

# the news



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PHILADELPHIA SECTION

AMERICAN SOCIETY OF CIVIL ENGINEERS

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Vol. 71-2

## Our 85th Year

November, 1998

### NOVEMBER JOINT DINNER MEETING

Philadelphia Section, American Society of Civil Engineers  
Philadelphia Chapter, Women's Transportation Seminar  
Philadelphia Section, Society of Women Engineers

### THURSDAY, NOVEMBER 12, 1998

WILLIAMSON'S • GSB Building • City Line Ave. • Philadelphia • See Location Map Below  
Cocktails - 5:30 p.m. • Dinner - 6:30 p.m. • Meeting - 7:30 p.m.

**SUBJECT:** "Recent Federal Transportation Legislation (ISTEA and TEA-21) and How It Will Affect The Philadelphia Region." A panel discussion.

**SPEAKERS:** Denise L. Goren, Deputy Mayor for Transportation, City of Philadelphia; Happy Fernandez, Former Councilwoman and Current Candidate for Mayor, City of Philadelphia; Karen L. Martynick, Vice Chairman, Chester County Board of Commissioners

#### SPECIAL FEATURE: VILLANOVA UNIVERSITY NIGHT

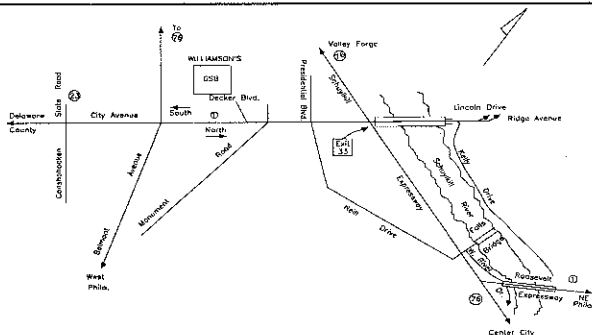
The ASCE Student Chapter, Alumni and Faculty of the Civil and Environmental Engineering Department of Villanova University will be honored at this meeting. All Students, Faculty and Alumni are cordially invited.

**RESERVATIONS MUST BE SUBMITTED BY TUESDAY, NOVEMBER 10, 1998.** Please send your check for the number of attendees @ \$25 per member or guest; \$13 ASCE Student Members, payable to the Phila. Section, ASCE, P.O. Box 58186, Phila., PA 19102-8186; or call the electronic Message Center: (215) 934-3639 (Open 24 hours/day).

In 1991, Congress passed the Intermodal Surface Transportation Enhancement Act (ISTEA), a landmark funding bill which changed the nature of transportation facility funding from what it traditionally had been before that time. The old concentration on new facilities and an almost-exclusively highway focus was radically revised to a new emphasis on preservation and maintenance of existing systems, "tinkering" where necessary to increase mobility, and completely new programs for congestion mitigation, air quality measures, transportation enhancement, and an ability to "flex" funding to mass transit. This past year, with the passage of the Transportation Equity Act for the Twenty-First Century (TEA21), even more changes are in store, mainly in the areas of intelligent transportation systems (ITS) and other high-tech measures.

Pennsylvania has been a principal benefactor of both acts, particularly TEA21, and the Philadelphia area stands to receive a generous share of the funding for numerous needed transportation

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**LOCATION MAP**  
for  
**Williamson's  
GSB Building,  
City Line Ave.,  
Philadelphia**

### TECHNICAL GROUP ACTIVITIES

#### Geotechnical and Environmental/ Water Resources Group

(Combined Program for 1998-99)

**LOCATION:** Drexel University  
Hill Conference Room,  
LeBow Engineering Center  
31st & Market Sts., Philadelphia  
6:30 - 9:00 pm

**CONTACTS:** Dr. J.P. Martin, (215) 895-2363  
Dr. S.C. Cheng, (215) 895-2996

**Program:** For the program, the committee is presenting a series of speakers on the range of geotechnical and geoenvironmental practice, including professional issues as well as technical projects.

