

Partners in Quality

A Publication of the Maryland Quality Initiative
Steering Committee (MdQI)

Spring/Summer 2015

STEERING COMMITTEE

Dave Coyne
MdQI Co-Chairman, SHA
Dan Cheng
MdQI Co-Chairman, JMT

Sponsors

Joe Makar - ACEC/MD
Bob Long - ACPA, Mid-Atlantic
Mark DeLuca - CEAM
Frank Murphy - City of Baltimore DOT
Breck Jeffers - FHWA
Brian Dolan - MD Asphalt Assoc.
Paul Shank - MAA
Alex Olerman - MAA
Dave LaBella - MDTA
Tom Evans - MRMCA
Steve Silva - MTA
Jim Russ - MTBMA

Subcommittee Chairs/Co-Chairs

Conference

Doug Rose, JMT

Ray Moravec, WMA

Transportation Operations

Eric Eckhardt, AMT

Tony Crawford, SHA

Training & Recruitment

Mark Crampton, SHA

Joe Makar, WRA

Partnering

Bridgid Seering, SHA

Steve Whitecotton,

P. Flanigan & Son

Project Development

Daniel Cheng, JMT

Glenn Vaughan, SHA

Public Relations

Fran Ward, SHA

Joel Oppenheimer, STV, Inc.

Safety

Eric Tabacek, SHA

Matt Allen, WMA

Utilities

Nelson Smith, SHA

Awards

Dana Knight, McCormick Taylor

Steve Bucy, SHA

Members

Shelly Baquol, MTBMA

Butch Lundgren, Concrete General

Jo Ellen Sines, Corman Construction

Steve Marciszewski, SHA

Tom Gianni, MVA-MHSO

Welcome to the Spring/Summer issue of Partners in Quality!

Last year at this time, Greg Welker stated, “Let’s all hope for better weather next year” and sure enough, we got what we collectively hoped for. On both days, we enjoyed seasonal temperatures and no precipitation for the 22nd annual Maryland Quality Initiative Conference (MdQI).

Conference participants had the opportunity to attend sessions on Asset Management, Three-Dimensional Modeling, Connected and Automated Vehicle Initiatives, Closeout on Design Build Projects and Emergency Retaining Wall Replacement in Baltimore City.

Sessions to enhance both professional and leadership skills were also available, such as Understanding the Four Generations – with a Fifth Generation on the Way, Leadership for Success and Ethics Training presented by Michael Lord, Esq., Director of the State Ethics Commission. All were well attended as were the other 22 technical sessions presented throughout the conference.

We also piloted an app (CrowdCompass) that contained all the details related to the conference which was used by nearly 200 attendees. The browser version of the app was also useful to those attendees who either didn’t want another app installed on their phone, or simply couldn’t remember their iTunes App Store password.

We had 812 people attend the full conference and 941 people attend the Awards Banquet. We extend our thanks to the 74 vendors who participated in the Conference and made the Country Western vendor theme successful.

We were also fortunate to hear from our new Transportation Secretary, Pete Rahn who shared his gratitude to the industry and expressed his philosophy on how he plans to approach the transportation challenges in the state. Secretary Rahn also participated in celebrating and honoring our MdQI Award recipients.

Planning for the 2016 MdQI Conference has already begun. If you are interested in participating in the conference planning process, please let us know. Please keep an eye out for updates throughout the year in future newsletters, app updates at event.crowdcompass.com/2015-mdqi-conference and the MdQI website at mdqi.org. Registration for the 2016 conference will open in early December.

Partners in Quality

An MdQI Publication

Chairman's Letter *(Continued)*

Thank you for again making this the biggest transportation industry event in Maryland a success. We look forward to your attendance at next year's conferences and appreciate the efforts and commitment made by you to invest in the quality of our industry. We look forward to building on the momentum generated from this year's conference as we prepare for the 2016 MdQI Conference.



Dave Coyne
MdQI Co-Chairman,
SHA Deputy Administrator/
Chief Engineer for Operations



Dan Cheng
MdQI Co-Chairman,
Johnson, Mirmiran & Thompson
Executive Vice President

The 22nd Annual MdQI Conference

Over 800 transportation professionals attended the 22nd annual Maryland Quality Initiative (MdQI) Conference at the Baltimore Convention Center to enjoy the accomplished speakers, informative training sessions and unique networking opportunities only this two-day event can offer.

For the first time, a meeting management app (CrowdCompass) was used to share information about the Conference. Some participants installed the app on their smart phone and others used the CrowdCompass webpage to view Technical Session schedules and other conference information. We hope to serve our participants better in 2016 by expanding the use of this service.

