



**COMMISSION  
AGENDA MEMORANDUM**

**Item No.**

9a

**BRIEFING ITEM**

**Date of Meeting**

April 10, 2018

**DATE:** April 2, 2018

**TO:** Executive Director Stephen P. Metruck

**FROM:** Michael Ehl, Director Aviation Operations  
Jeffrey Hoebet, Senior Manager Airport Operations

**SUBJECT:** Airport Drives Traffic Enhancement Briefing

**EXECUTIVE SUMMARY**

Sea-Tac's roadway system was designed in the late 1960s when the Airport facilitated the movement of 5 million annual guests. Replacement of the original return-to-terminal loops, immediately adjacent the parking garage, with the South 160th Street recirculation loop in 2008 assisted in removing some 40% of recirculating traffic from the inner drives, and effectively expanding the projected practical capacity of the system beyond its saturation at 40 million annual guests which was forecast in 2016-2017.

Given Sea-Tac's record 40 percent growth in passengers between 2012 and 2017, the roadway system is again strained in peak operating periods, regularly resulting in stop and go conditions on the inbound/southbound lanes of the Northern Airport Expressway. While these conditions historically affected Arrivals/Lower Drive traffic and were limited to nighttime holiday peak periods, 2017 saw the emergence of impacts spread more broadly across the operating day, to include daytime impacts to the Departures/Upper drives.

Equally dynamic in nature has been the changing mode split for ground transportation options available to Airport patrons. In particular, the introduction of Transportation Network Companies (TNCs) to Sea-Tac in 2016 drastically altered the volume of vehicles using the roadway system as necessitated by the transit from remote holding lots to the customer pick-up area on the third floor of the parking garage.

Recognizing that completion of roadway capital improvements to address the long-term capacity needs of the Airport is currently slated for 2020-2021, this briefing is intended to inform the Commission of near-term operational mitigations which are currently underway to provide improvement in the summer of 2018 and beyond.

**ADDITIONAL BACKGROUND**

During the holiday season of 2012, Aviation Division staff and the Port of Seattle Police Department implemented the Traffic Mitigation Plan (TMP) initiative to mitigate anticipated

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high traffic volumes. Specifically, this plan restricts access to the southbound Airport freeways by closing the Air Cargo Road on-ramp, thus preventing large numbers of taxis, TNCs, and smaller number of other GT vehicles from impacting the traffic flos as they merge and weave across three lanes of traffic to enter the third floor plaza of the parking garage. The TMP has been implemented approximately 12 times since November 1, 2017.

While the TMP has been very effective over the ensuing 5 years in rapidly counteracting long queues of traffic entering the Airport drives system during peak periods, it is a reactive measure which is labor intensive and less than ideal in its impact on customers and GT operators alike. As such, Aviation staff is pursuing other modifications that are proactive and considerate of other objectives. The first modification identified for implementation is the use of TNC Re-Match procedures.

In November 2017, the Port worked with the TNCs to implement a trial of new rideshare application feature, utilized at many airports across the country, known as Re-Match. The feature allows for TNC drivers who have just completed a passenger drop-off on the Airport's departure drive to receive an immediate dispatch for a passenger pick-up in the ground transportation plaza in the garage. The benefit to the driver is that they do not need to travel back to the 160<sup>th</sup> Street holding lot and wait for a passenger pick-up dispatch from their TNC. Instead, the driver exits the departure drive and utilizes the return to terminal loop and enters the garage pick-up area to receive their passenger.

The TNC's main interest in implementing Re-Match is to reduce the waiting time for passengers requesting a pick-up from the Airport, which, of course, is a goal of Port staff as well. During the duration of the pilot of Re-Match, passenger wait times have been reduced by a third, according to information provided by the TNCs.

TNCs are very enthusiastic about the power of Re-Match to reduce deadheading trips to the airport, while also expanding opportunities to those drivers who have previously not been permitted to pick up passengers. TNCs' environmental performance is measured via the E-KPI, which uses vehicle fuel efficiency, deadhead reduction, and ridesharing factors to determine if TNCs are meeting the environmental equivalent of the taxis' contracted 45 MPG and 93% deadheading rate (set while Puget Sound Dispatch/Yellow Cab was still under contract).

When the TNC pilot was first launched, TNCs were unsure how to meet the E-KPI and decided to focus on restricting pickup events to only those drivers possessing high fuel efficiency vehicles, rather than on deadhead reduction or increasing ridesharing. Thus, many TNC drivers who dropped passengers at the airport were unable to pick up due to the restriction imposed by the TNCs. However, during the Re-Match pilot, the TNCs relaxed the fuel efficiency restriction only for those vehicles that had provided a drop off, as a means of reducing the amount of deadheading occurring to serve airport passengers. The results have slightly lowered the average fuel economy of pickup events while dramatically reducing deadheading. We estimate roughly 30,000 deadheading trips to the airport were avoided during the month of

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December. The participating TNCs E-KPI performance increased during the pilot while also expanding opportunity for drivers, and reducing vehicle miles traveled by TNC operators.

The Port has realized other important benefits from Re-Match as well, including:

- (1) Significant reduction in congestion and traffic within and around the 160<sup>th</sup> Street holding lot.
- (2) Improvement in Airport expressway congestion close to the terminal as fewer TNC drivers merge onto the Airport expressway from the Air Cargo Road/South 170<sup>th</sup> Street on-ramp; this benefits all Airport expressway users, including private citizens as well as other modes of commercial transportation including taxis, limos, shuttles, etc.

As part of the Re-Match trial, the Port and TNCs have worked closely to find additional improvements that could be implemented to further improve the efficacy of Re-Match. One such revision is to utilize a ramp from the departure drive back to the south entrance of the Airport garage for TNC Re-Match vehicles. By allowing this routing into the garage, TNC Re-Match drivers would be able to avoid utilizing the return to terminal loop to enter the garage for their passenger pick-up. With this change, two significant benefits would be realized:

- (1) Passenger wait times would be further reduced, as drivers would have significantly less distance to travel to get to the TNC pick-up area within the garage.
- (2) Airport expressway congestion would see additional improvement as the TNC Re-Match vehicles would avoid the return to terminal loop to enter the garage.

Port staff is currently developing the implementation strategy for the south entry and working with both the TNC partners and internal Port stakeholders (including Environmental, Operations, Parking, etc.) in finalizing the optimal layout and policies for the program. Staff's goal is to implement the garage south entry program in early April.

**ATTACHMENTS TO THIS BRIEFING**

Presentation slides

**PREVIOUS COMMISSION ACTIONS OR BRIEFINGS**

None