



# PUBLIC WORKS DEPARTMENT

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## MONTHLY INFORMATION REPORT

**June 2020**

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HIGHLIGHTING DATA METRICS  
TO IDENTIFY OPERATIONAL TRENDS  
AND  
FACILITATE INFORMED DECISION MAKING

505 TELSER ROAD  
LAKE ZURICH, IL 60047

## DEPARTMENTAL NARRATIVE

**Park Maintenance:** Crews continue to address both routine and specific maintenance items as needed. Staff has been monitoring facilities during the Covid-19 pandemic insuring proper sanitation is occurring. Facility HVAC system levels have been adjusted in an effort to minimize usage. Crews have begun the process of opening beaches and the splash pad in anticipation of a July 6<sup>th</sup> opening.

**Storm Water System Maintenance:** Significant rainfalls again had crews very busy completing both routine maintenance, and responding to reports of flooding. Administrative staff has been receiving an unprecedented number of calls relating to private property drainage.

**Right-of Way Maintenance:** Crews have completed the 2020 sign replacement program. The program locations mimics the annual Road Resurfacing Program. The 2020 Pavement Marking program which encompasses both thermoplastic and epoxy pavement markings has begun. Staff anticipated completion in early August.

### **June Water Main Break Locations:**

None

**Water Main Replacement:** The bid opening for the Rt. 12 water main project occurred on December 18, 2019. Copenhaver Construction Inc. was the low bid and awarded the contract. Construction began on March 16 but several conflicts slowed initial progress. Due to a previously unknown conflict with Nicor, the water main alignment had to be redesigned and was recently approved by IDOT. Due to the conflict delay, the contractor relocated to an alternate job and remobilized to Lake Zurich on June 17<sup>th</sup>. The revised schedule estimates completion at approximately September 1<sup>st</sup>.

**Well 8 Scheduled Maintenance:** On April 6<sup>th</sup>, Well 8 was taken out of service for our well contractor (Layne Christensen Co.) to pull and perform routine preventative maintenance to the well pump and motor. Due to a necessary pump repair and poor column pipe condition, reinstallation wasn't completed until June 15<sup>th</sup>. Well 8 was placed back in service on June 19<sup>th</sup>.



**Employee Training:**

Cancelled.

**Anniversaries:**

**Staff Kudos:**

***E-mail from Emily Okallau (Morton Arboretum) to Betty Harrison: UCF Grant***

*Great, thank you Betty!*

*It was really nice meeting you as well. I'm glad that you enjoyed talking about the trees. Shawn & Lake Zurich are doing a great job! I'll be in touch soon with reimbursement info.*

***VM – Carole Burns on Eddy Ln***

*Jason, I can't thank you enough, I didn't realize everything would be so quickly taken care of! Thank you, thank you, thank you, I so appreciate your efforts!*

***VM – Neil at 604 Applegate Ln, Tree Trimming***

*I just wanted to let you know that the crew came out this morning and I couldn't be more pleased. They were courteous, thorough, professional and very welcoming and accommodating to my requests. Kuddos to those guys, I could not be more pleased of the job they did in terms of trimming the tree in front of my house!*

***VM – Colleen Jennings on Stillwater Ct, Sink hole***

*Thank you for fixing the hole near the sewer so fast everyone from Stillwater Ct. thanks you!*

***VM - Tony Harper at 1170 Lexington Ln***

*Thank you for being so quick on having that tree branch removed from the street, well done!*

***Curt and Joni Wachta - 156 Lorraine Dr***

*On behalf of our neighborhood (LZ Estates) THANK YOU for listening to our concerns (see original email Aug 26, 2018) on the state of our pond and taking action to restore its natural balance. Thanks to the Aquatic Maintenance Program the Village implemented over the past year to reduce the green sludge, this pond is experiencing a lot of renewed wildlife, plant life and aesthetic beauty! The before and after photos below say it all! Our sincere thanks to LZ Village leadership and the LZ Public Works Dept.*

