



2019



Annual Report

Public Works

OVERVIEW

The Village of Morton Grove Public Works provides essential public services, in a professional and fiscally responsible manner, to the community and general public. Thirty-seven dedicated employees are responsible for the maintenance of Village infrastructure and provide a wide variety of services to Village residents, businesses and others.

Public Works is split into five divisions:

Street Division

Engineering Division

Water/Sewer & Pumping Station Division

Vehicle Maintenance Division

Building Maintenance Division

On page three, you will find a brief description of each Division's duties and responsibilities.

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COMBINED CREW ACCOMPLISHMENTS

- LEAF COLLECTIONS
- SNOW/ICE CONTROL
- MORTON GROVE DAYS
- ARBOR DAY
- SWANCC EVENT
- NATIONAL NIGHT OUT



Mayor Di Maria and Board of Trustees:

I would like to thank the Public Works Department for another year of dedication and accomplishments. Each Division has come together in-order to deliver essential services to the Village. With the support of the Mayor and Board of Trustees, we have been able to make great strides in providing quality services to the residents of Morton Grove.

In 2019, Public works faced many personnel changes from pervious retirements in 2018 and early 2019. Bill Burns position as head of Building Maintenance was reclassified to the position Facility Maintenance/ Procurement and Safety Compliance Manager. John Mitchell was promoted to Superintendent of the Street Division and Kevin Lochner was promoted to Superintendent of Water/Sewer Division. This was followed by Daniel Stolarski's promotion to Maintenance Supervisor of the Water/Sewer Division and Jake Zukerman to Crew Leader of the Water/Sewer Division. Public Works hired four new Maintenance Workers as well (Andy Pawlik, Lucas Mannette, Ryan Chepulis and Samuel Shemroske). I am very proud of the employees promoted and look forward to working with our new employees for years to come.

The Morton Grove/Niles Water Commission (MGNWC) Transmission Water Main Project continued in 2019. Major reservoir upgrades to the North and South Station supply mains, reservoir control valves and master meters were completed. Pavement reconstruction of River Drive and resurfacing of Nagle Avenue was also completed in 2019 through the MGNWC Project.

It is my pleasure to present the 2019 Public Works annual Report. This report provides you with a brief summary of the Department's activities and accomplishments from last year. I want to thank the Public Works staff for the completion of this year's report and hope you find it to be an informative and useful tool.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "Joseph J. Dahm", with a stylized flourish at the end.

Joseph J. Dahm

Director of Public Works

Street Division

The Street Division is responsible for the maintenance of 82.55 miles of Village, State and County roads including 11 miles of paved alleys. Additionally, the Division is responsible for the maintenance of all Village rights-of-way (parkways, sidewalks and unimproved alleys). Maintenance operations consist of: street sweeping, landscaping, street patching, signage, pavement markings, leaf collection, sidewalk/curb replacement, tree trimming, removal, replacement of trees, snow/ice control, and storm damage cleanup. This Division is also responsible for the operation and maintenance of the Village parking lots.

Engineering Division

The Engineering Division is responsible for the design, inspection and administration of all construction projects for the Village. These include the following annual programs: street improvement, street patching, water main improvement, sewer lining and improvements, crack sealing, pavement markings, traffic signal and street light maintenance. This Division is also directly involved in the procuring of State and Federal funding while administering various projects performed within the boundaries of the Village by the State of Illinois Department of Transportation. Additional duties include performing engineering studies related to the Village streets such as: sewers/water main infrastructure, reviewing plans and proposals for projects proposed by private developers for compliance with policies and regulations of the Village and other regulatory agencies. Performing work site inspection to verify code compliance and providing developers with pertinent information regarding the diverse physical features of the Village. Advancing and maintaining the Village's Geographic Information System (GIS). Engineering also provides critical support for the Traffic Safety Commission as primary Village Staff liaison including, meeting coordination and providing technical review of Traffic and Parking Impact studies.

Water/Sewer Division

The Water/Sewer Division is responsible for the operation and maintenance of the Village owned water/sewer systems. The water system consists of two Pumping Stations with a combined storage capacity of 8.55 million gallons. Both Stations pump approximately 2.9 million gallons of water a day into 98 miles of water main which, in turn, supplies water to residents and 1,050 fire hydrants. Maintenance operations consist of: water main repairs, leak location, meter installation, inspections, J.U.L.I.E utility locates, maintenance and repair of all Pumping Station apparatus, hydrant maintenance, and water sampling.

The sewer system consists of 40.6 miles of sanitary sewer, 21.13 miles of combined sewer and 44.8 miles of storm sewer. Some maintenance operations consist of catch basin cleaning, sewer rodding, cleaning, sewer repairs, and basin installation/repair.

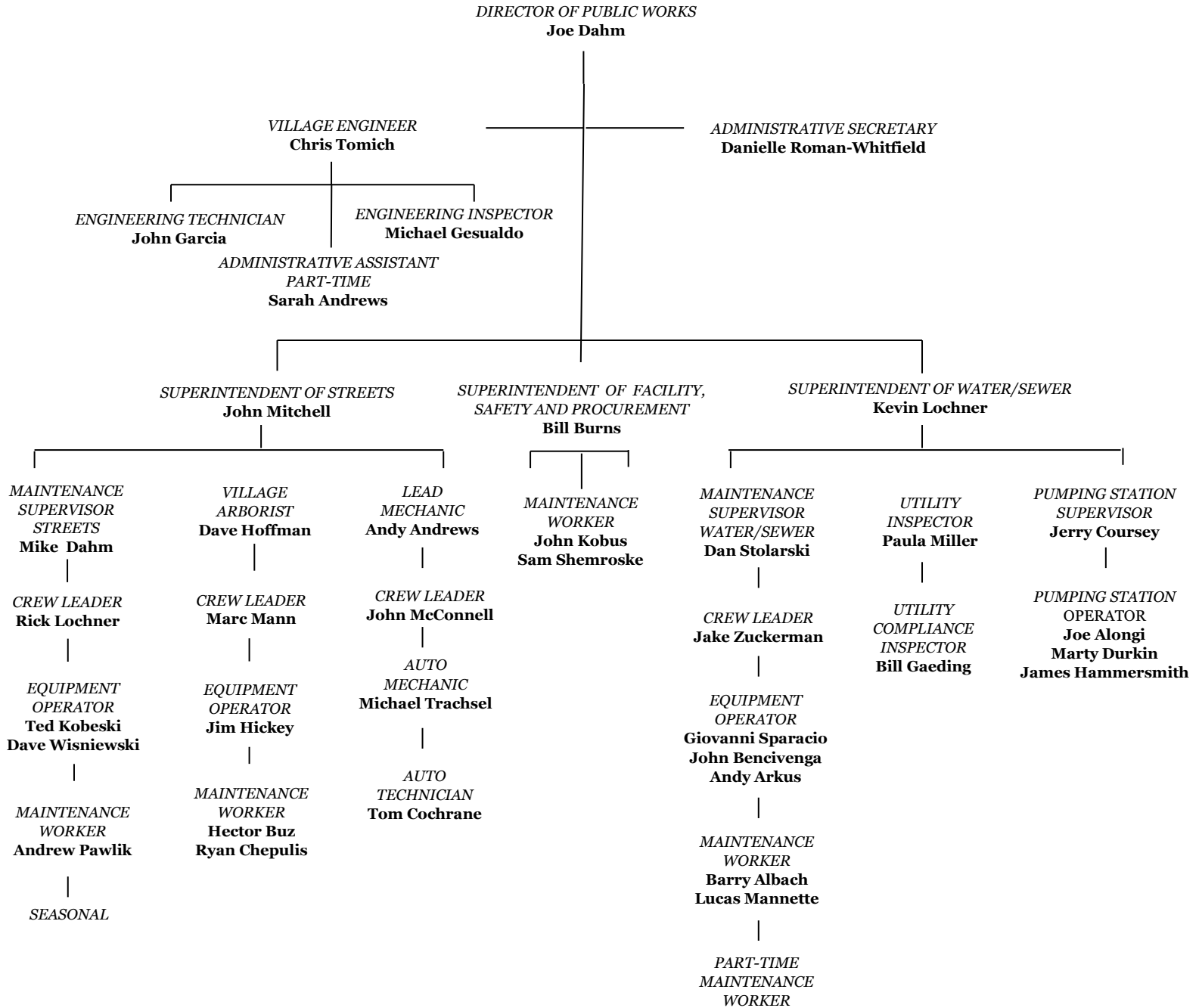
Vehicle Maintenance Division

The Vehicle Maintenance Division is responsible for the scheduling and performance of routine maintenance and all repairs to the municipal fleet. The fleet includes Fire Department, Police Department, Public Works, and the Administrative Department vehicles. This consists of approximately 130 vehicles. This Division ensures that all Village vehicles and equipment are available, reliable and safe to operate on our Village roads.

Building Maintenance Division

The Building Maintenance Division monitors, maintains, and verifies the condition of municipal buildings and properties on a continual basis. This Division participates in setting design specifications, bidding and overseeing the preventive maintenance programs which decrease the overall cost of maintaining buildings and properties. They also respond to emergency maintenance calls particularly where conditions can threaten health or safety. This includes unscheduled service calls in order to prevent injury, loss of property or to return a specific asset to service.

2019 VILLAGE OF MORTON GROVE
PUBLIC WORKS ORGANIZATIONAL CHART



STREET DIVISION

Mission Statement

The Morton Grove Public Works Street Division's mission is to maintain the Village owned property that includes 270 lane-miles of thoroughfare and approximately 60 lane-miles of State and County roadways, and maintain and preserve the public rights-of-way that encompass those areas. The Street Division prides itself by operating within budget parameters while maintaining a high level of customer service to Village residents.

The Street Division is comprised of three separate Divisions:

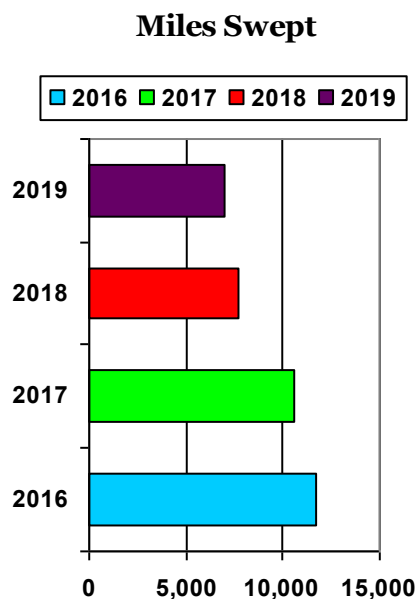
- Signs/Street Sweeping/Combined Operations
- Forestry
- Landscaping

This Division is responsible for the cleaning, repairs, maintenance of our streets and alleyways. Other responsibilities include the General Pavement Maintenance Program, Alley Improvement Program and year round temporary cold-mix and hot-mix asphalt patching. This allows the Village the capability to mitigate risk on the roadways while extending the life of those road surfaces by providing the flexibility to quickly service road hazards and repair utilities. We effectively maintain the safety of the Village's roadways and alley systems by street sweeping and maintaining crucial pavement markings on streets, curbs, and parking lots.

