

PARKING SERVICES

2023 ANNUAL REPORT

PUBLIC WORKS DEPARTMENT



SUMMARY

PURPOSE

The [Municipal Parking Management Strategy](#) requires that an Annual Report for the Municipal Parking Management Program be received and reviewed by Council on a yearly basis. The Annual Report is intended to illustrate trends in key business indicators, describe progress towards meeting the program's goals and objectives, capture parking inventory and rate information, and present the Capital Program Plan.

MUNICIPAL PARKING MANAGEMENT PROGRAM OVERVIEW

The City of Ottawa provides paid public parking through the Municipal Parking Management Program. Delivered by Roads and Parking Services within the Public Works Department, the Municipal Parking Management Program is mandated to provide public parking services that are in alignment with the goals and objectives of the Municipal Parking Management Strategy.

The Municipal Parking Management Strategy, in alignment with the Municipal Act, requires that the Municipal Parking Management Program be financially self-sustaining. This means that parking revenues must be sufficient to entirely recover all related operating and capital lifecycle maintenance expenditures, including contributions to the Parking Reserve Fund to finance future parking system development, operation, and promotion.

2023 ANNUAL REPORT OVERVIEW

Based on the Municipal Parking Management Strategy requirements, the Parking Services 2023 Annual Report presents the following information:

- Highlights for the Municipal Parking Management Program in 2023, including the status of the implementation of the Public Bike Parking Strategy.
- An overview of the Parking Stakeholder Consultation Group.
- The key accomplishments and achievements of 2023, aligned to five themes consistent with Parking Services' Performance Measurement Program:
 - Customer Experience
 - Parking Studies
 - Building Community Relationships
 - Operational Enhancements
 - Environmental Sustainability

- The 2023 year-end results across 13 key business indicators with a comparison to 2022 and 2021.
- A summary of changes made to paid parking in 2023.
- An inventory of all paid municipal public parking from 2023.
- A Capital Program Plan which summarizes the program's capital budget and longer-term plans for the Parking Reserve Fund.

PUBLIC BIKE PARKING STRATEGY UPDATE

The [Public Bike Parking Strategy](#) was approved by Council in April 2021. The key purposes in developing this Strategy were to align the various functions relating to bicycle parking that were previously undertaken by different departments, clarify criteria relating to the location and type of bike parking installations and provide direction for the newly created Public Bike Parking Program.

The objectives contained in the Public Bike Parking Strategy are as follows:

1. Provide an appropriate and optimized supply of public bike parking that is accessible and convenient while balancing all needs associated with the public space.
2. Balance the bike parking requirements of various cycling trip generators to accommodate all types of cyclists.
3. Adhere to data-based processes in the planning, implementation, and maintenance of all types of bike parking.

The Public Bike Parking Program was launched in 2021 to implement the initiatives and recommendations included in the Public Bike Parking Strategy.

In 2023, the Public Bike Parking Program continued to evolve and follow through on the implementation of the Public Bike Parking Strategy. This involved a number of actions, including:

New Installations

- Installation of two new on-street bike corrals representing 19 bike parking spaces. There are now nine bike corrals that are installed and removed seasonally.
- Installation of 14 new on-street racks (12 ring-and-post racks and 2 multi-racks), representing 33 bike parking spaces.
- Additional inventory added through road reconstruction projects - 71 new bike racks (36 staple-like racks, 31 ring-and-post racks and 4 multi-racks),

representing 162 spaces.

- Installation of two secure bike locker modules at the Dalhousie Garage and Glebe Garage (activation expected in 2024).
- Supported six customers including schools, a church, a medical clinic, and a local business) to acquire nine bike racks under the “Hello Vélo” program which makes bike racks available for installation on private property at a reduced cost.
- Installation of 11 bike racks at ten Recreation, Culture and Facility Services (RCFS) locations through an existing partnership / funding model.

Repairs / Replacement

- Full implementation of seasonal inspection processes (Spring and Fall), which led to the identification and repairs of 446 bike racks.
- Replacement or refurbishment of 66 bike racks representing 141 bike parking spaces in the Glebe, Centretown, Lowertown and Old Ottawa East.

Bike Repair Stations

- Integrated the Bike Repair Station Program into the Public Bike Parking Program with Parking Services assuming responsibility for administration and maintenance of 49 existing repair stations and the request / installation process going forward.
- Developed new inventory and inspection mechanism for bike repair stations through ArcGIS Field Maps.
- Repair/replacement of 122 tools on 37 bike repair stations, including six stations having damaged or missing tools from both Summer and Fall inspections.

Other Initiatives

- Continued development of the overall internal inventory of public bike parking facilities and data collection processes through ArcGIS Field Maps.
- Provided winter maintenance services for 81 bike racks at 39 locations to keep them free of snow / ice.
- Reviewed historical and current event bike parking practices locally and across other municipalities towards developing a program for Ottawa in 2024.
- Reviewed current practices for managing abandoned bikes across various internal units, including Parking Services, Roads Services, Parks and Forestry Services, Facility Operations Services and Transit Services towards developing consistent practices / guidelines in 2024.

2023 HIGHLIGHTS – MUNICIPAL PARKING MANAGEMENT PROGRAM

Aside from the accomplishments and progress that has been made with respect to bike parking, below are some additional highlights for Parking Services in 2023. A number of

these align with the various themes in this report and are expanded on in the subsequent sections.

- Started work on various initiatives and processes to convert on the Rate Setting Guidelines that were approved as part of the Municipal Parking Management Strategy Refresh in 2019 (e.g. demand-based pricing and evening/weekend parking), with updates to be tabled at Transportation Committee and Council in 2024 and 2025.
- Completed information / data collection and initial phases of consultation for the Kitchissippi Parking Study Update.
- Procured License Plate Recognition (LPR) technology to automate data collection processes. This will be the subject of a pilot in 2024.
- Approval of two Business Improvement Area (BIA) Parking Initiative Grants for Somerset Street Chinatown BIA and Preston Street BIA and began development of a new process to adjust the Parking Initiative Grant amount based on the size of each BIA with paid parking.
- A total of 13 rate adjustments were made at off-street facilities as a result of the regular off-street rate review process (further details on page 26).
- Continued to offer free overnight parking during winter parking bans at all five municipally managed public parking garages (Gloucester Garage, ByWard Market Garage, Dalhousie Garage, City Hall Garage, and the Glebe Garage), accommodating an average of 438 vehicles per event (three overnight parking bans).
- Upgraded the Parking Guidance System (PGS) at ByWard Garage (70 Clarence) with new sensors to increase the reliability of the real-time vehicle counts which are communicated to the public.
- Completed the first full year of monitoring and providing operational support for 22 Electric Vehicle (EV) on-street charger units (11 locations).
- Provided parking-related comments on 12 Zoning By-law amendments and four planned active and alternate transportation projects in 2023 (e.g., Old Ottawa South bike lane, York Street neighborhood bike way, and 265 Catherine Street)
- Concluded a pilot at the Somerset Lot (687 Somerset Street) which used camera-based technology to track real-time occupancy. Staff will not proceed with this technology at this time, but one of the recommendations of the pilot was to pursue other alternate technology options for the same purpose, including in-ground

sensors.

- Supported regulatory / signage changes which enabled: the relocation of tour bus spaces due to construction; accommodation of the National Capital Commission's Gatineau Park shuttle; and mobile payment zones where construction activity did not allow for the installation of a Pay & Display machine.

PARKING STAKEHOLDER CONSULTATION GROUP

The Parking Stakeholder Consultation Group (PSCG) was established with the approval of the Municipal Parking Management Strategy. Consisting of 13 members who represent a wide variety of key stakeholder groups, its mandate is to act as a channel between the City, stakeholders, and affected citizens and groups. The group also provides feedback on parking management policy that supports the objectives of the Municipal Parking Management Program as well as the parking-related objectives of the Transportation Master Plan. Regular consultation with the PSCG ensures transparency and that community stakeholders remain well informed on issues related to municipal parking and that services offered by Parking Services remain aligned with community needs.

The group serves for a period that runs concurrently with the term of Council. Meetings are held approximately 3-4 times per year and minutes from the meetings are now available at ottawa.ca/parking.

PSCG MEMBERS – YEAR-END 2023

- Chair (current) – Quentin Levesque, Director, Roads & Parking Services.
- Business Improvement Area (BIA) Representatives – Judy Lincoln (Westboro Village BIA), Darrell Cox (Glebe BIA), SabriNa Lemay (Centretown BIA), Colleen Gyori (Downtown Rideau BIA).
- Community Association Representatives – James Grant (Old Ottawa South Community Association), Ken Hahn (Wellington Village Community Association), Derrick Simpson (Federation of Citizen's Associations)
- TDM/Cycling/Pedestrian Representative – Daniel Spence
- Ottawa Tourism & Convention Authority Representative – Julia Cosentino
- Development Industry Representative – Dean Karakasis
- Places of Worship Representative – Greg Fyffe
- Accessibility Representative – Ana Maria Cruz-Valderrama
- Council on Aging – Asaf Mitta

The Parking Stakeholder Consultation Group had three meetings in 2023, providing updates to members on the work plan and budget for 2023 as well as a variety of topics related to the Municipal Parking Management Program, including parking lifecycle and maintenance projects, Public Bike Parking Program, off-street EV charging expansion, bike share review, and a review of monthly parking demand trends.

CUSTOMER EXPERIENCE

Service excellence and the corresponding impact on the customer experience plays a significant role for Parking Services – it means striving to provide a level of operational performance that exceeds the expectations of the residents and visitors to Ottawa. In alignment with the Municipal Parking Management Strategy, Parking Services provided support which served a multitude of purposes.

PAY-BY-PHONE ENHANCEMENTS

Google and Apple Pay methods were introduced to this system in early 2023 to allow more payment platforms to pay-by-phone users.

Parking Services also developed a pay-by-phone expansion strategy, the majority of which will be implementation in 2024. Improvements have started with the decals on all on-street and off-street Pay & Display machines towards making them clearer.

SAFETY AND SECURITY UPGRADES AT OFF-STREET FACILITIES

The process to identify a new security contractor for four parking garages was successfully completed in 2023, which resulted in a new vendor and increased on-site presence.

Security cameras installed at the Gloucester Street Garage (210 Gloucester Street) and improvements to the camera monitoring system at the Glebe Garage have enhanced the ability to provide continuous 24/7 surveillance and increased the tools available to on-site security personnel to identify and address issues.

Improvements have also been made through upgrades to the door hardware at the Gloucester Street Garage to better control access and additional signage has been added to the garage entries/exits at City Hall which increase visibility and provide clear directions and more effective wayfinding for pedestrians.

Ultimately these initiatives create a safer environment for those using the facilities.

