

CAR SHARING POLICY REVIEW

Prepared by the City of Kelowna

August 2017



(Photo Credit: OGO Car Share Co-op Kelowna)

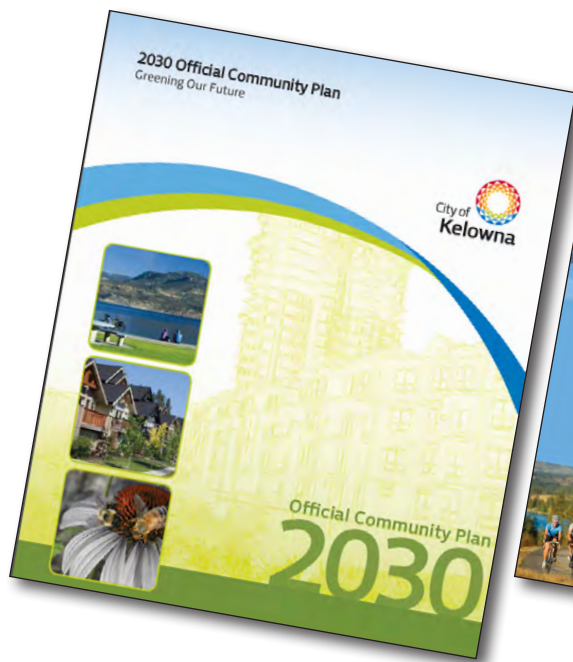


Introduction

Over the last five years, the City of Kelowna has worked closely with Okanagan Car Share Co-op (OGO) to encourage the growth of a grassroots car sharing operation and, more recently, to improve the efficiency of the City's fleet management. The partnership with OGO has developed incrementally, with several Council reports and memos largely defining the City's position on car sharing. Over this time OGO's operations has grown to include a larger number of vehicles, more locations and an expanded role with the City's fleet management.

As the City of Kelowna moves toward a more compact development pattern, car sharing can complement the city's growth management and transportation planning goals. The City's goals for live-work urban centres with balanced transportation options align with the conditions to support car sharing. Also, these are the areas where developers are seeking variances for parking reductions in multi-family residential projects. Car sharing can be a valuable tool for encouraging alternative transportation options and for supporting dense urban development. A predictable policy framework is required to encourage further growth of car sharing as a tool to reduce parking in multi-family residential projects and to support the growth of vibrant urban centres.

This briefing document highlights the significant number of North American cities (11 Canadian Cities alone) that are integrating car sharing. The report outlines how the City of Kelowna could refine its policies and practices to support the growth of car sharing as a tool to support multi-modal transportation.



Section 1: Overarching Policy

As car sharing grows within north American cities there is a move to create policies to clarify how car sharing fits into the city's transportation goals. A policy framework is critical for describing the City's plan to support this new transportation mode through its parking management and development approval practices. Two examples are provided to illustrate how other cities in British Columbia are considering car sharing within their broader planning framework. Also, the benefits of car sharing as viewed by leading researchers are provided to understand the rationale for supporting car sharing.

BEST PRACTICES FROM OTHER CITIES

City of Vancouver

- ▶ Vancouver's Transportation 2040 Plan includes car sharing as part of the City's efforts to encourage more efficient and sustainable driving practices. Car sharing is identified as part of its transportation demand management (TDM) to reduce reliance on private vehicle ownership. This policy direction supports the use of car sharing as a tool for reduced parking requirements in multi-family residential development projects. Also, the 2040 transportation plan provides direction to support the use of on-street parking for car sharing vehicles as a TDM strategy.

City of Victoria

- ▶ Victoria has identified car sharing as part of the City's Sustainability Vision and developed several Council resolutions to support the use of car sharing to encourage transportation demand management.

