



Calgary

City Auditor's Office

Parks & Open Spaces – Contracted Mowing Services Audit

July 16, 2024



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Audit Objective

The objective of this audit was to assess the effectiveness of Parks & Open Spaces' (Parks) management of contracted mowing services.

The objective was achieved by reviewing the design and operating effectiveness of mowing processes and controls that mitigate the risk contracted mowing does not meet timeliness and quality standards.

Why it Matters

Effective management of contracted mowing services is critical to support The City of Calgary (The City) in maintaining a healthy and vibrant parks system to enhance the quality of life for Calgarians.

Parks maintains and stewards almost 8,700 hectares of public spaces and contracts out the majority of mowing services (turf mowing, litter removal and trimming). Since public spaces are important to Calgarians and are highly visible, there is an impact to citizen satisfaction when contracted deliverables are not met and an impact to Parks resources if they have to complete mowing in-house.

What We Concluded

Parks experienced challenges with contracted mowing services in 2023 due to significant performance concerns with one sampled contractor and cycle time delays at the beginning of the season with another. Monitoring, payment, and vendor performance management processes in sampled zones generally supported effective management of contracted mowing services. However, improvements are needed to performance measurement and inspection processes to support meeting quality and timeliness standards and ensure information is available to evaluate alternatives to respond to future performance challenges.

Parks has established key structures and processes to support effective management of contracted mowing services:

- Parks created KPI related to mowing timelines and the correction of deficiencies identified through inspection.
- The Turf Application allows contractors and Parks to identify sites mowed.
- Zone Superintendents monitored contracted mowing through contractor activity reports.
- City staff and mowing contractors also tracked mowing completion dates, identified issues, and created comments in the Turf Application.
- Parks staff recorded inspection results and contractors indicated issues were corrected in the Turf Application.
- A defined contractor invoicing process was in place and sample testing confirmed payment was made for turf that was mowed.
- Annual performance evaluations were completed for the three zones in our sample.

However, updates to structures and processes are required to better support effective management of contracted mowing services going forward, particularly where future challenges with vendor service delivery are encountered. Key changes required include reviewing existing KPI and establishing additional KPI to allow Parks to effectively measure and report on the achievement of contractor

mowing objectives related to timeliness and quality, developing a plan to enable extraction of periodic reports from the Turf Application to support KPI monitoring, and developing guidelines outlining inspection and re-inspection prioritization and target rates.

We raised four recommendations to support future effective contract management. Parks has agreed with our recommendations with plans to implement by December 31, 2025.

Background

The City's parks system includes regional and neighborhood parks, and natural areas that provide Calgarians with safe, inclusive, active-living opportunities that enhance quality of life. Parks maintains and stewards almost 8,700 hectares of public spaces (the equivalent of 11,000 football fields spread out citywide over 5,200 parcels of land)¹. Calgarians have consistently rated Parks services with high importance and satisfaction and in the 2024 Spring Survey of Calgarians rated the service at 96% importance and 89% satisfaction².

A recommendation to Council was made to expand third party contracting mowing services (turf mowing, litter removal and trimming) in September 2014³. As a result, external contractors mow a majority of City turf with City staff completing in-house mowing at highly visible parks.

For the 2023 mowing season, Parks utilized three primary contractors. One of the contractors had significant challenges meeting mowing services deliverables and terminated their contract with The City in Q4 2023. For the 2024 mowing season, there will be two primary mowing contractors. Parks Management advised their ability to pursue alternatives when deliverables are not met is impacted by a limited number of contractors that can meet The City's mowing requirements and limited internal staff and equipment to complete in-house mowing services.

The City is divided into nine mowing zones each with a Zone Superintendent who oversees in-house and contracted mowing services. The mowing season typically starts between the end of April to the beginning of May and includes a spring turf cleanup. Mowing services continue in cycles throughout the summer months and occur more frequently during May and June. Turf typically becomes dormant during August and fall turf cleanup occurs in October to end the mowing season.

Contractors are required to record mowing services completed in the Turf Application. City staff may inspect the overall condition of the turf, litter removal, and trimming and will record in the Turf Application whether a location "passes" or "fails" based on these criteria. If the inspection finds that these criteria are not satisfactory, the contractor is required to correct the deficiencies.

¹ Parks 2023-2026 Service Plans and Budgets.