Street Sweeping Operations

Street sweeping is necessary not only to keep streets clean, but also to prevent dirt and debris from entering the Village's combined sewer system. The less debris on the street, the better stormwater will drain during rain events. The Public Works operates two street sweepers during leaf season and one sweeper over the summer months bi-weekly.

Combined sweeping during the two seasons includes 7,023 miles swept and 70,827 gallons of water used.



STREET DIVISION

Sign Operations

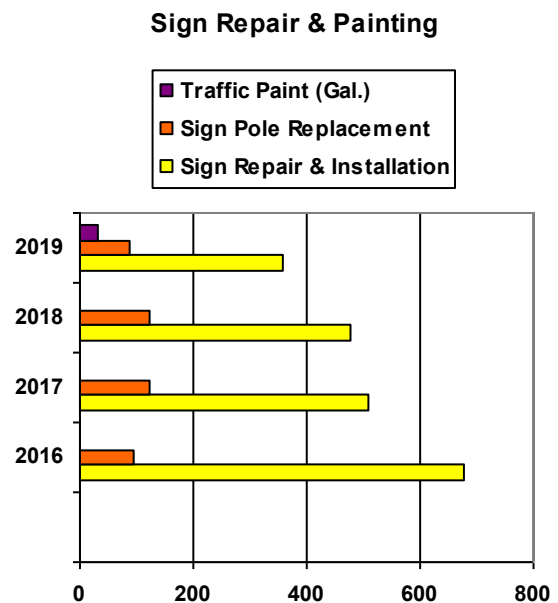
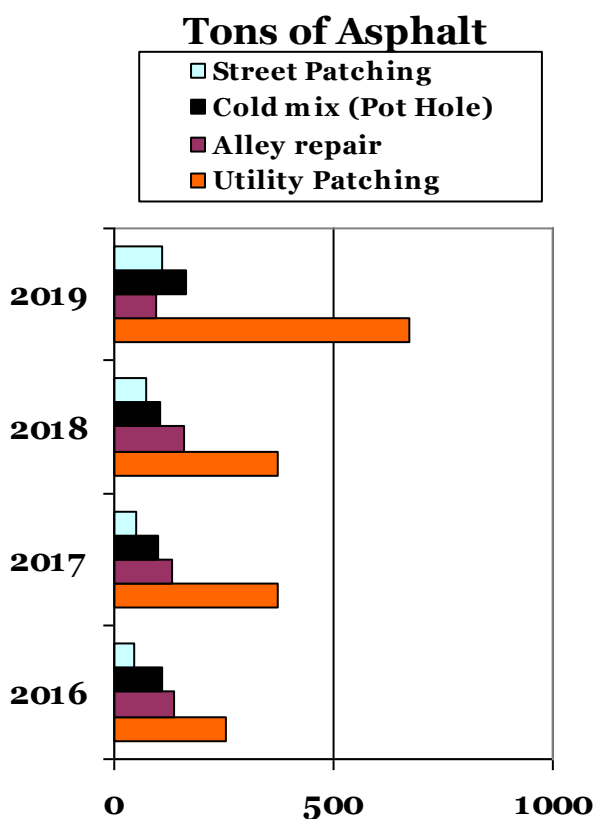
The Sign Division is responsible for sign development and includes; surveying, repairs, installation, and maintenance of all Village signs.

- ♦ 358 Signs were repaired and/or replaced.
- ♦ 87 Poles were repaired and/or replaced.
- ♦ 92 J.U.L.I.E. tickets were located for repairs.

Street Operations

The Street Division is responsible for the maintenance of our asphalt streets, alleyways and street sweeping. There are five full-time employees and one seasonal worker. Furthermore, this division is involved with the annual combined crew programs such as: leaf collection, de-icing and snow removal.

- ♦ Street Repairs 33 Locations 109.5 Tons of hot mix asphalt used
- ♦ Utility Repairs 127 Locations 671.75 Tons of hot mix asphalt used
- ♦ Alley Repairs 5 Locations 95 Tons of hot mix asphalt used
9 Cubic Yards of stone used
- ♦ Stone Alley Graded 1 Location 6 Cubic Yards
- ♦ Saw Cuts for Street/Alley 132 Locations
- ♦ Cold Mix Patching (potholes/water leaks) 162.5 Tons of cold-mix asphalt used
- ♦ Traffic paint used for pedestrian safety crosswalk 33 Gallons of paint used



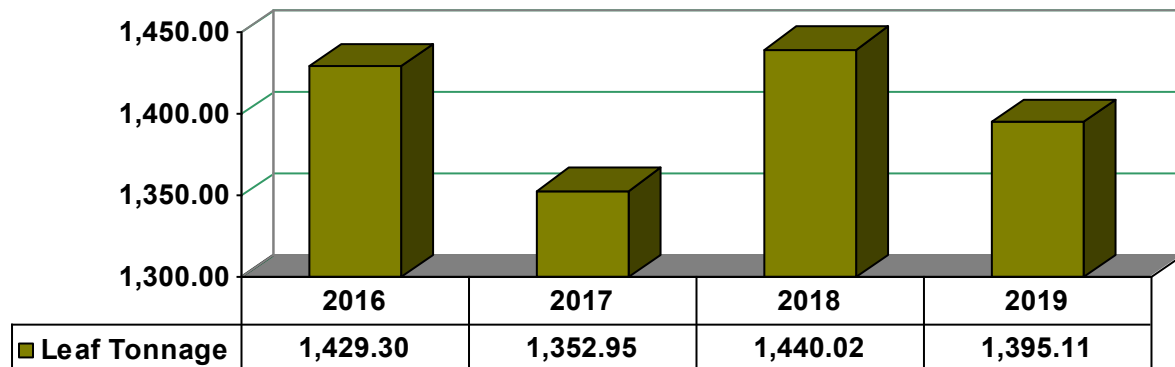
COMBINED CREW PROGRAMS

Leaf Collection Program

The Leaf Collection Program, when in full force requires the recruitment of the entire Street Division. During the 2019 leaf season 1,395.11 tons of leaves were hauled to and from the Public Works yard. The season began on October 21st and ended on December 13th.

Any remaining leaves are picked up in the middle of March when yard waste pickup resumes.

Leaf Collection Tonnage



COMBINED CREW PROGRAMS

Snow Removal Program

One of the primary objectives of the Public Works Snow Removal Program is to provide the safe and orderly movement of traffic throughout the Village of Morton Grove during snow events. Depending on the severity of the storm, residents are provided with quick and efficient removal of snow from all streets and alleys. This provides safe passage for residents, pedestrians and drivers. This program also includes snow removal from business areas such as: Dempster Street, Waukegan Road and Lincoln Avenue. Furthermore, it includes parking areas such as: Metra Station (including the off-street parking along Lehigh), 8550 Lehigh, 6240 Lincoln, and 5714/5828/6055 Dempster.

Snow Plowing and De-icing

Snow and ice control operations begin when hazardous road surfaces are expected. Depending on conditions, a pre-application of salt brine and road salt is applied to the pavement. Plowing begins after snow accumulates to 1” or more.

Snow Plowing:

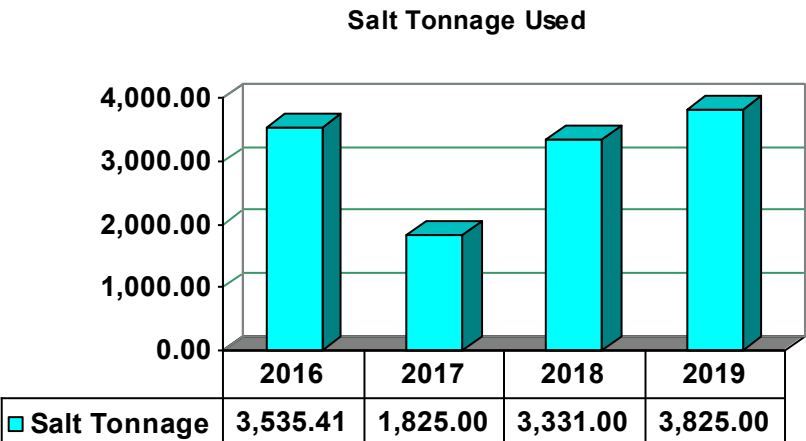
Snow plowing requires the cooperation of all Public Works staff; 2019 presented only 43 snow/ice events for the entire year.

De-icing:

