



CITY OF SHEBOYGAN  
PUBLIC WORKS



# ANNUAL REPORT 2021





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## MESSAGE FROM THE DIRECTOR

■ On behalf of the Department of Public Works, I am proud to present the 2021 Annual Report and highlight the incredible accomplishments the employees of DPW were able to complete under the uncertain conditions surrounding the COVID-19 Pandemic.



**The year 2021 was successful due to the perseverance and commitment of the employees of DPW to our community and our mission of improving the quality of life for our residents. Even with the unpredictable events, the employees were able to exceed expectations in many areas.**

The year 2021 presented extraordinary challenges but also opportunities for the department to demonstrate the essential services provided daily to keep the City of Sheboygan clean and healthy. I would like to personally thank and congratulate the employees of the Department of Public Works for their incredible efforts and teamwork. Their service to the community is essential and needs to be celebrated with other public safety departments. Without the employees of public works and their efforts, daily life and its pleasures would be difficult at best. This report

is one small step in recognizing the employees and importance of public works and its impact on our community.

More often than not, the employees of the Department of Public Works are not considered first responders or essential workers. The continuing pandemic associated with COVID-19 further demonstrates the importance of Public Works and its employees in the daily lives of the residents of Sheboygan. Please take the time to review this report and feel free to ask questions.

I hope you find this year's annual

report to be informative and interesting. The department is the largest, most complex and diverse in providing services to residents and businesses. The seven divisions that comprise DPW are a diverse mixture of skilled labor and technical professionals working together to advance the mission and vision of the City of Sheboygan. This report highlights their accomplishments in making Sheboygan better.

**It is a pleasure to serve the Department of Public Works and the City of Sheboygan.**

**Dedication**  
**RESPECT** **ENTHUSIASM**  
**Professionalism**  
**INTEGRITY**

David H. Biebel  
Director of Public Works





Department of Public Works  
Administration



MISSION

Improve the quality of life by effectively developing, maintaining, and improving the infrastructure, natural resources and community services.

VISION

Provide a professional Public Works organization that will offer quality infrastructure and services, in a sustainable way that will contribute to making Sheboygan a desirable place to work, live, and play.

GOALS

- Provide quality infrastructure that conveys safe, efficient delivery of essential goods and services.
- Provide clean and beautiful public spaces that maximize the natural environment to enhance the overall quality of life.
- Deliver professional quality public services with a friendly and welcoming atmosphere.



# Core Functions

The Department of Public Works seeks to provide quality infrastructure that conveys safe, efficient delivery of essential goods and services, provide clean and beautiful public spaces that maximize the natural environment to enhance the overall quality of life, and deliver professional quality public service with a friendly and welcoming atmosphere.

To meet each aspect of the goal, the Department has several objectives.



## 01

To provide quality infrastructure that conveys safe, efficient delivery of essential goods and services:

- Construct, repair, and maintain City streets, sewers, and other critical infrastructure to ensure public safety
- Maximize agency relationships with other entities to coordinate expansion, maintenance, and reconstruction of infrastructure in an equitable manner
- Develop public right of ways with designs that encourage accessibility and efficient movements
- Meet with key stakeholders early in the planning stage to gain understanding and informed consent
- Provide complete streets and use best practices to create clean and beautiful public spaces
- Continue to maintain environmental compliance below regulatory requirements
- Continue to operate the wastewater/storm water collection and treatment system in a fiscally sound manner for the benefit of our customers
- Evaluate all infrastructure for areas of insufficiency and develop an action plan to correct areas of concern
- Develop a five-year capital improvements program identifying and prioritizing the major infrastructure projects needed to meet the community's needs

## 02

To provide clean and beautiful public spaces that maximize the natural environment to enhance the overall quality of life:

- Collect and properly dispose of garbage, litter, debris, and graffiti from public spaces creating a clean, livable community
- Lead sustainability practices preserving natural resources and reducing energy consumption
- Preserve and maintain all facilities in a manner that provides a safe environment for the facilities' functions and occupants
- Maintain an adequate amount of active and passive recreational lands to meet current and future recreation needs
- Ensure that open space, recreation facilities, and programs are designed to meet the special needs of all residents, especially senior citizens and the handicapped
- Coordinate subdivision review with all Divisions responsible for providing or maintaining adequate park facilities
- Continue to replace old and deteriorating recreation equipment at all City parks
- Continue to monitor and maintain existing park equipment to ensure its longevity and safety

## 03

To deliver professional quality public service with a friendly and welcoming atmosphere:

- Retain, develop, and recruit individuals with self-motivation and personal responsibility while embracing diversity and overall understanding of our mission
- Provide training and acquire skills to allow individuals to succeed and grow
- Provide a safe, healthy, and supportive work environment valuing employee contributions to the community
- Improve the effectiveness, efficiency, and quality of DPW service delivery through employee development, technology, and equipment
- Leverage the use of volunteers and public/private contractors to supplement the core levels of service needed
- Establish quality customer service mentality (treat others as you would want to be treated)
- Develop time management principals, and scheduling by prioritization of activities through communication within the organization



# 2021 Common Council

# 2021 Public Works Committee



Mayor  
Ryan Sorenson



City Administrator  
Todd Wolf



City Attorney  
Chuck Adams



Dean Dekker  
Chairperson



Grazia Perrella  
Vice - Chairperson



City Clerk  
Meredith DeBruin



Council President  
Barb Felde



Council Vice-President  
Roberta Filicky-Peneski



Amanda Salazar  
Alderperson



Markus Savaglio  
Alderperson



Andre Walton  
Alderperson

Alderperson District 1 .....	Barb Felde	Alderperson District 6 .....	Dean Dekker
Alderperson District 2 .....	Roberta Filicky-Peneski	Alderperson District 7 .....	Grazia Perrella
Alderperson District 3 .....	Amanda Salazar	Alderperson District 8 .....	Leslie Laster
Alderperson District 4 .....	Betty Ackley	Alderperson District 9.....	Trey Mitchell
Alderperson District 5.....	Markus Savaglio	Alderperson District 10 .....	Andre Walton



# BY THE NUMBERS



**203.44 MILES**  
OF SANITARY SEWER

**4,590**  
LIGHTS

**19**  
BRIDGES



**42**

Signalized  
Intersections



**185.52 MILES**  
OF STORM SEWER

**9.89**  
Million Gallons  
of Sewage  
Treated Daily

**18,835**  
Trees



**OVER**  
**168,000**  
Square Feet of  
Bridge Decks

More than  
30,000 Signs



**197.97**  
MILES OF  
STREETS



**36**  
Parks

**15.81**  
SQUARE  
MILES IN  
AREA



# ADMINISTRATION

- The Public Works Administration is responsible for being the first point of contact for residents. The division is responsible for advanced clerical duties and administrative support.

The City of Sheboygan's Department of Public Works main purpose is to improve the quality of life by effectively developing, maintaining, and improving the infrastructure, natural resources, and community services. The administration is charged with the responsibility of developing strategy and ensuring the effectiveness of the Department's activities in meeting the needs of the citizens of Sheboygan. This is accomplished through the effective planning, organizing, leading, and controlling of all available resources within the Department.

One of the most important functions of administration is preparing and controlling the Department's budget. Public Works continues to innovate, adjust, and lead with regard to maximizing results with limited resources. Public Works is unique when compared with other departments in the City, in that the Department has both internal and external customers. This environment often creates competing demands for services, which the Department consistently balances with good satisfaction ratings. Overall, the Public Works and Parks and Forestry budget has

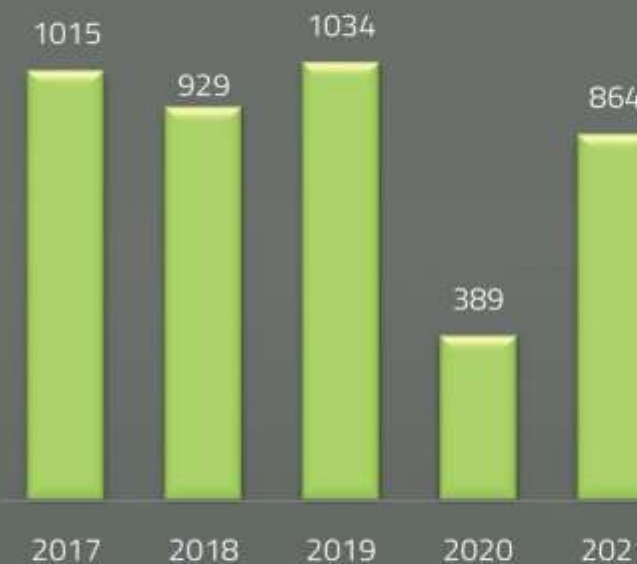
remained flat over the long term.

While the Department's budget has remained relatively flat, the Department's workload and demand for services is ever increasing. The operations of the Department are not comparable to a commercial setting in which economic demands determine the amount of labor and material needed. In addition, the Department has competing demands for the same limited resources further adding to the challenges. Balancing these limited resources and prioritizing them to meet the community needs is the main focus of administration.



## 2021 Park Rental Highlights

### Annual Park Reservations



A visitor's first impressions typically are the quality and cleanliness of streets and parks. The administration office staff manages all park reservations and special event applications.

City parks are one of the great assets of the community as shown on the annual parks reservation and annual park reservation revenue graphs.

Notable for 2021 is the rebound of park rentals to a similar reservation level as pre-COVID, even with the continuation of the pandemic. Residents were eager for the parks to re-open for reservations as alternative locations to having events at their own homes. The closure of the Senior Center also impacted the availability of Roosevelt Fieldhouse and the Kiwanis Fieldhouse for reservations. The Senior Center used the facilities for their scheduled programming.

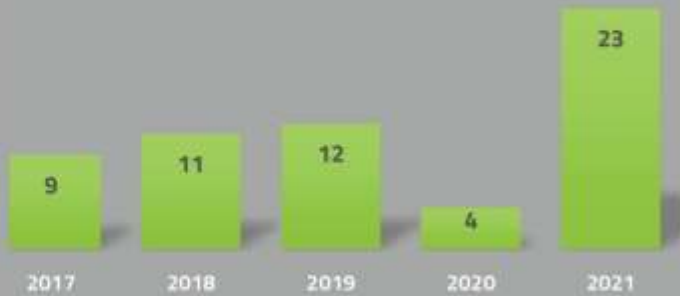


The Administration provides support services to all the Divisions within the Department by managing the budget, personnel transactions, customer requests, and public information. The objectives of the Administration are to support the necessary Divisions in order for their personnel to effectively concentrate on accomplishing their objectives. In addition, the Administration manages required reports for State and Federal agencies, grants, and the majority of permits and requests for service. Examples include: park permits, permits to excavate the right-of-way, permits to occupy the right-of-way (dumpster permits), boat ramp permits, and river boat slip leases.

The Public Works office also handles all of the Municipal Driveway permits. Any resident wishing to cut an existing curb to install or expand a driveway must secure a permit through our office. The purpose of this permit is to ensure proper placement of driveways so as not to cause problems. There is a small fee (\$25.00) for residential driveway permits. Also, a filing fee is charged for commercial driveways for recording at the Register of Deeds.

In years past, the Department had seen a decrease in the number of driveway permits issued. There was an increase shortly after the adoption of the new winter parking rules which have been in effect for over a decade and may be the cause of the upturn in permits issued once again, due to the increased discussion of snow emergency rules. The Department encourages residents to develop and provide off-street parking. The permits issued by the Department allow for the proper placement of driveways to prevent issues. Off-street parking significantly helps the Department in street sweeping, snow removal, garbage collection, tree trimming, and other operations.

Driveway Installation Permits



This is the same philosophy behind permits to occupy street right-of-way (ROW) or dumpster permits. This permit allows residents, businesses, or contractors to occupy the street ROW, typically the parking lane, with equipment for extended periods of time. A fee is collected for this activity and is based on the length of time someone is occupying the street ROW.

Permits to Occupy Right-of-Way



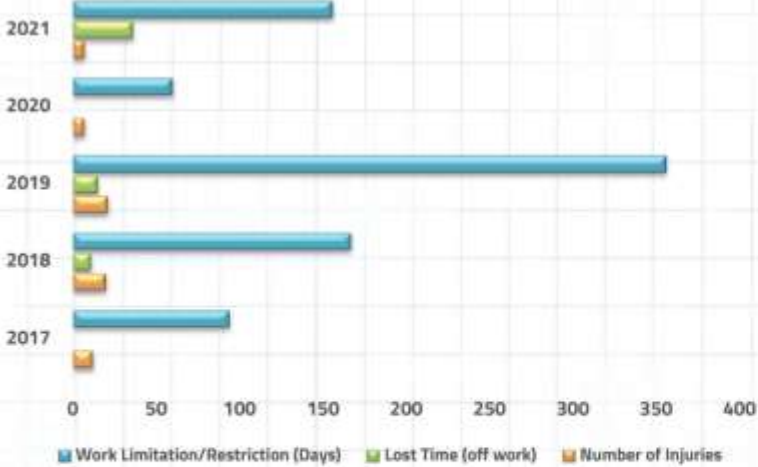
### THE ADMINISTRATION DIVISION IS OPENING THE LINES OF COMMUNICATION WITH THE CITIZENS OF SHEBOYGAN.

The Department enhanced its use of social media by providing real-time updates on road closures, construction detours, snow removal operations, garbage collection schedule changes, and other critical information.

The Department further extended its communication reach with the creation of a DPW focused website, [www.sheboygandpw.com](http://www.sheboygandpw.com). The website is a reliable source of the most up to date information.

In addition, the administration team gives public presentations to community groups and organizations on public works projects and programs.

OSHA Recordable Injuries



In late 2015, the Department hired a Superintendent of Streets and Sanitation who has a strong safety background and has made several safety improvements. The Department also takes advantage of Cities and Villages Mutual Insurance Company (CVMIC), the City's insurance company that provides assistance as part of our membership.

This year in an effort to engage employees, they were asked to participate in discussions pertaining to safety and other topics to create a more rewarding work environment. The Department continues to strive for improving and providing a safe and enjoyable work environment for all employees as well as the public at our work zones.

