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Project: Howard County Complete Streets

Meeting Description: Complete Streets Implementation Team Meeting #15 (Part 1)

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Introduction

The purpose of the meeting was to provide members of the Complete Streets Implementation Team (CSIT) an overview of new street types, review the comment log, and to provide brief updates on tracking and reporting on performance measures and the revised project schedule.

Jeff Riegner welcomed all attendees and reviewed the agenda.

Members of the CSIT were provided a copy of the draft minutes from the February 3 meeting in advance. Christiana Rigby made a motion to approve the minutes and Chris Eatough seconded the motion.

Kris Jagarapu commented that the discussion regarding the width of neighborhood yield street width was inaccurate, and that the second reference to 26 feet on page 3 should read 28 feet instead. Jeff noted that the discussion in question during the February meeting was regarding whether 26 feet of roadway width was sufficient to accommodate a fire truck. Chad Edmondson observed that 28 feet is sufficient to accommodate on-street parking, and that anything narrower requires indented parking. Chris Eatough asked if this relates to detail R-1.02 in the current Design Manual. Chad responded he would have to check. Chris noted that currently, the Design Manual lists 24 feet as the appropriate width for access streets and 26 feet for townhouses and condominium developments. Tom Auyeung noted that the current section does not address parking needs. Kris requested that his statement be modified to say 28 feet which allows enough space for parking on both sides of the street. Larry Schoen asked whether a wider dimension affects the rideability and walkability of the street. Jeff replied that any further questions about street width would be discussed during the March meeting. There were no objections to the modification.

Carl Gutschick commented that the reference to the size of the root barrier should read six feet from the back of curb not from the face of curb.

The CSIT approved the minutes with the two edits.

Jeff led the group through the presentation attached to these minutes. He noted that new street types will be addressed first. Because revisions to the sections address some of the issues raised by members of the CSIT, the comment log will be discussed second.

New Street Types

Jeff shared that WRA sought advice from Erv Beckert, PE, who is the Chief of the Highway and Bridge Design Division for Prince George's County. Prince George's County has already implemented Design Manual changes in response to the adoption of a Complete Streets policy. Erv could not attend the February Core Team meeting but he did share some feedback with WRA. Erv noted that Prince George's County guiding principles for street design are safety and responsible economic development. Although they kept the functional classification system, it is entirely separate from street design. This approach acknowledges that streets may need to be larger because of anticipated demand which doesn't relate to the classification. Prince George's County use 10-foot lanes in all urban areas except for industrial streets and on bus routes, where they use 11-foot lanes. Their rationale is to maximize the safety of all users of their streets. Erv highlighted the distinction between drivers feeling comfortable and drivers being safe. Very wide lanes can create a feeling of comfort, but as you narrow lanes drivers start to drive more defensively and pay more attention to each other and other street users. If you go too far in narrowing streets, it could compromise safety.



Jeff then reviewed the matrix approach that is organized according to street functional classification and land use contexts discussed at the last CSIT meeting. The core team looked more closely at applying descriptive street types to the matrix. Over 100 streets named during the December survey were reviewed using Google Street View, dimensions where available, and photographs, and then compared to the highway classification map. Jeff showed a series of streets in Howard County, asking the CSIT, "What functional classification is this street?" for each example. Larry asked how someone would go about venturing a guess. Jeff responded that a local street serves local traffic, an arterial serves through traffic, and a collector provides a connection between the two.

The first example was Freestate Drive, a three lane section with bike lanes that is classified as a local street. Larry asked why Freestate Drive is considered a local street instead of a collector given the fact that it serves through traffic. Larry also cautioned that a 4-foot bike lane adjacent to a gutter pan does not provide sufficient accommodation for cyclists. The second example was Farewell Road, a narrow residential street with on-street parking. Although this street appears to be a local street, it is classified as a minor collector, in theory because it serves more through traffic. The next example was Gerwig Lane, an industrial street with on-street parking and two vehicular lanes that is classified as a major collector. Troy Hill Drive, a four-lane divided highway with no parking and buildings set back from the roadway, is classified as a local street. The last example was Old Annapolis Road (MD 108), a narrower three-lane road that is classified as a minor arterial even though it is a narrow roadway.

