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**Item No. 8.1(i)**  
**Transportation Standing Committee of Council**  
**November 23, 2017**

**TO:** Chair and Members of the Transportation Standing Committee

Original Signed

**SUBMITTED BY:** \_\_\_\_\_  
Dave Reage, MCIP, LPP, Director, Halifax Transit

**DATE:** October 13, 2017

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

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**SUPPLEMENTARY REPORT**

**ORIGIN**

At the June 7<sup>th</sup>, 2017, meeting of the Transportation Standing Committee, the committee reviewed the report entitled Carriage of Two-Wheeled Devices on Halifax Transit Ferries. The following motion was put and passed:

That the Transportation Standing Committee defer consideration of the April 10, 2017 staff report pending receipt of a supplemental report which will include information regarding the number of cyclists that would have been delayed had the proposed rules been in place, and whether the rules can be relaxed around the number of cyclists during off peak hours.

**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 of Council recommend that Halifax Regional Council:

1. Approve modifications to the Halifax Transit ferries to accommodate an additional bicycle rack;
2. Restrict the number of standard sized bicycles carried per crossing to the number that can be accommodated in bicycle racks;
3. Approve the installation of tire sizing racks at the ferry terminals to ensure that bicycles can be

- accommodated prior to boarding; and
4. Prohibit segways from the Halifax Transit ferries.

## **BACKGROUND**

Due to growing concerns about the safe storage of two-wheeled devices on the harbor ferries, the staff report dated April 10, 2017, recommended the following:

- The number of standard sized bicycles permitted per crossing be limited to those that can be accommodated by the onboard racks;
- Two rows of seats be removed from each vessel to allow for up to two bike trailers per crossing;
- Tire sizing racks be installed to confirm that bicycles will fit into the onboard racks before permitting entry onto the ferry;
- Segways be prohibited from boarding the ferries; and
- The public be advised of the new practices via a robust communications plan.

At the request of the Transportation Standing Committee, additional information is being provided regarding bicycle capacity and volumes on the ferries.

## **DISCUSSION**

### *Existing Capacity*

Each of the five existing harbor ferries is fitted with bicycle racks. The older vessels in the fleet each have two bicycle racks, one at each end of the interior passenger deck. Both of these vessels will be replaced and removed from service in 2018. The newer vessels in the fleet have been fitted with one bicycle rack. The bicycle rack has the potential to hold up to six bicycles, however, due to variations in size and style of bicycle, there would be instances in which only four bicycles can fit in the rack at a time. Unlike with the older vessels, it is not possible to install an additional rack at the opposite end of the interior deck, as the aisle width would not allow passengers with bicycles to navigate through.

### *Existing Limitations on Two-Wheeled Devices*

There is currently no specific policy that limits the number of two-wheeled devices on the ferries. However, safety regulations require that emergency exits and access to safety equipment are unobstructed and that every staircase, corridor, door, and ladder provide a ready means of escape. The Municipality is responsible for the safety of the passengers and crew, and the ferry crew is responsible for ensuring safety regulations are met on each crossing, and therefore have the authority to require that any mobility device be relocated or repositioned onboard the ferry, or prohibit passengers with two-wheeled devices from boarding.

It would be advantageous to have clear and consistent rules regarding the number of two-wheeled devices permitted to board to provide greater clarity and certainty to passengers and reduce the potential for confusion or conflicts between passengers and crew.

On July 26, 2016, a public service announcement was released advising that electric and gas powered scooters and bicycles with trailers would no longer be permitted on the ferries. A further announcement was made advising that bicycles with trailers would continue to be permitted, pending a larger analysis of options.

### *Bicycle Volumes*

The number of bicycles being transported on the ferry was observed and recorded in both summer and fall of 2017. Each daily trip was observed once in each period, therefore the data collected represents a typical summer weekday and a typical fall weekday, and does not represent days with unusually high or low volumes. In addition to bicycles, a record was kept of all other devices onboard the ferry, including strollers, wheelchairs, powerchairs, walkers, and segways, to provide a sense of the volumes of other mobility devices that potentially compete with bicycles for the limited spaces available at the perimeter of the seating areas. The data collected is presented in Attachment A.

The maximum number of bicycles observed on the Woodside Ferry at any one time was four, and therefore

the existing bike rack arrangement appears to be sufficient for that route.

For the Alderney Ferry service, the maximum number of bicycles on any one trip on a typical fall weekday was four. However, during the summer counts, there were six trips which had greater than four bicycles on any one trip. This represents 6% of daily trips. The volumes of bicycles on these size trips were: 5, 6, 6, 7, 7, and 8.