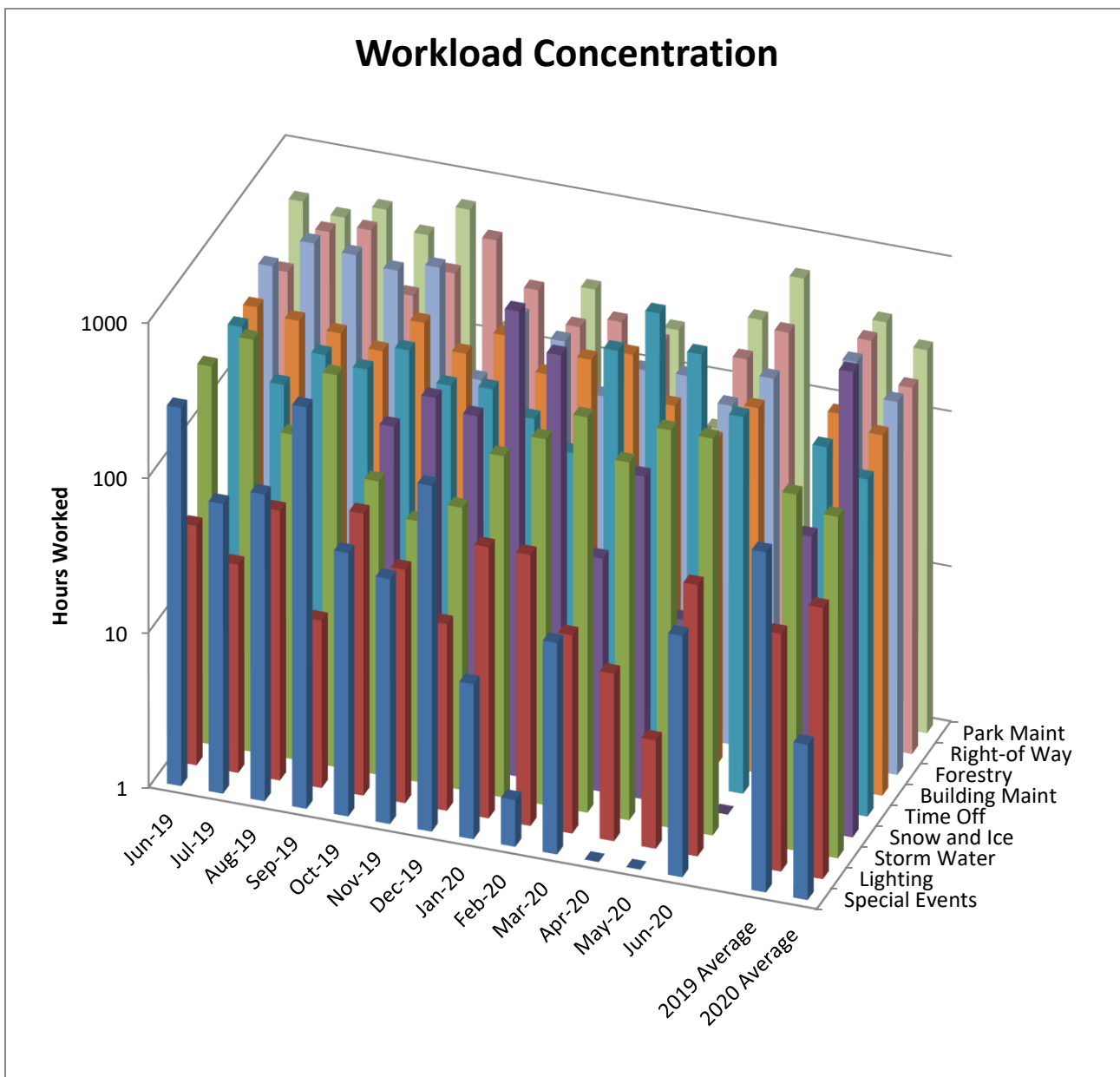
*Good morning Mike!*

*Actually, the subject line is a tad misleading! It really wasn't a nightmare but it did provide great drama for our neighbors 4 and 6 year old boys, watching your guys come and remove the large branch, hanging precariously from our neighbors parkway tree. This is just a shout out to your guys for a prompt response and efficient performance as they finished up and I am sure headed to their next assignment.*

