

Motorcycle Parking – Short-Term On-Street Parking and Overnight On-Street Permit Parking

Date:	September 12, 2013
To:	Public Works and Infrastructure Committee
From:	General Manager, Transportation Services
Wards:	All Wards
Reference Number:	P:\2013\Cluster B\TRA\Toronto and East York District\TOP\ PW2013145te.top

SUMMARY

This report responds to City Council's directive that the General Manager, Transportation Services, report back through the Public Works and Infrastructure Committee on a proposal to require payment when motorcycles and motor scooters park at on-street parking meter/machine locations and in designated permit parking areas. This report also addresses concerns about motorcycle parking on sidewalks and in other illegal locations.

On-street meter/machine parking: Exemptions to on-street meter/machine parking fees for motorcycles were implemented in 2005 to address complaints from motorcyclists who received parking tickets after their Pay-and-Display receipts were stolen or blew away, and to promote the use of motorcycles rather than larger personal vehicles. Despite this exemption, the City receives frequent complaints about motorcycles parked in illegal locations (e.g. on boulevards, on sidewalks, in "No Parking" zones, and within corner parking restrictions).

Transportation Services recommends developing an on-street motorcycle parking pilot to provide safe, convenient parking in designated motorcycle parking spaces. The creation of designated motorcycle parking spaces would be paired with education and enforcement to limit illegal motorcycle parking.

Motorcycles would be offered free parking in these spaces for a limited time, until Toronto Parking Authority has the technology to address concerns about securing receipts to motorcycles. Once Toronto Parking Authority is ready to offer Pay-by-Plate payment options that do not involve physical receipts, the City could then consider charging motorcycles hourly rates that are proportional to the space they occupy.

This program would generate projected annual revenues in the range of \$125,000 to \$250,000. The one-time costs of developing a program with 300 motorcycle parking spaces and Pay-by-Plate payment options are approximately \$250,000. Annual maintenance costs of approximately \$30,000 per year are also anticipated. The appropriate number and location of spaces remains to be determined based on parking surveys.

Permit parking: Exemptions to on-street permit parking fees for motorcycles were implemented in 2006 to promote the use of motorcycles rather than larger personal vehicles. Though the costs of removing the exemption are negligible, minimal revenue would be generated from removing the exemption; staff estimates that the change would generate less than \$10,000 in annual revenues.

RECOMMENDATIONS

The General Manager, Transportation Services, recommends that:

1. Transportation Services and Toronto Parking Authority create designated on-street motorcycle parking spaces on a pilot basis, and maintain the exemption from the requirement to pay until Pay-by-Plate technology can be deployed.
2. City Council maintain the existing exemption for motorcycles from the requirement to pay for overnight parking permits in designated on-street permit parking areas.

Financial Impact

The one-time cost of creating 300 designated motorcycle parking spaces in 25 areas on a pilot basis would be approximately \$75,000, without Pay-by-Plate machines. Maintenance costs for these spaces would be approximately \$18,000 per year. The funds required to create and maintain these spaces are available within the proposed 2014 Operating Budget for Transportation Services.

Once Pay-by-Plate technology can be deployed, purchasing and installing Pay-by-Plate machines for these spaces would cost an additional \$175,000. The funds required to purchase these machines will be included for consideration within the 2015 Capital Budget and 2016-2024 Capital Plan for the Toronto Parking Authority. Maintaining these machines would cost approximately \$12,000 per year, and the funds required will be included for consideration within the 2015 Operating Budget for the Toronto Parking Authority.

Requiring motorcycles to pay reduced hourly rates in designated motorcycle parking areas would generate projected revenues in the range of \$125,000 to \$250,000 per year.

There is no financial impact associated with the recommendation to maintain the exemption from the requirement to pay for overnight parking permits. The exemption could be removed at no additional cost, but would generate minimal revenues for the City: an estimated \$9,900, or 0.1% of annual revenue from parking permits.

The Deputy City Manager and Chief Financial Officer has reviewed this report and agrees with the financial impact information.

DECISION HISTORY

At the meeting of City Council on November 29, 30 and December 1, 2011, Council adopted as amended Member Motion MM14.19 directing the General Manager of Transportation Services to report on options for the implementation and enforcement of parking charges and fees for motorcycles and motor scooters. Council also requested information on the financial impact of the recommended changes.

(<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2011.MM14.19>)

ISSUE BACKGROUND

Under the Ontario *Highway Traffic Act*, a "motorcycle" is defined as including a motor scooter but does not include a motor-assisted bicycle (moped). When used in this report, the term "motorcycle" thus includes motor scooters.

