

## SPAB June 14, 2017 Meeting Notes

Attendees: Janine, Patricia, David, Carly, Gordon, Paul

Janine moves, David seconds the minutes. Minutes approved.

Public comment:

Robert is excited for the presentation about MLK presentation, he helped drive it and encourage the Board to look at projects to talk to them about advocacy and incorporate community comment.

Ryan comments: Re: vision zero, reducing speeds on northern part of rainier avenue should not wait as many years (2021). One Center City not in today's presentation – any transit lanes or space for transit lanes downtown, might be off the table. Impacts pedestrian realm because SOVs are not being affected downtown.

Matthew seconds Ryan's comment re: delay in reviewing speed limits on Rainier.

MLK:

(no slideshow presentation)

Pedestrian crossings at traffic signals. Traffic signal timing group and signal design and maintenance – all under Ahmed. MLK was first up to look at this year, with changes to light rail in the area having an unexpected effect on how signals are programmed. When ST made service changes to light rail, the programs didn't work well, needed changing to reduce amount of time peds have to wait. But this had significant effect on transit delays and cascading technical issues. This year is about studying the corridor in context of ST plans, to improve things for pedestrians. What are the trade offs re: signal timing?

Give peds the green article: at pre-timed signal, the walk signal comes on for peds every time in every direction, and it's a fixed time, same amount of seconds each phase. Semi-actuated intersections mean there is a main street of traffic and side streets have detection for vehicles/pedestrians – push buttons. Fully actuated = detection in all directions. Urban villages were proposed for all to be fixed time intersections. Discussion re: nuance of different situations – how the downtown system operates and works, in terms of predictability. Downtown is predictable, high demand in all directions so no need to detect people. Urban villages may have people waiting for no purpose if no one is there. SDOT looking into reduction of push buttons, analyzing efficacy of passive ped detection – they installed one thermal imaging to see how effective it is compared to push buttons – it was at Westlake and Denny for 90 days. They were able to record the instances of what was happening as the signal was fully actuated. Haven't crunched the data yet but will see if it was effective. Some challenges include the ambiguous space pedestrians stand in (no lanes). SDOT would like to find a way to design the system to better predict how people might move. These have not been used at signals in the nation that Ahmed knows of. RRFB vendors sometimes offer passive detection and Seattle has some on Linden at the Bitter Lake Community Center. SDOT wants a system with more flexibility.

Traffic on MLK is fairly high but not necessarily predictable. Removing push buttons isn't necessarily an option due to accessibility needs.

Regarding signal timing, the pedestrian clearance time is the biggest constraint on the traffic signal. MUTCD says that peds walk 3.5 feet per second, and that is factored into the width of the roadway. On major roadways, that can take a really long time due to long crossing distance. Similar to advanced detection, the signal can provide an extension within a certain amount of time, but when that window passes, the pedestrian has to wait for the next signal. SDOT wants to look at these tools on a continuum – tools include fixed time system, LPI, removing push buttons on main line, removing push buttons on side street, timing re: gap out.

How do we plan our roadways to say what type of roadway fits on which end of the continuum for treatments? Data from vision zero or stuff from the PMP could be used to inform pedestrian signal timing.

Action item: Ahmed will look into 23<sup>rd</sup> and Madison and 15<sup>th</sup> and John for signal timing reasoning.

With regards to Mercer, it's different as an adaptive installation. Metrics will inform other timing experiments. The benefit of the actuation is a little unclear – but delay time is one key piece. Adaptiveness has enabled reduced cycle lengths from e.g. 80 seconds to 60 seconds. Flexibility helps balance the trade-offs between modes and directions. Vibrating or audible messages are examples of new technology that provide accessibility, perhaps in lieu of push buttons where space is limited such as downtown. SDOT is beholden to PROWAG more so than ADA, during rebuilding or new projects. SDOT is interested in finding another way to provide the guidance and interaction rather than push buttons, and applied for a grant to try new technology. Experimental use, or in-service tests, are a way to apply to get approval to try things that the MUTCD does not approve.

Timelines for these projects: MLK – goal is for retiming by the end of the year. Mercer is ongoing and will continue spending attention on through the summer. Hope to have it stable by end of August. Document for experimentation for different signal operations – Ahmed's goal is to have a draft policy by end of 2017. Ahmed would like to come back to the Board when they have an idea of the draft proposal (TBD).

