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The ASHE Potomac Section Newsletter

President's Message

Dear ASHE Potomac members and friends,

Since September, our Section had the honor of hosting three dinner meetings and the Holiday event.

We had the opportunity to hear about the pulse of the industry from the private sector and from the public sector, and we asked detailed questions to further our knowledge.

We hosted GMU students, and one of them confessed that attending our meeting helped him learn more about the transportation field and decided to pursue a career in transportation.

It is not often that we see the results of our work first-hand, I think the Board worked hard and it is rewarding to see results.

Our Section has had a busy year, and with the new Directors on-board we were able to establish goals for the 2017-2018 season and to see some being accomplished.

Our Gold Sponsor Director was able to renew all current sponsors while attracting new ones. We now have 30 Gold Member Sponsors!

Our Scholarship Director and Young Member Coordinator joined forces, recruited volunteers and kick-started new activities to boost our scholarship funds.

One of our goals is to open a student chapter at George Mason University, and our Director has already developed a plan of action for early spring of 2018.

The board will also support the creation of an independent Foundation for the Stephen M Evans scholarship. This will also be part of the spring 2018 effort.

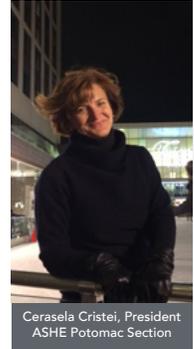
While the Board worked on organizing professional events from June until November, we put our fun hats on to orchestrate the Holiday Party in December. This end of the year party included fun activities and a 30-question trivia game over dinner. Prizes were awarded to the winners and all had a warm and relaxing evening.

I would like to thank all Board members for their time and dedication to our Section, for all the work with logistics, budgeting, coordination and continuous communication within the Board, within the membership and beyond to our friends.

I also would like to thank our Gold Sponsors for their sustained support, and to all our members and friends who keep giving us their time, friendship and support.

Best regards,

Cerasela Cristei
President, ASHE Potomac Section



Cerasela Cristei, President
ASHE Potomac Section

Projects and Meetings Recap

Summary of past projects

ASHE Potomac 2017 Field Trip

Every year ASHE Potomac provides its members the opportunity to further experience details of our profession by visiting construction sites or plants supporting construction.

This year's field trip organized by VP Charlie O'Connell was at the Chantilly Crushed Stone and Virginia Paving Companies. This visit provided an opportunity to learn about the materials used in the building of our roads, the source and the process of producing and delivering different paving materials. We met with Don Kerr of Chantilly Crushed Stone and went to the core of the quarry, seeing first-hand the majestic stone steps and the powerful devices carrying the loads of stone to the plant. It is interesting to note that the quarry origin and location was to facilitate the construction of the Dulles Airport and is expected to operate for another 25 years.

We also toured the facilities of Virginia Paving, where Robert McKeever provided a detailed tour of their facility. He walked us through the phases of the making of asphalt pavement. We started at the six buckets with different grades of stone, continued through to the furnace and the mixing plant all the way to the top of the asphalt silos. From there we saw the entire pavement engineering process under our own eyes: the quarry with its elegant-looking empty pool, the stone crusher (looking like a smart toy) and the asphalt plant line of operation.

Don and Robert proudly talked about their plants and of the processes they have in place to maintain the level of quality and the production quantity at the levels of needs and expectations of their clients. At the end of the trip, all members present had a different perspective on the roadway materials and pavement design.



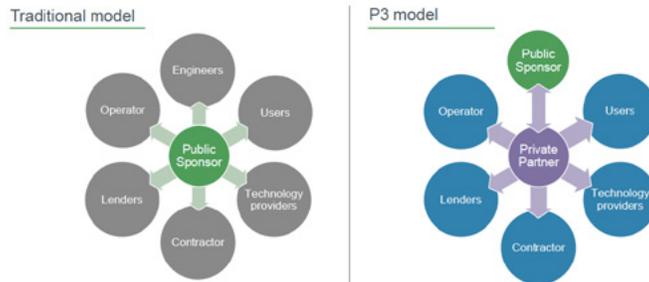
**ASHE Potomac Meeting
September, 13th, 2017**

Speaker: Ed Crooks, VP,
Development and Major
Project Delivery Transurban



Our guest speaker for the first meeting of the 2017-2018 season was Ed Crooks, Vice President of Development and Major Project Delivery at Transurban. He joined Transurban in late 2016 and played a key role in finalizing the 395 Express lanes project.

