

Revised Free-Floating Car-Share Pilot and Interim Policy

Date: March 26, 2018

To: Public Works and Infrastructure Committee

From: General Manager, Transportation Services

Wards: All

SUMMARY

Car-sharing is a growing new-mobility industry which is evolving as a result of the growth in the sharing economy enabled by mobile technology. Car-share programs have become increasingly popular in many jurisdictions around the world and there is a growing use of this service in our city with over 200,000 Toronto residents being members of a car-share company.

In response to a request from Public Works and Infrastructure Committee (PWIC), Transportation Services developed a proposed free-floating car-share pilot project and interim policy that would enable free-floating car-sharing vehicles to park in residential permit-parking areas of the city.

This report responds to a request from City Council on January 31, 2018 for further consideration of the proposed free-floating car-sharing pilot project and interim policy. A revised pilot project and interim policy is proposed which continues to exclude wait-listed residential permit-parking locations and would address concerns raised during the January 31, 2018 Council consideration of this item. Key changes to the proposed pilot and interim policy are as follows:

- parking with a valid free-floating car-share permit would be allowed without the three-hour time limit *only* in residential permit-parking locations;
- the pilot is proposed to operate for a period of *eighteen-months* beginning on June 1, 2018 with a report back to PWIC following the completion and monitoring of twelve months of the pilot;
- the wait-listed permit-parking locations to be excluded would be established at the beginning of the pilot and would be updated *semi-annually* during the pilot period;
- if the pilot is approved, Transportation Services would develop *compliance standards* for the pilot pertaining to permit issuance and termination, prior to issuance of Free-Floating Car-share permits; and
- anonymized data collected from participating car-share companies would be made available on the City's open data catalogue, where possible.

The City of Toronto Official Plan and various policies and programs have long supported the operation of car-sharing services as a sustainable transportation option. Car-sharing programs offer benefits to individuals, businesses, the environment, communities, and transportation network, including:

- Reduced vehicle ownership rates;
- Reduced household transportation costs;
- Reduced vehicle kilometres travelled (VKT);
- Reduced greenhouse gases and emissions; and
- An increase in walking, cycling, and transit use.

Transportation Services currently administers a program for designating on-street spaces specifically for vehicles displaying a car-share vehicle permit. Car-share operators have also been encouraged to work with the Toronto Parking Authority and private parking lot operators to provide an off-street inventory of spaces.

In recent years, as a result of innovation and growth in the sharing economy, a new operational model for car-share vehicles has emerged in the form of free-floating services, which has prompted a review of the City's existing car-sharing policies and programs. These policies must be carefully balanced against impacts to the existing on-street residential permit-parking system.

This report recommends the introduction of an interim free-floating car-share policy and provides details on a proposed pilot, including rules and conditions, and a pilot permitting system utilizing the existing Car-share Vehicle Parking Area Tier 2 permit fee.

RECOMMENDATIONS

The General Manager, Transportation Services recommends that:

1. City Council adopt the Interim Free-Floating Car-Share Policy, attached as Attachment 1 to the report (March 26, 2018) from the General Manager, Transportation Services.
2. City Council authorize the General Manager, Transportation Services to conduct an eighteen-month free-floating car-share pilot project, from June 1, 2018 to November 30, 2019, whereby the General Manager, Transportation Services, may issue permits to car-share companies in accordance with the process generally set out in Attachment 2 of this report with such permits permitting car-share vehicles to:
 - a) park in locations designated for permit-parking unless identified as wait-listed; and
 - b) be exempt from the three-hour temporal parking duration limits within locations designated for permit-parking unless identified as wait-listed while displaying a permit issued by the General Manager for the pilot program and complying with all other terms and conditions as set out in Attachment 2.
3. City Council amend City of Toronto Municipal Code Chapter 441, Fees and Charges, to allow car-share companies to utilize the Car-share Vehicle Parking Area Tier 2 annualized permit fee (\$1,499.02 annually plus HST in 2017) for free-floating car-share

vehicles in accordance with the interim policy outlined within Attachment 1 and 2 of this report.

4. City Council direct the General Manager, Transportation Services, to limit the number of free-floating car-share parking permits to 500 per car-share company and to a maximum of 2,000 permits in total for the pilot project.

5. City Council direct the General Manager, Transportation Services, to report back to Public Works and Infrastructure Committee in the third quarter of 2019 following the completion and monitoring of twelve months of the pilot, regarding the outcome and impacts of the pilot project, and recommendations to improve car-share policies and regulations in the City as they relate to various car-share operating models.

6. City Council amend the 2018 Operating Budget for Transportation Services to reflect the recommendations in this report, increasing the 2018 total revenues by an estimated \$0.583 million and \$(0.583) million net.

FINANCIAL IMPACT

The estimated revenues associated with the free-floating car-share pilot are not included as part of the 2018 Operating Budget for Transportation Services. While actual revenues will be a function of the number of applications, Transportation Services is estimating an annual revenue of approximately \$1.0 million. Administrative costs arising from the issuance of permits, and monitoring of the pilot program will be absorbed within Transportation Services' operating budget.

Accordingly, should Council approve the free-floating car-share pilot (June 1, 2018 to May 31, 2019), the 2018 Operating Budget for Transportation Services will be amended to reflect the recommendations in this report. The 2018 total revenues would be increased by an estimated \$0.583 million and \$(0.583) million net. In 2019, the annualized revenue increase for these fees is expected to be \$0.417 million and \$(0.417) million net.

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

DECISION HISTORY

Toronto and East York Community Council, at its meeting of September 15th, 2009, established a pilot program for designating on-street spaces specifically for vehicles displaying a car-share vehicle permit.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2009.TE27.84>

City Council, at its meeting of April 10 and 11, 2012, adopted an expansion of the pilot program to allow car-share parking within the city. This expansion established specified installation criteria, established a tiered parking permit structure, and introduced new fees.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2012.PW13.4>

Public Works and Infrastructure Committee, at its meeting of June 18, 2014, considered a communication, "Pilot Project Investigating On-street Parking for Car-share Vehicles" (Item PW32.25).

