priorities set forth by the city commission and our changing community. However, one area tracked constantly to monitor growth in Newton is the development of capital improvement infrastructure projects. Staff provides design, plan review, staking, inspection, and project administration duties for multiple projects in a year's time.

Engineering services provided for the development community generate revenue for the city general fund, and those services provided for city capital projects are dollars saved by using in-house staff as

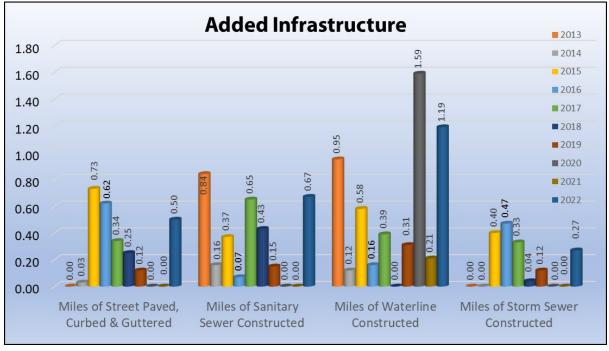
opposed to hiring outside professionals.

Material and supply shortages continued to dominate the development world and escalated pricing. Contractors are beginning to get busy again though and this is impacting the bidding climate. A few projects had to be rebid and delayed due to lack of bidders, i.e. 1st Street roundabout improvements, and demolition of structures. Several capital improvement projects did occur with many focused on reconstruction of existing infrastructure. Also, the Centennial Park Ballfield Project, funded through the PBC, added one field and performed some significant reconstruction to Kenny Williams Field & surrounding park space.

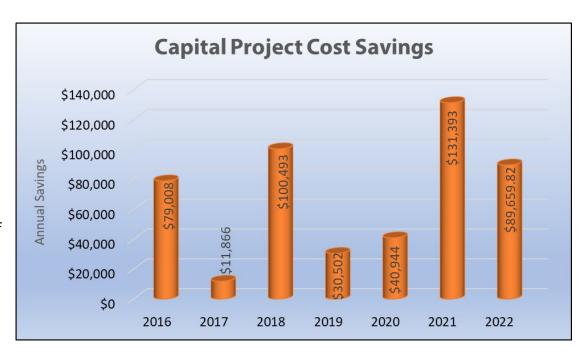


Centennial Park Ballfield Reconstruction

Public infrastructure consists of paved streets, waterlines, sanitary sewer lines, drainage systems, and public buildings.



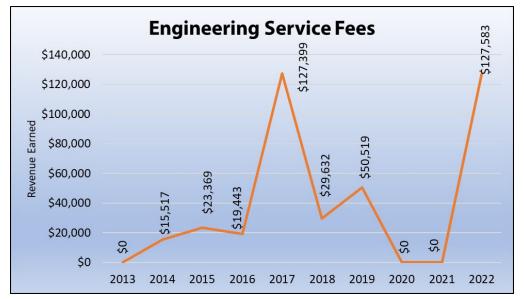
These dollars represent money saved by doing in-house design, staking, or inspections on capital improvement projects instead of hiring consultants to do the work.





#### **2022 Capital Improvement Projects**

- ♦ Centennial Park Ballfields
- ♦ 2022 CCLIP K-15 Mill & Overlay
- Sanitary Sewer Rehabilitation 2022
- Wheatridge Paving with Waterline
- NDV Waterline
- ♦ 2022 Annual Overlay





Building Maintenance Division had a very busy year in 2022 with repair requests and special projects for all city departments but especially at the airport. A new building maintenance staff position was filled to split 50/50 with the airport.

### Building Maintenance

- MaintainX, a new work order reporting program was brought on line. This is beneficial in reporting and tracking work order progress.
- Removed and installed new carpet in court offices and second floor East side.
- Repaired approximately twenty copper and pex pipes in the pool building due to freeze damage.
- Installed 2 TV/training monitors in the water building training room.
- Disassembly of the 3-chiller plate exchanger for descaling treatment and reassembly at the Library.
- Completed seasonal service of all HVAC systems at City Hall, Newton Recreation Center, Newton Public Library, and all three fire stations.
- Upgraded some of the office lights to LED for the Police Department.
- Converted a portion of a storage room into a new office for event staff to use at the Meridian Center.
- Continued updating of all push button lock sets with new codes for staff changes and reporting to supervisory staff quarterly to verify correct access is granted as needed.





