

## **October Meeting Minutes (10/23/2024)**

- Introductions
- Public Comment, Approval of Previous Minutes
- Monitoring Progress on SDOT's Transportation Equity Framework (Annya Pintak & George Every, SDOT)
- Seattle Transit Measure (STM) - Background and Programming (Matt Yarrow & Laura Lee Sturm, SDOT)
- Board Business
  - Presentations Follow-up / Action Items
  - Major Items Update
  - Levy Oversight Committee Report Out
  - Upcoming Officer Elections
- Announcements

### **Members in Attendance**

Art K

Zach Burton

Priya Balan

Ashwin Bhumbra

Carolin Tillinger

Carolyn Birkenfeld (SDOT Liaison)

Cole Laush

Deborah Barnard

Kyler Parris

Dana Coppernoll - Houston

Dexter Jenkins

Katie Freeman

Sandro Pani

Shirley

Venu Nemani SDOT

Laura Wojcicki SDOT

Matt Yarrow SDOT

Jeanne Clark SDOT

No Public comment

### **Approval of Previous Minutes**

Zach motions. Dexter and Deborah seconds. Meeting minutes approved.

### **Public Comment Time**

No comments.

## **Presentation 1 : Martin Luther King Jr. Way S Signal Reprioritization Pilot**

### **Background**

- The 1 Line in Rainier Valley runs at street level along MLK Jr. Way S corridor.
- There are over 25 at-grade intersections and 3 stations.
- Pedestrians and left-turning vehicles sometimes face long wait times at intersections.
- The signal system is designed to prioritize light rail vehicle (LRV) movement for consistent travel times.
- Current implementation often results in skipped phases for pedestrians and vehicles crossing MLK.

### **Pilot Signal Reprioritization**

- Testing a signal light synchronization method that cycles through all phases without skipping, while still prioritizing light rail vehicles (LRV).
- New signal timing sequence implemented between Rainier Beach and Othello stations.

### **Objectives**

- Maintain LRV travel times and maintain / reduce train stops.
- Shorten average wait times for pedestrians and left-turning vehicles.
- Gain community and operator support through feedback.
- Decrease signal violations by driver and pedestrian.
- Reduce collisions involving light rail and general traffic.

### **Pilot Approach**

Signal timing changes were implemented in three phases, with SDOT and ST staff on-site and in the Traffic Management Center.

### **Three Phases:**

Phase 1: Non-service LRV hours on Sunday, March 3, 2024

Phase 2: Weekend service on Sunday, March 24, 2024

Phase 3: Weekday service on Monday, June 17, 2024

### **Evaluation Between Phases**

- Defined evaluation points between phases for data-driven adjustments, coordination, and clear decision-making.
- 5-week interval between phases:
  - 3 weeks for data analysis and collaboration between subject matter experts (SME)
  - 1 week for SME briefings and recommendations

- 1 week for leadership decision-making
- ST's Chief Safety Office and SDOT's Senior Deputy Director served as decision-makers during the evaluation.

### **Community Engagement**

Before the pilot, SDOT communicated with all modal boards.

Other activities before the pilot:

- Both agencies emailed elected officials.
- Drafted newsletter and sent internal agency notifications.
- Created a factsheet and posted it online.
- Emailed community organizations and advisory boards.
- Promoted via social media.

### **Pre-Identified Success Measures**

- Maintain LRV travel times.
- Maintain or reduce the number of train stops along the corridor.
- Reduce average wait times for pedestrians.
- Collect feedback from the community and operators.
- Reduce or prevent collisions and near misses involving LRV and general traffic.
- Decrease vehicle and pedestrian signal violations.

### **Conditions to Reverse Pilot Changes**

As this is an in-field test, established clear thresholds to reverse timing if:

- Increase in safety incidents (collisions, near misses, incursions).
- New safety risks emerge, or existing risks worsen in severity or frequency.
- Travel time between stations increases by one minute.
- Two or more additional train stops occur between stations.
- Operators miss contractual minimum break times.
- Consistent and significant rider or operator complaints.

