

SCANNER

NEWSLETTER OF THE AMERICAN SOCIETY OF
HIGHWAY ENGINEERS



August - 1995 - 3

PRESIDENT'S MESSAGE

By Thomas J. Haslett, P.E.

The 1995 National Convention in Pittsburgh was an impressive display of the true character of the American Society of Highway Engineers. I was certainly proud to be there and take part in the ceremonies. Those in attendance will cherish memories of the unique ice breaker party, the well planned technical sessions, the spouses' programs, the delicious food, and of course the lively entertainment. The format in which the "Person of the Year" and the past presidents were honored is commendable. The Pittsburgh Convention Committee deserves a standing ovation.

For those members who didn't have the opportunity or good fortune to attend the 1995 Convention, please plan on joining us in Orlando in June of 1996 for the next national meeting. Rumors are already "flying" that a charter flight, from Pittsburgh, is being planned.

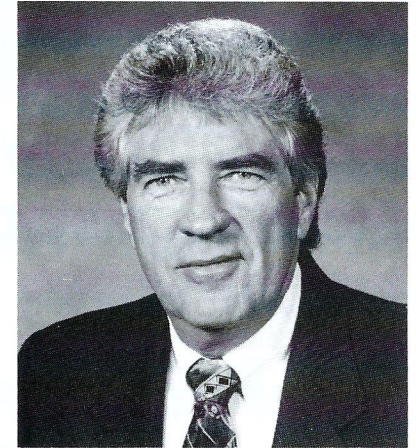
Thanks to the visions of our founding fathers, the original Constitution contains provisions to enable growth. It was their thought to accomplish this through a regionalization structure. Our records reveal that for the past nine or ten years, the National Board of Directors has named a committee to study that rezoning or redistricting process. During that same time frame, thanks primarily to the efforts of various new sections committees, we are now on the threshold of unprecedented expansion. To best accommodate the growth, it is necessary to adopt and implement a structured reorganization plan. Draft Number Three is in a formative stage and now being analyzed. It is my belief that we need the new format to more effectively serve the membership. Our economic analysis of the plan shows the change will not dramatically impact the budget. I encourage you to support the change with the trust it will provide an enhancing communication system which is truly needed to retain a sound relationship between the local sections and the National Board.

Generally, during the 1995-96 year, the National Board will be capitalizing on the accomplishments and directions established by the past few administrations. One challenge confronting the Board, for the first time in three years, will be the development of an updated Long Range Plan. The refined document will be for 1997-2000 and will feature a reassessment of our goals and philosophies. The Executive Director Committee will be concentrating on the adoption of a scheme to facilitate the administrative work of the organization with a focus on an individual who could serve as editor for the Scanner. It is also a special goal to assure that four issues of the Scanner are published this year while maintaining a high quality news publication.

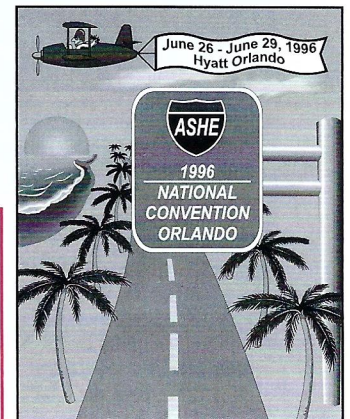
At the installation banquet, I offered a few of my thoughts on the allure of ASHE and the key matters that will be incorporated into our programming and committee objectives this year. Two of the most critical issues demanding the National Board's attention are the reactivation of those local sections that are struggling to retain a core of active members and closing the communication gap with those whose voice hasn't been heard lately.

When an individual joins ASHE, it entitles them to certain rights within the organization. One of those rights is to take an active role in the leadership of the Society. We recognize there are some who are perfectly content to simply attend the functions at the local section. For the others, ASHE provides a great opportunity for involvement. The National Board encourages the non-spectators to become part of the action by offering your talents and making it known that you are able and would be willing to serve the local sections as an officer on the Board of Directors.

The future of ASHE looks bright! You can be certain the National Board will appreciate your individual input and comments concerning any of our programs or committee functions during the year. Feel free to contact any of us at any time. In conclusion, I wish to thank all of you in advance for your dedication and ongoing support during the 1995-1996 year. ■



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NATIONAL BOARD NEWS

The National Board met for a regular Board Meeting on April 7, 1995 in New Stanton, PA and also for the annual Board meeting at the National Convention at the GreenTree Marriott in Pittsburgh, Pa on May 19, 1995. National President Raymond Petrucci, P.E. presided over the April regular board meeting and over his last official board meeting at the National Convention. The first regular board meeting for the new fiscal year was held at New Stanton on June 16, 1995 which was presided over by the Society new President, Thomas J. Haslett, P.E. President Haslett welcomed the new members on the National Board:

Christopher A. Drada, P.E. - National Director for the Franklin Section.

Sandra K. Ivory - National Director for the Altoona and Clearfield Section.

Domenic M. Piccolomini, P.L.S. - National Director for South West Penn and Mid Allegheny Sections.

NEW SECTIONS COMMITTEE:

Chairman Greenwood presented a detailed report on new section activities and their progress to date. Cooper Curtis added that the extensive effort being put forth in Florida is to charter new sections in each DOT District with a goal to help support legislation on transportation issues. The areas include:

Tampa, Florida - The Tampa Bay section meetings have seen approximately 60 to 70 in attendance and have been occurring since March. Charter night was scheduled for July 12, 1995, with membership anticipated between 150 to 200.

Fort Lauderdale, Florida - An organizational meeting is scheduled for August 3, 1995. The Committee will pursue volunteers to serve as officers and directors of the section and maintain close contact to assist in development and growth.

Jacksonville Florida - Officers have been elected and three monthly meetings were held. They anticipate a kick-off meeting in September-October with their FDOT District Secretary as speaker. The section expects to charter in November, 1995.

Miami, Florida - An organizational meeting is scheduled for August 2, 1995. The committee plans to have 3 or 4 consultants fund the dinner, one

is in the process of making all the arrangements for the meeting. The committee will pursue volunteers to serve as officers and directors of the section and maintain close contact to assist in development and growth.