For the last time, we saw the conference through Timothy Hyman's lens. Tim plans to retire after 66-years of state service with a great attitude and impeccable work ethic. He will be missed by many across Maryland.

The Conference started with the popular Ethics Training with well over 300 in attendance. It was followed by an overview of the Technical Sessions and a

Industry News & Upcoming Events

Upcoming MdQI Events:

23rd Annual MdQI Conference:

Save the date for the 2016 MdQI Conference to be held on February 3rd and 4th, 2016 at the Baltimore Convention Center. Please save this date and check the MdQI website (www.mdqi.org) for additional information coming soon.

Upcoming Industry Events:

MTBMA'S Invitational Golf Classic & Sporting Clay Shoot PAC Fundraiser

Golf Outing - Queenstown Harbor Golf Links
Sporting Clay Shoot - The Point at Pintail
Queenstown, MD
September 22, 2015

Please visit www.mtbma.org for more information. Additional information can also be found on Page 13 of this newsletter.

MD Construction & Materials Annual Conference

Hyatt Regency Chesapeake Bay Resort Cambridge, MD
June 17-19, 2015
Please visit www.MarylandConcrete.com for more information.

ACI MD Chapter Golf Outing

The Links at Challedon
July 13, 2015
Please visit www.MarylandConcrete.com for more information.

ACEC/MD 27th Annual Conference

Kingsmill Resort, Williamsburg, VA
June 24 - 26, 2015
Please visit acecmd.org for more information.

Partners in Quality

An MdQI Publication

video of the 2014 Bridge Competition presented by Glenn Vaughan. One of our MdQI Co-Chairs, Dave Coyne, provided examples of partnering taking place in our industry which contribute to the quality transportation products we all expect of ourselves.

We then heard from Federal Highway Administration (FHWA) as the Partners in Quality Awards were presented to the following State Highway Administration (SHA) employees:

Office of Real Estate

Gina Anthony

Lisa Sigwart

Olu Okunola

Office of Structures

Jesse Creel

Office of Materials Technology

Barry Catterton

Office of Planning and Preliminary Engineering

Felicia Alexander

Subrat Mahapatra

Office of Traffic and Safety

William (Bill) MacLeod

The first break gave participants the opportunity to visit the vendor area. This year's vendor theme was Country-Western which MdQI vendors took to a new level. Billy the Kid would have approved of the entries. Every booth was creative in a unique way with hard to resist goodies to go with it and restraint was "policed" by badge-donning MdQI committee members. The competition between the vendors was fierce however there was only one Most Creative booth award and that was "stolen" by Road Safety, LLC.

After a tour of the vendor's area, participants proceeded to technical sessions in which a wealth of knowledge and information was shared in the areas of Planning, Design, Construction, Management and Communication. This was where many contractors, consultants, material suppliers and government employees benefited from the updates shared by transportation professionals. More details on many of these presentations are available on the MdQI website located at www.mdqi.org. We encourage you to browse through them if you missed any of the Technical Sessions you were interested in.

After the Technical Sessions, participants enjoyed the reception and the competitive Pinewood Derby Races. In the end, it was the superior design, smoking tires and screaming fans that pushed the three-wheel wonder built by Mark Baum from E.J. ahead of others. Mark Baum from E.J. went home with a well deserved gold trophy.



Partners in Quality

An MdQI Publication

On the other side of the wall, a group of bridge engineers were trying to see who was the most accomplished “craft stick” structural engineer. This year’s event was one of the most competitive in our history with many creative designs. In the end, the winner was David Marcic from Hardesty & Hanover.

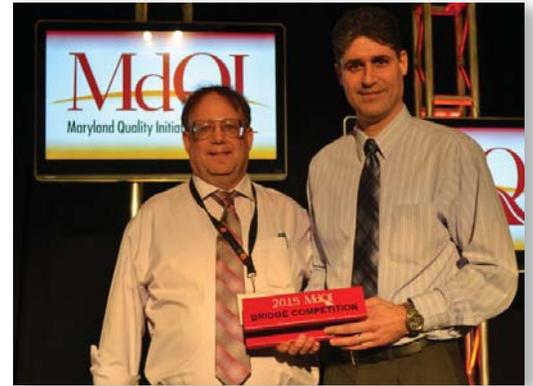
On Day 2, Doug Rose, MdQI Steering Committee member, introduced the keynote speakers. Agency updates were provided by Doug Simmons on behalf of former State Highway Administration, Administrator, Melinda Peters and former Maryland Transit Administration (MTA), Administrator, Robert Smith. William Pines presented on behalf of Bruce Gartner, Executive Director for the Maryland Transportation Authority (MDTA). Paul Wiedefeld, Executive Director for the Maryland Aviation Administration (MAA), shared their plans for the future of Baltimore/Washington International Airport (BWI). Frank Murphy, Senior Advisor for the Baltimore City Department of Transportation, shared updates on what is happening in the City of Baltimore.

