

ENVIRONMENTAL ENGINEER

VOLUME 42 NUMBER 3 — SUMMER 2006

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Engineering Markets
Continue Rebound with
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ENGINEERING MARKETS CONTINUE REBOUND WITH GREATER THAN 10 PERCENT GROWTH RATE IN 2005

by Alan L. Farkas & Christopher S. Frangione

From the annual Farkas Berkowitz & Company State-of-the-Industry Report, an assessment and review of market trends and the outlook for environmental engineering services.

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WHAT ABOUT OUR HUMAN INFRASTRUCTURE: CONCERN OVER DECLINING ENROLLMENT

by Michael W. Selna, P.E., BCEE

Decaying infrastructure is a headline topic in the environmental engineering profession as many of the nation's water, wastewater, and solid waste management systems reach and pass their planned service durations...



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Cover Photo courtesy of Susan Zarriello

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BY ALAN H. VICORY, JR., PE., BCEE

HEADING OFF A GATHERING STORM

THIS PAST MARCH, DEBRA REINHART (Debbie is Chair of the Civil and Environmental Engineering Department at the University of Central Florida, and the Academy's very recent Vice President-Elect) had the distinct privilege of representing AAEE at the Annual Convocation of Professional Engineering Societies at the National Academy of Engineering. The theme of the 2006 convocation was *Rising Above the Gathering Storm – Challenges to U.S. Engineering Societies: Internal Opportunities and External Responsibilities* and was prompted by a recently issued report titled "Rising Above the Gathering Storm; Energizing and Employing America for a Brighter Future."

The "Gathering Storm" Report was prepared by the National Academies' Committee on Prospering in a Global Economy in the 21st Century. The panel which guided the study comprised top (I emphasize "top") leaders in industry, research and education. In short, the concern addressed is the risk of the United States losing its competitive edge position globally in science and technology and the implications for our economy and quality of life, and answered the question what priority steps federal policy makers can take "to enhance the science and technology enterprise so that the United States can successfully compete, prosper, and be secure in the global community of the 21st century?"

I heartily recommend that you download the report (at least the Executive Summary – a total of four mouse-clicks when you enter The National

Academies Web Page). Between its ten text pages and three pages of "Some Competitiveness Indicators", you will likely suffer from wide eyes at learning of the trends in and status of research, K-12 education, higher education, and economics. For me, it's serious and scary stuff; the world is flat, engineers need no longer come to the U.S. as the work can be exported overseas with a mouse-click, we will not be able to compete head-to-head economically when seven or so engineers in Asia, collectively, command the same salary as an engineer in the U.S., in 2000, 93% of students in grades 5-9 were taught physical science by a teacher lacking a major or certification in the physical sciences, etc.

The good news is, due to this issue, the Convocation was one of the most heavily attended and spirited, and there were many useful observations and suggestions for action. Permit me to list a few for you:

- The time is ripe for action, but engineering societies **MUST** work cooperatively, versus separately, particularly with the legislative and executive branches of government; one voice will get results.
- Engineers are poor marketers (no surprise here). We must find ways to relate engineering to individuals (e.g. design of sports equipment) to impart an appreciation that engineering is in near everything and constantly touches our lives; little appreciation – little respect.

- Tell the kids engineering is fun (I trust you agree) and a great profession. Do this, for example, through a kid's page on the website.
- Encourage retiring engineers to enter the classroom as a second career.

Drawing from the above, it seems to me there are opportunities for, and responsibilities of, this Academy to do what it can, in cooperation with other engineering organizations and within our own resources and programs, to contribute to heading off a gathering storm. The Academy's efforts should be considered in the context of our strategic plan, the development of the Environmental Engineering Foundation (see the announcement on page 19) and our annual program and budget. We should do this without sacrificing our core mission; the identification and certification of qualified practicing environmental engineers. And actually, it's a perfect time as your Academy has taken recent steps to position it for membership and programmatic growth.

This said, it also seems to me we have an individual responsibility here; for example to take every opportunity to promote environmental engineering as a career option and explain just how important it is or, as identified during the Convocation, to become an instructor in mathematics and science. As economic studies have shown as much as 85% of measured growth in U.S. per capita income is tied to technological change, the quality of the lives of future generations appears to be in the balance. 

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Environmental Engineer is published by the
American Academy of Environmental Engineers®.
Address all communications on editorial, business
and other matters to:

Editor-in-Chief,
Environmental Engineer®
American Academy of
Environmental Engineers®
130 Holiday Court, Suite 100
Annapolis, Maryland 21401
410-266-3311

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NEW EXECUTIVE DIRECTOR

The Academy is pleased to announce the appointment of Lawrence C. Pencak as the new Executive Director of AAEE. Larry started July 11th and has already contacted most of the Board of Trustees for discussions to get acquainted with the Academy's inner workings. A more detailed introduction from Larry will be in the upcoming issue of *Environmental Engineer*. In the mean time, if you would like to talk to Larry about any Academy business, you can call him at our Annapolis office (410-266-3311) or e-mail him at lpencak@aaee.net.

2006 COMMITTEE APPOINTMENTS

Reminder to Committee Chairs – President-Elect Kellogg is anxious to receive your recommendations for new committee members and/or chairs to replace those whose terms expire in December 2006. We are seeking volunteers interested in helping the Academy through its committees. Committee appointments are for three-year terms. Please send your recommendations and letters of interest to President-Elect Kellogg at Academy Headquarters at your earliest convenience.

Committee Chairs are requested to advise Executive Director Larry Pencak by letter on or before September 1, 2006 of any items they intend for the Board to address including Committee Policies & Procedures when it meets November 11. All such documents are needed by September 1 so they can be reviewed by the Executive Committee.

ABET PROGRAM EVALUATOR TRAINING SESSION 2006

A special training session for those wanting to be Program Evaluators in accreditation of environmental engineering education programs has been scheduled for Sunday, October 22 at the Dallas Convention Center. Again, the instructor is William C. Boyle, Ph.D., P.E., BCEE. The course lasts all day and will begin at 8:00 a.m. and conclude at 5:00 p.m. The registration of \$150 includes breakfast, lunch, breaks and copies of course materials. To register, use the WEFTEC Registration Form or go to www.weftec.org.

2006 ANNUAL MEETING

The 2006 Annual Meeting of the Board of Trustees will be held in Cincinnati, Ohio, Saturday, November 11. Final details are being worked on between now and mid-August.

AAEE CAREER CENTER

The Academy will launch its new AAEE Career Center on October 2, 2006. The interactive job board will be free to members and is in response to increased demands by employers and recruiters for highly qualified environmental engineering job candidates. Employers will be able to post available positions directly to the Career Center for a fee of \$250/position for a 30 day listing. Employer payment will be made directly online by credit card.

2007 E3 ELECTRONIC SUBMISSIONS

The AAEE E3 Competition for 2007 will introduce a new entirely electronic submission process. Participants will be able to submit their completed entry directly online. Judging will also be conducted electronically allowing for an unlimited geographic representation of judges.



BY LAWRENCE C. PENCAK

MY TIME TO STOP, LOOK, AND LISTEN...

I enthusiastically encourage you to communicate with me your thoughts and concerns regarding any aspect of the Academy.

HELLO. I'M LARRY PENCAK, THE ACADEMY'S NEW EXECUTIVE DIRECTOR. Who am I, and why am here? I've been an executive director for professional societies, associations, and non-profits for 26 years. Most recently I served as the executive director of the Rehabilitation Engineering Society of North America (RESNA). RESNA awarded three specialty credentials and was the standards developer of four ANSI/ISO engineering standards. My professional interests are certification to promote competency assurance as well as standards development to advance global competitiveness. During all of my previous positions as Executive Director, I have been fortunate to have been part of a team of volunteers and staff that was successful in significantly growing each organization. But, I shall **Stop**, as staff service in a professional society or academy is about just that – service, and not about self.

During my first weeks as your new executive director, I have committed to a comprehensive effort to **Look** at and become familiar with as much information as possible about the Academy: your vision and direction, your rich and lengthy history, the AAEE's programs and initiatives, volunteer committee studies, the most recent organizational planning

documents from 2000, 2002, and 2004, and the Academy's aspirations and opportunities as well as its challenges for the future. My role at the AAEE is to assist and support you and the Academy reach your goals and achieve your ambitions in the shortest amount of time possible. The successful executive and staff of a professional association serves as the instrumentality to implement the plans and designs of the organization and its members... to make those grand plans and designs a functioning and lasting reality. I excitedly look forward to working with you to that end.

