The MdQI Steering Committee is jointly sponsored by representatives of the following agencies: Maryland Department of Transportation, Maryland State Highway Administration, Maryland Transportation Authority, Maryland Port Administration, University of Maryland, Johns Hopkins University, and University of Baltimore.

The MdQI Mission - "To provide the Maryland Highway Industry a forum that fosters Coordinated and Continuous Quality Improvement in order to ensure Safe, Efficient, and Environmentally Sensitive Highways which meet the needs of all Transportation Stakeholders."

Please visit our website at www.mdqi.org

Spring/Summer 2005

Learn More about MdQI at www.mdqi.org
I would like to express my many thanks to all of you who made the 12th Annual Maryland Quality Initiative (MdQI) conference a greater experience for 2005. Attendance was outstanding and our largest to date. The conference offered a wide variety of session topics as well as providing a good mix of work and fun. Over 650 people attended the full conference as well as 42 vendors. In addition, approximately 750 people attended our annual awards banquet.

We were very fortunate again this year to have as speakers, the Secretary of Transportation, the Honorable Robert L. Flanagan, the Federal Highway Administration’s (FHWA) Associate Administrator for Safety, Mr. George A. Ostenson, Maryland State Police (MSP) Colonel Thomas E. Hutchins, Texas Transportation Institute, Dr. Gerald L. Ullman, and the National Partnership for Quality Highway’s (NPHQ) Executive Director Mr. Bob Templeton. Secretary Flanagan discussed the priorities of the Administration and of Governor Robert L. Ehrlich, such as the importance of highway safety and that it is the number one priority. Secretary Flanagan embraced the true meaning of partnering between the public/private sectors, and he recognized the worthwhile efforts of this partnership effort in providing a quality transportation system. Associate Administrator George A. Ostenson offered the federal perspective on work zone safety. Colonel Thomas E. Hutchins, Maryland State Police spoke of MSP’s partnership with State Highway Administration (SHA) and his commitment to work zone safety. Dr. Gerald L. Ullman, spoke on the quality improvement in work zones: challenges and opportunity.

This year’s theme, “Quality in Safety…Beyond the Barrels” included interesting and pressing topics which attendees embraced. Subjects covered a wide range of issues and challenges that face the industry daily. These sessions provided a forum for open dialog and personal experiences. Some of the successes we experienced during the conference included the Building for the Future: 1/95 Expansion and Interconnectivity Connector session that concentrated on the progress and issues associated with Maryland’s larger and more complex projects. Other sessions that were well received were The ABCs of Managed Lanes, ADA: Hot Topics and Utility Coordination in Design Build, and Private Public Partnerships for Highways.

This year the quality movement led SHA to win three NPHQ awards for projects which exemplify all aspects of innovation and project partnerships. The Woodrow Wilson Bridge project won a gold level and silver level award in two categories and I-270/Md187 Rockledge Drive project won a silver level award.

Please take the time to utilize the MdQI web site. The site is improved year after year and provides valuable information and is user friendly. Copies of this year’s conference presentations are posted on the website for easy access at www.mdqi.org.

The Third Annual Highway Construction and Engineering Career Day event will be held on April, 25 2006 at the Timonium Fairground. The new format will be presentation based and we will again be working with our industry and consultant partners.

In 2008, SHA will be celebrating 100 Years of SHA. Keep a look out for updates on this historic event. We also have great news for the 2006 MdQI Conference. The conference will be moving to a more spacious facility and will be held at the Wyndham Baltimore Inner Harbor on January 18 & 19, 2006. Keep your eyes open for additional details throughout the year.

Once again, I would like to thank Secretary Flanagan, FHWA’s Associate Administrator for Safety George A. Ostenson, Maryland State Police Colonel Thomas E. Hutchins, Texas Transportation Institute, Dr. Gerald L. Ullman, NPHQ’s Bob Templeton and SHA’s Administrator Neil Pedersen, for their continued support and participation in this year’s conference.

In conclusion, I would like to extend my sincere appreciation to all the transportation stakeholders, particularly MdQI’s sponsors, for all the tireless work that goes into making the Maryland transportation infrastructure one that leads the nation in innovation and quality. I would also like to thank everyone for their dedication and hard work, in making the 12th annual MdQI Conference a huge success. I look forward to building on the momentum generated from this year’s conference as we proceed through 2005.

