



PUBLIC WORKS DEPARTMENT

MONTHLY INFORMATION REPORT

April 2020

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.

Winter Events: Crews have completed maintenance on vehicles and equipment associated with winter operations. There was one event in April that required crews to perform de-icing procedures. Projections show that overtime usage will be well below anticipated for the 19-20 season. Crews are scheduled to repair any damage caused by winter operations as soon as bulk topsoil becomes available.

Right-of Way Maintenance: Crews have begun the 2020 sign replacement program. The program locations mimics the annual Road Resurfacing Program. The program is scheduled to be completed in April.

April Water Main Break Locations:
830 Windemere Lane

Thorndale Lift Station Replacement: Concrete & asphalt have been completed and landscaping restoration will be completed when weather permits.

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 have since slowed initial progress. Due to a previously unknown conflict with Nicor, the water main alignment has been redesigned and is awaiting approval from IDOT. A revised schedule will be determined once the contractor is able to proceed.

Well 8 Scheduled Maintenance: On April 6th, 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. Maintenance/repairs and reinstallation are anticipated to be completed by the end of May and the well back in service in early June.



Employee Training:

Cancelled.

Anniversaries:

Shawn Creech 25 years.

Peter Neyfeldt 5 years

Staff Kudos:

Email from resident to Mike Cernock

Mike,

That is the fastest most thorough response I have ever gotten from any town I've ever lived in. Thank you so much for taking care of this so quickly. I can let you know tonight when it's dark.

Adam Frank

Email from resident to Mike Brown

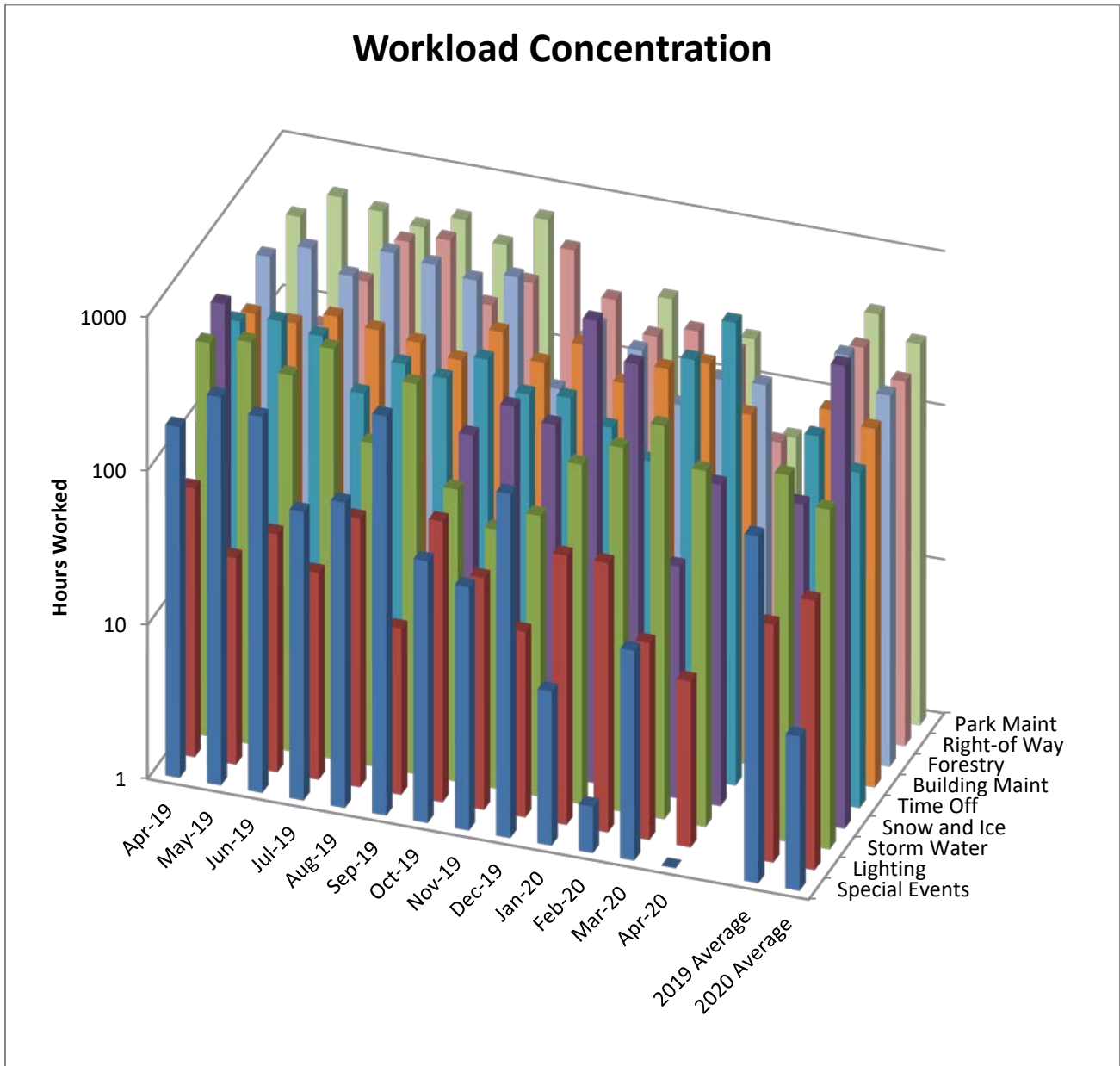
Thanks Mike for your quick response to my issue here.

