



JULY • AUGUST 2007

VOLUME XXIV NUMBER 4

REPORTER

The Magazine of the Pennsylvania Society of Professional Engineers



Also Inside

Risky Business - Successor to the Crown
PSPE Conference Highlights
PEPP Happenings
Hartford Citywide Traffic Calming

Daydreaming of ways to save?



PSPE members save with UPS

Your Pennsylvania Society of Professional Engineers membership entitles you to discounts on shipping services. Whether it's overnight letters across the country or international shipping around the world, you save right from the start. No minimums. No catch. And all with the reliability of the company that delivers more packages on time than anyone. It's simple to become part of this program and it only takes about two minutes to sign up.

WHAT CAN BROWN DO FOR YOU?®

Sign up now at savewithups.com/membership

Or call 800.325.7000 to start saving.

Here's how you can save:

UPS Next Day Air® (Ltr)	\$1.50 off published rates
UPS Next Day Air® (Pkg)	10% off published rates
UPS Worldwide Express™ Export (Ltr/Doc/Pkg)	20% off published rates
UPS 2nd Day Air A.M.® (Ltr/Pkg)	10% off published rates



Pennsylvania Society of
Professional Engineers



©2006 United Parcel Service of America, Inc. UPS, the UPS logo, and the color brown are registered trademarks of United Parcel Service of America, Inc. All rights reserved.



Pennsylvania Society of Professional Engineers

2007-2008 Executive Committee

President: Leonard K. Bernstein PE, F.NSPE
4140 Orchard Ln ; Philadelphia, PA 19154-4418
215.824.3570 • lenbernsteinspe@yahoo.com

President Elect: John F. Bradshaw PE
4431 N Front St 2nd Fl; Harrisburg, PA 17110-1709
717.939.9551 Ext 2640 • jbradshaw43@comcast.net

Secretary: Joseph F. Boward PE
411 Poplar Ct; Moon Township, PA 15108-9028
724.457.0708 • jboward@garvinbowardeng.com

Treasurer: John A. Nawn PE
1235 Westlakes Dr Ste 260; Berwyn, PA 19312
610.640.7456 • j.nawn@gaiconsultants.com

Immediate Past President: Harve D. Hnatiuk PE, F.NSPE
PO Box 1075; Ft Washington, PA 19034
267.252-0166 • harvehnat@aol.com

Vice President Northeast Region: Walter J. Poplawski PE
90 N Thomas Ave; Kingston, PA 18704
570.822.8500 • wpoplawski@aegroup.org

Vice President Northwest Region: David L. McCullough PE
390 Bradys Ridge Rd; Beaver, PA 15009
724.774.7349 • dlmccullough@pbsj.com

Vice President Southeast Region: Francis J. Stanton Jr. PE
50 Fir Dr; Richboro, PA 18954
215.497.1231 • fjstanton@cs.com

Vice President Southwest Region: Michel J. Sadaka PE
9318 Marshall Rd; Cranberry Township, PA 16066
412.771.7701 • michel@sadaka.net

Vice President Central Region: Susan K. Sprague PE
220 St Charles Way Ste 200; York PA 17402
717.741.6222 • SSprague@jmt.com

Executive Director: John D. Wanner, CAE
908 N. Second Street; Harrisburg, PA 17102
Phone: 717.441-6051 • john@wannerassoc.com

Editor: Jennifer A. Summers

The *PE Reporter* is published six times annually by the Pennsylvania Society of Professional Engineers (PSPE) located at 908 N. Second Street, Harrisburg, PA 17102. Phone: (717)441-6051 • www.pspe.org. Opinions expressed by authors herein do not necessarily reflect the opinion of PSPE.

NSPE Code of Ethics for Engineers Engineers' Creed

As a Professional Engineer, I dedicate my professional knowledge and skill to the advancement and betterment of human welfare. I pledge:

To give the utmost of performance;

To participate in none but honest enterprise;

To live and work according to the laws of man and the highest standards of professional conduct;

To place service before profit, the honor and standing of the profession before personal advantage, and the public welfare above all other considerations. In humility and with need for Divine Guidance, I make this pledge.

Adopted by National Society of Professional Engineers, June 1954

Table of Contents

Columns

President's Message	3
On Capitol Hill	5
Risky Business	7
Membership	18
Classifieds	22
Calendar	22
Chapter Spotlight	23
PAC Update	26
Member Spotlight	28

Features

Dams - Obviously Important and Often Overlooked	10
PSPE Conference Highlights	12
PNC Park	15
Hartford Citywide Traffic Calming Master Plan	16
PEPP Happenings	21
Call for Volunteers	24
LTAP - Focus on the Future	26

Advertisers

Barry Isett & Associates	14
Buchart-Horn, Inc.	14
Burns Engineering Inc.	8
C.S. Davidson, Inc.	14
Cayuga Concrete Pipe	2
Cowan Associates, Inc.	8
Engineering Mechanics, Inc.	14
F.T. Kitlinski & Associates	19
Fenner & Esler Insurance	4
GAI Consultants Inc.	IBC
Gannett Fleming	14
Garvin Boward Engineering	14
George, Miles & Buhr, LLC	8
Hanover Engineering Associates, Inc.	19
Keddal Aerial Mapping	6
L. Robert Kimball & Associates	6
McMahon Associates, Inc.	8
Michael Baker Corporation	BC
New Enterprise Stone & Lime Co. Inc.	6
Penn State Outreach Marketing	8
Pickering, Corts & Summerson Inc.	6
Powell Trachtman Logan Carrle & Lombardo	4
Ricoh Business Systems	8
Senate Engineering Company	14
Tantala Associates	14
The Gateway Engineers Inc.	8
UPS	IFC

Cover Photo

In early April 1999, Pittsburgh-based Dick Corporation, as part of a joint venture with Detroit-based Barton Malow, broke ground on PNC Park in Pittsburgh, PA. This engineering marvel was completed and ready for opening day for the 2001 baseball season. See details on p. 15.

INVEST IN *Pennsylvania*

PA TRANSPORTATION

NJ STEEL

NJ SAND

PA LABOR

PA STONE

PA VENDORS

KEEP PA STRONG

BUY CONCRETE PIPE

Do It Right - Specify Concrete Pipe

CAYUGA CONCRETE PIPE a division of  Oldcastle Precast, Inc.

77 Bristol Road, New Britain, PA 18901 215-345-1544 FAX 215-340-1711
PO Box 129 RR1 Rt 706 Montrose, PA 18801 * 800 278-1375 * FAX 570-278-2886

President's Message

Len Bernstein, P.E., F.NSPE

My term as President of PSPE did not start out as I had planned. I was unable to join you at the Annual State Engineers Conference in Reading due to knee replacement surgery less than two weeks before the conference. However, from all reports, the conference was well attended and exceeded everyone's expectations. Kudos to Rick Aulenbach, his committee, and the members of the Reading Chapter for all their work in organizing the conference.

If you did not attend the conference in Reading, I know we both missed a great time. I've marked my calendar for the 2008 Annual State Engineers Conference in Gettysburg from June 5th through 7th. If you'd like to help in organizing the Gettysburg Conference, please contact President-Elect John Bradshaw.

At the Reading Conference, an emphasis was placed on young members because that's where the future of our profession and our Society lies. Less than ten percent of our membership is under 40 years of age. In fact, at your next Chapter meeting or event, take a look around you. What do you see? I would expect that you'll see the same thing I see when I attend one of my Philadelphia Chapter meetings – a lot of gray hair (or in my case, not much hair at all). We need to change that. We need to reverse the "graying" of PSPE. We need to attract and retain young members. We need to pass on the experience we have to the younger members of our profession.

And how do we do that, you ask? When was the last time you talked to a younger colleague about PSPE? When was the last time you invited a younger colleague to join you at a Chapter meeting or event?

Why did you join PSPE? Did an older colleague invite you to a meeting? That's what happened to me. I was a young engineer working for the Chief Engineer of the Philadelphia Water Department when my wife called me to tell me that the letter came letting me know I passed the PE exam. I was so proud – I was now a Professional Engineer. I went right to my boss, Ken Zitomer, to tell him. His response was to congratulate me and to tell me that he was taking me to a Philadelphia Chapter meeting that evening. I didn't know at the time that Ken was the President of the Philadelphia Chapter nor did I know anything about PSPE. I attended the meeting and before I knew it (actually it was a couple of months later), I was appointed to fill a vacancy on the Chapter Board and the rest is history so to speak.

That was almost 30 years ago and I am no longer a young engineer, but I still remember that day as if it was yesterday. I joined PSPE because I was encouraged by an older colleague.

Now I am one of the "older colleagues" and it's up to me, and you, to encourage younger colleagues to become licensed engineers and to join PSPE.

Is your story similar to mine?

Have you done your part? Have you encouraged a younger colleague to join you at a chapter meeting? Have you offered a younger colleague a six-month free membership to PSPE? It's up to us to reverse the graying of PSPE. We need to get out there and talk to our younger colleagues about the engineering profession and PSPE. Together we can change the future of PSPE. We must encourage younger colleagues to start the journey to replace each one of us . . . and that journey starts with each one of us inviting a younger colleague to a chapter meeting or event.

As we start this new administrative year, I welcome any comments you may have about our Society. Please feel free to e-mail me at LenBernsteinPE@yahoo.com and we'll see if together, we can move our Society forward. ■

PSPE Calendar of Events

29	30	1	2
2007			
September 22	MATHCOUNTS Coordinator Meeting Sheraton Harrisburg-Hershey Hotel Harrisburg, PA		
September 29	PSPE Board of Directors Meeting Hyatt Place Cranberry Township, PA		
2008			
March 28-29	Pennsylvania MATHCOUNTS Competition Sheraton Harrisburg-Hershey Hotel Harrisburg, PA		
June 5-7	PSPE Annual Conference Wyndham Gettysburg		

Announcing A Revolutionary Concept In Insurance For Pennsylvania Engineers: A Choice.

When it comes to professional liability insurance, about the only choice available for engineers has been "take it or leave it." With limited options available it's no wonder so many engineers overpay for the coverage they know they need. Or worse, leave themselves exposed because adequate coverage is simply unaffordable.

But there is an alternative. Blue-chip professional liability coverage from a

company that knows the profession. Since 1923, Fenner & Esler has been delivering the right amount of coverage and value to professionals and firms of all sizes. We're industry leaders in



FENNER & ESLER
INSURANCE

SINCE 1923

providing customized coverage plans for design professionals and related companies. We represent numerous "A" rated carriers and can provide coverage that's customized, competitive-and flexible. Even if you're in the middle of a multi-year policy, we'd be happy to provide a quote on the exact coverage you need.

Now there's only one choice for you to worry about: will you be contacting us by phone, fax or e-mail?

Call Timothy P. Esler, CPCU: Toll Free: 1-866-PE-PROTEK ext. 208 (866-737-7683 ext. 208)

E-mail: tesler@fenner-esler.com

www.powelltrachtman.com

Stability requires protection. We provide both.