Our lunch-time speaker was Dr. Arthur T. Benjamin who dazzled the audience with his engaging performance. He made mathematics fun for everyone which is the greatest magic of all. Imagine a room full of engineers with a “Mathemagician” throwing numbers at them; it was like Michael Jackson throwing his jacket at screaming groupies. It was a match made in math geek heaven.

After dinner and prior to our awards ceremony we had the privilege of listening to Peter K. Rahn, Secretary for the Maryland Department of Transportation (MDOT) who was introduced by Dave Coyne. In addition to sharing his outlook on the future of transportation in Maryland, he pointed out that every employee bears the responsibility of improving the way we do business. He also shared his philosophy on practical design and mentioned that he plans to review the way the contracts are processed to maximize their effectiveness.

At the conclusion of Secretary Rahn’s presentation, Doug Rose and Ray Moravec kicked off the awards banquet to showcase all of the great work being done by our industry. The full list of MdQI Awards of Excellence winners are included in the newsletter beginning on Page 7 below.

We thank all the participants and organizers for another successful MdQI Conference and look forward to seeing you at next year’s conference. If you have any suggestions for the upcoming 2016 conference, please contact the Conference Sub-Committee Co-Chair Ray Moravec at rmoravec@wallacemontgomery.com.



Highlights from the 2015 MdQI Conference

Vendor Contest

This year our Vendors were asked to decorate their booths to reflect a “Wild West” theme. From cowboys and cowgirls, to shoot-outs and wanted posters, our Vendors delivered! As in year’s past, attendees at the Conference were asked to vote for their favorite vendor based on how well the vendors adhered to the theme.

After all the votes were counted, Road Safety LLC garnered the most votes with their Wild West Store, securing their lead over past winners, JMT and DFI.

This victory earns Road Safety LLC a free booth at the 2016 MdQI Conference. Congratulations Road Safety LLC!

We look forward to seeing you at next year’s Conference. Stay tuned for updates on what we have in store for the 2016 Vendor Competition!



Pinewood Derby Race



2015 brought us another exciting run for the Rose Cup in MdQI Pinewood Derby action. Eleven teams began the quest for the cup after we had a late minute scratch from our original dozen. All of the participants did a great job of embracing our pickup truck theme this year.

McCormick Taylor was back in the game after last year’s hiatus and suffered an early loss to defending champ EJ. Undeterred, the McCormick Taylor team rallied in the second chance bracket knocking off SHA and then perennial power Century. Schnabel also rallied from an early defeat to Wallace Montgomery to win two straight races over KCI and Brudis before ultimately falling to Stantec. McCormick and Stantec then waged a tough race, but not even the encouragement of cross country project manager John Wisner could will the Stantec crew to victory.

On the winners bracket side both EJ and Wallace Montgomery cruised to victory setting up a battle for the bracket between these titans of the raceway. EJ won that race pushing Wallace Montgomery to the second chance bracket where they had to face the red hot McCormick Taylor gang. The challenge was just too difficult and despite a valiant effort, Wallace Montgomery fell setting up an epic final between McCormick Taylor and EJ. In the end Mark Baum’s craftsmanship and engineering skills proved too formidable as EJ handily defeated McCormick Taylor to win the 2015 Rose Cup.



Congratulations to all of the participants for their hard work. This year’s races were very competitive. DFI won the “Tabacek” award for the truck that most embraced our country western theme. The DFI team also had to put in some extra pit time to get their prize winning vehicle ready for competition. Sandy Henningsen from F&R was also involved in some last minute modifications that allowed her to compete as well. Special kudos goes out to Mark Baum again as he proved his is the king of MdQI derby cars, or in this case trucks, and ruler of the Rose Cup.