Jeff said the team concluded that, based on all of the streets analyzed, there is not a clear link between highway classification and the design of streets in Howard County. He clarified there is nothing wrong with this approach, but it does suggest it would be best to use descriptive street types for design instead of the matrix approach. Larry asked if there is a way to connect the two approaches and asked how streets are assigned classifications now. Jeff responded that there does not appear to be a way to connect the two approaches and referenced the highway classification map that is included in general plan.

Larry asked if highway classifications get updated. David Cookson responded that classifications are updated when the General Plan is updated. As new roads are built, classifications are determined as part of the planning and development review process. David noted that generally, local roads come in as part of development plans. Larry asked how the County would determine what descriptive street type to use for a capital project. Chris asked if Larry meant for new roads or existing streets, clarifying that existing streets are assigned a highway classification already. Larry noted that if there is no cross referencing between highway classification and descriptive street type, it is not clear how the designer would determine which street type to use. Jeff responded that other jurisdictions have followed two approaches. One approach is to produce a new map that shows which descriptive street types apply to the existing road network. The more common approach is less prescriptive. When a designer begins a project, they take into account surrounding land use, anticipated traffic volumes, whether transit is present, and then determine what they believe to be an appropriate street type. Larry confirmed that the proposed road type would be reviewed by County staff. Jeff responded that whoever designs the street would determine what is appropriate. Larry responded that proposed street types should be reviewed by the Office of Transportation.

Jeff asked the CSIT whether it would be beneficial to create a street type map now or allow more discretion at design phase. No feedback was received.

Jeff noted that files were distributed over the weekend that included proposed street types for new construction. The proposed street types were developed in consideration of comments received from members of the CSIT. Effort was made to weigh the pros and cons of lane widths and different types of street configurations. He shared that some members of the CSIT have sent additional comments since these street types were distributed for review, and those comments have not yet been incorporated into the comment log.

Jeff reviewed each street type by land use, starting with streets in mixed-use areas. He noted the most prominent examples of mixed-use development in Howard County are in Maple Lawn and Columbia. Although there are not many other mixed-use areas in the County, there is a good chance there will be in the future, making this is an important street type to plan for.

Boulevard

The boulevard street type is a four-lane roadway that may or may not have on-street parking. The top section shows on-street parking bottom section does not. Boulevards have a raised median, sidewalk, and separated bikeway, based on the level of traffic stress (LTS) and the amount of pedestrian demand. On four-lane roads it is assumed that the speed and traffic volume is high enough that there needs to be physical separation for cyclists. In new construction, the separated bike lane would be located behind the tree zone, which is six feet wide. The separated bike lane could be at same level as the sidewalk or at a lower level. The section shows the separated bike lane at a lower level than the sidewalk only for visual purposes. The sidewalk is significantly wider than in other types because sidewalk would extend to the face of the buildings. Inside travel lanes are 10 feet wide and outside travel lanes are 11 feet wide. This configuration provides more flexibility adjacent to parked cars and it is common to have bus service in mixed-use areas.

Larry commented that he agrees with the use of separate bike lanes along this type of street, but noted he wouldn't want the 11-foot travel lanes shown in this typical section to be used as a precedent when the bike has to share the roadway with cars. He observed that the boulevard street type requires a lot of right of way and asked what would happen when the right of way is not available. Jeff responded that this street type is for new development only, for example the next Maple Lawn Boulevard. Bruce Gartner replied that the comment may apply to new construction if there is not sufficient space. Larry asked how the process would work if there are negotiations or compromises between the County and the developer. Jeff noted that if it is a greenfield development there should not be a need to compromise due to limited right-of way. If there is a retrofit situation, the Design Manual would have a process based on the FHWA *Bikeway Selection Guide*, which provides guidance on determining the ideal width of a bicycle facility and how to narrow other street elements when there is not sufficient space for the ideal. Chris commented that if it was a developer project and the developer was proposing something that differed from the County's street type, the developer would have to request a waiver. Chad affirmed that the waiver process would have to be followed when deviating from the typical section. Larry replied that he understands that Maple Lawn is existing, noting that he had never seen the need for two travel lanes on Maple Lawn Boulevard and asked whether it needs to be so wide.

