SUBJECT: Bicycle Racks on Transit Buses (PW07015) - (City Wide)

RECOMMENDATION:

(a) That the General Manager of Public Works be authorized and directed to purchase Bicycle Racks for the Transit fleet of 204 buses at an estimated cost of $224,000, to be funded from the Transit dedicated Federal Gas Tax reserve;

(b) That Council authorize a permanent transfer from the Provincial Gas Tax reserve in the amount of $20,000 to offset the cost of repairs, maintenance, replacement and annual removal and re-installation of the Bicycle Racks.

EXECUTIVE SUMMARY:

At its September 14, 2006, meeting, the Provincial Gas Tax/Transit Master Plan Steering Committee received a request from the Hamilton Cycling Committee and subsequently recommended to Council that Bicycle Racks be installed on the Transit fleet in 2007.

Council subsequently directed staff to submit a 2007 Capital Request for Bicycle Racks for consideration during their budget deliberations.

The City of Hamilton Transportation Master Plan and the Transit Ridership Growth Plan contain various policies and strategies to reduce private automobile use and encourage alternative travel modes for a variety of trip purposes. Improving inter-modal accessibility is an identified transit ridership growth strategy that can be implemented through the installation of bicycle racks on buses. The proposed program is
recommended by the Provincial Gas Tax Transit Master Plan Steering Committee and the Hamilton Cycling Committee as a positive action to encourage growth in transit ridership and support existing cycling initiatives.

Cycling continues to grow in popularity as an active travel mode for a variety of trip purposes. Bicycles are affordable, provide health benefits to the user and, when used in combination with transit and existing bike routes/trails, offer low cost access to employment, shopping, health care and leisure facilities throughout the urban area, with negligible impact on the environment. Alternative forms of transportation to the automobile contribute to reduced taxes through reduced cost of health care treatment for chronic diseases related to GHG emissions. Throughout North America, transit agencies are implementing programs to make using the bike/transit mode more attractive to consumers and reduce dependency on automobiles. Most transit programs, such as Burlington and Ottawa, employ a self-service, non-motorized rack, mounted on the front bumper of the bus, with a capacity of two bikes.

The data on bike rack usage and the characteristics of users is limited. In general, usage increases in proportion to the number of years the program has been in existence, the availability of the racks (number of bus routes with racks, seasonal versus year-round) and the level of awareness created through marketing and promotion efforts, such as public demonstrations. Through random sampling, qualitative data can be obtained by operators to determine how frequent bike racks are used.

Bicycle racks were first introduced to the North American transit industry in large numbers about a decade ago. Reaction from the cycling community has been positive. Initially, introduction of bike rack programs required an extensive marketing and communications investment. Current experience however, suggests that only a modest investment in marketing/communications is required which can be accommodated in the current transit marketing budget. In general, bus riders, transit staff and the general public have reacted in a neutral to positive manner. Bus operators and bus operator unions initially objected to bike racks on buses due to issues related to safety, personal liability and schedule adherence. Again, our research suggests that all of these apprehensions can be overcome with education and awareness programs which staff will undertake as part of the implementation plan. None of the transit agencies reported having to modify route schedules to accommodate additional time for bike rack use.

The Transportation Master Plan promotes the coordination of transit trips with walking and cycling trips so multi-modal trips are convenient, safe and comfortable. Implementation strategies include exploration of opportunities and issues related to providing bicycle racks on buses, particularly buses that cross the escarpment, and those serving student populations, and large employment centres. Since achieving this objective has impact on almost the entire Transit fleet, staff is recommending a full implementation of bicycle racks on the entire Transit fleet, to ensure continuity.

**BACKGROUND:**

The information/recommendations contained within this report have City wide implications.