Time Capsule Bench Installation

## Building, Zoning, & Compliance

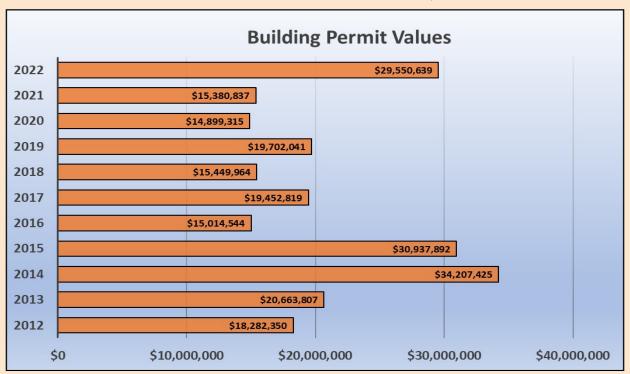
The building and zoning staff strives to ensure construction projects are safe and code compliant through the issuance of permits, through enforcement of local and national codes and inspections.

The Environmental Inspector handles city violation responsibilities as well as the City Pride programs and Residential Yard of the Year program.

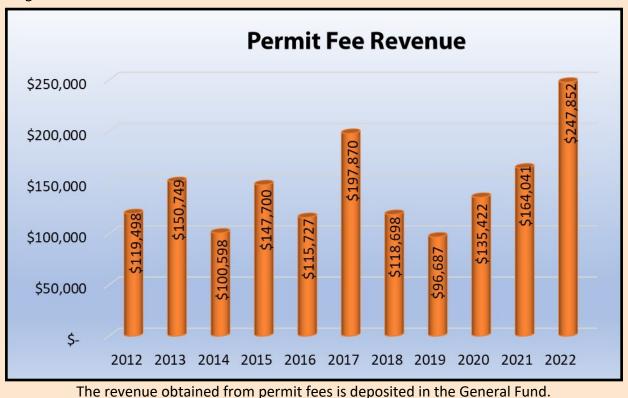


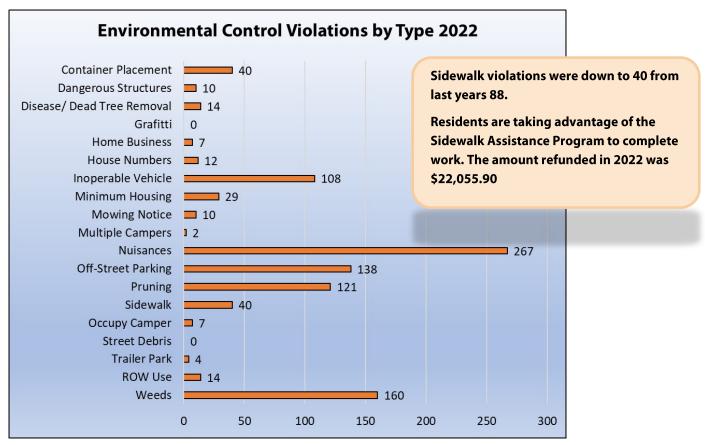
Mennonite Housing at Interurban 2nd Addition



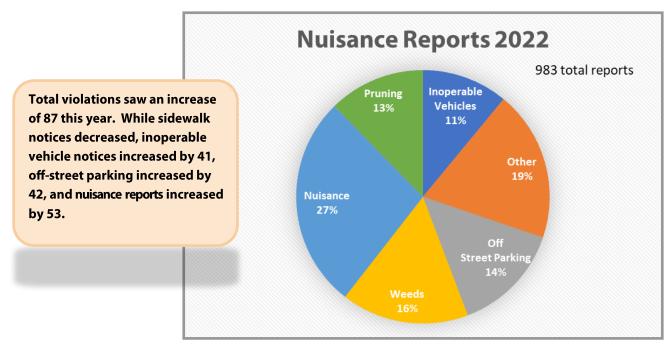


In 2022 there were 20 single family residential housing starts and 17 multi-family starts, resulting in 37 new residential living spaces. A total of 564 building permits were issued with a total valuation of \$29.5 million, an increase of over 92% from the previous year. The increased number of permits also created over a 20% increase in building inspections, up 217 from 2021. An additional 841 permits were issued for construction trades, up 56 from 2021. Trade permits include items such as electrical, mechanical, plumbing, etc.





