REPORT FOR ACTION

Contract Award - Phase 3 Pay by Plate Equipment Purchase

Date: February 14, 2025
To: Board of Directors, Toronto Parking Authority
From: President, Toronto Parking Authority
Wards: All

SUMMARY

The purpose of this report is to seek approval from the Board of Directors, Toronto Parking Authority for the purchase of 1,900 Pay-by-Plate (PbP) parking meters, valued at $15.6 million, as part of management's multi-year strategy to replace end-of-life parking payment equipment. This purchase represents the third (3) and final phase of a modernization initiative that began in 2023. This investment is included in TPA's 2025–2027 capital plan, with procurement and installation scheduled over that period.

As background, on April 21, 2023, the Board of Directors of the Toronto Parking Authority (TPA) approved the purchase of 225 PbP on-street parking meters valued at $2.06 million, marking Phase One (1) of TPA's parking equipment modernization strategy. (Refer to PA3.8 Pay by Plate Equipment Purchase.)

Further On July 4, 2024, the Board approved the purchase of an additional 339 PbP on-street parking meters, valued at $3.1 million, as part of Phase Two (2) of the modernization strategy. (Refer to PA10.09 Pay by Plate Equipment Purchase.)

During the last two (2) years a total of 564 new PbP meters were purchased and installed. The implementation of these meters has driven significantly better performance outcomes; specifically, the TPA achieved approximately $548,000 in savings, driven by reduced operating expenses, avoidance of EMV Non-Compliance fees, and rate change related expenses. In addition, the new meters provide improved consumer payment options including debit, Apple and Google pay.

The investment in new equipment significantly reduces the Parking Equipment/Technology Management risk profile identified in our Enterprise Risk Management (ERM) Strategy. To date, 27 percent of devices have been replaced, contributing to 45 percent of total revenue generated through meter channel. (Refer to PR5.4 TPA Enterprise Risk Management Report.)

To procure the remaining PbP equipment, TPA will leverage its Master Services Agreement with Precise ParkLink (PPL).

RECOMMENDATIONS

The President, Toronto Parking Authority recommends that:

1. The Board of Directors, Toronto Parking Authority, authorize payment of $15.6 million excluding Harmonized Sales Tax (HST) for the purchase of 1,900 Pay by Plate (PbP) parking machines from Precise Parklink Inc., which will be made pursuant to the terms and conditions of the Master Services Agreement between the Toronto Parking Authority and Precise Parklink Inc. dated July 1, 2016.

FINANCIAL IMPACT

The total cost of the 1,900 new PbP parking machines is $15.6 million (excluding HST) and is based on a cost submission provided by Precise Parklink Inc. as a statement of work against the existing Master Services Agreement. The total cost of this purchase has been approved in TPA's three (3) year capital budget.

All operating expenses on a per-unit basis for the new PbP parking machines will remain consistent with the current parking equipment.

DECISION HISTORY

The Board of Directors of Toronto Parking Authority received for consideration item PA12.5 "Toronto Parking Authority - 2025 Operating Budget and 2025-2027 Capital Budget" at its meeting of November 29, 2024.The Board received the proposed budget for TPA as outlined in the report: Agenda Item History - 2024.PA12.5

The Board of Directors of Toronto Parking Authority received for information item PA 12.6 "2025 Annual Operating Plan" at its meeting of November 29, 2025. https://secure.toronto.ca/council/agenda-item.do?item=2024.PA12.6

At its meeting on July 19, 2024, the Board of Directors of Toronto Parking Authority approved the purchase of 339 Pay by Plate parking machines from Precise Parklink Inc.at a value of $3.112 million (excluding HST) as detailed in the report that can be found at the following link: Agenda Item History - 2024.PA10.9

At its meeting on April 25, 2024, the TPA Audit and Risk Management Committee adopted the report on the completion of the setup of the TPA Enterprise Risk Management Program as outlined in the report PR5.4 - Toronto Parking Authority Enterprise Risk Management Report. Additional information on this report can be found at the following link: https://secure.toronto.ca/council/agenda-item.do?item=2024.PR5.4

At its meeting on April 21, 2023, the Board of Directors of Toronto Parking Authority authorized payment of $2,056,961.25 (excluding HST) for the purchase of 225 Pay by Plate parking machines from PPL. as outlined in the report PA3.8 "Pay by Plate Equipment Purchase". Additional information on this report can be found at the following link: https://secure.toronto.ca/council/agenda-item.do?item=2023.PA3.8

COMMENTS

The purpose of this paper is to seek authorization from the Board of Directors of the Toronto Parking Authority to purchase the third and final phase of 1,900 multi-space parking meters, with a total estimated value of $15.6 million (excluding HST).

