




CITY OF HAMILTON
PLANNING AND ECONOMIC DEVELOPMENT DEPARTMENT
Transportation Planning and Parking Division

TO:	Chair and Members Public Works Committee
COMMITTEE DATE:	September 8, 2023
SUBJECT/REPORT NO:	Free-Floating Carshare Program (PED20168(b)) (City Wide) (Outstanding Business List Item)
WARD(S) AFFECTED:	City Wide
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SUBMITTED BY:	Brian Hollingworth Director, Transportation Planning and Parking Planning and Economic Development Department
SIGNATURE:	

RECOMMENDATION

- (a) That the City of Hamilton continue the free-floating carshare permit program on a permanent basis in Wards 1, 2, and 3;
- (b) That the City of Hamilton expand the free-floating carshare permit program to the entire City;
- (c) That the draft Amending By-law for On-Street Parking By-law 01-218 attached as Appendix "A" to Report PED20168(b), and the draft Administrative Penalties By-law 17-225 attached as Appendix "B" to Report PED20168(b), which have been prepared in a form satisfactory to the City Solicitor, be approved;
- (d) That staff be directed to explore opportunities to make available a limited supply of parking spaces on residential streets with Parking by Permit Only restrictions for free-floating carshare parking;
- (e) That the matter respecting Item ABW, that the City of Hamilton implement a pilot permit program to allow for free-floating carshare parking in Wards 1, 2, and 3 for an 18-month period and report back to the Public Works Committee prior to the end of the pilot be identified as complete and removed from the Public Works Committee Outstanding Business List.

EXECUTIVE SUMMARY

The purpose of this Report is to provide an update on the Free-Floating Carshare Pilot and make recommendations for the future of this Program. Free-Floating, or one-way carsharing, is a carsharing model where carshare vehicles holding a valid permit can park in designated on-street locations. This contrasts with the two-way carshare model, where a vehicle is picked up and dropped off at a specific spot in an off-street parking facility.

An 18-month pilot began in June 2022 and will end in December 2023. As part of this 18-month pilot, permits were distributed by the City of Hamilton that allow free-floating carshare to operate in Wards 1,2, and 3. The vehicles can travel anywhere, however, they must start or end their trip within these wards. The permit fee of \$270.78 plus HST per carshare vehicle is outlined in the User Fees and Charges By-law effective September 1, 2021. This permit fee represents three times the 2020 on-street permit parking and time-limit parking permit. This rate is subject to change annually. Communauto FLEX has been the only company to operate free-floating carsharing as part of this pilot.

Based on the analysis of the operating data provided by Communauto FLEX, consultation with stakeholders involved in the program, and the lack of complaints by residents, staff have concluded that the pilot has been successful. Based on these findings, staff is recommending that the program be made permanent. The following changes will need to be implemented to make it a permanent program:

- Expansion of the geographic extent of the program from Wards 1, 2, and 3, to the entire City of Hamilton, and associated changes to offences and penalties; and,
- New offence created to prevent clustering of vehicles, and a requirement to provide related data.

In addition, the original conditions of the pilot will remain, such as the requirement to provide monthly car-share data related to their membership information, fleet usage, and complaint information as a condition of their permits.

Alternatives for Consideration – See Page 8

FINANCIAL – STAFFING – LEGAL IMPLICATIONS

Financial: Each vehicle participating in this program is required to have a permit to operate. The current annual fee per vehicle, per year, is \$270.78 plus HST. This fee is subject to change annually. The levy will be impacted by an increase in revenue; it is estimated that in the next few years, the City will continue to issue approximately 25 permits per year.

Staffing: Hamilton Municipal Parking System staff would continue to be required to issue permits to carshare vehicles. Parking enforcement of free-floating vehicles will also continue to be required, the same as other vehicles in Hamilton.

