



ADMINISTRATIVE REPORT

Report Date: January 5, 2010  
Contact: Jerry Dobrovolny  
Contact No.: 604.873.7331  
RTS No.: 08152  
VanRIMS No.: 08-2000-20  
Meeting Date: January 19, 2010

TO: Standing Committee on Transportation and Traffic

FROM: General Manager of Engineering Services

SUBJECT: Reserved On-street parking spaces and Residential Parking Permits for Car-Sharing Vehicles

**RECOMMENDATION**

- A. THAT Council approve the process and set the rates for reserved on-street car-sharing parking spaces as outlined in this report.
- B. THAT Council approve the issuance of residential parking permits to car-share vehicles, with rates and conditions as outlined in this report.
- C. THAT the Director of Legal Services be instructed to prepare the necessary amendments to the Street and Traffic By-law and Parking By-law generally as set out in Appendix A.

**COUNCIL POLICY**

In June 1995, Council adopted the Vancouver CityPlan, which includes directions to prioritize walking, biking, and transit over automobile use.

In May 1997, Council adopted the City of Vancouver Transportation Plan, which encourages the use of car-sharing vehicles.

In April 2002, Council adopted Sustainability Principles to guide City actions and decisions including a focus on reducing fossil fuel use, especially for transportation.

In March 29 2005, Council approved the Community Climate Change Action Plan that includes the expansion of community car-sharing as an action that would contribute towards meeting the community Green House Gas (GHG) reduction target of 6% below 1990 levels by 2012.

In October 2009, Council adopted the recommendation of the Greenest City Action Team (GCAT) which includes recommendations to encourage the use of car-sharing systems.

Council Policy is to use parking pricing to improve turnover of street parking for short-term use and to set meter rates to reflect market demand.

Residential permit fees are reviewed periodically as part of an overall annual fee review. It is Council policy that fees should either recover the full cost of providing services or provide a charge that is equivalent to competitive charges where the fee is of a market nature.

### ***PURPOSE/SUMMARY***

The purpose of this report is to seek Council authority to make changes to the City of Vancouver's on-street parking policies in order to support car-sharing. This report recommends the introduction of a fee for on-street reserved spaces for car-sharing vehicles and that Residential Parking Permits (RPP) be provided to car-sharing vehicles to park in the residential areas. These initiatives are consistent with the goals of Greenest City Action Team (GCAT)

### ***BACKGROUND***

Car-sharing is a service that provides its members with access to a fleet of vehicles on an hourly basis. Members reserve a vehicle online or by phone, and pick up the vehicle from a variety of locations within the Lower Mainland. Car-sharing has proven to be an effective way to gain access to a vehicle without the obligations and ongoing costs of owning and maintaining a car. Instead of owning one or more vehicles, a household or business accesses a fleet of shared-use vehicles including cars, pick-up trucks and vans. It encourages the use of sustainable modes of transportation such as walking, cycling and transit for most everyday trips, but gives access to a vehicles on an as needed basis. In Vancouver, car-sharing vehicles can be found in residential neighborhoods, as well as in the Downtown core. The term car-sharing is the same as "Shared-Vehicle" as defined in the Parking by-Law.

### **Benefits of Car-Sharing**

According to Transport Canada, car-sharing members emit an average of 0.32 metric tones of Carbon Dioxide equivalents, or about one tenth of that emitted by the average driver. There are numerous studies from US and Canada that consistently support the benefits of car-sharing. A sample of those study results are listed below:

- 29% of car-sharing participants sold a vehicle after joining a car-sharing program;
- 61% members delayed or had forgone a vehicle purchase;
- Members reduced their Vehicle Miles Traveled (VMT) by 43%;
- Car-Share users generate 90% less carbon output than a private vehicle owner;
- One car-share vehicle replaces up to 23 cars from the roads; and
- Private vehicles are used 2% of the time, whereas car-sharing vehicles are used 50% of the time.

---

<sup>1</sup> Millard-Ball, Murray, Schure, Fox, Burckhardt (2005), *Car-Sharing Where and How it Works*, Transportation Research Board

### **Car-Sharing in Vancouver**

Currently there are three car-sharing companies in Vancouver: Cooperative Auto Network (CAN), Zipcar and CityFlitz. In addition to these companies, there is the possibility that more car-sharing companies could enter the Vancouver market in the future. Although these organizations can be accessed by the public, they are not publicly accountable for their service levels or rates. As such, the perceived public benefits of these services must be balanced against any public subsidies or other support to their operations.

