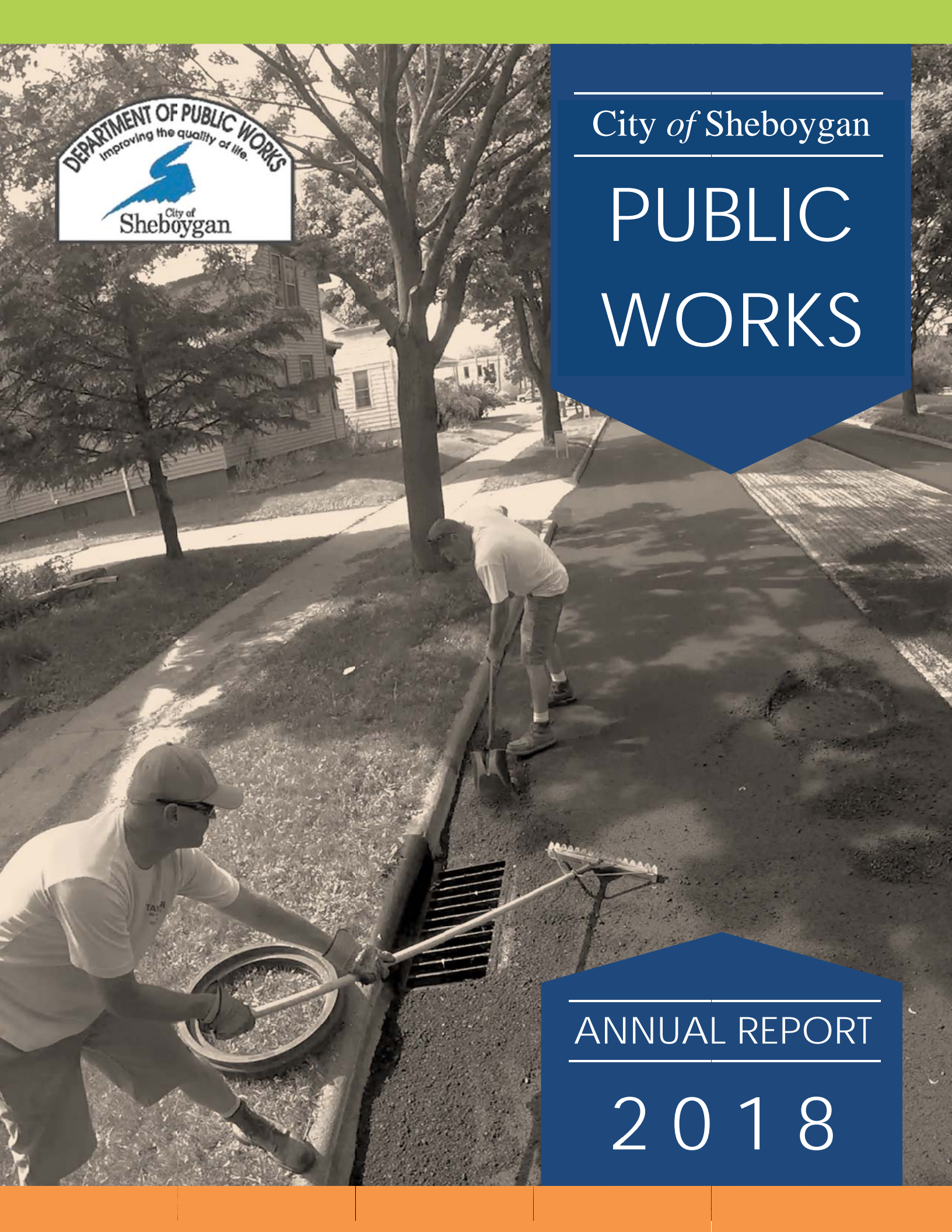




City of Sheboygan

# PUBLIC WORKS



ANNUAL REPORT

2018



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## MESSAGE FROM

# *The Director*

The Department of Public Works is pleased to present this Annual Report for the calendar year 2018. Consistent with the department's mission – improving the quality of life by effectively developing, maintaining, and improving the infrastructure, natural resources and providing community services – the department will use this annual report to communicate the progress and state of the City through the activities accomplished by the Department of Public Works.

The Department has 100 dedicated individuals facilitating the services necessary to accomplish the Department goals and objectives and to meet the community's needs. For decades, the Department of Public Works has improved the efficiencies of its workforce through the addition of skilled workers and implementing technologies and equipment that provide a comparative advantage.

For example, although the City's population has grown only six percent since 1970, the area of the City has expanded by 50 percent, from a total area of 9.64 square miles in 1970 to 15.795 square miles today. Furthermore, the total miles of City streets has grown 39 percent over this same period from a total of 143.5 miles of City streets to over 200 miles of City streets. Lastly, park acreage has doubled to approximately 705 acres from 347 in 1970. All of these additions occurred while the Department's work force was being reduced by 53.7 percent from 216 full-time employees in 1970 to today's 100 full-time employees.

This annual report demonstrates the Department of Public Works commitment to improving the quality of life within Sheboygan. It details the amount of services provided and where the Department is allocating its resources. The report highlights the competing forces within the Department and how the Department responds and adjusts while meeting the objectives set forth in the budget and by the Common Council.



Foremost, this report highlights the employees of the Department of Public Works. With their dedication and commitment to our mission and vision to the City of Sheboygan, many of the accomplishments included in the report would not have been possible. Therefore, the employees are the highlight of this year's annual report and continue to be our most valuable asset.

For this purpose, the Department of Public Works is proud to present the 2018 Annual Report to the Common Council. It is our goal to provide accurate and transparent information to help the Council answer questions from the citizens about public works issues. The Department of Public Works is committed to constant improvement, quality service and the overall betterment of Sheboygan.

A handwritten signature in blue ink that reads "David H. Biebel". The signature is fluid and cursive, written over a white background.

David H. Biebel  
Director of Public Works

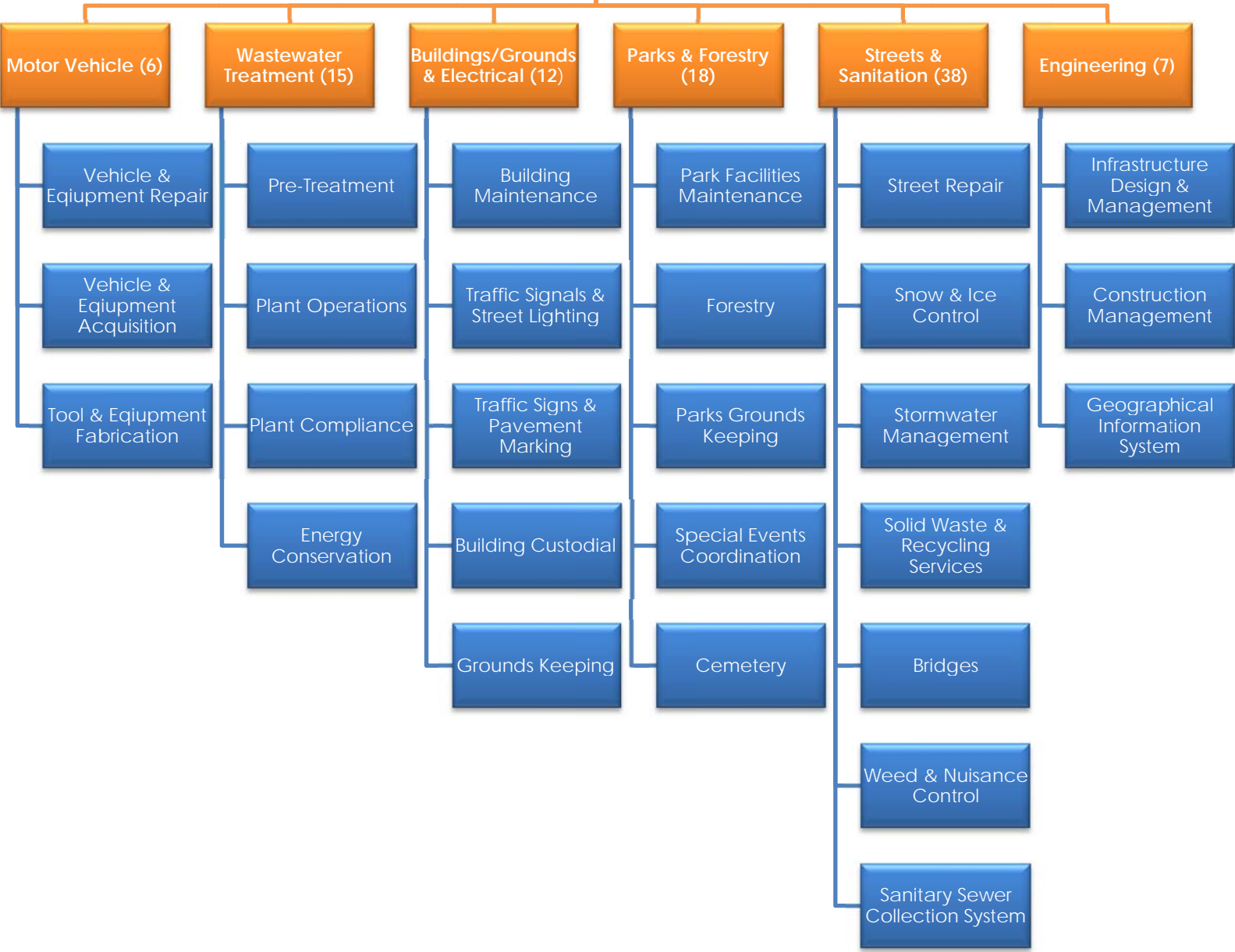
# *Dedication*

enthusiasm Professionalism

*Integrity* RESPECT

# Department of Public Works

## Administration (4)



# 2018 COMMON COUNCIL

Mayor, Mike Vandersteen  
City Administrator, Darrell Hofland  
City Clerk, Meredith DeBruin  
City Attorney, Chuck Adams  
President, Todd Wolf  
Vice-President, Mary Lynne Donohue

Aldersperson District 1 .....	Ronald Rindfleisch
Aldersperson District 2 .....	Todd Wolf
Aldersperson District 3 .....	Mary Lynne Donohue
Aldersperson District 4 .....	Rosemarie Trester
Aldersperson District 5 .....	Markus Savaglio
Aldersperson District 6 .....	Dean Dekker
Aldersperson District 7 .....	Rose Phillips
Aldersperson District 8 .....	Ryan Sorenson
Aldersperson District 9 .....	Trey Mitchell
Aldersperson District 10 .....	Jim Bohren