Partners in Quality

An MdQI Publication

Bridge Competition

For the second year in a row, the team from Hardesty & Hanover was able to create the most efficient bridge for the competition. The contest was re-designed to ensure that a winner could be determined (this was a problem in 2014) while continuing to attract young engineers to MdQI and provide an audience friendly program at the end of Day 1. MdQI distributed bags of matchstick size wooden pieces for contestants to build efficient bridges that could span 20 inches and support a load within a specified range. (100 lbs min to 250 lbs max)

Fifteen bridges from twelve firms (AECOM, Ballard, Brudis, Hardesty & Hanover, Johnson, Mirmiran & Thompson, KCI, Marine Solutions, McCormick Taylor, Rummel, Klepper & Kahl, Stantec, Wallace Montgomery, and Whitman Requardt) ranging from a low of 56 grams to a high of 189 grams (there was a 200 gram maximum limit) were entered into the contest. All bridges were weighed and displayed during the afternoon of Day 1.

The contest got underway after the audience was informed of the scoring criteria. The contest started with a qualifying phase in which the bridges needed to hold the 100 pound minimum load in 3 locations. Bridges that passed the qualifying phase were then loaded at their midpoint up to the maximum load of

250 pounds (no bridge reached this limit). The bridge with the best efficiency index would be declared the winner, such that a bridge with a mass of 200 grams would have to hold twice as much weight as a bridge with a mass of only 100 grams. The judges had a computer application that displayed all of the bridges and the loads necessary for them to get into 1st place. Contestants loaded their bridge with barbell weights until the bridge broke. The result of the contest was that Hardesty & Hanover built the most efficient bridge. They were awarded an inscribed commemorative bridge girder during the Day 2 luncheon to recognize their accomplishment.

What we learned from the competition was that we need to continue to evolve these contests to ensure that new designs and innovations are encouraged. MdQI recognizes the value of friendly competition and will strive to create new and exciting challenges that attract a larger pool of contestants. The contest organizers would like to thank all of the contestants who took the time to put together a bridge for the contest. We recognize that there is a substantial effort associated with this challenge and commend you for all your effort.



Partners in Quality

An MdQI Publication

2015 MdQI Conference Awards of Excellence

MdQI Modal Award Project of the Year – Over \$5M

MARC Wedge Yard Storage Yard at Union Station

Location: Washington, D.C.

Owner: Maryland Transit Administration (MTA)

Construction Firm: American Infrastructure of MD – Greenbelt, MD

Design Firms: Gannett Fleming, Inc. – Windsor Mill, MD; Parsons Brinckerhoff – Baltimore, MD; Whitman Requardt & Associates LLP (WRA) – Baltimore, MD

MdQI Modal Award Project Of The Year - Under \$5M

Replacement of US 219 Bridge over Cherry Creek

Location: Oakland, Garrett County

Owner: Maryland State Highway Administration (SHA)

Construction Firm: Charles J. Merlo, Inc. – Mineral Point, PA

Design: SHA Office of Structures and Constellation Design Group – Timonium, MD

Project Cost: \$1.7 Million

Planning

Purple Line Light Rail Planning Study

Location: Montgomery and Prince George's Counties

Owner: Maryland Transit Administration (MTA)

Firms: AECOM – Baltimore, MD; RK&K – Baltimore, MD; Parsons Brinckerhoff – Baltimore, MD

Project Cost: (Estimated) \$2.4 Billion

Green/Sustainability/Environmental

Intercounty Connector Project (MD 200) Upper Paint Branch (PB 85) Stream and Floodplain Restoration

Location: Lower Paint Branch Watershed in Prince George's County

Owner: Maryland State Highway Administration (SHA)

Construction Firm: Environmental Quality Resources, LLC – Millersville, MD

Design Firm: McCormick Taylor – Baltimore, MD; Coastal Resources – Annapolis, MD

Project Cost: \$2.4 Million

Partnering – Gold

I-95 Millard E. Tydings Memorial Bridge Foundation and Substructure Repairs

Location: Havre De Grace, Harford County

Owner: Maryland Transportation Authority (MDTA)

Construction Firm: Corman Marine Construction – Baltimore, MD

Design Firm: Parsons Brinckerhoff – Baltimore, MD

Project Cost: \$32.2 Million



Partners in Quality

An MdQI Publication

Partnering – Silver

I-70 Bridges over Conococheague Creek

Location: Washington County
Owner: Maryland State Highway Administration (SHA)
Construction Firm: Concrete General, Inc. – Gaithersburg, MD
Design: SHA Office of Structures
Project Cost: \$14.8 Million

City of Baltimore DOT Modal Award – Under \$5M

Kent Street Transit Plaza and Pedestrian Corridor

Location: Baltimore City
Owner: City of Baltimore Department of Transportation
Construction Firm: P. Flanigan & Sons, Inc. – Baltimore, MD
Design Firm: STV- Baltimore, MD
Project Cost: \$896,500