Nuisances include: Brush Piles, Car Parts, Construction Debris, Containers, Trash, Metals, Household Items, and Pet Feces.



Other includes: Container Placement, Dangerous Structures, Dead/ Trimmed Trees, Graffiti, Home Business, House Numbers, Minimal Housing, Mowing, Multiple Campers, Sidewalks, Street Debris, & Parked Trailers.

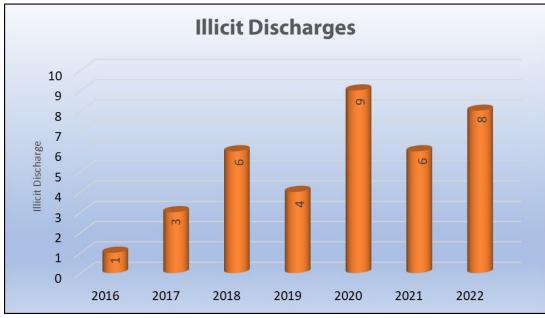


### Stormwater

#### **2022 Environmental Sciences Scholarship:**

To comply with the City's Stormwater MS-4 NPDES Permit, the first ever annual City of Newton Environmental Sciences Scholarship was awarded in the amount of \$500 on June 13<sup>th</sup> to Madelynn Hamm. Madelynn is currently attending Eastern Mennonite University to obtain an environmental science and biology degree.

In 2022 there were 5 stream bank cleanups along Sand Creek. These cleanups were headed by **Emerge Harvey** County and Newton's Lions Club chapter. There were 4,015 yards of streambank cleaned during these events.



Illicit discharges are a release of any substance other than stormwater. A few examples are vehicle fluid loss, dirt and sediment runoff, or trash and debris.





Illicit discharges, such as these, are the reason public works staff are trained to recognize and report potentially harmful illicit stormwater discharges.



## Information Technology

#### **Major Projects of 2022**

Secure VPN for remote workers

Multi-Factor Authentication implemented

Upgraded Incode software and installations

Audiovisual upgrades at Water Training Facility

New Mobile Data Terminal's for Police force

Mobile Data Terminal's for Fire/EMS

CyberSecurity employee training

Upgraded Fleet gas software

Upgraded signage software for City Hall

Additional mobile devices for water department efficiencies

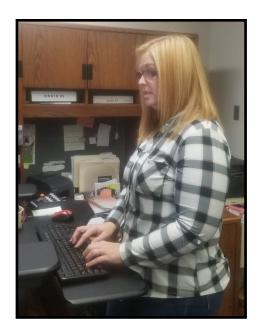
Lock down outside links per Cybersecurity insurance requirements

New firewall ordered

Project up time was 99.999%

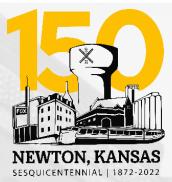
In 2022 there were a total of 1,729 tickets received by Imagine IT, our IT consultant, a decrease of 213 from 2021. Of those, 956 were proactive tickets from Imagine IT to prevent bigger issues. The remaining tickets were incident tickets from city staff of which 3 of those were still open.

Organizations across the world are dealing with ransomware attacks by bad actors. In 2022 we focused on increasing our security measures to help keep our organization safe. We locked down any outside portals and implemented VPN by permissions. We also implemented multi-factor authentication to ensure only valid logins are happening on our system.



#### **2023 Planned Projects**

- Infrastructure upgrades
- Migrating to software as a service for some applications
- Server upgrades as needed on replacement schedule
- Desktop and Laptop replacements as scheduled
- New Bodycam software for police department







### Historic Preservation

#### **The Year in Review**

Twenty-seven projects were reviewed in 2022. One was approved by the State Historic Preservation Office, and 26 were approved administratively.

