

P.O. Box 1749 Halifax, Nova Scotia B3J 3A5 Canada

Item No. 8.1.1 (ii)
Transportation Standing Committee
June 7, 2017
November 23, 2017

TO: Chair and Members of Transportation Standing Committee

Original Signed

**SUBMITTED BY:** 

Dave Reage, Director, Halifax Transit

**DATE:** April 10, 2017

SUBJECT: Carriage of Two-Wheeled Devices on Halifax Transit Ferries

### **ORIGIN**

This report originates from the August 2<sup>nd</sup>, 2016 meeting of Halifax Regional Council, Item 15.2, and the November 8<sup>th</sup>, 2016 meeting of Halifax Regional Council, Information Item3.

# **LEGISLATIVE AUTHORITY**

Halifax Regional Municipality Charter, R.S.N.S. 2008, c. 39. subsection 69(1) allows the Municipality to provide a public transportation service, and clause 79(1)(o) provides authority for Council to expend money to provide public transportation.

Canada Shipping Act, 2001 (S.C. 2001, c.36), subsection 120(1)

Hull Construction Regulations, (C.R.C., c.1431)

Vessel Fire Safety Regulations, SOR/2017-14

Safe Working Practices Regulations, (C.R.C., c. 1467)

#### **RECOMMENDATION**

It is recommended that the Transportation Standing Committee recommend that Halifax Regional Council direct staff to modify Halifax Transit Ferries and introduce rules to govern the carriage of two wheeled devices on ferries as outlined in this report.

# **BACKGROUND**

Halifax Transit operates five harbour ferries on two routes between Halifax and Dartmouth, Nova Scotia. The ferries in the fleet were designed and certified to carry mainly walking passengers with a small number (four to six) of standard sized bicycles secured in bike racks.

Since the commencement of the Halifax Harbour Bridges Big Lift project, the number of customers arriving with various types of bicycles, scooters, strollers and Segways and expecting transportation via the ferry service has increased significantly. Staff have struggled to safely accommodate passengers with these items while maintaining safe and comfortable conditions for all passengers and crew. The challenges are particularly acute during peak periods of travel and special events; on Canada Day, 2016, staff observed hazardous conditions created by the carriage of these items. Complicating the matter is the wide variety of bicycles and scooters that are available today; our contract security staff, who are responsible to collect fares and monitor access, are sometimes unable to accurately classify passenger items to determine whether or not they are permitted for carriage.

Mindful of the interests of passenger and crew safety and in preparation for the Natal Day 2016 weekend, on July 26th, 2016 staff issued public service announcements prohibiting carriage of electric and gas powered scooters and bicycles with trailers from the ferry system. This announcement was subsequently modified to permit the carriage of bicycles with trailers, pending a review of related issues.

Staff delivered an Information Report for the November 8<sup>th</sup>, 2016 meeting of Halifax Regional Council, with a commitment to follow up with additional recommendations at a later date.

#### **DISCUSSION**

The *Motor Vehicle Act*, R.S.N.S, 1989, c. 293, provides the following definition:

"vehicle" means every device in, upon or by which any person or property is or may be transported or drawn upon a public highway, excepting a motorized wheelchair and devices moved by human power or used exclusively upon stationary rails or tracks.

The *Hull Construction Regulations* issued under the *Canada Shipping Act*, define "passenger ships" and "ferry vessels" as follows:

"passenger ship" means a ship carrying passengers, and "passenger steamship" means a steamship carrying passengers and in the case of a Safety Convention ship means a steamship carrying more than 12 passengers.

"ferry vessel" means any vessel, having provision only for deck passengers and for vehicles, that is operated on a short run on a schedule between two points over the most direct water route and offers a public service of a type normally attributed to a bridge or tunnel.

Halifax Transit vessels have been assessed and certified as "passenger ships" not "ferry vessels".

Scooters or any other devices that fall under the definition of "vehicle" under the *Motor Vehicle Act* are prohibited on passenger ships. If Halifax Transit were to carry vehicles, the vessels would have to be reassessed as a "ferry vessels", with implications such as structural fire protection, ventilation, electrical requirements, stability, and passenger capacity.

It should also be noted that regardless of classification or power output, items powered by gasoline engines are prohibited on our ferries due to the hazards posed by gasoline. Scooters, classified as vehicles, are permitted to traverse the Halifax Harbour Bridges, providing avenues available to cross the harbour for these riders.

