

MEMORANDUM

March 20, 2014

TO: Mayor and City Council

CC: Dr. Penny Ballem, City Manager
Sadhu Johnston, Deputy City Manager
Janice Mackenzie, City Clerk
Michael Magee, Chief of Staff
Kevin Quinlan, Director of Policy Communications
Mairi Welman, Director of Communications
Lynda Graves, Administrative Manager
Taryn Scollard, Director Streets

FROM: Peter Judd, P.Eng.
General Manager of Engineering Services

SUBJECT: Downtown Historic Railway (DHR)

Summary

The purpose of this memo is to provide Council with an assessment of the viability of continued operation of the Downtown Historic Railway. The system has not been operational for a number of years. It has become apparent that under the current operating model of the DHR the City is exposed from a regulatory and liability perspective, and due to the difficulty in maintaining the fleet, staff is discontinuing passenger service operations.

Background

The Downtown Historic Railway (DHR) pilot project was established in 1998/99 to highlight the potential for a streetcar network expansion in the City. It provided a seasonal weekend service typically operated during the months of July to October using 2 leased vintage streetcars (interurbans BCER 1207, and BCER1231) as the fleet. Since inception, the DHR has carried a total of 121,197 passengers, averaging 14,000 passengers per year, originally connecting Granville Island with Science World prior to the Olympics and to the Cambie corridor afterwards. Service disruptions have occurred in 2007, 2009, 2010, 2012 and 2013 for a variety of reasons. For comparison purposes an average bus route in the City transports 18,000 passengers daily.

From a regulatory perspective, the DHR is a designated Heritage Railway and operates under Provincial Minister's Certificates as provided under the Provincial Railway Regulations specific to Heritage Railways. DHR operations are managed through a safety management system developed and administered by the City. Passenger service operations are supported by way of an unwritten partnership with the Transit Museum Society (TRAMS), a volunteer organization.

Two cars have been leased to the City to provide the service, one owned by Coast Mountain Bus Company (CMBC) and the other by a private citizen, Byron Cole.

Challenges and Risks of Operating

There are a number of challenges and risks that the City is faced with when providing passenger operations.

- Liability for rail operations. As the railway, the City manages the primary risk exposures, that of the DHR passenger operations, potential collisions, and damage to property in two ways. Training of volunteers and staff in the operating rules and vehicle safety is the primary method to mitigate risk. The secondary means is through the provision of corporate property insurance to cover the loss or damage to the leased interurban vehicles and corporate liability insurance to cover potential claims arising from passenger operations and collisions. The Transit Museum Society is named as additional insured on the liability insurance policy as they lack the financial capacity to secure separate coverage.
- Accidents. The DHR has a history of accidents. There have been a total of 10 accidents to date, of which 4 resulted in ICBC claims. Each accident exposes the City to financial risk associated with vehicle and infrastructure repairs. To date the 10 accidents resulted in \$90,000 in cost to the City. Although there have been no third party liability claims to date, the risk of third party claims remains a valid concern. Accidents also cause disruptions to service.
- Regulatory compliance. The City has developed a management system and operating rules to govern the railway operations. The City is compliant to date through various exemptions and or modifications. A constant review of changes and diligence to the regulations is required and sustainable transfer of staff knowledge is required. Please refer to Appendix B for more detail regarding regulatory compliance requirements.
- Fleet reliability and maintenance. The fleet is aging and is increasingly more difficult to maintain. Replacement parts and experienced contractors are difficult to source and schedule. Bartering for parts with other collectors or museum societies is common. One vehicle is currently non-operational. Vehicle breakdowns have created disruptions and made passenger service unreliable.
- Qualified volunteer availability for passenger service operations. There has been a decrease in the availability in the volunteer pool due to the regulatory requirements for medical examinations. The volunteer membership has a large proportion of retired transit operators some of whom were not able to pass the medical examinations taken in 2010. Others did not take the test as they did not expect to pass. It is expected

that this trend will continue. Passenger service is contingent on the volunteer interest; any decrease in interest will continue to erode reliability.

- Reliability of service. Accidents, volunteer availability and fleet reliability have, or have the potential to impact the reliability of the service. The impacts may cause delays to the start of the operating season, during the season causing short to prolonged disruptions, possibly even resulting in the cancellation of the remainder of a given season.

The risks and challenges have certainly impacted the reliability of the service and therefore made a scheduled service extremely difficult to maintain. As such it does not provide a useful or reliable transportation service.

Community Outreach

Throughout the review process a few key parties were consulted with.

Granville Island identified that a sustained and regular year round commercial service that would enhance connectivity to key transportation nodes, mainly the Cambie corridor is their greatest desire. The DHR service is nice but due to the seasonality, limited operating hours, and lack of reliability of service, it is not a sustainable or long term solution for Granville Island, nor is it relevant as it stands in its current form.

Tourism Vancouver commented that the DHR offers a nice tourist experience; however it is not seen as an economic generator. For the limited seasonal service there does not appear to be much value in providing a connection to Granville Island.