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2014.PW32.25>

Public Works and Infrastructure Committee, at its meeting of November 12, 2015, received a report, "Car-Share Parking in Permit Parking Areas" (Item PW9.10). Transportation Services is responding to a request from the Public Works and Infrastructure Committee regarding the feasibility of creating a pilot project to allow car-share vehicles to park in certain residential on-street permit-parking areas throughout the city where on-street parking exists.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.PW9.10>

Public Works and Infrastructure Committee, at its meeting of February 28, 2017, considered a letter from the Chair of the Public Works and Infrastructure Committee, "Car-sharing On-Street Policy and Pilot Project" (Item PW19.5), requesting a report reviewing parking permit allocations, current car-share data, feasibility of a pilot project, impacts to residents and a comprehensive Free-Floating Car-Share Vehicle Policy.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.PW19.5>

City Council at its meeting of October 2, 3 and 4, 2017, received a report, "Free-Floating Car-Share Pilot and Interim Policy" (Item PW23.8) and referred the item to the General Manager, Transportation Services for further consideration and to report back to the January 31, February 1 and 2, 2018 City Council meeting.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2017.PW23.8>

City Council at its meeting of January 31 and February 1, 2018, received a report, "Revised Free-Floating Car-Share Pilot and Interim Policy" (Item CC36.14) and referred the item to the General Manager, Transportation Services for further consideration and to report back to the April 11, 2018 Public Works and Infrastructure Committee meeting. January 31, February 1 and 2, 2018 City Council meeting.

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2018.CC36.14>

COMMENTS

Benefits of Car-Sharing

Car-sharing is a sustainable transportation option that allows people to have access to cars when they need one without the associated cost and responsibilities of personal vehicle ownership. 33% of households within Toronto and East York do not own a vehicle (2011).

The City's Official Plan Policy 2.4 (9) (e) supports the allocation of on-street parking designated for car-share stating:

"9. In support of the Transportation Demand Management (TDM) and environmental policies of this Plan, the City may:

e) provide on-street, reserved parking spaces for car-sharing vehicles in selected locations."

Car-sharing programs offer a number of benefits to individuals / businesses, the environment / community and transportation network including:

- **Reduced vehicle ownership rates** - A major benefit of car-sharing is the reduced need for private vehicle ownership. By obtaining convenient access to a vehicle for occasional trips, a household might be able to forego ownership of a car or a second car. Independent studies have found that one car-share vehicle replaces approximately 11 privately-owned vehicles, with some members giving up a vehicle and others foregoing the purchase of one after becoming car-share members [1].
- **Reduced household transportation costs** - Fixed costs associated with owning a vehicle are considered a major household expense, second only to housing. By comparison, the fixed costs associated with car-sharing are low. When someone owns a car, the initial investment and maintenance costs are considerable, promoting more frequent use of the vehicle to get perceived “value” out of the investment. The costs of car-sharing are directly proportional to the amount of time the vehicle is actually driven. Therefore, members have a strong financial incentive to drive less. Car-share members report they spend less time driving and use public transit, cycle, or walk more frequently, reducing their transportation costs.
- **Reduced vehicle kilometres travelled (VKT)** - Generally, members of car-share companies travel fewer kilometres by car, which helps to reduce congestion and parking demand [1],[2],[3]. One estimate concluded that each shared vehicle leads to approximately 29,000 fewer VKT every year [4].
- **Reduced greenhouse gases and emissions** - Reduced VKT directly translates to reduced greenhouse gas emissions and other air pollutants.
- **An increase in walking, cycling, and transit use** - Members of a car-share company tend to walk, cycle, or take transit for more trips than non-members.

Car-Sharing Operating Models

In recent years, operational models for car-share vehicles have evolved from fixed location services to also include free-floating services. The car-share industry has indicated that these operating models are complimentary, depending on the needs of the car-share member for their particular trip(s). In the past few years, there have been three (3) car-share companies operating in Toronto (i.e., Enterprise CarShare, Car2Go,

1 Martin, Elliot, and Susan Shaheen. 2011. The Impact of Carsharing on Public Transit and Non-Motorized Travel: An Exploration of North American Carsharing Survey Data. *Energies* 2011, 4: 2094-2114.

2 Cervero, Robert and Yushin Tasi. 2004. City CarShare in San Francisco, California: Second-Year Travel Demand and Car Ownership Impacts. *Transportation Research Record* No. 1887: 117-127.

3 Cervero, Robert, Aaron Golub, and Brendan Nee. 2006. San Francisco City CarShare: Longer-Term Travel-Demand and Car Ownership Impacts. Working Paper.

4 Osgood, Andrea. 2007. *Curb Dreams: Allocating On-Street Parking for Carsharing*. Unpublished Master's thesis. University of California, Los Angeles.

and Zipcar). Other companies have more recently entered the market (i.e. Maven). These companies operate under one of the two following models:

- Round-trip car-sharing: a car-sharing service that allows its members to undertake trips beginning and ending at the same location.
- Free-floating car-sharing: a car-sharing service that allows its members to undertake one-way trips, beginning in one location and terminating in another.

The City's current car-share regulations address the round-trip car-sharing model through the Council approved Car-Share Vehicle Parking Areas (CVPAs) program. In addition, under the current regulations a "supplementary car-share parking permit" can be issued that allows parking within a specific company CVPA's, where a member can pick-up a vehicle at one CVPA and return it to a different CVPA.

Free-floating car-share services have been introduced in a number of North American cities. Variations in the rules, conditions, and permit fees have been established to address and mitigate local concerns including limiting the number of permits issued, managing vehicle clustering, and appropriate permit fee rates. The table in Attachment 3 summarizes some of the current free-floating car-share practices in other jurisdictions.

Currently, only Car2Go operates a free-floating model in Toronto. Prior to April 2016, Car2Go operated within Toronto Parking Authority (TPA) and private parking lots, where members could start and end their trips at different parking lots.

As of April 2016, in addition to operating out of parking lots, Car2Go has allowed their members to park their car-share vehicles on city streets which has raised concerns regarding the impact on residential on-street parking. The City currently has no legal framework where this type of on-street free-floating car-share can be accommodated in a manner different to any other vehicle parked on City streets. Currently, on-street free-floating car-share vehicles are subject to all City parking by-laws and restrictions in a manner identical to any other vehicle parked on a City street.

Concerns have been raised that car-share vehicles are found to be parked illegally in residential permit-parking areas, and at times the 'clustering' of vehicles is observed, which is when multiple car-share vehicles occupy the same street block. This has resulted in complaints from residential on-street permit-parking holders who feel that their parking availability is being reduced and that they are being forced to park further from their residences than they would prefer.

In order for the City to accommodate the free-floating operating model in a more controlled manner and mitigate these concerns, a set of rules and regulations for car-sharing companies to follow would need to be established.