Cooperative Auto Network (CAN) was the first car-sharing organization in Vancouver; it started its operation in 1997, providing residents with a sustainable and cost-effective alternative to owning personal vehicles. Since CAN's inception, the City has provided CAN vehicles with Residential Parking Permit (RPP) decals for \$33 per year, allowing car-sharing vehicles to park in any RPP zone. The City also provides CAN with seven reserved on-street parking spaces at no cost to CAN. This was intended to help the first car-sharing company establish its operation in Vancouver and to give car-sharing vehicles a visual presence on the streets. CAN currently operates around 225 car-sharing vehicles in the Lower Mainland. CAN wishes to continue having RPP decals and would like to have more reserved on-street parking spaces for its vehicles.

Zipcar is a newer car-sharing organization that established operations in Vancouver in early 2007. The City has also provided RPP decals to Zipcar vehicles in the interim, while a formal policy is developed, so that its members can park in any of the RPP zones. Zipcar currently operates around 125 car-sharing vehicles in the Lower Mainland. Zipcar is interested in having reserved on-street spaces for its vehicles.

CityFlitz started their operation in Vancouver in June 2009 and currently has just six vehicles available for sharing. CityFlitz uses their vehicles for commercial advertising and members must drive at least 25 kilometers per booking, but vehicles cannot be driven outside of the Lower Mainland. Staff contacted CityFlitz to enquire if they would be interested in participating in the RPP or on-street reserved spaces programs. Currently, they are not interested in any of the programs.

### ***DISCUSSION***

Numerous City policies and programs have helped grow sustainable modes of transportation such as walking, cycling, transit and car-sharing. In order to further encourage car-sharing in Vancouver, staff recommends the introduction of a process to allocate on-street reserved spaces for car-sharing vehicles and that Residential Parking Permits (RPP) be provided to car-sharing vehicles to park in the residential areas.

### **On-Street Reserved Spaces For Car-sharing Vehicles**

In most areas, car-sharing companies park their vehicles in off-street parking lots. The City is currently assisting car-sharing by requiring all rezoning applicants to provide off-street car-sharing spaces and vehicles in their developments at no cost to the car-sharing companies. Staff believes that parking and storage of vehicles is best provided for in off-street lots while on-street spaces should only be considered as a supplement to off-street parking.

Currently, CAN has seven reserved on-street parking spaces. To be fair to all car-sharing organizations, staff recommends that reserved on-street spaces be made available to all interested car-share organizations, and that a market fee be charged for these spaces. The intention of this program is to determine how many spaces, overall citywide, can be allocated

to car-sharing in the context of other demands for public street space. It is not the intention of this program to entirely meet the needs of all the car-sharing companies that exist now or in the future by providing space on-street to park all of their vehicles.

Dedicating sections of streets for specific users, such as car-sharing companies is similar to the zones that the City provides for taxis, tour buses, valets, and commercial loading. However, in this case, staff are recommending that the space be dedicated to a specific car-sharing company so that the space can be used to park one specific vehicle. Since this will make the space unavailable for other users, and will apply at all times of the day, staff are recommending that the City charge a fee for the space.

When determining a fee for the exclusive use of street space, staff reviewed current Council policies on parking, street use and fees as well as the market prices for commercial, residential and metered parking. The car-sharing companies were also consulted about the impact the fees would have on their operation so that staff could recommend a fee that supported car-sharing consistent with Council policy.

Staff recommend that for on-street reserved spaces in residential areas, and not on metered streets, car-sharing companies be charged a fee equal to the off-street market rates for residential parking. This is intended to match the approximate price that a resident would pay to park their vehicle in an underground space in their apartment building. The proposed rates range from \$300 to \$1320 per year, as shown in Table-1, depending upon the location of the space in the City.

