Department of Public Works

2017
Annual Report of Operations

DPW 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

DPW Mission:

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

David H. Biebel, Director of Public Works

DPW CONTACT LIST
AFTER HOUR RESPONSE

EFFECTIVE DATE: January 1, 2018

STREETS AND SANITATION DIVISION
EMERGENCY CALL LIST

SUPERINTENDENT	Call 1st	Call 2nd	Call 3rd
Jason Blasiola	414-732-9356	920-207-0226	414-259-9913

Sewer Backups / Sewer Repairs / Sewer Problems

	NAME	Call 1st	Call 2nd	Call 3rd
1	Brandon Munnik	920-912-0857	920-627-4892	-
2	Dave Groves	920-627-1451	920-207-4379	-
3	Scotty Buboltz	920-946-6290	920-946-6971	920-565-4291

Street Cave-Ins / Holes / Street Problems

	NAME	Call 1st	Call 2nd	Call 3rd
1	Dave Groves	920-912-0857	920-627-4892	-
2	Scotty Buboltz	920-946-6290	920-946-6971	920-565-4291
3	Brandon Munnik	920-912-0857	920-627-4892	-

Barricade Requests / Traffic Control / Traffic Signage

	NAME	Call 1st	Call 2nd	Call 3rd
1	Scott Tetschlag	920-627-2561	920-627-0372	-
2	Bruce Matzdorf	920-918-2341	920-207-4378	-

Garbage / Recycling Collection

	NAME	Call 1st	Call 2nd	Call 3rd
1	Bruce Matzdorf	920-918-2341	920-207-4378	-

Water Leaks of Any Kind

Water Utility	920-459-3800
After Business Hours	920-459-3811

ENGINEERING DIVISION
EMERGENCY CALL LIST

Engineering Related Items

CITY ENGINEER	Call 1st	Call 2nd	Call 3rd
Ryan Sazama	920-807-6566	920-946-1882	-

*** If unable to make contact with individuals listed above, call Dave Biebel on his cell phone at 920-946-2906 or home phone at 920-458-0947

DPW CONTACT LIST
AFTER HOUR RESPONSE

EFFECTIVE DATE: January 1, 2018

PARK/FORESTRY/CEMETERY
EMERGENCY CALL LIST

SUPERINTENDENT	Call 1st	Call 2nd	Call 3rd
Joe Kerlin	920-980-2733	920-459-3446	-

Parks

	NAME	Call 1st	Call 2nd	Call 3rd
1	Brian Meulbroek	920-980-8290	920-459-3446	-
2	John Klemme	920-912-2630	920-459-3445	-
3	Dan Billman	920-946-5805	920-459-3445	-

Trees

	NAME	Call 1st	Call 2nd	Call 3rd
1	Kenneth Meinnert	920-207-7449	920-946-1881	-
2	Brian Meulbroek	920-980-8290	920-459-3446	-

Cemetery

	NAME	Call 1st	Call 2nd	Call 3rd
1	Jim Lavey	920-207-8059	-	-
2	Joe Kerlin	920-980-2733	920-459-3446	-

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WASTEWATER TREATMENT FACILITY
EMERGENCY CALL LIST

SUPERINTENDENT	Call 1st	Call 2nd	Call 3rd
Steve Jossart	920-639-0340	920-639-0340	920-459-3464

Accidental Discharges to the Sanitary Sewer

	NAME	Call 1st	Call 2nd	Call 3rd
1	Mark Wittstock	920-207-1754	-	-
2	Steve Jossart	920-639-0340	920-639-0340	920-459-3464
3	Robert Butcher	920-452-6096	920-917-3014	-

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DPW CONTACT LIST
AFTER HOUR RESPONSE

EFFECTIVE DATE: January 1, 2018

BUILDINGS & GROUNDS
EMERGENCY CALL LIST

SUPERVISOR	Call 1st	Call 2nd	Call 3rd
Mike Willmas	920-207-9742	920-980-5270	-

Buildings & Grounds, City Buildings - Excluding Park Buildings

	NAME	Call 1st	Call 2nd	Call 3rd
1	Al Keitel	920-698-2004	-	-
2	Chris Peterson	920-803-5184	-	-

TRAFFIC DIVISION (ELECTRICAL)
EMERGENCY CALL LIST

SUPERVISOR	Call 1st	Call 2nd	Call 3rd
Mike Willmas	920-207-9742	920-980-5270	-

Traffic Division (Electrical)

	NAME	Call 1st	Call 2nd	Call 3rd
1	Bob Hayon	920-946-1970	920-980-6416	-
2	Al Fleisner	920-698-2004	-	-
3	Al Keitel	920-698-2004	-	-

8th Street Bridge

	NAME	Call 1st	Call 2nd	Call 3rd
1	Mike Willmas	920-207-9742	920-980-5270	-
2	Bob Hayon	920-946-1970	920-980-6416	-
3	Al Fleisner	920-698-2004	-	-

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MOTOR VEHICLE/STOCKROOM
EMERGENCY CALL LIST

SUPERVISOR	Call 1st	Call 2nd	Call 3rd
Rick Ney	920-980-3676	920-452-6335	-

Motor Vehicle

	NAME	Call 1st	Call 2nd	Call 3rd
1	Rick Ney	920-980-3676	920-452-6335	-
2	Mark Strains	920-889-5052	920-773-0033	-

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Executive Summary

The Department of Public Works is pleased to present this Annual Report for the calendar year 2017. 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.

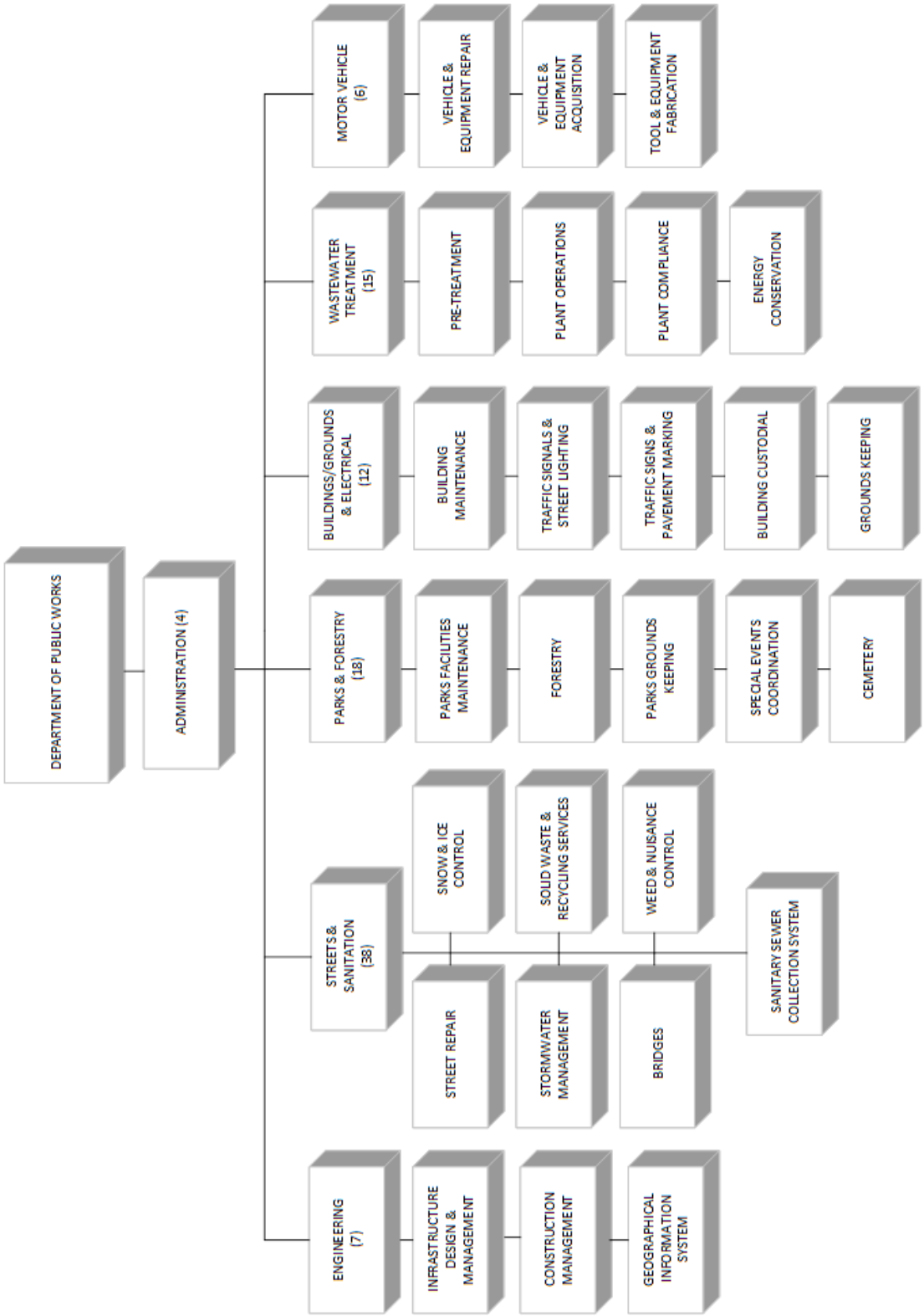
The department has 100 dedicated individuals facilitating the services necessary to accomplish the department goals and objectives and to meet the community's needs. Since 1970, the Department of Public Works has improved the efficiencies of its workforce through the addition of skilled workers and implementing technologies and equipment that provide a comparative advantage.

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 200 miles of City streets. Lastly, park acreage has nearly doubled to approximately 675 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 will demonstrate 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. It 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.

For this purpose, the Department of Public Works is proud to present the 2017 Annual Report to the Common Council. It is our goal to provide accurate 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 betterment of Sheboygan.

Table of Organization



2017 Common Council

Mayor Mike Vandersteen
City Administrator Darrell Hofland
City Clerk, Susan Richards
City Attorney, Chuck Adams
President, Todd Wolf
Vice-President, Roman Draughon

1st Alderperson District

Todd Wolf .....John Belanger

2nd Alderperson District

Roman Draughon .....Ronald Rindfleisch

3rd Alderperson District

Rosemarie Trester .....Mike Damrow

4th Alderperson District

Andy Ross .....Mary Lynne Donohue

5th Alderperson District

Markus Savaglio .....Scott Lewandoske

6th Alderperson District

Henry Nelson .....Bryan Bitters

7th Alderperson District

Andrew Schneider .....Susan Holzschuh

8th Alderperson District

Ryan Sorenson .....Jim Bohren

2017 Public Works Committee Members

Chairperson ..... Todd Wolf

Vice Chairperson ..... Andrew Schneider

Member.....John Belanger

Member.....Bryan Bitters

Member.....Henry Nelson

2017 Public Works Department – Mission and Goals

DPW 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 service with a friendly and welcoming atmosphere*

DPW Objectives:

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

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

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

2017 Public Works Department – Vital Statistics

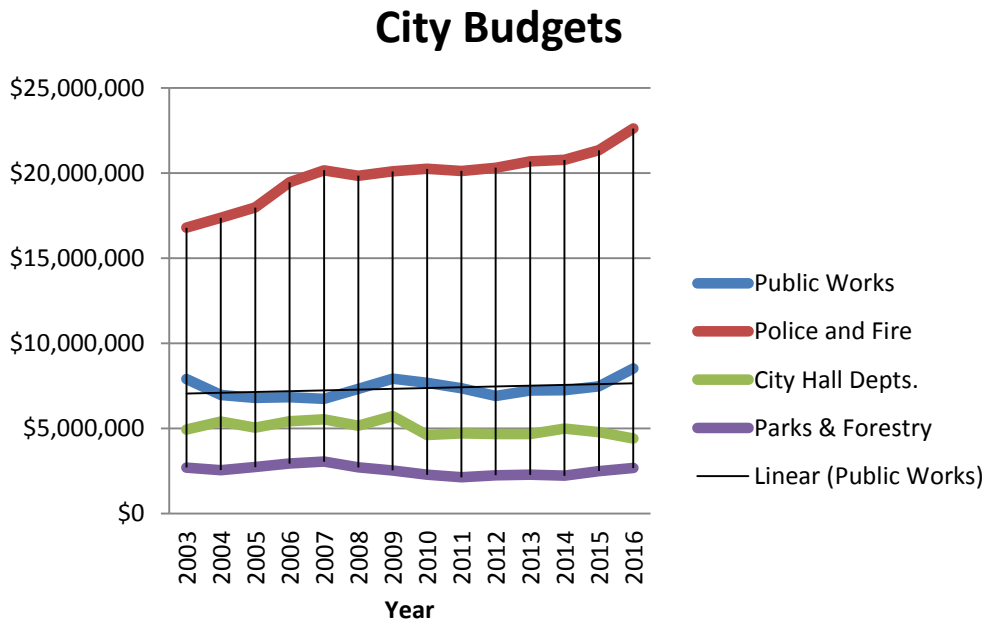
Area, Square Miles	15.795
Miles of Streets	199.7
Miles of Sanitary Sewers	171
Miles of Storm Sewers	102.5
Number of Bridges	19
Square Feet of Bridge Decks	185,212
Sewage Treated Daily – Millions of Gallons	10.98
Signalized Intersections	39
Parks	36
Park Acreage	705.45
Population	50,792
Trees	23,000
Signs	30,000
Lights	4,505

Administration

David H. Biebel ..... Director of Public Works
Dawn Sokolowski ..... Management Analyst
Heather Burke ..... Administrative Clerk
Melissa French ..... Administrative Clerk

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.

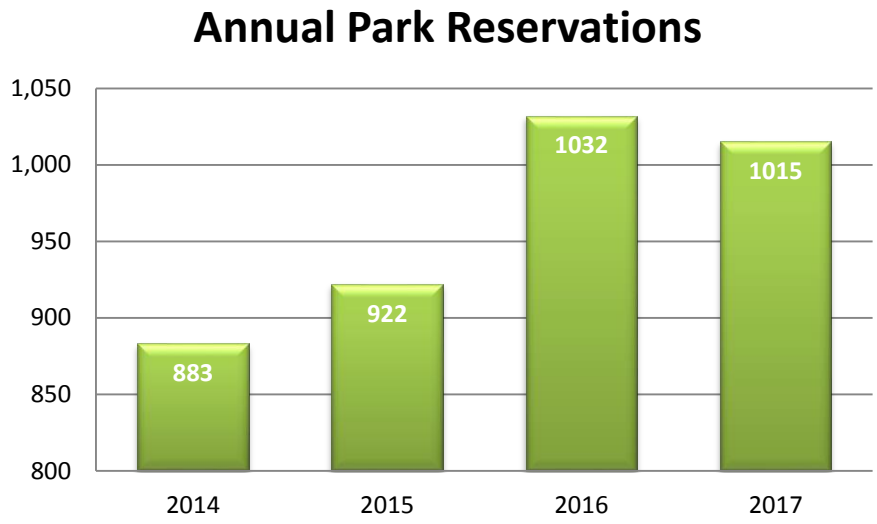
One of the most important functions of administration is preparing and controlling the department's budget. Public Works continues to innovate, adjust, and lead with regard to maximizing results with limited resources. Public Works is unique when compared with other departments in the City, in that the 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 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:

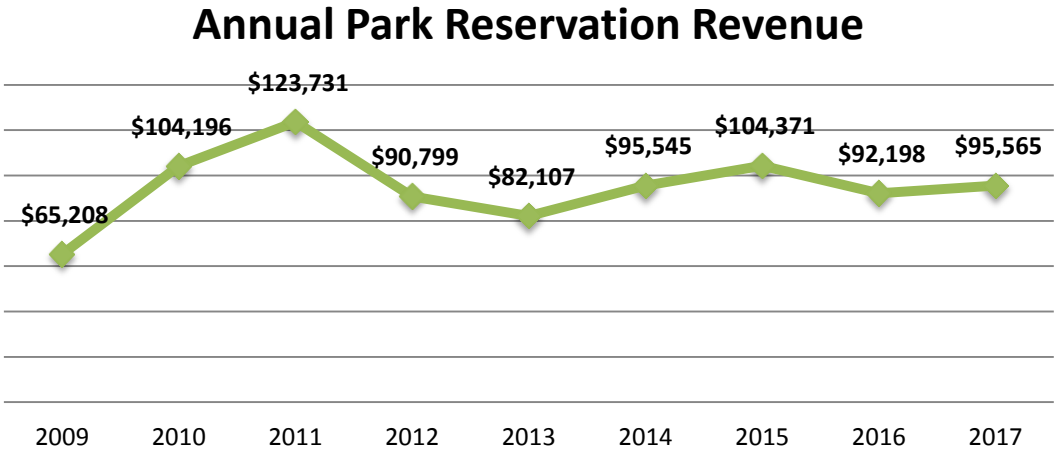


While the department's budget has remained relatively flat; the department's workload and demand for services is ever increasing. The operations of the department are not comparable to a commercial setting in which economic demands determine the amount of labor and material needed. For example, the

department does not have a fluctuation of orders for widgets, the garbage, streets and area of the City is always increasing. Furthermore, park usage is increasing and is one of the great assets of the community as shown on the annual parks reservation graph. Most importantly, a visitor's first impressions typically are the quality and cleanliness of our streets and parks.