None of the aforementioned information should be interpreted to mean that if a mode of transportation is not a "vehicle", it is permitted for carriage on our vessels without restriction. The bicycle racks on our vessels, and the area in the immediate vicinity, were not designed or scoped to accommodate anything other than standard sized bicycles. As a result, whenever any mode of transportation of abnormal length or wheel dimensions is carried, passengers typically situate their item in the passageways between the seats or in the area in the vicinity of the Engine Room door/bottom of the interior staircase. In the case of bicycles with trailers, as the ferries were not designed to carry arrangements of any length, there is no turning circle to assist in the embarkation and disembarkation of these units. As a result, the bikes are typically driven in and then backed out, which can be awkward and time consuming given the number of obstructing features in our vessels. Even if the trailer is decoupled from the bicycle and the bicycle put in a rack, the staff and passenger must still find a spot for the trailer. In all cases, items that cannot be safely stowed in the racks provided, due to size or number, can and do impede the safe passage of both passengers and staff under both normal and potentially emergency conditions. The difficulties and risks are amplified during peak and special events when there is a high passenger load, and there are associated impacts on schedule.

The Vessel Fire Safety Regulations, issued under the Canada Shipping Act, state:

#### Escape Routes

314(2) Every stairway, corridor, door and ladder must be arranged to provide a ready means of escape to the muster and embarkation stations.

The Safe Working Practices Regulations, issued under the Canada Shipping Act, state:

10. No person shall cause an emergency exit to be obstructed or otherwise made ineffective.

"Person" includes the Owner (HRM), Master and crew; violation carries liability.

These regulations require direct and unobstructed access via passageways to escape routes and emergency exits. Practically speaking, two wheeled devices are acceptable as long as they do not pose a hazard; properly stowed in designated racks/areas and accounted for in stability data for each vessel. Unless the Halifax Transit vessels are modified (by removing passenger seating and installing racks, for example), there is currently very limited capacity for designated safe stowage areas.

Creating space and safe storage arrangements to accommodate each of the different types of two wheeled devices under discussion presents several challenges. The currently serving ferries are fitted with bike racks that will accommodate four to six (depending on the class of ferry) standard sized bicycles; to accommodate more bicycles safely, passenger seating would have to be removed. The bike racks currently fitted will not accommodate bicycles, electric bicycles or electric scooters with wide tires. The safe stowage of bicycle trailers would require the removal of passenger seats and the installation of a hitch arrangement to keep them immobile, while the safe stowage of Segways would require the removal of seats and a special rack arrangement to keep them immobile as well. Any modification of the ferries to accommodate these devices requires careful consideration and an approach that is balanced to accommodate the needs of walking passengers and a reasonable number of passengers in possession of two wheeled devices without compromising safety.

The bicycle and pedestrian lanes on the Macdonald Bridge are scheduled to reopen in Spring 2017; this will re-establish the means, other than the Ferry Service, to conduct cross harbour passage using a two wheeled device. In order to mitigate the concerns outlined above, maintain compliance with the regulations, provide a safe and comfortable environment for passengers and staff, and provide a reasonable balance between the needs of walking passengers and evolving transportation choices, staff recommend the following measures:

1. Restrict the number of standard sized bicycles carried per crossing to the number of racks currently featured on each ferry;

- 2. Remove two rows of seats on all ferries (including the two ferries currently in build) to provide space and a hitching arrangement for two bike trailers. The capital cost of removing seats, restoring deck surfaces and installing appropriate signage is approximately \$2500 per ferry for a total of \$17,500 (five existing ferries, two in build);
- 3. Install tire sizing racks at the entrance of each ferry terminal. Similar to the concept of sizing racks for carry-on luggage at airports, these tire sizing racks would be used to verify that a bicycle, electric bike or electric scooter with wider tires can be safely accommodated in the racks featured on the ferries. The approximate cost including signage is \$1000 per terminal for a total of \$3000;
- 4. Permit electric bicycles only if they fit the bicycle racks fitted, and only if they do not cause the total number of bicycles carried to be exceeded;
- 5. Prohibit Segways as they cannot be accommodated in the currently fitted bike racks and creating space for their safe storage would require the removal of additional seats; and
- 6. Create and implement a robust communications plan to advise the public of the amended access rules.

### **FINANCIAL IMPLICATIONS**

Implementation of the recommendations outlined in this report will require a capital expenditure of an estimated amount of \$17,500 (CVD00436) to modify the ferry vessels and an estimated amount of \$3,000 (CB200428) to procure sizing racks for the three ferry terminals. Funding is available in Project Account Nos. CVD00436 – Biennial Ferry Refit and CB200428 – Transit Terminal Upgrade & Expansion. Funding has been confirmed by Finance.