Transportation Sustainability Research Centre (adapted) Benefits of Car Sharing

- ▶ Reduces parking demand and private vehicle ownership
- ▶ Reduces vehicle kilometres traveled and greenhouse gas emissions
- ▶ Encourages use of transportation alternatives
- ▶ Provides a social benefit, providing low-income households with low-cost access to personal automobile
- ▶ Reduces amount of area allocated to private vehicles, enhancing economic vitality of urban areas
- ▶ Support community-driven sustainable transportation solutions

DISCUSSION

Currently, the City of Kelowna has several policies that reference car sharing, but there is no formal policy outlining the City's goals for car sharing and how it relates to transportation demand management, parking management, climate action and urban development. In the absence of an overarching policy it is challenging to communicate why the City is supporting car sharing.

DRAFT RECOMMENDATIONS

- ▶ Establish a car sharing Council Policy that will outline the City's rationale for supporting car sharing as a fleet management and transportation demand management tool. Elements of this policy could also be integrated into the City's forthcoming Transportation Master Plan.



(Photo Credit: MODO Car Share Co-op)

Section 2: Definitions

A clear explanation of what constitutes car sharing is critical for ensuring a level of consistency across car share operators and developers. Also, a clear definition assists City staff in reviewing potential applications for parking reductions or reserved parking spaces on City parking lots.

BEST PRACTICES FROM OTHER CITIES

Both the City of Vancouver and the City of Victoria define car sharing in their Streets & Traffic Bylaw. The definition is the foundation of establishing regulations and policies to support car sharing moving forward.

Definition Examples

- ▶ **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 (Vancouver).
- ▶ **Free Floating Vehicle:** means a vehicle owned by a Car Share Organization (CSO) which is shared among the organization's members and has no fixed or dedicated public parking space. (Vancouver)
- ▶ **Car share co-op vehicle:** means a vehicle owned by a not-for-profit co-operative association incorporated under the laws of British Columbia and used exclusively in the provisions of the association's car

sharing service; (Victoria)

- ▶ **Car Share Organization (CSO):** means an organization which owns ten or more vehicles for the purpose of shared use among its members. (Victoria)
- ▶ **Car Sharing:** Operations that allow people to rent cars on a short-term (hourly or daily), as-needed basis, paying only for the time they use the car and the mileage they drive. The operators of the car sharing program provide vehicle maintenance, repair, and insurance.

DISCUSSION

In Victoria and Vancouver MODO is the sole member-owned co-op CSO. Victoria has taken the approach of promoting the co-op model through its definitions of car sharing (car share co-op vehicle and car share organization). The City of Kelowna could also encourage CSOs with a social benefit through definitions and parking fees that incentivize non-profit CSOs.

DRAFT RECOMMENDATIONS

- ▶ City of Kelowna will establish a formal definition of car sharing to be included in the City's Traffic Bylaw and Zoning Bylaw, specifying classic (two-way) car sharing operations and member-owned co-operative ownership models.



Section 3: Classic car sharing

The classic car sharing model (OGO Kelowna) is where a car is returned to the same location at the end of the trip. Classic car sharing has different considerations for parking management and operations than floating car sharing. Currently, Kelowna only has a classic CSO.

I. Pricing & regulation of reserved spaces for car sharing organizations

Car share organizations need long-term reserved parking spaces in lots, parkades as well as on-street parking. Optimal vehicle locations are areas that are surrounded by high population and employment densities and a mix of uses. Cities have different approaches for pricing and regulation. Generally, a reserved space has an annual cost with the pricing depending on the operator, the value of parking in that area and the city's desire to encourage car sharing. The approach to pricing and regulation of reserved spaces in public lots, parkades is described below.

BEST PRACTICES FROM OTHER CITIES

- ▶ City of Vancouver policy states that pricing reflects the maximum annual revenue the space would have generated if the space was metred, but, in practice, have charged 60% of expected revenue to Co-op CSOs in some locations.
- ▶ City of Victoria provides a 50% discount to the local co-op / non-profit when they lease reserved spaces in City owned parkades (\$700-\$1200 / year).
- ▶ City of Denver has identified a pricing target 33 per

cent of the projected revenue of the space.