Christina asked when the boulevard type would be utilized. Chad responded that historically, that answer depends on what is being built along the roadway and the projected average daily traffic (ADT). He noted that a shorter road with less built along it would require a smaller roadway section.

Paul Walsky asked whether something like the boulevard street type could be applied to Route 1. Christiana noted that Route 1 is state owned and there isn't much right of way on either side so it could not accommodate a median.

Jeff reminded members of the CSIT who provided comments to staff via email to speak up so the rest of the CSIT can hear those comments.

Kris confirmed that the boulevard street type would not apply to an existing roadway frontage but would be applied to a greenfield development. Jeff agreed, but noted that these sections will inform projects on the existing street network. He clarified that the number of existing streets that are in a mixed-use area with the demand for the boulevard type is very small, for example a portion of Twin Rivers Road and some other parts of downtown Columbia. Kris replied that if this type were to be applied for frontage improvements there would be a concern because there are not any areas with 100 feet of right of way available. He noted concern with a 7-foot-wide one-way bikeway, noting that the parking and tree zone already take up 14 feet and protect people on bikes from vehicular traffic. He observed the separated bike lane is shown as a different level from the sidewalk and asked what the rationale was.

Jeff responded that there are three options for separated bike lanes:

- Facility is at the same height as the sidewalk and the bike lane and sidewalk are differentiated by pavement types, i.e. an asphalt bike lane and concrete sidewalk
- Facility is at street level or about 8 inches below the sidewalk allowing for less complicated and less expensive drainage



- Facility is between the street and sidewalk level with a beveled small curb between the separated bike lane and sidewalk

Jeff noted that his personal preference for Howard County is for a sidewalk level separated bike lane. Kris asked why 7 feet is the recommended width when 5-foot lanes are applied elsewhere. Jeff replied that when a 5-foot bike lane is adjacent to travel lanes, cyclists can use the vehicular traffic lane to pass. A 7-foot separated bike lane allows for bikes to pass one another without entering the pedestrian area. Chris noted the added width is helpful for overtaking other cyclists as well as side by side riding. He noted that this treatment is only for mixed-use dense areas where significant pedestrian volume is expected. Jeff noted that if the separated bike lane is level with the sidewalk, 6 feet might work because bikes could use the sidewalk to facilitate passing, but AASHTO does not recommend that cyclists pass or overtake one another within 6 feet of space, recommending 7 feet.

Kris asked whether the sidewalk would extend to the edge of the right of way against a building. Carl noted that in Maple Lawn you cannot tell where the right of way line is located. Although the sidewalk does extend to the building, only 4 feet of the sidewalk is required by the Design Manual and located within the right of way. The remainder of the sidewalk width that extends to the building is shown on the site development plan. Therefore, the majority of the sidewalk is privately owned and maintained. The material used for the sidewalk is the same from the back of the curb to the building. He suggested 5 feet as a minimum sidewalk width that can be shown in the proposed section with a note saying that sidewalk outside the right of way can be continued per the site development plan as appropriate.

Jeff replied that approach makes sense, and that it is important to ensure there is sufficient hardscape between the separated bike lanes and the buildings for a high volume of pedestrians and sidewalk cafes. There are benefits of having those features outside of the right of way. Jeff asked Carl if there is a pavement joint at the right of way line. Carl responded that there is not; it is a continuous hardscape between the back of the curb and the building, which is 10-11 feet behind the right-of-way line.

Carl asked if there would be an on-street bike lane option for boulevards. Jeff responded that based on federal guidance, on-street bike facilities are not appropriate if there is sufficient volume of traffic to support a four-lane roadway.