**Table-1 -Annual On-street Reserved Space Parking Rates for Car-Sharing Vehicles in Residential Areas**

<b>Residential (Non-Metered) Areas</b>	<b>Annual Rate Excluding Tax</b>
<b>Downtown and Southeast False Creek</b>	\$1320
<b>Metro Core (Except Downtown and Southeast False Creek)</b>	\$660
<b>Areas outside of Metro Core</b>	\$300

Though staff will endeavour to allocate spaces for car-sharing vehicles that are not on blocks with parking meter spaces, there is a possibility that some car-sharing spaces will displace parking meter spaces. For on-street reserved spaces in metered zones, fees are recommended to be based on the meter revenue that would have been collected by the City. This process will support car-sharing vehicles by giving them spaces in high profile locations while at the same time not have any negative impact on the City's operating budget. Table-2 shows the value of metered spaces in different rate zones around the city.

As spaces are allocated in this program, the annual price to the car-share companies will be based on whether the space is in an area with parking meters or in a residential area without parking meters. Each space will be allocated for a two year term and the price will be reviewed on an annual basis. This will ensure that the correct rate is being charged and account for the situation where a parking meter gets added to a block that previously was residential only.

Each reserved on-street car-sharing space will be designated with curb side signage and will be designed to include a bike rack so that users can cycle to pick up the vehicle. More information on the Implementation Plan and Financial Implementations is available in the corresponding sections of this report.

**Table-2 Examples of Annual Rates for Reserved Car-Sharing Spaces on Metered Spaces**

Meter Rate (Per Hour)	Annual Lost Meter Revenue
	(66% usage)
\$1	\$3,132
\$2	\$6,264
\$4	\$12,528
\$6	\$18,792

### Residential Parking Permit (RPP) Decals for Car Sharing Vehicles

In addition to allocating reserved on-street spaces for car-sharing vehicles, it is recommended to formalize the process for selling Residential Parking Permits (RPP) decals to car-sharing companies. This would give the car-sharing vehicles the same access to neighbourhood parking that is given to residents' personal vehicles.

RPP decals are issued in areas with a high demand for on-street residential parking. Residents who live in the RPP zones purchase RPP decals which enable them to park their vehicles close to their homes. Vehicles parked in a specific RPP zone without a valid City issued decal for that zone can be ticketed by City staff. Table-3 shows the annual Residential Parking Permit (RPP) rates for various city areas.

**Table-3 Annual Rate for Residential Parking Permit (RPP) Zones**

Area	Annual RPP Rates (Excluding Tax)
West End, Robson North and other parts of Downtown	\$64.76
VGH, Oak West and Fairview	\$47.62
Other areas, as shown in Map1.0	\$32.38

Staff is recommending issuing RPP decals for car-sharing vehicles, which will enable a car-sharing vehicle to park in any of the 20 RPP zones. These decals would not only allow residents of RPP zones to access and park car-sharing vehicles close to their homes but would also allow any member of car-sharing organization to park a car-sharing vehicle in any of the RPP zones. Because this privilege is not available to regular RPP decal holders, and is being recommended exclusively to encourage car-sharing, staff recommend issuing RPP decals to car-sharing vehicles at the highest annual RPP rate of \$64.76 per vehicle. The RPP decals are different from reserved on-street spaces as the decals do not guarantee parking in any one specific location.

Facilitating the use of car-sharing vehicles in RPP areas has the potential to decrease the demand for street parking as residents are provided with an alternative to owning (and

needing to park) their own vehicle. Staff believes this initiative would significantly encourage car-sharing by increasing the convenience of using the vehicles.

### *ENVIRONMENTAL IMPLICATIONS*

Providing reserved on-street car-sharing spots and allowing car-sharing vehicles to park in RPP zones will make these vehicles more accessible to residents and will increase visibility for car-sharing. Both measures are expected to encourage sustainable modes of transportation such as walking, cycling and transit by making it easier for residents to forgo ownership of personal vehicles.

Several Canadian and American cities such as Toronto, Victoria, Arlington, Seattle, Portland and Washington DC have either started pilot programs or established ongoing programs for reserved on-street car-sharing spaces. The City of Arlington has evaluated the results of its pilot program and their studies show that the introduction of the on-car-sharing program resulted in a 68 ton reduction of carbon dioxide per on-street parking space per year. While it is difficult to calculate the Vehicles Miles Travelled (VMT) and Green House Gas (GHG) reductions expected from the provision of on-street reserved car-sharing spaces for Vancouver, the experience of Arlington shows that the benefits could be significant.

### *IMPLEMENTATION PLAN*

On-street reserved spaces would be allocated over the spring and summer of 2010. In order to include any new car-sharing organizations in Vancouver and to accommodate new street uses over time, all spaces would be allocated for a two-year term. After two years, the spaces will be reviewed and re-allocated if necessary.