**October 27, 1998**

*Perspectives on Changes in Geotechnical Practice;* Richard Mabrey, Private Consultant

**November 16, 1998**

*The 1st Weston Lecture: Geotechnical and Environmental Problems in Mining Waste Disposal;* Dennis Grubb, Georgia Institute of Technology

**December 15, 1998**

*Exploration, Planning & Execution of Delaware River Channel Dredging;* Michael Carnivale, U.S. Army Corps of Engineers

**January 19, 1999**

*Slope Stabilization, Cherry Island Landfill;* William Deutsch, R.F. Weston

**February 16, 1999**

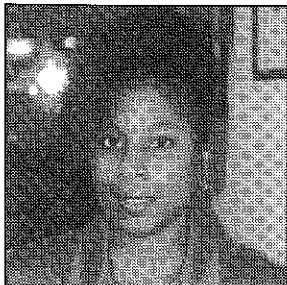
*Exploration and Earthwork Design, Nooristown PA Turnpike Widening;* Bashar Qubain, Valley Forge Laboratories

**March 2, 1999**

*Geosynthetics in Transportation/Geotechnical Applications;* Dr. Robert Koerner, Drexel University

*"A problem is half solved  
when it's well defined."*

— Charles Kettering



## THE PRESIDENT'S MESSAGE

Our year got off to a great start with an excellent program featuring **Nuria Hernandez**, Deputy Administrator of the Federal Transit Administration, who focused on Federal transportation issues. We now look forward to our upcoming meeting in November where the focus will be on city-wide transportation issues. The goal of having a female slate of speakers throughout the year promises to be interesting and informative.

Attendance at our Section meetings continues to rise and the atmosphere offers a great mixer for client and consultant relations but there is always room for improvement. Therefore, I am calling upon all members

for your assistance in building our membership. I would like for each member to invite at least one guest and recruit at least one new member. With each recruitment, your name will be entered into a drawing for a special prize award which will be awarded at our April meeting. Good luck comrades!

I had the pleasure of representing the Section and attending the National ASCE Presidential Inauguration at the Annual Convention in Boston, Massachusetts. Boston proved to be an excellent venture for exhibitors to view world renowned civil engineering projects such as the Central Artery/Tunnel Project which is better known as "The Bid Dig." Congratulations were extended to Delon Hampon, our new President Elect, on his recent victory at ASCE National. We were also represented by **Joe Synchron** who was installed as the new District IV Director and **Chris Menna** who graciously accepted a History and Heritage Award for the Section.

The idea of being more involved in Government Affairs has started out on the right foot. I look forward to this month's meeting which will feature a Deputy Mayor, a Commissioner and a former City Councilwoman and Mayoral candidate. Panel discussions have been an excellent forum in the past for interesting interaction between our engineers in the area. So, without a doubt, we believe this panel shall provide adequate examples for our members interested in government service related to leaders in transportation. Remember, make your reservations today by calling our Hotline at (215) 934-3639.

Sincerely, Sandra J. May  
President, Phila. Section, ASCE

## October Dinner Meeting

(Continued from Page 1)

projects. A panel has been assembled to address the effects of this legislation on the region from three differing perspectives. The panel includes:

**Happy Fernandez**, candidate for Mayor of Philadelphia — Until recently, Dr. Fernandez was a Councilwoman at Large in Philadelphia's City Council. She took a special interest in the transportation needs, problems and solutions for the City. She will speak from the point of view of an urban legislator. She will provide the perspective as author of the City's Strategic Plan on Transportation.

**Denise L. Goren**, Deputy Mayor for Transportation, City of Philadelphia — Ms. Goren will add her insights as a member of the Rendell Administration. She has spoken to various Section groups several times in the past and was the recipient of our Government Service Award in 1992. Ms. Goren will moderate the discussion.

**Karen L. Martynick**, Commissioner, Chester County — Ms. Martynick will relate her experiences as an elected official in one of the fastest growing counties in Pennsylvania and a suburban area which is beginning to feel many of the effects of development and urban sprawl. She is a Board member of SEPTA, the region's mass transit authority.

**Happy Fernandez** has been a catalyst for positive change in the city and region throughout her thirty years of service to the Philadelphia community.

**City Council Committees:** Chair, Committee on Transportation and Public Utilities; Vice Chair Committee on Commerce and Economic Development; Member, Committee on Education, Com-

mittee on Finance, Committee on Public Health and Human Services, Committee on Ethics, Committee on Law and Government, Committee on Parks, Recreation and Cultural Affairs.