### STAY IN TOUCH

[www.sheboygandpw.com](http://www.sheboygandpw.com)

- Facebook
- Twitter
- Instagram
- Nextdoor



City of Sheboygan Department of Public Works  
2026 New Jersey Avenue, Sheboygan WI 53081  
920.459.3440



## WINTER PARKING RULES ARE IN EFFECT

LEARN MORE

City of Sheboygan Department of Public Works COVID-19 Site

LEARN MORE

FLOOD INFORMATION

No Flooding

GARBAGE & RECYCLING

On Schedule

ROAD CLOSURES

Last update: 2:24pm Feb. 8, 2022

OUR MISSION

At the City of Sheboygan

Instagram

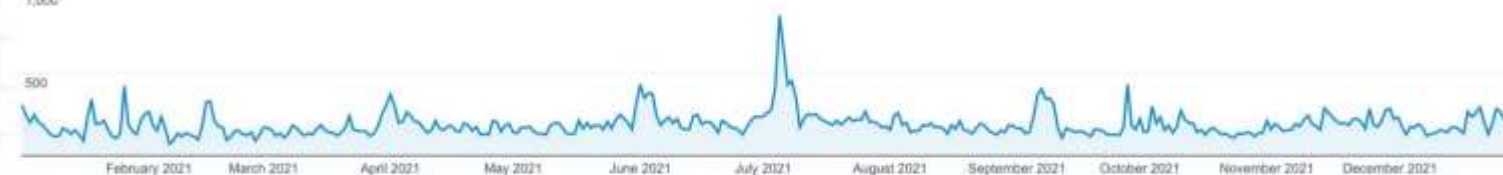
Facebook

Twitter

IN 2021  
530 NEW LIKES &  
2.4K FOLLOWERS  
ON DPW FACEBOOK

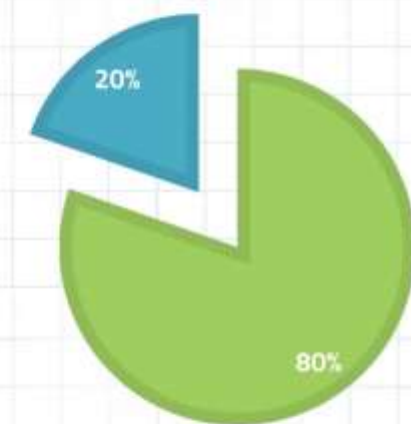
Users

1,000



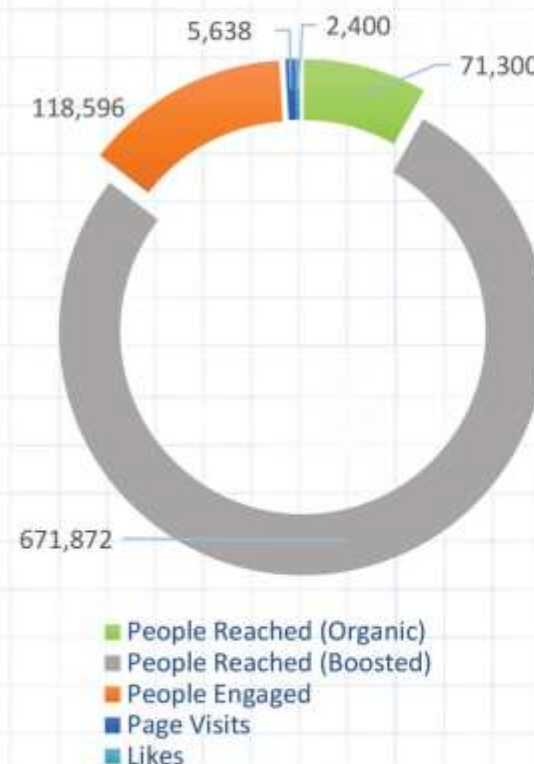
Of website visitors in 2021, **80%** were **new visitors**, showing that outbound marketing helped reach **52,922 new residents** in the City. The sites average session duration (1:32) shows that users are engaging with the content across the site and finding the content meaningful.

DPW WEBSITE



New Visitor Returning Visitor

2021 Facebook & Instagram Metrics



3,255,571  
IMPRESSIONS  
WITH PAID FACEBOOK &  
INSTAGRAM ADVERTISING

FACEBOOK

- Park Day was the top paid campaign ad with a reach of 2,991 people
- Calumet Drive Road Closure was the top organic post with a reach of 25.2K
- January 30th Winter Storm Update had 2.8K link clicks

INSTAGRAM

- 70% Engagement growth over previous year

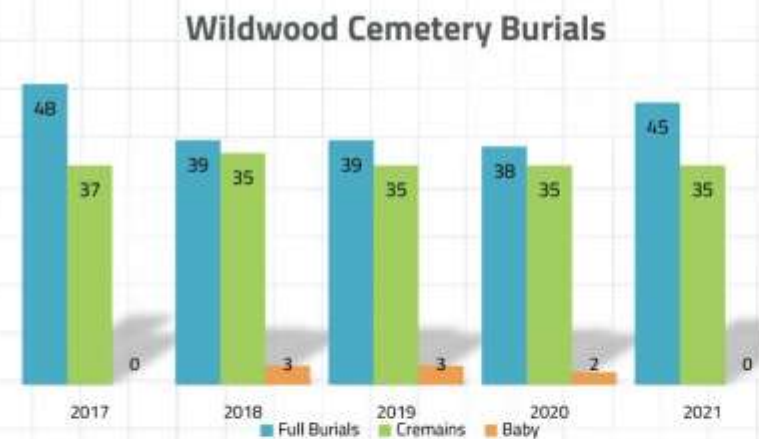
TWITTER

- 3,465 Profile Visits
- Uptown Parklet top tweet with 2,131 impressions



# CEMETERY

The City of Sheboygan Department of Public Works has owned and operated the Wildwood Cemetery since the 1850's. The cemetery is 62 acres and has over 25,000 graves with perpetual care, with approximately 20,000 burial lots remaining. Of the 62 acres, 40 acres are intensively maintained, and the remaining 22 acres are reserved for future use.



The Department of Public Works Administrative staff provides quality death-care services to families in their time of need. Tree care, mowing and trimming account for the tremendous amount of time that it takes to keep the cemetery beautiful for visiting families.

One of the City of Sheboygan's major goals is to transition off the legacy AS-400 system as it is outdated and will no longer be supported in the near future by IT. In addition, this project meets strategic plan focus areas of quality of life and communication. LEAN process improvement techniques identified the great need for record-keeping and procedure improvements. The project objective was to convert cemetery records into the GIS applications/interface, which provides internal and external end-users with a digital representation of the spatial location.

Creating an accurate map of the Wildwood Cemetery on GIS included lots, graves, way-finding section signs, monuments, underground sprinkler system, and sewer pipes. Cemetery records were compiled into scanned files and spreadsheets to be converted into the GIS system. Interment, lot, deed, scattering garden, and perpetual care information was audited by comparing records in books, catalogs, deeds, review of the actual grave sites, and the legacy AS-400 system data. The work is done incrementally by cemetery sections. Due to the intensity of the project scope, the project is active and anticipated to close out in early 2023.



The Wildwood Cemetery had many areas affected by the Emerald Ash Borer as a result trees needed to be removed. The project was accomplished by working collaboratively with the City Forester and a local contractor to remove 65 dying ash trees. The schedule was managed diligently with a close eye on weather conditions. Expediting the project in increments so that the project did not compromise the privacy of burial ceremonies were all part of controlling and monitoring the project.

In addition, the existing monument pedestal in Scattering Garden I was damaged and needed to be replaced. In the Scattering Garden II location, the monument's pedestals reached their maximum capacity for plaques of the interned. Upcoming interments would not have the option of an interment plaque in the garden if this issue was not addressed.

Planning included engaging and working in cooperation with key internal and external stakeholders, including Public Works Administrative staff, Parks Division, Streets Division, a local landscaper, and a monument company. An extensive and time-consuming detailed review of interment records needed to be completed. This was accomplished by comparing the documented monument plaques to paper records to ensure the monument plaques placement was correct. The project scope was to make landscaping improvements, procure two monument pedestals and create a beautiful, tranquil setting that creates a peaceful atmosphere for families who visit the cemetery, as well as offer an affordable solution to those who might not want a traditional burial. Signage was created and placed in the cemetery, so families of loved ones interned were notified of the beautification project.





## Project Highlights

- Geele Avenue Street Resurfacing
- Georgia Avenue Street Resurfacing
- South 10th Street Resurfacing
- Calumet Drive Pavement Repair
- Union Avenue Reconstruction
- Kiwanis Park Trail Construction
- Butzen Sports Complex Grading





Capital Improvement Projects are a big part of Public Works' role in building the future. The Capital Improvement Plan establishes a five year plan for improvements to the community's infrastructure.



Construction on Georgia Avenue and South 14th Street



### Georgia Avenue/South 10th Street Resurfacing

**Completion:** December 2021

**Project Description:** This was a cooperative project between the City of Sheboygan and the Sheboygan Water Utility with the construction including water main replacement, lead water service replacement, storm sewer repairs, concrete sidewalk repairs, and new asphalt pavement.

The project also included the installation of traffic signals at the intersection of South Business Drive and Georgia Avenue.



### Butzen Sports Complex Grading

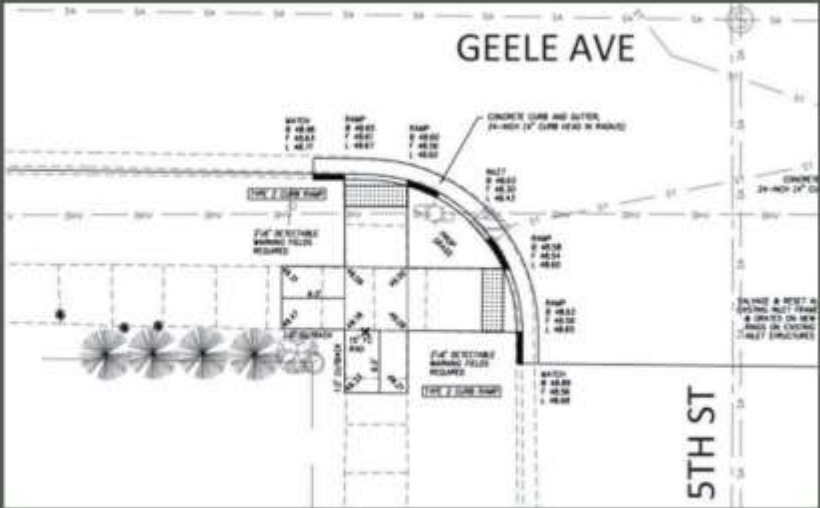
**Completion:** Spring 2022

**Project Description:** This project began in 2020 with earthwork and was expanded in 2021 to include the construction of a storm water pond for future parking lot development. In addition, several of the old buildings located on the property were demolished in preparation for the parking lot development.

### Geele Avenue Resurfacing

**Completion:** October 2021

**Project Description:** This project included storm sewer repairs, concrete sidewalk repairs, and new asphalt pavement.



### Union Avenue Reconstruction

**Completion:** November 2021

**Project Description:** This project reconstructed Union Avenue between South 26th Street and Georgia Avenue. Improvements included storm sewer repairs, concrete curb and gutter, concrete sidewalk, asphalt pavement, and street lights.





# ENGINEERING

+ 2021 Average  
Pavement Rating  
**6.42/10**

- The Public Works Engineering Division has five main areas of concentration:
- Planning and Design
  - Asset Management Surveys
  - Maps and Records
  - Construction Management
  - Consultant Oversight

Through its programs and services, the Engineering Division seeks to improve the quality of life within the City by overseeing maintenance of the existing infrastructure and design and oversight of improvement projects. The Engineering Division has a total of eight full time employees with several of the staff being with the Division many decades providing key historical references and information.

The Engineering Division manages the major infrastructure improvement projects (capital improvements program) within the City. Since 1995, the City of Sheboygan has invested approximately \$79 million in infrastructure improvements. The annual street resurfacing program provides the majority of street improvements. However, State and Federal funding for connecting highways also provides for the major reconstruction projects. Furthermore, new subdivision development requires the expansion of streets and sewer systems.

The City of Sheboygan's Pavement Management Program is a strategy that identifies cost-effective methods for preserving the City street network

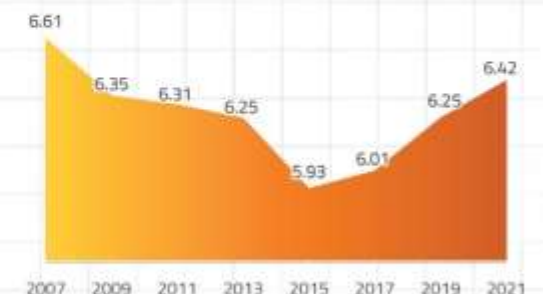
and prioritizes the levels of maintenance along with funding levels in order to improve the quality and extend the life on our existing street network. Pavement Management Systems take complex, large networks of data, and summarize this information into usable data for decision making. Streets are ranked biennially by many factors such as pavement condition, average daily traffic, pavement type, utility condition, width, age, and many other factors. The goal of the Pavement Management is to make cost effective decisions with limited funding while improving and extending the life of the street.

The Pavement Management System provides the Department of Public Works with a comprehensive overview of our street network and display the overall health or condition of this network, all based on condition assessments and maintenance strategies matrices and funding analysis. As a result, the Department has increased its efforts to improve this critical infrastructure to our community as is evident in the increased miles of streets resurfaced/reconstructed in recent years.

Miles of Streets Reconstructed or Resurfaced per Year

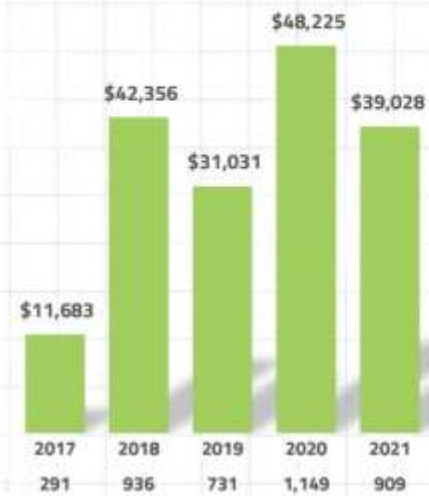


Pavement Condition Rating





### Linear Feet of Mini-Storm Sewer Installed



The Engineering Division has designed and installed over \$314,934 of mini-storm sewers since the 1980's, totaling approximately 10.43 miles in the City since the project's initiation. Since the flood of 1998, the Division has taken an aggressive approach to solving clear water problems. This program continues to grow; Engineering Division now requires storm sewer laterals in any new construction to ensure sump pumps are not discharged into the sanitary sewers. The mini-storm sewer program is ongoing.