A full service law firm with a unique approach to the practice of law: we focus on the prevention, not just the cure, of our clients' problems. The firm provides counsel to the design professional community on matters including:

- Preparation of Contracts for Design Services
- Licensure Requirements and Compliance
- Defense of Professional Malpractice Claims
- Business, Tax and Estate Planning Transactions
- Commercial Litigation and Dispute Resolution
- Employment Law
- Business Organization

**POWELL
TRACHTMAN
LOGAN
CARRLE &
LOMBARDO**

A PROFESSIONAL CORPORATION

**475 Allendale Road, King of Prussia, PA . 610 354 9700
114 N. Second St., Harrisburg, PA . 717 238 9300
1814 E. Route 70, Cherry Hill, NJ . 856 663 0021**



On Capitol Hill

John D. Wanner, CAE

Budget Passage Delayed, But Not Denied

It took 17 days longer than it was suppose to, but the General Assembly and Governor Ed Rendell finally worked out an agreement on the Commonwealth budget as well as several other initiatives. The Governor did not get everything he wanted. In particular, his energy proposals are stalled until a special session begins in September. However, the budget was accompanied by a transportation funding bill and several minor pieces in of Rendell's healthcare reform plan.

In the end, the budget that passed was fairly modest and some programs were cut and even eliminated. Of particular interest to PSPE, the line item that supports MATHCOUNTS was restored entirely. That means MATHCOUNTS will again receive a \$75,000 grant from the PA Department of Education. The bad news is that the engineering equipment grant program, which PSPE has championed for many years, suffered a drastic reduction. The program that has been traditionally funded at the \$1 million level, only received a \$150,000 appropriation. The notion of splitting that amount of money amongst 20 engineering schools is almost laughable, even if it is a 2 to 1 matching grant. But getting even a token appropriation keeps the program on the books so that it will have to be discussed in next years budget negotiations. PSPE is committed to working towards full restoration of the grant program in the next budget.

Transportation Funding Enacted

Major changes to how highway construction, bridge repair and mass transit will be funded were enacted as part of the overall spending plan passed by the General Assembly this month. HB 1590, sponsored by Rep. Joe Markosek, D- Allegheny, the Democratic Chairman of the House Transportation Committee, passed both chambers and was the subject of intense negotiations between House and Senate leaders and the Rendell Administration. The primary source of new funds will come from bonds, increased turnpike fares and the tolling of Interstate 80. The plan also allows for an Allegheny County to impose up to a 10% "drink tax", similar to one levied in Philadelphia currently. HB 1590 was the final key piece in the budget puzzle, and became Act 44 on July 18. Key provisions are outlined below, thanks to Senate staff analysis.

NEW TRANSPORTATION FUNDING INITIATIVE

Beginning in fiscal year 2007-08 the Pennsylvania Turnpike Commission (TPC) and the Department of Transportation (PennDOT) will enter into a public-public partnership in order to deliver one of the largest infusions of money into roads, bridges, and transit in the history of the Commonwealth. The TPC will enter into a fifty-year lease agreement which will require it to make payments to PennDOT. In return, the TPC will be allowed to toll and operate Inter-state 80.

Below is a chart of scheduled payments from the TPC to PennDOT:

Fiscal Year	Total Transfer to PADOT	Funding for Transit	Funding for Roads and Bridges
2007-2008	\$750M	\$300M	\$450M
2008-2009	\$850M	\$350M	\$500M
2009-2010	\$900M	\$400M	\$500M
2010-2011+	\$900M + 2.5%cola	\$400M+2.5%cola	\$500M +2.5%cola

The TPC will meet these financial requirements in three ways: by issuing up to \$5 billion in Motor License Fund backed bonds*; using excess Turnpike spine-line revenue and monetizing future spine-line revenue; and using excess Interstate-80 revenue and monetizing future Interstate-80 revenue.

*The debt service on the bonds backed by the Motor License Fund will be paid by the Commission. The issuance of these bonds will have no effect on the amount of funds available in the Motor License Fund.

Transit Funding Changes

HB1590 completely restructures the way mass transit is funded in Pennsylvania. While some of the sources of funding remain the same, the old patchwork system of funding is repealed and replaced with one dedicated fund – the Public Transportation Trust Fund, which will be established in the state treasury.

Sources of funding: The following will be deposited into the Public Transportation Trust Fund annually.

	PTAF Money	4.400% of Sales Tax**	Lottery Money	TPC Money*	Act 3 Capital Commitment	TOTAL
FY2007-08 est.	\$180.3M	\$392.8M	\$80M	\$300M	\$125M	\$1.08Bn

"Capitol" continued p. 20

KEDDAL

AERIAL MAPPING

A Division of Kucera International Inc.

Film and Digital Aerial Photography
Multispectral and thermal aerial surveys
Aerial LIDAR surveys
Airborne GPS and GPS/IMU control
Digital terrain and 3D modeling
Planimetric/Topographic Feature Mapping
CAD/GIS conversion and support
Cadastral and Land Use Mapping



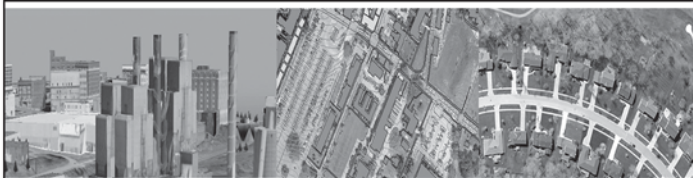
Pete Quigley, Manager

Tel (724) 942-2881, Fax (724) 942-2885

1121 Boyce Road, Suite 3100, Pittsburgh, PA 15241

map@keddalaerial.com, www.kucerainternational.com

Providing high quality, cost effective "sky-to-screen"
geomatic services to Pennsylvania engineers.



ENGINEERING



CAREERS

Kimball engineers use their expertise on a variety of projects and are rewarded for their contributions. We offer competitive salaries, training opportunities, flexible work hours, and more. We are a leader in our industry and are looking for talented individuals in many disciplines to help us reach our goal of growth for our staff, clients, and company.

Mechanical • Electrical • Structural • Bridge • Highway
Airport • Civil • Environmental

814.472.7700 | www.lrkimball.com

BEST PLACES to work in PA 2006

Kimball
L. Robert Kimball & Associates
Architects and Engineers



PICKERING, CORTS & SUMMERSON, INC.

CONSULTING ENGINEERS, LAND SURVEYORS,
PLANNERS AND LANDSCAPE ARCHITECTS

WORKING TOGETHER,
WE TURN VISIONS INTO REALITY



NEWTOWN, PA
215.968.9300

PENNINGTON, NJ
CENTER VALLEY, PA
PLYMOUTH MEETING, PA

PA 413 & I-95
BUCKS COUNTY, PA

CAREER OPPORTUNITIES AVAILABLE
WWW.PCS-INC.BIZ



New Enterprise Stone & Lime Co., Inc.

- ♦ Construction Services
- ♦ Concrete Paving
- ♦ Prestress Beams
- ♦ Ready-Mix Concrete
- ♦ Crushed Stone
- ♦ Blacktop

*Providing Highway Construction
Materials Since 1924*

(814) 766-2211

www.nesl.com

Risky Business

Rebecca Bowman, Esq., P.E.

Successor to the Crown

I usually try to write to all of you, but this time, I'm writing to those of you involved in partnerships or smaller incorporated firms. Those of you in government or industry practice are only going to be interested in the second half of this column.

We have talked in previous columns (and we will again) about filling the pipeline of professionals behind. This time, we're not talking about generalities; we're talking about you and your unique situation.

Financial successor issues

There are a number of ways to deal with financial successor issues. I can't tell you what will work for you, but I can tell you that you need to think about these issues and have a plan.

Whether you're in a partnership or a corporation, you're a stakeholder. How can you or your family extract the value of your stake without destroying the firm? If you love the firm you have helped build, you'll want to make sure that you have a plan in place for this.

There are two possibilities you need to think about: disability and death. If you're competent, capable, and interested, you can gradually reduce your activity level and work out a retirement plan with compensation provisions, even a buy-out plan. That's really not what we're talking about here. We're talking about sudden events that remove you from the picture. (Note that some of the following discussion will not apply if the concerns are your desire to leave or revocation of your license, so don't extrapolate; talk to your lawyer.)

To deal with these possibilities, there are two people you need to talk to: your lawyer and your insurance broker. That because the

two tools you need to explore are buy-sell agreements and insurance.

Buy-sell agreements

I probably don't need to tell you that a buy-sell agreement is an agreement among partners or stakeholders that if the seller needs to sell (because of death, disability, or other specified reason), that the business or the other partners/stakeholders will buy, but I'll tell you anyway.

Buy-sell agreements should have been a part of the original formation of your partnership or corporation. It's like a pre-nuptial agreement. However, it has been my experience that only a few professional engineers entering into a new association deal with these issues.

That means that you and your other partners or stakeholders are going to have to deal with the issue after the fact. Just like a post-nuptial agreement, it can be made to work, but it takes some special effort. And, since it is now a separate contract (from the documents you agreed to when the business was established), there will need to be some separate consideration (that's means payment, but it doesn't have to be in cash).

There are four factors that must be dealt with in a useful buy-sell agreement: valuation, conditions, buyers, and funding. An effective buy-sell agreement establishes the method for determining valuation. Most set an initial value; that will need to be periodically updated. Why does this matter? Otherwise, at the time of your death or disability, conflicts will arise between the seller (who wants a high valuation) and the buyer(s) (who want a low valuation). Take care of setting that method and the timing for updates right upfront.

Whether you're in a partnership or a corporation, you're a stakeholder. How can you or your family extract the value of your stake without destroying the firm? ... you'll want to make sure that you have a plan in place for this.

The second set of factors are about the conditions of a sale: Must there be a single payment? If so, when must it be made? If not, how many payments and with what frequency? Is the payment schedule dependent upon the profitability of the company (This option is generally a bad idea, because profitability can be manipulated.)

The third factor is acceptable buyers. Must the buyer be the business? Must the buyers be the other partners/stakeholders? Is there anyone you absolutely do not want as the buyer? There's nothing wrong with this desire (as long as it's not illegally discriminatory), but excluding certain potential buyers it likely to decrease the value. On the other hand, there is a fairly shady character who keeps asking me if I want to sell my practice, so I want to make certain that he can't get his hands on what is essentially my reputation, my legacy.

"Risky" continued p. 9

RICOH

Wide Format Digital Imaging System

For Medium to Large size
Workgroups



Ricoh 480W 8cpm
80GB HD, Doc Server,
2 Rolls Standard, 600dpi resolution,
scan to e-mail, scan to folder,
scan to doc server

**Scan, Store, and Print Up to 36" Wide
& 49' Long Originals (480W)**

**Scan & Print 36" Wide and 49' Long
Originals(240W)**

Lease a **RICOH**
Wide
Format & get a **FREE**
26ppm
color
network
printer



Promotion code: 480WF07

Expiration
Date: **12/31/2007**

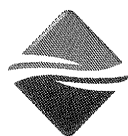
For Small Workgroups



Ricoh 240W 4cpm,
600dpi resolution, scan
to folder.

Contact: Wolf Schwarz
Tel: 215-827-2347
E-mail: wolf.schwarz@ricoh-usa.com

RICOH BUSINESS SYSTEMS
2727 COMMERCE WAY
PHILADELPHIA, PA 19154



GATEWAY

On Call. On Time. On Target.

