Date: June 18, 2021

Date of Meeting: June 2, 2021
Meeting Location: Video conference

Work Order Number: 32189-005
Project: Howard County Complete Streets

Meeting Description: Complete Streets Implementation Team Meeting #18

<table>
<thead>
<tr>
<th>Name</th>
<th>Company</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tom Auyeung</td>
<td>Howard County DPW, Trans. &amp; Special Projects</td>
<td>410.313.6142</td>
<td><a href="mailto:tauyeung@howardcountymd.gov">tauyeung@howardcountymd.gov</a></td>
</tr>
<tr>
<td>Jennifer Biddle</td>
<td>Howard County DPW, Traffic Engineering</td>
<td>410.313.2430</td>
<td><a href="mailto:jbiddle@howardcountymd.gov">jbiddle@howardcountymd.gov</a></td>
</tr>
<tr>
<td>David Cookson</td>
<td>Howard County Office of Transportation</td>
<td>410.313.3842</td>
<td><a href="mailto:dcookson@howardcountymd.gov">dcookson@howardcountymd.gov</a></td>
</tr>
<tr>
<td>Chris Eatough</td>
<td>Howard County Office of Transportation</td>
<td>410.313.0567</td>
<td><a href="mailto:ceatough@howardcountymd.gov">ceatough@howardcountymd.gov</a></td>
</tr>
<tr>
<td>Chad Edmondson</td>
<td>Howard County Department of Planning &amp; Zoning</td>
<td>410.313.2350</td>
<td><a href="mailto:cedmondson@howardcounty.gov">cedmondson@howardcounty.gov</a></td>
</tr>
<tr>
<td>Felix Facchine</td>
<td>County Council, on behalf of Christiana Rigby</td>
<td>410.313.3108</td>
<td><a href="mailto:ffacchine@howardcounty.gov">ffacchine@howardcounty.gov</a></td>
</tr>
<tr>
<td>Carl Gutschick</td>
<td>Gutschick, Little and Weber, P.A.</td>
<td>410.880.1820</td>
<td><a href="mailto:cgutschick@glwpa.com">cgutschick@glwpa.com</a></td>
</tr>
<tr>
<td>Kris Jagarapu</td>
<td>Howard County DPW, Highways</td>
<td>410.313.7470</td>
<td><a href="mailto:kjagarapu@howardcountymd.gov">kjagarapu@howardcountymd.gov</a></td>
</tr>
<tr>
<td>David Nitkin</td>
<td>Howard County General Hospital</td>
<td>410.740.7740</td>
<td><a href="mailto:dnitkin1@jhmi.edu">dnitkin1@jhmi.edu</a></td>
</tr>
<tr>
<td>David Ramsay</td>
<td>Howard County Public School System</td>
<td>410.313.6726</td>
<td><a href="mailto:david.ramsay@hcpss.org">david.ramsay@hcpss.org</a></td>
</tr>
<tr>
<td>Christiana Rigby</td>
<td>Howard County Council</td>
<td>410.313.3108</td>
<td><a href="mailto:crigby@howardcountymd.gov">crigby@howardcountymd.gov</a></td>
</tr>
<tr>
<td>Kristin Russell</td>
<td>Columbia Association</td>
<td>410.715.3107</td>
<td><a href="mailto:kristin.russell@columbiaassociation.org">kristin.russell@columbiaassociation.org</a></td>
</tr>
<tr>
<td>Larry Schoen</td>
<td>Multimodal Transportation Board</td>
<td>410.730.9797</td>
<td><a href="mailto:larryschoen@gmail.com">larryschoen@gmail.com</a></td>
</tr>
<tr>
<td>John Seefried</td>
<td>Howard County DPW</td>
<td>410.313.5712</td>
<td><a href="mailto:jseefried@howardcountymd.gov">jseefried@howardcountymd.gov</a></td>
</tr>
<tr>
<td>Sam Sidh</td>
<td>Howard County Office of the County Executive</td>
<td>410.313.2013</td>
<td><a href="mailto:ssidh@howardcountymd.gov">ssidh@howardcountymd.gov</a></td>
</tr>
<tr>
<td>Cory Summerson</td>
<td>Public Works Board</td>
<td></td>
<td><a href="mailto:cory.j.summerson@bge.com">cory.j.summerson@bge.com</a></td>
</tr>
<tr>
<td>Paul Walsky</td>
<td>Howard County Recreation and Parks</td>
<td>410.313.1695</td>
<td><a href="mailto:pwalsky@howardcountymd.gov">pwalsky@howardcountymd.gov</a></td>
</tr>
<tr>
<td>Jennifer White</td>
<td>Horizon Foundation</td>
<td>248.345.3030</td>
<td><a href="mailto:jwhite@thehorizonfoundation.org">jwhite@thehorizonfoundation.org</a></td>
</tr>
<tr>
<td>Jeff Riegner</td>
<td>WRA</td>
<td>302.571.9001</td>
<td><a href="mailto:jriegner@wralp.com">jriegner@wralp.com</a></td>
</tr>
<tr>
<td>Leah Kacanda</td>
<td>WRA</td>
<td>302.571.9001</td>
<td><a href="mailto:lkacanda@wralp.com">lkacanda@wralp.com</a></td>
</tr>
<tr>
<td>Mayra Filippone</td>
<td>Mahan Rykiel Associates</td>
<td>410.235.6001</td>
<td><a href="mailto:mfilippone@mahanrykiel.com">mfilippone@mahanrykiel.com</a></td>
</tr>
</tbody>
</table>
Introduction