Toronto's Current Car-Share Vehicle Parking Program

The Car-Share Vehicle Parking Areas (CVPAs) program allocates dedicated on-street car-sharing areas that serve the round-trip car-sharing model, where a trip begins and ends at the same location (or where a trip begins in one CVPA and ends at a different

CVPA, belonging to the same car-share company). Currently, there are a total of 40 CVPAs, which include approximately 80 on-street parking spaces designated for exclusive use by car-share vehicles. The program currently generates a yearly revenue of approximately \$100,000, and allows for a maximum allocation of 40 additional spaces per year. Council approved criteria are used to designate spaces under the program and are included in Attachment 5.

Car-Share at Toronto Parking Authority Locations

The Toronto Parking Authority (TPA) works with car-share companies operating in Toronto to provide dedicated parking areas for car-share vehicles where there is parking space capacity at various Green P off-street facilities. These tend to be located in the Downtown and at major commercial centres throughout the City.

Car-share services generally pay the standard posted rates to park their vehicles. In a typical month, the TPA has over 400 different car-share vehicles park in their lots with over 6000 transactions, generating over \$60,000 in parking revenue per month.

Parking Infractions and Associated Fines Incurred by Car-Share Companies

Information regarding parking infractions and associated fines or penalties that car-sharing companies have incurred in the City of Toronto is included in Attachment 6. When reported to Council on January 31, 2018 as part of item CC36.14, infractions incurred by traditional rental car operations by Enterprise Rent-a-Car were also included, rather than only the sub-set of infractions incurred by Enterprise Car-Share, since both vehicle types are registered under the same company. Enterprise Car-Share indicated that the vast majority of these infractions are associated with Rent-a-Car operations, rather than those assigned to Enterprise Car-Share which represent a comparatively small number of vehicles.

Interim Free-Floating Car-Share Pilot Project and Interim Policy

Car-share programs have become increasingly popular in many jurisdictions around the world and there is a growing use of this service in the City of Toronto. The free-floating car-share model has expanded in Toronto over the last six years with over 75,000 Toronto residents registered as members of this service.

Transportation Services has been contacted by other companies in the technology and new mobility industries who would be interested in operating under a similar free-floating model in Toronto. In addition to expanding mobility options for Toronto residents, this could represent investment in the Toronto economy and creation of jobs.

Recognizing this growing trend, having a City policy for free-floating car-share operations would ensure that this type of service is better regulated and managed in the city.

This report proposes that the City undertake a pilot program for a free-floating car-share operating model for a period of eighteen months based on the rules of operations

outlined in the Interim Free-Floating Car-Share Policy (Attachment 1) and according to the regulations detailed in Attachment 2, appended to this report.

The proposed Interim Free-Floating Car-Share Policy would set a framework by which free-floating car-share companies can operate in the City of Toronto within locations designated for permit-parking under Chapter 925, Permit Parking. Parking of car-share vehicles with a valid free-floating car-share parking permit would be allowed:

- without the three-hour parking time limit in residential permit-parking locations;
- and during the hours where only residential permit-parking permit holders were previously authorized to park.

The exception to the above would be wait-listed residential permit-parking locations, which would be excluded from the pilot and interim policy. Participating car-share companies would be required to exclude wait-listed areas from their service area for free-floating car-sharing services (i.e. through geo-fencing in their mobile app systems, so that their members would be unable to start or end a trips within these zones).

The wait-listed permit-parking locations to be excluded would be established at the beginning of the pilot, based on the locations that were wait-listed at the end of the previous semi-annual permit-parking term. The excluded locations would be updated semi-annually during the pilot period.

It is proposed that the eighteen-month pilot could start June 1st, 2018 and end November 30, 2019.

The pilot program would permit all car-share companies offering short-term vehicle rentals in the City of Toronto to apply for a free-floating car-share parking permit for the pilot program period. City staff have reached out to the car-share companies who currently operate in Toronto, as well as some who operate in other jurisdictions to gather information on the types of car-sharing models these companies currently operate and to gauge if there is an interest in participating in a free-floating car-share pilot. There was interest from some of these companies in participating in the pilot.

For the purpose of the pilot, the City would limit the number of free-floating car-share permits to a maximum of 2,000. The total number of free-floating car-share parking permits that would be issued in the pilot program would not exceed 500 per car-share company. Free-floating car share parking permits would only be valid for the particular car-share vehicle identified on the permit, and would not be transferable.

Car-share companies wishing to participate would need to submit an application to the City by May 1, 2018 through the Permit Parking office. Consideration of applications submitted after the start of the pilot would be subject to the number of free-floating car-share permits left, if any. Following evaluation of the pilot, if successful, the number of permits could be expanded or reduced.

Proposed Car-Share Vehicle Parking Permit Fee

The annualized parking permit fee for free-floating car-share vehicles is proposed to be based on the current annual CVPA fee for Tier 2 (permit parking area under Chapter 925, Permit Parking) which was set at \$1,499.02 plus HST in 2017.

Subject to Council approval and implementation of the pilot, it is proposed that this fee be reviewed, along with a review of the overall three-tiered CVPA fee structure, as part of a report back after twelve months of pilot project operation.

Data Requirements from Car-Share Companies and Open Data

As part of the proposed pilot, participating car-share companies would be required to provide quarterly information to the City regarding:

- fleet usage
- membership
- trip origins and destinations, etc.

In order to better understand how the free-floating car-sharing model works, the City would also require the participating car-share companies to conduct a member survey about travel behaviour, vehicle ownership, and car-sharing use within 30 days of permit issuance and within 30 days of the end of the pilot (i.e., November 30, 2019).

As the pilot progresses, anonymized data collected from participating car-share companies would be made available on the City's open data catalogue, where possible.

This information would be used by City staff to evaluate the free-floating car-share permit-parking pilot and identify further improvements and actions to be taken to ensure the program runs smoothly.

Vehicle Re-Distribution

One of the concerns with a free-floating car-share model is the incidences of clustering of car-share vehicles along city streets. This generally results in complaints from residents who feel inconvenienced due to reduced available parking on their streets.

For the purpose of this program, clustering will be defined as more than one (1) car-share vehicle from the same company, within a street block, for any length of time.

To mitigate this problem, car-share companies will be required to be pro-active in monitoring the location of and re-locating their vehicles to avoid incidences of clustering.

In addition, in order to be responsive to complaints of clustering of vehicles in a particular area, the car-share company will be required to re-distribute its vehicle(s) within two (2) hours of receipt of notification of clustering observed by the City or a resident.

Enforcement of Parking Regulations and the Terms of the Pilot

Car-share vehicles are subject to all applicable parking rules and regulations under the Municipal Code Chapter 950 (Traffic and Parking).