Tallahassee, Florida - Plans are to begin regular monthly meetings in September. A charter meeting in late 1995 is anticipated. Credit is given to Billy Hattaway, Central Florida section member and now State Highway Design Engineer, for promoting ASHE throughout FDOT.

Atlanta, Georgia - President Petrucci and Curtis met with Georgia DOT Commissioner Wayne Shackelford on April 17, 1995, with favorable results for having Georgia DOT employees becoming active ASHE members. Regular meetings are being planned to begin in September before planning a charter in late fall.

Charlotte, North Carolina - An organization meeting was led by Bob Pearson on March 30, 1995. Temporary officers and directors were selected for the Carolina Piedmont Section". They expect to initiate monthly meetings in September and charter the section by November, 1995.

Columbia, South Carolina - Bob Pearson was contacted and furnished a list of names for a potential "kick-off" meeting. Arrangements will be made for an initial meeting.

Emporia, Kansas - Dave Greenwood has written to a contractor expressing support for his efforts in determining interest for a new section. There are already several associations in the area with members from both Kansas DOT and contractors. Greenwood will work with them to survey the industry with respect to interest in ASHE.

The New Sections Committee will develop a strategic plan for new sections for input to the long range plan. Also, they will address how new sections will impact the Reorganization Plan.

MEMBERSHIP COMMITTEE:

Chairman Patrick Welsh reported on a potential membership service to provide discount long distance telephone service to members and receive a nominal income for National. Several carriers are being evaluated and sections will be advised of progress in this area.

Cooper Curtis made a recommendation to the Membership Committee on changes to the membership application form, primarily format for E-mail transfers. Secretary Conner expressed concern that only one uniform version of the form be used for ease of processing.

REORGANIZATION COMMITTEE:

Chairman Haslett discussed Draft 3 "Revised Guidelines" for the society reorganization at the April 7, 1995, Board Meeting. This draft addressed issues put forth by the Sections. Sections were asked for further input and recommendations for implementation of the reorganization plan. Past President Roland Nesslinger will chair the Committee for 1995-96, with a goal to present, for Board approval, a final document and plan to implement the reorganization structure.

CONVENTION COMMITTEE:

The 1995 Convention in Pittsburgh, Pa was a great success for ASHE and the Pittsburgh Section. A special thanks by the Society is given to Convention Chairman Lisle Williams and his Committee especially for the extra publicity they sought for ASHE in the local media. As a high light, the Allegheny County Commissioners proclaimed May 14 to 21 "Highway Engineers Week" and welcomed delegates from throughout the U.S. to the 33rd Annual ASHE Convention. An overview report was presented to the Board at the June 16, 1995 meeting by convention commit-

Continued on page 5

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CENTRAL DACOTAH SECTION CHARTERED CONGRATULATIONS AND WELCOME

On October 18, 1994 the Central Dacotah Section located in Bismarck, North Dakota was chartered as the 32nd Section of ASHE. Attending the charter ceremonies were Roland A. Nesslinger, Past National President; David A. Greenwood, National 2nd Vice President and Dave W. Jones of the Central Ohio Section. The Central Ohio Section was very instrumental in the start-up of the Dacotah Section.

The meeting revolved around the charter signing and attendant activities, with 56 members in attendance. Past President Jon J. Jennings served as the master of ceremonies. The Director of the North Dakota Department of Transportation, Marshall W. Moore gave a brief greeting followed by Mr. Nesslinger, Dave Jones and David Greenwood respectively.

The issuance of pins and certificates along with signing the charter ended the meeting. Section leaders who were installed at the meeting accepted the challenge and responsibility to uphold the integrity and principals of the organization and foster its purpose. The officers and board members of the Central Dacotah Section are: John J. Jennings, Past President; Ray R. McKenzie, President; Robert J. Shannon, Vice President; Francis G. Ziegler, Public Relations Officer; Paul H. Zent, Treasurer; Jon R. Mill, Secretary; Duane R. Bentz, Director; Joel M. Wilt, Director; Steve S. Smith, Director; Steve C. Dorval, and Terrance J. Zich, Director.



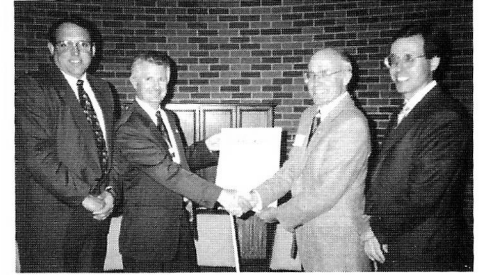
Swearing in of Officers.

L to R: Paul H. Zent, Jon J. Jennings, Ray R. McKenzie, Joel M. Wilt, Duane R. Bentz, Terrance J. Zich, Steve S. Smith, Francis G. Ziegler, Steve C. Dorval, and Jon R. Mill.

The members of ASHE and specifically, the Dacotah Section give a special thanks to the Central Ohio Section and particularly Dave Jones and George Downing along with Dave Greenwood who were very instrumental in assisting the new Section in the early stages leading to the Charter.



