











# Area Advisory Committee Report



# Introduction ooo

Since their first meetings in March 2014, AAC members have worked diligently. Over 15 months, they attended eight meetings and one corridor-wide kick-off event. They discussed the CCT alignment, traffic, bicycle and pedestrian access, stormwater management, urban design, station design, environmental impacts, noise analysis, operations, and project costs and funding. This report provides a summary of the topics presented and the common themes heard at those meetings. Detailed summaries of individual AAC meetings and copies of all materials provided to AAC members can be found at: www.mta.maryland.gov/cct.

Selection to the AACs was based on self-nominations sent to the Maryland Transit Administration (MTA) in December 2013. The AAC nomination process kicked off at the October 30, 2013 Public Open House where information about the AACs and nomination forms were available. The forms were also available on the project website and mailed to community leaders. Those interested in participating on an AAC were able to nominate themselves.

MTA created the AACs to encourage involvement from the community regarding the planning and design of the transitway, as well as how the stations would be incorporated into the existing communities. AAC members were encouraged to share what they learned with their communities and constituencies and to bring back reactions. This two-way feedback allowed the project design team and the community to work together to develop the best project possible.

The Fingerprints section on page 14 shows the results of the AACs' work by listing the project-related changes that occurred based on member feedback provided at their meetings. The CCT is a better project because of the passion, involvement and engagement the AAC members brought to every meeting, and the MTA thanks the members for giving their time and energy to the project.

The Maryland Transit Administration (MTA) created the Corridor Cities Transitway (CCT) Area Advisory Committees (AACs) to solicit input from the public in designing how the proposed transitway, stations and related amenities would be integrated into the community.

# AAC Members & Staff

### AAC MEMBERS / AAC TECHNICAL STAFF / ADDITIONAL EXPERTS

AACs were facilitated, collaborative working groups of 12 to 19 community stakeholders actively engaged in the CCT project planning and design process. Each AAC included representatives from residential, commercial, community and institutional organizations and was staffed by project team members and representatives from agency partners.

#### **AAC One Members**

Joseph Allen Girum Awoke

Marilyn Balcombe

Stuart Barr

Brian Downie

Cherian Eapen

Neil Harris

Peter Henry

Michael Janus

Erik Morrison

David Rosenbaum

Steve Scharf

Anita Schweinfurth

Lynne Tucker

Francine Waters

Michael Watkins

Ronald Welke

James Woods

Kam Yee

#### **ACC Two Members**

Donna Baron

Wayne Berman

John Brandt

Lisa Cline

John Dunlop

Marilyn Fleetwood

Kara Guthro

Tim Henderson

Jefferson Jex

Toby Lehman

Rosalind MacLennan

David McDonough

Tami Mensh

Melanie Weerakoon

Sims Zhou

#### **AAC Three Members**

Marcia Bond

Gerald Calderone

Kevin Johnson

Alan Kaplan

Marilyn Leist

Martin Mankowski

Christopher Maravilla

Timothy McDonald

Arlene Robinson

Fred Samadani

Gail Sherman

Mel Willis

## **Government Representatives**

Joana Conklin, Montgomery County Department of Transportation

Gary Erenrich, Montgomery County Department of Transportation

Edgar Gonzalez, Montgomery County Department of Transportation

Rafael Olarte, Montgomery County Department of Transportation

Tom Pogue, Montgomery County Department of Transportation

David Anspacher, Maryland-National Capital Park and Planning Commission

Tom Autrey, Maryland-National Capital Park and Planning Commission

Patrick Butler, Maryland-National Capital Park and Planning Commission

Steve Findley, Maryland-National Capital Park and Planning Commission

Nkosi Yearwood, Maryland-National Capital Park and Planning Commission

Gregory Mann, City of Gaithersburg

Rob Robinson, City of Gaithersburg

Emad Elshafei, City of Rockville

Katie Mencarini, City of Rockville

Daniel Seo, City of Rockville

Craig Simoneau, City of Rockville

Robin McElhenny-Smith, Washington Metropolitan Area Transit Authority

#### **AAC One Technical Staff**

Holly Storck, Facilitator Denny Finnerin, Segment Engineer Todd Connelly, Station Architect Elizabeth Andrew, Traffic Engineer