I appreciate greatly the action that Jason and his coworker took for their inspection under the manhole cover

and I was impressed with the courtesy they showed and the professional advise they gave me.

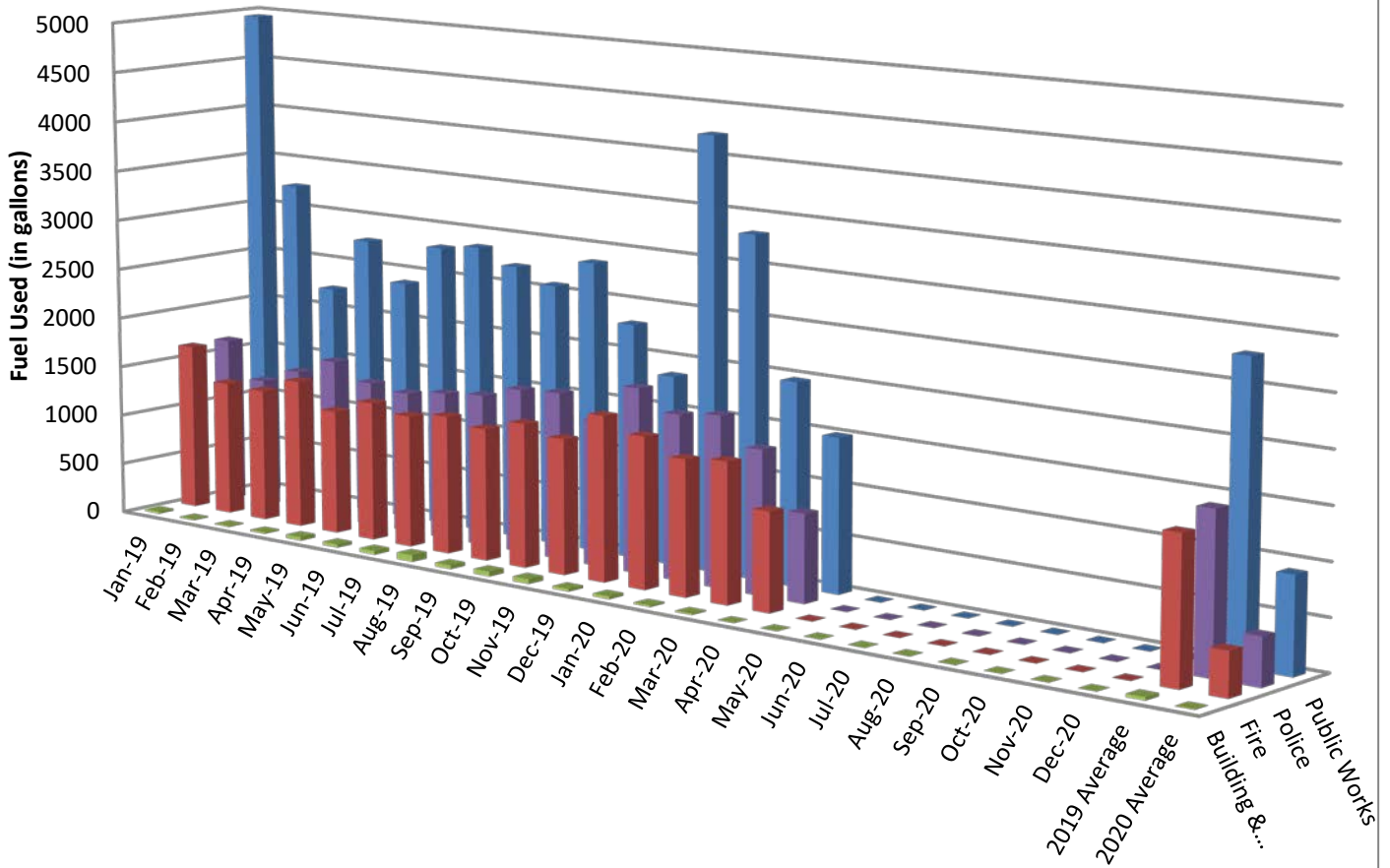
Thanks again!