*It is a pleasure to watch our Village work so well. Good management leads to great results. Thank you.*

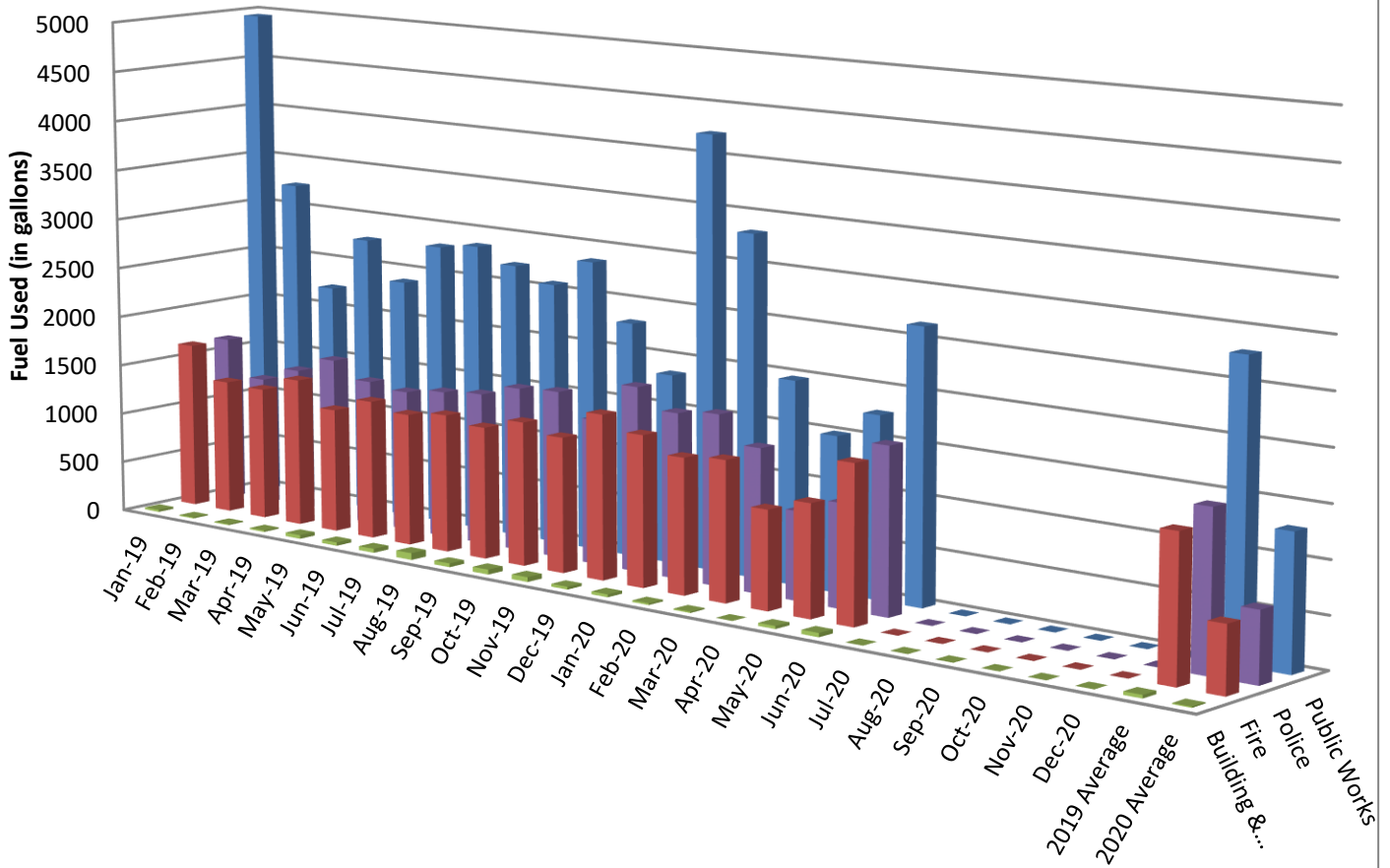
*Orlando*

## Workload Concentration



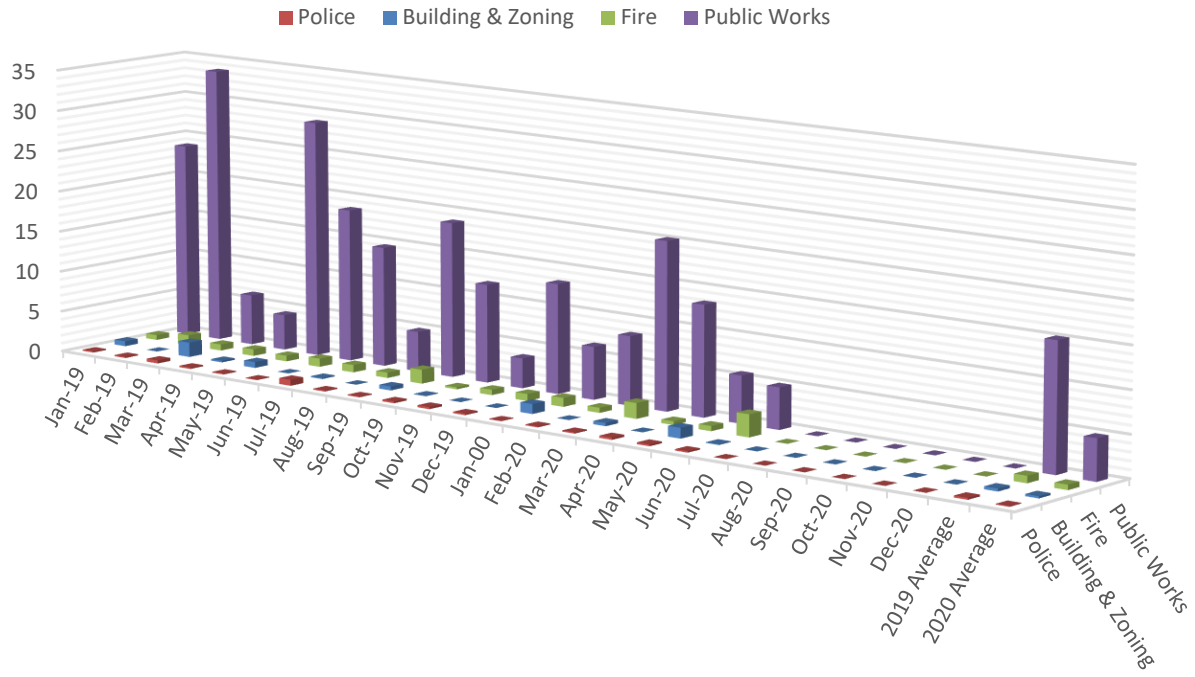
A core function of Public Works are related to the completion of work orders for several categories, including administrative, forestry, park maintenance, municipal property maintenance, right-of-way, snow and ice, street lighting, and storm water system maintenance. This chart shows the number of hours worked on major activities.