Most administrative reviews have been for roof replacements and minor interior repairs. This is only one less than last year which held the record for most reviews done since the Historic Preservation Commission was formed.

#### **Historic Overlay Districts**

The Historic Preservation Office in conjunction with the Planning and Zoning created the first overlay districts that in the most recent zoning code update. These give an integration between planning and zoning and the historic preservation ordinance to better facilitate project review.

#### **Untold Stories-Library Program**

The Historic Preservation office in conjunction with the Newton Public Library, Carriage Factory Art Gallery and research assistance from the Harvey County Historical Society created a 5 day library program for 5th-7th graders held in April after school. This program included guided walks through the historic downtown, topic experts as speakers and a set of learning objectives. The week ended with a group art project to solidify as group the different untold stories the children learned about their community.

## Parks & Cemeteries

#### **Park Division responsibilities**

- Maintenance of 670 acres of parks
- Right-of-way's
- Cemeteries
- Waterways
- ◆ 17 Parks
- 15 Traditional playgrounds
- 1 Natural playground
- 14 Shelters
- 9 Public restrooms
- 1 Pool
- 1 Splash Park
- ♦ 8.91 Miles of Trails/Bikepath
- 38.48 Miles of sidewalk and curbs
- Maintenance of the tree canopy
- Vegetation control
- Flower, shrub and tree planting
- Snow removal
- Cemetery burials and perpetual care

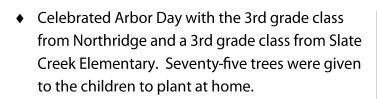
The Parks and Cemeteries
Division works to constantly
improve the appearance of the
community while maintaining a
broad spectrum of outdoor
recreational opportunities. The
focus is to improve the city's
overall appearance through
intensive maintenance of park
facilities, grounds, and
cemeteries.



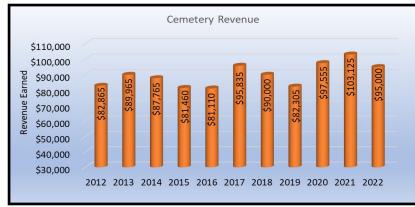
Cleaning The Mennonite Settler Statue

#### 2022 Highlights for the Park Division include the following:

- Maintained Tree City USA status for the 47th year.
- Achieved Tree Cities of the World for designation for the 3nd year.
- Built and installed the Todd Akers memorial bench in Athletic Park.



- Replace worn playground parts.
- Assisted in the renovation/construction of the new ballfields at Centennial Park.
- Assisted with 115 community events throughout the year.
- Certified employees maintained their job certifications.
- Assisted in moving and installing the time capsule bench at City Hall.





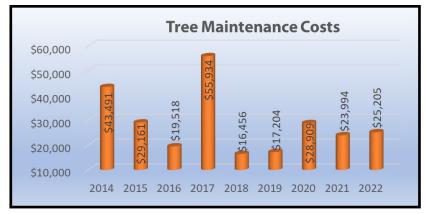


ACRES MOWED						
Right-of-way	1,308.08					
Waterway	116.16					
Park	4,421.50					
Cemetery	2,161.25					
Other	5,109.25					
TOTAL ACRES	13,116.24					

ACRES MAINTAINED					
Right-of-way	163.51				
Waterway	38.72				
Parks	176.86				
Cemetery	86.45				
Other	204.37				
TOTAL ACRES	669.91				

#### 2022 Cemetery Statistics:

- 78 full size burials
- 64 cremations
- -84 lots sold
- 74 headstone permits sold



Tree maintenance costs include planting new trees, yearly maintenance of all trees, and removing dead or damaged trees.

# Street Division

The Street Division is responsible for street repair and maintenance, sidewalk and curb repair, and traffic control, maintenance, and snow removal. The Street Division completes many tasks related to intersection improvement, neighborhood traffic concerns, school-zone flashers, traffic signal maintenance & repairs, and road & parking lot striping.

Staff also performs pavement evaluation, asphalt and concrete patching, crack and slurry sealing, utility cut restoration, street cleaning, surface treatment, vegetation management, snow and ice removal, set up and tear down for community festivals.





The Street Division made several improvements and repairs to the C3 Downtown District. One of the projects was the replacement of the sidewalk on the north side of 5th Street, between Main Street and the alley to the west of Main Street.