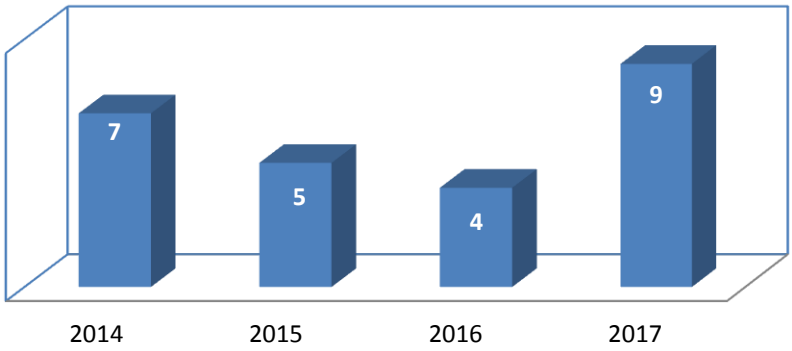
The administration provides support services to all the Divisions within the Department by managing the budget, personnel transactions, customer requests and public information. The objectives of the administration are to support the necessary Divisions in order for their personnel to effectively concentrate 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, street right-of-way excavation permits, permits to occupy (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) for residential driveway permits. Also, a filing fee is charged for commercial driveways for recording at the Register of Deeds.

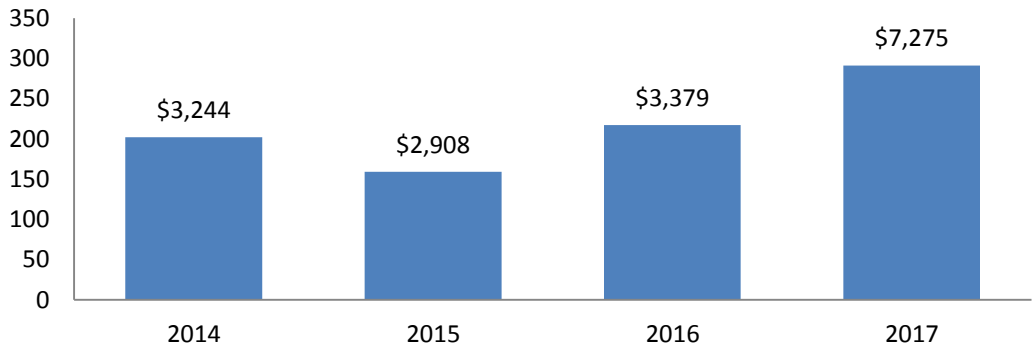
Driveway Installation Permits (curb-cuts)



The Department has seen a decrease in the number of driveway permits issued, until this year. There was an increase shortly after the adoption of the new winter parking rules which has been in effect for over a decade. Nevertheless the department encourages residents to develop and provide off-street parking. The permit issued the department allows for the proper placement of driveways to prevent issues. Off-street parking significantly helps the department in street sweeping, snow removal, garbage collections, tree trimming and other operations.

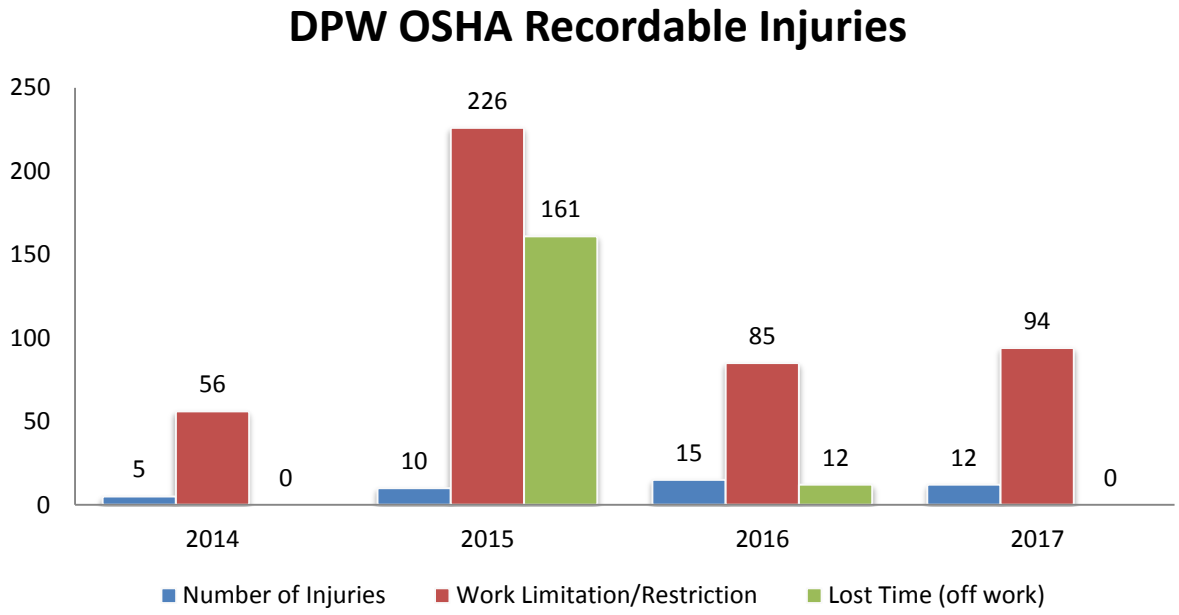
This is the same philosophy behind permits to occupy street right-of-way (ROW) or dumpster permits. This permit allows residents, businesses or contractors to occupy the street ROW, typically the parking lane, with equipment for extended periods of time. A fee is collected for this activity and is based on the length of time someone is occupying the street ROW. As a result, revenues are not directly proportionate to the number of permits.

Permits to Occupy Street Right-of-Way



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. Since 1991, the Division had a full-time individual devoted to safety training and inspections. However, in 2010 the individual retired and the position has not been filled.

In late 2015, the department hired Mr. Jason Blasiola, Superintendent of Streets and Sanitation. Jason has a strong safety background with his previous employer, City of Milwaukee, and has made several safety improvements as indicated by the reduction in lost time in 2016 compared with 2015. 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 and improvement work environments employees are ask to participate in discussions including safety and other topics to create a rewarding work environment. The Division 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.

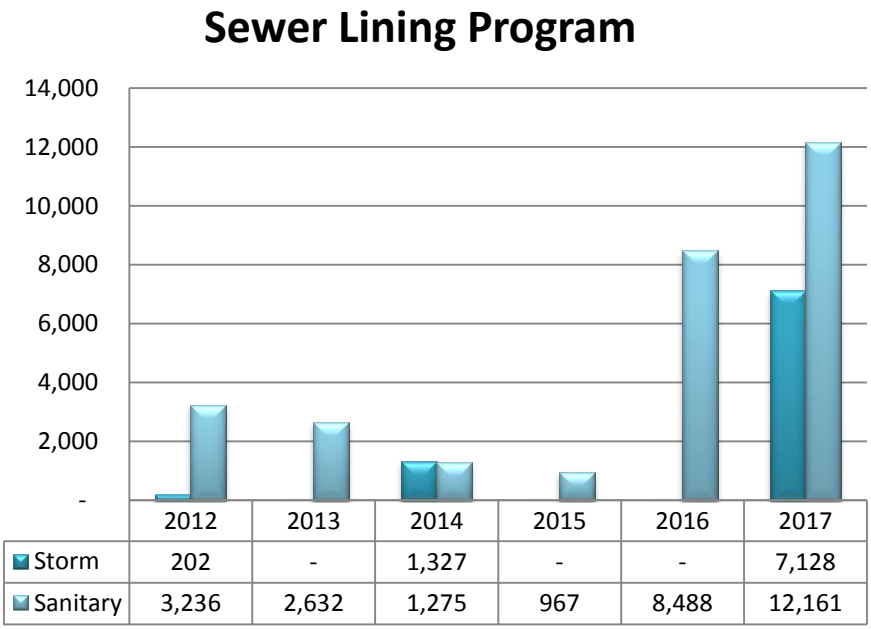
Overall, the administration is opening the lines of communication with the citizens of Sheboygan. In 2016, the department enhanced its use of social media (Nextdoor, Facebook, Twitter and the City website) by providing real-time updates on road closings, construction detours, snow removal operations,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

Engineering Division

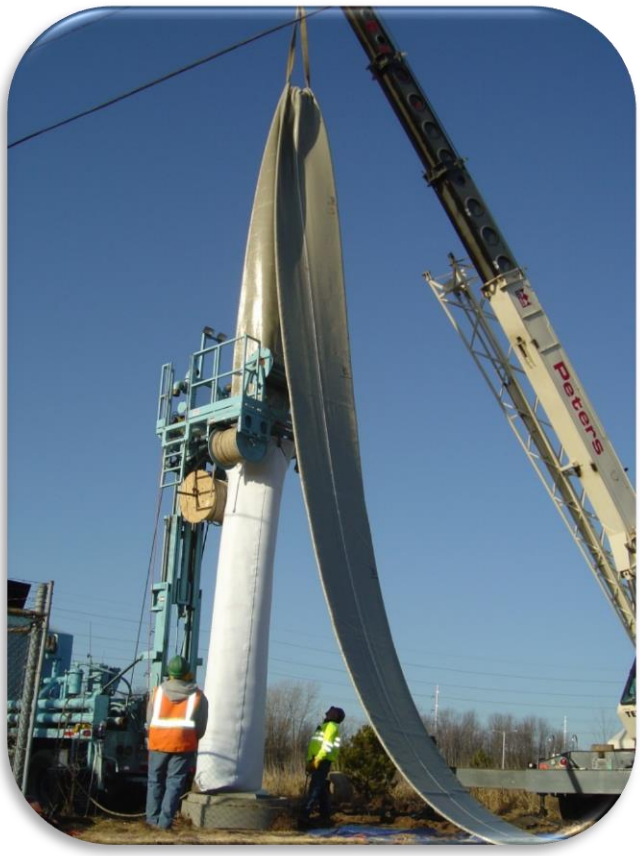
Ryan Sazama, P.E. .....City Engineer
Kevin Jump, P.E. .....Civil Engineer/Project Manager
Scott Issaccs, P.E. ..... Environmental Engineer
Mike Born, ... City Surveyor/Engineering Technician
Vic Gatawakas .....Senior Engineering Technician
Jordan Sucha .....Civil Engineering Technician
Andrew Bartell .....Geographic Information Systems Specialist

The Engineering Division of the Department of Public Works is responsible for the design and inspection of the City's infrastructure. Engineering has five main areas of concentration: planning and design, construction management (including inspection), surveys, maps and records, engineering management and consultant oversight. Through its programs and services the Engineering Division seeks to improve the quality of life within the City by designing and ensuring the quality of infrastructure expansion and improvement projects. The Engineering Division has a total of seven full time employees.

The main function of the Engineering Division is managing major infrastructure improvement projects (capital improvements program). Since 1995, the City of Sheboygan has invested approximately $44.7 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. Furthermore, new subdivision development requires the expansion of streets and sewer systems.

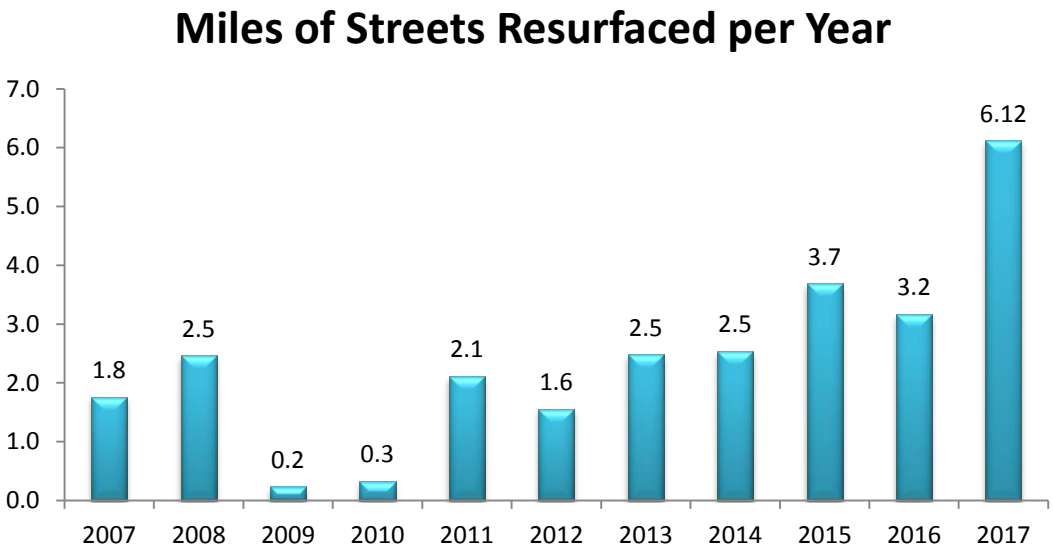


	2012	2013	2014	2015	2016	2017
Storm	202	-	1,327	-	-	7,128
Sanitary	3,236	2,632	1,275	967	8,488	12,161



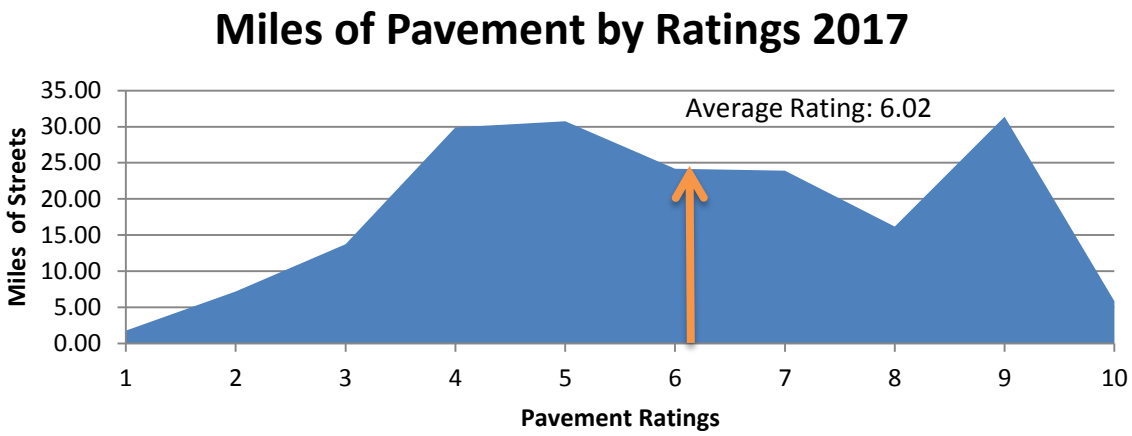
Liner Being Inserted Into Sewer Pipe

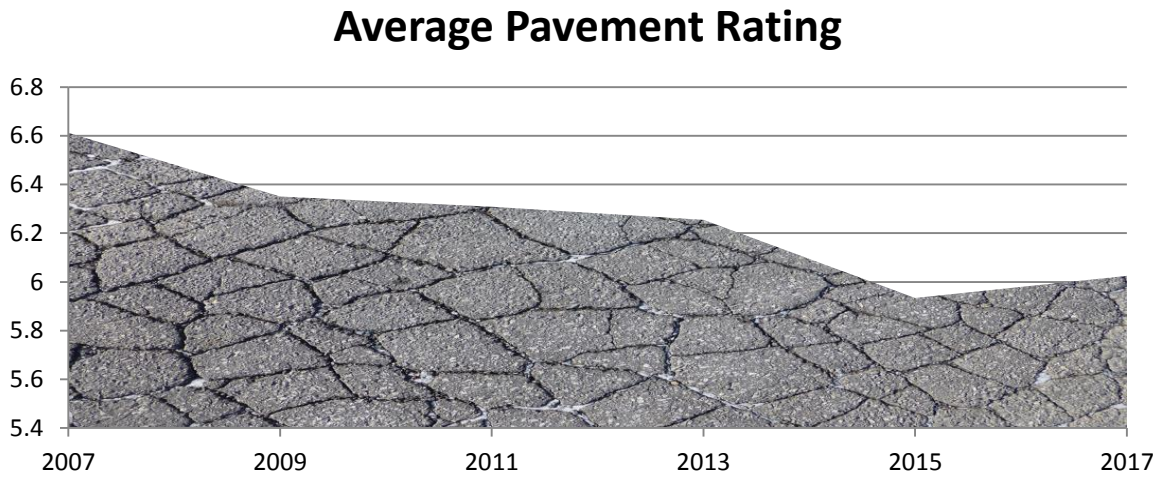
Since 2012, the Division has relined CIPP (curb-in-place-pipe) over 5.45 miles of sanitary sewer and approximately 1.64 miles of storm sewer. In 2017, the Division replaced 3.65 miles of sewer linings. In addition to sewer construction, the Division reconstructed or resurfaced 26.9 miles of new City streets since 2012.