- ▶ Minneapolis has identified the target of 80 per cent of the potential revenue of the space.
- ▶ City of Calgary charges \$500 to \$1,000 for reserved spaces.

DISCUSSION

Currently the City of Kelowna does not charge OGO for access to any of its lots or parkade areas, the majority of these spaces are part of the city's fleet system. The Osprey parking lot in Pandosy Village and Cawston Ave and St Paul St lot are two non-fleet oriented locations where an annual cost could be appropriate.

DRAFT RECOMMENDATIONS

- ▶ Provide direction to fleet management within the Council Policy. The CSO would not have to pay for parking spaces associated with City fleet vehicles; however, there would be a competitive bidding process for fleet management services if additional CSOs enter the Kelowna market.
- ▶ Update City of Kelowna Traffic Bylaw for CSOs on City lots not directly associated with the City of Kelowna's Fleet Management. Consider charging Co-op, non-profit and social enterprise CSOs 50% of adjacent revenue. Consider charging for-profit CSOs a slightly higher rate at 80% of adjacent revenue.

II. Use of on-street non-metred parking for CSO reserved space:

In many cases a Classic CSO may be looking to locate a car in a residential area where there are time restrictions, but not necessarily metred parking. Cities have taken different approaches on how to price these less valuable spaces often located outside or on the edge of urban centres.

BEST PRACTICES FROM OTHER CITIES

- ▶ City of Victoria provides access to these spaces free of charge. Signage is installed identifying no parking except for CSO (reserved space).
- ▶ City of Vancouver provides permits authorizing a reserved space for shared vehicles at costs ranging from \$300, \$600 or \$1,320 annually based on the location.
- ▶ MODO / OGO report that high utilization of vehicles requires a highly visible and convenient location for the car share vehicle. Preference is a reserved space (no parking except for car share).

DISCUSSION

Currently, the City of Kelowna does not provide this as an option to OGO; but, City of Kelowna charges residents in the residential permit areas a \$30 annual fee for non-reserved on-street parking permits connected to a vehicle's license plate. This approach could be adapted to include reserved spaces for Car Share vehicles at a higher cost with the car share vehicle's license plate registered with parking services. In cases where an on-street reserved space is not practical, a floating space could be explored for a specific block if the area was not too large.

DRAFT RECOMMENDATIONS

- ▶ Amend Traffic Bylaw to exclude CSOs from time restriction in on-street time restricted areas as well as from the 24-hour storage restriction. A suggested price range for a on-street reserved car share permit could be between \$300-\$500 annually.

III. Use of short-term metred parking during car share trips:

In most cases the user of the car share vehicle is responsible for the same charges that a typical car would be responsible for (e.g. parking at a metre or pay lot).

BEST PRACTICES FROM OTHER CITIES

- ▶ Currently, the majority of CSOs using the classic model are responsible for on-street metred parking costs or public lot cost while on the trip.

DISCUSSION

Currently, City of Kelowna staff are responsible for paying for on-street metred parking when they are using fleet (OGO) vehicles. If all car share vehicles were included in the EcoPass program City staff would not have to pay for short-term parking in areas with on-street metred parking. This would also provide an incentive for people to use car sharing as they would receive free on-street parking in metred areas.

DRAFT RECOMMENDATIONS

- ▶ Identify an objective within the car share Council policy to use on-street parking management to promote car sharing and alternative transportation options.
- ▶ Amend City of Kelowna Eco-Pass Parking Permit Council Policy to allow car share vehicles to be exempt for the first two hours of on-street pay parking.



Section 4: One-way (floating)

The other major car sharing model is one-way. This approach allows the vehicle to be dropped off in a different location than where the trip started (floating). At this point Kelowna does not have any one-way CSOs, but this model has grown significantly in larger centres in Canada (e.g. Calgary, Montreal, Toronto, Halifax and Vancouver).