The Transportation Standing Committee requested information regarding the number of cyclists that would be delayed should bicycles be limited to those that can be accommodated in the existing racks. Based on the volumes cited above, the number of cyclists that would be delayed on a typical day by limiting the number of bicycles onboard to the number that could be loaded into the existing bicycle rack would range from four to fifteen, pending bicycle dimensions and ability to accommodate four or six bicycles in the available rack. In addition, there is a risk that during the morning peak departing Alderney, cyclists would need to be held back for multiple trips. With an additional bicycle rack in place, there would be capacity for all observed cyclists without any delays.

#### *Trailer Volumes*

One bicycle with a trailer was observed on the Alderney Ferry service on a typical summer day, and one was observed on a typical fall day. In both instances, they were on crossings during off-peak times.

#### *Ability to Accommodate Additional Bicycle/Trailer Storage*

The data collected demonstrates that there is insufficient capacity aboard the vessels to accommodate existing bicycle demand, and it is anticipated that this demand will grow in the future as the Municipality invests in bicycle infrastructure to further encourage travel by sustainable transportation. It is recommended that an additional storage space be created for two-wheeled devices.

An additional bicycle rack can be safely installed on each vessel to increase bicycle storage capacity to between eight and twelve bicycles. Based on the summer and fall bicycle counts, this capacity would accommodate the observed volumes of bicycles within the racks and minimize any delays to cyclists travelling on the ferry. To accommodate this, seating for approximately 18 passengers would need to be removed and an additional rack would be installed, at a cost of \$1,000 - \$3,600 per vessel. This additional space could also be used to stow one or two bicycle trailers when the rack is not in use. On high demand crossings, ferry crew would need to balance the boardings of bicycles and trailers to ensure that the space was used as efficiently as possible to reduce delays.

The removal of seats would have no impact on the total number of passengers that can be carried per crossing, but would result in additional passengers standing during high volume periods. Currently, the ferries accommodate approximately 95 seated passengers on the main deck (interior of the vessel) and 90 passengers on the top (exterior) deck, so this modification results in a loss of approximately 10% of the total seating, and 19% of the interior seating.

Although the additional capacity may not be required on the Woodside service at this time, the additional bicycle racks are recommended for all five vessels as all vessels operate on both the Alderney and Woodside routes. Because two of the existing vessels will be replaced in 2018, only three existing vessels would need to be modified, and the additional bicycle racks can be added to the remaining two vessels currently under production.

#### *Segway Volumes*

During the data collection in the summer and fall, no segways were observed boarding the Woodside Ferry service. However, 12 segways were observed on the Alderney Ferry service, travelling in both directions, in the summer, and three were observed in the fall. The crossings in which segways were observed had a minimum of three segways onboard, and a maximum of five. The current configuration of the seating on the ferries precludes the safe and efficient use of segways, as a result, they consume a great deal of space, block doors, and can be a tripping hazard. Unlike other mobility devices travelling on the ferries, such as bicycles, wheelchairs, strollers, and bicycle trailers, the segways observed do not appear to be privately owned or used for personal transportation, but are part of a commercial operation.

### *Special Events*

The bicycle volumes cited above and in Attachment A are intended to be representative of a typical weekday in the summer and fall. Ferry passenger volumes of all types tend to be higher during special events, on some holidays, and on weekends in the summer, with volumes varying widely depending on the occasion and weather conditions. During these high volume periods, limitations on the number of two-wheeled devices are critical to accommodating the large crowds safely.

### **FINANCIAL IMPLICATIONS**

Modifications to the ferries to remove approximately 18 seats and install an additional bicycle rack will require a capital expenditure of an estimated amount of \$14,000 and can be accommodated from the Biennial Ferry Refit (CVD00436) project account. Procuring sizing racks for the three ferry terminals is estimated at \$3,000 and can be accommodated from the Transit Terminal Upgrade & Expansion (CB200428) project account. Budget availability has been confirmed by Finance.

#### **Budget Summary:**

#### **Project No. CVD00436 – Biennial Ferry Refit**

Cumulative Unspent Budget	\$310,508
Less: Estimate Ferry Vessels	<u>\$ 14,000</u>
Balance	\$296,508

#### **Project No. CB200428 – Transit Terminal Upgrade & Expansion**

Cumulative Unspent Budget	\$23,897
Less: Estimate Ferry Vessels	<u>\$ 3,000</u>
Balance	\$20,897

The balance of funds will be used to implement remaining Ferry Refits and Transit Terminal Upgrade expenditures.

### **RISK CONSIDERATION**

There is a short term risk of negative public opinion and acceptance of the recommendation, as two-wheeled devices have not been limited in this way in the past. This can be mitigated with a robust communications plan and consistent enforcement of the amended rules for use of the ferries.