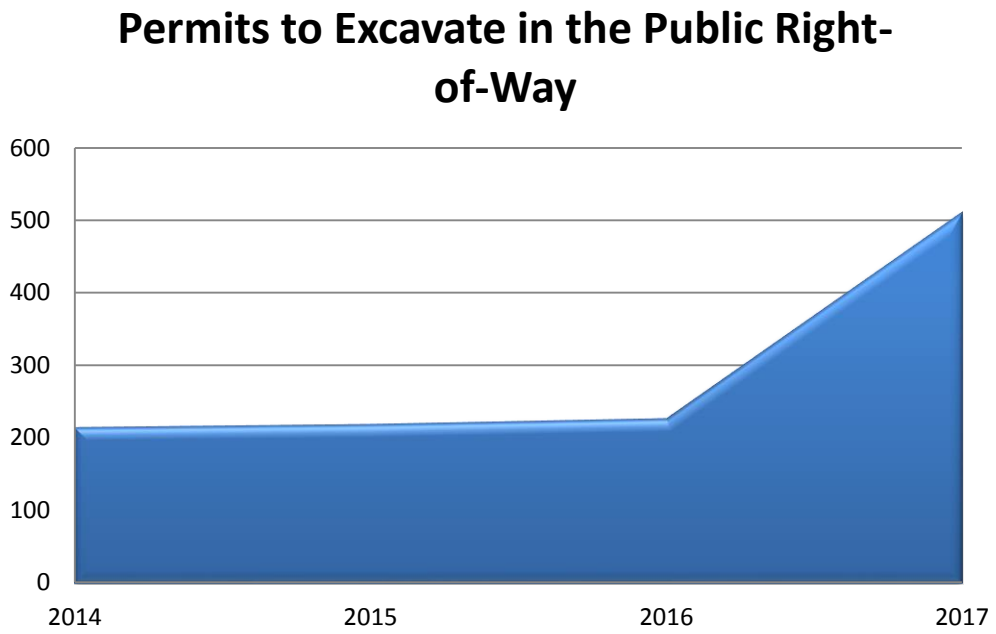
The City of Sheboygan's Pavement Management Program is a strategy that identifies cost-effective methods for preserving the City street network and prioritizes the levels of maintenance along with funding levels in order to improve the quality and extend the life on our existing street network. Pavement Management Systems take complex, large networks and data, and summarize this information into usable data for decision making. Streets are ranked 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.

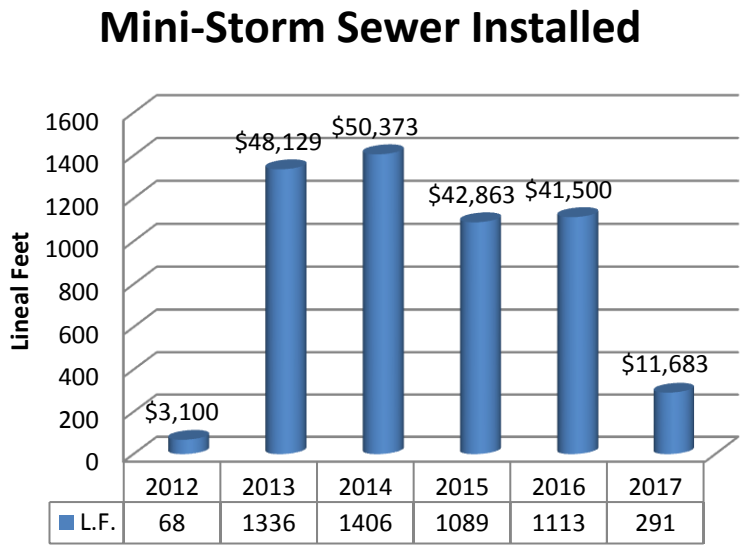




The Engineering Division also manages the utility cuts or excavations within the street right-of-way. This is an important program that ensures proper pavement restoration is performed. Poorly restored excavations in the street right-of-way lead to accelerated pavement deterioration.

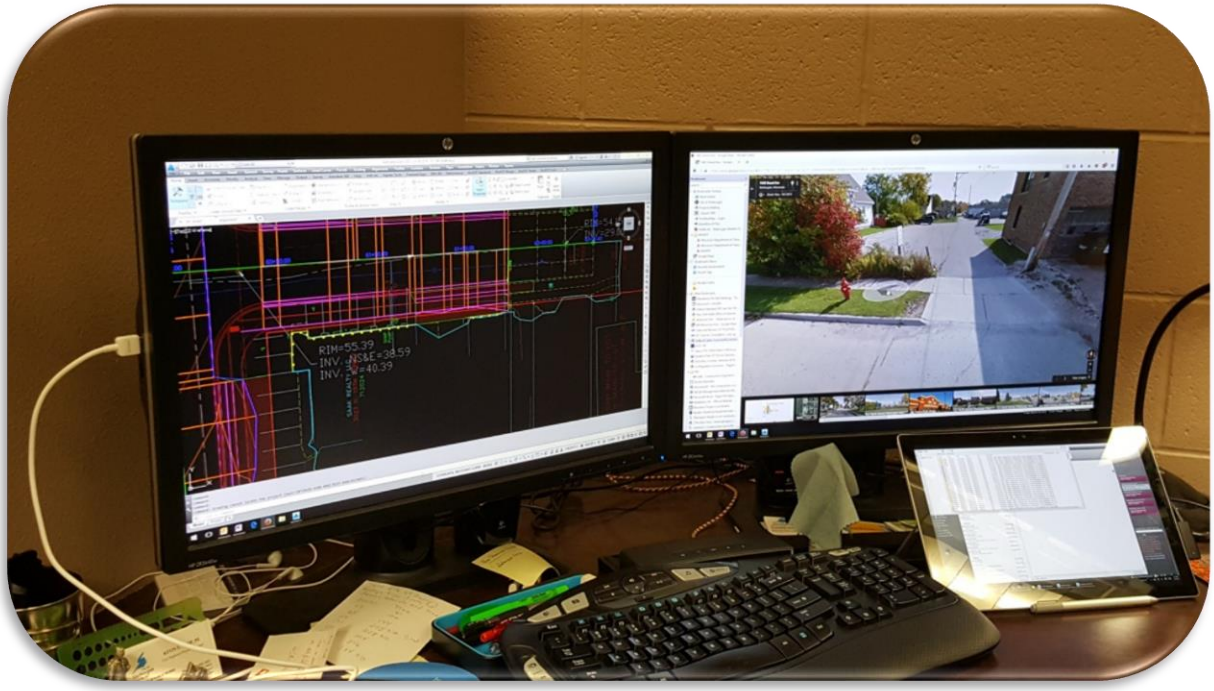


In addition and over the same time period, the Engineering Division has designed and installed over $196,600.00 of mini-storm sewers in the City. Since the flood of 1998, the Division has taken an aggressive approach to solving clear water problems. This program continues to grow; however, the Engineering Division now requires storm sewer laterals in any new construction to ensure sump pumps are not discharged into the sanitary sewers.



Mini Storm Sewer Installation - Backyard

Engineering also maintains all the mapping and data regarding the City's infrastructure. The City's base map is now digitally produced. 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.



Computer Aided Design Station

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. Although the Engineering Division is technologically advanced, several of the staff has been with the Division many decades providing key historical references and information.

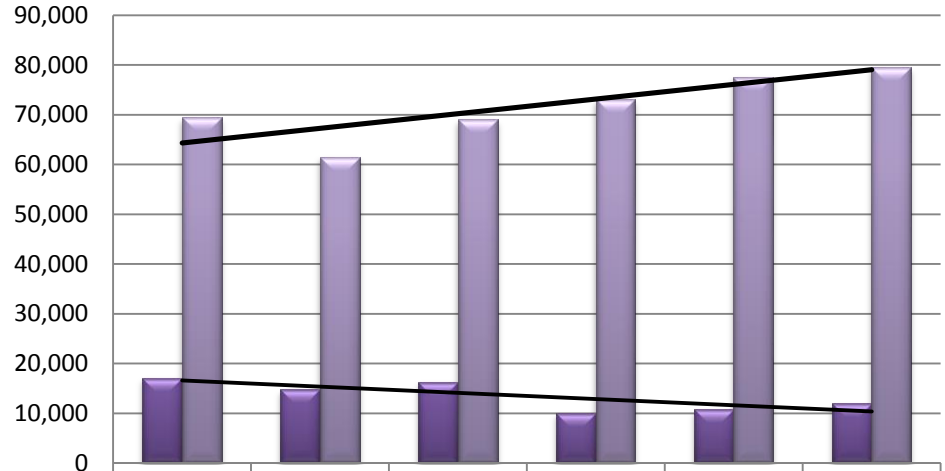
Computer Surveying/GPS Equipment

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

	2012	2013	2014	2015	2016	2017
Square Feet (S.F.)	17,096	14,750	16,330	10,057	10,792	12,006
Cost (Remove/Replace)	$ 69,438	$ 61,500	$ 69,011	$ 73,107	$ 77,594	$ 79,560
Cost per S.F (Install Only)	$ 2.93	$ 3.05	$ 3.15	$ 5.25	$ 5.80	$ 4.50

Sidewalk Repair/Replacement Program



	2012	2013	2014	2015	2016	2017
Square Feet (S.F.)	17,096	14,750	16,330	10,057	10,792	12,006
Cost (Remove/Replace)	$69,438	$61,500	$69,011	$73,107	$77,594	$79,560

Parks, Forestry & Cemetery

Joe Kerlin ..... Superintendent of Parks, Forestry & Cemetery
Brian Meulbroek ..... Parks Leadman
Ken Meinnert ..... Forestry Leadman
John Klemme ..... Construction & Maintenance Craftsman II
Dan Billmann ..... Construction & Maintenance Craftsman
Jim Lavey ..... Cemetery Caretaker
Tim Bull ..... Arborist
Tom Perl ..... Tree Trimmer
Scott Plehn ..... Tree Trimmer Truck Driver
Jason Harrison ..... Utility Driver
Dan Gilbertson ..... Park Caretaker
John Burkard ..... Park Caretaker
Ryan Cyr ..... Park Caretaker
Chad Prisinger ..... Park Caretaker
Mike Johnson ..... Truck Driver
Neil Sprangers ..... Truck Driver
Rich Beseler ..... Truck Driver

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:

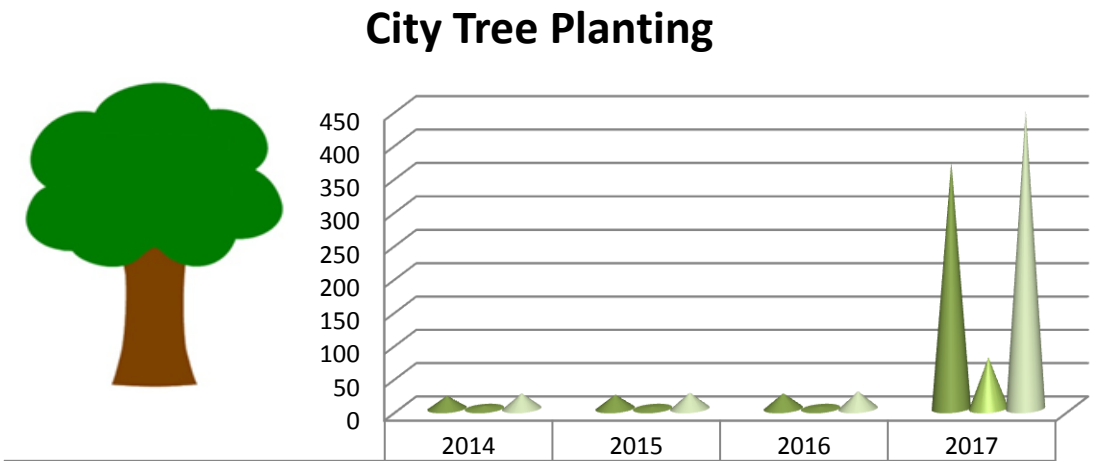
- Provide appropriate financial support for park, recreation and open space needs.
- Develop an attractive diversified park system comprising of imaginatively designed indoor and outdoor areas and facilities to meet the varied interests of the residents.
- Maintain the park system, in accordance with 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.

Forestry

The City of Sheboygan has been named "Tree City USA" for the last 39 years, which is the longest running in the State. The Department of Public Works Forestry Division is a subdivision of the Parks Division. There are four full-time forestry employees that care for 23,000 street trees and the park trees. During the winter months, another three person crew aids in the trimming of the street trees.

In 2016, the City Council accepted its first Urban Forestry Management and Emerald Ash Borer Plan. It also developed a planting plan, inventorying over 3,000 possible street planting sites. Tree planting and ash tree management became a priority for 2017 and will be for years to come.

As part the new Urban Forestry Management Plan, planting trees was a high priority for 2017. The Department received two tree planting grants, one for $25,000 from the Wisconsin DNR and a $10,000 Bay-Lakes EAB Mitigation Grant. The Division also worked with Tax Incremental District #6 to replace 60 trees in the South Pier area.

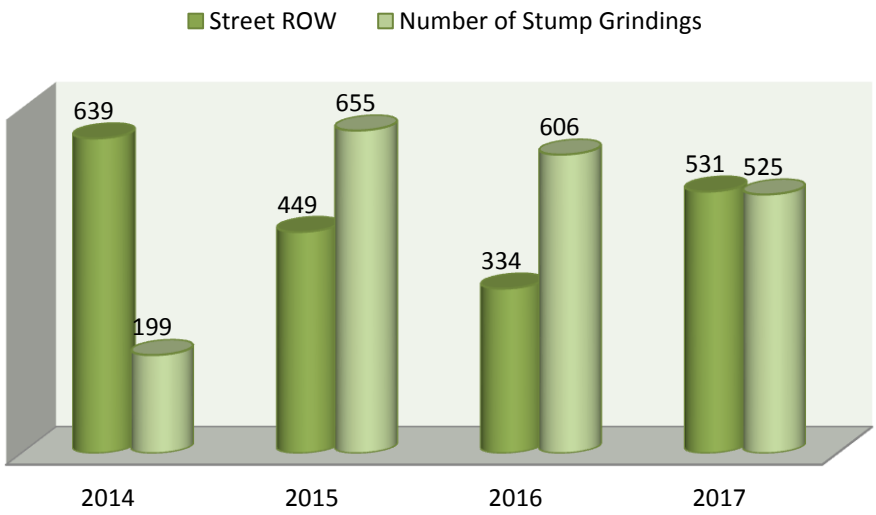


	2014	2015	2016	2017
Number of Street Trees Planted	19	21	23	371
Number of Park Trees Planted	4	3	3	77
Total Trees Planted	23	24	26	448

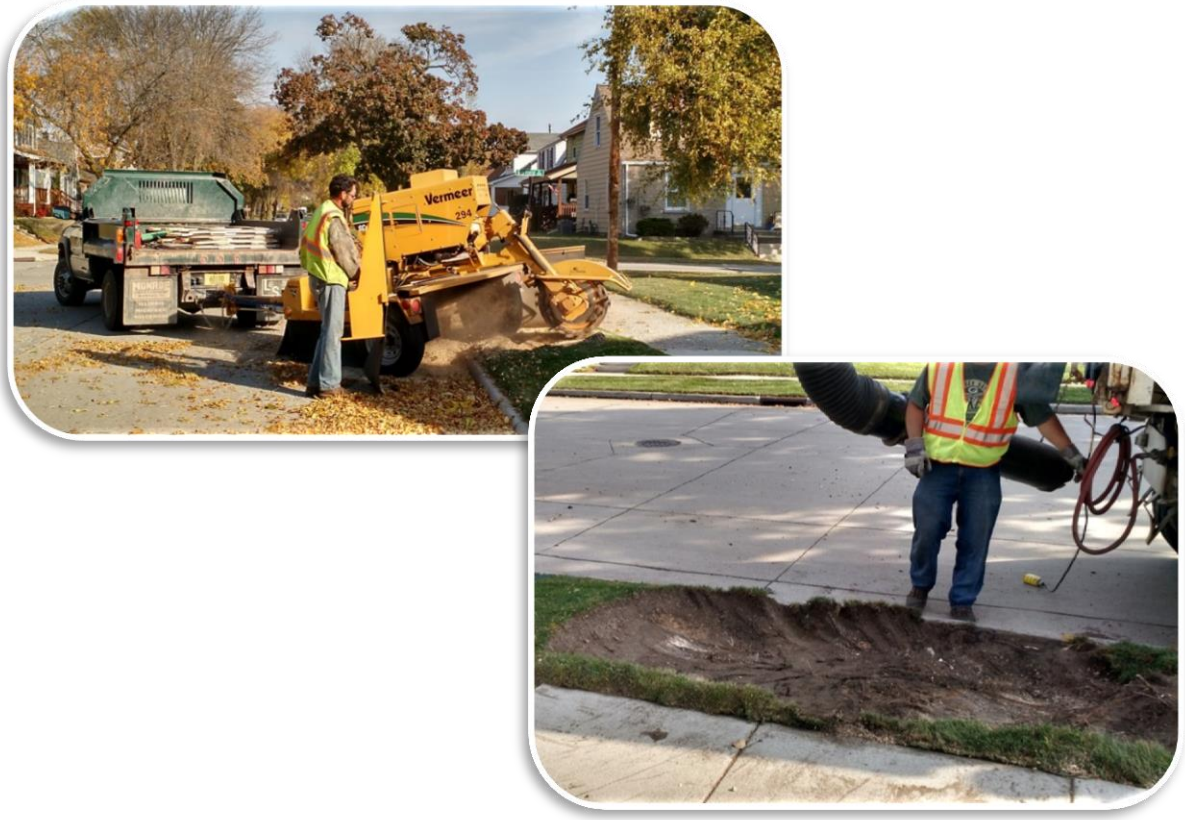
New tree planting

The Parks and Forestry Department celebrated Arbor Day 2017 with the Grant Elementary Great Lake Gang Environmental group at Maywood Park. The students learned the importance of Urban Forestry and helped the Mayor plant a few trees. The students were also treated to a tree climbing activity.