The purpose of the meeting was to review updated Chapter 3 (structures), updated Chapter 4 (adequate public facilities test requirements), updated Chapter 5 (traffic studies), and the revised list of remaining Design Manual edits.

Jeff Riegner welcomed all attendees and reviewed the agenda. Jeff led the group through the materials attached to these minutes.

Members of the CSIT were provided with a copy of the draft minutes from the April 7, April 9, May 5, and May 7, meetings in advance. Jennifer White made a motion to approve the minutes, and Christiana Rigby seconded the motion. The CSIT approved the minutes unanimously.

Jeff noted that the distributed versions of Chapter 3, 4, and 5 did not include track changes. He noted that the track-changes version of each chapter will be distributed to the CSIT following the meeting to aid in their review of the documents.

Updated Chapter 3 (structures)

Jeff reviewed the substantive changes made to Chapter 3, Design of Bridges, Retaining Walls, and Small Structures. The only new section is 3.7 Shared Use Path Underpasses. The organization of the remainder of the chapter is the same. Changes are specified in the attached meeting materials. Questions and comments from members of the CSIT on proposed changes are included in these minutes.

Chris Eatough noted that there is no mention of bridge height in Section 3.2 I, Clearances. Jeff clarified that section only applies to bridges over roadways, and the vertical clearance for the road beneath the bridge will govern the bridge height. The section on shared use path underpasses will require a 10-foot minimum vertical clearance. Christiana asked where the height minimum is mentioned, noting that all bridges should allow for transit. Jeff responded that bridge height is addressed in subsection I.3 Vertical Clearance. Kris observed that the section on clearances is split into a horizontal and vertical section which sufficiently covers the issues raised by the group.

In Subsection 3.2 J, the AASHTO Bike Guide is added as reference for railings and fences. Jennifer asked how updates to AASHTO would be handled, and whether the Design Manual will need to be updated each time references change. Jeff noted that the revised version of the AASHTO Bike Guide that was supposed to be published in 2017 has still not been released. It would be appropriate to note that the current edition will apply in the references section. Jennifer responded that “current edition” language should be included for all referenced guidance.

John Seefried noted that the Department of Public Works (DPW) is not familiar with every reference included in the Design Manual revisions. Sometimes, DPW likes the flexibility to decide when a new manual is adopted because the changes can be contentious, and it is helpful to allow time to see how the new guidance works out in other jurisdictions. Instead of using the current edition for all guidance, it should be looked at comprehensively. Jeff asked if the current edition could be referenced for all AASHTO references in this chapter. John agreed.

Jeff provided an update on bridge widths which are part of section 3.2 I, which requires shoulders be incorporated to accommodate bicyclists and pedestrians even in areas where there are no planned bicycle or pedestrian facilities. Larry asked what happens if the rehabilitation does not allow for widening. Jeff replied the way it is written, a rehabilitation would be required that consists of a full superstructure replacement. Jeff asked for feedback from DPW, suggesting adding the language “to the extent practical given the extent of the project.” Kris replied that it is important to define what a rehabilitation is, for example, if DPW is just working on a bridge deck repair, it may not be feasible to modify the structure. Larry referenced the Old Columbia Road bridge adjacent to SR 29 which is a one-lane bridge. He noted a structural issue would take years to address, but the current configuration could be improved for bicyclists if the bridge had two bike lanes and one vehicular lane, requiring cars to yield. Jeff suggested including the language “to the extent practical. If the scope of the project does not allow for the full width of those facilities,
consideration should be given to retrofits to accommodate pedestrians and bicyclists.” Larry responded that he would review the section after the meeting to provide additional feedback.

