The 2013 Congress in Chicago: Engineering Change
The APWA Reporter, the official magazine of the American Public Works Association, covers all facets of public works for APWA members including industry news, legislative actions, management issues and emerging technologies.
New ways of doing things

Edward A. Gottko, PWLF
APWA President

Editor’s Note: President Gottko gave the following address during the Congress Opening General Session on August 25, 2013.

You’ve heard a lot about change today. When I started to think about what I was going to say, I reflected upon change and my experience as an engineer and a public works official over the time I got started in the business. Simple things, like instead of using a drafting table we now use computers. Doing calculations we started out using slide rules; you can now go to any museum and find one [audience laughter]. In the mid-1970s came the calculator—two hundred ninety-five dollars. There is more capacity in your cell phone than was in that calculator. Eventually we got to computers, we got to laptops, we got to i-Pads, and now we’ve got our phones.

As an educator, I remind our students that there’s a building on campus called a library. And I remind them of that because when I started and you wanted to do research, you had to actually get a book and open it and look it up. Now they Google it. All the information is there. I can remember when the phone was this black thing on the desk that had a dial and you made a call. Now you’re married to your phone. I understand some people leave it on at night on their bed stand. Typewriters—we used to type something. Now we text, we e-mail, we tweet, we use Facebook. We use instant communication.

Many times when we were asked why we did something we used to say, “Well, that’s the way we always did it.” Well, today that answer doesn’t hold. Technology and techniques have changed. That’s what you’re all here this week to learn about. New techniques, new technology, and new ways of doing things. Change has occurred over a forty-year period and changes extend to your organization.

Five years ago, here in Chicago, the Board of Directors met to begin a plan to strategically change how the Board operates. How the focus of the Board would change from receiving reports to focusing on strategic initiatives. Out of those discussions grew ideas and thoughts on how we provide services to our members. We are an educational association. Our prime focus is education, something of which I am very passionate about. My whole career as an engineer, as a public works director, as a city manager, and as a private consultant has always focused around education.

Over the last couple of years the association has instituted the APWA Donald C. Stone Center. We have the Chapter Institutes. We have certification programs. And this year we are going to ask the Professional Development Committee to get their arms around all of our educational opportunities to make sure we are providing the best educational programs to the members. To aid in that we created the Members’ Library—everything is available 24/7. People learn differently today. They learn differently than I did, they learn differently than a lot of you did. They learn at a different pace, they learn through different media, they learn from different programs. So the
Members’ Library allows access to different educational programs 24/7.

Technology. I kid about technology because I’m old enough to remember before we had all of this technology. But as an association we’ve made a commitment and an investment to improve our technology, and we’ll continue to do that. Change is not easy, change is hard. Change brings out the resistance in all of us to give up a comfort zone. We’re happy in the way we do things, and change is difficult.

But you have to understand that your Board is committed to making changes, to discussing things differently. We’re asking some of our committees to look at things differently. Yesterday, for most of the day, the House of Delegates wrestled with change—to refocus—and it was difficult at times. It was heated at times. No consensus was reached, but it was the beginning of a long process—a process of development, a process that once they decide what they want to do, they’ll tell us and we’ll react.

Sustainability is important. Without being financially sustainable, we’re all going to have a problem. And that is a commitment that we’ve made, to look at the financial sustainability of the organization.

If any of you play golf, you’ll know that the golf course is divided into two nines—the front nine and the back nine. A lot of us in this association are on the back nine of our careers. As long as we’re not putting out on hole number eighteen, we’re okay [audience laughter]. Hopefully we’re only on the tenth or eleventh hole and we’ve got a lot more to go. But, we have a group of individuals who are starting out on this golf course called young professionals. I’ve had the privilege over the last year to attend several chapter meetings where there have been presentations by our young professionals. And these are an amazing group of individuals. They are dynamic, they are committed, and they are looking to do something. I stand here today and I challenge our chapters to get the young professionals in your chapters involved. Not just as a member—give them something to do. They are eager to do it, just like all of us when we started out. They are us, many years ago, when we got involved. They are the future of this organization. Welcome them and get them involved. You will find it is an amazing resource.

As we engineer change over the next several days and you take the information back to your communities, your chapters, and your companies, I ask you to keep in mind the following thoughts. Always ask yourself, “How can I do it better?” Remember that we’re always evolving as professionals and as a profession, and we’re always developing new techniques and technologies. Don’t be afraid of them. Always keep looking ahead, and remember that what we do today we can always do better tomorrow. Thank you.
PWA’s advocacy priorities, approved in late August during the APWA International Public Works Congress & Exposition in Chicago, focus on supporting the work of public works professionals and advancing policies that create livable communities and economic growth in local communities. They are based on five key principles: (1) support for adequate investment in public infrastructure; (2) respect for local authority; (3) reasonable regulations and protection from unfunded mandates; (4) support for streamlining government oversight; and (5) support for sustainability and environmental stewardship.

Each year, APWA’s Government Affairs Committee recommends priorities to guide member advocacy initiatives. This year’s priorities represent a timely and targeted set of legislative and regulatory policy goals. They are:

• **Surface Transportation**

  *Objective:* Increase federal investment in transportation infrastructure; support full implementation of MAP-21; then enact a multi-year, multimodal surface transportation authorization that maintains a strong federal role and provides dedicated, reliable and equitable funding to both state and local governments for building, maintaining and operating state and local systems.

• **Sustainability, Environmental Protection and Public Health**

  *Objective:* Support legislative and regulatory issues that encourage and enhance an understanding of sustainability in public works, including: stewardship of the environment, public health and societal well-being, and sustainable economic vitality.