In 2005, City Council exempted motorcycles from the requirement to pay for short-term on-street parking at meters and machines.

<http://www.toronto.ca/legdocs/2005/agendas/council/cc051026/wks9rpt/cl002.pdf>

In 2006, City Council exempted motorcycles from the fees associated with overnight on-street permit parking.

<http://www.toronto.ca/legdocs/2006/agendas/council/cc060925/wks6rpt/cl019.pdf>

Motorcyclists are still required to acquire and display a valid parking permit for overnight on-street parking, for parking space tracking purposes. They are also still required to pay the listed rate when parking at Toronto Parking Authority off-street facilities.

Member Motion 14.19 was submitted to address a deemed loss in potential revenue resulting from the exemption of motorcycles from on-street parking fees. It was also submitted to address the issue of motorcycles parking on sidewalks and in other illegal areas.

COMMENTS

Purposes of the Exemptions

Exemptions to on-street parking fees for motorcycles were implemented for two reasons:

1. To address complaints from motorcyclists who received parking tickets after their Pay-and-Display receipts were stolen or blew away.
2. To promote the use of motorcycles rather than larger personal vehicles.

Addressing concerns about the Pay-and-Display system

In 2005, with the on-going conversion of parking meter spaces to Pay-and-Display parking zones, Transportation Services and Toronto Parking Authority were receiving an increasing number of complaints from motorcyclists regarding the theft of parking receipts or their inability to secure the parking receipt to the motorcycle. Many motorcyclists received parking tickets despite having paid for parking.

Motorcyclists who complained of this were advised to keep the Pay-and-Display receipts with them; if they received a ticket, they could bring their receipt to a "First Appearance" facility to have the ticket withdrawn. However, this process was quite onerous and unfair for motorcyclists. Council's 2005 decision to exempt motorcycles from payment for short-term on-street parking aimed to remove the disincentives associated with the Pay-and-Display system.

Promoting the use of motorcycles

City Council's 2006 decision to exempt motorcycles from fees for permit parking was aimed at encouraging the use of motorcycles instead of cars: to alleviate congestion, to make more efficient use of the public right-of-way, and to reduce greenhouse gas emissions from transportation.

Motorcycles are significantly smaller than other vehicles and occupy less space in the right-of-way – both when in motion and when parked. Three motorcycles can share one on-street parking space. Furthermore, because motorcycles are compact and lightweight, most are significantly more fuel efficient than cars; many gas-powered motorcycles exceed 100 miles per gallon (2.4 litres per 100 km), and electric models are also common in Toronto. This means fewer greenhouse gas emissions – though some motorcycles emit more nitrogen oxides than cars. The use of lightweight vehicles also means less wear and tear on the City's streets.

Based on feedback from motorcyclists, free parking is important in motivating the use of motorcycles for commuting, and can counter disincentives such as inclement weather. Free parking can also contribute to the decision to purchase a motorcycle, as it helps to offset the costs of owning and operating the vehicle.

Motorcycles in Toronto

As of December 31, 2012, only 2.1% of passenger vehicles registered in the City of Toronto were motorcycles. As illustrated in the table below, this is a significant increase from 2005, when motorcycles accounted for only 1.3% of registered passenger vehicles. It is unknown to what extent the City's policy support for motorcycles has led to the increase in registered vehicles.

Date	Passenger vehicles registered in Toronto	Motorcycles registered in Toronto	Motorcycles as % of vehicles
Dec. 31, 2005	1,017,117	13,488	1.3%
Dec. 31, 2006	1,020,418	14,605	1.4%
Dec. 31, 2011	1,020,344	20,507	2.0%
Dec. 31, 2012	1,023,775	21,380	2.1%

This motorcycle ownership trend suggests that potential revenue from motorcycle parking will increase in the future. The sections below discuss the options for and expected impacts of requiring motorcyclists to pay for short-term on-street meter/machine parking, and overnight on-street permit parking.

Short-Term On-Street Parking

There are approximately 18,000 on-street metered/machine parking spaces in Toronto, operated by Toronto Parking Authority (TPA). The spaces are in the core commercial areas and in the city's retail strips, and are priced based on the rate zone in which they are located. Prices range from \$4.00/hour in the downtown core, to \$1.50/hour in the largest and least expensive zone.