#### **AAC Two Technical Staff**

Cathy Smith, Facilitator
Karen Kahl, Segment Engineer
John Bull, Station Architect
Charles Freeman, Traffic Engineer
Jason Rashid, Traffic Engineer

#### **AAC Three Technical Staff**

Tracee Strum-Gilliam, Facilitator Allison Berkheimer, Segment Engineer Kyle Kramer, Station Architect Kevin Permisohn, Traffic Engineer

### **Additional Subject Area Experts**

Lindsey DeHenzel, Urban Design
Seth Garland, Urban Design
Nimish Desai, Stormwater Management
Kelley Moxley-Stanka, Stormwater Management
Seyed Saadat, Stormwater Management
Lisa Yang, Stormwater Management
Chris Bell, Operations
Eric Almquist, Environmental
Erron Ramsey, Environmental
Ginny Roach, Traffic
Charles Kenny, Engineering
Michelle Lockhart, Engineering
Christine Sutkowski, Engineering
Jack Carroll, Station Architecture
Ryan Goodman, Station Architecture

#### **Additional Project Staff**

Crystal Saunders, Public Involvement Lead
Anthony Brown, Logistics
Lineta Duren, Logistics
Tori Leonard, Logistics
Kyle Nembhard, Project Staff
Carl Williams, Logistics
Jordan Vann, Logistics



# Meeting #1

# WELCOME, INTRODUCTIONS, OVERVIEW AND EXPECTATIONS OF AAC PROCESS

AAC One: March 6, 2014 AAC Two: March 13, 2014 AAC Three: March 11, 2014

The first meeting of the AACs was focused on introductions, an overview of expectations and the project description. As AAC members arrived at the meeting, they were asked to place dots on a map of the CCT corridor: a green dot to show where they live and a red dot to show where they work. This was done to provide the group with a sense of where the members were coming from and what types of issues they may be concerned with.

Rick Kiegel, CCT Project Manager, kicked off the meetings by welcoming and thanking the AAC members for their involvement. He then introduced the AAC team and government representatives who would be working with the AAC over the next 15 months. Then, the AAC members introduced themselves.

They stated their names, length of time they have lived and/ or worked in the corridor, their affiliation, why they want to be an AAC member and what they hope to get out of the process.

Next, the facilitators walked the members through the AAC binder and reviewed the AAC Handbook, emphasizing the AAC Roles and Responsibilities and Ground Rules of a Successful Meeting sections.

Rick Kiegel discussed the current status of the project, including schedule, estimated cost, funding status and possible alignment changes that the project team is studying.

Finally, the facilitators asked the members to state their top three concerns related to the project. The responses were recorded and used to develop the agendas for subsequent meetings.







# Kick Off Meeting

On April 5, 2014, more than 70 people gathered from 8:30 am to 12:30 pm at the Universities at Shady Grove Conference Center to hear from CCT project officials and subject area experts as well as ask questions and provide feedback. The event brought together all AAC members for a morning of dialog and creative visioning designed to help them provide input as the CCT advanced through the planning process.

Rick Kiegel kicked off the event by welcoming the attendees and speakers and providing an overview of the day's agenda. Next, Henry Kay, Executive Director, MTA Transit Development and Delivery, thanked AAC members for their participation and stressed the importance of their input and feedback. He discussed the CCT's role within the larger transportation context and described how the CCT stations provide placemaking opportunities.

The first set of speakers, Dan Hardy, Principal, Renaissance Planning Group and Jack Gonsalves, National BRT Practice Leader, Parsons Brinckerhoff, discussed project potential and possibilities.