The TPA stands as North America's largest municipal parking operator, with a proven track record of leading innovative parking solutions. TPA's legacy of innovation includes pioneering the first fully automated parking garage at St. Lawrence Market in 1995, introducing the automated Pay and Display (P&D) machines for on-street parking in 1998, and deploying the world's largest network of 1,269 units by 2002. In 2016, TPA launched the Green P App, which has become one (1) of the world's foremost municipal parking apps, with over 2.3 million active users. More recently, in 2024 TPA has introduced digital payment options for parking in gated car parks, real time parking occupancy in various On and Off-Street locations, integration of EV charging and Parking all into the Green P App.

Today, the TPA manages approximately 21,800 on-street paid parking spots, serviced by 2,612 multi-space meters, 151 single-space meters, and the Green P App with over 2.3 million subscribers. The P&D parking technology that was once considered class-leading in the early 2000's is now over 20 years old and is approaching the end of its intended service life. There is an immediate need to modernize TPA's parking technology to reduce the risk associated with aging equipment, increase customer payment options, and integrate proof of payment into TPA and Toronto Police Service's enforcement platforms. The window for modernization is narrowing and the case for change is real.

That case for change, detailed Board Paper PA3.8 "Pay by Plate Equipment Purchase" in April 2023, is summarized below.

- The 20+ year-old P&D equipment does not accept debit card payments, which account for 28 percent of all retail payments in Canada. Additionally, the equipment does not support any other form of contactless payments, including Tap, Apple Pay, Google Pay, Samsung Pay, etc.
- All P&D machines currently in operation are not "chip and pin" compliant, resulting in an additional fee of $0.15 USD per transaction for failing to meet Europay, Mastercard and Visa (EMV) standards that came into effect in October 2023. This upgrade is a critical enabler of our cyber security risk management program.
- P&D equipment requires a physical ticket to be placed on the vehicle dashboard as proof of payment. This process is not user friendly for the customer and unproductive from an enforcement standpoint, leading to additional costs.
- TPA's legacy Pay-and-Display (P&D) equipment operates exclusively on 3G networks, which Rogers has publicly announced will be decommissioned in July 2025.

The introduction of the first and second tranches of PbP parking meters in 2023 has driven material improvements in performance. These include a broader range of payment options, the elimination of the need for customers to return to their vehicles to display receipts, and real-time adjustments to parking rates. By removing the need for a one-for-one meter exchange, these measures have reduced both operational and capital expenditures, minimized street clutter, and improved pricing flexibility. These improvements underscore the organization's commitment to optimizing resource allocation and maximizing financial performance.

Critically, the new PbP meters comply with EMV industry payment standards, avoiding a non-compliance fee of $0.15 USD per transaction, which is being applied to our legacy P&D machines as of October 2023. Phase One deployment benefits are highlighted in Table 1.

Table 1: *Phase 1 and Phase 2 PbP Deployment Findings*

Findings	Summary	Impact
Reduction in Hardware	The PbP meters have allowed for an increased ratio of meters to parking stalls from 1:6 to 1:12 driving a reduction of approximately 30% in required parking equipment.	• Reduction in OPEX of approximately $253,000 in 2023 and 2024. • $1.8M savings in CAPEX for replacement costs due to a need for less parking machines. • Reduction of street furniture, which supports the City of Toronto with programs such as Café TO, cycling infrastructure and additional space for pedestrians.