The rehabilitation section also includes language about maintaining a bridge deck surface smooth and free of irregularities. Larry noted that there are often missing covers on bridge joints, and it would be helpful to be more qualitative about what constitutes smooth. Jeff responded that it depends on what is practical in terms of construction tolerances and maintenance. It is important to not create an unfunded mandate. Larry asked about standard practice when resurfacing, such as adding collars to utility access points to maintain a level surface during repaving projects. Kris replied that typically new collars are added and adjusted. Since the plow also catches those locations the County would know about any major irregularities. John noted that DPW only inspects developer projects and occasional work by utility companies. Although a trip hazard standard has been discussed, nothing has been published. John offered to follow up on the trip hazard provision, and Jeff noted that although ADA addresses sidewalks, it does not address surface irregularities for bicyclists.

Carl asked about the ADA clause, and whether it includes a generalized exception for facilities that follow the road grade. He observed there are not a lot of bridges that will be built at a grade higher than five percent. Jeff replied that an exception is not necessary since the ADA accessibility guidelines state that sidewalks may follow the existing road grade, including roads passing over a bridge.

Larry asked for clarification on why there are landing areas along the shared use path bridge on Little Patuxent Parkway. Chris replied that he was not sure whether that was required for ADA. Jeff replied that typically, a running slope of five percent maximum is acceptable before triggering a ramp requirement, which has a 1:12 or 8.33% grade and requires landings. Chris noted that Toole Design Group designed the pathway and they may have input on why landings were provided. Kris noted that the length of the slope was an issue. Larry commented that the landings are less than ideal for cyclists. Kris replied that the landings provide a place where wheelchair users can slow their speed.

**Updated Chapter 4 (adequate public facilities test requirements)**

Jeff noted that there are only minor changes to Chapter 4, as noted in the track changes version of the document. Last year it was determined that this chapter will remain intact except for a few housekeeping measures since changes will also impact the Adequate Public Facility Ordinance (APFO) portion of the County Code.

Jeff commented that the biggest potential change has to do with background growth rate. There are three types of traffic growth that need to be considered: growth based on the development in question, growth based on other committed development in the vicinity, and background growth associated with growth beyond the study area. Over time there has generally been an increase in vehicular traffic. The current language incorporates background traffic growth of three percent per year, and an increased rate of six percent per year after the third year of the study, which is an extraordinarily high percentage. Jeff shared that based on preliminary analysis, something closer to 1.5 percent or two percent is likely, but the analysis is not yet complete. Although this seems like a traffic issue, it is very relevant to walking and bicycling since when additional lanes are added to accommodate estimated motor vehicle traffic, there is less room available for people walking and bicycling. More information will be provided at the next meeting.

Jeff noted that there is currently a Pedestrian and Bicycle Level of Service test (PLOS and BLOS) required for Downtown Columbia. There is nothing wrong with PLOS and BLOS tests, but Design Manual revisions specify Level of Traffic Stress (LTS) as the appropriate methodology for the design of bicycle facilities in Howard County. LTS has a bias toward separate bicycle facilities, which are not explicitly noted in BLOS. Jeff asked the CSIT if there was concern that the two methods are different, clarifying that both methods provide for better bicycle facilities.

Larry acknowledged that limited updates are being done to Chapter 4 because it is related to the APFO. He asked whether it is possible to state that APFO creates certain minimum requirements, but that other sections of the Design Manual and the Complete Streets policy go beyond those minimum requirements.
Jeff responded that the question is whether there is a difference between what can legally be required of developers based on the Code, and what could be provided in excess those requirements by a willing participant based on the Design Manual. There is nothing that prevents a developer from doing more, but Chapter 4 sets forth the minimum requirement. Larry replied that during the development of the Complete Streets policy, there was some discussion about whether the policy should be an ordinance with more mandatory language, but there was an acknowledgement that it was important to get into the details of the Design Manual. He expressed concern that the older system will be maintained since the Complete Streets policy does not have any teeth. For example, the Complete Streets policy says if existing facilities are being degraded or not provided something must be done.

Chris noted that the County was initially reluctant to make changes to Chapter 4 because APFO was recently updated by a committee. The few housekeeping items that Jeff has raised are transportation related and were not addressed the last time APFO was updated. Some changes in the measures used for analysis, like the use of LTS instead of BLOS, have occurred since those updates were made. He noted that, in his opinion, transportation related changes to APFO could happen, and that this group is comprised of transportation experts qualified to make recommendations. The previous APFO committee was not focused on transportation elements and did not make substantive changes to transportation aspects of APFO.