PARKING STUDIES

Parking Services conducts various parking studies and data collection throughout the city to ensure the objectives of the Municipal Parking Management Strategy are being met. An emphasis is placed on accurate and up-to-date data to ensure decision-making processes are based on the best available data.

KITCHISSIPPI PARKING STUDY UPDATE

The Kitchissippi Parking Study Update, initiated in 2023 is a follow-up to the [2017 Westboro Local Area Parking Study](#) and [2017 Wellington West Local Area Parking Study](#). It represents a coordinated approach to identifying and addressing parking related issues across both the Westboro Village and Wellington Street West Business Improvement Areas. The objective is to determine the need for, nature and extent of municipal involvement in the provision of public parking services consistent with the Municipal Parking Management Strategy.

Results from previous parking studies indicate on-street parking pressures and issues in the commercial area along Richmond Road and Wellington Street West, particularly due to neighbourhood intensification and competition for the use of limited curb space.

In 2023, information and data collection was completed. This included preliminary consultations were held with Business Improvement Areas, community associations, and the local ward Councillors to discuss the background, history, purpose, objectives, and process of the parking study update.

The Kitchissippi Parking Study Update will be tabled alongside this report.

LICENCE PLATE RECOGNITION (LPR) PILOT

LPR pilot technology was identified in the Parking Services Technology Road Map and is a potential solution to streamline and replace traditional municipal parking data collection methods while enhancing accuracy and efficiency.

Procured in 2023 for a pilot in 2024, a single vehicle has been equipped with LPR technology. A limited number of paid and unpaid on-street parking spaces have been mapped to assess and evaluate the ability of the LPR system to reliably and accurately collect parking data in real-world scenarios in conjunction with traditional methods.

BUILDING COMMUNITY RELATIONSHIPS

Parking Services aims to support local businesses in various ways beyond ensuring the availability of parking.

Building and maintaining positive relationships with local communities is a key component

for the continued success of the Municipal Parking Management Program. A number of stakeholders were actively engaged in 2023 through various programs, projects and operational initiatives.

SUPPORT FOR EVENTS

Parking Services can provide support to local businesses and groups in various ways beyond ensuring the availability of parking. Where possible, accommodations are made in support of stakeholders by the Municipal Parking Management Strategy. For example, use of the following municipally managed surface lots was granted to support special events and economic development:

- Slater Parking Lot (234-250 Slater Street) – Permitted exclusive use for Capital Pride festivities.
- Somerset and Cambridge Parking Lot (687 Somerset Street) – Permitted exclusive use for Ottawa Chinatown Night Market and Chinatown Bazaar.
- Preston Parking Lot (301 Preston Street) – Permitted use for Italian Week Ottawa.

Parking Services also responded to a request from the House of Paint summer event and provided two modular bike racks for use by the event.

STAKEHOLDER CONSULTATION

Stakeholder discussions were primarily focused through the Parking Stakeholder Consultation Group. In 2023, Parking Services shared updates on the work plan and budget for 2023, parking lifecycle and maintenance projects, the Public Bike Parking Program, off-street EV charging expansion, bike share review, and a review of monthly parking demand trends.

Parking Services actively maintained direct engagement with other key stakeholder groups, including individual Business Improvement Areas with paid parking, Bike Ottawa and Ottawa Tourism. Parking Services also made consultation a key priority of the Kitchissippi Parking Study Update, completing Phase I of the planned consultation in 2023.

OPERATIONAL ENHANCEMENTS

In addition to on-street paid parking, Parking Services manages 16 facilities (five garages and 11 surface parking lots), and 5,660 bike parking spaces. Ensuring that the supply of municipal paid parking / bike parking is properly maintained, and that existing

infrastructure is appropriately managed and accessible as an important part of operational performance. The following are some examples of works undertaken in 2023 towards process improvements and parking facility maintenance / upgrades.

BIKE PARKING DIGITIZATION

In 2023, significant enhancements were made to the internal inventory of public bike parking facilities and associated data collection tools using ArcGIS Field Maps. As part of the enhancements, Parking Services introduced new internal inventory and inspection tools tailored for bike repair stations through ArcGIS Field Maps.

Additionally, a systematic framework was developed to facilitate the regular update of interactive maps, showcasing the locations of bike repair stations and winter-maintained bike racks on platforms such as Ottawa.ca, GeoOttawa, and Open Data Ottawa

Furthermore, an initiative was implemented to collect data on bike parking occupancy, involving the incorporation of a dedicated collection field into the overall bike rack inventory dataset, which underwent rigorous testing during the fall inspection.

CAPITAL PROJECT PLAN - LIFECYCLE REPAIRS

As part of the planned lifecycle work schedule, a number of repairs were completed in 2023.

At the Glebe Garage, localized crack repairs were completed. In addition, repairs to the roof deck at the ByWard Garage were completed and handrails replaced. The stairwell refurbishments at the Dalhousie Garage continued with one stairwell being completed.

At the City Hall, substantial progress has been made in facilitating after-hours access to the parking garage with completion expected in 2024.

ENVIRONMENTAL SUSTAINABILITY

One of the objectives of the Municipal Parking Management Strategy is to promote sustainable modes of transportation by supporting and maintaining programs and facilities that encourage sustainable mobility choices (e.g. public transit, cycling, walking) and alternative modes, including electric vehicles, car sharing, and other modern technologies as they emerge. Parking Services was involved in several projects throughout 2023 that encouraged these types of initiatives, including the following.

ELECTRIC VEHICLE (EV) CHARGING - OFF-STREET DEVELOPMENT

Parking Services currently offers EV charging options at a number of its facilities (30 stations in total). To encourage the increased adoption of electric vehicles among Ottawa residents,

Parking Services is looking at options to expand the network of charging stations at off-street parking facilities.

In 2023, Parking Services initiated a feasibility study in collaboration with Hydro Ottawa to identify costs and capacity considerations related to this expansion. This work will help to inform a plan which will be developed in 2024.

BIKE REPAIR STATIONS

In 2023, the bike repair station program was migrated from Safer Roads Ottawa to Parking Services. This program involves 49 bike repair stations city-wide.

Parking Services now manages all aspects of the program, including new requests, procurement, and maintenance and has started a process to develop a model which will enable the sustained growth of these stations to further support cycling.

INTER-DEPARTMENTAL SUPPORT

Annually, Parking Services funds a portion of the costs of other groups such as Transit Services, Roads Services, and Transportation Planning. This transfer supports programs promoting sustainable modes of transportation which relate to the Municipal Parking Management Program. For example, funds are provided to Transit Services to be used towards the maintenance of Park & Ride facilities. In 2023, the total transfer for this purpose was \$791,771.

In addition, Parking Services supports Recreation, Culture and Facility Services (RCFS) annually by providing up to \$50,000 towards the purchase and installation of bike racks at City of Ottawa facilities. In 2023, RCFS installed 11 new bike racks at ten locations using this funding source.

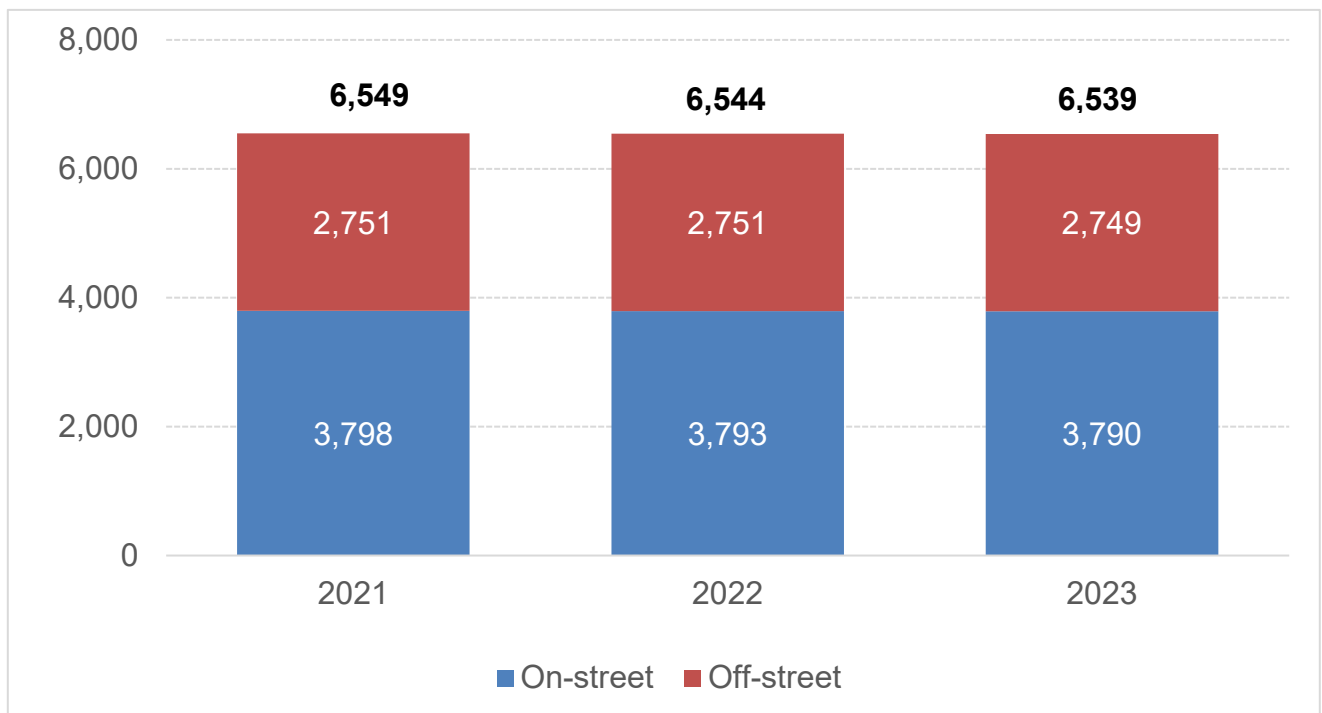
PERFORMANCE MEASURES

Measuring performance plays a critical role in the decision-making process. To this effect, Parking Services' Performance Measurement Program is integrated as part of the Municipal Parking Management Strategy. The clearly defined approach assists in ensuring the Municipal Parking Management Program's functions are aligned with the City's strategic objectives. The following 13 key business indicators have been selected to indicate the overall performance of the branch and are presented on the following pages:

1. Total Parking Spaces Managed
2. Parking Equipment Uptime (proportion of time equipment is fully functional)
3. Parking Transactions by Payment Type (On-Street)