If the pilot is approved, Transportation Services will develop compliance standards for the pilot, prior to issuance of Free-Floating Car-share permits, in order to establish criteria for Transportation Services to terminate some or all of the permits issued to a particular company as a result of non-compliance with the terms of the pilot as set out in the Municipal Code Chapter 950 Section 510C(3).

Following implementation, Transportation Services would monitor the effectiveness of program compliance based on the number and nature of the complaints received (i.e., from Councillors and residents) as well as fleet usage and trip data provided in quarterly reports from participating car-share companies.

In the case of non-compliance by a participating car-share company with the rules of operation and the relevant requirements under Municipal Code, 950 (Traffic and Parking) the General Manager, Transportation Services would in the first instance discuss any breaches with the company and issue a written warning. If participating companies are not able to responsibly handle the size of their fleet and meet the terms of the pilot to the satisfaction of Transportation Services, the General Manager may terminate some or all the free-floating car-share parking permits issued to that car-share company.

Reducing Impacts to Residential Permit Parking Holders

One of the main considerations raised regarding free-floating car-sharing in Toronto is a concern that these vehicles can reduce the availability of parking spaces in designated residential permit-parking areas.

There are currently over 72,000 residential permit-parking spaces across the City, with the majority in Toronto and East York. The table in Attachment 4 provides a general overview of the number of available permits under Chapter 925, Permit Parking, in each of the wards where permit-parking is available.

There are a total of 99 residential permit-parking areas and 412 streets with street-specific permit-parking. Additional information regarding residential permit-parking that is currently close to the threshold for being wait-listed for permits is included below and the maps in attachment 7,8 and 9:

Wait-listed (refers to 110% capacity for areas and 100% capacity for street-specific)

- 19 permit-parking areas
 - 35 street-specific permit-parking
- Total of 7,700 parking spots

95% capacity or higher (includes wait-listed)

- 27 permit-parking areas
 - 45 street-specific permit-parking
- Total of 9,900 parking spots

90% capacity or higher (includes wait-listed and 95% or higher)

- 38 permit-parking areas
 - 64 street-specific permit-parking
- Total of 17,000 parking spots

In order to ensure that residential permit-parking holders are not adversely impacted, it is recommended that wait-listed locations be excluded from the free-floating car-share pilot and interim policy.

With this change to the pilot terms and conditions, participating car-share companies would be required to exclude wait-listed areas from their service area for free-floating car-sharing services.

As an example, the existing company operating this service in Toronto, Car2Go, has indicated that the geo-fencing in their system, the Car2Go mobile app, would be modified so that their members would be unable to start or end a trip within the Car2Go mobile app (i.e., park a Car2Go vehicle) at a wait-listed location.

Car2Go has advised that excluding wait-listed locations would likely impact about 20% of existing trips by residents using their service, as thousands of their members currently live on streets in wait-listed locations.

Excluding additional permit-parking areas that are close to the threshold for being wait-listed locations (particularly at the 90% capacity level) would substantially reduce the size of the service area for the pilot and is not recommended.

City staff had several discussions with various car-share companies to ascertain how they would ensure compliance with all the rules and conditions of the pilot and more specifically addressing clustering and minimizing the impact of car-sharing in residential areas in close proximity to special events.

Car-share companies have advised that they will address these issues through a mix of technology and operational support, member policy and communication, and data intelligence, as a fundamental function of their business operations. Measures that will be used include the following:

Technology

- Continuous real-time monitoring of each car (through GPS technology) to ensure compliance with parking restrictions and clustering conditions.
- Detailed and dynamic operating zone design to avoid excluded locations.

Operational

- Rebalancing staff team available to move cars parked in improper locations and parked for too long.
- Arranging for off-street parking in key areas to mitigate residents' concerns about clustering in certain areas and in areas with special events.

Communication and Policy

- Real-time messaging to customers in order to dynamically adapt behaviour.
- In-app advertising about discounted pricing in order to increase vehicle rotation in specific areas and at certain hours of the day.
- Transfer of fines and penalties to members for incurring parking regulation infractions.

Evaluation of the Pilot and Interim Policy

City staff will monitor the operations of the pilot and work directly with participating car-share companies to minimize impacts of free-floating car-sharing.

In addition, Transportation Services would work with City Planning, the TPA, and the car-share industry to identify additional solutions that could further improve car-sharing policies and regulations in the City as they relate to various car-share operating models. This review would include consideration of improvements to the CPVA program, policies as they relate to car-share parking spaces on private property identified as part of the development approval process, as well as changes to car-share parking in parking lots operated by the TPA.

Upon completion of the twelve months of pilot operation, Transportation Services will report back on the pilot findings and a recommended way forward, including, if applicable, any recommended changes.

CONTACT

Jacquelyn Hayward Gulati
Acting Director, Transportation Infrastructure Management
Transportation Services
Telephone: 416-392-5348
Email: Jacquelyn.HaywardGulati@toronto.ca

SIGNATURE

Barbara Gray
General Manager, Transportation Services

ATTACHMENTS

Attachment 1 - Interim Free-Floating Car-Share Policy
Attachment 2 - Municipal Code Amendments
Attachment 3 - Free-Floating Car-Sharing in Other Jurisdictions
Attachment 4 - Permit Parking Availability and Allocation by Ward
Attachment 5 - Criteria for Car-Share Vehicle Parking Areas
Attachment 6 - Parking Infractions and Associated Fines Incurred by Car-Share Companies
Attachment 7 - Wait-listed Residential Permit Parking Map
Attachment 8 - 95%+ Capacity Residential Permit Parking Map
Attachment 9 - 90%+ Capacity Residential Permit Parking Map

Attachment 1 – Interim Free-Floating Car-Share Policy

Introduction

Car-sharing is a sustainable transportation option that allows people to have access to cars when they need one without the associated cost and responsibilities of personal vehicle ownership. Car-sharing is a transportation demand management (TDM) tool that can help reduce overall car dependence.

The City's Official Plan Policy 2.4 (9) (e) supports the allocation of on-street parking designated for car-share stating:

*"9. In support of the TDM and environmental policies of this Plan, the City may:
e) provide on-street, reserved parking spaces for car-sharing vehicles in selected locations."*

This OP policy is currently being addressed through the City's 'Car-share Vehicle Parking Areas' (CVPA) program, but is limited to the pick-up and drop-off of a car-share vehicle at a dedicated on-street spot for members to undertake trips beginning and ending at the same location.

The proposed Interim Free-Floating Car-Share Policy would set a framework by which free-floating car-share companies can operate in the City of Toronto within locations designated for permit-parking under Chapter 925, Permit Parking. The free-floating model allows its members to undertake one-way trips, beginning in one location and terminating in another.