Tom Auyeung asked whether there will be requirements for a storm drain system on the bike lane. Jeff replied that there would be if the bike lane is at a different level than the sidewalk and street. He noted that cross slopes are not shown in these sections, but if the sidewalk and separated bike lane are both draining to the curb you may be able to address drainage by having openings where water can flow through.

Chris asked Jeff to show a photograph of a flush bike lane so the CSIT could better envision how it would work. Jeff showed a picture of a sidewalk level separated bike lane on Vassar Street in Cambridge, Massachusetts. In this example the tree zone is paved except for occasional tree pits. The separated bike lane is asphalt and the sidewalk is surfaced with concrete unit pavers.

Carl noted that the cross section graphically shows a step down and asked whether the flush treatment would be made clear through a footnote. He agreed that the design and drainage would be much more complex with a step down. Jeff replied that the proposed typical section shows a step down because a decision has not yet been made on that detail, but after today's conversation it seems that a separated bikeway flush with the sidewalk is preferred by the majority of the group. The designer can always provide a different level if they want but it will not be the default.

Larry asked if the paving treatment would differentiate between the bike lane and pedestrian area. Jeff responded yes, and Chris said there also would be bicycle pavement markings to make it clear.

Kris commented that during the February meeting a question was raised about U-turns and asked whether the design vehicle can make a U-turn in the boulevard section. Jeff replied that the proposed sections were compared to the current sections included in the Design Manual. With 4 lanes and a 16-foot median specified in both the proposed boulevard section and in the existing section in the Design Manual, not even a passenger car can make a U-turn. A passenger vehicle can make a U-turn in a four-lane section with a 30-foot median or a six-lane section with a 16-foot



median, both of which are options for the proposed parkway type. He clarified that neither the current nor proposed sections handle U-turns for vehicles larger than a passenger car.

Town Center Connector

Jeff moved on to the next proposed street type, town center connector, which has a three-lane cross section. He noted this street type might work at the entrance to a development where volumes do not warrant a four-lane cross section. If traffic projections anticipate less than roughly 20,000 vehicles per day, this type of section would be appropriate. The center lane would function as a two-way left-turn lane or a striped median. As with the boulevard section, the top example shows on street parking and the bottom example shows no parking. The remainder of the configuration is similar to the boulevard section, with a six-foot tree zone, separated bike lanes, and large sidewalks. Jeff noted the same recommendations received regarding sidewalks in the boulevard section could be applied to the town center connector street type. The reason for 11-foot wide lanes is due to potential bus traffic and higher volumes of traffic adjacent to on-street parking.

Carl asked if it would be possible to reduce the bike lane to six feet for this section. Christiana asked whether the bike lane would be at a different level than the sidewalk in this section. Jeff replied that the bike lanes could be sidewalk level, and the width would also correspond to the width shown in the boulevard section since the same principles apply. Larry asked whether seven feet is the preferred width for side by side passing and whether six feet is a compromise. Jeff responded in the affirmative, noting that the guidance for overtaking based on the bicycle as a design vehicle is seven feet. Kris asked if the adjacent sidewalk could be used by a cyclist when passing. Jeff responded yes, but only if it is not occupied by a pedestrian. He noted mixed-use areas are the only locations that so much right of way is being designated for walking and biking since the high density will result in higher volumes of people walking and biking. Chris noted that sidewalks sometimes have other items that may be obstacles to cyclists including sandwich boards, planters, and street furniture. Larry noted that since this is an all ages facility, there may be an instance of a parent and child riding side by side, and this facility should accommodate that. Chris asked what the positives would be for a six foot bike lane, noting that two benefits are a reduction in impervious surface and less right of way required.

Kris replied that looking at 122 feet of required right of way with only 28 or 18 feet of impervious area was concerning to him. He also expressed concern that a 10-foot two-way left-turn lane is too narrow and may present issues if a driver is trying to merge into the center turn lane after pulling out of a driveway.