² The 2024 Spring Survey of Calgarians, respondents rated Parks services with a 96% importance on a four point scale (very important- 77%, somewhat important- 17% and 4% not very important or not at all important). Respondents rated satisfaction with services at 89% (very satisfied- 44%, somewhat satisfied- 45% and 11% not very satisfied or not at all satisfied with the job).

³ City Manager's Report to Priorities and Finance Committee – September 16, 2014. Retrieved from The City of Calgary website: <https://pub-calgary.escribemeetings.com/filestream.ashx?DocumentId=4930>

Invoices are issued by the contractors based on the turf mowed for the period at the contracted rate.

Scope & Approach

The scope of the audit included reviewing the following key processes and controls related to contracted mowing services for the 2023 mowing season:

- Performance measurement to ensure there are mowing KPI and reporting is available from the Turf Application;
- Monitoring processes to ensure turf was mowed within expected timelines;
- Inspection processes to ensure mowing met quality standards and issues were remediated on a timely basis; and
- Vendor performance management to manage poor performance and payment processes to ensure payment is only made for turf that was mowed.

Our audit approach included interviews with key personnel in the Parks team. We reviewed City contractor related mowing procedures/guidelines and contracts, and a sample of:

- Turf mowed and Daily Activity Reports (from the mowing contractors);
- Turf inspected based on data extracts from the Turf Application;
- Annual performance evaluations; and
- Contractor invoices.

Reviewing the processes and controls related to in-house mowing, boulevard mowing, 311 requests related to mowing, and naturalization projects were outside the scope of this audit.

Results

Parks practices across sampled zones generally supported effective management of contracted mowing services. However, improvements are needed to processes and controls related to performance measurement and inspections.

Results of our audit work for each group of processes evaluated are outlined in the following sections.

Performance Measurement

Based on our review, we determined improvements are needed to KPI and reporting from the Turf Application to support monitoring of the quality and timeliness of mowing services. Relevant mowing KPI and enhancements to data management capabilities support operational and leadership staff in measuring and monitoring contractor performance and making data driven operational improvements for future years, including strategic decisions on mowing service delivery models (i.e. fully contracted out or hybrid).

The following mowing KPI/standards were outlined in the RFP for mowing services and vendor contracts:

- A maintenance cycle must be completed within 14 days except in May and June, which must be completed within 10 days;
 - Cycles for select sports fields must be completed within 7 days;
 - Deficiencies must be corrected in 48 hours; and
 - 98% of turf cut even at 5-10 cm, no more than 1% of turf areas cut too low, and no more than one litre per 100m² clippings left on turf.
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In addition, Parks' internal practice was to inspect a site within 48 hours of mowing to identify any deficiencies.

We sampled the first and second mowing cycles in 2023 for three of nine park zones and four sites with deficiencies to assess if mowing standards were met. Since expected timelines to complete mowing and inspections for the sample were exceeded, we recommended reviewing current KPI to assess if they are achievable (Recommendation 1).

We noted there were no mowing KPI focused on measuring the quality and overall timeliness of mowing services, such as failed inspection rates, average time to remediate a failed inspection, and timely re-inspection to ensure deficiency corrected within 48 hrs. We recommended identifying additional KPI to monitor the quality and timeliness of mowing services (Recommendation 2).

The Turf Application was being utilized by contractors and City staff to identify sites mowed as we were able to confirm the existence of data extracts from the Turf Application, which generally occurred weekly or bi-weekly during the mowing season. However, there were no periodic reports or accurate data extracts available from the Turf Application for users to effectively track and report on existing contractor mowing KPI across all zones from a single accurate data source. We recommended the development and implementation of a plan to extract periodic reports from the Turf Application to support KPI monitoring (Recommendation 3).

Monitoring

We reviewed the design and operation of monitoring process for mowing contractors to ensure timeliness by selecting six communities in the first and second mowing cycle (from three of nine Parks zones).

This process was generally effective since:

- City staff and mowing contractors noted mowing completion dates, identified issues, and created comments in the Turf Application which evidences City staff and contractors utilized the application.
- Activity reports from mowing contractors were obtained which tracked the dates sites were mowed for three zones and six communities in our sample.
- The Zone Superintendents monitored the daily activity reports to identify if the contractor was behind at the zone level. Generally, a few days delay is not an issue as it can be due to weather. If there were concerns, they reached out to the contractor to discuss improvements required.
- Mowing for the cycle generally started on or after the last day of the previous cycle in the three zones in our sample.
- Activity reports from the mowing contractors and the data extracts from the Turf Application supported the monitoring of mowing cycle completion time KPI.