4. Service Requests – Parking Equipment
5. A) Average Hourly Rates (Weekday)
B) Average Daily Maximum Rates (Weekday)
6. Operating Expenses (Excluding Parking Reserve Fund Contribution)
7. Parking Fee Revenue
8. Parking Reserve Fund Contribution
9. Average Expense per Space (Excluding Parking Reserve Fund Contribution)
10. Average Revenue per Space
11. Spending on Sustainable Modes of Transportation
12. Total Bicycle Spaces Managed by Parking Services

1. TOTAL PARKING SPACES MANAGED



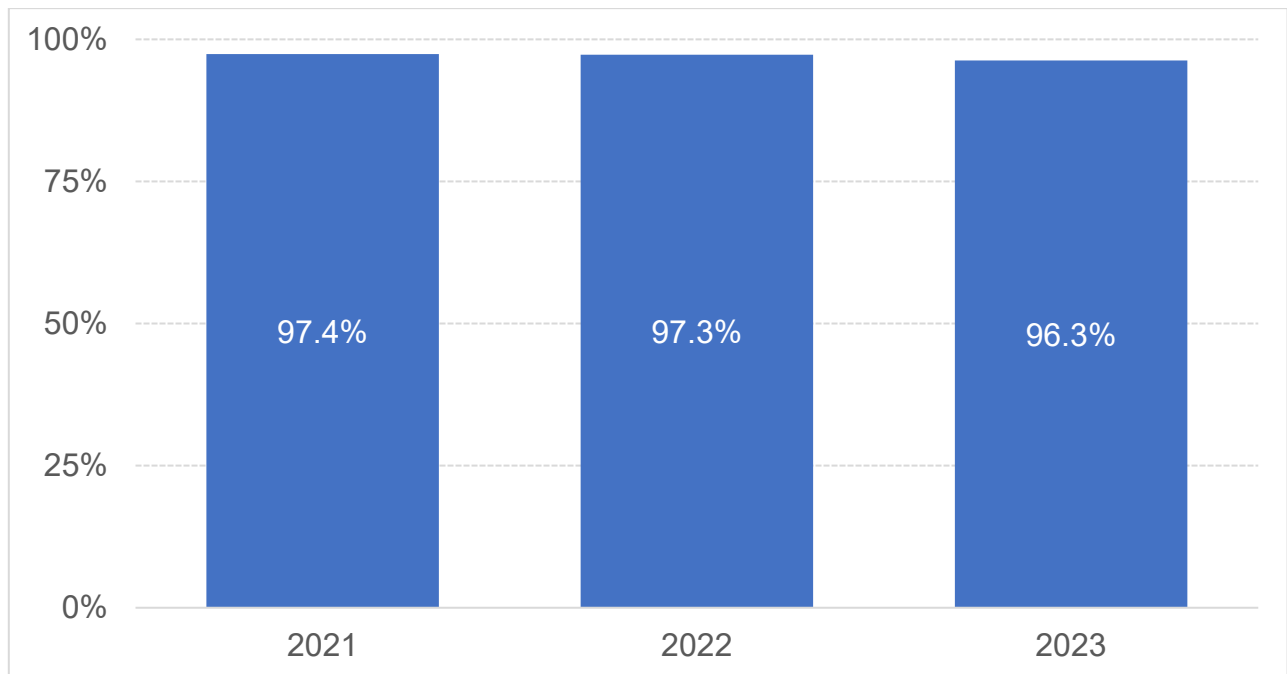
Total Parking Spaces Managed	2021	2022	2023
On-street	3,798	3,793	3,790
Off-street	2,751	2,751	2,749
Total	6,549	6,544	6,539

ANALYSIS

As of December 31, 2023, Parking Services managed a total of 6,539 paid parking spaces, comprised of 3,790 on-street spaces and 2,749 off-street spaces. There was a decrease of three on-street spaces (-0.1 per cent) compared to 2022. This decrease was as a result of several adjustments to curbside regulations throughout the year such as removal of seven spaces on Albert Street between Lyon Street and Bay Street for road redesign and 15-minute parking spaces.

The number of off-street paid spaces saw a slight decrease of two spaces (-0.1 per cent) compared to 2022, which can be attributed to the installation of a secure bike locker at Dalhousie Garage (Lot 5).

2. PARKING EQUIPMENT UPTIME



Parking Equipment Uptime	2021	2022	2023
Total uptime	97.4%	97.3%	96.3%

ANALYSIS

The uptime rate represents the duration of time the Pay and Display machines are fully functional.

At the end of 2023, there were 676 active Pay and Display machines in total with 640 located on-street spaces and 36 off-street parking facilities.

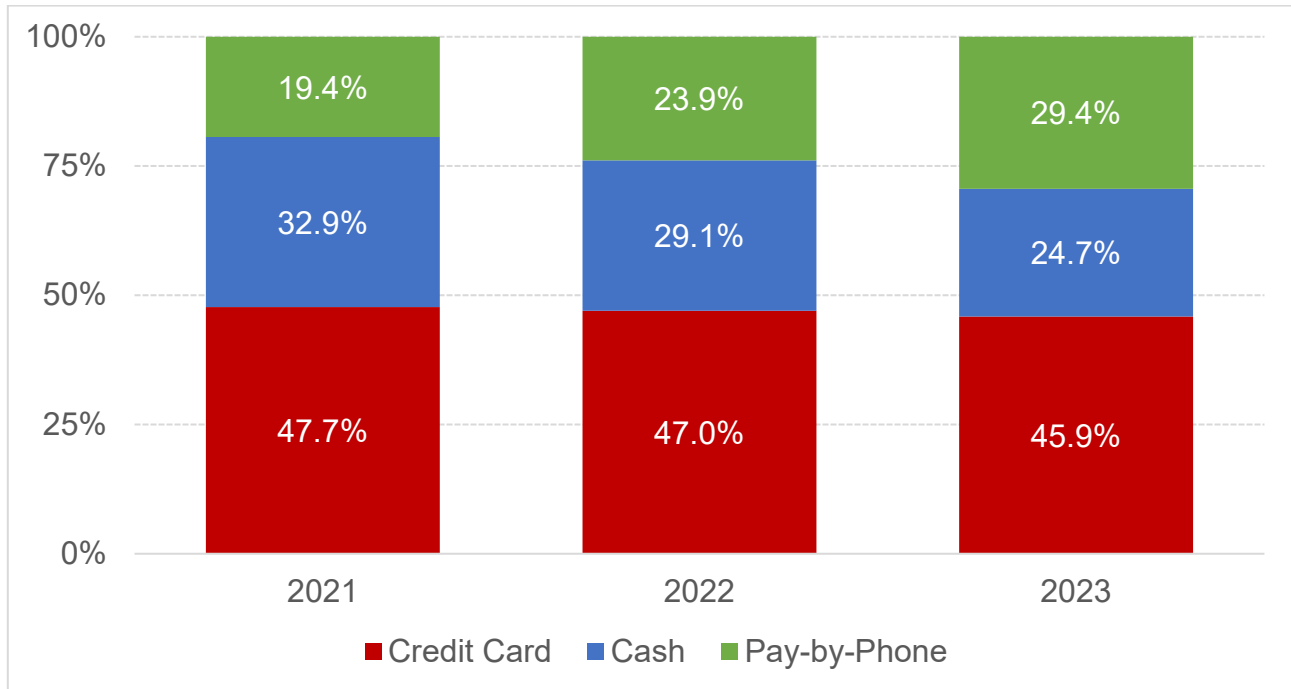
The uptime rate over all of 2023 was 96.3%, a decrease of one per cent compared to the preceding year.

The decrease is attributed to an increase in alarms for issues such as coin payment failures, printer failure, card reader fault and could be reflective of the machine’s aging.

Despite the increase in alarms, overall uptime remains high and will continue to be monitored to ensure that a high level of service continues to be offered to customers.

Parking Services’ staff will continue to collaborate with equipment vendor (Precise Parklink) in 2024 to ensure prompt and proactive action on any issues affecting parking payment equipment performance.

3. PARKING TRANSACTIONS BY PAYMENT TYPE (ON-STREET)



Transactions by Payment Type	2021	2022	2023
Pay-by-Phone	19.4%	23.9%	29.4%
Cash	32.9%	29.1%	24.7%
Credit Card	47.7%	47.0%	45.9%

ANALYSIS

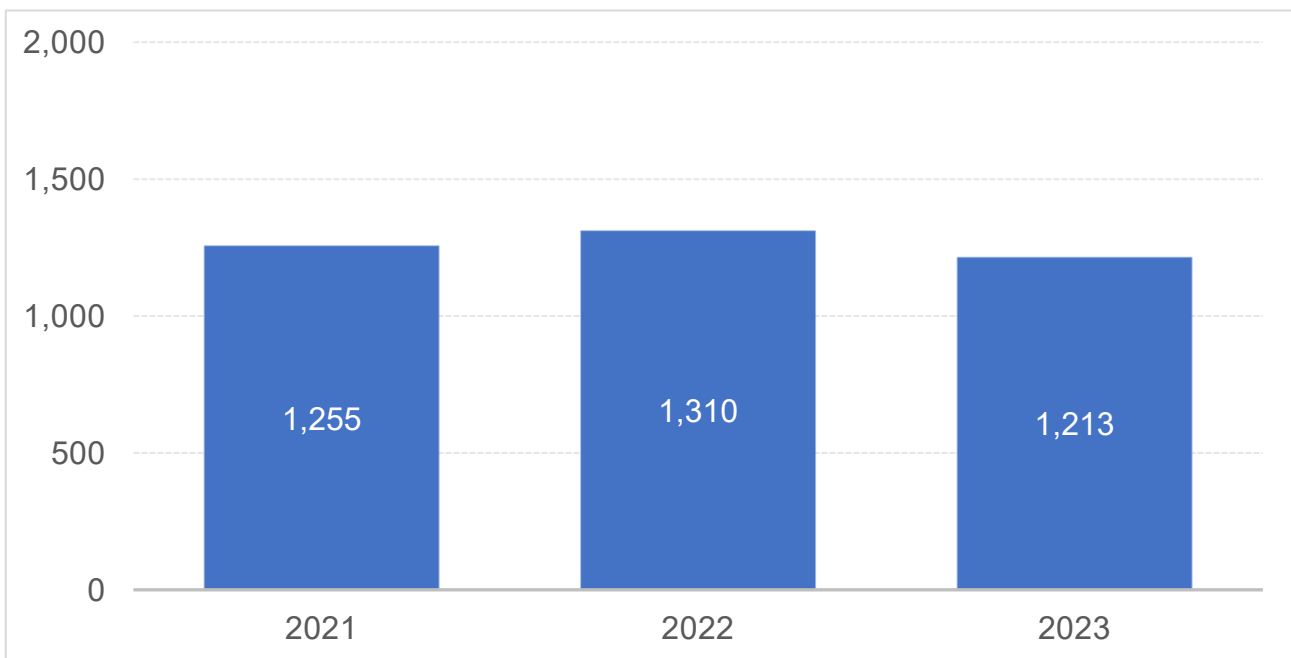
Previous trends continued in 2023, highlighted by significant growth in the use of the pay-by-phone. For the first time, pay-by-phone use eclipsed the use of cash and now represents

almost one third of all transactions. In alignment with the Technology Road Map, Parking Services has developed a strategy to continue to increase awareness and use of the pay-by-phone option and will also work with the vendor where feasible to develop initiatives along those lines.