CEAM Modal Award – Under \$5M

Potomac Hollow Road Bridge over Moores Run

Location: Allegany County
Owner: Allegany County Department of Public Works
Construction Firm: Carl Belt, Inc. – Cumberland, MD
Design Firm: Whitney Bailey Cox & Magnani – Baltimore, MD
Project Cost: \$877,000

MAA Modal Award - Under \$5M

BWI Comprehensive Paving Improvements Program

Location: BWI Thurgood Marshall Airport
Owner: Maryland Aviation Administration (MAA)
Program Manager: JMT- Sparks, MD
Construction Manager: Parsons Corporation – Columbia, MD
Construction Firm: P. Flanigan & Sons – Baltimore, MD
Design Firm: Michael Baker International – Linthicum, MD
Project Cost: \$2.8 Million

MTA Modal Award - Under \$5M

Baltimore Light Rail - Union Avenue & Clipper Mill Road Grade Crossing Replacements

Location: Baltimore City
Owner: Maryland Transit Administration (MTA)
Design/Construction Manager: Parsons Brinckerhoff – Baltimore, MD
Construction Firm: Amtrac Railroad Contractors of MD – Hagerstown, MD
Design Firm: Parsons Brinckerhoff – Baltimore, MD
Project Cost: \$928,000



Partners in Quality

An MdQI Publication

SHA Modal Award - Under \$5M

TIE (Two Winners)

1) Replacement of US 219 Bridge over Cherry Creek

Location: Oakland, Garrett County

Owner: Maryland State Highway Administration (SHA)

Construction Contractor: Charles J. Merlo, Inc. – Mineral Point, PA

Design: SHA Office of Structures and Constellation Design Group – Timonium, MD

Project Cost: \$1.7 Million

2) I-68 Westbound – Whitetopping of Truck Climbing Lane West of Friendsville

Location: Friendsville, Garrett County

Owner: Maryland State Highway Administration (SHA)

Construction Firm: Concrete General, Inc. – Gaithersburg, MD

Design: SHA District 6 Engineering Systems Team and SHA Office of Materials Technology

Project Cost: \$388,000



CEAM Modal Award - Over \$5M

Anacostia Flood Risk Reduction Project

Location: Prince George's County

Owner: Prince George's County Department of Public Works

Construction Firms: Highway & Safety Services, Inc. – Gaithersburg, MD; Concrete General, Inc. – Gaithersburg, MD; Sagres Construction Corp. – Lorton, VA; JLW Associations, Inc. – Leonardtown, MD

Design Firm: McCormick Taylor – Baltimore, MD

Project Cost: \$14 Million



MAA Modal Award - Over \$5M

BWI Runway 15L-33R and Adjacent Runway Safety Area Compliance

Location: BWI Thurgood Marshall Airport

Owner: Maryland Aviation Administration (MAA)

Firm: Parsons Corporation – Columbia, MD

Project Cost: \$ 5.6 Million



MDTA Modal Award - Over \$5M

I-95 Millard E. Tydings Memorial Bridge Foundation and Substructure Repairs

Location: Susquehanna River Crossing / Harford and Cecil Counties

Owner: Maryland Transportation Authority (MDTA)

Construction Firm: Corman Marine Construction – Baltimore, MD

Design Firm: Parsons Brinckerhoff – Baltimore, MD

Project Cost: \$32.2 Million

Partners in Quality

An MdQI Publication

MTA Modal Award - Over \$5M

MARC Wedge Yard Storage Yard at Union Station

Location: Washington, D.C.

Owner: Maryland Transit Administration (MTA)

Construction Firm: American Infrastructure of MD – Greenbelt, MD

Design Firms: Gannett Fleming, Inc. – Windsor Mill, MD; Parsons Brinckerhoff – Baltimore, MD; Whitman Requardt & Associates LLP (WRA) – Baltimore, MD

Project Cost: \$38.5 Million

SHA Modal Award - Over \$5M

I-70 Bridges over Conococheague Creek

Location: Washington County

Owner: Maryland State Highway Administration (SHA)

Construction Firm: Concrete General, Inc. – Gaithersburg, MD

Design: SHA Office of Structures

Project Cost: \$14.8 Million

Project Cost: \$38.5 Million



ICC Corridor Partners Garner Top Award in ACEC/MD Engineering Excellence Awards Competition

The American Council of Engineering Companies/Maryland (ACEC/MD) is pleased to announce that ICC Corridor Partners, a Joint Venture of Rummel, Klepper & Kahl, Parsons Brinckerhoff, and URS Corporation), received the Grand Award in the 2015 ACEC/MD Engineering Excellence Awards (EEA) competition for the Intercounty Connector (ICC) General Engineering Consultant project. The thirteen finalists in this prestigious competition were recognized for diverse accomplishments that exemplify today's engineering challenges.