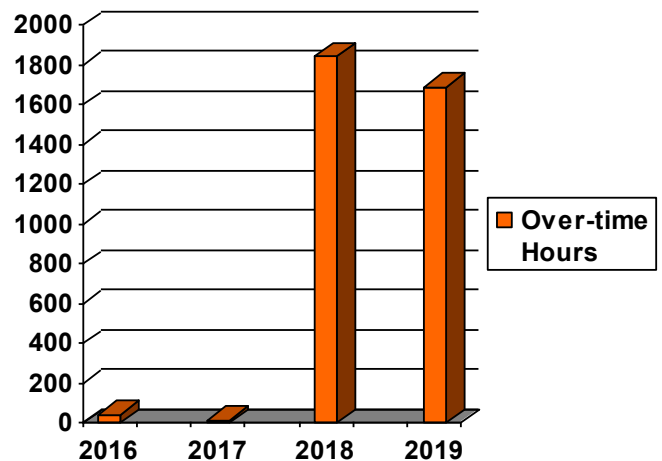
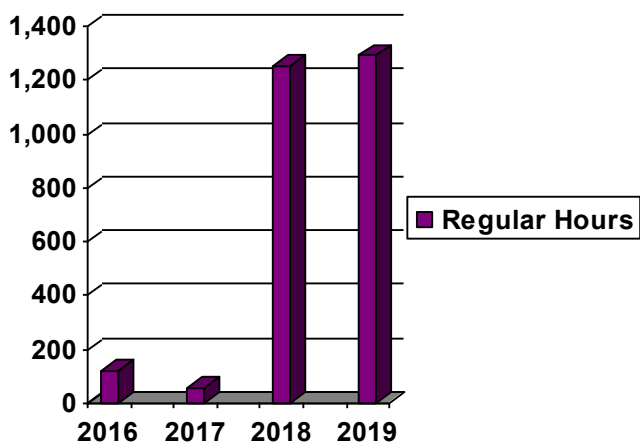
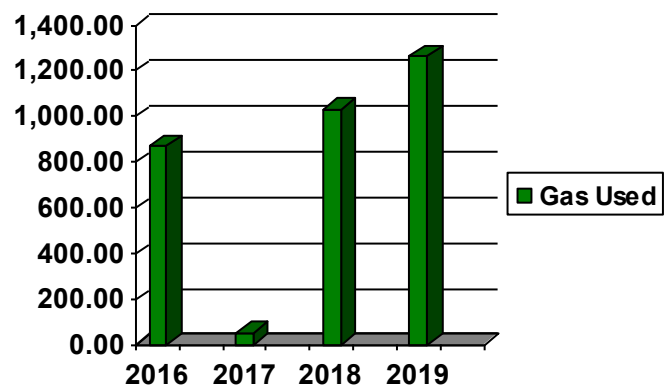
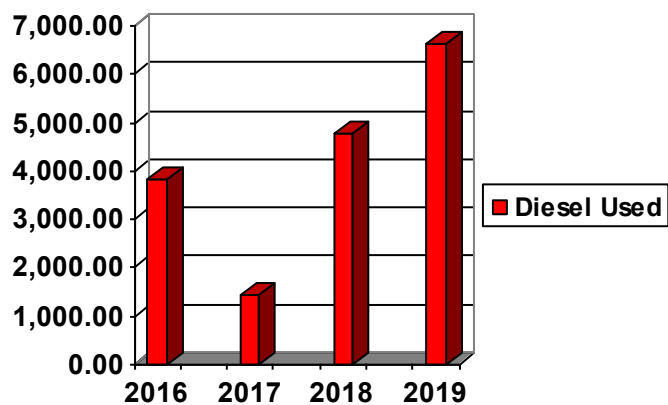
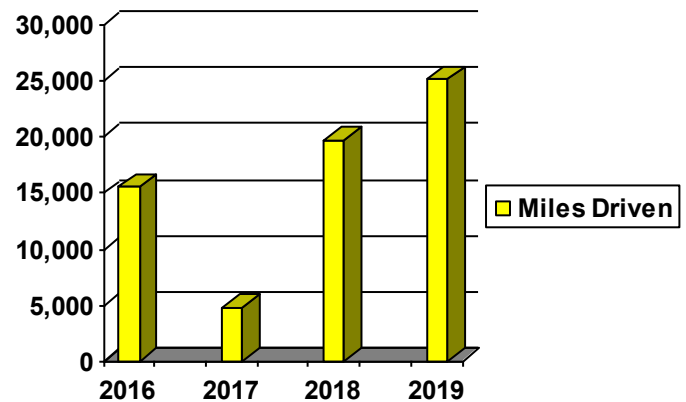
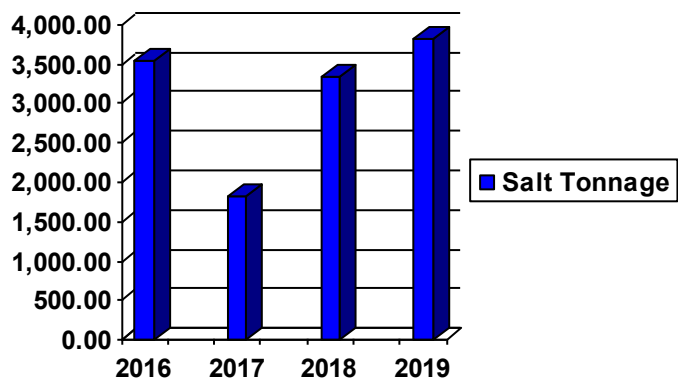
De-icing requires nine Street Division personnel to fully operate the Village’s salt truck fleet which remain on a 24 hour on-call status through the entire season.

- ◆ 3,825 Tons of Salt used.
- ◆ 7,164 Gallons of Calcium Chloride used.
- ◆ 6,630.1 Gallons of Diesel Fuel used.
- ◆ 1,263.7 Gallons of Gasoline used.
- ◆ 330 Gallons of Brine used.

Total Vehicle miles driven was 25,089. Total employee hours worked during regular time was 1,290.50 hours, and total employee hours worked on over-time was 1,685.50 hours.



WINTER SEASON COMPARABLES 2016–2019



FORESTRY DIVISION

This Division is responsible for all trees on public property; planting, trimming, general care and maintenance. The complete removal of dead or diseased trees, stump grinding and parkway restoration is also the responsibility of the Forestry Division. Other Forestry responsibilities include flag and banner/decoration installation, street light maintenance, branch pick-up, parkway repairs/restorations and participation in annual combined crew programs such as: leaf collection, de-icing and snow removal.

The Village has a Certified Arborist who provides assistance to residents and participates in public education. The Arborist annually visits public schools to educate children at the third grade level about the benefits of trees and our environment. The Village Arborist promotes Arbor Day activities while demonstrating proper tree planting techniques. Distributing trees, started from seedlings helps to qualify the Village as a Tree City USA community. Morton Grove has been a member of this community for 19 years now.

Tree Removal

Total number of trees removed	247
Total linear feet of canopy removed	6996'

Tree Pruning

Total number of trees pruned	2,435
Pruned by village staff	1,680
Pruned by contractor	755

Tree Planting

Total number of trees planted	206
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Tree City USA

Arbor Day:

1. Coordinate with ComEd and schools.
2. Visited five schools to discuss Arbor Day, the benefits of trees, and distribute seedlings to students.

Stump Removal

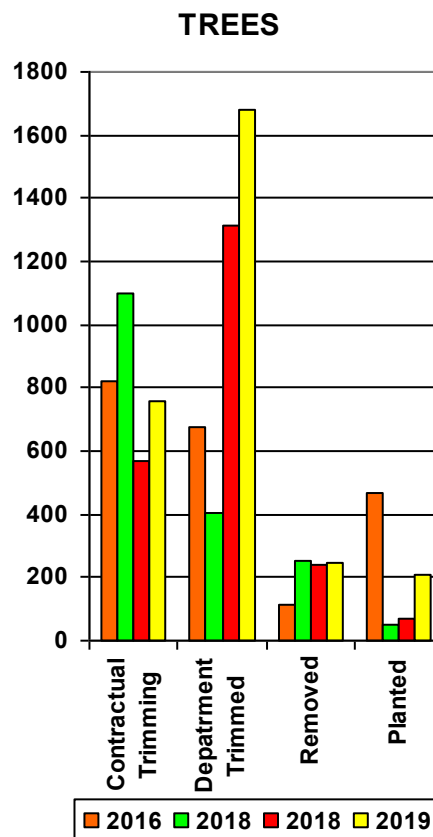
Total number of stumps removed	233
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Parkway Repair

Total number of parkways restored	183
Total number of grass seed used	1,600 pounds
Residential alleys cleared of overgrowth	98 locations

Wood Chips

Delivered to residents	118 yards
Hauled to recycling center	2,520 yards



LANDSCAPING DIVISION

This Division is responsible for landscape design, planning and maintenance of Village owned properties and buildings. Other responsibilities include, spring, fall, alleys, and roadside cleanups. Village parking lot maintenance, maintenance and replacement of Village gate-way signs/plantings. When developing design ideas for landscapes, the division ensures they are cost effective, require minimum maintenance, and cope with the challenges of the ever-changing climate and soil conditions. Day-to-day care of lawns, trees and shrubs takes place as well as providing and managing irrigation solutions, weed control, and fertilizer application.

The Landscaping Division has one year round Maintenance Worker during the spring/summer months. Tasks include assisting in Village properties such as: Village Hall, Civic Center, Metra Station, Public Works, and other Village owned properties which are mowed once a week. Flowers are planted, watered and weeded on a weekly basis. All other properties are mowed and weeded as needed. This division also picks up garbage and debris within the Dempster and Waukegan business districts, as well as many other locations.

Public Building Cuts

Grass cutting, sidewalk edging, garbage pick-up, planting flowers/bushes and trimming trees/bushes— 3 locations.

Cul-de-sac Cuts

Grass cutting and trimming bushes—14 locations.

Alleys Cuts

Trimming bushes and garbage pick-up—65 locations.

Right-of-way Cuts

Grass cutting, line trim and garbage pick-up—34 locations.

Village cuts

Grass cutting, edging, line trim, trimming trees/bushes, and garbage pick-up—748 Village cuts for the year.

Annual Planting Beds

Maintain and water 91 planters.

Village Sign Maintenance

Maintain and repair Village signs or posts. Installed Fire Station #5 sign.

Adopt a Pot Program

91 flower kits were adopted for locations at: Dempster St., Lincoln Ave., Civic Center, Village Hall, and Metra Station.



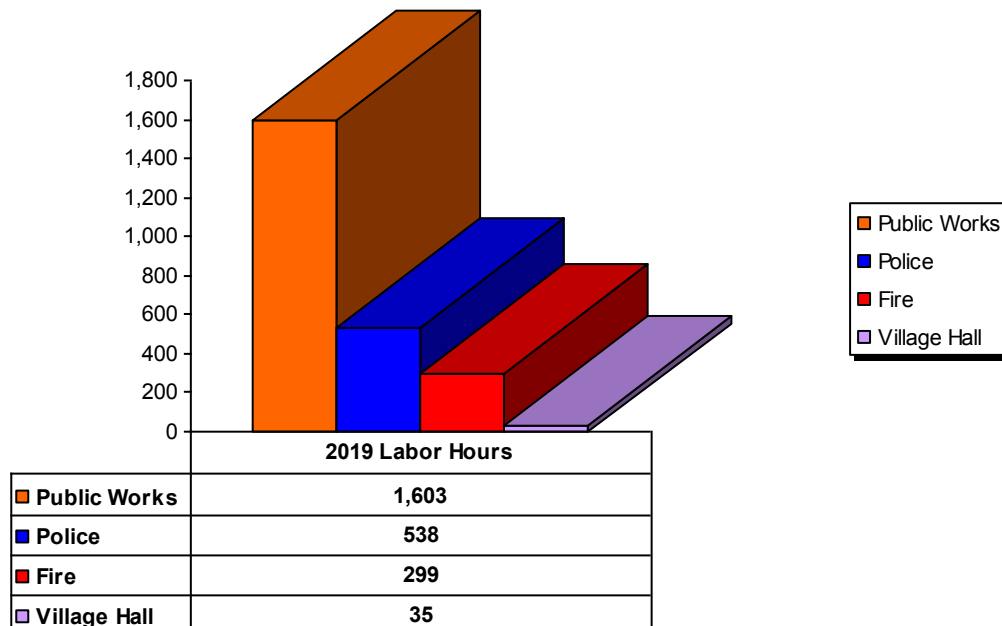
VEHICLE MAINTENANCE DIVISION

The Vehicle Maintenance Division is responsible for the scheduling and performance of routine maintenance and repairs to the entire municipal fleet. The fleet includes Fire Department, Police Department, Public Works, and the Administrative Department vehicles. This consists of approximately 130 vehicles. The Division ensures that all Village vehicles and equipment are available, reliable and safe to operate in the most cost efficient manner. Parts inventory and all record keeping is obtained and kept on file by the vehicle maintenance supervisor. Records kept include data regarding the fuel control system. This warrants and ensures compliance with federally mandated fuel and tank regulations.