### **COMMUNITY ENGAGEMENT**

No community engagement was conducted regarding this supplemental report.

### **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 Regional 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 Regional Council the accommodation of some combination of devices other than what is recommended in this report, with a corresponding requirement to remove passenger seating.

### **ATTACHMENTS**

Attachment A: 2017 Bicycle Counts

Attachment B: Staff Report Dated April 10, 2017

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A copy of this report can be obtained online at [halifax.ca](http://halifax.ca) or by contacting the Office of the Municipal Clerk at 902.490.4210.

Report Prepared by: Patricia Hughes, MCIP, LPP, Manager, Planning & Scheduling 902.490.6287

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## Attachment A – 2017 Bicycle Counts

### Alderney – Halifax Ferry

Depart	From Alderney				Depart	To Alderney			
	Summer		Fall			Summer		Fall	
	Bikes	Other	Bikes	Other		Bikes	Other	Bikes	Other
630a	3		3		645a				
700a	7		2		715a			1	
715a	3		3		730a				
730a	3		1		745a	2			
745a	1		2		800a	1			
800a	3		1		815a	1			
815a	3		4		830a			1	
830a	4		2		845a	1		1	1
845a	4		2		900a				
900a	2		3		915a	1			
930a	1		4		945a	2	1	1	
1000a			3	3	1015a			1	
1030a	2			1	1045a	6			
1100a					1115a				3
1130a					1145a	1			
1200p	3		2		1215p				1
1230p	8	1			1245p	3	5	1	1
100p			2		115p	1	1		1
115p					130p				1
130p	1	5		1	145p			1	3
145p		1		1	200p		1		
200p	2	1		1	215p		1		
215p		7			230p		4		
230p		2	1		245p	1	4	1	
245p	1	2			300p		2		
300p		1	1	3	315p		1		
315p		5			330p	2	2	2	2
330p	1	1	1		345p				2
345p	2				400p	2		2	
400p					415p	7	3	3	
415p		1	2		430p	1		3	1
430p	1	4		1	445p		1	2	
445p	1		1	1	500p	2	4	1	
500p	3	3			515p	3	5	1	
515p	2	1			530p	6	4	1	
530p	1	2			545p		2	2	
545p		3			600p		1	1	
600p		3			615p	3	2		
615p	1	5	2	1	630p	1			
630p					645p		3		
645p		2	2		700p	3	2		
700p	2	2			715p	1	1	3	
715p		2			730p	2	3		
730p	3				745p		2	2	
745p	2	1			800p	2	1	1	2
800p	1	1			815p	5	3		1
815p		1			830p	1	3		
830p	1				845p	2	2		
845p					900p	2	1	1	
900p	3		1		915p	1	1	1	
<b>Total</b>	<b>75</b>	<b>57</b>	<b>45</b>	<b>13</b>	<b>Total</b>	<b>66</b>	<b>66</b>	<b>34</b>	<b>19</b>

\*Other counts includes strollers, wheel chairs, power chairs, walkers and segways.

**Woodside – Halifax Ferry 2017 Bicycle Counts**

From Woodside					To Woodside				
Depart	Summer		Fall		Depart	Summer		Fall	
	Bikes	Other	Bikes	Other		Bikes	Other	Bikes	Other
637a			3		652a	1		1	
652a	1				707a				
707a			2		722a			1	
722a	1				737a	2		2	
737a					752a	1			
752a	1				807a			4	
807a			1		822a			1	
822a					837a			2	
837a			1		852a	1		2	
852a			1		907a				
907a	1		1		922a				
922a				1	937a			2	
937a	1		1		952a	1			
1007a					1022a				
1037a			3	1	1052a				
1107a	2		1		1122a			1	
1137a					1152a	1			1
1207p					1222p	1			
1237p			1	1	1252p				
107p		1			122p				
137p					152p	1			
207p					222p				
237p	1	3	1		252p	2			
252p					307p				
307p			1	1	322p	1	1		
322p		1	1		337p				
337p			2		352p	1	1		
352p					407p	2		3	
407p					422p	2		1	
422p	1	2	3		437p			1	
437p	1				452p		1		
452p					507p			1	
507p				1	522p				
522p					537p	1			
537p			3		552p				
552p		2			607p				
607p	1				622p				
637p		1	2		652p	1		1	
707p	2			1	722p				
737p					752p		2		
807p			1		822p		1		
837p					852p				
<b>Total</b>	<b>13</b>	<b>10</b>	<b>29</b>	<b>6</b>	<b>Total</b>	<b>19</b>	<b>6</b>	<b>23</b>	<b>1</b>

\*Other counts includes strollers, wheel chairs, power chairs, walkers and segways.