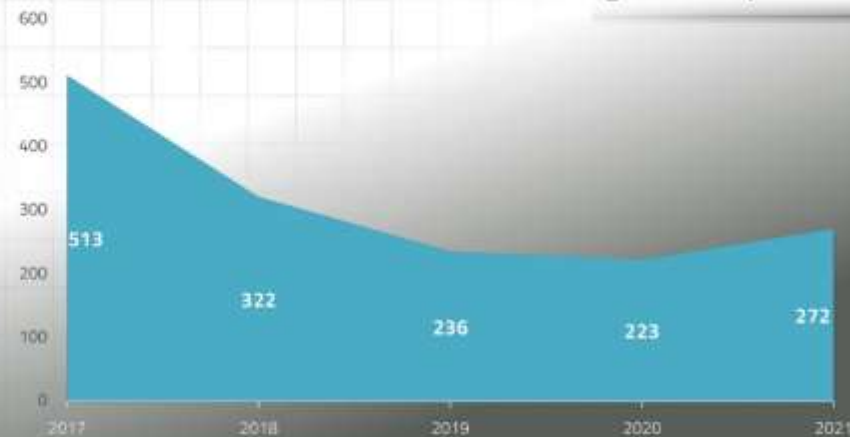
The Engineering Division also maintains all the mapping and data regarding the City's infrastructure. The City's base map is now digitally produced. In 2018, the Engineering Division invested in a new mapping and data collection software called ESRI. This software is the standard used throughout the industry. This software will allow the Division to transfer and share data more efficiently with other departments in the City of Sheboygan as well as other governmental and private industry entities. It will be the foundation for all of the infrastructure and data to be captured geographically. The majority of City services, even those outside of Public Works, are geographic in location.

Surveying data is also captured digitally and downloaded into the mapping and design software (CAD), greatly enhancing the accuracy as well as speed to alter designs and review alternative layouts.



The Engineering Division also manages the utility cuts or excavations within the street right-of-way. This is an important program that ensures proper pavement restoration is performed. Poorly restored excavations in the street right-of-way lead to accelerated pavement deterioration.

### Permits to Excavate in the Public Right-of-Way



The Engineering Division manages the City Sidewalk Program, which inspects defective sidewalk and orders their replacement. It is the City's responsibility to maintain a safe pedestrian walkway, and failure to do so may result in future liability. Once notified of a defective sidewalk, the property owner has the option to do the work, hire their own contractor, or contract with the City's contractor for the sidewalk replacement. With approximately 350 miles of sidewalk, this program is ongoing.

### Lineal Feet of Sewer Lining



Since 2012, the Division has relined CIPP (cure-in-place-pipe) over 10.9 miles of sanitary sewer and approximately 3.6 miles of storm sewer.



### Sidewalk Repair/Replacement





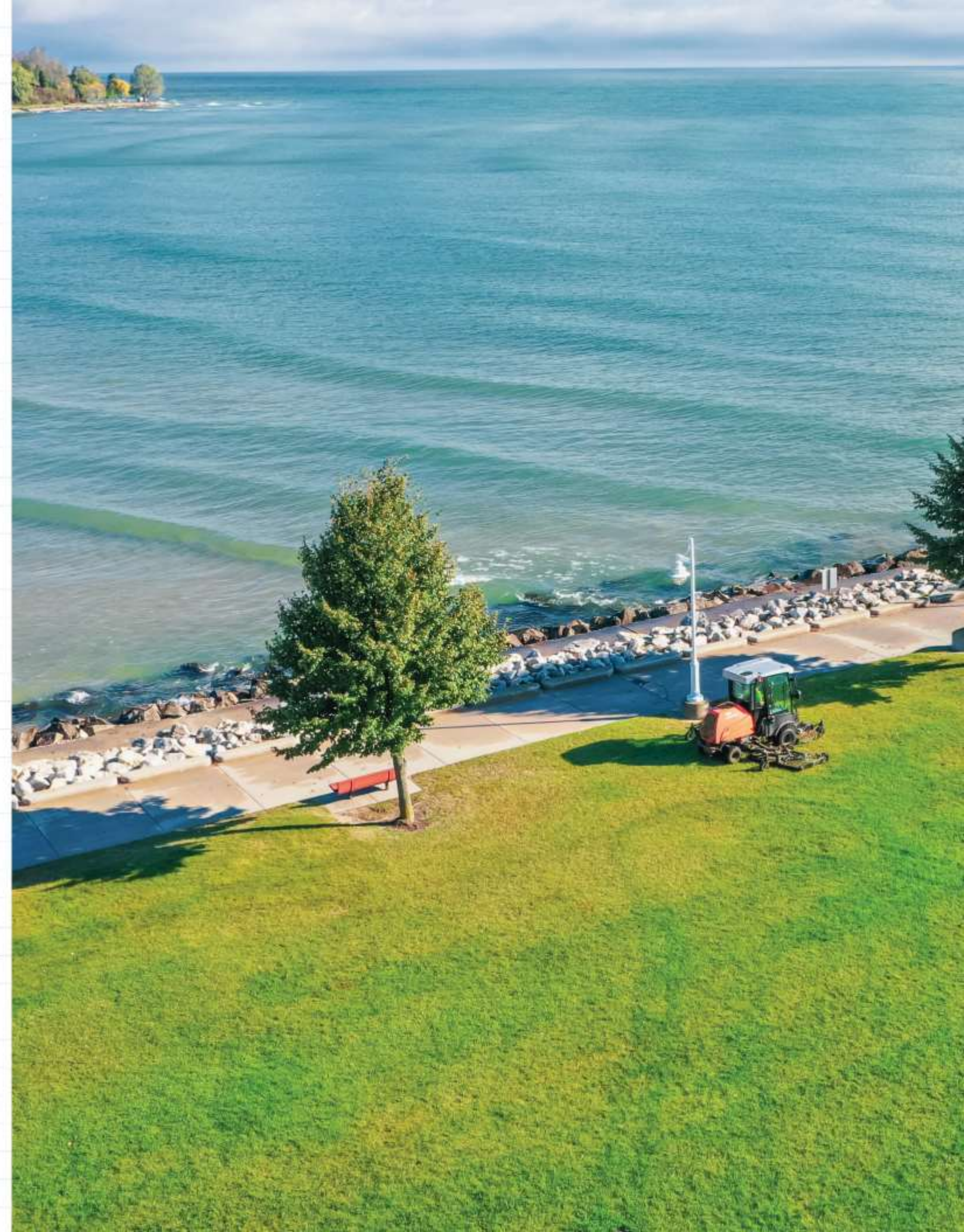
# PARKS & FORESTRY

- The Parks and Forestry Division of the Department of Public Works main purpose through its facilities, programs, services, and personnel, seeks to enhance the quality of life and environment; to acquire, conserve, and protect natural resources; and to provide leisure opportunities for the benefit of its present and future citizens.

The Parks and Forestry Division has several goals that guide them to constantly strive for their purpose.

- Provide appropriate financial support for park, recreation, and open space needs.
- Develop an attractive diversified park system comprising of imaginatively designed indoor and outdoor areas and facilities to meet the varied interests of the residents.
- Maintain the park system, in accordance with high standards, so as to contribute to the beauty, charm, and quality of life of the City of Sheboygan.
- Cooperate with and support the Sheboygan Area School District in the joint planning, design, development, and operation of areas and community, recreation, and education programs.
- Utilize land and water resources in cooperation with both public and private agencies for the maximum development of recreation programs and services.
- Maintain high standards in leadership, facilities, and equipment consistent with the Department of Public Works and the City of Sheboygan's mission.
- Provide for the planting, maintenance, and preservation of all trees and flora on City owned properties.

The division is responsible for maintaining and improving the City park system, which consists of 36 parks, 705 acres, six rent-able buildings, 10 rent-able picnic shelters, a bandshell, 24 restrooms, 25 playgrounds, three splash pads, two fish cleaning stations, a kayak launch, four tennis courts, six tennis/pickleball courts, three pickleball courts, six baseball/softball fields, Wildwood Softball Complex, Wildwood Athletic Complex, two miles of public beaches, a concrete skate park, and an archery range. The division also assists with the many Sheboygan celebrations and special events held throughout the parks and other locations within the community.



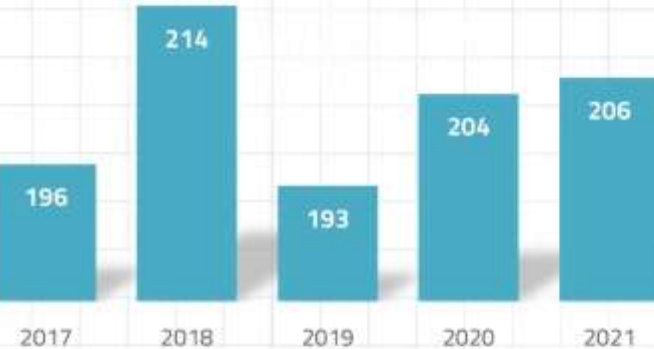




## Parks

Park garbage is collected twice a week by two park staff using the park garbage truck. The division also collects garbage from the 8th Street receptacles, City offices, and the Police and Fire Departments.

Park Garbage in Tons



Grass cutting and park maintenance dominate the summer season. The grass mowing crews are comprised of full-time and seasonal employees. These crews are responsible for mowing and trimming of all parks, street boulevards, and water retention areas. With 16 rent-able areas during the summer and 24 open restrooms, maintenance and cleaning are scheduled seven days a week.



Winters for the park and forestry crew consist of adding an extra tree trimming crew, snow removal of 26.2 miles of sidewalks and trails, cleaning 11 parking lots and maintenance of park signs, picnic tables, garbage corrals, grills and cleaning of four park rental buildings. The Parks and Forestry Division also assists the Streets Division on an as-needed basis with street snow removal.

In addition to routine maintenance items, the division is responsible for delivering park equipment to the major festivals and smaller gatherings within the park system. The department charges these organizations for the use and delivery of the equipment. Other than equipment and park rental fees, the majority of the parks are available at no charge to the public.

In 2021, most major events were held once again in the city. Major events that are usually held in the city's parks include:

- Greek Fest
- Freedom Fest Independence Day Celebration
- Hmong Summer Festival
- Rotary Lobster Boil
- Jaycee's Bratwurst Days
- Gus Macker Basketball Tournament
- Night Market
- Maywood Earth Ride

These celebrations are open to the entire community and enrich quality of life of the citizens of the City of Sheboygan. The division is committed to supporting these events and providing quality services which is consistent with enhancing the quality of life for the citizens of Sheboygan.

The Parks Division continues to work with Lakeshore Natural Resource Partnership (LNRP), and several other partners to hire Wisconsin Conservation Corps (WisCorps) to remove and chemically treat a variety of invasive species. Stantec, an environmental engineering consultant, is instrumental in working with WisCorps along the North Point Bluff. WisCorps were able to work two weeks on the bluff again in 2021. Part of the Bluff Restoration Project will be the continued invasive removals and planting of a variety of native grass seed, trees, and shrubs for erosion control.



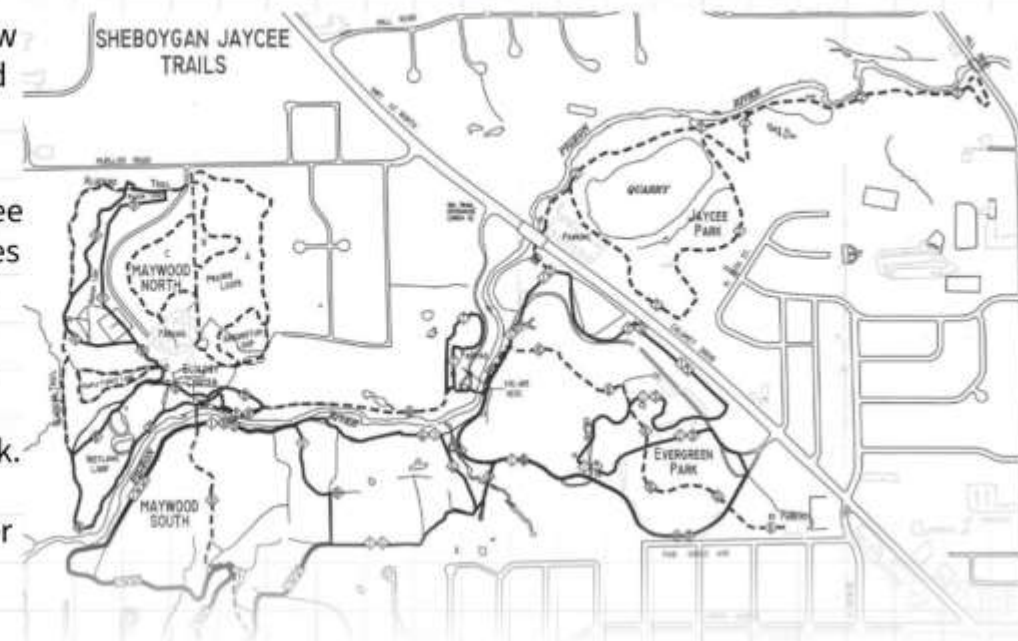


Jaycee Park is 38.29-acre park that provides a year-round 18-hole disc golf course, mountain bike trails along Pigeon River, and a beautiful spring fed quarry lake that is home to the Quarry Beach and Adventure Park. The adventure park first opened in 2013, leased by the City to a private company. In 2017, a local company, EOS Surf, took over management and lease of the Quarry. The park provides water park inflatables, or wibits, for ages 6 and up, kayaks, stand up paddleboard rentals and lessons, a beautiful sand beach, and party room rental. The park is a big part of Sheboygan's history, and the adventure park has brought new life to the whole park.



equipment and stain so the new custodian and volunteers could pressure wash and stain the Prairie Overlook.