#### 2022 Highlights

- Multiple C3 District Downtown Improvements were completed.
- The Street Division helped with 38 community events.
- There were 9 Winter Storm events in 2022 resulting in the use of 680 tons of salt and 1,800 gallons of salt brine.
- Corrected several sight obstructions throughout the city that hindered motorist visibility.
- Installed and programmed lights south of U.S. Highway 50 to help direct traffic as the city continues to expand south.
- Repaired 71 pavement failures on asphalt streets in preparation of slurry seal.
- Repaired multiple pavement failures on roadways, like this one on the west side of the SE 24th Street overpass.



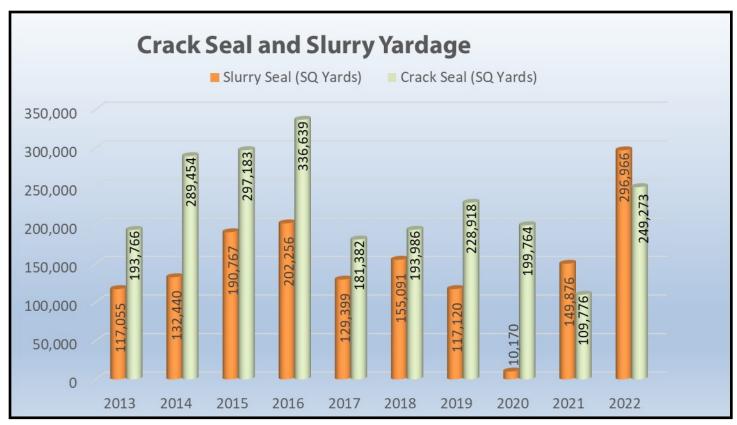


• The median on West Broadway at Meridian was shortened to allow citizens who live on the north side of the street better access to their driveways.



The Street Division replaced ADA ramps as part of the 2022 K15 CCLIP. Both ramps on E 3rd and Main Street, which also serve as a lid to the cities storm sewer system, were replaced.





In 2022, the Street Division's slurry truck was fully operational after 2 years of trial and error following EPA emissions guidelines. The division was able to complete a lot of the back log which included Area 4 and most of Area 5. Due to budget limitations, the division backlogged part of Area 5, about 42,000 square yards. These 42,000 square yards includes Athletic Park, which is 10,000 square yards. This is by far the most slurry seal completed since the division started the program in 1985.

#### **Material Consumptions**

	2014	2015	2016	2017	2018	2019	2020	2021	2022
	_							_	
Cold Asphalt Mix (tons)	15	11	11	9	10	10	12	10	12
Dry Portland Cement (tons)	35	46	42	23	31	26	4	22	60
Fill Sand (tons)	865	865	457	1,080	452	156	618	2,079	644
Hot Asphalt Mix (tons)	408	336	576	566	643	695	515	325	548
Joplin Chat (tons)	1,676	2,200	2,500	1,700	1,700	1,700	1,700	-	3,074
Petroleum Asphalt Emulsion									
(gallons)	52,885	71,906	66,000	39,575	47,492	39,000	5,000	34,165	71,000
Ready Mix Concreted (cubic									
yards)	619	725	975	1,002	1,097	1,077	934	1,610	515
Road Rock (tons)	582	319	356	520	635	795	1,243	172	172



Gutters were replaced at Northridge Road and Terrace Drive (left) and 5th Street and Columbus Avenue (right) to improve drainage







Repaired 97utility cuts within city alleys or roadways.

#### Storm Water

- 2616 lane miles were actively swept in 2022 collecting 2597 yds<sup>3</sup> of debris.
- Priority intake list was cleaned 8 times throughout the year.
- Inspection of intakes for structural integrity was completed in Area 5.
- Intake repaired at the intersection of Broadway and Poplar.
- Completed cleaning of all intakes within city limits twice in 2022. Spring and Fall.
- Regraded ditch that runs along S Kansas at the Autumn Glen addition. This includes shaping the slopes and seeding grass.
- Place concrete around culverts under Autumn Glen PKWY creating an apron for water to drain more efficiently.
- As part of the 2022 CCLIP K15 overlay project, removed 3 storm sewer intakes on K15 for a contractor to replace with upgraded basins.
- Fixed drainage grate on E 12<sup>th</sup> Street at Kwik Shop entrance that sunk and had become a traffic hazard.
- Removed broken concrete and a tree stump from a stormwater outfall in the Rolling Hills subdivision. Rip rap was replaced to help prevent erosion.
- Fixed a drainage issue at Old 81 and K15 intersection with the help of the Water Division.
- Excavate excess soil and placed rip rap around field drainage in field north of 17<sup>th</sup> and Grandview intersection.