L to R: John J. Jennings's, David A. Greenwood, and Ray R. McKenzie



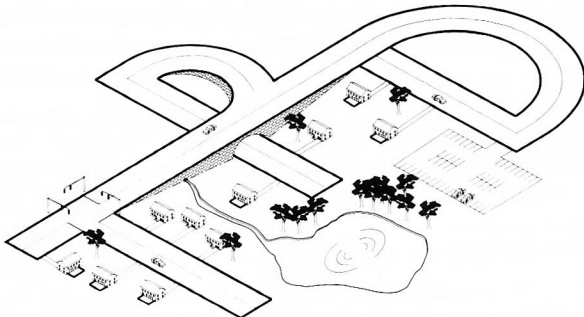
L to R: David A. Greenwood, Jon J. Jennings, Roland A. Nesslinger, and Dave W. Jones



*Front Row, L to R: Steve C. Dorval, Francis C. Ziegler, Jon J. Jennings, Ray R. McKenzie, and Paul H. Zent
Back Row, L to R: Joel M. Wilt, Terrance J. Zich, Jon R. Mill, and Steve S. Smith*

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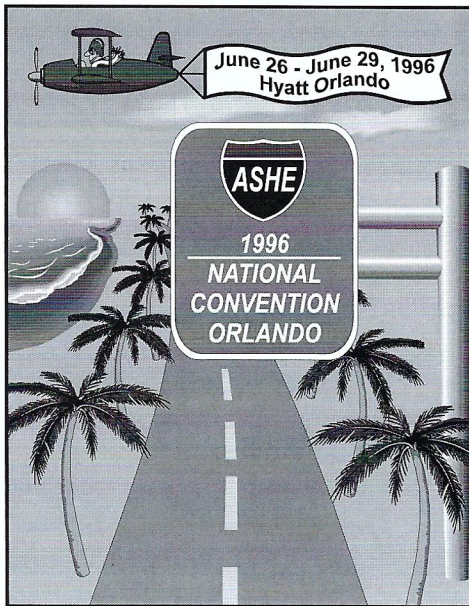
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AMERICAN SOCIETY OF HIGHWAY ENGINEERS CENTRAL FLORIDA CHAPTER



In 1996 the American Society of Highway Engineers (ASHE) will break its long standing tradition of holding its National Conventions in the northeast and visit one of the newest Sections in Orlando, Florida. The date of the 1996 convention is scheduled for June 27 - 29, 1996 at the Hyatt Hotel, located along I-4 at the interchange of U.S. 192, Irlo Bronson Highway, Kissimmee, FL. This location is near most of the Central Florida attractions and within a short drive of Orlando International Airport.

The Central Florida area is rich in family vacation opportunities. The Central Florida Section also wants to take the opportunity to develop a program at its National Convention that addresses the current and future issues of our industry. In order to develop a

comprehensive program, we are asking for suggestions from the sections on subjects they would like additional information on. We ask that your suggestions be forwarded to John Murphy, at GAI Consultants-Southeast, Inc., 201 East Pine Street, Suite 200, Orlando, Florida 32801.

The Convention Committee has already established a discount airfare with USAir, the official airline for the '96 Conference and is working on discount automobile rentals. Details will follow once they have all been finalized.

We are looking forward to visiting with you at the 1996 ASHE Conference and hope to see you in Orlando. ■

NATIONAL BOARD NEWS

Continued from page 3

tee members John DeRoss and Tamar Johnson. Total attendance exceeded 330 and 53 exhibitors displayed booths at the convention.

Planning for the 1996 Convention in Orlando, Florida is progressing well. The dates will be June 26 thru 29, 1996 featuring two days of technical activities and a focus on family activities by taking advantage of nearby Disney World.

The 1997 Convention will be hosted by Delaware Valley Section and 1998 will be hosted by Harrisburg Section.

EXECUTIVE DIRECTOR COMMITTEE:

Chairman Martin provided the Board an overview on a variety of services as well as expected representation of an "Association Management Services" firm. The Committee was directed to obtain a proposal for assisting in managing and publishing the Scanner for a trial one year period. The Committee will also develop a three year plan for management services to mesh with ASHE's Long Range Plan. ■

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WHEATON NAMED VICE PRESIDENT

Alan P. Wheaton, P.E. was recently promoted to Vice President and Director of Transportation of Patton Harris Rust & Associates. He has been with PHR&A for six years, and will manage all PHR&A services related to transportation, structural, and traffic engineering and transportation planning. He is a member of ASHE, Potomac Section.



ROBERT A. GLADSTONE DIRECTOR OF BUSINESS DEVELOPMENT

McDonough Bolyard Peck has named Robert A. Gladstone, P.E., as Director of Business Development.

A 1969 civil engineering graduate of the Massachusetts Institute of Technology, Gladstone is a registered professional engineer in Virginia. He has been very active in ASHE as:

Chesapeake Section Member (prior to formation of Potomac Section)
Charter Member, Potomac Section
President, Potomac Section, 1992-93
Program Chairman, Potomac Section, 1990-92

Membership Co-Chairman (Recruitment), Potomac Section, 1994-95
Board of Directors, Potomac Section, 1990-95

EDWARD M. D'ALBA NAMED PHILADELPHIA CIVIL ENGINEER OF THE YEAR

The Philadelphia Section of the American Society of Civil Engineers has recognized Edward M. D'Alba as its 1995 Philadelphia Civil Engineer of the Year. This award, the Section's highest honor, was presented to Mr. D'Alba at the Section's annual Spring Social/Dinner Dance, which was conducted on May 5.

Mr. D'Alba has served as President and Chief Executive Officer of Urban Engineers for the past five years, after sixteen years at that firm in various technical and administrative capacities. He is a 1973 graduate of Worcester Polytechnic Institute, where he received a Bachelor of Science degree in Civil Engineering, with a subsequent Master of Science degree from the University of Pennsylvania in 1977.

Mr. D'Alba, his wife and two sons live in Berwyn, Pennsylvania. He is a member of the Delaware Section of ASHE.



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STUDENT SCIENCE PROJECTS RECEIVE AWARDS FROM THE DELAWARE VALLEY SECTION

For the third year, the Delaware Valley Section of ASHE sponsored awards for student science projects. Board members Dick Prentice, Elaine Elbich and Scott Sibley attended the Delaware Valley Science Fairs on April 5, 1995 to search for the best project related to the highway industry. They looked at each of the 800 projects submitted by sixth through twelfth grade students from schools in Delaware, southern New Jersey and Southeastern Pennsylvania. All of the projects were of high quality since they had previously won in a regional science fair.

Six projects were selected by the ASHE judges for interviews with the students. The interviews provided an opportunity to find out what the students learned and also to provide encouragement and guidance for further study. Each student interviewed also received an evaluation sheet from the judges, providing additional encouragement on their projects and

career choice.

