One of the major challenges facing the transportation and construction industry is the lack of qualified employees. More and more employees who were responsible for constructing the nation’s highway system are retiring and fewer new employees are entering these industries. This shortage impacts the companies and agencies responsible for designing and constructing highway projects along with those responsible for inspecting and maintaining roads and bridges.

In an effort to address this looming crisis, the Virginia Asphalt Association (VAA), the Virginia Department of Transportation (VDOT) and the Virginia Community College System (VCCS) have partnered to form a new training center – Virginia Education Center for Asphalt Technology (VECAT). (To learn more about VECAT, please read the article on page 4) This new training center will be headquartered at Germanna Community College, the lead college for VCCS.

With the establishment of VECAT, Secretary of the Commonwealth Levar Stoney made the formal announcement at the 2016 Fall Asphalt Conference on October 5th. Secretary Stoney spoke of the need for a new and well-trained workforce to support Virginia’s economy and to keep the economy growing. Secretary Stoney was joined by Dr. Randy Stamper – Assistant Vice Chancellor for VCCS and Dr. David Sam – President of Germanna Community College. Dr. Stamper spoke about the VCCS six year strategic plan and the goal to triple the number of credentials issued by the VCCS.

VECAT fits into this long-term plan and he looks forward to working with this exciting pro-

Continued on page 3
Virginia’s Transportation Leaders Speak at Fall Asphalt Conference

The first day of the 2015 Fall Asphalt Conference was filled with big announcements from special guests. Leaders from the Virginia Secretary of Transportation to the VDOT District Engineers spoke on the status of transportation legislation to local funding of projects.

Led by 2015 VAA President of the Board, Dennis O’Connor, the Conference started with Secretary Aubrey L. Layne, Jr. addressing a variety of topics. He described the changed process required under House Bill 2 to rank and prioritize construction projects. Along with HB 2, HB 1887, also known as State of Good Repair, put forth funding and a plan to improve the overall health of the roadway network. Secretary Layne also touched on new projects such as the widening of I-66 in NOVA and I-64 on the Peninsula. Finally, he commended VAA, VDOT and VCCS for the establishment of VECAT.

Following Secretary Layne was VDOT’s Commissioner Charlie Kilpatrick. Commissioner Kilpatrick echoed his strong support for VECAT. The Commissioner noted his recent participation at an AASHTO meeting in Chicago. The same themes recur across the country—the need for training and workers in the transportation industry. Kilpatrick mentioned VDOT is not in the education business, but in the transportation construction and maintenance business. VDOT will rely on the community college system to provide much of the training in the future. In his final opening remarks, the Commissioner noted the strong relationship that exists between VDOT and Industry that does not exist across most of the country. He also stressed the need for vigilance concerning job safety for all workers.

Currently, VDOT has over $7 billion in needs across the commonwealth, but only $1.2 billion in available funding. This will require projects to be scoped to the available dollars. The only new revenue in Virginia is going to NOVA and Hampton Roads as a result of the new taxing authorities. With the falling gas prices, the revenue in the rest of the state has maintained constant. With the additional revenues in Hampton Roads, the money is being spent on major interstate projects such as the I-64 widening. In NOVA, the money is being spread over numerous projects. This additional $200 million in NOVA annually will be administered by localities and VDOT. Specifically to paving, VDOT will be budgeting between $400 and $500 million annually over the next three years. Along with these funds, bonus federal highway money in 2015 ($55 million) will be spent on State of Good Repair projects—pavement and bridges. For the money being allocated, VDOT demands a quality project and industry should demand quality deci-

Continued on page 3
The announcement was live release was given to the media. The announcement of VECAT, a press mission. VECAT will help Germanna to meet part of the College’s mission. VDOT will be incentivizing good work and early completion. The traveling public expects a good final project done in a timely manner.