Tree & Stump Removals



In 2017, the Division removed over 500 trees. For every tree removed the department needs to remove the stump, add top soil and spread grass seed.

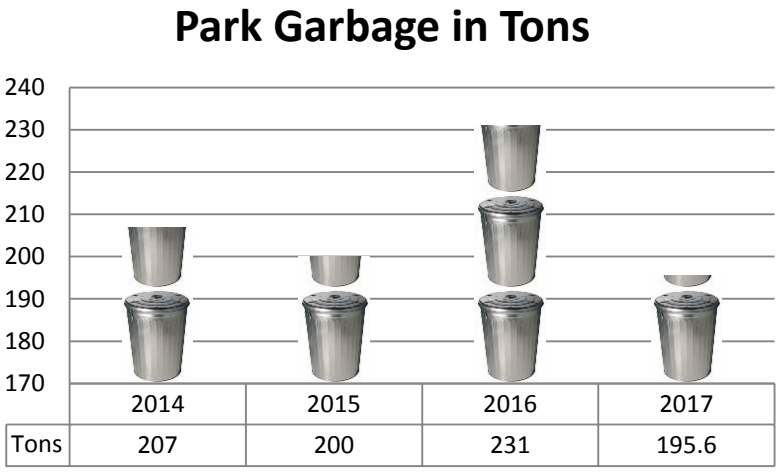


Tree trimming and elevating is a big part of the forestry work load. With 23,000 street trees the crew needs to trim 2,800 trees annually to achieve the goal of trimming every street tree over the course of eight years. Due to the workload of the Forestry Division, 2,365 trees were removed in 2017.

Parks

The Parks Division is responsible for maintaining and improving the City park system, which consists of 36 parks, 705 acres, six enclosed rentable shelters, 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 concreate skate park and an archery range. The City parks are also used for 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 Department also collects garbage from the 8th Street receptacles, City offices and the police and fire departments.



Clean-up following the 4th of July

Grass cutting and park maintenance dominates 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 Parks Division is responsible for delivering park equipment to the major festivals and smaller gatherings within the park system. The table below highlights some of the major festivals and the equipment provided. 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 residents and non-residents.

Park Equipment Used 2017

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				45	40			
Graduation	Vollrath					1						1	1	
Greeks	Deland	15	40	20	42	1					30			
Gus Macker	Deland		20		11				3					3
Ice Bowling	Blue Line		24	16		1							1	
July 4th	Lakefront		42		98	1			4	30	120			
Lakeshore Wknd	Blue Harbor		105	32	70	1	1				50	1	1	
Misc. Permits	All over town	56	90	106	225	3	3		10	62	94	2	1	6
	Totals	71	340	174	526	9	4	0	17	137	334	4	4	9

For 2017, the Parks Department scheduled nine major events, such as the Independence Day Celebration, Jaycee's Bratwurst Days, and the Early Bird Rotary Club's Lobster Boil. These celebrations are open to the entire community and enrich quality of life of the citizens of the City of Sheboygan. The Parks Department is committed to supporting these events and providing quality services which is consistent with improving the quality of life for the citizens of Sheboygan.

Richardson Shelter

King Park

Deland Community Center

The Parks Division has 11 picnic shelters and six park buildings that are available for rental. The Division also cares for 19 playgrounds and two splash pads.

Capital Improvements for the year consisted of painting the Deland Tennis Courts, construction of a new concrete skate park, and a remodel of the Vollrath Park restrooms.

Deland Tennis Courts

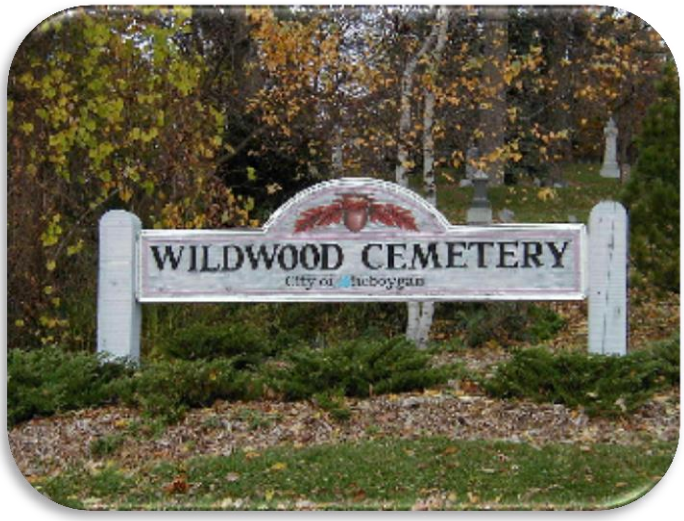
Kiwanis Skate Park

Winters for the park crew consist of adding a tree trimming crew to the Forestry Division, 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 Division also assists the Streets Division on an as-needed basis for snow removal.

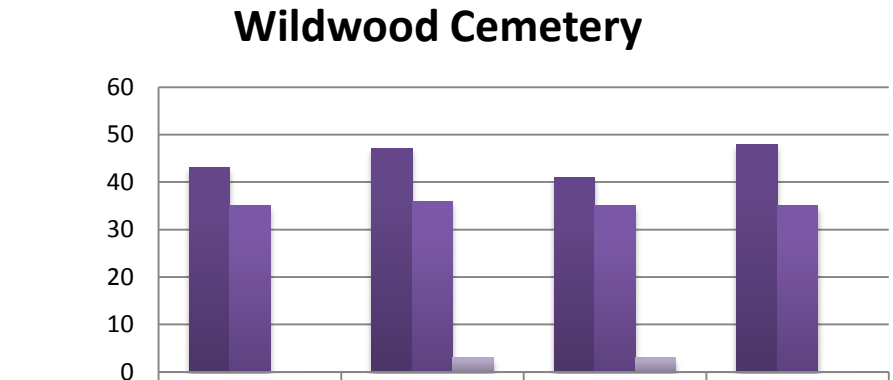
Jaycee Quarryview Park is 38.29 acre park that provides a year round 18-hole disc golf course, mountain bike trails along Pigeon River and a beautiful spring fed quarry that is home to the Quarry Beach & Adventure Park. The adventure park first opened in 2013 leased by the City to a private company. 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 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.

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.



	2014	2015	2016	2017
Full Burials	43	47	41	48
Cremains	35	36	35	35
Baby	0	3	3	0

Streets & Sanitation

Jason Blasiola	Superintendent of Streets & Sanitation
David Groves	Supervisor of Operations
Scotty Buboltz	Leadman
Brandon Munnik	Leadman
Bruce Matzdorf	Leadman
Chad Kuehn	Maintenance Worker III
Nick Binsfeld	Maintenance Worker IV
Ben Mohar	Maintenance Worker IV
Kevin Prisinger	Maintenance Worker IV
Mark Wilhelm	Maintenance Worker IV
Chris Anderson	Maintenance Worker III
Mark Kuhfuss	Maintenance Worker III
John Burkart	Maintenance Worker III
Adam Gilson	Maintenance Worker III
Travis Hill	Maintenance Worker III
Gene Kunstman	Maintenance Worker III
James McKenzie	Maintenance Worker III
Mark Kiser	Maintenance Worker III
Mark Polish	Maintenance Worker III
Thomas Ross	Maintenance Worker III
Tim Allee	Maintenance Worker II
Mike Bender	Maintenance Worker II
John Bridges	Maintenance Worker II
Jason Brill	Maintenance Worker II
Jim Brom	Maintenance Worker II
Chad Jones	Maintenance Worker II
Travis Larson	Maintenance Worker II
Robert McNitt	Maintenance Worker II
Tyson Pitsch	Maintenance Worker II
Matt Yancey	Maintenance Worker II
Nate Schanno	Maintenance Worker II
Brian Schmitt	Maintenance Worker II
Rick Van Der Vaart	Maintenance Worker II
James Gilliam	Maintenance Worker I
Bill DeAmico	Maintenance Worker I
Chris Dekker	Maintenance Worker I
Adam Fryman	Maintenance Worker I
Dave Smith	Maintenance Worker I
James Michalesko	Maintenance Worker I

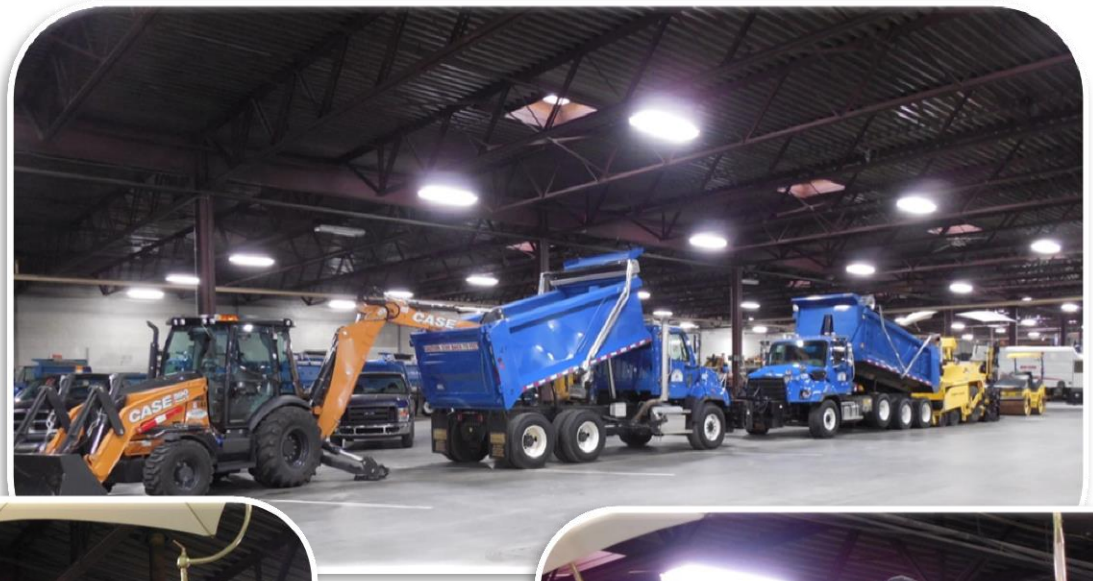
The Streets & Sanitation Division has 39 full-time employees, which makes it the largest Division within the Department of Public Works. The Division places a high priority on improving the quality of life by effectively developing, maintaining and improving the infrastructure, and community services.

Daily street maintenance for the Division includes

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

Daily sanitation maintenance for the Division includes

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

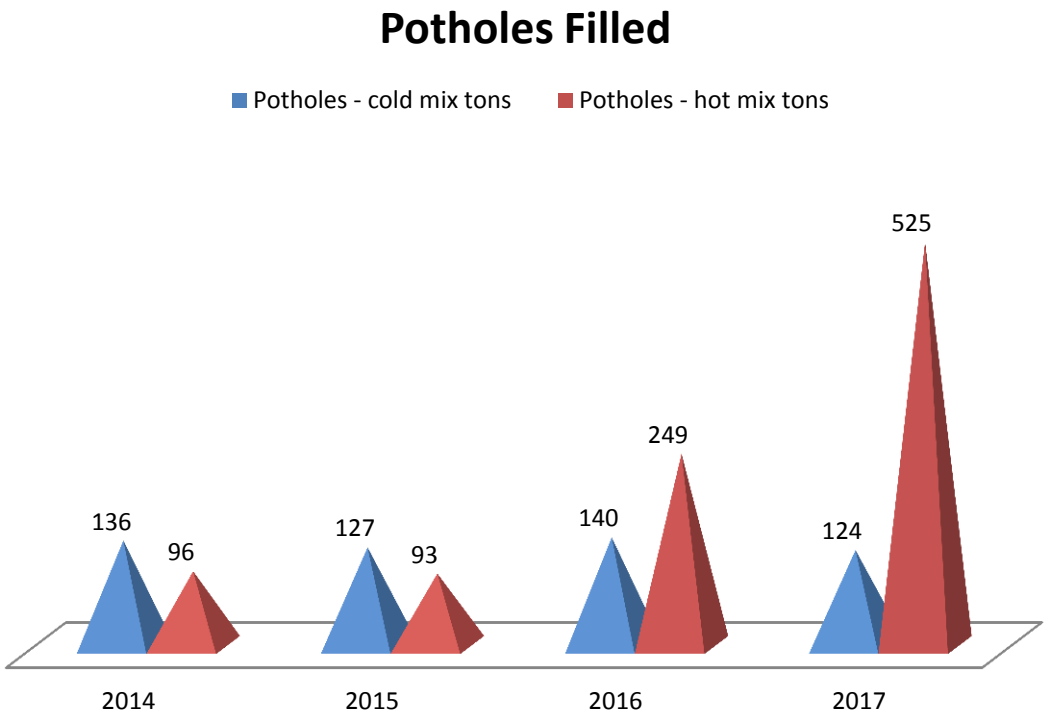


Street Maintenance

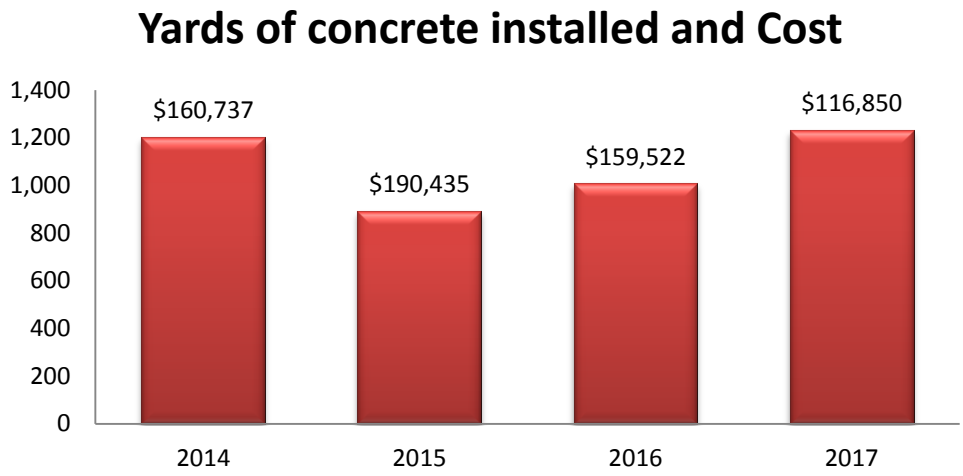
Street maintenance is one of the major functions within the Division and most costly. In 2005, the budget for street maintenance was $1.35 million. In 2017, the budget was $1.41 million. The Division performs street repairs as well as repairs from contractor's utility excavations within the street right-of-way.