The ASHE judges were unanimous in selecting the project of a ninth grader, Harry Feigel III. His project was a study of the effects of deicers on concrete samples. He prepared over 100 concrete samples and soaked them in four different solutions of three different deicing agents. He then broke a sample of each every week for eight weeks and recorded the strength. In the interview, Harry clearly knew the reasons and results of the process he had studied.

Another project was selected for Honorable Mention. Dina Feith, a ninth grade student, developed a computer simulation of the operation of Tandem Toll Booths. These are used where there is no room to add additional lanes. Two toll booths are placed on a single lane, and during peak periods, half of the cars are waived through to the second booth to pay their toll. To develop her model, Dina timed transactions at two

interchanges of the Pennsylvania Turnpike.

Dick Prentice returned for the Awards Ceremony to present a plaque and \$100 savings bond to Harry and a certificate to Dina. Dick also presented a short talk about the importance of engineers in society and encouraged the young scientists to consider engineering as a career.

The Delaware Valley Section of ASHE sponsors this award as part of their Career Awareness program and expects to continue this annual tradition. ■



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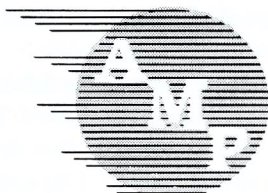
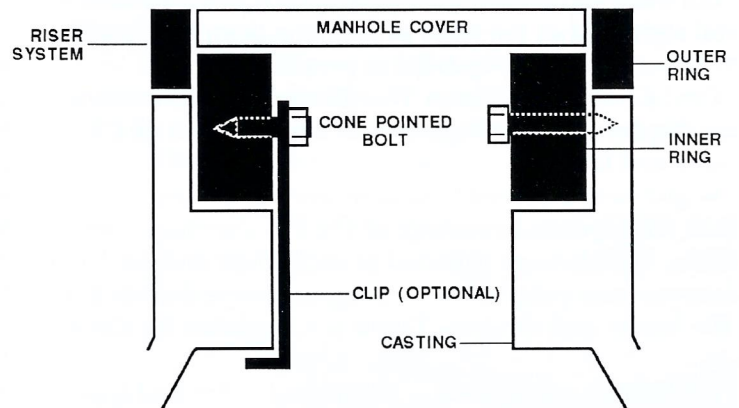
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Highlights From The 1995

After 26 months of preparation, Cari Moore and her committee including Paula Duffy, Blair Stocker, Bob Sciullo, Sean Henderson, Jim Weaver, Jr., Matt Smith and Tom Moore, were prepared to greet over 300 ASHE members and guests who attended the 1995 Annual National Convention at the Green Tree Marriott in Pittsburgh. The convention drew participants from 13 States and Mexico and reflected attendance by 23 of the 27 Sections. Several of our participants read about the convention in National publications as part of Public Relations Chair Paul Ostrowski's efforts. Registrants received an HDR tote bag filled with a bottle of Ripepi wine, engraved wine glasses, pens (Marriott & Contech), O'Brien-Kreitzberg post-it notes, Sofis backscratchers, Contech keychain and a State Farm Insurance Designated Driver Pin. A Convention Book filled with information and over 100 ads compiled by John Maffeo and printed by Reprographics Resources, Inc was distributed along with a colorful folder displaying all the ASHE Section shields.

Regardless of whether conventioners arrived by plane or car, they knew they were in the right place. A large banner greeted our guests at the airport and PennDOT welcomed everyone via the Parkway West overhead sign. Driving up to the Marriott, Trumbull had placed an electronic message board and another large banner was attached to the hotel.

Bill Bury and Heather Harmon of SAI provided directional signs within the hotel as well as a large tally board which was constantly updated as people registered.

City, County and Green Tree Borough Proclamations were displayed at the Registration Table as well as City, County and US flags.

Registrants received tickets to events of their choice which were printed courtesy of the PA Turnpike Commission. Tickets were collected at each event and used to determine door prize winners. Programs were distributed at the lunch and dinners. These were printed by Kwik Kopy.

Pat Kane in cooperation with Michael Baker had a van on-call for our guests. Gerry Gawaldo and the Port Authority of Allegheny County provided transportation for the technical tour.

The Hospitality Room opened at 3:00 P.M. to allow our weary travelers a chance to relax and get re-energized for the weekend's festivities. Jim Lombardi and Gene Lipovich greeted our visitors. Many old friendships were rekindled and new friends were made as guests enjoyed Iron City Beer products, Ripepi wine, soft drinks and the

delicious baked goods provided by Lu DeRoss. The Exhibit Hall opened on Thursday evening featuring 53 companies, assembled by Jerry Pitzer, representing a broad range of highway related equipment and services. As part of the convention book, each exhibitor provided a brief description about their company. A "Project in the Works" Icebreaker was held across the bridge from the exhibitors. As tolls were collected by John Havel, guests received orange vests, and special attention was given to individuals with hard hats. Even the Marriott staff sported Russell Industries' hard hats. Ethnic foods of the Pittsburgh area such as pierogies and kielbasa, etc. was presented buffet style as Mickey "Our One Man Band" played his music. Cari Moore (Pgh), Jim Lombardi (Pgh), Richard Cook (Cuyahoga Valley) and Nick Genovese (NE Penn) won "Nuts About Pittsburgh" prizes. Richard Neu (Hbg) won a "Basket of Pittsburgh", Mary Matone (NE Penn) won a jar of M&M's, Natalina Petrucci (daughter of Ray) won a jar of gumballs and John Kenny (Central Ohio) won a stereo. Attendees whose birthdays were closest to May 18 were urged to take the Concrete Cylinder Centerpieces home with them.

Throughout the evening Vince Borrelli could be spotted taking pictures. He continued his efforts during the entire convention. As pictures were developed, copies were given to attendees. A photo album will be maintained in Pittsburgh and available for all to see.