• **Wastewater and Drinking Water Infrastructure Funding**

  *Objective:* Increase the federal partnership with state and local governments for funding clean water and drinking water infrastructure.

• **Comprehensive Stormwater Management and Funding**
Objectives: Support solutions that promote a comprehensive approach to stormwater management by all contributing parties including non-regulated entities. Support funding for the research pilot projects that support the development of best management practices.

• **Emergency Management**

**Objective:** Increase federal investment to public works as first responders for all-hazards approach in disaster assistance, security of public works infrastructure systems and emergency management that move toward effective mitigation, preparedness, response and recovery support.

APWA committees, chapters, task forces and members advance these priorities through outreach to policymakers and elected officials. The APWA Advocates network also supports public works advocacy by maintaining contact with congressional representatives in response to action alerts and other opportunities. Members of APWA Advocates have access to a variety of resources, including fact sheets, issue updates and the APWA Washington Report, the newsletter on federal legislation and regulations affecting public works. For more information on how to become involved, visit the APWA Advocates webpage, http://www.apwa.net/be_involved/APWA-Advocates, or contact Tracy Okoroike at (202) 218-6702 or apwaadvocates@apwa.net.

The Government Affairs Committee may update APWA’s advocacy priorities during the course of the year if necessary. To find out more about APWA advocacy, visit www.apwa.net or contact the APWA Washington Office at (202) 408-9541.

Jim Fahey serves as senior staff advocate promoting APWA advocacy priorities and positions before the U.S. Congress, federal agencies and the media. He can be reached at (202) 218-6730 or jfahey@apwa.net.

“Resilient communities require more than decent housing, important as that is; they require an array of amenities that support the social fabric of the community and build the capabilities of community residents.”

– Ben S. Bernanke, Federal Reserve Chairman
Hatchery for the future of Alaska

Daniel Billman, P.E., Vice President; Megan O’Mullane, P.E., Project Engineer; and Paul Witt, P.E., Vice President, HDR Engineering, Anchorage, Alaska

In July of this year the William Jack Hernandez Sport Fish Hatchery (WJHSF) in Anchorage, Alaska became the first project to receive an Envision™ “Gold” award for sustainable infrastructure. The Envision sustainable infrastructure rating system, administered by the Institute of Sustainable Infrastructure (ISI), is the new standard for sustainable infrastructure. The hatchery combines state-of-the-art technology to conserve resources and energy while at the same time revitalizing a brownfield site. The WJHSF is the largest indoor sport fish hatchery in North America, and was designed and built with sustainability in mind. The Gold Envision award represents significant achievement across 60 sustainability criteria.

Program manager and lead designer HDR Engineering worked with the State of Alaska to submit the application for the Envision rating, although the rating system had not been in place when the project began. The Gold award represents a project “done right, for the right reasons.”

Background of the hatchery

The WJHSF Hatchery is owned and operated by the Alaska Department of Fish and Game’s Division of Sport Fish (DSF). The economic impact of sport fishing in Alaska is estimated to amount to $1.4 billion a year, including $545 million in income and $246 million in tax revenue. In the 1990s the DSF operated two hatcheries in this most populated area of the state and was having difficulty meeting their fish production goals. Both hatcheries had lost their source of free heated water when the adjacent military power plants closed down. Warm water is crucial to meeting fish production goals because it accelerates fish growth. This is particularly critical in the cold Alaskan climate. The hatcheries had been built adjacent to the power plants to capitalize on the free waste-heat as it was not sustainable for the DSF to heat the required volume of water using conventional hatchery design.

DSF realized that it would need to replace its aging hatcheries and a new method of fish rearing would have to be incorporated to make it

Metal fish sculpture in front of the William Jack Hernandez Sport Fish hatchery. Metal sculpture by artist, Peter Busby & Alaska State Council on the Arts, Percent for Art Program.
financially viable. It was decided that a single new hatchery would replace the two old facilities, and the new hatchery would utilize the latest water reuse technologies to minimize water heating costs and meet production goals.

In 2006 the DSF worked with the Alaska Department of Transportation and Public Facilities (ADOT&PF) to bring on HDR as its design lead. As the project evolved it was decided to bring on a contracting team in a Construction Manager General Contractor role so that the contractor could work hand in hand with the owner and design team to control costs and assist in crafting the sustainability of the project. Kiewit Building Group was brought in as the lead contractor when the design was at about a 20% level.

Keys to sustainability
The project team set sustainability as one of its primary goals early on, particularly how best to control energy and water usage. In addition, the building was to have low maintenance costs, and the ability to produce the greatest number of fish, as rapidly as possible, with the least use of energy and water.

A water reuse and recirculation hatchery system was designed that allowed reuse of 95% of the water and reduce heating requirements by 88% over a conventional single pass-through hatchery.

The site chosen for the hatchery was the former cooling pond of one of the military’s power plants. Remediation of this site within the urban area of Anchorage revitalized the area as an educational site for school classes as well as a prime area for tourism. To maintain strong public support for the program, the team incorporated public access so that hatchery operations could be observed.

Institute for Sustainability and the Envision Rating System
The Institute for Sustainable Infrastructure (ISI) is a not-for-profit organization founded by the American Council of Engineering Companies, the American Public Works Association, and the American Society of Civil Engineers. Envision™ is the product of a joint collaboration between the Zofnass Program for Sustainable Infrastructure at the Harvard University Graduate School of Design and the Institute for Sustainable Infrastructure.

Envision™ provides a holistic framework for evaluating and rating the community, environmental and economic benefits of all types and sizes of infrastructure projects. It evaluates, grades and gives recognition to infrastructure projects that use transformational, collaborative approaches to assess the sustainability indicators over the course of the project’s life cycle.