The ICC project, among the largest projects undertaken in the Baltimore-Washington region, presented the ICC Corridor Partners General Engineering Consultant (GEC) with unprecedented challenges. From its 2005 start-up to final completion, the GEC managed this project utilizing innovative solutions in partnership with owners and design-builders (D-B). The \$2.36B ICC arose out of a need for a direct route for moving goods and people in existing and proposed areas between the I-270/I-370 and I-95/US 1 corridors in Montgomery and Prince George's Counties. The collaborative effort between owners (MD Transportation Authority; MD State Highway Administration) and a variety of stakeholders resulted in a state-of-the-art, 18.8-mile open road tolled, six-lane highway multi-modal facility.

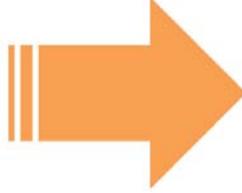
Balancing local owners, including residents and businesses and other stakeholders', the GEC brought value to the community's natural, human and cultural environments through a well-documented and tactical environmental stewardship program; managed a vigorous DBE/MBE outreach program; oversaw complex phased construction matching project characteristics/risk level with the appropriate delivery, including MDOT's largest D-B contracts to date; enacted "co-location" of the GEC team;

developed an innovative quality oversight program; developed and administered a formal partnering program; established an executive committee with a "project comes first" attitude; conducted intense design/constructability reviews; developed D-B innovations from RFP through close-out; created and oversaw a vigorous community outreach program; and utilized Primavera for the master schedule and for each phase.



Successfully meeting these challenges allowed the ICC team to build a world-class transportation facility, featuring complex construction phasing and an adaptable multi-modal network for the area's countless businesses and nearly two million residents. The ICC Corridor Partners would like to thank the Owners, many contractors, material suppliers and consulting engineering firms that assisted in delivering this major project. The success of the ICC is the result of the strong partnership held by these stakeholders.

Partnering
In Motion



Partnering-Gold
Award Winner

Millard E. Tydings Memorial Bridge Foundation and Substructure Repairs

Maryland Transportation Authority, Corman Marine Construction, Parsons Brinckerhoff

The Pier 12 Rock Anchor change in condition is an excellent example of how partnering added value to the project and resulted in an outcome that satisfied everyone's interest in the project. While excavating the cofferdam at Pier 12, a rock slope outcropping was discovered in an area that was thought to be flat and not contain rock. The location of this rock slope compromised the structural stability of the designed repair at Pier 12. When the rock slope was initially discovered, all stakeholders were notified and a special partnering meeting was requested, with all the necessary team members in attendance. At this early meeting, the group openly discussed potential solutions to the problem.

Some of the more conventional potential solutions early in the discussions included demolition and excavating the rock slope so that the pier could be repaired as per the original design. However, as the team discussed this option in more detail, it became apparent that the cost and time required to complete such an operation would not result in a positive solution for any of the stakeholders involved. After further discussions, the team agreed that the solution would somehow need to incorporate the existing slope into a redesigned repair for the foundation. This type of solution required additional time to research, so the team agreed that all parties would investigate their role in the solution and follow up meetings were scheduled in the coming days.

During subsequent follow up meetings the team was able to combine the expertise of engineers and contractors to agree on a rock anchor solution. This solution required that the footing repair

actually be anchored to the existing bedrock in the river. This was accomplished by drilling through the existing bedrock and installing large anchors that would be locked in place by diving crews. Several subcontractors specializing in this drilling process were consulted for a solution as to how these anchors could be installed in this unusual marine application.

The team was able to arrive at the most cost effective resolution by developing alternatives beyond the most obvious solutions. The conventional method for installing the anchors would have required that a specially designed platform be erected in the river to support the drilling equipment. This platform would have been expensive and time consuming to install. After working with prospective

“The team was able to arrive at the most cost effective resolution by developing alternatives beyond the most obvious solutions.”