2019 Diesel & Gas Usage Village Fleet

Month	Public Works/Street		Public Works/Water		Police Department	Fire Department		Village Hall	Park District		School Dist. 70
	DIESEL:	GAS:	DIESEL:	GAS:	GAS:	DIESEL:	GAS:	GAS:	DIESEL:	GAS:	GAS:
JAN	3,050	1,471	1,571	719	3,134	856	165	50	27	318	81
FEB	2,071	1,193	1,067	615	2,658	808	153	28	0	352	40
MAR	881	885	415	416	2,934	778	144	27	47	152	19
APR	1,321	1,087	680	560	2,647	673	131	40	30	276	22
MAY	971	959	478	472	2,616	662	156	36	93	482	0
JUN	1,361	1,283	670	632	2,797	784	93	32	197	521	22
JUL	1,169	1,257	575	619	2,876	834	118	51	108	634	0
AUG	1,096	1,101	540	542	2,975	808	118	41	105	509	0
SEPT	1,117	915	550	450	2,727	740	142	40	153	481	23
OCT	1,641	1,030	808	507	2,887	944	155	37	80	74	20
NOV	2,112	948	1,040	467	2,762	929	157	25	38	357	16
DEC	712	1,345	712	1,000	1,757	576	106	20	0	238	32
TOTALS:	17,502	13,474	9,106	6,999	32,770	9,392	1,638	427	878	4,394	275

VEHICLES REPAIRED BY DEPARTMENT



STREET DIVISION VEHICLES & EQUIPMENT

UNIT #	MODEL YEAR	MAKE	MODEL	HOURS / MILES	DESCRIPTION	AGE
0101	2001	Dodge	3500	96,999	Small Dump	18
1202	2012	Ford	F-250	43,272	Pick Up	7
1603	2016	Ford	Explorer	30,946	SUV	3
0104	2001	Ingersol Rand	DD16	333/hrs.	Roller	18
1206	2012	Ford	F-350	34,076	Small Dump	7
0307	2003	Ford	F-350	78,022	Small Dump	16
1408	2014	International	Work Star	20,608	Chipper Truck	5
1610	2016	Freightliner	SD108	8,201	Dump/Salter	3
1511	2015	International	4600	20,043	Dump/Salter	4
1812	2018	Freightliner	108SD	4,880	Dump/Salter	1
1313	2013	Ford	F-450	26,061	41' Aerial	6
1214	2012	Mack	CXU613	189,369	Semi Tractor	7
9914T	1999	Hilbuilt	Mongoose	N/A	Semi Trailer	20
1815	2018	Freightliner	108SD	4,012	Dump/Salter	1
9617	1996	John Deere	544G	11,142	End Loader	23
1718	2017	John Deere	544K	1,862/hrs.	End Loader	2
1419	2014	John Deere	544K	14,918	End Loader	5
1421	2014	Ford	3500	38,121	Utility	5
0022	2000	International	4700	28,145	55' Aerial	19
8825	1988	Ford	L8000	107,558	Dump/Salter	31
9126	1991	GMC	Top Kick	51,318	Flatbed	28
9627	1996	Bomag	5 ton	718/hrs.	Roller	23
9930	1999	Vermeer	1024	248/hrs.	Stump Grinder	20
1732	2017	Freightliner	108 SD	12,672	10yd Dump	2
9836	1998	Ford	LN8000	82,792	Dump/Salter	21
1337	2013	Ford	F-250	46,0064	Pick up	6
1038	2009	Bobcat	S220	1075/hrs.	Skid Steer	10
0938T	2009	Sure Trac	20'	N/A	Trailer	10
0742	2007	JLG	Lo16	N/A	Roller Trailer	12
9543	1995	Mobark	17	1,147	Chipper	24
9844	1998	Target	26	N/A	Saw	21
0347	2003	Ford	F-250	129,654	Pick up	16
7848	1978	Vermeer	N/A	N/A	Log Splitter	41
1351	2013	John Deere	1435	653/hrs.	Mower	6
0951T	2009	United Cargo	N/A	N/A	Trailer	10
0052	2000	Sterling	LT 7500	92,252	14yd Dump/Salter	19
1541	2015	Ford	Utility	81,222	Pool Car	4
0870	2008	Big Tex	Trailer	N/A	Trailer	11

STREET DIVISION VEHICLES & EQUIPMENT

UNIT #	MODEL YEAR	MAKE	MODEL	HOURS / MILES	DESCRIPTION	AGE
1723	2017	Freightliner	108 SD	11,824	15 yd Dump	2
9554	1995	Ingersolrand	835	442/hrs.	Compressor	24
0156	2001	Ford	F-350	116,476	Small Dump	18
1157	2011	Mobark	1800	3,934/hrs.	Chipper	8
1459	2014	Ford	F-450	3,711	Tow Truck	5
9163	1991	HiVue	N/A	N/A	Arrow Board	28
9264	1992	Target	24	N/A	24" Saw	27
0665	2006	International	N/A	326,842	Semi Tractor	13
9665T	1996	Hilbuilt	Mongoose	N/A	Semi Trailer	22
1350	2013	Dodge	Charger	55,265	Pool Car	6
0987	2009	Ford	Fusion	26,261	N/A	10
0766	2007	Bobcat	463	651	Skid Steer	12
1768	2017	Bobcat	S630	187	Skid Steer	2
0969	2009	International	7400	30,740	Dump/Salter	10
1471	2014	Ford	Fusion Hybrid	5,311	Pool Car	5
0872	2008	John Deere	544J	7,064/hrs.	End Loader	11
1673	2016	Ford	F-250	33,226	Pick Up	3
1574	2015	Lee Boy	1000B	101	Paver	4
0076	2000	Big Tex	TX15	N/A	Paver Trailer	19
1977	2019	Ford	F-250	315	Pick up	0
0178	2001	Ford	F-350	81,659	Pick up Utility	18
1683	2016	Ford	F-350	13,683	Small Dump	3
1084	2010	Ford	Fusion	28,147	Pool Car	9
0785	2007	Wanco	N/A	N/A	Arrow Board	12
0386	2003	Toyota	4000	5,573	Forklift	16
0955	2009	Scagg	Tiger Mower	648/hrs.	Mower	10
19S2	2019	Elgin	Pelican	3,612	Sweeper	0
09S1	2009	Elgin	Pelican	41,717	Sweeper	10
1875	2018	Ford	Expedition	16,466	SUV	1
1931	2019	Freightliner	108SD	5,071	Dump/Salter	1
1849	2018	Hamm	HD 10c VV	4/hrs.	Roller	1
0958	2009	Continental	Cargo Trailer	N/A	Trailer	10
1460	2014	Ford	Utility	71,102	Pool Car	5
2015	2015	Atlas	Trailer	N/A	Morton Grove Days	4

WATER/SEWER DIVISION VEHICLES & EQUIPMENT

UNIT #	MODEL YEAR	MAKE	MODEL	HOURS / MILES	DESCRIPTION	AGE
1605	2016	Ford	F-350	32,677	Pick up Utility	3
1309	2013	Ford	F-550	29,808	Step Van	6
9316	1993	Peterbuilt	357	38,922	Vactor	26
1620	2016	Ford	F-250	30,299	Pick up	3
0053	2000	Sterling	LT 7500	72,634	14yd Dump	19
1424	2014	International	Work Star	21,909	10yd Dump	5
1228	2013	Caterpillar	420FIT	3,844/hrs.	Backhoe	6
1529	2015	Caterpillar	M316	602/hrs.	Excavator	4
1533	2015	Ford	K2500	22,949	Pick up Utility	4
0134	2001	Dodge	Ram 2500	45,808	Van	19
9835	1998	Sterling	LT8000	80,078	12yd Dump	21
1645	2016	Ford	F-250	12,592	Pick Up	3
1740	2017	Ford	F-250	10,555	Pick up	2
1046	2010	Ford	Fusion	33,507	Car	9
0861	2008	Ford	F-450	36,932	Flatbed	11
1362	2013	Wanco	N/A	N/A	Arrow Board	6
9367	1993	Ditch Witch	N/A	107/hrs.	Trencher	26
1139	2011	Ford	F-250	73,960	Pick up	8
0180	2001	Caterpillar	420D	6,047	Backhoe	18
0681	2006	International	4900	25,482	Vactor	13
0782	2007	Ford	Explorer	36,484	Eng. Inspector	12
0189	2001	Ford	F-250	120,811	PW Pool Car	18

FIRE DEPARTMENT VEHICLES

UNIT #	MODEL YEAR	MAKE	MODEL	HOURS / MILES	DESCRIPTION	AGE
A4	2011	International	4300	74,035	Ambulance	8
A4R	2007	International	4700	101,386	Ambulance	12
A5	2017	Freightliner	FL80	30,795	Ambulance	2
Q4	2006	Smeal	N/A	98,791	Quint Pumper	13
E5	2015	Smeal	N/A	39,595	Pumper	4
E4R	1999	Pierce	Sabre	128,056	Pumper	20
S4	1993	Pierce	Arrow	18,357	Squad truck	26
400	2015	Dodge	Charger	78,215	Chief's Car	4
402	2008	Chevrolet	1500	46,095	Command Van	11
404	2015	Ford	Expedition	7,380	Fire Prevention	4
406	2010	Ford	Crown Vic	30,133	Pool Car	9
408	2012	Dodge	Charger	111,598	Pool Car	7

POLICE DEPARTMENT VEHICLES

UNIT #	MODEL YEAR	MAKE	MODEL	HOURS / MILES	DESCRIPTION	AGE
Squad 801	2017	Ford	Interceptor	23,567	Command Vehicle	2
Squad 802	2017	Dodge	Charger	9,961	Patrol	2
Squad 803	2018	Ford	Interceptor	29,455	Patrol	1
Squad 804	2018	Ford	Interceptor	19,987	Patrol	1
Squad 805	2013	Dodge	Charger	43,971	Patrol	6
Squad 806	2018	Dodge	Charger	30,341	Patrol	1
Squad 807	2018	Dodge	Charger	26,386	Patrol	1
Squad 808	2017	Ford	Interceptor	36,641	Patrol	2
Squad 809	2019	Dodge	Charger	3,366	Patrol	0
Squad 810	2016	Dodge	Charger	86,055	Patrol	3
Squad 811	2017	Ford	Interceptor	53,072	Patrol	2
Squad 812	2016	Ford	Interceptor	58,093	Truck Enforcement	3
Squad 820	2013	Ford	Interceptor	61,704	Investigations	6
Squad 821	2013	Dodge	Charger	75,270	Special Operations	6
Squad 822	2013	Dodge	Charger	75,505	Investigations	6
Squad 823	2013	Dodge	Charger	62,871	Investigations	6
Squad 824	2015	Dodge	Charger	27,623	Deputy Chief	4
Squad 825	2017	Ford	Interceptor	35,184	Deputy Chief	2
Squad 826	2015	Ford	Explorer	57,972	Chief	4
Squad 830	2008	Ford	F150 Pick Up	47,822	Animal Control	11
Squad 831	2012	Dodge	Charger	71,956	C.S.O.	7
Squad 832	2011	Ford	Crown Vic	64,875	C.S.O.	8
Squad 833	2013	Dodge	Charger	93,112	C.S.O.	6
Squad 834	2012	Dodge	Charger	65,792	C.S.O.	7
Squad 835	2015	Ford	Crown Vic	75,882	C.S.O	4
Squad 840	2006	Nissan	Armada	48,723	Special Operations	13
Squad 841	1999	Ford	E250 Van	76,000	Special Operations	20
Squad 842	2005	Ford	F-150	173,709	Special Operations	14
Squad 844	2016	Ford	Escape	36,835	Special Operations	3

ENGINEERING DIVISION

The Engineering Division is responsible for the design, inspection and administration of construction projects involving private and public infrastructure improvements. The management of the Village's GIS (geographical information system) is another responsibility of the Engineering Division. The Engineering Division strives to proactively evaluate the Village's infrastructure systems and identify long-term maintenance needs as well as to develop annual programs and projects to maintain or expand infrastructure systems. Most of these programs and projects are developed and administered by the Engineering Division. Construction standards controlling construction of improvements in the rights-of-way or on village property are established, followed and revised by the Engineering Division.