Charlie.



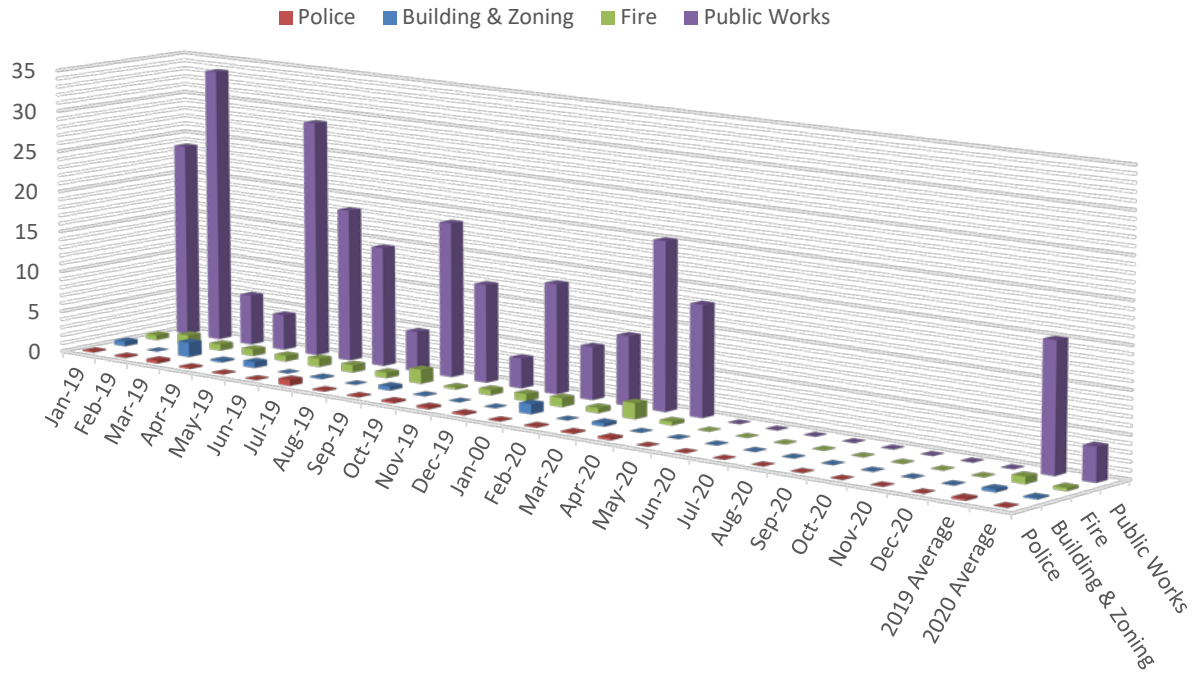
A core function of Public Works are related to the completion of work orders for several categories, including administrative, forestry, park maintenance, municipal property maintenance, right-of-way, snow and ice, street lighting, and storm water system maintenance. This chart shows the number of hours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