Maywood, Evergreen and Jaycee Park offer many winter activities including cross country skiing, snowshoeing, hiking, fat tire biking, disc golf, and a plowed walking path on the one-mile park roadway in Evergreen Park. All three parks offer beautiful winter views of the Pigeon River and wooded areas.



Ellwood H. May Environmental Park, or more commonly referred to as, "Maywood," is Sheboygan's largest park with 135-acres of unique property that has been converted back into a natural state including six unique habitats; Prairie, Pine

Forest, Mixed Hardwood Forest (Maple Forest), Ponds, Wetlands and the Pigeon River. The property also has an arboretum, a butterfly and humming bird garden, and a fantastic Ecology Center. Maywood's primary focus is environmental education and stewardship. Programs offer educational and outdoor experiences designed to connect people of all ages to the natural world. In 2018, Maywood worked with the Sheboygan Area School District and Camp Y-Koda to offer a pre-school program. The program has grown and now offers morning and afternoon sessions that offer a hands-on nature-based learning experience.

**This year Maywood said it's good-byes to long time Park Director David Kuckuk. David retired and Samantha Lammers was hired as the new Maywood Park Director. Samantha has wasted no time getting things done at Maywood.**

A few items that the parks division has assisted with include flail mowing half of the prairie in preparation for burning next year, several ash trees were removed so a pre-school play area could be built, and provided



A great holiday tradition is driving through the Sheboygan County Rotary Club's, Making Spirits Bright, annual holiday lights show in Evergreen Park. It was open to the public from 5:00 – 9:00 p.m. from the Friday after Thanksgiving through December 31 (closed on Christmas Eve). Making Spirits Bright was initiated in 2012 by the Sheboygan County Rotary Clubs and held in Evergreen Park and the Quarryview Center in Jaycee Park. The City is just one of the many partners that work closely with the County Rotarians to support the event.

In addition to the drive through event, The Sheboygan County Food Banks hosts the annual Holiday Lights Hunger Run/Walk. The 4th Annual Holiday Lights Hunger Run/Walk was the biggest year yet! Thanks to the community's generous support, over \$75,000 was raised, and a total of 1,922 runners and walkers to take steps against hunger – the most ever.





The Vision for Lakeview Park

## Lakeview Park and Evergreen Area #5 closed for 2022

Lakeview and Evergreen Area #5 will be used for staging areas for projects during 2022. Lakeview park will have drainage improvements along the Lake Michigan. In exchange the park will receive several improvements as part of the project. Construction of the new bridge in Evergreen Area #5 will start in March and the area will receive several updates next year.



### Kiwanis Park Trail

**Completion:** November 2020

**Project Description:** Early in the year a ½ mile asphalt trail was constructed along the river in Kiwanis Park. This was part of the 2018 Master Plan for the park. There are several seating areas along the trail with beautiful views of the Sheboygan river.



Between the high water in Kiwanis Park and COVID-19, John Powers, operator of the Sheboygan Biergarten, made the decision not to open the Biergarten in 2020. The river receded this year leaving river silt where the Biergarten was. Park staff tilled and re-seeded the area by the Biergarten and John had new gravel brought in. John stated that he had a successful year and that the new trail was heavily used.



### Wildwood Athletic Complex

The Department of Public Works aided the Sheboygan A's with several projects. The Street Division removed old asphalt and installed a new concrete pad under the A's shelter. The A's applied a new coat of paint to make it look nice. The A's host many pre-game parties during in this area during the season. Starting next year, the shelter will be sponsored by Culver's.

The Parks and Engineering Divisions also worked with the A's to replace the old batting cage with a new one. This project is much bigger than it looks. The Water Utility was even called upon to help water excavate 10 post holes.



### Jaycee Park Disc Golf Course Additions

The Sheboygan Eagles Disc Golf Club along with the park staff installed 11 new tee pads. Eight of the pads were added to existing holes and three were for new holes added to the course. Three new baskets were also added. The group paid for the baskets and materials needed.

**Re-shingling Roosevelt Pavilion**  
The park division along with help from the street division made quick work of re-shingling the Roosevelt Pavilion in the spring. The Senior Center started using the shelter in May for classroom activities and continued to use it throughout the summer until moving to the Kiwanis Fieldhouse in the fall. They will continue to use the Kiwanis Fieldhouse until the new Senior Center will be available to them.



### Memorial Bench Program

There were eight memorial benches purchased this year. The Department has a bench program where a new bench can be purchased and installed in a park or along a trail in memory of a loved one. A memorial bench is a way to keep a loved one's memory alive and it helps the department to add new benches where needed or replace an older non-memorial bench. Benches are purchased in the spring and the fall.



### New Landscaping around the Marina

Park staff removed overgrown shrubs and trees that were impeding the sidewalks around the Marina in early spring. Staff designed and planted vegetation that would better suit the area.





**In 2018, the Department of Public Works piloted an Adopt-A-Park and Adopt-A-Trail program for Neighborhood Associations, local businesses and community groups. The program provides volunteer opportunities for community members to take an active role that contributes to the beautification of local parks and trails.**

In 2021 three more parks were adopted bringing the total adoptions since the program's initiation to nine. Gateway Neighborhood adopted Fountain Park and a portion of Shoreland 400 Trail that runs through the Gateway Neighborhood; The Sheboygan Peace Park, a part of Deland Park, was adopted by the Sheboygan Peace Park; and Optimist Park was adopted by the Optimist Club of Sheboygan. The department works closely with approved applicants to plan kick-off events to announce their adoption, organize and provide support for clean-ups, and guidance for future park upgrades.

Vollrath/North Point Neighborhood Association adopted Cole Park in 2019. This year the Association took advantage of a Special Projects Support Program offered through the Planning and Development Department. With the support funds, volunteers prepared and planted a new flower bed. Since there is no water available in Cole Park, the group attached rain gutters to a small shelter, secured a rain barrel to the shelter, and ran a downspout from the gutters into the rain barrel. Volunteers from the group take turns watering the flowers when needed using the rain water.



**In 2020, the Parks division partnered with the Optimist Club of Sheboygan to further improve Optimist Park.**

**In 2021, Optimist Club of Sheboygan had several members paint the restroom building in Optimist Park. The restroom building was graffitied and needed a new coat of paint after being pressure washed.**







# Forestry

The division has five full-time forestry employees that care for about 20,000 street and park trees. During the winter months, an additional three-person crew is formed by other Public Works employees to aid in the trimming of the street trees.

In 2016, the Common Council accepted its first Urban Forestry Management and Emerald Ash Borer (EAB) Plan. It also developed a planting plan, inventorying over 3,700 possible street planting sites. Tree planting and ash tree management became a priority for the division in 2017 and will be for years to come. The urban forest of Sheboygan provides aesthetic, economic, and environmental benefits to citizens, businesses, and visitors. Beyond shade and beauty, trees have practical benefits and real monetary value.

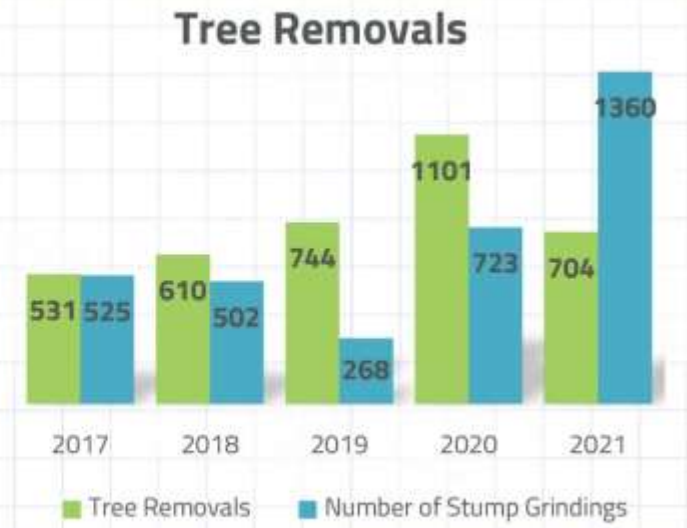
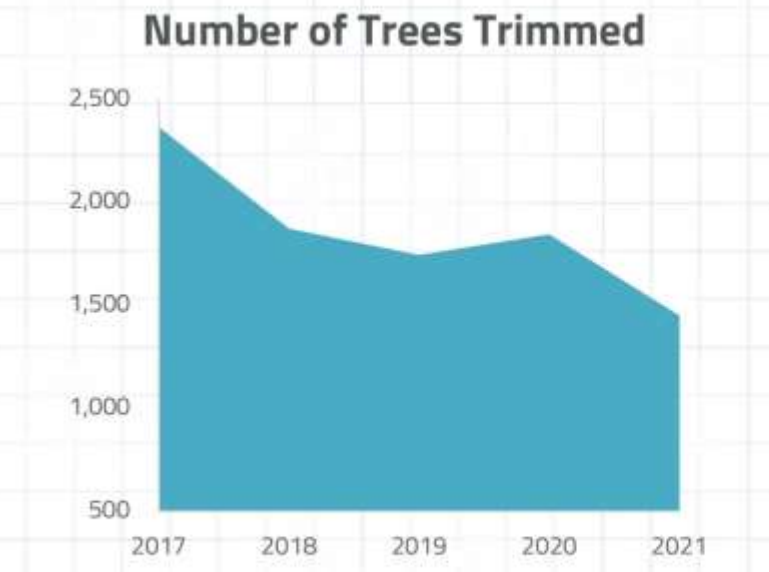
**An i-Tree analysis found that trees contained within the City of Sheboygan inventory contribute \$3.1 million in benefits per year.**

These benefits include: stormwater runoff reduction, carbon dioxide reduction, energy savings, property value increases, and air quality improvement. The purpose of having an urban forest management plan is to ensure that the citizens of the City of Sheboygan will enjoy the benefits of trees through proper arboricultural techniques and management practices. The plan breaks down into two main goals:

1. Eliminating high risk situations such as high-risk trees, branches, and the removal and management of EAB infected trees.
2. Establish a routine, comprehensive Urban Forestry Program for a healthy forest.



In 2021, the division planted 467 trees, re-treated 749 ash trees, removed 384 ash trees, removed 289 other dead, dying, or hazardous trees, trimmed 1,400 trees, and ground out 1,362 stumps. Through three bid processes, 70 of the removals and 676 of the stumps were completed by hired contractors. Through the financial assistance of the Sheboygan County Stewardship Fund, along with Restoration Of Our Trees (ROOTS) and Alliant Energy, the Department of Public Works was able to construct a Tree Gravel Bed which will assist in planting healthier bare root trees, at a lower cost, along city streets and in city parks. Use of the Tree Gravel Bed will allow for at least 600 trees to be planted every year by the Forestry Division.





# STREETS & SANITATION

The Streets and Sanitation Division has 37 full-time employees, which makes it the largest Division within the Department of Public Works. The division places a high priority on improving the quality of life by effectively developing, maintaining and improving the infrastructure, and community services.

Daily street and sanitation maintenance for the division includes:

- Street excavation and repairs
- Tarring or crack filling
- Pothole repair
- Asphalting and concrete work
- Street sweeping
- Snow and ice removal
- Barricading for City celebrations/events
- Garbage and recycling program
- Residential Recycling Center
- Sewer maintenance and construction



## Street Maintenance

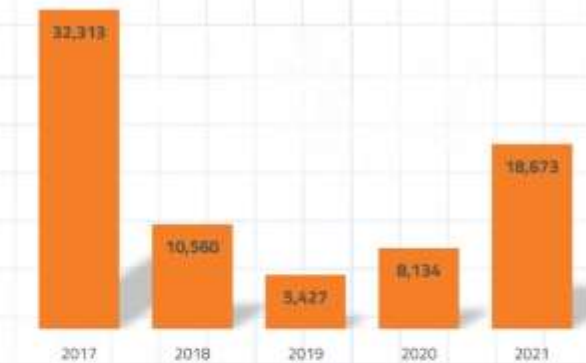
**Street maintenance is one of the major functions within the Division and is the most costly.**

The Streets Division has made an effort to fill potholes using hot mix asphalt during the 2021 construction season. Using hot mix makes a better, longer lasting repair. As shown in the graph, the DPW placed 198 tons of hot mix asphalt in 2021. The DPW's goal is to respond to pothole requests within two business days. During 2021, the division was able to respond to 86% of pothole repair requests within two days.

During the winter months when hot mix is unavailable, cold mix asphalt is used during emergency situations. Cold mix asphalt does not adhere to the road surface and will eventually come loose. The Division purchased a new hot mix wagon in 2020 that has the ability to recycle hot mix. It takes 24 hours to reheat and make the recycled asphalt. This allows for the DPW to make small batches of hot mix all year long leading to a decrease in the amount of cold mix asphalt.



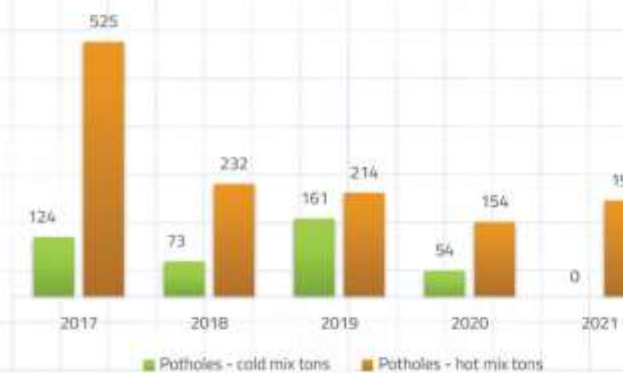
LINEAL FEET OF ASPHALT OVERLAY



The utility companies are performing their own street repairs as a result of their work which is inspected by the division to ensure quality and to prevent premature failures. Overall, the division is pleased with this arrangement because it allows our crews to concentrate on more essential repairs and maximize the effectiveness of street repairs.

The division did complete paving sections of North Taylor Drive from Saemann Avenue to North Avenue, Superior Avenue from 18th Street to 24th Street, Najacht Road from Mill Road to Enterprise Drive, South 12th Street from Union Avenue to Washington Avenue, Park Avenue from North 1st Street to North 3rd Street, and North Franklin Street from North 4th Street to Wisconsin Avenue. In addition to resurfacing roads, the Streets & Sanitation Division also paved the bike and walking trails at Vollrath and Kiwanis Parks and paved the parking lot at Moose Park. Streets and Sanitation employees also placed new concrete walkways, staircases, and picnic pads at Vollrath Park and Sheboygan's A Baseball Park.