There are five categories of credits within the Envision rating system: Quality of Life, Leadership, Resource Allocation, Natural World, and Climate and Risk. This project scored especially well in the categories of Quality of Life, Leadership and Natural World.

Certification required documenting how the HDR team and DSF considered sustainable features in the hatchery and how the selected features were implemented.

Preparing the application was a significant commitment because the HDR team had to find documentation that would support the Envision application. HDR had about 30,000 documents including reports, meeting notes, drawings, and specifications in the electronic files for this project. The management team mined these files to find supporting documents for each criterion where the project could gain points. Preparing the application was done over an eight-week period. This included an initial application which was reviewed by the Envision reviewer and returned with requests for additional data where needed. This step was valuable as the HDR application team benefited from the feedback and clarification on how to improve the documentation.

The project team was pleased at how well the hatchery scored through the Envision process. Throughout the project the client was focused on building an efficient and sustainable project. The process pointed out the interrelationship between decisions and how they translated into project success. For example, the decision early on by the owner to use CMGC procurements meant a stronger client-designer-contractor team could be built. This led to fewer change orders and a better sense of working together to solve problems as they came up.

Last thoughts
The Envision evaluation process highlighted how sustainability is the sum of many decisions. DSF
understood that they needed a different way of growing fish to be able to meet production goals. This understanding led to building a hatchery that conserves both energy and water supplies, and allows DSF to meet their production goals and stay within their budget. In this case the evaluation was performed after the hatchery was operational. The Envision process is an effective system to outline sustainability for a project as it is developed, to discuss and evaluate project features, and to incorporate those sustainability features into infrastructure projects. We value the Envision process as a method to help project teams build the right projects in the right way.

Daniel Billman, P.E., is a vice president specializing in project planning. Megan O’Mullane, P.E., is a project engineer and Paul Witt, P.E., is a vice president specializing in program management. All are located in the Anchorage office of HDR Engineering and can be reached at (907) 644-2000.
APWA has once again partnered with renowned Public Sector Advocate and Leadership Development Innovator, Ian Hill, to create this first-of-its-kind program that will equip participants with the leadership competencies and tools the times require. One Leader at a Time incorporates the best elements of the successful Leadership in Changing Times program while offering new tools and concepts to help participants fulfill their full leadership potential.

Full Series
Building the Public Sector: One Leader at a Time has been designed for every member of your department and offers three flexible tracks of learning for Executive Leaders, Emerging Leaders and Front Line staff. Participants will learn how to generate sustained performance improvement and discover new skills for success that are needed in today’s rapidly changing world.

Executive Track
Individuals not interested in signing your agency up for the full training package (Director, Emerging Leader, Front Line Staff Tracks) may register their executive-level leadership for the Director Track only.

Each track includes:
- 5 live video stream workshops (one every three weeks).
- Live video chat support coaching sessions (between the learning sessions).
- Weekly reinforcement and motivational emails.
- A learning portal containing on-demand video archives of all sessions, all materials and a support forum for the dynamic exchange of information.
- The learning portal will be available for continuous use for an entire year after the initial 15-week program ends.

Don’t wait, sign up today!

For more information, visit www.buildingthepublicsector.org.
In the past 20 years, the Mile High City has seen huge changes in its transportation infrastructure. As Denver’s multi-modal transit options have grown, so too have the challenges associated with meeting the needs of the different users of these modes. No one understands the challenges better than Matt Wager, interim Director of Traffic Engineering Services for Denver Public Works. Since Matt began with the City and County of Denver in 1991, he has seen the landscape of traffic engineering in Denver change immensely. However, through it all, Matt’s thoughtful approach to arising challenges and his commitment to safety on Denver streets has remained steady.

As interim Director of Traffic Engineering in Denver, Matt oversees the division that manages the City’s transportation system including 500,000 traffic signs and more than 1,200 traffic signals, as well as 100 miles of bike lanes and other bicycle infrastructure. The division implements mobility improvements, and is responsible for the operation, maintenance, installation and emergency repair of traffic control devices. His agency regulates activities in the City right-of-way, including where parking is allowed and where meters are used. Most recently, Matt’s division launched a permitting system allowing on-street car share operators to come to Denver, a program that has proven to be highly successful. Matt involves other departments, such as Planning and Right-of-Way Enforcement, in traffic engineering projects, ensuring a collaborative approach.

Since beginning with Public Works in the early ’90s, Matt has had many accomplishments. He has overseen the implementation of a fiber optic cable network for Denver’s traffic signal system, the development of three state-of-the-art traffic management centers, and a major overhaul in the City’s sign and pavement marking maintenance program. Matt has also been instrumental in the execution of the Strategic Transportation Plan (STP), a multimodal guide designed to understand and address the current and future transportation needs of the City and County of Denver. The STP serves as a unique and innovative approach to identifying future system needs and community values, and provides a method to incorporate them into future transportation decisions and solutions. While the STP provides a guide for moving Denver forward, Matt has been instrumental in balancing all transit modes, as interest in biking and alternative modes of transportation in Denver has increased.

Matt’s employees say his leadership qualities are enviable. While he oversees a department of hundreds, he places a high importance on understanding and recognizing the contribution of each employee. Matt’s candid but thoughtful nature ensures that decisions are responsibly made, especially in regard to department resources. Employees are encouraged by the example Matt sets—always leading by example with integrity. Finally, some have called Matt the “proudest member of Denver Public Works.” He never misses an opportunity to speak highly of the department and embodies its commitment to service values of excellence, accountability, innovation and teamwork.