Benefits of Car-sharing

Car-sharing programs offer a number of benefits to individuals / businesses, the environment / community and transportation network including:

- **Reduced vehicle ownership rates** - A major benefit of car-sharing is the reduced need for private vehicle ownership. By obtaining convenient access to a vehicle for occasional trips, a household might be able to forego ownership of a car or a second car. Independent studies have found that one car-share vehicle replaces approximately 11 privately-owned vehicles, with some members giving up a vehicle and others foregoing the purchase of one after becoming car-share members [1].
- **Reduced household transportation costs** - Fixed costs associated with owning a vehicle are considered a major household expense, second only to housing. By comparison, the fixed costs associated with car-sharing are low. When someone owns a car, the initial investment and maintenance costs are considerable, promoting more frequent use of the vehicle to get perceived "value" out of the investment. The costs of car-sharing are directly proportional to the amount of time the vehicle is actually driven. Therefore, members have a strong financial incentive to drive less. Car-share members report they spend less time driving and use public transit, cycle, or walk more frequently, reducing their transportation costs.

- **Reduced vehicle kilometres travelled (VKT)** - Generally, members of car-share companies travel fewer kilometres by car, which helps to reduce congestion and parking demand [5],[6],[7]. One estimate concluded that each shared vehicle leads to approximately 29,000 fewer VKT every year [8].
- **Reduced greenhouse gases and emissions** - Reduced VKT directly translates to reduced greenhouse gas emissions and other air pollutants. Through TransformTO: Climate Action for a Healthy, Equitable and Prosperous Toronto - Report 2 - The Pathway to a Low Carbon Future, City Council has made a commitment to continue reducing its greenhouse gas emissions footprint to reach its 2050 targets and responding to climate change by investing in various low carbon transportation plans. Car-sharing programs allow people to have access to cars when they need one, without needing to own their own car, contributing to the reduction of GHGs.
- **An increase in walking, cycling, and transit use** - Members of a car-share company tend to walk, cycle, or take transit for more trips than non-members.

Rules of Operation

- Parking of car-share vehicles with a valid free-floating car-share parking permit are allowed:
 - without the three-hour parking time limit in residential permit-parking locations; and
 - during the hours where only residential permit-parking permit holders were previously authorized to park.

The exception to the above are wait-listed residential permit-parking locations, which would be excluded from the pilot and interim policy.

- The wait-listed permit-parking locations to be excluded would be established at the beginning of the pilot, based on the locations that were wait-listed at the end of the previous semi-annual permit-parking term. The excluded locations would be updated semi-annually during the pilot period.
- Clustering of car-share vehicles, which is defined as more than one (1) car-share vehicle from the same company parked within the same street block, is not permitted. A car-share company will be required to pro-active in monitoring their vehicles' location and re-locate them when clustering occurs.

5 Martin, Elliot, and Susan Shaheen. 2011. The Impact of Carsharing on Public Transit and Non-Motorized Travel: An Exploration of North American Carsharing Survey Data. *Energies* 2011, 4: 2094-2114.

6 Cervero, Robert and Yushin Tasi. 2004. City CarShare in San Francisco, California: Second-Year Travel Demand and Car Ownership Impacts. *Transportation Research Record* No. 1887: 117-127.

7 Cervero, Robert, Aaron Golub, and Brendan Nee. 2006. San Francisco City CarShare: Longer-Term Travel-Demand and Car Ownership Impacts. Working Paper.

8 Osgood, Andrea. 2007. *Curb Dreams: Allocating On-Street Parking for Carsharing*. Unpublished Master's thesis. University of California, Los Angeles.

- In addition, in order to be responsive to complaints of clustering of vehicles in a particular area, the car-share company will be required to re-distribute its vehicle(s) within two (2) hours of receipt of notification of clustering observed by the City or a resident.

Data Requirements and Open Data

Participating car-share companies are required to provide quarterly information to the City regarding:

- fleet usage
- membership
- trip origins and destinations, etc.

In order to better understand how the free-floating car-sharing model works, the City would also require the participating car-share companies to conduct a member survey about travel behaviour, vehicle ownership, and car-sharing use within 30 days of permit issuance and within 30 days of the end of the pilot (i.e., November 30, 2019).

Anonymized data collected from participating car-share companies would be made available on the City's open data catalogue, where possible.

Permitting

The City of Toronto's residential permit-parking program under Chapter 925, Permit Parking, is unique in that there is an inventory of the number of parking spaces available in each of the permit-parking areas of the City.

Car-share vehicles will be allowed to park in locations designated for permit-parking under Chapter 925, Permit Parking, both without the three-hour parking time limit and during the hours where only residential permit-parking holders were previously authorized to park, with the exception of wait-listed locations, provided that the car-share vehicles have a valid free-floating parking permit.

The free-floating car-share permit in residential permit-parking areas under Chapter 925, Permit Parking will work as follows:

- A car-share company may submit an application to the Transportation Services Division for a free-floating car-share parking permit for their car-share vehicle.
- A free-floating car-share parking permit, when issued, is only valid for the particular car-share vehicle identified on the permit (i.e., company name and license plate number) and is not transferable.
- A free-floating car-share parking permit (other than a free-floating car-share parking permit for a pilot project) is proposed to be valid for a period of eighteen-months from the date of issuance and renewed annually thereafter, unless terminated earlier or declined for renewal by the General Manager, Transportation Services.

- The total number of free-floating car-share parking permits shall not exceed the number of permits established under the Municipal Code Chapter 950 (Traffic and Parking).
- The General Manager, Transportation Services may terminate any free-floating car-share parking permit at any time.

Fees

Fees are proposed to be applied to the following:

- Each Free-Floating Car-share Parking Permit upon issuance (annualized based on current annual CVPA fee for Tier 2 permit parking area under Chapter 925, Permit Parking)
- Each Re-issuance or Replacement of Permit

Fees will be set out in the Municipal Code Chapter 441, Fees and Charges. All fees are subject to applicable taxes and annual inflationary increase.

Enforcement of Parking Regulations and Non-Compliance

Car-share vehicles are subject to all applicable parking rules and regulations under the Municipal Code Chapter 950 (Traffic and Parking), enforced by Toronto Police Service, Parking Enforcement Unit.

In the case of non-compliance by a participating car-share company with the rules of operation and the relevant requirements under Municipal Code, 950 (Traffic and Parking) the General Manager, Transportation Services would in the first instance discuss any breaches with the company and issue a written warning. If participating companies are not able to responsibly handle the size of their fleet and meet the terms of the pilot to the satisfaction of Transportation Services, the General Manager may terminate some or all the free-floating car-share parking permits issued to that car-share company as a result of non-compliance with the terms of the pilot as set out in the Municipal Code Chapter 950 Section 510C(3).