17th and Grandview intersection



Rolling Hills Subdivision



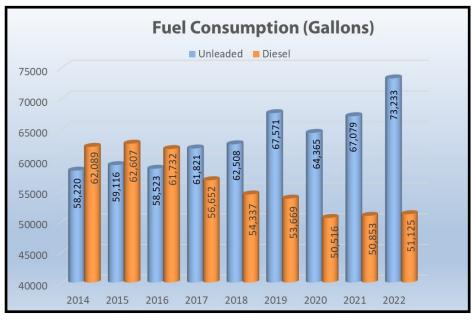
Repair orders for 2022 saw an increase of 529 over 2021.
Total repairs for 2022 was 3,104.

### Shop

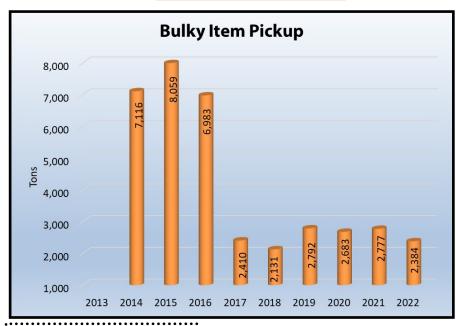
An additional Automotive Technician to prepare for the retirement of another.

His training on the various equipment and vehicles in the city fleet is progressing.





## Sanitation Division

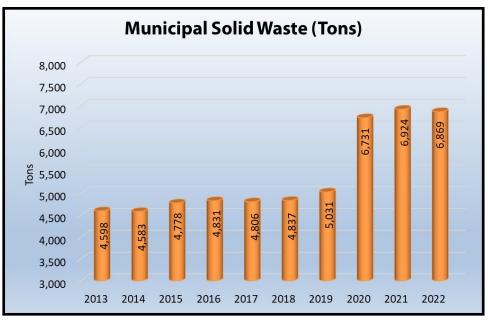


The Sanitation Division had 328 residents called for a bulky item pickup, taking advantage of this lower rate of \$10, while 191 did not call so the larger items were picked up for a \$20 charge.

There was a decrease in violation notices with the closing of the recycle program on May 1, 2022. Violations were down to 721 over the 2,827 from 2021.

The Sanitation Division dispensed 2,967 free land-fill coupons in 2022 and of those, 1,745 were used. The total annual coupon cost for 2022 was \$22,680 with the average coupon valued at \$13.02

There were 193 roll off dumpster rentals with \$27,950 in revenue. This is a decrease of 52 dumpsters from 2021.



The Collections and Treatment staff are responsible for the entire wastewater system serving the City of Newton.

This system begins with collecting wastewater from homes and businesses through a series of underground piping that leads to the treatment facility.

# Wastewater Collections & Treatment



Ice issues at the plant

589 million gallons of sewage were treated at the Newton Wastewater Treatment Plant in 2022

Highest Day Flow 7.75 million gallons

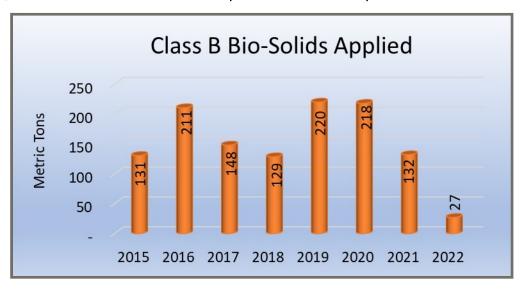
In 2022 the Wastewater Treatment Facility treated an average daily flow of 1.6 million gallons with zero permit violations. In addition, 27 metric tons of bio-solids were spread on city owned land for beneficial farm use.