# 2018 PUBLIC WORKS COMMITTEE

Chairman, Todd Wolf



Vice-Chairman, Ryan Sorenson



Member, Dean Dekker

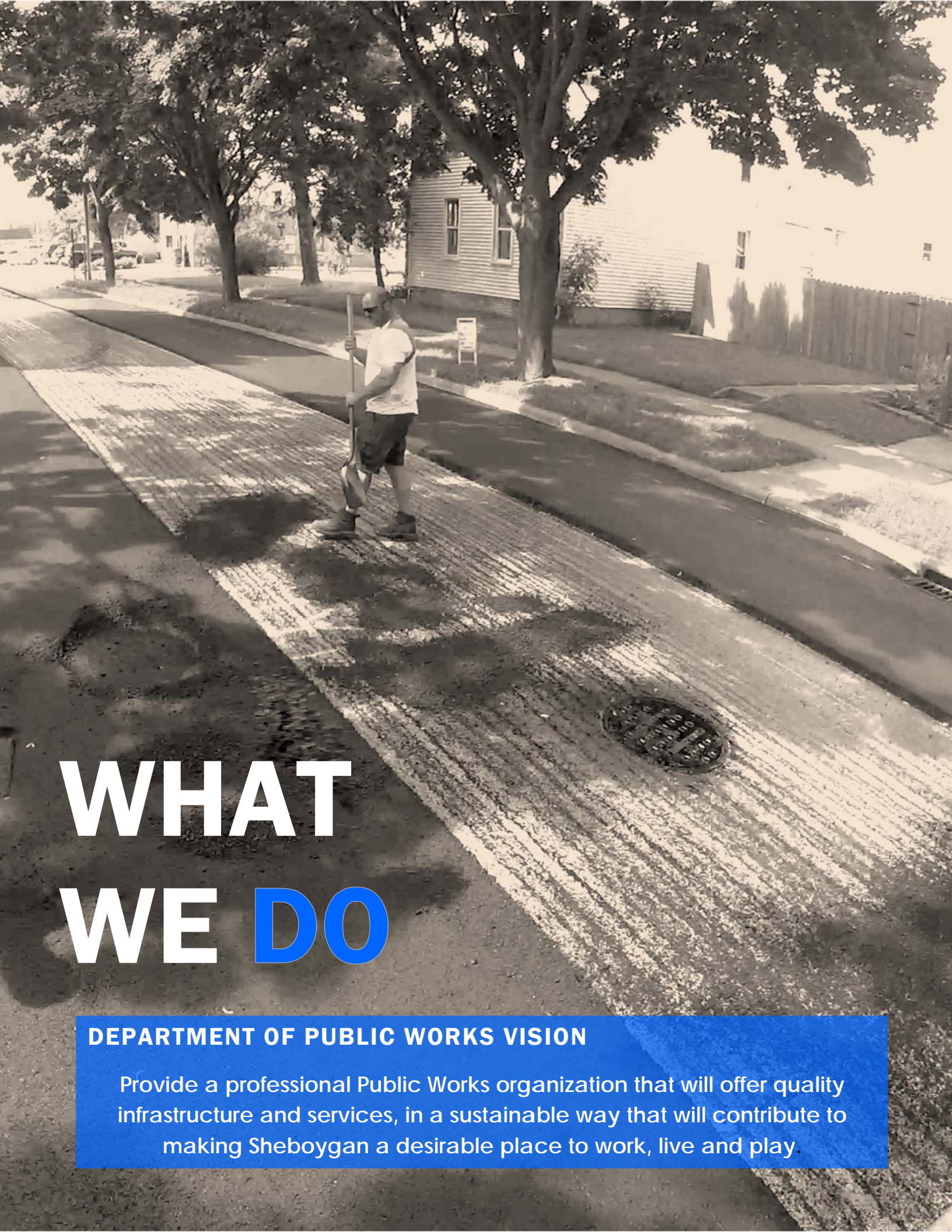


Member, Rose Phillips



Member, Markus Savaglio





# WHAT WE DO

## DEPARTMENT OF PUBLIC WORKS 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.



## CORE FUNCTIONS

The Department of Public Works is comprised of seven divisions: Administration, Engineering, Parks, Forestry & Cemetery, Streets & Sanitation, Facilities & Traffic, Motor Vehicle, and Wastewater. We handle some of the most frequently reported community issues such as traffic signals, potholes, household garbage pick-up, and street trees. Public Works also provides engineering services to the City.

### COMMUNITY OUTREACH

Public Works week occurs annually in May, watch for an open house event hosted at the Municipal Service Building



## GOALS & OBJECTIVES

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.

### 1 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

## 2

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

- Collect and properly dispose, garbage, litter, debris, 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

## 3

### 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, scheduling – prioritization of activities through communication within the organization

# DPW VITAL STATISTICS



**19 BRIDGES**

**10.98**

**MILLION GALLONS  
OF SEWAGE TREATED**

**DAILY**



**36 PARKS**

**30,000**

**SIGNS**



**39**

**SIGNALIZED  
INTERSECTIONS**

**OVER**

**185,000**

**SQUARE FEET OF  
BRIDGE DECKS**

**23,000**

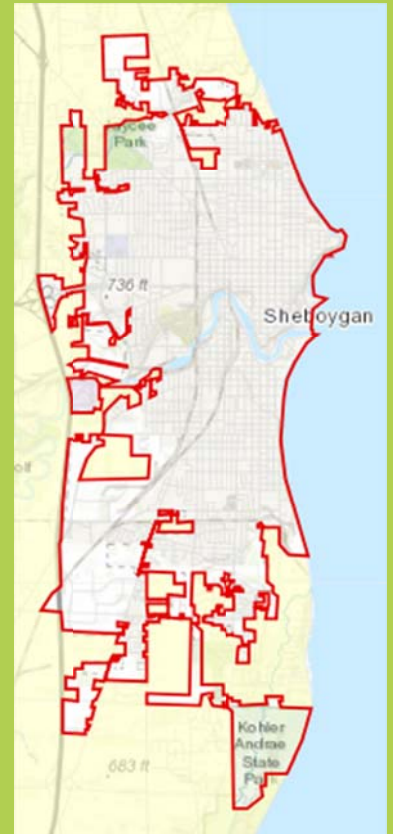
**TREES**

**171 MILES**

**OF** SANITARY  
SEWER

**102.5 MILES**

**OF STORM SEWERS**



**15.795**

**SQUARE MILES  
IN AREA**

**199.7**

**MILES OF  
STREETS**

**4,505**

**LIGHTS**

# ADMINISTRATION

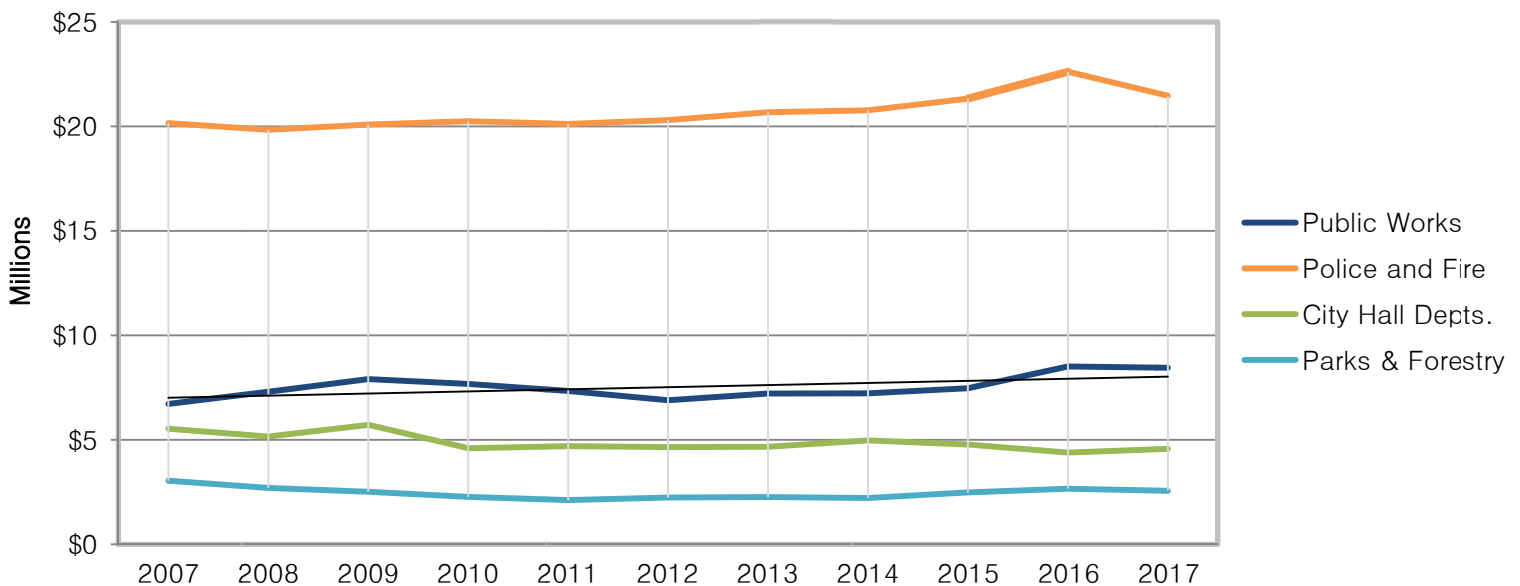
The City of Sheboygan’s Department of Public Works main purpose is to improve the quality of life by effectively developing, maintaining and improving the infrastructure, natural resources, and community services. The administration is charged with the responsibility of developing strategy and ensuring 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 & Forestry budget has remained flat over the long term and well under the growth rates of other City departments as is shown in the chart below:

<b>David H. Biebel</b>	Director of Public Works
<b>Dawn Sokolowski</b>	Business Manager
<b>Heather Burke</b>	Administrative Clerk
<b>Melissa French</b>	Administrative Clerk

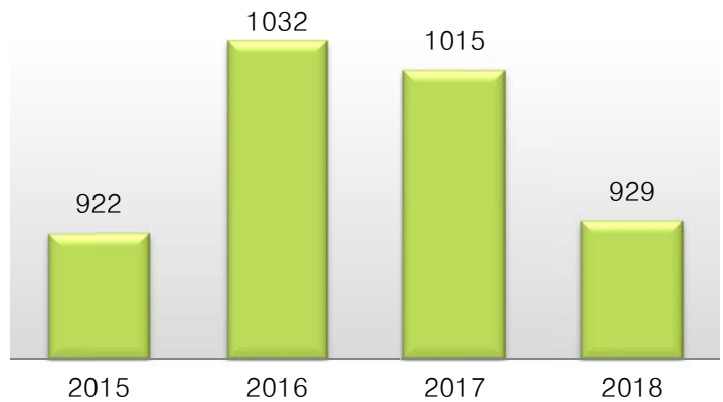


City Budgets

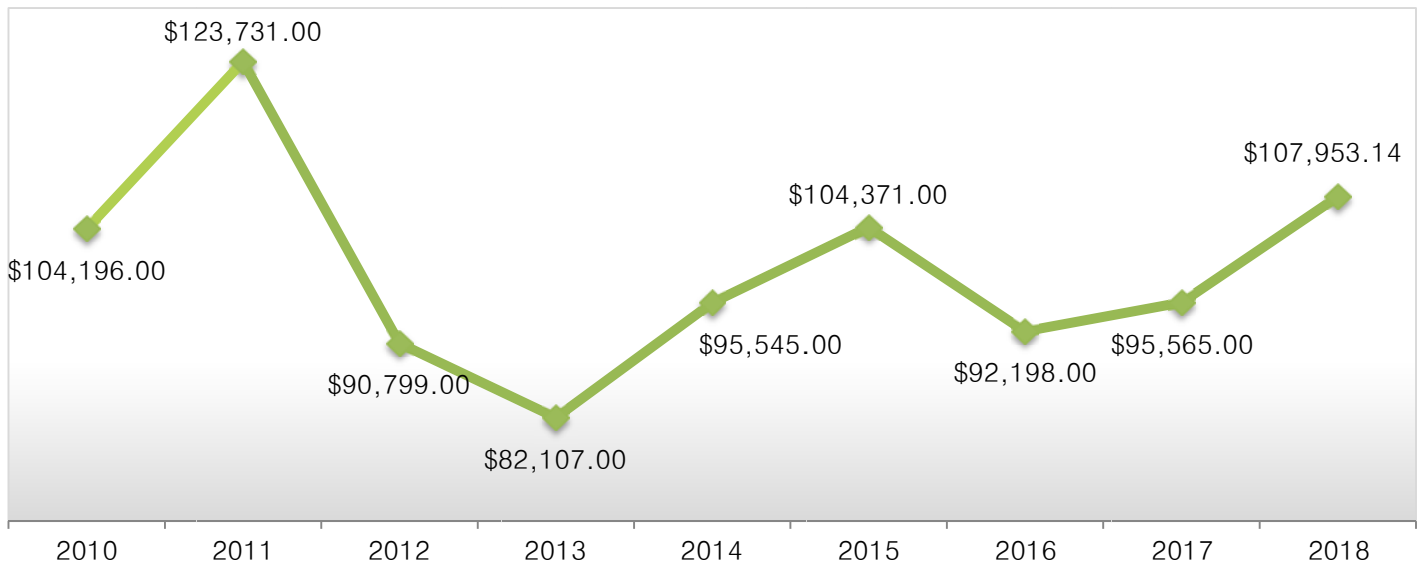


While the Department's budget has remained relatively flat; the Department's workload and demand for services is ever increasing. The operations of the Department are not comparable to a commercial setting in which economic demands determine the amount of labor and material needed. In addition, the Department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

### Annual Park Reservations

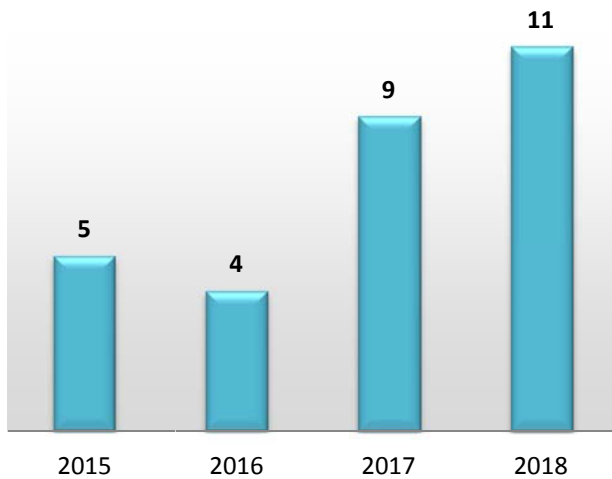


### Annual Park Reservation Revenue



City parks are one of the great assets of the community as shown on the annual parks reservation and annual park reservation revenue graphs. Although the annual reservations are decreasing, the revenue has steadily increased in recent years. This is most likely due to rentals for buildings accounting for sixty-four percent of our rentals for 2018. Building rentals require more attention from park staff versus outdoor open shelters. Most importantly, a visitor's first impressions typically are the quality and cleanliness of our streets and parks. The administration front office staff manages all park reservations and special event applications.