Larry asked whether this chapter should speak to LTS. Jeff replied that the street types were developed based on LTS. The text shown on BLOS is what is currently in Chapter 4. The question is which test are developers in Downtown Columbia required to use to determine the bicycle facilities that are provided for their developments.

Carl shared that he has done a lot of work in Downtown Columbia, and generally, the design of transportation facilities has been much more progressive than elsewhere in the County. There was a lot of legislation implemented that only applies to the 350 acres of Downtown Columbia. If changes to those regulations are going to be made, it is important to involve those engaged in Downtown development, since substantial investments in planning have already been made that reflect the Downtown standards. Carl noted that he does not think it would be appropriate to apply standards for the rest of the County to Downtown, since it has been viewed as a separate entity subject to more rigorous standards. Jeff noted that if these standards have resulted in the facilities that have been developed recently, the Downtown requirements are working well, but if they are due to the largess of downtown developers, there may be more standards required. What is being built appears to be high quality infrastructure. Carl replied that transportation facilities in Downtown are the results of past planning efforts and current Downtown standards. Developers agreed to the standards as part of the negotiated package for Downtown revitalization, which included a lot of give and take. Making changes to those standards is much more complicated than just applying the new regulations to Downtown.

Jennifer noted that it is important to maintain the same high standard of bicycle and pedestrian facilities in Downtown Columbia as elsewhere in the County. Christiana commented that the Law Office should be included in any conversations about changes to the Downtown Columbia regulations.

Jeff suggested that BLOS and PLOS studies may provide a high enough design standard. He noted that the current tests are working well, and because of the level of complexity and number of stakeholders it may be best to leave this section untouched. It will not shortchange walking and bicycling in the Downtown Columbia area. Carl agreed and clarified that Downtown Columbia does not include the broader Columbia area. It is an area with an extremely high design standard that exceeds what is in place for the rest of the County and the rest of Columbia. If it has already been determined that an area needs to be handled differently, the County should be cautious about applying a countywide regulation.

Larry observed that there are places Downtown where the transportation network works very well, especially for pedestrians. It is difficult to judge the Merriweather District because occupancy is lower due to the pandemic, but there are gaps in the bike network. He cited a 2021 Transportation Research Board paper that acknowledges that BLOS does not account for traffic exposure and delay. There are issues at intersections for both bicyclists and pedestrians. Everyone agrees that stakeholders need to be involved, and the Complete Streets policy should apply to Downtown Columbia.
Chris noted that many good walking and bicycling facilities are not the result of BLOS or PLOS but because there was a specific requirement in a plan to connect points A and B with a shared use pathway. Outside of new facilities that were required by a plan, there are a lot of gaps and there is room for improvement. Jeff noted that there will be opportunity to further review and discussion of this section.

**Updated Chapter 5 (traffic studies)**

Jeff only reviewed the key items for Chapter 5, traffic studies. He noted that there are more significant changes in this chapter than Chapters 3 and 4. One big change in organization is separating pedestrian and bicycle studies. This chapter includes six different types of studies: traffic level of service (LOS) studies, safety evaluations, pedestrian crossing studies, bicycle LTS, parking and access studies, and noise studies.

Jeff provided information about pedestrian studies and midblock crossings. Christiana noted that from a land use perspective, the County has a growing push to reinvest in incremental development. For example, instead of redeveloping large swaths of land, slowly convert single family homes to duplexes and eventually to fourplexes. She asked how to account for that incremental development when planning for multimodal facilities. Jeff responded that many communities reference future land use in their general plan or comprehensive plan. Facilities should accommodate future land use not current land use. Christiana asked how the Design Manual would support that approach, and how facilities designed now can adapt for the future. Jeff replied that where land use is noted in Chapter 1, future land use should also be referenced. The Design Manual has to guide requirements for developers and County capital projects.

Larry noted that there are analogous issues in the western part of the County, where a development of ten homes may not have a significant impact now, but if there are a series of ten unit developments, a road that used to be walkable or bikeable may no longer be so. He agreed that it is important that the Design Manual address incremental development.

Jeff replied that if the County wants to undertake a future update to APFO, there is a policy called fair share contributions or Transportation Investment Districts (TIDs) where a transportation plan is used to identify future facilities with build-out scenarios. Each trip is required to pay their fair share into those improvements, then the County builds the improvements via the capital project process. Larry asked about concurrency. Jeff replied that the County addresses that now. Redeveloping a single family home would not trigger contributions.