If you would like to submit a nomination for a future Recognize Your Leaders column, e-mail Becky Stein at bstein@apwa.net.
The 2014 Snow Conference will bring together more than 1,500 snowfighters from cities and townships, county and rural street divisions, and state and provincial departments of transportation. It’s four days of education and networking, featuring an exhibit floor with the newest equipment and products available, quality education programs and technical tours, and opportunities to exchange ideas with manufacturers, distributors, consultants and other public works professionals.

ATTEND  •  EXHIBIT  •  SPEAK

WWW.APWA.NET/SNOW
Bright outlook for carbon

Andrew C. Lemer, Ph.D.
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Dennis Gabor, awarded the 1971 Nobel Prize in Physics for his discoveries underpinning the development of holography, once wrote, “The future cannot be predicted, but futures can be invented.” Imagination to Innovation is a periodic look at new technology and scientific discovery that we could be using to invent the future of public works.

Carbon...think soot and charcoal...was known to the ancients. Eighteenth-century scientists showed that diamonds and graphite are carbon too, and we thought that was it. But by the 1970s, researchers found evidence of new forms of carbon with remarkable properties. First was carbon nanotubes, infinitesimal straws with walls only a few carbon atoms thick. In 1985 came buckminsterfullerene, or simply fullerene or “buckyballs,” so named because the molecules resemble the famous architect’s geodesic domes.

In 2004, scientists succeeded in isolating graphene, a one-atom-thick sheet of carbon, thought until then to be unstable.

Nanotubes, very strong, stiff when taken one at a time but resilient when bundled, behave sometimes like a metal and others like a semiconductor (the basis for transistors and microprocessors). Researchers have already demonstrated their use in very thin video displays that need no backlighting and 3D-projection holograms—imagine paper with completely changeable print and “face-to-face” meetings with people projected into your space from wherever they are. Able to hold electrical energy, carbon nanotubes may be ideal for high-capacity storage devices—capacitors—to replace electric-vehicle batteries... think fast and clean fleet refueling.

Strong and conductive, nanotube apps may both monitor structures’ performance and provide strength... think adding load-bearing capacity to a long-span roof and letting managers know when snow loads soar. Researchers have created...
nanotube aerogels that expand and contract with electrical stimulation—think artificial muscles.

Fullerenes are like carbon soccer balls, a surface of 60 or more atoms with lots of empty space inside, able to hold on to other molecules clinging outside or carried within. Researchers think fullerenes may be a good way to store hydrogen gas to power motor vehicles and small electric generators. Impregnated with other molecules, fullerenes might deliver drugs to specific parts of the body or trace the presence of chemicals marking disease or infection. With carbon nanotubes, scientists used fullerenes to make an extremely absorbent material to filter out water contaminants or soak up oil. The little balls already show up in lubricants.

Graphene, a one-atom-thick transparent carbon sheet, shares the remarkable properties of nanotubes but also has an ability to heal itself when torn; atoms at the edge of the tear quickly relink with their mates or, if atoms of another material are placed in the way, bind with these others to produce other two-dimensional crystals. Essentially any promising nanotube applications seem more so with graphene, but researchers figure it could take a decade or more to learn how to produce and handle it. And there may be health risks. More than razor thin, bits of graphene could slice into living cells...think industrial hazards like asbestos and cotton dust.

Science fiction writer Arthur C. Clarke (2001: A Space Odyssey) in 1979 published Fountains of Paradise, an award-winning novel about constructing a space elevator, a structure running from Earth some 22,000 miles to a geostationary satellite. Scientists have found ways to bundle carbon nanotubes into long strands that could make the idea feasible. Who knows? The Panama Canal once was considered an impossible dream.

Andrew Lemer, Ph.D., is currently a Senior Program Officer with the National Academy of Sciences of the United States of America. In addition to technical papers and occasional articles for the Reporter, he writes on civil infrastructure and human settlement at www.andrewlemer.com.

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Jennings Randolph International Fellowship Program

Lillie Plowman
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Jennings Randolph served 26 years as a U.S. Senator. His political career began in 1930 when he was unsuccessful in his bid to be elected to the U.S. House of Representatives from West Virginia’s 2nd Congressional District. Benefiting from Franklin D. Roosevelt’s landslide victory, he was elected to the House of Representatives in 1932 and served from 1933 until 1947, following his defeat in the Republican landslide of 1946. During his time in the House, he championed the disabled and supported the right to vote, renewable energy, public works, the environment, and aviation and aerospace.

After Jennings Randolph left the House of Representatives in 1947, he entered the private sector, becoming a professor of public speaking and Dean of the School of Business Administration at Southeastern University in Washington, D.C., and assistant to the president and director of public affairs for Capital Airlines, which would later be purchased by United Airlines.

He returned to the political life upon his election to the U.S. Senate in 1958 where he remained until he decided not to run again in 1984. He left the Senate in January 1985 after having chaired the Senate Public Works Committee from 1966 until 1977 when the committee was renamed the Environment and Public Works Committee. He continued to chair the committee until 1981.

To honor Jennings Randolph, the Dean of Public Works Legislators, following his retirement from the Senate, the Jennings Randolph International Fellowship Program was established at the Eisenhower World Affairs Institute in May of 1987 and is administered by the American Public Works Association. The APWA International Affairs Committee (IAC) annually solicits and reviews proposals and makes a recommendation to the Eisenhower Institute for those fellowships to be awarded in any given year. The Institute reviews and, if appropriate, approves the recommendations. The fellowship supports participation at a public works conference of one of APWA’s international partners and a public works study tour in that country.

In making the program available, APWA hopes to further its international principles:

- To provide an opportunity for individuals to broaden their knowledge and exchange experiences and information on trends and advances in public works, through direct contact with APWA international partners.
- To promote friendship and understanding among public works staff on an international basis.
To provide a venue for the exchange of information between APWA and our international partner countries. Currently, these countries are: Australia, the Czech Republic, Mexico, New Zealand and the Slovak Republic.