## Driveway Installation Permits



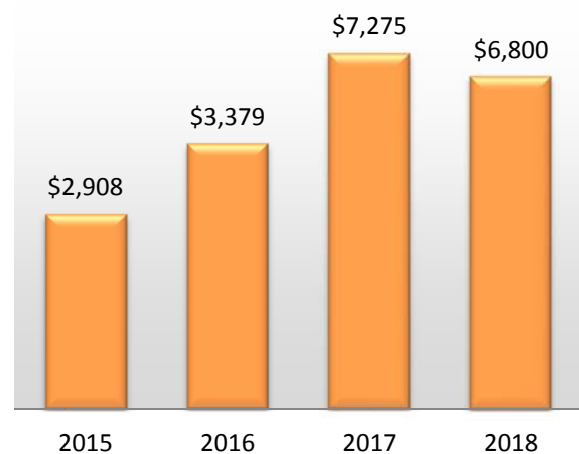
The administration provides support services to all the Divisions within the Department by managing the budget, personnel transactions, customer requests, and public information. The objectives of the administration are to support the necessary Divisions in order for their personnel to effectively concentrate 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 offices. 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.

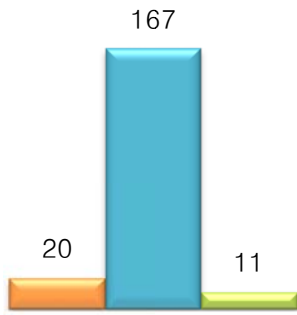
In years past, the Department had seen a decrease in the number of driveway permits issued. There was an increase shortly after the adoption of the new winter parking rules which have been in effect for over a decade and may be the cause of the upturn in permits issued once again, due to the increased 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.

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



## 2018 OSHA RECORDABLE INJURIES



- Number of Injuries
- Work Limitation/Restriction (Days)
- Lost Time (Days off Work)

Worker compensation claims can be a costly part of any business, especially in Public Works, where the nature of work is hazardous and physical. As a result, the administration is serious about protecting employees from 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.



DPW Annual Picnic

Overall, the administration is opening the lines of communication with the citizens of Sheboygan. In 2016, the Department enhanced its use of social media (Nextdoor, Facebook, Twitter, and the City website) by providing real-time updates on road closings, construction detours, snow removal operations, garbage collection schedule changes, and other critical information. In addition, the administration gives public presentations to community groups and organizations on public works projects and programs.



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

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<http://www.sheboyganwi.gov/departments/public-works/>

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**HOURS:**  
 Monday – Friday  
 7:30 a.m. – 4:00 p.m.

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**After Hours Emergency:**  
 920.459.3333

### STAY IN TOUCH



Facebook



Twitter



Nextdoor

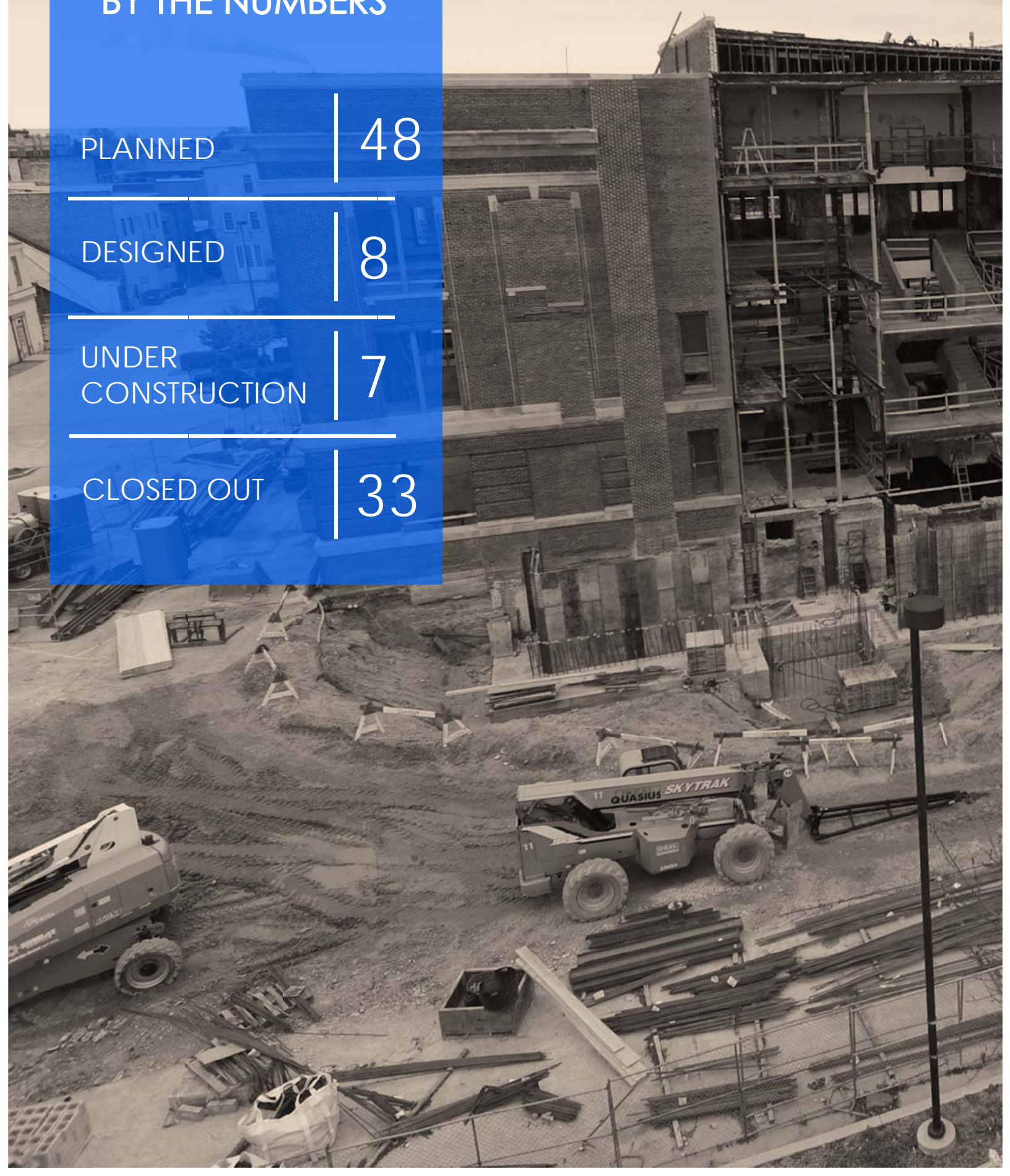
# CAPITAL PROJECTS BY THE NUMBERS

PLANNED | 48

DESIGNED | 8

UNDER  
CONSTRUCTION | 7

CLOSED OUT | 33







# PROJECT HIGHLIGHTS

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- City Hall Renovation Project
- Southpointe Project
- North 3<sup>rd</sup> Street Reconstruction
- North 3<sup>rd</sup> Street Force Main Reconstruction
- Washington Avenue Reconstruction
- Taylor Drive Reconstruction
- Geographical Information Systems (GIS)
- Riverfront Boat Dock Replacement
- Shaw Family Playground (Evergreen Area #2)
- Black Top Hot Patcher & Trailer

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



### City Hall Renovation Project

**Expected Completion:** Summer 2019

**Project Description:** This project creates a safe, functional space for citizens and employees of the City of Sheboygan. There was a desire to preserve the historical nature of City Hall; however significant modifications would need to be made to upgrade the building to make it a functional space for many years to come. In September 2017, the Common Council voted to begin the renovation of City Hall.



### Taylor Drive Reconstruction

**Expected Completion:** Spring 2019

**Project Description:** This project reconstructed portions of the road in advance of the new Meijer store opening. Work included new sidewalk, new signalized entrance to the Meijer store, upgraded the traffic signals at Taylor Avenue and Erie Avenue, and added street lighting.



### Shaw Family Playground

**Expected Completion:** Summer 2019

**Project Description:** This project creates a fully accessible ADA playground in the City. The City of Sheboygan provided property within Evergreen Park and partnership in new restroom facilities. Several businesses and organizations have partnered with the Shaw family to create a safe and accessible environment.

# ENGINEERING

The Engineering Division of the Department of Public Works has five main areas of concentration:

- **Planning and design**
- **Asset management**
- **Surveys, maps, and records**
- **Construction management**
- **Consultant oversight**

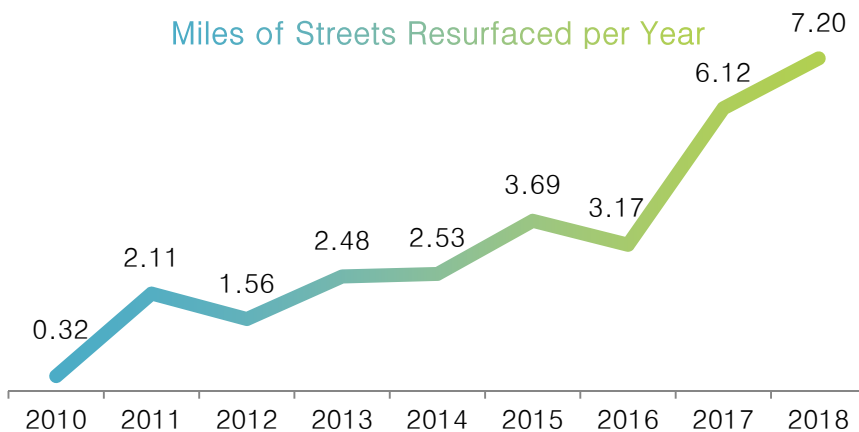
Through its programs and services, the Engineering Division seeks to improve the quality of life within the City by overseeing maintenance of the existing infrastructure and design and oversight of improvement projects. The Engineering Division has a total of eight full time employees with several of 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 \$60.2 million in infrastructure improvements. The annual street resurfacing program provides the majority of street improvements. However, State and Federal funding for connecting highways provides for the major reconstruction projects. In 2019, the City of Sheboygan will have three federally funded reconstruction projects. These projects are North

<b>Ryan Sazama, P.E.</b>	City Engineer
<b>Kevin Jump, P.E.</b>	Civil Engineer/Project Manager
<b>Scott Isaacs, P.E.</b>	Environmental Engineer
<b>Michael Born, P.L.S.</b>	City Surveyor/Engineering Technician
<b>Vic Gatawakas</b>	Senior Engineering Technician
<b>Jordan Sucha</b>	Civil Engineering Technician
<b>Tyler Hill</b>	Engineering Technician
<b>Andrew Bartell</b>	Geographic Information Systems Specialist



Miles of Streets Resurfaced per Year



Avenue (Calumet Drive to North 15th Street), Superior Avenue (North Taylor Drive to North 29th Street) and the Pennsylvania Avenue Bridge for a total dollar amount of \$10.8 million. Furthermore, new subdivision development requires the expansion of streets and sewer systems.

Since 2012, the Division has relined CIPP (cure-in-place-pipe) over 7.40 miles of sanitary sewer and approximately 2.55 miles of storm sewer. In 2018, the Division installed 2.86 miles of sewer linings.



Liner Being Inserted Into Sewer Pipe

## Sewer Lining Program



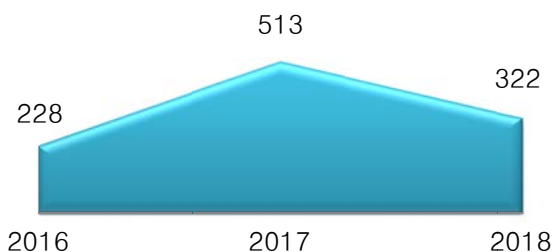
The City of Sheboygan's Pavement Management Program is a strategy that identifies cost-effective methods for preserving the City street network and prioritizes the levels of maintenance along with funding levels in order to improve the quality and extend the life on our existing street network. Pavement Management Systems take complex, large networks and 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 matrixes 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.

**2017 Average  
Pavement Rating**

**6.02 / 10**

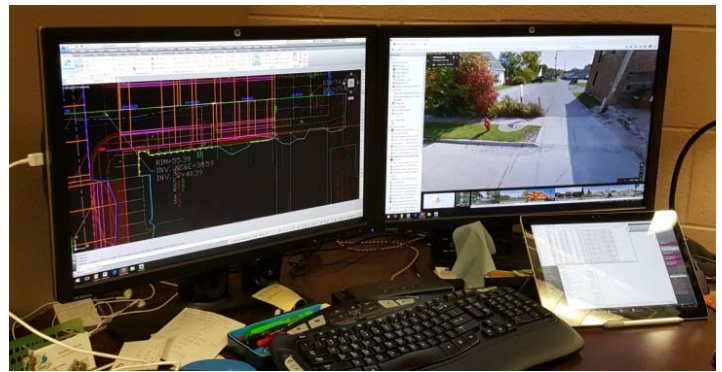
## Permits to Excavate in the Public Right-of-Way



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.