Since 2005, motorcycles have not been required to pay for the use of on-street metered/machine parking spaces in Toronto. Despite this exemption, the City receives frequent complaints about motorcycles parked in illegal locations (e.g. on boulevards, on sidewalks, in "No Parking" zones, and within corner parking restrictions). Motorcyclists generally park illegally for convenience, or because of concerns about motorcycles being damaged in on-street spaces. Illegal motorcycle parking is detrimental to safety and mobility, particularly for pedestrians.

The City has also created 27 designated motorcycle parking areas in 8 locations. These spaces are near the downtown core, on Albert Street, Church Street, Hoskin Avenue, Elm Street, McCaul Street and Victoria Street. These areas are generally well used.

Options and Recommendations for Short-Term On-Street Parking

Other cities have developed a range of motorcycle parking programs (Appendix A). The majority of these programs include designated motorcycle parking spaces. The majority of these programs also offer motorcycles reduced rates; most other large North American cities charge motorcycles between 25% and 50% of the hourly rate for full-sized vehicles. Finally, most of these programs include a mechanism to address concerns about securing physical receipts to motorcycles.

Based on a review of these options, Transportation Services recommends the following:

- 1. Additional designated motorcycle parking spaces.** Designated motorcycle parking spaces provide a convenient, secure place for motorcyclists to leave their vehicles. Additional spaces could be created on a pilot basis, in locations that reflect the current distribution of motorcycles across the city. The appropriate number and location of spaces remains to be determined based on parking surveys. The creation of designated spaces would be paired with education, and increased enforcement of parking regulations in the surrounding area to limit illegal motorcycle parking. Based on experiences in cities such as Calgary, the creation of additional designated spaces is expected to decrease illegal motorcycle parking in Toronto.

Before and after parking surveys in the areas surrounding the pilot locations would enable evaluation of whether the spaces are well used, and whether they reduce illegal motorcycle parking. The areas could also be seasonal, if parking surveys suggest that there is limited demand for motorcycle parking in the winter months.

- 2. Reduced rates for motorcycle parking, once the City can use Pay-by-Plate technology.** As discussed, the City originally exempted motorcyclists from payment at on-street meters/machines because of motorcyclists' inability to secure parking receipts to their motorcycles. However, "Pay-by-Plate" parking payment technologies are now available that address these concerns, because they do not involve physical receipts. Furthermore, Pay-by-Plate technologies would enable the City to charge motorcycles reduced hourly rates for parking – an option that is not available using existing technology. TPA will begin to use "Pay-by-Plate" technology in the spring of 2014, as part of its mobile payment system pilot. After the pilot, TPA intends to deploy the mobile payment system and Pay-by-Plate technology across the city.

Transportation Services recommends that motorcycles be offered free parking in designated spaces for a limited time period. Once TPA is ready to use Pay-by-Plate technology, TPA would install separate Pay-by-Plate machines in designated motorcycle parking areas. These machines would charge motorcycles reduced hourly rates in proportion to the space they occupy. As three motorcycles may be parked in a single standard parallel parking space, motorcycles could be charged between 25% and 50% of the hourly rate for full-sized vehicles. Motorcycles would also be able to use TPA's mobile payment system once it becomes available.

3. **All-day motorcycle parking.** To accommodate motorcycle commuters, the rate structure at designated motorcycle parking spaces could mirror that of TPA's all-day metered parking spaces. After paying for 4 hours of parking in these spaces, the rest of the day is free.

The capital cost of creating 300 designated motorcycle parking spaces in 25 areas without Pay-by-Plate machines would be approximately \$75,000. Operating costs for these spaces would be approximately \$18,000 per year. Purchasing and deploying Pay-by-Plate machines for these spaces would cost an additional \$175,000, for total capital costs of \$250,000. Operating these machines would cost approximately \$12,000 per year, for total operating costs of \$30,000 per year. Appendix B provides the breakdown of these costs.

Potential Revenue from Short-Term On-Street Parking

To estimate the revenue that would be generated by removing the exemption, the Division looked to the City of Calgary, where motorcycle transactions are tracked separately. In Calgary, motorcycles pay 50% of the normal hourly rate in seven designated on-street motorcycle parking zones (weekday parking is \$2.50 per hour up to a daily maximum of \$8). Annual revenue from these zones is approximately \$65,000, accounting for 0.5% of the \$13 million in total revenue from on-street parking. In addition, Calgary offers monthly motorcycle parking in several lots for \$126 per month, and receives approximately \$40,000 in annual revenue from these spaces.