#### Budget Summary: Project No. CVD00436 – Biennial Ferry Refit

Cumulative Unspent Budget \$335,508 Less: Estimate Ferry Vessels \$17,500 Balance \$318,008

# Project No. CFB200428 - Transit Terminal Upgrade & Expansion

Cumulative Unspent Budget \$ 27,432 Less: Estimate Ferry Vessels \$ 3,000 Balance \$ 24,432

#### **RISK CONSIDERATION**

There is a short term risk of negative public opinion associated with this action, as users of two wheeled devices have not been subject to the restrictions and recommendations outlined in this report. This risk can be mitigated with a robust communications plan and consistent enforcement of the amended rules for use of the ferries.

# **COMMUNITY ENGAGEMENT**

No formal community engagement was conducted in preparation of this report, although staff met with representatives of the Halifax Bike Coalition to discuss the challenges associated with this issue.

#### **ENVIRONMENTAL IMPLICATIONS**

Staff have not identified any environmental implications associated with the recommendations of this report.

# **ALTERNATIVES**

- 1. The Transportation Standing Committee could recommend to Council a restriction on the accommodation of two wheeled devices to the original design concept (standard size bicycles only and no other devices, and only in the number of racks currently fitted).
- 2. The Transportation Standing Committee could recommend to Council the accommodation of some combination of devices other than what is recommended in this report, with a corresponding requirement to remove passenger seating. More complex configurations may also require a fifth person for each of the eight crews to act as Loadmaster, with a corresponding impact on the operational budget.

# **ATTACHMENTS**

Attachment A - E	Electric & Gas Powered	d Scooters and Bicycles w	Trailers Info Report

A copy of this report can be obtained online at http://www.halifax.ca/commcoun/index.php then choose the appropriate Community Council and meeting date, or by contacting the Office of the Municipal Clerk at 902.490.4210, or Fax 902.490.4208.

Report Prepared by: Glen Bannon, Manager, Transit Operations, 902.490.1505



P.O. Box 1749 Halifax, Nova Scotia B3J 3A5 Canada

Item No. 03
Halifax Regional Council
November 8, 2016

TO: Mayor Savage and Members of Halifax Regional Council

Original Signed by Director

**SUBMITTED BY:** 

Dave Reage, Director, Halifax Transit

**DATE:** October 17, 2016

**SUBJECT:** Electric & Gas-Powered Scooters and Bicycles w Trailers Information Report

# **INFORMATION REPORT**

#### **ORIGIN**

This report originates from the August 2<sup>nd</sup>, 2016 meeting of Halifax Regional Council, Item 15.2.

MOVED by Councillor Karsten that Halifax Regional Council receive a staff report on the public service announcement released on July 26, 2016 advising that electric and gas-powered scooters and bicycles with trailers are not permitted on Halifax Transit ferries.

#### **BACKGROUND**

Halifax Transit operates five harbour ferries on two routes between Halifax and Dartmouth, Nova Scotia. The ferries in the fleet were designed and certified to carry mainly walking passengers with a small number (four to six) of standard sized bicycles secured in bike racks. Additional information related to the design and certification of our ferries is included in this report.

Since the commencement of the Halifax Harbour Bridges Big Lift project, the number of customers arriving with various types of bicycles, scooters, strollers and Segways and expecting transportation via the ferry service has increased significantly. Staff have struggled to safely accommodate passengers with these items while maintaining safe and comfortable conditions for all passengers and crew. The challenges are particularly acute during peak periods of travel and special events; on Canada Day, 2016, staff observed hazardous conditions created by the carriage of these items. Complicating the matter is the wide variety of bicycles and scooters that are available today; our contract security staff, who are responsible to collect fares and monitor access, are sometimes unable to accurately classify passenger items to determine whether or not they are permitted for carriage.

Mindful of the interests of passenger and crew safety and in preparation for the Natal Day 2016 weekend, on July 26<sup>th</sup>, 2016 staff issued public service announcements prohibiting carriage of electric and gas powered scooters and bicycles with trailers from the ferry system. This announcement was subsequently modified to permit the carriage of bicycles with trailers, pending a review of related issues. This staff report is intended to inform Halifax Regional Council of the challenges to be considered.

