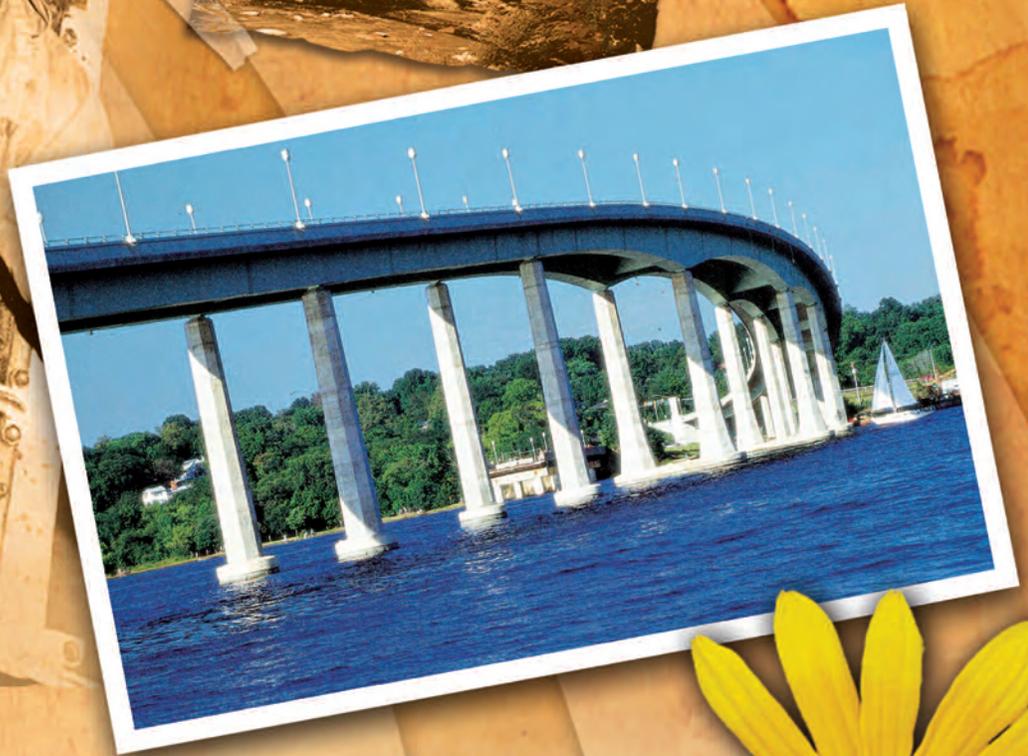




STATE HIGHWAY ADMINISTRATION ANNUAL REPORT

07





Dear SHA Customers, Partners, and Employees,

Maryland's State Roads Commission (SRC) was founded in 1908, making 2008 the centennial anniversary of modern road building in our state. The SRC built many of the state and local roads we travel today. When the Department of Transportation was formed in 1971, the Maryland State Highway Administration (SHA) took responsibility for state roads, and the Maryland Transportation Authority assumed ownership for toll facilities.

The SRC's 100th anniversary is a unique reminder that our state's highways are an invaluable support to our economy and way of life. At SHA, we are proud to be the stewards of one of the finest highway systems in the nation. As we exercise that stewardship, we make the safety of our customers—everyone who drives, bikes, or walks along Maryland's roads—our number one priority.

Most people know that SHA clears snow, fills potholes, and builds roads. When we need to repair or expand a road, we and our partners work to minimize inconveniences to drivers, residents, and neighboring business owners. However, much of SHA's everyday work to maintain Maryland's 16,700 lane-miles of state highways happens "behind the scenes." As a state agency, SHA must be accountable to the public for all these efforts. SHA tracks critical activities and outlines specific goals through a comprehensive business plan. This annual report highlights SHA's major achievements during FY 2007.

Notable highlights include: saving the public \$1 billion in delay costs by reducing congestion caused by crashes and other incidents; fulfilling 100 percent of environmental commitments made under the National Environmental Policy Act; piloting a Customer Care Management System that will allow better management of customer concerns; and helping 93 percent of Maryland drivers and passengers to buckle-up—one of the highest rates of seat-belt use in the nation. Additionally, SHA delivered the largest capital program in its history, all while keeping the \$2.4 billion Woodrow Wilson Bridge and Intercounty Connector (ICC) projects on-time and on-budget. We are also proud that SHA has dedicated a significant portion of the ICC budget to environmental stewardship initiatives well beyond requirements.

It is an honor to work with the dedicated men and women of SHA and with the supportive and effective consultants and contractors who help us serve the public. All of us benefit from the strong leadership of the O'Malley Administration. In the next four years, SHA will move forward with major strategic initiatives, including those to: improve highway safety for all roads in Maryland; preserve and maintain the quality of SHA-owned roads and facilities; preserve core technical expertise and production capability; and implement performance-based management fully sustained by state-of-the-practice IT systems. I thank you in advance for your support as we seek to achieve these goals and make SHA the most effective agency possible.

Sincerely,

Neil J. Pedersen, SHA Administrator

Our Mission, Our Vision Our Values, Our Goals,

SHA's Mission

Efficiently provide mobility for our customers through a safe, well-maintained and attractive highway system that enhances Maryland's communities, economy and environment.

SHA's Vision

Providing our customers with a world class highway system.

SHA's Values

State Highway Administration employees embrace values that complement our vision and mission.

These are grouped into four categories:

We Value Excellence in Our People: SHA employees are energetic, loyal, and supportive of one another. We encourage each other to reach our highest potential and are committed to gaining the skills, knowledge, and training to achieve our goals.

We Value Excellence in Our Work: As a team, we strive to know the needs of our internal and external customers. We fulfill commitments in a timely and accurate manner, using resources responsibly, and observing all legal, moral, and ethical standards.

We Value Excellence in Our Relationships: We value each other's opinions and ideas as well as those of our customers. We earn the respect and trust of our internal and external customers through fairness, honesty, integrity, and open communication. We accept responsibility and are accountable for our performance.

We Value Excellence in Our Work Environment: SHA provides a professional environment that is committed to putting the safety of its people and customers first. We strive to continually improve the workplace by rewarding accomplishments and encouraging employee involvement at all levels of the organization.

SHA's Goals

- Improve highway safety in Maryland
- Improve mobility for our customers
- Maintain a quality highway system
- Improve the effectiveness of managing our resources and projects
- Develop and maintain Maryland state highways in an environmentally responsible manner
- Provide services and products to our customers that meet or exceed their expectations

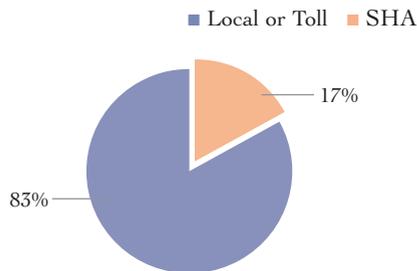
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Glossary of Terms and Acronyms **ii**

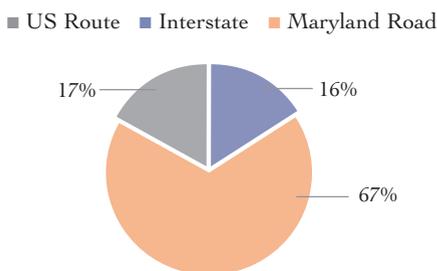
A reference guide for some of the terms used on the following pages:

AASHTO	American Association of State Highway and Transportation Officials
ADA	Americans with Disabilities Act
Centerline Miles	The length of a road in miles measured along the center of the road
CHART	Coordinated Highways Action Response Team
CCTV	Closed Circuit Television
CY	Calendar Year
DMS	Dynamic Message Signs
DOT(s)	Department of Transportation
DUI	Driving Under the Influence of drugs or alcohol
FHWA	Federal Highway Administration
FY	Fiscal Year
ICC	Intercounty Connector
ITS	Intelligent Transportation Systems
GIS	Geographic Information System
Lane-miles	The mileage from one end of a highway to the other multiplied by the number of lanes
LED	Light-emitting diode
MDOT	Maryland Department of Transportation
MHSO	Maryland Highway Safety Office
Mitigation	To lessen the impact of pollution in communities and on the environment due to highway construction/highway maintenance activities
NHTSA	National Highway Traffic Safety Administration
NPDES	National Pollution Discharge Elimination System
RSA	Roadside Safety Audit
SAH	Sponsor-A-Highway
SHA	State Highway Administration
SHSP	Strategic Highway Safety Plan
USDOT	United States Department of Transportation
VMT	Vehicle Miles Traveled (i.e.,: 2 vehicles traveling 2 miles equals 4 VMT)
WWB	Woodrow Wilson Bridge

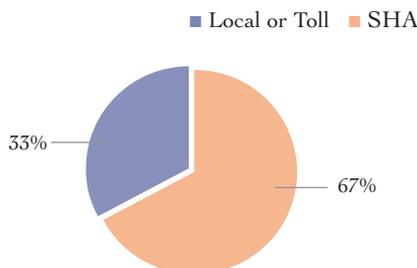
Maryland Highway Mileage



Roads on SHA System (by lane miles)



Travel on Maryland Highways (VMT)



Major Program Responsibilities

An excellent highway system is crucial to a strong economy, maintaining the quality of life of Maryland's citizens and keeping people safe as they travel.

SHA owns, operates and maintains the Interstate, U.S. and Maryland numbered roads that represent the backbone of Maryland's transportation system. This infrastructure forms the majority of Maryland's National Highway System that connects local and county roads to major activity centers and other modes of transportation such as mass transit, the port, airports and railroads. SHA roads carry 67% of traffic in the state. For SHA, this translates to managing the planning, design and construction of more than 500 projects from minor projects to improve accessibility to meet requirements of disabled travelers to mega-projects such as the Intercountry Connector and the Woodrow Wilson Bridge reconstruction.

SHA is committed to improving highway safety on all roads in the State of Maryland as our highest priority. The Maryland Highway Safety Office at SHA administers statewide safety education programs that are widely visible such as Smooth Operator, Click-it or Ticket, Safe Routes to School and many more. SHA has proactively implemented these programs in a variety of ways ranging from using dynamic highway message signs to raise awareness of drivers, to distributing thousands of brochures to schools, community groups, interest groups and public agencies. The recently completed Strategic Highway Safety Plan, developed through an intensive collaborative approach with virtually all stakeholders involved in highway safety issues, will be critical to further improving highway safety in Maryland.

To provide the high quality roads for which Maryland is known, SHA places an emphasis on:

- Preserving the quality of approximately 16,731 lane-miles of road and 2,500 bridges
- Retaining expertise on staff to perform critical specialized functions such as design quality control and managing traffic during emergencies, especially during snowstorms
- Performing routine maintenance on roadway features such as pavements, bridges, signs, lights, roadway markings, drainage and litter pick up
- Delivering high quality projects working in collaboration with citizens, communities and elected officials.

¹ The National Highway System is a federally-designated category of roads important to the nation's economy, defense, and mobility.

² Except specific facilities owned by the Maryland Transportation Authority and Interstate roads in Baltimore City

District Offices & Shops

The State Highway Administration (SHA) has approximately 3,200 employees who carry out SHA's mission: "Efficiently provide mobility for our customers through a safe, well-maintained and attractive highway system that enhances Maryland's communities, economy and the environment."

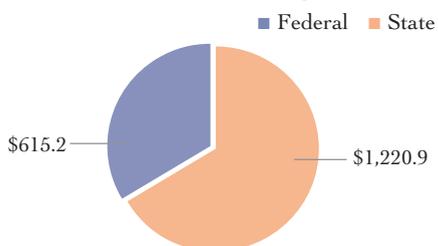


SHA's headquarters office is in Baltimore City and is home to over 750 employees, including the Administrator and Deputy Administrators. There are 14 offices at headquarters that provide central administrative, information technology, financial, planning and engineering functions. In addition to this SHA's operations offices and the Statewide/Emergency Operations Center are centrally located in Hanover, Maryland near the BWI Thurgood Marshall Airport. SHA has more than 40 facilities around the state, including seven engineering district offices and 28 maintenance shops. District offices manage all highway and bridge construction contracts; perform maintenance functions such as roadway and equipment repair, snow and ice removal, and roadside management; and are responsible for traffic engineering projects and operations.

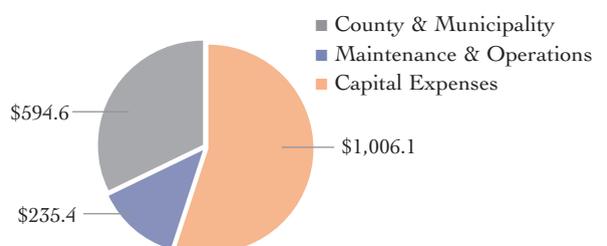
SHA Funding

Financing for SHA activities comes from the State of Maryland's Transportation Trust Fund and from federal transportation funding. SHA uses these funds for everything from planning new roads and bridges to building, maintaining and operating existing roads. In FY 2007 we delivered our largest capital program ever of more than \$1 billion. Additionally, SHA spent more than \$200 million on maintenance and operations of SHA's 16,731 lane-miles of roadway and distributed nearly \$600 million in highway user revenues to counties and municipalities for use on local systems.

Source of Funding for FY 2007



SHA Use of Funding for FY 2007



Goal: Improve highway safety in Maryland

Highlights of our Accomplishments

A flagger directs traffic to slow down at a work zone off of I-695 South.



- Maryland has the highest seat belt use rate among all east coast states. The safety belt use rate increased to 93.1% across the state, which represents a conversion rate of 22.4% of those drivers who did not “Buckle-up” as of last year.
- Maryland had fewer than 55,000 traffic injuries; the number dropped from 59,500 to 53,615 by year-end of Calendar Year (CY) 2006, meeting SHA’s highway safety target.
- The injury rate has declined from 242.1 in 1973 to 94.7 in CY 2006, a 60% decline.
- The Maryland CY 2006 fatality rate of 1.15 per 100 million vehicle miles of travel (100 million VMT) remains lower than the national fatality rate of 1.42.