## Fleet Fuel Consumption (By Department)



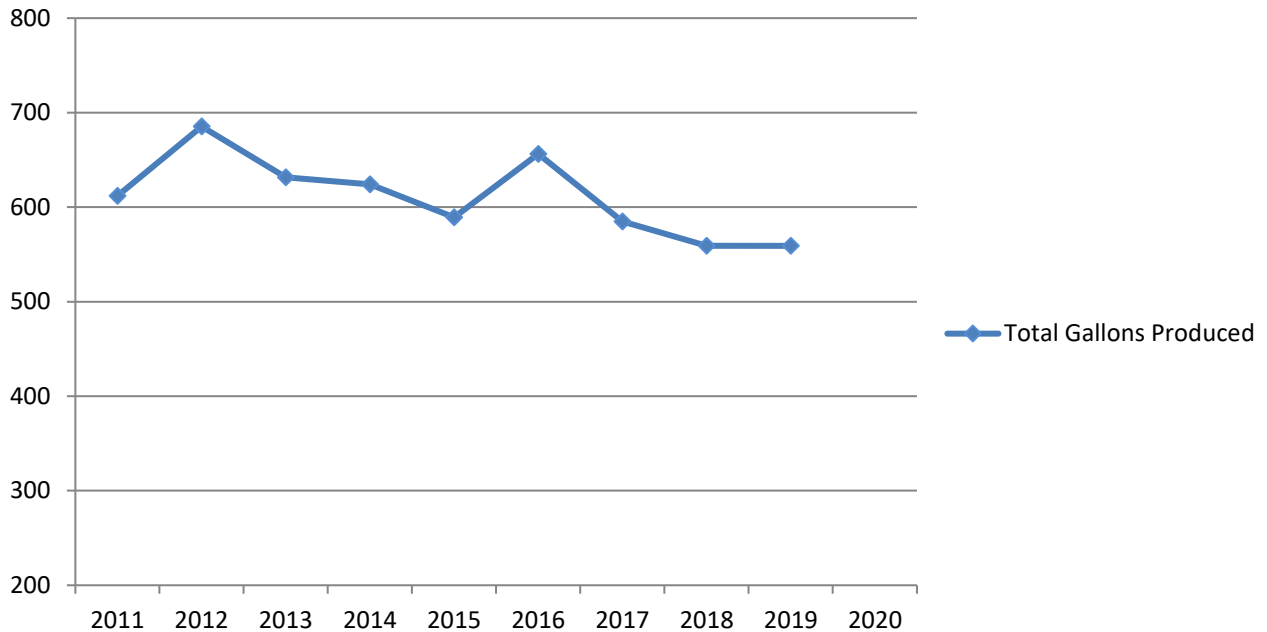
Tracking fuel consumption allows staff to make informed decisions relating to the municipal vehicle fleet, including the number of vehicles in each department, the types of vehicles purchased and the type of fuel source used. Dramatic fluctuations in fuel consumption can occur during events such as heavy snowstorms. (Output measure)

## Average Cost per Mile for Village Fleet (By Department)



Vehicle cost per mile is an initial indicator of an efficient fleet operation. With basic cost per mile information in hand, all components that feed into that cost can be scrutinized and measured. These components include labor rates, fuel costs and parts costs. Looking further into the Village’ vehicle cost per mile, staff can measure other components such as average vehicle age. When vehicles are replaced within their life cycle, the impact is usually positive.

