

2022 Summer Road Maintenance Summary

ISSUE

Summary of the 2022 summer road maintenance program and continuous improvement initiatives.

BACKGROUND

The Roadways, Fleet and Support department reports annually on the summer road maintenance accomplishments and program enhancements.

The summer road maintenance program includes maintenance of paved and gravel streets, sidewalk maintenance, street cleaning and sweeping and specialized maintenance.

DISCUSSION/ANALYSIS

The Roadways section in the Roadways, Fleet and Support department contributes to the goal of safe and optimal traffic and pedestrian movement by applying treatments to make roads and sidewalks smoother and safer as well as responding to emergent and urgent issues that impact safety and mobility. The street cleaning and sweeping program is important as it removes sand and debris that can become airborne due to wind and traffic. Maintaining clean streets improves the quality of life of citizens. Service levels approved by City Council in 2017 guide the Roadways section in defining objectives and prioritizing the work.

Summer 2022 Accomplishments

- Repaired potholes with 2,000 tonnes of asphalt concrete. In addition to potholes identified by Roadways staff inspections, which accounts for most of the potholes, inspected and repaired approximately 800 potholes reported by residents through the Report a Pothole map.
- Completed maintenance and permanent repairs to roadways and sidewalks due to 1,600 cuts for underground utility repairs.
- Maintained focus on preventative maintenance and treated 36 kilometres of streets with crack sealant to extend the life of the asset.
- Graded 400 kilometres and reconstructed 13 kilometres of gravel back lanes.
- Removed tripping hazards on nearly 5,800 sidewalk panels for a total length of approximately 8.6 kilometres.
- Washed all bridges and pedestrian overpasses to remove corrosive winter salting residue, which extends the timeline for a major rehabilitation or replacement.
- Completed curb-to-curb sweeping of all residential streets prior to the end of June. High traffic driving lanes and Business Improvement Districts were cleaned once per month from June to September. Through the spring street cleaning and sweeping program, a total of 17,000 tonnes of debris was removed from the streets.

- Swept four bridge walkways that were most impacted by the splashing of de-icing materials and debris last winter (Warman Road over Circle Drive, McKercher Drive over College Drive, Spadina Crescent Bridge, and Stew Uzelman Pedestrian Bridge - Circle Drive North). This work was completed before the end of May.
- Swept 104 kilometres of streets in the fall to reduce the risk of drainage problems next spring.

Continuous Improvement Initiatives

1. Introduction of GPS Routing for Pothole Repairs

New GPS-based software was used this year to plan and record pothole repairs. The software uses the collection of pothole locations and plans the most efficient order and the route for the pothole repairs. The route is provided to the pothole repair crews on a digital tablet. There were nearly 50% more potholes reported by residents this year compared to last year, but with the assistance of the new software the time to repair reported potholes dropped by 25%. This new software also helped reduce fuel consumption by calculating the most efficient route between multiple repair locations.

2. Implementation of Fusion Enterprise Asset Management (EAM)

Roadways crews started using the new Enterprise Asset Management software, a module within Fusion that was implemented corporately in spring 2022. The new software allows better visibility of concerns reported by residents and permits for easy transfer of issues to the appropriate crew for response. Another early realized benefit of the new system is concerns from residents can be viewed on a map-based system to allow for better planning and coordination of work.

3. Enhanced Processes for Sidewalk Repairs

New processes were developed in collaboration with the City's Asset Preservation section to assess safety concerns from residents and prioritize and plan minor and major sidewalk repairs. These enhanced processes streamline the inspection and evaluation of the sidewalk condition and provide a framework for prioritizing minor and major repairs. The benefits include less effort spent on inspections and better coordination between Roadways and Asset Preservation. Roadway crews focus on making minor repairs, and processes are in place to transfer locations that require major repairs to Asset Preservation. This has improved the ability to respond to residents' concerns and provide more definitive timelines for when repairs will be completed. Appendix 1 provides additional details on the enhancements made to the sidewalk repair program.

4. Communication Enhancements for Street Sweeping

Communication enhancements for the street cleaning and sweeping program included a new video on early spring sweeping and a campaign called "Dirt and grime are so last season". The video was shared to help explain the difference between early spring priority street sweeping and the city-wide residential street

sweeping. The new campaign included additional billboards in neighbourhoods where the highest number of parking restriction violations have historically occurred.

IMPLICATIONS

There are no direct financial, social, legal, or environmental implications identified with this report.

NEXT STEPS

Planned continuous improvement initiatives for the 2023 summer maintenance season are focused on continued implementation of the Fusion Enterprise Asset Management system. Planned work includes enhancing existing and creating new processes for its use and ensuring quality data for data driven decision making and program delivery.

APPENDICES

Appendix 1 - Continuous Improvement - Sidewalk Repairs

Report Approval

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