Strategic Highway Safety Plan

The Maryland Strategic Highway Safety Plan (SHSP) is a statewide, coordinated, comprehensive, traffic safety plan that provides the framework for reducing highway fatalities and serious injuries on all public streets and highways. SHA led the statewide effort to update Maryland’s SHSP. SHA hosted the state’s first ever traffic safety summit in July 2006 when interdisciplinary teams initiated work on objectives and strategies within 14 safety emphasis areas. The strategies developed within the emphasis areas supplement existing strategies that include enhancing safety laws, enforcing those laws, conducting public information and education campaigns, training state and local agencies and making infrastructure improvements. The SHSP is a working and living document that establishes the overall goals, objectives and strategies that adapt to emerging issues from 2006 through 2010. Two examples of emphasis areas within the SHSP are:

- **Improve Information and Decision Support Systems:** The Traffic Records Coordinating Committee (TRCC) manages this emphasis area. In FY 2007, MHSO hosted a comprehensive assessment of its traffic records program in partnership with NHTSA. The TRCC incorporated recommendations into their work plans for CY 2007 and 2008.
- **Develop Safe Young Drivers:** The Young Driver Safety Emphasis Area Team began meeting in July 2006, as part of Maryland’s Strategic Highway Summit.

Overview of Highway Safety Results³

While Maryland has made significant progress in reducing motor vehicle fatalities, the number of fatalities increased between CY 2005 and CY 2006. Some attributing factors to the increase in fatalities include: an increase in vehicle travel, increase in population, increase in the number of older drivers and increasingly aggressive driving. In 2006, 652 people lost their lives in the 101,889 police-reported traffic crashes in Maryland, while 53,615 people were injured and 65,431 crashes only involved property damage. In total, 429 drivers (352 vehicle drivers and 77 motorcycle operators), 103 pedestrians and bicyclists, and 120 passengers lost their lives on Maryland roads. On average, one life was lost every 13.5 hours, 147 people were injured each day (six injuries every hour), and 279 police-reported traffic crashes occurred every day.

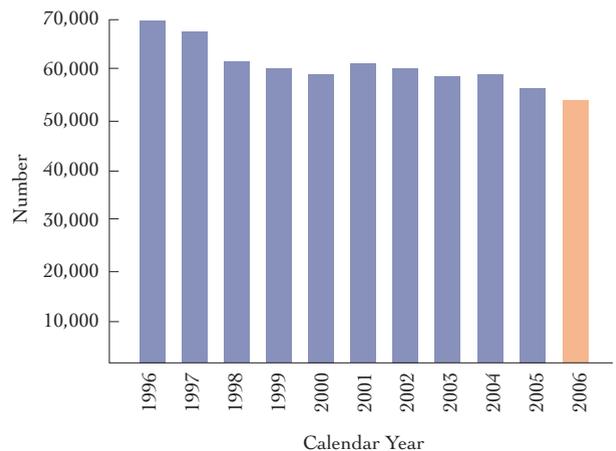
At the same time there were many positive trends to note in FY 2007. For instance, there were decreases in every sub-category of crashes other than fatalities in CY 2006. Over the past year, total reported crashes decreased by 719 and injury crashes and total injuries decreased by 679 and 1,672, respectively. The largest decrease was seen in total injuries, which decreased by 3 percent. Maryland's overall fatality rate has also consistently been lower than the national fatality rate for every year since 1992 including 2006. In 2006, the fatality rate in Maryland was 1.15 per 100 million VMT, well below the national average of 1.42 per 100 million VMT and the lowest from all East Coast states.

Pedestrian fatalities and injuries experienced similar reductions. In CY 2005, the number of pedestrian fatalities returned to 103. Yet in CY 2006, they decreased again dropping to 96 fatalities by December 31, 2006. In CY 2006 pedestrian injuries also decreased from the CY 2005 number to 2,594 injuries. Finally, total injury crashes decreased in 2006, along with total property crashes decreasing and total VMT, which decreased slightly by less than 1% to 56.6 billion in 2006. The following graphs illustrate the trends in safety related performance measures.

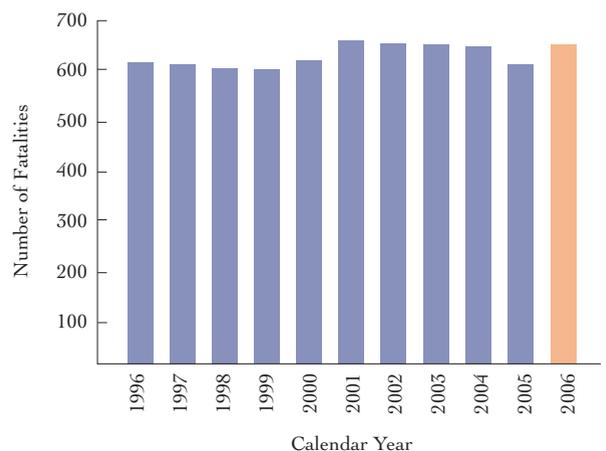
³ Data from February 2008

⁴ The numbers in the Maryland Statewide Pedestrian and Fatalities and Injuries graph are as of December 31, 2007 as reported in the MHSO Annual Report.

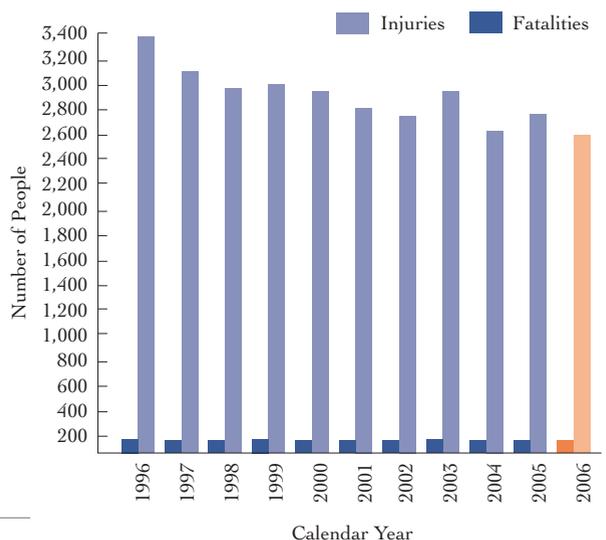
Statewide Traffic Injuries



Statewide Traffic Fatalities



Statewide Pedestrian Fatalities





Comprehensive Approach to Improving Highway Safety

SHA's MHSO provided funding to Maryland's state, county and local police agencies for a variety of enforcement operations. In Federal Fiscal Year 2006, more than \$1.7 million was provided for police officers, sobriety checkpoints, and overtime patrols in a variety of programs including aggressive driving prevention, impaired driving prevention, motorcycle safety and occupant protection.



Enforcement

Impaired Driving Program: MHSO's Impaired Driving Program and the Impaired Driving Coalition (IDC) met in FY 2007 as part of Maryland's Strategic Highway Summit. Since that time the team has established a set of strategies and action steps to address increased enforcement, stronger penalties and standards for impaired driving convictions, as well as an overall strengthening of the post-arrest scenario. In addition, the team agreed to explore a more effective and better coordinated enforcement and media campaign to increase awareness of impaired driving and integrated the team with Maryland's existing IDC. Within this program area SHA accomplished the following in FY 2007:

- SHA partnered with local jurisdictions such as Anne Arundel, Harford & Howard County District DUI/Drug Courts that target subsequently convicted DUI offenders. The courts are designed to offer charged offenders with a highly intensive monitoring and rehabilitative treatment program that will divert offenders from long periods of incarceration.
- SHA supported state and local law enforcement to increase traffic patrols and sobriety checkpoints in areas where impaired driving has been identified as a problem in local communities and roadways. Increased enforcement was conducted during heavily advertised enforcement waves.
- The IDC developed and distributed a statewide DUI enforcement plan. The plan requires that participating law enforcement agencies carry out a minimum of eight DUI operations per quarter and that half of these operations be checkpoints, and that saturation patrols must involve at least two police vehicles to qualify.

Seat Belt Usage (safety): This year, occupant protection citations issued during the Chief's Challenge increased from approximately 51,000 in 2005 to 54,000 in 2006 or a 5.8% increase. This increase in citations resulted in an increase in Maryland's safety belt use rate of 93.1%. SHA accomplished the following within this area in FY 2007:

- "Chiefs' Challenge" 110 law enforcement agencies and barracks participated in the FY 2007 "Chiefs' Challenge," a 1% increase over last year's participation.
- "Click It or Ticket" SHA launched Click it or Ticket and we supported the initiative by displaying messages on overhead message signs during non-emergencies.



Aggressive Driving: The Aggressive Driving Emphasis Area Team started meeting in July 2006 to begin developing and implementing strategies. Aggressive Driving Enforcement Zones were established on highway corridors in five counties. These corridors have been identified as having a high incidence of Aggressive Driving related crashes, and were addressed by a combination of signing and heavy concentrations of law enforcement.

Street Smart Campaign: SHA coordinated numerous pedestrian enforcement activities, including crosswalk enforcement actions targeting both pedestrians and drivers. These efforts were coupled with educational activities, including the distribution of materials regarding Maryland's crosswalk laws, and airtime garnered through the use of pedestrian safety-related radio PSAs.



Engineering

Road Safety Audit (RSA): SHA institutionalized a safety program to conduct RSA's on all new highways, highway improvements, and at selected locations along existing highways. In FY 2007 SHA assisted local agencies in creating local audit programs, developed guidelines for conducting RSA's and trained local personnel to conduct safety audits paving the way for short and long term safety improvements.

Advanced Warning Signs: In FY 2007, SHA revised its study of six locations where Signal Ahead–Prepare To Stop When Flashing (SA-PTSWF) advanced warning signs are used to warn motorists of stopping conditions on approaches to intersections where red traffic signal indications and/or traffic queues are obscured from the driver's view. The "before and after" analysis found a significant 60% reduction in the overall crash rate, 37% fewer rear-end collisions, 63% less right-angle collisions, along with 74% left turn collisions.

The Median Barrier program: SHA continued upgrading priority locations along Interstate highways and other expressway by bringing the end treatments and barrier heights up to standard. Additionally, barriers were constructed in the medians of high-speed divided highways in accordance with SHA's barrier policy.

Rumble Strips and Markings: In addition to protecting those vehicles that leave the roadway through safer barriers, SHA increased its efforts to keep vehicles from straying from the roadway in the first place. As a component of the overall program to reduce the consequence of drowsy driving, SHA expanded its use of continuous shoulder rumble strips along highways where such driving is most apt to occur. SHA also increased the width, brightness, and effectiveness of its road edge striping (lines).

Roundabouts: SHA is the nation's leader in the use of modern roundabouts. In FY 2007, SHA increased its construction of roundabouts in partnership with many local jurisdictions. Studies showed that when traffic signals were replaced by single lane roundabouts, injury and crash rates were reduced on average by 86 %, within 100% fatality reduction.

Some key projects within the engineering area in FY 2007 include:

- Signal upgrades along MD 210 (Indian Head Highway) at Livingston/Palmer Roads and Swan Creek Road to allow pedestrian "countdown" and Accessible Pedestrian Signals (APS), which enable visually impaired pedestrians to hear when most likely safe to cross a roadway.
- US 113 in Worcester County, widening of the four-mile section from Market Street (MD 394) to Public Landing Road (MD 365) was completed fall 2006.
- MD 404 in Caroline County-widening one mile from Double Hills Road to Sennett Road and adding safety features such as wider shoulders. This road had a pattern of serious crashes during summer months when beach-bound traffic is at its peak.
- MD 115 upgrades in Montgomery County were completed to provide improved safety from MD 28 to MD 124.

Education

Community Traffic Safety Programs (CTSP): In FY 2007 SHA continued its partnership with Maryland counties to promote all of its safety programs. The CTSP's are an important link to local communities. In fact, SHA has a contact person in each county to call on as well as to distribute up-to-date safety educational materials. The following results were achieved through Maryland's CTSP's in 2006:

- 297,936 pieces of educational materials were distributed
- 510 traffic safety presentations were delivered
- 25,288 people attended traffic safety presentations
- 2,028 traffic safety events were held or attended
- 88,691 people attended traffic safety events
- 67,144 traffic safety citations and 41,095 traffic safety warnings
- Utilized the "Buckle Up After Every Pit Stop" pickup truck brochure
- The Maryland Pacesetter Safety Belt Awards Program included more than 150 agencies, schools, and businesses were eligible for recognition.
- Launched a new campaign targeting young women who wear their safety belts incorrectly and distributed to participating "Chiefs' Challenge" agencies and barracks.
- In southern Maryland adopted "The Car Fit" program, to instruct older drivers on proper positioning and safety belt use.

Smooth Operator: In FY 2007 SHA conducted a media campaign promoting the Smooth Operator message on a variety of web-based media including Pod-Casts, Radio Streaming, Video Downloads and Internet Gaming sites to target drivers age 18-34. The Public Service Announcements were directed to drivers of all vehicles, including motorcycle operators.

Smooth Operator Media events were conducted on the Woodrow Wilson Bridge in Prince George's County and at the Francis Scott Key Bridge in Baltimore County. These events were attended by major media outlets in their respective metropolitan areas, and significant coverage was earned in both print and on-air media.

Older Driver Training: SHA held training sessions with a 60 participants, including staff from SHA headquarters, districts and counties on human factors and design concepts to accommodate older drivers.



SHA crews support first responders at a crash in Cecil County on the MD 215 Bridge.