The Engineering Division is directly involved in procuring funding and/or administering contracts for projects performed within the Village using State or Federal money. To complete its work, the Engineering Division staff regularly coordinates with residents, businesses, developers, utility companies, elected officials, county, state and federal regulators, and staff members from other municipalities.

CONCRETE REPLACEMENT PROGRAM

The purpose of this program is to repair concrete features to a serviceable condition and improve sidewalks and curb ramps to meet accessibility standards. This program focuses on the condition of concrete sidewalks, curb/gutter, pavement, and driveways that naturally deteriorate over time and can be damaged by snow plowing operations, public utility repairs, tree root growth, and excessive loading.

Totals for 2019 Concrete Replacement Program

Sidewalk Repairs

93 Locations 8,365 square feet

Curb Repairs:

41 Locations 988 lineal feet

Driveway Apron Repairs (required due to utility repairs)

20 Locations 231 square yards

Pavement Patches

3 Locations 62 square yards

Concrete Saw Cutting Program

This is a new program intended to be a cost effective way to restore accessibility and eliminate tripping hazards on pedestrian routes. Differential settlement of sidewalk panels creates an environmental barrier at the joint between panels to the use of a sidewalk. Village staff implemented a pilot program to saw and grind concrete to restore smoothness of the joint. There are limitations to the extent that the joint can be saw cut and often sidewalk panels need to be replaced. Safe Step, LLC has an exceptional process for performing the work and was selected for the pilot program. The public acceptance and cost effectiveness of saw-cutting was evaluated and found to be an acceptable alternate to concrete replacement. A larger program is planned for 2020. The program cost was \$10,000. The contractor surveyed 1.3 miles of sidewalk and cut joints at 140 locations.

Traffic Safety Commission

Engineering staff reviewed seven Plan Commission applications or Request for Review for five Traffic Safety Commission meetings in 2019.

Street Patching Program

The 2019 Street Patching Program included approximately 30 different street segments throughout the Village. Chicagoland Paving Contractors, Inc. was hired to remove and replace 2,119 square yards of the top 1.5 inches of asphalt pavement. The total cost of the project was \$37,504.00

ENGINEERING DIVISION

Emergency Water Supply Project

This project began to reduce the risk and improve the resilience of the Village's water supply system. This project would connect a new pipeline to an existing water supply pipeline owned by Northwest Water Commission. Northwest Water Commission supplies water to several northwest suburban municipalities and their line passes through the Village approximately 1200 feet from the Village's North Pumping Station. The Village's engineering consultant, Ciorba Group Inc., was hired to provide the preliminary and design engineering services for this project in the amount of \$87,621. Ciorba was paid \$33,471 in 2019 to complete the preliminary engineering. Village staff and Northwest Water Commission staff began coordinating a review of the preliminary engineering and using that information to help draft an intergovernmental agreement. It is expected an intergovernmental agreement and design engineering will be completed in 2020 and construction will be completed in 2021.

Construction Standards and Permit Revisions

Public Works' standard construction details were last revised in 1999. The Engineering Division updated these standards to reflect current practice and code requirements. The Rights-of-Way Permit form was also reformed to tailor the necessary information in a visual form that is easy for both the Village and the permit applicant to use. Instructions for what to submit with a Rights-of-Way Permit application was prepared and published in an attempt to reduce common applicant errors that lengthen the time to process a permit.

Sawmill Station Development

A 26-acre redevelopment broke ground in 2019. Sawmill Station Shopping Center includes commercial and residential development in 11 new buildings near Dempster Street and Waukegan Road, the former Prairie View Shopping Center site. All new utility infrastructure and stormwater management was designed and constructed by the development team. The Engineering Division staff met regularly with the development team to work through the complexities as well as the permitting by several outside agencies. The commercial development is expected to be completed in 2021 and residential in 2022.

Annual Contract Procurement

The Engineering Division prepared nine contracts for the Public Works Department annual maintenance programs. Generally, these contracts include preparing contract documents, bidding, contract award, and contract execution before transferring control of the contract to another Division. Some include contract administration by the Engineering Division.

Capri-Emerson Sewer Separation Study

One neighborhood in the northeastern corner of the Village has experienced street flooding, property flooding, and basement backups during heavy rainfalls. The neighbors asked the Village to reduce the frequency and severity of flooding. The neighborhood is drained by a combined sewer, which carries waste water as well as rain water and the sewer pipe is undersized. The Village desires to separate the sewer into a sanitary sewer and storm sewer as well as to provide some storage for the excess rainwater that floods the streets and private properties. The Village hired Ciorba Group, Inc. to perform a feasibility study to provide the Village with options to separate the sewers and reduce flooding. The prefinal report was submitted at the end of 2019. The work in 2020 will be to assemble the funding and design the sewer improvements.

Sanitary Sewer System Long Term Operation and Maintenance Program

The Village was required by the Metropolitan Water Reclamation District of Greater Chicago to develop and implement a long term operation and maintenance program for its sanitary sewer system. The Village hired Ciorba Group, Inc. to assist with developing the program. Sewer regulations in the Village's Municipal Code had to be changed in order to meet the minimum requirements imposed by Metropolitan Water Reclamation District of Greater Chicago. As part of that effort, the entire chapter of sewer regulation in the Village's Municipal Code was revised. The Municipal Code revision delayed development of the program. The program is expected to be adopted by the Village in 2020.

Pavement Marking Program

Faded pavement markings on Village streets were remarked. The Village participated in a cooperative purchasing pavement marking program with 10 other communities. The Engineering Division staff managed the program. The contract cost was \$31,655 and improved the visibility of pavement markings at 16 locations.

WATER & SEWER DIVISION

The Water & Sewer Division is committed to around-the-clock service for the Village and its residents. It continues to strive to improve its preventive maintenance programs, through cost-effective measures, as well as maintain and further enhance the current level of service provided. One of the Division's priorities is to preserve and maintain major infrastructure while protecting the system's investment.

FUNCTION OF THE WATER MAINTENANCE CREW

The Water Division crew maintains and repairs approximately 98 miles of water mains, 1,050 fire hydrants and 1,050 service valves located in the Village's water distribution system. The following chart represents some of the services performed during 2019.

RECORD OF WATER REPAIRS IN 2019

Month	Water Main Breaks	Water Service Leaks	Bolt Leaks	Valves Repaired	Valves Replaced	Valves Exercised	Valves Installed	Water Main Replaced/Installed LF	Hydrants Repaired	Hydrants Replaced/Installed	Hydrants Flushing	Hydrants Painting
January	16	1	0	0	0	40	0	7	0	7	0	0
February	12	2	1	0	2	33	0	0	3	12	0	0
March	9	1	2	1	0	23	3	0	0	1	0	0
April	3	1	0	0	0	6	0	0	0	7	0	0
May	1	0	0	0	0	2	0	0	0	0	0	0
June	5	0	1	0	0	223	0	37	1	1	398	0
July	5	3	0	9	1	159	0	0	1	2	25	0
August	9	1	0	1	1	28	0	0	0	0	32	100
September	2	0	0	0	4	23	1	0	0	0	6	0
October	4	4	0	2	2	20	0	5	0	5	6	0
November	9	2	0	0	0	20	0	14	0	2	9	0
December	11	3	1	1	1	38	0	0	0	3	14	0
2019 Total	86	18	5	14	11	615	4	63	5	40	490	100

SEWER DIVISION

The Sewer Division is responsible for the operation and maintenance of the Village's 40.6 miles of sanitary sewer pipe, 44.8 miles of storm sewer pipe and 21.13 miles of combined sewer pipe. Crews are equipped with the latest sewer rodding, drain-cleaning and video inspection equipment to effectively and quickly identify and clear problem areas in the sewer system. The Sewer Division also replaces and rebuilds aging sanitary, storm sewer pipes, catch basins and manhole structures throughout the Village. The lining of aging sanitary sewer pipe continues annually providing a new structurally sufficient pipe while decreasing infiltration and inflow from ground water run-off into the Metropolitan Water Reclamation District interceptors.

The following chart represents some of the services performed during 2019.

RECORD OF SEWER REPAIRS IN 2019

Month	Curb Drains Cleaned EACH	Curb Drains Repaired EACH	Curb Drains Replaced EACH	Storm Sewer Pipe Installed/ Replaced LF	Storm Sewer Pipe Repaired LF	Storm Sewer Pipe Televised LF	Storm Sewers Rodded LF	Sump Pump Connections LF	Combination Sewers Rodded LF	Sanitary Sewers Rodded LF	Sanitary Sewer Pipe Repaired LF Basin 7	Sanitary Sewer Pipe Televised LF	Sanitary Sewer Pipe Televised Basin 7	Sanitary Sewer Pipe Repaired LF	Sanitary Sewer Pipe Installed/ Replaced LF	Sanitary Sewer Pipe Lined LF
JAN	0	0	0	0	0	0	0	0	0	544	3,907	544	3,907	0	0	0
FEB	2	0	0	0	0	0	0	0	0	0	0	0	0	10	0	0
MAR	2	1	0	0	0	0	0	0	0	600	900	0	0	0	0	0
APR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
May	0	0	0	50	0	0	0	0	0	120	0	0	0	11	0	0
JUN	7	7	0	0	5	0	0	0	120	16,290	715	0	0	8	0	0
JUL	20	14	3	8	0	0	250	0	50	550	0	75	0	0	0	0
AUG	27	13	1	5	0	0	0	0	500	0	0	0	0	0	0	0
SEPT	11	11	0	30	0	0	0	0	0	0	2,480	0	1,879	0	0	0
OCT	2	1	0	60	0	0	0	0	0	0	338	0	338	0	16	0
NOV	1	1	0	0	5	0	0	0	0	300	1,300	0	1,300	0	0	6,892
DEC	0	0	0	110	0	0	200	0	0	1,115	3,620	0	3,620	0	10	0
2019 Totals	72	48	4	263	10	0	450	0	670	19,519	13,260	619	11,044	29	26	6,892