Attachment 2 - Municipal Code Amendments

AMENDMENTS TO MUNICIPAL CODE CHAPTER 925

Addition to § 925-1: Definitions

FREE-FLOATING CAR-SHARE PARKING PERMIT - A permit issued by the General Manager pursuant to Toronto Municipal Code Chapter 950, Traffic and Parking, authorizing parking of a particular car-share vehicle in locations designated for permit parking under this chapter.

Addition to § 925-5: Parking Permits – A new subsection N (1)(a) Conditions of Permit

N (1) (a) Despite § 925-5N(1), a person may park a vehicle with a valid free-floating car-share parking permit for that vehicle properly displayed in a location designated for permit parking during the time period set out adjacent to the name of the road in Schedule A to this chapter provided that such parking is in accordance with the terms and conditions of the free-floating car-share parking permit and the permit parking area or street is not wait-listed.

AMENDMENTS TO MUNICIPAL CODE CHAPTER 950

Addition to § 950-101: Definitions

FREE-FLOATING CAR-SHARE PARKING PERMIT - A permit issued by the General Manager authorizing parking of a particular car-share vehicle in locations designated for permit parking under Chapter 925, Permit Parking, in accordance with this chapter.

Addition to § 950-400: General stopping and parking regulations - A new subsection D (5)(b) For a period longer than three hours;

(b) Subsection D (5) does not apply to a car-share vehicle with a valid free-floating car-share parking permit parked in a location designated for permit parking under Chapter 925, Permit Parking.

Addition to § 950-510: Issuance of permits – new subsection 'C'

C. Free-floating car-share parking permits.

(1) Applications.

- (a) A car-share company may submit an application to the General Manager for one or more free-floating car-share parking permits in accordance with this section.
- (b) No more than 500 car-share vehicles per application is permitted.
- (c) Applications for free-floating car-share parking permits by a car-

share company for car-share vehicles shall contain the following:

- (i) Name, address and telephone number of the car-share company; and
 - (ii) A list of the valid license plate numbers and up to date Ontario validation sticker information for each car-share vehicle which is the subject of the application.
- (d) Applications for free-floating car-share parking permits shall only be accepted where all of the car-share vehicles that are the subject of the application are passenger motor vehicles which each have a registered gross weight of no more than 3,000 kilograms.
- (e) A complete application for a free-floating car-share parking permit must be received by the General Manager on or before May 1, 2018, and the General Manager shall not accept any application or part of an application after June 1, 2018. Applications submitted after May 1, 2018 would be subject to the number of free-floating car-share permits remaining in the pilot, if any.

(2) Issuance and term of free-floating car-share parking permit.

- (a) All free-floating car-share parking permits issued in accordance with this section shall be valid from the later of their date of issuance and June 1, 2018 until and including November 30, 2019.
- (b) A free-floating car-share parking permit may be issued only to a car-share company and only for one car-share vehicle where the requirements of § 950-510C(1) are complied with. Where an application under § 950-510C(1) was submitted for more than one car-share vehicle, each car-share vehicle that was the subject of the application may be issued a free-floating car-share parking permit where the requirements of § 950-510C(1) are complied with.
- (c) A free-floating car-share parking permit, when issued, is only valid for the particular car-share vehicle identified on the free-floating car-share parking permit.
- (d) A free-floating car-share parking permit is non-transferrable.
- (e) The number of free-floating car-share parking permits issued by the General Manager under this chapter for the term described in § 950-510C(2)(b) shall not exceed 500 free-floating car-share parking permits per car-share company.

- (f) The total number of free-floating car-share parking permits issued by the General Manager under this chapter for the term described in § 950-510C(2)(b) shall not exceed 2,000.

(3) Termination.

- (a) Despite § 950-510C(2)(a), the General Manager may terminate any free-floating car-share parking permit at any time if the permit holder fails to comply or ensure compliance with any of the conditions under § 950-510C(6).
- (b) Despite § 950-510C(2)(a), the General Manager may terminate any free-floating car-share permit at any time.

(4) Fees

- (a) The car-share company, upon the approval of a free-floating car-share parking permit application, shall pay to the City of Toronto the Car Share Vehicle Parking Area - Tier 2 Permit fee (spaces replaced on a street residential permit parking) as set out in Chapter 441, Fees and Charges.
- (b) The Car Share Vehicle Parking Area - Tier 2 Permit fee is non-refundable unless the permit associated with the fee is terminated under § 950-510C(3)(b).
- (c) The fee for a re-issuance of a lost or damaged Car Share Vehicle Parking Area - Tier 2 Permit, or for a re-issuance for a change of vehicle and/or licence plate, shall be set out in Chapter 441, Fees and Charges.
- (d) The re-issuance of a Car Share Vehicle Parking Area - Tier 2 Permit under § 950-510C(4)(b) for a new license plate number shall only occur if the original Car Share Vehicle Parking Area - Tier 2 Permit is returned to the City.

(5) Refunds.

- (a) In the event that the General Manager terminates a free-floating car-share parking permit under § 950-510C(3)(b), the General Manager may issue a refund of a pro-rated portion of the free-floating car-share parking permit fee to the permit holder for any unused days remaining in the free-floating car-share parking permit term, with the number of unused days being calculated as the number of days from and including the date the free-floating car-share parking permit was terminated under § 950-510C(3)(b) to November 30, 2019.
- (b) The General Manager shall not refund the free-floating car-share parking permit fee for a free-floating car-share permit revoked or

cancelled under § 950-510C(3)(a).

(6) Conditions of permit.