Crash Prevention Program

- Washington Regional Alcohol Program (WRAP) partnered with numerous public and private partners such as AT&T Wireless, GEICO Direct, Washington Area New Automobile Dealers Association and Exxon/Mobil, and presented programs on the effects of impaired driving to high school age youth and adults 21-44 years of age.
- The “Tipsy? Taxi!” Program, for Baltimore modeled after WRAP’s “Sober Ride” Campaign, was launched in FY 2007. The program provided 168 free rides to potentially impaired drivers and was cosponsored by SHA, AAA Mid Atlantic and Yellow Cab.
- SHA's Driver Improvement Program (DIP), which addresses pedestrian safety, truck awareness, seatbelts usage, driving safely through work zones, impaired and aggressive driving, high-risk driver awareness, and more, became available online as an e-learning class on the SHA shared drive, saving SHA \$20,000 biennially.

Young Driver Safety Program: The Campaign for Courtesy on the Road was expanded in Howard County, and now reaches all high schools in that county. The program combines routine communication with recruitment and incentives designed to promote participation and message retention. This project will adapt existing materials targeting Howard County young drivers and ultimately will make them suitable to use in other jurisdictions.

- A focus group on underage drinking and impaired driving programs was held as part of the Young Driver Task Force meeting during the fiscal year. The results of this group discussion will be used as the basis of the alcohol/impaired driving portion of this formative assessment.

Lt. Governor Anthony G. Brown, Mayor Sheila Dixon and Deputy Transportation Secretary Beverley Swaim-Staley gathered in Baltimore City to celebrate the launch of the Maryland Safe Routes to School Program with students.



Safe Routes to School: SHA manages the Maryland Safe Routes to School program, which utilizes federal funding. The grants are awarded annually to local government and non-profit organizations on a competitive basis based on need and problem identification. The program encourages children in grades K-8 to walk and bike to school. It also funds education, engineering and enforcement initiatives to protect children in their daily treks. Lt. Governor Anthony G. Brown highlighted how the program has already enhanced pedestrian safety in and around William Paca Elementary/Middle School, one of the schools benefiting from the \$720,000 grant to Baltimore City. Baltimore is one of 15 jurisdictions sharing a total of \$3.67 million in grants towards this program.

Pedestrian and Bicycle Safety:

- The Pedestrian & Bicycle Safety Task Force (PBSTF) met quarterly and served as a clearinghouse for pedestrian safety information, activities, and best practices in pedestrian and bicycle safety in Maryland and from around the nation. The PBSTF is a partnership between SHA, the CTSP Coordinators, law enforcement officers, state and local traffic engineers, planners, health and injury prevention specialists, pedestrian advocates, and elected officials.
- In partnership with the Washington Area Bicyclist Association, SHA provided a series of “train the trainer” workshops; a total of 800 people attended these events and approximately 2,500 pieces of educational material concerning pedestrian and bicycle safety were distributed.

Motorcycle Safety: The Motorcycle Safety Emphasis Area Team began in FY 2007. The team has identified priority strategies and action items which guided the development and deployment of resources for motorcycle safety. The Motorcycle Safety Emphasis Area Team works in partnership with the MHSO Motorcycle Task Force.



Work Zone Safety

Work zones are an unavoidable necessity in maintaining the SHA highway network. At the same time work zones create adverse conditions for drivers and workers alike. Therefore, SHA places great emphasis and takes numerous routine measures to protect those who work on our roads. In FY 2007 the following were accomplished:

- Overall work zone related fatalities decreased from 19 in 2002 to 16 in 2005, and to 13 in 2006.
- SHA presented work zone safety related information and distributed over 1,000 work zone safety brochures at the Maryland State Fair, at Timonium Fairgrounds.
- SHA, Maryland Occupational Safety and Health (MOSH), and Maryland Highway Coordinators Association (MHCA) formed an alliance agreement to reduce work zone injuries and fatalities. As part of the alliance SHA District Engineers, Regional Construction Engineers and Area Engineers participated in 6 safety training classes. SHA’s Office of Construction and District office representatives also formed a Safety Council to support this safety program.

SHA employees modeling the new safety "green" reflective uniforms that are now an SHA required "outermost garment."



- SHA presented work zone safety related information at driving schools in western Maryland. Approximately 5,000 work zone safety brochures were distributed at area car rental company locations. Hundreds more were distributed around the state.
- SHA and MHCA have partnered in conducting multiple Work Zone Traffic Manager's Training courses for Spanish speaking participants.
- Approximately 300 copies of the Work Zone Safety Tool Box were distributed to contractors, consultants, and SHA offices.
- SHA's goal of 800 annual work zone inspections was significantly surpassed—the total District tally was almost 2,900 work zone inspections.
- SHA published "Road Ready" brochures detailing major construction throughout the state, with distribution across the state and online.

Truck and Motor Carrier Safety

- SHA distributed more than 9,000 Maryland Motor Carrier Handbooks, which contains vital information for truckers seeking Maryland specific information on regulations and safety compliance.
- The Motor Carrier Division held a "No-ZONE" display and presentation at the annual Maryland State Fair in August. An estimated 11,000 promotional items with the "No-Zone" message were distributed at the fair, at truck stops, weigh stations, rest areas, and 129 driving schools throughout the State.
- New roadside enforcement initiatives increased the focus on speeding and other violations and random truck inspections.
- SHA published a Maryland Truckers' Map that identifies public and private places within the State where truckers can legally park. SHA distributed more than 17,000 copies at truck stops, weigh stations, visitor centers and elsewhere.

Goal: Improve mobility for our customers

Highlights of our Accomplishments

- SHA saved taxpayers \$1.09 billion last year by clearing 17,000 roadway incidents and assisting 22,000 stranded motorists.
- Reduced delays at traffic signals by 10% by adjusting the timing of signal systems to match traffic demand.
- Traffic signals continued to be upgraded to include audible pedestrian signals, battery backups and LED signal faces.
- Completed a strategic plan to strive for full-compliance with the Americans with Disabilities Act (ADA) on all state highways. The State of Maryland is now one of the few states to have such a plan.

CHART first responders with the Howard County police officer and Howard County Department of Fire and Rescue Services task force.



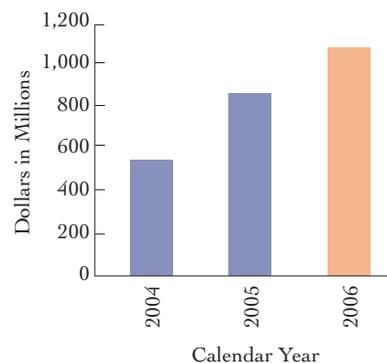
Managing Incident Delay – Coordinated Highway Action Response Team (CHART)

The CHART Incident Management Program continues to provide safety and economic benefits to motorists and commerce in Maryland and has become one of the more respected incident management programs in the nation. Based on several years of data collection, SHA has established a target of attaining a time savings (reduction in delay) of 30 million vehicle-hours a year on state highways by June 30, 2008. In the CY 2006 evaluation of the CHART Incident Management Program, SHA exceeded this target by achieving a time savings of 37.5 million vehicle-hours; which translates to \$1.09 billion in direct benefits to highway users. According to the same evaluation report, CHART reduced 290 potential secondary incidents through effective incident management and an additional 544 potential crashes through the removal of stationary vehicles on the SHA network.

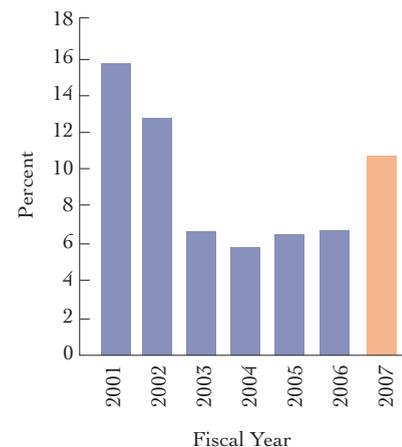
Through the CHART program, SHA accomplished the following:

- Responded to and cleared more than 17,000 incidents.
- Assisted more than 22,000 stranded motorists.
- Completed the Business Area Architecture, which outlines a framework for the development of the CHART Operating System Software for the next five years.
- Enhanced the video feed interoperability with other regional agencies to obtain access to over 200 camera images in Maryland. In addition, CHART deployed 26 new CCTV Cameras and 6 new DMS.
- Expanded the network to a total of 541 ITS devices deployed throughout the state, 47 CCTV cameras and 2 DMS in various stages of completion at the end of FY 2007.

User Cost Savings Due to CHART Incident Management



Percent Reduction in Network Delay Due to Signal Retiming



⁵ The dramatic increase in user cost savings from 2004 to 2005 is due to a comprehensive update to SHA's method of calculation that includes the consideration of increases to user costs.

Traffic Signal Retiming**Special Funding for Traffic Operations along the I-270 Corridor**

The I-270 corridor in Montgomery County was selected as one of eight pioneer sites in the country for an Integrated Corridor Management Pilot Project. The USDOT provided up to \$195,000 of funding assistance to develop a “Concept of Operations and Requirements” document for the corridor. The first workshop to identify and discuss prospective strategies for more effectively managing the corridor was held in Washington, D.C. in December 2006. The Concept of Operations Review Workshop was held in Houston, Texas in April 2007.

Changing Signal Timing to Minimize Delay at Intersections

SHA keeps traffic moving by retiming traffic signal systems along road corridors. In FY 2007, SHA retimed of 428 signals or 107% of SHA’s goal. This effort reduced traveler delay by 10.6 % along the corridors.

Fire boats spraying at the Woodrow Wilson Bridge**Delivering Projects That Provide Additional Capacity**

Woodrow Wilson Bridge: The largest construction project in the country remained on time and on budget with the Maryland portion now more than 90% complete. Some of the key activities that were completed in FY 2007 were:

- The team imploded the old Woodrow Wilson Bridge in Virginia
- Completed construction of the draw span section of the second bridge
- Began testing and commissioning both new draw spans on both bridges in June 2007.

MD 43 Extended from West of US 40 to MD 150: SHA opened the \$75.6 million project fall 2006 called “Road to Opportunity”, it supports economic development on the eastern side of Baltimore County, a designated growth area. The construction of MD 43 Extended improves access to the Martin State MARC station where the Maryland Transit Administration is doubling the number of parking spaces available to commuters. SHA also constructed a new 10-foot wide bicycle/pedestrian trail between Bird River Road and MD 150.

US 29/Briggs Chaney Road Interchange: This \$49 million interchange, located in Montgomery County, was completed on-time. The interchange replaces a traffic signal that has been a long-time bottleneck along US 29. This interchange is one in a series of projects recently completed that are saving motorists 10-20 minutes each day.

I-270, southbound auxiliary lane from I-70 to MD 85:

This project, located in Frederick County, provided a safer connection between eastbound I-70, westbound MD 85 and southbound I-270. Just south of the city of Frederick, these three roads all come together in one place. The close proximity of several ramps and ever-increasing traffic volumes meant that traffic could no longer be safely accommodated in less than a mile distance. This project provided a safer, direct connection from I-70 to MD 85 by eliminating the conflict with traffic traveling through on I-270.

Maryland and Virginia imploded the old bridge of which portions are being recycled for an oyster reef.



Intercounty Connector (ICC): The fiscal year began with Contract A design and construction for the westernmost part of the project, 7.2 miles and 3 interchanges from I-370/I-270 to Georgia Avenue. This contract includes major environmental incentives. Also, the initial financial plan for the ICC was approved by the Federal Highway Administration.

Crews relocate utilities before the first phase of construction of the Intercounty Connector.

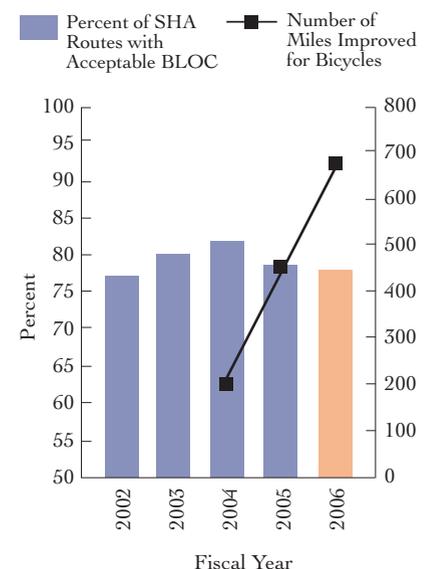
The first sign of construction activity occurred with the relocation of major transcontinental gas pipelines. These were relocated in advance of roadway construction beginning on Contract A.



Bike Routes

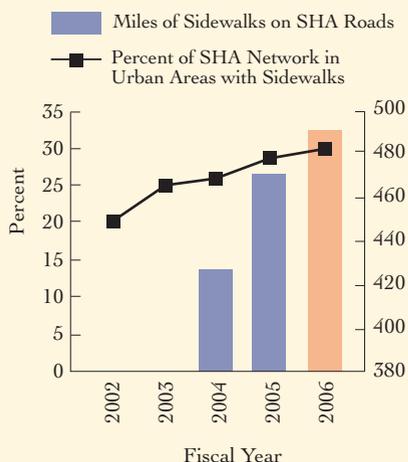
SHA continues to strive to maintain at least 80% of state-owned roadways with a Bicycle Level of Comfort (BLOC) rating of D or better. In FY 2007, SHA achieved 78% of its roadway center-line miles with an acceptable BLOC. Unfortunately this BLOC rating is slowly declining because of the increase in auto traffic alongside the bike routes. If nothing else, this reinforces the need for safe bicycle routes and SHA will continue to make investments in this area. In FY 2007, SHA:

Percent of SHA Roadways with Acceptable Bicycle Level of Comfort



- Constructed an additional seven miles where bicycles are allowed bringing the total bicycle approved center-line miles to 4,612 miles
- Promoted bicycle travel by presenting the Maryland 20-year Bicycle Plan at the 10th Annual Bicycle and Pedestrian Symposium in Annapolis.