The Streets Division has made a concentrated effort to fill pot holes using hot mix asphalt during the construction 2017 season. By using hot mix it makes a better, longer lasting repair. As shown in the graph below the DPW placed 525 tons of asphalt in 2017 as compared to 249 tons in 2016. The DPW's goal is to respond to pothole requests within two business days. During 2017, the Department's response rate averaged 1.6 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. DPW makes every effort to revisit these areas and install hot mix during the summer months.



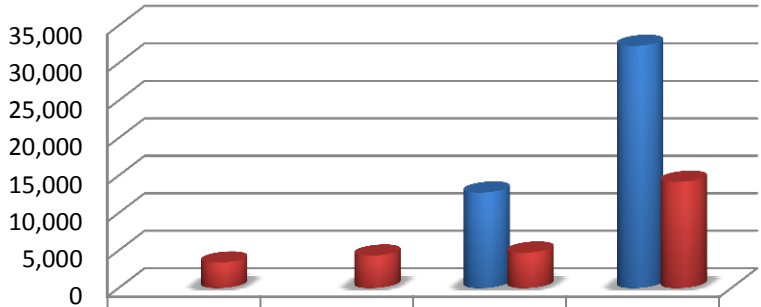
The Division is using more asphalt with an asphalt paver. The Water Utility and Wisconsin Public Service (gas) are performing their own street repairs as a result of their work. This work is inspected by the Division to ensure quality and to prevent premature failures. Overall, the Division is pleased with this arrangement because it allows our crews to concentrate on more important repairs and maximize the effectiveness of street repairs.



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 Department to complete Capital Projects. This year the DPW placed the final asphalt overlay on some projects versus a contractor. DPW crews overlaid North 10th Street, North 12th Street, Broughton Drive and Ashland Avenue. The DPW placed 14,178 tons of asphalt with the paver and overlaid 32,313 linear feet of asphalt in 2017.

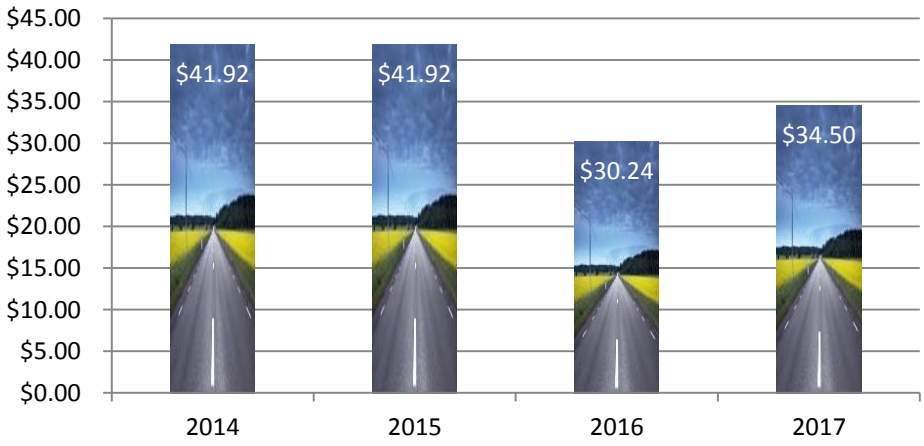
Asphalt Placed by City DPW Crews



	2014	2015	2016	2017
Asphalt Overlay (LF)			12,745	32,313
Asphalt Overlay (Tons)	3408	4,334	4,737	14,178

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.

Cost of Asphalt (Per Ton)



Asphalt Paver

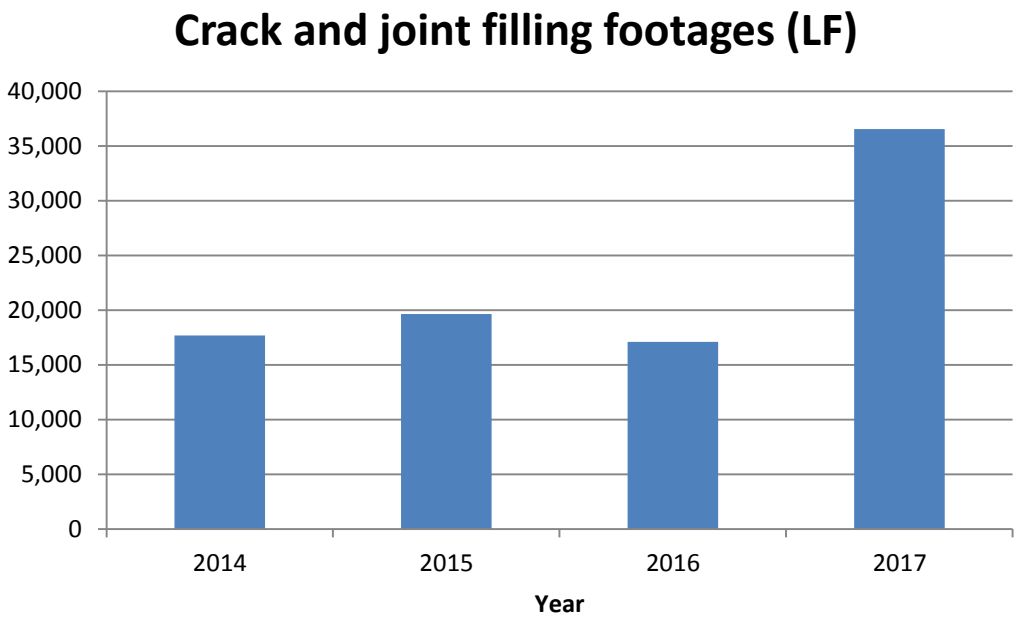
Street Right-of-Way (ROW) excavations occur when contractors need to dig within the street ROW to repair, replace or install utilities. It is important for the Department to regulate this activity to ensure protection of the street and underground utilities. In efforts to maintain the integrity of the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

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.

Street Excavation Patch

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. The Department has seen increase in the amount of linear feet that has been cracked filled from 12,745 in 2016 to 32,313 in 2017. As the DPW starts to overlay more streets the Department will continue to see increases in the amount linear feet cracked filled yearly.

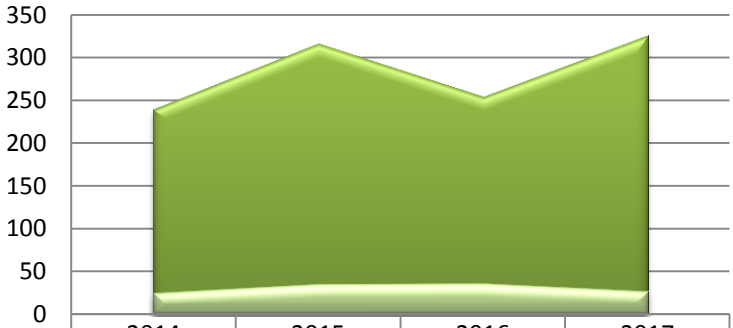


Crack Filling on Asphalt Overlay

The Streets Division is responsible for is 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

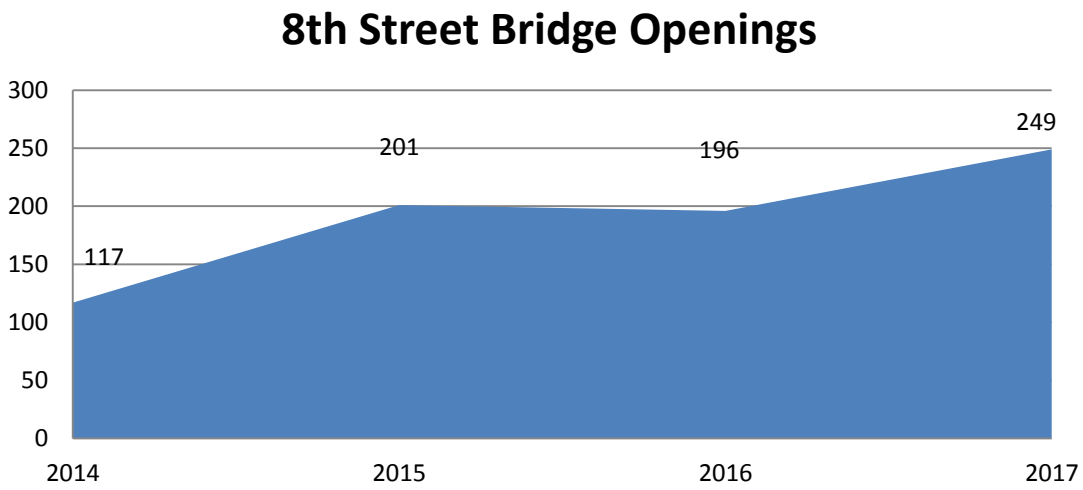


	2014	2015	2016	2017
Nuisance notices issues (weeds notice)	239	316	254	326
Number of lots cut by city contractor	25	35	36	27

Bridge Maintenance

Bridge maintenance is another major function under the Street and Sanitation Division. Maintenance includes seal coating the bridges biannually. The City has 16 bridges with over 153,000 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.



8th Street Bridge Controls

8th Street Bridge being inspected

8th Street Bridge deck being seal coated (County Highway Shared Service)

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.

Road Treated With Salt Brine

Salt Brine Production Equipment

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 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. The four year average snow fall totals were 50 inches and salt tonnage used in 2016-2017 season was 4,557 tons.

Winter Snow Operations

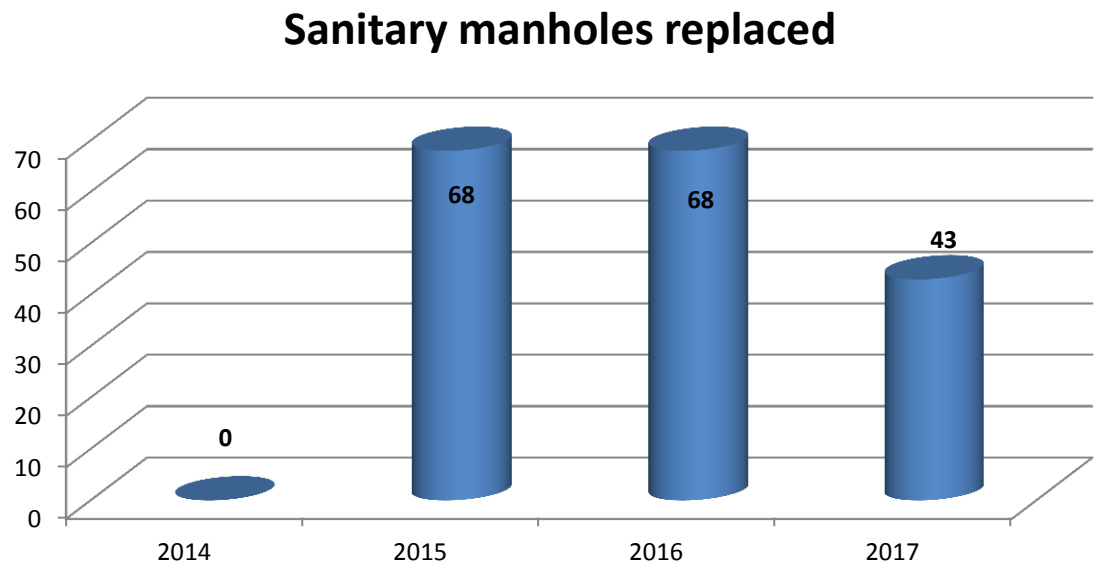
Year	EVENT #	EVENT DURATION (HRS)	EVENT PRECIPITION (INCHES)	TOTAL MAN HOURS	LABOR COST (AVG)	SALT (TONS)	SALT COST (TONS)
2013-2014	32	248.00	69.25	4,680	$ 147,428	4,667	$ 283,777
2014-2015	19	124.50	29.00	1,960	$ 61,740	2,302	$ 162,055
2015-2016	22	332.25	39.70	3,115	$ 98,107	4,552	$ 320,433
2016-2017	22	447.5	65.00	4,988	$ 157,122	4557	$ 314,314

Sanitary & Storm Sewer Construction

In 2017, the Street Maintenance Division worked closely with the Engineering Division. DPW crews worked ahead and performed the majority of underground repairs prior to the Engineering Division's contractor performed road repairs. On Ashland Avenue, DPW crews fixed multiple sanitary manholes before the street was repaired.

In addition to the Ashland Avenue project, the DPW crews repaired other sanitary manholes throughout the City based on their condition and their location.

During the 2017 construction season, the DPW replaced 43 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

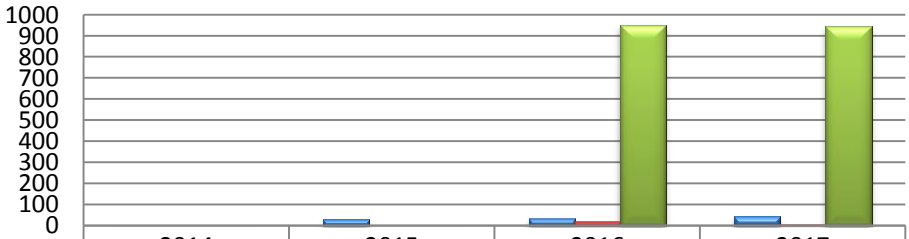
Precast Manhole with Rubber Boot

Along with replacing sanitary manholes on Ashland Avenue, 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.

Storm Drain (Catch Basin) Installation

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 2017, the DPW replaced 45 catch basins, seven storm manholes and over 900 linear feet of storm sewer pipe.

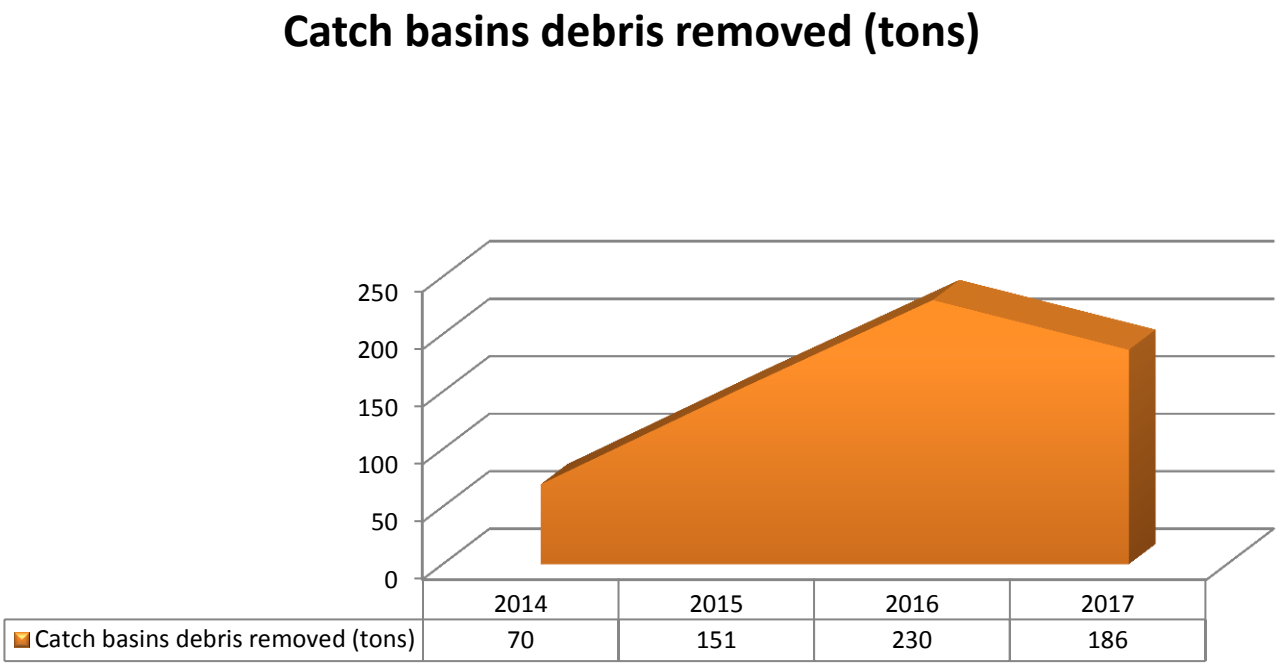
Storm Sewer Repairs



	2014	2015	2016	2017
Number of catch basins replaced	0	31	33	45
Number of storm manholes replaced	0	0	20	7
Storm Sewer Pipe Replaced (LF)	0	0	952	945

Stormwater Management

Due to flooding 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 Sewers 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 2017, the DPW removed over 186 tons of debris from the catch basins.