I have found that essential to any successful endeavor is to continually **Listen** to those with whom you are involved with – listen to the member, the board, the committee, the staff, the client, the customer, the vendor, the affiliated organizations and groups. One of the many thoughts that my dad left me with was his constant reminder that no one, absolutely no one, ever learned anything from talking. Listening is key to success and accomplishment. Prior to starting in the AAEE office, I began interviewing each of the Academy's Board of Trustees regarding their views of the AAEE: its strengths and weaknesses, opportunities, successes, disappointments, and challenges. This rather formal

activity will continue with committee chairs, past-presidents, members and others. I enthusiastically encourage you to communicate with me your thoughts and concerns regarding any aspect of the Academy. I see those communications not as a nuisance, but as yet another opportunity to listen... and learn.

As a kid, I remember the words Stop, Look, and Listen on the railroad-crossing signal near my home in Ohio. And, the many summer evenings I would walk over to that crossing and sit and wait excitedly as, at exactly 7:20 p.m. every night, the Twentieth Century Limited flew by in route from New York City to Chicago. It was a chrome blur moving at 90 mph. I can still see the train's name on the brightly illuminate blue sign on the rounded end of the last car as it faded down the track. The train was taking folks I thought from and to exciting places that I had never been to. Well, in life some things don't change that much. After stopping, looking, and listening at the AAEE, I'm excitedly waiting for the Academy's speeding and successful blur to take me somewhere that I have not been before. I look forward to making that trip with you. **A**

PAUL L. BISHOP, PH.D., P.E., BCEE, is the 2006 IWA World Water Congress Outstanding Service Award recipient. Dr. Bishop, Associate Dean of Engineering at the University of Cincinnati, has been certified since 1985 in General Environmental Engineering.

JOHN D. BOOTH, P.E., BCEE, was named Government Engineer of the Year, an honor granted by FES during the Florida Engineering Society (FES) Annual Summer Conference and Exposition this past summer. Mr. Booth, Executive Director of the Solid Waste Authority of Palm Beach County (SWA), has been certified since 1998 in Solid Waste Management.

ROOPESH JOSHI has been promoted to Principal Engineer with Hazen and Sawyer. Mr. Joshi is an Academy Member.

JEROME B. GILBERT, P.E., BCEE, has been named the 2006 IWA Water World Congress Honorary Member. Mr. Gilbert, a Past President, has been certified since 1977. He is certified in both Sanitary Engineering and Water Supply and Wastewater Engineering.

GEORGE E. KURZ, P.E., BCEE, has joined Barge Waggoner Sumner & Cannon, Inc., as a Senior Technical Leader. Mr. Kurz

has been certified since 1995 in Water Supply and Wastewater Engineering.

MICHAEL G. MORRISON, P.E., BCEE, has relocated to Freese and Nichols' Austin, Texas, location where he will be serving as Principal and Vice President. Mr. Morrison has been certified since 1982 in Water Supply and Wastewater Engineering.

DANIEL A. OKUN, SC.D., P.E., BCEE, is the 2006 IWA World Water Congress Grand Award recipient for outstanding achievements as a water engineer scientist. Dr. Okun, a Professor at University of North Carolina, has been certified since 1956 in Sanitary Engineering.

KERMIT L. PRIME, JR., P.E., BCEE, has been elected to a two-year term on the National Society of Professional Engineers (NSPE) Board of Directors. Mr. Prime, a Senior Vice President at PBS&J, has been certified since 1995 in Water Supply and Wastewater Engineering.

PHILIP C. SINGER, PH.D., P.E., BCEE, received the National Water Research Institute's Athalie Richardson Irvine Clark Prize for excellence in water research. Dr. Singer, the Dan A. Okun Distinguished Professor and director of UNC's Drinking Water Research Center, has been certified since 1989 in Water Supply and Wastewater Engineering.

IN MEMORIAM

PHILIP BARNETT, P.E., BCEE, passed away on June 28. He was a Vice President at Malcolm Pirnie, Inc., where he worked for more than 34 years. Mr. Barnett had been certified since 2000 in Water Supply and Wastewater Engineering.

ROBERT G. MCCALL, P.E., BCEE, passed away earlier this year. He had been certified since 1956 in Sanitary Engineering.

KENNETH F. CHERRY, P.E., BCEE, passed away earlier this year. He had been certified since 1991 in General Environmental Engineering.

ALVIN F. MEYER, JR., P.E., BCEE, passed away on July 14. He had been certified since 1956 in Industrial Hygiene.

DON R. ORT, P.E., BCEE, passed away on February 24, 2006. Mr. Ort was a Retired Consulting Engineer in Florida. He was a Life Member and certified in 1972 in Sanitary Engineering.

RONALD B. SIEGER, P.E., BCEE, passed away on May 3, 2006. Mr. Sieger most recently served as Vice President at CH2M Hill, and had been certified since 1993 in Water Supply and Wastewater Engineering. 

LETTERS TO THE EDITOR

This column is provided for those who wish to comment on opinions of the Editor, to respond to the President's Message or published articles or to present views on any matter of interest to the Academy or environmental engineering profession. The right to edit letters is reserved. If you wish to present an "Op-Ed" feature, please make advanced arrangement with the editor.

The Spring 2006 issue of *Environmental Engineer* is in my opinion Excellent. The Feature Article – **Rocky Flats Closure Project**, indicate the work that is done effectively by Environmental Engineers.

Thomas A. Donegan, P.E.
Naples, Florida

*Looking for a qualified employee?
Seeking a position?*

The Academy can help!

AAEE will launch the AAEE Career Center in September. There is no charge for members to use this service, and recruiters can post available positions for a fee of \$250/position for a 30-day listing. Check our website at <http://www.aace.net> for more details.



What About Our HUMAN INFRASTRUCTURE? CONCERN OVER DECLINING ENROLLMENT

by Michael W. Selna, P.E., BCEE

Decaying infrastructure is a headline topic in the environmental engineering profession as many of the nation's water, wastewater, and solid waste management systems reach and pass their planned service durations. Less frequently, the subject of declining enrollment and its impact on the profession's human infrastructure is raised as a concern. While we have analyzed the impacts of baby boomer departures from the workforce and the associated information drain, less attention has been paid to a serious down trend in graduate enrollment in environmental engineering programs.

Data obtained in 2003 and 2005 surveys of universities across the U.S. show a shocking decline in the number of students enrolling in Master of Science in environmental engineering (MSEE) programs. While the profession enjoys outstanding contributions from talented engineers from multiple disciplines and at various degree levels, i.e. BS, MS, PhD, the master's degree is often regarded as the level at which the professional engineer is well prepared to enter the workforce as a practitioner (ASCE, 2000). Unfortunately, enrollment in MSEE degree programs is substantially lower than the peak levels of the mid-1990s. MSEE enrollment statistics for universities participating in the surveys are contained in Figure 1.

There are multiple reasons for this trend. One obvious reason is the decline in funding for MSEE degrees from the levels

Enrollment in engineering, in general, and graduate environmental engineering, in particular, is impacted by a decline in interest and proficiency at K-12 levels.

of the 1970s and 1980s. While many of the factors causing declining MSEE enrollment, such as the decline in K-12 proficiency in math and science, need attention, a coalition of private and public entities has formed an organization named Environmental Engineers of the Future (E2F) to address the funding issue.



NATIONAL TRENDS IN EDUCATION

Enrollment in engineering, in general, and graduate environmental engineering, in particular, is impacted by a decline in interest and proficiency at K-12 levels. As reported