Sidewalks



Sidewalks–Pedestrian Safety and Accessibility

By the end of FY 2007, 30% of SHA-owned roads in urban areas had sidewalks. This is an 18.6% increase from last year and exceeds the original goal of 20%. SHA’s efforts in providing pedestrians with safe accessible routes resulted in the following:

- A total of 492 miles of sidewalks along SHA roads as of December 2006.
- A total of \$1.4 million was spent for the sidewalk program in FY 2007, approximately 75% more than was spent in FY 2006. SHA used the money for new sidewalks along state highways and the reconstruction/replacement of existing sidewalks as part of SHA’s revitalization effort.

Accessibility for People with Disabilities

SHA’s Americans with Disabilities Act (ADA) Strategic Plan seeks to integrate ADA principles and requirements into the routine of doing business, with an overall goal to provide full accessibility and mobility to all SHA’s customers, including those with disabilities. SHA is actively pursuing this goal with a dedicated funding source.

- Completed an inventory of ADA compliance issues on the SHA network and initiated an ADA retrofit program for sidewalks. SHA’s performance target is to increase the percent of sidewalks that are compliant by 2% annually.
- Opened construction bids on 103 projects of which 100% were ADA compliant, and 18 of which were approved with ADA waivers.
- Activated two contracts for construction of ADA provisions on SHA roads in Baltimore, Montgomery and Prince George’s counties. This is the first time Maryland has had this type of contract available and it is one of the first in the nation.
- Conducted ADA awareness training for SHA employees (including contractual and temporary employees). In FY 2007, SHA trained a total of 1,161 employees, 39% of all employees.
- Held public meetings to raise ADA awareness among local governments and demonstrated how to evaluate roads for ADA compliance. SHA provides a self-evaluation process, maps that illustrate field surveys and computers that are equipped with a GIS database of the specific county.

Expanding Park and Ride Facilities

SHA is committed to improving mobility for all users. The agency combats traffic congestion and re-occurring delay by constructing more

park-and-ride facilities throughout the State. In FY 2007, SHA constructed an additional 223 park and ride spaces raising the total to 11,560 spaces. This translates to 4.2 million vehicle miles of travel diverted from SHA roads.

Emergency Preparedness and Regional Incident Management Training

SHA continued to increase the State’s ability to prepare for and respond to natural disasters and homeland security incidents by completing various emergency traffic plans and projects such as:

- Statewide Emergency Traffic Evacuation Plan
- Emergency evacuation traffic management plans for the Delmarva Peninsula
- Draft Final Transportation Emergency Management (Evacuation) Plan for the Eastern Shore. SHA also began to develop implementation plans to install traffic detection devices along Eastern Shore roads and to provide highway patrols during summer weekends. This use of Intelligent Transportation Systems (ITS) supports weather, evacuation, seasonal traffic, special events and safety issues in the rural parts of Maryland.
- The draft Transportation Emergency Management (Evacuation) Plans for the Baltimore Metropolitan Region (which includes Baltimore City, Anne Arundel, Baltimore, Cecil, and Harford counties) are also posted on the secure Baltimore Metropolitan Council website.

During FY 2007, SHA continued to provide National Incident Management System (NIMS) training to supervisors and emergency responders within the organization. More than 500 SHA employees are certified by the Department of Homeland Security. SHA participated with other emergency response agencies in a variety of preparedness exercises throughout the year including:

- The Statewide Pandemic Flu Exercise
- The Calvert Cliffs Nuclear Power Plant Graded Exercise
- National Capital Region Regional Response 2007 Hurricane Exercise, aimed at testing regional response coordination in the aftermath of a strong hurricane making landfall
- Delmarva Emergency Task Force Tri-State Hurricane Exercise. SHA provided GIS mapping support for a number of these exercises.
- The National Capital Region Operation Fast Forward III District of Columbia Evacuation Drill
- MDOT Winter Storm Exercise.

CHART Vehicle



Goal: Maintain a quality highway system

Highlights of our Accomplishments

Bucky Snyder of the Maryland State Highway Administration uses a pole to probe a clogged storm drain that caused rain water to spill across U.S. Route 220 near Cresaptown on Sunday morning.



Photo courtesy Cumberland Times-News

- Maintained 84% of pavement in acceptable ride condition despite double digit percentage increases in the cost of resurfacing.
- The number of structurally deficient bridges was reduced from 143 to 130, a 9% decrease since last year.
- SHA met the majority of our maintenance targets, despite lower real dollar financial resources and contract costs that increased significantly faster than inflation.
- Roads were cleared from snow and ice after winter storms three hours faster on average than SHA's business plan target in the 2006-2007 winter season.

Overview

SHA's roads and bridges are reaching the age where they are deteriorating faster than ever. SHA is actively pursuing an integrated asset management approach to preserving and maintaining the system. The first step, which started in earnest in FY 2007, was the development of a Maintenance Management System specifically designed for highway facilities. The Maintenance Management System is an inventory program to collect information about all roadway assets and associated features, ranging from the smallest traffic signs to the largest bridges and billions of square feet of pavements.

Responding to Winter Storms

According to customer feedback, SHA's ability to keep roads clear during winter storms is one of the most highly valued services provided and SHA's performance in this area consistently receives extremely high marks. SHA fought eight storms in central Maryland during the 2006-2007 winter seasons. The metro area winter storms totaled 22 inches of snow, sleet and freezing rain. In Western Maryland, SHA's Keyser's Ridge Shop fought 33 winter storms totaling 174 inches of snow, sleet and freezing rain. SHA's 28 maintenance shops reached bare pavement during winter storms, on average, within one hour and six minutes after the end of frozen precipitation. During FY 2007, the pounds of salt used per lane mile increased back to FY 2005 levels, primarily due to the number and severity of ice storms which use much more salt than snow events.

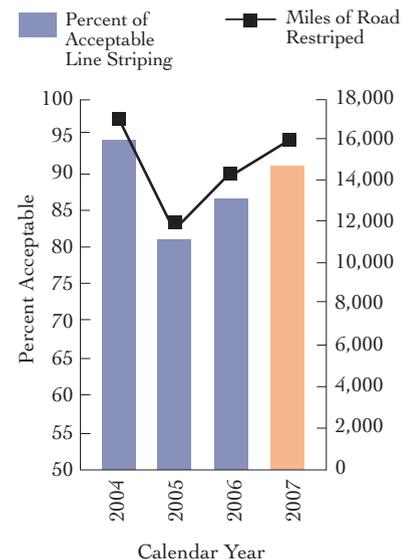
SHA also continues to maintain equipment so that it is available in good working condition at all times. SHA's initial target for this new measure was to sustain 98% availability of equipment. Beginning in January 2007, SHA consistently sustained 96% availability and reached a peak of 97%.

Road Maintenance Activities

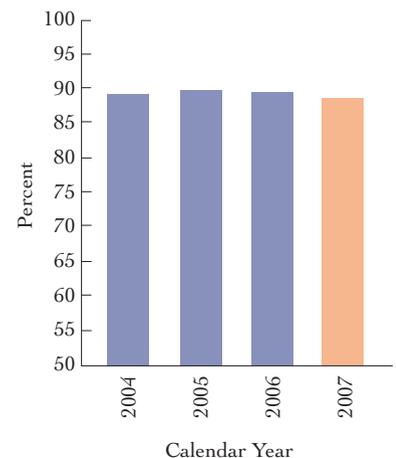
With the \$12 million increase in SHA's FY 2007 Maintenance Operating Budget, the overall expenditures per lane mile for specific maintenance activities increased about 15% from \$2,915 per lane mile in FY 2006 to \$3,358 per lane mile in FY 2007. The majority of the increased investment was spent on traffic safety items such as re-striping roadway lines, replacing guardrails and maintaining lights. SHA also made in roadside improvements such as drainage and litter removal. A complete review of the CY 2007 condition assessment reveals variation in the levels of service of the various maintenance activities. Specific accomplishments include:

- **Line Striping** – Statewide, the number of miles striped increased in the level of service by 4% over FY 2006.
- **Guardrail** – Approximately 11% more feet of guardrail was replaced compared to the prior year, with District 3, District 4 and District 5 showing substantial increases. Statewide expenditures per linear foot increased nearly \$1.50, primarily due to material cost. Still, the statewide level of service dropped to 3% below the 95% target.
- **Highway Lighting** – Overall the percentage of functioning lights has remained relatively the same from FY 2006 to FY 2007. Statewide lighting performance trends continue to decline due to major capital investment needs, with the FY 2007 level of service failing to meet the 90% target by 1.6%.
- **Brush and Tree** – Statewide, SHA had a 40% increase in the amount of roadside miles trimmed in comparison to the prior year. Unfortunately, this effort still only represents 2.8% of the highway system. Five out of seven Districts showed increases in expenditures per lane mile due to the type of trimming completed, specifically work that addresses canopies and long-term growth. Overall quality statewide was still below the 80% target by 6.4%.
- **Mowing** – Statewide, there was a slight decrease in the amount of acres mowed from the prior year due to lengthening the time between mowing cycles and allowing more acres to return to their natural state. Drought conditions also allowed resources to be shifted to other activities.

Line Striping



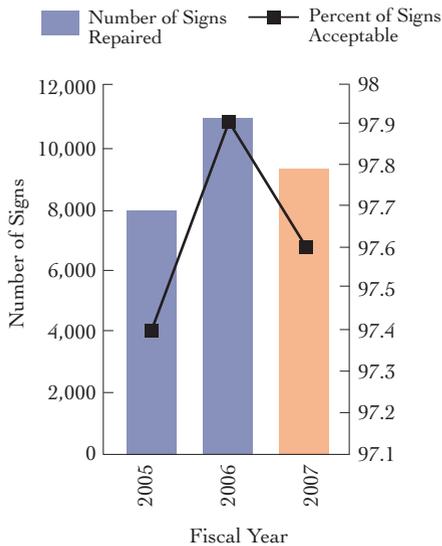
Percent of SHA Roadways with Acceptable Roadway Lighting



Mowed SHA Road



Roadway Signs



Preserving Pavement Condition

The primary pavement system preservation goal continues to be maintaining state roadways in acceptable ride quality condition. This is done by creating a plan to maximize the amount of the highway system that is in good or fair condition given the funds that are available. Even with the increase in the cost per lane mile for resurfacing, we are still hovering just 1% below our business target.

Efforts in FY 2007 focused on improving the quality of pavements at the time of construction. Working in partnership with the pavement industry, SHA modified the construction pavement specifications to be more attainable without compromising quality. These changes and work efforts to increase awareness of good sound construction practices improved the percentage of new pavements that met construction quality standards by 5%.

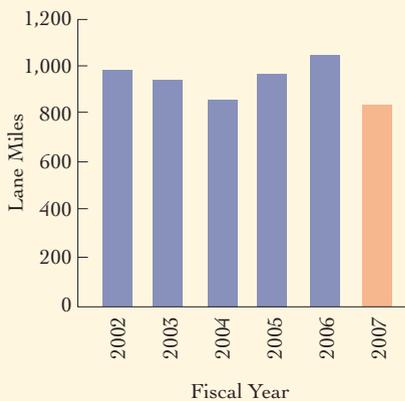
A resurfacing program is developed each year to reach specific objective goals for lane-miles improved and benefit achieved. Over the last 5 fiscal years, SHA has averaged resurfacing 930 lane-miles. Increases in construction and material costs have begun to dramatically impact the number and cost of projects and lane-miles each district can resurface. In FY 2007, each district completed 20 to 30 resurfacing projects, for an average of 120 lane-miles per district.

SHA worker on a resurfacing project

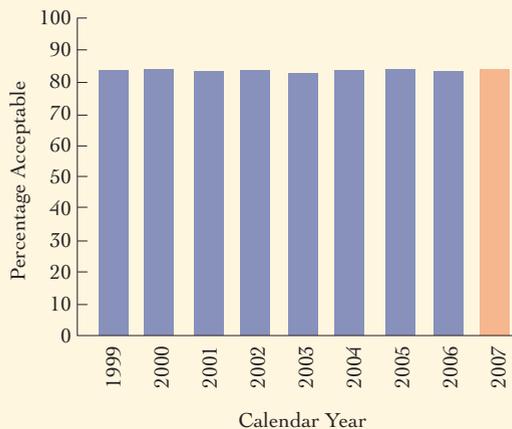


The composite maintenance index is a single score made up of all of SHA's maintenance activities.

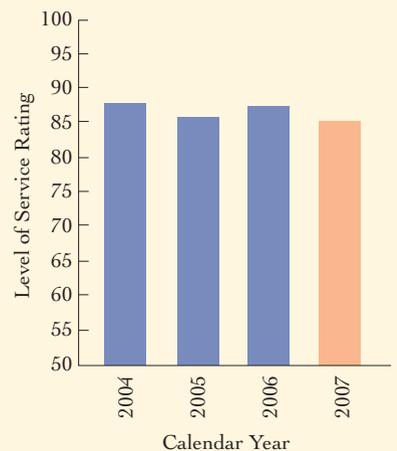
Pavement Rehabilitation



Ride Quality on SHA Roads



Composite Maintenance Index for Entire SHA Network



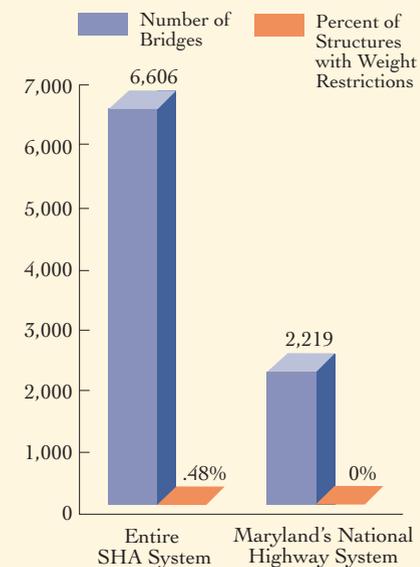
Bridges

The tragic I-35 bridge collapse in Minnesota has brought new light to the structural condition of our nation’s bridges. In 2006, SHA maintained 2,584 bridges across the state. To ensure that they are safe, SHA performed 1,400 inspections during the year and met federal guidelines for timeliness with 89% of inspections completed within one month of the due date and 100% completed within four months of the due date.