It is the intent of the IAC to award fellowships each year for APWA members to travel to countries with which APWA has formal international partnerships with other public works associations.

The IAC is pleased to announce the call for applicants for the 2014 Jennings Randolph International Fellowship Program. Applications are now being accepted for 2014 for the following locations:

- **IPWEA NZ – New Zealand:** The IPWEA NZ Conference is June 26-28, 2014 in Auckland, New Zealand.
- **ICLEI – Mexico:** ICLEI-Mexico typically holds two conferences per year—a public works and services conference (most commonly held in the spring or fall) and the annual national conference, usually held in the late summer. Past conferences have been held in such notable destinations as Cancún, Ixtapa, and Cozumel.

To be eligible for 2014 fellowships, applications must be received at APWA headquarters by midnight on November 15, 2013. The successful applicant(s) will be notified by the end of January 2014.

To access the Jennings Randolph Fund Guidelines and the application form, go to www.apwa.net/About/International or contact Lillie Plowman, International and Outreach Marketing Manager, at 1-800-848-2792, ext. 5253, or lplowman@apwa.net.

**Contributor:** Leonard K. Bernstein, P.E., F.NSPE, International Affairs Committee Member, City of Philadelphia Water Department (retired), Philadelphia, PA

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**Feature Attachment**

**Snow Plows**

**Angle Plows**

The Trackless Angle Plow is available in four widths using the same push frame. It is a full trip-type plow where the blade tips forward and rides up over the obstruction.

Blade widths: 60”, 72”, 84”, 96”

**Double Trip Sidewalk Plow**

The Double Trip Sidewalk Plow is designed for use by municipalities that have a significant number of toe trips resulting in constant plow tripping. The double trip system trips the mouldboard 35 degrees and the cutting edge 40 degrees.

**V Plow**

The Trackless V Plow is designed for higher speed plowing. An ideal combination for many municipalities is the V Plow and Rear Mounted Spreader. Since the snow is split into two banks with some fall-back on each side, the cleared width is usually reduced from 49-inches to approximately 44 inches. The spreader then follows, laying down a 41-inch wide path of material.

**5 Position Folding V Plow**

Many municipalities have chosen the 5 Position Folding V Plow for their sidewalk maintenance program. The operator can change from V to Angle or Scoop type plowing as conditions or requirements change.
Applying Public Works Research

The APWA Donald C. Stone Center for Leadership Excellence in Public Works

The mission of the APWA Donald C. Stone Center for Leadership Excellence in Public Works (DCS Center) is to position public works professionals for the twenty-first century. In keeping with this important goal, the APWA Reporter features a section dedicated to applied research in public works. This section, published quarterly, provides insight into thoughtful analysis of issues and opportunities based on applied scientific research methods as a way of further contributing to the body of knowledge.

Many of the articles appearing in this section will be capstone papers written by participants in the DCS Center Level 3 Public Works Executive (PWE) Program. Other research articles will be selected based on the applied nature of the paper and its relevance to public works.

Researchers interested in submitting articles should visit the website http://www.apwa.net/donald-c-stone/Donald-C-Stone-Center/Public-Works-Research to learn details of the requirements for publication. Articles submitted to the “Applied Public Works Research” section of the Reporter will be reviewed by the DCS Research Council, an expert group of professionals and academicians comprising the editorial board. Depending on the technical aspect of a submission, a summary to highlight how the research can be applied may be requested. These will appear as “Research Application Summaries below the abstract.” The 150-word abstracts of approved articles will be published quarterly. The full-length articles, as listed below, can be accessed via the link provided with each abstract.

This issue of the Reporter highlights three articles that fit the requirements for this section. The papers were presented to the Transportation Research Board.

Disclaimer: The views and opinions expressed in these papers are solely those of the authors and may not represent those held by APWA or the entities referred to in the articles.

Methodology to Gather Multimodal Trip Generation Data in Smart-Growth Areas

Source: TRB 92nd Annual Meeting Compendium of Papers

Date: 13 JAN 2013

URL: http://docs.trb.org/prp/13-5108.pdf

This TRB study presents a method to quantify multimodal trip generation for developments in “smart-growth” areas. The technique “combines door counts and intercept surveys to classify trips by mode, and it has several advantages over existing methods that use automated technologies to count automobiles entering and exiting access points to developments. These advantages are particularly important in urban areas with mixed-use developments, mixed-use buildings, and a variety of parking arrangements.”

Safety Effects of Converting Intersections to Roundabouts

Source: TRB 92nd Annual Meeting Compendium of Papers

Date: 13 JAN 2013

URL: http://docs.trb.org/prp/13-1319.pdf
This TRB-presented paper presents a before-after crash study of converting intersections to roundabouts in Denmark. “General crash trends and regression-to-the-mean effects are accounted for by using correction factors estimated on the basis of 32 general comparison groups in this non-experimental observational study. 332 converted sites, 57 fatalities, 1,271 other injuries and 2,497 crashes are included in the study. Conversions have resulted in decreases in the numbers of crashes and injuries of 27% and 60% respectively. Crashes become less severe, e.g., fatalities decreased by 87%, whereas property-damage-only (PDO) crashes only decreased by 16%.” A more detailed abstract is available at the above link.