Only one quarter (24.7%) of all transactions are now using cash. This continues a consistent trend in the reduction of cash transactions which were over two-thirds (67.6%) of all transactions ten years ago in 2013.

For the second straight year there was a slight reduction in the proportion of credit card transactions in lieu of more people using pay-by-phone.

4. SERVICE REQUESTS – PARKING EQUIPMENT



Service Requests - Parking Equipment	2021	2022	2023
Number of Service Requests	1,255	1,310	1,213

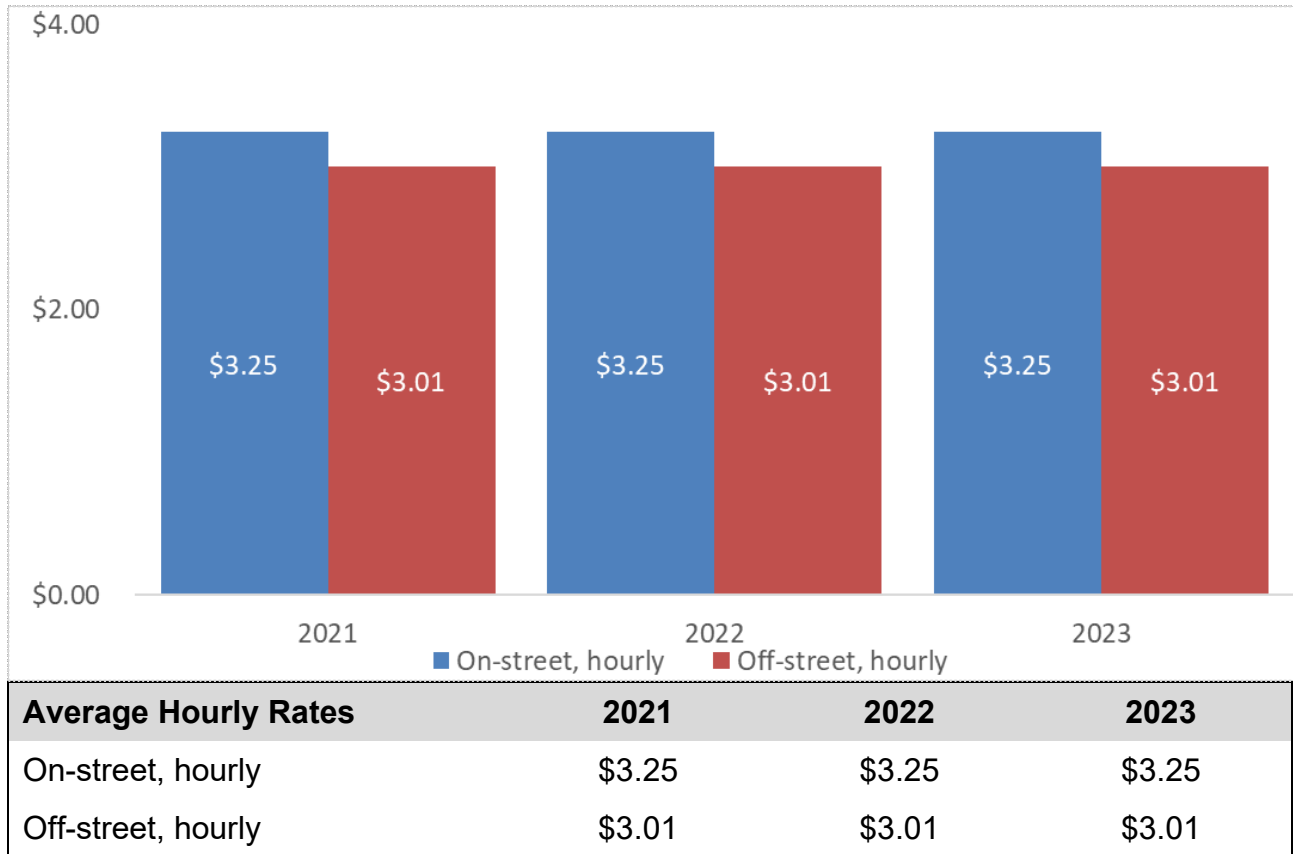
ANALYSIS

In 2023, a total of 1,213 service requests were registered relating to parking equipment, which equates to less than two service requests per Pay and Display machine over the course of the year.

The most common types of service requests for Pay and Display Machines include card reader issues and a lack of available tickets.

In 2023, there was a seven per cent decrease compared to 2022 and the 1,213 service requests represents the fewest number in a year since the implementation of the Pay and Display system in 2010. The decrease could be attributed to continued monitoring and reporting initiatives established by Parking Services to address long-term outages and ensure accountability on the part of the vendor.

5A. AVERAGE HOURLY RATES (WEEKDAY)

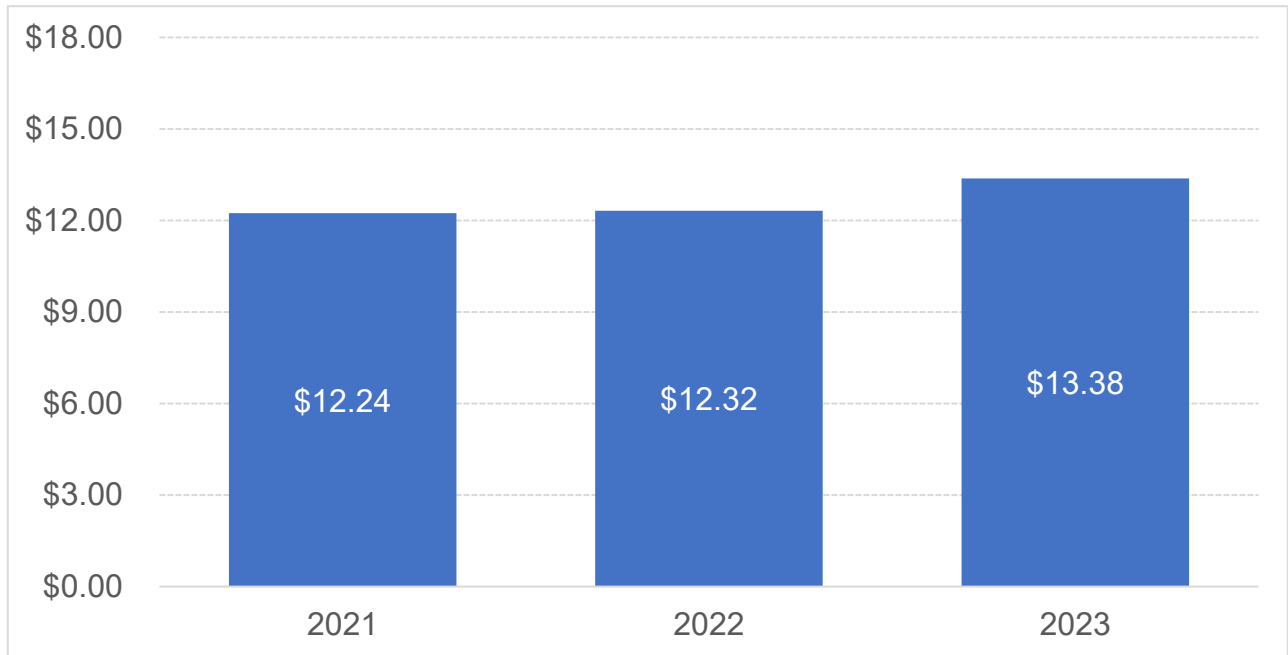


ANALYSIS

The average hourly on-street and off-street parking rates remained at \$3.25 and \$3.01 as in 2021 and 2022 as there were no changes in any hourly rates.

Moving forward, on-street rates will be reviewed and adjusted consistent with the demand-based pricing model and the off-street short-term rates will continue to be reviewed three times per year. Both approaches are consistent with the Rate Setting Guidelines.

5B. AVERAGE DAILY MAXIMUM RATE (WEEKDAYS)



Average Daily Maximum Rate	2021	2022	2023
Off-street	\$12.24	\$12.32	\$13.38

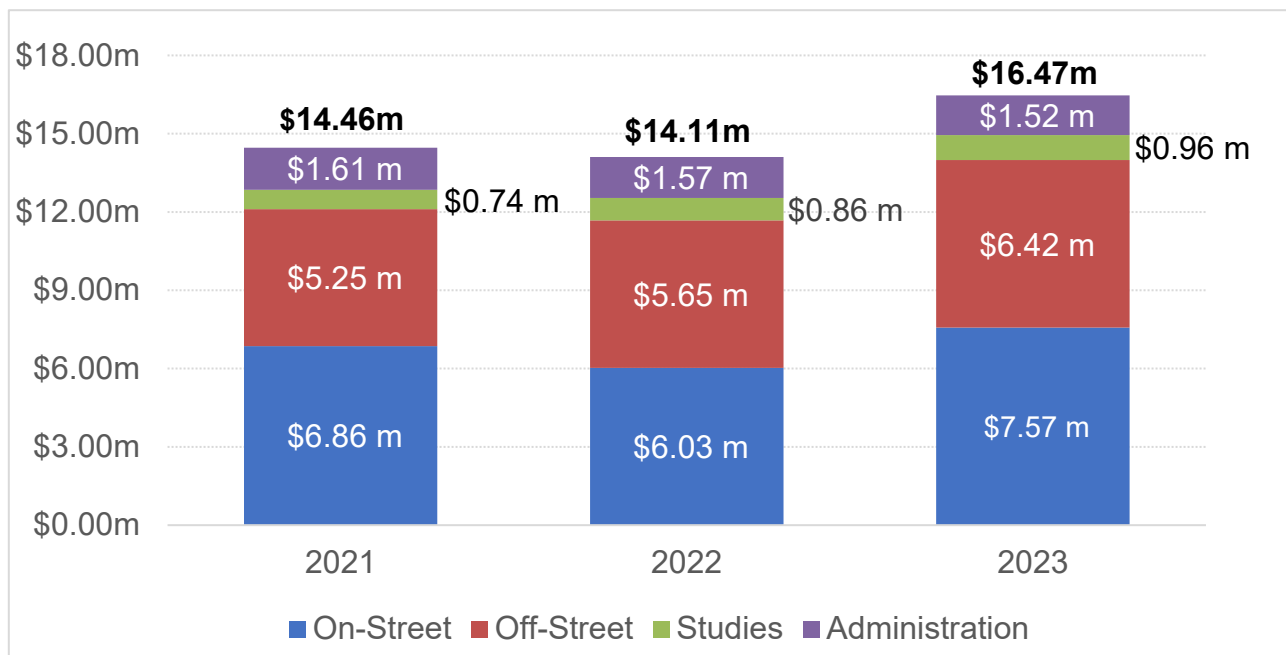
ANALYSIS

In 2023, Parking Services resumed the process of considering adjustments for off-street parking. The process to collect data and review conditions has continued, but adjustments were temporarily suspended through the pandemic.