Potholes Filled



In 2017, the DPW took delivery of a new asphalt paver. As a result, the Streets and Sanitation Division works collaboratively with the Engineering Division to complete capital projects. The division is using more asphalt with the asphalt paver. Asphalt is placed on streets with blacktop overlays. Streets are resurfaced with asphalt when the pavement becomes deteriorated.



2021 Cost of  
Asphalt per ton:  
**\$35.10**

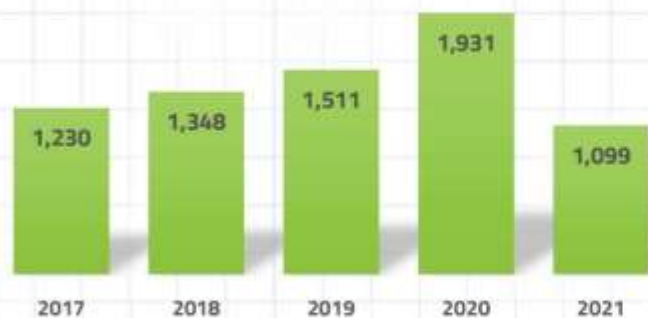
The DPW placed a total of 11,871 tons of asphalt with the paver, overlaying 18,673 linear feet of asphalt in 2021. The DPW purchases the majority of the asphalt from Sheboygan County Highway Department. The end result lowered the overall cost per ton.

The DPW concrete crews have been placing more yards of concrete due to the installation of American's with Disabilities Act accessible ramps. The crews work with the Engineering Division to learn how to use laser levels and set the proper grade for the accessible ramps. Crew members have also attended seminars to learn about the specific grades and requirements of the ADA Act. In 2021, streets crews installed the ADA-compliant ramps on our paving projects: South 12th Street, Superior Avenue, Park Avenue.



ADA-compliant ramp installation

### Yards of Concrete Installed

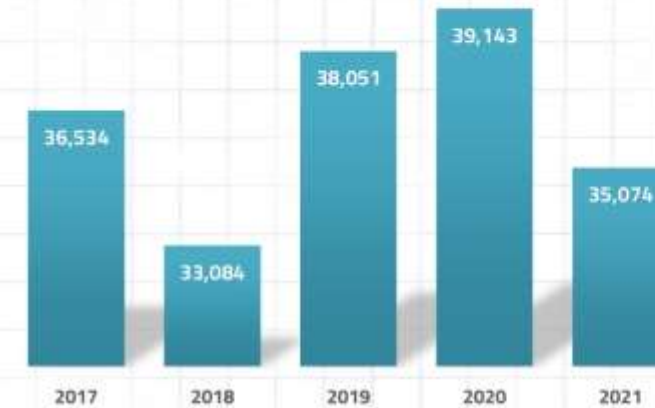


Street Right-of-Way (ROW) excavations occur when contractors need to dig within the street ROW to repair, replace, or install utilities. The department needs to regulate this activity to ensure the protection of the street and underground utilities. In efforts to maintain the street network's integrity and traffic, the DPW and the contractor require careful coordination.

In previous years, the Streets Division would perform all the repairs to the ROW. This activity would take a considerable amount of time and resources away from other division projects. To work more efficiently, the division has shifted this work back to the contractors and utilities. The division ensures the quality of the repair through the permit process and frequent inspections.

The division has witnessed an increase in the amount of utility service holes in City streets. Telecommunications deregulation has opened the competition, and the result is more companies installing new communication wires. Also, the gas utility has systematically upgraded its infrastructure.

### Crack and Joint Filling (Lineal Feet)



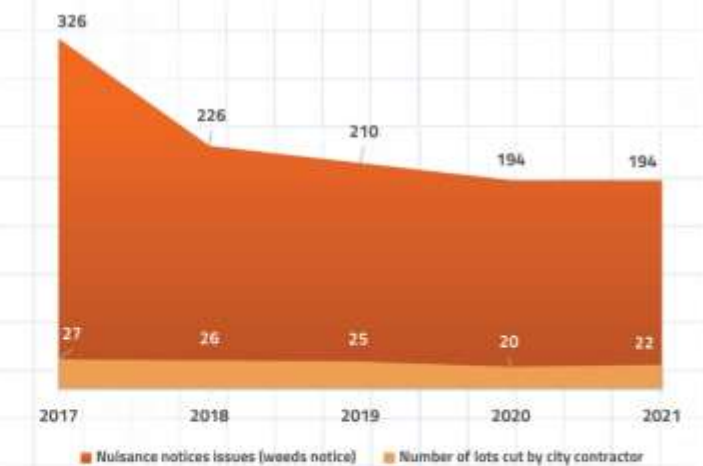
Crack filling is performed on a two-year, five-year, and ten-year cycle, in that streets with asphalt overlays or new streets have cracks filled during these periods. It is imperative to seal cracks to prevent water from penetrating the pavement, which will cause further deterioration. This program started in 1985 and has been very successful. In 2021, DPW crack filled 35,074 linear feet. As the division starts to overlay more streets, the City will continue to see increases in the amount linear feet crack filled yearly.



The Streets and Sanitation Division is responsible for the response and control of noxious weeds and tall grass complaints. The division takes calls on a complaint basis and will respond to verify if there is a problem. The supervisor notifies the property owner when a violation is discovered and gives 48 hours notice to cut the weeds or grass.

A follow-up inspection is then necessary to see if the problem has been rectified. If not, the supervisor will notify the City's contractor to cut the weeds or grass. As one can imagine, this process is time-consuming. However, it is a necessary program that helps maintain the high quality of life within our community.

### Weed and Tall Grass Control





# Bridge Maintenance

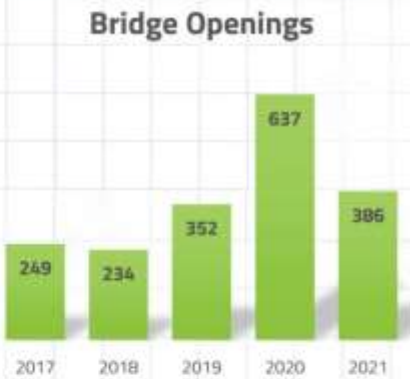
Bridge maintenance is another major function under the Streets and Sanitation Division. Maintenance includes seal coating the bridges biannually. The City has 19 bridges with over 168,000 square feet of bridge decking. The 8th Street Bridge over the Sheboygan River is the most expensive in terms of maintenance and operation.

The bridge has a lift span that must be opened for maritime traffic. From May 1 through October 31, the bridge is staffed with tenders that open and close the bridge for boaters.

State and Federal regulations require bridges to be inspected biannually by a certified bridge inspector, whom the division has contracted with the County. This year inspectors recommended cutting out sections of the New Jersey Avenue bridge and



replacing them with new concrete. The City of Sheboygan Department of Public Works assisted the Sheboygan County Bridge Maintenance Crew with this work.



# Snow & Ice Control

Snow and ice control is one of the most essential and visible activities the Streets Division performs. The division takes a proactive approach through advance planning, work crew training, equipment readiness, deicing agents, monitoring weather forecasts, dispatching crews, and public notification.



The Department of Public Works has started to use brine to treat the roadways. The direct application of brine, also known as anti-icing, can be applied to road surfaces three days before a snow event. Anti-icing is often the most cost-effective and environmentally safe practice in certain winter road maintenance situations.

Applying the brine to the roadways will prevent the snow and ice from forming a bond with the road surface. By preventing the bond, it becomes easier to remove the snow from the roadway.

Anti-icing requires about a fourth of material at one-tenth of the overall cost. One ton of salt makes around 800 gallons of brine. The DPW can treat 26 miles of road with 800 gallons of brine. Comparatively, one ton of salt applied directly on to the road at 300 lbs. per lane mile can treat up to 6.6 miles.

In addition to anti-icing, DPW salt and plow trucks can apply brine to the salt as it is applied to the road surfaces. Applying brine to road salt is called pre-wetting. According to recent studies, pre-wetting salt can reduce salt usage by 30 percent. It is activated by pre-wetting the salt with brine before being applied to the street and starts working immediately. In contrast, dry salt needs to come into contact with precipitation before it will to start work. When dry salt is applied to roadways, researchers have found that up to 30% of the salt bounces and scatters into the curb lines. Pre-wetted salt does not bounce as much and stays in the roadways.

Over the past four winter seasons, the City of Sheboygan has experienced an average of 15 snow events a year that required the DPW to respond. In 2020 - 2021 season, the City of Sheboygan saw 16 snow events, which totaled 39 inches of snow. The DPW used 2,276 tons of salt.

WINTER SNOW OPERATIONS

YEAR	NUMBER OF EVENTS	TOTAL EVENT DURATION (HOURS)	TOTAL EVENT PRECIPITATION (INCHES)	TOTAL MAN HOURS	LABOR COST	SALT (TONS)	SALT COST
2012-2013	24	319.25	61.50	4,004	\$ 126,126	5,012	\$ 297,574
2013-2014	32	248.00	69.25	4,680	\$ 147,428	4,667	\$ 283,777
2014-2015	19	124.50	29.00	1,960	\$ 61,740	2,302	\$ 162,055
2015-2016	22	332.25	39.70	3,115	\$ 98,107	4,552	\$ 320,433
2016-2017	22	447.50	65.00	4,988	\$ 157,122	4,557	\$ 314,314
2017-2018	15	253.50	47.50	3,424	\$ 117,710	2,925	\$ 195,785
2018-2019	20	231.00	69.00	2,937	\$ 102,795	3,212	\$ 245,300
2019-2020	10	210.00	34.00	2,863	\$ 71,575	1,701	\$ 137,696
2020-2021	16	288.00	39.00	3,339	\$ 83,475	2,276	\$ 191,616





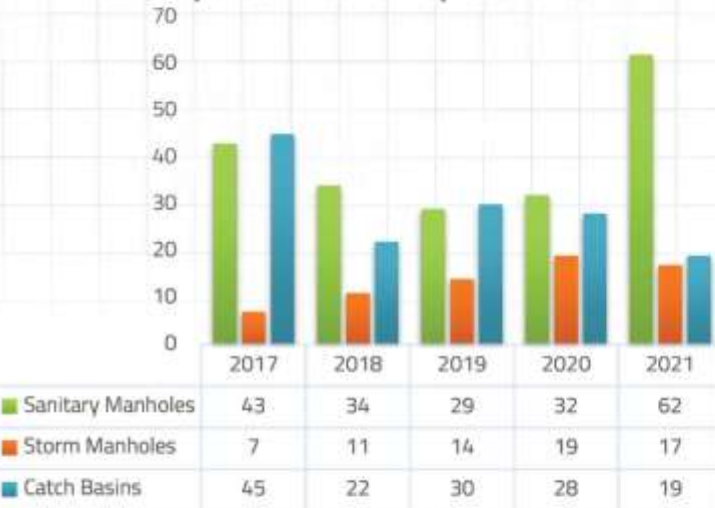
# Sanitary & Storm Sewer Construction

In 2021, the Streets & Sanitation Division crews worked ahead and performed most underground repairs before the paving crew overlaying the streets.

During the 2021 construction season, the DPW replaced 62 sanitary maintenance holes. The division uses precast concrete maintenance holes as replacements. They are often replacing cream city brick maintenances holes built by hand in the late 1800s. Using precast structures makes for faster and easier repairs, limiting the amount of time our employees are working in an excavation. Precast structures also limit the amount of infiltration from ground and surface water.



Sanitary & Storm Sewer Replacements

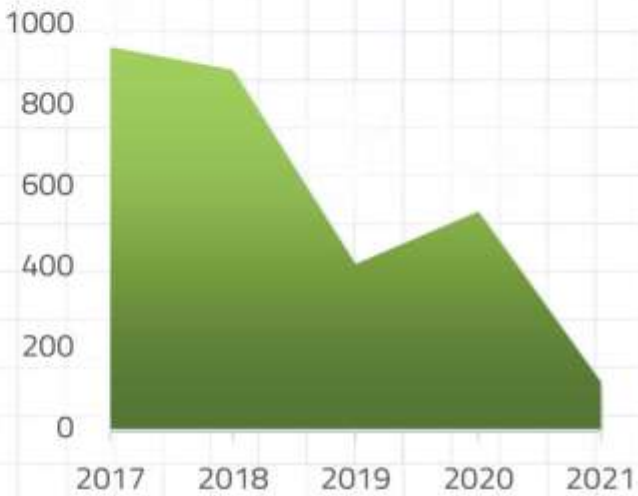


Along with replacing sanitary maintenance holes, crews also replaced catch basins and stormwater maintenance holes. Replacing the entire maintenance hole with a precast concrete one is more effective over the long term because they allow little opportunity for groundwater infiltration.

Although this process is more time-consuming, older maintenance holes constructed with block, brick, or a combination are easily infiltrated by groundwater.

Whenever possible, crews try to increase the size of the pipe when replacing catch basin leads. Unfortunately, this is not always possible because other buried utilities may conflict with the storm sewer pipe. In 2021, the DPW replaced 19 catch basins, 17 storm maintenance holes, and over 118 linear feet of storm sewer pipe.

Storm Sewer Pipe Replaced (LF)





# Sanitary and Storm Sewer Maintenance

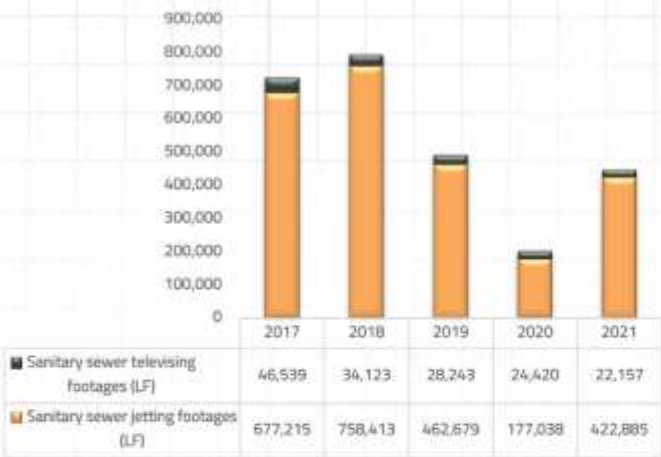
This Division performs sanitary sewer repairs through an interdepartmental budget from the Wastewater Treatment Plant. These expenses are charged against the sewer rates. The repairs are prioritized with any street resurfacing or reconstruction.