Chief Deputy Commissioner Quintin Elliott concluded the first session of the afternoon. Elliott discussed the changes in business practices underway at VDOT. For many years, the districts’ performance was measured by the Dashboard. Now, divisions at the Central Office were being measured as well—how well are they performing and delivering their business functions. He gave several examples of how applying a transparent approach to business processes are improving the department. One such example was the Virginia Transportation Research Council (VTRC). In the past, a successful project meant research was implemented on a project. However, success in many cases means applying research to VDOT’s overall program. Therefore, before new projects are initiated, researchers must work with others in the department to assess if the project’s results can be widely applied. While this may not be the case on every project, the question must be asked.

In 2016, VDOT is moving toward a learning organization. This move covers multiple areas. VDOT must monitor how well new ideas/technologies/designs and specifications are implemented. If the implementation is going well in some areas and not others, then share with those areas where implementation is struggling. In some cases, adjustments are needed and then move forward. He mentioned the time Commissioner Kilpatrick spent in the field in Hampton Roads. Lots of good ideas and approaches are being put to use, but the challenge is spreading that information across VDOT. VDOT will be working on ways to transfer that knowledge. VDOT is committed to improving the skills for their employees (engineers and inspectors) along with consultant employees. Consultants play a large role in the delivery of the program and they need the same skills as VDOT. He commended the establishment of VECAT and how it fits into the new learning organization.

After the break, the final VDOT session was held. This session featured the District Engineer’s and the Chief Engineer Garrett Moore. Each DE covered their impressions of the work completed to date, areas that needed attention, and the amount of work planned for advertisement in 2016. The DE’s were pleased with the overall quality of work; however, they expressed concern with timely pavement markings and ability for some contractors to complete work by the contracts end date. Each DE laid out the dollar amounts and quantities of materials to be advertised. A few district engineers noted some of the larger construction projects on the horizon. Following the DE panel, Curtis Contracting made a special presentation to Hampton Roads District Administrator Jim Utterback for his leadership in executing the rehabilitation of I-264. Andy Curtis also recognized Virginia Paving for their efforts as their paving subcontractor on I-264. (A presentation on the I-64 and I-264 Design-Build Contracts was made on Tuesday afternoon). Finally, Scott Claud of Colony Construction introduced the VAA Scholarship program. He outlined the applicant requirements and the value for each scholarship. Following Scott’s presentation, 2015 VAA President Dennis O’Connor made a few final comments and the group attended a reception in the hotel’s rotunda. To see the first session of the Fall Asphalt Conference on video, visit the Virginia Asphalt Association website www.vaasphalt.org and click on VECAT.

Virginia Education Center for Asphalt Technology Partners

Creation of VECAT (continue from page 1)

VECAT will help Germanna to meet part of the College’s mission.

With the formal announcement of VECAT, a press release was given to the media. The announcement was live streamed to the internet and was published in several media outlets around the Commonwealth. To watch the full announcement and read the press release, visit the VAA website www.vaasphalt.com.

Virginia’s Transportation Leaders Speak at Fall Asphalt Conference (continued from page 2)

Quintin Elliott
Chief Deputy Commissioner, VDOT

Garrett Moore
Chief Engineer, VDOT

www.vaasphalt.org
VECAT... Educating the Future Transportation Workforce

What is VECAT? Is it a new, recently discovered animal? Is it a trendy, new foreign sport car? While both are good guesses, VECAT is the Virginia Education Center for Asphalt Technology established by VAA, VDOT and the Virginia Community College System led by Germanna CC. VECAT provides a three pronged approach to training, educating and certifying individuals for the transportation industry. The first prong of VECAT is the Materials Certification program. Contractor employees, consultant inspectors and VDOT staff are required to hold various certifications while performing construction and maintenance projects. The program for asphalt related classes (Asphalt Field Level 1 and 2, Asphalt Plant Level 1 and 2, Asphalt Mix Design, Surface Treatment and Slurry Seal) will be revised as part of the VECAT effort. The course materials and manuals will be reviewed by a technical working group consisting of VAA members and VDOT staff. Where needed, subject matter experts will be contracted to perform the work. As work is completed and approved by the TWG, a final approval will be provided by the VECAT Steering Committee. The committee consists of VDOT’s Chief Deputy Commissioner, Chief Engineer, State Maintenance Administrator, and State Materials Engineer along with Executive Management from three VAA members and the VAA Director of Engineering. Finally, Germanna Community College’s President, VP of Work Force Development and Business & Career Coordinator will serve on the steering committee. It is planned the new asphalt plant and field courses will be piloted at the Germanna Community College campuses in March and April of 2016. The classes for the other asphalt-related areas will be rolled out in 2017 across the state.

