

The Voice

JUNE 2006

ACEC

AMERICAN COUNCIL OF ENGINEERING
COMPANIES OF TENNESSEE

THE VOICE OF TENNESSEE'S ENGINEERING COMPANIES

ACEC OF TENNESSEE PARTNERS

These companies provide Tennessee engineering firms with products and services and support the activities of ACEC of Tennessee through participation in the Partners Program. Additional information about these Partner Program participants is available at www.acectn.org.

American Water Works Association

Architectural Wall Solutions

Crow Friedman Group, LLC

ISCO Industries, LLC

Jacobs Sverdrup

Lellyett & Rogers Company

ModernTech

Sherman-Dixie Concrete Industries

Tennessee Concrete Association

The Crom Corporation

Thomas & Betts Corporation

United Structural Systems, Inc.

Water & Waste Equipment, Inc.

50 Years & Counting: The Interstate System

by Paul Degges, P.E.
Chief Engineer,
Tennessee Department of Transportation

Can you imagine driving to Knoxville on U.S. 70 these days? Or, how about all those Cracker Barrels and Holiday Inns that developed because of the interstate system?

On June 29, 2006, the U.S. Interstate System will be fifty years old. But, those of us younger than fifty have always driven on interstates and have no concept of what traveling in Tennessee was like before the 1960s and 1970s when the bulk of the system was built.

Those 1,105 miles of Tennessee interstate weren't easy to build.

Just think of the toil and trouble it took to get across Monteagle Mountain, Roane Mountain or Monterey Mountain. The construction of the bridge over the Mississippi River took an amazing amount of manpower, materials and money.

While the system was costly in terms of dollars, it was extremely profitable in terms of development. Tennessee ranks 6th in the nation in cargo carried by trucks. Almost a third (37 counties) of Tennessee's 95 counties directly access the interstate. And, I don't need to tell you how good our interstates are. Tennessee has been cited numerous times for having the best roads in the nation.

Besides the economic development aspect, consider the businesses that have flourished by the building of the system—contractors,

(continued on page 2)



Paul Degges



Today, 1,105 miles of interstates cross Tennessee. In 1956, when legislation creating the nation's interstate system was signed, travel in our state was miles away from the convenient, safe travel we enjoy today.



	1956	2006
No. of Tennessee Drivers	1.31 million	4.20 million
No. of Tennessee Cars	1.13 million	4.77 million
Construction cost of one interstate mile w/ interchange	\$628,705.00	\$1.68 million
Travel times		
I-40/I-81 (Memphis-Bristol)	14 1/2 hours	7 1/2 hours
I-24 (Clarksville-Chattanooga)	5 1/4 hours	3 hours
I-75/I-40 (Chattanooga-Knoxville)	3 1/2 hours	1 hour 50 min.
Average costs		
Car	\$2,100	\$28,000
Gallon of Gas	\$0.23	\$3.00+
House	\$22,000	\$264,540

Sources: www.mapquest.com, www.motortrend.com, www.nra.doe.gov, www.census.gov, www.usgovinfo.about.com, www.usgs.com

Board of Directors

President
James Collins, P.E.
 Kimley-Horn and
 Associates, Inc.,
 Memphis

President-Elect
Bill Johnson, P.E.
 ARCADIS, Chattanooga

First Vice President
Jim Morinec, P.E.
 CTE, Nashville

Second Vice President
Lillard Teasley, P.E.
 Teasley Services Group,
 Nashville

Secretary
Ed Hargraves, P.E.
 Askew, Hargraves,
 Harcourt & Associates,
 Memphis

Treasurer
Susan Thrasher, P.E.
 Parsons Brinckerhoff,
 Nashville

Director-at-Large
Harold Cannon, P.E.
 Cannon & Cannon, Inc.,
 Knoxville

Immediate Past President
Stephen Lane, P.E.
 Smith, Seckman, Reid,
 Inc., Nashville

National Director to ACEC
Mark Askew, P.E.
 Askew Hargraves
 Harcourt & Associates,
 Memphis

Chattanooga Chapter President
Mark Harrison, P.E., P.G.
 S & M E, Chattanooga

East TN Chapter President
John Kenny, P.E.
 Facility Systems
 Consultants, LLC,
 Knoxville

Memphis Chapter President
John Perry, P.E.
 Kimley-Horn and
 Associates, Inc.,
 Memphis

Nashville Chapter President
Jerry Stump, P.E.
 Wilbur Smith Associates,
 Nashville

ACEC Staff
 Candy Toler,
 Executive Director
 Nicole Beal,
 Manager of Member
 Services

Better Than I Imagined

by James Collins, P.E.
 President, ACEC of Tennessee

As I sat here last year trying to anticipate what the coming year would have in store for me, I thought I had a pretty good idea. I was wrong. It was better than I could have imagined!