The Project Management Experts

THE GATEWAY ENGINEERS, INC.
400 HOLIDAY DRIVE, SUITE 300
PITTSBURGH, PA 15220

P 412.921.4030
F 412.921.9960

www.gatewayengineers.com

A FULL-SERVICE CIVIL ENGINEERING FIRM

THE Burns GROUP

ENGINEERING AND CONSTRUCTION

Solutions
That Build
Your Future.



www.burns-group.com

Hone Skills in Watershed Management; Meet CPC Requirements

For more information call 800-PSU-TODAY
(778-8632) or visit the Web site:
www.outreach.psu.edu/proga/HECRAS

Penn State's short courses on watershed
management, taught by faculty nationally
recognized in their field, can help you
expand your expertise as you meet state
requirements for continuing professional
competency.

- Computational Methods in Stormwater
Management, May 16-18, 2007
- HEC-RAS/HEC-GeoRAS, June 11-15, 2007
- HEC-RAS for Stream Restoration and
Stabilization Projects, Sept. 17-21, 2007

PENNSTATE



an outreach program of the College of Engineering

PENN STATE Making Life Better

Penn State is committed to affirmative action, equal opportunity, and the diversity of its workforce. U.E.D.007 07-0344/pc Copyright © 2006 The Pennsylvania State University

MCMMAHON

TRANSPORTATION ENGINEERS & PLANNERS

www.mcmtrans.com

A full service transportation engineering firm
specializing in:

- Municipal Traffic Engineering Consultation
- Land Development Plan Reviews
- Roadway/Signal Plan Reviews
- Traffic Studies/Safety/Operations Analyses
- Transportation Planning/Traffic Calming
- Act 209 Studies/Financial Strategy Planning
- Land Survey
- Highway/Intersection/Structural Design
- Traffic Signal Design & Closed-Loop Systems
- Construction Management & Observation
- Expert Witness Testimony



Corporate Headquarters:
Fort Washington, PA
215.283.9444

Mechanicsburg, PA
717.691.5512

Exton, PA
610.594.9995

GMB

ARCHITECTS / ENGINEERS

CIVIL ENGINEERING
WATER / WASTEWATER
NUTRIENT REMOVAL

1030 Plymouth Rd, York PA 17402
866-600-0604 / www.gmbnet.com



COWAN ASSOCIATES, INC.

CIVIL ENGINEERS & SURVEYORS

Serving You since 1958 • Quality is Attitude

www.cowanassociates.com • cowan@cowanassociates.com

120 Penn - AM Drive • P.O. Box 949 • Quakertown, PA 18951

Tel. 215 536 7075, 1 800 492 5649 • Fax. 215 536 1582

Licensed in Pennsylvania, Connecticut, Delaware, Maine, Maryland, Massachusetts,
New Jersey, New York, North Carolina, South Carolina and Virginia

"Risky" continued from p. 7

The fourth factor is funding. Needless to say, if there's no money to buy out your share, the best buy-sell agreement in the world is moot. Small firms (with lower values) may be in a position to make the payment(s) out of cash. If your firm has sufficient cash flow, you can accumulate reserve funds to make the payment(s). With adequate credit and a cooperative banker, the firm could borrow the funds to make the payment(s). However, the other option is to fund the payment(s) through the use of insurance.

Insurance

Insurance is the other form of financial protection you can put in place. The most common product utilized is called "key-man life." (Yes, it's still called that.) This is a sort of life insurance policy in which the firm is either the beneficiary of the policy or the firm holds the contract and the beneficiaries are the other people who would be buying out your stake. If your heirs are the beneficiaries, it's just a typical life insurance policy (unless, of course, your heirs will be taking over the firm for you). The key characteristic of this policy is that it is specifically purchased to enable the other stakeholders to pay you or your estate for your stake. Without this policy, while the other stakeholders may have the best of intentions, they may not have the cash to pay you or your estate. And you don't want to be dependent upon their hoped-for future success to assure that you have received the value of your stake; you want to be assured that you will be cared for in your disability or that your estate receives the value of all your hard work over the years. Of course, as I have mentioned in other columns, I highly recommend that you check out disability income insurance. Many of my engineering clients have an ample estate to care for their families if they die. However, many of their estates will be drained before their deaths if they should suffer an incapacitating event such as a massive stroke.

There is a special issue to consider if you're a professional corporation. You will

need to make certain that the new configuration (after you're out of the picture) meets your state's requirements for professional corporation eligibility. For example, if the nature of your firm has shifted over time from civil engineering to environmental/planning services, you might not have another licensed professional engineer on staff to step in as the majority stakeholder. You should be prepared to deal with that before you're gone, not leaving it to someone else to scramble for a solution. Would a change in official status disqualify your firm for any contracts? (Unlikely; I have never seen a contract that required only professional corporations to bid.) If not, consider changing to a C- or S-corporation now, when you're in control. A smooth transition is probably more important than any perceived prestige associated with the professional corporation status.

Intellectual successor issues

Now, I know that in these days of workforce reductions and layoffs, we're all inclined to do what we can to make ourselves indispensable. However, that's irresponsible on two fronts: the rest of your life and the rest of the life of your firm. By most account, we are the most highly-regarded of the professions. One reason for that public confidence is the faith that we will do what's best for the public. (I want to note that that faith wouldn't have survived for long if it wasn't supported by experience. Congratulations!)

One of the sets of questions I have to answer when I renew my malpractice insurance has to do with what happens if I die or am disabled: Do I have a qualified person identified (who is agreeable) to step in and cover my projects in a timely fashion? Who is it? (If something has happened to me, the first indication may be disgruntled clients who can't get a response from me calling my carrier.) You need to be able to answer that set of questions. And the person you identify should be able to step in.

As much as each of us secretly desires to be indispensable in our early and middle

careers, as we get older, we come to understand that indispensability merely describes a prison, from which we increasingly desire parole. So . . . don't be indispensable.

When I counsel my estate-planning clients, I remind them that it isn't enough to gather their official papers together and put them in the fire-safe, if the executor doesn't know where the key is. The same principle is true for you. If you use secret (or obscure or indecipherable) code to identify files; make sure that someone knows where the "key" is. Better yet, what's the point of that code? Switch to an organized file structure (for both hard and soft files). It will make your work and your interactions more efficient today and any surprise transitions smoother tomorrow. If you're in a large firm, you are likely already using an "official" file structure. The primary reason is precisely to deal with these posterity issues.

If you're not in a position where your clients require that you submit periodic project reports, prepare them anyway. There are bunches and bunches of reasons why this is a good idea. (For example, routine records are acceptable to document change requests.) One of the best reasons is dealing with emergency situations when you're not there to provide guidance and instruction in person.

None of us particularly enjoys contemplating the possibility that something bad could happen to us. Get over it. If you haven't anointed a successor, if you haven't planned ahead for sudden disappearance, you're running a Risky Business. ■

The "Risky Business" column offers articles covering liability from both the legal and engineering perspective. Mrs. Bowman's articles share general information and should not be relied upon as professional legal advice of either a general or specific nature. Rebecca Bowman is a civil engineer-attorney in solo private practice in McMurray, Pennsylvania for more than 25 years. Her practice is a certified woman-owned business. Her B.S. in Civil Engineering is from the University of North Dakota.



Dams - Obviously Important and Often Overlooked

Kurt A. Staller, P.E.

Dams are unique and diverse structures. They are a part of our American History and many of the most famous dams – Hoover, Grand Coulee, Glen Canyon, and Flaming Gorge Dam – are engineering marvels visited by thousands of people each year. Almost everyone knows what a dam does; it impounds water. However, most people know very little else about dams.

Defining Dams

There are numerous types of dams, but in general they can be broken into five basic categories based on construction materials – earthfill, rockfill, gravity, arch, and inflatable/gated. Dams can also be a combination or variation on these categories. Many are multi-use facilities, but many are built for a single purpose, such as recreation, flood control, irrigation, or hydropower. Figure 1 provides a breakdown of the usage of dams by primary purpose in the U.S. These dams are owned by the federal, state, and local governments, as well as private entities. Roughly 55 percent of all dams are owned privately,

while the federal government owns only three percent. Municipalities, as a group, are one of the largest dam owners in the U.S.

So why are dams important to me? Besides all the above-mentioned uses, dams fail! In most cases, these failures do not make headlines or are overshadowed by other current events. In fact, dam failures are more commonplace than most people realize. Since 1999 there have been 119 reported dam failures, but most dams (approximately 49 percent in the U.S.) are less than 25 feet in height, and therefore, do not make headlines when they fail. However, when it's your dam that ceases to function properly, it certainly becomes newsworthy to you.

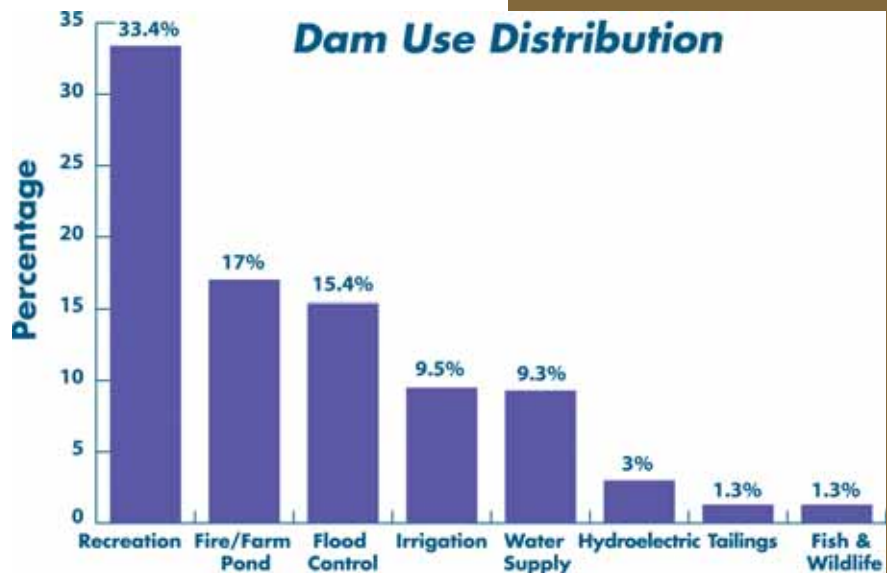
Why Do Dams Fail?

Many factors can contribute to the failure of a dam including age, flooding, maintenance, construction flaws, foundation issues, earthquakes, seepage, and even design flaws. Approximately 81 percent of dams are constructed of earth, which are susceptible to

seepage and overtopping. Piping and overtopping failures are the two most common failure modes for earthen embankments. Of the 119 reported dam failures since 1999, approximately 64 percent of those dams failed due to flooding. Another reason for failure is aging, and just like the human body, dams can develop problems with age. Almost half of the dams in the U.S. are approaching 40 years of age. Many dams in the U.S. were constructed using a 50- to 100-year design life, or in some cases, with no design life considered at all. The utilization or surrounding environment of many of these structures has changed considerably since their construction. Suburban sprawl continues to engulf the areas surrounding these structures. A dam may have been initially constructed for flood control, but now is used as a water supply or recreational dam. Also, the design criteria may have changed since a dam was constructed.