The second prong of VECAT is the Associate’s Degree program. The training manuals from the materials certification classes, along with other resources, will be used in semester long classes to deepen the student’s understanding of asphalt technologies. Many of the classes can be taken remotely, but a few will require hands-on time in the labs to strengthen understanding of concepts and technologies. By completing classes in the associate’s degree and apprenticeship programs, students/employees will earn certifications necessary to work in the highway transportation industry as a contractor, consultant or agency employee. These credentials will stack over time to benefit the individual.

The final prong of VECAT is the Associate's Degree. This new degree will be developed over the coming years using information from the materials certification program. The training manuals from the materials certification classes, along with other resources, will be used in semester long classes to deepen the student’s understanding of asphalt technologies. Many of the classes can be taken remotely, but a few will require hands-on time in the labs to strengthen understanding of concepts and technologies. By completing classes in the associate’s degree and apprenticeship programs, students/employees will earn certifications necessary to work in the highway transportation industry as a contractor, consultant or agency employee. These credentials will stack over time to benefit the individual.

By incorporating the community college system, people seeking an individual certification or an associate’s degree can do it on a local college campus and in many cases over the internet. Most materials certification classes will be live streamed to sister community colleges from the main Germanna campus. Attendees will register on-line through the VECAT website for specific classes and locations. By staying local, the costs related to travel will be greatly minimized. For the apprenticeship and associate’s degree programs, VECAT will link the employers/employees or students with local work force development centers and community colleges.

While not a new animal or sports car, VECAT will be an exciting new discovery for many people looking for a well-paying career. As VECAT evolves, employers and employees will be zipped into new technology to keep Virginia’s people and economy moving.

www.vaasphalt.org
Time for a Cool Change...

October is a time for change. Summer has just ended and the air is getting brisk as we head toward winter. In 2016, the cool October air will usher in another change—the 2016 Fall Asphalt Conference and Expo. What is so cool about this change—the venue, the format, and the exhibits. First, the fall conference has been at the Jefferson Hotel since its inception. However, with the expansion of the conference, a larger space with more hotel rooms was needed. The 2016 Fall Asphalt Conference will be at the Richmond Marriott Downtown. This hotel will have many more rooms available to attendees. If the rooms run out at the Marriott, a Hilton Garden Inn is just across the street. With both hotels, plenty of parking exists.

The second cool change is the format. The Fall Asphalt Conference will include an exhibit hall and restructured conference format. More on the exhibits in a moment. The new conference structure will include a start time of 10 am on Monday, but will still conclude by 5 pm on Tuesday. Lunch and break time will be expanded to allow more networking and visiting with vendors. Breaks and lunches will be in the exhibit hall. Plus, the VDOT and VAA Paving Awards presentations will be adjusted.

Finally, booths will be available for 64 exhibitors including the newly created VECAT booth. VAA member and non-member companies will be able to exhibit. On a first come, first served basis, companies can select a wall, corner or aisle booth. Pricing will vary based on location and VAA membership status. Along with exhibiting opportunities, companies will have the ability to sponsor one of the conference breaks, lunches and/or receptions.

A layout of the exhibit hall is shown below. The food and beverages will be placed on the semi-circular tables in the middle of the room with tables for seating nearby. Register to exhibit early so you can select your booth location and to get the early exhibitor prices. The Expo Brochure and Registration is available on the VAA website at http://www.vaasphalt.org/vaa-conferences/

APA Taps Amy Miller as new Director

The Asphalt Pavement Alliance has named Amy Miller, P.E. as its new National Director.