## Water Production

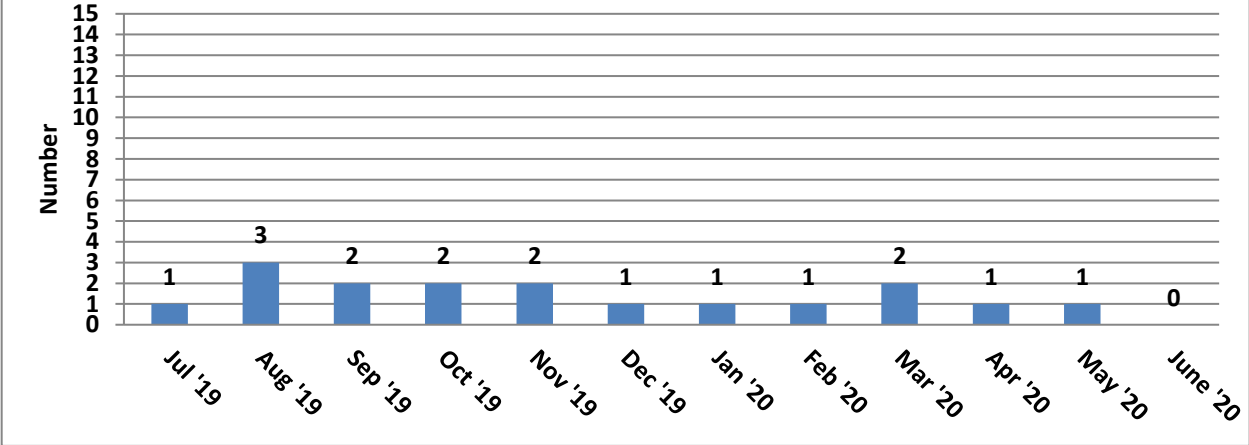


From 2012 to 2015, there was a steady decline in the annual volume of water produced and used by our community. This trend was altered in 2016 due to dry weather leading to increased watering of lawns and landscaped areas.

	2012	2013	2014	2015	2016	2017	2018	2019	2020
January	47.229	49.905	53.387	49.414	49.301	46.667	45.868	44.227	43.867
February	44.311	44.679	47.574	44.590	45.801	40.952	41.098	41.452	41.645
March	45.379	47.903	50.717	47.756	53.467	44.543	43.155	43.946	43.552
April	47.426	49.241	48.801	48.025	55.963	49.974	45,098	43.570	40.662
May	55.957	55.637	53.786	51.788	60.273	49.588	48,065	45.339	44.834
June	72.098	52.697	54.277	49.314	63.819	56.169	46.114	45.489	51.130
July	88.490	60.383	57.475	52.978	68.751	53.755	57.074	59.526	
August	71.191	64.299	58.865	57.018	66.229	54.746	54.067	61.419	
September	60.446	54.801	52.535	49.748	58.664	53.928	46.809	44.786	
October	54.287	51.133	50.722	47.667	45.838	47.169	44.369	43.476	
November	48.533	49.229	48.117	44.274	42.120	42.335	42.089	41,475	
December	50.002	51.850	47.938	46.754	46.088	44,961	45.305	44.379	
<b>Total</b>	<b>685.349</b>	<b>631.757</b>	<b>624.194</b>	<b>589.326</b>	<b>656.314</b>	<b>584.787</b>	<b>559.111</b>	<b>559.084</b>	<b>265.69</b>
<b>Avg</b>	1.873	1.731	1.710	1.615	1.793	1.598	1.532	1.532	1.460
<b>% incr/decr</b>	12.01%	-7.82%	-1.20%	-5.59%	11.37%	-12.23%	-4.59%	0%	

The highlighted months are the lowest for each of these months in the last 9 years. The highest monthly production in the last 8 years occurred in July of 2012. In 2019, our daily average was 1.53 million gallons per day.