The Average Daily Maximum Rate helps to illustrate trends related to how long-term parking is priced.

In 2023, there were nine adjustments to the max rate at eight parking facilities (further details on page 26). The average weekday daily max was \$13.38 in 2023, which is 8.6% higher than in 2022.

6. OPERATING EXPENSES (EXCLUDING PRF CONTRIBUTION)



Operating Expenses	2021	2022	2023
On-street	\$6.86 m	\$6.03 m	\$7.57 m
Off-street	\$5.25 m	\$5.65 m	\$6.42 m
Studies	\$0.74 m	\$0.86 m	\$0.96 m
Administration	\$1.61 m	\$1.57 m	\$1.52 m
Total	\$14.46 m	\$14.11 m	\$16.47 m

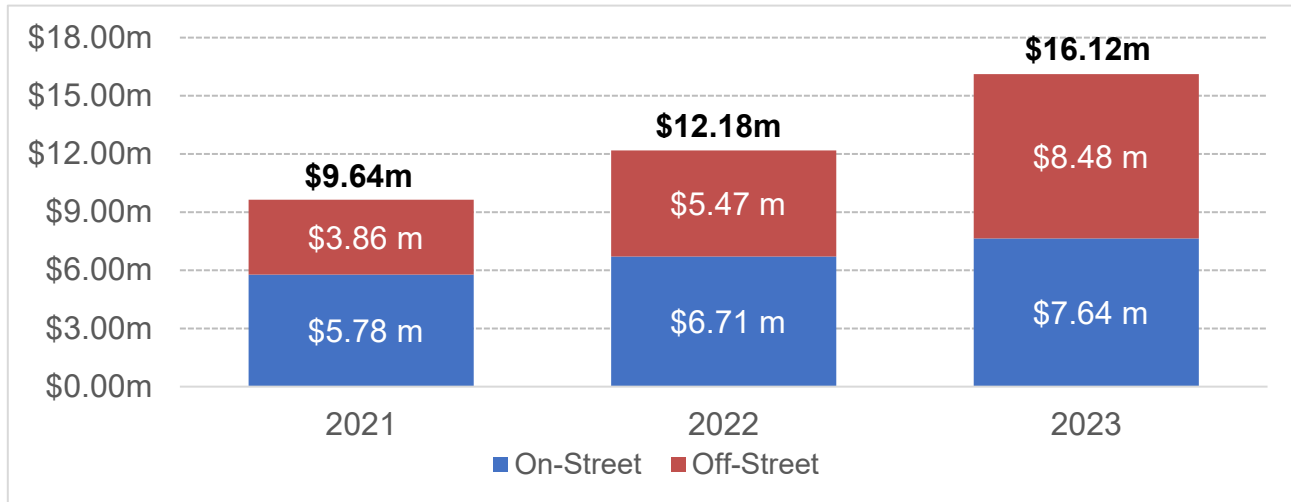
ANALYSIS

Total expenses in 2023 were 17 per cent higher than 2022. This was due to new or increased costs across both on-street and off-street parking operations.

On-street, there was a significant increase in the amount that is transferred to Roads Services to cover costs related to maintenance of on-street paid parking spaces. These are based on the actual costs incurred by Roads Services and the amount was \$4.56 million in 2023, an increase of \$1.23 million compared to 2022.

Off-street, one of primary cost increases related to security services at the garages. A new contract was awarded in early 2023 which included increased security provisions. This resulted in \$256 thousand in additional costs in 2023. The 2024 Budget has been adjusted.

7. PARKING FEE REVENUE



Revenue	2021	2022	2023
On-street	\$5.78 m	\$6.71 m	\$7.64 m
Off-street	\$3.86 m	\$5.47 m	\$8.48 m
Total	\$9.64 m	\$12.18 m	\$16.12 m

ANALYSIS

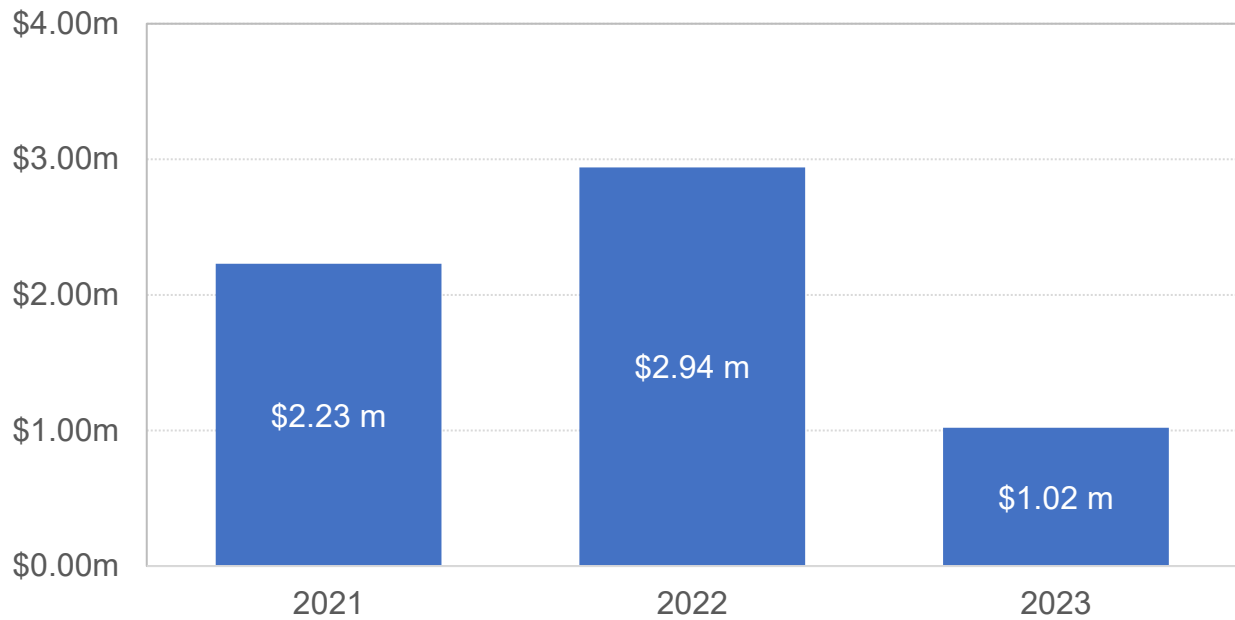
Parking revenues increased again in 2023 as demand for parking continued to rebound from the effects of the pandemic. Overall, there was 32% more revenue from parking fees in 2023 compared to 2022.

Off-street, 2023 revenues reached and exceeded pre-pandemic (2019) revenues by \$188,000. This is in part reflective of increases in demand that were observed starting in early 2023 as a greater portion of employees physically returned to work on a part-time or full-time basis.

On-street parking fee revenues also exceed pre-pandemic (2019) levels in 2023 by \$98,000 which is reflective of increases in demand to levels that are close to pre-pandemic city-wide and also accounts for increases in hourly parking rates (2020) and permit parking rates (annually in line with inflation).

Beginning in 2016, a portion of the on-street revenue has been allocated to offset deferred liability related to parking equipment (Pay & Display machines and Parking Facility Payment Systems) as a result of the contract with Precise Parklink. This accrual is no longer reflected in the parking fee revenues captured as part of this metric.

8. PARKING RESERVE FUND (PRF) CONTRIBUTION



Parking Reserve Fund Contribution	2021	2022	2023
Total contribution	\$2.23 m	\$2.94 m	\$1.02 m

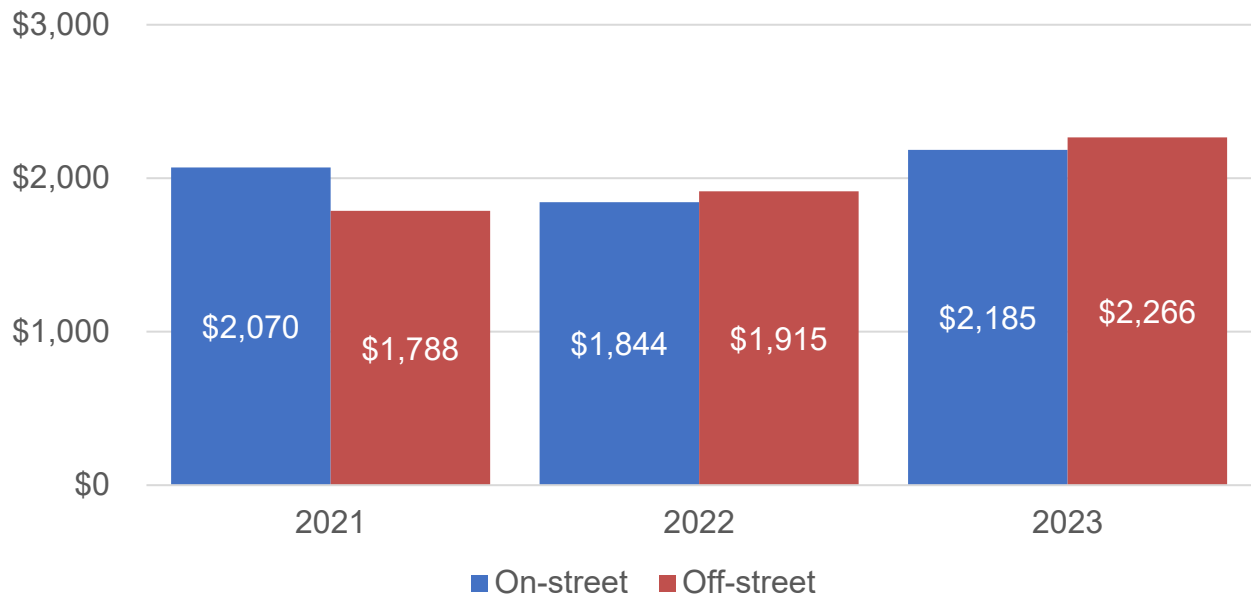
ANALYSIS

The contribution to the Parking Reserve Fund represents the difference between all revenues and expenditures and is key to ensuring that the revenues generated by the Municipal Parking Management Program are sufficient to wholly recover expenses and otherwise finance future parking system development, operation, and promotion.

