Date: July 27, 2021

Date of Meeting: July 7, 2021
Meeting Location: Video conference

Project: Howard County Complete Streets

Meeting Description: Complete Streets Implementation Team Meeting #19 (Part 1)

Participants:

<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>Bruce Gartner</td>
<td>Howard County Office of Transportation</td>
<td>410.313.0702</td>
<td><a href="mailto:bgartner@howardcounty.gov">bgartner@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 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>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>Arthur Shapiro</td>
<td>Howard County DPW</td>
<td>410.313.4900</td>
<td><a href="mailto:ashapiro@howardcountymd.gov">ashapiro@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>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@wrallp.com">jriegner@wrallp.com</a></td>
</tr>
<tr>
<td>Leah Kacanda</td>
<td>WRA</td>
<td>302.571.9001</td>
<td><a href="mailto:lkacanda@wrallp.com">lkacanda@wrallp.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) and to review the comments received on Chapter 4 (adequate public facilities test requirements) and Chapter 5 (traffic studies).

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

There was not a quorum at the start of the meeting, so minutes were considered at the end of the meeting.

Updated Chapter 3 (structures)

Jeff reviewed the final edits made to Chapter 3, Design of Bridges, Retaining Walls, and Small Structures. Changes are specified in the attached meeting materials. Questions and comments from members of the CSIT on proposed changes are included in these minutes.

Jeff introduced section 3.7 shared use path underpasses, which is new content since the last time Chapter 3 was shared with the Complete Streets Implementation Team (CSIT). Carl Gutschick asked whether these regulations apply to the corrugated metal culverts that are commonly used underpasses used by pedestrians and bicyclists. Jeff replied that there are very few corrugated metal pipes that meet AASHTO guidelines, which requires the provision of a 12 foot minimum clear width, with a preference for 14 feet, and a 10 foot vertical clearance, unless equestrians or maintenance vehicles need to be accommodated. If there is a culvert that meets those criteria, it would be compliant. Carl clarified that the designer would have to be able to inscribe a 14 by 10 foot rectangle beneath the bridge, which would mean that there is additional height at the crown and additional width at the sides, resulting in a very large section. Jeff replied for that reason, many of these structures are now built with concrete box culverts instead of corrugated metal. Carl asked if these regulations would apply to private property, such as a path through a golf course that passes under a county roadway. Jeff noted that a golf course path is not technically a shared use path since it is designed for use by golf carts, and asked representatives of the Department of Public Works (DPW) how they would apply these regulations to underpasses that connect private property located on two sides of a public roadway. John Seefried replied that if the underpass is beneath a public road, it needs to comply with the Design Manual regardless of the application. A waiver could be requested from the Bureau of Engineering Chief if an alternative design is proposed. Jeff noted that there could be a provision in the Design Manual that states if the path does not have shared use access by the public, a waiver to the clearance requirements could be requested. John noted that generally, the County would rather have a concrete box culvert than a metal pipe because it requires less maintenance and is more resilient. The County has had issues with corrugated metal culverts in the past. If AASHTO guidance pushes the County towards concrete that is a good thing. Jeff asked if the County would consider different dimensional requirements as long as the material used is concrete. Sufficient clearance for golf carts would be provided by an eight by eight foot box culvert. John replied that the County needs to be sensitive to public access since underpasses are located within the public right of way.

Larry Schoen noted that he agreed with John. If an underpass is in the middle of a golf course, he could see reducing the dimensional requirements, but if the underpass could potentially provide a connection in the bike network he would prefer the AASHTO dimensions be used so it is accessible to all users.

Kris Jagarapu observed that the key factor is what the underpass is going to serve. If it is a shared use path that is part of the bicycle and pedestrian network that is one situation, but if the same private entity owns both sides of the underpass, and it is only facilitating passage of that owner and their business, reducing the dimensional requirements could be considered. If the culvert is crossing a stream, a concrete structure is preferred because it is supporting the roadway. There will be a lot of site specific issues at play. The underpass may have to be placed much lower than the roadway, which will make grading on the underpass approaches challenging.

Chris Eatough asked whether the Design Manual could specify the dimensions required by AASHTO and require a golf course or similar applicant to go through the waiver process to have something smaller.
John mentioned the underpass by the Turf Valley Grounds Headquarters on Resort Road as a useful example. He reiterated that DPW’s focus is the resilience and strength of the structure, and that dimensions could be adjusted as needed in locations that the public cannot access.

Larry clarified that there are two issues, one regarding material (concrete or corrugated metal), and one regarding size (12 feet by 14 feet or eight feet by eight feet). He asked that if there is any chance the underpass will be used as a shared use path at any point in the future, the underpass be built to the larger specification.