Larry asked about mode share, and whether there should be a requirement in Downtown Columbia for trip reduction. There are ways that developers can enable short motor vehicle trip replacement. He asked how that could be addressed in the traffic studies section. Jeff replied that there are not specific trip reduction requirements. The traffic studies section addresses how studies are done and makes sure that those studies properly address multimodal travel. Larry speculated that a developer who invests in multimodal facilities that enable people to get to local schools or shopping destinations may not need to invest money in expanding vehicular capacity. Chris replied that kind of analysis is done by the APFO process, but he was not sure of the kinds of credits or reductions a developer can request. Jeff replied that APFO guidance around trip generation is very general and based on formulas and guidance from the Institute of Transportation Engineers (ITE), which is commonly used. Adjustments need to be made where there are good walking and bicycling facilities. Proximity to transit also tends to result in a deduction in motor vehicle trip generation. Although there has been research, nothing has been synthesized into practice.

Jeff introduced the safety evaluations section. Larry noted that the focus is on crash history, and although there is language that addresses midblock crossings, some issues of safety for bicyclists and pedestrians are not quantifiable. Jeff replied that those issues are addressed by the LTS section. There are similar criteria for intersection approaches, unsignalized crossings, and roundabouts. If the goal is LTS 2 in most areas and LTS 1 for certain destinations, this guidance can be used to evaluate what the comfort level is for bicyclists. LTS makes these issues quantifiable.

**List of New Content**
Jeff noted that the list of new content for the Design Manual was updated based on comments from the CSIT. New items are shown highlighted in yellow. Jeff walked through additions to the list. Chris noted that pedestrian crossings at unsignalized locations were added. He said that unsignalized crossings could be midblock or at intersections, which are different circumstances that require distinct guidance.

Jeff provided information on leading bicycle and pedestrian intervals. Bicycle signals could be used, or bicyclists could be allowed to use pedestrian signals to get a head start. He asked whether there are intersections that are set to recall instead of using pedestrian push buttons. Chris noted that national guidance would be helpful to determine when signals should be set to recall. Jeff replied he was only aware of location specific guidance. Determining whether a signal should be set to recall requires examining the volume of pedestrians at the intersection and the motor vehicle level of service. The decision tends to be a judgement call since guidance is not specific in terms of numbers. The goal is that both methods are included in the Design Manual so they are available to the designer. Jeff added that a note could be provided stating that “no turn on red” can be beneficial in locations where there are conflicts between vehicular traffic and bicycles and pedestrians. There is MUTCD guidance for those locations.

Jeff noted that a comment was received about using street design demonstration projects to pilot changes. He asked whether that concept should be housed in the Design Manual. Larry replied that some demonstration projects are more incremental pilot changes as opposed to temporary pop-ups. This type of pilot seems like it should go into the Design Manual, even if it just a cross reference to an external document or a sentence opening the door. Jeff replied that agencies should not be afraid to experiment, especially if changes are small and inexpensive. Jennifer mentioned tactical urbanism, which is a quick and affordable way to pilot changes. Chris agreed that this could require a lot of guidance that may need to be a standalone document. Larry asked if Chris was comfortable with a brief mention of pilot projects in the Design Manual and Chris agreed.

Larry asked if there were any significant suggestions from CSIT members that were not included in the list. Chris replied that bike dots were not included since they are not MUTCD approved and there is not much guidance available. Chris explained that bike dots are wayfinding pavement markings that guide where a bike should be positioned in the right of way and direction of travel.

Chris noted that OoT is working on a countywide bicycle wayfinding system using signs which are compliant with the MUTCD. The Design Manual should include things that are included in national guidance.

**Next Steps**

Jeff provided the CSIT with an update on the other sections of the Design Manual. The team is incorporating edits into Chapter 1 and Chapter 2 is under development. There is no new content to review on Friday. He asked whether CSIT members would prefer an informal meeting on Friday or to use that time to review the draft of Chapters 3, 4, and 5. Larry replied that he would prefer to use that time to review the draft documents. Chris agreed.

Jeff asked that comments be provided with a week. Jennifer asked whether the review period could be extended to Friday, June 11. The team agreed with the proposed timeline. Chris asked that a notice be sent out regarding the change of plans for the Friday meeting, as well as a homework reminder.

Action items from this meeting include:

- Review Chapters 3, 4, and 5 of the Design Manual by Friday, June 11

The next CSIT meeting is scheduled for Wednesday, July 7 at 1:00 pm.

Leah Kacanda, AICP