I. Pricing and regulation of spaces for floating car share organizations

This is a more flexible and dynamic model that is historically associated with larger centres. A one-way CSO allows users to end their trips anywhere in a defined area. In cities where one-way systems are successful, the defined areas have high population and employment densities and frequent transit coverage. Users are able to end their trips anywhere in the zone where on-street non-metred parking exists or in residential parking permit areas. A number of cities are also providing access to on-street metred parking areas as well.

BEST PRACTICES FROM OTHER CITIES:

- ▶ City of Victoria allows for a permit to be purchased that provides for unlimited parking (on-street metred and non-metred) at a cost of \$2,000 annually per vehicle. Car share vehicles are exempt from time restrictions via the traffic bylaw, allowing vehicles to be parked anywhere on-street within a defined zone.
- ▶ City of Vancouver does not allow trips to end in metred parking or parkade areas. Instead, trips end

in residential parking permit areas. Parking is also permitted on-street in areas with no signage or time restricted areas. The costs for these spaces varies depending on location (\$300-\$600-\$1,320).

- ▶ City of Calgary allows CSOs to purchase a permit for each car at \$600 annually for unlimited parking in all residential parking permit areas. CSOs are also able to park in two hour time restricted areas. Also, on-board GPS data from car share vehicles is cross referenced with enforcement data to charge for pay parking. This approach allows one-way vehicles to park in most areas within the zone defined by the CSO.

DISCUSSION

At this time Kelowna has no floating CSO. However, as Car Sharing expands into mid-sized markets in Canada there may be an opportunity for one-way car sharing in a defined area of Kelowna where higher population and employment densities exist. For this reason, it is worth establishing a one-way car sharing definition and to consider pricing options to attract CSOs who may consider the Kelowna market in the future.

DRAFT RECOMMENDATIONS

- ▶ Amend City of Kelowna Traffic By-law to include a definition of one-way car sharing.
- ▶ Explore parking and pricing options for one-way carsharing in Kelowna



(Photo Credit: MODO Car Share Co-op)

Section 5: Car sharing in residential projects

A number of BC municipalities have integrated car sharing into the development permit application process as a transportation demand management tool to support reduced on-site parking requirements. In some jurisdictions, car sharing is limited to areas where alternative transportation options and compact mixed-use settlement patterns are present.

Research has shown that, if residents are provided access to a car share vehicle, a significant number of households will forgo purchasing a vehicle in the future. In some cases, a household will eliminate their vehicle all together. Shaheen (2016) estimates a classic car share vehicle results in a reduction of 9-13 vehicles. Car share vehicles have been much more successful where the developer promotes car sharing through marketing or financial incentives.

I. Parking substitution ratio for car share vehicles

The majority of local governments in BC that are integrating car sharing into the development permit process are using car sharing as a tool to support reduced parking requirements.

BEST PRACTICES FROM OTHER CITIES:

- ▶ City of Vancouver supports a substitution ratio of 1:5 within residential developments (max of one shared vehicle for each 50 units). Within rental housing projects there is no cap on number of shared vehicles.

- ▶ City of New Westminster allows for a reduction of 5 on-site parking spaces for each car share vehicle up to ten per cent of the total required parking spaces.
- ▶ City of Richmond provides a 10 per cent reduction in the minimum on-site where a TDM study shows the integration of various TDM measures are available.
- ▶ City of Coquitlam allows 5% reduction in off-street parking based on TDM actions. Car Share has been used to justify 2-4 stall reduction based on the agreement and membership opportunity.
- ▶ Generally, car share incentives should be limited to areas where some parking management (time restrictions) are in place. This ensures that residents of new buildings are not using on-street parking in area for parking storage. Even time restrictions in area where incentives are offered limited parking spillover on surrounding streets.

DISCUSSION

A number of municipalities have followed the City of Vancouver's parking substitution approach. This practice requires the classic car share vehicle and parking space to be provided by the developer (in partnership with CSO) in exchange for a reduction of 2-5 parking spaces from the total on-site parking requirements.