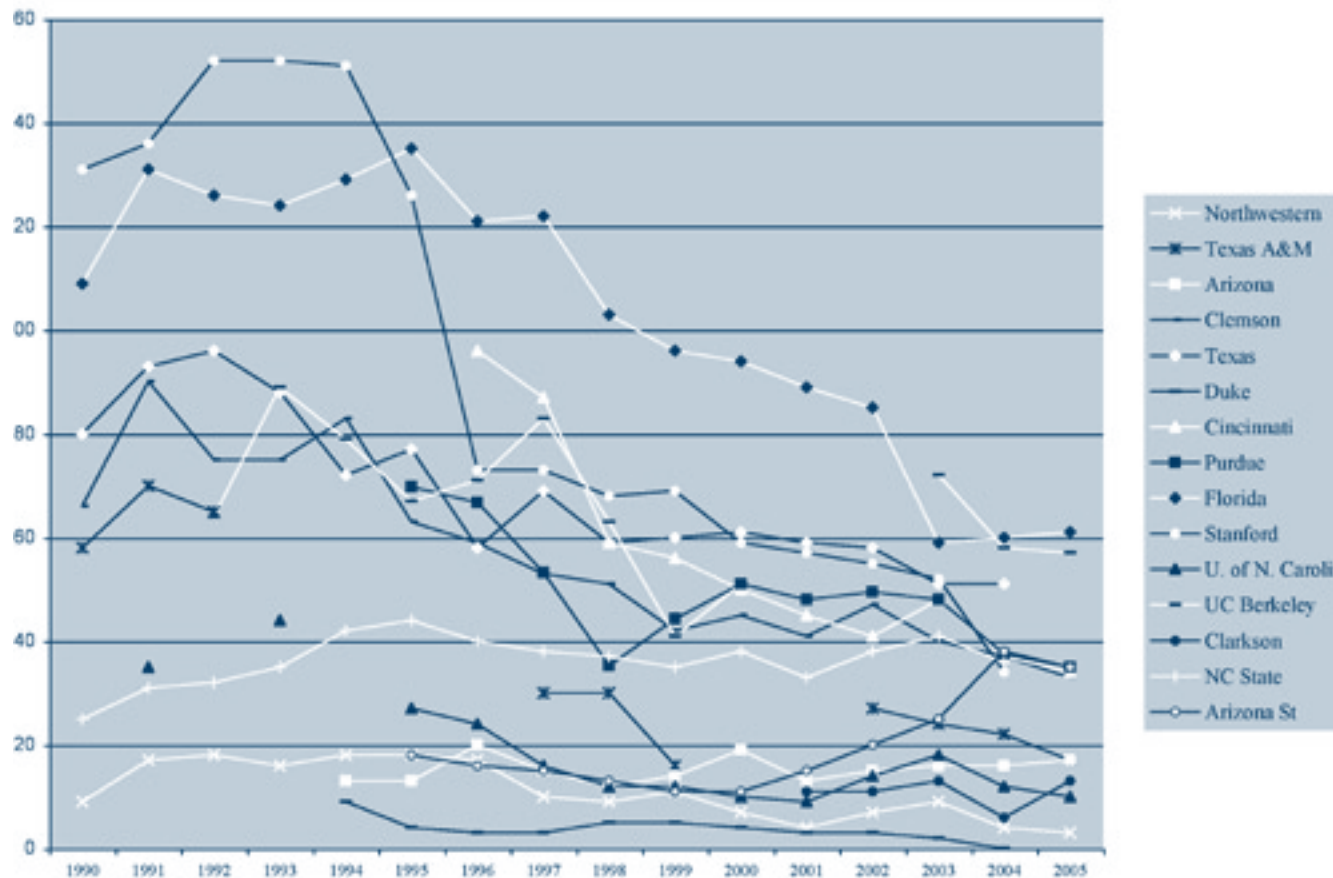
by the National Academies Committee on Science, Engineering, and Public Policy in the 2006 publication "Rising Above the Gathering Storm", fewer than one-third of US 4th-grade and 8th-grade students performed at or above a level called "proficient" in mathematics (National Academies, 2006). US 15-year-olds ranked 24th out of 40 countries that participated in a 2003 Program for International Student Assessment (PISA) examination (National Center for Education Statistics, 2005).

The reduced interest and aptitude in science and mathematics in the K-12 years translate into fewer undergraduate and graduate science and engineering majors. At the undergraduate level, overall U.S. engineering degrees awarded are down from a peak in 1985 of 77,000 to 60,000 in 2002. By comparison, Asia produced nearly 520,000 undergraduate engineering degrees and Europe 370,000 in 2002 (NSF, 2006).

At the graduate level, the United States is producing an ever-shrinking percentage of the world's engineers. As late as 1975, the United States graduated more engineering and scientific PhDs than Europe and more than three times as many as all of Asia according to Harvard economist Richard Freeman. In contrast, by 2002, the United States produced only 15% of the world's engineering doctorates (NSF, 2006).

At the same time that MSEE numbers are in decline, there is a shift away from the

FIGURE I
Declining Enrollment at the Master's Degree Level



Source: WEFTEC, 2006

more traditional engineering disciplines toward what are perceived to be more creative or cutting edge pursuits. This is occurring because of preferential funding for fundamental research and because of the global scale at which environmental engineers are being asked to solve problems, leaving the training of practitioners to work on infrastructure lacking. While fundamental cutting edge research is to be encouraged, academic programs that train practitioners are also essential. The participants in the 2002 workshop on the evolution of environmental engineering as a professional discipline summed it up well when they concluded that there is a sense that the project-based master's degree in environmental engineering is declining toward extinction. Aitken et al concluded, "This degree has been the cornerstone for employment in

Population growth, changing regulations, and decaying infrastructure are combining to create a growing demand for qualified environmental engineering professionals.

environmental engineering almost since the field's inception, and its decline is viewed with alarm by the practitioners who are aware of it" (Aitken, 2003).

THE LAW OF SUPPLY AND DEMAND
Population growth, changing regulations, and decaying infrastructure are combining

to create a growing demand for qualified environmental engineering professionals. Release of the National Infrastructure Report Card by ASCE in March 2005 attracted national media attention with headlines in major print and electronic media when it called for expenditures of \$1.6 trillion over the next five years. The Report Card predicted a \$30 billion annual expenditure requirement for water and wastewater infrastructure. Examples of impacts on the quality of life due to decaying or insufficient water and wastewater infrastructure are evident today. For example, based on EPA estimates contained in the Report Card, combined sewer overflows exceed 850 billion gallons per year and sanitary sewer overflows release as much as 10 billion gallons of raw sewage annually. California alone loses 222 million gallons per day of

drinking water due to leaking pipes (ASCE, 2005), enough to serve the domestic water residential consumption of roughly 2.2 million people at a time when the state struggles to meet demand.

A second component of infrastructure demand is growth. The U.S. Census Bureau predicts a fifty percent increase in U.S. population by 2050. Many of the large urban areas where this growth will be concentrated will face serious land use issues related to the siting of new water and wastewater treatment or solid waste facility capacity, placing additional disproportionate demand on environmental engineering professionals.

The third component of demand is changing regulations. Improvements in our ability to detect, identify, and quantify microorganisms and chemical constituents in water allow us to now speak in parts per trillion versus parts per million a few decades ago. Treatment technologies such as membrane treatment, advanced oxidation, and UV disinfection have become well established in response to the demand to produce higher quality treated water and wastewater. Water reuse will become more prevalent in the U.S. and worldwide as the two-thirds of the earth's population will be living in "water stressed conditions" by 2025 (U.N. Environmental Program 2006). Expansion of water reuse programs will create additional demand for water and wastewater professional services. Growth in the areas of TMDLs and storm water regulation is creating significant additional demand.

FUNDING PROGRAM

The growing disparity between the projected supply of environmental engineering professionals and the enormous demand for infrastructure design has compelled a number of private engineering consulting firms and public agencies to form a coalition to address these issues. Historically, funding for MSEE degrees was readily available, with Federal traineeship programs of the 1970s and 80s providing much of the support. Large-scale support for graduate education in environmental engineering no longer exists. Among universities surveyed, funding for MSEE students varies from total support for virtually all enrolled students to zero support at the MSEE level (i.e. support of PhD candidates only). The prevalent response to a survey conducted

The U.S. Census Bureau predicts a fifty percent increase in U.S. population by 2050. Many of the large urban areas where this growth will be concentrated will face serious land use issues related to the siting of new water and wastewater treatment or solid waste facility capacity, placing additional disproportionate demand on environmental engineering professionals.

in 2003 was that some, but not all, MSEE students would receive financial assistance. Although it is only one component of the solution, providing a funding mechanism was chosen as a first and achievable goal by the entities forming E2F.

Following focused information gathering efforts and sampling of opinions among the nation's university leaders, a program has been designed that encourages qualified students to enroll in MSEE programs at accredited universities that emphasize preparation to practice environmental engineering in the municipal water and wastewater fields and in solid waste management. The E2F program offers in-state tuition and reasonable living expenses up to \$20,000 toward



an MSEE degree with the understanding that the recipient would work for one of the funding partners for three years following graduation. Students are also required to take two prescribed core and select three elective courses at pre-approved universities. Applicants must hold a bachelor's degree in civil, chemical, mechanical, or related engineering field from an ABET accredited university. Pre-approved core and elective courses are selected by the E2F program based on a university application process. All U.S. universities with master's degree programs in environmental engineering, which offer courses meeting these requirements, are welcome to participate in the program. Each participating university is requested to supply course listings and to identify two core courses that would be required of each student in the areas of biological treatment and physicochemical treatment. Elective course lists from which the students select three breadth courses are also approved by the program for each university. Over forty universities are now participating in the E2F Program. A list of universities and the approved courses can be obtained at the E2F website: <http://www.engineeringmastersfunding.org/>

TABLE I
Participating Universities

Arizona	Georgia Inst of Tech	Michigan Tech	Tufts
Arizona State	Illinois	Minnesota	UC Berkeley
Auburn	Illinois Inst of Tech	MIT	UC Davis
Cal Poly	Iowa State	North Carolina	UCLA
Central Florida	Johns Hopkins	North Carolina State	USC
Cincinnati	Loyola Marymount	Penn State	Utah State
Clarkson	Manhattan College	Purdue	Washington
Clemson	Maryland	Rice	Wisconsin
Colorado State	Massachusetts	Stanford	
Colorado	Michigan	Texas	
Duke	Michigan State	Texas A&M	

(Source: WEFTEC 2006)

PROGRAM STATUS

Seven funding partners now are involved in E2F, two of which have provided double funding shares. The partners include Black & Veatch, CH2MHill, City of Phoenix Water Services Department, Los Angeles County Sanitation Districts, Malcolm Pirnie, MWH, and Parsons. Nine students were selected by a panel of the funding partners and funded for academic year 2005-2006. As of July 2006, four of the original nine have completed their degrees and are employed by a funding partner. The remaining five students are scheduled to graduate later in 2006. A second round of nine students has been selected and will start their studies in the fall of 2006.