Miller, a professional engineer licensed in Florida, has an extensive background in pavement design and pavement type selection issues. As a National Director of the APA, she will be responsible for coordination and leading education and field deployment efforts for the asphalt pavement industry, working in close cooperation with the Asphalt Institute (AI) in Lexington, KY. The National Asphalt Pavement Association (NAPA) in Lanham, MD., and the 40 state associations.

“I look forward to working with the APA’s partners to highlight exactly how asphalt pavements are the material of choice for ensuring quality, comfort, and value for the driving public and road owners alike,” Miller said.

“The asphalt pavement industry is moving forward with many advancements that boost sustainability and pavement performance,” said Mike Acott, President of NAPA. “We are excited to have someone of Amy’s caliber leading our efforts to put these innovations in front of road owners and decision makers.”

The APA is a partnership of the Asphalt Institute, National Asphalt Pavement Association and State Asphalt Pavement Associations.

Member News

The VAA and its members would like to welcome Sonneborn LLC and Kraton Polymers LLC.

Sonneborn is a global leader in refined petroleum and vegetable-based products. For the asphalt industry, Sonneborn produces the warm-mix additive called SonneWarmix™.

Like Sonneborn, Kraton is a company that services many different industries by offering a variety of products. Kraton Polymers provides products to enhance the performance of asphalt mixes. Polymer modified asphalt has been used on the NCAT Test Track successfully. In Virginia, Kraton polymer modified binders have been used in NOVA sub-divisions and on I-95 in NOVA District.

Roadtec, Inc. announces that Andy Guth has joined their team as the National Sales Manager for the Eastern United States Territory. Chris Connelly steps into a newly formed position as Director of National Accounts and Dealer Development for North America.

www.vaasphalt.org
VDOT’s Construction & Maintenance Award Winners

B & S Contracting, Inc. of Staunton and W-L Contracting & Paving, Inc. of Chilhowie took home the top VDOT paving awards for 2014. Each year since 1991, VDOT and the VAA have recognized the top construction/major rehabilitation paving project and the top maintenance overlay paving project.

For the 2014 paving season, eight maintenance projects were nominated for the statewide award. **W-L Construction and Paving** was nominated for their paving of southbound I-81 in Bristol District. **Adams Construction** was nominated for their work on northbound I-81 in Montgomery County. The paving of US 60 in Buckingham County by **Colony Construction** was nominated by the Lynchburg District. **Branscome Richmond** was nominated for their paving on I-85 northbound in the Richmond District. For the second time in several years, the Hampton Road’s District nominated a project. County Route 679, near Wallops Island on the Eastern Shore, was paved by **Branscome, Inc.**

In the Fredericksburg District, Lee Hy Paving was nominated for their work on eastbound SR 3 near the town of Montross. For the Culpeper District, the nomination was for the inlay of US 15/29 northbound north of Culpeper. This project was completed by **Superior Paving** and was only one of two projects using SMA. The other project was completed by Adams Construction on I-81 in the Salem District. The last project in the Maintenance Category was performed by **B&B Construction** for the Staunton District on SR 252 in Augusta County. The ultimate winner for the Statewide Maintenance Paving Award was the mill and inlay of SM-12.5E on I-81 in the Bristol District by **W-L Construction and Paving.** The project was 2 lanes and almost 3 miles long. All work was completed at night and had a final average IRI value of 43 inches per mile. This section of interstate has approximately 20,000 vehicles per day with a high percentage of trucks.

Unlike past years when only one or two projects were submitted for consideration, the Statewide Construction Paving category had four projects from across the Commonwealth. Salem District nominated the major rehabilitation of US 221 in Roanoke County completed by **Adams Construction.** This project had deep milling and widening, roadway realignment, medians and curb/gutters installed to accommodate the higher traffic levels. The final surface was SUPERPAVE. The Fredericksburg District nominated the reconstruction and widening of CR 614 in Gloucester County completed by **Branscome, Inc.** This project included the realignment of the existing lanes and wide shoulders. The final surface was a SUPERPAVE mix. **Superior Paving** performed the paving for the Culpeper District nominee at the SR 229 roundabouts. This was a reconstruction of existing intersections while under traffic. The fourth nominee and statewide winner came from the Staunton District on SR 636 in Fishersville. Paved by **B&S Contracting,** the project included a new bridge and a new highway alignment in order to link US 250 with the Augusta Health Center.