The committee wishes to thank all of the following sponsors and exhibitors.

Concrete Conference Sponsors:
- Concrete General, Inc.
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The program agenda for the Wednesday, April 6, 2005 Concrete Conference included some environmental speakers. The registration this year totaled around 100 participants. Key players on the conference planning committee included Vicki Stewart and Tom Evans as Co-Chairs, Jerry Kalista as Technical Program Chair, with committee members Tom Sparks, Kevin Chisham, Paul Finnerney, Vacher Donahue, David Beulahier, Pete Stephanoos, Lou Triandafillo, Azmat Hussain, and Sam Miller. This committee of talented professionals worked very well together in producing a notable conference.

Conference Key Note speaker was Calvin McCull, Engineering Services, Inc. and our Luncheon Speaker was Neil Pedersen, MD State Highway Administrator. Other speakers represented local firms like URS and Lafarge while even more spokespersons from State and National organizations contributed, including MD SHA, PENNDOT, VTRC, FHWA, ACPA. This year’s event welcomed 16 exhibitors and 25 sponsors who networked with all attendees.

The conference continued this format for one of our four concurrent technical sessions with a focus on four areas: Concrete Pavements, Concrete Structures, Architectural Concrete and General Concrete Technology.

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SHA Studies The Use Of Movable Steel Barrier For Worker Protection

Work zone safety is a high priority for the Maryland State Highway Administration (SHA) and is one of the key goals of SHA’s Highway Safety Business Plan. The SHA is continuously exploring new ideas and strategies to improve work zone safety for both workers and road users. Barrier types, such as temporary concrete barrier, movable concrete barrier, and water-filled plastic barriers are currently being used in various work zone scenarios. However, new methods of positive protection are being developed in response to the challenge of improving worker safety.

One new type of movable barrier system currently being evaluated by the SHA is the SafeGuard Link System, developed by BariSystems Inc. The portable “link system” is a movable steel reinforced barrier constructed with retictable wheels, which provides for quick deployment. The link system consists of individual barrier sections approximately 28 feet long and three feet in height, with a weight of about 3700 pounds. The system is costly to purchase - $16,000 per section - making the rental of this equipment possibly more desirable to contractors considering its use.

The barrier sections are connected with a steel pin and do not require anchoring on foundations. The link system has been tested and approved in accordance with NCWP Report No. 35 as Test Level 3 (62 mph collision). When test impacts with a pickup truck were conducted, the link system performed similar to temporary concrete barriers, recording a deflection slightly more than six feet. This deflection is based on a barrier “length of 8’ x 100’ on both ends of the assembly in the vicinity of the work area.” Barrier Systems states that most collisions with barriers do not result in significant damage to the barrier. In most cases following a collision, only minor adjustments or repairs are necessary for the redeployment of impacted sections.

Additionally, the link system may be used to close breaks in barriers for vehicles entering or exiting the work site. One section of the assembly can be disconnected and pushed back to provide safe access points for construction vehicles.

To evaluate the effectiveness of this product under actual work zone conditions, the SHA has approved the deployment of the link system along I-695 (Baltimore Beltway) at the York Road overpass, the location of an ongoing bridge replacement project. This project has a reduced work zone speed limit of 50 mph. The portable link system, stored adjacent to the existing median concrete barrier next to the work area, is moved every night to protect the work area. The deployment takes approximately 15 minutes.

So far, the portable link system has performed satisfactorily in terms of quick deployment/portability and, according to workers on site, has provided an increased sense of safety along the project. With a work area of almost 140 feet, more than 300 feet of the portable link system is deployed during nighttime operations at this project, including two truck-mounted attenuators (one as an end treatment and one to prevent errant motorists from entering the work space). There have been no incidents recorded at this site since the deployment of the portable link system. SHA continues to develop and implement new strategies to improve work zone safety. It is expected that the SafeGuard link system will improve safety in short work zones where portability and quick deployment is needed.

For more information, contact Michael Paylor at 410-787-5864.

