

Airport Drives Traffic Enhancement Briefing



Background

- Roadway system designed 1968 – 50 years ago
 - 5 million annual passengers
- Major realignment for Light Rail 2008
 - Right of way/Relocation of northbound lanes
 - Prior condition - gridlock within inboard roadway loops typical
 - Removed return to terminal loop ramps
 - Removed 40% of recirculating vehicles

1968-2018

Landside Access Critical to SEA



Managing a Complex Balance Requires Comprehensive Long-Term Strategic Policy

Intelligent Traffic System (ITS)



- Sensors attached to gantries on Airport Expressway and Air Cargo Road capture vehicle count and speed
- Data can determine a general level of service on roadways

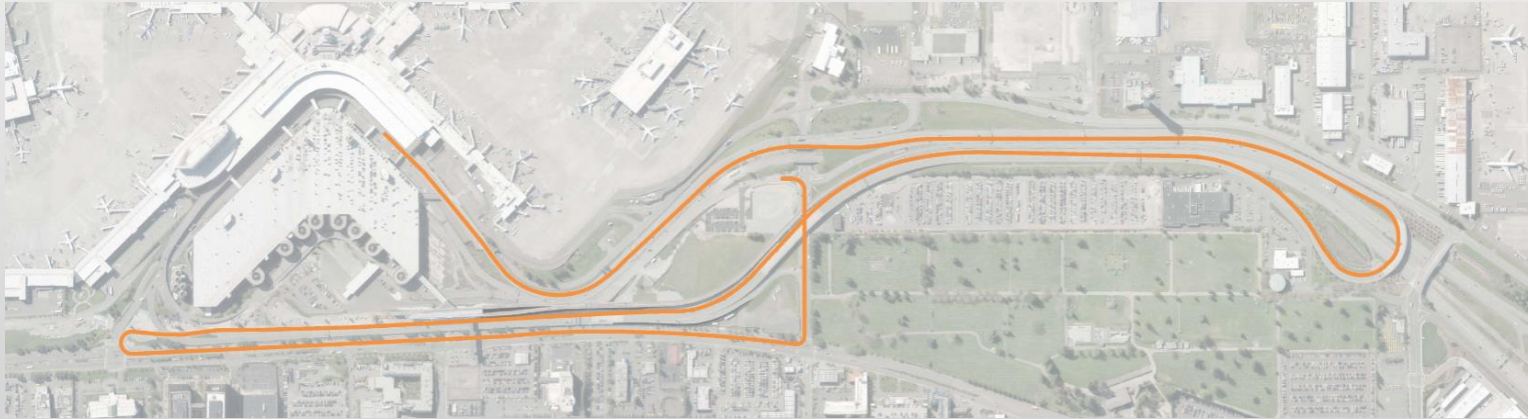
Powerful Data Available for Improvement Initiatives

Traffic Mitigation Plan

- Instituted for 2012 holiday season
- Implemented as needed during peak periods 9PM-1AM
- Revised and enhanced Thanksgiving 2017
- Automated alerts to Airport Duty Managers
 - Coordinate resources and communication to stakeholders
 - POS Police
 - GT Operators
 - City of SeaTac

Operational Mitigations Have Limited Effectiveness

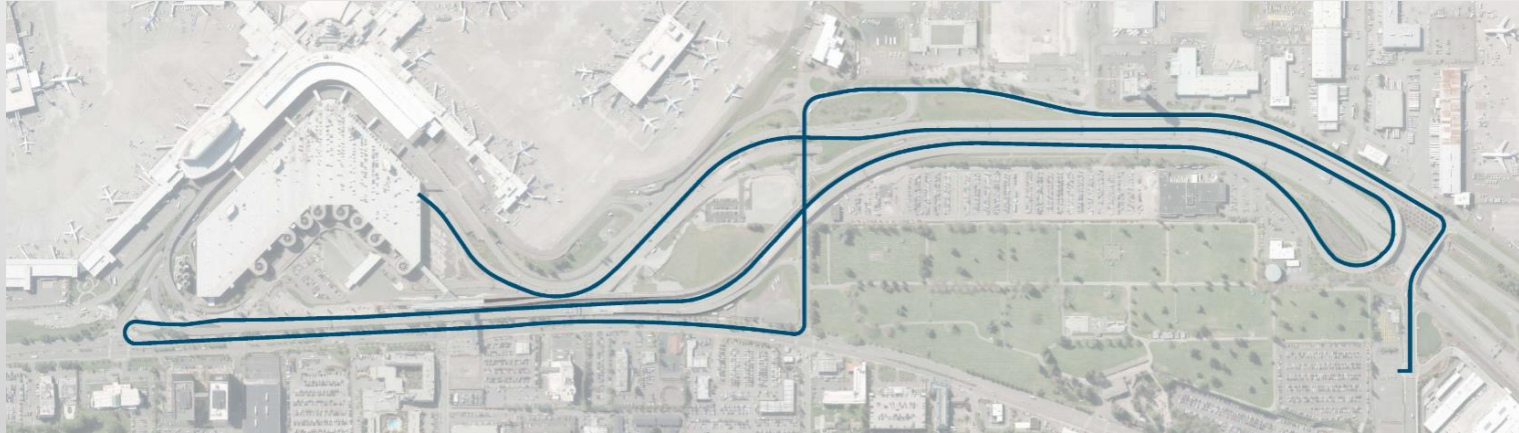
Traffic Mitigation Plan (Cell Phone Lot)