Congratulations to all the companies that were nominated and to **W-L Construction & Paving** and **B&S Contracting** for capturing the statewide awards.
The Virginia Asphalt Association celebrated the best non-VDOT paving projects at the 2015 Fall Asphalt Conference. This year’s projects were nominated by VAA members for consideration in one of four different categories: Non-Traditional Paving, Commercial Paving, Municipal Paving, and “Green” Paving.

The Non-Traditional Paving award was introduced in 2010 to recognize those projects not covered by the Commercial and Municipal categories. Projects in this category include airfields, federally owned/maintained facilities, and toll roads. The finalist for 2014 were: Rehabilitation of the Blue Ridge Parkway by B&S Contracting and I-95 Express Way by Virginia Paving Company.

The winner was Virginia Paving Company for their work on the I-95 Expressway. This project included the construction of new travel lanes, bridges and ramps for 8 miles while widening and rehabilitating 20 miles of the existing I-95. Paving thicknesses ranged from 2” to 18” of asphalt that totaled approximately 400,000 tons of base, intermediate and surface mixes.

The Commercial Paving award is for those projects typically done for a private entity such as malls, shopping centers and private roadway networks.

The winner for the 2014 Commercial Paving Award was Branscome, Inc. for their work on the Kemps Bridge Subdivision. The project was the overlay of a subdivision. The base asphalt had been placed years earlier. Branscome placed 1.5 inches of a SM-9.5A.

The Municipal Paving Award goes to the best project completed for a local government such as cities and counties. The types of projects range from street paving to parking lots. The finalist for the 2014 award were: City of Richmond by Colony Construction, Inc. and Ballahack Road by Branscome, Inc.

The 2014 Municipal Paving Award win, for the second year in a row, went to Colony Construction. Completed for the City of Richmond, the project’s scope included the resurfacing of nine urban streets. The work included milling, laying 31,000 SY of GlasPave Pavng Fabric, utility and ADA adjustments, and over 18,600 tons of asphalt surfacing.

The final category recognized at the Fall Asphalt Conference was the “Green” Paving category. Unfortunately, no projects were submitted in 2015. All winners of the VAA Paving Awards will be featured in the next membership directory. Likewise, these projects will be showcased on the Virginia Asphalt Association website over the next month. Congratulations to all the finalists and winners for 2014.
SUPERPAVE Mix Evaluation

For almost two years, VDOT and VAA have been partnering on an effort to improve asphalt mix durability. While rutting is not a primary concern, the onset of mixture fatigue cracking is a problem. Most of the cracking can be traced back to low asphalt contents common with the SUPERPAVE Mix Design Process. Through a series of lab phases, VDOT and VAA are getting closer to enhancing mix performance.

David Lee—Salem Materials Engineer and ARAC Chairman covered the evolution of the project and the statewide results from lab and field testing. Overall, most mixes in this study added 0.1 to 0.2 percent liquid AC. These mixes also had higher VMA and lower VFA. Of most interest so far, the in-place density is statistically higher than the conventionally designed SUPERPAVE mixes (65 design gyrations). Along with higher in-place density, the permeability of the mixes were lower meaning less intrusion of air and water that causes asphalt binders to oxidize, harden and eventually crack. Based on the results of the 2015 field projects, VDOT proposes to adjust the design gyrations, gradation bands and volumetrics for the SM-9.5 and SM-12.5 mixes.