Inspections

We reviewed the design and operation of inspection processes by reviewing data extracts from the Turf Application and selecting a sample of four sites with issues to assess if issues were resolved within specified timelines. We identified process enhancements to inspection and re-inspection guidelines.

Under the terms of the mowing contracts, all mowing services provided are subject to inspection and approval by The City, at any time. The City can determine when inspections are deemed necessary. Each sampled zone determined the target percentage of turf mowed to be inspected based on criteria such as, the experience of the contractor, and City staff capacity. Parks management advised staff may not be available to inspect turf due to other responsibilities and obligations.

Based on our review of inspection data from the Turf Application and sample testing of four issues, we noted:

- Parks staff recorded the date and outcome of the inspection (passes/fails) and created comments in the Turf Application; and
- Foremen also communicated issues to contractors via text including photos.

We noted that Parks does not have guidelines outlining inspection and re-inspection prioritization and target rates. Along with Recommendation 1 and 2, developing inspection and re-inspection prioritization guidelines (Recommendation 4) supports consistently meeting required deliverables outlined in the mowing contractor RFP, efficient utilization of City staff, and turf quality in future years.

Vendor Management

We determined the vendor performance management and payment processes were generally effective given challenges during the 2023 mowing season.

There were processes in place to support contract invoicing and ensure payments reflected services provided. The Zone Superintendents for our three sampled zones provided a master listing of turf to be mowed to the contractor, including square meters. Contractors submitted invoices, which the Zone Superintendents approved based on a review of contractor activity reports. We reviewed a sample of invoices in mowing cycle two for three zones and six communities and confirmed the rate charged was consistent with the mowing services contract and the square meters mowed agreed to activity reports. Zone Superintendents advised, they confirmed with their foremen, issues were dealt with at the end of the mowing cycle prior to payment.

According to the RFP/Contracts, there are a number of mechanisms to manage mowing contractor performance issues, such as holdback clauses where payment is held back or set off where the vendor has failed to comply with contract requirements, and the ability to engage another vendor if the contractor is not able to complete 85% of the work within expected timelines. The City can also issue a Performance Improvement Notice, which outlines performance rectification with a timeframe. If the vendor does not comply with the notice within five business days or provide a satisfactory rectification plan, The City can terminate the contract. The RFP also indicates "The City may also prohibit a Proponent from participating in a procurement process based on significant or persistent deficiencies in the performance of any substantive requirement or obligation under a prior contract or contracts."

The vendor management process includes the completion of a Vendor Performance Evaluation Review by the procuring entity rating performance from

1-5 in four categories (Customer Service, Performance, Project Completion, and Other). Low ratings (2 or below) must be explained in the "Comments" section.

For three sampled zones, Parks staff communicated performance concerns as they arose via text, email or in person and completed Annual Performance Evaluation Reviews for three mowing contractors for the 2023 mowing season. The Zone Superintendents for two of the zones sampled noted there were no significant performance issues, which was reflected in the Annual Performance Evaluation Review. Delays in mowing cycle completion noted in sample testing of cycle times under Performance Measurement above were included in the comments section.

Based on ongoing concerns with the 2023 mowing season in one Zone, Supply Management and Parks met with the contractor in July 2023 to discuss meeting mowing expectations. However, there was no formal documentation of the ongoing concerns or the discussions with the contractor during the season and Parks did not formally document performance improvements required in a Performance Improvement Notice.

Given the limited contractors available to take over mowing, Parks' approach was to work with the contractor during the season, including reducing the turf they were responsible to mow, to ensure some mowing could get completed. Completing a Performance Improvement Notice, would likely have resulted in contract termination, which would have compromised mowing completion. The Zone Superintendent completed a Vendor Performance Evaluation Review with low ratings, and comments on significant concerns, and indicated they would not use this Vendor again.

We shared an opportunity with Parks to clarify with Supply Management the required documentation to support disqualification from a future bid or non-renewal/termination of a contract.