Larry asked for safety data on the width of center turn lanes. Jeff replied that the information he has presented on vehicular safety as it relates to lane width is related to general purpose lanes. He further noted he has seen two-way left-turn lanes as wide as 20 feet and as narrow as 8 feet, and that many locations use 10 feet without safety issues.

Town Center Street

Jeff moved on to the town center street type, which would be applied in mixed-use areas with less traffic. This section has two travel lanes and would feature lower volumes and speeds. A narrower separated bike lane is suggested here because lower volumes of cyclists are anticipated and the need to accommodate overtaking is lower. This section also features five-foot sidewalks and there are parking and no-parking options.

Larry asked why the vehicular travel lanes are shown as 10.5 feet wide instead of 10 feet wide. Jeff replied the lanes were widened at the request of DPW, due to safety concerns adjacent to parked cars. Larry asked if parked cars present a known safety risk. Jeff replied based, on studies he is aware of, it is not. Larry noted that his preference would be a separated bike lane wide enough to accommodate side-by-side riding with a child, and a narrower travel lane that encourages slower travel.

Chad replied that County staff wanted to retain slightly wider lanes so that there is space for cars to veer away if a parked car door opens. 10.5 feet is not a lot of space for a larger vehicle and wider would be preferable. Bruce noted that generally, people wait to exit their car when another vehicle is passing. Chad replied that the extra space leaves



room for error. Carl noted that having extra space is similar to a cyclist having extra space in case a car door opens into their path.

Jeff noted that none of the discussed lane widths are wide enough to allow a motor vehicle to drive around an open car door. Drivers would have to wait until they have room to pass or the door shuts. Chad agreed but noted that situations could occur once the driver of the parked car has exited their car that would prevent them from leaving the vehicular lane, and that extra space creates a safer environment.

John Seefried commented that the group has been thinking about the ideal situation of people waiting for one another when someone is exiting a parked vehicle, but that sometimes that does not happen. He noted that when driving in Maple Lawn, he is unable to see four cars ahead of him if someone opens a door, and that the driver of the parked car may not have time to recognize a car is coming down the road. John mentioned that he may have to drive below the speed limit because he cannot see what is happening. He also informed the CSIT that he represents the Design Manual in legal cases when the County is sued. He noted that the extra half foot is there to create a safer environment, especially given the fact that pedestrians and cyclists are located on the other side of the tree zone. He reiterated that this is a safety issue and not a preference.

Jennifer revisited a question raised by Larry regarding group decision making. She noted that safety is being cited as the primary reason for recommending a particular street type feature, in this case a wider lane adjacent to parked cars, however Jeff indicated that he is not aware of any studies, safety concerns, or documentation around the issue. She noted that John expressed legal concerns and potential legal issues that could arise from decisions made as part of this process and that it would be helpful to speak with other jurisdictions for more feedback on legal concerns. Ideally, the CSIT decisions will be based on evidence. She noted the importance of moving forward in the process and asked for clarification on the CSIT's decision making process when there are not evidence-based resources that point the group in a specific direction.

Jeff responded that he had cited the *Highway Safety Manual*, a primary source that is used for the application of safety considerations in street and highway design, at a previous meeting. He noted that the Manual shows that at these speeds there is no safety difference between 10-foot and 11-foot lanes. Kris asked permission to share his screen and showed a picture of Cedar Lane which has 10-foot lanes (including the gutter pan). He noted that this image shows why every 6 inches matter. The small bus ahead is shying away from the face of the curb. When driving large vehicles, it is hard to judge the side of the curb when driving along the roadway. There is a slight curve approaching the intersection. The compact car next to the bus also moved to the left and applied their brakes as the bus moved into the left lane. Occurrences like this are not recorded as an incident.

Jeff noted that every place a proposed section shows a vehicular lane adjacent to a curb, an 11-foot travel lane (including the gutter pan) is specified. Chris noted that 11-foot lanes also accommodate transit.