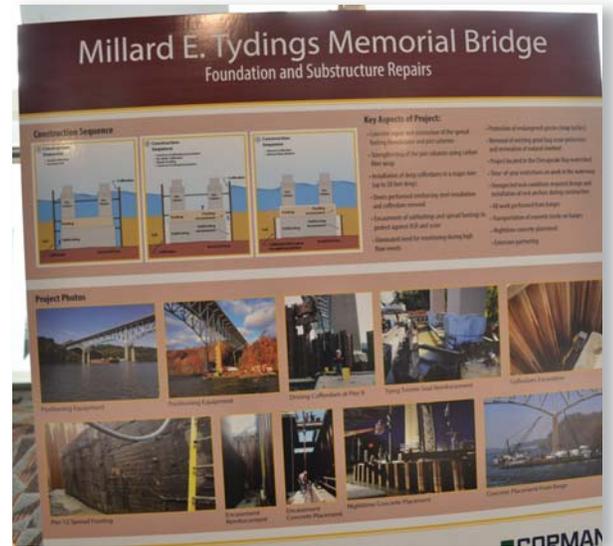
Partners in Quality

An MdQI Publication

subcontractors, the team was able to identify an alternate piece of drilling equipment that would be able to perform the work off the side of a barge and therefore eliminate the in-river platform.

The subcontractor selected to perform the work was already involved in the partnering process during preliminary design work, and after selection of the alternative, became a regular member of the team. This inclusion proved to be invaluable. Once the drilling work began, fracturing was discovered deep in the existing rock, which ceased drilling operations. The team met again to discuss the issue and potential alternatives. The subcontractor brought in its drilling foremen with firsthand experience dealing with this condition to help the team arrive at a solution which involved modifications to the drill rig. This solution allowed the team to continue with the rock anchor installation instead of abandoning the operation and designing a new solution.

Although taking the additional time to complete the Pier 12 repairs was not ideal, it was ultimately more cost effective and less time consuming than other alternatives discussed. By partnering the team was able to avoid a costly rock excavation process that would have required a new permitting process and expensive blasting equipment, material and personnel. The inclusion of all team members throughout the Pier 12 issue resolution process was critical to the successful installation of a safe and cost effective repair.



Save the Date

MTBMA's Invitational Golf Classic & Sporting Clay Shoot PAC Fundraiser

The annual MTBMA Golf Outing is scheduled for Thursday, September 22, 2015 at the Queenstown Harbor Golf Links in Queenstown, MD. Queenstown Harbor is one of the most scenic and challenging waterfront golf experiences.

Also, on September 22 MTBMA will host the annual Sporting Clay Shoot being held at The Point at Pintail also located in Queenstown, MD. The Point at Pintail consists of 300 pristine acres and four miles of shore line along the banks of the historic Wye River.

The golfers will be joined by the sporting clay participants for dinner, awards, prizes and giveaways at the Queenstown Harbor Golf Links catered by Casual Caterers following the Clay Shoot at Pintail Point.

The MTBMA Political Action Committee supports candidates for the Maryland General Assembly who will support a well-funded transportation program, sensible environmental policies and fair contracting policies.

MdQI Hosts 10th Annual Construction and Engineering Career Day

On April 22, 2015 MdQI hosted students from several high schools across Howard County for the 10th annual Construction and Engineering Career Day. The event held at the Applications Research High School introduced the approximately 260 students to the many different career paths in the transportation industry. During the event, students were able to interact with professionals and were able to see and have hands on experiences in the design, testing, and construction areas of the industry. Students were also given the chance to visit with several Maryland colleges and universities offering degrees in the industry.

The annual Career Day event would not be possible without the support of many partners in MdQI and the Howard County Schools. Our thanks go to the following companies who provided the speakers for the event: DFI, AECOM, JMT, RK&K, SWA, WBCM, EBA and SHA. We also thank Flanagan, Gray & Son, and Brawner. We also thank our industry partners who donated financially to help provide materials given to the students. Those helping us out this year were:

Gold level sponsors: Gray & Son, Inc., Johnson, Mirmiran & Thompson, Rummel, Klepper & Kahl, and Whitman, Requardt & Associates

Silver level sponsors: RJM Engineering, and Whitney Bailey Cox & Magnani

Bronze level sponsors: Development Facilitators, Inc.

Students were given a firsthand experience to see what transportation engineering and related careers both do and how they need to work together to deliver projects. Student Shreejan Gupta noted that "...working in the "real world" is harder than what it seems like when reading their job description online. It takes multiple fields of engineering to get one job done. "

We are always looking for speakers and helpers to staff our events to educate students about our industry. If you are interested in helping on the MdQI Industry Training and Recruitment Team, please contact Mark Crampton who co-chairs the team. We are always looking for outgoing speakers for our events. Mark can be reached at 301-624-8102, toll free at 1-800-635-5119 or by email at mcrampton@sha.state.md.us.