Following the presentation made by David Lee, David Helmick—Executive Vice President of Superior Paving Corporation, discussed his company’s experience with designing, producing, laying and compacting these new mixes. Superior produced two SM-9.5 mixes and one SM-12.5 mix. To produce the mix, the aggregate gradations were altered to meet the requirements on the #30 and #4 sieves. These changes increased the AC content by 0.1%. During the production and laydown of the mixes, no challenges existed. He did note that one less pass of a roller was needed to achieve density. The crew said “it seems to come out from under the screed better” and has a nice surface appearance.

To wrap up his presentation, Dave Helmick made a few suggestions for VDOT consider. First, look at designing mixes at 4% air voids and then adding binder to achieve 3.5% or 3% air voids. He recommended adjusting the SM-9.0 and IM-19.0 mixes to increase the AC content as well as adopting the BM-25.0 HMHB as the only conventional asphalt base mix. Finally, have VDOT follow the AC placement guidelines recommended by NCAT in NCHRP 531.

VAA Updates Membership Categories

The Virginia Asphalt Association’s membership committee initiated an effort in early 2015 to review the membership structure. Currently, the VAA has six different dues tiers and nineteen different membership categories. After meeting as a committee and with affiliate members, the VAA Board of Directors approved a reduction in dues tiers to four and an increase in the number of membership categories to twenty-four while dropping two existing categories (i.e., guard rail associate contractors and hauling contractors). A few categories were renamed and several more were created. These changes better reflect the nature of the work performed by the companies. The new and renamed membership categories are:

- Sand Suppliers
- Traffic Control Suppliers and Providers

With the establishment of this new structure, the website and membership directories will be modified in 2016 in order to enhance company exposure to potential customers and clients. Existing members will be placed in one of the new categories with the associated dues tier starting in January 2016. If members would prefer to be placed in a different category or in additional categories, they should contact the VAA office.
The annual Virginia Asphalt Association’s Asphalt Classic was held at The Club at Viniterra on October 7. With over 80 golfers in attendance, the Classic held contests such as longest drive, closest to the pin and longest putt, along with recognizing the First and Second Place Teams. And, of course, the Burgundy Tee and Mulligan cash raffle at the end of the barbecue. $1400 raffled back to the players! The tournament included a boxed lunch and barbecue dinner along with complimentary beverage carts during the round.

### Winning Team
All From PAPCO, Inc. - Bill Breeden, Joe Calhoun, Bob Miller, David Mullins

### 2nd Place Team
All From Branscome Paving Company - David Branscome, David Branscome, Jr.; Steve Pearson, Jamie Bowman

### Closest To Pin
Chuck Ingram, Slurry Pavers

### Longest Putt
James Ross, Blacklidge Emulsions, Inc.

### Longest Drive
David Branscome, Jr., Branscome Paving Company

Thanks to all our sponsors for helping to make such a successful tournament! Asphalt Emulsion, Inc.; Astec, Inc.; Axeon Specialty Products; B & S Contracting, Inc.; Blakemore Construction Corp.; Bittumar USA; Blacklidge Emulsions, Inc.; Boxley; Branscome, Inc; Branscome Paving Company; Colony Construction, Inc.; James River Equipment; Lee Hy Paving Corp.; Luck Stone Corp.; PAPCO, Inc.; Payne’s Parking Designs, Inc.; Slurry Pavers, Inc.; Superior Paving Corp.; Virginia Paving Company and S.L. Williamson Co., Inc.

The next VAA Asphalt Classic will be held at Viniterra on October 7, 2015. Start putting together your winning team today!

**Mark Your Calendar**

- **Governor’s Transportation Conference**
  October 28-30, 2015
  Virginia Beach, VA

- **SEAUPG Annual Meeting**
  November 16-19, 2015
  Williamsburg, VA.

- **TRB Annual Meeting**
  January 10-14, 2016

- **NAPA Annual Meeting**
  February 7-10, 2016
  LaQuinta, CA.

- **VDOT Asphalt Seminar**
  February 25, 2016
  Fredericksburg, VA

- **VDOT Asphalt Seminar**
  March 1, 2016
  Richmond, VA.