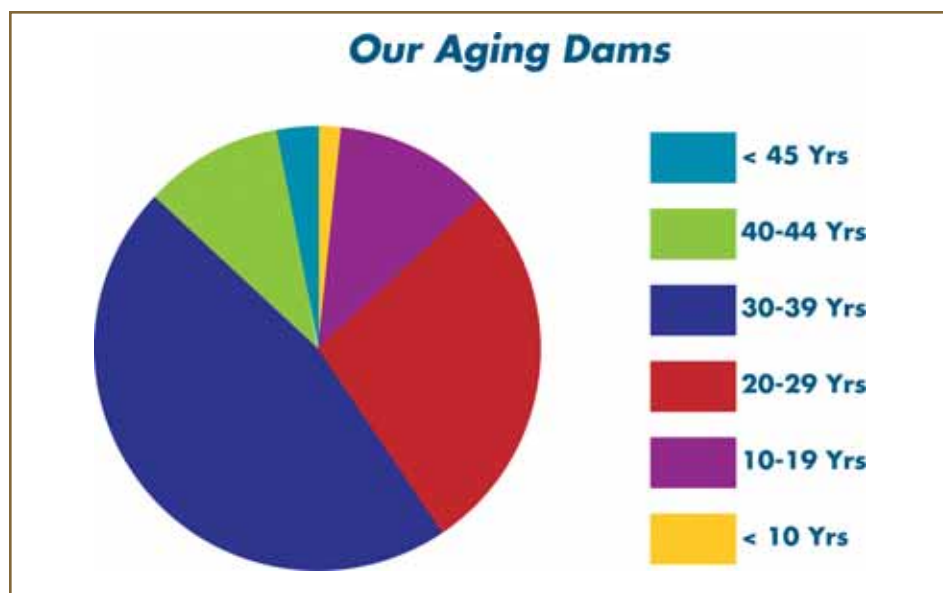
What Are Your Dam Problems?

When the Upper Shawme Dam, in the Oldest Town on Cape Cod, the Town of Sandwich, Massachusetts, became obsolete



and unsafe, the town turned to McMahon. Our firm is performing all permitting, final design, and construction inspection phase services required to replace the existing structure. ■

Kurt Staller, P.E. is Project Manager & Water Resources Engineer of McMahon Associates, Inc. Kurt Staller can be contacted at (717) 975-0295 or via email to kurt.staller@mcmtrans.com.



PSPE 2007 Annual Conference Highlights



1



2



3



4

To understand the intrinsic value of the PSPE Annual Conference, one needs to experience the event in person. Engineers and spouses who joined the conference can tell you that the words camaraderie, reunion, recognition and connection convey only a fraction of the actual essence. The snapshots shown here are only a glimpse into the entire picture of what was truly a successful congress of engineers.

Committee members Rick Aulenbach PE(chair)¹⁰, Steve Lester PE, Len Bernstein PE, F.NSPE, Harve Hnatiuk PE, F.NSPE, Paul Dugan PE, Jim McCarthy PE, Dave McCullough PE and Frank Stanton PE are to be commended for their teamwork and skill in bringing all aspects of the conference together.

Engineers and spouses from across the commonwealth (and one lone engineer from Texas) representing veteran leaders of the society and brand new members enjoyed the range of activities offered in Reading.

Members of the PSPE Reading Chapter and staff at RPA Associates organized a golf tournament at the beautiful Reading Country Club, which contributed \$1,500 to the Reading Chapter scholarship fund.

Committee members identified five unique and valuable education sessions, three of which were pre-approved to give attendees 5.0 PDH towards their New York license renewal. Engineers took advantage of the educational setting attending PSPE sessions at nearby Penn State Berks Campus to round out their knowledge base.

Saturday evening, PSPE guests celebrated the accomplishments of engineers and installed officers of the 2007-08 executive committee. Mayor Tom McMahon, P.E. welcomed PSPE to Reading as keynote speaker. The evening was beautifully framed by jazz music from the Bob Fanelli Trio, sponsored by Bohler Engineering.

Ken Rigsbee, P.E., F.NSPE, NSPE President 2008-2009 lead the installation ceremony.

2007-08 PSPE Executive Committee

President Elect

John F. Bradshaw, P.E., PLS¹

Treasurer

John A. Nawn, P.E.²

Secretary

Joseph F. Boward, P.E.³

Immediate Past President

Harvey D. Hnatiuk, P.E., F.NSPE⁴

Northeast Region Vice President

Walter J. Poplawski P.E.⁵

Northwest Region Vice President

David L. McCullough, P.E.⁶

Southeast Region Vice President

Francis J. Stanton Jr. P.E.⁷

Southwest Region Vice President

Michel J. Sadaka, P.E.⁸

Central Region Vice President

Susan K. Sprague, P.E.⁹

PSPE President 2007-08

Leonard K. Bernstein, P.E., F.NSPE (*in absentia*)



5



6



7



8



9



Awards

2007 Engineer of the Year
William J. Bryan, P.E., F.NSPE
 Ansys, Inc.

2007 Young Engineer of the Year
Paul L. Hoback Jr., EIT
 Allegheny County Airport Authority

President's Dedicated Service Award
Harry E. Garman, P.E., PLS
 Barry Isett & Associates, Inc.

Chapter Communications Award
Beaver County

PEPP Professional Development Award
McMahon Associates, Inc.¹¹

NSPE Fellows Pennsylvania Class of 2007

John E. Kampmeyer, P.E., F.NSPE¹²
 Triad Fire Protection Engineer

Thomas M. Maheady, P.E., F.NSPE¹³
 Borton Lawson Engineering Inc.

Donn R. Zang, P.E., F.NSPE
 Facilities Engineering Co.

Advertisers & Sponsors

Barry Isett & Associates
 Barton Associates
 Bohler Engineering, Inc.
 Borton-Lawson Engineering
 Gannett Fleming
 Johnson Mirmiran & Thompson, Inc.
 Maida Engineering
 McCarthy Engineering Associates
 PSPE Luzerne County Chapter
 PSPE Philadelphia Chapter
 PSPE Pittsburgh Chapter
 PSPE Washington County Chapter
 Qpro Q Engineering Inc
 Rettew Associates, Inc.
 RPA Associates Inc.
 Saper Vedere LLC
 UPS



10



11



12



13



See you next year!

2008 PSPE Annual Conference
 June 5 - 7
 Wyndham, Gettysburg



TANTALA ASSOCIATES
CONSULTING ENGINEERS

www.TANTALA.com

4903 FRANKFORD AVENUE
PHILADELPHIA, PA 19124-2617

T: 215.289.4600
F: 215.288.1885
E: mail@tantala.com

civil engineering
structural
geotechnical
site development
risk management

- Aerial Mapping/GIS
- Airport Design
- Architecture
- Bridges/Roadways
- Construction Services
- Municipal Buildings
- Parks & Trails
- Stormwater
- Telecommunications
- Water/Wastewater

800-274-2224

www.bh-ba.com

ENGINEERS ♦ ARCHITECTS ♦ PLANNERS



Construction of Kutzown Rec Center

Offices in
Coatesville, Harrisburg, Hershey, King of Prussia,
Pittsburgh, New Cumberland, State College,
Stroudsburg & York (corporate headquarters)



ENGINEERING MECHANICS, INC.
Consulting Geotechnical Engineers

Daniel Grieco, Jr., P.E.
President

Joseph P. Fagan, P.E.
Vice President

4636 CAMPBELLS RUN ROAD
PITTSBURGH, PA 15202

Phone: 412-788-3650
Fax: 412-787-5891

www.emigeotech.com

Transportation • Geotechnical • Water
Environmental • Industrial/Commercial
Homeland Security • GIS/Information Technology
Structural • Mechanical • Electrical



Gannett Fleming

A Tradition of Excellence

www.gannettfleming.com

207 Senate Avenue
Camp Hill, PA 17011

Tel: (717) 763-7211
Fax: (717) 763-8150



C.S. Davidson, Inc.

Excellence in Civil Engineering

www.csdavidson.com

- Consulting Civil Engineering
- Structural Engineering
- Site Design/Development
- Survey/GPS Services
- Planning/GIS Services
- Construction Inspection

York

Phone: 717-846-4805
Fax: 717-846-5811

Gettysburg

Phone: 717-337-3021
Fax: 717-337-0782

Lancaster

Phone: 717-481-2991
Fax: 717-481-8690

**SENATE ENGINEERING
COMPANY**

- Providing Engineering Services For Over 37 Years -

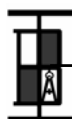
Water & Wastewater Systems - Feasibility Studies - Funding Acquisition
Roads & Bridges - Structural Design - Bridge Inspections - Permitting
Site Development - Stormwater Management - Surveying & Mapping - GIS
Project Management - Construction Surveillance

Kittanning, PA
Ph. (724) 548-1770

Pittsburgh, PA
Ph. (412) 826-5454

Washington, PA
Ph. (724) 228-6446

www.senateengineering.com



BARRY ISETT & ASSOCIATES, INC.

Consulting Engineers & Surveyors

Full Service Engineering • Founded 1977

Civil • Structural

Mechanical/Electrical/Plumbing Engineering

Surveying Environmental Construction Services

Lehigh Valley
610.398.0904

Valley Forge
610.539.2858

Hazleton, PA
570.455.2999

Berlin, MD
410.629.0883

www.barryisett.com



A STEP ABOVE A STEP BEYOND

CONSULTING
GEOTECHNICAL,
FORENSIC &
ENVIRONMENTAL
ENGINEERS

Joseph F. Boward, P.E.

R. Gary Garvin, P.E.

Garvin Boward Engineering, Inc. Phone: 412.922.4440
180 Bilmar Drive, Suite IV Fax: 412.922.3223
Pittsburgh, PA 15205 Email: jboward@garvinbowardeng.com



PNC Park

*Mike Fischer
Millennium Engineering, P.C.*

PNC Park, home of the Pittsburgh Pirates, is considered by many experts and fans to be the best stadium in baseball. Nestled intimately along the Allegheny River across from downtown Pittsburgh, this masterpiece provides both luxury and comfort to players and fans alike.

In early April 1999, Pittsburgh-based Dick Corporation, as part of a joint venture with Detroit-based Barton Malow, broke ground on the \$189 million project. Amazingly, the ballpark was completed and ready for opening day for the 2001 baseball season.

With just over 38,000 seats, PNC Park has the second smallest seating capacity in the Major Leagues, ahead of only Chicago's Wrigley Field. The ballpark's two-deck design allows every fan in the stadium to feel close to the action. The highest seat in the stadium is only 88 feet from the playing field, closer than in any other Major League park. Also, the ballpark is oriented to allow most spectators a marvelous view of the Clemente Bridge and the downtown Pittsburgh skyline.

The concept design for the stadium was done by Kansas City-based HOK Sport, who also provided the design for Heinz Field, home

of the Pittsburgh Steelers, and Citizens Bank Park, home of the Philadelphia Phillies. The architect of record was Pittsburgh-based L.D. Astorino Associates Ltd., who was responsible for completing the working drawings.

