

To: Community and Operations Services Committee

From: Kevin Alexander, Commissioner,
Community and Operations Services Department

Report Number: CO-26-09

Date of Report: March 4, 2026

Date of Meeting: March 9, 2026

Subject: Parking Occupancy Monitoring Technology at Lakeview Park

Ward: Ward 5

File: 03-05

1.0 Purpose

On February 24, 2025, Council considered Report [CO-25-06](#) concerning Potential Management Improvements at Lakeview Park and subsequently passed the following motion:

“That staff be authorized to investigate the financial implications of installing occupancy sensor technology as outlined in Sections 4.5.3 of said Report and report back; and,

That the rental permit application timeline and process as outlined in Section 4.5.5 of said Report be approved by Council.”

The purpose of this report is to review the improvements introduced in 2025 regarding the management of Lakeview Park and to provide an update on the financial implications of introducing parking occupancy monitoring technology at Lakeview Park as directed by Council at its February 24, 2025 meeting.

2.0 Recommendation

That the Community and Operations Services Committee recommend to City Council:

That based on Report CO-26-09 concerning Parking Occupancy Monitoring Technology at Lakeview Park, dated March 4, 2026, staff be directed to report back after one full season of implementation of non-resident paid parking at Lakeview Park and Ed Broadbent Park and provide updated cost estimates of parking occupancy monitoring technology at that time.

3.0 Input From Other Sources

- Community and Environmental Services
- Finance Services
- Information Technology Services
- Legal Services
- Legislative Services
- Municipal Law Enforcement and Licensing Services
- Parks and Roads Operations Services

4.0 Analysis

4.1 Background

Lakeview Park (“the Park”) is located at 55 Lakeview Park Avenue along the shores of Lake Ontario and is a 21-hectare tract of land.

The Park contains:

- a recreational trail
- a splash pad and playground
- a waterfront, beach and pier
- green space
- three (3) diamonds
- five (5) sports fields
- Jubilee Pavilion
- Oshawa Museum
- three (3) washroom facilities
- eight (8) parking lots with 806 regular spaces and 29 accessible spaces, including the paved parking lot at Ed Broadbent Park

4.2 Improvements to the Communication of Park Rules

Enhancements to visitor information and on-site communication at Lakeview Park have been implemented. Website content was updated to better inform both permitted and casual park users, including those unfamiliar with park rules. Information related to casual, unpermitted use was also added to the group picnic webpage to provide clearer guidance on park expectations.

Wayfinding signage located near parking lots was redesigned to enhance visibility and clarity. The updated signage now includes general park rules, including requirements to park in designated areas, no smoking, dogs on leash, prohibition of cooking equipment, and alcohol restrictions.

In addition to signage, City Staff will continue to educate visitors to ensure the Park is used in accordance with the City's rules, guidelines and by-laws.

Municipal Law Enforcement Officers will continue to proactively patrol and respond to complaints and identify park user violations while supporting compliance and improved visitor experience.

4.3 Improvements to the Permitting of Park Space

Enhancements to the permitted park use application and management process at the Park were implemented for the 2025 season. The Facility Booking Office began accepting rental applications for permitted park use on March 1, with Oshawa residents prioritized and applications processed in the order received. The processing of applications from non-residents began on June 1 and were considered on a first-come, first-serve basis.

Resident prioritization measures were strengthened by actively monitoring permit allocations to ensure that a minimum of 75 % of issued permits were allocated to Oshawa residents. In addition, permit volumes were managed by limiting permitted park use to a maximum of two (2) permits per day, with a maximum of 100 participants per permit. Exceptions for long-standing community events were reviewed and approved on a case-by-case basis.

For the 2025 permit season between May 15 to October 15, 2025, there were a total of 74 Park space permits issued. Of these permits, 64 were issued to residents, and ten (10) were issued to non-residents, indicating that permit allocations surpassed the resident prioritization at 86.5% of issued permits for 2025, and 13.5% for non-residents.

4.4 Parking and By-law Infractions

The number of parking tickets issued at the Park from May 1 to October 1, 2025 was 238. In comparison, there were 279 parking tickets issued in 2024, 250 in 2023, 290 in 2022, 97 in 2021, 30 in 2020 and 98 in 2019.