WWTP Clarifier #2

Interdepartmental sleeve replacement on a basin

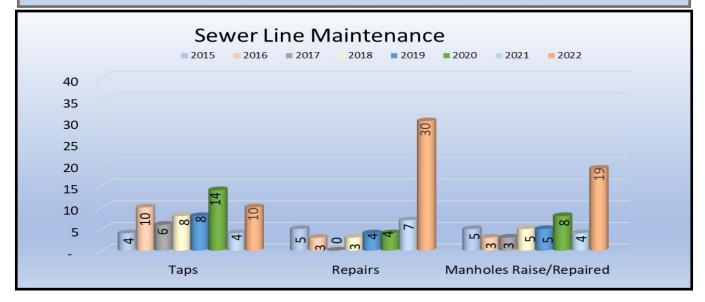


Preventive maintenance sewer inspections show the condition of the sewer line and how it is functioning. Our technician will insert a mini video camera into the sewer line and televise any debris or maintenance issues and pipe failures throughout the sewer system.

Blockages in sewer collection systems often are commonly caused by flushing items such as food waste, hair, paper and grease. The combination of these materials will often gel together, form a blockage and create backups in the system.

Of the 412,773 feet inspected and/or cleaned during 2022, 8,917 feet were completed using closed circuit video equipment.





# Water Production, Treatment & Distribution

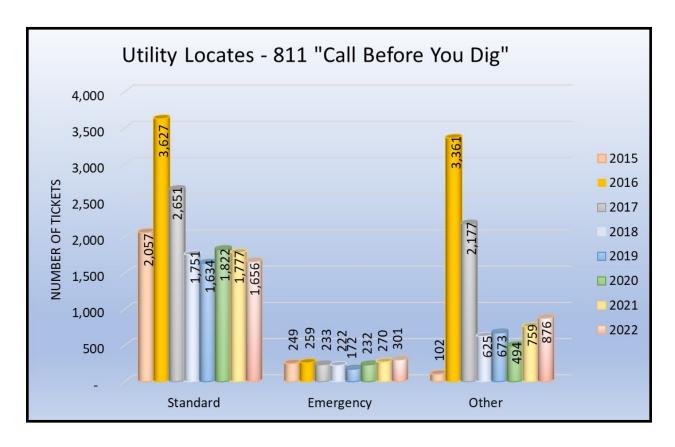
The Water Production and Distribution Section maintains piping, pumping and treatment systems in a manner to provide high-quality drinking water to all they serve. This process is done using pumping and treatment activities which are regulated by the State of Kansas.





Water main repair completed in the 300 block of SE 10th St.

City staff perform in-house locating services for the 811 program.



Standard Locate Ticket – A request which requires 72 hours notification before any excavation can take place.

<u>Emergency Locate Ticket</u> – A request which demands immediate action to prevent or repair a major service outage or is a clear and present danger to life, health, or property.

Other Locate Ticket – Requests to have markings refreshed, or to extend the working days of the original ticket.

- Per Statute 66-1803, regardless of complexity, any job that requires digging or penetrating the ground must comply with federally mandated "Call Before You Dig".
- Statute 66-1811 states that the liability of any damage done to utilities is the responsibility of the homeowner if a utility locate is not completed.

Dig Safe is necessary to keep the individuals working around live utilities, safe.

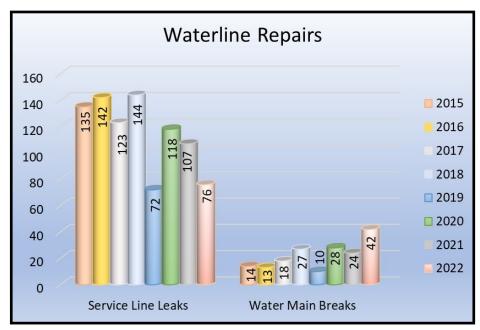
#### "It's the Law"

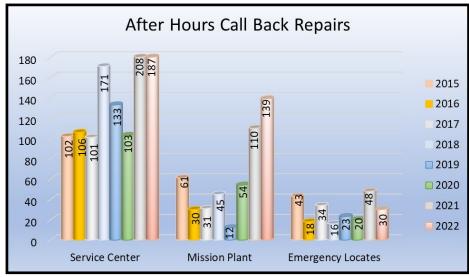


The water division has the responsibility of maintaining the water wells, sampling, lab analysis, addition of chemicals, maintaining water towers, maintaining water quality records, operation of the Public Wholesale Water District #17, and maintaining 24-hour monitoring of Mission Water Treatment Plant.