Ed started his presentation by introducing Transurban as a pioneer company in P3 delivery projects and collaborating with governments in the United States and Australia. In P3 model, private sector manages the project on behalf of the public sector and works with contractors, technology providers and users. Virginia was one of the first States to adopt P3 delivery method to extend express lanes. Transurban currently has Design-Build, Finance, Operations, and Maintenance (DBFOM) agreement with VDOT for 40 miles express lane projects.

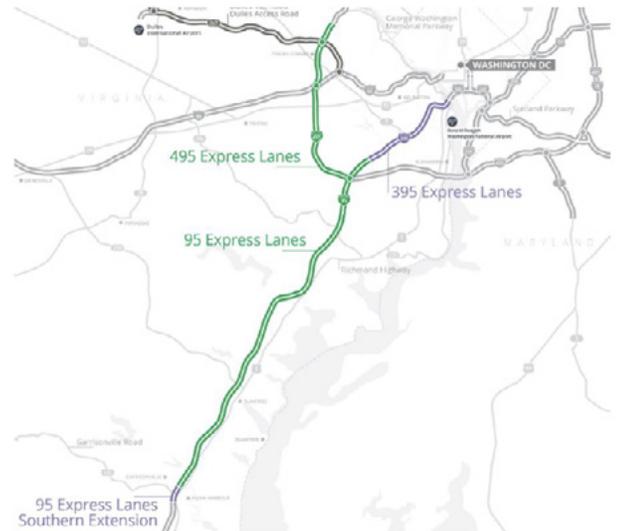


Mr. Crooks highlighted the focus of transurban on customers by collecting surveys from regional drivers and developing mobile apps to improve the use of express lanes by allowing customers to check the travel time and toll before entering the express lanes and pay the toll via phone.

Other collaborations of Transurban with VDOT includes network coordinations between VDOT and Transurban includes: adjacent construction, communication and training public in using the express lanes, enforcement of safety in the corridor and winter operation. Transurban is also involved in developing connected and autonomous vehicles and collaborating with VDOT and Virginia tech to test new technologies in express lanes.

Over 40 miles of managed lanes

- Long term DBFOM agreements with Virginia Department of Transportation
- **495 Express Lanes**
 - Opened in 2012
 - 14 miles, 2 new HOT lanes in each direction
- **95 Express Lanes**
 - Opened in 2014
 - 29 miles, 2-3 reversible lanes
 - HOV to HOT conversion
- **395 Express Lanes**
 - Financial close occurred July 2017
 - Target completion fall 2019
 - 8 miles, 3 reversible lanes



ASHE Potomac Meeting October 18th, 2017

Virginia Department of Transportation (VDOT) sponsors the Potomac Section of ASHE by organizing a yearly event at their NOVA Office.



On October 18, 2017, VDOT opened their door again to a joint event. Helen Cuervo, the VDOT NOVA District Administrator, opened the presentation with the "State of the District" and expressed that the District is heavily reliant on her staff of highly-qualified professionals and on the community of consultants.

Amanda Baxter, Special Project Development Manager, presented the latest news about the Transform 66 Inside the Beltway Project. The toll system had been under testing that culminated on December 4th with the opening of the Express Lanes. The process involved coordination with law enforcement and first responders, launching of the customer website (66expresslanes.org), deploying the advertisement and media campaign and commuter and special user groups outreach. The Eastbound Widening Project will receive notice to proceed in early 2018 and it is expected to be complete and open to the public in fall 2020.

Amanda continued her presentation with a Multimodal Projects update. The first round of new transit services had been recently deployed, the event being marked by a ribbon-cutting ceremony held by Governor McAuliffe and Secretary Lane. Part of this program are 10 new projects that are expected to provide some traffic operation advantages by moving as many as 1,500 additional people daily through the I-66 Corridor.

Michelle Holland, Megaprojects Manager presented the Transform 66 Outside the Beltway Project. On behalf of Susan Shaw who manages this project. VDOT and its private partner, Express Mobility Partners, continue to advance the project and have completed nearly 50 public meetings. The financial close for the Project funding has been completed in October 2017 and it is anticipated that the heavy construction schedule will begin in spring 2018. The ultimate goal is to open the Express Lanes in July 2022. One of the recent key issues in the development of the project is the location of the parallel bike trail, an issue continuously under development until all parties involved will develop a viable solution.