Jeff proposed that developers would have to pursue an exception from the standard proposed dimensions if the underpass is currently serving private property and there is no chance of public use in the future.

Jeff emphasized new text regarding the rehabilitation of existing structures and bridge widths included in section 3.11.A which was suggested by Jennifer White. The text is intended to emphasize the need for pedestrian and bicycle facilities but allow for flexibility if a bridge is just being resurfaced. Larry observed that the new text uses words like feasible and practical, and asked what those terms mean. Jeff replied that he viewed feasible and practical as synonymous. Larry noted that it would be helpful to define the terms, not just in this section but throughout the Design Manual. Larry offered to provide more detailed feedback via email.

Jeff requested feedback on Chapter 3 by Wednesday, July 14.

Review of comments received on Chapter 4 (adequate public facilities test requirements)

Jeff reviewed comments received on Chapter 4, adequate public facilities test requirements. Chapter 4 largely deals with traffic studies conducted by developers as a requirement for development plans. Although some developer requirements are in Chapter 4, they are also included in the subdivision and land development regulations which are required to be updated after Design Manual revisions are completed per the Complete Streets policy. The team will review comments on Chapter 4 to see what will add clarity to Chapter 4, but many of the comments will be addressed by changes to the subdivision regulations, including details on what types of studies will be required.

Larry noted that he was under the impression that the scope and substance of studies would be addressed in the Design Manual and be reflective of multimodal travel as required by the Complete Streets policy. Jeff replied that the distinction is between what studies are required and how those studies are performed. Usually, the Design Manual explains how, and the subdivision regulations explains when specific studies are triggered. Larry replied that his goal is that the scope of the studies chapter be broadened to include all of the multimodal aspects, even if the developer is not required to make a change to infrastructure as a result. Jeff asked staff to weigh in on why it makes sense to defer the triggers to the subdivision regulations.

Chris replied that subdivision regulations will mandate which studies have to be done and when. It is important that the Design Manual gives enough guidance on how to do the study once the mandate is in place. He asked that the general guidance on how to do a multimodal study is included in the Design Manual.

Jeff replied that was the intent behind the rewrite of Chapter 5. Larry asked for an example of triggering language in the subdivision manual. Chad replied that if a proposed development is generating more than five peak hour trips, an Adequate Public Facilities Ordinance (APFO) road study is required. Jeff asked Chad what happens if the study determines that the adjacent intersection is currently not meeting Level of Service (LOS) standards, and what happens when the intersection currently meets standards, but the development causes it to fail. Chad replied that if the intersection is already at LOS F, there would have to be a physical improvement to mitigate the added trips so that the intersection continues operating at its current (failing) LOS. If the development causes an intersection to fail, mitigation has to bring the intersection back to a passing level, not just mitigate for the development generated trips.

Larry observed that right now, all that is studied is cars and the functionality of the nearest intersection up to a certain level of road classification. He asked how the studies chapter can be more multimodal when that trigger is applied. Larry clarified that if a stretch of road between a development and an intersection does not currently have bicycle and/or pedestrian facilities, how can the studies process be used to at minimum identify that gap, whether or not the
developer has to remedy the gap? It would be helpful to know whether an intersection has pedestrian crossings, or whether there is a way for a cyclist to safely travel through it. It would also be helpful if the study area could extend to nearby destinations. Lastly, it would be useful to know if the development is making gaps in the multimodal network worse.

Chris noted that Montgomery County is using Level of Traffic Stress (LTS) evaluations a distance from the development, and the developer is required to do the analysis. If the development is degrading the LTS they have to mitigate for that. Pedestrian analysis is more regarding whether there is currently a sidewalk. Howard County already has sidewalk data via GIS. Jeff noted that a practical application of pedestrian infrastructure may be providing sidewalks to the nearest intersection.

John asked whether the process of checking BikeHoward would work to satisfy this need moving forward. He also asked that Chad could talk about the process for considering sidewalk connections, and whether currently employed techniques are working.

Jennifer commented that it is important that this document prioritize non-auto modes of travel. Although subdivision regulations will provide more clarity around those expectations, the County’s changing priorities should also be reflected in the Design Manual. This is an opportunity to elevate different modes of travel that have not been considered in the past.

Chris said that if the assumption is that an update of the subdivision regulations will include some requirements that developers make off-site improvements for walking and bicycling, that is a big step in the right direction. Bicycle and pedestrian studies will need to be mentioned in the manual. Perhaps LTS can be reviewed within a certain distance of the site, as well as sidewalk connections that should be provided, consistent with Howard County Public School Systems (HCPSS) standards. HCPSS does allow for walking on roads that are not busy, and they also provide crossing guidance. Subdivision regulations will have to be explicit about what distance from the development site should be considered.