Engineering 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 other governmental and private industry entities. It will be the foundation for all of the infrastructure and data to be



Computer Aided Design Station

captured geographically. The majority of City services, even those outside of Public Works, are geographic in location.

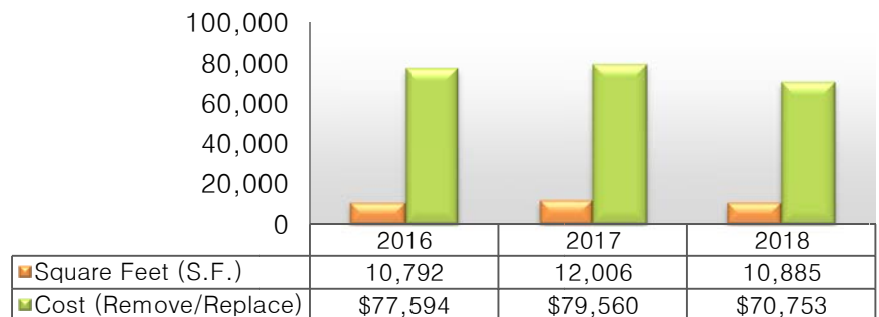
Surveying data is also captured digitally and downloaded into the mapping and design software (CAD) greatly enhancing the accuracy as well as speed to alter designs and review alternative layouts.



Computer Surveying/GPS Equipment

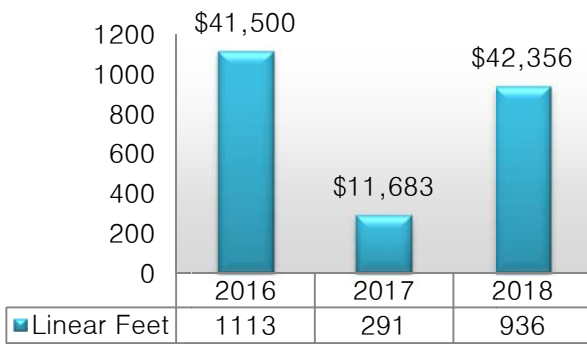
Engineering manages the City Sidewalk Program, which inspects defective sidewalk and orders their replacement. It is the City's responsibility to maintain a safe pedestrian walkway, and failure to do so may result in future liability. Once notified of a defective sidewalk, the property owner has the option to do the work him or herself, 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.

### Sidewalk Repair/Replacement Program



Before (left) and After (right) Sidewalk Replacement

### Mini-Storm Sewer Installed



In addition and over the same time period, the Engineering Division has designed and installed over \$196,650 of mini-storm sewers in the City. Since the flood of 1998, the Division has taken an aggressive approach to solving clear water problems. This program continues to grow; however, the 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.



Mini-Storm Sewer Installation - Backyard



Incorrect Sump Pump Discharge

## GOAL

Provide quality infrastructure that conveys safe, efficient delivery of essential goods and services

# PARKS, FORESTRY & CEMETERY

The Parks, Forestry & Cemetery 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.

Parks, Forestry & Cemetery Goals include:

- 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

<b>Joe Kerlin</b>	Superintendent
<b>Tim Bull</b>	City Forester
<b>Brian Meulbroek</b>	Parks Leadman
<b>Ken Meinnert</b>	Forestry Leadman
<b>John Klemme</b>	Construction & Maintenance Craftsman II
<b>Dan Billmann</b>	Construction & Maintenance Craftsman
<b>Jim Lavey</b>	Cemetery Caretaker
<b>Tom Perl</b>	Tree Trimmer
<b>Scott Plehn</b>	Tree Trimmer
<b>Jason Harrison</b>	Utility Driver
<b>Chad Prisinger</b>	Park Caretaker
<b>Ryan Cyr</b>	Park Caretaker
<b>James Gilliam</b>	Park Caretaker
<b>Mike Johnson</b>	Truck Driver
<b>Rich Beseler</b>	Truck Driver





PARKS CREW



36 Parks  
705 Acres

explore  
enjoy  
water  
relax  
outdoors







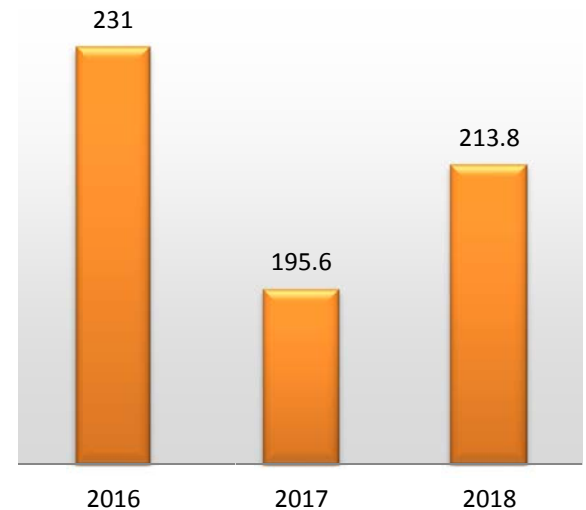
The Division is responsible for maintaining and improving the City park system, which consists of 36 parks, 705 acres, six rentable pavilions, 11 rentable picnic shelters, 34 restrooms, 19 playgrounds, two splash pads, two fish cleaning stations, 12 tennis courts, seven baseball/softball fields, Wildwood Softball Complex, Wildwood Baseball Complex, two miles of public beaches, a new concrete skate park and an archery range. The Division also assists with the many Sheboygan celebrations held throughout the summer season.

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.

Grass cutting and park maintenance dominate the summer season. The grass cutting crews are comprised of seasonal and full-time employees. These crews are responsible mowing and trimming of all parks, street boulevards, and water retention areas.

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. 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.

## Park Garbage in Tons



Park Equipment Used 2018

Event	Park	4' Bench	Straight Tables	Straight Bench	Combo Tables	Mobile Stage	Wood Stage	Old Stage	Grills	Snow Fence	Garbage Barrels	Trailer Chairs	Dance Floor	Bleachers
Brat Days	Kiwanis		19		80	1	1			45	40			
Graduation	Vollrath					1					20	4	1	
Greek Fest	Deland	15	40	20	42	1					30			
Gus Macker	Deland		20		11					2				3
Ice Bowling	Blue Line	16	20			1							1	
July 4th	Lakefront			92	144	1			4		115			
Misc. Permits	All over town	64	209	80	279	7	4		33	50	176	4	7	6
Totals		95	308	192	556	12	5	0	37	97	381	8	9	9

For 2018, the Department scheduled nine major events in the parks:

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

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 improving the quality of life for the citizens of Sheboygan.

Winters for the park crew consist of adding a 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, and grills. The Parks, Forestry, & Cemetery Division also assists the Streets Division on an as-needed basis for snow removal.

Capital Improvements for the year consisted of completion of a new concrete skate park in Kiwanis Park, construction of a new kayak/canoe launch in Kiwanis Park, construction of a new splash pad in Optimist Park, and development of the new Shaw Family Playground in area 2 of Evergreen Park.



Completed Kiwanis Skate Park Grand Opening



Completed Shaw Family Playground at Evergreen Park, Area #2

The Shaw Family Playground in Evergreen Park Area 2 is a partnership with the Sheboygan Park Project, the Sheboygan Jaycees, the City, and several Businesses. The playground is a fully accessible ADA playground. There is also a new parking lot and a shelter that is being constructed and scheduled to be finished in the spring of 2019.

## *Improving the Quality of Life*

Jaycee Quarryview 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 that is home to the Quarry Beach & 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 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.



Another popular City park destination is the Elwood H. May Environmental Park, or more commonly referred to as, “Maywood.” This park is unique in that it remains in a natural state. Its primary focus is environmental education and stewardship. Maywood has six diverse ecosystems, an arboretum, a butterfly and humming bird garden and a fantastic Ecology Center. 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 started a pre-school program. The program offers a hands on nature based learning experience.



Moose Park Adopt-A-Park Kick-off Event



Shoreland 400 Adopt-A-Trail Kick-off Event



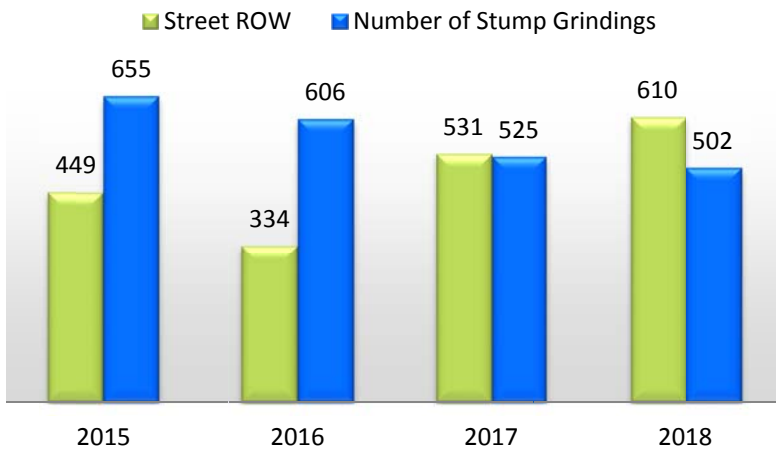
In 2018, the Department of Public Works piloted an Adopt-A-Park and Adopt-A-Trail program for local businesses and community groups. The pilot is doing very well with three successful adoptions completed and inquiries for more. Currently, a section of the Shoreland 400 Trail has been adopted by the Sheboygan Paper Box and Specialty Company, Moose Park has been adopted by the Indiana Corridor Neighborhood Association, and General King Park has been adopted by the King Park Neighborhood Association. The Department worked closely with leaders from the Sheboygan Paper Box and Specialty Company and Indiana Cooridor Neighborhood Association to plan kick-off events to announce their adoptions and is working with the King Park Neighborhood Association for their kick-off event.





# FORESTRY CREW

## Tree & Stump Removals



## GOAL

Recognize that the public lands owned and managed by the City present an opportunity for the City to practice good environmental management and demonstrate sustainable land management practices.



Tim Bull, the City Forester, giving a demonstration of how the Forestry Subdivision treats for the Emerald Ash Borer

The Division has five full-time forestry employees that care for 23,000 street trees and all park trees. During the winter months, an additional three person crew is formed by other Public Works Department workers and aid in the trimming of the street trees.

In 2016, the City 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, economical, and environmental benefits to citizens, businesses, and visitors. Beyond shade and beauty, trees have practical benefits and real monetary value. The purpose of having an urban forest management plan is to ensure that the citizens of City of Sheboygan will enjoy the benefits of

trees through proper arboricultural techniques and management practices. The plan breaks down into two main goals:



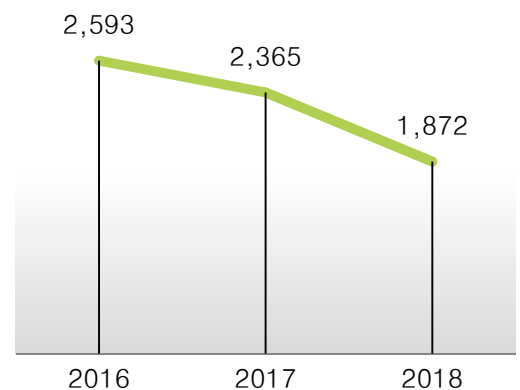
**1 Eliminating high risk situations such as high-risk trees, branches, and the removal and management of EAB infected trees.**

**2 Establish a routine, comprehensive Urban Forestry Program for a healthy forest.**

In 2018, the Division removed 610 trees, ground out 502 stumps, trimmed 1,872 trees, treated 1,252 ash trees, and responded to three major storms that damaged many trees that needed to be removed from the road and sidewalks. The Division also planted 21 trees and contracted the planting of 248 additional trees in the spring of 2019.