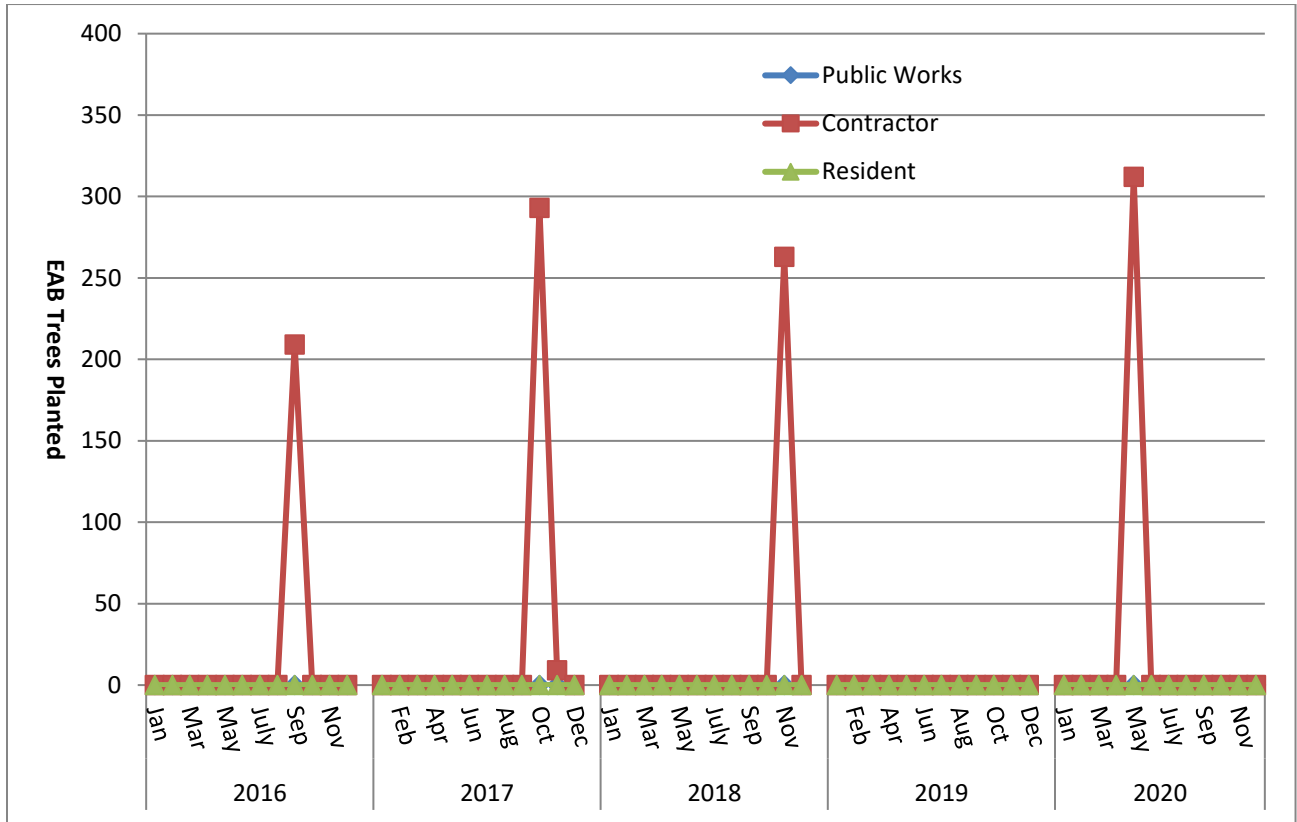
# Water Main Breaks Repaired



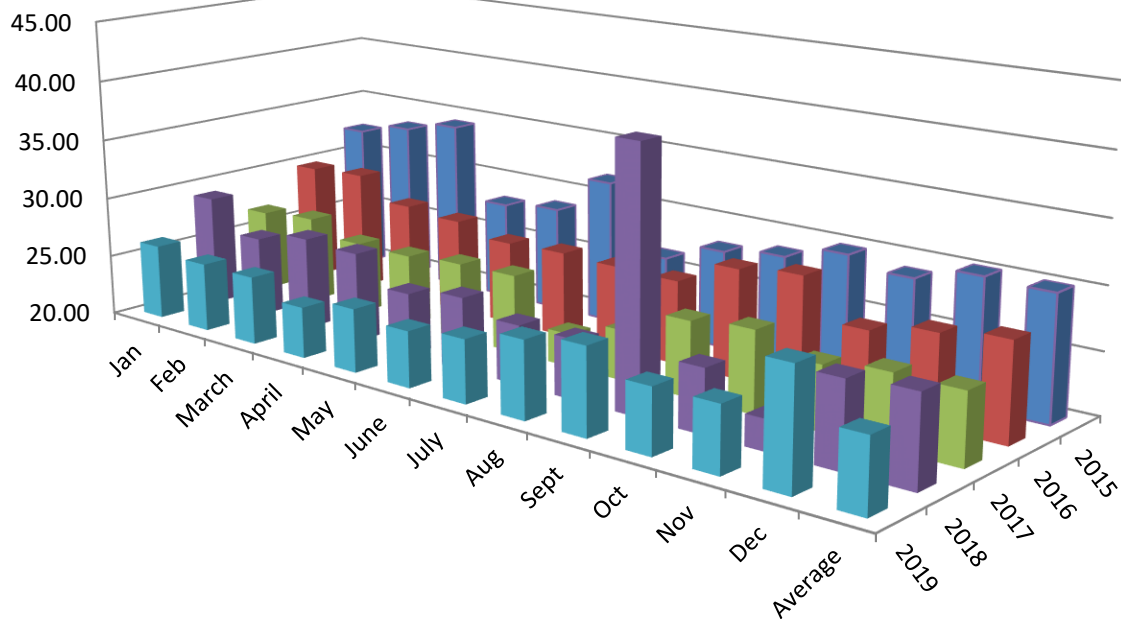
A water main break can be a hole or crack in the water main. Common causes of breaks in the water main include: age, pipe material, shifting in the ground attributed to fluctuations in moisture and temperature (below and above the frost line), corrosive soil that causes a thinning of the water main pipe, improper backfill, severe changes in water pressure (hammer) which has several causes and physical contact (damage) by excavating contractors.