Morton Grove Water Division Historical Milestone Events

Date of Event	Type and Location of Event
1896	Original Water System supplied by a deep well at 8525 Callie Avenue, next to the Village Hall, Fire Station and Police Department, 6250 Lincoln Avenue.
1911	First water main system was installed from Capulina Avenue to Lincoln Avenue, Old Mill Road to Georgiana Avenue. Well was located at 8525 Callie and Lincoln next to the Village Hall, Fire Station and Police Department, 6250 Lincoln Avenue.
1932	Started construction of the North Pumping Station and 500,000 gallon reservoir, 8820 National Avenue.
1934	Installed 12" Feeder Main from the North Pumping Station under the Chicago River to Main Street to feed the east side of the Village.
1936	Completion of the North Pumping Station, 8820 National Avenue with 500,000 gallon underground storage reservoir. Started receiving Lake Michigan Water from the City of Chicago.
1936	Completion of the water tank located at 8525 Callie Avenue next to the Fire Station.
1952	North Station 300,000 Gallon Water Tank was completed, 8820 National Avenue.
1952	North Station second room addition for Pump #4.
1952	North Station 2,000,000 Gallon Reservoir was completed, 8820 National Avenue.
1958	South Pumping Station and 2,000,000 Gallon Reservoir Construction, 6702 Oakton Street.
1958	12" Feeder Main installation from Harlem Avenue and Howard Street to the South Pumping Station.
1958	14" Discharge Main installation from the South Station east down Oakton Street to the South Water Tank.
1963	8" water main feed at Narragansett Avenue and Eldorado Drive to the Village of Golf.
1965	3,000,000 Gallon Reservoir was added to the existing 2,000,000 Gallon Reservoir at the South Pumping Station.
1967	Caldwell Avenue 20" Feeder installation from the South Pumping Station across the Chicago River east to Morton Grove Pharmaceutical.
1967	Lincoln Avenue 16" Feeder Main installation from the 20" main at Morton Grove Pharmaceutical to Dempster Street..
1967	Dempster Street Harrer Park 12" Feeder Main installation from the 16" Feeder Main at Dempster and Lincoln Avenue to Park View School.
1967	12" Feeder Main Installation from the 16" Feeder Main at Shermer Road and Church Street, east on Church Street to National Avenue.
1967	12" Feeder Main installation from the 16" Feeder main at Shermer Road and Church Street, west on Church Street to Ozark Avenue.
1967	16" Feeder Main installation from North Pumping Station to Church Street and Shermer Road.
1973	20" Feeder main was installed from the Howard Street and Harlem Avenue feed from Chicago to the South Pumping Station.
1974	North Pumping Station Back Room addition was completed.
1982	Started Water Meter Replacement Program with new Rockwell Water Meters and Tele-Tape Remote Reading System (TTR).

Morton Grove Water Division Historical Milestone Events

Date of Event	Type and Location of Event
1983	<i>North West Water Commission (NWWC) installed a 60" Transmission Water Main through the Com Ed right-of-way. The NWC provided a future 8" emergency water connection at National Avenue and the Com Ed right-of-way, currently not connected to the Morton Grove system.</i>
1988	<i>Completed Water Meter Replacement Program with new Rockwell Water Meters and Tele-Tape Remote Reading System.</i>
1989	<i>Installation of the Booster Pump and Vault at Washington Street and Courte Drive in Niles to supply water to North Suburban Public Utility Company (NSPUC).</i>
1992	<i>Installation of new pumps and motors at the South Pumping Station, 6702 Oakton Street</i>
1993	<i>New 16" water main connection from Chicago to Morton Grove's 20" Feeder Main at Howard Street and Harlem Avenue.</i>
1995	<i>Installation of the Vacuum Priming System at the North Pumping Station.</i>
1995	<i>Installation of the Pressure Relief Valve at the North Pumping Station on the 12" discharge main exhausting into the 2 million gallon reservoir.</i>
1995	<i>Installation of the Pressure Relief Valve at Davis Street on the 12" Feeder behind Park View School</i>
1995	<i>Installation of the Pressure Relief Valve at Caldwell Avenue on the 12" water main coming from the North Station.</i>
1995	<i>Upgrading of the South Station Chlorine System.</i>
1995	<i>Upgrading the South Station Backup Generator Diesel Fuel Tank.</i>
1995	<i>Installation of the North Station Wall Exhaust Fan and Vent Louver System in the Middle Room.</i>
1995	<i>Removal of the North Station 500,000 gallon legged water tank and replaced with a 750,000 gallon Spheroid water tank.</i>
1996	<i>Removal of the South Water Legged Water Tank and replaced with a 300,000 gallon Spheroid water tank.</i>
1999	<i>Installed new 12" water main on Beckwith Road east from Washington Street to Ozark Avenue.</i>
2000	<i>Installed new 12" water main on Beckwith Road east from Waukegan Road to Narragansett Avenue.</i>
2000	<i>Installed new 12" water main on Waukegan Road from Dempster Street North to Beckwith Road.</i>
2003	<i>12" Water Main extension installation from Beckwith Road on Ozark Avenue south to Church Street.</i>
2006	<i>12" Water Main extension installation from just north of Lincoln Avenue on Frontage Road and the Edens Expressway south to Central Avenue and Main Street.</i>
2008	<i>Installation of the North Station 500 kW Generator and Transfer Switch.</i>
2009	<i>Replaced four (4) 12" Gate Valves on Oakton Street on the 12" Feeder Main going to the South Station. Location #1 - Neva Avenue and Oakton Street #2 - Waukegan Road and Oakton Street #3 - New England Avenue and Oakton Street #4 - South Pumping Station Driveway and Oakton Street.</i>

Morton Grove Water Division Historical Milestone Events

Date of Event	Type and Location of Event
2010	<i>Dempster Street 12" water main installation from Lincoln Avenue to Central Avenue. (5,000 LF).</i>
2010	<i>Ferris Avenue 16" water main installation from Dempster Street to Lincoln Avenue.</i>
2010	<i>Replaced one 8" gate valve and 48" vault at Golf Road and Waukegan Road. Replaced one 8" gate valve and 48" vault at 9432 Waukegan Road.</i>
2011	<i>Water Meter Replacement Program: Installed Sensus Fixed Base Antenna Reading System and replaced 7,950 Water Meters.</i>
2011	<i>8" water main extension installation from School Street on Carol Avenue east to 6048 Carol Avenue.</i>
2011	<i>Installed new 8" water main on New England Avenue from Church Street to Davis Street replacing the old 6" water main.</i>
2011	<i>Relocation of the 20" Feeder Main at the North Pumping Station.</i>
2011	<i>Harlem Avenue & Greenleaf Avenue (Niles) replaced 12" Gate Valve with new 12" Butterfly Valve and new 60" Vault in the parkway. Added new 20" Butterfly Valve with new 72" Vault and the street pavement.</i>
2011	<i>Replaced 200 lineal feet of 12" feeder main at Lehigh Avenue and Church Street crossing under the Metra north railroad tracks. April of 2011 it was discovered that the 12" Feeder Main was leaking directly under the railroad tracks. A 24" Casing Pipe was first pushed under the tracks and then the 12" Feeder main was installed with 2 new 12" Butterfly Valves and Vaults and one new Fire Hydrant.</i>
2012	<i>Installed 280 lineal feet of 8" C900 PVC water main around the detention pond in the Trafalgar Square subdivision from the dead end of Elm Street west to Concord Drive to complete the water main loop.</i>
2012	<i>Installed 280 lineal feet of 8" Ductile Iron water main on Marion Avenue from Wilson Terrace north to Foster Avenue and Marion to complete the water main loop.</i>
2012	<i>Replaced 1,050 lineal feet of 6" water main on Lyons Street from Waukegan Road to Oak Park Avenue with 8" Ductile Iron water main.</i>
2012	<i>Replaced the motor and pump on Pump No. 1 at the North Pumping Station.</i>
2012	<i>Removed the foot valve in Reservoir No 1 from the suction line for Pump No. 1 and No. 4.</i>
2012	<i>Replaced the 300 lineal feet of 3" with 3" Ductile Iron water main in the Public Works yard for the Water/Sewer Division Building.</i>
2013	<i>Replaced 500 lineal feet of 4" water main on the 6700 block of Palma Lane with new 8" C900 PVC water main.</i>
2013	<i>Looped 200 lineal feet of 8" Ductile Iron water main on New Castle Avenue from Beckwith Road south to the alley.</i>

Morton Grove Water Division Historical Milestone Events

Date of Event	Type and Location of Event
2014	Replaced and installed 1,176 lineal feet of 8" ductile water main On Simpson Street from Sayre Avenue west to end at Golf Road. Also installed two water services laterals for McGrath Audi.
2014	Replaced 1,150 lineal feet of 12" and 20" feeder main with new ductile water main from Caldwell Avenue east across the North Branch of the Chicago River to the back of the curb at the driveway in Saint Paul Woods of the Cook County Forest Preserve.
2015	Installed 208 lineal feet of 8" C900 water main on Octavia Avenue from Wilson Terrace south to Lyons Street to complete the water main loop.
2015	Installed 235 lineal feet of 8" C900 water main on Ozark Avenue from Suffield Street north to Churchill Avenue to complete the water main loop.
2016	Replaced the Standby Generator at the South Pumping Station with a new 300 KW Generator and new Transfer Switch.
2016	Installed 550 lineal feet of 15" Sanitary Sewer Pipe in the alley right-of-way in the 8800 Block of Meade Avenue. Abandon in place the old sanitary pipe running in the rear yards.
2017	The Morton Grove Niles Water Commission (MGNWC or Commission) was formed to design, construct, finance and operate a regional water supply system that transports and delivers clean, safe and affordable Lake Michigan water to the Villages of Morton Grove and Niles. The MGNWC is invested in long-term water supply planning and management at stabilized rates that allow for needed infrastructure improvements.
2018	Completed MGNWC water main installation from Evanston to Morton Grove.
2018	Lined 20" water main from Harlem and Dobson to South Pumping Station.
2018	Completed 8900 Meade sanitary sewer relocation .
2019	Replaced 45 Fire Hydrants around the Village of Morton Grove to upgrade the water infrastructure .
2019	Lined 7,000' of sanitary sewer in Basin 7 area to prevent infiltration in the sanitary sewer system.

Outfall Re-construction



Water Main Break



INSPECTION SERVICES

Rights-of-Way inspections are performed by the Public Works Water/Sewer Division personnel throughout the year on new residential, commercial, and multi-family water and sewer service connections. This provides control and protection for the Village's existing utility infrastructure and the Village residents.

J.U.L.I.E. locates are performed on all requested utility locations by public and private contractors.

Most electric, gas, water, sewer, and telecommunications companies are delivering utility services underground. To avoid personal injury and damage to those underground lines, state law requires you to contact JULIE before any digging project, regardless of the project size or depth. Both the call and JULIE's services are free.