Funding partners contribute a \$25,000 funding share, to support an active student and associated administrative costs, and a second one time refundable share to bridge funding cycles. Each time a graduate is hired by a funding partner, a funding share is contributed to the program to fund the next round of students. If the student fails to complete the degree or program requirements or takes employment with other than a funding partner, the student is expected to reimburse the funding. The student is protected if none of the funding partners offers employment. Funding partners are encouraged to mentor the students during their course of study to impart real world experience. Each funding partner may mentor any or all of the students. Although there is substantial financial commitment by the funding partners, there is the realization that recruiting excellent candidates is not easy or inexpensive and that the cost is relatively the same as if a student is hired with a bachelor's degree and then funded through continuing education by the firm or agency.

The program has enlisted the services of AAEE to establish AAEE as the central hub for information about the program. This is consistent with AAEE's goal to encourage quality environmental engineering education and certification. AAEE handles student applications and correspondence. Assistance from the Association of Environmental Engineering and Science Professors (AEESP) has also been instrumental moving the program forward.

NEXT STEPS

The immediate goal of the program is to provide more students with funding. Additional funding partners are needed to realize that outcome. Efforts are underway to improve the visibility of the program through better information dissemination to potential funding partners and potential student applicants. The website has been essential in reaching students and is being improved to include feedback from the first nine students. Direct outreach to professors and students is being pursued.



**The E2F program is
but one component of
a broader effort necessary
within the profession aimed
at identifying students at
all levels who have a
passion for working on
environmental problems.**

CONCLUSIONS

Dramatic declines in the number of students pursuing MSEE degrees have been documented through nationwide surveys. While there are many reasons for this trend, funding for master's degree level education is much less available than in the past and is a contributing factor. The disparity between supply of qualified environmental engineers and the demand for their expertise is growing at an alarming rate. The E2F program is but one component of a broader effort necessary within the profession aimed at identifying students at all levels who have a passion for working on environmental prob-

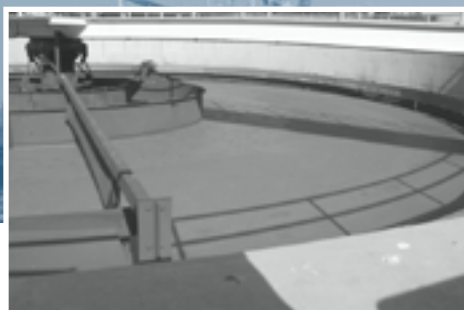
lems. We need to encourage young people to pursue environmental engineering careers that we know to be technically challenging as well as satisfying in terms of making a difference.

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ENGINEERING MARKETS CONTINUE REBOUND WITH GREATER THAN 10 PERCENT GROWTH RATE IN 2005

By Alan L. Farkas & Christopher S. Frangione

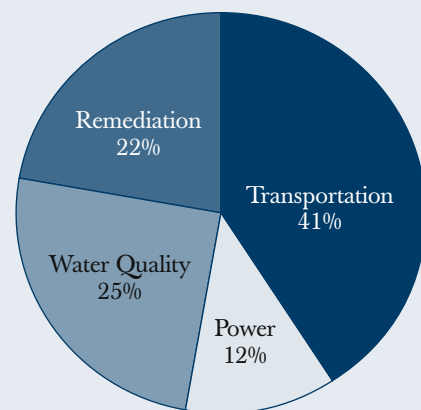


The U.S. environmental and infrastructure engineering market expanded 10.5 percent last year, its highest growth rate in six years.

All major market segments enjoyed solid growth in 2005. Transportation engineers saw their market climb to \$8.8 billion and register a growth rate of 12 percent. The power engineering market rebounded smartly with a 15 percent rate of growth. That engineering market in the U.S. now totals \$2.5 billion. Water quality engineering slowed from its recent years of double-digit

growth to a still-healthy nine percent rate. This market grew to \$5.3 billion in 2005. Finally, remediation consulting and engineering grew eight percent to \$4.8 billion, recording its second consecutive year of strong growth. Exhibit 1 shows the distribution of the infrastructure and environmental engineering market among the major market segments.

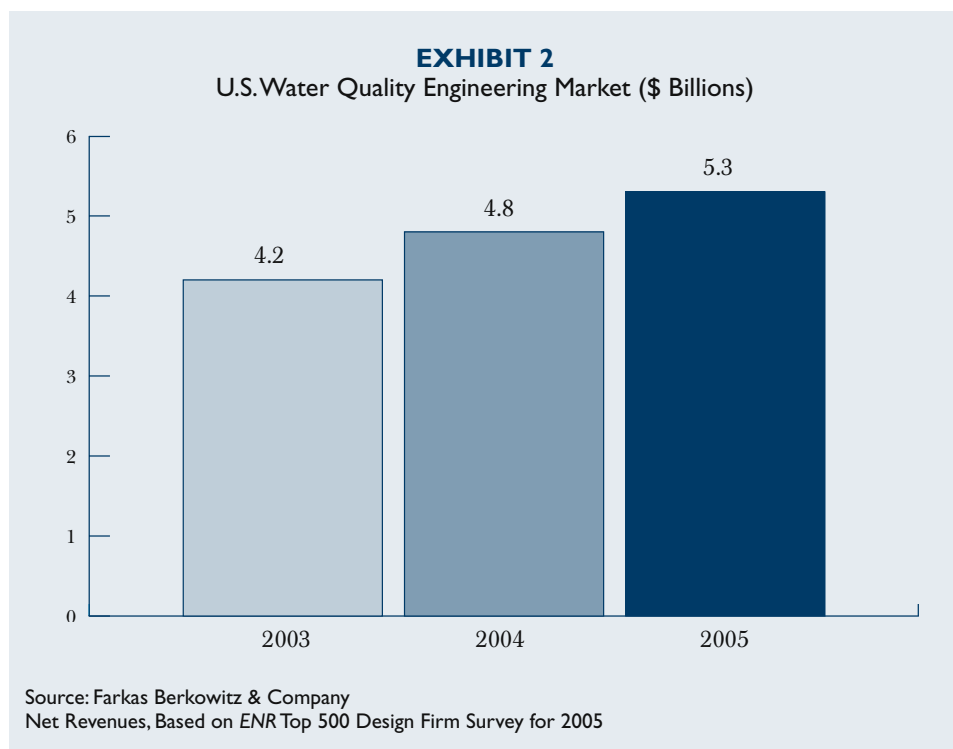
EXHIBIT 1
Distribution of \$21.4 Billion Market
in 2005 for Infrastructure and
Environmental Engineering



Source: Farkas Berkowitz & Company
Based on ENR Top 500 Design Firm Survey for 2005

Competition for resources and the resulting discontinuities in pricing is creating opportunities and threats – winners and losers – in all environmental and infrastructure markets. These influences are already being felt for some markets, while for others, the major effects may be several years in the future.

Escalating construction costs are an important example of the impact of resource competition. Construction costs have escalated to the point where many public-sector procurements no longer result in construction awards because all bids are significantly over the public agencies' cost estimates. For engineers, this could mean a downturn in construction management revenues, but it could also mean increased design fees as public agencies re-design projects to lower costs. The volatility of costs poses added risks to firms undertaking construction or design-build projects on a lump-sum basis. If the costs of energy and materials settle at higher equilibrium prices for a period of years, then the increased costs of construction will leave fewer dollars available for engineering design.

