

Service Level for Road Maintenance

Scope

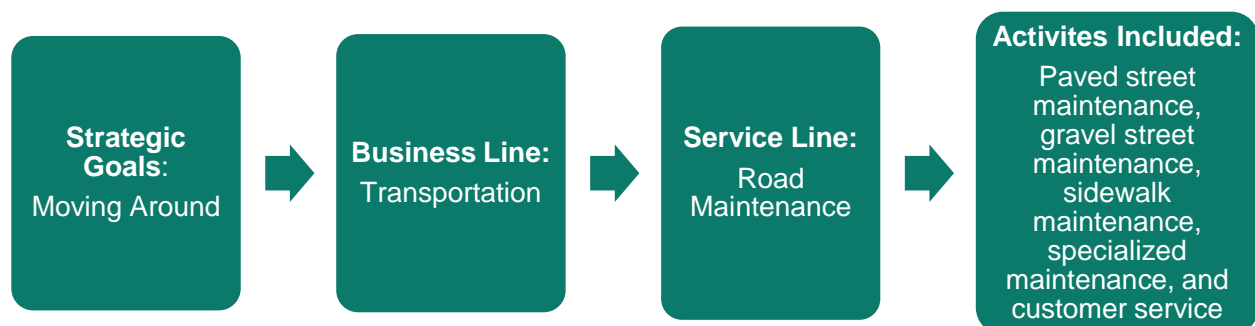
Service Level (SL) documents are prepared to allow citizens of the City of Saskatoon (City) to review and understand the services *currently* provided. This document includes activities completed under the Road Maintenance service line. This service may be completed by various divisions in the City.

Service Overview: what we do

The City's Road Maintenance program focuses on citizen mobility through infrastructure repair and maintenance, citizen-centric service, and fiscal responsibility. Four of the road maintenance programs are seasonal typically running from May to October including paved street maintenance, gravel street maintenance, sidewalk maintenance, and specialized maintenance. The service line also provides year-round service and information to citizens through the Customer Service Centre. More details on each program are available on page 2 - 4 of this document.

Purpose: why we do it

Saskatoon's core infrastructure like roadways, bridges, and sidewalks require a variety of programs to maintain their usable life and integrity in order to support the mobility needs of citizens, visitors, and service providers in the city. Activities such as back lane grading, bridge washing, and pothole filling increase the usable life of the City's infrastructure. Specialized maintenance such walkway litter pick up and mowing as well as guardrail and chain link fence repair are responsive activities dedicated to ensuring citizen safety and quality of life through safe needle pick up and disposal as well as motor vehicle accident severity mitigation.



Programs within Service Line	Service Attributes and Customer Values	Service Level Outcomes	Customer Performance Measures
Paved Street Maintenance	Safety, Responsiveness, Quality, Accessibility, Fiscal Responsibility	More than 4,000 lane kms make up the city's paved street network. Paved streets are maintained to ensure safe use and mobility for citizens and service providers. Treatments that can be performed to maintain paved streets include paving, blade leveling, pothole and utility cut repair.	<p><u>Emergency Pothole Repair</u></p> <ul style="list-style-type: none"> Emergency potholes are those that are larger than 60 cm in diameter, affect driving lanes, or are located on high traffic streets. Emergency potholes are responded to and repaired on a complaint basis year-round. Potholes that are reported as meeting emergency status will be inspected to verify severity within 1 day of the complaint. Potholes that are verified as emergencies will be repaired within 2 days after inspection. <p><u>Routine Pothole Repair</u></p> <ul style="list-style-type: none"> Routine potholes are those not meeting emergency criteria. Routine potholes are responded to and repaired on a complaint basis from May to November. All potholes reported or reclassified, after inspection, as routine will be tracked through the Pothole App and prioritized for repair through planned maintenance programs as resources allow. <p><u>Paving</u></p> <ul style="list-style-type: none"> Paving activities are completed between May and October. <p><u>Utility Cut Repair and Maintenance</u></p> <ul style="list-style-type: none"> Utility cuts are maintained year-round using gravel fill and blading. The frequency of maintenance treatments for utility cuts is adjusted based on the location and size of the cut as well as the traffic volume of the street. Permanent repair of streets damaged by utility cuts occurs between May and October, priority for repairs is determined by the location and size of the cut as well as the traffic volume of the street.
Gravel Street Maintenance	Safety, Accessibility, Fiscal Responsibility, Quality	Gravel streets include more than 655 kms of back lanes, city streets, and rural roads. Gravel streets are maintained annually to ensure safe use and access for citizens and service providers. Treatments that can be performed to maintain gravel streets include grading, adding gravel, and reconstruction.	<p><u>Back Lanes</u></p> <ul style="list-style-type: none"> Each spring all back lanes are inspected to determine treatment needs. Between July and October, all back lanes receive at least one maintenance treatment (e.g. grading). If a back lane needs reconstruction, citizens will receive a notice in their mailbox outlining the work to be completed and what they can expect during the work, prior to the work beginning. <p><u>Rural Roads</u></p> <ul style="list-style-type: none"> Rural roads are those gravel streets on the edges of the city limits. Rural roads are graded on a weekly basis from May to October. Dust palliation is also completed on rural roads. Dust palliation is a program under the Street Cleaning and Sweeping service line. More information on this program is found in the Street Cleaning and Sweeping service level document.