Michelle continued with the I-395 Express Lanes Northern Extension Project updates. The project is part of the Atlantic Gateway project to move more people and goods in the I-95 corridor. The I-395 Express Lanes Northern Extension Project had the groundbreaking ceremony on August 9, 2017 followed by the construction kickoff. Currently, work is underway to reconfigure Pentagon South Parking Area to enhance circulation for transit buses and carpools to encourage them to use future I-395 Express Lanes. Part of the project operations is the ongoing coordination with Pentagon and key stakeholder groups. The new express lanes are scheduled to open to the public in fall 2019, while other project elements are expected to be completed by summer 2020.

The I-95 Express Lanes Southern Terminus Extension Project was also presented. The project is funded jointly by Transurban and the Commonwealth; VDOT overseeing the design-build contract. Construction of the project is 90% complete on \$54 million dollar project to extend 95 express lanes by 2.2 miles beyond current flyover exit ramp at Garrisonville Road in Stafford County. New northbound and southbound ramps are anticipated to open ahead of schedule in fall 2017. An additional eight mile southern extension to Fredericksburg is part of Atlantic Gateway project to unlock I-95 corridor, and is being studied and developed.

ASHE's Mission Statement

"The mission of the American Society of Highway Engineers is to provide a forum for members and partners of the highway industry to promote a safe, efficient and sustainable transportation system through education, innovation and fellowship."

VDOT's Mission Statement

"Our mission is to plan, deliver, operate and maintain a transportation system that is safe, enables easy movement of people and goods, enhances the economy and improves our quality of life."

Construction Performance

98%

on time

93%

on budget

94%

quality

99%

environmental

Nick Roper, The District Project Development Engineer, presented the NOVA District Dashboard for the Fiscal Year 2017 Performance. The District and the Localities administer the area's projects and both have surpassed the 70% target for project development and the 77% and 85% respectively targets for on-time and on-budget project delivery. Nick also presented the value of the projects administered: VDOT administered 26% of the projects that had 50% of the value, while the Localities administered 74% of the projects of 50% value. The total of construction estimates was \$1.34 billion and the total project estimate was \$2.01 billion. The majority of the budget was invested in Added Capacity Projects while the most projects focused on bike and pedestrian improvements.

Nick continued his presentation with Smart Scale and Project Development. The Smart Scale prioritizes projects for funding based on the greatest benefits for taxpayers. "Transportation projects are scored based on an objective, outcome-based process that is transparent to the public and allows decision-makers to be held accountable to taxpayers. Once projects are scored and prioritized, the Commonwealth Transportation Board (CTB) has the best information possible to select the right projects for funding." (Source: <http://vasmartscale.org/about/default.asp>)

The SMART Scale dashboard is driven by the schedule; Commissioner's expectation is that all projects should be completed within 6 years.

One of the SMART Scale projects:

Bill Cuttler, The District Construction Engineer presented the state of the Construction activities in the NOVA District. The construction performance in 2017 was stellar:

- On Time 98%
- On Budget 93%
- Quality 94%
- Environmental 99%

Bill continued with presenting the Pavement Project Status, a total of 1,433 lane miles on 1,890 segments of roadway.

Bill also mentioned the completion of the first diverging diamond project in the NOVA district at the intersection of I-66 and Route 15. The Diverging Diamond Interchange (DDI) Project is now open to the public and it functions as well if not better than expected.

The meeting concluded with several questions from the audience, the most notable being related to VDOT's actions in response to the rapid evolution of intelligent transportation system and the promotion of the driverless car. The Department is constantly adopting new ideas and is continuously seeking to be areas of the newest technologies, their implications and the anticipated methods of implementation.

ASHE and VDOT have similar mission statements, thus making this partnership important for the community.

ASHE YP Event October 30th, 2017

The ASHE Potomac Young (and young at heart) Member group met at the Great Falls Park in Virginia on the last day of October.



The participants were inspired by the call to a hiking and mentoring event, and braved the early morning hours to be there. The park was almost empty at 8:30 in the morning, and the weather was spectacular.

Loaded with bottles of water and small snacks (sunscreen and bug repellent too) the mentors and mentees started hiking. The trail was very accommodating for us to be in a close group and to mingle to the point that we were all mentors and mentees to each other. We shared stories about travels, personal goals and professional ambitions.