Fleet Fuel Consumption (By Department)



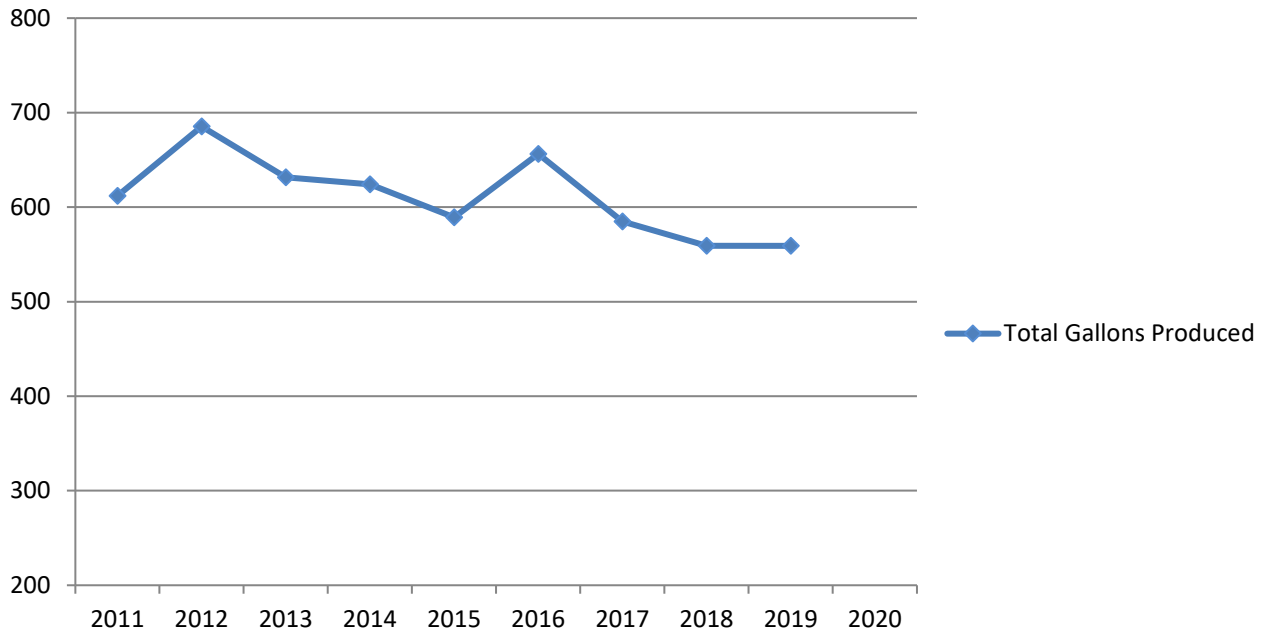
Tracking fuel consumption allows staff to make informed decisions relating to the municipal vehicle fleet, including the number of vehicles in each department, the types of vehicles purchased and the type of fuel source used. Dramatic fluctuations in fuel consumption can occur during events such as heavy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