Legal: An Amendment to the On-Street Parking By-law 01-218, as shown in Appendix "A" attached to Report PED20168(b), will permit free-floating carshare vehicles to park in all unregulated and time-limit parking locations on City streets across Hamilton. An Amendment to the Administrative Penalties By-law 17-255 as shown in Appendix "B" attached to Report PED20168(b), would update the infractions and penalties related to free-floating carshare vehicle permit provisions, specifically to enable the expansion to all Wards and to allow parking at designated meters.

HISTORICAL BACKGROUND

The first carshare program began in Hamilton in 2009. This program was operated by Community CarShare, an organization based in Waterloo, as a station-based, two-way carshare system. In 2018, Community CarShare became part of Communauto. In Hamilton, car share has grown to have over 40 station based carshare vehicles, the majority managed by Communauto.

A permit to allow carshare vehicles to park in designated on-street spaces was approved at the Public Works Committee meeting on May 31, 2021, Report PED20168(a). This enabled the introduction of one-way carsharing in Hamilton. The Hamilton framework was developed using lessons from existing free-floating carshare programs in Halifax, Toronto, Edmonton, and Calgary.

Hamilton's first one-way carshare program, Communauto FLEX, was launched in June 2022 with 25 vehicles. Communauto is the only operator to offer free-floating carshare in Hamilton. In the first year of operations, no complaints have been received by City staff or by Communauto regarding the FLEX program. Additionally, no tickets for offences that relate specifically to the free-floating carshare program have been issued.

Earlier this year, Hamilton Municipal Parking System staff launched a free carshare parking program with 12 spots in the downtown area. Previously, one-way carshare vehicles were prohibited from ending their trip in metered parking spaces. Feedback from users show that this has made it particularly difficult to travel to the downtown core. This program now allows car share users to park downtown for free and allows one-way carshare users to end their trips in the downtown core. These parking spaces are not

held exclusively for carshare users. The fee for parking in these spaces remain the same for all other road users.

POLICY IMPLICATIONS AND LEGISLATED REQUIREMENTS

Hamilton's, City Council approved, Transportation Master Plan supports a free-floating carshare through policy actions 46, 62, 63, and 64:

- Policy 46 - Identify opportunities for and run pilot projects to assess the applicability and/or feasibility of implementing new technological opportunities, such as mobility as a service;
- Policy 62 - Adopt off-street and on-street parking policies and designs that ensure an adequate parking supply to support growth and economic development, contribute to the achievement of the mode share targets of the Transportation Master Plan, and implement the Complete Liveable Better streets, and Vision Zero objectives of the Transportation Master Plan;
- Policy 63 - Evolve the Hamilton Municipal Parking System to support the increasing use of shared mobility such as carshare and other shared mobility options and, where applicable, park and ride, is supportive of a free-floating carshare; and,
- Policy 64 - Provide multi-modal access to/from and within employment lands, is also supportive of a free-floating carshare.

RELEVANT CONSULTATION

As part of the review of this program, consultation was conducted with Communauto, staff at Hamilton Municipal Parking System, and Parking Enforcement. All groups consulted support the continuation of the free-floating carshare program.

There are no complaints recorded by City staff or Communauto related to the free-floating carshare program. Additionally, Parking Enforcement has issued no tickets for the infractions related to the free-floating carshare program.

The potential for geographic expansion was also discussed with Communauto. Though they have no plans to expand the FLEX zone at this time, any expansion in the future would likely take place in Ward 4 or Ward 13. Expansion beyond that range is not likely by Communauto in the medium-term.

ANALYSIS AND RATIONALE FOR RECOMMENDATION

As a condition of the permit during the pilot, carshare operators were required to provide monthly data pertaining to vehicle usage. The table below summarizes relevant data for the first year of the pilot from Communauto FLEX.

