

Working Together to Improve Operations in the DSTT

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King County Metro

- Renamed for Martin Luther King Jr
- 256 HOV Lane Miles
- ~70 Miles of trolley wire
- 10m gallons of diesel annually
- And 16.4 gWh of electricity
- 899 Shelters with murals/artwork



King County

Outline

- Historic DSTT Operations
- Link Light Rail Expansion
- Performance Need
- Collaborative Improvement
- Results
- Lessons Learned

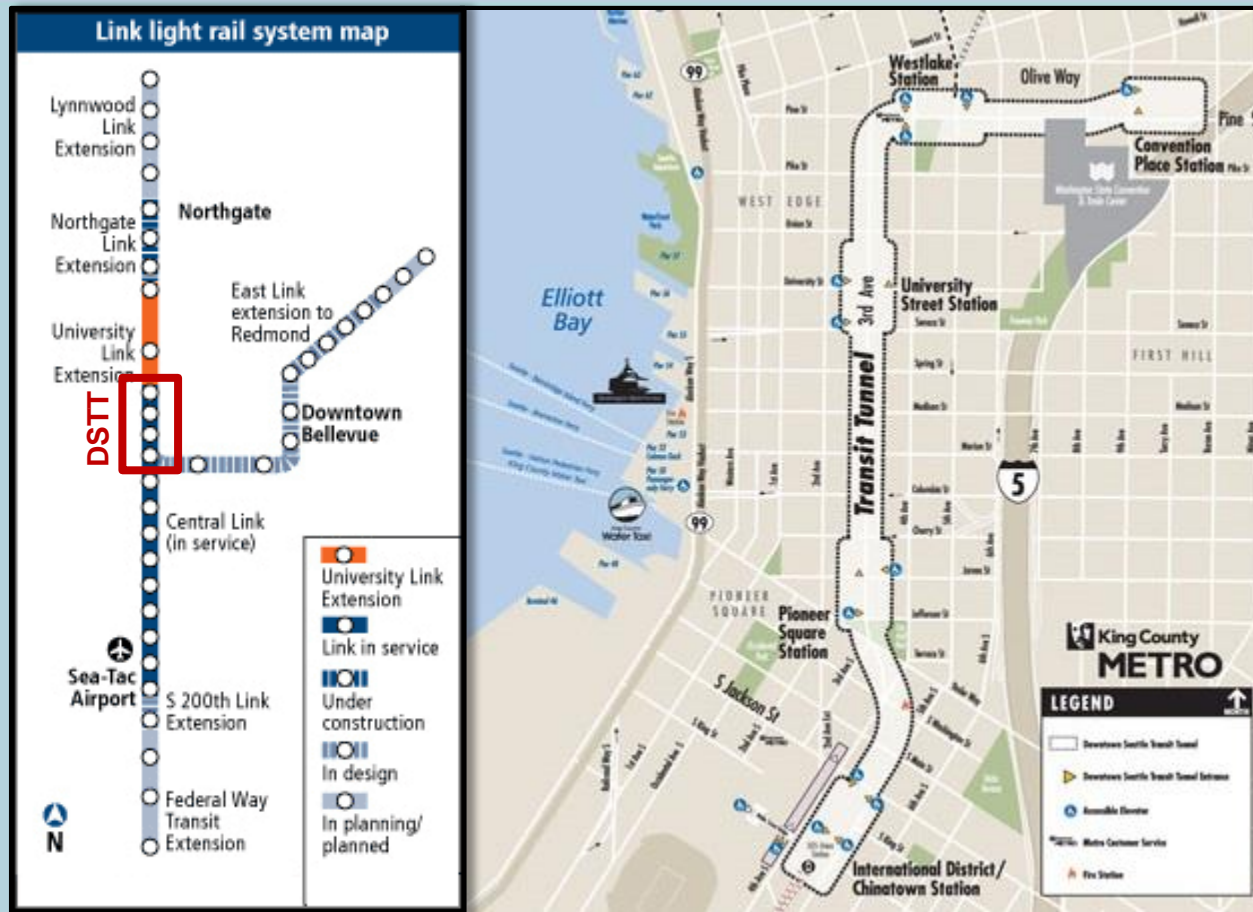
What the heck is a DSTT



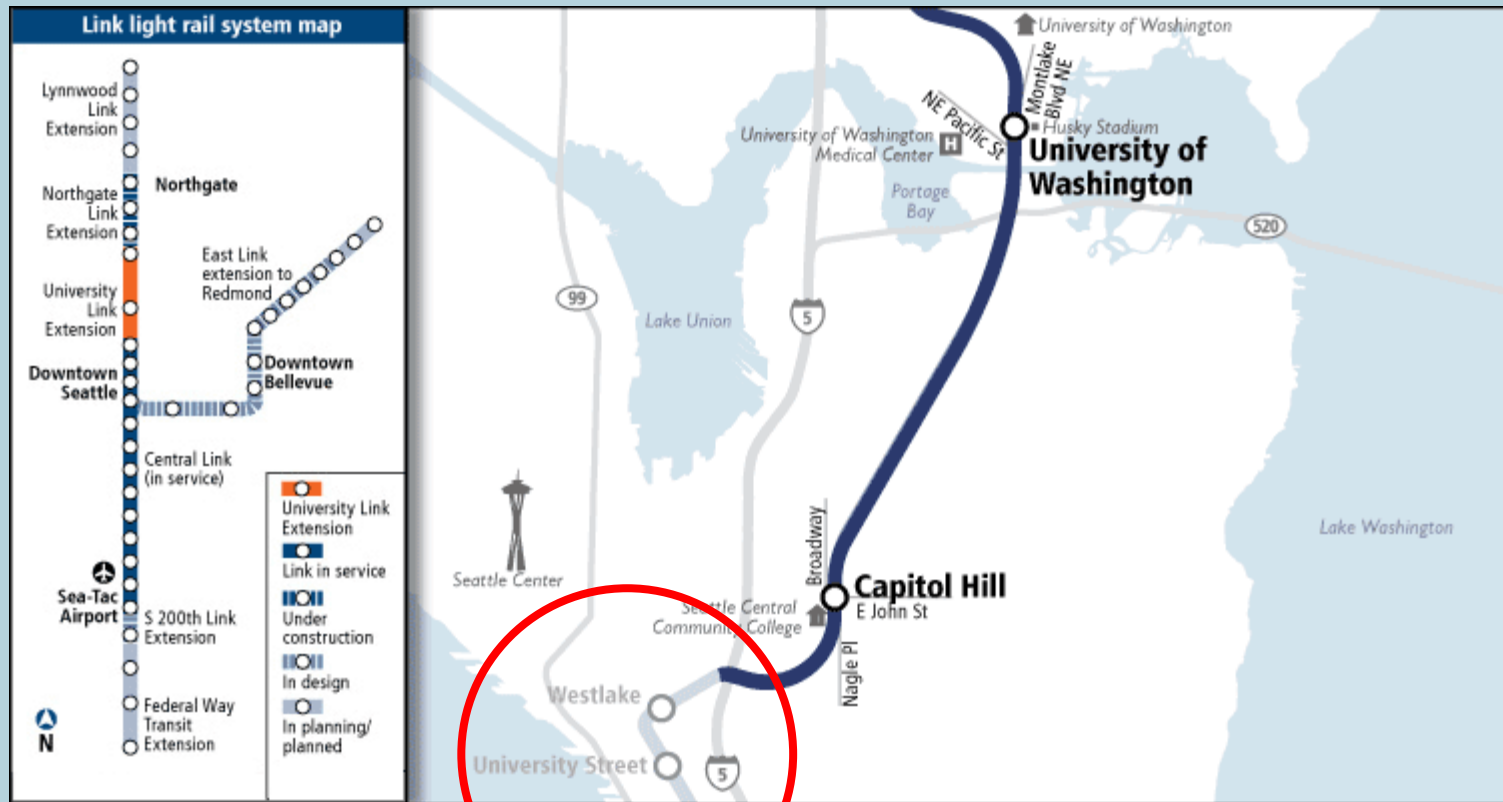
Historic DSTT Operations

- Downtown Seattle Transit Tunnel
- Joint Bus/Rail Tunnel
- Joint Bus/Rail Platforms
- Two Agencies (KC Metro-Bus, ST-Link)
- Single Service Provider (Metro/Metro)