Dan Hardy provided a history of the CCT beginning with Montgomery

County's Wedges and Corridor Comprehensive Development Plan. This plan directed growth along various corridors, including I-270, while preserving or limiting growth within the wedges between the corridors. Dan said that since the 1990s, Montgomery County has been planning for a transit line to serve the areas surrounding I-270. In the 2000s, Montgomery County developed small area plans that included increased transit services in the area. He concluded by saying that planning for the CCT has been a County priority for decades and has been a part of the County's solutions on how it will manage the anticipated growth.







Jack Gonsalves then presented "What is BRT?" He provided a definition of BRT, described the elements of BRT, and shared information about existing and planned BRT systems in the U.S. He also provided details on Los Angeles's Orange Line, Cleveland's Heath Line and Pittsburgh's busways. He emphasized BRT's flexibility and provided closing thoughts on how to develop and promote a successful BRT project.

Following a brief break, the second set of speakers, Greg Slater, Planning Director, Maryland State Highway Administration (SHA); Stu Sirota, Principal, TND Planning Group; and Otto Condon, Principal, ZGF Architects, provided thoughts on advancing the project and discussed complete streets, walkable/livable communities and station design and amenities.

Greg Slater provided an overview of SHA's Complete Streets Policy. Complete streets create safe solutions for all users of the roadway network—motorists, bicyclists, pedestrians, transit vehicles and trucks. He described the evolution of SHA's policies on complete streets, discussed opportunities to incorporate complete streets in design and provided specific examples of how

complete streets have helped improve bicycle safety.

Stu Sirota shared information on how the CCT can help facilitate the creation of walkable, livable communities along the CCT. He discussed different land use patterns and transit station layouts and their influence on creating the built environment. He noted emerging opportunities for creating more walkable, livable communities along the CCT corridor and recognized Kentlands, Lakelands and King Farm as examples of communities along the corridor that have shifted away from an automobile emphasis.

Otto Condon was the final speaker of the kick-off meeting and discussed station design and amenities. He described different station elements and gave examples of how stations could create a unifying civic architecture along the corridor. He also discussed the relationship between stations and the areas around them and opportunities to include sustainability, public art and placemaking.

Rick Kiegel closed the meeting by thanking everyone for their participation and telling the members that he looked forward to seeing the results of the AAC members' engagement and involvement in the CCT design process.

# Meeting #2

### **OPERATIONS OVERVIEW AND TRANSITWAY ALIGNMENT**

AAC One: May 14, 2014 AAC Two: May 7, 2014 AAC Three: May 13, 2014

The goal of this set of meetings was to help members become familiar with the CCT's alignment and operations plan. Each AAC went on a "tabletop tour" of the alignment through their AAC area. Led by the segment engineer, the AAC members were

shown the typical sections for the CCT and how the CCT alignment would interact with the existing transportation network. One of the challenges in designing the alignment is carefully considering how the alignment elements—transitway, shared use path, station platforms, proposed structures, stormwater management facilities and any needed adjacent roadway construction or resurfacing—can be integrated into the area.

AAC members asked questions and provided comments on their reactions to the proposed alignment. However, for the most part, it was noted that the alignment was fixed and could not be changed. An exception was in AAC Three, where members were asked for their opinions, suggestions, concerns and comments on two different typical section options for the King Farm Boulevard median. Option 1 was a center transitway, and Option 2 was an adjacent lane transitway, which more closely replicated the King Farm development plan's typical section. Based on feedback from the AAC, the project team moved forward with the adjacent lane transit option. The alternative preserves the grassy median, although narrower than it is today.

Also discussed at this meeting was an overview of the 2035 operations plan. The traffic engineer explained that the CCT would operate two routes along the alignment: 1) CCT Direct Service and 2) CCT Service via the Universities at Shady Grove. On the CCT Direct Service, the buses





would stop at all stations along the main route. On the CCT Service via Universities at Shady Grove, the buses will leave the transitway near Key West Highway between the LSC West and LSC Central Stations and serve two additional stations—one at Traville Gateway Drive and the other at the Universities at Shady Grove.