Sewer Whirlwind Catch Basin Cleaning Truck

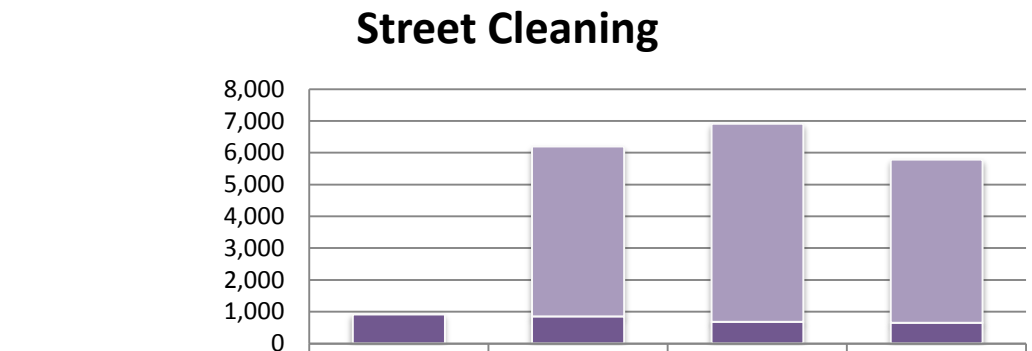
Catch Basin before Cleaning

Catch Basin after Cleaning

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 2017, the Department swept over 5,000 miles of curb line and removed 651 tons of debris from the City streets.



	2014	2015	2016	2017
Curb miles streets swept	0	5,342	6,229	5,132
Debris removed (tons)	912	850	678	651

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.

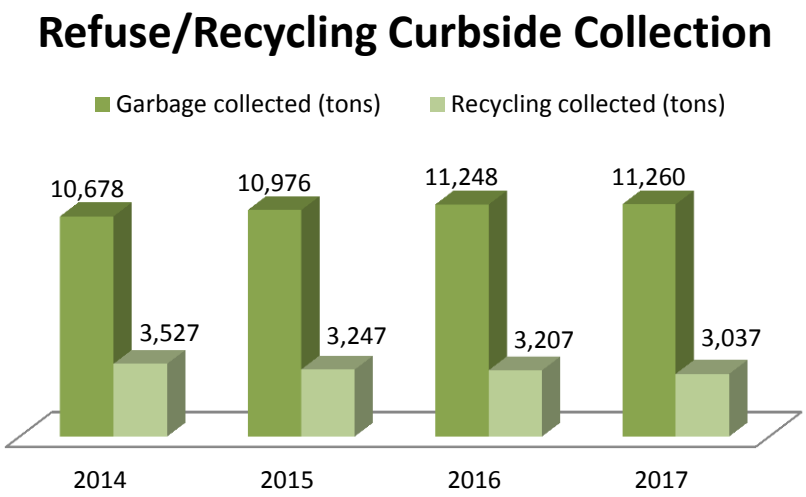
There has been a downward trend in the amount of leaves picked up off the street over the last three years. In 2015, DPW collected 1,842 tons of leaves, 1,793 tons of leaves in 2016 and 1,303 tons of leaves in 2017. Potential reasons for the trend may be increased environmental awareness and utilization of the Residential Recycling Center.

Fall Leaf Collection Special Vacuum Trailer

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 16,000 stops or pick-ups. In 2017, the DPW collected 11,259 tons of garbage and 3,036 tons or 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.



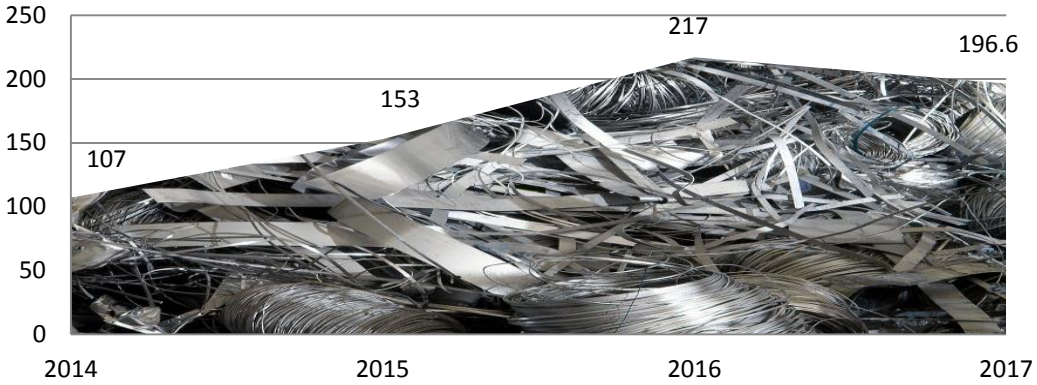
Sanitation Operator Collecting Residential Waste

Recycling Center

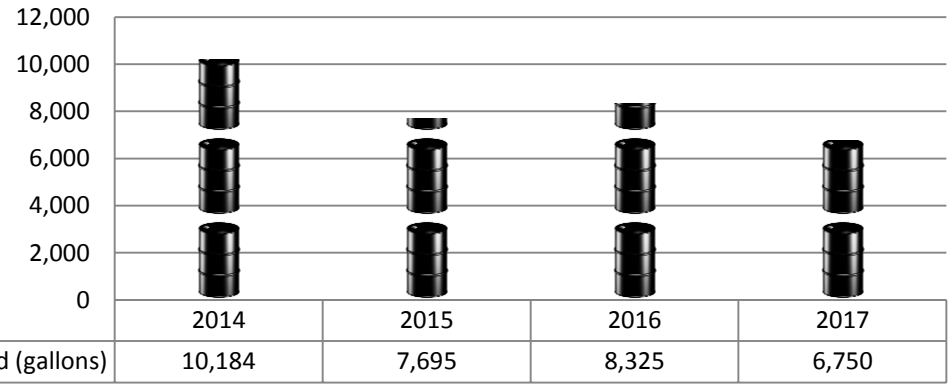
The Recycling Center drop-off site provides residents with a place to dispose scrap metal, yard waste, waste oil and many other items not picked-up with curbside collection or banned from landfills. Currently there is no charge for this service. Below is a summary of the annual tonnages collected at the Residential 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 Recycling Center's accessibility.

Recycling Center - Drop-Off Site

Scrap Metal Tons



Used Motor Oil Collected

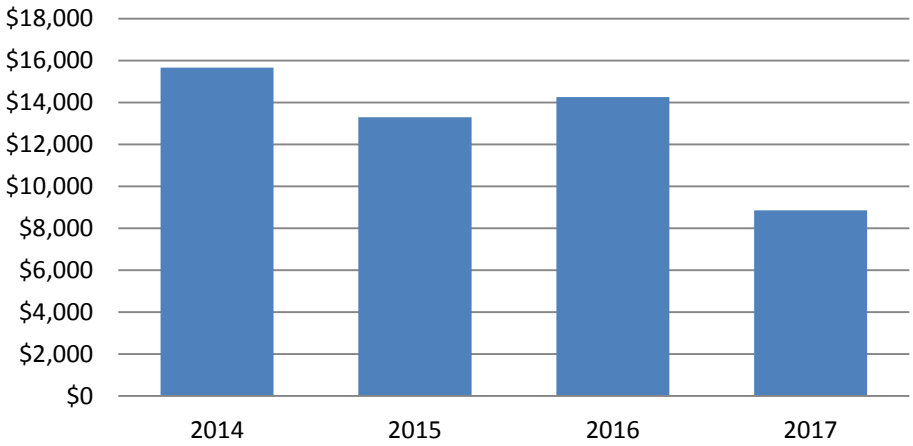


	2014	2015	2016	2017
Oil collected (gallons)	10,184	7,695	8,325	6,750

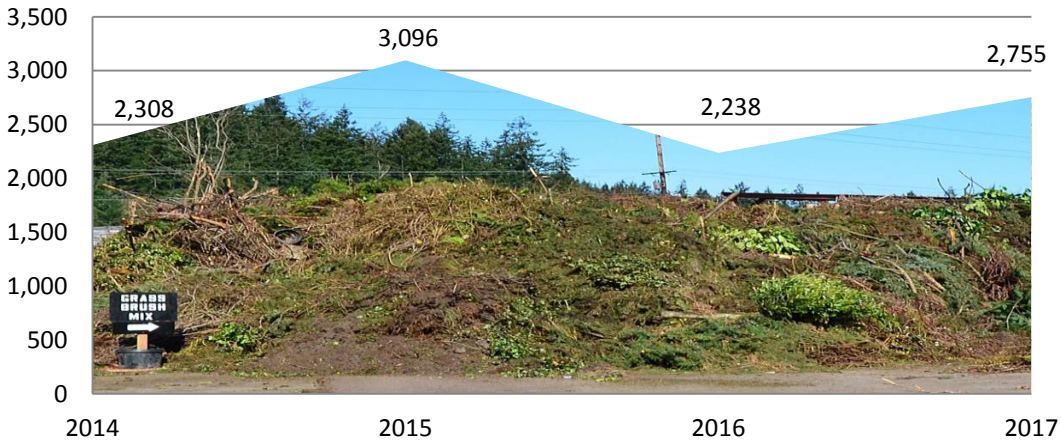
DPW Oil Collection Tanks

Used Tires Collected

Annual Cost to Grind Branches

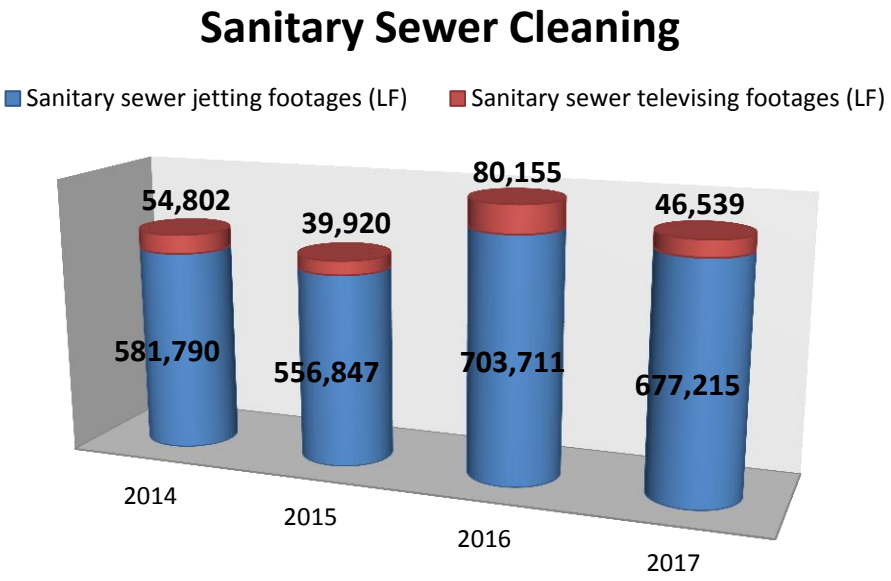


Tons of Yard Waste Managed



Sanitary & Storm Sewer Maintenance

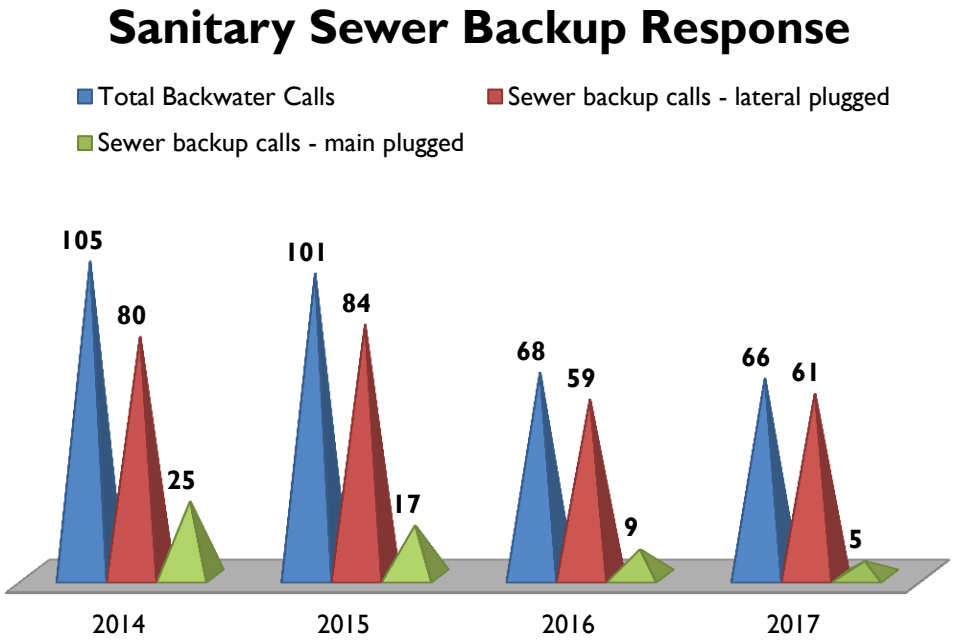
This Division performs sanitary sewer repairs through an interdepartmental budget from the Wastewater Treatment Plant. These expenses are charged against the sewer rates. The repairs are prioritized with any street resurfacing or reconstruction.



Sewer "jetting" is performed with a high-pressure water hose and is jetted through the sewer pipe to clean the inside of the pipe. 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. This debris causes the sewer to become restricted or smaller; therefore, 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.

Sewer TV Crew

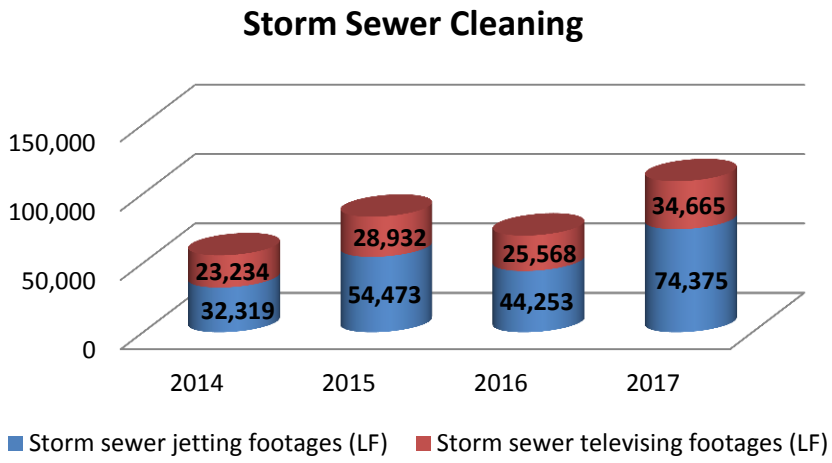
The Public Works Department owns and operates a sewer camera truck. This equipment allows the Division to inspect the integrity of sewer pipe to determine its performance. As a rule, prior to any street resurfacing or reconstruction the sewers are inspected to determine whether or not they should be 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.



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 2017, five backwaters were discovered in sewer mains, which is typically less than what we experience in a year.

A result of the decrease in backwaters can be linked to the increase linear footage of sewer cleaning and televising by City crews. Potential problems are removed before they can cause a backwater. In 2017, 677,215 linear feet of sewer pipe was jetted and 46,539 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 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.

Sewer Vactor Truck

Facilities and Traffic Division

Michael Willmas ..... Superintendent of Facilities and Traffic Division
Scott Tetschlag ..... Leadman
Robert Hayon ..... Maintenance Worker V
Allen Fleisner ..... Maintenance Worker V
Christopher Peterson ..... Maintenance Worker III
Allen Keitel ..... Maintenance Worker III
OPEN ..... Maintenance Worker II
OPEN ..... Maintenance Worker II
James Herschleb ..... Maintenance Worker II
Ryan Schneider ..... Maintenance Worker II
Travis Fintelmann ..... Maintenance Worker II
Juan Garcia ..... Maintenance Worker II
Jeffery Bemis ..... Maintenance Worker I

Facilities

This Division consists of six 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.

Notable projects for 2017:

- Renovation of the men's locker room at the Municipal Service Building
- Installed closed circuit television system at the Municipal Service Building
- Update the Emergency Alert System (Civil Defense Sirens)
- Upgrade all exterior lighting at the Municipal Service Building to LED
- Updates to the Harbor Center Marina building which include new energy efficient windows and re-siding the main building including three satellite structures (2016-2017)
- Entered into contract with Bray Associates Architects for the renovation and addition design of Sheboygan City Hall

Municipal Service Building

Harbor Center Marina

City Hall

City Hall Renovation

Historical Stairwell

Council Chamber Renovation

Traffic

The Traffic 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 subdivisions: Signs and Paint Division and Electrical Division both working in conjunction with each other to keep our roadways safe to travel.