It is anticipated that up to 60 reserved on-street spaces will be allocated, city-wide, in the first year of this program. Of those spaces, up to 10 spaces may be on blocks with metered spaces. Although it is anticipated that there will be some incremental growth in the program over time, if the demand for on-street reserved spaces increases beyond the scope presented in this report, staff will re-evaluate the program and report back as necessary.

Residential Parking Permit (RPP) decals would be issued immediately after the enactment of the by-law.

### *FINANCIAL IMPLICATIONS*

Table-4 shows the expected financial implications of the program. Calculations are based on the following estimates:

- RPP decals issued to approximately 50% of the vehicles owned both by CAN and Zipcar;
- In the residential areas of the city 20 spaces would be allocated in Downtown, 20 spaces in Metro Core outside of Downtown and 20 spaces would be allocated outside of Metro Core for reserved on-street car-sharing vehicles;
- Bike racks will be installed every year near the reserved car-sharing vehicle spaces; and
- Spaces allocated in metered zones are revenue neutral to the City.

Table-4 Expected Revenue and Use of Funds

	2010 (May-December)	Annual
Residential Parking Permit Revenue	\$5,900	\$5,900
On-street Reserved Parking Revenue	\$45,600	\$45,600
<b>TOTAL REVENUE</b>	<b>\$51,500</b>	<b>\$51,500</b>
Sign Installation Cost	(\$15,000)	(\$7,500)
Bike Racks	(\$5,500)	(\$13,000)
On-going Staff Costs	(\$31,000)	(\$31,000)
<b>TOTAL EXPENDITURE</b>	<b>(\$51,500)</b>	<b>(\$51,500)</b>
<b>NET REVENUE</b>	<b>\$0</b>	<b>\$0</b>

The car-sharing parking program is intended to be revenue neutral. The on-street fees and the RPP permit fees will generate funds to pay for the program costs. The bike rack part of the program will be sized to spend the money generated by the program over and above other required costs. The difference between the 2010 budget and the annual, on-going budget is that initial funds will be required in the first year to install signs and establish all of the reserved parking spaces. In future years, less money will be needed to add or replace signs, but it will take a number of years to reach the full capacity of bike racks at all locations. The expenditure budget for both sign and bike racks is to provide for up front costs as well as on going maintenance.

Some staffing costs will be needed in order to implement this program and then to sustain it on an on-going basis. This funding will be combined with funding for other parking programs to provide temporary help to renew RPP decals, find new reserved spaces and renew agreements for on-going reserved spaces.

### ***CONSULTATION***

Access to Residential Parking Permits (RPP) and to the reserved on-street parking space program for car-sharing vehicles was developed in collaboration with car-sharing organizations. Staff determined the RPP rates for car-sharing vehicles and for on-street reserved car-sharing parking spaces in consultation with Cooperative Auto Network (CAN) and Zipcar and both organizations have expressed that the parking rates are reasonable and can be accommodated in their business plan.

### ***CONCLUSION***

Allowing car-share vehicles to park in RPP zones and allocating reserved on-street parking spaces for car-sharing vehicles will make car-sharing vehicles more accessible and provide a more visible transportation alternative. This will further Council's goal of supporting car-sharing and lead to increased use of this form of transportation. All these actions are consistent with the City's Transportation policies and the goals of the Greenest City Action Team.

\* \* \* \* \*

Shared vehicle organization

BY-LAW NO. \_\_\_\_\_

**A By-law to amend Parking By-law No. 6059 with regard to  
the definition of shared vehicle organization**

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. In section 2 of the Parking By-law, Council:
  - (a) from the definition of "**Shared Vehicle**", strikes out "an", and substitutes "a shared vehicle"; and
  - (b) after the definition of "**Shared Vehicle**", adds:

**"Shared Vehicle Organization** means a legal entity whose principal business objective is to provide its members, for a fee, with a car-sharing service by which such members have access to a fleet of shared vehicles which they may reserve for use on an hourly basis, and which the City Engineer has approved."
2. A decision by a court that any part of this By-law is illegal, void, or unenforceable severs that part from this By-law, and is not to affect the balance of this By-law.
3. This By-law is to come into force and take effect on the date of its enactment.

