

National Capital Region Transportation Planning Board

777 North Capitol Street, N.E., Suite 300, Washington, D.C. 20002-4290 (202) 962-3310 Fax: (202) 962-3202 TDD: (202) 962-3213

MEETING NOTES

BICYCLE AND PEDESTRIAN SUBCOMMITTEE

DATE: Tuesday, November 15th, 2016

TIME: 1:00 P.M.

PLACE: Room 1, First Floor
777 North Capitol Street NE
Washington, DC 20002

CHAIR: James Carrington, WMATA

**VICE-
CHAIRS:**

David Goodman, Arlington Department of Environmental Services
Jeff Dunckel, Montgomery County Department of Transportation
Kristin Haldeman, WMATA
Jim Sebastian, DDOT

Attendance:

David Anspacher	Montgomery County Planning
James Carrington	WMATA
Jeff Ciabotti	Toole Design (by phone)
Cindy Engelhart	VDOT
Steve Friedman	Montgomery County (by phone)
David Goodman	Arlington DES
David Patton	Arlington County
Rahul Jain	DDOT
Oleg Kotov	City of Rockville
Tracy Loh	Center for Real Estate and Urban Analysis, GWU
Karyn McAlister	Prince George's County DPWT
Marieannette Otero	Safe Routes to School Regional Partnership
Jon Ryder	Montgomery County Planning
Molla Sarros	Maryland Department of the Environment (by phone)
Debbie Spiliotopoulos	Northern Virginia Regional Commission

Bicycle and Pedestrian Subcommittee
Notes from the November 15, 2016 Meeting
Page 2

Stephen Tu
Victor Weisberg
John Wetmore

Montgomery County Planning
Prince George's DPWT (by phone)
Pedestrians.org

COG Staff Attendance:

Michael Farrell
Andrew Meese
Jessica Mirr
Jon Schermann
Marco Trigueros

1. General Introductions.

The Transportation Safety Subcommittee section of the meeting was completed first, followed by a break and a second round of introductions.

Mr. Carrington chaired the meeting.

2. Review of the September 20th Meeting Notes

Meeting notes were approved, with a typo correction.

3. New Chair for 2017

Karyn McAlister of Prince George's County DPWT has volunteered to serve as Chair. Mr. Farrell noted that it was Maryland's turn to provide a Chair. At the state level Maryland has had a lot of turnover, and Jeff Dunckel has already been a Chair.

Ms. McAlister said that she would be happy to serve as Chair. Ms. McAlister noted that Prince George's has a very new pedestrian and bicycle program, and is looking forward to learning from its peers. Ms. McAlister will be Chair for calendar year 2017.

4. Arlington Low-Stress Bike Network

Ms. Loh spoke to a powerpoint. This was a TPB-funded TLC project that the Rails to Trails Conservancy did for Arlington, with the assistance of Dr. Peter Furth and graduate students.

The tool analyzes network connectivity using stress criteria. This project is just about bicycling not pedestrians. The tool can be applied to multiple scenarios; it is not just a one-off analysis.

Connectivity for this purpose means something different from typical transportation use. It

Bicycle and Pedestrian Subcommittee
Notes from the November 15, 2016 Meeting
Page 3

attempts to benchmark the quality of connections. RTC loves trails, but right of way is finite, and the roads need to be made safer and lower-stress for bicyclists. The trails serve as the spine of the system, but people need to use the streets to get to their destinations. Quantity versus quality. This method can be used to prioritize projects based on a single criterion.

A chain is only as strong as its weakest link. That link must be physically present, but also within the riders' tolerance for stress, which varies from rider to rider. With this tool you can adjust the stress tolerance level to analyze connectivity for different types of riders. Traffic volume, speed, and degree of separation from traffic affect the score. Protected bike lanes, etc. reduce rider stress. You can quantify how much a particular treatment will reduce cyclist stress, and how much the improvement will improve effective connectivity.

There is a rate of substitution between a lower-stress experience, and a more direct routing, with the understanding that there is effective maximum. Intersections are modelled separately from links. Data is loaded into ArcGIS. You need the street and trail network, and characteristics that indicate traffic stress, as well as bicycle facilities. You need a topologically correct street and trail network, with trail access points. Slope is one of the variables. This typically requires some work to get; most jurisdictions don't have it on hand.

For every origin, we know how many destinations were accessible via a low-stress route.