By 2035, the CCT Direct Service is scheduled to operate with 3.5 minute headways during peak periods and 6 to 10 minute headways during off peak periods. It is anticipated that CCT service will start and end approximately one-half hour before and after Metro's Shady Grove service starts and ends. The vehicle fleet at 2035 is expected to be 39 vehicles with a maximum of 32 vehicles running on any one day.

## **AAC Three Walking Tour Summary**

On June 16, 2014, the project team joined members of AAC Three on a walking tour of King Farm Boulevard. The group walked along the roadway and stopped at intersections and points of interest, while referencing various items including typical sections as well as the options under consideration. For example, the team created a scale dimension of both median options in front of the Ingleside at King Farm facility for a better understanding of what was proposed. This allowed everyone to visually understand the potential impacts of the transitway on the existing median. It also offered the opportunity for everyone to ask questions about their specific areas of concern.

## OVERVIEW OF TRAFFIC DECISION MAKING AND DESIGN

AAC One: July 23 2014 AAC Two: July 16, 2014 AAC Three: August 25, 2014

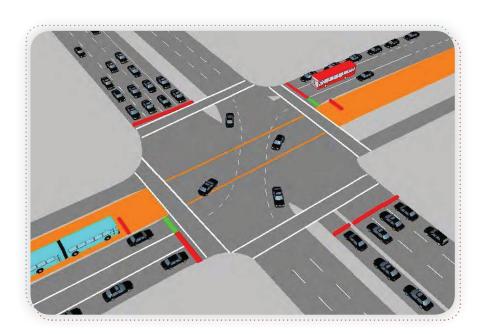
The emphasis of the third AAC meeting was traffic. The traffic engineers kicked off the meetings by explaining the different areas of project planning and design that traffic analysis informs and influences. These included the location of new traffic signals, operational design of new and existing traffic signals, pedestrian crossings, geometric roadway design such as turn lanes and median closures, BRT ridership estimates, BRT operations plans (e.g., travel times, headways, etc.) and inputs to noise and air quality studies.

The project team uses Vissim, a traffic computer modeling tool, to better understand existing traffic conditions and estimate the impacts of future growth and the CCT on future traffic conditions. The projected growth numbers come from the Metropolitan Washington Council of Government

(MWCOG) forecast, which is regularly updated. MWCOG calculates the growth in consultation with all the counties and localities within the region, and the forecast is based on the adopted master plans and planned and approved development projects.

To help the CCT vehicles maintain the appropriate headways, the CCT would use transit signal prioritization, which could extend the current green phase and allow a CCT vehicle to pass through an intersection sooner. The vehicles and traffic signals would be equipped with technology that allows them to communicate and coordinate signal requirements so that the signal timing can respond to real time travel conditions.

To help explain the range of signal phasing options being considered, the traffic engineer showed AAC members the signal design concepts for key intersections along the transitway and within the AAC's area and asked for their input on the concepts.



Example of Vissim animation showing a CCT median guideway crossing an intersection

## STORMWATER MANAGEMENT AND URBAN DESIGN

AAC One: September 11, 2014 AAC Two: September 17, 2014 AAC Three: August 25, 2014

The fourth meeting covered two topics: stormwater management and urban design. At first glance, these topics seem very different. However, because stormwater management is a landscaping feature that attempts to restore or mimic the natural water cycle in an urban environment and urban design strives to create agreeable spaces that people move to or through, the two disciplines influence and react to each other.

The discussion began with an overview of the natural water cycle, a comparison to the urban water cycle and a description of how CCT facilities could impact the water cycle. The CCT transitway and other associated impervious design elements would increase the quantity of runoff and negatively impact the quality of runoff because the runoff would collect pollutants from the transitway. Stormwater management uses a set of methods that reduces the quantity and improves the quality of water that flows from the project.

