



## CITY OF VANCOUVER

### ADMINISTRATIVE REPORT

Report Date: June 13<sup>th</sup>, 2007  
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Meeting Date: July 24, 2007

TO: Vancouver City Council

FROM: Chief License Inspector in consultation with the City Engineer

SUBJECT: Vehicle for Hire By-Law Amendment: Motor Assisted Pedicabs (MAP)

#### RECOMMENDATION

- A. THAT Council approve the proposed amendments to the Vehicle for Hire By-Law No.6066 to allow for the definition of Motor Assisted Pedicabs (MAP), generally in accordance with Appendix A.
- B. THAT Council approve the proposed amendments to the Guidelines for the Operation of Pedicab, generally in accordance with Appendix B.
- C. THAT the Director of Legal Services be requested to prepare the necessary By-law amendments to the Vehicle for Hire By-law, generally in accordance with Appendix A.

#### GENERAL MANAGER'S COMMENTS

The General Manager of Community Services RECOMMENDS approval of A, B and C.

#### COUNCIL POLICY

Vehicles for Hire By-Law No. 6066 licenses and regulates the owners and drivers of vehicles for hire in the City of Vancouver. Section 20 of the Vehicle for Hire By-law regulates the operations of pedicabs.

## PURPOSE & SUMMARY

This report recommends amending the Vehicle for Hire By-Law No.6066 to allow the "Pedicabs" definition to include Motor Assisted Pedicabs (MAP) in Section 20 and that the Guidelines be updated accordingly.

Motor Assisted Pedicabs (MAP) have the potential to enable better use of existing infrastructure and provides an opportunity for new green solutions. Staff recommend that Council approve the necessary amendments to the Vehicle for Hire By-Law No.6066, as generally outlined in Appendix A, to include the provisions for MAP. Engineering Services is currently reviewing existing pedicab routes, which was set some time ago, and will make any necessary modifications. Staff will again re-evaluate the routes post Canada Line construction.

## BACKGROUND

The current Vehicle for Hire By-Law No.6066 defines "Pedicabs" as:

"...a 3-wheeled vehicle propelled solely by the foot power of the operator and capable of carrying no more than 2 passengers in addition to the operator."  
(Vehicle for Hire By-Law, 2007)

Early this year the License Office was approached by two interested individuals enquiring about the City's regulations and provisions for operating an electric assisted pedicab. As defined above, a pedicab is defined as "solely by the foot power", which does not allow a pedicab to be assisted by a motor. The issuance of a license for a MAP as a vehicle for hire would require a by-law amendment.

The Vehicle for Hire By-Law stipulates that the License Office will issue a maximum of 30 pedicab licenses per year and Council approved Guidelines state that one business cannot hold any more than 10 of those licenses. Over the past five years, there have been 6 - 7 total licenses issued per year (the same company held all 6 licenses for the past 3 years). The existing pedicabs operate mainly along Granville Street providing service to patrons from the bars and restaurants in this area. Engineering Services also apply Guidelines for the Operation of Pedicab Tourist Carriages on City Streets (see Appendix B).

Currently, the City of Vancouver regulates pedicabs that are operated solely by foot power. Licensees must meet equipment criteria to ensure safety and visibility. All vehicles are subject to inspection by an Inspector and must follow the rules of the road as set out by the Street & Traffic By-Law. Notably, since ICBC does not require vehicle registration or insurance, the City requires that all operators carry liability insurance that is satisfactory to the Director of Risk Management.

Researching other municipalities in the province revealed that Prince Rupert defines a pedicab as "a three-wheeled, motor assisted cycle or human powered cycle, including a Peditrail" where a peditrail is described as pedicab that tows a trailer carriage. The conditions set out in Prince Rupert's and Vancouver's Vehicle for Hire By-Law, pertaining to pedicabs, are very similar. For example, there is a prescribed maximum number of licenses issued, provisions for the construction of the pedicab, requirement for insurance, designated

areas of operations, hours of operation, maximum number of passengers, and requirement to provide a building for storage and maintenance. Despite a high prevalence of pedicabs in cities like Victoria and Ottawa, these cities do not include the provision to allow pedicabs to be Motor Assisted.