The trip ended with a picnic skillfully planned by Khatereh Vaghefi, The Young Member Coordinator. The participants were impressed by the fresh, tasty and well-coordinated food: whole wheat baguettes, fresh Mozzarella and tomatoes, Manchego cheese, olives and dried salami. For dessert we had dark chocolate-covered pretzels. The food inspired more career discussions where advice was given and ideas were shared.

Waking up early on a Saturday morning to walk, talk and eat with other professionals was not a bad deal at all.

See you all at our next young (and young at heart) member event.



ASHE Potomac Meeting November 30th, 2017

Monica Backmon
NVTA Executive Director

At the November 2017 ASHE Dinner, we were honored to have Monica Backmon, the Executive Director of the Northern Virginia Transportation Authority (NVTA), as the guest speaker. Monica began her presentation by providing members with some background on NVTA. The authority was founded in 2002 and are currently celebrating their 15th Anniversary. NVTA is run by a board that has 17 members, which includes elected officials from the Counties, Cities, and Towns across the region as well as members from the State Assembly, the Commonwealth Transportation Board, VDOT, and DRPT. Supervisor Martin Nohe of Prince William County is the Chairman of the Board.

NVTA didn't really have much authority until 2013 when the Virginia General Assembly passed House Bill 2313 which provided a revenue stream for funding projects. This bill only pertains to Northern Virginia and involves revenue from a sales tax, interest tax, a grantor's tax, and a transient occupancy tax. NVTA has developed regional plans since 2002 however it wasn't until the Transaction 2040 plan was established when NVTA started receiving funding from the State.

Transaction 2040 is a long-range regional transportation plan for Northern Virginia. It outlines regional transportation improvements that amount to 27.5 billion dollars over 25 years. The Virginia General Assembly has agreed to \$300 million in funding per year and this rate is trending higher in recent years. It's important to note that in order for a project to be eligible for NVTA funding, the project must be included in the long-range plan and provide congestion mitigation.

NVTA Funding for the member jurisdictions are distributed in 2 ways. 30% of NVTA Funding is distributed to all member jurisdictions on a pro-rata basis. There is no sunset on these funds distributed however the jurisdictions need to show advancing of the funds provided. 70% of NVTA Funding is programmed and controlled by NVTA and distributed based on the adopted funding program. These funds need to be spent appropriately and effectively by the recipient jurisdiction. Even though NVTA selects the projects that receive 70% of the funding, Monica said that each locality must receive equal proportions of benefits. This does not mean that the projects must be spread across all member jurisdictions. It only means that a project may benefit multiple jurisdictions even though it is only in one jurisdiction.

Currently NVTA is in the process of developing its first six-year program that will be updated every 2 years. This new six year program called FY2018-2023 will be adopted in June 2018 after an open house and public hearing in May 2018. There was a call for Regional Transportation Projects on October 12, 2017 and project applications were due on December 15, 2017. The FY2018-2023 Six Year Improvement Program will fund approximately \$1.5 billion in transportation improvements. \$175 million is planned to go towards Metrorail improvements while another \$320 million is already funded in transit projects.

In the call for Regional Transportation Projects in October 2017, NVTA received requests for a total of \$42 billion in capital needs. Monica mentioned the following large projects were submitted in the October call for projects:

- American Legion Bridge
- Bi-County Parkway
- Metrorail Extensions/VRE Expansion
- Potomac River Crossing
- Route 28 Widening
- Route 1 Widening w/BRT
- Regional BRT Network

Here are the upcoming milestones for adopting the FY2018-2023 Six Year Program

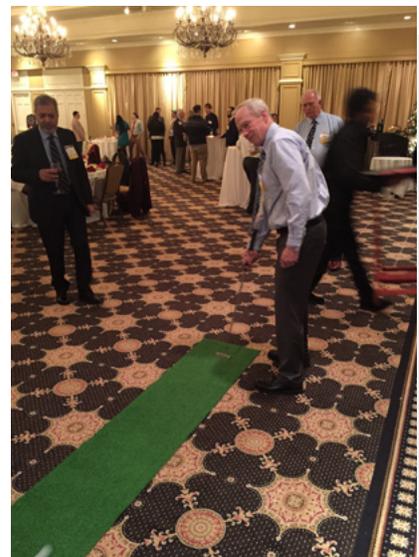
- **Noon, January 19, 2018** — Deadline for Governing Body resolution(s) of support. Note: The purpose of the later deadline for Governing Body resolutions is to provide some scheduling flexibility for jurisdictions and agencies during the Holiday season. Whether this additional time is needed to pass a resolution for a jurisdiction's

own applications, or in support of another jurisdiction's applications, is not material.