### **Adjustments between phases**

- Coordinated mode in signal controller.
- How signals recover after an emergency vehicle preemption.
- Signal controller settings to extend the "proceed" indication time for trains.
- Partial priority settings in the controllers at both Othello St. and Henderson.
- Changed timing program setting for when trains leave the stations.

### **Key Observations and Findings**

- In Phases 1 and 2, majority of trains traveled between stations without stopping
- Signal systems occasionally forced full priority, leading to skipped pedestrian/vehicle phases and long wait times.

- Observed long dwell times at Henderson for departing trains.
- Trains did not consistently receive the signal to proceed, even when north/south MLK was green. Multiple “ghost trains” were observed in phases 2 and 3.
- In Phase 3, LRT travel times increased in both the NB and SB directions by roughly 30-45 seconds or a 20% to 30% increase.

### **SMART Grant**

Strengthening Mobility and Revolutionizing Transportation (SMART:) Established to conduct demonstration projects focused on advanced smart community technologies and systems to improve transportation efficiency and safety.

- Phase 1: Planning and Prototyping Grants.
- Phase 2: Implementation Grants
- Sound Transit & SDOT were awarded a \$2 million Phase 1 - SMART Grant by the US DOT
- Funding will go towards planning, implementing and evaluating new technologies to enhance safety

### **Next Steps**

- Test a new signal system and controller firmware.
- Initial bench testing of several controller options has been completed.
- Use the SMART Grant Phase 1 to test these systems at select locations.
- Expand the new signal system if SMART Grant Phase 2 application is successful.
- In the meantime, make minor adjustments to the existing signal timing.

### **Questions:**

Ashwin - When you look at the results of the pilot - longer light rail travel times and other unexpected behaviors. Do you interpret the results of the pilot due to some unexpected results from the programming ?

Laura - Overall approach we are following here is success. What we learned is we do have some limitations in the current signal software. There are different signal systems out there and we can do some testing and check what works best for this.

Venu - Our signal controllers and software that is being used is more than a decade old and the settings are not tailored to prioritize transit operations. We will look onto products that can serve and fulfill the program requirements.

Ashwin - 1 of the goals is to maintain Light rail on time. Would it be feasible in the future to try to improve light rail travel times ? Do you have numbers to show how many times the light rail system stops through the system on a trip through MLK Way ?

We need to pull some information, that information is not readily available.

The state we are trying to reach is light rail vehicles to have minimum stops. It's a cross agency effort and requires coordination between all of these agencies.

We are not trying to be car centric, but we are seeing a lot of illegal left turns collisions between cars and light rail vehicles. We are trying to approach this issue from a car/driver's safety lens.

Has there been any conversation to deal with the left turn issues ? Any preventative measures regarding this issue.

We have not rejected any ideas, but all these ideas have implications from SDOT and ST sides, but we will carefully see what will work for this particular issue.

Deborah - Will the data from this project be included in the modeling software ?

That is one limitation we have, there is no way we can talk to the modeling software using the data. That is one of key reasons why we had to include SME in this testing, since we are not able to plugin the data back in to the modeling software,

### **Board business:**

Presentation follow ups and action items: Deborah would like to follow up on the MLK Pilot project.

A formal invitation for all the TAB members will come through early November for Boards and Commissions Appreciation Event.

Aurora Ave corridor Study : They have a report which is a summary for the study that they conducted. We will have another presentation in early 2025 (February).

Ballard link extension will be starting tomorrow.

Levy Oversight Committee: Less of a standard meeting. The team rode the Rapid Ride G. Got good insights into the challenges of the project,

Ended up having a more general conversation with Council member Saka. More Specifically, Saka was open to the capital gains tax in Seattle for example.

Transit wise, he is very committed to sidewalk infrastructure and safety in and all around transit are his main priorities.

Budget subcommittee: Final edits made to the letter to the mayor.

**Major items updates:**

Elections

Katie for Secretary, Zach and Ashwin for Co chairs, Priya and Carolyn T for Co vice chairs.

Dana motions the slate, and Deborah and seconds. No objections.

November in person retreat.