The calculation of the Parking Reserve Fund contribution accounts for revenue inputs beyond what is accounted for in the previous metric. As such, the outcome is different than simply subtracting the expenses (Operating Expenses – page 19) from revenues (Parking Fee Revenues – page 20).

Since 2020, there had been a steady increase in contributions largely due to increases in revenue through the pandemic and post-pandemic periods. However, in 2023, there was a significant decrease due primarily to the increases in expenses.

9. AVERAGE EXPENSE PER SPACE



Average Expense Per Space	2021	2022	2023
On-street	\$2,070	\$1,844	\$2,185
Off-street	\$1,788	\$1,915	\$2,266

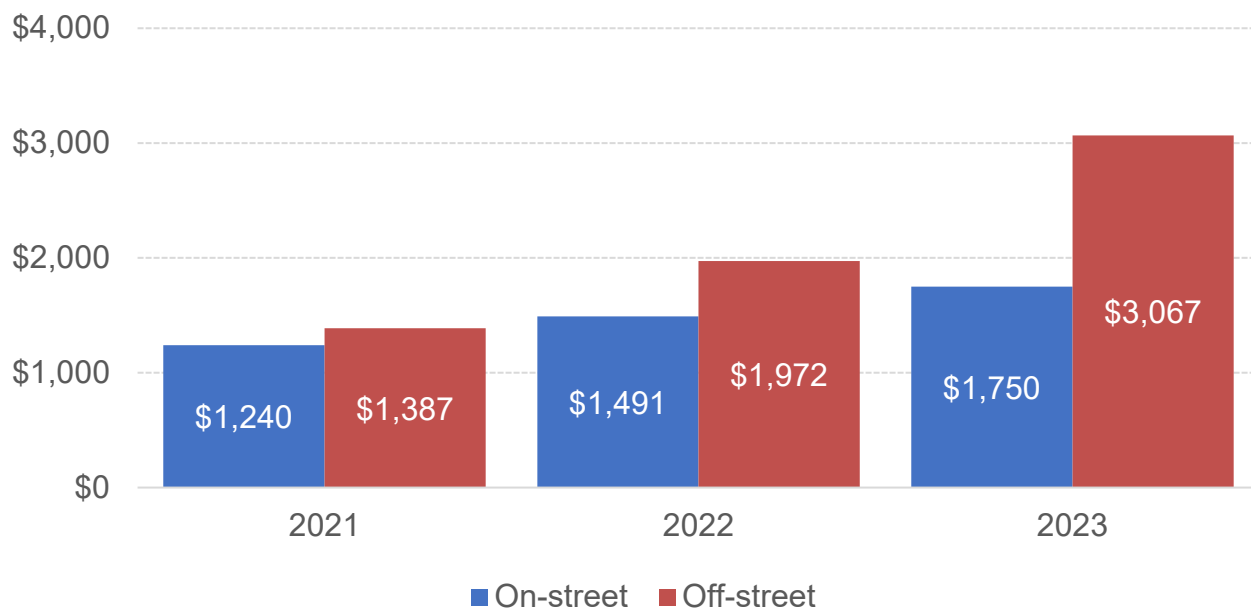
ANALYSIS

In 2023, the average expense per on-street parking space increased by 18% to \$2,185 (from \$1,844 in 2022).

Similarly, the average expense per off-street parking space also increased by 18% to \$2,266 in 2023, compared to \$1,915 in 2022. This includes applicable administration costs.

The variations can also be attributed to the changes in operating expenses. Further details are discussed on page 19.

10. AVERAGE REVENUE PER SPACE



Average Revenue Per Space	2021	2022	2023
On-street	\$1,240	\$1,491	\$1,750
Off-street	\$1,387	\$1,972	\$3,067

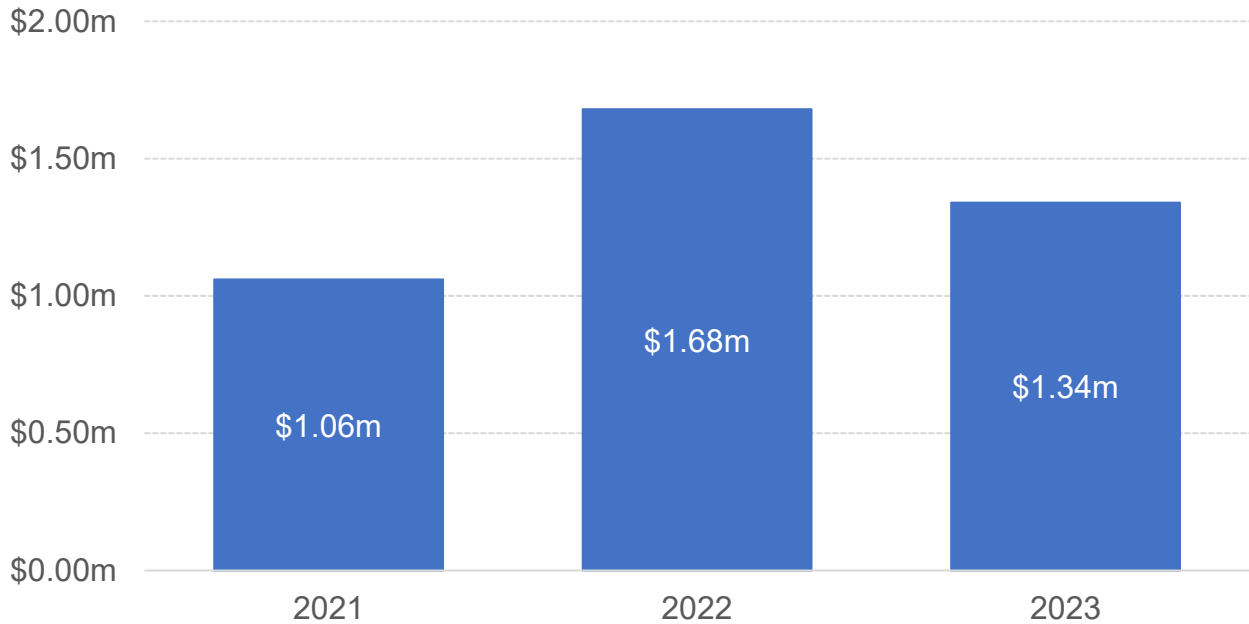
ANALYSIS

In 2023, both on-street and off-street parking saw a significant increase in average revenue per space. This can be attributed to higher utilization rates stemming from a return to more typical parking demand levels relative to pre-pandemic. The average revenue per on-street space in 2023 was \$1,750, marking a 17.4 per cent increase from the previous year.

Similarly, the average revenue per off-street space in 2023 reached \$3,067, reflecting a 55.5 per cent increase compared to 2022.

The variations can also be attributed to the changes in revenues. Further details are discussed on page 20.

11. SPENDING ON SUSTAINABLE MODES OF TRANSPORTATION



Spending on Sustainable Modes	2021	2022	2023
Total spending	\$1.06 m	\$1.68 m	\$1.34 m

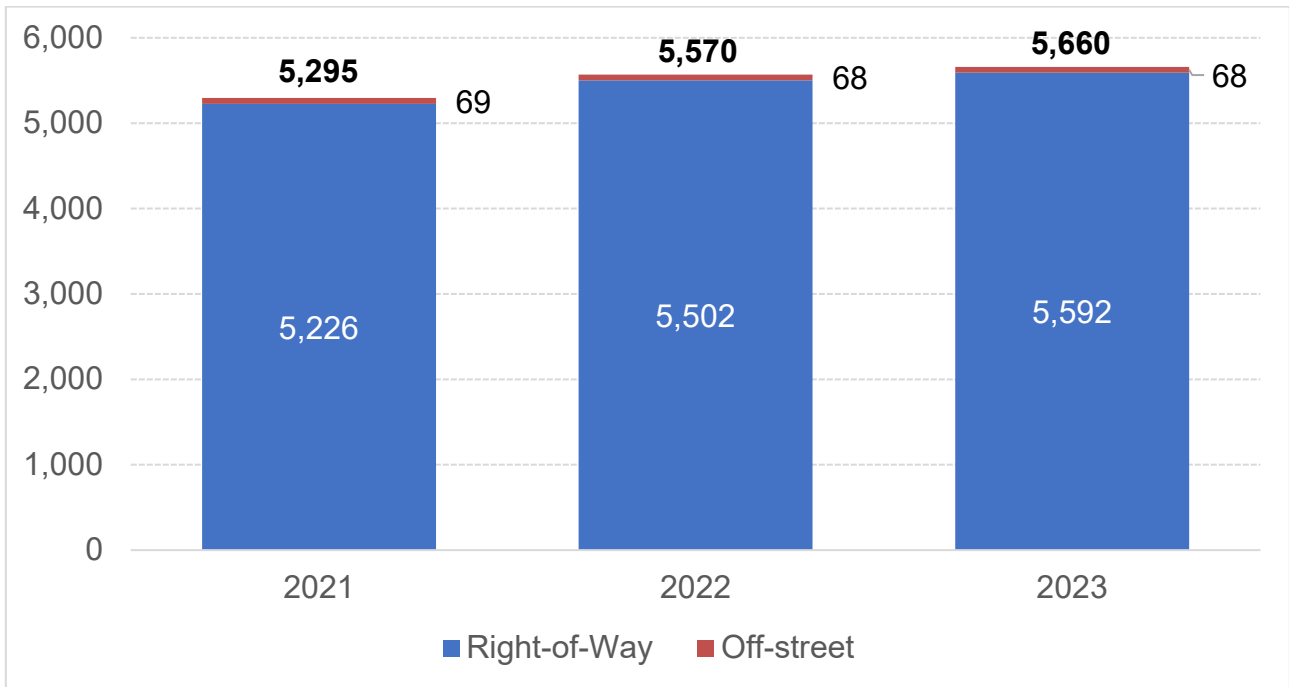
ANALYSIS

Investing in sustainable transportation aligns with the Municipal Parking Management Strategy's objectives and represents an opportunity to allocate parking fee revenues towards advancing the City's broader transportation objectives.

In 2023, total spending in support of sustainable transportation totaled \$1.34 million which was comprised of spending on various operations and initiatives that support things like bike parking, transportation demand management and transit use. The largest single expenditure in 2023 is in support of maintenance related to Park & Ride lots (\$791,771).

In 2022, there was a specific investment in the installation of new electric vehicle (EV) chargers which resulted in an increase in spending. This is something that Parking Services expect to continue investing in 2024.