Rapid Programming Change Ability	Modifying parking rates or operational hours can now be executed virtually in real time remotely. In contrast, adjustments to P&D machines require programming and the physical installation of an EPROM (computer chip) physically on-site at the parking meter.	• $105,000 reduction in EPROM costs for rate changes in 2024 and 2025. • 90 percent reduction in OPEX for labour & time for rate changes. • Improved customer service.
EMV / Chip & Pin Mandate	EMV is a global standard for secure payments, utilizing dynamic digital data in chip and pin transactions to reduce counterfeit fraud. Visa mandated EMV compliance for all payment terminals, including those on existing P&D parking machines, with a non-compliance fee of $0.15 USD per credit card transaction from October 2023.	• 564 PbP meters that meet EMV compliance. • Forecasted savings in OPEX for EMV non-compliance fees is $189,000 USD for 2024 and 2025. • Note that in 2025, TPA expects to pay approximately $295,000 USD for EMV non-compliance fees for the remaining P&D meters.

Phase 3 Pay-by-Plate Parking Machine Deployment

This third (3) and final purchase of 1,900 PbP parking machines will expand TPA's coverage through the remaining areas of the downtown core and the balance of both on and off-street parking locations across the City of Toronto. This expansion will capture the remaining 55 percent of all on-street and off-street parking revenue generated through parking meters. See Table 2 below.

Table 2: *Parking Modernization Phasing Summary*

	Phase 1 - Completed (November 2023)	Phase 2 - Completed (December 2024)	Phase 3 - Proposed (2025 to 2027)	TOTAL (Phase 1 + 2 + 3)
Number of PbP Parking Machines for Install	225	339	1,900	2,464
Number of P&D Parking Machines Decommissioned	291	463	2,509	3,263
Percentage of total revenue from Parking Machines	21%	24%	55%	100%

As identified in TPA's ERM program, aging parking equipment poses significant risks to the TPA. Completing the deployment of PbP parking machines will significantly mitigate these risks associated with TPAs parking operations. Failing to update the P&D parking machines will lead to escalating risks that could impair TPA's ability to operate the business effectively. These risks are highlighted in Table 3.

Table 3: *Enterprise Risk*

Risk	Summary	Impact
Serviceable Life	Existing P&D parking machines are at the end of intended serviceable life with an increasing rate of service failure. Refurbished parts and other components that are used to maintain the existing P&D equipment are now scarce, expensive, and subject to long lead times.	• Increased labour costs for maintaining end of life P&D parking machines. • Higher rate of failure with critical parts in P&D parking machines will result in poor customer satisfaction, loss of revenue, and reputational risks.

Network Connectivity	Network connectivity of the existing P&D parking machines is built to operate on the 3G network which was first deployed 20 years ago. While 3G is still supported in Canada, Rogers Communication Inc. has communicated that they plan to sunset the use of the network starting July 31, 2025.	Network connectivity is required to process payments and other transactional data from the P&D parking machines. Without network connectivity the P&D devices would no longer be able to communicate with servers. Therefore, payment and other transactional information would not be transmitted from P&D machines.
Revenue	Customers have increasingly moved to using alternate forms of payment including mobile payment, digital wallets (Apple Pay, Google Pay, Samsung Pay) and the increasing use of debit cards.	It's essential to offer customers the option to pay using modern and widely adopted payment methods. Failing to do so can increase the risk of non-compliance and discourage the use of parking as an accessible mobility option. Additionally, this limitation can negatively impact cost efficiency, as debit card transactions are generally more cost-effective to process compared to cash or credit card payments. By integrating diverse payment options, the TPA can promote greater equity and convenience for all users while also optimizing operational costs.

Next Steps

The final acquisition of 1,900 PbP parking machines will complete our multi-year journey to modernize our equipment, protect our on-street base business and minimize current risks. More importantly, PbP equipment enables the TPA to elevate our customer offerings. It provides modern payment options, ease of use, speed and choice. It allows customers to pay and continue their journey without returning to the vehicle to provide proof of payment. Strategically, PbP unlocks the future development of an integrated omni-channel digital solution for our Parking, Bike Share and EV charging verticals.

TPA will leverage its Master Services Agreement with PPL, to purchase the PbP parking equipment. PPL is a Toronto-based organization with more than 800 staff across Canada that is recognized for providing integrated parking and mobility solutions for both private and public sector customers including hospitality, commercial, healthcare, aviation, institutional and government. Existing municipal customers include

Toronto, Ottawa, Vancouver, Calgary, Edmonton, Saskatoon, Halifax, Fredericton, Oakville, Burlington and Mississauga.

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