TRAMS was consulted with to explore a 3rd party operating model, whereby they would be responsible for regulatory compliance, vehicle maintenance, and assume risk as the railway operator. However they expressed challenges with obtaining liability insurance coverage and financing to support the model. TRAMS indicated an interest in remaining involved with the care and custody of the heritage vehicles, but having recently lost their warehouse storage facility. They would need support in the medium term with vehicle storage.

Conclusions and Next Steps

The DHR pilot project was originally conceived to serve as a low cost mechanism to raise awareness of the potential for streetcar in the City. Due to the age of the vehicles, the challenges with maintaining the fleet, the risks associated with running a railway, the potential for collisions, and the projected maintenance expenditures and administration costs, the DHR is no longer seen to provide a low cost option and the value of continuing operations was reviewed.

As an intermittent seasonal service the DHR does not provide a reliable transportation option. It is a novelty and marginally contributes to the Granville Island and Vancouver tourism experience. There is no longer a need to raise awareness for the streetcar network in the City and the priority focus of funding and effort in the near term should be the Broadway rapid transit corridor (subway) with forms part of the 2040 Transportation Plan.

BCER 1231 is a provincial heritage asset with local ownership. We intend to transition the lease to TRAMS, provide access to the existing facility for vehicle storage for a period of 5 years with the possibility of extension, and support TRAMS with consideration given to public display opportunities as appropriate. The remaining vehicle, BCER 1207 is not operating and would be redundant. Given that it is privately owned and the lease has expired we will repair it as required by the lease terms and return it to the owner.

Please do not hesitate to call me if you have questions.

Regards,

A handwritten signature in black ink, appearing to read 'Peter Judd', written in a cursive style.

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General Manager of Engineering Services

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PJ/dvd

Attachments

Appendix B: Regulatory Compliance

Listed below are the sections of the Heritage Railway Regulations the DHR complies with and briefly outlines how compliance is achieved.

Part 1 - Railway Operating Rules - Exemption - DHR has operating rules specific to the DHR track. These are extracted from the Canadian Rail Operating Rules.

Part 2 - Communication Rules - Use of radio communications is preferred. All communication is directed through the Operations Superintendent. The DHR has specific rules for dual car and single car operations. All conductors and motormen are trained in both hand and flag signals.

Part 3 - Passenger and Freight Car Inspection Rules - Exemption - The DHR does not have freight or passenger cars and does not run in a train configuration.

Part 4 - Passenger and Freight Train Brake Rules - Exemption - The DHR does not run in a train configuration.

Part 5 - Passenger Handling Safety Rules - This forms part of the DHR safety management system. Due to the urban environment and surroundings, operators (motormen and conductors) are instructed to evacuate and call 911.

Part 6 - Safety Critical Positions - Positions have been identified and records are kept in accordance with the regulations.

Part 7 - Prevention of Fires - Exemption - The DHR operates in an urban environment.

Part 8 - Track Safety - Modification - All track infrastructure has been designed as per the regulations except for the flange ways. This was due to the specific nature of the Bombardier vehicles. Track infrastructure is inspected weekly. A rail contractor inspects the track monthly. Speed is posted at 45km/hr and falls below the maximum allowable of 65km/hr. Speed is restricted to 25km/hr for the heritage vehicles.

Part 9 - Medical Rules - DHR requires medical cognitive function checks for all safety critical positions. This mirrors the Canadian Rail Operating Rules.

Part 10 - Work Rest Rules on Common Carrier Track- Exemption - DHR is not a common carrier track (does not share track).

Part 11 - Work Rest Rules on Captive Track - *Exemption* - Limited service or limited weekend operating hours fall under the maximum work hours as allowed by the regulations.

Part 12 - Standards Respecting Pipeline Crossings - All utility crossings are to be in compliance with the regulations. Legal documentation is required.

Part 13 - Notice of Railway Works - Notification of works is provided as per the regulations.

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Part 14 - Employee Qualifications Standards - *Exemption* - practical operating rules exam, vehicle safety orientation, hands on vehicle training (3 year expiration). Inactive safety critical positions are required to recertify.

Part 15 - Appliance Standards for Rolling Stock - *Exemption* - Replacement of materials will be done in kind and any significant modifications will be certified by an Engineer.

Part 16 - Safety Management System - DHR has an accepted Safety Management System.

Part 17 - Wire Crossings and Proximity - All 3rd party utilities are required to comply with the regulations. Legal documentation for each crossing is required.

Part 18 - Standards Respecting Clearances - Rail infrastructure has been designed by a professional engineer and installed by a rail contractor. Restricted clearances are dealt with through operating bulletins.

Part 19 - Roadway Pedestrian Crossing Protection - The DHR has installed standard crossing signs (cross bucks) and the Moberly crossing is a signalised crossing with an interconnection to the City's traffic signal.

Part 20 - Heritage Locomotive Inspection Rules - *Exemption* - The DHR operates self-propelled heritage units. The SMS and Operating rules require daily, monthly, and periodic inspections. Hydrostatic testing and track inspection requirements were developed in consultation with a rail contractor/operator.