Jennifer asked what other strategies could be considered at this time. It would be a good step to require developers to make certain improvements, it is important to detail the studies that would facilitate those efforts.

Larry elaborated on Chris’s comment, noting that it would be good to require the developer to mitigate traffic impacts for people walking and bicycling. The County currently looks at sidewalks 250 feet beyond the property line for pedestrians but expanding to include facilities for bicyclists would be a positive. Another aspect that needs to be considered is that the development could create worse conditions for people using existing bicycle and pedestrian infrastructure due to increase motor vehicle volumes. He acknowledged improvements may not be the developer’s responsibility, but that it would be valuable to identify improvements that could be made with a County project.

Chris replied that the County has already identified those improvements via the bicycle and pedestrian master plans. He acknowledged that the master plans have not been updated based on development. He asked Larry if the recommendation was to build improvements following private development. Larry replied that standards, expectations, and opportunities change, and the master plans are only periodically updated. Chris noted that BikeHoward was not based on LTS, but when the plan is updated LTS analysis will be used which would pick up the impact of increased traffic volumes. Larry referenced the concept of a walkability study, developed by Jeff Speck which moves beyond the question of whether or not a sidewalk is present to evaluate whether a sidewalk is safe and pleasant to walk on. Chris asked if that approach is more similar to a walk audit, which is a valuable tool but not quantitative. Jeff noted that County capital projects can account for public feedback, but developer projects must be informed by clear standards.

Bruce emphasized the difference between developer standards and guidance for capital projects, noting that some things relating to process will be addressed by updates to the subdivision regulations. He referenced Montgomery County’s APFO process which goes beyond the scope of updates to the Design Manual. Larry asked for more information on Montgomery County’s process. Bruce replied that Montgomery County assessed their APFO process
and what they require of developers as a whole, but those changes were never considered to be part of the Design Manual updates.

David Cookson noted that APFO will be updated following the general plan update. That would be a good opportunity to look at establishing a connectivity standard and how to measure it. The County has gone through an established process of doing APFO for automobiles, but some of those standards can be built in for other modes. Bruce asked if it was possible to reference this process in the Design Manual to give the advocates a level of comfort with the process.

Chris replied that he would like to see more direction on what an appropriate pedestrian and bicyclist study would be. Often current studies only count the current level of bicyclists and pedestrians. It would be useful to list the study options in the Design Manual, including pedestrian level of comfort and LTS connectivity analysis. Later updates to the subdivision regulations would detail what would trigger those studies and how far off site those studies must consider.

David Ramsay asked to be included in that conversation if possible. In non-transported area, the Howard County Public School System (HCPSS) goes through a thorough analysis when there is an appeal, but this process might be able to serve as a good tool for HCPSS moving forward.

Larry cited Sheppard Lane, where incremental development has created an overall need for bicycle facilities.

Jeff noted that since Chapter 4 focuses on APFO, work on that chapter will largely be deferred until changes to APFO are addressed as part of changes to the subdivision regulations. Changes can note that this section will work in conjunction with subdivision regulations to meet the goals of the Complete Streets policy.

**Review of comments received on Chapter 5 (traffic studies)**

Jeff explained that Chapter 5 includes information on traffic studies. It will include a new section on bicycle parking and walkability studies. Chris noted that the presence of sidewalks in all of the proposed street types is a big step for Howard County, as well as additional guidance on crossings.

Larry noted that the current traffic studies tend to focus on nodes as opposed to links, but links are extremely important for walking and bicycling. He asked how to make sure that the company completing traffic studies references WalkHoward and BikeHoward. Chris noted that is an approach that John Seefried has suggested. Perhaps developers could refer to existing bicycle and pedestrian master plans to determine which facility types should be applied. Larry commented that if the developer does something to increase the need for a particular link, that would have to be factored into the study as well.

John agreed that the developers should cross reference WalkHoward and BikeHoward, which will show where sidewalks and bicycle facilities should connect. He noted that the extent of the off-site improvement will need to be addressed in the subdivision regulations, especially since many of the remaining developable areas may not be that large. He noted that on the capital project side OOT plans for these facilities, as long as the map is robust and regularly updated. Studies based on numbers are more challenging, and the County already faces challenges for automobile traffic studies.