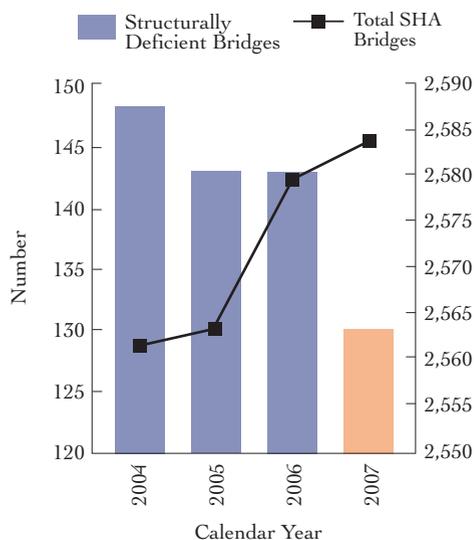
Of these bridges, SHA has been able to reduce the number that are categorized as structurally deficient to 130 with 24 of those in various stages of repair/construction. The FY 2007 bridge conditions are:

- 100% of the bridges on the National Highway System are safe for all legally-loaded vehicles. This includes trucks up to 80,000 pounds that transport freight.
- 99% of all SHA bridges can safely carry legally-loaded vehicles up to 80,000 pounds.
- 5% of SHA bridges are designated as structurally deficient, which is an early warning sign for engineers to prioritize funding to repairs or to begin the process to replace a bridge.

2007 SHA Structures Capable to Carry Legal Loads



Structurally Deficient Bridges



Highways for LIFE Grant Awarded

The “Highways for LIFE” program is a Congressionally-authorized initiative of the Federal Highway Administration to advance innovative methods to create longer-lasting highway infrastructure quickly, efficiently and economically. SHA was awarded \$800,000 under the “Highways for LIFE” program for the replacement of two bridges: MD 28 over Washington Run and MD 450 over Bacon Ridge Branch.

Weems Creek Bridge – Pier Elevation



*College Creek Bridge –
Aesthetic Gateway Branch*



*I-83 Over NCR Trail –
Completed Bridge Over NCR Trail*



The Following bridge projects were completed in FY 2007:

The Replacement/Rehabilitation of Bridges on MD 70 (Rowe Boulevard) over Weems and College Creek: This award-winning project serves as a gateway to historic downtown Annapolis across the waterways of College and Weems creeks. This project involved replacing the Weems Creek Bridge and rehabilitating the College Creek Bridge. The existing bridges were more than 50 years old and the new bridges were designed to complement the historic colonial city, urban residential neighborhoods and two scenic waterways.

Freeland Road Over I-83: The purpose of the project was to replace deteriorated structurally-deficient bridge. The new bridge was completed ahead of schedule, in only five months, because the road was closed to all traffic and complete, well-prepared plans allowed the contractor to hit the ground running.

I-83 OVER Northern Central Railroad (NCR) TRAIL: This project replaced the deteriorated structurally deficient bridges that carried northbound and southbound I-83 over the NCR Trail and Little Falls. The bridges were completed using a temporary bridge that was placed in the median area of I-83 to carry traffic while construction was underway. This process allowed all lanes of traffic to be accommodated at all times and provided a safe environment for both motorists and construction workers.

I-68 Bridge Deck Overlays: SHA completed a project to overlay the bridges on I-68 from West Virginia to LaVale. There were 24 bridge decks and the cost was approximately \$10 million. SHA expects this effort will add at least 20 years to the life of these bridge decks.

MD 936 Over Neff Run: This project replaced a deteriorated structurally-deficient bridge that frequently flooded. The road was closed and traffic detoured so that the new bridge could be completed in a single phase quickly and safely. The bridge was designed with aesthetic enhancements to be compatible with a recently completed streetscape in the Town of Midland in Allegany County.

MD 90 over Assawoman Bay and St. Martins River: The pier footings for these two bridges needed strengthening. This project included sealing cracks in the existing footings and constructing structural concrete caps on top of the pier footings. There was a sense of satisfaction when SHA was able to correct a deficiency in the original bridge footings and the bridge was made safe for the traveling public for many years to come.

MD 450 Bridge over the CSX Railroad: SHA completed this \$6.9 million bridge replacement in the heart of Bowie in December 2006. The original bridge was constructed in 1926 and had outlasted its useful life. The new bridge has two lanes for traffic and two nine-foot wide shoulders that can be used as bike lanes. The new bridge has an expected lifespan of about 80 years.

MD 936 Over Neff Run (Before)



MD 936 Over Neff Run (After)



MD 90 Assawoman Bay and MD 90 over St. Martins



MD 450 Bridge over CSX in Bowie



Goal: Improve the effectiveness of managing our resources and projects

Highlights of our Accomplishments

*Construction Career Day in
Waldorf, Maryland*



- SHA was recognized as one of the top five agencies in the State of Maryland for making timely payments on about 60,000 invoices a year.
- Through June 7, 2007, SHA Maintenance expenditures were 98.7% of the Fiscal Year 2007 budget, which included an anticipated winter expenditure amendment. The capital expenditures slightly exceeded the total budget by 3%.
- SHA delivered a \$1 billion capital program, the highest ever in SHA history.
- For the fiscal year, 78% of our major projects were advertised to start construction within 30 days of the originally established date.
- SHA decreased the number of annual work injury claims to below 300 for the first time in ten years and increased the same-day reporting time to the Injured Workers Insurance Fund by 15%. However, SHA remains vigilant as the days of work lost due to injuries fluctuates from year to year; especially when workers are injured in car crashes while working out on the road.

Workforce Planning and Development

Workforce Resource Center is an internal website created to provide a one-stop interface with access to resources that assist SHA employees and managers in career and workforce planning activities. It has a Classification Guide with online classification specifications and career mobility options, a Manager's Toolkit for workforce and succession planning activities, links to current job announcements and the Organizational Development Division's web-based Student Learning Center and other training and development resources.

SHA's Workforce Planning and Development Model includes five key areas:

1. Business Planning and Performance Management

SHA leaders worked throughout FY 2007 to develop a new four-year business plan. The goals, objectives and performance measures are the guide for identifying resource and workforce planning needs. SHA then piloted a performance-based appraisal system that links managers' performance to business plan performance measures. This pilot is led by SHA on behalf of the Department of Transportation for 174 SHA management positions.

2. Strategic Staffing

- In FY 2007, recruitment and hiring was an important issue to SHA's Senior Managers. SHA's recruitment and retention efforts increased to recruit civil engineers using a Transportation Engineer hiring bonus and referral bonus, an increased Internet presence and a "rate and refer" program for on-campus recruiting.

- In addition SHA recognized the value of and supported internship offerings:
 - SHA recruited 125 students through Maryland colleges and universities and from specialized vocational programs and work studies.
 - The Maryland TRAC Program (AASHTO’s Transportation Research Activities Centers) increased recruitment opportunities by aggressively seeking partnerships with Maryland high schools and colleges.
 - SHA partnered with Johns Hopkins University (JHU) and signed a Memorandum of Understanding to promote TRAC, and in return offer internships through JHU’s Engineering Innovation program for high school and college students interested in engineering.
 - SHA cultivated relationships and outreach efforts with organizations such as the Black Engineers of the Year, Catonsville Community College and Morgan State University, who provide SHA the opportunity for additional student outreach.
 - SHA recruited college and high school students who have demonstrated interest in transportation and engineering careers to work as interns in SHA.
 - SHA co-sponsored construction career days at 14 schools with 430 students in Charles County. SHA career days offer students the opportunity to learn about actual engineering careers.

3. Knowledge Management

In FY 2007, SHA piloted the “Community of Practice” concept using an internal website. Other pilot projects and efforts to organize and catalog information also began. These efforts are associated with areas that are at high risk for losing expertise due to recent and impending retirements. Also, a knowledge mapping example was begun to support long-term plans for a Customer Call Center. This will be used by employees to determine the most appropriate resources for information and responses to inquiries.

4. Succession Planning

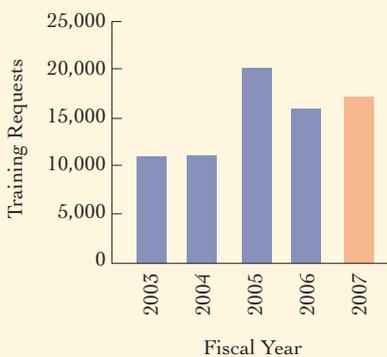
In FY 2007, a Succession Planning and Development Program was implemented to preserve skill capacity for Highway Maintenance Shop Management positions:

- Completed a competency model, skill assessment tool and development activity model targeting Highway Maintenance Shop Management
- Used skill assessment feedback to create a customized Professional Development Plan for each candidate.

5. SHA University

During FY 2007, the concept of SHA as a Learning Organization was embraced. The learning organization looks at ways to integrate employee development, performance, and talent management into one package to help make an employee effective from hire to retire. A greater emphasis was placed on managers, at all levels, as coaches to guide employees' learning and development to match the business needs of the organization.

Number of Training Requests Fulfilled



SHA University Model

SHA UNIVERSITY

Executive Committee

College of Operations Operating Committee	College of Administration Operating Committee		College of Planning & Engineering Operating Committee
Training Committee	Training Committee		Training Committee
Materials & Technology	Finance	Human Resources	Planning & Preliminary
Construction	Procurement	Performance Excellence	Engineering
Maintenance	Audits	Training	Highway Design
Traffic & Safety	Policy & Research	Administrative Support	Bridge Design
.ITS/Chart	Communications	Leadership	Environment
	Information Technology	Equal Opportunity	Real Estate
			Project Management

In FY 2007, SHA established curricula for critical business functions of transportation engineering, facility maintenance technician, and transportation engineer technician. Additional classification curricula such as procurement and information technology were also identified. In total, employees, supervisors and managers completed numerous learning events to sustain technical and management skills. Some examples of training completed in FY 2007 include:

- Provided Americans with Disability Act Awareness (ADA) Training to 1,305 employees.
- In coordination with the Office of Homeland Security and the Maryland Emergency Management Agency, the Office of Maintenance trained 424 people in the use of the National Incident Management System.
- Training was provided to 1,722 SHA employees on workplace related safety topics.

- In a new partnership with Maryland Occupational Safety and Health, six safety training classes were conducted for District Managers.
- SHA coordinated with the Maryland State Ethics Commission to deliver training to 108 State Highway Administration employees. The training covers all areas of ethics laws but focuses on conflict of interest and standards of ethical conduct.

Stepping into Success! Program – Class of 2007



To remain current with today's environment, SHA redesigned the curriculum for its Leadership Education and Development Program (LEAD), a two-year leadership development program for selected middle manager, and the New Supervisors Training Program. In FY 2007, the major accomplishments in these programs included:

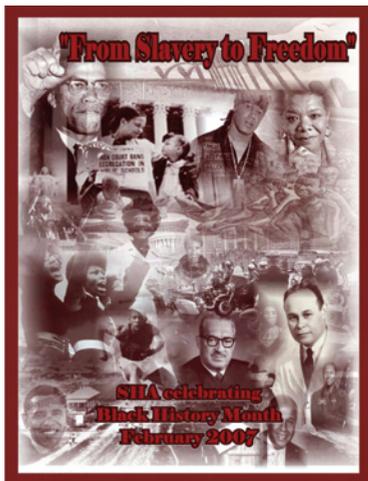
- 105 supervisors and managers completed the LEAD training program.
- 15 engineers successfully graduated from the Graduate Engineer Training Program.
- SHA celebrated the first graduating class of Stepping Into Success. 18 administrative, paraprofessional and professional employees graduated from the Program. In addition, 26 new participants were enrolled for the class of 2009.
- Eight mid-level managers completed the Advanced Leadership Program, which is a two-year developmental leadership program for managers.
- District 2 graduated 14 employees from their Highly Effective Leadership Program.
- The Office of Real Estate hosted 27 Real Estate specific classes to address immediate business needs and enhance employee skills.
- The Office of Construction hosted the Construction EXPO 2007 Conference and offered 29 training classes.

SHA employees at the March 2006 Women's Day Conference



Diversity Training, Cultural Awareness and Development Initiatives

SHA realizes the greatest asset to the organization is its diversity. SHA strives to provide an inclusive workplace by subscribing to the philosophy that the organization should mirror the customers that it serves. Through diversity awareness training SHA has strengthened its efforts to further promote inclusion. Also, SHA holds the annual Diversity Awareness Training Conference that qualifies as completion of the non management Diversity awareness training requirement.

SHA Celebrates Black History Month

In FY 2007:

- 528 management and non-management employees were trained in Diversity awareness.
- 208 employees participated in district wide diversity awareness training classes in an effort to provide employees access to training.
- SHA held a women's day conference at the Baltimore World Trade Center.
- 49 new managers and supervisors were trained on Managing Diversity at SHA through leadership training programs.
- 328 SHA employees attended the ninth annual Diversity Training Conference entitled "Breaking Barriers in Principle and in Practice" that included cultural exhibits, dynamic speakers and four diversity awareness workshops.
- The first annual SHA Diversity Summit was held and 280 employees participated in the interactive roundtable "town hall" discussions.
- The Diversity Advisory Board met quarterly to discuss the promotion of diversity and inclusion strategies for SHA, and developed a new Vision and Mission Statement for diversity in the organization. The board's 27 members represent all districts, offices and job classifications of the organization.