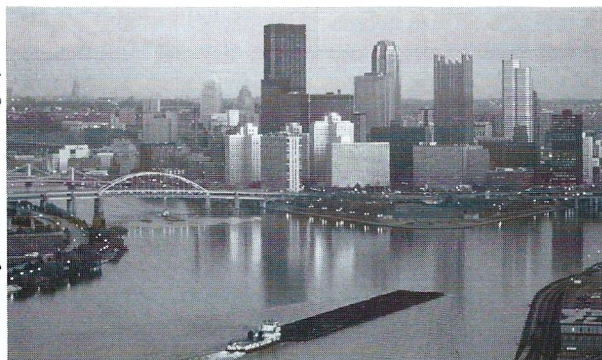
Convention Chairman Lisle Williams opened the General Session Friday morning followed by our National Officers conducting the Annual Meeting. Delaware Valley Section won the attendance award. A moment of silence was held in memory of Michael Loy who passed away shortly before the convention. Pittsburgh Mayor Tom Murphy welcomed everyone to Pittsburgh and offered his comments on transportation and other related topics. George Schoener from the FHWA in Washington, DC was the Keynote Speaker. Technical sessions, scheduled by Jerry Johnson, included Kenneth Keitt (Intelligent Transportation Systems); Joe Krolkowski (Privatization); Christian Pegher (Computer Technology); Seth Pearlman (Boston Central Artery Project); Scott Christie (Metrication); and Joe Chnupa (Hazardous Waste). Tony Chammas and Chuck Schubert served as moderators.

Ronald L. Zook, P.E. was honored as the Man-of-the-Year. Immediate Past National President Roland Nesslinger introduced Mr. Zook who is the Assistant Director and Chief Engineer for the Ohio Department of Transportation. Mr. Zook thanked ASHE and offered his

Pittsburgh

CONVENTION 95

Photo by Jack Lever, Photographer



comments on the state of the industry. A floral centerpiece was presented to Rachel Zook.

Following lunch technical tour participants were given handouts from Michael Baker, Port Authority and Mackin Engineers. These handouts served as a permanent reminder of the various stops along the tour. The first stop was in Mt. Washington where the 85 tour members heard from Steve Wilson on the future Wabash Bridge - Airport Busway project. John Mine then explained the renovation of the Monongahela Incline. After taking the trip down the incline, Tom Riester presented an overview of the rehabilitation of the historic Smithfield Street Bridge. A ride on the "T" concluded the tour.

Many spouses enjoyed a tour led by Joan Gennuso and Mary Anne Dodds on our Pittsburgh rivers aboard the Gateway Clipper. The luncheon cruise gave everyone an opportunity to enjoy the scenery and relax. A stop at the Shops of Station Square was also included.

On Friday evening a dinner was held to honor our Past Presidents. We were fortunate to have Russell Horn, Jim Weaver, Sr., John DeRoss, Gene Smith, Mike Tiani, Ron Springman, Mike Suich, Steve Lester, Al Kozel, Jr. and Roland Nesslinger in attendance. Master of Ceremonies John DeRoss read messages from several who were unable to attend. Gary Runco (Pgh) won a color tv from the exhibitors. Another color tv was won by John Kolanter (NE Penn) for visiting the exhibitors. Ben Thayer (Pgh) won a "Basket of Pittsburgh" and Enrique Padilla, Secretary of Transportation and Communications, Guadalajara, Mexico received a "Nuts About Pittsburgh" prize for traveling the farthest. Magic Moments provided the musical entertainment.

Saturday 60 golfers took to the links and enjoyed the beautiful Ponderosa Golf Course. Through the efforts of Ed Oskin and his committee including Don Gennuso and Larry Dodds, each golfer received an ASHE towel, engraved brass divot tool, tees, cups, pencils, keychain and a sleeve of balls. Skill prizes were won by Jim Richmond - \$100.00 (Pgh), John Landy - \$100.00 (Pgh), Greg Smith - \$75.00 (Central Florida), Marcie Downing - \$50.00 (Central Ohio), Joe Mottiqua - Putter (Pgh), Peter Florian - Putter (Pgh), Ron Lamb - All Weather Sports Jacket (Del. Valley, Al Malatesta - Putter and Golf Pull Cart (Southern NJ), Jerry Johnson - 7 Wood (Pgh), and Howard Braun - Putter (Pgh). Nine door prizes were awarded. The Grand Prize winner was Jon Jennings (Central Dacotah) who won a trip for 2 to Sawgrass in Ponte Vedra, Florida which also included \$400.00 toward transportation.

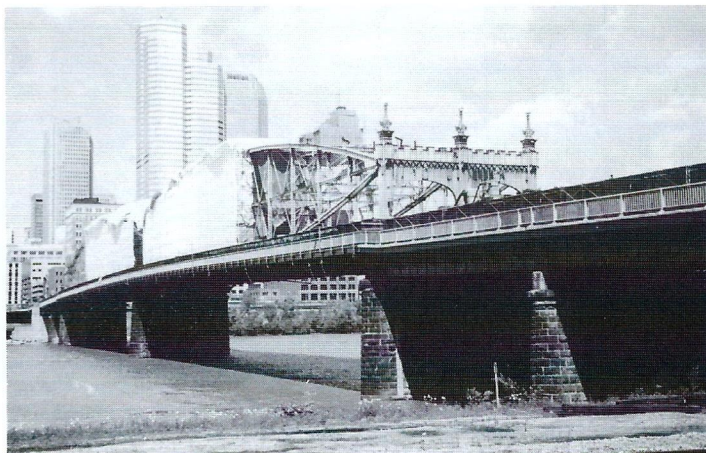
Pam Williams led the way for the "Saints and Sinners of All Nationalities" tour. They visited St. Anthony's Church, Pitt Nationality Rooms and the Allegheny Brewery where guests had lunch.

The Installation of Officers Banquet on Saturday evening concluded the weekend events. Al Kozel, Jr. served as Emcee with Steve Pavlack (PennDOT) singing the Lord's Prayer. A Champagne toast was offered by Orville Richmond. Gene Smith installed the Officers and Directors for 1995-1996 and Ray Petrucci passed the President's gavel to Tim Haslett. Turnpike Deputy Executive Director Fred Graham gave the Keynote Address. To end the festivities a color tv was awarded to Norman Cowell (Franklin) and a "Basket of Pittsburgh" was won by Angela Haslett (Franklin). Entertainment was provided by Eclipse.