#### Vision Zero:

Police department collects crash data but SDOT codes and maps it. Crash reports include circumstances of collision, people involved (age, zip code) and this can give fascinating findings ([seattle.gov/visionzero](http://seattle.gov/visionzero) for some of these findings). This work will be a foundation for all projects moving forward including large capital projects and spot improvements. Other cities are replicating this approach. The BPSA helped SDOT be more proactive but difficult to normalize that data, until Microsoft and others created an exposure model which allows estimating volumes on every single street in the city. This work can help inform educational efforts. Large dataset is in the works, and once 3 years of data have been collected, SDOT will want to share with the Board. New York has had a lot of success reducing crashes – some lessons learned include seasonal spikes (fall at dusk). Seattle has far more serious injury crashes in June, July and August. Fatal crashes spike in May, September and December. These are trends to keep an eye on and see what conclusions can be drawn. Every major city has adopted vision zero.

CM Harrell allocated extra money this year so SDOT has 3.3 million instead of 2.3 million, thanks to advocacy from Neighborhood Greenways.

Project this year: 5<sup>th</sup> Avenue from Stewart to Marion – signal changes and ramp upgrades. 5<sup>th</sup> and Union, the south leg, for peds crossing 5<sup>th</sup> avenue east/west, is the most challenging.

5<sup>th</sup> Avenue NE is a minor street but channelization and crosswalk improvements should bring down vehicle speeds to reduce crashes.

More projects in the works for Lake City Way coming in 2019.

Alternatives for Rainier will be presented later in the summer for the community to respond to – needs speed reduction and space reallocation.

20 corridors are under study/evaluation/planning/design right now.

Rural Ohio was the origin of the 85<sup>th</sup> percentile speed, so SDOT is looking at what they can do to use the 50<sup>th</sup> percentile speed, which has some vague federal guidance.

Where people are already traveling below the speed limit, easy to make the change. Some situations where speed limits are reduced do not see any reduction, such as 15<sup>th</sup> Avenue NE – generally making physical changes to the roadway first makes the most sense. Physical changes might not need to be costly, though – such as Delridge Way where massive amounts of pavement made for a wide visual field. Paint and delineator posts provided visual friction to get speeds low enough to lower the speed limit to be consistent across the corridor. Minor arterials around the city such as Florentia and E Aloha have some opportunities.

Seattle was only city in King County to have 30mph default speed limit instead of 25, until unanimous vote last year.

SDOT's perspective on Rainier is that dropping the speed limit without redesigning in some way will not have any impact, and the Accessible Mount Baker project timeline puts that speed limit reduction then at 2021.

High collision program – makes recommendations for improvements to spot projects based on crash data from vehicle, ped and bike perspective.

SDOT is considering more “no turn on red” in the downtown core. Sightlines and skewed geometry seem to be biggest contributors since many intersections already prohibit turns on red.

\$600,000 every year from separate fund helps pay for education campaigns. SDOT is focusing on under-represented communities such as non-English speakers.

Opportunities for collaboration with the Board: sharing information about where we experience issues is one important step. Deficiencies in the PMP can potentially be filled by Vision Zero. Letters of support for controversial projects would be another powerful way the Board can help.

Northgate Ped/Bike Bridge:

Goal is to share revised design and get feedback. Feedback so far has included steep slope.

Project on 1<sup>st</sup> avenue between 95<sup>th</sup> and Northgate will be constructed at about the same time.

Pedestrians will need to use steeper ramp when station is closed. Costs high for sequencing to have a more direct connection (less right angles). The angles are based on CPTED.

Rachel and Eric will get back to the Board with examples of other pedestrian bridges of similar length.

Great sightlines and overlooks are intended to improve the experience.

235 foot span over highway where the span has the truss element.

Current cost estimate = \$21 million. Total project budget is \$35 million, fully funded.

Barrier is a cable net structure. Openings are less than 2 inches. 2.5 feet above the deck adds a little enclosure over the truss span, versus 6 inches on the rest of the bridge. Preliminary strategy for art is to have interactive lighting that lights the path ahead of someone traveling. Another option is kinetic foil elements in suspended plane, slightly off the bridge, that create shadows when the wind blows, creating a dynamic kinetic grid.

Pike Pine and Convention Center may be good examples of cost effective treatments to improve experience.

Rachel and Eric will give presentation to Transit Board as well.

Paul wants to do an email survey re: field trip between now and July 1.