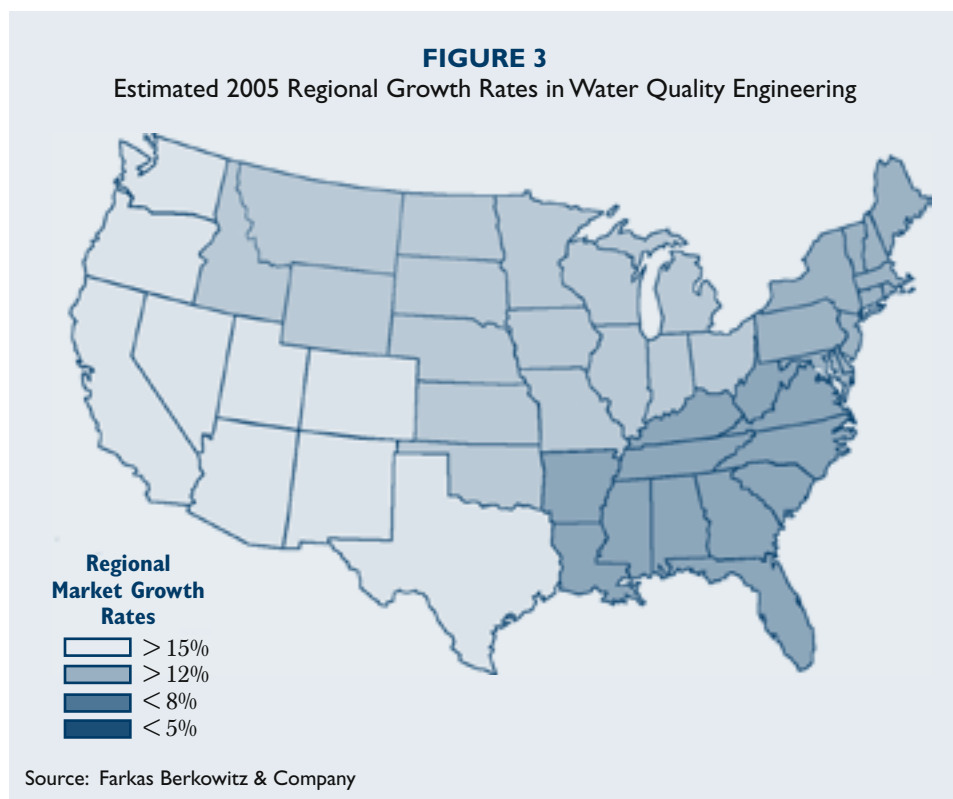


WATER QUALITY ENGINEERING, DESIGN BUILD, AND OPERATIONAL SERVICES

The water quality engineering market registered a nine percent growth rate growing to \$5.27 billion in 2005 (see Exhibit 2), after seven consecutive years of double-digit

growth. The top five firms in this sector are CH2M HILL, MWH, AECOM, Tetra Tech, and CDM, and still collectively command a full one-third of the market.

Considerable regional variation exists in growth rates. The growth rates in this market mirror growth in population. In 2005 the Western market grew at better than 15 percent and the Southeast at better than 12 percent, while the Central U.S. grew less than 8 percent and the Northeast



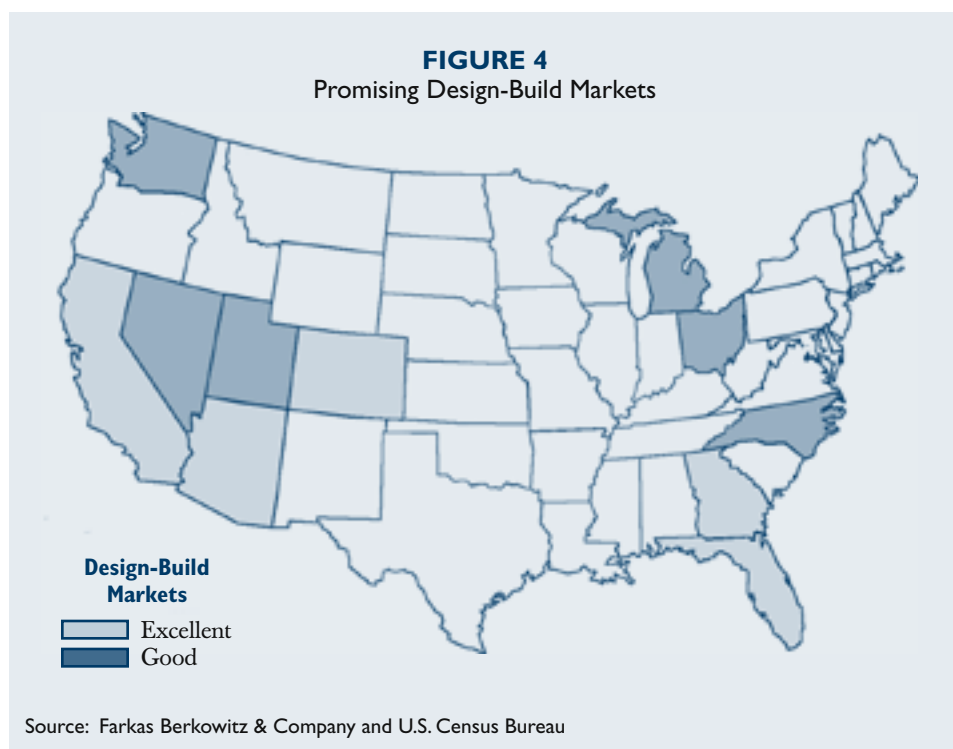
The top five firms in (water quality engineering) are CH2M Hill, MWH, AECOM, Tetra Tech, and CDM, and still collectively command a full one-third of the market.

less than 5 percent (see Exhibit 3). The U.S. Census Bureau projects that from 2000 to 2030 the rates of growth in the West and South will be roughly five times that of the Central and Northeast states.

The design-build market for water and wastewater treatment grew 10 percent. Most of this growth can be attributed to fewer than a dozen states that have embraced this delivery mode, and almost all of those states are located in the rapidly growing Western and Southeastern regions (see Exhibit 4).

The top engineering firms participating in the design-build market have begun to bid more selectively as they assimilate lessons learned in providing integrated design-build services on a fixed-price basis. Municipal clients are gaining confidence in this alternative delivery method as evidenced by the larger size of projects being let and by the reduced dependence on third-party advisors. Growth will accelerate for the remainder of this year and next year.

The market for public-private partnerships for water and wastewater treatment systems grew 8.5 percent in 2005 to \$1.26 billion (see Exhibit 5). The average growth was skewed by the 57 percent rate of growth reported by Southwest Water. Without Southwest Water, this market grew five percent, with some of the larger players growing only one or two percent. Veolia's share of

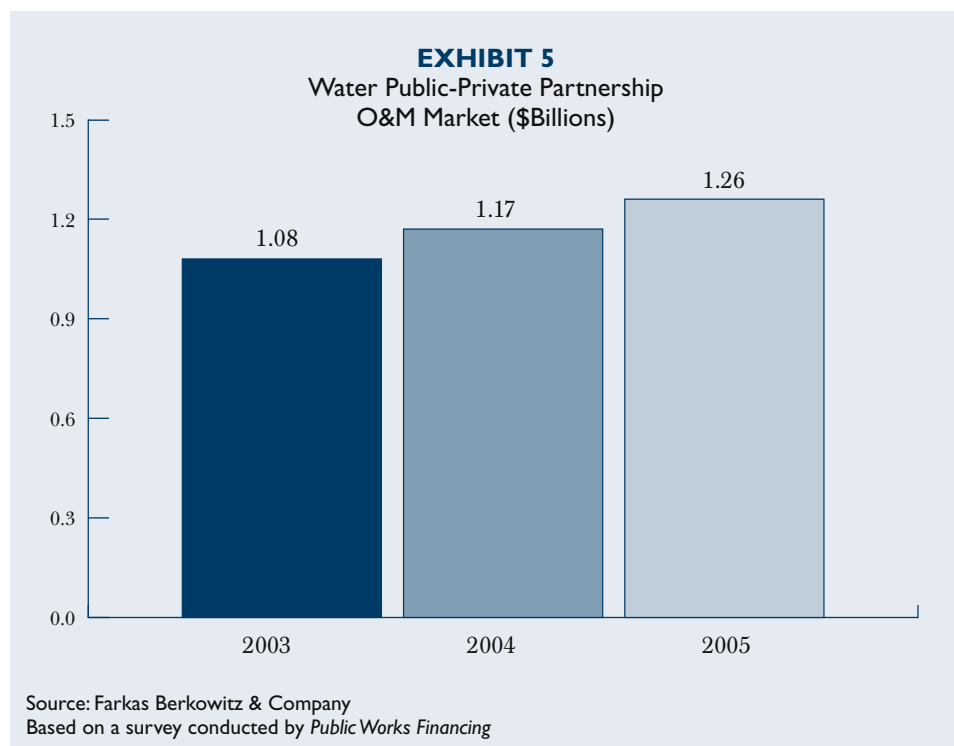


the total market dropped slightly to 30 percent, while the next five, including United, CH2M HILL, Southwest Water Company, American Water, and Severn Trent Services, command an additional 58 percent of the market.