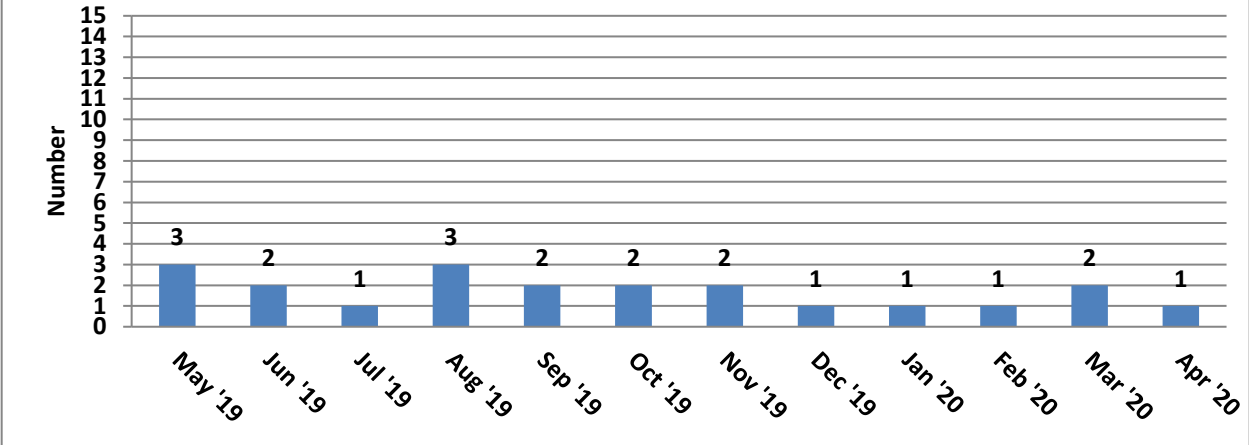


From 2012 to 2015, there was a steady decline in the annual volume of water produced and used by our community. This trend was altered in 2016 due to dry weather leading to increased watering of lawns and landscaped areas.

	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	
June	72.098	52.697	54.277	49.314	63.819	56.169	46.114	45.489	
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	
Total	685.349	631.757	624.194	589.326	656.314	584.787	559.111	559.084	169.726
Avg	1.873	1.731	1.710	1.615	1.793	1.598	1.532	1.532	1.403
% incr/decr	12.01%	-7.82%	-1.20%	-5.59%	11.37%	-12.23%	-4.59%	0%	