PNC Park is located just a few hundred feet east of the previous home of the Pirates and Steelers, Three River Stadium, which was imploded in February 2001, just prior to the opening of PNC Park.

To put a project like this into perspective, it is interesting to note the massive amount of materials that was used. Inclusive of the 970,000 square foot structure are 42,500 cubic yards of cast-in-place concrete, 15,500,000 lbs of structural steel, 7.67 miles of railing, 3,361 doors, 727 toilet fixtures, 610 televisions, 19 elevators, 8 escalators, and 3.1 acres of natural grass playing surface. To put all these pieces together in just 24 months and have a finished product as beautiful as PNC Park is truly an engineering marvel. ■

Author's note: Thanks to David Briskey, P.E. and Nadine Lee from Dick Corporation for providing materials/facts about the construction of the ballpark.



View from section 316 courtesy of Dave Briskey, P.E.



Hartford Citywide Traffic Calming Master Plan

Najib O. Habesch

The Hartford, Connecticut Traffic Calming Master Plan is the first plan in the nation to encompass an entire city. The plan covers each of Hartford's 14 residential neighborhoods and was developed through a highly interactive public process in which nearly one thousand residents and stakeholders participated. The plan was selected as a national award winning project by the American Council of Engineering Companies.

Traffic calming is a relatively new transportation specialty that serves to minimize high-speed and high-volume traffic in communities. The Hartford Traffic Calming Master Plan, developed by Urban Engineers, was achieved through a highly interactive public process that allowed residents and other stakeholders to define neighborhood traffic problems and identify possible solutions. While Urban analyzed the desired treatments requested by the community to determine their feasibility, a

"bottoms up" approach towards traffic calming was largely developed by community members, as these were the people most familiar with the neighborhood's traffic related challenges.

Though traffic calming plans have been developed for specific locations, streets, or neighborhoods in many communities, the Hartford Traffic Calming Master Plan is believed to be the first to encompass an entire city. Each of Hartford's 14 residential neighborhoods participated in the charrette process and plan development. As a result, Urban was able to develop the plan using a truly holistic approach, in which a proposed traffic calming treatment's potential impact on surrounding streets could be taken into consideration and planned for accordingly.

The success of this project highlights the benefits of planning traffic calming treatments at a citywide level. The City of Stamford, Connecticut, whose engineers closely followed the progress of the Hartford

Master Plan, have followed suit and are in the process of becoming the second municipality nationally to develop a citywide traffic calming plan.

Study scope – Urban conducted focus groups with key organizations with a stake in traffic calming; publicized the project through local media, flyers, website, and community meetings; collected data including vehicles speeds, volumes, and classifications, as well as accident records, signal locations, and land use data; conducted a community wide kick-off charrette, 14 neighborhood opening charrettes, 14 neighborhood closing charrettes, and walking audits aimed at educating residents about traffic calming and collecting feedback on perceived challenges and potential solutions; developed a final report including a written summary of the public outreach initiative and a discussion of relevant issues and concerns identified for each city neighborhood; developed a block by block traffic-calming plan for each of the city's 14 residential neighborhoods, showing the traffic-calming measures considered appropriate and including a graphic depiction of their placement at specific street locations relative to constraints imposed by street right-of-way width, existing buildings, and utilities; and prepared rough order of magnitude costs associated with carrying out the recommended traffic-calming measures.

Four other firms participated as subconsultants. They were CR3,LLP, which prepared landscape architecture plans and graphics; Fitzgerald and Halliday, Inc., which provided assistance with public outreach and scheduling of charrettes; Patel Engineering Associates, LLC, which assisted with the design of traffic calming devices; and Walkable Communities, Inc., which assisted with the identification and design of traffic calming measures and with public presentations.

Seeking community input – The highly interactive public process provided an excellent opportunity for the community to

become directly involved in the engineering process and nearly 1,000 residents and community stakeholders took advantage. The charrette participants attended a presentation explaining various types of traffic calming treatments, how they work, and where they can be best utilized. Residents then defined goals for the project, identified specific concerns, and proposed potential traffic calming solutions. While the community's recommendations were subject to review by the engineering team for feasibility, effectiveness, and constructability, the Master Plan, in large part, directly reflected the input of the charrette attendees. The extent to which community input was incorporated into the Master Plan resulted in each neighborhood claiming a sense of ownership in the plan and approving of the results almost unanimously.

Social, economic and sustainable development benefits – Development of the Traffic Calming Master Plan provided social, economic and sustainable development benefits. Socially, a sense of community was fostered in each neighborhood as residents and stakeholders came together to address commonly perceived problems. Economically, the City of Hartford benefited as the master plan facilitated opportunities for traffic calming treatments to be implemented at minimal cost during regularly scheduled maintenance programs. The master plan and accompanying report also identified a wide range of potential funding sources and eligible locations. In terms of sustainable development, the implementation of treatments identified in the master plan has made Hartford a more “pedestrian friendly” city. While all of the newly installed treatments have helped to reduce vehicle speeds, curb extensions in particular have provided additional benefit to pedestrians by improving sight lines, reducing crossing distances, and encouraging residents to cross at the appropriate location.

Results – To date, the City of Hartford has implemented many treatments based on



Plan elements from the 14 neighborhoods were consolidated and coordinated to form a citywide plan.

the recommendations of the master plan including six road diets (road narrowing), 14 curb extensions, two parking chicanes, two roundabouts, and numerous speed tables. Before-and-after studies conducted at locations where road diets were installed showed that following implementation, speeds were reduced by as much as six miles per hour while accidents were reduced by an average of 25 percent. Similar studies have shown significant speed reductions on streets where speed tables were installed. Public opinion of most treatments has been overwhelmingly positive.

While many of the locations that were evaluated for possible treatments presented unique challenges, perhaps the greatest challenge was the magnitude of the project as a whole. The master plan encompasses nearly an entire city of over 17 square miles and over 120,000 residents. To make the project a success, the study team had to become acutely familiar with the city's entire street network, while understanding the different goals and characteristics of 14 different neighborhoods, and reach out to nearly 1,000 residents and stakeholders.

The master plan is an economical and cost-effective solution because it allows the city to implement traffic calming treatments in locations where they are needed as opportunities arise rather than as stand alone

projects. For example, treatments have been installed in conjunction with previously scheduled construction projects and routine maintenance at a reduced cost. The master plan has also helped the city to identify locations in need of improvement for which construction costs may be financed by state and federal grants.

The project met and even exceeded the city's goals in terms of several different criteria. It created an outlet for residents and stakeholders to voice their traffic related concerns, educated them about the benefits of traffic calming, and strengthened the sense of community in many neighborhoods. Because the final plan directly reflected the community's input, the project team was able to achieve near unanimous consensus. The master plan also achieved the city's goal of serving as an easy-to-use blueprint for future traffic calming deployments. Finally, many successful traffic calming treatments have already been constructed based on the recommendations in the master plan. These treatments have successfully limited vehicle speeds, reduced accident rates, and been positively received by Hartford residents. ■

Najib O. Habesch is vice president and manager of Urban Engineers' New England Regional Office in Hartford, CT. nohabesch@urbanengineers.com



©iStockphoto.com

Membership

Timothy S. Ormiston, PE

I hope you are having a great summer! This is the time of transition in the PSPE year and that is true with the Membership Committee and its activities as well. The committee members are changing as some move on to other responsibilities and new ones are added in new focus areas. The new committee should be set before the next issue of PE Reporter.

In future issues of *the PE Reporter* I plan to discuss the benefits of membership as it relates to the PSPE Practice Divisions: Construction, Education, Government, Industry, and Private Practice. Every member should be included in one of the divisions, if not, please contact the NSPE membership web site (<http://www.nspe.org/membership/>) to request inclusion to one of the divisions. Each division brings a different perspective to membership in the Society that deserves some discussion.

Looking forward to future committee activities in the fall:

- The next Committee conference call is scheduled for Wednesday, September 12, 2007.
- Focus points to start the 2007-2008 season include:
 - o Increased activity for membership services at the Chapter level.
 - o Conduct regularly scheduled conference calls with Chapter Membership Chairs.
 - o Increased activity on PEPP link to membership efforts.
 - o Actively engage Young Engineers in membership efforts, including adding a young engineer to the Membership Committee.

When you are interested in participating in the committee efforts, or if you have new ideas to share, please contact me via e-mail at: tsormiston@zoominternet.net. ■

Did you know...

- Chapters can access the most current chapter member data online. Chapter membership chairs can sign up for a login and password to view and download member records from the NSPE member data website.
- PSPE chapters interested in contacting all PE's registered in their region can obtain a mailing list from the PSPE state office. (Mailing addresses only; neither phone numbers nor e-mail are collected by the state registration board.)

Contact Jen Summers for details.

717.441.6051; jennifer@wannerassoc.com.

Member Question of the Month...

Q

What activity would you like to have offered by your practice division that is not available today?

A

Send your reply to pspeinfo@pspe.org with the subject: Member Answer of the Month.

PSPE Member Update

Following is a list of members who have joined PSPE to date in 2007. Chapter officers can access member data in realtime with a login and password from NSPE. If your chapter does not yet have a membership chair or officer who has this access, please contact Jennifer Summers, jennifer@wannerassoc.com or 717.441.6051.

Beaver County

Paul A Ellis PE
Paul L Hoback EI

Bucks County

James D Barlow
Albert L de Richemond PE
Edward J Godorov PE
Mark Alan Havers PE
James K Lynam EI
Eric Matthew Lysiak EI
Kevin McAuliffe EIT
Brian J Morrison PE
Luke T Teller PE
Christopher W Wright

Central

Kaiser Mohammed EIT
George J Selembo Jr PE

Chester County

James J Brady Jr EI
Ray S Crossan PE
Robert M Danek PE
Joseph John Hunt PE
Michael P Noonan PE
Eric Michael Rich
Vincent P Ridley PE

Delaware County

Carlos A Castro PE
Michael C Clinger PE
Guido W DiMartino PE
Wayne A Droesser PE
James M Gade PE
Gerard C Gambs PE
Eileen M Nelson PE

Erie

Harry R Diz PE
John F Novotny PE
Edward F Orris Jr PE
Robert L Rabell PE

Harrisburg

Bryan J Anthony EI
John J Baldassari PE
Larry M Brown PE
Susan M Bruns PE
Matthew D Chicy PE
Wendy L McAbee PE
Kathleen J Rhoten PE
George D Whitcomb EIT

Johnstown

David M Cunningham PE
Stanley J Kieta PE
John M Weiland PE

Lehigh Valley

Charlie J Baker
John A Cooke PE
James W Davis PE
Stephanie M Grahl PE
Jeffrey T Nason PE
Jennifer R Walls PE

Lincoln

David W Bernhardt PE
Joseph D Brown Sr PE
Steven M Brown PE
Timothy T Koppenhaver EIT
Eric P Sellers PE

Luzerne County

Joseph J Gibbons PE
Lawrence Marchetti PE

Midwestern

Eric J Kirsch PE
Robert L Mueller PE
Jonathan C Snyder PE

Northeast

Marshall E King PE
William W Schneider Jr PE

Philadelphia

Michael Devuono
Garret T Hooper
Scott K PE
Liang Luo
Joseph C McGowan PE
Bariki Mlawa
Joseph P Morrin
Michael M O'Neal PE
Todd M Rohn PE
Mark Tiger PE
Kevin B Watson EI

Pittsburgh

George J Anderson PE
Timothy S Erney PE
Graham L Ferry PE
Joseph Garlicki
Thomas D Howell PE
Elizabeth M John
Emily A Palmer PE
Samuel J Sero PE
Thomas J Tarka PE

Reading

Denise R Alston-Guiden PE
Matthew L Boggs PE
James M Eways PE
Thomas C Green PE
Clifford C Iroanya
Robert I Weir PE

Valley Forge

Chad E Camburn PE
Gary M Horninger PE
Brian F Malloy PE
Kristin M Norwood PE
Bruce J Rhoades PE
Daniel J Yaw Jr

Westmoreland

Peter C Buss PE
Steve M Rogers

Chapter not yet assigned

Matthew Z Kensil PE
Syed J Qasim PE
C Richard Roseberry PE

HANOVER ENGINEERING ASSOCIATES, INC.