Observations & Recommendations

#1: Review and Update Mowing KPI	
OBSERVATION	RECOMMENDATION
<p>Mowing KPI require a review and update to identify additional measures to support tracking Parks progress toward contractor mowing objectives and assess if current KPI are achievable. In the absence of additional KPI, Parks are unable to effectively measure the achievement of the objectives of contracted mowing in terms of quality and timeliness.</p> <p>There were limited mowing KPI to measure contractor operational performance. Current KPI outlined in mowing RFP relate to standard times to complete a mowing cycle (ten days for regular mowing in May and June and seven days for select sport fields), and time to correct deficiencies (within 48 hours of notification).</p> <p>We sampled the first and second mowing cycles in 2023 for three of nine park zones to assess if mowing standards were met. Based on the Daily Activity Reports of sites mowed provided by the Zone Superintendents from contractors, all three zones exceeded expected days to complete mowing for both cycles by 1 to 21 days. We sampled six communities (within the three zones), and noted three of six communities, within two zones, exceeded the expected days to complete mowing by 2 to 19 days. We also sampled four sites with deficiencies that were selected for inspection, and noted the four sites exceeded Parks internal practice of inspecting a site within 48 hours after mowing.</p> <p>The operational KPI were documented in the mowing contractor RFP from February 2020 and 2021. Given standard times were on average, not met in our sample, operational mowing KPI should be periodically reviewed and updated to ensure they are achievable and consistent with current practices. In addition, there is an opportunity to reevaluate if all deficiencies should be corrected within 48 hours or if only significant deficiencies require immediate correction.</p> <p>Parks can track the cost of mowing per hectare for contracted mowing and citizen satisfaction with turf through the Customer Level of Service model refreshed in 2022.</p>	<p>1. The Director, Parks & Open Spaces, review current operational KPI to ensure they are achievable.</p> <p>MANAGEMENT RESPONSE Agreed.</p> <p>ACTION PLAN Current KPI Standards will be documented and reviewed by the Director, Parks and Open Spaces in consultation with Operational Managers. Operational KPI will be reviewed within Park operations for consistency and effectiveness.</p> <p>LEAD Parks Logistics Lead</p> <p>SUPPORTED BY Operational Superintendents, and Operational Managers.</p> <p>COMMITMENT DATE June 30, 2024</p> <p>2. The Director, Parks & Open Spaces: a) Establish additional KPI that measure achievement of contracted mowing objectives; b) Assess data availability to monitor the KPI (e.g. Turf Application); and c) Implement a process to monitor the KPI on an established frequency.</p> <p>MANAGEMENT RESPONSE Agreed.</p> <p>ACTION PLAN a) Consider what KPIs should be included for monitoring and review options for data storage for additional KPI and create supporting process for retaining historical records. We will also create new KPI for mowing focused on performance standards outlined in contract.</p>

<p>However, Parks have not established KPI to assess if contractor mowing objectives are being met in terms of quality (e.g. failed inspection rates, number of re-inspections before a deficiency is corrected, and average time to remediate a failed inspection), and timeliness (e.g. timely re-inspection to ensure deficiency corrected within 48 hrs.).</p> <p>Establishing additional KPI will allow Parks to effectively measure the achievement of contractor mowing objectives related to quality, and timeliness, which supports strategic decision making on mowing service delivery models (i.e. fully in-house, fully contracted or hybrid).</p> <p>To the extent additional KPI are established, Parks will need to evaluate the availability of data before implementing a periodic monitoring process.</p>	<p>b) Trials of new KPI will be run using data from mowing cycles in Q3 2024 for review. We will then review new KPI annually and review that established KPIs are meeting reporting needs; review to see if changes are needed to metrics. We will also incorporate KPI review in annual lessons learned session with operational superintendent sessions. Including formal feedback to contractors on performance.</p> <p>c) Implement new KPI and adjust as needed.</p> <p>d) Commit to completing an internal report two months after the mowing season that provides recommendations to Director, Parks & Open Spaces with any changes to be implemented for the following mowing season. The report would also be reviewed by the General Manager Operational Services.</p> <p>LEAD</p> <p>Parks Logistics Lead</p> <p>SUPPORTED BY</p> <p>Operational Superintendents, Operational Managers.</p> <p>COMMITMENT DATE</p> <p>a) July 31, 2024 b) January 31, 2025 c) June 30, 2025 d) December 31, 2025</p>
<p>#2: Turf Application KPI Data</p>	
<p>OBSERVATION</p> <p>There are no periodic reports or accurate data extracts available from the Turf Application for users to effectively track and report on contractor mowing KPI across all zones from a single accurate data source.</p> <p>Data from the Turf Application was generally extracted weekly or bi-weekly during the 2023 mowing season. However, as the Turf Application does not save historical changes to records between data extracts, weekly extracts cannot be relied on to support reporting from the Turf Application. For example, in our sample testing of four sites with deficiencies (identified as issues in the Turf</p>	<p>RECOMMENDATION</p> <p>3. The Director, Parks & Open Spaces, develop a plan and implement extraction of periodic reports from the Turf Application to support KPI monitoring, including updating the Turf Application to save historical changes.</p> <p>MANAGEMENT RESPONSE</p> <p>Agreed.</p> <p>ACTION PLAN</p>