<p>Sidewalk Maintenance</p>	<p>Safety, Responsiveness, Quality, Accessibility, Fiscal Responsibility</p>	<p>The sidewalk system is more than 1,900 kms. It is maintained from May to October to ensure safety and mobility for all citizens. Treatments that can be performed to maintain the sidewalk system include grinding tripping hazards, small asphalt patching, and concrete filling.</p>	<p><u>Sidewalk Inspections</u></p> <ul style="list-style-type: none"> Sidewalks in high-traffic areas are inspected annually in October. <p><u>Sidewalk Complaints and Investigations</u></p> <ul style="list-style-type: none"> Sidewalk complaints are investigated from May to October. Sidewalk complaints that refer to locations on a preservation list for the current year will be investigated and repaired as scheduled under the preservation contract. Sidewalk complaints that refer to locations not on a preservation list for the current year will be investigated and prioritized into emergency and routine categories using a risk matrix based on the hazard posed and pedestrian traffic potential of the location. <ul style="list-style-type: none"> Investigations that deem an issue an emergency, locations posing the highest risk to pedestrians, will be marked to increase hazard visibility and repaired first. Investigations that deem an issue routine, low or medium risk to pedestrians, will be tracked and prioritized for repair through planned maintenance programs as resources allow. <p><u>Sidewalk Damage due to Utility Cuts</u></p> <ul style="list-style-type: none"> Sidewalk damage related to utility cuts is repaired with a planned program running from May to October. Repair priority is determined by considering traffic volume on the sidewalk, timing of adjacent street rejuvenation projects (if any), ground settling, and an “oldest first” model (e.g. where those areas that have had temporary fixes in place, the longest will be scheduled for permanent repair first until the winter backlog has been eliminated).
<p>Specialized Maintenance</p>	<p>Safety, Responsiveness, Quality, Aesthetics</p>	<p>Specialized maintenance activities include bridge washing, guardrail repair, surface drainage management, small litter pick up, chain link fence repair, walkway maintenance, and landscaping of utility cuts. These activities are completed to ensure the road network is maintained in a holistic fashion through the Road Maintenance service line.</p>	<p><u>Bridge Washing</u></p> <ul style="list-style-type: none"> All bridges and structures (e.g. overpasses, pedestrian tunnels) are washed once per year throughout July and August to ensure inspection quality and increase usable life. <p><u>Guardrail Repair</u></p> <ul style="list-style-type: none"> Guardrail repair is a reactive activity occurring from May to October. The activity occurs whenever the City’s guardrail system is damaged, usually after motor vehicle accidents. Reports of damage to guardrails will be investigated within 24 hours. Damage that occurs from May to October is scheduled for repair as soon as possible, usually within two weeks. Damage that occurs from November to April is made safe as soon as possible and scheduled for permanent repair in May using the “oldest first” model until the winter backlog has been addressed. <p><u>Surface Drainage Management</u></p> <ul style="list-style-type: none"> Surface drainage refers to structures that are part of the roadway (not below) including culverts, catch basin covers, ditches, etc. All culverts are inspected annually for usability. If necessary, culverts can be treated to improve drainage support.