Based on statistics from Calgary, the Division estimates that motorcycle payments for on-street parking would generate an additional \$250,000 per year in revenue for Toronto Parking Authority if motorcycles were charged 50% of the normal hourly rates. This would account for approximately 0.5% of total revenue from on-street parking spaces. If motorcycles were charged 25% of the normal hourly rates, annual revenue would be in the range of \$125,000. Appendix B provides additional information on these calculations. It also demonstrates the viability of this estimate given 300 motorcycle parking spaces.

On-Street Overnight Permit Parking

In Toronto, overnight parking regulations and permit fees are set out under Municipal Code Chapter 925, Permit Parking, and Chapter 441, Fees and Charges. The permit fees are as follows:

Priority 1 - fee of \$168.48 plus HST/year, for applicants with no access to on-site parking for their 1st vehicle on the street.

Priority 2 - fee of \$421.56 plus HST/year, for applicants with no access to on-site parking for their 2nd vehicle on the street.

Priority 3 - fee of \$590.16 plus HST/year, for applicants with access to on-site parking (permit is for convenience).

Parking permits can be purchased for one or both of the six-month terms. The terms are from December 1 to May 31 and from June 1 to November 30. Permits are issued for 78 areas near the downtown core, and for about 70 individual streets outside of the core. Motorcyclists must obtain parking permits, but they are not required to pay for them.

Options for Overnight Permit Parking

The City has the option of charging motorcyclists the same fees as full-sized vehicles for overnight parking permits. The City could also charge motorcyclists reduced fees for parking permits, proportional to the space they occupy.

Charging motorcyclists for overnight parking permits would require changes to the e-permitting system. Staff would need eight weeks to make the necessary changes to the two computer systems, though there would be negligible cost associated with these changes. As permits are issued for six-month terms starting December 1 and June 1, changes would need to be initiated in early October or in early April.

Potential Revenue from Overnight Permit Parking

Even though on-street parking permits are free for motorcycles, few motorcycle owners apply for them. For the term from June to November 2013, only 478 permits were issued to motorcycles. The other 98% of motorcycles registered in the City did not receive permits. They were most likely parked in garages, backyards, or off-street parking spots.

Before motorcyclists were exempted from permit parking fees, even fewer motorcyclists purchased permits. For the term from June to November 2006, when motorcycles were required to pay for parking permits, the City only issued permits to about 30 motorcycles – 0.1% of registered motorcycles. All of these permits were Priority 1 permits.

Year	Motorcycles registered	Permits issued	% of motorcycles with permits
June 2006 – Nov. 2006	14,605	30	0.2%
June 2013 – Nov. 2013	21,380	478	2.2%

We estimate that if motorcycles were required to pay the full fees for on-street parking permits, only 0.2% would purchase permits, as in 2006. This would mean the sale of 44 permits to motorcycles, generating revenue of \$7,413 per year. The other 434 permits would become available for purchase by owners of other vehicles. However, there is a limited demand for parking permits in Toronto; less than 3% of permit parking spaces are in areas that are at capacity. If 3% of available permits were purchased for other types of vehicles, at an average cost of \$191.34, this would generate additional revenue of \$2,679.

Type of vehicle	Estimated number of permits issued	Average cost of permit	Annual revenue
Motorcycle	44	\$168.48	\$7,413.12
Car, van, truck	13	\$191.34 ¹	\$2,487.42
Total	57	-	\$9,990.54

1. The average cost accounts for the Priority 1, 2, and 3 permits purchased across the City.

Overall, staff estimates that requiring motorcycles to pay for permits would less than \$10,000 in additional revenue – less than 0.1% of total revenues from parking permits in the City of Toronto. If motorcycles were charged a reduced fee for on-street parking permits, revenues would be even lower. Appendix B provides additional information on these revenue estimates.

Recommendations for Overnight Permit Parking

There is no compelling reason to remove motorcyclists' exemption from the requirement to pay for parking permits. Though the costs of removing the exemption are small, minimal revenue would be generated from removing the exemption. We estimate that the change would generate less than \$10,000 in annual revenues. If Council is still in favour of promoting the use of motorcycles as an alternative to larger vehicles, the existing exemptions should be maintained.

If City Council determines that it would be beneficial to remove the existing exemptions for motorcycles from the requirement to pay at on-street parking meter/machines and/or in designated permit parking areas, it may approve the following:

1. City Council remove the existing exemptions for motorcycles from the requirement to pay in designated overnight on-street permit parking areas, by:
 - a. Amending Municipal Code Chapter 441 to introduce new fees for parking motorcycles in designated permit parking areas. Notice would be required to allow for deputations.
 - b. Amending Municipal Code Chapter 925, Permit Parking.