Public Bikesharing in North America: Early Operator Understanding and Emerging Trends
Source: TRB 92nd Annual Meeting Compendium of Papers
Date: 13 JAN 2013
URL: http://docs.trb.org/prp/13-4472.pdf

This TRB-presented paper presents a study of information technology public bikesharing programs. “Public bikesharing—the shared use of a bicycle fleet—is an innovative mobility strategy that has recently emerged in major North American cities. Bikesharing systems typically position bicycles throughout an urban environment, among a network of docking stations, for immediate access. Approximately five years ago, information technology (or IT)-based bikesharing services began to emerge in North America. Since 2007, 27 IT-based programs have been deployed—26 are operational and one is now defunct. Bikesharing growth potential in North America is examined on the basis of a survey of all 15 IT-based public bikesharing systems operating in the United States and all four programs operating in Canada, as of January 2012.” A more detailed abstract is available at the above link.

For more information about this special section of the APWA Reporter dedicated to applied research in public works, please contact Mabel Tinjacá, Ph.D., APWA Director of Professional Development, at (816) 595-5214 or mtinjaca@apwa.net.
Maybe it was the hard work of the Chicago Metro Chapter and all of their great volunteers that made it all possible. Maybe our visitors from around the country and the world just couldn’t get enough of the magic that Chicago has to offer. Then again, it could have been the homecoming atmosphere as our annual show returned to the roots of APWA’s foundation in 1937. Or, quite possibly, people just love listening to the “Blues Brothers.”

Whatever the reasons, the attendees at this year’s International Public Works Congress & Exposition had a terrific time—many saying it was the best Congress they had attended in years. The more than 160 educational sessions, 87,000 square feet of exhibit space, inspiring General Session speakers, and fun networking events contributed to an enthusiasm in the attendees that was truly contagious. And with the Chicago Metro Chapter and their many dedicated and enthusiastic volunteers providing professional support during the conference, work, pleasure and camaraderie combined to make it all come together for the APWA Congress in the Windy City.

Taking information back to our communities

In an APWA tradition, the Friday and Saturday before the official start of Congress, on Sunday, August 25, were nearly as busy as the Congress itself. On Friday the Board of Directors, their spouses and other volunteers took part in a community service project at the Northern Illinois Food Bank in Geneva, Illinois. The team worked hard during the day packing boxes of meats and vegetables for those in need. “I worked with [Board member] Rick Stinson on packing boxes with large meats over five pounds such as whole chickens, turkeys, ribs and ham,” said Cora Jackson-Fossett, APWA Director-at-Large, Leadership and Management. “Other teams loaded various-sized frozen meats on our table.” APWA advocates for the future of our communities, and charitable events like these always bring that message home in a personal way for our leadership and valued members.

On Saturday the House of Delegates held their annual Business Meeting and discussed the current House refocus initiative, providing feedback to the House Refocus Task Force as they continue their work crafting the “new” House. Also, a full-day workshop took place regarding “Self Assessment Using the Public Works Management Practices Manual.” The Technical Committees held meetings to shape their yearly business plans, and the exhibitors continued their move-in to the exhibit hall, and

Working at the community service project at the Northern Illinois Food Bank are (left to right) Jean Gottko (wife of President Ed Gottko); Region II Director Harry Weed; Region VIII Director Ronald Calkins; Executive Director Peter B. King; and President-Elect Larry Stevens.
setting up their booths to prepare for thousands of visitors.

Congress officially began the following morning with the 17th annual First-Timers Meeting with nearly 200 attendees. This special meeting gives attendees the chance to learn simple strategies for using their time and opportunities productively at their first Congress. New APWA President Edward A. Gottko opened up the meeting by stressing the value of attending Congress. “You will find, as I found a long time ago, this is probably one of the most beneficial number of days you will spend at any event,” Gottko said. “It is an opportunity for you to network, learn, and take information back to your communities. Make sure that you take full advantage of everything that’s out there.”

Also, APWA Executive Director Peter B. King discussed the Congress Program & Show Guide, as well as the convenient APWA 2013 mobile app that tracked the schedule of sessions and events during the show. King also mentioned that in addition to the formal program which is a very important part of Congress, the value of the informal part cannot

Nearly 200 members attended the seventeenth annual First-Timers Meeting on Congress Sunday.
be underestimated. “One of the things that I’ve found over the years is that public works participants at APWA activities will drop everything when they get a question from a colleague,” King said. “So make those connections, and as you leave Congress on Wednesday, I hope that you’ll take a number of e-mail addresses, names and faces with you to make those connections.”

Business meetings and educational sessions followed covering current topics such as the sustainable building program tool; funding-to-construction; green streets and porous pavements; and the latest tools for your winter maintenance arsenal.

Picking up the mantle of change

At Sunday’s Opening General Session in McCormick Place Lakeside Center’s Arie Crown Theater, a packed house of Congress attendees listened to the Smiley Tillmon Band along with Tony Award-nominated vocalist Felicia Fields and the Apollo Chorus of Chicago. After the opening music, fifteen countries were recognized for sending representatives from across the globe to the annual Congress. These countries included Australia, Belgium, Brazil, Canada, Chile, Colombia, Finland, Guam, Korea, New Zealand, Nigeria, Palau, Spain, Trinidad and Tobago, and of course, the United States of America.

Incoming President Ed Gottko received the presidential gavel from outgoing President Elizabeth Treadway at the Opening General Session.

President Elizabeth Treadway began by thanking the APWA membership for the privilege of serving as their president for the past year. She then discussed the theme “Engineering Change” of this year’s conference. “As we have moved through the end of the 20th century into the 21st, the concept of change has been all around us,” she said. “We’re seventy-five years moving into seventy-six, and if you think about what has transpired over that time it is absolutely amazing.

The pace at which change is coming at us today is in fact daunting, a little frightening, but believe it or not we’ve got a lot of youngsters out here who understand the technology and the challenges that are in front of us as well. So I’m delighted to see lots of young people in the audience today, because it is their legacy and their generation that will pick up the mantle of change and really bring us forward in the 21st century.”