The bicycle racks add approximately nine inches to the overall length of a bus in the collapsed position, forcing a requirement for reallocation of ten buses from outside
storage to inside storage. Until recently, this could not be accommodated as the entire bus parking area, inside and outside storage combined, was over capacity. However, a planned expansion of the exterior bus parking capacity at the Mountain Transit Centre, to accommodate the growth in HSR and DARTS fleet due to service expansion is nearing completion, which will now allow this initiative to move forward.

Outside storage of buses in the winter months is not recommended due to the difficulty associated with starting buses in the extreme cold after overnight storage. The buses also require extended idle time to warm up and build adequate air pressure to operate, resulting in undesirable exhaust emissions. For this reason, staff is recommending that Council approve of removing the racks during the extreme cold months and re-installation as early as practical in the Spring.

ANALYSIS/RATIONALE:
Presently, customers are permitted to bring bikes on board all low-floor conventional transit buses (75% of the fleet) when the bus Operator determines that space is available. During rush hour periods and when personal mobility devices occupy buses, there is generally insufficient space to accommodate bikes.

Over the last decade, North American transit properties have been installing bike racks on their buses as cycling grows in popularity and the public become more aware of the role bikes can play in creating a balanced transportation network. Bike racks on buses allow users to combine transit and cycling to complete their trips. Even commuters who regularly complete their entire work trip by bike can make use of the racks to overcome unforeseen obstacles.

Bike rack equipped buses extend the reach of fixed routes, reducing travel time between a house/business and a bus stop. Cyclists can make use of the racks to continue their trips in poor weather, navigate steep hills, combat heavy car traffic or travel after dark. From the transit operator’s perspective, the racks result in no loss of interior passenger capacity, require no intervention by the bus driver, can encourage transit ridership and serve to foster an improved image for public transit in the community.

Agencies addressed concerns through awareness and education campaigns. Additional driver training to deal with the over sweep of the front of the bus, making customers fully responsible for keeping an eye on their bikes and the ease at which customers were able to master the loading and unloading tasks all contributed to overcoming the initial apprehension expressed by bus drivers. None of the transit agencies responding to an industry-wide survey had to modify route schedules to accommodate additional time for bike rack use.

Based on the experience of other transit properties, bike rack usage tends to mirror availability. Those transit agencies offering racks on all or a majority of their routes tend to experience higher usage. Staff wish to implement a program that offers bike racks on all buses with removal of the racks during the extreme cold winter period to facilitate inside storage of as much fleet as possible with the exact dates the racks are installed and removed at the discretion of the Transit Division.

Table 1 provides an overview of the bike racks on buses programs at larger Canadian transit properties.
### Table 1
BIKE RACKS ON BUSES
SAMPLING OF CANADIAN TRANSIT OPERATORS
JANUARY 2007

<table>
<thead>
<tr>
<th>CITY</th>
<th># OF BUSES WITH RACKS</th>
<th># OF ROUTES EQUIPPED</th>
<th>% OF FLEET EQUIPPED</th>
<th>COMMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burlington</td>
<td>50</td>
<td>14</td>
<td>100%</td>
<td>April to November only</td>
</tr>
<tr>
<td>Calgary</td>
<td>100</td>
<td>17</td>
<td>14%</td>
<td>Year-round availability, expansion under review</td>
</tr>
<tr>
<td>Kitchener</td>
<td>181</td>
<td>60</td>
<td>100%</td>
<td>Year-round availability, usage increased after going to 100% of routes</td>
</tr>
<tr>
<td>Toronto</td>
<td>80</td>
<td>5</td>
<td>5%</td>
<td>Expansion of rack equipped routes under review</td>
</tr>
<tr>
<td>Windsor</td>
<td>23</td>
<td>8</td>
<td>23%</td>
<td>April to November only</td>
</tr>
<tr>
<td>Winnipeg</td>
<td>30</td>
<td>1</td>
<td>5%</td>
<td>CBD to University route only, May to October only, 170 users per season</td>
</tr>
</tbody>
</table>

### ALTERNATIVES FOR CONSIDERATION:

Council may elect to reject the staff recommendation. However, this would contradict Council and community objectives to improve access to the community and reduce automobile trips.