			<ul style="list-style-type: none"> • Catch basins are inspected, cleaned, and replaced throughout the city during severe rain watches/ warnings and after severe rainfall has occurred. <p><u>Small Litter Pick Up</u></p> <ul style="list-style-type: none"> • This activity is a waste collection service to ensure litter does not end up on the roadways. Using a planned route a “curbster” machine empties small waste containers throughout Business Improvement Districts and during special events from May to October. • Frequency of the activity is based on need for each area. <p><u>Chain Link Fence Repair</u></p> <ul style="list-style-type: none"> • Chain link fence repair is a reactive activity occurring from May to October. • Reports of damage to chain link fences will be investigated within 24 hours. • Damage that occurs from May to October is scheduled for repair as soon as possible, usually within two weeks. • Damage that occurs from November to April is made safe as soon as possible and scheduled for permanent repair in May using the “oldest first” model until the winter backlog has been addressed. <p><u>Walkway Maintenance</u></p> <ul style="list-style-type: none"> • Walkways are green spaces between civic infrastructure (e.g. roadways and sidewalks) and private property. • The majority of these spaces are maintained once per month (e.g. mowing and litter pick up) from May to October. • Four locations near Circle Drive (between Airport Drive and Clancy Avenue) are maintained on a weekly basis, in order to keep grass short, to ensure staff safety when removing the high volume of litter and needles frequently in these areas. <p><u>Landscaping of Utility Cuts</u></p> <ul style="list-style-type: none"> • Landscaping damage related to utility cuts is repaired with a planned program running from May to October. • Repair to landscaping can only be completed once any sidewalks, sprinkler, and paving stone repairs are completed. • Landscaping repairs will be completed through top soil and grass seed placement or by adding turf. Turf is generally only used if large sections of private front yards have been damaged due to a utility cut repair. • Repair priority is determined by considering ground settling and an “oldest first” model.
<p>Customer Service</p>	<p>Safety, Responsiveness, Quality</p>	<p>The Customer Service Centre provides centralized 24-hour customer service through a call and email based operation. The workgroup maintains the knowledge base and customer relationship management software, takes inquiries, books service requests and</p>	<p><u>Phone Calls</u></p> <ul style="list-style-type: none"> • All calls are answered promptly within 3 rings. • All staff will answer the phone with the following message an opening greeting, the staff person’s name, and “How may I help you?” • Calls will only be transferred when necessary. • If a transfer must be made the customer service staff person will advise the connected subject matter expert of the caller’s concern prior to connecting the transfer so the caller does not have to repeat themselves. • Callers should not be on hold for longer than 2 minutes, if this must occur the customer service staff person will take the caller’s name and phone number to return the call when the information or answer is available.

dispatches City crews to investigate and make safe reported incidents.

Emails

- All emails will be acknowledged within 2 business days.

Resource Allocation: what does it cost

All costing information presented is estimated based on available data.

Service Line	Programs	2017 Budgeted Cost to Deliver Service	2017 Estimated Actual Cost to Deliver Service	Variance
Road Maintenance	Paved Street Maintenance, Gravel Street Maintenance, Sidewalk Maintenance, Specialized Maintenance, Customer Service Centre	\$8,562,500	\$8,562,500	\$0

Service Line	Program Components	Cost per Program ¹	Cost per Unit
Road Maintenance	Paved Street Maintenance <i>Inventory: 4,000 lane kms</i>	\$3,895,500	\$910 per lane km
	Gravel Street Maintenance <i>Inventory: 655 lane kms</i>	\$1,397,000	\$2,130 per lane km
	Customer Service Centre <i>Unit: 101,350 interactions in 2016 (e.g. emails, out-going and in-coming calls)</i>	\$585,000	\$5.80 per interaction
	Specialized Maintenance	\$1,685,000	N/A ²
	Sidewalk Maintenance <i>Inventory: 1,900 kms</i>	\$1,000,000	\$525 per km

Financial Assumptions

Costs are represented as averages but the total service line cost is highly variable in reality due to traffic loads on streets, current inventory quality, deterioration rates, changing standards, and the use of contractors.

¹ This column includes Operating funding only.

² This program offers a diverse set of activities that are largely need-based, making deriving units costs difficult as such they have not been included.

Supporting Information

To view more information about road maintenance services click on the images below to review their respective webpages at Saskatoon.ca.



Example of sidewalk damage requiring a routine repair



Example of damage requiring sidewalk an emergency replacement



Example of an emergency pothole



Example of a routine pothole



Example of a gravel back lane

Constraints

Risk factors that may impact the City's ability to deliver the services as described above include: weather; the amount of inventory for roads and sidewalks; and the availability of labour, equipment, and materials

Supporting References

- Projected 2017-2019 Roadway Preservation Plan
- 2017 Sidewalk Preservation, Repair or Replacement Criteria