- Prior to 2016 – **3 Terminals**
 - Bus North, Bus South, Rail (North)

Historic DSTT Operations



Link (Light Rail) Expansion



Link (Light Rail) Expansion

- Extension is a fundamental change in operations
- DSTT is now in the middle of the Link alignment
- Delay/Variability in the DSTT now impacts both directions
- Link fleet implications



Performance Need

- Performance Needed to Improve
 - In Fall 2015 – 90th %tile = ~14.5 Minutes
 - Target – 90th %tile = 11 minutes
- Link service in DSTT needs to be consistent
 - Headways
 - Trips
 - Passenger Loads

Performance Need

- Reduce travel time by 3.5 minutes and improve reliability..... EASY!
 - Errrrr, maybe not
- Why is it tough
 - Two agencies worth of planners and managers
 - Two division within Metro historically separated
 - “We have always done it this way”

A Plan to Improve

- Put everyone in a room and let them sort it out. But, who is everyone?
 - Senior Managers, Managers, Planners, Engineers, Operations Staff, Control Center Staff, On the Ground Supervisors, Safety, Schedulers, Communications Staff, Marketing Staff, Vehicle Maintenance, Project Managers
 - From two agencies

**I used to be a people
person...**

**but people ruined that
for me.**



A Plan to Improve

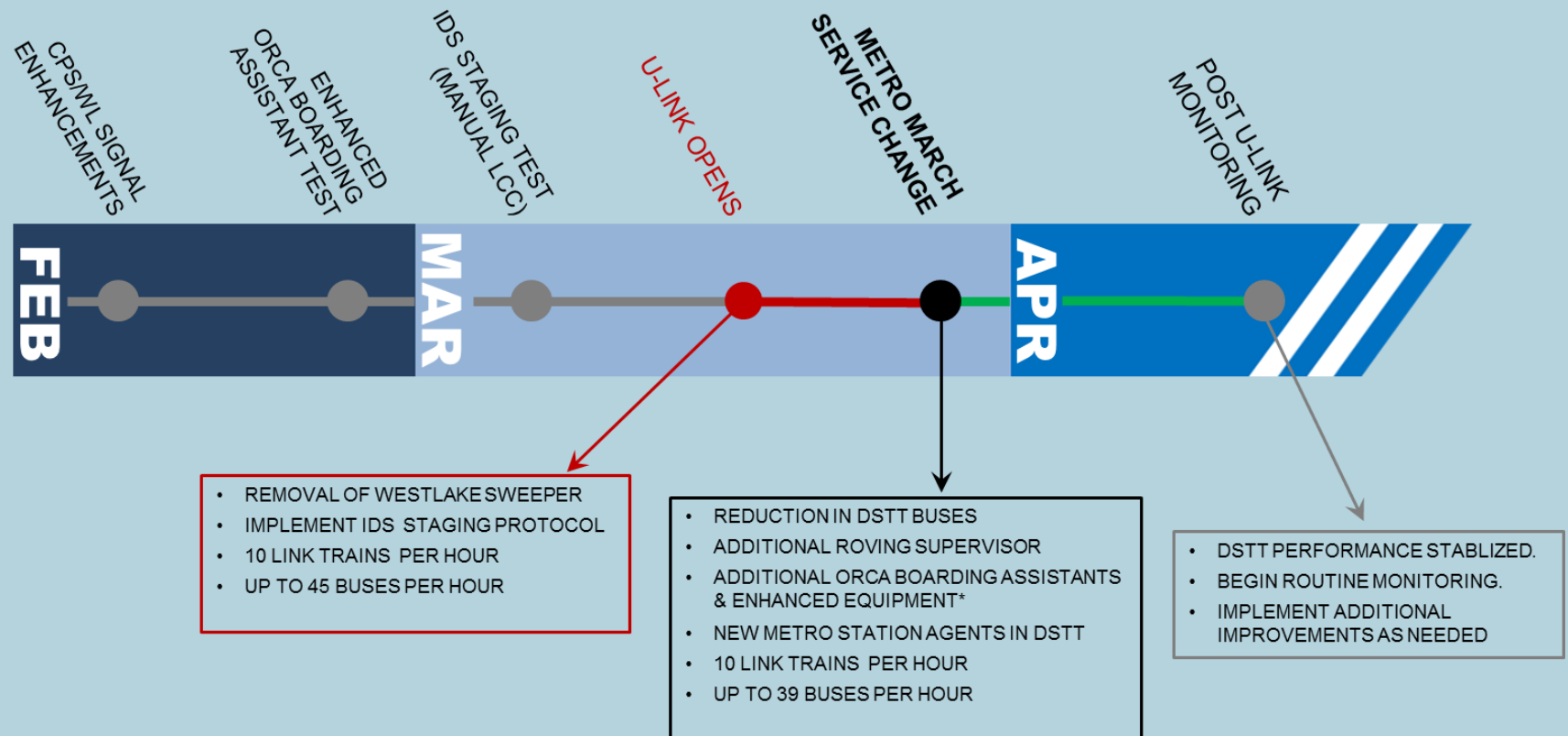
- We have all the people, what do we improve. Three Categories
 - Increase Vehicle Speed/Reduce Dwell
 - Improve Bus/Rail Coordination
 - Manage Risk
 - Reduce Buses in the DSTT
- Over the course of 2 months we developed 18 potential improvements
 - Some easy, some difficult