Philadelphia Gas Commissioner, 1992-1997.

**A Respected Educator:** Tenured Professor in the School of Social Administration of Temple University (1974-1992).

Current Board Member of the Pennsylvania Academy of Fine Arts, Philadelphia Cultural Fund and the Education Law Center; Member of the Forum of Executive Women and the Women's Transportation Seminar.

**Denise L. Goren** is the Deputy Mayor for Transportation for the City of Philadelphia. In this capacity, Ms. Goren reviews and sets transportation policy for the City and provides liaison on policy issues with SEPTA, PaDOT, DRPA and Federal agencies. She has been a key player in the advancement of legislation such as ISTE and TEA-21, and has been a major influence in the strengthening of the roles of cities in Federal transportation policy. She helped to create the North American Cities Transportation Officials organization and this has evolved into an international group which held a conference in Philadelphia in July. She has been involved with the City's transportation efforts over the past fourteen years as the Deputy Mayor as well as in the Managing Director's Office. Her efforts in this area were recognized by the Phila. Section, ASCE, in 1992 when she was the recipient of our Government Service Award.

**Karen L. Martynick** is Vice-Chairman of the Chester County Board of Commissioners having served as Chairman in 1993 and from 1995 to

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**RESOLVE TO ATTEND ALL  
MONTHLY SECTION MEETING  
AND FUNCTIONS...  
AND INVITE YOUR CLIENTS,  
ASSOCIATES AND COLLEAGUES  
TO COME ALONG WITH YOU!**

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**COPY DEADLINE FOR  
DECEMBER 1998 ISSUE  
NOVEMBER 12, 1998**

## YOUNGER MEMBER FORUM NEWS

by Christopher Menna, Forum Editor

The Younger Member Forum (YMF) current membership includes college students, recent graduates, and young Registered Professional Engineers who are 35 years of age and under. The objectives of this group are: 1) To provide networking opportunities, 2) To interact with schools and the general public to promote Civil Engineering, and 3) To enhance career development.

Young engineers or college students who would like to become part of the YMF please contact **Carol Martsoff**, Parsons Brinkerhoff at (215) 790-2319.

### Upcoming Events

In November, we will return to the outdoors. On **Saturday, November 7, 1998**, there will be a Joint YMF and Sierra Club Trailwork Day in the Wissahickon Park. The work will begin around 10 a.m. and will be in a different location in the park. Specific details are to be released one to two weeks prior to the event. YMF members, college students, and the general Philadelphia Section membership are encouraged to participate. To register for this volunteer activity, please contact **Chris Menna**, Phila. Street Department as soon as possible at (215) 686-5070.

The YMF plans to host its Second Annual Winter Social on **Thursday, December 17, 1998** at Bistro St. Tropez in Center City. This well attended event will be an excellent opportunity to mingle and network with YMF members, Section members, and Section Board members. YMF members and college students are strongly encouraged to attend. For more information and to make a reservation, please contact **Carol Martsoff**.

### Past Accomplishments

On **Wednesday, October 21, 1998**, there was a Student Chapter Social for our area engineering schools at Sam Adams Brew House in Center City. This was an excellent opportunity for students to network and to learn about the YMF and ASCE. A special thanks to **Chrissy Berardi**, NTH Consultants for coordinating this event.

### Member Spotlight

The purpose of the member spotlight is to introduce a fellow YMF member to the Delaware Valley Engineering Community.

**Monica McCullough, P.E.**, is a Project Geotechnical Engineer employed by Gannett Fleming, Inc., in King of Prussia. One of her current responsibilities is the coordination of field monitoring, maintenance, data reduction, and data interpretation for 300 geotechnical instruments at the Delaware Solid Waste Authority's Cherry Island Landfill in Wilmington. She is a co-author of a paper about the Cherry Island instrumentation and recently attended the ASTM Symposium on Field Instrumentation for Soil and Rock in Atlanta to present the paper. Monica has been involved in a variety of landfill design, environmental, and transportation projects, including foundation design for bridges and retaining walls in the PennDOT Route 202 Section 400 Rehabilitation

## OCTOBER DINNER MEETING

October 15, 1998

Williamson's City Line, Phila., PA

### The Transportation Equity Act

By Bob Wright, Staff Writer

A satisfactory number of Phila. Section, ASCE members and guests attended and enjoyed the first regular monthly meeting of the 1998-1999 season at Williamson's, GSB Building, City Line, Philadelphia, PA on October 15, 1998. Section President **Sandra J. May, P.E.**, very capably presided at her debut meeting.