MAP are considered to fall under the category of a Motor Assisted cycle or MAC according to ICBC. A MAC is described as: a two or three- wheeled cycle with a seat, pedals and an electric motor that is 500 watts or less. A vehicle in BC would need to comply with regulations outlined by ICBC. Such regulations require that the operator be 16 years or older to operate and must wear a helmet, see Appendix C for more details. ICBC does not require vehicle registration, licensing, and insurance for MAC. By comparison, a scooter (electric motor under 1500 watts) is considered to be a low-powered vehicle and does require vehicle registration, licensing, and insurance.

The Motor Assisted Cycle Regulations set in the Motor Vehicle Act establishes provisions for:

- size and speed of the motor,
- size of wheels,
- motor shut-off requirements,
- prohibition of generators/alternator or similar device,
- brake performance requirements,
- drive system and equipment securement, and
- insulation of electrical terminals.

Upon advice from the Licensing Office, the current applicant sought endorsement for their business plan from the Bicycle Advisory Committee (BAC). Tabled as a green transportation option the plan was supported by the BAC on March 21<sup>st</sup> 2007. Staff from Licensing, Engineering, Police, and Sustainability Office have met repeatedly with the applicant to discuss the process, to review possible routes, and to informally inspect the pedicab.

## DISCUSSION

Motor Assisted Pedicabs, herein after referred to as MAP, is similar to a pedicab in that it is a 3-wheeled vehicle capable of carrying no more than 2 passengers in addition to the driver. Specifications for a power or electric assisted pedicab state that they are generally capable of reaching a maximum speed of 30 km per hour although it is unlikely that this speed can be attained. The motor assist component can only take effect while the driver is pedalling, making the motor assist supplementary to the human power. The following discussion will present the benefits of this mode and identify limitations and implications.

### Benefits

MAP represents a sustainable transportation option for Vancouver residents and tourists. MAP compliments Council's goal of becoming a carbon neutral city because they are electrically powered and subsequently have zero carbon emissions. In addition, this type of pedicab supports Council approved policies such as the Vancouver Transportation Plan (1997) and the Downtown Transportation Plan (2002) to improve downtown accessibility and livability by creating a balanced transportation system. These plans identify the need to increase public transit options because of the limited opportunity to expand the existing road capacity. As a

result, there has been an increase in the number of bike lanes throughout the downtown core.

This mode of transportation addresses livability issues for downtown residents, seniors, tourists and business people in downtown Vancouver. For example, MAP could complement the existing public transit network because they would enable passengers to travel directly to site specific destinations. Business people could travel short distances easily between downtown meetings. In addition, MAP could provide an additional transportation option for downtown residents or tourists returning home from local bars, cabarets and restaurants.

### Implications

Despite the maximum speed of 30 km/hour it is believed to be unlikely that MAP would reach this speed or even near it. An informal demonstration of the vehicle with staff from Licensing, Sustainability Office, Police, and Engineering revealed that even operating downhill the vehicle reached 12 km/hour. Average travel speed of MAP is 9-12 km per hour which is noticeably slower than the average speed in the downtown. Staff are concerned that MAP may impede commuting cyclists on the bike routes because of the relatively slow speed and the physical width of the MAP. Commuting cyclists are a group that staff and Council encourage and support. Impediments, such as speed, to their growth in numbers would serve to be detrimental to the cause of encouraging more cyclists.

Further, staff are concerned that MAP would cause congestion in the bike lanes. A bike lane is 1.5 meters wide and on average, MAP are approximately 1.3 meters wide (including side-view mirrors). Passing opportunities are limited for commuting cyclists to overtake MAP; cyclists may need to integrate in vehicular traffic in order to pass. Consequently, MAP may produce a safety concern for commuting cyclists.

### Routes

As indicated in Section 20(1) (a) of the Vehicle for Hire By-law pedicabs are permitted only on designated City streets approved by the City Engineer. Pedicab routes, last updated in 2003, were designated to ensure that pedicabs do not negatively impact traffic flow or commuter cyclists particularly during the rush hours (see Appendix D). The intent is that MAP would operate on City streets and some existing bike lanes as approved by the City Engineer. At this juncture, MAP would not be permitted on bridges.