Council may also elect to direct staff to undertake a partial implementation. Again, this is not recommended as it would contradict a Transportation Master Plan recommended initiative to equip all buses that make escarpment crossings or operate in the east/west downtown corridor which essentially encompasses the majority of the transit fleet. Also, due to the space constraints at the MTC, dedicated appointment of fleet to specific routes is not practicably feasible.

### FINANCIAL/STAFFING/LEGAL IMPLICATIONS:

Staff is recommending that the estimated $224,000 in Capital funding for the bicycle racks be from the Transit dedicated Federal Gas Tax reserve. The Agreement between the city and the Federal Government requires that these funds be used exclusively for Transit Capital projects. This agreement, though, specifically excludes use of these funds for ongoing Operating expenditures. For this reason, staff is recommending permanent funding of $20,000 from the Provincial Gas Tax reserve associated with the requirement for repairs, maintenance, replacement and annual removal and re-installation of the Bicycle Racks.

At December 31 2006, the uncommitted balance in the Provincial Gas Tax reserve was $4.4 million.

At December 31 2006, the uncommitted balance in the Transit dedicated Federal Gas Tax reserve was $1.1 million.

_The Highway Traffic Act_ currently prohibits transporting bikes in bike racks across municipal boundaries. Hamilton has one bus route in this category which provides a connecting service to the City of Burlington. Staff are confident that this obstacle can be
overcome by having the bike transferred to inside storage on the bus on occasions when this occurs.

**POLICIES AFFECTING PROPOSAL:**

Transit Ridership Growth Plan - Strategy D.5 Improve Intermodal Accessibility
Bike racks on buses can help to promote transportation that is more active and improve intermodal connectivity. In Hamilton, they would have a role to play in encouraging bicycle owners to consider cross-escarpment trips using their bikes.

Transportation Master Plan - Walking and Cycling
Promote the coordination of transit trips with walking and cycling trips so multi-modal trips are convenient, safe and comfortable. Implementation strategies include:

- Explore opportunities and issues related to providing bicycle racks on buses, particularly buses that cross the Escarpment, and those serving student populations, and large employment centres.
- Promote cycling and walking connections with public transportation in transit marketing programs including partnership programs with employers.

**RELEVANT CONSULTATION:**

Hamilton Cycling Committee is a strong supporter of bike racks on buses to encourage cycling activity and compliment the investments in other cycling infrastructure that have been made by the City. This submission also consulted the following resource:


The Capital Planning & Implementation and Operations & Maintenance Divisions of the Public Works Department have also been consulted and support the report recommendations.

The Public Health Department requested, and provided, input to this report and enthusiastically support the full implementation of bike racks on buses.

The Executive of the Amalgamated Transit Union (ATU) have been apprised of the initiative and invited to provide comment.

Todd White, a McMaster University Student on a term assignment with the Transit Division provided research and input to the report.

**CITY STRATEGIC COMMITMENT:**

By evaluating the “Triple Bottom Line”, (community, environment, economic implications) we can make choices that create value across all three bottom lines, moving us closer to our vision for a sustainable community, and Provincial interests.

Community Well-Being is enhanced. ☑ Yes ☐ No
Bicycle Racks on Transit buses will improve accessibility to the community for Hamiltonians.

Environmental Well-Being is enhanced. ☑ Yes ☐ No
A transportation network integrated with other modes of travel, including cycling, enhances the attractiveness of alternatives to the private automobile.
Alternative forms of transportation to the automobile, in particular cycling, has identifiable health benefits.
Economic Well-Being is enhanced. ☑ Yes  ☐ No
Access to the Community for work purposes is improved.

Does the option you are recommending create value across all three bottom lines?
            ☑ Yes  ☐ No

Do the options you are recommending make Hamilton a City of choice for high performance public servants?
            ☐ Yes  ☑ No