## Number of Trees Trimmed



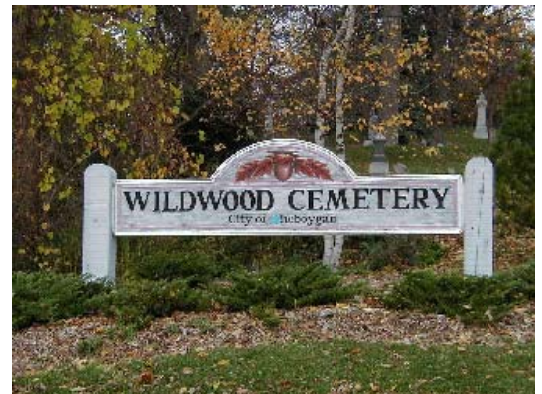


# 40 YEARS of Tree City USA

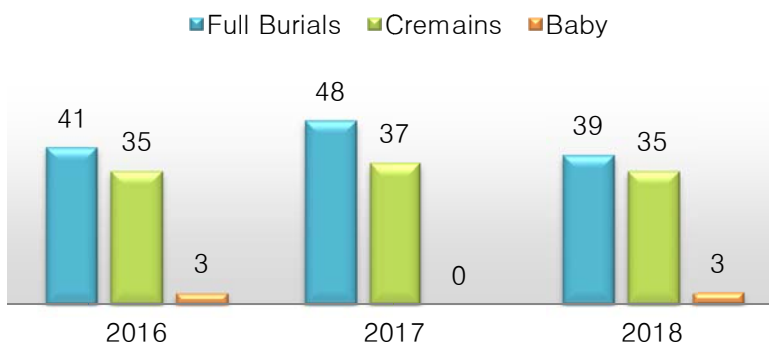
This year the City received its 40th Tree City USA award during its Arbor Day Program in Deland Park. Sheboygan is the longest Tree City USA recipient in the State of Wisconsin. The Wisconsin DNR and the Sheboygan Area Rotary Clubs joined the City in the celebration. The Sheboygan Area Rotary Clubs donated \$14,500 to the City to aid in the replanting of City trees.

## Wildwood 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 cemetery has a dedicated full-time caretaker and office support staff that provides quality death-care services to families in their time of need. The cemetery is supported by the parks and forestry crews and several seasonal employees. Tree care, mowing and trimming account for a tremendous amount of staff time keeping the cemetery looking nice for visiting families.



### Wildwood Cemetery Burials



# STREETS & SANITATION

The Streets & Sanitation Division has 38 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 maintenance for the Division includes

- Street excavation and repairs
- Tarring or crack filling
- Pothole repair
- Asphaltting and concrete work
- Street sweeping
- Snow and ice removal
- Barricading for City celebrations/events

Daily sanitation maintenance for the Division includes

- Garbage and recycling program
- Residential drop-off site
- Sewer maintenance and construction



<b>Jason Blasiola</b>	Superintendent
<b>David Groves</b>	Supervisor of Operations
<b>Scotty Buboltz</b>	Leadman
<b>Brandon Munnik</b>	Leadman
<b>Bruce Matzdorf</b>	Leadman
<b>Chad Kuehn</b>	Maintenance Worker III
<b>Nick Binsfeld</b>	Maintenance Worker IV
<b>Ben Mohar</b>	Maintenance Worker IV
<b>Kevin Prisinger</b>	Maintenance Worker IV
<b>Mark Wilhelm</b>	Maintenance Worker IV
<b>Chris Anderson</b>	Maintenance Worker III
<b>Mark Kuhfuss</b>	Maintenance Worker III
<b>John Burkard</b>	Maintenance Worker III
<b>Adam Gilson</b>	Maintenance Worker III
<b>Travis Hill</b>	Maintenance Worker III
<b>Gene Kunstman</b>	Maintenance Worker III
<b>James McKenzie</b>	Maintenance Worker III
<b>Mark Kiser</b>	Maintenance Worker III
<b>Mark Polich</b>	Maintenance Worker III
<b>Thomas Ross</b>	Maintenance Worker III
<b>Bill DeAmico</b>	Maintenance Worker III
<b>Tim Allee</b>	Maintenance Worker II
<b>Mike Bender</b>	Maintenance Worker II
<b>John Bridges</b>	Maintenance Worker II
<b>Jason Brill</b>	Maintenance Worker II
<b>Jim Brom</b>	Maintenance Worker II
<b>Chad Jones</b>	Maintenance Worker II
<b>Travis Larson</b>	Maintenance Worker II
<b>Robert McNitt</b>	Maintenance Worker II
<b>Matt Yancey</b>	Maintenance Worker II
<b>Nate Schanno</b>	Maintenance Worker II
<b>Brian Schmitt</b>	Maintenance Worker II

Joel Brunnbauer	Maintenance Worker I
Kyle Thomas	Maintenance Worker I
Chris Dekker	Maintenance Worker I
Adam Fryman	Maintenance Worker I
Mike Yank	Maintenance Worker I
James Michalesko	Maintenance Worker I

# Teamwork

Accountability **innovation**

*Service* Fiscal **Responsibility**

**RESPECT**



Demonstrating the Sewer Camera Truck on Public Works Day

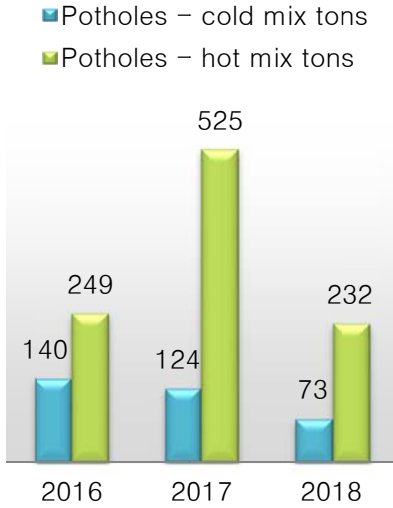


**STREET MAINTENANCE CREW**



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

## Potholes Filled



In 2005, the budget for street maintenance was \$1.35 million. In 2017, the budget was \$1.41 million. The Division performs street repairs as well as repairs from contractor's utility excavations within the street right-of-way.

The Streets Division has made a concentrated effort to fill pot holes using hot mix asphalt during the construction 2018 season. By using hot mix it makes a better, longer lasting repair. As shown in the graph, the DPW placed 232 tons of hot mix asphalt in 2018 as compared to 525 tons in 2017. The DPW's goal is to respond to pothole requests within two business days. During 2018, the Department's response rate averaged 1.8 days.

During the winter months when hot mix is unavailable, cold mix asphalt is the only alternative. Cold mix asphalt does not adhere to the road surface and will eventually come loose. The Division makes every effort to revisit these areas and install hot mix during the summer months.

The Division is using more asphalt with an asphalt paver. The Water Utility and Wisconsin Public Service (gas) are performing their own street repairs as a result of their work. This work 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 important repairs and maximize the effectiveness of street repairs.

## Yards of Concrete Installed and Cost



Concrete Crew

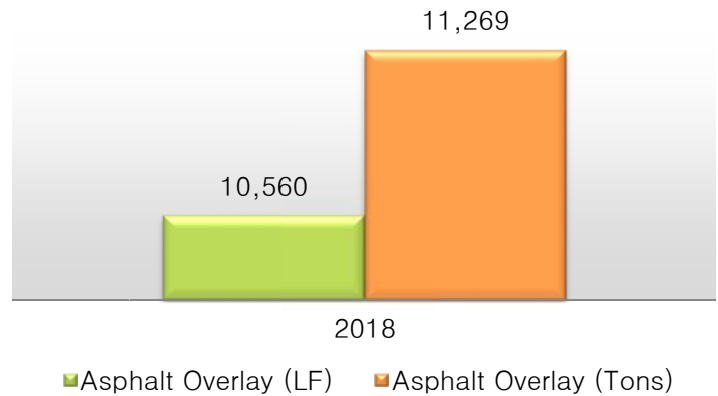
Asphalt is placed on streets with blacktop overlays. Furthermore, streets are resurfaced with asphalt when the pavement becomes deteriorated. In 2017, the DPW took delivery of new asphalt paver. As a result, the Division has had a large increase in the amount of tons used. The

Streets and Sanitation Division has started working with the Engineering Division to complete Capital Projects. This year the DPW placed the final asphalt overlay on North Evans Street, National Avenue, Winter Court, Zimbal Court, South 16th Street, Nevada Court, 13th Street and Woodview Avenue, Mill Road, Colorado Court, Mehrtens Street, Heller Avenue, South 14th Street, Georgia Avenue, Union Avenue, South 13th Street, and Sauk Trail. The DPW placed 11,269 tons of asphalt with the paver and overlaid 10,560 linear feet of asphalt in 2018.



Asphalt Paver

### Asphalt Placed by City DPW Crews



The DPW purchases the majority of the asphalt that we use from Sheboygan County Highway Department. The end result lowered our overall cost per ton.

2018 Cost of Asphalt per ton:  
**\$32.80**

Street Right-of-Way (ROW) excavations occur when contractors need to dig within the street ROW to repair, replace or install utilities. It is important for the Department to regulate this activity to ensure protection of the street and underground utilities. In efforts to maintain the integrity of the street network and prevent disruption of traffic and public services, careful coordination is required by the DPW.

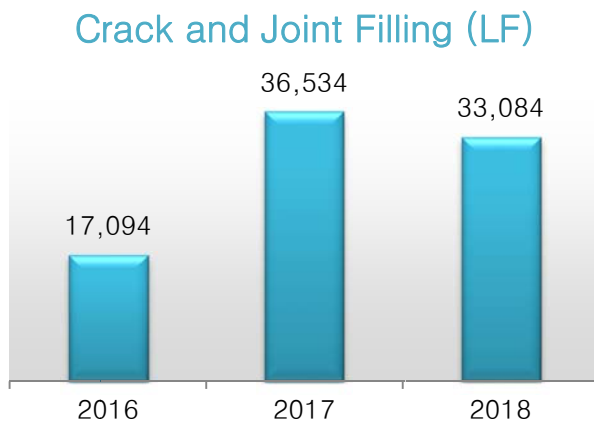


Street Excavation Patch

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. In efforts to work more efficiently, the Division has shifted this work back to the contractor's or utilities performing street ROW excavations. 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. In addition, the gas utility has systematically upgraded their infrastructure.

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 time periods. It is imperative to fill cracks to prevent water from penetrating into the pavement, which will cause further deterioration. This program started in 1985 and has been very successful. In 2018, DPW cracked filled 33,084 linear feet. As the Division starts to overlay more streets, the City will continue to see increases in the amount linear feet cracked filled yearly.

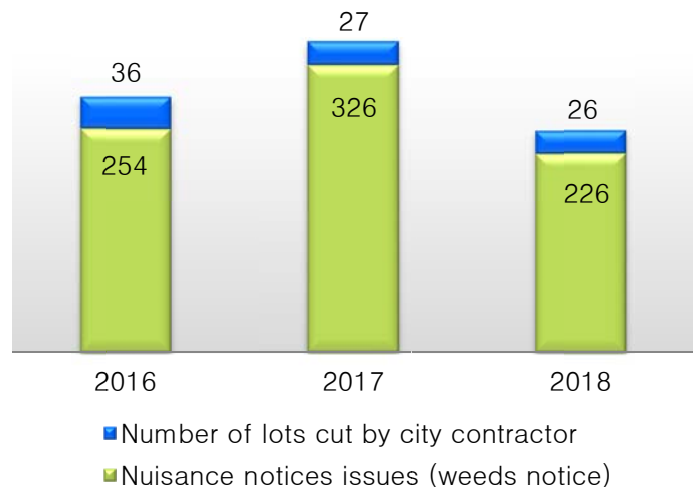


Street Excavation Patch

The Streets 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 then notify the City's contractor to proceed with cutting 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 Complaints

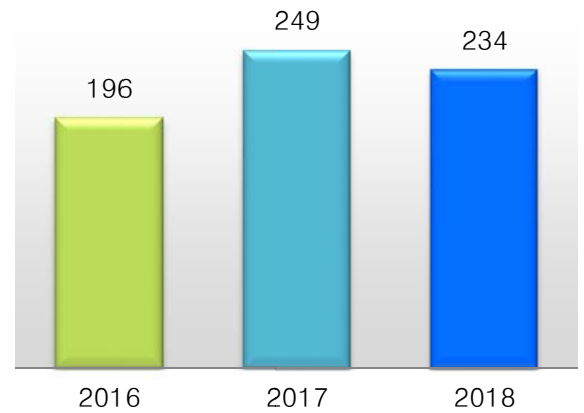


## Bridge Maintenance

Bridge maintenance is another major function under the Street and Sanitation Division. Maintenance includes seal coating the bridges biannually. The City has 19 bridges with over 185,000 square feet of bridge decking. The 8th Street Bridge over the Sheboygan River is the most expensive bridge 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 are inspected biannually by a certified bridge inspector, whom the Division has contracted with the County.

## Bridge Openings



8<sup>th</sup> Street Bridge Controls



8<sup>th</sup> Street Bridge being inspected

## Snow & Ice Control

Snow and ice control is one of the most important and visible activities the 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 up to three days

prior to 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 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 is able to treat up to 6.6 miles.

In addition to anti-icing, DPW salt and plow trucks have the capability to 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



Salt Brine Treated Road

30%. By pre-wetting the salt with brine prior to being applied to street, it is activated and starts working when it comes in contact with road. Whereas 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 24 snow events a year that required the DPW to respond. In 2018, the City of Sheboygan saw 15 snow events for a total 47.5 inches of snow. The DPW used 2,925 tons of salt in 2018.