Because the CCT is both a state and federal project, it must conform to both sets of regulations for stormwater management. The current guidelines require that runoff must be treated at the source and not at ponds located far from the project. The CCT will include several types of stormwater management facilities, including bio-swales, micro-bioretention planters (planter box and planted green space), water quality inlets, stormwater ponds and underground storage facilities. The approach taken depends on the local conditions and available space. Following the general discussion, the stormwater management lead presented the proposed approaches for each AAC area.

Urban design is the intersection of several different design disciplines and works directly with architecture, landscape architecture, stormwater management, planning and civil engineering to create an environment that is easy for people to use. The CCT urban design program is focused on two areas: the transit corridor between the stations and the areas around the station. The urban design team presented concepts and ideas for these two areas and then showed representative transitway conditions and station area plans specific to each AAC area.



Micro-Bioretention, Baltimore Inner Harbor



Micro-Bioretention, Towson, MD



Bio-Swale, Seattle, WA



Bio-Swale, Wilsonville, OR



Pervious Pavements in Trails, Crystal Bride Museum, Bentonville, AR



Permeable Pavement in Pedestrian Access Areas, Gott's Court, Annapolis, MD

# Meeting #5

## STATION ARCHITECTURE

AAC One: November 13, 2014 AAC Two: November 12, 2014 AAC Three: November 3, 2014

The emphasis of the fifth AAC meeting was station architecture. AAC members were given an overview of station location, station sizing, station elements and amenities, station finishes, station safety and system wide architecture.

The station architect explained that the CCT would have a common station design and architectural concept. The use of a consistent station area design would serve as a branding element for the system. However, the design team is sensitive to the context of the different stations and is exploring ways to tie the station to the community while still maintaining station-wide continuity.

The station architect presented two station concepts for ACC discussion and feedback: Framework and Helix. While the two concepts present two different station structures, the location and quantity of station elements, procession of passengers and canopy coverage would be similar in both concepts.

The Framework concept is about creating an urban room and creating space that has an edge within the long transitway. The team tried to create the ideal transit platform – one that had no columns in the middle of it. In the Framework concept, the columns are pulled to the outside of the transitway and the canopy is hung from the underside of the framework.

The Helix concept is more contextual and speaks to the corridor's science and technology identification. The Helix concept tries to generate a form, which is seen in the shape of the roof. The team is trying to enhance and reinforce the idea of the twisting with the diagonal structure. The form would be supported on two columns.

AAC members provided their thoughts on the aspects of each concept they liked and disliked. While it is not possible to combine the two concepts into a new concept, the station architect reminded the members that there are elements from one concept that can be introduced and translated into the other.



Center Median Station - Sidewalk View



Center Median Station - Aerial View



Sidewalk Station - Aerial View

### **OPERATIONS**

AAC One: January 28, 2015 AAC Two: January 14, 2015 AAC Three: March 9, 2014

At the second meeting, AAC members were provided an overview of the proposed CCT operations plan. At the sixth meeting, the Operations Task Lead led an in-depth discussion with AAC members about how the CCT would operate and described the decision-making process the project team used to come to its conclusions about an optimal operations plan.

The first step in the operations planning process is determining ridership demand. This information is used to establish service frequency levels and how many vehicles per hour are needed to meet passenger demand. The ridership is calculated using a customized version of the MWCOG's regional transportation model.

The ridership model generates data on station by station boardings and alightings, which is used to calculate passenger loads. This data is then used to calculate the number of vehicles needed to meet the maximum passenger load during the peak hour. The opening year (2020) peak hour maximum load is in the morning in the northbound direction between East Gaither and West Gaither stations. During the peak hour, 893 passengers are expected to be on board a CCT vehicle between these two stations. Dividing the peak hour maximum load by 90 (the passenger capacity of the vehicle), results in a need for 10 buses per hour. This translates into a vehicle every six minutes.

