

From: **"Mochrie, Paul"**

To: **"Direct to Mayor and Council - DL"**

Date: 2024-05-06 11:47:53 AM

Subject: Early Traffic Pattern Observations for the Water St Closure

Attachments: ENG - Memo - Early Traffic Pattern Observations for the Water St Closure.pdf

Dear Mayor and Council,

Please see the attached Council Memo from Lon LaClaire regarding **Early Traffic Pattern Observations for the Water St Closure**. A short summary of the memo is as follows:

- Staff have been collecting the traffic data after Water St was closed for construction on March 2, 2024 as well as after the Port of Vancouver introduced a checkpoint restricting vehicle access to authorized vehicles to Waterfront Road on April 8, 2024
- Overall, the transportation network has continued to function well
- East of Main St, a reduction of vehicle volumes has been observed and west of Main St; West of Main St, modest increases in traffic volume on Hastings St (15% increase) and Pender St (5% increase) have been observed
- Prior to the Port introducing their checkpoint, volumes on Waterfront road were up over 30%; post checkpoint, volumes have decreased

If you have any questions, please feel free to contact Lon LaClaire at 604-873-7336 or lon.laclaire@vancouver.ca

Best,
Paul

Paul Mochrie (he/him)
City Manager
City of Vancouver



The City of Vancouver acknowledges that it is situated on the unceded traditional territories of the xʷməθkʷəy̓əm (Musqueam), Sḵw̓x̓wú7mesh (Squamish), and səlilwətał (Tsleil-Waututh) Nations.

MEMORANDUM

May 6, 2024

TO: Mayor and Council

CC: Paul Mochrie, City Manager
Armin Amrolia, Deputy City Manager
Karen Levitt, Deputy City Manager
Sandra Singh, Deputy City Manager
Katrina Leckovic, City Clerk
Maria Pontikis, Chief Communications Officer, CEC
Teresa Jong, Administration Services Manager, City Manager's Office
Mellisa Morphy, Director of Policy, Mayor's Office
Trevor Ford, Chief of Staff, Mayor's Office

FROM: Lon LaClaire
General Manager, Engineering Services

SUBJECT: Early Traffic Pattern Observations for the Water St Closure

RTS #: N/A

Staff have been collecting traffic data related to the traffic management plan (TMP) that was implemented on March 2 to close Water St to motor vehicles to support construction in Maple Tree Square and the upcoming Pedestrian Zone pilot. This data has allowed staff to respond to immediate issues, and will inform the approach for any future summer pedestrian zones and transportation network changes needed to support a pedestrian-first Water St.

Overall, the transportation network has continued to function well. East of Main St we have seen a reduction in the overall volume of motor-vehicle traffic on most east-west streets. West of Main St, there has been some additional traffic on Hastings St (15% increase) and Pender St (5% increase), but well within the capacities of the streets.

The most significant issues have been on Waterfront Road where volumes were up over 30%. To manage traffic volumes on Waterfront Road and to minimize the impacts to the convention centres and cruise ship operations, the City has supported the Port of Vancouver to implement a checkpoint at the foot of the Main Street overpass on April 8 that requires non-commercial vehicles to provide proof of business.

There have also been some transit impacts for buses travelling southbound Main St. Staff are working with CMBC to mitigate these impacts.

Given the high number of vulnerable people in the area, staff have also been regularly reviewing operations at a number of intersections, including Main and Hastings. The intersections are continuing to operate without observable changes in conflicts between pedestrians and vehicles. Staff will continue to monitor the safety at these locations.

Key findings to date are in Appendix A. and more complete data can be found in Appendix B. Staff will continue to tweak the plan as traffic patterns change over time.

Staff will also be providing an update for Council in the coming weeks on plans for the Water St Pedestrian Zone pilot.

Please contact me directly if you have any questions with regard to this information.

A handwritten signature in blue ink, appearing to read 'Lon LaClaire'.