Awards of Excellence Presented at 12th Annual MdQI Conference

The 12th annual MdQI conference concluded with the annual Awards of Excellence Banquet, hosted by Neil Pedersen, Doug Rose, and Brian Holmes, Executive Director of the Maryland Highway Contractors Association (MHRCA). Prior to the MdQI awards presentation, Bob Templeton praised Maryland for winning three NCHRP Making a Difference awards in 2004. The Woodrow Wilson Bridge Contracting Team won a Gold “Risk Taking” Award for its successful re-engineering and re-bidding of a project contract to stay within budget. The Woodrow Wilson Bridge team won a Gold “Partnering” Award for its success in reducing the duration of a major project to construct a new interchange along I-270 and reconstruct the I-270/MD 187 interchange. Another Woodrow Wilson Bridge team won a Silver “Breaking the Mold” Award for its innovative efforts to protect fish in the Potomac River during deep water pile driving for the bridge foundations. Neil, Doug, and Brian presented 21 MARC Awards of Excellence to State and private sector teams. The awards ceremony featured a PowerPoint presentation of winning projects created by Steve McClain and SHA’s Office of Construction.

Major Roadway Project
widens US 29 from MD 99 to MD 100 in Howard County
Contractor: Concrete General, Inc. Project Bid Cost: $11.9 million Design Firm: URS Corporation
Consultant Highway Design - Large Project
widens US 29 from MD 99 to MD 100 in Howard County
Contractor: Concrete General, Inc. Project Bid Cost: $11.9 million Design Firm: URS Corporation
Minor Roadway Project
widens of MD 135 from Malvera Avenue to Chestnut Avenue in Baltimore County
Contractor: Gray & Son, Inc. Project Bid Cost: $2.1 million Design Firm: Rummel, Klepper & Kahl

New Bridge Construction
Replace MD 32 Bridge over River Road, CSX and Patapsco River in Howard County
Contractor: Joseph B. Fay, Co. Project Bid Cost: $3.7 million Design Firm: SHA
In-House Bridge Design
Replace Bridge on MD 32 over River Road, CSX and Patapsco River in Howard County
Contractor: Joseph B. Fay, Co. Project Bid Cost: $3.7 million Design Firm: SHA
Bridge Rehabilitation and Consultant Bridge Design
Repair/Replacements/Reconstruction to Three Structures on US 40 Alt. over Spiker Contractor: Carbolt, Inc. Project Bid Cost: $1.2 million Design Firms: SHA, KCI Technologies, Inc.; Driver Brothers Consulting Engineers

State Leaders Search For New Solutions To Bay Bridge Congestion

NEW TASK FORCE ANNOUNCED; TRANSPORTATION NEEDS REPORT RELEASED

The Task Force on Traffic Capacity Across the Chesapeake Bay is poised to begin identifying and examining issues associated with increasing traffic congestion on the Bay Bridge. The Task Force is comprised of 19 distinguished Marylanders and Marylanders for quick deployment/portability and, according to workers on site, has provided an increased sense of safety along the project. With a work area of almost 140 feet, more than 300 feet of the portable link system is deployed during nighttime operations at this project, including two truck-mounted attenuators (one as an end treatment and one to prevent errant motorists from entering the work space). There have been no incidents recorded at this site since the deployment of the portable link system. SHA continues to develop and implement new strategies to improve work zone safety. It is expected that the SafeGuard link system will improve safety in short work zones where portability and quick deployment is needed.

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December 2004. The report projects that during the next 20 years traffic will increase by 40 percent, resulting in 12 hours of traffic congestion on weekends.

The Task Force will review the findings of the Needs Report as well as examine community, economic and environmental issues associated with increasing capacity across the Bay. Its goal will be to increase public understanding of the capacity issues, define objectives associated with capacity expansion, and identify other issues that also must be considered when developing solutions.

Members are not being asked to identify any specific project. Further planning for any future project would occur through Federal and State mandated planning and review processes.

The Task Force’s first meeting was to be held May 24, 2005. The public will be encouraged to attend meetings of the Task Force and workshops will be held to solicit input.

More information on the task force and its work is available at www.mdtransportationauthority.com.

Continued on Page 6