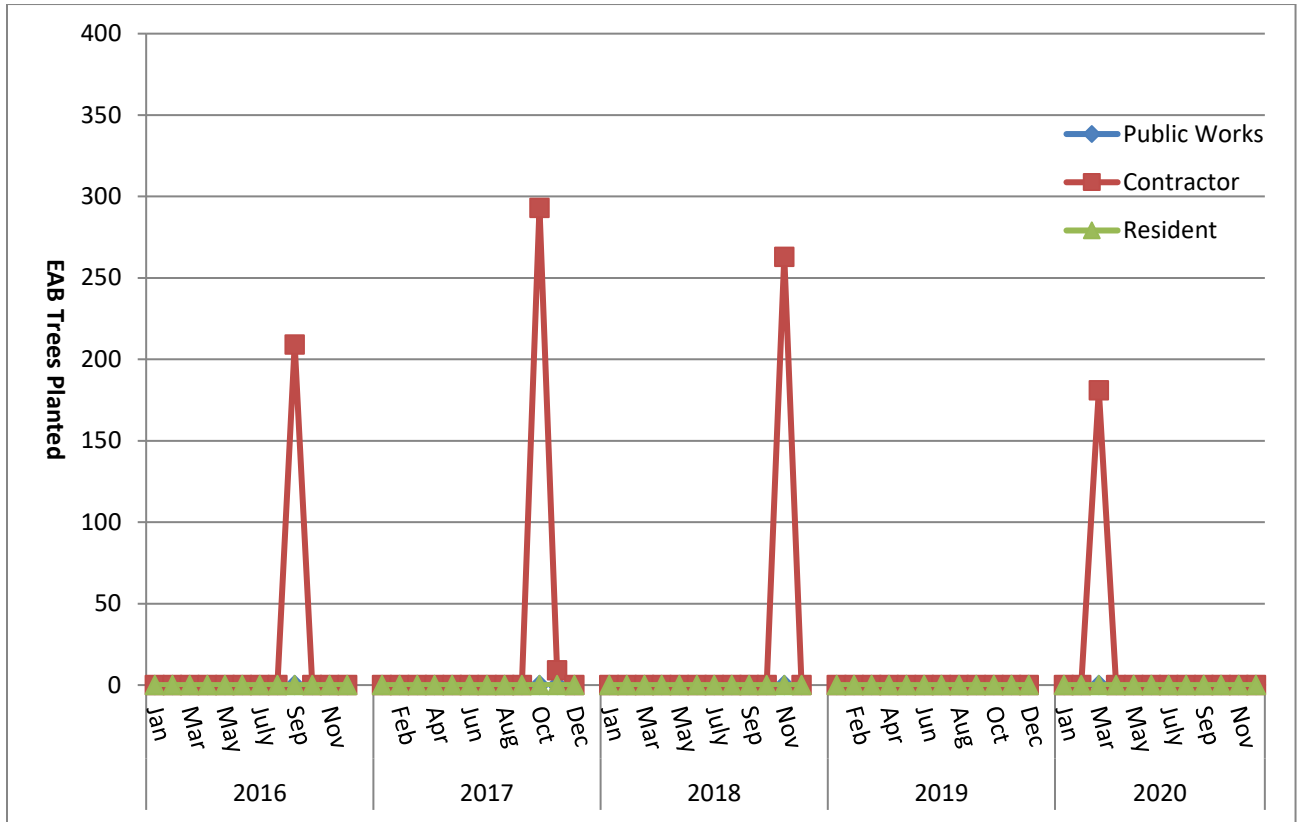
The highlighted months are the lowest for each of these months in the last 9 years. The highest monthly production in the last 8 years occurred in July of 2012. In 2019, our daily average was 1.53 million gallons per day.