The competitors in this market are adapting to its slowing rate of growth. While

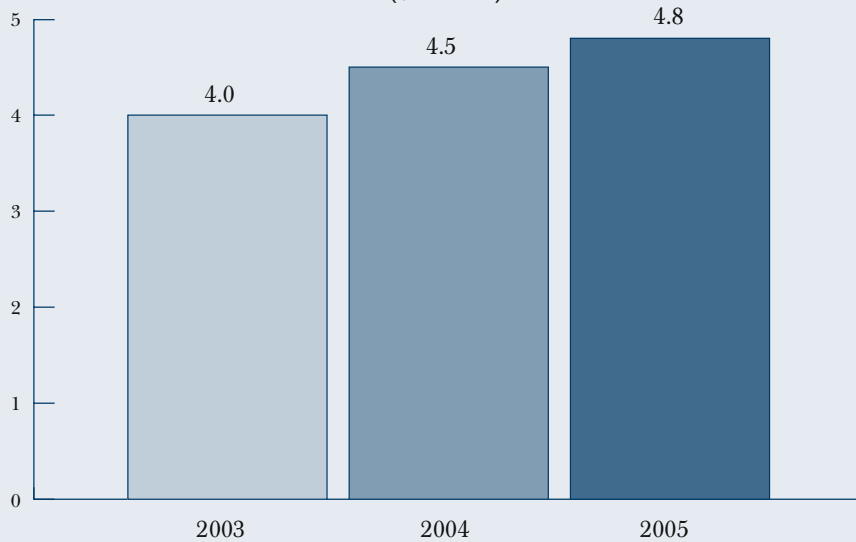
the flow of new starts continued to trickle, renewals were plentiful, and 83 percent of the public partners were satisfied enough to remain with their incumbent private partners. In fact, 93 percent of municipalities with expired contracts elected to continue with the public-private partnership model. However, the design-build-operate market has failed to fulfill its initial promise, with only two awards made during all of 2005.

The bottom line for competitors in the public-private partnership sector has improved as unprofitable contracts have either



The market for private-public partnerships for water and wastewater treatment systems grew 8.5 percent in 2005 to \$1.26 billion.

EXHIBIT 6
U.S. Remediation Consulting Market
(\$ Billions)



Source: Farkas Berkowitz & Company
Net Revenues, Based on ENR Top 500 Design Firm Survey for 2005

been renegotiated or written off. Many of the players here will work hard over the coming years to shed their body-shop image and strive to become true strategic partners with their municipal clients.

REMEDIATION CONSULTING AND ENGINEERING

Remediation firms saw a considerable disparity in 2005 market growth between the industrial market and the Department of Defense (DOD) and the Department of Energy (DOE) cleanup markets. Although

2005 saw an overall growth rate of eight percent to \$4.8 billion (see Exhibit 6), a closer analysis of the top 15 firms in this market showed that those six firms that principally serve the federal market actually registered an aggregate decline in revenue of eight percent last year, while the nine firms that principally serve the industrial market enjoyed an aggregate revenue growth of 27 percent.

Private sector environmental and remediation consultants are clearly benefitting from record petroleum industry profits.



Increased cleanup spending on the part of these companies during both 2005 and 2004 helped to account for much of the surge in growth in what had recently been a slow-to-no-growth market. The development of coal fired plants, LNG facilities, and the improvements being made to the transmission grid are all boosting revenues relating to environmental permitting assistance.

FEDERAL MARKETS

Those serving the federal market, and particularly the DOD, saw a big shift in

❖ Continued on 20 ❖



Private sector
environmental and
remediation consultants
are clearly benefitting
from record petroleum
industry profits.

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The American Academy of Environmental Engineers is pleased to recognize these individuals who contributed to several Academy fund during the 2006 certification renewal process. The total contribution to each program or fund are:

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ENVIRONMENTAL ENGINEERING FOUNDATION IS LAUNCHED!

The Environmental Engineering Foundation recently received its IRS determination as a publicly-supported charitable organization that is exempt from income taxes under Section 501 (c)(3) of the Internal Revenue Code, ending a multi-year quest. According to Foundation President Charlie Willis, this determination will have far-reaching implications for the Academy because funds can now be raised for the benefit of Academy programs that relate to education.

This, in turn, means that moneys can be received through the Foundation from universities foundations in payment for the Kappe Lecture series, in support of university participation in the Excellence in Environmental Engineering Awards® program, support for the work of the Academy's Education Committee, and other activities. Serving with President Willis will be Past-President Jerry Gilbert as Treasurer and Past-President Tim Shea as Secretary. Other members of the Academy will also be invited to serve, as this vital activity is launched for the benefit of the Academy.

More information will be provided on Foundation activities over the next few months.



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ENGINEERING MARKETS CONTINUE REBOUND WITH GREATER THAN 10 PERCENT GROWTH RATE IN 2005,

continued from page 15

priorities in 2005. Funding for Iraq and hurricane relief clearly siphoned away dollars from remediation of contaminated sites. Federal contractors reported a significant decline in the flow of task orders and dollars throughout most of 2005 and the first quarter of 2006.

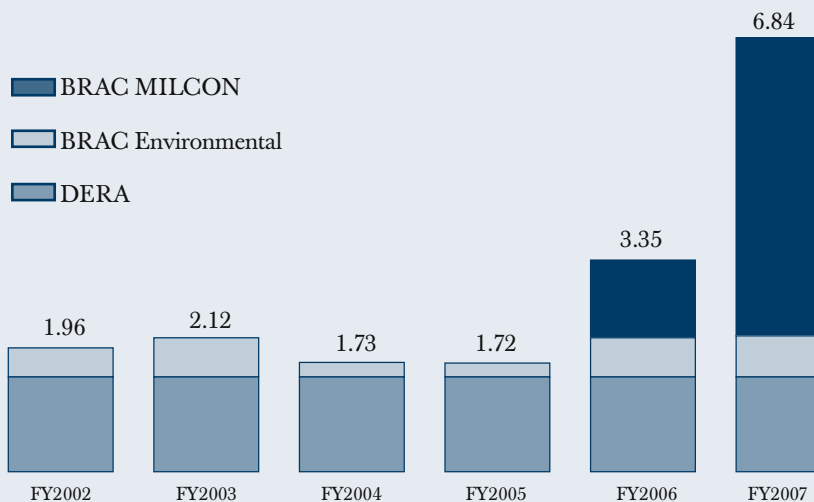
The fortunes of federal cleanup contractors should change once the Base Realignment and Closure (BRAC) program gets underway. Funding authorizations will increase over four-fold in federal FY2007 over FY2005. BRAC-related military construction dollars account for most of this huge increase. Exhibit 7 compares anticipated funding levels to those of recent years.

In attacking the BRAC market, federal contractors cannot rely simply on their remediation and cleanup skills. Top brass in the military have indicated that they want to find ways to use the cleanup and sale of property to help fund the realignment effort, and this will place a premium on contractors having deal-making skills and development savvy, the capability to do clean as well as dirty construction, and experience in dealing with local development agencies.

In the DOE cleanup market, the substantial number of the upcoming re-



EXHIBIT 7
BRAC and DERA Funding (\$ Billions)



Source: Farkas Berkowitz & Company

competes may challenge the top four firms currently serving this market: Bechtel, Washington Group International, CH2M HILL, and Fluor. Many firms have signaled their interest in the DOE market, including Northrup Grumman, Lockheed, Jacobs, Parsons, and the Shaw Group.

The DOE's effort in 2004 to award prime contracts to small businesses appears to have subsided, with the results of that program having hurt as many small businesses as it helped. This effort was plagued with sustained protests and delayed and cancelled procurements, all of which increased the business development costs of small businesses without necessarily allowing them to reap any reward for their efforts.

DOE will move away from the incentive-laden performance contract model used so successfully at Rocky Flats. Some within the DOE community criticize this change, but many feel that the Rocky Flats contract model is not appropriate to the sites that remain. The environmental management budget for DOE will continue to decline, with the President's proposal down 11 percent from the FY2006 appropriation level.

Focusing on federal government niche markets, many firms benefited from the flow of dollars resulting from Katrina. Between FEMA and the Corps of Engineers, nearly \$9 billion has been spent. Most re-

cently, FEMA spending has favored small firms from the four-state impacted region. The delay in the reconstruction effort has many firms puzzled over when and how that reconstruction effort will unfold.

As for the reconstruction effort in Iraq, approximately \$10 billion has been spent on reconstruction in Iraq with half of that procured by the Corps of Engineers and the rest split about equally between U.S. AID and the Air Force Center for Environmental Excellence. In the last 18 months, much of the funding has gone for security infrastructure, including police stations, training academies, and military installations, rather than civil infrastructure. Most of the U.S. contractors operating in Iraq today will wind down completely over the next six months, with the remaining firms leaving within the next 12 months. Continuing reconstruction efforts will rely on Iraqi firms.

ABOUT THE AUTHORS

Farkas Berkowitz & Company is a management consulting firm serving companies that provide design, construction, and operational services relating to civil infrastructure and environmental protection. Established in 1983, the firm assists clients with strategy, mergers and acquisitions, and operations improvement. Inquires should be addressed to Alan Farkas at 202-833-7530 or farkas@farkasberkowitz.com or visit their website: www.farkasberkowitz.com.



TOP EMPLOYERS

AND RECRUITERS OF BOARD CERTIFIED ENVIRONMENTAL ENGINEERS

in **2005**

OVER THE LAST TWO YEARS, the Academy has seen significant growth in the number of new Board Certified Environmental Engineers. In 2005 alone, 142 men and women passed their exams and were certified by the Academy. The 2005 class was profiled in the Winter issue of the *Environmental Engineer*[®] (Volume 42, Number 1).