You can prevent injury and avoid damage by following these four important steps:

- Call or Click before you dig
- Wait the required amount of time (two working days after your phone call)
- Respect the marks
- Dig with care

Notify JULIE if you are doing any of the following projects:

DECKS & PATIOS

TENTS

SWIMMING POOLS

TREES OR SHRUBS

FENCES

LANDSCAPING

SWING SETS

MAILBOX POSTS









FOUNTAINS

SIGNS

ROOM ADDITIONS

GARDENS

You'll know what's below by the different flags, stakes or paint.

-  **Red** - Electric
-  **Yellow** - Gas, oil or petroleum
-  **Orange** - Communications
-  **Blue** - Potable water
-  **Purple** - Reclaimed water, irrigation
-  **Green** - Sewer
-  **White** - Proposed excavation
-  **Pink** - Temporary survey



PUMPING STATIONS

Mission Statement

The ultimate goal of the Pumping Station personnel is to preserve public health while furnishing adequate amounts of water for fire protection and consumption for residents and businesses. Additionally, using sound management practices and operating procedures which are economically sound and in the best interest of the Morton Grove residents. When delivering these services, the department will continue to comply with all State and Federal EPA mandates, striving to continually enhance consumer confidence in the Village's water system.

Morton Grove's water system is an essential part of our everyday lives. Over 850 million people in the world lack access to safe drinking water. Drinking water in the U.S. must meet strict standards set by the EPA. To ensure that all drinking water is safe for our residents, Pumping Station operators perform daily inspections and testing as well as monitoring supply and demand of water usage. These tests are performed 365 days a year to keep the Village drinking water safe.

WATER SUPPLY OPERATORS

The Morton Grove Pumping Stations have three full-time certified water operators. These employees take care of the daily, weekly, monthly, and yearly tasks of record keeping, water sampling, building maintenance, meter repair, and numerous other jobs. This includes holidays and weekends as well. It is up to the operators to protect the health and welfare of our community ensuring that all of the strict EPA regulations are followed.

Water supply operators must follow the EPA regulations for continuing education. This ensures all water operators stay informed of new regulations as well as new ideas in the water industry. A Class "C" Water Operator must earn a minimum of 15 classroom hours to maintain his certification with the state. Last year our water operators earned over 40 hours of continuing education. One of the EPA regulations is that water supply operators must follow continuing education. This insures that the Water Operator stays informed of new regulations as well as new ideas in the water industry.



North Pumping Station

ANNUAL PUMPAGE 2019

Total water pumped for the year: 1,013,589,000 gallons (Down 3,493,000 gallons from 2018).

Average monthly pumpage: 84,466,000 gallons (Down 291,000 gallons from 2018).

Highest monthly pumpage: July with 95,775,000 gallons.

Lowest monthly pumpage: October with 79,081,000 gallons.

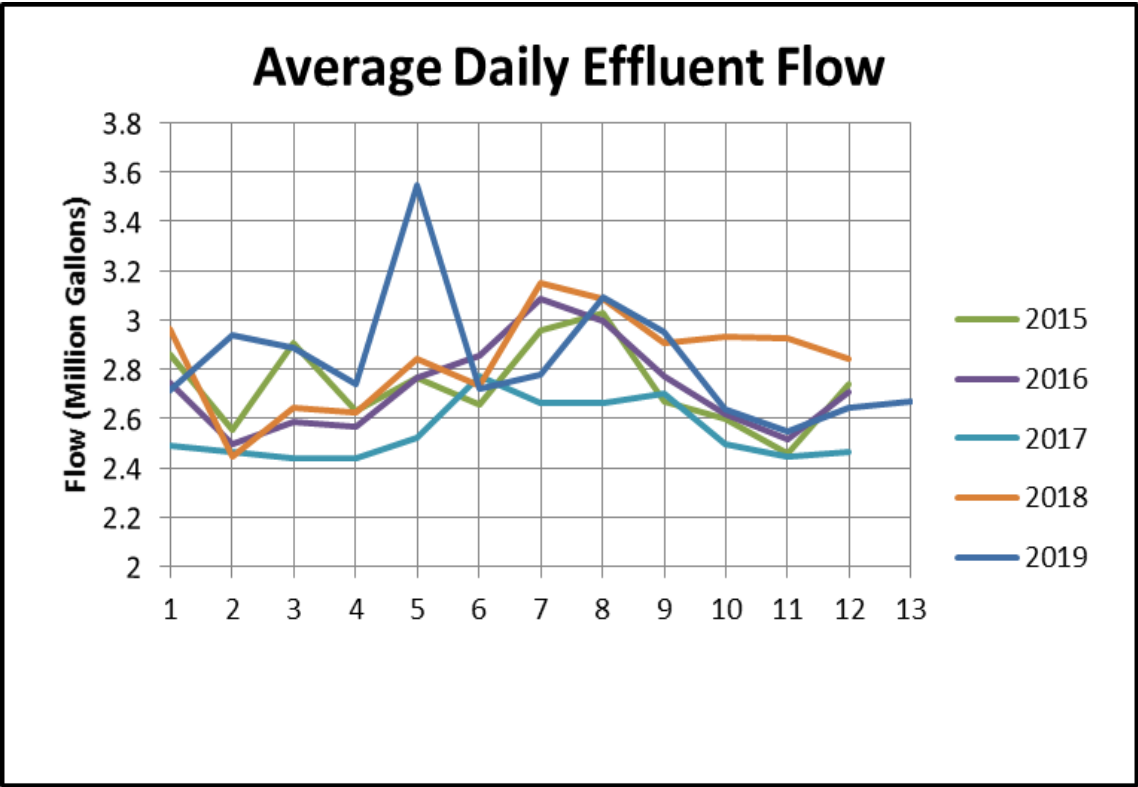
Average daily pumpage: 2,777,000 gallons.

Highest daily pumpage: January 26th with 4,123,000 gallons.

Lowest daily pumpage: January 8th with 2,182,000 gallons.

2019 revealed a slight decrease in water consumption compared to 2018.

Many different factors play a key role in daily pumpage; extreme heat, bitter cold, work days, non-work days, and holidays. Because of these factors it is important that we pay close attention to what’s happening in our community every day of the week.



METER DEPARTMENT

Water consumers of the Village of Morton Grove can request a service call if they have any water related concerns. Service requests range from high usage, noisy meter, frozen meter, remote reader malfunctions or water termination. Water consumption is monitored through a 24-hour remote reading system which detects zero or unusual water usage. If a location appears on this report, water consumers will be notified by a phone call, door hanger, or follow-up appointment, upon request.

<u>MONTH</u>	<u>SERVICE CALLS</u>	<u>DELIVERIES</u>	<u>TOTAL</u>
JANUARY	15	1	16
FEBRUARY	20	2	22
MARCH	12	5	17
APRIL	10	5	15
MAY	15	5	20
JUNE	12	10	22
JULY	20	1	21
AUGUST	18	2	20
SEPTEMBER	15	1	16
OCTOBER	16	2	18
NOVEMBER	7	1	8
<u>DECEMBER</u>	<u>8</u>	<u>2</u>	<u>10</u>
TOTAL	168	37	205

SENSUS WATER METERS



IPERL 5/8" TO 1"



OMNI 1-1/2" TO 8"

WATER METER TESTING

To ensure meter accuracy and improve efficiency, Morton Grove requires water meters to be tested. Village Personnel test residential water meters as they are replaced. An appointment is required for staff to access the water meter. Testing generally takes one (1) hour.

Testing of Industrial, Commercial and Institutional properties will be contacted by mail or telephone by Village personnel when meter testing is required. Property owners will be fully informed of the testing procedures and of any questions that may come up. All concerns will be addressed before the test takes place and results will become available shortly thereafter. Meters that fail will be repaired and/or replaced.

This program is an annual project under the Waterworks Infrastructure Rehabilitation and Preventive Maintenance Program. A water meter is a mechanical device and, like all measurement devices, they are subject to wear and tear. Through normal usage, it can stop working, leak or provide a low/inaccurate consumption reading. Testing allows us to improve the meter reading and billing process, resulting in improved customer service and reduced operating costs.

Village personnel tested 45 residential meters in 2019. Two large meters were tested by a private contractor.

CROSS CONNECTION

The Village of Morton Grove is required by the EPA to provide safe and potable water to its customers at all times.

In order to ensure that contamination does not enter the distribution system due to backflow or backsiphonage through cross-connections, it is necessary that the premises of each water customer be inspected for cross-connection (in accordance with Ordinance #95-7). Inspections must be performed by a plumber, licensed by the State of Illinois for cross-connection control device inspections. Where a cross-connection exists, a fixed proper air gap or an approved backflow prevention device must be installed to protect the safety of potable water supply.

There are currently 773 total cross connection prevention devices in Morton Grove with many more being installed on new and existing buildings and homes each year.

In 2019, a total of four cross connection devices were inspected, in house, by Pumping Station personnel; one is located at the North Pumping Station and three are located at the Public Works Facility.



Cross Connection

Protects your drinking
water and city water from contaminants.

CHLORINE (CL₂)

Chlorine is an important chemical for water purification. Using chlorine in the water system kills bacteria and other microbes that can be harmful to humans. Chlorine is a toxic gas that irritates the respiratory system and can lead to death. It is also a strong oxidizer that can react with flammable materials. Great care must be taken when dealing with chlorine gas.

Each Pumping Station has a number of chlorine tanks used to inject chlorine into the water system as it comes into the station to ensure safe drinking water. This injection is monitored to ensure just the right amount flows into the system. These tanks must be located in a secure, ventilated place. Because chlorine gas is heavier than air, it tends to accumulate at the bottom of poorly ventilated areas. The tanks have to be replaced every few weeks. This involves the Pumping Station personnel physically removing the tanks and hooking up new ones. Precautions must be taken because chlorine gas is so harmful. All proper safety regulations must be followed to ensure the safety of the Pumping Station personnel, i.e. two employees to change one tank, ventilation fans turned on while in the chlorine room and final inspection of all connections after the tank is hooked up. The Pumping Station operator attends a chlorine safety class every year, in order to review how to handle this dangerous chemical safely and what to do in case of emergency.

In 2019, 4,249 pounds of chlorine were used.



Chlorine Storage



Chlorine Scale

WATER SAMPLES

In order for the Morton Grove Pumping Station's to supply safe and clean water to its customers, it must be properly operated and maintained. However, this alone cannot document the safety or quality of the water. To develop and maintain a record of water quality, it is necessary to collect representative samples of water and have them analyzed by a certified EPA laboratory on a routine basis. The minimum number of samples required to adequately monitor a water supply is determined by considering the water source, the type of treatment employed, the population served, and the history of the water quality in the system. A total of 48 disinfection by-products samples are taken throughout the year in the Village's water system.