High school students from Howard County get hands on experience finishing concrete at the 10th Annual Construction and Engineering Career Day.



2015 MdQI - Conference Application Update

The 2015 MdQI Conference marked our inauguration into the exciting world of event applications for mobile devices. Subcommittee members worked with CrowdCompass to develop a conference mobile app that opened the door to new communication and organizational enhancements through smart phone and tablet technology. The application development process was relatively straight forward and gave us the opportunity to provide attendees and exhibitors with detailed information on event schedules, session topics, speakers, sponsors, venue navigation, and social networking – all in the palm of their hands.

Overall the app integration effort was a success! Here are a few metrics that summarize how the app was utilized by attendees and exhibitors:

- The app was downloaded to 172 unique devices
- 86 different organizations were viewed
- There were 1056 Events viewed
- Within the Events, there were 1301 Detail Pages viewed
- There were 5569 Banners viewed (great for sponsors!)

While there are still a few minor “learning curve” issues and bugs to be sorted through, we are confident that we’ll build on our 2015 experience and utilize available marketing and promotional opportunities to reach an even greater level of attendee and exhibitor participation in 2016.

In addition to a few existing features (i.e., social networking, sponsorship, push notifications, etc.) that we can optimize for next year’s conference, here are several features that have been recently

introduced to enhance the mobile experience:



Group Based Hidden Content

Content, launch icons and push notifications can now be restricted to certain groups. This ensures the right content shows for the right attendees. For

example, we can associate our VIP sponsors to a group so they can see the extra activities and sessions just for them.

Subsessions

We can now create parent/child relationships for sessions. For example, if we have a longer session at our event (maybe 2-3 hours), that includes multiple speakers, we’ll want sub-details on our speaker and their content. With subsessions, we can show all the details of our session, and allow attendees to see subsessions by tapping for more information (including speaker name, description, attachments, etc.). We will see a new column in our import template to list the parent session, or we can associate each activity manually within the EventCenter.

Pro-tip: Consider special promotions or contests to incentivize attendees to download our app. For example, “One attendee who downloads the app will be randomly chosen to win a \$25 gift card at the event!”

Updated Icon Packs & Color Tinting

Within the EventCenter, we now have four new icon packs to choose from with 69 icons each. Plus, 23 of the new icon images are new, including music notes, CE credits, shopping bags, public transportation, and more. There are now two dedicated icon packs which allow us to pick our color or enter a hex value for easy custom icons. Another bonus: We will also see our icons reflected throughout the previews in the Design section and on the Launch Icons page.

Facebook Share Changes

Facebook made changes to their integration which means that CrowdCompass will need to make changes as well. At this time, they have removed the Facebook share button until they have a new integration built out. This is a temporary change, Facebook sharing is not going away permanently.

New Icon Size

The launch icon size is now 216x216 pixels, PNG, which look better on higher-resolution devices like large Android phones and the iPhone 6 and 6+. On these devices, the launch icons are going to be larger as well.

Partners in Quality

An MdQI Publication

EventCenter Navigation Change

Event Settings navigation has been broken up into multiple pages. We will now see new pages for: event details, privacy, social sharing, and attendee options. This will make it easier to find what we need and save changes quickly.

Display Name Removed

They removed the "Display Name" field from the attendee profile. This ensures that all attendees will have a consistent appearance and sort order within the application.

Post Directly to Activity Feed

They made some changes to the app terminology to be more intuitive. The Event Compass is now called the Activity Feed and the My Compass (the personalized

version of the Activity Feed), is now called My Feed. Attendees can now post comments and photos directly to the Activity Feed. Posts directly to the Activity Feed will also automatically include the hashtags for the event and include the social post icons.

Browser Compatibility

The app will now support Chrome, Mobile Chrome, Firefox, Safari, Mobile Safari, and Internet Explorer 9, 10, and 11. Internet Explorer 8 support is being phased out and will not be supported later this summer.

Thanks again to everyone who helped compile, review, and market the mobile app in 2015! We look forward to improving the experience for next year.

The MdQI Steering Committee is jointly sponsored by representatives of the following agencies:



The MdQI Mission - "To provide the Maryland transportation industry a forum that fosters coordinated and continuous quality improvement in order to ensure safe, efficient, environmentally sensitive and sustainable systems to meet the needs of all transportation stakeholders."



Continuous Quality Improvement
Maryland's Transportation Industry

Don't forget to visit our [website](http://www.mdqi.org) at www.mdqi.org