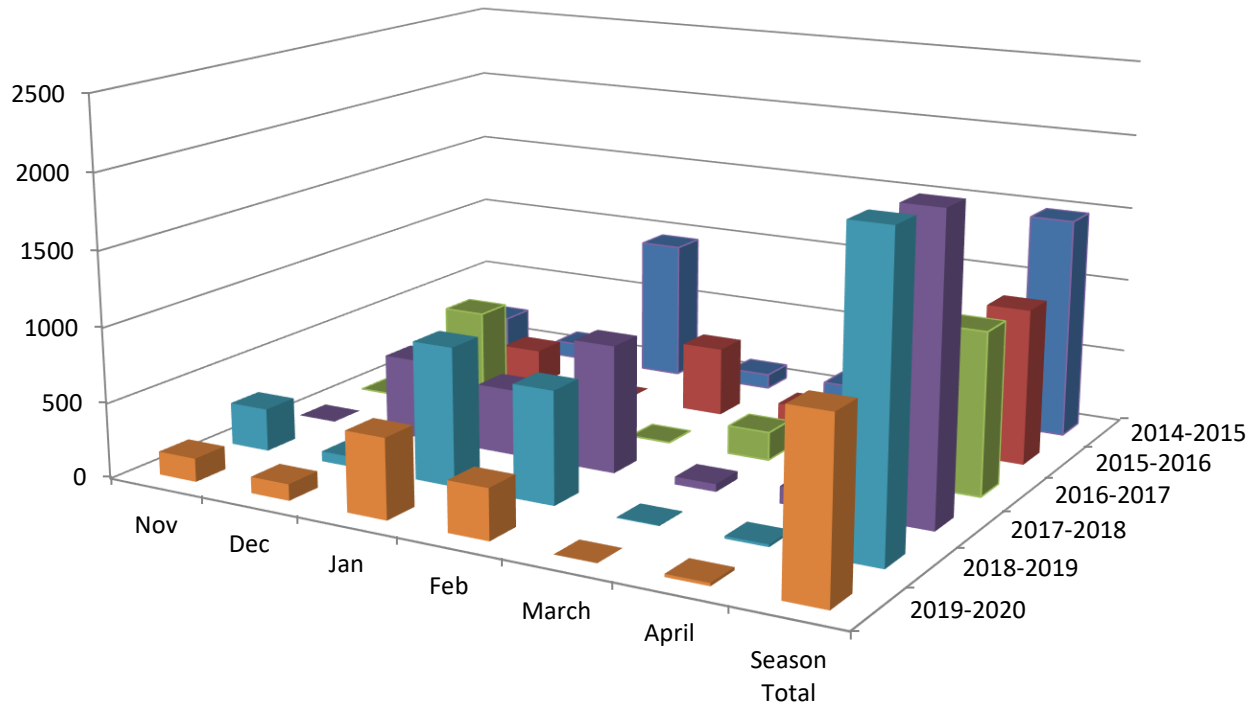
## Emerald Ash Borer Tree Replacement Program



## Percentage of Refuse Recycled by Month/Year



## Tons of Road Salt



## Gallons of Liquid Deicer