(Continued on p. 22)
For more information about these programs or to register online, visit [www.apwa.net/Education](http://www.apwa.net/Education).
Program information will be updated as it becomes available. Questions? Call the Professional Development Department at **1-800-848-APWA**.

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= Click, Listen, & Learn program (Free to Members)

= Live Conference (Paid Registration)

= Certification Exam

APWA members may access past Click, Listen, & Learn programs from the Members’ Library at no cost. Programs can be streamed to your computer via the link found in the library.

If you have expertise that you would like to share, please use the online Call for Presentations form to describe your expertise and perspective on the topic. [www.apwa.net/callforpresentations/](http://www.apwa.net/callforpresentations/)
After the traditional passing of the presidential gavel, the new President, Ed Gottko, noted that much has happened to engineer change in the field of public works and in the APWA organization itself. One of the most impactful changes to the latter was the development and implementation of the APWA Donald C. Stone Center for Leadership Excellence in Public Works, offering world-class educational opportunities and providing the very best resources for our membership. Gottko also stressed the importance of being adaptable to change, mentioning recent changes in how the APWA Board of Directors operates. “Five years ago, here in Chicago, the Board of Directors met to begin a plan to strategically change how the Board operates, and how the focus of the Board would change from receiving reports to focusing on strategic initiatives. Out of those discussions grew ideas and thoughts on how we provide services to our members. We are an educational association. Our prime focus is education, something of which I am very passionate about. My whole career as an engineer, as a public works director, as a city manager, and as a private consultant has always focused around education.” (For President Gottko’s entire speech at the Opening General Session, please see page 2 in this issue.)

The Opening General Session’s Keynote Speaker, best-selling author and New York Times columnist Thomas Friedman, highlighted for attendees his views on the engines of change in the U.S., and how globalization and advances in technology have taken us from a society of connectedness to “hyper-connectedness.” Friedman cited robotics and developments in artificial intelligence as two areas where technology is enhancing basic services that humans have traditionally received from other humans, citing industries such as legal services, phone services, restaurants and a wide array of white and blue collar jobs.

Friedman also emphasized to attendees that the age of “average” is officially over. “What was average work ten years ago is below average today and will be further below average ten years from now,” he said. “Think of the world as one big classroom being graded on a curve. Well, that curve is steadily rising as more brainpower and computing power and robotic power enters the classroom. As a result, everyone A good time was had by all at Sunday’s Get Acquainted Party at Soldier Field, home of the Chicago Bears.
needs to raise his or her game just to stay in place, let alone get ahead of other workers. What was an average performance in the past will not earn an average grade, an average wage, or a middle-class standard of living.”

On Sunday evening after the first day of the 2013 Congress, hundreds of attendees, volunteers, and exhibitors attended the annual Get Acquainted Party held at Soldier Field, the celebrated home of the Chicago Bears. The opening event, hosted by the Chicago Metro Chapter, featured great food and drink, and gave attendees the opportunity to hear some live Chicago blues from the “Blues Brothers” and their musical cast of characters.

**A whole new ball game**
The second official day of APWA’s 2013 Congress brought together hundreds of attendees for Monday’s General Session featuring Chicago Department of Transportation (CDOT) Commissioner, Gabe Klein, who was appointed by Mayor Rahm Emanuel in May 2011. Presenting in the Arie Crown Theater, Klein explained Chicago’s new strategy to rebuild infrastructure as “A Whole New Ball Game: Chicago’s Infrastructure Planning.”

Speaking about the “Chicago Forward” initiative, Klein began by saying, “When I came in after the mayor hired me in May of 2011, we needed to align our vision and we needed to work internally within the agency to figure out how we could accomplish as much as possible in as little time as possible. And so, as I did in Washington, D.C., we put together the ‘Chicago Forward’ agenda. This is a road map towards achieving the mayor’s vision through concrete, measurable steps in the realm of transportation that includes better construction, great public spaces, safer streets, and support for neighborhood and global business as well. ‘Chicago Forward’ really outlines those critical values and principles that we aspire.
to as the protectors of the city’s transportation network, as well as the policies and actions that will help us continually make progress towards those ideals.”

Much of Klein’s presentation focused on improvements to transportation safety in Chicago. “We are redesigning our streets for safety,” he said, “and we’ve actually looked at all of the zones around schools and parks. There are eighteen hundred schools and parks in the city, and we know that we’ve got a traffic safety problem. We’ve got fifty safety zones that we implemented over the last year with a lot of different infrastructure improvements. We already have the largest red light enforcement program in the United States, and it’s been very successful with a seventy-three percent reduction in pedestrian fatalities. The idea is to change the way people view the city and how you can drive. We also know that proactive traffic enforcement makes roads safer, reduces traditional crime, and improves the quality of life in neighborhoods.”

The General Session was followed by targeted educational sessions throughout the rest of the day addressing many various public works topics including asset management and capital planning for infrastructure; partnering to achieve green infrastructure goals; and total resource management. Upstairs in the exhibit hall, the Exhibitor Solutions Theater featured presentations on a diverse range of topics including Operations Management: The Missing Piece of Your Enterprise; How to Implement GPS; Going Green with Hot-in-Place Recycling; and Impact of Unwanted Vegetation on Municipal Infrastructure.