David Ramsay noted that school bus drivers are encouraged to use the right lane at all times because they want them to drive at slower speeds and be out of the way of moving traffic. For this reason, they prefer the wider lane to be the right side lane.

Kris emphasized he wanted to illustrate the difference six inches can make and noted that 12-foot lanes are not being shown in any of the recommended sections, all of the lane widths have been reduced.

John asked for clarification as to whether the *Highway Safety Manual* includes the gutter pan or not in their measurements, since Howard County's experience seems to be different than the national standard. Chris observed that there is an operating speed referenced with the data. [Note: the ITE Traffic Engineering Handbook cites "speeds of 45 mph or less."] Chris noted that Cedar Lane is likely in the low 40s for operating speed.

Larry offered to provide the point of view for pedestrians trying to cross the street. He noted that wider lanes encourage faster traffic because drivers feel more comfortable. Wider lanes also create more space that needs to be crossed by pedestrians and, while crossing, pedestrians are more at risk when speeds are higher. He reminded attendees of the graphic data shared at the last meeting regarding how speeds impact the rates of serious injury and

death for pedestrians. The reason for narrowing lanes is to calm traffic and protect vulnerable users. He acknowledged that where there is significant bus traffic it is important to increase lane width from 10 to 11 feet, but argued that one bus an hour is not significant bus traffic.

Bruce noted that there can be more than one bus an hour due to mobility buses on the road. Kris agreed that all members of the CSIT are here to address the concerns Larry articulated. The DPW position is to address other users who are on the roadway such as bus operators and truck drivers. He noted the importance of reducing speed and the need to make it work. He observed that mirrors were not included in the last image he showed, and that 10.5 feet wide will not feel wide enough to a bus driver. He noted that he followed a mobility bus down Cedar Lane to Freetown Road and it was clear the driver was having a hard time navigating the narrow lane configuration.

Larry noted that curves are another situation where 11-foot lanes may be needed, but questioned whether they are needed for the entire length of a roadway. He commented that Cedar Lane does not meet anyone's needs and does not fit any design standards.

Bruce returned to the proposed section on the screen and raised the difference between 10.5- and 10-foot lanes with respect to pedestrians crossing. He observed that there are pedestrian facilities on both sides of the street, which is better than much of the County. He noted that good crosswalks will be provided, and there will only be one additional foot for pedestrians to cross. He also asked about side by side riding for bikes, and whether it is necessary when there are facilities on both sides of the street. He asked whether staggering your riding on a six-foot-wide separated bike lane a problem. He advocated that the proposed section is a good compromise. Larry noted that the default width for a one-way separated bike lane is 7 feet. He acknowledged that the proposed section is far better than what is in place across the County, but noted that these standards will affect the County for decades into the future, expressing a desire to get it right.

Jeff said more information will be provided from published sources on separated bike lane widths. The goal is to talk again before the first meeting in April.

Neighborhood Yield Street

Jeff then reviewed the last mixed-use street type, the neighborhood yield street. He noted many parts of the County have the same general type of configuration, where parking is permitted on both sides of the roadway because it tends to be less frequent. Vehicles yield to each other when cars are parked. He noted a 24-foot wide curb-to-curb width is only proposed in areas with lower density, since there would be fewer instances when cars are parked directly across from one another. In areas that are denser, where cars may be parked directly across from one another, the street would be 26 feet wide to allow for emergency vehicles. This section also features 6-foot tree zones and 5-foot sidewalks.

Jennifer noted she provided written comments but wanted to raise them for consideration. She noted it would be helpful to explicitly describe this as a two-way street. She noted that the wider section would be more appropriate where transit routes are located. She affirmed that this is a great street type. In response to the question, "do we need a wider section that accommodates parking on both sides of the street for high density areas," she noted that neighborhood yield streets do not work well in high density areas since they require 80 percent or less parking occupancy. If there is not a way to pass, it becomes difficult for the street to function. As an alternative there could be no parking or no passing zones on a high-density street, but that is not commonplace. This street type is best used in neighborhoods with a mix of on-street and off-street parking. Although it can work in denser areas it cannot work where there are a lot of apartments.

