

National Accessibility Evaluation Bike Subgroup Panel Meeting

Notes

December 7, 2017

10:30 - 11:30 a.m. CST

Action items denoted in bold.

Participants:

University of MN: Shannon Engstrom, Brendan Murphy, Andrew Owen

Arkansas DOT: Michael Henry

DC DOT: Stephanie Dock

FHWA: Jeremy Raw

Florida DOT: Elizabeth Stacey

Maryland DOT: Stephen Miller

Minnesota DOT: Deanna Belden, Hattie Hiler, Michael Petesch

Virginia DOT: Peter Ohlms

Welcome & introductions - Andrew

Review of project goals - Brendan

Project Goals - to bring bicycling into the fold of accessibility research with auto, transit and walking. To do this AO will:

- Determine scalable LTS framework using OSM data
- Apply LTS in national bicycle accessibility calculations
- Develop & present metrics assessing quality of bike access

Jeremy expressed concern about the use of the LTS framework, specifically the use of the term 'traffic stress.' He is concerned that using this term, if drifting further away from traffic stress, is not appropriate and another term could be more appropriate. The term has continued to be used in different ways and has drifted from the original definition. Jeremy recommended 'bicycle quality of service' instead. Andrew thanked Jeremy for mentioning this and agreed this was an important time to discuss terminology. Stephanie recommended talking with the TRB Bicycling Committee to see what they might recommend. Her concern is that the same terminology is being used in other similar studies. **AO staff will plan to research current terminology in the literature and address the issue during the January 2018 TAP meeting.**

**ACCESSIBILITY
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Review of methodology - Brendan

Using OpenStreetMap, AO staff tagged roads as LTS 1, 2, 3, and 4, and then calculated accessibility per LTS level. They then compare networks & accessibility data per level.

Review of LTS Classifications:

LTS 1: residential streets, off-street / protected bicycle facilities

LTS 2: tertiary roads, slower streets with some mixed traffic, good bike lanes

LTS 3: faster streets, secondary roads, maybe some bike lanes

LTS 4: primary roads, arterials, no bike facilities

Brendan shared maps of Minneapolis in all LTS 1, 2, 3, and 4 (see slides 5 - 8).

Stephanie asked about renderings available for D.C. Brendan plans to create similar LTS 1- 4 maps for every pilot city. Stephanie is curious to compare how auto parking contributed to bike lane protection.

Pilot city results (Minneapolis-only so far) - Brendan

Brendan shared accessibility maps, starting with LTS 1. He noted that LTS 1 & 2 facilities are usually comfortable for those only interested in routing via bike-only facilities. For the avid bikers who are willing to be uncomfortable for parts of their commute, LTS 3 expands accessibility drastically. Lastly, LTS 4 further increases accessibility into areas that are least comfortable for cyclists.

Stephanie asked about speed and Brendan recalls using 17 km/hour.

Brendan shared metrics identified from these data. A few examples:

- “People willing to bike in mixed traffic can reach 10,000 (or 25%) more jobs than people who prefer separated facilities.”
- Access gap – underserved communities stand to gain with low-stress networks
- Identify areas that benefit from low-stress investments

Brendan shared the LTS 3 v. LTS 2 maps that show gap areas between the two LTS levels. Closing the gap will constitute improving the bike network.

He also shared the neighborhood by neighborhood access data - the gaps between LTS 2 & LTS 3 *within* major neighborhoods (slide 15). The map shows the accessibility gained if bike facility improvement was done at the neighborhood level. It shows which neighborhoods might have the most to gain.

Project timeline - Brendan

- As planned, preliminary results were shared during this meeting and will be followed by a comment period (2 wks)
- AO will perform remaining test-city calculations (2 wks)
- AO will present draft materials for remaining test cities at January 2018 TAP meeting
- AO will present draft materials for full national implementation ca. March 2018

Feedback on LTS results/metrics - Brendan

Stephen commented that it might be helpful to be able to specific facility analysis to know how a major facility impacts accessibility (e.g. adding or removing to the Midtown Greenway).

Stephanie agreed this would be helpful. Brendan said this would be possible and will be willing to analyze specific facilities separate from the TAP. **AO will test this analysis using facilities in the pilot cities and possibly share the results in January. AO will also include these case studies in the final report.**

Brendan mentioned that he is looking at commuting distribution timing data and investigating whether this could help with weighting the data. More information will be shared in January.

Review next steps - Brendan

- Incorporate any TAP feedback over the next two weeks
- Continue troubleshooting routing
- Expand test calculations to other test-case cities (Washington, D.C., Seattle, Miami, Little Rock)

Andrew thanked participants for their support and guidance throughout this new project.

Adjourned at 11:12 a.m. CST