The vast majority of that new class came to us not on their own, but because they were encouraged to apply for specialty certification by someone else. In many cases, a Board Certified Environmental Engineer simply asked a qualified fellow environmental engineer, "have you considered becoming a BCEE?" In many other cases, an environmental engineer's employer encouraged them to seek credentialing by the Academy.

In 1999, the Academy initiated the Professional Development Program (PDP) with environmental consulting firms to provide for the systemic professional development of environmental engineers from new graduates and extending through specialty certification and beyond. The PDP is customized by each participating firm according to its specific Human Resources needs and practices. As a part of this customization, the participating firms provide appropriate support and tangible incentives for program participants.

To date, eight firms have committed themselves as participants in the PDP. In 2002, the Academy further strengthened its recruiting efforts by kicking off the "More is Better" campaign. Together, these two efforts have gone a long way in rejuvenating interest in Academy membership and specialty certification.

Listed on this page are the Top Ten Employers of Board Certified Environmental Engineers in 2005 as well as the five organizations that recruited the most new Board Certified Environmental Engineers in 2005. The Academy would like to recognize and thank those employers for their continued support.

The Academy would also like to thank each and every member who has taken the time to recruit new Board Certified Environmental Engineers and continues to do so. Your efforts are greatly appreciated. Each new person that earns their specialty certification adds credibility to the BCEE designation by making it that much more recognizable as a distinguishing characteristic within the environmental engineering profession. 

Professional Development Program as of December 31, 2005

CDM
ERM – Environmental Resources Management
Hazen and Sawyer
HDR Engineering, Inc.
Malcolm Pirnie, Inc.
PBS&J
Stearns and Wheler
The Stover Group

Top 5 Recruiters

Organization	Number of New BCEEs in 2004 & 2005
CDM*	64
Malcolm Pirnie*	31
Mississippi DEQ	21
LA Sanitation Districts	8
ERM*	5

*denotes participating firm in PDP

THE TOP TEN

Current Rank	Organization	Number of BCEEs	Rank Last Year	Current Rank	Organization	Number of BCEEs	Rank Last Year
1	CDM*	239	1	6	CH2M Hill	31	7
2	Malcolm Pirnie*	110	2	7	MWH	30	5
3	Mississippi DEQ	46	8	8 (tie)	Parsons	28	6
4	PBS&J*	44	3	8 (tie)	Brown & Caldwell	28	9
5	Stearns & Wheler, LLC*	38	4	9	Carollo Engineers	22	9

*denotes participating firm in PDP

2005 FINANCIAL STATEMENT

INDEPENDENT AUDITORS' REPORT

We have audited the accompanying statements of financial position of American Academy of Environmental Engineers (a non-profit organization) as of December 31, 2005 and 2004, and the related statements of activities and cash flows for the years ended. These financial statements are the responsibility of the Academy's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of American Academy of Environmental Engineers as of December 31, 2005 and 2004, and the changes in its net assets and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

**MULLEN, SONDBERG,
WIMBISH & STONE, P.A.**

*Annapolis, Maryland
March 30, 2006*

Note: The accompanying notes are an integral part of these financial statements.

STATEMENTS OF FINANCIAL POSITION

December 31, 2005 and 2004

ASSETS		2005	2004
CURRENT ASSETS			
Cash and cash equivalents	\$	71,736	\$ 65,935
Accounts receivable		13,969	14,869
Prepaid expenses		<u>47,105</u>	<u>44,172</u>
Total current assets		132,810	124,976
PROPERTY AND EQUIPMENT			
Net of accumulated depreciation		4,803	6,874
OTHER ASSETS			
Net of accumulated amortization		<u>12,453</u>	<u>14,017</u>
Total assets		<u>\$ 150,066</u>	<u>\$ 145,867</u>
LIABILITIES AND NET ASSETS			
CURRENT LIABILITIES			
Accounts payable and accrued expenses	\$	13,514	\$ 12,112
Settlement payable		18,000	18,000
Note payable		11,137	10,490
Deferred revenue		<u>213,325</u>	<u>210,742</u>
Total current liabilities		<u>255,976</u>	<u>251,344</u>
LONG-TERM LIABILITIES			
Settlement payable	--		18,000
Note payable		<u>5,823</u>	<u>16,960</u>
Total long-term liabilities		<u>5,823</u>	<u>34,960</u>
Total liabilities		<u>261,799</u>	<u>286,304</u>
NET ASSETS			
Unrestricted		(142,970)	(171,674)
Unrestricted – board designated		<u>31,237</u>	<u>31,237</u>
Total net assets		<u>(111,733)</u>	<u>(140,437)</u>
Total liabilities and net assets		<u>\$ 150,066</u>	<u>\$ 145,867</u>

STATEMENTS OF ACTIVITIES
Years Ended December 31, 2005 and 2004

	2005	2004
REVENUES, GAINS AND OTHER SUPPORT		
Certification fees	\$ 333,240	\$ 326,121
Publications	65,146	70,965
Meetings	47,926	39,763
Contributions	47,135	30,620
Environmental engineer	9,905	7,482
Kappe lecture	9,350	12,750
Other income	1,915	2,246
Donated equipment	---	545
Investment income	---	35
	<u>514,617</u>	<u>490,527</u>
EXPENSES		
Program service expenses:		
Memberships	37,278	35,521
Environmental engineer	32,046	32,206
Meetings and seminars	26,406	13,237
Publications	18,685	19,964
Public education	15,677	15,268
Certificate/membership	15,275	13,151
Kappe lecture	4,435	9,797
Committee expense	1,588	3,507
	<u>151,489</u>	<u>142,651</u>
Management and general expenses:		
Staff salaries, fringe benefits and contract employment	216,585	225,985
Office expense	87,529	90,341
Legal, accounting and miscellaneous fees	17,030	11,387
Depreciation and amortization	4,701	7,754
Insurance	3,601	3,231
Officer and trustee expenses	3,419	8,958
Interest	1,361	1,971
Awards	198	276
	<u>334,424</u>	<u>349,903</u>
	<u>485,913</u>	<u>492,554</u>
Change in net assets	28,704	(2,027)
NET ASSETS AT BEGINNING OF YEAR	<u>(140,437)</u>	<u>(138,410)</u>
NET ASSETS AT END OF YEAR	<u><u>\$(111,733)</u></u>	<u><u>\$(140,437)</u></u>

NOTES TO FINANCIAL STATEMENTS

December 31, 2005 and 2004

Note 1 — Summary of Significant Accounting Policies

Nature and Organization

American Academy of Environmental Engineers (AAEE) was founded in 1955 to improve the practice of environmental engineering by certifying properly-qualified environmental engineering specialists, accrediting university environmental engineering curricula and by informing the public and environmental engineers through lectures, publications and other venues regarding proper environmental practices.

Income Taxes

The Academy is exempt under Section 501(c)(6) of the Internal Revenue Code from paying federal income tax on any income except unrelated business income. No provision has been made for income taxes as the Academy has no net unrelated business income.

Basis of Accounting

The Academy prepares its financial statements in accordance with accounting principles generally accepted in the United States of America. The basis of accounting involves the application of accrual accounting; consequently, revenues and gains are recognized when earned, and expenses and losses are recognized when incurred.

Revenue Recognition

Certification fees and certain other revenues are recorded as deferred revenue upon receipt and are recognized in the period to which the fees relate.

Contributions received are recorded as unrestricted, temporarily restricted, or permanently restricted support, depending on the existence and/or nature of any donor-imposed restriction. Support that is restricted by the donor is reported as an increase in unrestricted net assets if the restriction expires in the reporting period in

2005 FINANCIAL STATEMENT

which the support is recognized. All other donor-restricted support is reported as an increase in temporarily or permanently restricted net assets, depending on the nature of the restriction. When a restriction expires (that is, when a stipulated time restriction ends or a purpose restriction is accomplished), temporarily restricted net assets are reclassified as unrestricted net assets and reported in the statement of activities as net assets released from restrictions. Unexpended grant awards are classified as refundable advances until expended for the purpose of the grants since they are considered conditional promises to give.

Non-Cash Donations

Donated marketable securities and other non-cash donations are recorded as contributions at their estimated market value at the date of contribution.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingencies at the statement of financial position date and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Accounts Receivable

Accounts receivable consists of amounts due for certification fees, royalties and reimbursements at the end of the year. The Academy considers all accounts receivable to be fully collectible. Accordingly, an allowance for doubtful accounts has been established.