Chris agreed that the density of parking is critical on this type of street. He noted that he lives on a 24-foot wide, recently built Howard County street. Its appropriateness depends on the housing type and driveway type. In his development, homes have two-car garages and driveways wide and long enough to park two additional vehicles. He noted they do not have much need for on-street parking, and the street works fine because it is never narrowed by parking. He noted kids can play in the street and speeds are reasonable. He could see being comfortable with a 26-foot-wide street, but 28 feet would impact the speed and feel unsafe. Jeff responded that he lives on a 28-foot-wide



street and does not feel comfortable with the speed cars choose to travel. He noted there is very little on-street parking with about 10 percent occupied. He noted he did not allow his children to play in the street when they were younger due to concerns about speed.

Kris noted he is responsible for maintaining all the roadways in the County. He noted when they have bad weather events they have to send equipment to each roadway in the County, and that some operators don't like to go to more narrow streets because it is difficult for a truck to maneuver the plow in and out of the neighborhood. He acknowledged that snow events only happen a maximum of 10-15 times a year, being able to efficiently clear streets is important. He noted he receives phone calls from residents who need to get out immediately, and fire and rescue may need access. He acknowledged that these streets have the most impact on our daily lives. People want to have places to park. Many neighborhoods in Howard County have bigger lot sizes with longer driveways and people still choose to park in the street.

Jeff noted that current Design Manual guidance states that for streets with a volume of 1,000 vehicles per day or less, a 24-foot width is specified. If there are townhouses, condominiums, or apartment developments that width increases to 26 feet. For volumes exceeding 2,000 vehicles a day that would increase to 28 feet. He suggested, as a compromise, to maintain the same widths that are currently in the standards, with the exception of widening the sidewalks from four to five feet wide. Jeff asked if there were any objections. There were no objections.

Christiana asked Kris if there were other plow vehicles that would work on smaller streets better. Kris noted that is a great question, and that they can use a pickup truck, however the pickup trucks do not have the same salting capabilities. Once a truck is emptied of salt it has to travel back to the salt barn before it can continue. The County currently uses a ten-ton truck and a five-ton truck, although the smaller truck has a larger turning radius. The ten-ton truck can get through 10-15 miles of roadway before a refill of salt is necessary. The average mileage for each route is 15 miles. Christiana stated that using smaller trucks in neighborhoods is a capacity issue. Kris agreed, noting that a pickup truck has a capacity of less than one ton.

Chris asked whether the County does any outreach to residents advising them to not park on both sides of the street when snow is coming. He noted that awareness may be helpful. Kris responded that they have tried in the past, even on a neighborhood-by-neighborhood basis. Maple Lawn created a parking lot which would be kept clear so that the County can clear snow on the roadways. It worked for a little while, but then people started to park in the street again. Larry commented that people learned not to park in the street where he grew up in Brooklyn when the plow drivers buried their cars. Larry volunteered to ride with a snow plow driver if Kris agreed to take a bike ride with Larry.

Jeff reiterated that there are currently standards varying between 24 and 28 feet based on volume and land use and asked whether there is any objection to maintaining that approach. No objections were heard.

Schedule Changes

Jeff provided a brief update on changes to the schedule. He observed it just took the CSIT two full hours to make it through one land use type, and it is clear that more time is necessary to discuss the rest of the proposed street types. He reminded the group that the goal is to have a draft Design Manual complete by mid-summer to ensure there is time for public outreach and adoption by the October deadline. He asked the CSIT whether they would be able to meet next week to work through the remainder of the agenda. Hearing no concerns, Jeff offered to send out a poll to determine the time that works the best for all members of the CSIT.

