

**CITY OF NAPERVILLE
MEMORANDUM**

DATE: January 30, 2020

TO: Doug Krieger, City Manager
Marcie Schatz, Deputy City Manager

THROUGH: Dick Dublinski, Director of Public Works

FROM: John Rutkowski, Deputy Director

SUBJECT: 2019 Bulk Curbside Leaf Program

Purpose:

The purpose of this memorandum is to provide Council with a recap of the 2019 bulk curbside leaf program and recommendations regarding the future of the overall program to ensure continued long-term success.

Background:

Each fall the Department of Public Works (DPW) performs the annual bulk curbside leaf program. The bulk program augments the annual free bagged leaf program so that residents have options to dispose of leaves during each fall season.

The bulk program is a 6-week program whereby residents are afforded three opportunities to rake their leaves curbside to be picked up and disposed of by DPW. The program begins six weeks prior to Thanksgiving and ends the weekend following Thanksgiving, or earlier if winter weather prevents DPW from picking up leaves.

Due to challenges surrounding aging equipment, unpredictability of weather and the public safety needs for adequate winter preparation, in May of 2019 the City Council approved additional funding for the 2019 program to test new leaf pick-up equipment, contract out additional leaf disposal and pick-up, and increase contract trucking to complete the program on time.

Discussion:

Equipment

DPW piloted a replacement piece of equipment, the Trackless Leaf Loader, in 2019. The Trackless was rented for a total of 4-weeks and utilized in all types of weather and leaf conditions. The Trackless proved to be a valuable tool that can be added to DPW's fleet for leaf pick-up to eventually replace the aging leaf equipment currently in DPW. Based on the success of our testing, DPW will move forward with the purchase of a Trackless in 2020 (funding approved through the CY20 budget process).

DPW also piloted the use of front-end wheel loaders in 2019. DPW utilized four loaders, all which proved to be successful in their ability to pick-up leaves regardless of weather or leaf conditions. The only drawback to the use of the front-end loaders is that they leave more leaf

residue on the pavement after pick-up than the existing leaf loaders in our fleet or the newly piloted Trackless. Nonetheless, due to their ability to pick up leaves in rain, snow, ice, and any other weather condition, front-end loaders will continue to be an integral part of the leaf program.

Based on the success of the 2019 program, which was impacted by two substantial snowstorms resulting in over six inches of snow combined, one of which caused for over 500 service requests for downed limbs and trees, DPW plans on incorporating the use of the Trackless and front-end wheel loaders into the program going forward to ensure long term sustainability and success for bulk leaf collection.

The following table represents DPW's equipment inventory for leaf operations and provides a five-year plan for equipment replacement to ensure the program success.

Equipment	CY19	CY20	CY21	CY22	CY23	CY24
Leaf Loaders (1)	5	5	5	5	5	5
Suction Units (Dinks)	5	3	2	1	0	0
Vacuum (Titan)	2	2	2	3	3	3
Front End Loaders	4	4	5	5	5	5
Trackless (2)	0	1	1	1	2	2
John Deere	6	6	6	6	6	6
Volvo Tractor	2	3	3	3	3	3
Total Units	24	24	24	24	24	24

- (1) Retain Leaf Loaders until they are no longer operational; limited value on open market and can be used as donor parts for remaining equipment that is operational.
- (2) Rented and successfully tested for 4-weeks in 2019
- (3) Items highlighted in **GREEN** note new equipment additions that will be added each budget year to replace the aging Dinkmars highlighted in **RED** each year

Operational Changes

Historically the bulk curbside leaf program costs the City approximately \$1.2 million dollars annually to pick-up and dispose of leaves put curbside by residents. The City Council approved a \$274,000 budget increase in 2019 for leaf disposal contract services, leaf pick-up contractor assistance, and semi trucking in to improve the efficiency of the leaf program (as further described below). Because of the approved changes, the actual 2019 bulk curbside leaf program cost the City approximately \$1.4 million dollars to complete. Given the success of each of these operational changes, staff plans to continue the use of each for the 2020 leaf program and beyond.

Leaf Disposal Contract Services - In 2018, DPW piloted the use of a contractor to pick-up leaves collected by DPW and temporarily stored at the Fort Hill Drive location so that the contractor could truck the leaves to their operation for composting. This proved successful in 2018 since the leaves collected by DPW were located on a hard, paved surface. As a result, DPW eliminated operational delays resulting from trucks not being able to access farm fields due to poor weather conditions and/or crops still in fields before harvest. In 2018 approximately 15,000 cubic yards were disposed of by this method; while in 2019 nearly 35,000 cubic yards

was taken from both DPW facilities at Fort Hill and Plainfield/Naperville Road. Again, the process expedites disposal since all trucks have continuous access to dump without delay.

Leaf Pick-up Contractor Assistance - In 2019 DPW also had contractor assistance in two additional leaf districts whereby the contractor was responsible for picking up the leaves curbside. Traditionally DPW has used one contractor in District 12, which has always helped expedite leaf pick-up since it is one of the heaviest leaf districts in the City. In 2019, two contractors picked-up leaves in Districts 8, 10 and 12. Again, the additional assistance ensured that DPW crews could stay on track with the remaining seventeen districts, including the college area, during the 6-week program.

Semi-Trucking Contract Services - With the additional use of front end wheel loaders in 2019, and to ensure that DPW could prep its dump trucks for winter operations the final two weeks of November, the City Council also increased the contract semi-trucking budget. The additional budget allowed for the continuous use of the front-end wheel loaders throughout the program while also enabling DPW to utilize a few dump trucks for the winter storms that occurred during the program and prep all dump trucks for winter operations by the first week in December.

Leaf Totals – During the 2019 program, DPW and its contractors picked-up approximately 47,000 cubic yards of leaves during the 6-week program. In comparison, DPW collected approximately 55,000 cubic yards of leaves in 2018, 25,000 cubic yards of leaves in 2017, 46,000 cubic yards of leaves in 2016, and 49,000 cubic yards of leaves in 2015, for an average of 45,000 cubic yards of leaves annually.

In addition to the above operational changes, DPW continued to market and offer the City's free bagged leaf pick-up program and encouraged the benefits of composting and mulching leaves on residential properties. The City will continue to promote both options along with the bulk curbside program so that the residents have a three-tiered approach to leaf disposal on an annual basis.

Conclusion

DPW will continue to evaluate the program annually to determine what additional and/or different methods will help improve the bulk leaf pick-up program. However, based on City Council's support in 2019, DPW is confident that its continued use of contractor help along with the replacement of its aging equipment with newer technology will ensure program success into the future.

Recommendation:

Include this information in the January 30, 2020 MM.