	2022						2023						
	Jun	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Number. of Cars	26	25	25	25	25	25	25	25	25	24	24	23	24
Number of Trips	618	971	967	1,025	1,063	1,110	1,052	1,116	1,112	1,206	1,253	1,274	1,174
Active Members	106	171	203	211	229	228	239	231	231	252	274	283	255
Average Trip Duration (hours)	5.1	2.9	5.5	3.4	5.3	4.2	4.1	3.3	3.8	4.2	4.1	4.7	7.0
Average Trip Length (kms)	27	31	49	32	44	30	32	29	29	30	36	42	44
Percentage of trips after which the Car was parked for 72-hours or greater	1.4%	0.8%	0.5%	0.3%	0.1%	0.0%	0.5%	0.2%	0.1%	0.0%	0.1%	0.1%	0.0%
Average Length of Time between two usages (night time included) (hours)	13.7	14.3	13.1	12.6	11.4	11.1	12.2	11.7	9.7	10.0	9.0	8.0	7.3

Since the launch of the pilot on June 13, 2022, the number of trips has steadily increased. The average trip length and duration has fluctuated over the last year, with a steady increase since February. The percentage of trips after which the car was parked for 72-hours or greater has substantially dropped since inception, from 1.4% in June 2022 to 0% in June 2023. The average length of time between two usages has also been steadily declining, with the latest 7.3 hours being nearly half of the 13.7 hours between usages in the first month of operation. The data is comparable to data from the pilot conducted in the City of Toronto, which launched in November 2018.

- **Permitted Free-Floating Carshare Areas**

The pilot program permitted operations of a free-floating carshare program in Wards 1, 2, and 3. This corresponds to the area where the majority of existing two-way carshare vehicles are based. Currently, the operating area that Communauto has chosen for the FLEX program covers almost the entirety of Wards 1 and 2, and most of Ward 3. The area north of Barton Street East and east of Wellington Street North is not part of the FLEX area. The FLEX area also ends at Gage Avenue North, rather than extending to the edge of Ward 3 at Ottawa Street North.

Communauto does not currently have geographic expansion plans for the FLEX program in Hamilton. On the success of the program, and the benefits to residents of a free-floating carshare system, staff are recommending an expansion to the entire City of Hamilton. This will allow any carshare company to bring this service to residents across Hamilton, if they choose.

The full list of parking permissions for free-floating carshare vehicles can be seen in Exhibit 1. Free-floating carshare vehicles that hold a valid permit will be exempt from the 12-hour time limit restriction imposed with on-street residential parking spaces. The permit will allow vehicles to occupy a designated parking space for a maximum of 72-hours.

Exhibit 1: Comparison of Parking Permissions between Private Passenger Vehicle and Free-Floating Carshare Vehicle

Parking Space Type	Private Passenger Vehicle	Free-Floating Carshare Vehicle
On-Street		
Revenue generating spaces (e.g. meters)	Required to pay the parking fee and must abide by any posted maximum durations and time limits.	Same as private passenger vehicles. Vehicles cannot end a trip in these spaces.
Carshare Friendly Parking Spaces	Required to pay the parking fee and must abide by any posted maximum durations and time limits.	Carshare vehicles can park for free in these spaces (identified with green parking and a sticker). Vehicles can also end trips in these spaces.
Non-Revenue Time Limited Parking Zone	Must abide by posted maximum durations and time limits. Eligible residents can obtain a Time Limit Exemption Permit from Hamilton Municipal Parking System. They are still required to adhere to the 12-hour limit.	Vehicles can end a trip in these areas and remain parked for up to 72-hours. Carshare operators will be required to move their car out of the zone within 24-hours if there is a complaint.
Non-Revenue Zone with No Posted Time Limit	Must abide by the 12-hour limit.	Vehicles can end a trip in these areas and remain parked for up to 72-hours. Carshare operators will be required to move their car out of the zone within 24-hours if there is a complaint.