Fleet size is determined by dividing the round-trip run time by the service frequency. As an example, the CCT via USG route has a round trip run time of 105 minutes with a policy-set frequency of 15 minutes. Dividing 105 minutes by 15 minutes shows that this service requires seven buses to operate the service at the desired frequency.

In addition to discussing ridership and fleet size, operations-related elements that enhance the customer experience and safety and security elements were also described.

### **Muddy Branch Road Alignment**

Throughout the AAC process, there was great discussion, especially in AAC Two, about the CCT transitway and how it would travel down Muddy Branch Road. The original CCT alignment had the transitway running on the east (Belward Farm) side of Muddy Branch Road. The 15% design moved the alignment to the median of Muddy Branch Road. The alignment was changed after discussions with the Mission Hills neighborhood and their concerns about impacts to traffic, in particular free right turns out of their neighborhood, and the impact on a home. However, Montgomery County's Master Plan shows Muddy Branch Road eventually becoming a six-lane road with the existing median being used to accommodate the expansion. That would not be possible if the CCT were moved to the existing median.

The agreement reached between MTA and Montgomery County is that MTA, during construction of the CCT, would modify the footprint of Muddy Branch Road so that it can accommodate six lanes when needed in a future year. The west side (Washingtonian Woods side) of the roadway footprint will remain where it is and the existing two southbound roadway lanes would remain where they are. There would be a grassy strip graded to accommodate an additional southbound roadway lane, the two CCT transit lanes, another grassy strip graded to accommodate an additional northbound roadway lane, and then the replacement of the existing two northbound lanes.

Only the CCT lanes, four roadway travel lanes and turn lanes at the intersections would be built as part of the CCT project. The fifth and sixth lanes would be built by Montgomery County when they feel additional roadway capacity is needed.

## **ENVIRONMENT AND STATION ARCHITECTURE**

AAC One: March 26, 2015 AAC Two: March 18, 2015 AAC Three: March 30, 2015

The environmental documentation required for the CCT project was one of the topics discussed at the seventh meeting. An update on the refined station architecture plans was also covered.

Because the MTA is seeking federal funds for the CCT project, the environmental documents for the project are prepared in accordance with the National Environmental Policy Act of 1969 (NEPA). The Environmental Assessment (EA) for the CCT covers the nine-mile Phase I portion of the project and evaluates the impact of two alternatives, build and no build, on 28 specific resources that are divided into four major categories: socioeconomic resources, cultural resources, natural resources and physical resources. The EA also includes a draft Section 4(f) evaluation component, which looks at impacts to publicly owned parks, recreation areas, wildlife or waterfowl refuges and any publicly owned historic sites listed or eligible for listing on the National Register of Historic Places.

The EA is based on a 15% level of design, which means the project will evolve and change as the design progresses. However, throughout the design process, the project team has looked for and will continue to look for ways to avoid, minimize and mitigate impacts to resources along the corridor.

Once the Federal Transit Administration (FTA) approves the EA, the document will be sent to the Cooperating Agencies for a 30-day review. NEPA.gov defines Cooperating Agencies as Federal agencies, other than a lead agency, that have jurisdiction by law or special expertise with respect to any environmental impact involved in a proposal or reasonable alternative. Once both reviews have been completed and approved, the document will be ready for distribution to the public. The MTA will advertise its availability for a 30-day comment period. There will be multiple ways to comment on the document including public hearing testimony and e-mailing comment forms through the project website. Scheduling the public hearing is subject to the time it takes the FTA to complete its review, but it is anticipated that a public hearing could be held in Fall 2015. The MTA will then finalize the Finding of No Significant Impact (FONSI) document based on comments received from the public

and agencies and send it back to the FTA for final review and approval. Once the final environmental document is issued, which is expected to occur in Winter 2015/2016, the project is able to move into final design, right-of-way acquisition and construction.