Different stress levels are indicated by different colors. There are many low stress streets, but they are often separated from each other by high stress streets. Miles of low stress facilities is not a good indicator of accessibility, if there are high stress barriers. There is nowhere you can live in Arlington now that will give you a low-stress route to all four major employment centers within the county. In the far north of the county there are no low-stress routes available to any employment center.

If you add 30 miles of protected bike lanes to the high-stress streets, you get a big increase in accessibility to the four employment centers by a low-stress route. The number of sharrows and ordinary bike lanes would decrease, as places with sharrows and ordinary bike lanes would be upgraded. Low-stress routing, where it already exists, becomes much more direct.

Most of the proposal is for upgrades, with just a few new facilities to bridge barriers.

There isn't necessarily a county-wide constituency for some of the needed improvements, but the analysis makes the case for things like access around the Pentagon. Together, these improvements make a big difference in terms of the feasibility of building your life around bicycling in Arlington County.

One last note. Some of the bikeshare stations are not currently connected by a low-street route to any other station. That's a problem. In some cases, you could improve accessibility by moving the stations, without even providing any new facilities.

For elementary and middle schools, you can look at very low stress routes.

5. Low-Stress Bicycling in Montgomery County

Mr. Anspacher is the project manager for the county's bicycle plan. He spoke to a powerpoint.

The bike stress tool will inform the county bicycle plan.

Traffic stress is ranked into seven categories, from no stress to very high stress.

Parking turnover contributes to stress, as does speed, volume, separation of traffic, truck volume, driveway frequency. The tool can be found at www.mcatlas.org/bikestress

Mr. Anspacher demonstrated the tool. It demonstrates the meaning of different stress levels, using video cameras to illustrate the look and feel of different stress levels.

Every road and trail in the County has been ranked for traffic stress. It took about a year.

The tool is accessible to the public, which can use it to generate low stress routes.

Many important destinations, such as downtown Silver Spring, do not have low-stress bicycle access. 75% of all streets in the County are low stress, but those streets are not connected to each other with low stress routes, or lack a reasonably direct low stress connection.

Montgomery County will continue to monitor the county for low-stress bicycle access, and compare them to a set of access goals.

Ms. Engelhart asked about the "map my bikeshed" tool. Mr. Anspacher said that it shows the bike access of the area around you.

Ms. McAlister asked about the similarities and differences of the tools. Ms. Loh said that most jurisdictions don't have the staff time to look at every road segment in Google street view, and they don't have much existing data either. In that case, Arlington has added an extension that will give you a stress level for every segment based on just the speed limit and the number of travel lanes. For intersections the stress level would depend on the number of travel lanes. If you have just that information, you'll get an LTS (stress) rating.

Arlington County is already too advanced in terms of bike planning for that kind of quick and dirty LTS analysis. It's a complicated urban area, and they have too many bicycle facilities. Peter Furth biked the entire County and ground-truthed the GIS based LTS rating. And Arlington had pretty good GIS data to begin with. You can upload your own LTS rating as an

Bicycle and Pedestrian Subcommittee
Notes from the November 15, 2016 Meeting
Page 5

input.

The Arlington LTS tool has only stress levels 1, 2, 3, and 4.

Montgomery County can share its tool for free. But the hard part is the data.

RTC's tool is not free. It's not useful without preparing the data, and the RTC staff will walk you through that process.

When Virginia did a stress analysis they had the public ground-truth it. Ms. Loh said that they prefer an objective rating. There is a table of parameters so that "stress level" will have a consistent meaning between users. Otherwise the ratings for the same facility will be wildly different for different individuals.

Mr. Goodman asked Ms. Loh about stress levels in intersections. Different movements impose different costs on the user, with a base depending on the underlying stress level of the road. With intersections, left turns are assigned a higher stress value. So going straight through imposes a lower cost than turning left.

There was a question about gradient in Arlington. Ms. Loh replied that digital elevation was part of the model; greater slopes impose greater costs. Ms. Engelhart asked about the penalty for crossing high stress routes. The Montgomery model does do that. If there is a signalized crossing you are not penalized for crossing a high stress route. If the intersection is not signalized then you are penalized. Arlington did the same thing. The main treatment is a traffic signal, but other improvements such as bike boxes can be accounted for.

Ms. McAlister asked whether this information was being fed into the transit plans for the Counties. Mr. Anspacher replied that Montgomery County has a lot of big transit projects like the Purple Line, but that so far there has not been a lot of thinking about how people are going to get to the stations. The same is true for the Bus Rapid Transit proposals. WMATA has been doing more of that kind of analysis, mostly for getting pedestrians to Metro stations.