Jeff proposed the following process in light of the fact that the CSIT has already reviewed Chapter 1. He noted that this proposed schedule assumes that the remainder of the street types will be vetted by the CSIT in early March. Each chapter that has not been covered so far will first be reviewed with County subject matter experts, some of whom may be outside of the core team. The chapter will then be reviewed with the core team, followed by the CSIT, and repeated as needed to address all comments. He noted that yesterday, WRA presented the bridge chapter to the County's lead bridge engineer to solicit buy in on specific technical issues and make sure they are resolved before introducing the draft to the broader group. The CSIT will have the opportunity to collaborate on any changes



that affect functionality for multi-modal issues. Once all of the chapters are addressed the CSIT will seek stakeholder input.

Jeff then presented a draft schedule. Chapter 1, the Introduction, is partially complete and needs street type input and some additional sections. It will be reviewed by staff in March and brought to the CSIT in April and May. Chapter 4, Bridge and structure design will be reviewed with staff in March and also be brought to the CSIT meeting in April and May. Chapter 2, Traffic Studies, needs significant edits and will be reviewed by staff in March and April and brought to the CSIT in May and June. Chapter 3, Street Design, will be reviewed by staff in April and May and also brought to the CSIT in May and June. Larry asked whether traffic design refers to signalization. Jeff said it refers to signals, signs, and pavement markings.

Jeff observed that it will require more than two hours a month to advance this schedule, and suggested two meetings early in the month. Larry agreed that more meetings are necessary to meet the schedule. Larry observed that the CSIT has not yet seen Chapter 2. Jeff affirmed that the core team has reviewed Chapter 2 but the CSIT has not. Larry noted concern with the fact that the CSIT is only getting involved three quarters of the way through the discussion. Jeff noted that the entire CSIT had agreed that content would be discussed with County staff first and then be brought to the CSIT. Bruce commented that it has to be done this way since a lot of these issues require knowledge transfer up front to ensure County staff are all on the same page.

Jennifer White affirmed that meeting as frequently as necessary is appropriate at this stage, and understands that County staff need to meet internally in order to inform larger group discussions. As the schedule is developed, it would be helpful to put together a timeline that details when CSIT members can provide comments with enough time to ensure that external feedback still informs internal discussions.

Bruce noted that April and May are budget season and there are a lot of meetings that will need to be worked around. Christina agreed this is a difficult time of year, but stated that the Complete Streets work is important and affirmed her commitment to the process on behalf of Council.

Larry commented that he wants to have sufficient time to do a review. Jeff responded that all of us feel rushed in this process, but confirmed that the goal is to share materials with the CSIT in a timely manner, and to do otherwise would not be fair or respecting the process. He noted that Larry may have less time than he would prefer, but that staff share his pain and are working to get things done as quickly as possible.

Tracking and Reporting

Jeff provided a brief update on the tracking and reporting of Complete Streets policy performance measures. The Complete Streets policy requires an annual report be presented to the CSIT and County Council each April that details progress made during the previous calendar year. The annual report will include the status of the performance measures listed in the Complete Streets policy. Jeff shared the 13 performance measures and noted that the Core Team is confident in providing information on ten of the 13 measures. Three of the measures will be more challenging. Performance measure number 10 concerns access to the low-stress bike network. The County is relying on the state to provide LTS mapping, however the data has not yet been released. If it is completed on time the analysis will be performed, but if not the team will supplement with what is available. The County's current sidewalk data is good at showing where sidewalks are located, but it is not routable so it cannot show connectivity within the network. The team is currently working to see how long a process developing a routable sidewalk layer would be, and it may need to be supplemented at a later date.

David Cookson noted that OOT has done some preliminary work with Mead and Hunt on a sidewalk network mode, and offered to set up a conversation between OOT, WRA, and Mead and Hunt to discuss next steps. Leah said she would provide WRA's availability.



Next Steps

Jeff noted the action items from this meeting:

- CSIT members are to review the street cross sections and provide comments.
- WRA will distribute two polls, one to schedule second half of this meeting, and a second to ascertain availability early in the month for a reoccurring second CSIT meeting.

The next regularly scheduled CSIT meeting is scheduled for Wednesday, April 7 at 3:00 pm. An additional March and April CSIT meeting will be scheduled ASAP.



Leah Kacanda, AICP