Staff of the Toronto Parking Authority and the Toronto Police Service have been consulted in preparation of this report.

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ATTACHMENTS

Appendix A - Survey Results re: Motorcycle Parking Regulations in Other Cities

Appendix B - Additional Information on Revenue and Cost Estimates

APPENDIX A

Survey Results re: Motorcycle Parking Regulations in Other Cities

Calgary

Designated spaces: Calgary has installed approximately 100 designated on-street pay-for-parking motorcycle parking stalls in seven zones in the downtown core. These stalls are available from May to October each year. The City has also created monthly parking spots for motorcycles in off-street parking lots.

Meter/Machine Parking Fees: Parking rates for these stalls are 50% less than those for regular-sized vehicles. Weekday parking is \$2.50/hour up to a daily maximum of \$8. Payment is required from 9:00 a.m. to 6:00 p.m., Monday to Saturday. Monthly parking is available for \$126 per month.

Mechanism to Prevent Loss of Receipts: Not needed because of designated stalls.

Noncompliance: Calgary reports that illegal motorcycle parking is significantly reduced compared to past years. The supervisor of the downtown foot patrol group advises that since the motorcycle spaces were put in there have been very few tags issued for on boulevards or sidewalks. Though there are still small pockets of motorcycles illegally parked, these are generally tucked into small pockets of private property that the City cannot patrol.

Ottawa

Meter/Machine Parking Fees: In Ottawa, on-street and off-street Pay-and-Display parking machines provide half-price motorcycle parking year-round. Pay-and-Display machines are equipped with a grey motorcycle button that reduces rates by 50% from the normal price of at least \$3.00/hour. In 2012, Ottawa also introduced a new Pay-by-Phone service which automatically applies the half-price charge.

Mechanism to Prevent Loss of Receipts: To assist motorcyclists in displaying the parking receipt, the City has created a Motorcycle and Scooter Sleeve that is similar to a luggage tag and allows the receipt to be secured to motorcycles. These sleeves cost the City approximately 10 cents each, and are provided to motorcyclists free of charge at a number of convenient locations. The City has not received any complaints related to the use or theft of these sleeves. Use of this sleeve to display the receipt is optional. Ottawa's Pay-by-Phone service also eliminates the need to display a parking receipt on the vehicle.

Designated Spaces: Ottawa has also developed a seasonal motorcycle parkade offering half-price parking at the ByWard Market Parking Garage. The parkade offers 12 motorcycle parking spaces.

Vancouver

Use of Meter/Machine Parking and Noncompliance: In 2010, the City of Vancouver implemented a motorcycle parking program that created new designated motorcycle parking areas, about half of them metered and half of them offering free parking. The program also offered discounted parking for motorcycles and scooters at regular on-street metered parking spaces. In 2012, staff recommended reducing the already-discounted rates, based on the following observations:

- Most un-metered areas were well used, while metered areas had lower occupancies than expected.
- In the Downtown and near metered parking, motorcycles and scooters continued to park in bicycle parking, on sidewalks and in other illegal places as a free alternative to the incentives offered by the program.

Meter/Machine Parking Fees: If using Pay-By-Phone, gas-powered motorcycles receive a 50% discount at both painted and regular parking meter spaces. Registered electric motorcycles park for free at painted parking meter spaces and receive a 75% discount off of the listed rate at regular parking meter spaces.

If paying by coin, the regular listed meter rate applies for all types of vehicles. More than one motorcycle can share a parking space, and only one vehicle must pay for the spot. However, if the meter expires, both vehicles in a space will receive a ticket.

Mechanism to Prevent Loss of Receipts: Using Pay-by-Phone eliminates the need to display a parking receipt on the vehicle.

Chicago

Permit Parking Fees: In Chicago, motorcycles and scooters are not required to pay for residential parking stickers.

Meter/Machine Parking Fees: Motorcycles are required to pay full rates for short-term on-street parking at meters and machines.

Mechanism to Prevent Loss of Receipts: Parking receipts are printed as stickers with adhesive backings, and are posted to the motorcycle headlamp. Furthermore, the license plate number is to be written on the receipt, to prevent theft.

APPENDIX B

Additional Information on Revenue and Cost Estimates

Short-Term On-Street Parking - Revenue Estimate

Assessing revenue based on information from the City of Calgary

To estimate the revenue that would be generated by requiring motorcycles to pay for short-term on-street parking, we looked to the City of Calgary, where motorcycle transactions are tracked separately.