Subject of the meeting was a very important and timely one: "New Starts in the Transportation Equity Act for the 21st Century (TEA-21)." Principal speaker was **Nuria I. Fernandez**, Deputy Administrator, Federal Transit Administration (FTA, the United States Government Funding arm for transportation). She is second in command of the Federal Transit Funding and Advocacy Agency.

### Thomsen Presents Ms. Fernandez

Section Past President **William T. Thomsen** (1994-95) introduced the evening's speaker, **Nuria I. Fernandez**. Ms. Fernandez asked those present if anyone had not heard of the Transportation Equity Act for the Twenty-First Century, or TEA-21 as it is more commonly known. (TEA-21 is the recent Federal transportation funding legislation, for those who have not yet heard about it.) Everyone in the room was apparently aware of it. She explained that the act offered more opportunities than its predecessor, the equally-famous Intermodal Surface Transportation Efficiency Act (ISTEA), through more creative solutions to problems, and abilities for joint development and facility enhancement, particularly on the transit side.

### TEA and ISTEA Funding Comparisons

TEA-21 brings \$5 billion more in total funding than ISTEA, with almost twice as much for transit (\$8 billion vs. \$4.5 billion in ISTEA). There are 191 fixed guideway/rail earmarked projects and over 250 earmarks for bus facilities nationwide. Pennsylvania particularly fared well, with \$1.56 billion in TEA-21 for all modes compared to \$1.1 billion in ISTEA. Most of the thanks for this should go to Congressman Bud Shuster.

Shuster also insisted on the creation of a "firewall" to ensure that the transportation funds could not be allocated to other purposes or to cover budget deficits. Thus, the TEA-21 funding is dedicated to the solution of transportation problems. In addition, there is a guaranteed level of funding to the tune of \$36 billion which, if not used for transportation purposes, will merely sit unutilized. This is prompting many transportation agencies to act quickly to get their projects funded and underway.

Project. Monica received her B.S. and M.S. degrees from Drexel University where, during her Masters studies, she concentrated on Geotechnical engineering and geosynthetics. She has been an active YMF member for over three years.

Another major change in the Act allows a program for infrastructure financing. This will permit USDOT to provide lines of credit to transportation agencies to help advance needed projects if funding becomes problematic. A State Infrastructure Bank has been instituted in four States. A new program will provide for improvements to freight railroads.

### "New Starts" in Rail Transit

On the transit side, Ms. Fernandez noted that nearly one-third of the FTA budget will go to the "new start" program for rail transit. With this comes changes in the planning process for these starts, which will be over and above criteria provided in ISTEA. FTA will evaluate the ability of sponsor agencies to both build and operate the proposed starts and whether agency staff and/or consultants can effectively monitor the design and construction phases of the starts. Many cities are clamoring for new rail systems and are finding ways to finance them, such as passenger facility charges on airline tickets for routes into airports, and the addition of such systems onto proposals for downtown sports stadiums.

### New Project Requests Will Abound

FTA anticipates that its staff will be extremely busy in coming years with the additional funding available and the numerous requests for new projects. It will explore innovative financing methods to fund projects, especially since appropriations do not always match expected funding levels. This will help to avoid any problems with lags in appropriations or unfunded mandates.

Ms. Fernandez highlighted the recent "listening" sessions conducted around the country on the new requirements in TEA-21, especially on the planning side. Full guidance on this has not yet been issued but will be coming soon. Requirements for air pollution attainment and remediation will be assisted by a \$50 million program for non-attainment areas which will focus on new technology, such as alternative fuels. FTA will have the burden to review and recommend (or not recommend) these projects for eligibility for federal dollars. These projects will also be reviewed by Congress, which may have differing opinions.