We would like to thank Convention Sponsors Parsons, Brinckerhoff, Quade and Douglas, Gannett Fleming, Michael Baker and Zenith Painting who helped to make our Icebreaker, Golf Outing, Continental Breakfast, Lunch and Dinners a success through their generosity.

We would be remiss if we did not applaud the efforts of the entire committee including Secretary Tammy Johnson who graciously accepted their convention assignments. Many of our other Officers, Directors and Members, who were not mentioned by name in this article, offered their time and talents for the good of ASHE.

The Pittsburgh Section was honored to host the convention and the entire committee sincerely hopes that everyone enjoyed their stay. We extend our best wishes to Central Florida who will host next year's convention June 26 - 29. We hope to see you all there. ■



Touring the renovation of the historic Smithfield Bridge.

HIGHLIGHTS FROM THE 1995 CONVENTION



Man-of-the-Year Ronald Zook enlightens the membership of past accomplishments.



Pittsburgh City Mayor Tom Murphy welcomes the Convention attendees to the City.



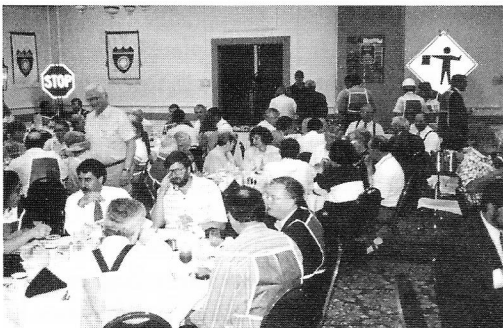
A beautiful golf day and outing.



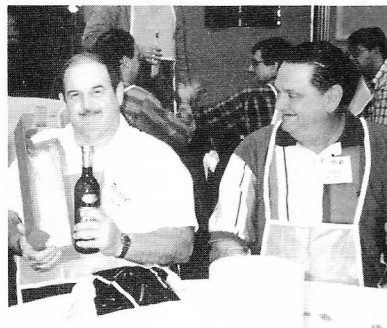
George Schoener of FHWA as Keynote Speaker informs the membership of the latest on the federal agenda.



National President Roy Petrucci welcomes the attendees at the Annual Meeting.



Pittsburgh food and hospitality is enjoyed by attendees along with typical highway industry signage.



Nick Genouese and John Kolander of North East Penn Section. Nick smiles but John later wins a color TV.



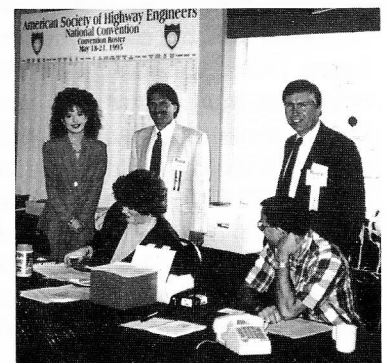
John DeRoss hosts the Ice Breaker with a robust and pleasurable prize awards.



Exhibitors support Convention and inform attendees on their products and services.



Exhibitors make a great contribution to Convention. Past President Al Kozel with Exhibitor Dave Kozel



Registration Committee, Tony Chamas, Cari Moore, Jim Smith, Tom Reister and Gene Lipovich.



National Secretary Terry Conner gives Membership Award to Michael Martin of Old Dominion Section.



National Secretary Terry Conner gives Membership Award to Curtis Cooper of Central Orlando Section.



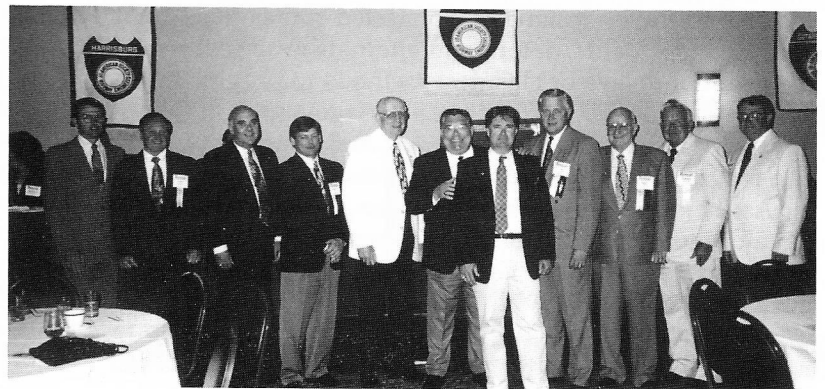
Saturday night entertainment and dancing.



National Secretary Terry Conner gives Attendance Award to Pat Depasquale of Delaware Valley Section.



Enrique and Maria Padilla from Mexico with Anna Marie and Al Kozel enjoying a great convention.



Past Presidents at Friday Night Banquet.

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EASING CONGESTION IN CHARLOTTE, NORTH CAROLINA

Julie W. Batchelor, PE
Construction Programs Engineer
North Carolina Department of Transportation

Congestion has been and continues to be a problem in urban areas across the nation. As the largest city in North Carolina, Charlotte is no exception. Congestion caused both by rush hour traffic and incidents has been on the rise for a number of years. Commute time for most has become longer and longer with urban sprawl, and accidents are a daily event on Charlotte's many thoroughfares.

Congestion caused by accidents got a hard look in the summer of 1991 after a hazardous materials incident closed Interstate 77 for more than eight hours causing backups stretching to Columbia, South Carolina- over 100 miles south of Charlotte.

Response agency representative and transportation engineers came together to develop a plan to prevent similar events in the future. The plan included two key strategies. First, as an immediate measure, implement an incident management plan to reduce delays when incidents occur. Second, develop a traffic management system that would be a long term formula for reducing congestion, both recurring and nonrecurring.

An incident management plan was soon up and running. The plan includes an incident management team made up of transportation engineers and emergency response agency representatives for Mecklenburg County, a patrol to travel designated congested routes to prevent and detect incidents, detour and alternate routes for use in the event of delays or closures, methods to provide information to motorists - variable message signs, highway advisory radios and media contacts, and a facility to serve as a temporary traffic operations center.