Sewer “jetting” is performed with a high-pressure water hose and is jetted through the sewer pipe to clean the inside of the pipe. Storm sewers become restricted with debris build-up such as leaves, twigs, sand, and gravel in storm sewers. Sanitary sewers have mineral deposits, grease, and roots. Sewer “jetting” alone is not sufficient to remove roots. The City hires a contractor to apply chemical-laden, thick foam to kill roots, which then decay and slough away. When debris causes the sewer to become restricted or smaller, the sewer is not capable of handling the normal flow. As a result, backwaters may occur. Sanitary sewers are the division’s main concern due to the health concerns of the potential of raw sewage backing up. This explains the large disparity between the number of feet of sanitary sewer jetted versus storm sewer.

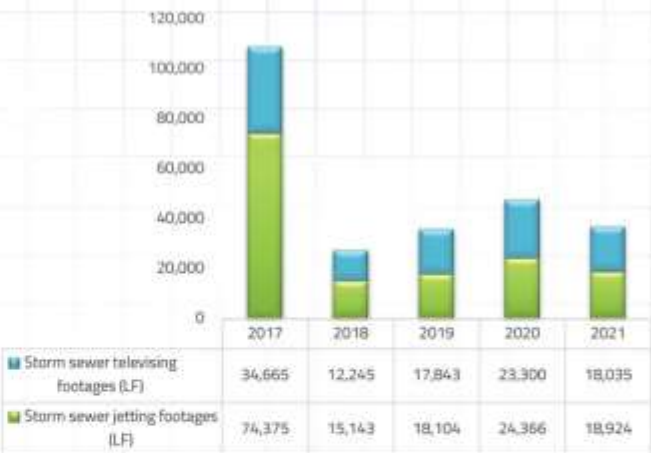
The Public Works Department owns and operates a sewer camera truck. This equipment allows the division to inspect the integrity of sewer pipe to determine its performance. As a rule, before any street resurfacing or reconstruction, the sewers are inspected to determine whether they should be replaced, lined, or remain. This practice has significantly reduced the need to excavate in newly paved streets, which is never popular or good for public relations. Also, to maintain high standards, new sewers are inspected to verify appropriate construction practices.



Sanitary Sewer Cleaning



Storm Sewer Cleaning

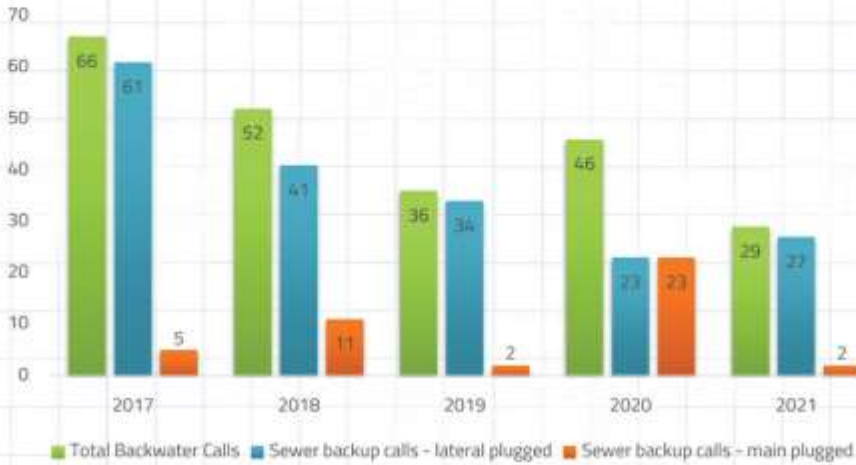


Backwaters occur when sewage backs-up into a residence or business. There are numerous reasons why a backwater may occur. Unfortunately, most backwaters result from the property owner flushing or dumping

inappropriate materials into the drains. The result is a clogged sewer lateral, which is the property owner’s responsibility. At times the sewer main is clogged and must be opened and cleared for the sewage to flow again.

Potential problems are removed before they can cause a backwater. In 2021, 422,885 linear feet of sanitary sewer pipe was jetted, and 22,157 linear feet were televised. There was 18,924 linear feet of storm sewer pipe jetted, and 18,035 linear feet televised. The DPW received 29 calls for backwaters, or sewer backups. Out of the 29 calls 27 were caused by the homeowner’s lateral that connects the home to the sanitary sewer.

Sanitary Sewer Backup Response



To educate the public, the division has developed an informational handout for the public on “Coping with Sewer Back-ups.” It is available on the Department’s web site and is personally delivered on backwater calls.

Manhole entries are performed during inspections, cleaning operations, installing monitoring equipment, and installing the camera for T.V. inspections. Every entry must have a permit that documents a confined space entry. Furthermore, two persons must be on-site during the entry for safety.

Manhole entries are very dangerous due to the potential of lethal gases and engulfment from flows. Annual training is mandatory for employees required to enter confined spaces. The City of Sheboygan has 4,852 sanitary sewer manholes and approximately 3,202 storm sewer manholes.

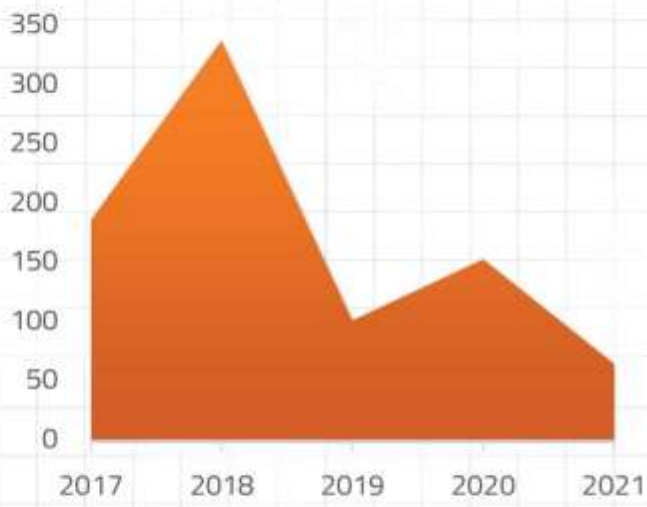




# Stormwater Management

Due to water quality concerns, the State of Wisconsin now requires the City to permit its storm sewer system through the Wisconsin Department of Natural Resources (WDNR). The permit requires “best management practices” (BMP) to ensure water quality. Two major BMP are street sweeping and catch basin cleaning. In 2000, the Streets Division started to systematically clean catch basins. Before this period, the Division cleaned basins only on a complaint basis. The first year experienced a large amount of tonnage collected due to the infrequent cleaning in the past. In 2021, the DPW removed over 65 tons of debris from the catch basins.

Catch Basin Debris Removed (Tons)



The Engineering Division completed a comprehensive update to the Citywide Stormwater Management Plan in 2020 and is awaiting DNR approval. The Wisconsin Department of Natural Resources provided a grant to help pay the costs of contracting with a consulting engineer to help draft the update. Since it was over ten years, the plan needed a comprehensive update and incorporated new rules that the State of Wisconsin DNR is permitting for water quality initiatives. Once approved by the DNR, the Department will have a plan that will guide daily maintenance activities and provide future capital planning of major stormwater management projects within the City.

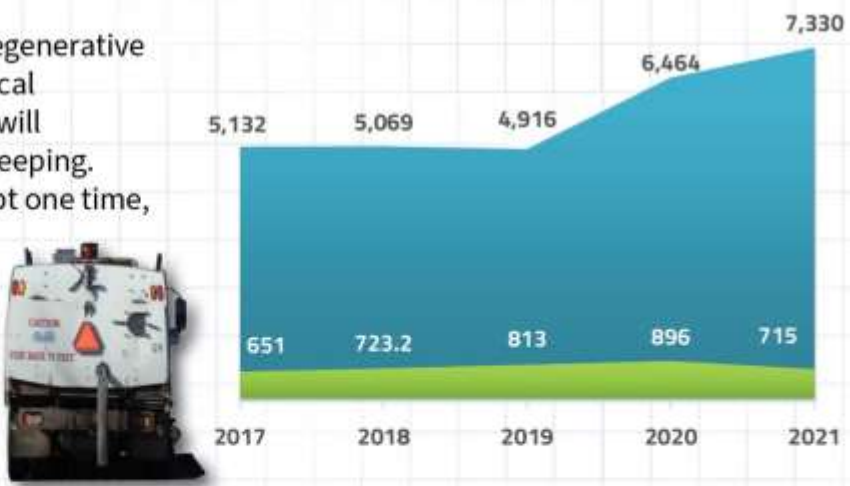
# Street Sweeping

In 2000, the division revised street sweeping routes to comply with the WDNR’s stormwater permit requirements. Overall, the amount of tonnages collected as part of the street-sweeping program has been fairly consistent. One change that has significantly affected the program was the requirement to dispose of the street sweeping debris in a landfill. Previously, the division used material in backfill or compost.

The DPW has three sweepers that are regenerative air/vacuum sweepers and one mechanical sweeper. During early spring, the DPW will dispatch all four sweepers for heavy sweeping. After the City has been completely swept one time, two sweepers are kept on through the rest of the year as weather permits.

In 2021, the Department swept over 7,330 miles of curb line and removed 715 tons of debris from the City streets.

Street Sweeping

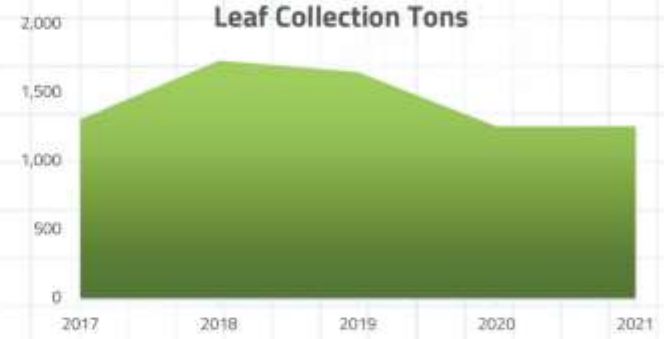


# Leaf Collection

The Street Division manages the fall leaf collection program. Between October and November, the City allows residents to rake leaves into the street’s parking lane to facilitate efficient collection of leaves every fall. Since the division is already performing street sweeping, it is most useful to allow the residents to rake additional leaves from their property into this designated area.



Leaf Collection Tons





# Garbage & Recycling

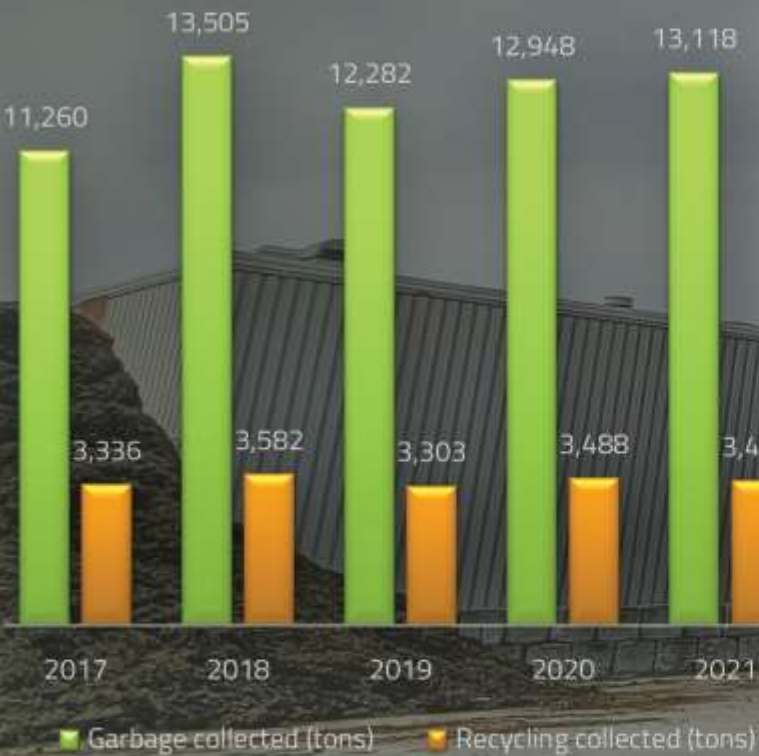
The Sanitation Division provides a curbside pick-up of garbage and recyclables for residential units of four or less. Every week the sanitation operators make approximately 18,000 stops or pick-ups. In 2021, the DPW collected 13,118 tons of garbage and 3,425 tons of recyclables.

The Residential Recycling Center is a drop-off site that provides residents with a place to dispose scrap metal, yard waste, waste oil, and many other items not picked-up with curbside collection or banned from landfills. Currently, there is no charge for this service. The increase in scrap metal collected is due to the market

prices falling; as a result, citizens are not cashing in their scrap metals and conveniently using the drop-off site. The trend in yard waste has steadily grown due to the increased awareness of the Residential Recycling Center's accessibility.



Refuse/Recycling Curbside Collection



Material  
Diversion Rate  
**20.7%**

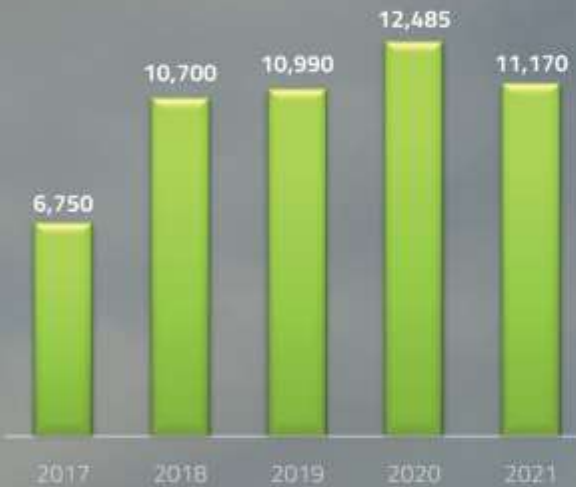
Used Tires Collected



Tons of Yard Waste Managed



Used Motor Oil Collected (Gallons)



Scrap Metal Collected (Tons)



Annual Cost to Grind Branches





# FACILITIES & TRAFFIC

■ The Facilities and Traffic Division is responsible for maintaining the City's building infrastructure system including the Emergency Alert System also known as the Civil Defense Warning System.