The number of by-law infractions have remained relatively consistent. Common By-law infractions include illegal parking, the prohibited use of barbecues, smoking, dogs off leash in the park, dogs on the beach, busking with guitars and amplifiers, use of enclosed tents and open use of illegal substances and alcohol.

4.5 Introduction of Non-resident Paid Parking

On June 26, 2025, Council considered Report CNCL-25-57 and subsequently directed staff to implement a paid parking system at Lakeview Park and in the paved parking lot in Ed Broadbent Park for non-residents to commence in 2026.

Non-resident paid parking will be implemented on weekends, public holidays and during Council endorsed special events at a flat rate of \$20 per visit, valid on the same day, from May 15 to October 15 annually.

Oshawa residents may park at Lakeview Park and in the paved parking lot in Ed Broadbent Park at no cost on weekdays, weekends and during Council endorsed special events by registering their license plate by completing an annual online application form and providing proof of address and vehicle registration.

The implementation of non-resident paid parking will assist in the management of growing demand for waterfront parking at Lakeview Park. It is intended to improve space availability, reduce congestion and support ongoing maintenance and enhancements to the waterfront.

City staff will report back to Council in early 2027 after one full season of implementation of non-resident paid parking.

4.6 Parking Occupancy Monitoring Technology

Parking occupancy monitoring technology uses sensors (in-ground or surface-mount) and/or camera-based AI to track real-time parking space availability, reducing drive search times, lowering emissions, and maximizing facility capacity.

4.6.1 Occupancy Sensor Technology

Occupancy sensors installed in each parking space indicate availability in real time by detecting vehicles entering or leaving. These small sensors are embedded in the ground and detect vehicles by using electromagnetic and ultrasonic sensors. They transmit wireless signals to nearby receivers, enabling the system to continuously update parking status. City staff can use this data to track parking usage and calculate average stay, which helps with identifying peak hours, and appropriate allocation of Municipal Law Enforcement resources. Another option uses entry- and exit-lane vehicle detection devices embedded under the pavement at parking lot entrances and exits. These devices contain a wire loop that creates an electromagnetic field. When a vehicle passes over or stops the loop, its metal disrupts the field. A controller detects this change, registers the vehicle, and accurately counts entries and exits. However, this technology cannot distinguish between a car, an oversized vehicle, or a lawnmower.

These systems combine wireless technology, long-range communication networks (“LoRaWAN”), and real-time analysis to enhance parking operations. They improve compliance and streamline enforcement. Using both parking space and vehicle counting sensors, the system provides accurate, real-time data to a cloud-based dashboard. It enables live occupancy monitoring, issues overstay alerts and generates automated reports.

The estimated costs to install these occupancy sensors are:

1. One-time costs of \$455,846 in the first year, which includes initial setup, training and ongoing project management and in-ground sensor and outdoor gateway installation; and,
2. Annual costs of \$69,264 for the Network service and subscription bundle.

4.6.2 Installation of AI Camera Technology

AI-powered cameras are widely used to monitor parking lots, using overhead or pole-mounted cameras to capture videos and recognize vehicles. Computer vision vehicle detection software enables computers to interpret visual data and analyze footage to detect vehicles entering or exiting. Footage data is processed on remote servers and accessed via dashboards to provide real-time occupancy information, track patterns, and generate metrics to support space utilization and efficiency. This enables identification of high-demand and underutilized areas, as well as the impacts of pricing or policy changes.

To ensure operations remain reliable, adequate lighting and stable camera mounting are required and must remain accessible for ongoing maintenance, such as lens cleaning and firmware updates.

The estimated costs to install AI Camera Technology is:

1. One-time costs of \$56,647, including hardware (cameras), shipping and freight costs, and software licenses for the first year; and,
2. Annual licensing cost of \$16,380; and,
3. Camera installation is not included in the quote and would be installed by the City's electrical contractor. The installation cost is estimated at approximately \$28,000.

5.0 Financial Implications

There are no financial implications arising from the recommendations of this report.

6.0 Relationship to the Oshawa Strategic Plan

This report responds to the Oshawa Strategic Plan Priority Area “Lead: Governance and Service Excellence” with the goal to expand, embed, and modernize customer-centric service delivery.



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