Our services are based on providing customized timely service and one-on-one personal attention on Municipal and Public Works Projects.

BETHLEHEM OFFICE:
252 Brodhead Road,
Suite 100
Bethlehem, PA 18017
610-691-5944
610-691-6968 Fax

- ♦ Municipal
- ♦ Wastewater
- ♦ Water Supply
- ♦ Geology
- ♦ Wetlands
- ♦ Hydrogeology
- ♦ Storm Water Management
- ♦ Traffic/Transportation
- ♦ Planning
- ♦ Structural
- ♦ Surveying
- ♦ On-Lot Sewage
- ♦ Soils Investigation

ADDITIONAL OFFICES:

LEHIGH, LANCASTER/LEBANON, POCONO AREA, SOUTHEASTERN REGIONAL

VISIT OUR WEBSITE AT: WWW.HANOVERENG.COM

F. T. KITLINSKI & ASSOCIATES, INC.

Civil / Geotechnical
Engineers & Consultants

THE FOUNDATION SERVICES COMPANY

Test Borings Division

Services Limited Exclusively to the Field of
Soil Mechanics, Foundations and Geotechnics
3608 N. Progress Ave. Harrisburg, PA. 17110
717-652-8620

"Capitol" continued from p. 5

**Beginning in FY2010-2011 this money will be increased by an annual 2.5% COLA (\$250M of this will be operating money in each fiscal year)*

*** This amount is equal to the total general fund appropriations for transit, plus the \$75M in funding from Act 3.*

Distribution of Funding: The funds in the Public Transportation Trust Fund will be distributed approximately as follows:

	Operating	Asset Improvement	Dedicated Capital	Programs of Statewide Significance	New Starts
FY2007-08	\$785M*	\$175M**	\$75M	\$52M	***

** This represents a \$250M increase over their current operating funding*

*** Initially this allocation will consist of the proceeds of Commonwealth capital bonds which will be supplemented by \$50M from the TPC in FY2007-08, in FY2008-09 this will be supplemented with \$100M from TPC, in FY2009-10 with \$150M, and in FY2010-11 forward FY2011-2012 increased by 2.5% annually*

**** PADOT is authorized to spend up to \$50M a year on matching funds for Federal New Start programs.*

Transit Provisions

New Operating Money - The legislation will provide a new infusion of operating money for transit agencies. This money will be available immediately to alleviate pressing budgetary needs and grow in the future to insure financial stability. This money will be distributed to transit agencies based on performance statistics in order to ensure an equitable distribution.

Simplified Dedicated Growing Funding - Funding for transit agencies will be completely overhauled under the new legislation. The current patchwork system of funding will be repealed and the funding that transit agencies are currently receiving will be replaced by a revenue neutral dedicated portion of the Sales and Use Tax. This will ensure that transit agencies have a reliable and growing source of funding in the future.

Dedicated Capital Money - In order to help transit agencies better maintain their current capital and allow them to fulfill outstanding bond covenants, a portion of the Transportation Trust Fund will be driven out to the transit agencies on a formula basis so that they have a steady reliable stream of capital funding.

New Needs-Based Capital Money - The Turnpike Commission will transfer money to PennDOT to be used for additional capital assistance to transit agencies. These funds will be distributed to the transit agencies based on their demonstrated need

Funding for Programs of Statewide Significance - Programs of statewide significance, such as the Persons with Disabilities program will be fully funded using a dedicated portion of the Public Transportation Trust Fund.

Roads and Bridges Provisions

New Growing Source of Funding - The legislation will provide PennDOT with a much needed infusion of new money to address the current crisis facing Pennsylvania's Roads and Bridges. This money will both be available immediately and grow in the future. These funds will be distributed on needs-based formulas that are developed and revised by PennDot and Pennsylvania's Rural and Metropolitan Planning Organizations on a periodic basis.

Dedicated Funding for Special Needs - 15% of the funds deposited into the Motor License Fund from the TPC will be set aside to be used at the Department's discretion as contingency funds in case of changes to existing project costs or unforeseen funding needs.

Dedicated Funding for localities- the legislation provides for \$35M a year to be distributed to localities for maintenance of their roads and bridges.

Other Provisions

Local taxation authority - Second Class Counties will have the option of imposing a new tax on liquor-by-the-drink or car rentals.

MOTOR LICENSE FUND

The Motor License Fund is the central repository for the taxes and fees that have been placed on gasoline, diesel fuel, alternative fuels, Motor Carrier Road Tax, Vehicle Registration and titling, driver licenses, taxes on oil franchise companies, liquid and alternative fuels, fees received from other states, and vehicle code fines.

The official Motor License Fund revenue estimate was \$2.322 billion for the 06-07 fiscal year. The actual revenue for the 2006-07 fiscal year was \$2.295 billion. Prior year lapses increased from \$58 million in 2006-07 to \$76.13 million in the 07-08 fiscal year.

Highway Maintenance

The 2007-08 budget proposals for state highway and bridge maintenance provides \$900 million under the "Highway Maintenance" heading and cited in PennDot budget proposal documents (E40.15). Highway Maintenance programs under this broad heading of "Highway Maintenance" include "Smoother Road and Priority Bridges", "Highway Maintenance" is driven out to the counties by formulae on a ten year basis. The "Bridge Preservation program" will receive \$18 million of the \$900 million.

Highway Construction

The FY 2007-08 budget proposal provides \$581.16 million in state funds for Highway Construction. In the 06-07 fiscal year \$613 million was appropriated for highway construction. The final budget's level of funding for the 07-08 fiscal year reflected the proposed level of funding in the Governor's budget. Under the umbrella heading of

"Capitol" continued p. 27



©iStockphoto.com

PEPP Happenings

Oh the Places You'll Go!

*Johann F. Szautner, P.E.
PA PEPP Vice President Southeast Region*



**Pennsylvania Society of
Professional Engineers**

Chair

Dale L. Englehart PE
Quad Three Group Inc

Vice Chair

Drew Bitner PE, PLS
VE Engineering Inc.

Secretary

Virginia A. Dailey PE
D & D Engineering

Treasurer

Richard S. Poplaski PE
Benatec Associates

Immediate Past Chair

Walter J. Poplawski PE
A & E Group Inc

Southwest Region Vice Chair

Michel J. Sadaka PE
Sadaka Corp

Northeast Region Vice Chair

Johann F. Szautner PE
Cowan Assoc Inc

Northwest Region Vice President

Chrisellen Lindsay PE
Santangelo & Lindsay Inc

Southeast Region Vice President

Paul A. Dugan PE
Millennium Engineering PC

Central Region Vice President

Mark Gaines, P.E.
Dawood Engineering Inc

PSPE Liaison

John F. Bradshaw PE
Michael Baker Jr Inc

This poem by Dr. Seuss came to mind while listening to the Senior Thesis Presentation of Penn State's Architectural Engineering seniors. Representing PEPP, I was honored to serve as part of a distinguished panel of about 50 judges, visiting engineering practitioners from all over the country.

PEPP, true to its mission of sponsoring professional development of engineers in private practice, underwrote three (3) awards this year—one for the juried best Senior Thesis, including a check for \$1,000; and two for professional practice awards, including a check for \$500 each. These awardees were chosen by faculty.

The Senior Thesis Presentations are the major highlight of the five year BEA Undergraduate Program. A Senior Thesis consists of obtaining an outside sponsor who provides the student with an actual building that will be used as the model for a variety of technical and management tasks throughout the year. Based on the building, students will investigate and analyze its design and construction, and value engineering components for performance improvements, construction cost and time savings.

Their work is grouped in accordance with four discipline specializations – construction, lighting/electrical, mechanical and structural. This year, a total of 85 students completed the program and presented their projects to a faculty jury. Eight finalists, two from each discipline, were then selected to compete for the numerous best Senior Thesis awards.

This year's winner was Justin Bem, EIT, a mechanical engineering senior; and the two practice awards underwritten by PEPP went to Brian Barna, EIT and David Smith, EIT.

Being a judge at these very impressive student presentations provided me with an insight of how much engineering studies have progressed over the last 40 years, and reminded me how much better my mind used to be, the older I get.

For me, being able to have this experience widened my professional horizon and gives me hope for our engineering profession. Oh, the Places They'll Go! ■



Brian Barna



Justin Bem



David Smith

Classifieds

Chief Engineer

Flexospan Steel Buildings, Inc., a leading manufacturer of commercial and industrial metal siding roofing and custom engineered buildings, has an opening for chief engineer.

This position involves challenging projects in a fast paced environment, opportunity to acquire license in several states and other professional growth. The successful candidate must enjoy handling multiple projects and deadlines and be able to communicate and work with customers, engineering staff and sales force.

Competitive salary and excellent benefit package, including top notch health care and retirement plan.

Submit resume by mail, e-mail or fax to:

Flexospan Steel Buildings, Inc.
Attn: Lauri Frederick
PO Box 515, 253 Railroad Street
Sandy Lake, PA 16145
Fax: 724-376-2073
E-mail: lfederick@flexospan.com

Transportation Engineering Manager

GTS Technologies, Inc., (www.gtstech.com) a well respected, medium sized, civil engineering consulting firm in Harrisburg, Pennsylvania, with offices in Exton and Hazleton, is seeking a senior-level Transportation Engineering Manager to take the lead in growing the firm's transportation design and engineering group. Qualifications must include a minimum of 8 to 10 years experience with PennDOT projects, PE, structural/highway design, project management and multiple consultant coordination experience. Responsibilities will include developing a service group to serve existing and new clients, assisting with preparing winning proposals, mentoring staff, design and oversight, performing QA/QC on transportation projects, and participating with the management team on decisions related to the transportation group.

Salary commensurate with experience. EOE. Competitive benefits program. Submit resumes in confidentiality to Managers@gtstech.com.



Civil/Environmental Engineer/Project Manager

PE required. Experience in design/engineering for municipal/industrial water/wastewater systems, oversee, schedule & provide quality control for engineering & design staff. Duties include: specification writing, cost estimating, equipment selection, interface with clients, some fieldwork including construction admin. Challenging opportunity for exp. professional. Job location: Reading, PA.