The staff consists of 12 full-time employees and one part time employee, which are responsible for the overall preventative maintenance and repair of the heating and ventilating systems, plumbing systems, electrical equipment, and providing custodial services for City Hall and the Municipal Service Building. Staff is instrumental in reducing City costs by performing numerous services for all city departments, including City Hall, Municipal Service Building, Transit, Police Department, Senior Activity Center, and five Fire Stations.

In 2021, the Facilities and Traffic Division faced one main challenge: the COVID-19 Pandemic. The COVID-19 Pandemic created a new set of rules on how to manage facilities and the employees that occupy them. Focusing on cleaning and disinfecting, safety management, and controlling costs were at the forefront. The challenges of this pandemic continue to influence the way we conduct our business and manage our facilities.



Exterior security lighting at the Sheboygan Police Department

The division was responsible for converting **234** light poles to energy efficient LED's throughout City streets including parks; this resulted in an annual energy savings of **\$9,262**. Other LED conversions included installing exterior security lighting at the Sheboygan Police Department.





# Traffic

The division is responsible for the design, maintenance, and repair of all city-owned traffic control systems, signs, markings, and devices. This division is divided into signs and paint and electrical, both working in conjunction with each other to keep our roadways safe to travel. The division is also responsible for installing, removing, and maintaining all festive decorations throughout the City of Sheboygan.



The signs and paint crew, which consists of four full time employees, is responsible for all City street signs and painted traffic markings; such as centerlines, stop bars, crosswalks, and turn arrows.

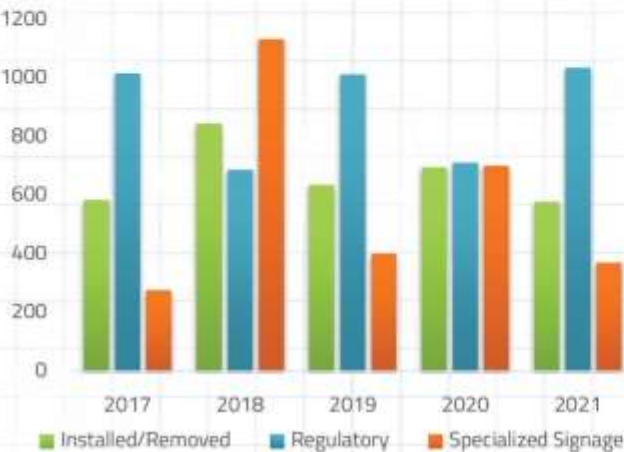
The City of Sheboygan has approximately 30,000 signs, ranging from stop signs, street name signs, speed limit signs, no parking signs, and custom way finding signs. City of Sheboygan signs are designed, fabricated, and installed in-house using a computerized plotter and multi-color heat transfer printing system, which can create custom indoor/outdoor signage. The signs and paint crews fabricate signs for many departments citywide including the Mayor's Office, Fire and Police, Maywood, Parks, Wastewater Treatment Plant, Motor Vehicle Division, and other outside agencies. The employees also work closely with Shoreline Metro in supplying them with custom signage along with installing and replacing parking meters.

The signs and paint crew maintain crosswalks at 405 different locations throughout the city and 195 traffic arrows at 72 different locations. The centerline painting is contracted with the Sheboygan County Highway Department, which has the specialized equipment for this procedure. With the help of city employees, this process takes approximately two weeks to complete.

In 2021, the employees line striped a total of **98.7** miles of white and yellow paint, which equates to **1,955** gallons of paint in the process. To get the reflectivity of the centerlines **11,740** pounds of glass beads were added in the painting procedure. Adding to those paint totals, the Division used **855** gallons of paint to enhance the pedestrian crosswalks, stop bars, and traffic arrows.



## Signs



Notable projects for 2021 include reestablishing 18 miles of bike lane lines throughout the City of Sheboygan, the second phase of this project will be completed in 2022, which will include enhancing the "shared roadway" markings.



Working with multiple departments, local and federal, we were able to create, design, and install "Speed Restriction" signs on the Navigational Aid Pole on the United States Coast Guard's property. This location was chosen because it informed the mariners entering and exiting the Sheboygan River system of the reduced speed.

Another notable project included fabricating and installing bike path signs alongside a newly established bike path through Kiwanis Park. The Division also worked with Sheboygan and Fond du Lac Counties Planning Departments on extending the Old Plank Trail signs on the newly developed trail system along State Hwy 23's expansion project. To create uniformity, the Fond du Lac trail signs differed in color and displayed the Fond du Lac logo. Our last project, in Fall, entailed the layout and painting 75 parking stalls in the parking lot of the new Humane Society of Sheboygan County.



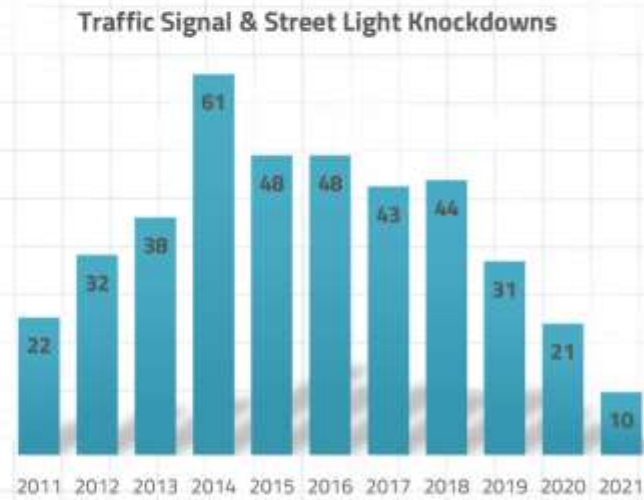
The electrical crew consists of two full time Journeyman Electricians. The electricians are responsible for the design, installation, maintenance, and repair of all city-owned electrical systems to include city owned buildings, installation of data cabling, traffic signaling and coordination, street lighting, pathway lighting, parking lot lighting, and our park system, which also includes ball diamond lighting.

These employees install, repair, and maintain 42 signalized intersections, seven red flashing signals, and two yellow flashing signals. In addition to the traffic signals, the city owns and maintains over 2,700 streetlights, 505 pathway lights, parking lot lights, and 1,380 lights in our park system. The division is also responsible for the design and layout of newly installed lighting throughout the city.

Annually, the employees test all the traffic controllers, which contains the program for that individual intersection, and conflict monitors, which monitor for any faults in the system, to ensure they are operating correctly.



Electricians respond to knockdown situations both day and night. The severity and complexity of each incident varies from one incident to another. Damage from these incidents to city owned property ranges from \$1,000 to over \$90,000 per incident. Almost 100% of the repairs are completed by the division.



As a part of a five-year Capital Improvement Project, the division updated and installed 44 new LED Lumec light poles on 8th Street from Center Avenue to Virginia Avenue to include the side streets. Along with updating the light poles, we replaced all underground wiring and overcurrent protection. Once completed, the project will convert 264 Sternberg light poles to energy efficient Lumec light poles with an annual energy savings of \$7,195.

The division also retro-fit 190 Phillips-Gardco Street light fixtures to energy efficient LED's which results in an annual energy savings of \$8,090.



## Facilities

Updates to the Municipal Service Building, constructed in 1966, are ongoing and included completing the new women's bathroom, locker room, and shower area and updating the men's shower room in early 2020.

Part of our 2021 Capital Improvement Project for the Municipal Service Building was delayed due to combining the engineering costs with a closely related 2022 CIP project. The 2021 CIP project, replacing the Municipal Service Building generator, and the 2022 CIP project, updating the Municipal Service Building electrical panels, were engineered together because they complimented each other in terms of the work that had to be performed by an electrical contractor. Furthermore, this saved the City \$10,000 in engineering costs. Engineering was completed in 2021 and the work will commence in 2022.

The COVID-19 Pandemic was a significant impact to the current facilities in 2020 and many modifications were made. The Municipal Service Building Business Office required a new protective barrier installed on the counter top to reduce the contact between employees and citizens. Additionally, three barriers were added to City Hall at the Finance counter, Planning & Development counter, and Clerks counter. These barriers were



all custom fabricated and installed by division personnel. A total of 12 contact-less hand sanitizing stations were installed between City Hall and the Municipal Service Building.

There were numerous challenges when creating signage to clearly communicate to citizens entering the facilities. Significant amounts of information pertaining to social distancing and traffic flow made creating signs difficult because each situation was highly specialized. Citizens and employees also needed to be reminded to have minimal contact with surfaces to help prevent the spread of COVID-19 throughout each of the facilities.

Sanitizing both facilities per CDC standards takes a significant number of man-hours and required additional purchases of specialized product and equipment. For example, after a socially distanced meeting, employees must go in to sanitize the conference rooms or gathering areas. This occurs on a daily basis to mitigate the spread of the COVID-19 virus. Employees must be diligent to give adequate time for the sanitizing solution to eliminate the virus from hard surfaces before another meeting can be held.

The challenges of this pandemic will influence the way we conduct our business and manage our facilities throughout the upcoming year.





# MOTOR VEHICLE

■ The Motor Vehicle Division is responsible for maintaining the Department's fleet of equipment.



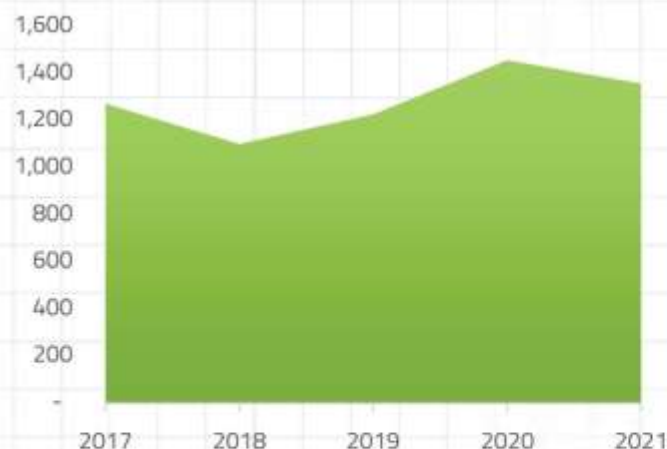
This division is unique, as it operates as a self-supporting, or enterprise, fund within the city budget. The Motor Vehicle fund is used to account for the central automotive equipment operations, which includes the purchasing, dispatching, repair, and maintenance of vehicles and motorized equipment used by the department.

The Motor Vehicle Division is primarily responsible for repairs and preventative maintenance on vehicles and equipment operated by the Department of Public Works and Fire Department.

Preventative maintenance for the fleet of more than 100 over road vehicles and an additional 200 off road pieces of equipment takes up the majority of the employee's time. This covers all the vehicles that the Department of Public Works



Work Orders Processed



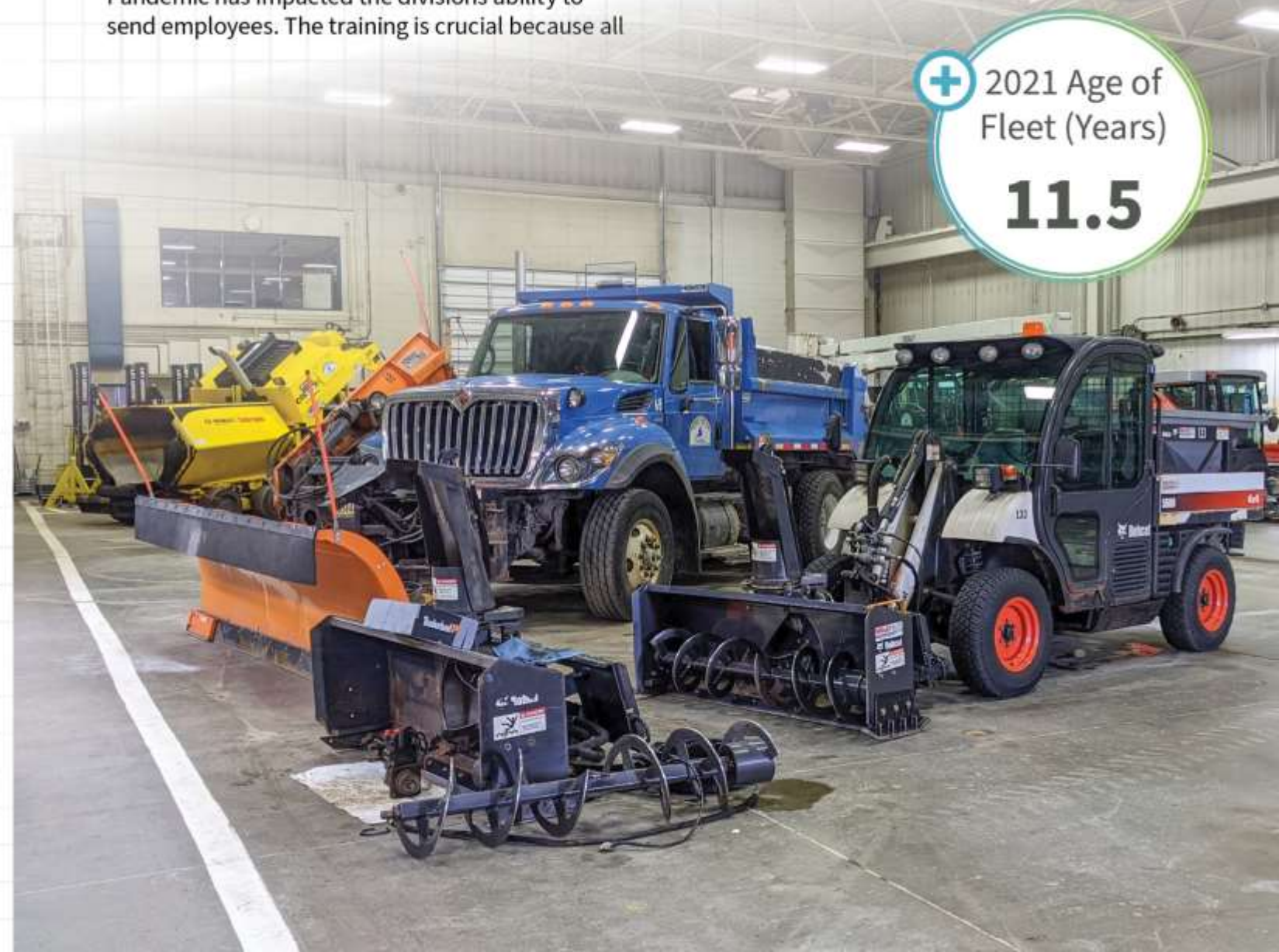
uses, including the garbage trucks, plow and construction trucks, bucket trucks, mowers, etc. Work orders are consistently escalating due to the increasing age of the fleet. This has resulted in the Department of Public Works entering into a lease and maintenance agreement with Enterprise Fleet Management for all light duty trucks, one ton and under. This lease agreement will considerably reduce the age of the fleet, equipment downtime, work orders and give us the ability to better maintain the rest of the existing fleet. Due to supply chain shortages these vehicles will not arrive until the spring of 2022.