*Doug Simmons and Wesley Mitchell –
Mentoring Partners*



Mentoring

SHA's mentoring program supports its succession planning initiative and is instrumental in developing, recruiting and retaining employees. Relationships built in mentoring partnerships increase organizational knowledge, SHA cultural understanding and leads to the development of skills that are necessary for promotions. In FY 2007, SHA's major accomplishments in this area include:

- The SHA Mentors Program was launched in January. 42 mentoring partnerships were developed within SHA as a result.
- Approximately 220 employees have been identified in formal and informal mentoring relationships.

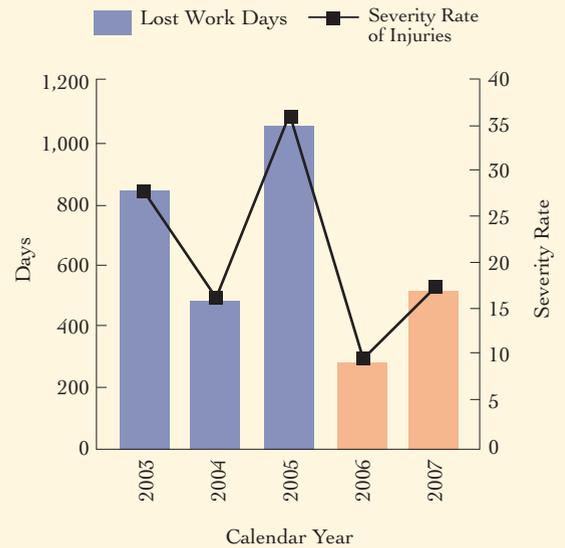
Wellness and Workplace Safety at SHA

SHA realizes the importance of a healthy workforce. The Wellness and Work Life Program at SHA assists employees with tools to make good decisions regarding their health. In October 2006, the Influenza Prevention Awareness and Vaccination Campaign was coordinated SHA-wide to give reasonably priced vaccines to SHA employees and to provide everyone with information on prevention.

SHA has an excellent history of keeping workplace injuries down. In a business where injuries on the job can involve serious car crashes, it is an important issue. In FY 2007, SHA reduced the number of injury claims by 5%, the rate of recordable incidents occurring by 3% and the frequency of “lost time” cases by 14%. However, the incidents that did occur were more severe in nature than they were the previous year. Overall SHA was slightly above (by 1%) the target for the maximum severity rate⁶ that we strive to achieve. Specific initiatives completed in FY 2007 included:

- Implementing an agency-wide Personal Protective Equipment Program
- Revising, reprinting and distributing SHA’s Workplace Safety Guidelines
- Developing an SHA Chainsaw Training Program that incorporated safety guidelines
- Successfully conducting a safety management educational training conference.

Lost Work Days Due to Injury



⁶ Severity rate describes the actual impact that workplace injuries have at SHA. It is calculated by dividing the number of lost work day per 100 employees by the total hours worked by all employees at SHA.

Supporting and Reaching Out to Minority, Disadvantaged and Small Businesses

SHA reaches out to businesses, particularly women and minority owned businesses, to share information about the products and services that SHA uses and needs. Because the pool of certified minority businesses that operate in the highway construction industry is limited, SHA also provides MBE certification information and encourages those businesses that are not MBE certified through MDOT to consider being certified. SHA offers business resource information/literature. Many of the small businesses are unaware of the information, programs, and training available to them. SHA sponsored or attended the following outreach events in FY 2007:

1. Eighth Annual African-American Business Forum
2. Twelfth Annual Congressman Albert R. Wynn’s Fourth Congressional District Procurement and Business Expo
3. City of Baltimore Procurement and Outreach Fair
4. Annual federal government Offices of Small and Disadvantaged Business Utilization Procurement Fair

5. Maryland District of Columbia Minority 25th Annual Business Procurement Conference
6. Southern Maryland Small Business Seminar
7. Congressional Black Caucus Conference
8. Maryland Judiciary/Anne Arundel Community event for small and minority businesses interested in working with the State of Maryland
9. MBE Workshop St. Mary's College
10. Baltimore City Unity Day
11. SHA District 3 Truckers Networking Event to assist truckers interested in the winter snow removal operations
12. Maryland Public Purchasing Association Conference
13. Government Procurement Fair
14. Four DBE outreach meetings for the Intercounty Connector project

Percent of Invoices Paid on Time



Financial Management

- SHA Maintenance expenditures were 98.9% of the FY 2007 budget, which included an anticipated winter expenditure amendment. The capital expenditures slightly exceeded the total budget by 3%.
- The administrative and general expenditures were contained below the FY 2007 budget target.
- SHA, in partnership with Maryland Transportation Authority, the Secretary's Office, and the Federal Highway Administration, received approval for the Intercounty Connector Initial Financial Plan. This allowed the project to receive authorization to proceed.
- SHA slightly exceeded the target for paying over 60,000 invoices on time each year and continues to maintain consistent high performance in this area.
- SHA led the automation of the Maryland Department of Transportation's payroll system for 8,300 employees by implementing an electronic time entry system that allowed the Department to streamline bi-weekly payroll. The new time entry system reduced data entry, eliminated the need for couriers, reduced the need for paper, and decreased the error rate in time reporting.

Project Delivery

The delivery of quality projects on time and within budget is important to SHA:

- For the fiscal year, 78% of our major projects were advertised to start construction within 30 days of the originally established date.
- SHA delivered a \$1 billion capital program, the highest ever in SHA history.
- The average time to process monthly vouchers was the lowest ever at 1.25 days, compared to a 1.5 day average the previous year.
- The internet is now being used to transfer estimates, and process change orders and additional work requests internally. This upgrade significantly improved the file transfer rate by about 90%, saving time and money.
- An electronic system was put in place to track errors and omissions in construction plans.
- SHA successfully kept the amount of change orders on construction contracts down to 4%, which is the lowest in several years and well below the 8% target.

Performance Excellence at SHA

Woven throughout the pages in this report is the story of SHA's quest for performance excellence. SHA's vision for performance excellence is to achieve "Excellence in All That We Do," derived from the Malcolm Baldrige Criteria for Performance Excellence, but tailored into the five vision areas shown in bold below.

Accomplishments in the **Leadership** area include the application of SHA's leadership competencies in promotional decisions, performance appraisals for managers, and SHA-wide leadership development programs. In FY 2007, the Supervisory Training Program was revised based on these competencies and supervisory skills that can be immediately applied. SHA also took the lead within the Department of Transportation to implement performance plans and pilot performance-based appraisals. Leaders at SHA completed an agency-wide internal performance excellence assessment and developed action plans to address five areas of improvement. Finally, SHA's employee survey was enhanced to provide rapid results that were communicated to the entire workforce setting the stage for groups of managers and employees to work together to improve.

In **Business Planning and Performance Measurement**, SHA published a new business plan that measures the key performance areas critical to SHA for the next four years. Key Performance Area Councils comprised of a cross-section of SHA stakeholders worked collaboratively to develop the objectives in this plan. Performance results from the business plan are reviewed bi-weekly to assess performance and make adjustments. In individual offices and districts, plans were also updated and are now being linked to managers' individual performance plans. The Senior Management Team also prepared a list of core outcomes that are important to SHA to support Governor O'Malley's StateStat program. In order to meet the challenge of regularly reporting performance data, SHA also implemented a data reporting process that clarified accountability within SHA.

Process Improvement and Management, SHA has moved forward with identifying process improvement needs and forming work teams. Process improvements are being identified through internal self-assessments, performance results, external customer surveys, the employee satisfaction survey and policy direction. The key to success is engaging teams to work on solutions. There have been three process improvement teams working at an SHA-wide level: Sound Barrier Process Team, Third Party Agreements Team, Recruitment and Hiring Team.

Workforce Planning and Development is a high priority at SHA. The goal is to enable every employee to develop to his or her potential. For a list of FY 2007 accomplishments, refer back to the chapter on Organizational Effectiveness in this report.

Customer Communications, Service and Satisfaction is an area that is receiving increasingly more attention from our external stakeholders and thus more emphasis within SHA. The Customer Communication, Service and Satisfaction chapter of this report outlines in detail what happened in this area.

Goal: Develop and maintain Maryland State highways in an environmentally responsible manner
Highlights of our Accomplishments

- Continued to maintain 99% compliance with erosion and sediment control requirements during construction
- Met all National Pollution Discharge Elimination System (NPDES) requirements
- Expanded environmental compliance program with proactive training, inspection and tracking systems to include SHA construction projects in addition to maintenance shops. In excess of 900 people were trained during the year
- Initiated agency-wide efforts to reduce energy and paper use, increased use of alternative fuels and expanded use of recycled materials.
- Planted 5,350 trees over reforestation requirements exceeded wetland mitigation requirements.

Eastern Shore Sunset



Enhancing the Environment and Meeting SHA's Environmental Commitments

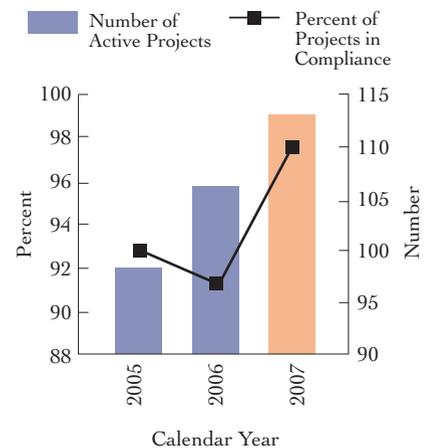
SHA's commitment to environmental stewardship is far-reaching, from planning new projects to constructing roads and maintaining all SHA facilities. Environmental Stewardship is one of the key performance areas identified in SHA's Business Plan, and focuses on the natural environment (wetlands, streams, wildlife, water quality, etc.) as well as the human environment. SHA approaches environmental stewardship strategically, with an agency-wide focus to enhance Maryland's communities and environment.

Environmental Enhancements as an Integral Part of Mega-Projects

Through the Woodrow Wilson Bridge and Intercounty Connector projects, SHA continues to demonstrate national leadership in streamlining the delivery of projects through collaboration to produce excellence in environmentally sensitive design, comprehensive environmental mitigation and innovative construction techniques. Both of these projects have state-of-the-art, proactive environmental management systems to ensure that their environmental commitments are met.

As part of the Woodrow Wilson Bridge project, a coalition including the Maryland State Highway Administration and Federal Highway Administration, Maryland National Capital Park and Planning Commission, Prince George's County, the District of Columbia, the National Oceanic and Atmospheric Administration, and the U.S. Environmental Protection Agency is in the final stages of completing an important wetland mitigation project on the shores of Anacostia River.

Percent of Active SHA Construction Projects in Compliance with Environmental Stewardship Commitments



Anacostia River Wetland Mitigation Project

This project:

- Created 34 acres of wetlands and woodlands, increasing the tidal wetlands on the shores of the Anacostia River by 20%
- Reconsolidated 100,000 tons of previously placed and unregulated trash and debris on the 50-acre site
- Restored 919 feet of stream
- Provided 2,177 feet of plantings to eliminate a major gap in the Little Seneca Creek Greenway
- Created fish reefs in the Chesapeake Bay by transporting and placing debris from the demolition of the old bridge into an appropriate location for fish spawning

New Llewellyn Fields Soccer Field

The ICC Environmental Stewardship and Mitigation projects began construction with the first wetland mitigation project in the floodplain of Northwest Branch and the construction of parkland.

- Constructed the first phase of an ultimate park plan for Llewellyn Fields that includes a soccer field, which was made available for youth leagues by the fall 2006 season
- Completed a new 4.5 acre wetland system along Northwest Branch

This project also includes incentives to encourage the contractor to meet a high standard of performance on compliance with environmental stewardship expectations.

New Northwest Creek Wetland

Improving Water Quality and Protecting the Chesapeake Bay

SHA's contributions toward restoring wetlands and streams are important to the overall health and restoration efforts for the Chesapeake Bay. In fact, it is intended to compensate for loss of wetlands and the degradation of streams in the Chesapeake Bay watershed. Accordingly, SHA created 50 acres of wetlands during FY 2006 towards its overall goal to establish 200 acres by FY 2010. In addition to this, several new mitigation projects were identified in FY 2006 and are currently being designed.

- In FY 2007, SHA invested \$5.7 million in capital expenditures for National Pollution Discharge Elimination System (NPDES) water quality improvements. In fiscal year 2007, there was a total of 54 NPDES projects identified for completion. In addition to its own investment, SHA also partnered with other agencies on improving 11 watersheds using additional investments through the Transportation Enhancement Program.

SHA's water quality activities also include regular maintenance of storm water management facilities (such as ponds that collect and filter water).

Storm Water Management Pond Outfall Stabilization

SHA is also required to meet federal and state guidelines for National Pollution Discharge Elimination System (NPDES) on all of its roads (known as NPDES compliance). SHA maintains high standards for NPDES and achieves 100% compliance.

Sediment and Erosion Control

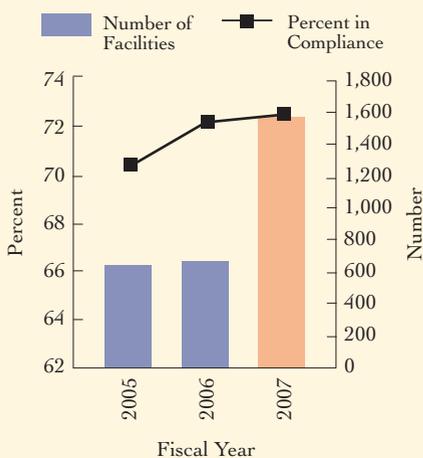
In FY 2007, SHA established guidelines for self-inspection of all SHA projects to ensure compliance with the Maryland Department of Environment’s Erosion and Sediment Control regulations. Achieving 100% compliance can be a challenge due to the complexity of the construction project and weather. SHA tracks the frequency of inspections to ensure a two week inspection period.