- (a) Where a valid free-floating car-share parking permit for a car-share vehicle is properly displayed on that car-share vehicle in accordance with this § 950-510C(6), a person may park that car-share vehicle in a location designated for permit parking under Chapter 925, Permit Parking, being the highways, the side of the highways, locations within the highways and at the times set out in Schedule A of Chapter 925, Permit Parking and the permit parking area or street is not wait-listed.
- (b) Despite having a free-floating car-share parking permit, no person shall park a car-share vehicle for which a free-floating car-share parking permit has been issued continuously in any one place for a period exceeding two consecutive days. This subsection (b) shall not apply to a car-share vehicle with a valid car-share parking permit parked in a car-share vehicle parking space in a car-share vehicle parking area in accordance with this chapter.
- (c) Whenever a car-share vehicle for which a free-floating car-share parking permit has been issued is parked in accordance with the conditions in this § 950-510C(6), the car-share free-floating parking permit shall be clearly displayed in the lower inside of the windshield on the driver's side of the car-share vehicle.
- (d) A person with a valid free-floating car-share parking permit properly displayed on a car-share vehicle parked in accordance with the conditions in this § 950-510C(6) is subject to all applicable parking prohibitions, including temporary restrictions that may be imposed to facilitate snow removal operations.
- (e) Clustering
 - (i) For the purposes of this § 950-510C(6), "Clustering" will be defined as more than one car-share vehicle from the same car-share company being parked on the same City street block for any length of time.
 - (ii) No car-share vehicle shall be parked as to cause clustering on a City street block.
 - (iii) Where a car-share company becomes aware of its car-share vehicles clustering, the car-share company shall move its car-share vehicle(s) within two hours to location(s) which do not result in clustering and shall ensure its car-share vehicles are moved and parked in accordance with all applicable parking prohibitions.
 - (iv) Where a car-share company becomes aware of its vehicles clustering, the car-share company shall move its car-share vehicle(s) in accordance with subsection

(iii) or within two hours of receipt of notification from the City or a resident.

(f) Data requirements

- (i) Any car-share company to which a free-floating car-share parking permit has been issued shall provide the General Manager, within 30 days after issuance of their first free-floating car-share parking permit and every three months thereafter for the term of any free-floating car-share parking permit issued to the car-share company, the following information to the satisfaction of the General Manager:
 1. Geographical distributions of membership of the car-share company, including the number of members for the car-share company who reside/are located in each City ward and each permit parking area as defined in Chapter 925, Permit Parking.
 2. Total number of car-share members registered in Toronto for the car-share company.
 3. Number of car-share vehicles in the fleet for the car-share company in Toronto
 4. Fleet usage data for the car-share vehicles in the fleet for the car-share company in Toronto, including the percentage of time car-share vehicles were used by members or customers during the preceding three months.
 5. The date, time, and location of the start and end of all car-share vehicle trips for each car-share vehicle of the car-share company in Toronto for the preceding three months, as well as the Vehicle Kilometres Travelled (VKT) for each car-share vehicle trip for each car-share vehicle of the car-share company in Toronto for the preceding three months.
 6. Average number of unique users for each car-share vehicle of the car-share company in Toronto for each of the preceding three months (i.e., user frequency).
 7. Log of all complaints received by the car-share company regarding car-share vehicle parking locations in Toronto for the preceding three months, including:
 - a. The time and date each complaint was received by the car-share company
 - b. The time and date the car-share company dispatched staff to address the complaint.
 - c. The time and date the car-share vehicle of the car-share company was moved from the

location of the complaint

- d. The location of the parked car-share vehicle which is the cause of each complaint.
- (ii) Any car-share company to which a free-floating car-share parking permit has been issued shall conduct a member survey about travel behavior, vehicle ownership, and car-sharing use within 30 days after issuance of their first free-floating car-share permit and within 30 days after November 30, 2019. The survey questions shall be approved by the City prior to being released to the members of its car-share company, and the General Manager shall be provided with the results of the survey within 30 days of the survey being conducted by the car-share company.

Attachment 3 – Free-Floating Car-Sharing in Other Jurisdictions

City	Permitted Parking Areas	Fees	Comments
Calgary	<ul style="list-style-type: none"> • Residential Parking Permit (RPP) • Spaces with parking time limit of 2 hours or greater 	<ul style="list-style-type: none"> • \$450 annually for RPP • Designated spaces: <ul style="list-style-type: none"> • \$50 for application • Costs for changes to signage and markings • Cost for rental of street space if located in a commercial area or on block with RPP • \$1000 for rental cost for full-size vehicle (or the value of the lost parking revenue, whichever is greater) • \$500 for rental cost of small vehicle (or the value of the lost parking revenue, whichever is greater) 	<ul style="list-style-type: none"> • Posted time restrictions and pay parking rates still apply to car-share vehicles • Car-share operators required to move vehicles when numerous vehicles are repeatedly parked within the ParkPlus zone or residential block with posted RPP restrictions
Vancouver	<ul style="list-style-type: none"> • Residential Only • No Parking Except with Permit 	<ul style="list-style-type: none"> • \$64.76 annually for RPP and permit areas • Designated spaces: <ul style="list-style-type: none"> • \$1320: Downtown & Southeast False Creek non-metered space • \$660 Metro Core non-metered space • \$300 remained of city non-metered space • Metered spaces: the sum equal to the maximum potential annual revenue for parking space 	

City	Permitted Parking Areas	Fees	Comments
Seattle	<ul style="list-style-type: none"> • Restricted Parking Zones (RPZs) • Metered Parking 	<ul style="list-style-type: none"> • \$1,730 (USD) annually comprised of the following: <ul style="list-style-type: none"> • \$930 (USD) - adjusted annually based on actual meter use in paid parking areas • \$700 (USD) - RPZ fee • \$100 (USD) - administration fee 	<ul style="list-style-type: none"> • No more than 4 potential operators, each operator is eligible to receive up to 500 permits, or 750 if providing citywide service
Washington, DC	<ul style="list-style-type: none"> • Residential spaces • Metered spaces 	<ul style="list-style-type: none"> • \$2,890 (USD) annually for residential and metered space permit 	<ul style="list-style-type: none"> • Company must provide at least as many vehicles available to members in private parking locations as in public parking locations