## 15 SNOW EVENTS

The City saw 15 snow events for a total of **47.5** inches of snow. The DPW used **2,925** tons of salt in 2018.

## Winter Snow Operations

Year	EVENT #	EVENT DURATION (HRS)	EVENT PRECIPITATION (INCHES)	TOTAL MAN HOURS	LABOR COST (AVG)	SALT (TONS)	SALT COST (TONS)
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

## Sanitary & Storm Sewer Construction

In 2018, the Streets & Sanitation Division crews worked ahead and performed the majority of underground repairs prior to the paving crew overlaying the streets.

During the 2018 construction season, the DPW replaced 34 sanitary manholes. The Division uses precast concrete manholes as replacements. Often times, they are replacing cream city brick manholes that were built by hand in the late 1800's. Using precast structures makes for faster and easier repairs, limiting the amount of time that our employees are working in an excavation. Precast structures also limit the amount of infiltration from ground and surface water.



Preparing to Install a new Sanitary Manhole



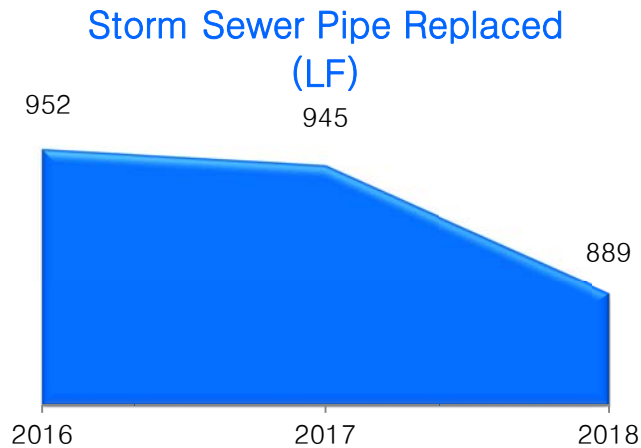
Precast Manhole with Rubber Boot

Along with replacing sanitary manholes, crews also replaced catch basins and storm water manholes. Replacing the entire manhole 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 manholes constructed with block, brick or a combination thereof are easily infiltrated by groundwater.

## Sanitary & Storm Sewer Replacements



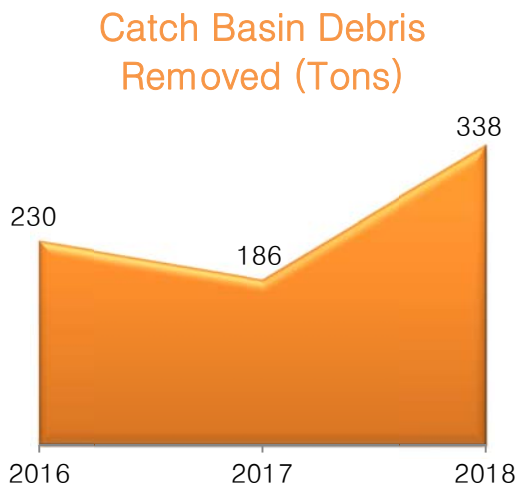
Whenever possible, crews try to increase the size of the pipe when replacing catch basin leads. Unfortunately, this is not always possible due to the fact that other buried utilities may be in conflict with the storm sewer pipe. In 2018, the DPW replaced 22 catch basins, 11 storm manholes and over 889 linear feet of storm sewer pipe.



Storm Drain (Catch Basin) Installation

## 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's) to ensure water quality. Two major BMP's are street sweeping and catch basin cleaning. In 2000, the Streets Division started to systematically clean catch basins. Prior to 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 2018, the DPW removed over 338 tons of debris from the catch basins.



Sewer Whirlwind Catch Basin Cleaning Truck



Catch Basin Cleaning, Before (Left) and After (Right)

## Street Sweeping

Beginning in 2000, the Division restructured some of the street sweeping routes to comply with the WDNR's storm water permit requirements. Overall, the amount of tonnages collected as part of the street-sweeping program has been fairly consistent with a slight downward trend. 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 was 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 2018, the Department swept over 5,000 miles of curb line and removed 723 tons of debris from the City streets.

### STREET CLEANING

In 2018, the street sweepers removed **723.2** tons of debris and swept **5,069** curb miles.





## Leaf Collection

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

In 2015, DPW collected 1,842 tons of leaves, 1,793 tons of leaves in 2016, 1,303 tons of leaves in 2017, and 1,734 tons of leaves in 2018.

### Leaf Collection Tons



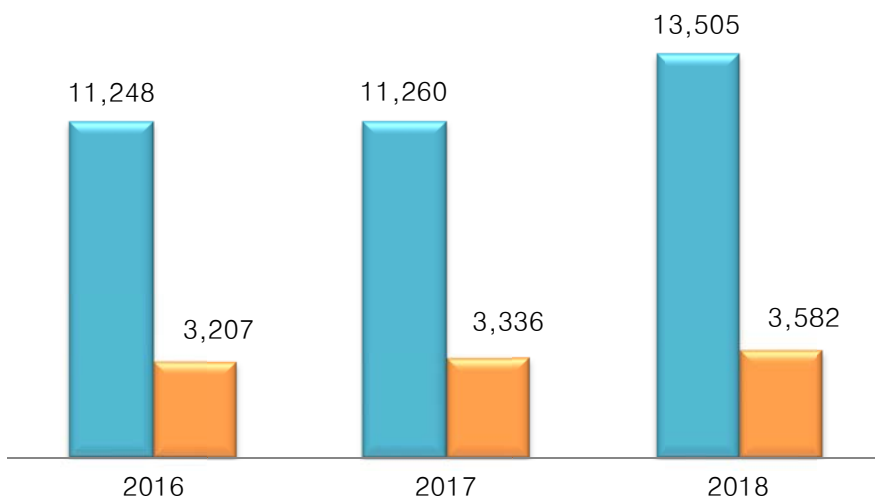
Leaf Collection Special Vacuum Trailer





### Refuse/Recycling Curbside Collection

■ Garbage collected (tons)   ■ Recycling collected (tons)



**MATERIAL  
RECOVERY RATE**

**27%**



## *Garbage & Recycling*



The Sanitation Division provides curbside pick-up of garbage and recyclables for residential units of four or less. Every week the eight sanitation operators make approximately 18,000 stops or pick-ups. In 2018, the DPW collected 13,505 tons of garbage and 3,582 tons of recyclables.

The Division uses split rear packers for the collection of both garbage and recyclables without commingling the material. This allows the Division to collect both materials with one vehicle.

The Department and the citizens of Sheboygan believe the City should avoid manual collection and move to a cart based system. In 2018, the Division began a study to determine the feasibility of the conversion to an automated collection system.

## *Residential Recycling Center*

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 following page is a summary of the utilization of the drop-off site. 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.

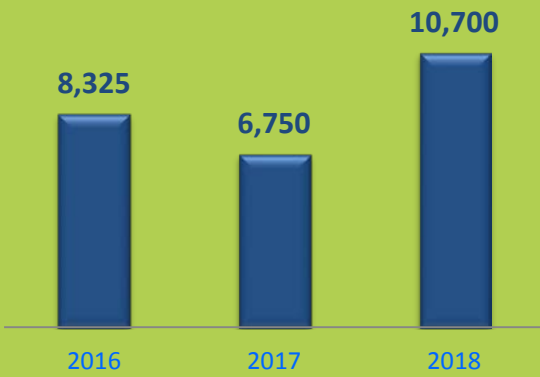


# DPW RECYCLING CENTER STATISTICS



OIL COLLECTION TANKS

## USED MOTOR OIL COLLECTED



## SCRAP METAL TONS



## 2,830 TONS OF YARD WASTE MANAGED IN 2018



# \$17,890

## DOLLARS SPENT ON BRANCH GRINDING



## USED TIRES COLLECTED



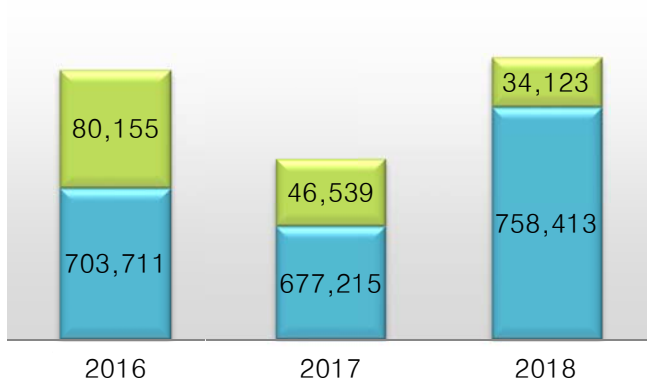
This Division performs sanitary sewer repairs through an interdepartmental budget from the Wastewater Treatment Plant. These expenses are charged against the sewer rates. The repairs are prioritized with any street resurfacing or reconstruction.

Sewer “jetting” is performed with a high-pressure water hose and is jetted through the sewer pipe to clean the inside of the pipe. Sewers become restricted with debris build-up such as leaves, twigs, sand, and gravel in storm sewers whereas; 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 numbers 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, prior to any street resurfacing or reconstruction the sewers are inspected to determine whether or not 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. In addition, to maintain high standards, new sewers are inspected to verify appropriate construction practices.

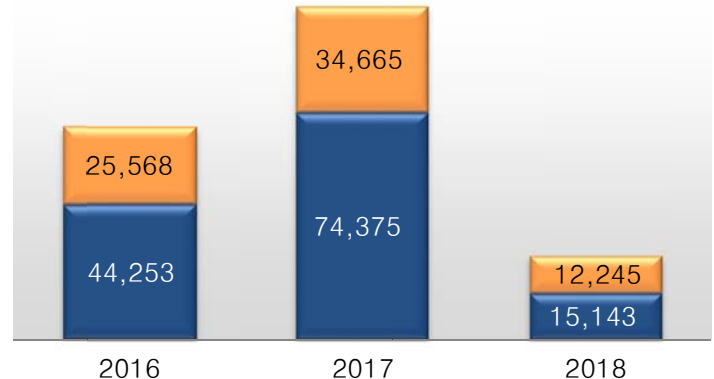
## Sanitary Sewer Cleaning

- Sanitary sewer televising footages (LF)
- Sanitary sewer jetting footages (LF)



## Storm Sewer Cleaning

- Storm sewer televising footages (LF)
- Storm sewer jetting footages (LF)

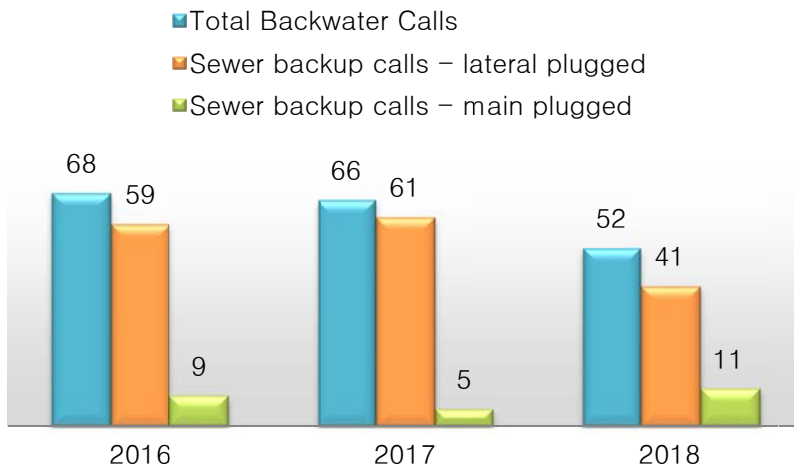


Backwaters occur when sewage backs-up into a residence or business. There are numerous reasons why a backwater may occur. Unfortunately, the majority of backwaters are result of the property owner flushing or dumping inappropriate materials into the drains. The end result is a

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.

In 2018, 11 backwaters were discovered in sewer mains. Seven of the incidents were caused due to one sewer that failed.

## Sanitary Sewer Backup Response



Potential problems are removed before they can cause a backwater. In 2018, 758,746 linear feet of sewer pipe was jetted, and 34,123 linear feet were televised.

In an effort 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 TV inspections. Every entry must have a permit that documents confined space entry. Furthermore, two persons must be on-site during the entry for safety.

Manhole entries are performed during inspections, cleaning

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 space. The City of Sheboygan has 4,852 sanitary sewer manholes and approximately 3,202 storm sewer manholes.