SHA continues to be a leader in the Green Highways Partnership, an effort to promote integrated environmental solutions such as watershed improvement, ecosystem management and recycle/reuse. This partnership includes federal agencies, several states, and the private sector. In April 2007, SHA and the Environmental Protection Agency hosted a two-day Green Highways Forum that focused on the US 301 Waldorf Area Transportation Project. This project has become the national model for the Green Highways Partnership in identifying and incorporating collaborative environmental solutions during project development.

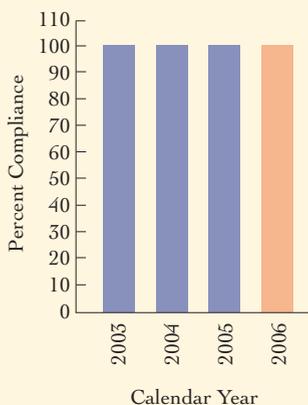
SHA Storm Water Management



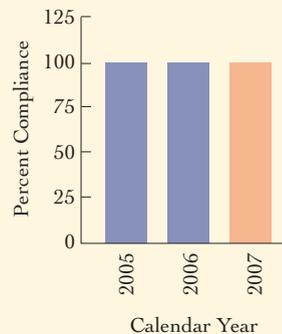
Storm Water Management Facilities



Erosion and Sediment Control Compliance



NPDES Compliance



Wildflowers Along Highway*Casselman River Bridge Preserved Today as a National Historic Landmark*

Landscaping and Highway Beautification

Highway beautification involves improving the appearance of SHA highway network through landscaping, community planting, wildflowers and reforestation programs. SHA works with communities to implement projects along state highways to enhance entrances to towns and neighborhoods.

- Completed 18 Partnership Planting projects, including four Eagle Scout projects
- Planted 125 acres of wildflowers across State highways. The program continues to receive many positive calls and letters from travelers
- Completed more than 30 landscaping projects along state highways

Environmentally Friendly Fuel Usage

SHA is committed to reducing fossil fuel dependence and improving air quality through the use of alternative and low emission fuels.

- Most SHA fuel locations are now distributing bio-diesel; 89 % of all diesel used by SHA is bio-diesel. Of that, 98 % of the diesel is ultra low sulphur variety that significantly reduces air pollution.
- Currently, 75 % of SHA fuel for gasoline-powered vehicles utilize ethanol mixed fuel (E10). Efforts are being made to acquire additional vehicles that are capable of utilizing 85% ethanol (E85) fuel.

Scenic Byways and Recreational Trails

In January 2007, the Chesapeake Country National Scenic Byway became a connecting route for the National Park Service's Chesapeake Bay Gateways Network (CBGN). The new connector route starts at the Chesapeake and Delaware Canal, goes through Chestertown, Eastern Neck National Wildlife Refuge, Centreville and ends at Stevensville. This route provides public access to, and interpretation of the natural, cultural, historical and recreational resources along the Chesapeake Bay area and rivers of the Bay watershed. This is the second Maryland Byway that has become a CBGN connector route.

SHA hosted the National Scenic Byways conference in May 2007 and unveiled a map and book of Maryland's new system of 19 designated scenic byways. In FY 2007, SHA programmed \$675,000 in National Scenic Byways funds from the Federal Highway Administration for 11 projects. SHA also awarded and programmed \$1.04 million in National Recreational Trails Funds for various projects in partnership with projects' sponsors.

Sound Barrier Program

Initiated in the late 1970s, SHA's Retrofit Sound Barrier Program addresses highway noise reduction for communities that were built before the construction of the adjacent state highway. Sound barrier projects completed in FY 2007 include:

- I-95 in Prince George's County three communities benefited from this project: Powder Mill Estates, which benefited 7 benefiting residences; Knollwood, which benefited 31 residences and Hollywood Extension, which benefited 25 residences.
- MD 197 in Laurel the residents of Contee Road/Willow Lakes Apartments benefited. This project replaced a barrier that was constructed in 1978.
- US 29 in Howard County there were two projects. The Guilford Downs project benefited 21 residences and the Atholton Manor project benefited 28 residences.

Recycling and Anti-Litter

- In 2006, SHA recycled 3,845 tons of regulated recycling material, and 47,000 tons of other material such as anti-freeze, asphalt, concrete, construction and demolition debris, industrial fluids, landscaping debris, scrap automobiles, scrap metal, sewage sludge, tree stumps and more.
- SHA's recycling rate is 54%, consistently exceeding the statewide goal of 20%.
- Promoted Keep Maryland Beautiful Anti-Litter Campaign through public service announcements.
- Promoted SHA's Earth Day, Adopt-A-Highway and Sponsor-A-Highway programs to help remove litter and roadside debris. Adopt-A-Highway and Sponsor-a-Highway included volunteer and corporate sponsorships to remove litter from 1,300 miles of state highways.
- Picked up 21,000 truck loads of litter.

Percent of SHA Roadways with Acceptable Litter Levels



Goal: Provide services and products to our customers that meet or exceed their expectations

Highlights of our Accomplishments

SHA town ball meeting display, another example that shows the lengths we take to ensure that the projects we deliver meet and exceed our customers' needs.



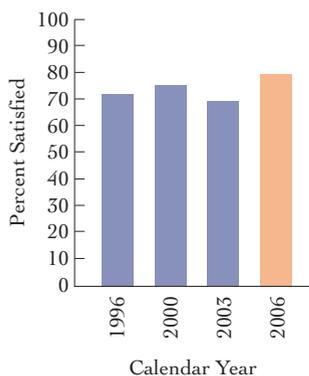
- SHA received high approval ratings for snow removal which ranked as third most important service in the eyes of our customers
- Increased the percentage of projects using partnering to 92.6%
- Developed and piloted SHA's new Customer Care Management System (CCMS)
- Established a stakeholder advisory group on compliance with the Americans with Disabilities Act

Overview

In light of more than a decade of significant employee downsizing, SHA continues to place its customers in the forefront of everything that it provides: good highways and services that meet or exceed our customers' expectations. Results from a recent survey indicate that customers rate SHA's performance above average for "maintaining roads" and "clearing roads after crashes" and consider these the agency's two most important services. Half of the people surveyed gave SHA an "A" in removing snow from roads.

In FY 2007, SHA conducted a training conference on diversity that aimed at teaching employees how to better address the needs of Maryland's diverse population. SHA also held a new agency-wide customer week that focused on teaching our employees how to give better customer service. SHA included new customer-focused business plan goals, objectives and strategies in the agency business plan.

Customer Satisfaction with SHA



These figures are based on the % of Marylanders who rate SHA with an "A" or "B".

External Customer Survey

One clear result of the survey is that SHA's dedication and skill in handling snow removal came across with flying colors! It was SHA's highest rated activity, with 87% of respondents rating SHA "B" or better. Snow removal is also the third most important function SHA performs according to this survey. It is a critical activity to sustain.

According to survey respondents, the second most important activity SHA performs is maintaining roadways. Sixty-five percent of the survey respondents rated SHA as "B" or better in roadway maintenance. The majority of comments indicate that customers respond based on issues related to the ride quality of the road and the length of time it takes until a road is made smooth. Other areas where SHA scored well are:

- Overall roadway features such as lights, guardrails, signs
- Signs that show directions, regulations and information

Some other topics that came up consistently in the survey as areas that are important to drivers and need more attention were:

- Providing roadside emergency assistance
- Removing debris and litter from roads
- The amount of time it takes to respond to customer concerns
- Traffic lights and passing/turning lanes at intersections

Some quotes from our customers:

“Maryland roads are better than anywhere I’ve been.”

“(SHA is) Very effective and efficient.”

“(I am) Very well satisfied, I can see where our tax dollars go.”

Addressing the areas that need improvement will take some time. Many of the strategies SHA needs to implement were already included in SHA’s business plan. The survey helps SHA focus on the ones that are most important to its customers such as:

- Increasing funding for preservation of pavements
- Implementing SHA’s Litter Control Plan
- Implementing a 511 Roadway Information System and a 311 Customer Call System
- Improving signal timing to reduce delay for drivers

SHA’s I-95 Roadway Rest Areas

Some of SHA’s most visible contact points with drivers are the rest areas it owns and maintains. Satisfaction with these rest areas is surveyed on a regular basis and translated to action when repairs and improvements are needed.

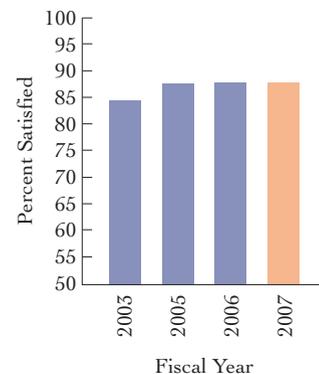
Customer Care Management System (CCMS)

In FY 2007, SHA conducted research on a Customer Relations Management System (CRMS); the agency’s leadership team visited Baltimore City’s 311 call center and submitted budget requests for an SHA call center and CRMS of our own. In the meantime, a customized CCMS was rolled out in two pilot phases, becoming an SHA-wide operational pilot on July 30, 2007 (within 6 months of the original inception). CCMS is being used by 25 SHA offices and districts. The system allows employees to route specific customer requests to the appropriate work unit, track responses and make sure the needs of SHA’s customers are being met in a timely and effective way. A CCMS user’s group was formed and meets monthly to develop standard operating procedures and future system enhancements and resolve knowledge management issues.

SHA Celebrates 100 years of Customer Service



Customer Rest Area Rating



These figures are the percent of customers who rated SHA rest areas along I-95 as an “A” or “B”.

*Context Sensitive Solution for Maryland
Historic National Road Route 169*



*US 50 Crossing Public Meeting – Town
Hall Meeting*



Community Involvement and Context Sensitive Solutions on SHA Projects

Context sensitive solutions are projects where a community is involved during the entire delivery process of a project. The community's needs are evaluated during all phases of project development, from planning through construction.

SHA holds regular public and project focus group meetings, and uses a variety of other techniques to involve communities in project decision-making. Some examples are:

- During the bridge replacement in Perryville on MD 7, the road was closed and a detour was in effect. SHA engineers attended regular town meetings in Perryville. They updated the town on the work being performed, the schedule in coming months and the status of the overall contract until the time for re-opening to traffic. At the end of the project the town wrote a letter to SHA in appreciation.
- SHA's District 3 Office hosted an outreach event with the municipalities from Prince George's County.
- The Bel-Air Streetscape design-build team, made up of representative from several SHA offices, participated in a series of meetings with the Town of Bel-Air for the MD 924 Streetscape project. This included the Town of Bel-Air Street Fest and separate meetings with Bel-Air Alliance to discuss issues unique to merchants.
- Numerous public meetings and hearings were held for projects in the planning phase such as the US 1 Corridor Improvement Strategy in Prince George's County, US 301 study at Waldorf in Charles County, the MD 175 study in Anne Arundel County and the US 15 study at Monocacy Boulevard in Frederick.

Advisory Committees

Americans with Disabilities Act (ADA) Advisory Committee

The ADA Advisory Committee was established to provide multi-disciplinary guidance from the stakeholder perspective for the implementation of Maryland SHA's ADA program. One of the aims of this group is to increase public awareness and involvement in support of SHA's efforts to meet ADA requirements. In FY 2007, some of our accomplishments include:

- Conducted ADA awareness training for 1,161 SHA employees (including contractual and temporary employees).
- Held public meetings to raise ADA awareness among local governments and to inform them about how to evaluate their roads for ADA compliance. SHA provides a self-evaluation process, maps that illustrate field surveys, and computers that are equipped with GIS database of the specific county.

Public Outreach

SHA undertook a very effective and creative outreach activity on the Woodrow Wilson Bridge (WWB): The Toughest Bridge Commute Contest for the rights to trigger detonation of the old bridge. With international media coverage including 100 million media impressions in the US alone, the August 29, 2006 blast genuinely was “The shot heard ‘round the world.” What’s more, the content of the coverage was just as positive as the exposure was enormous.

SHA teamed with the Maryland Department of Natural Resources to host a media event in September 2006 to highlight the creation of fish habitat from portions of the demolished Woodrow Wilson Bridge. At least 2.5 million people were reached through news stories, with an estimated broadcast audience reach of more than one million viewers and a combined reach of approximately 1.5 million print and online readers.

SHA hosted a media event in April 2007 to kick-off the Woodrow Wilson Bridge’s “ground-healing” Anacostia Landfill Relocation and Wetlands Creation project. The event featured Maryland Transportation Secretary John D. Porcari, as well as leaders from the District of Columbia. The event captured substantial media coverage, totaling approximately one million media impressions.

The Intercounty Connector Project also has an aggressive plan to reach out to communities affected by the project. Proactive community involvement that occurred during the planning phase, continued to be an important activity as the project moved into the design phase in FY07. During this period, the project team:

- Participated in 18 community outreach meetings relating to Contract A (the westernmost section of the projects) and 11 for Contracts B and C, the next adjacent segments
- Handled 382 phone calls at the 866-462-0020 ICC Project Hotline
- Participated in 65 outreach events to communicate with Disadvantaged Business Enterprises seeking work on the ICC project
- Hosted two events for the media; the dedication of the Llewellyn Soccer Field in August, 2006 and the Groundbreaking for Contract A in October 2006

The following additional activities were conducted to reach out to the public on issues of concern to SHA:

- Wrote, distributed and pitched ongoing traffic-related news releases, resulting in significant coverage in local radio traffic reports, newspapers and television stations

US 301 Town Hall Meeting



- Assisted with boat tours (for the Woodrow Wilson Bridge project and the Chesapeake Bay) for various agency and professional groups
- Developed and maintained the content for the Project Website (<http://www.marylandroads.com/WebProjectLifeCycle/ProjectHome.asp>) which provides the public with basic information about SHA's projects
- Partnered with AAA and Yellow Cab for "Topsy? Taxi!" Campaign, which provides a safe, free ride home for impaired people 21 and over
- Provided a guided media tour of the 18th and 19th century Connemara Archeological Site where archeologists are hoping to uncover the lives of slaves of the middle-class.
- Released its annual construction brochure "Road Ready 2007," and distributed it to all SHA engineering districts, as well as all Maryland rest areas and the Thurgood Marshall/BWI Airport

Collaboration with our Partners

SHA continues to be a leader in the state in promoting and developing opportunities for minority and disadvantaged businesses (M/DBE) by participating in over a dozen outreach events, as well as providing materials and assistance to firms interested in becoming M/DBE certified.