It is important to recognize that within mid-sized cities, only certain locations with high densities, mixed-use character, access to transit, good walkability, and proximity to other car share vehicles support viable car sharing (i.e. Downtown, South Pandosy, Capri-Landmark).

DRAFT RECOMMENDATIONS

- ▶ Allow for substitution only in the Urban Core in areas where viable alternative transportation options exist and where the site is in close proximity (500m) to a range of services and amenities.
- ▶ Amend the parking and loading section of the Zoning Bylaw to provide a reduction of five parking spaces for every classic car share vehicle and parking space provided to a maximum of 10% of the total number of required spaces provided.

II. Location of the vehicle within residential developments:

The location of where the car share vehicle is parked is very important to the long-term utilization of the vehicle and ultimately the success of car sharing. Within Metro Vancouver there is a significant amount of experience with this aspect of car sharing to learn from.

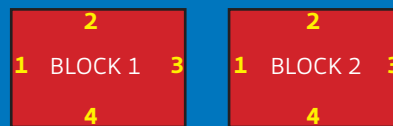
BEST PRACTICES FROM OTHER CITIES:

- ▶ Metro Vancouver surveyed CSOs to understand preferred car share locations in residential development. Convenience and ease of access was critical to the success of the utilization of the vehicle.
- ▶ City of Kelowna staff interviewed Modo, which have a fleet of 500 vehicles and 17,000 members. Car share vehicles that were parked on-street in front of building were 40% more utilized than cars within underground parkades. This is a key consideration when a car sharing network is still in its early stages. If the car is available and visible to building residents and nearby residents, the likelihood of the vehicle being successful increases and it also serves as a community transportation amenity.
- ▶ The preferred options are identified as (1) on-street reserved in front, (2) on-site at grade in a visible location and (3) visitor parking within the development.

DRAFT RECOMMENDATIONS

Introduce regulations that will outline the desired locations for the car share vehicle with priority as follows:

1. Reserved surface level space at-grade in a highly-visible location on the development site
2. Reserved on-street parking in front of the building or on the same block as the development in cases where the development is not on a retail street (limit to 1 per block face, numbered block faces in **yellow**).



3. Where multiple vehicles are provided as part of a development, a reserved space at a parking lot or parkade within 150m is an option for the second car share vehicle.

III. Process for securing the car share vehicle and space:

Based on a scan of best practices and an interview with Modo, a clear takeaway is the importance of involving CSOs early on in the development permit process to ensure the car share vehicle and parking spot is integrated into the design of the project in a comprehensive manner as a TDM tool. The best practices reflect how to integrate car share in the development permit application process.

BEST PRACTICES FROM OTHER CITIES:

- ▶ The City of Vancouver requires developers to submit a letter of support from CSO as part of the development permit application, committing in principle to car share vehicle as part of development. Also, the drawings and plans must identify the location of the car share vehicle and parking spot. The official agreement is then signed after building permit is issued.
- ▶ In Metro Vancouver the vehicles with the highest utilization rates were in developments where the residents had a high level of awareness of the benefits of Car Share as a result of a defined marketing and promotions strategy.
- ▶ In the City of Vancouver the CSO delivers car before

occupancy. Payment from developer to CSO begins after occupancy permit (Modo/OGO) with 2-3 year agreements at a cost of \$28,000 (including vehicle). At the end of agreement CSO continues to provide vehicle and no longer receives subsidy from developer.

- ▶ In interviewing MODO, their experience is that a 2-3 year agreement is ideal, allows for adaptations to improve utilization of vehicles. Some local governments in Metro Vancouver are pushing for longer agreements that make it difficult to make changes (car type, location, pricing etc).
- ▶ The City of Victoria is using a strategy of having developers provide car share memberships that are connected to the individual units in perpetuity as opposed to securing the car share vehicle.
- ▶ The City of Vancouver is exploring requirements for incentives or promotions to encourage use of car share vehicles. For example, MODO has worked with developers to provide credits (\$120) for initial use of car share vehicles to encourage demand.
- ▶ Metro Vancouver: Experiencing higher usage of car share in market rental buildings vs condominiums.
- ▶ Generally, cars that have a visible and convenient parking spot are the most likely to be successful.