A Plan to Improve

#	Improvement	Implementer Agency / DSTT Working Group Member	Increases Speed/ Reduces Dwell	Improves Bus/Rail Coordination	Manages Risk	Potential Link Travel Time Savings
Planned Improvements for March 2016 Service Change						
1	Additional Customer Communication/Outreach	ST	X	X		0-15 seconds
2	Royal Brougham Security Barrier Operating Procedures	ST / ST Safety	X	X		0-15 seconds
3	Bay Consolidation in the Tunnel	Metro		X		15-30 seconds
4	Provide additional training/guidance to ORCA boarding assistants	Metro	X		X	15-30 seconds
5	Provide roving service quality supervisor in the Tunnel during the peak period	Metro		X	X	15-30 seconds
6	Purchase a push truck (TUG) for the DSTT	Metro			X	0-15 seconds
7	Create Tunnel Customer Service/Station Agent position to improve platform loading operations and customer service.	Metro / ST				0-15 seconds

Roadmap

DSTT ROADMAP: FEBRUARY – APRIL 2016



Improvements

- Many Successes
 - Adding supervision
 - Consolidating Bus Bays
 - “We have always done it this way”
 - Bus/Rail Signaling Changes
 - Revised Tunnel Ingress/Egress Procedures

A Few Failures



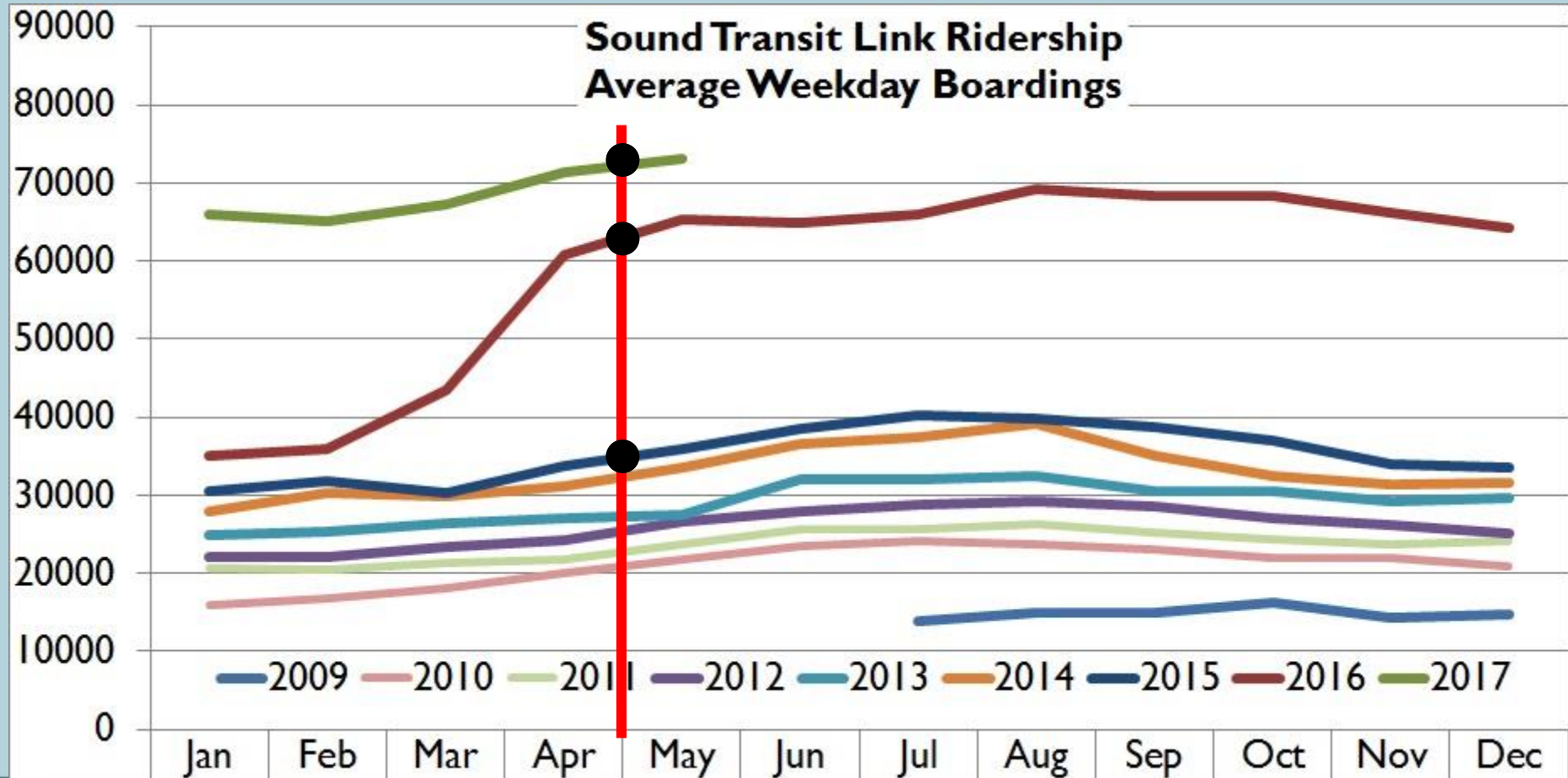
“Verdict on Platform Decals: Meh”



Positive Outcome

- Reduced Travel Time
 - 90th Percentile better than 12.25 Minutes
 - Didn't quite hit the target
 - Link has been a success
- Huge increase in reliability
 - Better Staffed
 - Better Equipped
 - Better Reliability

Positive Outcome



Lessons Learned

- Connect with those on the ground for ideas about how to improve operations
 - Understand that they may not know why something is “Broke” just that is
- Educate your customer – Make them part of the solution
 - Just don’t rely on them exclusively



Lessons Learned

- Question the way it has always been done
 - Unless it has to do with unions, then slowly and calmly back away
- Great things happen when agencies challenge each other but maintain positivity
 - It will be your job to keep everyone positive



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