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



Debris in a Sanitary Sewer



Sewer TV Crew

# FACILITIES & TRAFFIC

The Facilities & Traffic Division consists of 12 full time employees, which are responsible for maintaining the City's building infrastructure system including the Emergency Alert System also known as the Civil Defense Warning System. The staff is responsible for the overall preventative maintenance and repair of the heating, and ventilating systems, plumbing system, electrical equipment, and also provides custodial services for City Hall and the Municipal Service Building. This staff is also instrumental in reducing City costs by performing numerous services for all City departments to including City Hall, Municipal Service Building, Transit, Police Department, Senior Center, and five Fire Departments.


<b>Michael Willmas</b>	Superintendent
<b>Scott Tetschlag</b>	Leadman
<b>Robert Hayon</b>	Maintenance Worker V
<b>Allen Fleisner</b>	Maintenance Worker V
<b>Christopher Peterson</b>	Maintenance Worker III
<b>Allen Keitel</b>	Maintenance Worker III
<b>David Smith</b>	Maintenance Worker III
<b>James Herschleb</b>	Maintenance Worker III
<b>Juan Garcia</b>	Maintenance Worker II
<b>Tyson Pitsch</b>	Maintenance Worker II
<b>Travis Fintelmann</b>	Maintenance Worker II
<b>Steven Kuchinski</b>	Maintenance Worker I



In 2018, the Facilities & Traffic Division completed a renovation of the lead person room, supervision offices, and conference room at the Municipal Service Building, upgraded the service at Kiwanis Park to 400 amps to better accommodate seasonal festivals, and upgraded 44 exterior canopy lights at the Sheboygan Transit Transfer Station to energy efficient LED lighting. This will result in annual energy savings will be \$869.94. The Division also updated and installed new electrical and LED lighting to the Harbor Center Marina office and store, entered into contract with Quasius Construction Inc. for the renovation of Sheboygan City Hall, updated and prepped the old Social Security Building and Sheboygan County Highway Department to accommodate City Hall employees during the City Hall renovation process, relocated 51 City Hall employees and all office equipment to two different facilities and entered into contract with Flotation Docking Systems for the installation of new boat docks on the west side of the Sheboygan River, which completes a two year process in updating the boat docking system.



Updated River Boat Docks

**SouthPointe**  
ENTERPRISE CAMPUS

[bizsheboygan.com](http://bizsheboygan.com)

For Development Inquiries contact  
the City of Sheboygan at:  
[development@sheboyganwi.gov](mailto:development@sheboyganwi.gov)  
920.459.3377

SouthPointe Enterprise Sign



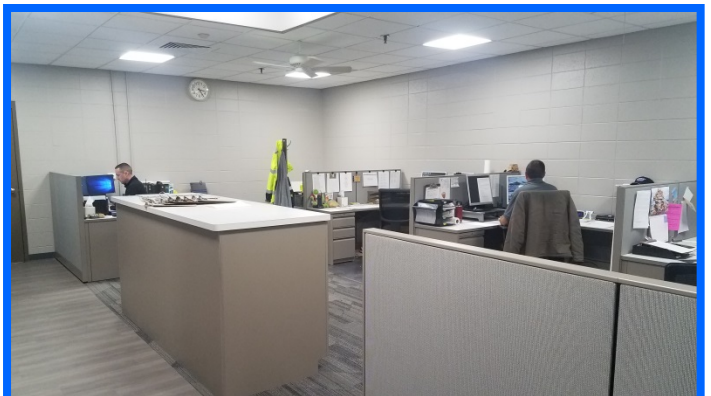
Relocating City Hall



LED Upgrade at the Sheboygan Transit Transfer Station



Basement Renovation in Progress at City Hall



Renovated DPW Lead Person Room





**FACILITIES & MAINTENANCE CREW**



**GOAL**

Preserve and maintain City buildings and/or facilities in a manner that provides a safe environment for the facilities' functions and occupants. Strive to reduce facility depreciation, equipment and structural failures through preventative maintenance programs.



**SIGN CREW**

# 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 two: Signs and Paint and Electrical both working in conjunction with each other to keep our roadways safe to travel.

This Division is also responsible for installing, removing, and maintaining all festive decorations throughout the City of Sheboygan.

# Signs & Paint

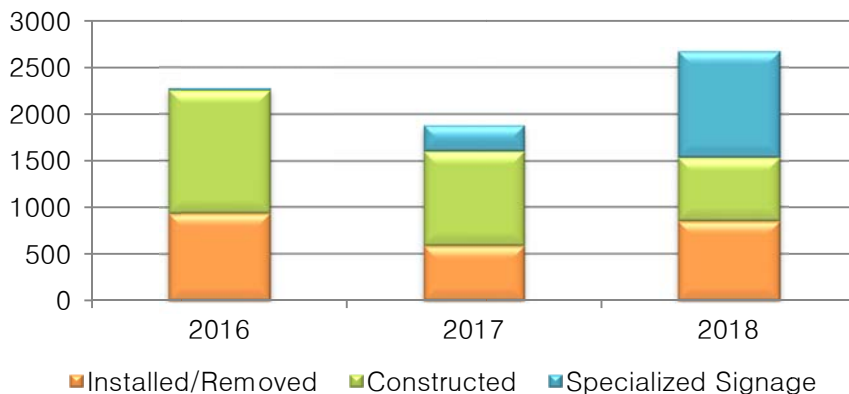
The Signs and Paint Subdivision, which consists of four full time employees, is responsible for all City street signs and painted traffic markings; such as, center lines, stop bars, crosswalks, and turn arrows.

The City of Sheboygan has approximately 30,000 signs, ranging from stop signs, street name signs, speed limit signs, no parking signs, and custom signs. All 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 Subdivision fabricates signs for many departments city-wide including the Mayor's Office, Fire and Police, Maywood, Parks, Wastewater Treatment Plant, Motor Vehicle Division, and other outside agencies. The Subdivision also works closely with Shoreline Metro in supplying them with custom signage along with installing and replacing parking meters.



Sign Design & Fabrication

## Signs





8' X 16' Billboard created for the SouthPointe Enterprise Project

The Signs and Paint Subdivision maintains 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 2018 the Subdivision line stripped a total of 76.6 miles of white and yellow paint which equates to 1,677 gallons of paint in the process. To get the reflectivity of the centerlines 11,619 pounds of glass beads were added in the painting procedure.

Notable projects for 2018 include working with the Neighborhood Revitalization Group to fabricate and install signage for the "Near North Neighbors" project, "Adopt-a-Park" and "Adopt-a-Trail" signage was designed, fabricated, and installed by this Subdivision, new signage and billboard for South Pointe Enterprise Campus, was designed, fabricated, and installed, groundbreaking sign designed and fabricated for the City Hall Renovation project.



Street Markings

## *Electrical*

The Electrical Subdivision 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.

This Subdivision installs, repairs, and maintains 39 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 street lights, 505 pathway lights, parking lot lights, and 1,380 lights in our park system. The Subdivision is also tasked with the design and layout of newly installed lighting throughout the City.

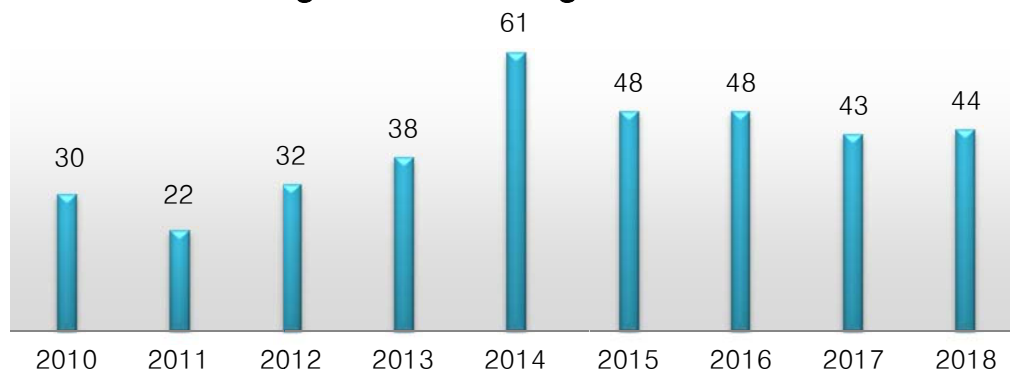
The year 2016 saw the most comprehensive preventive maintenance done in over 10 years on the 39 signalized intersections we are responsible for. Over \$30,000 in materials went into completing this job. For example, the Electricians replaced 379 12" LED traffic lamps which costed approximately \$13,265; the majority of the new LED's are replacing incandescent lamps which consume nearly 10 times more power than the energy efficient LED's.

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

Electricians also 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 has varied from \$1,000 to over \$50,000 per incident. Almost 100% of the repairs are completed by the Department of Public Works.



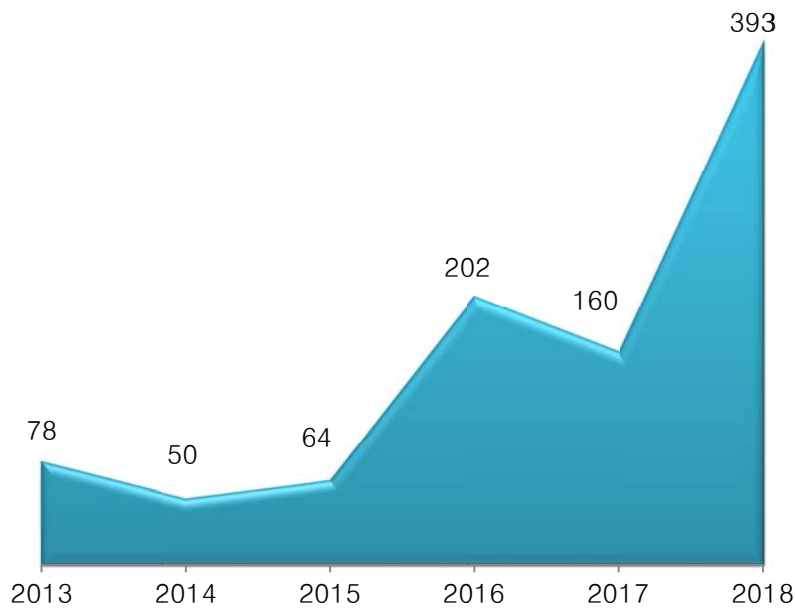
Traffic Signal & Street Light Knockdowns



As a part of a five-year Capital Improvement Project, the Division updated or installed 64 new LED Lumec light poles on 8<sup>th</sup> Street in 2018. Once completed, the project will replace 264 Sternberg light poles to energy efficient Lumec light poles with an annual energy savings of \$7,195.

The Division also retro-fit 70 Phillips-Gardco street light fixtures to energy efficient LED's which will result in an annual energy savings will be \$3,778.

## LED Street Lighting Conversion



Adding Energy Efficient LED Lighting



# MOTOR VEHICLE

The Motor Vehicle Division is responsible for maintaining the Department's fleet of equipment. This Division is established as an enterprise account 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.

In 2018, the Motor Vehicle Division implemented a 5-S methodology. The goal of the methodology is to create a workplace that is clean, uncluttered, safe and well organized. The Division embraced the goals and was able to make a significant impact on their work environment. They eliminated any garbage and clutter and discussed what items were being used infrequently and could be eliminated. They also relocated several workstations and equipment to create a better work flow. Now, each member of the team is responsible to maintain the workplace on a daily basis; for example, each piece of equipment has a specific location to be returned to, and the work place is wiped clean.

<b>Rick Ney</b>	Supervisor of Operations
<b>Dennis Klumb</b>	Certified Mechanic
<b>Max Zschetsche</b>	Certified Mechanic
<b>Karl Leissring</b>	Certified Mechanic
<b>Shane Piel</b>	Certified Mechanic
<b>Scott Hinz</b>	Service Mechanic



Before (left) and After (right) 5S Initiative



## Motor Vehicle Yearly Comparison

	Year	2014	2015	2016	2017	2018
Total Pieces of Equipment		393	406	366	387	396
Gallons Diesel Fuel		95,200	94,500	92,500	78,496	85,210
Gallons Gasoline		23,766	23,859	25,348	25,734	26,203
Gallons Motor Oil		1,297	924	1,035	814	856
Gallons Hydraulic Oil		703	351	1,189	515	528
Snow Plow Trucks		28	25	27	27	27
Snow Plow Blades		60	54	58	58	58
Repair Orders Processed		1,398	1,448	1,384	1,271	1,099

# WASTEWATER TREATMENT

The Sheboygan Regional 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.

