



June 2, 2023

MEMO TO : Park Board / Mayor and Council

FROM : Steve Jackson – Acting General Manager, Parks and Recreation

SUBJECT : **Stanley Park Train Update**

---

Dear Mayor and Council,

The purpose of this memo is to provide an update on the status of the work to reopen the Stanley Park Train. The train has been out of service since failing a Technical Safety BC (TSBC) inspection in September 2022.

The train assets consist of four gas-powered locomotives and thirteen passenger carriages, all manufactured in the early to mid-1960's apart from one newer locomotive, manufactured in 1975. The City of Vancouver's Fleet & Manufacturing Services (FMS) has been maintaining the trains since 2012. Prior to that, an external contractor maintained the locomotive engines and a staff member, since retired, provided routine biweekly preventative maintenance on the undercarriages, wheels, braking systems, etc.

### **Summary of Diagnostic Findings**

TSBC requested that staff engage a third-party contractor with knowledge of the specific manufacturing standards of the equipment to assess the entire train fleet, and to provide a condition report and remediation plan to return the ride system to the manufacturer's minimum operating standards

While a number of factors were identified as contributors to the condition of the assets and the resulting TSBC stop order, the following are some themes that came from the consultant's review.

- **Age of assets** - The Stanley Park Train is one of two attractions in North America solely operating multiple trains of this gauge and vintage. The manufacturer no longer produces 20-gauge trains or undercarriage components and cannot fully support operators with this equipment. Further, maintenance staff must rely on original manufacturer's documentation. In older equipment, this documentation is not always specific or complete when compared to current safety standards.
- **Loss of staff with expertise in train maintenance** - COV staff who first maintained the trains beginning in 2012 have moved on to other roles and current staff have not had sufficient exposure to the trains to gain familiarity. The train manufacturer has cited a lack of expertise within their own team when asked to support maintenance needs for Stanley Park Train assets. Past instances of requests for support have required the manufacturer to contact retired mechanics/personnel to return to support.
- **Limited preventative maintenance plan** - Preventative maintenance is typically performed three times a year, before the seasonal events: Easter, Ghost Train, and Bright Nights. All other maintenance work is performed in response to specific emergent issues noted by train staff. The manufacturer's specifications detail maintenance needs after



specific operating intervals, which becomes increasingly important as assets age, as older equipment requires more frequent inspection and attention.

- **COVID shutdown** – The subsequent downtime for the train and staffing shortages led to significant gaps in maintenance delivery. Issues that had been flagged prior to COVID were not resolved and, due to staffing shortages and modified post-pandemic operations, remained unresolved through 2022, as only the equipment that was utilized was serviced.

### Next Steps

Staff are working closely with the consultant to determine an expedited path forward to have these assets repaired in time for the 2023 holiday event season (October through December).

Estimated costs for parts to support bringing a single engine and carriages into commission has been estimated at \$260,000. Labour costs are estimated at \$100,000. The consultant will oversee the work, liaising with TSBC, to ensure that the repairs will satisfy all safety requirements. Due to limited funding, staff may require seeking approval for funding reallocations once the full part and labour cost is known.

In addition to funding, the manufacturer has indicated that parts could take anywhere from four to five months to be delivered. Staff will be moving forward with part orders based on funding availability.

Regards,

Steve Jackson  
Acting General Manager - Parks and Recreation

/RY

Copy to: PB Leadership Team  
Rosemary Yip, Train Operations Team Lead  
PB Communications