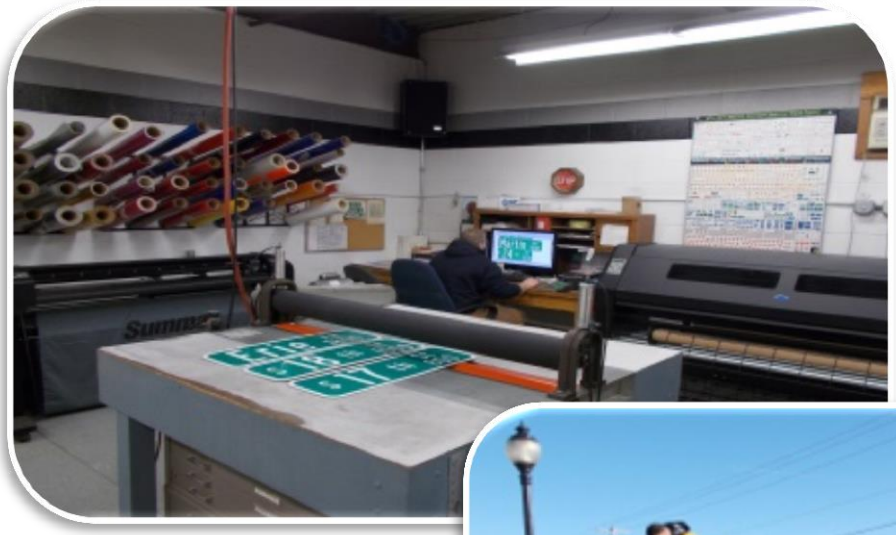
This Division is also responsible for installing, removing, and maintaining all festive decorations throughout the City of Sheboygan.

Signs and Paint

The Signs and Paint Division, 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 Division 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 Division also works closely with Shoreline Metro in supplying them with custom signage along with installing and replacing parking meters.

Construction Signs



Sign
Design/Fabrication

Installation of Signs

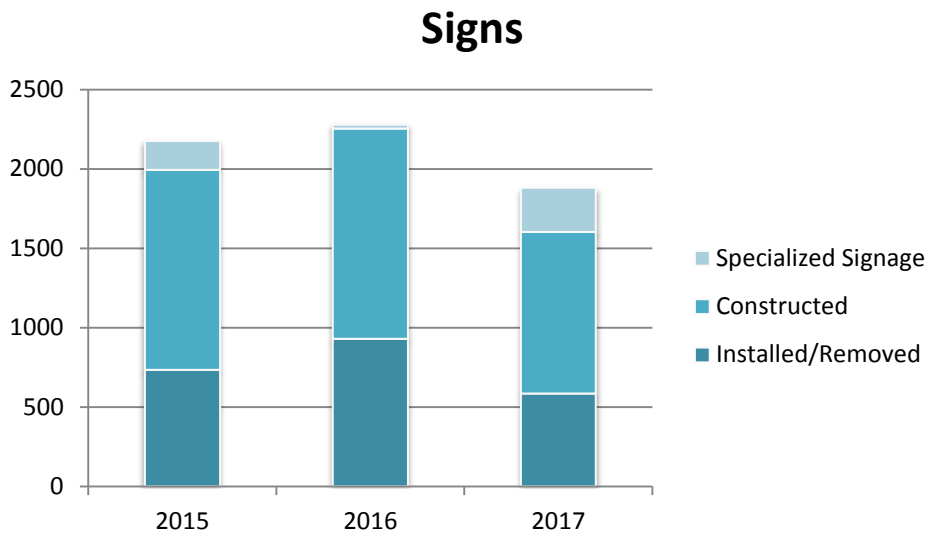
The Paint Division maintains crosswalks at 405 different locations throughout the City and 195 traffic arrows at 72 different locations. The centerline painting is contracted with the Sheboygan County Highway Department which has the specialized equipment for this procedure. With the help of City employees this process takes approximately two weeks to complete. In 2017 the Division line stripped a total of 71 miles of white and yellow paint which equates to 1,609 gallons of paint in the process. To get the reflectivity of the centerlines 11,263 pounds of glass beads were added in the painting procedure.

Street Centerline Painting - County Highway Shared Service

Street Markings

Notable projects for 2017 include:

- Purchase and installation of new Christmas decorations for downtown Sheboygan
- New signage installed on North 15th Street from Mayflower Avenue to Eisner Avenue
- New signage installed on the river walk railing, north side of the river
- Designed and fabricated 48 signs for the Army Corps of Engineers regarding pier safety for the Great Lakes



U.S. Army Corps of Engineers
– Great Lakes Project

Fire Station #3 – Special Project

Electrical

The second part of this Division is the Electrical Division which 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.

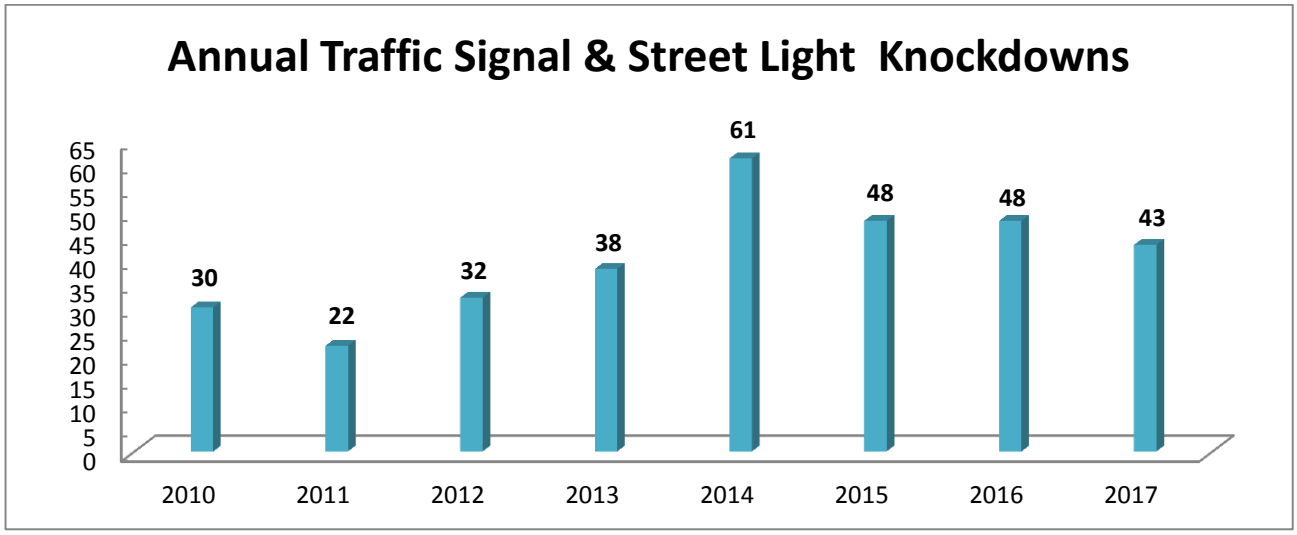
This Division installs, repairs, and maintains 39 signalized intersections, seven red flashing signals, and two yellow flashing signals. In addition to the traffic signals, the City owns and maintains over 2,700 street lights, 505 pathway lights, parking lot lights, and 1,380 lights in our park system. The Division 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 $30,000.00 in materials went into completing this job. For example, the Electricians replaced 379 12" LED traffic lamps which costed approximately $13,265.00; 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 Division 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 $1000.00 to over $50,000.00 per incident. Almost 100% of the repairs are completed by the Department of Public Works.

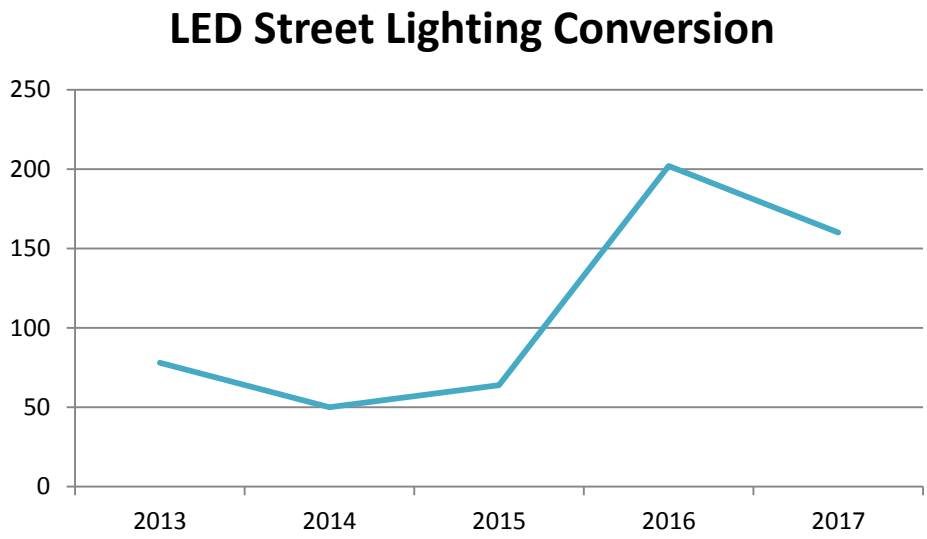
Year	Knockdowns	Material Cost
2010	30	$ 40,440.81
2011	22	$ 33,175.45
2012	32	$ 59,378.45
2013	38	$103,342.17
2014	61	$132,272.09
2015	48	$ 99,967.80
2016	48	$103,288.37
2017	43	$ 107,209.16




NEW JERSEY
Altmeyer
Electric
23

Street Lighting

- Notable street lighting projects for 2017 include the conversion of 160 light poles converted to energy efficient LED's along Washington Avenue from Taylor Drive to South Business Drive, Blue Harbor roadways, and the remainder of North Avenue to Vollrath Park. The park system also benefited with the installation of 12 LED fixtures. This upgrade saves the City approximately $3,846.00 in energy costs per year.
- Approximate total energy savings per year for all LED conversions is $19,726.00



Ball Diamond Lighting Maintenance

Adding energy
efficient LED lighting

Motor Vehicle

Rick Ney ..... Supervisor of Operations
Mark Strains..... Master Certified Mechanic
Dennis Klumb..... Master Certified Mechanic
Joel Brunnbauer..... Certified Mechanic
Max Zschetzsche ..... Certified Mechanic
Scott Hinz ..... Service Mechanic

The Motor Vehicle Division is responsible for maintaining the Division'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 Division.

Year	2014	2015	2016	2017
Total Pieces of Equipment	393	406	366	387
Gallons Diesel Fuel	95,200	94,500	92,500	78,496
Gallons Gasoline	23,766	23,859	25,348	25,734
Gallons Motor Oil	1297	924	1035	814
Gallons Hydraulic Oil	703	351	1189	515
Snow Plow Trucks	28	25	27	27
Snow Plow Blades	60	54	58	58
Repair Orders Processed	1398	1448	1384	1271

Wastewater Treatment

Steve Jossart.....Superintendent of Wastewater Treatment
Mark Wittstock.....Pretreatment Supervisor
Robert Butcher .....Maintenance Supervisor
Wendy Gorges .....Administrative Assistant
Frederick Meifert.....Process Systems & Operations Coordinator
Willard Houseye .....Operator
William Voss .....Operator
Brian Willadsen.....Operator
Tyler Hoffman .....Operator
Josh Lampe .....Master Electrician
Tony Gottschalk..... Maintenance Technician
Jeffery Sargent ..... Maintenance Technician
Mark Oldenburg ..... Maintenance Technician
Dana LePage.....Lab Technician

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:

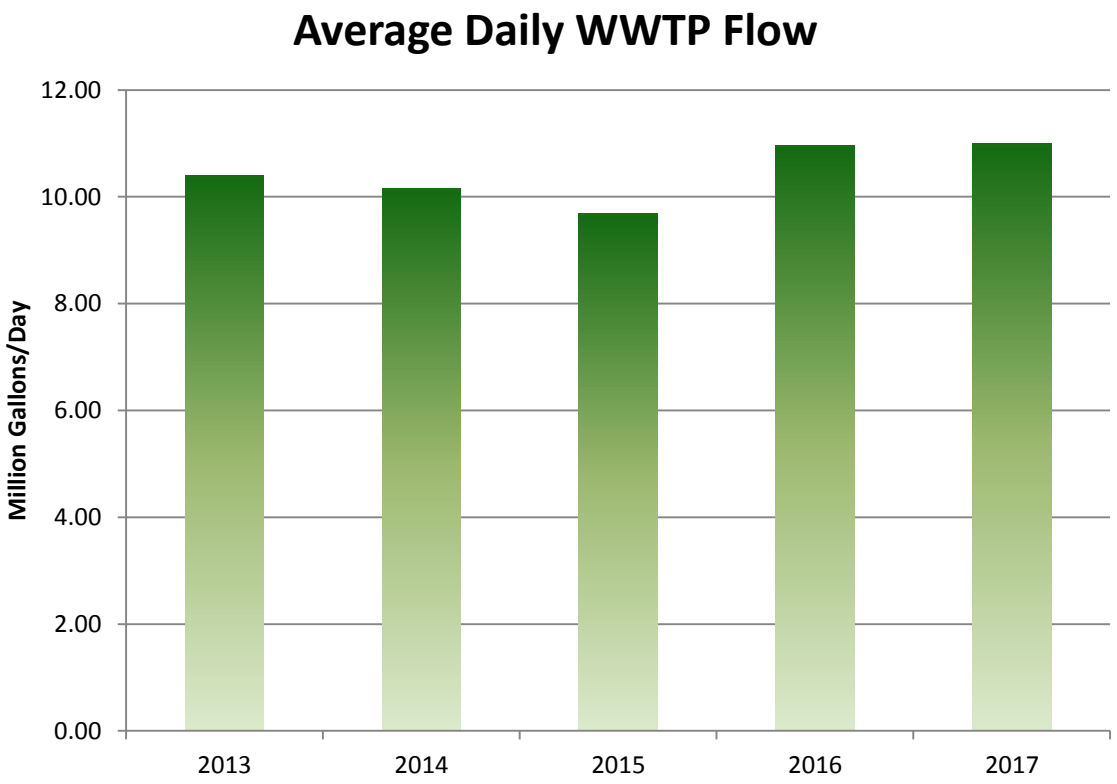
- Meet all compliance and reporting obligations for wastewater, air emissions and biosolids reuse
- Maintain the infrastructure of the wastewater system in a sustainable and fiscally responsible manner
- Empower the employees to develop and implement practices which will optimize the process and continuously 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

Process Description

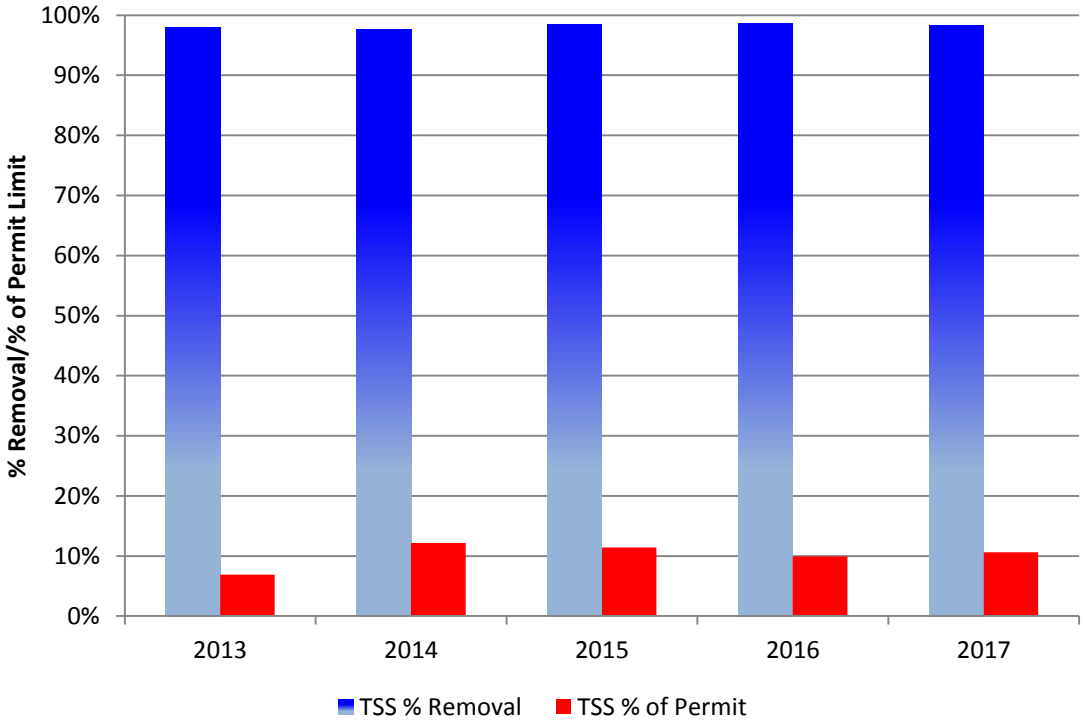
The WWTP is a conventional activated sludge wastewater treatment facility which utilizes enhanced biological nutrient removal to reduce total phosphorous and total nitrogen levels in the final effluent. The plant process includes primary treatment, secondary treatment (activated sludge) followed by effluent disinfection prior to discharging to Lake Michigan. Sludges generated by the facility are stabilized using anaerobic digestion, which produces a stabilized biosolids that is utilized as a soil conditioner/fertilizer. Gases produced from the digestion of sludge are used for process heat as well as to generate electricity utilizing the on-site gas turbines.