**Mission: To protect public health and the environment by providing reliable and cost efficient wastewater collection and treatment services.**

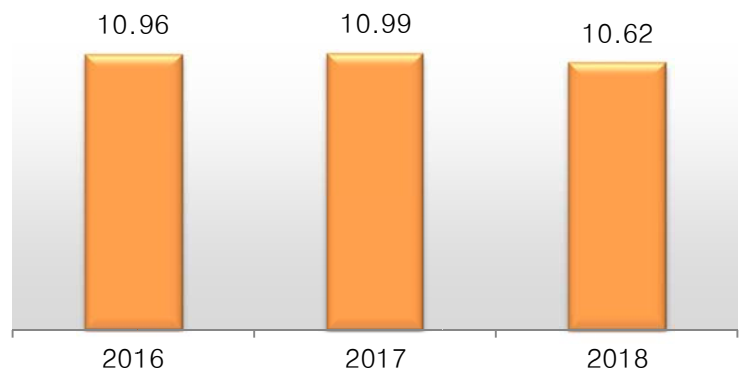
Goals:

- Meet all compliance and reporting obligations for wastewater, air emissions, and biosolids 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

<b>Steve Jossart</b>	Superintendent
<b>Mark Wittstock</b>	Pretreatment Supervisor
<b>Robert Butcher</b>	Maintenance Supervisor
<b>Wendy Gorges</b>	Administrative Assistant
<b>Frederick Meifert</b>	Process Systems & Operations Coordinator
<b>Brendan O'Connor</b>	Operator
<b>William Voss</b>	Operator
<b>Brian Willadsen</b>	Operator
<b>Tyler Hoffman</b>	Operator
<b>Josh Lampe</b>	Master Electrician
<b>Tony Gottschalk</b>	Maintenance Technician
<b>Jeffery Sargent</b>	Maintenance Technician
<b>Mark Oldenburg</b>	Maintenance Technician
<b>Dana LePage</b>	Lab Technician



Average Flow Million Gallons/Day







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 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% moisture at a temperature above 180 F to produce a Class

A biosolids material. This material is then sold to a customer who uses it to enhance the nutrient and organic value of their top soil. Gases produced from the digestion of sludge are used for process heat as well as to generate electricity utilizing the on-site gas turbines.

There were many significant accomplishments in 2018. The following is a list of the most important items completed during the year:

- Plant Staff installed a new sludge recirculation pump and variable frequency drive to provide an on-line spare to be used in the event of a failure for this critical application. Along with the pump, a flow meter was installed to provide the operators with flow information, so they can verify that the system is operating as designed.
- A phosphorous optimization plan was completed and submitted to WDNR in December and received excellent feedback from WDNR as a result of the work we did during 2018.
- Plant staff installed a new scum pump and wired it into the existing control system. The new pump replaced an older progressive cavity style pump which was at the end of life and was not the proper pump for the scum application.
- Digester #5 was taken out of service, pumped out, cleaned and inspected.
- A new raw influent pump #6 was installed. Along with the installation of the pump, all process controls for the raw influent pumps were updated by plant staff.
- 100% of the biosolids generated at the facility were dried and sold. No liquid biosolids were land applied during the year, and the monitoring requirements for liquid biosolids were suspended in the current WPDES permit.



Digester #5



Installation of new Raw Influent Pump

- The drive on Secondary Clarifier #4 was replaced, the clarifier was inspected, the rake arm coating was repaired, and all concrete control joints in the tank were re-sealed.
- The installation of the new electrical feed (switch gear) was started with expected completion during the spring of 2019.
- Inspected south aeration basins to determine scope of work for future projects.
- The facility completed the application and received an air permit.



Secondary Clarifier #4



Construction of the new Electrical Feed (Switch Gear) Building

## Annual Biosolids Production

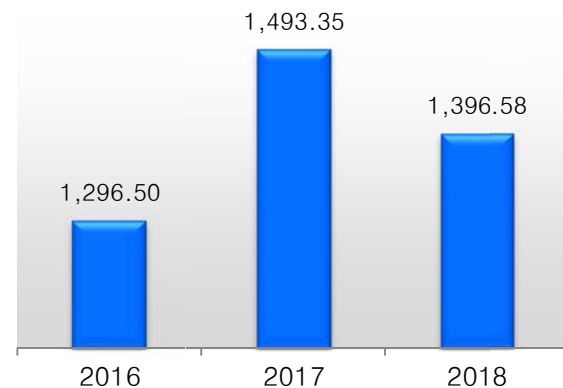
The sludge drying system presented significant challenges during 2018, and a great deal of effort by the staff was made to improve the operation of this system.

Accomplishments during 2018 include:

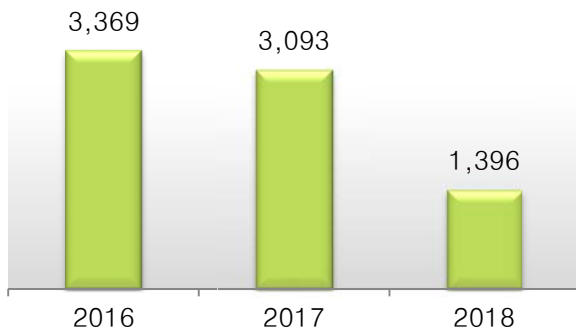
- Improved cake solids from the screw presses
- Improved preventative maintenance of the equipment
- A new operating strategy for running the system in a more cost effective manner

Though there are still some challenges with scale build-up in the dryer recirculated air condensing system, we are looking at ways to minimize the build-up and increase the time between total media replacement.

## Dried Biosolids Annual Production Tons



## Total Biosolids Produced (Tons/Year)



Since suspending the acceptance of high strength waste, the amount of biosolids generated at the facility has dropped by nearly sixty percent. As the operation of the dryer improved, it is anticipated that the facility will have the capacity to dry all sludge generated now and into the foreseeable future. The production of "Class A" biosolids allows the facility to eliminate approximately \$250,000/year in sludge hauling and land application costs while generating \$10,000 in revenue from the sale of the dried "Class A" biosolids.



Primary Clarifier #2

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. In 2018, five industries received letters of Notice of Non-Compliance (NON). Two industries were determined to be in Significant Non-Compliance (SNC).

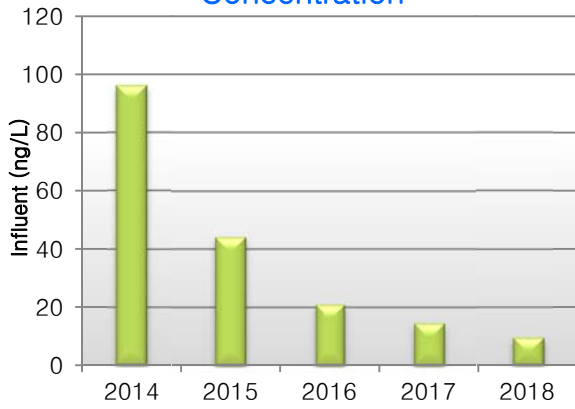
Each permitted industry received an Annual Site Inspection (ASI) during 2018. There were four industries which were reissued Industrial Wastewater Permits in 2018.

## Industrial Pre-Treatment Program

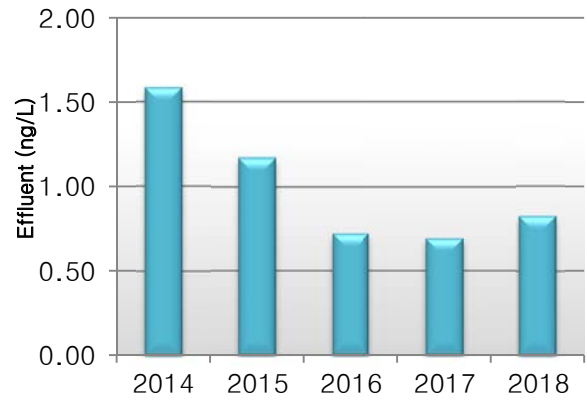
## Laboratory

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. The laboratory was nominated for laboratory of the year by WDNR Lab certification after the successful completion of the laboratory audit.

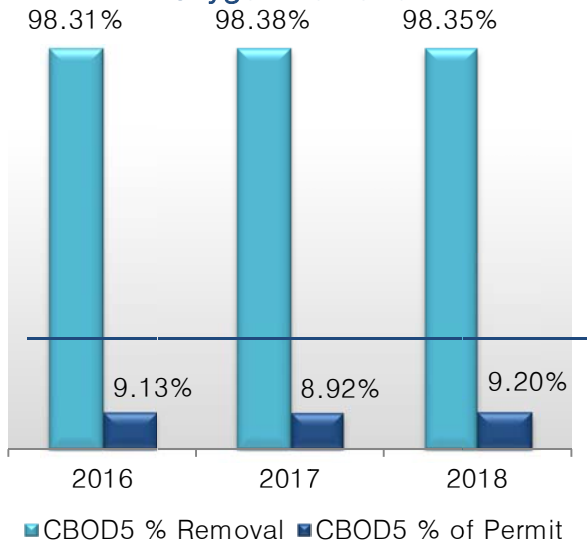
Annual Influent Average Mercury Concentration



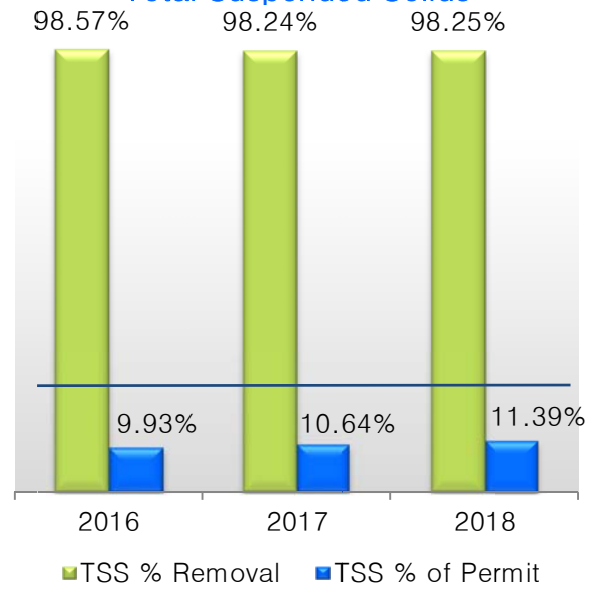
Annual Effluent Average Mercury Concentration



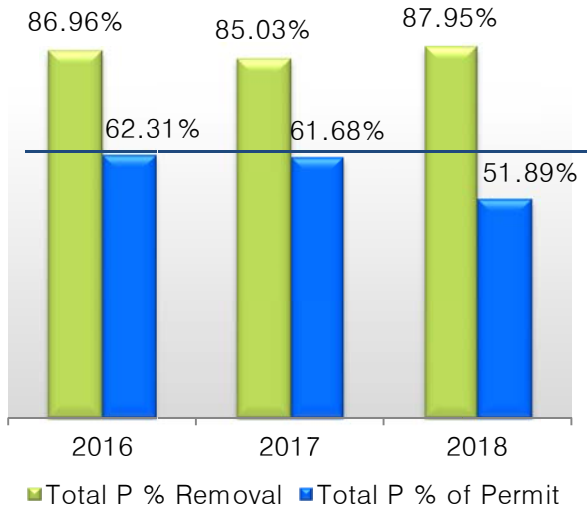
Carbonaceous Biochemical Oxygen Demand



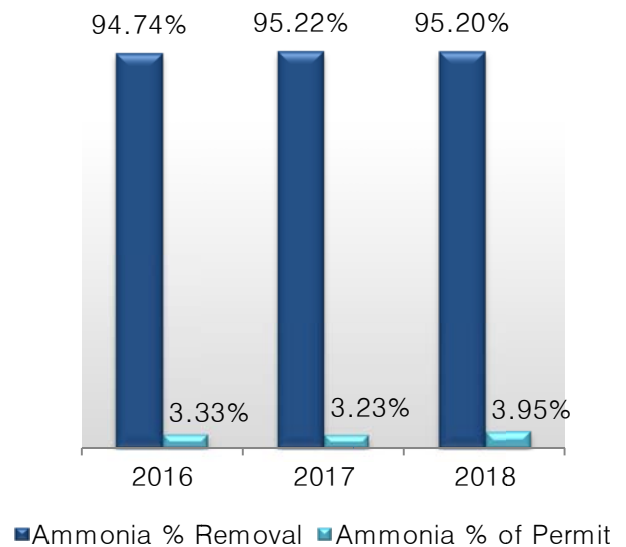
Total Suspended Solids



Total Phosphorous



Effluent Ammonia



There are a number of significant projects planned for 2019 in addition to working on reducing the effluent total phosphorous concentration per the optimization plan submitted to WDNR.

Major projects scheduled for 2019 include:

1. Installing new drives on Primary Clarifier #2 and Final Clarifier #2
2. Moving the power feeds to the new electrical switch gear while maintaining the operation of the wastewater plant
3. Installation of a third aeration blower to provide adequate on line back up capability for the facilities aeration system
4. Installation of a new HVAC system for the influent building
5. Install two phosphate analyzers in the aeration basins to optimize our chemical feeds for phosphorus removal