Lon LaClaire, M.Eng., P.Eng.
General Manager, Engineering Services

604.873.7336 | lon.laclaire@vancouver.ca

Appendix A: Key Findings

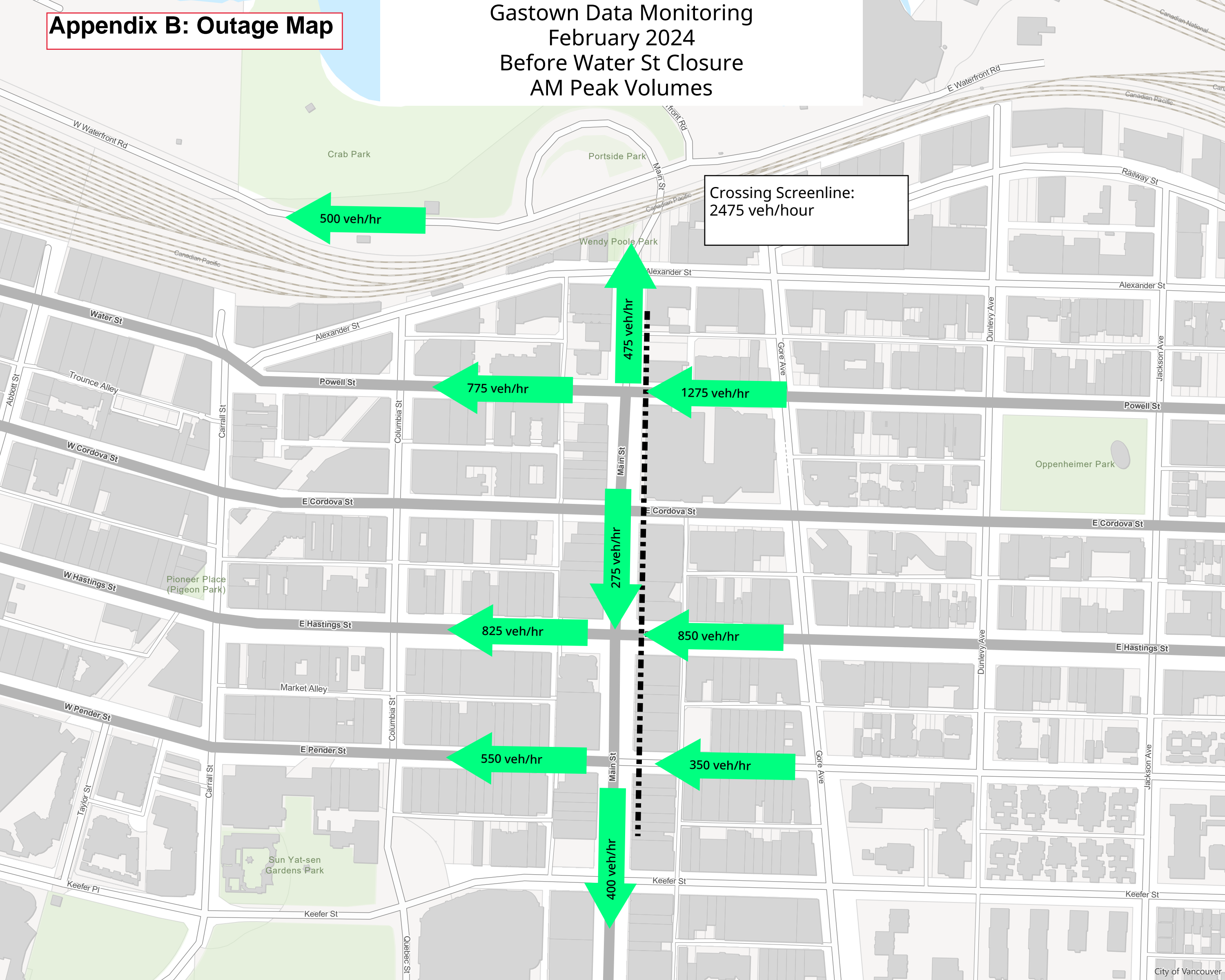
Below is information from before and after the checkpoint on Waterfront Road and other more minor interventions. The data focuses on the morning peak period, as the changes primarily impact the morning commute.

- March 2, 2024 (initial TMP) until April 8th, 2024 (Checkpoint implemented)
 - Traffic volumes on Powell St approaching the intersection of Powell and Main dropped approximately 30% (375 veh/hour)
 - Traffic volumes did not fully shift to westbound Hastings St or Pender St - there was an overall drop of 15% across this screenline
 - Traffic increased 30% on Waterfront Rd – observationally, this resulted to significant congestion and delay
 - Traffic volumes on Pender St (+5%) and Hastings St (+15%) west of Main St increased
- After April 8th, 2024 (Checkpoint implemented)
 - Traffic volumes on Powell St approaching the intersection of Powell and Main dropped further, 40% below baseline (525 veh/hour)
 - Traffic did not further shift to westbound Hastings St or Pender St, there is now an overall drop of 20% across this screenline
 - Traffic volumes on Waterfront Rd have reduced significantly; however, there are still many vehicles arriving at the checkpoint and being turned around
 - Traffic volumes on Main St north of Powell St have returned to pre-TMP levels; however there is often congestion in this area leading up to the checkpoint

Traffic volumes on Pender St and Hastings St have remained unchanged from before the checkpoint. Both right turns from Main St onto Pender St and Hastings St are at capacity

Appendix B: Outage Map

Gastown Data Monitoring February 2024 Before Water St Closure AM Peak Volumes



Gastown Data Monitoring March 2, 2024 - April 7, 2024 After Water St Closure, Before Checkpoint AM Peak Volumes



Gastown Data Monitoring April 8, 2024 - Present After Water St Closure, After Checkpoint AM Peak Volumes



Crossing Screenline:
1900 veh/hour
20% Volume Decrease

Port Checkpoint
Approved Vehicles Only

No westbound through
traffic across Main St on
Powell St

Maple Tree
Square
Construction