Port of Tacoma Commission



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DATE:	February 13, 2024
то:	Port of Tacoma Commission
FROM:	Eric Johnson, Executive Director
	Sponsor: Jason Jordan, Director, Environmental & Planning Services
	Project Manager: Ryan Medlen, Senior Planner
SUBJECT:	Traffic Impacts of the Fishing Wars Memorial Bridge Closure

A. BRIEFING PURPOSE

This briefing is to provide the Commission with an assessment of traffic impacts following the recent closure of Fishing Wars Memorial Bridge.

Strategic Plan Initiative: TA-2 - Advocate for the transportation infrastructure and system management needs of Port-related businesses in the Tideflats and Pierce County.

B. SYNOPSIS

The Fishing Wars Memorial Bridge closure has resulted in additional congestion in the Tideflats in the evening hours. Port priorities established in 2022 for road projects may help mitigate this additional congestion if the bridge remains closed for an extended period. The loss of a bridge crossing the Puyallup River is concerning from a resiliency perspective.

C. BACKGROUND

The Federal Highway Administration ordered the City of Tacoma to close the Fishing Wars Memorial Bridge (FWMB) on October 20, 2023. At the time, the bridge was one of four crossings over the Puyallup River serving vehicular traffic. Due to weight restrictions, the bridge primarily served passenger vehicle traffic on Pacific Hwy and some truckers used the bridge on empty runs, though the FWMB was not used for freight trips from Port facilities.

Traffic that would otherwise use FWMB is diverting to the remaining bridges over the Puyallup River: the Lincoln Ave Truss, SR 509, and I-5. Utilizing data from Inrix and analysis from an on-call consultant, this memo presents information on the congestion (using vehicle speed as a proxy) added by these diversions followed by a discussion of Port of Tacoma priority transportation projects and next steps relevant to the FWMB situation.

Inrix is a data vendor that can calculate vehicle speed from cell phone data, connected vehicles, and truck fleet data. This method allows staff to review the flow of traffic for one month before the closure of FWMB and one month after the closure, adjusting for holidays in the case of the

latter. Tuesday through Thursday was evaluated in an effort to capture days with the highest volume of regular traffic. This data provides an overall picture of the situation in the absence of physical traffic counts. As the change in speed is an average over a month, individual days will differ from the numbers shown in this analysis.

D. **PROJECT DETAILS**

Findings:

Data was pulled for the corridors shown in Figure 1. The data for all studied corridors is found appended to the presentation. Highlights include:

- 1. Bridge crossing delays in the AM (6 to 9am) and midday (MD) do not show a significant change since closure of the FWMB.
- 2. Congestion has significantly increased on the three bridges crossing the Puyallup River in the PM (3 to 6pm) hours.
 - a. Southbound SR 509 (corridors 1 and 2) has the greatest additional congestion and resulting decline in travel speeds with up to an average 29% reduction in average speeds.
 - b. Southbound I-5 (corridor 10) has seen significant increased congestion, with an average 17% decline in PM travel speeds west of Port of Tacoma Road.
 - c. Northbound I-5 and westbound Lincoln Ave (corridor 9), from Port of Tacoma Road to Portland Ave, also see notable declines in travel speeds.
 - d. Passenger vehicle diversions are congesting these corridors primarily during the PM.
- 3. In addition to the corridors that align with Puyallup River crossings, a severe decline in travel speeds due to congestion on Port of Tacoma Road (corridor 6) in the PM hours and a moderate decline MD.
 - a. These reduced speeds reflect increased congestion at the Port of Tacoma Road and I-5 interchange as well as the intersection with Pacific Hwy.
 - b. Port of Tacoma Road is part of the official detour route for vehicle traffic on Pacific Hwy.

Other Considerations:

- Redundancy: With a limited number of crossings over the Puyallup River, access out of the Tideflats is vulnerable. This analysis finds the greatest congestion increases are along routes associated with remaining river crossings.
- Evacuation Route: Pacific Hwy is a key evacuation route out of the Tideflats. The closure of the FWMB creates a concern in the event of an evacuation by reducing the number of points where people can seek safety or higher ground in a tsunami event.
- Emergency Response: There is insufficient information available to determine any direct impact to response times from the closure of FWMB. Fire stations in the City of Fife and Tideflats provide support to those in the Dome District, and it will be more challenging for these stations to provide this support with the loss of a more direct path of travel and increased congestion on the alternate routes.



Figure 1: Studied Corridors.

Potential System Improvements

In November 2022, the Port of Tacoma Commission voted to adopt priority transportation projects. Two of these adopted priority projects focus on areas of increased congestion and would improve the system before and after the FWMB is replaced. The new data supports continuing pursuit of these projects:

- Port of Tacoma Road I-5 Interchange completion: Completing the second phase of the Port of Tacoma Road interchange project would improve system performance from Pacific Hwy to 20th St. E. This will provide a new crossing over I-5 for northbound Port of Tacoma Road traffic and reduce turning conflicts. This project is a high priority as identified in strategy TA-1 of the Port's Strategic Plan.
- 2. Lincoln Ave and Portland Ave intersection improvements: Improving traffic flow at the intersection of Lincoln Ave and Portland Ave to alleviate congestion.

In addition to working with Port staff on the projects above, staff from the City of Fife and Tacoma have been coordinating changes to traffic signal timing at various locations to improve traffic flow in some of the congested areas when feasible.

Addressing the impacted areas of SB SR-509 and I-5 would require additional research and coordination to determine if any mitigation options are viable. The congestion on these corridors is related to areas of the transportation system outside of the Tideflats.

E. ATTACHMENTS TO THIS BRIEFING

- Slide presentation.
- One-pager from City of Tacoma: Fishing Wars Memorial Bridge Replacement Summary January 2024.

F. NEXT STEPS

Current efforts to mitigate the traffic impacts from the FWMB closure will include Port of Tacoma staff engaging with the City of Tacoma on possible improvements to the Lincoln Ave and Portland Ave intersection, the city's Portland Freight Access project, as well as considering improvements to the transportation system for purposes of freight movement in the initial stages of the Fishing Wars Memorial Bridge replacement design. Staff will also continue to monitor and support phase 2 of the Port of Tacoma Road Interchange, which is currently funded for design and construction.