Historical Performance

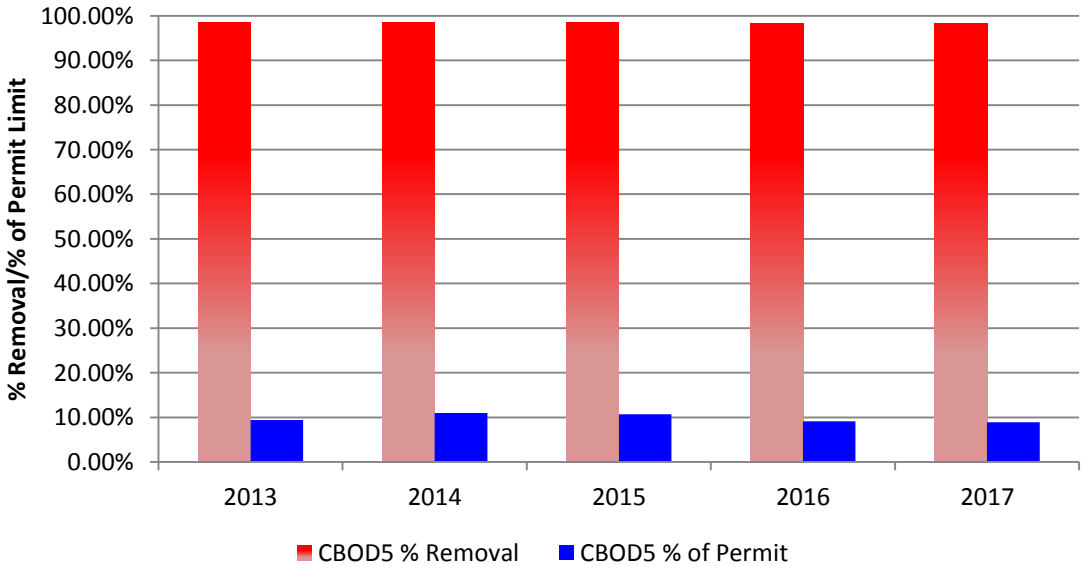
The following graphs show our historical performance for plant flow and conventional pollutants:



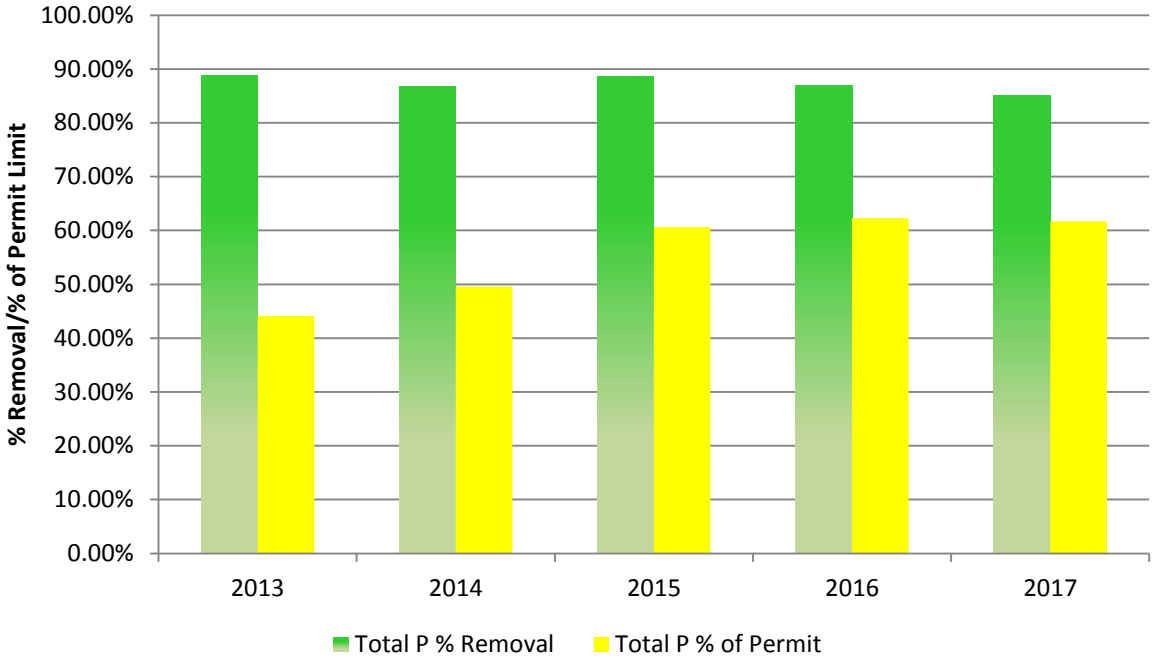
Final Effluent Total Suspended Solids



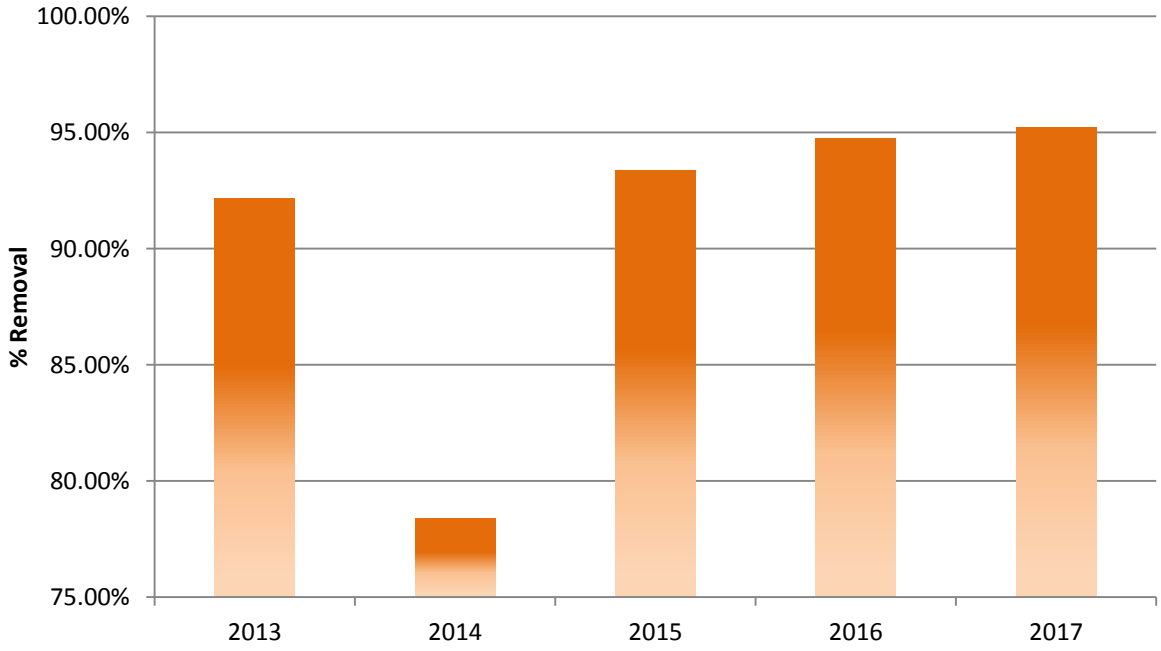
Final Effluent Carbonaceous Biochemical Oxygen Demand

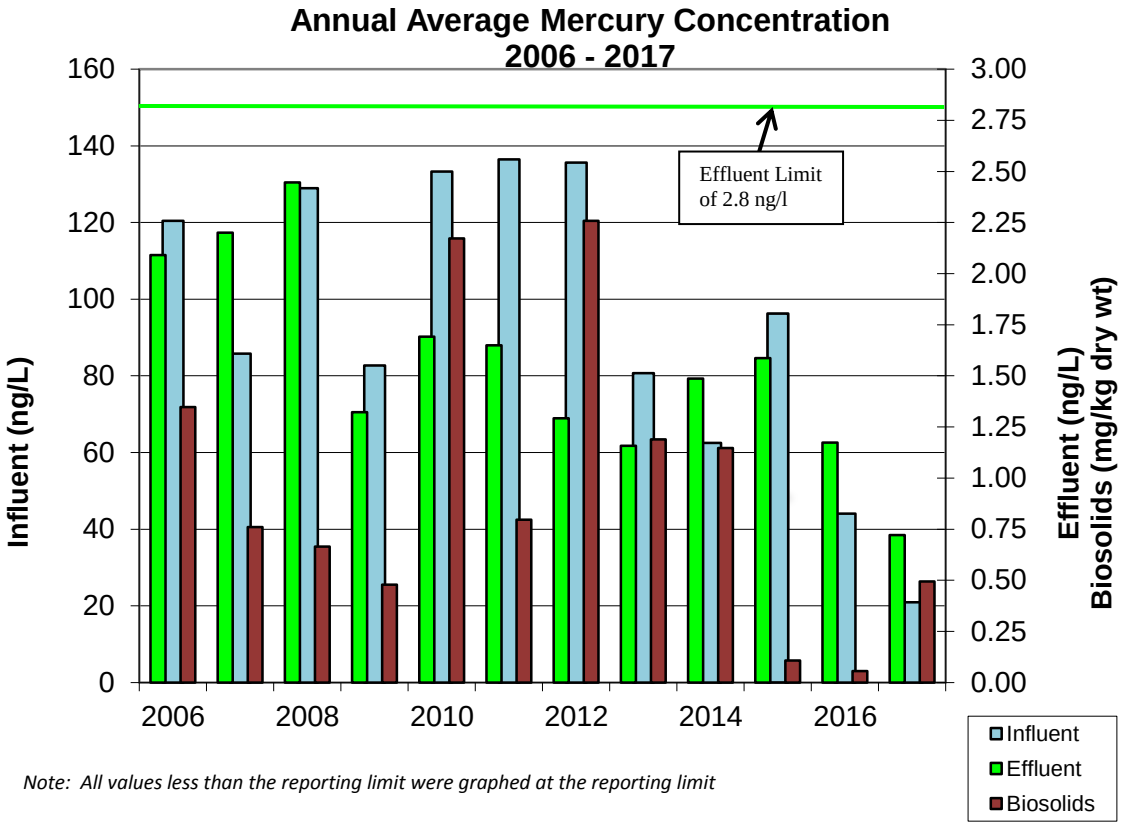


Final Effluent Total Phosphorous



Ammonia % Removal





Note: All values less than the reporting limit were graphed at the reporting limit

2017 Accomplishments

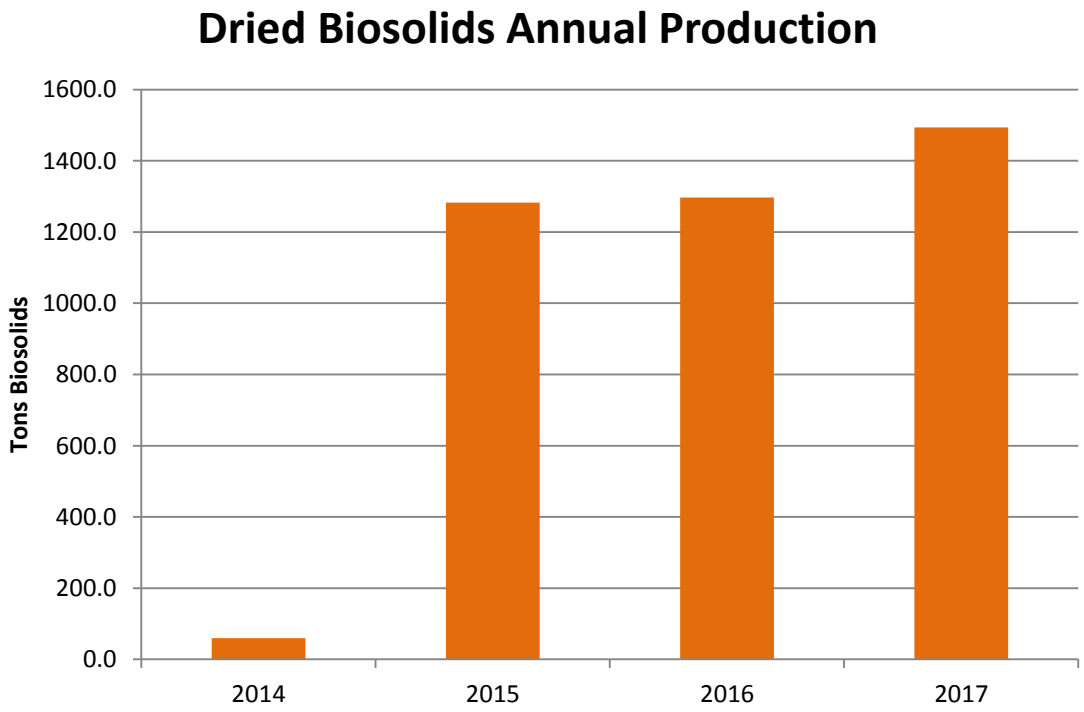
There were many significant accomplishments in 2017. The following is a list of the most important items completed during the year:

- A facility plan was completed and submitted to Wisconsin Department of Natural Resources, which outlines the future infrastructure needs for the facility
- A phosphorous optimization plan was completed and submitted to WDNR in February and updated in December.
- A new sodium hypochlorite feed system with new controls was installed by plant staff.
- Plant staff adapted to the changes caused by the suspension of receiving high strength waste.
- The north aquastore was emptied, cleaned, inspected and put back into service.
- The 200 kW micro turbines and sludge boilers were programmed to operate automatically to manage digester gas for the purpose minimizing the use of the waste burner.
- The work order system was fully implemented and is being utilized by all employees to document the maintenance work being done and to provide a better history on equipment failures.
- The primary drain for the wastewater plant was repaired.

Biosolids Management

Sludge Drying System

The drying system presented significant challenges during 2017. Due to continued fouling of the recirculation air condensing coil, modifications were made to eliminate this problem and improve the reliability of the system. Unfortunately the modifications made did not resolve these issues, and further changes are planned for early 2018. The new modifications will eliminate the air condensing coil from the system and utilize the water spray condenser to cool and condense off gasses from the dryer, prior to recirculation. By eliminating the air condensing coil, the dryer draft system will no longer be restricted which will allow the dryer to operate at full capacity.



Sludge Generation

Due to the suspension of high strength waste, the amount of biosolids generated by the facility was significantly lower during the 4th quarter of 2017. Based on the initial data, it appears there will be a reduction in biosolids production of over 50% from previous years. As a result of this change the facility is looking at utilizing the sludge dryer to process 100% of all biosolids generated and sell them as Class "A" biosolids (dried biosolids). Achievement of this goal will allow the hauling of liquid biosolids to be phased out over the next few years.

Industrial Pre-Treatment Program

Significant Industrial Users (SIU)

Each of the 15 permitted SIUs 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 2017, five industries received letters of Notice of Non-Compliance (NON). One industry was determined to be in Significant Non-Compliance (SNC).

Each permitted industry received an Annual Site Inspection (ASI) during 2017. There were no industries which were reissued Industrial Wastewater Permits in 2017.

Laboratory

The on-site laboratory is responsible for the analysis of all conventional pollutants including Total Suspended Solids (TSS), Carbonacious 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 (10 – 15 Total phosphorous samples) are completed by a contract laboratory annually during the vacation period of the primary analyst.

Future Challenges/Improvements

There are a number of significant projects planned for 2018 in addition to working on reducing the effluent total phosphorous concentration per the optimization plan submitted to WDNR.

Major projects scheduled for 2018 include:

1. Cleaning out the existing high strength waste tanks (old digesters).
2. Installation of a new drive and inspection of the rake arm for final clarifier #4.
3. Installation of new electrical switch gear and disconnects on the facilities incoming power feeds.
4. Installation of a new #6 raw influent pump.
5. Inspection of the South aeration basins and sealing of the wall joints.
6. Install ORP probes and optimize ferric chloride chemical feed system as part of the total phosphorous optimization plan.