Sure, it was a lot of hard work. There were a lot of late nights writing newsletter articles, catching up on pending legislation, and re-writing the liability clauses in public agency contracts. What I underestimated was the tremendous number of people that were willing to help. In addition to the best Board of Directors anyone could ask for, there are a number of people giving their valuable time to serve on the various committees that keep this organization effective.



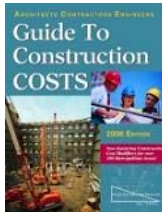
James Collins

Through these hardworking volunteers we were able to accomplish the five major goals set by the Board for the year. We increased the PAC contributions. The legislative program was more than just reactive, it was proactive when appropriate. Membership continued the growth initiated in previous years. Public awareness was improved through the actions of the local chapters. Member communications were improved by enhancements to this newsletter and timely communications by our staff via e-mail. We also addressed many business issues that are common to our members, both on the local and national levels.

Finally, as I leave this post in the capable hands of Bill Johnson, I want to thank the leadership of our sister organization, the Tennessee Society of Professional Engineers. It has been my pleasure to work with Harry Clark over the last year. I could not have asked for a better partner.

From ACEC Publications

Architects, Contractors & Engineers Guide to Construction Costs 2006 (BNi) \$49.95



This unique resource contains detailed cost coverage for all construction items, as well as quick estimating components and square foot costs for preliminary estimates and budgets. The metropolitan area cost modifiers have been greatly expanded in

this year's edition to cover virtually every region of the country. Cost is \$49.95 for ACEC members. To order, go to the Bookstore at <http://www.acec.org>. Then do an advance search for 1-58855-069-9.



I-40 under construction between Buffalo Valley and Silver Point, Tennessee. The project was completed in 1963.

Interstate System (continued from page 1)

engineering consultants, landscapers, fencing companies, concrete companies, just to name a few. Then, there are the businesses that have located here because of our system, businesses such as Nissan and Saturn.

The interstate system is considered to be the largest public works projects ever undertaken in our nation's history. It is very important to the future of the system that we not underestimate its value.

The Tennessee Department of Transportation is leading the state's effort to recognize the importance of the system. We are erecting three interstate markers to commemorate important

historical elements of the interstate development. We will also have an event on June 29 at the Bicentennial Mall in Nashville that will kick off a convoy down to the first section of interstate completed in Tennessee on I-65 at the Tennessee-Alabama line. There are also several other events that are planned across the state that are outlined on our website. I encourage you to visit it at www.tninterstate50.com and find out more about the system and events we will be having over the next several months. And, don't forget the interstate exhibit at the Tennessee State Museum on display until September 1.

Water-Related Issues Discussed at May Meeting of Environment Committee

by J. Greg Davenport, P.E.
Chair, Environment Committee

Water-related issues were the primary topic of discussion at the May 9 meeting of the ACEC of Tennessee Environment Committee. Bill Hench, Division of Water Supply at the Tennessee Department of Environment & Conservation (TDEC), noted that there is a decline in the use of chlorine as an oxidant added to raw water before entering treatment plants. This is because chlorine reacts with total organic carbon to produce byproduct compounds that must be limited under



Greg Davenport

recently implemented regulations. Hydrogen peroxide is being used as an oxidant with success. The feed equipment is relatively simple and cost effective; however, long-term success has not been determined.

Hench reported that experiences so far with membrane treatment in Tennessee have been positive. Tennessee is reportedly the third leading state in the country with membrane treatment plants in operation; there are approximately 10 plants operating and 10 plants under design or construction. Membranes have been applied in a variety of ways including new plant construction, retrofits of existing plants, and to backwash and process waste waters.

Representatives of the Division of Water Pollution Control (DWPC) reported that TDEC is considering issuing a General NPDES Permit for discharges of storm water associated with construction activities for linear projects. The plan is to issue a separate General Permit for linear projects. This should standardize the method by which storm water plans are prepared and reviewed.

Bob O'Dette was recently hired to administer the biosolids program at DWPC. TDEC intends to develop rules regarding biosolids to address areas of the 40CFR503 regulations felt inadequate and to promote standardization for enforcement. DWPC also is

proposing modifications and new additions to the design criteria for sewage works to address concerns about the proliferation of on-site drip disposal systems in Tennessee that allow growth in areas outside traditionally sewered areas.

The Water Quality Control Board recently overruled TDEC's determination to issue an ARAP allowing the installation of a culvert in a wet weather conveyance. TDEC may make a motion to reconsider to the Board. The Board's decision has also prompted some state legislators to consider formation of a study group to examine wet weather conveyance regulations and development of legislation.