Water Main Breaks Repaired

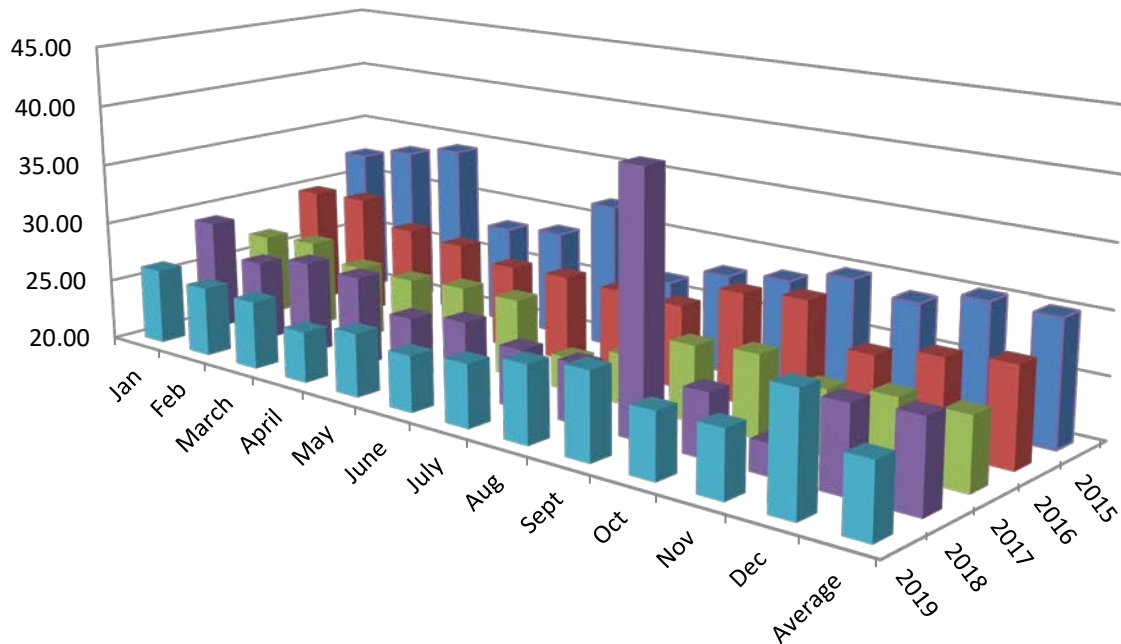


A water main break can be a hole or crack in the water main. Common causes of breaks in the water main include: age, pipe material, shifting in the ground attributed to fluctuations in moisture and temperature (below and above the frost line), corrosive soil that causes a thinning of the water main pipe,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

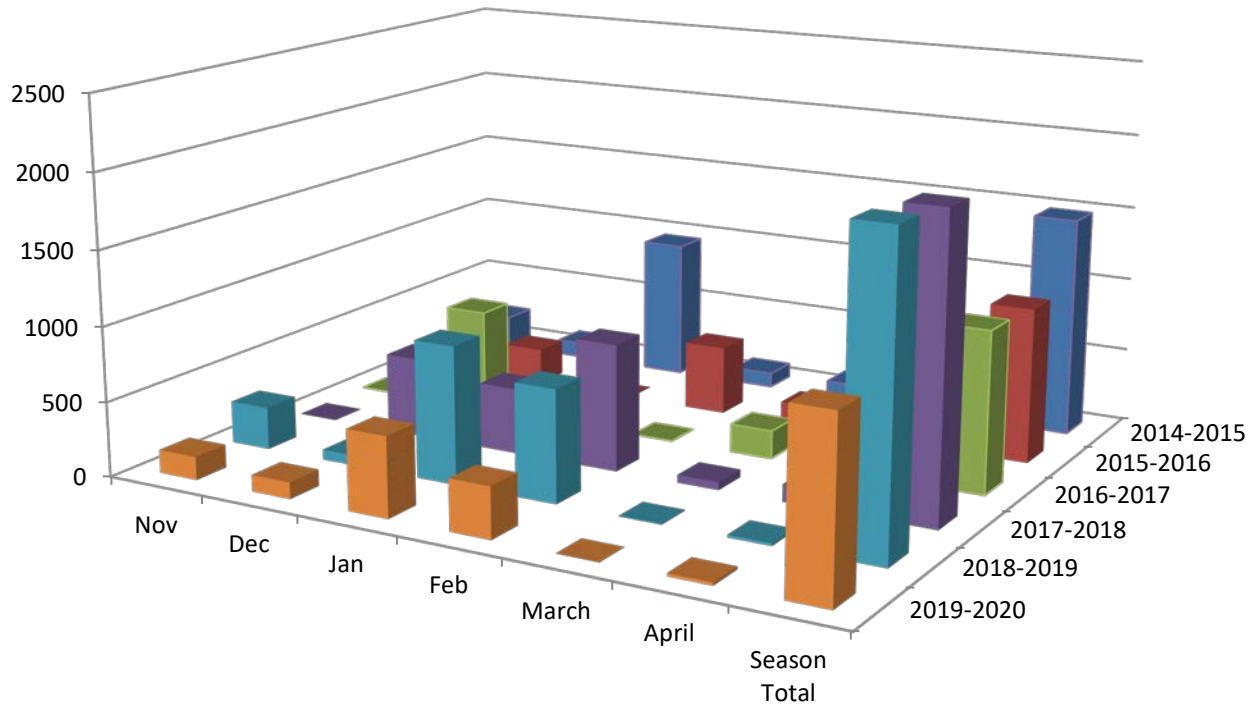
Emerald Ash Borer Tree Replacement Program



Percentage of Refuse Recycled by Month/Year



Tons of Road Salt



Gallons of Liquid Deicer