In Calgary, motorcycles pay 50% of the normal hourly rate in designated on-street motorcycle parking zones. Annual revenue from these zones is approximately \$65,000, accounting for 0.5% of the \$13 million in total revenue from on-street parking. Extrapolating this percentage to Toronto, Toronto Parking Authority would receive an additional \$241,636 each year in revenue from on-street motorcycle parking.

	Revenue from on-street motorcycle parking	Total revenue from on-street parking	% of revenue from motorcycles
City of Calgary	\$65,000	\$13,000,000	0.50%
City of Toronto	\$241,636	\$48,327,111	0.50%

In addition, Calgary offers monthly motorcycle parking in several lots for \$126 per month, and receives approximately \$35,000 in annual revenue from these spaces. We estimate that Toronto would capture at least \$10,000 of the \$35,000 that Calgary receives from monthly motorcycle parking as additional revenue from short-term and daily motorcycle parking.

Based on these assumptions, we estimate that motorcycle payments for on-street parking would generate an additional \$250,000 per year in revenue for Toronto Parking Authority if motorcycles were charged 50% of the normal hourly rates. If motorcycles were charged 25% of the normal hourly rates, annual revenue would be in the range of \$125,000.

The ratio of motorcycles to cars in Calgary is comparable to that in Toronto.

Assessing this estimate given 300 pilot, designated motorcycle parking spaces

We estimate that if the City created 300 designated motorcycle parking spaces, these spaces would be occupied for at least 3 hours per day, 5 days per week, on average. With this occupancy, charging an hourly rate of only \$1.00 per hour, Toronto Parking Authority would collect \$234,000 per year from these spaces.

This occupancy estimate is supported by 2013 counts of motorcycles parking. About 500 motorcycles were counted in a survey of less than 30% of all Pay-and-Display spaces.

Short-Term On-Street Parking - Cost Estimate

One-time cost estimate

Estimated one-time costs are illustrated in the tables below.

One-time costs per zone with 12 spaces	
Signs and markings	\$3,000
Pay-by-Plate machines	\$7,000
Total	\$10,000

Capital costs of 25 zones	
Signs and markings	\$75,000
Pay-by-Plate machines	\$175,000
Total	\$250,000

Annual maintenance cost estimate

Estimated annual maintenance costs are illustrated in the tables below.

Annual costs per zone with 12 spaces	
Pay-by-Plate machines	\$720
Signs and markings	\$480
Total	\$1,200

Annual costs of 25 zones	
Signs and markings	\$18,000
Pay-by-Plate machines	\$12,000
Total	\$30,000

Overnight Permit Parking - Revenue Estimate

Number of motorcycles purchasing permits

For the term from June to November 2006, when motorcycles were required to pay for parking permits, the City only issued permits to about 30 motorcycles – 0.1% of registered motorcycles. All of these permits were Priority 1 permits. For the term from June to November 2013, when parking permits were free for motorcycles, 478 permits were issued to motorcycles – 2.2% of registered motorcycles. We assume that if motorcycles were required to pay the full fees for on-street parking permits, only 0.2% would purchase permits, as in 2006. This would mean issuing permits to 44 motorcycles.

Scenario	Motorcycles registered	Permits issued	% with permits
2006 – pay for permit	14605	30	0.21%
2013 – free permits	21380	478	2.24%
2013 – pay for permit	21380	44	0.21%

Number of vehicles purchasing permits vacated by motorcycles

If only 44 of 478 motorcycles holding free permits chose to pay for permits, the other 434 permits would become available for purchase by owners of other types of vehicles. However, there is a limited demand for parking permits in Toronto; less than 3% of permit parking spaces are in areas that are at capacity. If 3% of available permits were purchased for other types of vehicles, at an average cost of \$191.34, this would generate additional revenue of \$2,679.

Permits available to other vehicles	% of parking spaces in areas at capacity	Permits purchased by other vehicles
434	Less than 3%	13

Total additional revenue

If 44 motorcycles purchase Priority 1 permits at a cost of \$168.48, and 13 other vehicles purchase permits at the average permit cost of \$191.34, this would generate additional revenue of \$9,900.54.

Type of vehicle	Number of permits purchased	Average cost of permit	Annual revenue
Motorcycle	44	\$168.48	\$7,413.12
Other vehicles	13	\$191.34 ¹	\$2,487.42
Total	57	-	\$9,900.54