Annually, two employees are sent to Fire Apparatus Training, however the past two years, the COVID-19 Pandemic has impacted the divisions ability to send employees. The training is crucial because all

Motor Vehicle employees need the training courses to service the highly specialized vehicles used by the Fire Department. Our hopes are that class availability will resume in 2022.

Starting in 2018, the Motor Vehicle Division adopted the 5S Methodology to create a clean, organized, efficient, and safe work environment. The program has been a success and in 2021 it was implemented in the stockroom or Central Stores Inventory. The division's inventory was reorganized, cleaned, and eliminated of overstock and unsellable items. This will make the implementation of the new EAM software scheduled for 2022 much more efficient, resulting in a quality finished product.

+ 2021 Age of Fleet (Years)  
**11.5**





# WASTEWATER TREATMENT

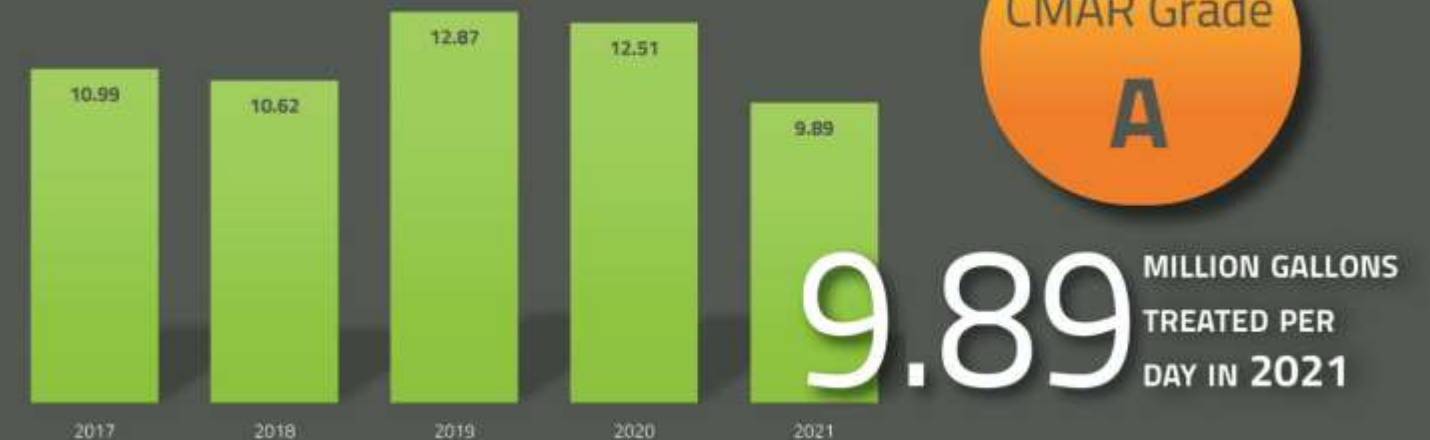
The Wastewater Treatment Division's mission is to protect public health and the environment by providing reliable and cost efficient wastewater collection and treatment services. The Wastewater Treatment Plant (WWTP) is owned and operated by the City of Sheboygan. It provides wastewater treatment for the City of Sheboygan, City of Sheboygan Falls, Village of Kohler, Town of Sheboygan, and Town of Wilson.

Goals for the Wastewater Treatment Division include:

- Meet all compliance and reporting obligations for wastewater, air emissions, and bio-solids reuse.
- Maintain the infrastructure of the wastewater system in a sustainable and fiscally responsible manner.
- Empower the employees to develop and implement practices which will optimize the process and continuously improve equipment reliability.
- Update and implement the long term facility plan, through effective planning and project execution.
- Work with industrial customers to effectively meet all compliance obligations in a cost effective manner.
- Use new technologies to improve the process and reduce operating costs.

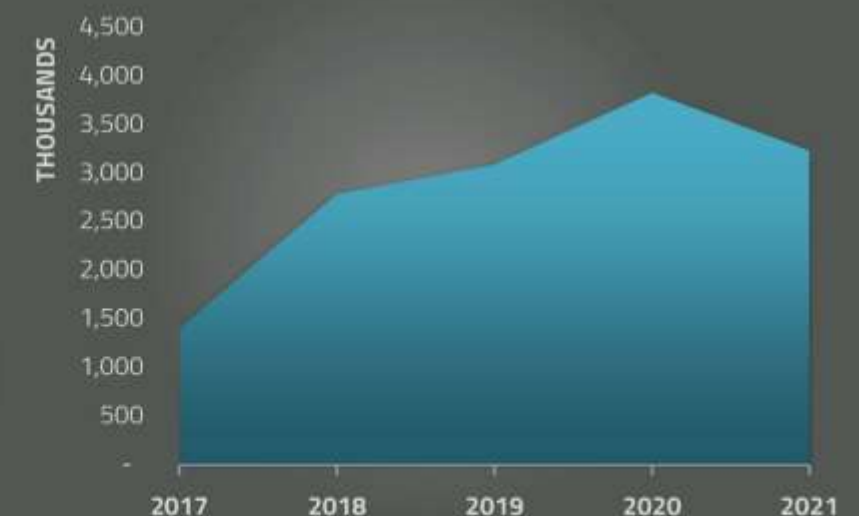
The WWTP is a conventional activated sludge wastewater treatment facility which utilizes enhanced biological nutrient removal to reduce total phosphorous and total nitrogen levels in the final effluent. The plant process includes primary treatment, secondary treatment (activated sludge) followed by effluent disinfection and de-chlorination prior to discharging to Lake Michigan. Sludge generated by the facility is stabilized using anaerobic digestion, after which the material is dried to less than 10 percent moisture at a temperature above 180°F to produce a Class A bio-solids material. This material is then sold to a customer who uses it to enhance the nutrient and organic value of top soil. Gases produced from the digestion of sludge are used for process heat to dry the bio-solids and heat the facility's buildings.

Average Flow Million Gallons/Day



Total Dried Biosolids Produced (lbs)

**3,607 MG**  
OF WASTEWATER  
TREATED IN 2021





There were many significant accomplishments in 2021. The following is a list of the most important items completed during the year by plant staff:

- Completed lockout forms for all digesters, clarifiers and aeration basins.
- Rebuilt line shaft for Raw Influent Pump #3.
- Rebuilt RAS pump #2.
- Installed a 16" flow meter at North Avenue Lift station to remove a discharge line restriction.
- Rebuilt West Influent Screen and installed new controls to improve screen operation.
- Set up DG Boiler to operate off of both Digester and Natural Gas.
- Installed air flow meters on both aeration trains to monitor blower performance and air distribution.
- Installed new security software and updated the security system.
- Cleaned and inspected Digester #7.
- Optimized disinfection system in preparation for meeting the new E. coli limit which goes into effect in 2022.
- Demolished and scrapped gas turbines.
- Rebuilt #1 pump at North Avenue Lift Station.
- Rebuilt #3 pump at Indiana Avenue Lift Station.



### Influent Building HVAC Replacement

**Completion:** February 2022

**Project Description:** Two new HVAC units were purchased and are in the process of being installed to provide adequate ventilation for the grit room and influent wet well. All of the old duct work and HVAC equipment was demoed and the new units are in the process of being installed with new ductwork and controls. This project is expected to be completed by February 2022.



### Blower # 4 Replacement

**Completion:** April 2022

**Project Description:** The new aeration blower was purchased to replace an old unit which had been out of service for a number of years. The new unit is a dual core unit with two individual 200 Hp blowers installed within the same enclosure to provide a small footprint. The new units will be more efficient than the existing Turblex, and will be set up to automatically start and stop based on system requirements. This project is expected to be complete by April 2022.



### Primary Clarifier #4 and Final Clarifier #2 Drive Replacement

**Completion:** August 2021

**Project Description:** Primary Clarifier #4 and Final Clarifier #2 were taken off line to be cleaned and inspected. In the photo to the right of Primary Clarifier #4, there is a drive that was removed and replaced



in the center. Final Clarifier #2 also had the drive removed and replaced. In addition, the rake arms and stilling wells were repaired, the rake arm coating was touched up, and the construction joints for the concrete tanks were replaced. A scum box was added to Primary Clarifier #4 to capture floating debris.



Touch up painting in Final Clarifier #2, showing corrosion on the stilling well



New scum box installed on Primary Clarifier #4

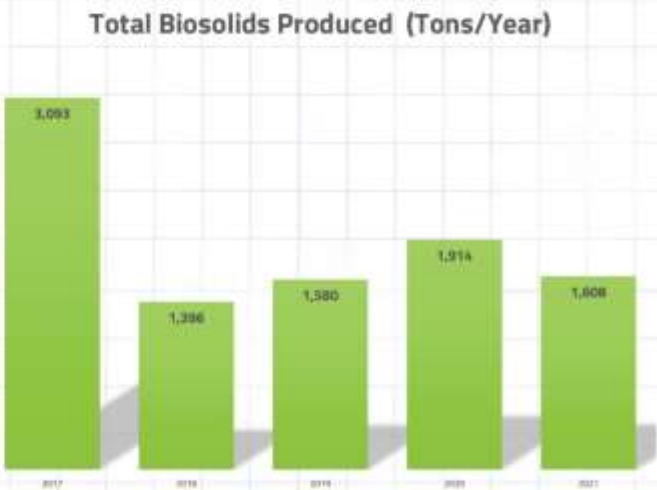


# Annual Bio-solids Production

Screw press cake solids were down slightly averaging 21.6% in 2021 as compared with 22.3% in 2020. This reduction was primarily due to the work that was done to reduce polymer consumption where significant strides have been made since 2019, reducing polymer consumption/ton by 30%. During 2021, we eliminated one screw press wiper change, saving approximately \$9,000 annually, we reduced polymer consumption/ton by an additional 6.2% and for the first time in many years, we completely emptied our sludge storage tanks.

Challenges for 2022 include improved monitoring of screw press filtrate to track loadings from the dewatering operation and determine the impact of these streams on the treatment system, trialing a new screw press sludge supply pump to improve reliability and minimize maintenance costs,

automating our waste sludge system to better control plant sludge age and ensuring compliance with the new E. coli limit which takes effect on March 31, 2022.



# Industrial Pre-Treatment Program

Each of the 15 permitted Significant Industrial Users (SIU) complete wastewater sampling and laboratory analysis for a specific list of parameters set by the Environmental Protection Agency (EPA) and the Sheboygan Regional WWTP semi-annually. Each Industry must meet their individual permit limits, which are regulated through the facilities pre-treatment program per WDNR and EPA Regulations. In 2021, two industries received a letter of Notice of Non-Compliance (NON). No industries were determined to be in Significant Non-Compliance (SNC).

Each permitted industry received an Annual Site Inspection (ASI) during 2021. There was one Industrial Wastewater Permit reissued in 2021.

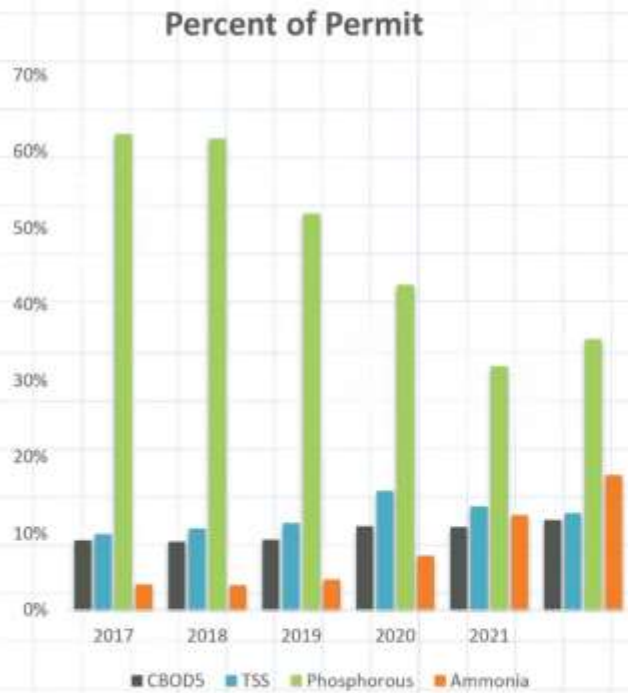


# Laboratory

The on-site laboratory is responsible for the analysis of all conventional pollutants including Total Suspended Solids (TSS), Carbonaceous Biochemical Oxygen Demand (CBOD5), Total Phosphorous, Ammonia, Total Chlorine, pH, and Temperature. There is one primary analyst and two operators who are trained to perform the analysis when the primary analyst is off. Of the conventional pollutants analyzed, only a small number of samples were completed by a contract laboratory. For 2022, the laboratory will be focused on a laboratory audit scheduled for the first quarter, improving our process control data, and stream lining our data in a more organized manner.

As a part of the WI DNR permit the Wastewater Treatment Plant has to abide by certain permitted levels in the final effluent. In 2021, the Sheboygan Regional Facility used the following percentages of permitted levels:

- 11.8 % of the Carbonaceous Biochemical Oxygen
- 12.6 % of the Total Suspended Solids
- 35.5 % of the Total Phosphorous
- 17.6 % of the Ammonia







[www.SheboyganDPW.com](http://www.SheboyganDPW.com)