<p>Application), we were unable to obtain evidence of the issues being corrected after the last inspection.</p> <p>As noted under Observation #1, the data related to additional KPI identified to monitor quality and timeliness, such as failed inspection rates and time to re-inspect a deficiency, may be available in the Turf Application. However, the Turf Application will require an update to save historical changes to support complete accurate KPI data.</p> <p>In addition, we noted contractors provide Daily Activity Reports to each Zone or a mowing report to the Zone Superintendents at the end of a mowing cycle to support the invoice submitted. There is an opportunity to leverage the Turf Application to generate a report or extract data from the Turf Application at the end of the mowing cycle to validate the turf mowed and support monitoring of cycle times and identification of trends that require attention.</p> <p>Generating operational activity reports with accurate historical data for multiple zones from the Turf Application supports Parks operational and leadership staff in their oversight of mowing contractor performance and making data driven operational improvements.</p>	<p>a) Review current Turf Mowing Application and develop a plan to enable saving historical KPI data digitally.</p> <p>b) Application development will include additional functionality, including reporting (to the extent possible) and to enable a contractor to identify issues on site and record deficiencies, improving communication between contractors and city staff.</p> <p>LEAD</p> <p>Asset Systems Coordinator</p> <p>SUPPORTED BY</p> <p>Operational Superintendents, Parks Logistics Lead, Operational Managers.</p> <p>COMMITMENT DATE</p> <p>a) November 30, 2024 b) April 30, 2025</p>
<p>#3: Inspection and Re-inspection Guidelines</p>	
<p>OBSERVATION</p> <p>Parks does not have guidelines outlining inspection and re-inspection prioritization and target rates. In the absence of documented Parks guidelines, inspections and re-inspections may not be consistently prioritized, which could impact the timely identification and remediation of significant turf issues and effective utilization of City staff.</p> <p>We sampled three of the nine Parks zones and noted each zone determined prioritization and target inspection rates based on criteria such as, the experience of the contractor, and City staff capacity. Prioritization criteria and guidelines outlining the number and percentage of inspections and re-inspections were not documented.</p> <p>Inspection and re-inspection prioritization criteria should be developed using a risk-based approach to support meeting required quality deliverables outlined in the mowing contractor RFP and efficient and effective utilization of City staff. For example, prioritization criteria</p>	<p>RECOMMENDATION</p> <p>4. The Director, Parks & Open Spaces, develop and document inspection and re-inspection prioritization guidelines outlining criteria and target rates to be applied consistently across Parks.</p> <p>MANAGEMENT RESPONSE</p> <p>Agreed.</p> <p>ACTION PLAN</p> <p>A consistent inspection prioritization of park type will be created with criteria outlining what level of deficiencies should be corrected. Re-inspection guidelines will be formalized.</p> <p>A Standard Operating Procedure will be documented to ensure consistent application and monitoring of inspection/reinspection data in relation to newly created KPI.</p>

could include contractor performance, 311 service requests, staff capacity and high use areas.	<p>Contractor Orientation documentation will be provided to all Contractors upon each season start, outlining the expectations and standards.</p> <p>LEAD Park Logistics Lead</p> <p>SUPPORTED BY Operational Superintendents, Asset Systems Coordinator, Operational Managers.</p> <p>COMMITMENT DATE April 30, 2025</p>
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Acknowledgements

The City Auditor’s Office conducts projects, including this audit, in conformance with the International Standards for the Professional Practice of Internal Auditing.

The City Auditor’s Office would like to thank staff from Parks for their cooperation and support during this audit.