#### **Final Station Architecture**

Also at this meeting, the station architect presented a revised station architecture concept. Based on feedback from the AACs and ongoing discussions within the project team, the team is moving forward with the Helix concept. However, the project team has tried to incorporate strengths identified with the Framework concept, such as its "presence" and sense of creating a "room", into the refined Helix concept as it extends beyond the canopy design. The Helix concept is felt to be more dynamic and adaptable and has less of a presence, which the project team feels helps it complement the areas in which the stations are placed.

Where appropriate, the station design includes a number of safety elements including a two-foot high perimeter wall that serves as a barrier between adjacent traffic and the transitway and station area. It will protect the station, provide a crash barrier, allow landscaping with ornamental grasses and minimize mid-block pedestrian crossings. The grasses and wall will help guide people to the proper station entrances and define the station area.

Adjustments have been made to the steel and glass canopy as originally proposed at the fifth meeting. The canopy is lower and has smaller columns to give the station area a more intimate feel. The overhang across the transitway, which in the original design was high enough to allow emergency vehicles to pass under, has been removed. This allows the canopy to be lower. The station lighting would likely be integrated into the Helix structure itself and would reflect down to reduce light pollution. The team is developing lighting layouts and locations on the canopy. The project would follow established industry standards for light levels on the platforms and approach areas.

The mostly transparent windscreen is a major element of the platform and incorporates seating, signage and interactive information such as next bus information. It will also feature a gutter system for rainwater runoff.

#### **FINAL MEETING**

AAC One: May 20, 2015 AAC Two: May 13, 2015 AAC Three: June 8, 2015

The eighth meeting was the final AAC meeting for the design phase. However, the project team hopes to reconvene the AACs during the construction phase. Rick Kiegel attended the final AAC meetings to thank AAC members for their time and input and to share project updates associated with the environmental document, capital costs and funding approaches and Muddy Branch Road alignment.



Members of the project team then presented information on three cost-saving recommendations that the project team is advancing: Key West Avenue/Diamondback Drive intersection, transitway width and station platform length. The recommendations came out of a Value Engineering (VE) workshop, a process where a team of experts not affiliated with the project look for opportunities to save money without impacting the core mission of the project.

# Key West Avenue/Diamondback Drive Intersection

The 15% design plans for the Key West Avenue/Diamondback Drive intersection included an underpass. However, based on the VE study this intersection would now be an at-grade crossing. This would result in an approximately \$30 million cost reduction, partly due to utility relocation cost savings. However, making this intersection at-grade will result in an average travel time delay of 45 seconds.

### **Station Platform Length**

At Metropolitan Grove, Kentlands, Crown Farm and West Gaither stations, the platform lengths have been reduced from 150 feet to 125 feet. The Shady Grove Station platform remains 150 feet long. The remaining CCT Direct stations will be 65 feet long. Stations along the CCT via USG route will go from 75 feet to 65 feet. However, the station area designs will preserve space for 125-feet long platforms to be constructed as warranted when ridership increases.

### **Transitway Width**

As a result of the VE process, the width of the transitway has been reduced from 14 feet per lane to 13 feet per lane and the transit lanes at the station areas have been reduced from 14 feet to 12 feet. Reducing lane width results in less concrete being used, which also reduces the amount of impervious surfaces requiring stormwater management. Both of these factors create cost savings. The 13-foot lane width is based on recent guidance from the American Association of State Highway and Transportation Officials (AASHTO) on separated, dedicated BRT facilities.

Next, the urban design team described how the team calculated how much bicycle parking is needed at each station. The number of racks provided is based on the station's forecast ridership and accommodating WMATA's 2020 goal of having 2.1% of AM peak boardings arrive by bicycle. BikeShare is implemented by individual jurisdictions and is not a part of the bicycle parking analysis. However, the CCT team has identified areas around the stations where BikeShare could be accommodated.