Competitive benefits pkg. Send resume and salary requirements to: **Entech Engineering, Inc.**, P.O. Box 32, Reading, PA 19603 Attn: HR Mgr. EOE.

©iStockphoto.com

Civil Engineers

Fleisher Forensics is seeking full-time civil engineers in our Fort Washington, PA office to evaluate litigation and claim matters, and testify as expert witnesses.

Candidate requirements:

- PE
- MSCE
- Self-Confident & Self-Motivated
- 15 years minimum experience
- Committed to fulfilling client needs
- Multi-task oriented, team player
- Desire to work in a fast-paced environment
- Excellent written and verbal communication skills
- Experience in highways, traffic, structural or construction

Benefits:

- 401k
- Dental
- Medical/Prescription
- Bonuses for exemplar work
- Salary commensurate with experience
- Suburban Philadelphia location

Submit a letter of interest and resume in strict confidence to:

Fleisher Forensics
Suite 306
550 Pinetown Road
Fort Washington, Pennsylvania 19034
[215] 641-1114
dfleisher@fleisherforensics.com

AN EQUAL OPPORTUNITY/AFFIRMATIVE ACTION EMPLOYER



John Green of Eco-Fueler lets scholarship winner Clayton Hose (front) take a turn in the American Roadster.



Dr. Scott Pierce (left) and his York College engineering students discuss CNG technology with John Green of Eco-Fueler.



New Lincoln Chapter president, Paul Francis, gets behind the wheel of the American Roadster as he prepares to drive next year's officers forward.

Lincoln Chapter Spotlight

Chapter Members Consider Alternative Fuel Vehicle

Charles C. Gales, PE

The May 22, 2007 meeting of the Lincoln Chapter of PSPE featured a recently developed vehicle that operates on compressed natural gas (CNG), one of the cleanest burning alternative fuels. The American Roadster, manufactured by Eco-Fueler in Eugene, Oregon, is an efficient commuter vehicle designed to transport up to three passengers. John Green, chief designer of the vehicle and expert in CNG technology, led a team of Eco-Fueler representatives as they presented the technology behind the Roadster.

The meeting was conducted at the home office of Bucharth-Horn in York where the Roadster was displayed in the firm's parking lot. A contingent of students from the Society of Automotive Engineers (SAE) chapter at York College attended the Eco-Fueler presentation and were very interested in all aspects of the new technology.

The Roadster, as a means to combat surging gas prices, brought local media to the meeting, including a live news broadcast on WGAL-TV in Lancaster. In addition to the Roadster presentation, Lincoln Chapter officers for 2007-2008 were inducted and college scholarship winners were honored. Everyone enjoyed a picnic-style dinner and an opportunity to climb into the driver's seat of this vehicle of the future. ■

2007-2008 Lincoln Chapter Officers

President

Paul K. Francis PE

Immediate Past President

Charles C. Gales, PE

President Elect

Michael C. Poletti PE

Past President

Mark Hilson, PE

1st Vice President

David J. Atkins PE

State Director

Robert R. Reisinger PE

2nd Vice President

Keith A. Miller PE

Lincoln Log-e Editor

John H Conaway PE

Recording Secretary

John H Conaway PE

2007-2008 Chapter Directors

Larry L. Moore PE

Karl E. Eckstrom PE

Treasurer

Kenton R. McGinnis Jr. PE



Calling All Delaware Valley Engineers:

Future City Philadelphia Needs Mentors, Judges for 2008: Volunteer NOW, Before Start of School Year

Trish Bopert

The 2008 Philadelphia Regional Future City Competition may be six months away, but now is the perfect time for previous mentors to re-up, and for would-be mentors and judges to take the plunge. According to Regional Coordinator John Kampmeyer, P.E., F.NSPE, with more Delaware Valley schools than ever expressing interest in Future City, the need for mentors is especially critical.

"Mentors play such a vital role in the Future City experience, and we need those volunteer commitments now, before the school year starts. By signing on now, mentors are ready to jump in when the students begin working on their Future City projects in September," said Kampmeyer.

Stephen Piccolo, a first-time mentor in 2007, says that mentors can expect to find the experience fulfilling and enjoyable and very much worth their time and energy. When the Air Tectonics sales engineer, (who is also president of the Philadelphia Chapter of ASHRAE), signed on to mentor a team from Glen Landing Middle School, (in Gloucester Township, NJ), he was both excited and apprehensive.

"I'm on the road a lot, so I was somewhat concerned about the time commitment, but fitting it into my schedule was never a problem. I met with the kids two or three afternoons a month, depending on my schedule. We'd meet for about an hour or so, and the students, (and their teacher, Patti Coughlin), were just delightful. The kids were really enthusiastic and engaged in the process every step of the way, and I was amazed by their grasp of engineering concepts and their creative approach to solving real-world problems," said Piccolo.

The mentor/student collaboration generated results. In just its third year of competition, Glen Landing Middle School earned an Honorable Mention in the 2007 Philadelphia Regional Future City Competition. Piccolo, who couldn't be prouder, encourages other Delaware Valley engineers to get involved with Future City.

"So many engineers are concerned about the future of the profession, and if you're one of them, you can make a difference by becoming a Future City mentor. Mentoring is about so much more than getting middle school kids excited about engineering; at its core, mentoring is about connecting with and supporting the next generation of engineering talent. Every Delaware Valley engineering company should get behind Future City," said Piccolo.

The Philadelphia Regional Future City Competition is one of 38 regional Future City programs held annually across the U.S. in December and January as part of National Engineers Week, (next celebrated February 17 - 23, 2008). Last year, 38 teams from across the Delaware Valley participated in the program that starts in September and culminates with the all-day competition at Villanova University in January. (First-place finisher Kutztown Middle School went on to place fourth nationally.)

Future City is the nation's largest (nationwide, more than 30,000 students from 1,000 schools participated in 2007) and most successful not-for-profit engineering education program. Help ensure its continued success, and the continued vitality of the engineering profession, by becoming a Future City volunteer. Contact John Kampmeyer, P.E., Regional Coordinator for the Future City Philadelphia Region at (610)328-3020 or jkampmeyer@futurecityphilly.org, or visit www.futurecityphilly.org (click on "Engineer") today. ■

Photo: Pictured from left to right, (front row) are Glen Landing Middle School students Daniella Canterman, Nicole Schiavone and Jeliasko Jeliaskov, members of the Glen Landing Middle School 2007 Future City team. The team earned an Honorable Mention in the 2007 Philadelphia Regional Future City Competition, (held in January at Villanova University). Also pictured is mentor Stephen Piccolo and teacher Patti Coughlin.

Political Action Committee Report

2007 Sponsor Recognition

Many thanks to the following individuals who contribute to the PSPE Political Action Committee fund. The PAC fund allows PSPE lobbyists to influence bills on behalf of PSPE members. PSPE is very active at the Pennsylvania state capitol. Each session we monitor legislation that could impact PSPE members in their profession. Your contributions are critical as PSPE affects bills such as those found in the article "On Capitol Hill."

Pennsylvania Circle

\$500 - \$999

Mark Onesky

Century Club

\$100 - \$499

John Albarano	Robert Dietz, PE	Kevin Johnson	Walter Poplawski, PE
John Boyer, Sr, PE, AIA	Ronald Dnrevich, PE	Charles Lentz, Jr, PE	Michel Sadaka, PE
Christopher Briglia, PE	William Erdman, PE	Frank Lundy II	Robert Seeler, PE
Gary Bruce, PE	Belknap Freeman, PE	Earl McCabe, Jr, PE	Zeyn Uzman, PE, F. NSPE
Joseph Capuano, PE	Ralph Gilbert, Jr., PE	Daniel McCay	N. Daniel Waltersdorff, PE
Elizabeth Catania, PE	Frederick Hay, PE	Matthew McTish, PE	Patrick Ward, PE
Joseph Daily, Jr., PE	Harvey Hnatiuk, PE	Gregory Newell, PE	Craig Weaver, PE
Edward D'Alba, PE	Kenneth Jefferis, PE	Kevin Orndorf, PE	David Williams, PE
			Douglas Zaenger, PE

L. Robert Kimball & Assoc. PAC

Capitol Club

\$50 - \$99

Chester Allen, PE	Bruno Cinti, PE	Robert Lentz, PE
Henry Bartony, PE	David Folk, PE	Joseph Salvatorelli, PE
John Boderocco, PE	Charles Fuellgraf, PE	Raymond Szczucki, PE
Charles Catania, Jr, PE	Ernest Gingrich, PE	Paul Underiner, PE
Charles Catania, Sr, PE	Richard Gray, PE	Maurice Wadsworth, PE
	Arthur Hall, PE	

Friends Society

\$5 - \$49

Syed Faruq Ahmed, PE	Edmond Dunlop, PE	Charles Homan, PE	Louis Smith, PE	Benjamin Thayer, PE
Srinivasarao Chitikela, PE	Arthur Dvinoff, PE	James Horton, PE	Kevin Smith, PE	Thomas Tronzo, PE
Kin Chung, PE	Howard Eckert, Jr. PE	David Jones, PE	Rick Spranger, PE	Thomas Twiford, PE
James Cobb, PE	Alfred Fazio, PE	Joseph Keller, PE	Joseph Stachokus, PE	George Whitcomb, EIT
Howard Doran, PE	Jack Ferenci, PE	David McCullough, PE	George Stanley, PE	Steven Wilson, PE
James Driscoll, PE	Alma Forman, PE	Roger Miller, PE	Robert Stieg, PE	Clarence Wysocki, PE
Jon Drosendahl, PE	Henry Gorman, PE	Ronald Olsen, PE	Gerald Swendsen, PE	Ronald Zborowski, PE
William Dulling, PE	Jack Hager, PE	Michael Quickel, PE	James Szalankiewicz, PE	

Pennsylvania's Municipalities Focus on the Future

*Bill Pogash, Research Division Manager, Pennsylvania Department of Transportation;
Doug Argall, Senior Project Manager, GeoDecisions*

Counties, cities, and towns across the United States collectively maintain more than three million miles of road and 29,000 bridges. These roads and bridges often encounter excess wear and tear due to traffic, weather, and mistreatment. Keeping them safe and navigable requires extensive design, maintenance, and rehabilitation. However, having the right tools, funding, and training to effectively manage the continuous demands for infrastructure improvements is often a challenge for the nation's 38,000 communities.

The Federal Highway Administration (FHWA) recognized their needs for technical assistance and created the Local Technical Assistance Program (LTAP). The program focuses on sharing transportation technology through training, safety, and maintenance assistance, as well as other customer services to municipal elected officials and their staff.

In Pennsylvania, the Pennsylvania Department of Transportation (PennDOT) Bureau of Planning and Research (BPR) took a proactive and innovative approach to ensuring that the state's municipalities can tap into the resources and training offered through the LTAP program. The PennDOT BPR manages the PennDOT LTAP training and technology transfer program

The PennDOT BPR worked with GeoDecisions, the GIS/IT Division of the engineering firm of Gannett Fleming, to develop and implement the LTAP Web site. The site helps Pennsylvania's municipalities

become more aware of LTAP and quickly access its safety and maintenance information, as well as other resources.