Attachment 4 – Permit Parking Availability and Allocation by Ward

Ward Name	District	Inventoried Spaces	Residential Permits Issued	Residential Spaces Available	Permit vs Total Space (%)	Temporary Permits	
						Issued in 2016	Daily Average (year)
01 - Etobicoke North	EY	28	10	18	35.7%	3	0
02 - Etobicoke North	EY	83	4	79	4.8%	-	-
03 - Etobicoke Centre	EY	52	17	35	32.7%	17	0
05 - Etobicoke-Lakeshore	EY	597	195	402	32.7%	847	2
06 - Etobicoke-Lakeshore	EY	1,480	511	968	34.5%	2,082	6
11 - York South-Weston	EY	2,224	853	1,371	38.4%	2,689	7
12 - York South-Weston	EY	617	234	383	37.9%	664	2
13 - Parkdale-High Park	EY	6,015	4,168	1,847	69.3%	16,979	47
14 - Parkdale-High Park	TEY	5,529	4,509	1,020	81.6%	31,217	86
15 - Eglinton-Lawrence	NY	1,287	530	757	41.2%	2,101	6
16 - Eglinton-Lawrence	NY	3,142	1,384	1,758	44.1%	5,077	14
17 - Davenport	EY	5,869	3,336	2,533	56.8%	16,958	46
18 - Davenport	TEY	5,489	4,046	1,443	73.7%	28,474	78
19 - Trinity Spadina	TEY	6,064	4,870	1,194	80.3%	47,005	129
20 - Trinity Spadina	TEY	4,037	3,270	767	81.0%	27,364	75
21 - St. Paul's	TEY	2,955	2,092	863	70.8%	13,470	37
22 - St. Paul's	TEY	1,904	1,350	554	70.9%	6,269	17
25 - Don Valley West	NY	622	350	272	56.3%	1,126	3
26 - Don Valley West	NY	24	6	18	25.0%	2	0
27 - Toronto Centre-Rosedale	TEY	1,760	1,361	399	77.3%	11,531	32
28 - Toronto Centre-Rosedale	TEY	2,351	2,097	254	89.2%	12,051	33
29 - Toronto-Danforth	TEY	2,532	2,446	86	96.6%	4,334	12
30 - Toronto-Danforth	TEY	7,820	6,833	987	87.4%	31,813	87
31 - Beaches-East York	TEY	1,977	1,584	393	80.1%	4,584	13
32 - Beaches-East York	TEY	8,112	7,155	957	88.2%	28,373	78
36 - Scarborough Southwest	SC	23	10	13	43.5%	70	0
Totals		72,593	53,221	19,371	73.3%	295,100	

Attachment 5 - Criteria for Car-Share Vehicle Parking Areas

General Criteria

- At every location where a CVPA is requested, vehicles must be able to park at all times of the day and all days of the week;
- Each proposed location must not be located closer than 30.5 metres to an intersection controlled by traffic control signals or 9 metres of an uncontrolled intersection or intersection controlled by "Stop" signs or "Yield" signs;
- The location of a requested CVPA will not adversely impact on safe and efficient traffic operation; and
- Each proposed CVPA location must be acceptable to the Ward Councillor.

In addition to the general criteria noted above, all requested CVPAs that will be located on a section of the street where residential permit parking is authorized, must also satisfy the following specific criteria, below:

Specific Criteria - Residential Permit Parking Area

- The CVPA will not be located in a low-density residential zone (in front of single family homes); and
- The residential permit parking area must not be wait-listed for permits.

This program has an established annual permit fee with a three-tiered structure provided below, based on the impact a car-share vehicle would have on the existing parking supply.

1. **Tier 1:** The car-share vehicle parking area will not impact on, or cause a reduction in, the number of residential permit parking spaces or parking machines/parking metres on the street. The 2017 fee for Tier 1 is \$799.57 per year plus HST.
2. **Tier 2:** The car-share vehicle parking area will eliminate or cause a reduction in the number of parking spaces in a designated residential permit parking area. The 2017 fee for Tier 2 is \$1,449.02 per year plus HST.
3. **Tier 3:** The car-share vehicle parking area will eliminate an existing parking space in an area where parking is controlled by a parking machine or parking meter. The 2017 fee for Tier 3 is \$4,964.08 per year plus HST.

Attachment 6 - Parking Infractions and Associated Fines Incurred by Car-Share Companies

Revenue Services Division is responsible for processing and collecting fines for all parking tickets issued in the City of Toronto. Based on information from Revenue Services Division, a summary of parking infractions and associated fines or penalties that car-sharing companies have incurred in the City of Toronto is included below:

Car-Share Company	Year	Number of Infractions	Sum of Fines or Penalties	Sum of Fines or Penalties Collected	Percentage of Fines or Penalties Collected
Car2Go Canada Ltd.	April - Dec. 2016	31,045	\$847,152	\$844,721	99.7%
	2017	42,595	\$1,124,936	\$387,098	34.4%
Enterprise*	April - Dec. 2016	29,768	\$1,408,846	\$1,466,445	104.1%
	2017	35,487	\$1,734,221	\$1,691,300	97.5%
ZipCar Canada Inc.	April - Dec. 2016	13,892	\$668,168	\$684,948	102.5%
	2017	14,952	\$736,611	\$744,859	101.1%

*Note Regarding Enterprise

The above information, reported to Council on January 31, 2018 as part of item CC36.14, includes infractions incurred by traditional rental car operations by Enterprise Rent-a-Car, rather than only the sub-set of infractions incurred by Enterprise Car-Share, since both vehicle types are registered under the same company.

Enterprise Car-Share has indicated to the City that the vast majority of these infractions are associated with Rent-a-Car operations, rather than those assigned to Enterprise Car-Share which represent a comparatively small number of vehicles.

Enterprise has provided details indicating that in 2017, Enterprise Car-Share incurred 469 infractions totalling approximately \$25,000, a small sub-set of the number of infractions listed above. However, in cases where an Enterprise Car-Share member received a notice of parking infraction during their reservation, and paid it promptly, information regarding that infraction would not be available to Enterprise.

Collection Rates

The collection rates represented at higher than 100 percent relate to occasions when tickets are cancelled as a result of an error but the owner has already made a payment. In about 3% of cases, this results in collection rates that are slightly above 100 percent.

Generally with respect to the collection process, some tickets take up to two-years to collect through a process involving City-issued notices and the Ministry of Transportation license renewal system.

Parking By-law Infraction Types

A summary of the top-five types of by-law infractions for each car-share company currently operating in the City of Toronto is included below, for April to December 2016 and January to December 2017:

Car2Go Canada Ltd

Total number of by-law infractions (April 2016 to December 2017) - 73,634

- Park at prohibited time no permit - 48,454
- Park on signed highway prohibited day/time - 6,571
- Park at machine: required fee not paid - 5,119
- Park on signed highway except permitted time - 3,937
- Park and fail to display receipt - 3,410
- All others - 6,143

Enterprise (includes Enterprise Rent-a-Car and Enterprise Car-Share)

Total number of by-law infractions (April 2016 to December 2017) - 65,252

- Park on private property - 12,452
- Park at prohibited time no permit - 12,026
- Park on signed highway prohibited day/time - 11,388
- Park at machine: required fee not paid - 5,587
- Park and fail to display receipt - 2,807
- All others - 20,992

ZipCar Canada Inc.

Total number of by-law infractions (April 2016 to December 2017) - 28,842

- Park at prohibited time no permit - 5,773
- Park on signed highway prohibited day/time - 5,261
- Park on private property - 4,882
- Park at machine: required fee not paid - 2,783
- Park and fail to display receipt - 1,709
- All others - 8,434