Mr. Wetmore asked if such an analysis could be done for the local road system feeding into the Woodrow Wilson Bridge project. Mr. Anspacher said that it could be. For the American Legion Bridge there is a recommendation in the County plan that a rebuilt bridge will have walking and bicycling facilities. The new LTS tool will be incorporated into future planning for such projects. The data for Montgomery County was collected 2014-2015. The tool will continue to be updated, and it will be made part of subdivision review.

Mr. Carrington asked whether the forecast bicycle traffic could be incorporated into a signal warrant at a high stress intersection. Ms. Loh replied that more research was needed to forecast actual bicycle traffic based on reduction of bicycle stress. There is a strong correlation between low stress bicycling and actual bicycling, but more research is needed to provide forecasts for

specific facilities. New papers will be published next year.

Montgomery County is also trying to do more to forecast bicycle travel at the census tract level. That model still needs some work.

6. Other TPB Program Updates

- ADC/Kappa Maps

There is no written proposal from Kappa yet.

- Professional Development Workshops

On December 8th there will be a TLC workshop at REI. We'll likely have one speaker from FHWA to talk about federal funding. Most of the presenters will be previous TLC grantees. The target audience is prospective TLC grantees, who should be local governments, but which can also be nonprofits in partnership with a local government.

Another workshop which is not yet firmly scheduled is the regional Safe Routes to School meeting. Mr. Farrell typically presents on Street Smart, but the core of it is educators and parents who are doing Safe Routes projects the local level. The Bike Ped Subcommittee co-sponsors this event with Safe Routes to School. Likely time frame is late January.

Mr. Farrell suggested that the Subcommittee sponsor a professional workshop on the new FHWA Applying Design Flexibility manual. Toole Design has people who are ready and able to present on the top. Mr. Carrington said that traffic engineers would be a good target audience. Mr. Farrell replied that the goal of the manual was holistic design.

Ms. Engelhart said that FHWA held a webinar yesterday on the topic. Mr. Farrell replied that he was not aware of it, and Ms. Engelhart to send him the announcement, so that he could examine it for possible duplication. The live and local experience is different from a national webinar.

Ms. Engelhart suggested Vision Zero as a possible workshop topic. Mr. Farrell said that he would look into it. We have a number of jurisdictions that have Vision Zero or Towards Zero Deaths policies, so we could have a locally based workshop, with jurisdictions talking about their experiences.

Mr. Anspacher added that Montgomery County was going through its Vision Zero

Bicycle and Pedestrian Subcommittee
Notes from the November 15, 2016 Meeting
Page 7

exercise now. Vision Zero in the United States has typically been applied in major cities. The meaning of Vision Zero in a suburban and exurban context, where development is spread out, and speeds higher, is a relatively new challenge in this country.

We may want to check with Renee Moore, at WABA, which is organizing a regional Safety summit. There will be a stakeholders meeting at the end of the month.

Mr. Farrell noted that due to the renovation of COG offices, and resulting temporary reduction of meeting space, this Subcommittee will be moved to Room 3 in 2017. This is a major renovation and redesign, with staff being exiled from their offices in phases.

- **Capital Trails Coalition**

The press event was held on October 13th, near the 14th Street Bridge, a very successful event. The CTC will hold a Trails Symposium later this month. Mr. Farrell will forward an invitation.

7. Jurisdictional Updates

Ms. Engelhart asked if anyone knew of a pedestrian advocate for the Virginia State BPAC, Bicycle and Pedestrian Advisory Committee, which is currently heavy on bicycle advocates. Pedestrian advocates are hard to find. Mr. Cobb suggested disabled persons groups. Medical Centers might be willing to participate. Mr. Farrell suggested that certain Business Improvement Districts are interested in pedestrian issues. It would have to be someone able to go to Richmond four times a year. Mr. Carrington suggested Kristin Haldeman, who is an Arlington representative.

Prince George's bike share feasibility study is done. Phase 1A would involve 29 stations. It would connect to the Capital Bikeshare system. It's not currently funded.

The Central Avenue Trail is under design. It will connect three Metro stations along the blue line.

The Ager Road Complete and Green Streets project near the West Hyattsville Metro is ready for construction.

Mr. Wetmore said that Frederick recently built a new tunnel and bridge under Route 15 to connect to the Carroll Creek Trail. It's opened to rave reviews.

8. Adjourned