Parking Space Type	Private Passenger Vehicle	Free-Floating Carshare Vehicle
On-Street		
Parking by Permit Only Area	Eligible residents may be able to obtain a permit from Hamilton Municipal Parking System. Otherwise, parking is prohibited in these areas.	Parking is prohibited in these areas at all times.
Off-Street		
Municipal Car Parks	Required to pay the parking fee and must abide by hours of operation.	Same as private passenger vehicles. Vehicles cannot end their trip in these spaces.

- **Managing Distribution of Vehicles**

Operators will now be required to proactively manage vehicles to avoid clustering of vehicles in one area. Clustering occurs when more than three carshare vehicles from the same company park on a street block for any length of time. The carshare company will be required to move its vehicle(s) within two-hours of a complaint. While clustering has not been an issue during the pilot program, this new requirement will help to manage any future growth of the program, including the introduction of new operators.

- **Benefits of Free-Floating Carsharing to Residents**

A free-floating carshare program helps to expand sustainable, affordable, and convenient mobility options in Hamilton. Carshare has been proven to reduce car ownership among members, a typical carshare vehicle replacing 6-23 vehicles from the road¹. Research on the impact of free-floating carsharing found a 5% reduction in vehicle kilometers travelled in Canadian urban areas that implemented free-floating carsharing². By reducing vehicle miles, and discouraging vehicle ownership, free-floating carshare can have a significant impact on reducing greenhouse gas emissions in Hamilton and reducing household transportation costs.

¹ Lane, C., 2005. PhillyCar-share: first-year social and mobility impacts of carsharing in Philadelphia, Pennsylvania. Transp. Res. Rec. 1927, 158–166.

Martin, E., Shaheen, S., Lidicker, J., 2010. Impact of carsharing on household vehicle holdings. Transp. Res. Rec. 2143, 150–158.

Zipcar, 2005a. Zipcar Customer Survey Shows Car-Sharing Leads to Car Shedding. Available at <https://www.autorentalnews.com/75124/zipcar-releases-survey-on-car-sharingimpact>.

² Martin, E., Shaheen, S., 2016. Impacts of car2go on Vehicle Ownership, Modal Shift, Vehicle Miles Traveled, and Greenhouse Gas Emissions: An Analysis of Five North American Cities. Transportation Sustainability Research Center, Berkeley, CA.

- **Enforcement and Management**

Carshare operators are required to move free-floating vehicles out of the zone within 24-hours of a complaint being submitted from Transportation Planning staff or a local resident, even if the 72-hour period has not elapsed. For notifications and complaints related to clustering, operators are required to move free-floating vehicles out of the zone within 2-hours.

- **Parking on Permit Only Streets**

At present, free-floating carshare vehicles are not permitted to park on streets with Permit Only Parking. For these streets, a fixed number of permits are sold to residents based on spaces available. Currently, permits are only available to residents of one, two, and three-family dwellings.

There is merit in considering options to allocate a limited number of permits on some, or all of these streets for carshare vehicles, specifically since carshare vehicles could replace one or more single owner vehicles. However, changing this policy will require a review of the delegated authority by-law for residential permits, and should be implemented in a phased manner. Staff are proposing to review this matter and bring forth options for consideration. The review will be completed in parallel with a review of the residential permit parking policy and eligibility requirements.

ALTERNATIVES FOR CONSIDERATION

Council could choose to expand the program only to Wards 4 and 13 instead of an expansion to all Wards. Communauto has not expressed interest in geographic expansion in the near future, though Wards 4 and 13 have been identified as the most likely for future expansion. Given the success of the program to date, and the update to the by-laws to prevent clustering, staff are confident that an expansion to all Wards in Hamilton is appropriate.

Council could also choose not to extend the pilot. This approach is not recommended based on the success of the pilot program to date, and the benefits of the program to residents.

APPENDICES AND SCHEDULES ATTACHED

Appendix "A" to Report PED20168(b) - Amending By-law to City of Hamilton By-law 01-218

Appendix "B" to Report PED20168(b) - Amending By-law to City of Hamilton By-law 17-225