ENACTED by Council this \_\_\_\_\_ day of \_\_\_\_\_, 2010

\_\_\_\_\_  
Mayor

\_\_\_\_\_  
City Clerk

BY-LAW NO. \_\_\_\_\_

**A By-law to amend Street and Traffic By-law No. 2849  
regarding shared vehicle parking and miscellaneous matters**

THE COUNCIL OF THE CITY OF VANCOUVER, in public meeting, enacts as follows:

1. This By-law amends the indicated provisions of the Street and Traffic By-law.
2. To section 3, after the definition of "Service Vehicle", Council adds:  
  
' "Shared Vehicle" means a four-wheeled automobile, van, or pick-up truck owned and operated by a shared vehicle organization;  
  
"Shared Vehicle Organization" means a legal entity whose principal business objective is to provide its members, for a fee, with a car-sharing service by which such members have access to a fleet of shared vehicles which they may reserve for use on an hourly basis, and which the City Engineer has approved.'
3. Council repeals the title "RESIDENTIAL PERMIT PARKING" that appears before section 23.1, and substitutes "RESIDENTIAL AND SHARED VEHICLE PARKING".
4. Council repeals section 23.1, each time it appears, and substitutes:  
  
"23.1 If:  
  
(a) the City Engineer designates any street or part of a street for the parking only of:  
  
(i) vehicles belonging to residents who live in a particular area of the city, and  
  
(ii) shared vehicles,  
  
or any one or more of such classes of vehicles;  
  
(b) the City Engineer identifies any such street or part of a street by posting on it signs indicating a prohibition on parking except for a vehicle that displays a permit authorizing parking in that area; and  
  
(c) a person driving a vehicle that displays such a permit complies with all other parking restrictions that apply in that area;  
  
such a person may park that vehicle on any such street or part of a street."

5. After section 23.1A, Council adds:

"23.1B If:

- (a) the City Engineer designates any street or part of a street for the reserved parking only of shared vehicles;
- (b) the City Engineer identifies any such street or part of a street by posting on it signs indicating a prohibition on parking except for a shared vehicle marked as a shared vehicle and bearing the name of the shared vehicle organization that owns it; and
- (c) a person driving a shared vehicle that displays such a permit complies with all other parking restrictions that apply in that area;

such a person may park that shared vehicle on any such street or part of a street."

6. Council repeals section 23.4, and substitutes:

"23.4 The annual fee for a permit authorizing parking under section 23.1(a)(i) or (ii) is:

- (a) for parking of each vehicle belonging to a resident on streets located in the West End and Robson North areas, as defined in Schedule D to this By-law \$64.76
- (b) for parking of each vehicle belonging to a resident on streets located in the area of the city bounded on the north by 6th Avenue, on the east by Cambie Street, on the south by 19<sup>th</sup> Avenue from Cambie Street to Oak Street, and by Douglas Crescent, Wolfe Avenue and Marpole Avenue from Oak Street to Granville Street, and on the west by Granville Street, except for the 500 and 600 blocks of West 18<sup>th</sup> Avenue and West 19<sup>th</sup> Avenue \$47.62
- (c) for parking of each vehicle belonging to a resident on streets located in all other areas of the city \$32.38

23.5 The annual fee for a permit authorizing parking under section 23.1(a)(iii) for each shared vehicle in all areas of the city, payable to the city on May 1, is \$64.76.

23.6 The annual fee for a permit authorizing reserved shared vehicle parking under section 23.1B for each shared vehicle, payable to the city on May 1, is:

- (a) Downtown area as described in the Parking By-law for non-metered reserved shared vehicle parking space \$1,320.00
- (b) Metro Core, being the area west of Clark Drive, north of 16<sup>th</sup> Avenue, east of Burrard Street, and south of Burrard Inlet, except the Downtown Area and Southeast False Creek for non-metered reserved shared vehicle parking space \$660.00
- (c) Remainder of city outside Metro Core for non-metered reserved shared vehicle parking space \$300.00
- (d) For reserved shared vehicle parking space that the city would otherwise meter, that sum which is equal to the maximum annual revenue the parking space would have generated if metered during the same calendar year in which the city issues the reserved shared vehicle parking permit.

23.7 The annual fee for each vehicle set out in each of sections 23.4, 23.5, and 23.6 is exclusive of all sales, goods and services, harmonized, and other taxes imposed from time to time under federal or provincial law.”



Map 1.0