Jeff noted that Level of Service (LOS) is not the best measure for walking and bicycling. Jennifer agreed that although LOS has been the emphasis in Howard County to date, other metrics that prioritize the needs of bicyclists and pedestrians should be used in the future. She drew attention to comment number 200 as the most important comment that Horizon provided, since it challenges the current process and outcomes of that process. In order to build out the necessary infrastructure, the way the County measures success needs to change.

Chad replied that when the subdivision regulations are changed it would be helpful to address current issues and difficulties regarding frontage improvements. The Department of Planning and Zoning will put out a proposal once the CSIT considers modifications to the subdivision regulations. It is important to classify projects based on their size.
A lot of projects are corner lots being developed as single-family homes that have a few hundred feet of frontage. When those developers are asked to provide curb and gutter, they quickly realize it may cost them an additional $250,000, especially if a utility pole has to be relocated. The County typically requests a $10,000 cost estimate to do fee in lieu. Moving forward, it is important to differentiate the development of single family homes, minor subdivisions, major subdivisions, and commercial developments. It may be necessary to develop a more robust fee in lieu program for small projects.

Chris shared that Montgomery County uses 50 peak person hour trips as the threshold for bicycle and pedestrian studies.

Kris noted that some minor subdivision projects have requested pedestrian refuge islands and other improvements that presented a difficulty for the property owners. The County felt they were asking more than was appropriate. When fee in lieu is collected, if often costs more money to build the infrastructure than what was collected. The biggest challenge is how to support an individual property owner.

Jeff commented that this conversation highlights the difficulties with updates to the subdivision and land development regulations in a short time frame. Jennifer pointed out pursuing an alternative to LOS. Jeff cited another County that pursued an alternative to LOS. They went through an 18-month process to evaluate other standards and ended up not changing them. Even if they had decided to move away from LOS, a very robust process is required to make that decision. Montgomery County uses LOS with higher standards for the amount of delay that is acceptable in areas that are pedestrian friendly or served by high capacity transit. For example, driving will take longer if you live near a metro station. There are lessons to be learned from Montgomery County, but the scale is different in Howard County. Kris replied that the fact that Montgomery County has the metro system is a key difference. Bruce commented that the buses in Montgomery County also have much more frequent headways.

Jeff shared that growth rates will be discussed during Friday’s CSIT meeting. He asked all CSIT members to look at the comment log. Edits to chapters 3 and 4 will be made based on the comments and discussions at the CSIT meetings.

Larry commented that future revisions to APFO or the subdivision regulations need to have requirements for pedestrian and bicyclists, as well as a discussion of the tradeoffs. It is important that the studies chapter provide the tools that can be used when required. Bruce replied that he was unsure if all the tools could be provided in the Design Manual. Larry noted external guidance could be referenced where necessary.

Minutes

Members of the CSIT were provided with a copy of the draft minutes from the June 2 meeting in advance. Larry made a motion to approve the minutes, and Chris seconded the motion.

Carl noted an issue with the sentence at the bottom of page four, which states that the Complete Streets policy should be applied to Downtown Columbia. He noted that he would agree if the word generally was added, but as it is written, it seems to contradict the previous paragraph which explains that Downtown Columbia is subject to different design requirements than the rest of the County.

Larry noted that the requirements in Columbia are stricter than the rest of the County. Chris noted that the sentence notes that the Complete Streets policy applies to Downtown Columbia, not the Design Manual, and that the policy as adopted does apply to the entire county. Jeff suggested removing the final clause of the sentence, which reads “and the Complete Streets policy should apply to Downtown Columbia.” Carl replied that he is comfortable with removing the clause or the addition of the word “generally” before “apply.” Kristin Russell disagreed with the use of the word generally because it makes it seem like Downtown Columbia is not held to the Complete Streets policy, and that the Columbia Association would like it to be applied. Carl noted there are many different requirements in different parts of the County, and that the clause in question is a sweeping statement that does not acknowledge the nuance of the previous paragraphs. Larry and Chris were both comfortable with removing the second clause of the sentence and there was no further discussion.
The CSIT approved the amended minutes unanimously.

**Next Steps**

Jeff noted that the schedule will be presented on Friday since staff had an internal conversation today that impacted the timing of some things. The challenge is to allow adequate time for review by the CSIT, stakeholders, and the general public before the changes are pre-filed with County Council. Friday’s agenda will also include a discussion of growth rates and revisions to Chapter 1. Bruce noted that the Public Works Board is required to review and approve the draft before it goes to County Council. Coordinating their review is necessary before we finalize the schedule.

Action items from this meeting include:

- Review Chapter 3 of the Design Manual by Wednesday, July 14

The next CSIT meeting is scheduled for Friday, July 9 at 1:00 pm.

Leah Kacanda, AICP