### FTA and Local Agency Coordination

FTA is also emphasizing that major investment studies (MIS) and alternative analyses should be funded with local/agency funds to preserve scarce Federal funds for final design and construction phases. Ms. Fernandez noted that too many studies have been undertaken with no finite results, and that the funds expended on these studies could have been put to perhaps better use in implementation. Her suggestion to those expecting to submit projects was that they should have a well-cemented plan for implementation.

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## JOIN THE SECTION'S TECHNICAL GROUPS

### Younger Member Forum

*John Zarsky, P.E., President*

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### Engineering Management

*Dennis MacBride, P.E., Chairman*

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### Environmental-Geotechnical

*Dr. Joseph P. Martin, Chairman*

Drexel University  
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Philadelphia, PA 19104  
(215) 895-2363

*Adam Hockenberry, Asst. Chairman*

Drexel University  
Civil & Architectural Engineering Dept.  
32nd & Chestnut Sts.  
Philadelphia, PA 19104  
(215) 895-1633

## November Joint Meeting

(Continued from Page 2)

1997. Chester County is the seventh largest county in the Commonwealth of Pennsylvania with 415,000 residents. As County Commissioner, Ms. Martynick oversees a budget of \$250 million and a work force of 2400 full and part-time employees and is responsible for administering a wide array of departments, programs, and services including human services, libraries, parks, housing, planning and water resources, the courts, and administrative areas such as human resources and procurement.

Since her election in 1991, Commissioner Martynick has focused special attention on the challenges faced by a rapidly growing county especially in the areas of land use, growth management and environmental protection.

In addition her work on land use and growth management, Commissioner Martynick's work has included special initiatives in the areas of eco-

nomics development and government efficiency. Chester County was the first county in the Commonwealth to adopt a strategic plan for economic development in 1994. Working with corporate leaders from such companies as Vanguard, Shared Medical Systems, QVC, and Lukens Steel, the county developed a set of goals and objectives to insure a sound economic future. Recognizing the need to run county government more like a business, Commissioner Martynick has spearheaded programs to bring customer service and greater efficiency to county government.

In addition to her duties as County Commissioner, Ms. Martynick has served for six years as a member of the Southeastern Pennsylvania Transportation Authority. As a SEPTA Board Member, Commissioner Martynick has pushed for improved service to Chester County and has spoken on the need for regional cooperation in the area of public transportation to local, state and national organizations. Commissioner Martynick is active in the National Association of Counties serving on the Energy, Environment, and Land Use Committee from 1992 to 1996 and currently serving on the Transportation Committee.

## ACI ANNUAL AWARDS COMPETITION

The Delaware valley Chapter of the American Concrete Institute (ACI) is pleased to announce its **8th Annual Awards Competition**. The purpose of the competition is to recognize outstanding concrete projects. Submittal projects must be completed between **January 1, 1993 and December 31, 1998**. Projects located in the Chapter Counties of Philadelphia, Montgomery, Bucks, Delaware, Chester, Berks, Lehigh, Lebanon, Dauphin, and Northampton in the Commonwealth of Pennsylvania, or in the State of Delaware, are eligible for the Competition.

For further information and submittal forms, please contact: **Ken Balch, CVM Engineers, (610) 989-3800**.

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[www.vill.edu/~engine/cee/grad.htm](http://www.vill.edu/~engine/cee/grad.htm)

## October Dinner Meeting

(Continued from Page 3)

### Highway Funding and Environmental Considerations

Highway dollars area also available for transit purposes, with the Congestion Mitigation/Air Quality (CMAQ) program specifically suited for intermodal efforts. Environmental considerations should also include economic impacts, particularly on the transit-dependent.

Ms. Fernandez closed with a reminder that there still is not sufficient funding for all needs, even at the generous levels provided in TEA-21, and funding remains critical for mobility, not only in urban areas, but in suburban and rural areas where transit is nearly non-existent.

### Questions and Answers

Many questions from members of the audience on the local efforts of FTA and the future of design-build were fielded by Ms. Fernandez with clarity and thoroughness. It was an excellent presentation by our distinguished speaker.

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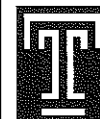
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