#### **DISCUSSION**

The Nova Scotia Motor Vehicle Act provides the following definition;

"vehicle" means every device in, upon or by which any person or property is or may be transported or drawn upon a public highway, excepting a motorized wheelchair and devices moved by human power or used exclusively upon stationary rails or tracks

Halifax Transit vessels are certified as passenger vessels and, for the purpose of the Hull Construction Regulations issued under the Canada Shipping Act, our vessels have been assessed as "passenger ships" not "ferry vessels" as defined:

"passenger ship" means a ship carrying passengers, and "passenger steamship" means a steamship carrying passengers and in the case of a Safety Convention ship means a steamship carrying more than 12 passengers

"ferry vessel" means any vessel, having provision only for deck passengers and for vehicles, that is operated on a short run on a schedule between two points over the most direct water route and offers a public service of a type normally attributed to a bridge or tunnel

Scooters or any other devices that fall under the definition of "vehicle" under the Nova Scotia Motor Vehicle Act are prohibited on Halifax Transit vessels. If we were to choose to carry vehicles, the vessels would have to be re-assessed as a "ferry vessels" (as defined above) with implications such as structural fire protection, ventilation, electrical requirements, stability, and passenger capacity. It should be noted that scooters classified as vehicles are permitted to traverse the Halifax Harbour Bridges, providing avenues available to cross the harbour for these riders.

It should also be noted that regardless of classification or power output, items powered by gasoline engines are prohibited on our ferries due to the hazards posed by gasoline.

None of the aforementioned information should be interpreted to mean that if a mode of transportation is not a "vehicle", it is permitted for carriage on our vessels without restriction. The bicycle racks on our vessels, and the area in the immediate vicinity, were not designed or scoped to accommodate anything other than standard sized bicycles. As a result, whenever any mode of transportation of abnormal length or wheel dimensions is carried, passengers typically situate their item in the passageways between the seats or in the area in the vicinity of the Engine Room door/bottom of the interior staircase. In the case of bicycles with trailers, as the ferries were not designed to carry arrangements of any length, there is no turning circle to assist in the embarkation and disembarkation of these units. As a result, the bikes are typically driven in and then backed out, which can be awkward and time consuming given the number of obstructing features in our vessels. Even if the trailer is decoupled from the bicycle and the bicycle put in a rack, the staff and passenger must still find a spot for the trailer. In all cases, items that cannot be safely stowed in the racks provided, due to size or number, can and do impede the safe passage of both passengers and staff under both normal and potentially emergency conditions. The difficulties and risks are amplified during peak and special events when there is a high passenger load, and there are associated impacts on schedule.

The Hull Construction Regulations state:

### Means of Escape — Applicable to Passenger and Cargo Ships

84.(8) The stairways, corridors and doors, shall be so arranged as to permit ready and direct access to the various muster stations and lifeboat embarkation areas.

The Safe Working Practices Regulations, issued under the Canada Shipping Act, state:

10. No person shall cause an emergency exit to be obstructed or otherwise made ineffective.

"Person" includes the Owner (HRM), Master and crew; violation carries liability.

These regulations require direct and unobstructed access via passageways to escape routes and emergency exits. Practically speaking the modes of transportation under discussion are acceptable as long as they do not pose a hazard; properly stowed in designated areas and accounted for in stability data for each vessel. Unless the Halifax Transit vessels are modified (by removing passenger seating and installing racks, for example), there is currently very limited capacity for designated safe stowage areas.

While the bicycle and pedestrian lanes on the Macdonald Bridge are scheduled to reopen prior to spring of 2017, the increasing popularity of the Ferry Service and its potential roles in the expected Integrated Mobility Plan and the active transportation network require more detailed consideration of the associated challenges; these will be the subject of a staff initiated recommendation report that is planned for submission in December 2016.

## **FINANCIAL IMPLICATIONS**

There are no financial implications associated with this report.

# **COMMUNITY ENGAGEMENT**

No formal community engagement was conducted in preparation of this report, although staff met with one representative of the Halifax Bike Coalition to demonstrate and discuss some of the challenges associated with this issue. Staff will engage appropriate stakeholders in the process of preparing the staff initiated recommendation report that will follow.

# **ATTACHMENTS**

None.

A copy of this report can be obtained online at http://www.halifax.ca/council/agendasc/cagenda.php then choose the appropriate meeting date, or by contacting the Office of the Municipal Clerk at 902.490.4210, or Fax 902.490.4208.

Report Prepared by: Glen Bannon, Manager, Transit Operations, 902-490-1505