Groundwater provides
Newton's water supply. This
water is pumped to the
treatment plant where it is
treated using chemicals and
fluoride. The water is
transported through
transmission lines to be stored
at the pump station where it is
then distributed to the service
areas.

As our systems continue to age, failures can occur more frequently. In 2022 there were 118 repairs due to breaks and service line leaks, which is down from 2021. Our staff does not hesitate to insure repairs are made regardless of the time of day or weather conditions. They strive to limit water loss and impacts to the customers.



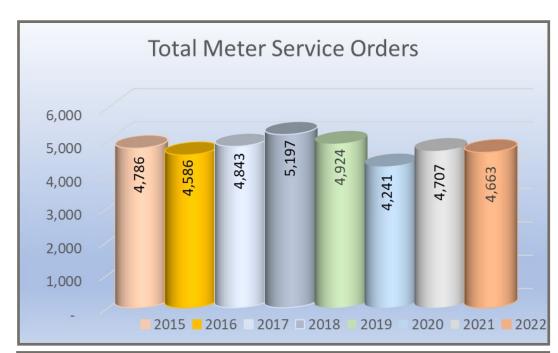


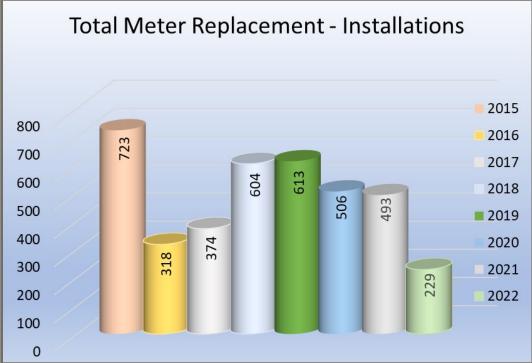
Main break at South Kansas and 24th Street



Meters are regularly scheduled for replacement but can be replaced sooner due to meter failures or due to the "Reduction of Lead in Drinking Water Act" that was put into effect in January 2014. This requires the removal of any pipes, pipe fittings, plumbing fittings, meters, and fixtures containing more than a weighted average of 0.25% lead content. New meters are installed on new homes/buildings or service splits for multi-family units.

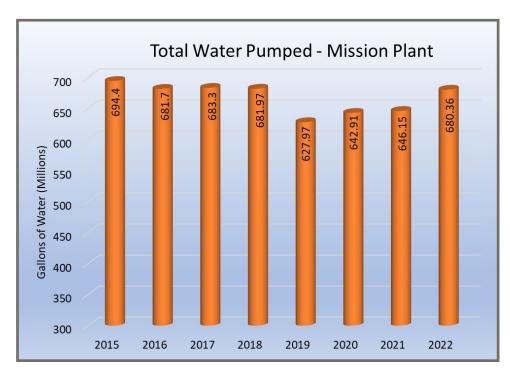
Meter service orders include readings when service is being started or stopped, monthly usage readings, shut off's, and for customer request or to be checked for leaks.











The daily average of water pumped through the mission plant in 2022 was 1.9 million gallons.

The highest daily use was 3.2 million gallons.

Raw water is pumped from city wells in the Equus Beds to the Mission Water Plant. Once water arrives at the plant, the treatment process begins by adding the following:

- 1. Caustic Soda for pH adjustment
- 2. Sodium Bicarbonate (Baking Soda) for lining the pipes to prevent corrosion
- 3. Chlorine gas to disinfect the water
- 4. Fluoride to promote dental health, as voted in by the city commission in 1999

At the end of the treatment process water is pumped to the towers and ready for use.

Inspection on the 12th Street water tower.



Daily reporting, monthly logs, and testing being completed at the Mission Plant