Since 2003, there has been major construction and development in infrastructure. The current permitted routes do not take into account:

- new bike lanes in the downtown core arising from the Downtown Transportation Plan,
- Canada Line construction and corresponding road closures, and
- the convention centre construction near Canada Place.

Staff supports this mode of transportation and want to establish sound regulations to ensure success. Staff have concerns with potential conflicts with cyclists and vehicular traffic with respect to speed and overtaking opportunities. As such, Engineering Services is currently undergoing a review of the Pedicab Routes to reflect significant changes and impacts on traffic patterns in downtown as part of Phase I of a two-phased approach.

Phase I will temporarily revise the existing pedicab routes until after completion of the Canada Line in light of the construction, expanded cycling network, and subsequent traffic flow in and around Canada Place. Phase II will be post Canada Line construction and will re-evaluate changes in traffic flow and improvements in infrastructure in time for the Olympics. Phase II will also consider the effectiveness of MAP to date and implement routes that will accommodate MAP given the existing road network and transportation options for the Olympics.

## FINANCIAL IMPLICATIONS

There are no financial implications.

## COMMENTS

### Engineering Services

A significant amount of work has been done in the downtown to ensure a reasonable balance between the various modes of transportation while still actively supporting cycling, pedestrians and transit. The cycling mode has been well accepted in the downtown and has been growing steadily. It is important to ensure that a new service such as the pedicabs do not negatively impact the other priority modes of transportation such as cyclists and transit. The current speed of the MAP are such that they will be an impediment to cyclists on bike lanes and transit on shared bus lanes. This is an important consideration particularly when evaluating any changes to the allowable time of day operations of MAP. This impact will be significantly lessened once technological advances allow the MAP to better match that of a cyclist and other traffic in the downtown core.

The role of the pedicabs is also uncertain due to the slow speed which is closer to that of a walking pedestrian. The environmental impact of other downtown transportation options is also being reduced by the use of hybrid taxis, trolley buses and improved transit diesel technology.

## CONCLUSION

This zero-emission transportation option could compliment existing transit options within the downtown core and provide services to residents, tourists, seniors and business people. Staff in the License Office, Engineering Services and the Sustainability Office supports the concept of MAP although there are concerns related to impacts on other modes of transportation. Staff are in the process of developing routes to enhance the possible successful integration into existing infrastructure given changes in today's traffic patterns. While the existing pedicabs impede traffic flow in some areas, MAP are better equipped to maintain speed and may be a more viable mode of transportation. Any proposal to expand routes must be critically evaluated in order to minimize the impacts on other sustainable forms of transportation.

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## Proposed By-Law Amendment

### Vehicle for Hire No.6066

Under "Definitions" include:

"**Motor Assisted Pedicab**", which means a 3-wheeled vehicle propelled by foot power of the operator and motor assist and capable of carrying no more than 2 passengers in addition to the operator.

Amend Section (20) accordingly:

### Pedicabs and Motor Assisted Pedicabs

20. (1) A person must not operate a pedicab unless:
- a) That person does so on designated City street approved by the City Engineer for use by pedicabs or motor assisted pedicabs;
  - b) The equipment forming part of, attached to, or carried on or within the pedicab or motor assisted pedicab and acceptable to the Inspector includes heavy duty front and back brakes ~~acceptable to the Inspector~~, front headlights, rear tail lights, rear flashing light (for night time operations), turn signal lights, reflector on wheels and carriages, standard bell, read mud flaps or similar protection, first aid kit, repair kit, rear bumper or similar protection, and unless rooftop design exceeds six feet, a six foot high flag pole and a safety flag on the flag pole;
  - c) The rear of the pedicab or motor assisted pedicab has a current Vehicle for Hire plate, issued under the authority of this By-law, affixed to it; and
  - d) That person is carrying a current business license for the operation of the pedicab or motor assisted pedicab along with a current photo identification that includes the person's name, address, and birth date.
- (2) No more than 30 pedicabs or motor assisted pedicabs shall be licensed as such at any time.
- (3) An owner of a pedicab or motor assisted pedicab business must have each pedicab or motor assisted pedicab to be used in the business fully operational within 60 days after the date of issuance of the license for pedicab or motor assisted pedicab.
- (4) An owner of a pedicab or motor assisted pedicab must ensure that parking, storage, and maintenance of the pedicab or motor assisted pedicab occurs only on private property, except for parking on streets in accordance with other by-laws during business hours while waiting for customers.