DRAFT RECOMMENDATIONS

- ▶ If project meets all key criteria (urban location, convenient access, incentives etc) integrate into the development permit application process as identified below.
 1. The car-sharing parking space must be shown on the building plans and on the Development Permit plans, (could be provided as a guideline in the Revitalization Permit Area).
 2. A letter of support in principle from the CSO should be provided as part of the development permit application.
 3. A copy of the 2-3-year car-sharing agreement between the proponent and the CSO must be submitted with the building permit application.
 4. The proponent must include a strategy (incentives and/or promotions, marketing) to encourage use of car share vehicles among residents within development as part of building permit.



(Photo Credit: MODO Car Share Co-op)



Conclusion

Car Sharing is part of a growing shift toward multi-modal transportation in cities across North America. From 2005 to 2015 Car Share memberships in Canada increased from 12,000 to 336,000 in 2015. Fueled by advancements in information technology and the proliferation of smart phones car share users can easily access vehicles for short trips without the burden of ownership. Car Sharing facilitates access to a network of car share vehicles as opposed to one private vehicle leading to reduced private vehicle ownership.

Locally, the City of Kelowna has partnered with OGO Car Share Co-op to support the development of a made-in-Kelowna community transportation solution. Over the last five years this pilot project has grown from a couple of cars to a successful car share operation with an 11 car fleet in 8 locations in Kelowna's Urban Core. More recently, OGO Car Share has begun providing fleet management services to the City of Kelowna. The City of Kelowna has a unique opportunity to support the growth of this community-based transportation solution by updating City policies and practices to encourage further growth of Car Sharing, reducing GHG emissions and private vehicle ownership.

Proposed Key Actions

- ▶ Develop a Council policy that outlines the City's rationale for car sharing in relation to parking management, transportation demand management, and environmental sustainability.
- ▶ Establish formal definitions for inclusion in the city's Traffic Bylaw and Zoning Bylaw to ensure consistent understanding and interpretation of what constitutes a car sharing operation, referencing classic car sharing operations.
- ▶ Update the Traffic Bylaw to establish consistent pricing for reserved parking spaces in city lots and parkades for car share vehicles.
- ▶ Update the Traffic Bylaw to exclude CSOs from time restriction and storage in on-street time restricted areas.
- ▶ Amend the Zoning Bylaw to support reduced parking requirements in multi-family residential developments where a car share vehicle and parking space is provided as part of the development.

References

City of Calgary. 2011. A parking policy framework for Calgary.

Metro Vancouver. 2015. Car Share Study Summary Booklet.

Metro Vancouver. 2014 Car Share Study Technical Report.

City of Toronto. 2009. Parking Standards Review: Examination of Potential Options and Impacts of Car Share Programs on Parking Standards

City of Victoria. 2015. Governance and Priorities Committee. Encouraging the Growth of Car Share - Streets and Traffic Bylaw Amendment.

Namaz, Michiko. 2017. What can we tell from data?. Institute for Resources, Environment and Sustainability The University of British Columbia.

Personal Interviews with MODO, OGO, Urban Systems and City of Vancouver Staff.

Shaheen, Susan. 2010. North American Carsharing: A Ten-Year Retrospective. North American and International Car Sharing Update.

Shaheen, Susan and Martin, Elliot. 2016. Impacts of car2go on Vehicle Ownership, Modal Shift, Vehicle Miles Traveled, and Greenhouse Gas Emissions: An Analysis of Five North American Cities.

University of California Berkley: Transportation Sustainability Research Center. Car Sharing Overview. Retrieved from: <http://tsrc.berkeley.edu/carsharing>

Urban Systems. 2017. Summary of North American Car Sharing Research. Backgrounder Presentation.