As incident management planning was taking place, development of a traffic management system also was underway. The North Carolina Department of Transportation contracted with a private engineering firm to develop a traffic management system for the Charlotte urban area. The traffic management system, called CARAT - Congestion Avoidance and Reduction for Autos and Trucks, was designed to reduce congestion on the freeways and connecting arterials in the Charlotte urban area. The system would be expandable so that it could be built in increments as funds became available.

The first funding package for the traffic management

system was approved in 1994 under the Federal Highway Administration's Special Experimental Project 14. Combined, federal and state funding of \$13,125,000 will be used for construction of the first phase of CARAT under a design/build/warrant application. The project will include the elements necessary for a basic structure for the system:

- central control facility
- monitoring and surveillance system
- traveler information system
- communications system connecting all parts of the traffic management system
- training of permanent personnel

A warranty of no less than two years will be required as part of the contract. Development of specifications for the package is underway with an anticipated advertisement for request for proposals in December, 1995 and award in May, 1996. Design and construction of the system is expected to last two years. The contract will specify performance based criteria for the elements of the project.

The design/build/warrant application is a new approach in the transportation industry. Use of the procedure required special legislation from existing North Carolina law which requires a bifurcated proposal process for design firms and construction contractors.

The uniqueness of this application was the major factor in award of funds from the Federal Highway Administration. As such, the process will be evaluated by a separate private engineering firm. The firm will document and evaluate the process determining if the design/build/warrant approach is a cost effective method for implementation of traffic management technologies.

There is no simple solution to reducing congestion. However, the integrated approach applied in Charlotte, North Carolina has proved highly successful. The incident management strategies implemented have reduced congestion caused by accidents and are cost effective. Furthermore, they will be essential elements of the future traffic management system. Implementation of the traffic management system will complete the package for congestion reduction. ■

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NCDOT AND WETLAND MITIGATION

David C. Robinson, Ph.D., P.E.*

Head, Permits and Wetland Mitigation Unit Planning and Environmental Branch
North Carolina Department of Transportation

The implementation of the Governor's Transportation 2001 Plan, a comprehensive program designed to accelerate improvements to North Carolina's transportation system, has put additional pressure on the NCDOT's Planning and Environmental Branch over the past year, particularly with respect to obtaining environmental permits and implementing wetland mitigation. Currently, the NCDOT has 30 individual permit applications pending; the issuance of which will allow the expenditure of about \$275 million in highway construction and maintenance funds.

The mitigation plan for five of these projects, on US 64 in Edgecombe and Martin counties, has recently been completed at a cost of \$225,000. To mitigate (at a 3:1 ratio) the 108 acres of wetlands being filled by the US 64 projects, the plan provides 325 acres of mitigation, plus another 380 acres (estimated to yield about 125 acres of credits for future projects).

The NCDOT currently has 15 approved project-specific mitigation sites in various stages of implementation. Some sites are being graded, some are ready to be planted, some have been completed and are being monitored, and others have yet to have work started. However, none of these sites are yet considered complete by the state and federal regulatory agencies.

The NCDOT is also in the process of developing three mitigation banks, totaling about 1,450 acres. One is a 625-

acre prior-converted wetland site owned by the NCDOT, which will provide mitigation for three major highway construction projects. The second is a 230-acre mountain bog, also owned by the NCDOT, which had been severely altered in an aborted attempt by a private developer to build a golf course. The third is a 600-acre site adjacent to the Dismal Swamp, on which the NCDOT has an option to purchase, subject to the completion of a mitigation plan. In addition, the NCDOT has entered into an agreement with a county soil and water conservation district, whereby wetland restoration will be funded by the NCDOT in return for needed mitigation credits. Other mitigation banks have been identified, but have not reached the state of being studied for feasibility.

To accommodate the additional workload created by permit applications and mitigation planning, a reorganization was recently implemented that resulted in the assignment of mitigation-related work to a group of engineers and biologists who work in a different section than the permit application specialists. Although there is considerable coordination and cooperation among the two sections by virtue of their being in the same larger unit, it is felt that a greater emphasis has been placed on developing mitigation sites and banking credits well in advance of the construction schedule of projects causing wetland impacts.

* Member, Central Carolinas Chapter, ASHE

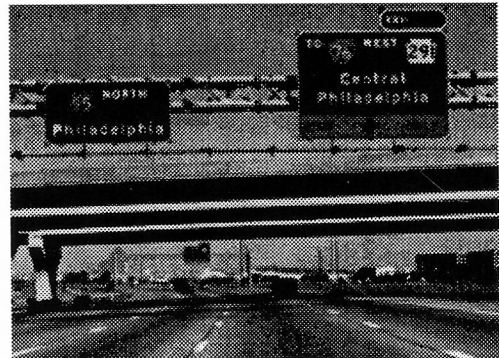
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DEFLECTION TESTING CAN SAVE YOU BIG \$'S

Article by Geoff Rowe, North Central Jersey Section



Figure 1: The Falling Weight Deflectometer

Deflection testing of highway pavements, which has been in existence for well over 40 years, is essential in order to design overlays and to achieve a cost effective pavement management strategy. The early days of deflection testing made use of a device known as a "Benkelman Beam." This device, measured the deflection caused by a slow moving axle and was eventually followed by the automated, "The Lacroix Deflectograph," thus enabling measurements to be made much more rapidly. The Benkelman Beam and Lacroix Deflectograph have been used extensively around the world including the North Eastern USA. However, the principle disadvantages of these early devices were; 1) inability to measure multiple deflections at a location, and 2) the relatively slow speed of loading.