- **March 2018** — Authority approves date of Public Hearing for the FY2018-23 Six Year Program
- **April 2018** — Authority releases draft FY2018-23 Six Year Program for public comment
- **May 2018** — Open House and Public Hearing for the FY2018-23 Six Year Program
- **June 2018** — Adoption of FY2018-23 Six Year Program

Please visit NVTa's website (<http://www.thenovaaauthority.org/>) for more information and updates on the FY2018-2023 Program

Holiday Party December 30th, 2017



Stephen M. Evans Memorial Scholarship



Up to \$5,000 in SCHOLARSHIP(S)

**AVAILABLE FOR STUDENTS PURSUING B.S.
DEGREES IN CIVIL ENGINEERING OR
TRANSPORTATION RELATED FIELDS**

Applicants must be an undergraduate student entering their junior or senior year, enrolled in an ABET-accredited engineering program majoring in Civil Engineering. Applicants must have a interest in transportation engineering, a minimum overall GPA of 2.75 on a 4.0 Scale, and a minimum 3.0 GPA in their engineering-related course work.

These Scholarships are from the Potomac Section of The American Society of Highway Engineers (ASHE). The Potomac Section is based in Northern Virginia with members from across the Washington DC metro area.

ESSAY

Applicants must prepare an essay of at least 500 words describing the following:

- How the applicant became interested in engineering.
- The applicant's personal goals as they pertain to Transportation Engineering.
- The contributions the applicant hopes to make to the transportation industry.

SUBMISSION

- Essay
- Official Transcript
- Resume

Submit applications to:
Charlie O'Connell
charlieoconnellpe@gmail.com
Subject: ASHE Scholarship Application
Questions?: 703-853-8447

CANDIDATE SELECTION

Members of Potomac Section ASHE will evaluate the submissions. Winner(s) will be invited to attend the June 6, 2018 ASHE meeting for presentation of award(s). Good Luck!

Application Deadline March 15, 2018

ASHE Potomac's Gold Members in the News

T3 Design Corporation

T3 is a woman-owned small business specializing in transportation engineering. Our services include traffic modeling and analysis, as well as design of traffic signals, pavement markings, signing, lighting, TMP, MOT, and ITS. T3 has exceptional experience in roadway improvement projects throughout VA, MD, and DC.

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In 2015, RA became a woman-owned firm and is currently SWaM and LDBe certified.

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UPCOMING EVENTS



Golf Tournament

To Benefit the Stephen M. Evans Memorial Scholarship

FRIDAY, MAY 18th

Bull Run Golf Club

3520 James Madison Highway, Haymarket, VA 20169

- Registration begins at 12:00 noon with a box lunch
- Driving Range available prior to the event
- Four person/captain's choice modified shotgun at 1:00 p.m.
- Awards dinner (BBQ) following the tournament
- Prizes will be awarded for closest to the pin and longest drive, and to the 1st, 2nd, and 3rd place teams
- Raffle tickets will be sold for great prizes!
- Cost: \$90 per golfer; \$360 per foursome
(Includes green fees, cart, range balls, a box lunch, refreshments and dinner)

Register by May 7, 2018!



Sign Up & Get More Info at: www.potomac.ashe.pro/events

Upcoming ASHE Events

- February 7th — Monthly Meeting, VDOT Northern Virginia District Office
- March 14th — Monthly Meeting, Westwood CC
- April 9th — Mid-Atlantic Region's 2018 Annual Spring Technical Conference, University of Virginia
- April 18th — Monthly Meeting, Westwood CC
- May 17th-20th — ASHE National Conference, Cleveland, Ohio
- May 18th — ASHE Golf Tournament, Bull Run Golf Club
- June 6th — Monthly Meeting, Westwood CC
- Date TBD — Summer Field Trip, Location TBD

Save the dates!

Thank you to our 2017-2018 Gold Member Sponsors!

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