- **VDOT Asphalt Seminar**
  March 10, 2016
  Roanoke, VA.

- **World of Asphalt**
  March 22-24, 2016
  Nashville, TN.

**VAA Scholarship Program**
Help the Future of Transportation Help Your Company.
Donate Today!
Go to www.vaaasphalt.org
VAA Asphalt News  

The Back Page—Fall Conference Wrap-Up

Quality Initiatives

Throughout the Fall Conference two themes were recurring—Education and Quality. In many cases, proper education can lead to higher quality. To start off the second day of the Fall Conference, Chief Engineer Garrett Moore discussed quality—echoing the sentiments expressed by the Commissioner the day before. VDOT expects quality in the work completed on their projects. Quality starts with good mix designs and continues through production, placement, and compaction. He pointed to the work done by the Asphalt Quality Task Force to recommend increased use of incentive-only specifications for rideability to incentivize higher quality. The need for better mix designs that have more asphalt to give longer durability is needed. He was encouraged by the SUPERPAVE pilot study. The Chief Engineer commended the efforts to set-up VECAT to provide more education. This is not only needed on the materials certification side, but for inspection. Inspectors need more training and he asked the industry to assist in these efforts. VDOT is in the process of developing an inspector’s “cheat sheet” that addresses common issues encountered on projects and potential courses of action to resolve them.

VTRC Research Updates

Research is at the heart of many things done in the transportation industry. Research is either generated due to project needs or is inspired by transportation issues. Dr. Jose Gomez, Director of VTRC, gave an update on the various research projects being performed by VTRC.

In 2012, VDOT agreed to sponsor five test sections at NCAT—three of which dealt with recycled materials. After 10 million ESALS, no distress had been recorded. Therefore, VDOT agreed to another 3 year cycle to continue the trafficking and distress monitoring of these sites in order to better understand and design pavements with these materials.

Along with NCAT, VDOT is installing an accelerated pavement testing facility at Virginia Tech. This site using a heavy vehicle simulator will compliment the work at NCAT and address other VDOT research projects. This site will be up and running in late 2015.

In addition to these projects, Gomez covered the work looking at measuring friction of pavement surfaces, asphalt surface temperatures behind the screed, and performance of SM-4.75 (i.e., Thinlay) mixes.

Research in Action—HiPM

During comments made by Chief Deputy Commissioner Elliott on Monday, he stressed the need to place research into VDOT’s common business practices. During the technical sessions on Day 2, two research in action projects were highlighted—High Polymer Asphalt (HiPM) on I-95 and the SUPERPAVE Mix Evaluation Study (see Page 8).

The HiPM presentation was made by NOVA Materials Engineers David Shiells and Virginia Paving Assistant Plant Engineer Brian Gawthrop. David discussed the motivation for using the HiPM. On Lower Volume roads, the potential for less patching and improved long-term performance. On higher volume roads, it is hoped HiPM would delay the on-set of reflective cracking with composite pavements, improve material durability, and reduce overall pavement thickness without compromising quality. Mixes with HiPM had been placed on the NCAT Test Track with exceptional performance. The main drawbacks are the initial material cost and the workability. Three different trial sections were installed on I-95—two with SUPERPAVE mixes and one with SMA, and a conventional SUPERPAVE mix with modified binder (E binder) was the control section.

After the background and overview of the HiPM projects, Brian Gawthrop discussed the production and placement of HiPM mixes. Gawthrop walked the audience through the process Virginia Paving Company (VPC) followed to complete the project. He discussed the considerations for the binder—more viscous, shorter shelf-life, and increased coordination with the supplier. Along with the binder, other lessons learned were—workability is difficult, the mix sets up quickly as it cools, and the SMA was more challenging probably due to the higher AC content. He felt it would make a great patching material, but coordination is needed to use the material while it was hot. Finally, Gawthrop stated warm mix additives made the material more workable. The higher the dosage resulted in more workable asphalt.

Over the coming months and years, these sections will be monitored. To get copies of these presentations, visit the VAA website.