12. TOTAL BICYCLE SPACES MANAGED BY PARKING SERVICES



Total Bicycle Spaces Managed	2021	2022	2023
Right-of-Way	5,226	5,502	5,592
Off-street	69	68	68
Total	5,295	5,570	5,660

ANALYSIS

As part of the Public Bike Parking Program and consistent with the Public Bike Parking Strategy, Parking Services manages and maintains different types of bike racks that are located within the right-of-way and at off-street public parking facilities. In previous Annual Reports, this metric has tracked different types of racks separately, but these have been consolidated into a single number starting in 2023.

The inventory of bike parking spaces has increased by 596 (11.8%) since the approval of the Public Bike Parking Strategy in early 2021. Among other things, this is attributed to the installation of additional ring-and-post racks and the expansion of the on-street bike corral program. Specifically in 2023, 16 new racks were installed (12 ring-and-posts, two corrals and two multi-racks) representing 52 new bike parking spaces.

PAID PARKING ADJUSTMENTS IN 2023

Parking Services is required to report on any changes made to parking rates, hours,

and locations during the year under the Delegation of Authority By-law through the Annual Report. The following is the list of changes in 2023.

RATES & HOURS

Gloucester Garage (212 Gloucester Street) - Lot 3

- Increased Daily Max rate weekday (Monday to Friday) from \$18 to \$19 (8.30am to 6pm).
- Increased Monthly Permit from \$225 to \$ 240.

ByWard Market Garage (70 Clarence Street) - Lot 4

- Increased Daily Max rate Monday to Friday from \$14 to \$15 (6am to 6pm).

Dalhousie Garage (141 Clarence Street) - Lot 5

- Increased Daily Max rate weekday (Monday to Friday) from \$11 to \$12 (6am to 6pm); \$4 to \$5 (Sat/Sun/holiday).

City Hall Garage (110 Laurier Avenue West) - Lot 6

- Increased Daily Max rate weekday (Monday to Friday) from \$18 to \$20 (6am to 6pm).
 - Increased Monthly rate from \$215 to 230.

Slater Parking Lot (234-250 Slater Street) - Lot 9

- Increased Daily Max rate from \$20 to \$21 (6am to 6pm).

Preston Parking Lot (301 Preston Street) - Lot 14

- Increased Daily Max weekday from \$9 to \$11 (8.30am to 5.30pm)
- Increased Monthly Permit rate from \$118.80 to \$130.

Tech High School Parking Lot (422 Slater Street) - Lot 18

- Increased Daily Max rate Monday to Friday from \$16 to \$17 (8am to 5.30pm)

North River Road Parking Lot (400 North River Road) - Lot 20

- Increased Daily Max, Monday to Friday from \$14 to \$15 (8.30am to 6pm)
- Raised Monthly Permit rate from \$120 to \$130.

OFF-STREET INVENTORY

- Reduction of three spaces at the Dalhousie Garage (Lot 5) due to parking installation of one bike locker module.

PAID ON-STREET INVENTORY

- Bank Street – Ten spaces added between Thornton Avenue and Holmwood Avenue.
- Besserer Street – Nine paid spaces added between Cumberland Street and King Edward Avenue due to new development.
- Montreal Road – Eight paid spaces added between Vanier Parkway and North River Road due to road reconstruction.
- Gilmour Street – Three spaces added between Bank Street and O’Connor Street due to new development.
- Queen Street – Three spaces added between Metcalfe Street and O’Connor Street due to road reconstruction.
- O’Connor Street – Two paid spaces added between Maclaren Street and Gilmour Street.
- Albert Street – Seven spaces removed between Lyon Street and Bay Street for road redesign and 15 minutes parking.
- Besserer Street – Six paid spaces removed between Cumberland Street and King Edward Avenue due to new development.
- Montreal Road – Six paid spaces removed between Vanier Parkway and North River Road due to road reconstruction.
- Preston Street – Four paid spaces removed between Adeline Street and Sidney Street due to new development.
- Bank Street – Three spaces removed between Thornton Avenue and Holmwood Avenue.
- Somerset Street – Two paid spaces removed between Preston Street and Rochester Street due to loading zone.
- Kent Street – Two paid spaces removed between Cooper Street and Lisgar Street due to Bus stop.
- O’Connor Street – One paid space removed between Maclaren Street and Gilmour Street.
- Lisgar Street – One space removed between Kent Street and Lyon Street
- Montgomery Street – Three paid spaces removed between Selkirk Street and Montreal Road due to Taxi Zone.

- George Street – One paid space removed between Sussex Street and William Street due to scooter parking.
- Cobourg Street – One space removed between Rideau Street and Dead End due to new development.
- Various – Paid spaces added/removed due to remeasurements and other roadway modifications.
 - Somerset Street – Three paid spaces added between Booth Street and Rochester Street.
 - Hamilton Avenue – Two paid spaces added between Armstrong Street and Wellington Street.
 - Holland Avenue – One paid space added between Spencer Street and Scott Street.
 - Montreal Road – Two paid spaces removed between Montgomery Street and Palace Street.
 - Wellington Street – Two paid spaces removed between Booth Street and Lett Street.
 - Somerset Street – Two paid spaces removed between Booth Street and Rochester Street.
 - Ruskin Street – One paid space removed between Parkdale Street and Melrose Avenue.

ON-STREET PAID PARKING INVENTORY

ALL LOCATIONS

#	Zones	Parking Spaces	Hourly Rate
1	Constellation	156	\$3.50
2	Holland Cross	84	\$1.50
3	Ruskin	55	\$3.50
4	Vanier	75	\$2.00
5	Terminal	74	\$1.50
6	War Museum	124	\$3.50
7	Little Italy North	95	\$3.50
8	Little Italy South	107	\$3.50
9	Rochester	134	\$1.50
10	Chinatown	155	\$3.50
11	Glebe South	143	\$3.50
12	Glebe North	76	\$3.50
13	Centretown South	444	\$3.50
14	Centretown North	623	\$3.50
15	Downtown	542	\$3.50
16	King Edward	16	\$3.50
17	ByWard North/East	346	\$3.50
18	ByWard Core	308	\$3.50
19	Besserer	92	\$3.50
20	Rideau	114	\$1.50
	Tour Bus parking (Various locations)	27	\$4.50

OFF-STREET PAID PARKING INVENTORY

PARKING GARAGES

#	Garage	Parking Spaces	Accessible Spaces	Hourly Rate (weekday day)
3	210 Gloucester Street	212	7	\$4.00
4	ByWard (70 Clarence Street)	289	6	\$3.00
5	Dalhousie (141 Clarence Street)	459	6	\$2.50
6	City Hall (110 Laurier Avenue)	845	20	\$4.00
8	Glebe (170 Second Avenue)	144	7	\$2.50

PARKING LOTS

#	Lot	Parking Spaces	Accessible Spaces	Hourly Rate (weekday day)
9	234-250 Slater Street	62	1	\$5.00
10	574 Bank Street	19	1	\$3.00
11	687 Somerset Street	46	2	\$2.50
13	Parkdale Market	20	1	\$1.50
14	301 Preston Street	60	3	\$2.00
18	422 Slater Street	10	1	\$3.00
19	474 Elgin Street	20	1	\$3.00
20	400 North River Road	78	4	\$2.50
22	283 Cyr Avenue	25	2	\$1.00
23	2950 Riverside Drive	186	3	\$2.00
30	795 Trim Road	274	3	\$1.50

CAPITAL PROGRAM PLAN

PURPOSE

Since the original Municipal Parking Management Strategy was approved in 2009, the development of a Capital Program Plan has been a requirement and has been reported to Council every year. Starting in 2020, the Capital Program Plan has been captured as part of the Parking Services Annual Report. The purpose of the Capital Program Plan is to summarize the program's capital budget and projected plans for the Parking Reserve Fund over the next five years.

FORECASTING

The forecast in this document was developed with the best information and data available at the time. However, it is subject to revision due to changes in revenue, operational requirements, alternate assigned priorities, inflationary pressures, interest rate fluctuations, or other factors beyond the control of the Municipal Parking Management Program.

FUNDING MODEL

The Municipal Parking Management Strategy requires that the Municipal Parking Management Program be financially self-sustaining, as a whole. This means that parking revenues must be sufficient to entirely recover all operating and capital lifecycle maintenance expenditures related to the program. This includes contributions to the Parking Reserve Fund to finance future parking system development, operation, and promotion.

Consistent with the Municipal Act, any spending from parking fee revenues must align with the Municipal Parking Management Strategy and there must be a reasonable connection to parking. Additional details related to Municipal Parking Management Program revenues, expenses and the Parking Reserve Fund can be found in the Funding Model portion of the Municipal Parking Management Strategy.

PARKING SERVICES CAPITAL PROGRAMS

Existing capital programs for Parking Services can be broken down into seven different categories for budgeting and tracking purposes. The following is an overview of the purpose of each existing capital account:

- **Lifecycle Renewal – Parking Facilities:** Projects necessary to adapt and extend the life of parking infrastructure and to ensure the safety and convenience of parking customers.

- **Parking Facilities Improvement:** Supports improvements to the existing parking facilities to enhance the customer experience and provide operational efficiencies. This includes the funding of electric vehicle (EV) charging infrastructure.
- **On-Street Facility Modification:** Supports improvements to the existing on-street parking network, including initiatives to assess performance and the implementation of measures intended to help fulfill the Municipal Parking Management Strategy. This includes the funding of electric vehicle (EV) charging infrastructure.
- **Parking Studies:** Supports various parking studies and parking data collection throughout the City related to growth and parking trends. These activities are required on an on-going basis to ensure parking data is up-to-date and to support decisions related to the application of the Municipal Parking Management Strategy.
- **Bike Parking:** Accounts for costs related to the implementation of the Public Bike Parking Strategy, which includes the purchase, implementation, and maintenance of both secure and unsecure bike parking facilities.
- **New Facilities:** Funds designated for the design and construction of new public parking facilities. Partnership opportunities are being pursued to work with developers to ensure appropriate parking supplies where needed. Periodic investments are budgeted as placeholders based on identified requirements.
- **Payment System:** When required, this captures anticipated purchase requirements related to new payment equipment to ensure continuity of service.

PARKING SERVICES TECHNOLOGY ROAD MAP

As part of the update to the Municipal Parking Management Strategy, the development of a Technology Road Map was identified as a requirement to enable proper strategic planning. The initial Technology Road Map was developed by the external firm BA Group and was completed in 2020. Per the Municipal Parking Management Strategy, updates to the Technology Road Map are required at least once per Council term.

In developing the Technology Road Map, the areas of focus were as follows:

- On-street Payment Technology
- Off-Street Payment Technology
- Payment Systems
- Parking Guidance Systems
- Website and Mobile Apps
- Data Collection and Analytics
- Parking Enforcement
- Vehicle Technologies

For each focus area, it was necessary to identify where the Municipal Parking Management Program currently stands, what the current trends and options are, and what future considerations for Parking Services might look like.