- All cell phone patrons utilize Right turn only onto 170th Street to International Boulevard
- Right turn on International Boulevard to South Airport Entrance at 182nd Street
- Right turn to 182nd Street and onto Airport Expressway system to terminal

Traffic Mitigation Plan Level 1

Traffic Mitigation Plan (Commercial Traffic)



- Coordinated closure of on-ramp from Air Cargo Road to Southbound Expressway
- Traffic rerouted on 170th Street to International Boulevard to 182nd Street entrance
- Allows greater distance for taxis and TNCs to merge into left lanes to enter third floor GT Plaza

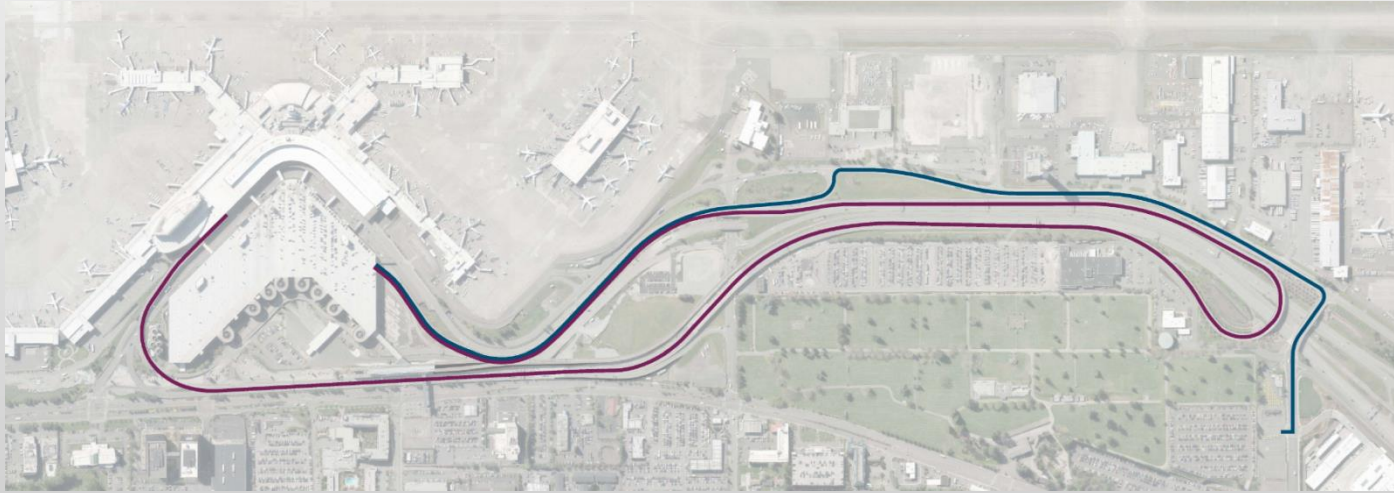
Traffic Mitigation Plan Level 2

TNC Re-Match Pilot

- In November 2017, Port authorized signatory TNCs to allow for vehicles dropping off passengers on the Airport drives the ability to dispatch for a pickup, bypassing the staging lot on South 160th Street (Re-Match)
- Re-Match vehicles use the Return to Terminal loop on the Airport Expressway to enter the Ground Transportation Plaza on the third floor of the Parking Garage for passenger pickup

Re-Match is a product used by TNCs at many major airports

Current Routes of TNC Traffic



- Pickups originating from the staging lot (blue) utilize S 160th Street and Air Cargo Road to enter the Ground Transportation Plaza
- Pickups from Re-Match (purple) drop passengers off at the Airport drives and use the Return to Terminal loop on Airport Expressway to return to pick up customers

TNC vehicles can receive trip requests from either the staging lot or immediately after dropping off a passenger

TNC Re-Match Pilot Results

Issue	Effect	Notes
Passenger Waiting Times	Decreased	Waiting times from Re-Matched trips are roughly a third shorter than from the staging lot
Environmental Performance	E-KPI performance improved by ~4-5% for the participating TNCs	Average fuel economy of pickup events slightly decreased, but reduced deadheading more than made up for it
Opportunity for TNC Operators	Significantly Increased	Over 4,000 new drivers have made an outbound trip since Re-Match pilot implementation
Deadhead Trips	Reduced 30,000 deadheading trips during December 2017	Reduced deadheading decreases GHGs, reduces congestion, and increases driver productivity

Re-Match has been beneficial both operationally and environmentally

Proposed Re-Match Route of TNC Traffic



- TNC trips originating from S 160th Street staging lot (blue) continue to use Air Cargo Road to enter GT Plaza
- Re-Match rides (purple) immediately enter Garage from south entrance and use Helix 1 to third floor

TNC pickups via Re-Match should see drastic decreases in passenger waiting times

Next Steps

- Implement TNC Re-Match in April.
- 7 day CPI/Lean LIFT event with > 20 stakeholders April – May 2018.
- Introduce LIFT improvements June 2018.
- Air Cargo Road improvements project.
 - Addresses congestion around Cell Phone Lot.
 - Design 2018
 - Construction 2020
- Arrivals Drives Widening project
 - Preferred option May 2018.
 - Addresses congestion entering parking, 3rd floor GT plaza/arrivals drives.
 - Commission authorization in late August.
 - Construction in 2020-2021.

Continued Focus Going Forward