The Morton Grove water system is required to take a minimum of 25 samples each month (a total of 300 each year). Pumping Station personnel collected and analyzed 360 samples, all of which were within EPA guidelines.

In 2019, the Village of Morton Grove, along with other Village's, is required by the Illinois Environmental Protection Agency to sample for Unregulated Contaminants (These samples will be used to set standards for future monitoring). A total of 44 samples were taken from two distribution areas in Morton Grove; 120 lead and copper samples were taken as well.



Water sample bottle must be sealed before collection of sample, and filled up to 100ml mark.

RAINFALL TOTALS 2019

The total rainfall from April 2019 to November 2019 was 36.53 inches. The average rainfall per month was 5.21 inches.

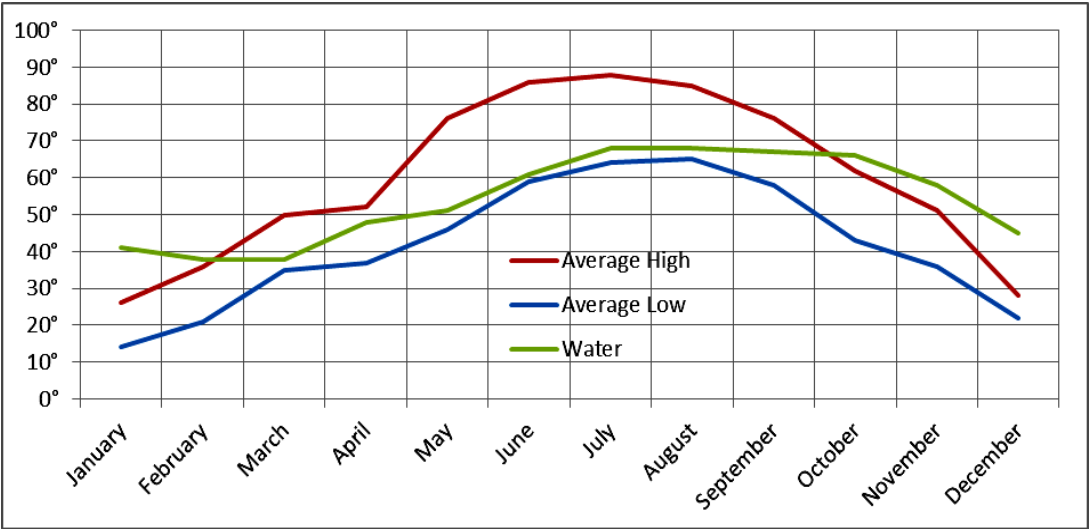
January	out of service
February	out of service
March	out of service
April	6.29 inches
May	6.50 inches
June	3.03 inches
July	2.77 inches
August	5.49 inches
September	6.30 inches
October	6.15 inches
November	out of service
December	out of service

Total:

36.53 inches

AIR & WATER TEMPERATURE

Month	Low (°F)	High (°F)	Avg. Low (°F)	Avg. High (°F)	Water Temp. (°F)
January	-25	50	13	27	35
February	4	53	31	35	35
March	-2	57	23	39	42
April	24	80	37	56	43
May	36	87	45	69	51
June	46	98	57	84	60
July	54	102	63	84	66
August	55	93	61	83	67
September	53	90	59	77	65
October	18	71	39	57	57
November	6	54	25	40	51
December	9	60	24	39	43



ALARMS

The Morton Grove Pumping Stations are set up with dozens of early warning alarms as well as emergency warning alarms. These early and emergency alarms help the water operators keep the water system safe, clean, and running properly. These alarms can range from power failure, burglar alarm, pressure levels, and low vault temperature.

An alarm company as well as an internal alarm system, notifies the operator “on call” so the alarm can be assessed for its danger level and requires that the operator take action immediately.

There were a total of 585 alarms in 2019, 112 occurring after working hours.

2019 ALARMS

Month	# of Alarms	During Work Hours	After Work Hours	2018 Alarms
Jan	47	35	12	11
Feb	60	52	8	32
Mar	60	58	2	17
Apr	186	130	56	43
May	32	28	4	23
Jun	39	33	6	48
Jul	33	20	13	84
Aug	28	26	2	58
Sept	16	11	5	14
Oct	17	17	0	37
Nov	30	30	0	46
Dec	37	33	4	99
Total	585	473	112	512

SECURITY

Pumping Station security is always a factor in the job of water supply operators. The operators perform a daily Ph and Orthophosphate test at both the North and South Pumping Stations. Additionally, a 2nd Ph test is taken at two predetermined sites in town (one on the east end and one on the west end) to check the water once it is in the distribution system.

Along with these tests, a daily security check of each Pumping Station is performed.

BUILDING MAINTENANCE DIVISION

This Division's priority is to monitor, maintain and verify the condition of municipal buildings and properties on a continual basis. This Division participates in setting design specifications, bidding and overseeing the preventive maintenance programs which decrease the overall cost of maintaining buildings and properties.

The Building Maintenance Division plans future maintenance expenditures and helps to create and develop a comprehensive plan to address the nature, amount and timing of future capital expenditures. This division is also responsible for developing and overseeing the Public Works wellness, safety and training programs. Special events, specifically, the Morton Grove Days, held over the fourth of July is managed by this division as well. All operations, before, during, and after the event are administered by Building Maintenance. Tasks include; obtaining vendors, and scheduling services, coordination of entertainment, safety of attendees, and confirming complete and proper clean up is achieved.

2019 Completed Projects of Capital Improvements to Municipal Buildings:

Civic Center

Installed 5 new Roof Top Units (RTU's).

Installed all new wireless controls for thermostats and VAV boxes.

Built room for washer and dryer and installed electric for units.

Fire Stations

Installed tap box for mobile generator for Station #4.

Installed gas line to Station #4 RTU for forced air heating to bunk room.

Sealed and striped the parking lot at Station #4.

Installed wireless controls for HVAC at Station #5.

Police Department

Completed remodel of radio room.

Replaced 80% of bulbs to LED bulbs.

Removed all asbestos from boiler room and replaced insulation on boiler and piping.

Installed three new windows.

Village Hall

Replaced 90% of bulbs to LED bulbs.

Installed security door with remote opener.

Installed two security keypad locks on the west side first floor entrances.

Installed wireless communication on boiler.

Masonry repairs and re-caulking the brick to the north entrance.

Public Works

Completed Roof Project.



EMPLOYEE TRAINING

Personal Protective Equipment (PPE)

Employees are trained on personal protective equipment and when necessary how to properly put on, adjust, wear and take off. They are also trained on the limitation of the equipment and proper care, maintenance, useful life and disposal of the equipment. Protective equipment for eyes, face, head and extremities, protective clothing, safety footwear, respiratory devices, and protective shields and barriers are prime examples.

32 Public Works Employees participated.

Fall Prevention & Protection Training

Each employee with fall hazard exposures receives training on how to recognize these hazards and minimize them, in accordance with OSHA standards. This training includes, correct procedures for maintaining, disassembling and inspecting fall protection equipment and systems. Use and operation of guardrail, personal fall arrest, and any other fall protection systems.

32 Public Works Employees participated.

Hazard Communication

Employees are informed of the contents of the Hazard Communication Standard, the hazardous properties of the chemicals with which they work, and the safe handling procedures and measures employees can take to protect themselves from these chemicals. Our employees are trained on the hazardous chemicals and work related practices used at the Public Works Facility. They are aware of where this information is stored and accessed, proper labeling, safe use, maintenance and handling procedures for emergency response.

32 Public Works Employees participated.



SAFETY TRAINING

The Public Works Safety and Training Committee continues their dedication in achieving their goals and commitments towards a safe working environment and employee wellness. It continues to provide training options and opportunities for staff development and the development of safe practices, procedures, and policies, continuing the trend of reducing incidents and accidents in the work place.

Confined Space Entry Program

The goal of the Confined Space Entry Program is to fully analyze all hazards of confined spaces on the Village premises and determine safeguards to eliminate or control hazards that could result in serious personal injury or death. Examples of confined spaces found within the Village are manholes, underground vaults, storage tanks, water towers, and valve pits.

32 Public Works Employee participated.

Excavation and Trench Rescue Operations

Both trenches and excavations expose employees to the same hazard of unstable soil conditions with the potential for cave-ins. Training helps identify existing and predictable hazards in the vicinity of the excavation/trench area and determines prompt corrective measures to eliminate them. Excavation and trenches are most commonly found within the Village's utility (gas, electric, water and sewer) installations or repairs.

32 Public Works Employees participated.

Blood Borne Pathogens

Blood borne pathogens are infectious microorganisms in human blood that can cause disease in humans. Training helps us recognize the ways exposure and transmission are likely to occur in our particular situation, whether it is providing first aid, cleaning up from an accident, or the pickup and disposal of trash or animal remains. Workers are trained to protect themselves with the use of proper personal protective equipment.

32 Public Works Employees participated.

2019 Hands-on Training

- CPR training—38 employee's participated.
- Snow Plow simulator training - 3 employee's participated.
- Audiogram testing—32 of our employee's participated and passed.



WHAT IS ARBOR DAY?

Arbor Day is an annual observance that celebrates the role of trees in our lives and promotes tree planting and care. The first ever Arbor Day was held on April 10, 1872, and it was a wild success. J. Sterling Morton led the charge in the planting of approximately one million trees. The tradition quickly began to spread and schools across the country started to participate in Arbor Day every year. Throughout the world, people of all ages are planting trees, caring for them, and learning their value.

Morton Grove Public Works participates in speaking with schools about the importance of Arbor Day and the benefits of trees.

FUN FACTS...

- In the United States, it is called Arbor Day.
- In Israel, it is called the New Year's Day of the Trees.
- Korea has a Tree-Loving Week.
- Iceland has a Student's Afforestation Day.
- India celebrates a National Festival of Tree Planting.



“...ALL THE PEOPLE STRIVE ON Arbor Day to plant many, many trees, both forest and fruit. May the day and the observance thereof be cherished in every household, and its name and fruits become as a shower of blessing to the long lines of generations who shall succeed us.”

— J. Sterling Morton



NATIONAL NIGHT OUT

National Night Out is an annual community event hosted by the Police Department with the assistance of Public Works. This partnership and neighborhood camaraderie makes our neighborhoods a safer place to live. National Night Out enhances the relationship between neighbors and law enforcement/public works while bringing back a true sense of community. Furthermore, it provides a great opportunity to bring police/public works service and neighbors together under positive circumstances.



SWANCC RECYCLING EVENT

As a courtesy to SWANCC (Solid Waste Agency of Northern Cook County) community residents, this agency provides an opportunity to Morton Grove and all member communities to destroy sensitive documents and recycle electronic devices such as; medical records, tax forms, bank statements, T.V.'s, and printers. Seasonal document destruction and electronic recycling events can be scheduled annually between May and October. Morton Grove schedules this event on the 3rd Saturday of May, each year. In 2019, Morton Grove had 611 vehicles participate in this event.

CPR TRAINING FOR PUBLIC WORKS