Property and Equipment

Property and equipment acquisitions in excess of \$500 are capitalized and recorded at cost less accumulated depreciation and amortization. When assets are retired or otherwise disposed of, the cost and related depreciation are removed from the accounts, and any resulting gain or loss is reflected in income for the period. The

STATEMENTS OF CASH FLOWS Years Ended December 31, 2005 and 2004

	2004	2004
CASH FLOWS FROM OPERATING ACTIVITIES:		
Change in net assets	\$ 28,704	\$ (2,027)
Adjustments to reconcile change in net assets to net cash provided by operating activities		
Depreciation and amortization	4,701	7,754
Noncash donations	---	(545)
(Increase) decrease in operating assets:		
Accounts receivable	900	22,142
Prepaid expenses	(2,933)	(24,753)
Increase (decrease) in operating liabilities:		
Accounts payable and accrued expenses	1,402	9,458
Settlement payable	(18,000)	(18,000)
Deferred revenue	2,583	12,817
	<u>17,357</u>	<u>6,846</u>
Net cash provided by operating activities	17,357	6,846
CASH FLOWS FROM INVESTING ACTIVITIES:		
Acquisition of property, equipment and trademarks	(1,066)	(7,589)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Principal payments on notes	<u>(10,490)</u>	<u>(9,880)</u>
Net change in cash	5,801	(10,623)
Cash and cash equivalents at beginning of year	<u>65,935</u>	<u>76,558</u>
Cash and cash equivalents at end of the year	<u>\$ 71,736</u>	<u>\$ 65,935</u>
SUPPLEMENTAL CASH FLOW INFORMATION:		
Cash paid during the year for interest	<u>\$ 1,361</u>	<u>\$ 1,971</u>
Noncash investing activities:		
Acquisition of property, equipment and trademarks	\$ 1,066	\$ 8,134
Noncash donations	---	(545)
Cash paid to acquire property and equipment	<u>\$ 1,066</u>	<u>\$ 7,589</u>

cost of maintenance and repairs is charged to current income as incurred; where as significant renewals and betterments are capitalized. Depreciation and amortization of property and equipment are provided on a straight-line basis. Leasehold improvements are amortized over their estimated useful lives or the life of the lease, whichever is shorter. Furniture and equipment are depreciated over three to ten years.

Program Service Expense

Program service expense represents the direct cost of performing programs. Direct costs do not include salaries and related expenses. Management and general costs have not been allocated to such programs.

Cash and Cash Equivalents

For purposes of the statement of cash flows, cash and cash equivalents represent deposits in checking and savings accounts.

Note 2 — Concentration of Cash Balances

At various times during the year, the Academy maintained cash-in-bank balances in excess of the federally insured limit of \$100,000.

Note 3 — Property and Equipment

Property and equipment are summarized below for the years ending December 31:

	2005	2004
Furniture and equipment	\$ 207,248	\$ 206,182
Leasehold improvements	<u>6,951</u>	<u>6,951</u>
	214,199	213,133
Less accumulated depreciation	<u>(209,396)</u>	<u>(206,259)</u>
Net property and equipment	<u>\$ 4,803</u>	<u>\$ 6,874</u>

Depreciation expense for the years ended December 31, 2005 and 2004 was \$3,141 and \$6,277, respectively.

Note 4 — Other Assets

Trademark and organization costs incurred by the Academy are amortized over fifteen years. Amortization expense for the

years ended December 31, 2005 and 2004 were \$1,560 and \$1,477, respectively.

Note 5 — Lease Commitment

The Academy leases office space under a noncancellable operating lease which expires on July 31, 2008.

Future minimum lease payments required under the lease are as follows:

2006	45,636
2007	46,548
2008	<u>27,467</u>
	<u>\$119,651</u>

Rent expense for the years ended December 31, 2005 and 2004 amounted to \$47,588 and \$47,201, respectively.

Note 6 — Settlement Payable

In October 2001, the Academy entered into a settlement agreement with a former employee in a wrongful termination lawsuit. The Academy has agreed to pay a total sum of \$108,000 in consideration for the release of all claims known or unknown by the plaintiff against the Academy. The Academy shall pay the settled amount in a total of six annual installments of \$18,000 to the defendant's counsel. The first installment payment was made in October 2001. The remaining 5 installments are due by February 15 of each year.

The future scheduled maturities of long-term debt for the year ended December 31, 2006 is \$18,000.

Note 7 — Note Payable

In June 2002, the Academy obtained a note that is payable to a law firm in the amount of \$51,084. The note was obtained to pay legal fees incurred in 2001 defending a lawsuit (See Note 6). Monthly installments of \$988 including interest at 6% are to repaid over 60 months.

The future scheduled maturities of long-term debt are as follows for subsequent years ending December 31:

2006	11,137
2007	<u>5,823</u>

	16,960
Less current maturities	<u>(11,137)</u>
Long term obligations	<u>\$5,823</u>

Note 8 — Unrestricted Net Assets — Board Designated

It is the policy of the Board of Trustees of the Academy to review its plans for future projects from time to time and to designate appropriate sums to assure adequate financing of such projects.

Snow Fund — represents a \$10,000 unrestricted contribution for which the Board of Trustees designated for some future use. The Board directed that the \$10,000 principal remain intact and that the interest can only be used for purposes designated by the Board. Total designated funds as of December 31, 2005 and 2004 amounted to \$14,528. Total accumulated interest as of December 31, 2005 and 2004 amounted to \$4,528. The Academy cashed in the Certificate of Deposit for operating purposes during the year ended December 31, 2000 and intend to reestablish the certificate of deposit when funds are available.

Kappe Fund — represents a \$10,000 bequest received from the Estate of Stanley E. Kappe during 1985. This unrestricted bequest is used for the purpose of recognizing the contributions of Stanley E. Kappe to the environmental engineering profession. The Board has designated the fund as a Quasi-Endowment. Hence, the principal portion of this fund is to remain intact and the interest can be spent on funding the Kappe Lecture Series. The Board has also designated additional funds and any annual contributions to the Kappe Lecture to be used to fund the Kappe Lecture Series. Total designated funds as of December 31, 2005 and 2004 amounted to \$16,709. Total accumulated interest as of December 31, 2005 and 2004 amounted to \$3,694. The Academy cashed in the certificate of deposit for operating purposes during the year ended December 31, 2001 and intends to reestablish the certificate of deposit when funds are available.

Note 9 — Employee Benefit Plan

The Academy established a 401(k) Retirement Plan in 1997 for all employees meeting certain eligibility requirements.

❖ Continued on 26 ❖

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2005 FINANCIAL STATEMENT,

continued from page 25

Employees may contribute up to 15% of their eligible compensation to the plan, subject to the limits of Section 401(k) of the Internal Revenue Code. The Academy does not match the employee contributions.

Note 10 — Going Concern

These statements are presented on the basis that the Academy is a going concern. Going concern contemplates the realization of assets and the satisfaction of liabilities in the normal course of business over a reasonable length of time. The accompanying financial statements show a current year accumulated deficit in unrestricted net assets of \$111,733.

The Academy has developed a plan to reduce expenses and increase revenues. The Academy continues to implement the plan. Management has projected cash flows for one year.

The Academy's continued existence depends on the success of cost reductions and development new sources of revenue. 

KATHLEEN P. CLACK
ATTORNEY AT LAW

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THE BALLOTS HAVE BEEN COUNTED. While the results will not be official until the Annual Meeting when the Teller's Report is confirmed by the Board, the following individuals have been elected for 2007. Current President Elect, Stephen R. Kellogg will succeed to the Office of the President: William P. Dee will be President-Elect; Debra R. Reinhart has been voted as Vice President; and Michael W. Selna and Thomas E. Decker have been voted as Trustee-at-Large.



Stephen R. Kellogg



William P. Dee



Debra R. Reinhart



Michael W. Selna



Thomas E. Decker



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2006 Academy Awards

The 2006 Academy Awards Banquet was held on Wednesday, May 3. This year's banquet proved to be one of AAEE's most successful, with the hall filled to capacity. Here are some highlights of this year's event.



Past President Dr. Tim Shea, P.E., BCEE, presents the Honorary Board Certified Environmental Engineer Award to Dr. James Barnard, while Past Executive Director David Asselin and President Alan Vicory look on.



Dr. Wayne F. Echelberger, P.E., BCEE, 2006 Stanley E. Kappe Award Recipient, and Dr. Philip C. Singer, P.E., BCEE, 2006 Gordon Maskew Fair Award Recipient.

Newly-elected Trustee-at-Large Michael W. Selna, P.E., BCEE, and James F. Stahl, P.E., BCEE, of the Sanitation Districts of L.A. County, Grand Prize winner for Operation & Management for the project, The Power of Innovation – Antelope Valley Green Energy Program.



The Superior Achievement Award winning project for 2006 was Rocky Flats Environmental Technology Site, entered by the Kaiser-Hill Company, LLC. of Broomfield, Colorado.

Dr. Daniel A. Okun, P.E., BCEE, Past President (1970), and 2006 Gordon Maskew Fair Award Recipient, Dr. Philip C. Singer, P.E., BCEE.




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**Entries are due by February 1, 2007.
For an entry form and details, contact:**

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