The following summarizes the recommended outcomes of the current Technology Road Map:

1. Increase smart phone and web-based payment.
2. Improve the Parking Services website and allow online parking permit purchases.
3. Evaluate the benefits of implementing pay-by-plate technology for existing Pay & Display machines.
4. Test and implement overhead camera-based parking sensor technology at surface lots and on-street.
5. At parking garages, consider License Plate Recognition / Bluetooth technology for future parking access and revenue control system upgrades.
6. Consider a vehicle and handheld based License Plate Recognition system for enforcement.
7. Test and evaluate the potential for vehicle-based License Plate Recognition systems for data collection.
8. Increasing electric vehicle (EV) use and test EV stations for on-street parking.

Some of these outcomes and initiatives have been accounted for in previous budget allocations and planned future spending as part of the Capital Program Plan (e.g., on-street EV charging stations).

An updated Technology Road Map is expected to be completed in 2024.

RECENT TRENDS

Through 2020-2022, there were reductions in both on-street and off-street parking revenue due to lower demand through the pandemic period. The contributions to the Parking Reserve Fund in 2020 (\$1.56 million), 2021 (\$2.23 million) and 2022 (\$2.94 million) occurred following provincial transfers which addressed lost revenues. Revenues started to stabilize in 2022 and have returned to pre-pandemic levels in 2023. This helps to mitigate the risk and uncertainty that had previously existed, but the impact of the pandemic on parking revenues reinforced that proper management of the Parking Reserve Fund and accounting for potential risks will ensure that there will be available funds for necessary program-related requirements in the future.

Through the pandemic, there were also much higher inflation rates. This has had an impact on both the anticipated operating and capital costs going forward. Examples of increased operating costs that have already had an impact are for security services (new

contract in 2023) and related to internal transfers to cover the costs of road maintenance within on-street paid parking and permit zones.

The net effect of the operating cost increases is that the yearly Parking Reserve Fund contributions are projected to be smaller over the next five years than what was envisioned as part of the previous Capital Program Plan.

From a capital perspective, there has been cost escalation with regards to existing lifecycle projects.

Accounting for smaller contributions and increasing capital costs, there are pressures with regards to the Parking Reserve Fund which will force some reductions to previous planned spending in order to ensure that the Parking Reserve Fund remains viable and within the parameters set out in the Municipal Parking Management Strategy.

CAPITAL PROGRAM PLAN – EXISTING BUDGET ALLOCATIONS

As part of the 2024 Budget, the following allocations were identified for 2024 to 2028.

Capital Program	2024 (in 000's)	2025 (in 000's)	2026 (in 000's)	2027 (in 000's)	2028 (in 000's)
Lifecycle Renewal – Parking Facilities	\$1,800	\$2,227	\$4,102	\$1,074	\$3,589
Parking Facilities Improvement	\$100	\$100	\$100	\$400	\$100
On-Street Facility Modification	\$600	\$100	\$100	\$100	\$600
Bike Parking	\$400	\$400	\$400	\$400	\$400
New Facilities	--	\$7,000	--	--	--
Parking Studies	\$120	\$120	\$120	\$120	\$120
Parking Payment System	--	--	\$2,000	\$2,000	\$2,000
Total	\$3,020	\$9,947	\$6,822	\$4,094	\$6,809

CAPTIAL PROGRAM PLAN – UPDATED EXPENDITURES

The budgeting process is continuously evolving and requires review on a regular basis to ensure planned expenditures are up to date. As additional work is done, particularly with respect to the lifecycle requirements, these amounts may be revised accordingly.

Since the 2024 budget was approved, the 2025-2028 projected Lifecycle Renewal – Parking Facilities costs have increased \$3.883 million (+35%). This is the result of additional requirements being identified and the increase in anticipated costs.

As such, some reductions in capital spending in other categories are required over the next five years in order to both account for the increase in lifecycle costs, but also the aforementioned reduction in the expected annual Parking Reserve Fund contribution.

The updated capital requirements are captured and discussed in the table below. Barring any further developments, these revised amounts will be tabled for Council approval as part of the 2025 budget process.

Capital Program	2024 (in 000's)	2025 (in 000's)	2026 (in 000's)	2027 (in 000's)	2028 (in 000's)
Lifecycle Renewal – Parking Facilities	\$1,800	\$2,850	\$4,825	\$5,000	\$2,200
Parking Facilities Improvement	\$100	\$50	\$50	\$400	\$50
On-Street Facility Modification	\$600	\$50	\$50	\$50	\$50
Bike Parking	\$400	\$300	\$300	\$300	\$300
New Facilities	--	--	--	--	--
Parking Studies	\$120	\$120	\$120	\$120	\$120
Parking Payment System	--	--	\$1,000	\$1,000	\$1,000
Total	\$3,020	\$3,370	\$6,345	\$6,870	\$3,720

The following is a summary of the changes:

- Parking Facility Improvement – Reduced by \$50,000 in 2025, 2026 and 2028, and maintained at \$400,000 in 2027 to continue to account for future expansion of the EV charging network.
- On-Street Facility Modification – Reduced by \$50,000 annually (2025-2028) which is supported by lower-than-expected spending from these accounts in recent years. This does not impact any plans related to the EV charging network.
- Bike Parking – Reduced from \$400,000 to \$300,000 annually (2025-2028) which is supported based on actual costs to-date related to the development / expansion of bike parking on an annual basis.
- New Facilities – A \$7 million placeholder has been removed which was previously identified for 2025. Existing funding allocations (\$7 million in 2022) are still in place

to accommodate the next opportunity that arises (related to the ByWard Public Realm Plan or otherwise).

- Parking Payment System – This procurement is expected to conclude in late 2025 at which point clearer purchase / implementation costs will be known. For planning purposes, the annual amounts starting in 2026 have been adjusted to allow for longer amortization of these costs.

To further clarify expected capital funding by year, in each year (2024-2028) there are allocations that relate to the following:

- As required parking facility upgrades / improvements (e.g. to increase customer service or enhance safety / security)
- Improvements to the existing on-street parking network
- Funding for continuing bike parking initiatives in alignment with the Public Bike Parking Strategy, including continued expansion of secure bike parking
- Fulfillment of requirements to complete studies and support initiatives related to the Municipal Parking Management Strategy

Beyond those, the following captures the allocations that are specific to each year:

2024	<ul style="list-style-type: none"> • Forecasted lifecycle works, including joint repairs and door replacement at the Dalhousie Garage, re-painting (masonry walls) at the Gloucester Street Garage, and slab reinforcement at the Glebe Garage. • Expansion of EV charging at on-street locations
2025	<ul style="list-style-type: none"> • Forecasted lifecycle works, including concrete repair and fan replacements at City Hall (exhaust / air supply), and projects at the Dalhousie Garage to replace lighting and complete design work for future asphalt replacement.
2026	<ul style="list-style-type: none"> • Forecasted lifecycle works, including resurfacing of the ramps at the Gloucester Street Garage, and both replacement of the membrane and replacement of the sprinkler lines/standpipes at the Dalhousie Garage • Incremental funding for replacement of existing parking payment system
2027	<ul style="list-style-type: none"> • Forecasted lifecycle works, including the resurfacing of the upper levels at the Gloucester Street Garage and the replacement of the waterproofing membrane at the Glebe Garage. • Expansion of EV charging facilities at lots/garages • Incremental funding for replacement of the existing parking payment system
2028	<ul style="list-style-type: none"> • Forecasted lifecycle works, including ramp replacement and lighting replacement at City Hall, masonry / cladding repairs at the Dalhousie Garage and concrete / ceiling repairs at the Glebe Garage • Incremental funding for replacement of existing parking payment system

PARKING RESERVE FUND

The Parking Reserve Fund was established to fund parking-related programs consistent with the Municipal Parking Management Strategy. On an annual basis, surplus revenues from the Municipal Parking Management Program are contributed to the Parking Reserve Fund.

To ensure the forecasted capital costs can be fully paid for by the Parking Reserve Fund, the current status of the Parking Reserve Fund and projected contributions need to be accounted for.

	2024 (in 000's)	2025 (in 000's)	2026 (in 000's)	2027 (in 000's)	2028 (in 000's)
Opening Balance	\$20,073	\$20,414	\$19,034	\$14,679	\$9,799
Contribution	\$1,550	\$1,990	\$1,990	\$1,990	\$1,990
Total Capital Expenditures	\$3,020	\$3,370	\$6,345	\$6,870	\$3,720
Capital Funds Returned	\$1,811				
Year-End Balances	\$20,414	\$19,034	\$14,679	\$9,799	\$8,069

Every year, a review of existing capital accounts is completed to determine if any funds are no longer required and can be returned to the Parking Reserve Fund. In 2024, there is \$1.811 million that will be returned to the Parking Reserve Fund. This is attributed to the closure of 11 accounts from 2017 to 2022 that were deemed to longer be required due to project completions, deferrals, or a reassessment of cost requirements.

PARKING RESERVE FUND PARAMETERS

Due to changing conditions in parking, the development of new technologies, and requirements related to additional public parking, it can be difficult to predict requirements and opportunities for capital spending from the Parking Reserve Fund. When the Municipal Parking Management Strategy was updated in 2019, parameters were established to ensure proper management of the Fund. Per the Municipal Parking Management Strategy, the following clarifies each threshold:

- **Minimum** – ensures that there will be available funds for necessary program related capital requirements

- **Maximum** – ensures that the fund will not grow beyond forecasted requirements
The required minimum and maximum will be re-assessed on an as required basis and will be reported as part of the Capital Program Plan

If the Parking Reserve Fund exceeds the maximum, Council can approve the allocation of excess funds to specific City capital accounts which relate to Municipal Parking Management Strategy objectives (e.g., Park & Ride lots or lifecycle costs related to the right-of-way in paid parking areas).

When the updated Municipal Parking Management Strategy was approved in 2019, the thresholds were set at \$8 million (minimum) and \$20 million (maximum). The Municipal Parking Management Strategy specifies that the status of the Parking Reserve Fund and the limits should be reassessed on an as-required basis, and this is accounted for as part of the annual review of the Capital Program Plan.

The minimum limit of \$8 million continues to be a sufficient reserve amount to cover necessary program-related operating and capital requirements. The requirement for a sufficient minimum balance has become all the more evident in light of the impacts that have been seen as a result of the pandemic situation.

Based on the projected spending plans and the importance of maintaining a minimum Parking Reserve Fund Balance of \$8 million, staff are recommending that as part of this Capital Program Plan that the current balance of \$20.073 million (year-end 2023) be retained.