More recently the Falling Weight Deflectometer (FWD) has become the standard tool for performing deflection measurements. This NDT equipment, endorsed by the Strategic Highway Research Program (SHRP), has been used extensively in the Long Term Pavement Program (LTPP) for obtaining pavement deflection information. The FWD, which also has been heavily utilized in the paving industry - including highways, airports and port pavements - loads the pavement in a controlled manner by means of a falling weight (hence its name) so that the load pulse resembles that of moving wheel loads. It consists of a trailer towed behind a vehicle and the equipment is stationary during each test which takes approximately one minute, see Figure 1. The applied load is measured by a load cell and recorded by an on-board computer. Simultaneously seven transient deflections of the pavement surface are measured at various distances from the load enabling the definition of the deflected pavement shape typically over a 12 foot diameter area. The shape of this "deflection bowl" is influenced by all the pavement layers including the subgrade.

The weight of the applied impulse load can be adjusted to simulate the anticipated traffic population. On heavy trafficked interstates the load applied typically varies between 9,000 and 16,000 lbs whereas on an airport runway, with frequent Boeing 747's landings, loads as high as 55,000 lbs are applied.

Back-calculation of the FWD test data enables the condition of the materials to be obtained and hence the load carrying capacity of the pavement. The software packages used for back-calculation generally make use of layered elastic analysis which allows the determination of the stiffnesses of the different pavement layers. Figure 2 illustrates how the

shape of a deflection bowl is changed by the stiffness of the main structural pavement layer and the soil properties. The resulting stiffnesses are indicative of the relative condition of the pavement layers.

Surveys can be conducted on a range of pavement types (flexible, rigid and composite) and along with materials test data, the FWD results are used to assess residual life and to design alternative strengthening or maintenance measures. In addition, the FWD is particularly suitable for assessment of load transfer and slab support at the joints on PCC pavements. This enables quantitative selection of poor performing joints for remedial treatment prior to placing an overlay. This optimization of treatment reduces the reflective cracking which can easily destroy the effectiveness of an overlay in a few years.

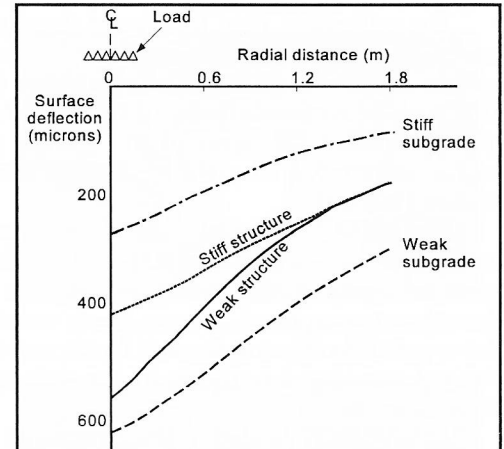


Figure 2: Simplified characterization of the deflection bowl

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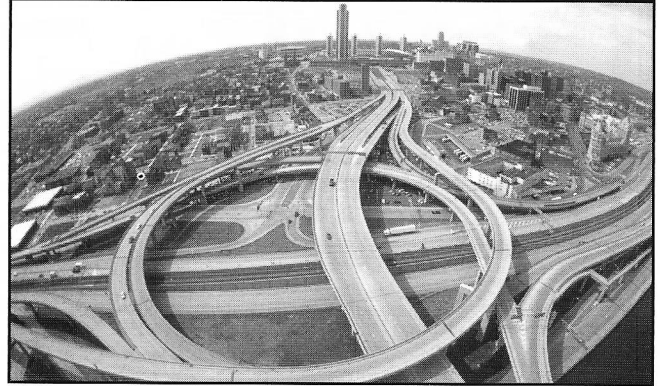
LEGISLATIVE NOTICE

Two bills are presently before the U.S. Congress that need the support of all ASHE members. These bills potentially effect the entire transportation industry.

H.R. 842 (Truth in Budgeting Act) would remove the Highway, Aviation, Harbor Maintenance, and Inland Waterways Trust Funds from the Unified Federal budget. Congress has underspent the money in these trust funds and has used the balance to make the federal deficit appear smaller. The specific taxes that go into these trust funds are user based and should be used exclusively for infrastructure improvements and investments. We need Congress to honor its contracts with the citizens and to restore the integrity of these trust funds which were put into place for specific purposes.

S.B. 440 (The National Highway System) must be enacted by October 1, 1995 or \$6.5 billion dollars will be withheld from the States. This bill designates approximately 150,000 miles of various highways as the National Highway System. Failure to pass this bill will obviously damage the ability of the State's to carry out their mission of providing safe and efficient transportation for the citizenry.

Please contact your own Congressional representatives and ask for their support in passage of these two very important transportation bills. ■



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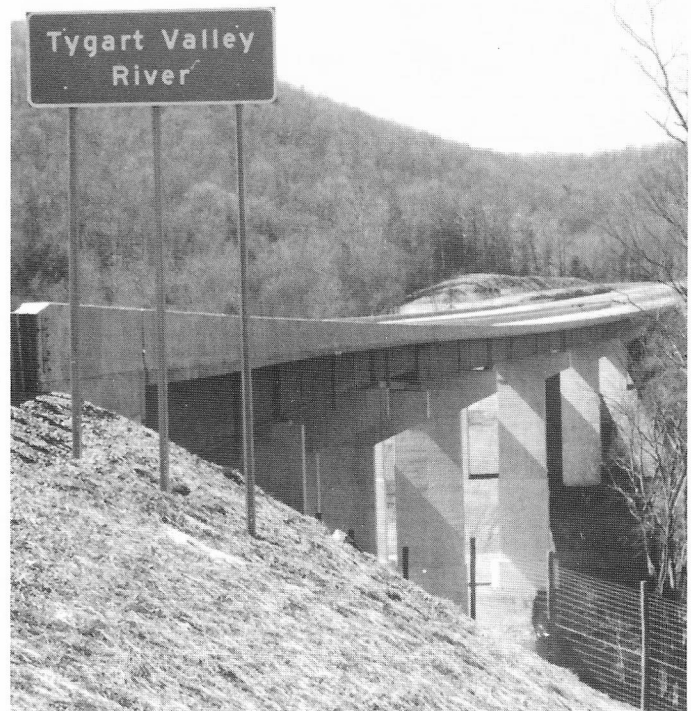
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