One of the main goals of the LTAP Web site is to help the Commonwealth's municipalities, which maintain more than 75,000 miles of roadways, access the tools for improving Pennsylvania's transportation operations and making the best use of roadway maintenance dollars.

"Through the site, municipal officials have the tools to learn how to improve their local roads without spending a dime or leaving their township," said Tom TenEyck, director of the PennDOT BPR. "We realized that many local transportation workers could not afford the time or expense to participate in road maintenance and safety training programs held out of town."

Through the Web site, the PennDOT LTAP has trained and assisted approximately 6,000 municipal employees per year in effective and efficient maintenance procedures, essential safety practices, and infrastructure management processes. Additionally, from April 20, 2005, through April 10, 2007, the site had been visited more than 22,000 times, and the number of users increased during this time frame by more than 4,600 individuals.

With the PennDOT LTAP Web site, users can easily submit a request for technical assistance by providing a few pieces of key information: the type of request (safety, infrastructure management, workforce

development, etc.); contact preference; and a description of the problem. The site automatically routes the request to technical experts, who quickly respond via telephone, e-mail, or in person. Examples of these technical requests may be advice on winter maintenance preparations, how to fix unsafe pavement edges, worker safety questions, or questions about preventative bridge maintenance.

In addition to being a valuable tool for municipalities, PennDOT's LTAP Web site offers management tools for PennDOT personnel. It provides program administrators with integrated analysis tools to make better decisions regarding using and navigating the site. Utilizing the site, PennDOT management has the ability to quickly run reports or produce charts and graphs that previously took days or months to create.

"Now, the site produces needed information on the fly, enabling our staff to respond more immediately to questions," TenEyck added.

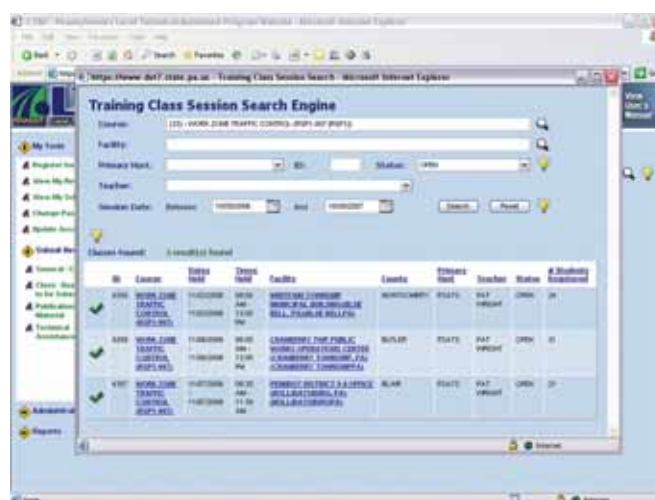
Another key feature of the site is the quick and simple enrollment process for a variety of training courses that are offered at little or no cost to municipalities. Training events include scheduled workshop training, Roads Scholar courses, on-site road shows, and local product demonstrations. The Roads Scholar courses, as well as customized versions of them, are brought directly to the municipalities as road shows.

In keeping with communication efforts to municipalities, PennDOT LTAP also distributes a newsletter quarterly to at least one contact in each Pennsylvania municipality, as well as FHWA officials, metropolitan and rural planning organizations, and other LTAP centers. The newsletter covers new programs, practices, technologies, legislation, reminders, and money-saving tips applicable to municipal maintenance and safety efforts. These newsletters and technical information sheets are available for download from the Web site, even without an LTAP user account.

PennDOT LTAP also maintains a library of publications, videos, FHWA reports, and CD-ROMs on maintenance and safety topics. Users can search the collection and request to use these materials via the LTAP Web site.

The PennDOT LTAP Web site is the only LTAP site developed by a state department of transportation that has implemented a comprehensive management tool. Additionally, it provides program managers with integrated analysis tools to make better decisions regarding how to administer the program. The system has a broad range of reporting tools, allowing them to easily query the system's data.

The PennDOT LTAP Web site plays a key role in municipality's day-to-day business. Every aspect of the application enhances the users' quality of business, and sets new standards for the next generation of transportation technology and the Commonwealth's municipalities, in addition to numerous transportation improvements to benefit Pennsylvania motorists and pedestrians for years to come. ■



"Capitol" continued from p. 20

Highway Construction are programs such as: "Highway and Safety Improvements", "Highway Capital Projects," "Security Walls", Highway Capital Projects, (EA) "Highway Bridge Projects (EA)" and the "Bridge program" (EA). These funds will be used to begin construction and reconstruction work on interstates and state highways that contribute to the Commonwealth's economy and provide mobility for its people. With the appropriated level of funding for Highway Construction 25 miles of new highway will be constructed, 75 miles of Interstate highway restored and 232 bridges repaired or replaced (without \$450 million). A portion of the \$450 million for the 07-08 fiscal year found in HB1590 will find its way to Highway Construction especially for deficient bridges.

2007 Senate Fall Session Schedule

The following are the remaining scheduled session days for the Senate in 2007:

September	17, 18, 19, 24, 25, 26
October	1, 2, 3, 15, 16, 17, 22, 23, 24, 29, 30
November	13, 14, 15, 19, 20, 27, 28
December	3, 4, 5, 10, 11, 12

Copies of all bills of interest are available from the PSPE office, or they can be accessed via the Internet at <http://www.legis.state.pa.us/WU01/LI/BI/billroom.htm>. ■

2007 House Fall Session Schedule

The following are the remaining scheduled session days for the House in 2007:

September	10(Non-voting), 17(Non-voting), 24, 25, and 26
October	1, 2, 3, 15, 16, 17, 22, 23, 24, 29, 30, and 31
November	13, 14, 19, 20, 27, and 28
December	3, 4, 5(Non-voting), 10, 11, and 12

Member Spotlight



William J. Bryan, P.E., P.L.S., F.NSPE as PSPE 2007 PSPE Engineer of the Year.

Mr. Bryan began his engineering career with Westinghouse Electric Corporation gaining experience in design, analysis, and construction of nuclear power plants and nuclear fuel, including development of analysis computer software. His experience with ABB Combustion Engineering, Inc. involved improving performance and efficiency of nuclear fuel. During these years Bill published 118 technical papers, was awarded 38 U.S. Patents, and managed an engineering department. Bill is considered an expert witness in the fields of mechanical vibration, stress analysis, flow induced vibrations, and nuclear fuel design.

Bill is currently the Corporate Quality Manager for ANSYS, Inc. where he has been employed for fifteen years. His primary experience includes mechanical design and software development. In his position with ANSYS, Inc., Bill has published and presented papers on development of engineering design and analysis software. His works focus on development of quality systems that improve the quality of commercial software programs.

Bill received his Bachelor of Science in Mechanical Engineering, a Master of Science in Mechanical Engineering and a second Master of Science in Industrial Engineering from the University of Pittsburgh. He has taken PhD courses at the University of Pittsburgh and Carnegie Mellon University, and courses from Harvard Business School Executive Management program, and Crosby's Quality College.

Bill is a registered Professional Engineer and Professional Land Surveyor in Pennsylvania and has been a member of PSPE for 32 years; he currently serves as President of the Pennsylvania Engineering Foundation. Bill has received numerous awards including PSPE's Young Engineer of the Year, State and National Membership Development Awards, and PSPE's Distinguished Service Award. He has served as a member of the NSPE National Membership and Professional Development Committees. He is also an active member of the American Society of Mechanical Engineers.

Mr. Bryan, his wife Joann, and their three daughters reside in Washington Township, south of Pittsburgh. Mr. Bryan is an Eagle Scout serving as Explorer Post Leader of Post 1316 in Canonsburg, PA for the past twelve years.



The PSPE Young Engineer of the Year Award is presented to an individual (no more than 35 years-old) based on his/her scholastic achievements, technical and professional society activities, technical papers and/or patents, engineering experience and accomplishments, and civic/humanitarian activities. It is awarded to a licensed Professional Engineer or Engineer-In-Training, who is nominated by his/her PSPE Chapter. PSPE is proud to recognize **Paul L. Hoback, Jr., E.I.T.** as the 2007 Young Engineer of the Year.

Mr. Hoback received his Bachelor of Science degree in Mechanical Engineering from Geneva College (1997). Paul began his engineering career as a Research and Development Engineer for Veka, Inc., where he provided maintenance technical support to 45 extrusion lines and managed several aspects of the plant's environmental permitting. Paul moved on to Paragon Trade Brands, where he worked as a Process Engineer managing mechanical installations, rolling out corporate line improvements, and providing technical support to four diaper production lines.

Paul has been with Allegheny County Airport Authority (ACAA) for more than six years, and is currently a Project Manager managing all mechanical projects at both the Pittsburgh International Airport (PIT) and the Allegheny County Airport (AGC). Paul is in direct charge of over \$110 million in project work at PIT and AGC. Paul's current project work includes construction of a 10 MGD deicing / stormwater treatment plant at PIT, construction of a new 58,000 sq ft Operations and Control Center for US Airways near PIT, construction of a 40,000 sq ft snow removal equipment storage building at PIT, and construction of a new facility that will accommodate an in-line baggage handling system to screen all US Airways baggage.

Besides his numerous professional accomplishments, Paul serves as School Board President of the Beaver Area School District of which he has been a member since 2003. Paul is a member of the Vanport Township Planning Commission and is involved as a volunteer in several local charity organizations including the March of Dimes, Wings for Children, and Allegheny District of the National Multiple Sclerosis Society.

Paul was born and raised in Economy Borough, Pennsylvania. He and his wife, Amy, and son, Cannon, reside in Beaver. His personal interests include golfing, fishing, taking walks with his family, and reading books or watching programs about American history. ■



Transforming Ideas Into Realities...

Transportation Planning & Design

Highway & Bridge Design

GIS Services

Construction Engineering & Inspection

Land Development & Planning

Environmental Engineering Sciences & Remediation

Cultural Resources & Historic Preservation

Surveying



gai consultants

Our Work.

Simply put, we are in this business to deliver successful projects to our clients, and to help them exceed the expectations of the communities that they serve.

Northeast

Philadelphia, PA
Pittsburgh, PA

Midwest


Cincinnati, OH
Fort Wayne, IN

Southeast

Charleston, WV
Florence, KY
Jacksonville, FL
Orlando, FL

For more information on
GAI Consultants, Inc., please
visit www.gaiconsultants.com
or call 1.800.292.6076

Renewing Assets—Building a Future



Meeting the challenge of renewing aging assets in western Pennsylvania is critical to successful and continued economic development. But, this is only a single phase of the complete asset “life cycle.”

For Baker, life cycle is the compilation of all phases of a project, program, or asset: Planning; Design; Construction Services; Operations; Maintenance; and Renewal. We offer a specialized range of professional services focused not only on meeting the challenges of renewing assets, but on helping our clients succeed in building a future.

We view challenges as invitations to innovate.

Baker

ChallengeUs.

1.800.553.1153

www.mbakercorp.com