## Guidelines for the Operation of Pedicab and Motor Assisted Pedicab Tourist Carriages on City Streets (2007)

1. Carriages are subject to inspection by the Licenses and Inspections, and Engineering Departments prior to being allowed on the street.
2. Pedicabs or Motor Assisted Pedicabs must be equipped with:
  - heavy duty front and back brakes
  - front headlight/rear rail lights
  - rear flashing light (for night time operations)
  - turn signal lights
  - reflectors on wheels and carriages
  - standard bell
  - rear mud flaps or similar protection
  - first aid kit
  - repair kit
  - rear bumper or similar protection
  - 6' safety flag (unless rooftop design exceeds 6')
3. All pedicab or Motor Assisted pedicab operators are required to obtain a license from the Licenses and Inspections Department under the "Vehicles for Hire By-law #6066." Please see Schedule "A" of the bylaw for the amount per carriage, per calendar year. The current Vehicle for Hire plate must be displayed at the rear of the pedicab, as well as the owner/operator must have a current business license. All operators must carry current photo identification that includes the person's name, address, and date of birth. The license **cannot** be transferred to other individuals.
4. All persons operating leased pedicabs on a daily fee basis must obtain a license from the License and Inspections Department, under the Vehicles for Hire By-law #6066, and pay an annual fee as stated in Schedule A of the bylaw.
5. The carriages must only be operated on designated streets as approved by the City Engineer. Drivers who operate on prohibited streets are subject to having their licenses suspended.
6. Operators must **not** stop to load/unload passengers in any location which would disrupt traffic. When parked, they **must** pay at parking meters and must not park in any restricted zones identified for other vehicles.
7. All operators must carry liability insurance required under the Vehicles for Hire Bylaw #6066 and satisfactory to the Director of Risk Management.
8. Operators of all carriages must obey all provisions of the Street and Traffic **By-law #2849** and all provisions of the Motor Vehicle Act (normally those applicable to the definition of a vehicle).
9. A total of **30** licenses will be available. The limit of the number of licenses per applicant is **10**.
10. Operators have until **February 2nd** of each year to renew their licenses. If not renewed by this time, they become available on a first come, first serve basis.
11. Areas of operation may be changed by the Engineering Department after consultation with the Police Department and the pedicab operators.
12. All owners of pedicabs or Motor Assisted pedicabs must have their carriages fully operational within **60 days** from the date of license application.
13. An owner of a pedicab or motor assisted pedicab must ensure that parking, storage, and maintenance of the pedicab or motor assisted pedicab occurs only on private property, except for parking on streets in accordance with other by-laws during business hours while waiting for customers.

## ICBC Requirements for Motor Assisted Cycles

In order to qualify as a MAC, certain conditions must be met. For example:

- the electric motor must be 500 watts or less and be capable of propelling the cycle no faster than 32 km/h on level ground without pedalling
- it must be equipped with a mechanism that either:
  - allows the driver to turn the motor on and off, or
  - prevents the motor from turning on or engaging before the MAC attains a speed of 3 km/h
- the motor must disengage when the operator does at least one of the following:
  - stops pedalling, or
  - releases the accelerator, or
  - applies a brake
- it must be capable of being propelled by muscular power using the pedals, but it is not necessary to always be pedalling
- it must meet any additional conditions set forth in the Motor Assisted Cycle Regulations (B.C. Reg 151/2002)

Source: Insurance Corporation of British Columbia - Register, License a Vehicle - Rules for low-powered vehicles - *Motor Assisted Cycles*.

[http://www.icbc.com/registration/reg\\_rules\\_low\\_pwr\\_mtr\\_asstd\\_cycles.asp](http://www.icbc.com/registration/reg_rules_low_pwr_mtr_asstd_cycles.asp)