AACs One and Two wrapped up their final meetings with a presentation on the Maryland-National Capital Park and Planning Commission's (M-NCPPC) Montgomery County Bicycle Master Plan update. The purpose of the Bicycle Master Plan is to help make communities better places to live, to incorporate current best practices, to improve mobility and transportation choices and consolidate bikeway recommendations. Of particular interest to AAC members is the coordination between the M-NCPPC, Great Seneca Science Corridor, the City of Gaithersburg, the City of Rockville and other major stakeholders along the CCT corridor. The intent is to create a high-quality bicycle network that connects the CCT stations to the surrounding community. M-NCPPC hopes to have draft recommendations for the CCT area in the next few months with a longer term

goal of having County Council approval of the overall plan by September 2017.

AAC Three concluded their meeting with a presentation by WMATA staff on the Shady Grove Capacity Study, which provided a better understanding of how WMATA will accommodate the anticipated increased number of riders at that station. The premise of the presentation was

that while the station is currently crowded, an increased amount of passengers is partly from both the CCT and other commercial developments that are proposed to occur in the area. WMATA has developed alternatives to help alleviate some of the congestion, but they are not currently funded.

# Fingerprints



AAC members provided observations, insights and suggestions throughout their meetings, and that feedback shaped the CCT's designs. Some of the changes brought about because of AAC member discussions are described below.

- Pedestrian bridge at Metropolitan Grove: The
  project team had discussed an at-grade crossing of
  the CSX tracks, but AAC members pointed out that
  CSX trains sometimes park at the station, which would
  make an at-grade crossing difficult to use. The design
  now shows a pedestrian bridge over the tracks.
- Shared use trail between NIST and Kentlands Stations: The design originally presented showed the shared use trail crossing the transitway at Sioux Lane. Based on AAC comments, the design was revised to keep the trail on the outside of the CCT transitway along Quince Orchard Road, then go under the CCT bridge crossing over Great Seneca Highway and connect to the existing trail along Great Seneca Highway.
- Muddy Branch Road transitway alignment: The original design showed the CCT transitway on the eastside shoulder. Based on AAC member input, the project team studied a variety of alternative alignment locations before moving forward with a median alignment that allows for development of future lanes along Muddy Branch Road.
- **Station Sizing:** Reduced Station Platform lengths: The original CCT stations illustrated the station platforms at 150 feet to allow for two bus berths in each direction. The question of reduced length station platforms was raised by the AAC groups as a way to reduce station impact on the neighborhoods in which they exist. This consideration was further evaluated by the project team during the value engineering exercise and resulted in a reduced typical length of

- 125 feet. This length was further reduced to 65 feet at 8 of the 13 stations to both reduce cost and impact on neighboring communities. While the length of these station platforms were reduced for initial construction, the transitway has been designed to allow for future platform extension to 125 feet.
- **King Farm Boulevard alignment location:** The project team solicited feedback from AAC members about whether the transitway should run adjacent to the King Farm Boulevard median or within the median. Based on the AAC members' responses, the project team is moving forward with designing the transitway adjacent to the median.
- Intersection modifications: Based on comments from AAC members, several intersections that had been shown as being closed to traffic were reevaluated. Reserve Champion Drive will be kept open to through traffic, emergency access to the Ingleside at King Farm facility will be preserved through the use of a mountable curb median section with pervious pavement and Crestfield Drive will be closed to traffic, although it will be open to pedestrians and have two unsignalized crosswalks.
- Increased awareness of bicycle access issues: AAC members have expressed interest in integrating bicycle access along the CCT Corridor and with the surrounding communities. Their support has facilitated a broader bicycle discussion among the project team, M-NCPPC, Montgomery County and the cities of Gaithersburg and Rockville.



#### **CORRIDOR CITIES TRANSITWAY STUDY**

Maryland Transit Administration Office Of Planning 6 St. Paul Street, Suite 902 Baltimore, MD 21202

Rick Kiegel, Project Manager (410) 767-1380 (888) 218-2267 mta.maryland.gov/cct