Upcoming meeting of interest: Kentucky/Tennessee Section of AWWA Water Professionals Conference, July 9 - 12, 2006, Chattanooga. Register at www.kytnawwa.org/annualconference.htm.

To view the Chairman's complete notes of this May 9 meeting, please visit www.acectn.org (under Committees).

Special Note from Greg Davenport: It has been my honor and privilege to serve as Chairman of this committee for the past two years. As I complete my term of service, I express my appreciation to all the committee members. It has been especially gratifying to be part of the continued development of the working relationship between TDEC and ACEC of Tennessee. Thank you for this opportunity.

Davenport is Vice President of Engineering at J.R. Wauford & Company Consulting Engineers, Inc., Nashville.

CALENDAR

JUNE
8

Annual Golf Tournament
8 a.m. shotgun start,
Forrest Crossing
Golf Course
Franklin, TN

JUNE
8 - 9

ACEC of TN / TSPE
Annual Meeting
Franklin Marriott
Cool Springs
Information:
nbeal@t nec.org

JULY
17

Tennessee Engineering
Foundation Trustees
Meeting
Tennessee Engineering
Center
12 noon, Nashville

AUGUST
8

Environment
Committee Meeting
1:30 p.m., Nashville

SEPTEMBER
18 - 21

ACEC Fall Conference
Charleston, SC

NEWS

Bill Kervin, PE, Knoxville, died suddenly last month in Knoxville. He was a member of the 278th Tennessee Army National Guard for 27 years and recently served in Iraq. Bill most recently worked for CH2M Hill. Many of you knew Bill from the services he provided for many municipalities and the State through the Municipal Technical Advisory Service.

National
Conference
on the

Built Environment

September 18-21, 2006

To register visit www.acec.org/conferences/fall-06 or call 202-347-7474.

Sponsored by:






Save the date!



in historic
Charleston

South Carolina



ACEC

AMERICAN COUNCIL OF ENGINEERING COMPANIES
of Tennessee

Tennessee Engineering Center
800 Fort Negley Boulevard
Nashville, TN 37203

Return Service Requested

PRESORTED
STANDARD
U.S. POSTAGE PAID
Nashville, TN
Permit No. 1078

INSIDE

- 50 Years & Still Counting – page 1
- Better Than I Imagined – page 2
- May Environment Committee Report – page 3

Notice

Regarding Newsletter

The next issue of ACEC of Tennessee's newsletter will publish in mid-July and will be a joint July/August edition. This edition will feature photos from the Joint Annual Meeting of ACEC of Tennessee and TSPE.

News from your firm

should be submitted to ctoler@tnec.org by June 19 to be included in the July/August edition. We look forward to hearing from you.

FROM THE EXECUTIVE DIRECTOR

Find the Answers at the A/E Board Web Site

by Candy Toler
Executive Director, ACEC of Tennessee

I attended a recent meeting of the Tennessee Board of Architectural and Engineering Examiners and was reminded of how information technology has changed communication techniques since I served as Executive Director of that Board. When I left the Board in mid 1999, we did have a web site; however, we were just starting to post information for engineers and architects. Now, the A/E Board (as it is more commonly called) posts numerous resources on its web site, including The Reference Manual for Building Officials and Design Professionals, which is periodically reviewed and updated. To facilitate the



Candy Toler

ability of engineers and architects to understand the A/E Board's requirements for plans, the web site also includes laws, rules, and policies. There is even a section designed to let consumers know what kinds of buildings require the services of engineers and architects and how to choose a design professional. In addition, there is a consumer's guide to the design professions.

The Governor appoints A/E Board members for

four-year terms from a list submitted by ACEC of Tennessee and the Tennessee Society of Professional Engineers. For the past year, former state ACEC President Bob Campbell, P.E. (Robert G. Campbell & Associates, Knoxville), has served as Chair of the Board. Phillip Lim, P.E. (Memphis Light, Gas and Water), and Bill Stockard, P.E. (retired from Hart Freeland Roberts, Brentwood), also serve on the A/E Board. Associate members are Carlton Norris, P.E. (ARCADIS, Chattanooga); Raymond White, P.E. (retired from Garver, Brentwood); and Dennis Henderson, P.E. (TLM Associates, Jackson).

At ACEC of Tennessee headquarters, we often receive calls from people mistaking us for the licensing board. We get questions about the registration requirements, what plans need to be stamped, how to deal with unusual situations, how to file a complaint, and much more. As I prepared this article, someone called to inquire if a particular person was licensed in Tennessee. Of course, I led the caller to the A/E Board's web site, where it is easy to check. Most of the other questions Nicole and I are asked are answered on that web site as well.

It's a long address, but <http://www.state.tn.us/commerce/boards/ae/index.html> sure can come in handy if you have a question about what you need to do. It's even fairly easy to find the needed resources. Check it out.