SHA also continued partnerships with the general consulting and contracting communities who we rely on to deliver our projects. This is done in the form of formal partnering and regular meetings such as:

- Partnering through formal agreements with contractors on 92.6% of SHA's construction projects, the highest ever in the history of SHA
- Conducted the annual Maryland Quality Initiative Conference jointly with consultants and contractors to celebrate projects completed, share best practices and discuss issues facing the industry

Percent of Partnered SHA Construction Projects



2007 Awards

SHA and its people were recognized with a number of awards and honors during FY 2007. This portion of the annual report lists some of these awards and honors.

American Association of State Highway and Transportation Officials (AASHTO) National Recognition Awards

AASHTO advocates transportation-related policies and provides technical services to support State Departments of Transportation, and annually recognizes national accomplishments in transportation. The Maryland State Highway Administration won seven national AASHTO awards in 2007:

2007 Scenic Byway Award for the “Context-Sensitive Solutions for Maryland Scenic Byways” publication. This award recognizes byway projects that exhibit excellent examples of community involvement and public outreach, partnerships and innovation. The guide was developed to stimulate thoughtful decision-making for projects on designated scenic byways.

Gold Level (Exemplary Partner) Team Excellence Award for the Americans with Disabilities Act Steering Team. The Team made substantial progress setting up internal processes, formalizing policies and guidelines, training staff, developing action plans, performing self-evaluations, and expanding public outreach and involvement. Tangible results have been achieved such as moving ahead of schedule to implement projects that will immediately serve our customers with disabilities.

Gold Level (Exemplary Partner) Team Excellence Award for the Construction Curriculum Advisory Team. The team provided continuous training program for the construction inspection field personnel that will develop and improve their technical and leadership skills. The curriculum was designed to meet Federal, State, and SHA requirements.

Silver (Pathfinder) Level Team Excellence Award for the Crash Analysis Safety Team. The team evaluated the safety improvements resulting from roundabouts in Maryland. The team’s findings indicate that at 19 locations in Maryland where single lane roundabouts have been installed there has been a 68% decrease in the total crash rate per million vehicles entering the intersection; a 100% decrease in the fatal crash rate; an 86% reduction in the injury crash rate and a 40% reduction in the property damage only. The projects yielded a 13 to 1 rate of return for every dollar spent.



A context sensitive solution was designed and developed for this scenic byway in Bolivar Maryland.



Charles Adams and Terry Maxwell, Project lead in SHA's Scenic Byways Publication.



Silver (Pathfinder) Level Team Excellence Award for the Office of Traffic and Safety/District Four Safety Team. The team identified and implemented safety counter-measures to significantly reduce crash rates at intersections. The team identified 13 hazardous intersections in Harford County where improvements were implemented. The team assessed crash rates for three years before and after each improvement. The combined total crash rate for all 13 intersections was reduced by 54%. The total number of collisions was reduced from 359 to 231. This supports the SHA business plan goal to improve highway safety in Maryland.

Bronze (Trailblazer) Level Team Excellence Award for Hot Mixed Asphalt (HMA) Pay Factor Team. This team was formed by the Maryland Asphalt Association and SHA. The team's findings resulted in improving the efficiency and effectiveness of Hot Mixed Asphalt (HMA) material acceptance by eliminating the need for void testing and reducing the testing time, level-of-effort, and cost that are currently required to accept HMA materials. It is estimated that elimination of this single test could reduce the time and cost of HMA acceptance by more than 50%.

Weems Creek Bridge – Elevation View



Bronze (Trailblazer) Level Team Excellence Award for Maryland Products Evaluation Listing (MPEL) Team. The team created an online database for New Products and the Qualified Product List. This reduced meetings between vendors and SHA personnel by 60% and reduced the initial evaluation review time. MPEL is now being used as the model for a national project.

Awards for the MD 70 (Rowe Boulevard) Bridges over Weems and College Creek

Rowe Boulevard (MD 70) is a main artery that serves as a gateway to historic downtown Annapolis, providing a direct connection with US 50. Two bridges along the route needed repair. The new Weems Creek Bridge is a five span steel girder bridge. The College Creek Bridge has a new superstructure and minor rehabilitation of the substructure. Both bridges have received national recognition:

- **2007 Special Recognition Award for a structure project by the National Partnership for Highway Quality**
- **2007 Honor Award in the Excellence in Engineering Awards Competition by the Maryland American Council of Engineering Companies (ACEC)**
- **Mid Atlantic Construction Best of 2006 – Bridge Category**

Awards for the Woodrow Wilson Project

The Woodrow Wilson Bridge (WWB) was awarded the **2007 American Segmental Bridge Institute (ASBI) Bridge Award of Excellence**. This biennial award, one of the most prestigious in the bridge industry, recognizes owners of bridges that exemplify “concrete segmental bridge design and construction excellence.” MDOT and Virginia DOT shared in this award, as owners of the WWB. Judging criteria included innovation of design, rapid construction, aesthetics and cost effectiveness.

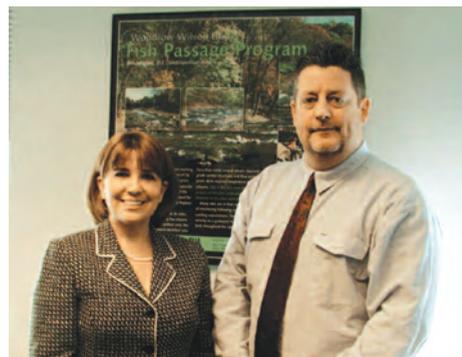
The project also received the **Federal Highway Administration’s Exemplary Ecosystems Initiatives 2007 Award** for WWB Initiatives, Management and Mitigation. **Maryland Chapter of the American Council of Engineering Companies (ACEC/MD) 2007 Engineering Excellence Awards** for WWB were:

- **Grand Award** for the entire project. This is the highest ACEC/MD award given for all projects submitted for consideration.
- **Outstanding Project Award in the building/technology/structural systems category**
- **Outstanding Project Award in the transportation category**
- **Award of Merit** for the I-95/I-495/I-295 Interchange; this is the second highest award for all projects submitted for consideration.
- **Honor Award in the environmental category** for the WWB Fish Passage project associated with the bridge.
- **Outstanding Small Project Award** for the WWB Fish Passage project that involved restoring 26 miles of historic fish spawning habitat by removing or modifying 23 man-made barriers to fish passage.

The Woodrow Wilson Bridge’s “Bascule” Draw Bridge Opening



Susan Ridenour and Todd Nichols are the project leaders for the WWB Fish Passage Project.



Intercounty Connector (ICC) Utility Relocation

Federal Highway Administration’s (FHWA) Incentives for Utility Relocation Award for projects over \$100 million – The Utility Team negotiated relocation agreements between SHA and 15 utility companies. SHA offered a significant monetary incentive to the utility companies, and created a win/win situation for all the ICC stakeholders with commitments from the utility companies to abide by aggressive time frames for completing their specialized work. This is a landmark accomplishment for SHA and for design-build projects in Maryland.

Diversity Awards

2007 James W. Rouse Diversity Award of Excellence was presented to SHA by the Chesapeake Human Resources Association for the promotion of Diversity, Inclusion and Wellness throughout the organization. SHA was one of two organizations to win this year.

Normetha Goodrum, Deputy Administrator for Finance, Information Technology and Administration, is an SHA leader in diversity.



The Maryland State Highway Administration was named as one of the **Top 100 Supporters of Historically Black Colleges and Universities** in a survey published in the June/July 2006 issue of US Black Engineer and Information Technology magazine.

Highway Safety Awards

The **Pacesetter Program** is a partnership between SHA's Maryland Highway Safety Office (MHSO) and the Maryland Committee for Safety Belt Use to encourage 100 percent safety belt use by employees. Agency-wide there was an average 98% observed seatbelt usage rate throughout the seven districts and 32 maintenance shops. In fact the following SHA districts had a 92% or better employee seatbelt use rate:

- District 7 won a "Platinum" Pacesetter Honor Roll Award. This is the sixth Pacesetter award District 7 has won in six years.
- District 6 received 2 Pacesetter awards, one for their office and the other for all of their county shops.
- District 5 received 6 Pacesetter awards, which includes all 5 of their shops.
- District 4 received 3 Pacesetter Awards; one each for the Churchville Shop, the Owings Mills Shop and the district office.
- District 3 received Pacesetter awards for their 4 shops and the district office.
- District 2 received Pacesetter awards for their 5 shops and the district office.
- District 1 received Pacesetter award for their 4 shops and the district office.

WRAPPY Award from the Washington Regional Alcohol Program

(WRAP) was again awarded to SHA's MHSO. It is given out to those organizations that have demonstrated a commitment to public service work in highway safety and preventing impaired driving.

Environmental Stewardship Awards

An **Exemplary Ecosystem Initiative** award was received from the Federal Highway Administration for protection and enhancement of the bog turtle habitat on the MD 30 Hampstead Bypass project in Carroll County. The bog turtle is an endangered species in Maryland. Over 100 acres of habitat are being protected and enhanced.

SHA won a **2006 Award for Roadside Excellence in the State DOT category from the National Roadside Vegetation Management Association**. This is the second time SHA has received this award.

National Conference of State Historic Preservation Officers 2007 Award of Excellence in Historic Preservation in the Partnerships with a Public Entity category. This award, given for being “Partners for Preservation Progress,” recognized the exemplary partnership between SHA and the Maryland Historical Trust on behalf of significant historic resources.

Federal Highway Administration 2007 Environmental Excellence Award for Excellence in Livable/Sustainable Communities for the MD Route 45 (York Road) project. SHA won this biennial award that honors those partners, projects and processes that excel in meeting growing transportation needs while protecting and enhancing the environment. This community-based project was guided by SHA and a multi-disciplinary task force that worked together to identify the needs of the community and blend transportation improvements with urban redevelopment.

National Association of Environmental Professionals National Environmental Excellence Award in the Environmental Stewardship Excellence category for the Woodrow Wilson Bridge fish passage projects. This award recognizes significant contributions to environmental practices across the country.

Communications Awards

SHA won two **Crystal Awards of Excellence** for Public Service Announcements entered in the **Communicator Awards 2006 Video competition**. This award is the highest level award and is given to those entries whose ability to communicate puts them among the most outstanding in the field. Nearly 100,000 entries were submitted nationwide.

- “Buckle Up Maryland” with crash survivor David Wiley (2007 edition)
- “Adopt A Highway 2007”

Highway Pavement Awards

SHA was awarded several **2006 Maryland Asphalt Association Quality Pavement Awards:**

- Interstate Paving Award for the I-695 Outer Loop Widening project from south of Frederick Road to I-95
- Interstate Paving Award for the Northbound I-83 project from South of Seminary Avenue to Timonium Road
- Primary Resurfacing for MD Route 4 in Calvert County
- Safety and Resurfacing Award for 0.40 Mile east of Spickler Road to MD 63 in Washington Count.

Bruce Grey accepted on behalf of SHA; Rodney Little Accepted on behalf of the Maryland Historical Trust.



Above: James McConaha, North Carolina State Historic Preservation Officer (SHPO) Treasurer and New Hampshire SHPO; Bruce Grey, Maryland Department of Transportation Deputy Director of Project Planning; J. Rodney Little, Maryland SHPO and MHT Director; Jay D. Vogt, North Carolina CSHPO President and South Dakota SHPO.

Lisa Choplin holding 2006 Owner of the Year Award



Sound Barrier Design

National 2006 PCI Precast/Prestressed Concrete Institute Design Award in the Best Custom Solution – Bridge Category. The sound barriers on MD 216 in Howard County were among 24 winners from 110 entries recognizing outstanding design in precast, prestressed cement. The designs were developed by Creative Design Resolutions and depict the Maryland landscape with murals of trees and birds.

Individual Recognition Awards

Lisa Choplin from the Office of Highway Development was presented the **2006 Owner of the Year Award** from the National Capital Chapter of the Design-Build Institute of America (DBIA) and a **National 2007 Meritorious Award from DBIA** for her contribution in advancing the awareness, understanding and use of the design-build project delivery method.

Charlie Adams from the Office of Environmental Design was elected **American Society of Landscape Architects Fellow** for his career work in promoting landscape architecture in the transportation industry.

Robert Healy of the Office of Bridge Development was selected by the Maryland Section of the American Society of Civil Engineers as **2007 Civil Engineer of the Year**. Robert has a 30-year career in civil engineering and he has been heavily involved in several major projects, including the WWB replacement and the ICC.

Gregory Slater of the Office of Highway Development received the **Outstanding Contribution to GIS in Maryland Award** during the 20th Annual Geographic Information Sciences (GIS) Conference.

Dr. C. Edwin Becraft received the **Governor's Citation** in October 2006 for his service and contributions to SHA regarding employee health, safety, and case management.

Neil Pedersen, SHA Administrator, was recognized by the Transportation Research Board, American Association of State Highway and Transportation Officials and the American Road Transportation Builders Association with the **2006 George S. Bartlett Award for Outstanding Contribution to Highway Progress** for "his extraordinary achievements as a transportation planner and administrator and for his efforts in promoting highway innovation at the national level throughout his career." This prestigious award is given annually to an individual who has made an outstanding contribution to national progress.

Martin O'Malley *Governor*
Anthony G. Brown *Lt. Governor*
John D. Porcari *MDOT Secretary*
Neil J. Pedersen *Administrator*

Maryland Department of Transportation

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