At 2:00 p.m., the Public Works Stormwater Summit began with the first day of the two-day session, featuring moderator Paul Hindman, P.E., PWLF, Chair of the APWA Water Resources Committee and Executive Director, Urban Drainage & Flood Control District, Denver, Colo. Speakers included Connie Bosma, Municipal Branch Chief, Water Permits Division, Office of Water, U.S. Environmental Protection Agency in Washington, D.C., who outlined the intended outcomes of the draft NPDES regulations covering Municipal Separate Storm Sewers (MS4). Expert panelists looked ahead to consider the impacts of anticipated changes to current regulations.
Later in the afternoon, the APWA Donald C. Stone Center for Leadership Excellence in Public Works announced the first graduates of the Public Works Executive and Public Works Manager programs during the APWA DCS Center’s 2013 Awards Ceremony. Awarding these honors for the first time represented an important milestone in the development of the APWA credentialing program. The Public Works Leadership Fellow (PWLF) designation awards were also presented to 56 senior executive public works professionals. “The DCS candidates who have completed these rigorous programs have developed their skills to effectively lead and implement change to move their organizations forward,” said APWA Executive Director Peter B. King. “The Public Works Manager (PWM) program is for mid-level and emerging leaders who focus on all functions within public works, and how the functions work together as a system. And the Public Works Executive (PWE) program addresses the strategic aspects of public works.”

The Monday Awards Ceremony and Reception started at 5:00 p.m. in the Arie Crown Theater. The annual Awards Program recognizes the outstanding individuals, groups and chapters representing the best in public works. The exciting evening began with APWA President Ed Gottko, who opened the ceremony, celebrating the accomplishments of all the honorees. The awards included the Top Ten Public Works Leaders of the Year awards, recognizing the excellence and dedication of outstanding career service achievements of individual public works professionals and officials. Other awards included the Young Leader Award, followed by the graduation awards of the APWA Emerging Leaders Academy, the Sustainability Practices Awards, the Professional Managers of the Year Awards, the Charles Walter Nichols Award for Environmental Excellence, the APWA Presidential Leadership Award presented by immediate Past President Elizabeth Treadway, the Harry S. Swearingen Award for Outstanding Chapter Achievement and Excellence in Chapter Service, and other exceptional performance awards, as well as the APWA Public Works Projects of the Year.

The day closed out at 8:00 p.m. with the Young Professionals Networking Reception where the APWA members under age 35 got together to meet and socialize with other young public works professionals.

**Following the process**

On Tuesday, August 27, the first APWA Congress session was the Small Cities/Rural Communities (SCRC) Town Meeting at 7:30 a.m. Following that, Congress attendees headed for the Tuesday General Session at 8:30 a.m., featuring reality-based leadership best-selling author, Cy Wakeman. Wakeman discussed how to “Ditch the Drama and Turn Excuses into Results,” emphasizing the importance of reality-based rules for the workplace focusing on leadership, employee value, and accountability in achieving needed results in the work environment.

Members arrived at the Arie Crown Theater late Monday afternoon to attend the annual Awards Ceremony and enjoy the reception that followed. In this photo, President Ed Gottko presents the Professional Manager of the Year Award in Administrative Management to Sonja Simpson, Deputy Director, Division of Operations, Ohio Department of Transportation.

Attendees enjoyed having Cy Wakeman, Tuesday’s General Session speaker, sign copies of her book following her insightful presentation.
Wakeman discussed the “How Can I Help” mentality for employees in the workplace, an approach that emphasizes empathy, rather than sympathy. She stressed that the organization should focus on fewer meetings and more trust, and especially in trying times—the importance of leading first and managing second. She also stressed that organizational change is an important feature of the workplace, and that people need to get behind change to capitalize on it. Her focus is primarily on a reality-based work environment in which you lead others to deliver results, and give benefits to those who do.

Wakeman spent a portion of the session discussing the importance of teamwork. “A fundamental role of a manager is to make sure people are following the processes,” she said. “After that, personal accountability is necessary to drive a team to better business results by providing accurate feedback on a process first-hand. If we assume everyone is accountable on a broad level, we inadvertently create a situation where no one is accountable on an individual level. That is part of a recipe for losing.”

After the General Session, educational sessions followed throughout the day, addressing such topics as City Art Re-imaging the St. Paul City Systems; Collaborating to Retrofit Communities; Customer Service You can App-reciate; and Executive Level Leadership. Upstairs in the exhibit hall, the Exhibitor Solutions Theater featured more presentations including Understanding and Utilizing Bio-Based Solutions for Public Works; Rubberized Asphalt Pavement Technologies; and What is Sabotaging Our Underground Systems and How Do We Fight Back?

The second day of the two-day Public Works Stormwater Summit session presented speakers focused on three case studies highlighting best practices in local stormwater management. The presentations included It Takes A Village – Systems Approach to Water Quality Permit Compliance from Fairfax County, Va.; the Stormwater Best Management Practices (BMPs): Develop a Plan, from the City of Lenexa, Kans.; and Breaking Down TMDLs – Are They Really the Problem? from Greenville County, S.C.

Later in the afternoon, more educational sessions followed on topics such as Chicago’s Bicycle

(Continued on p. 28)
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Program; How to Innovate in Public Works; What Gets Measured Gets Done – Performance Standards for Solid Waste Management; and Workforce Diversity: Recruiting and Retaining Minorities and the Disadvantaged.

Following the afternoon educational sessions, Tuesday evening was highlighted with many chapter dinners at area restaurants, giving Congress attendees a more literal taste of Chicago.

Define your game plan
Wednesday’s Closing General Session provided a real treat for football fans in general and Chicago Bears fans in particular. The keynote speaker was NFL Hall of Famer and Super Bowl-winning coach Mike Ditka, who played for the Bears for five years and returned later as head coach to lead them to six NFC Central titles, three NFC championship appearances, and the Super Bowl XX title. Boasting a career that few can match, Ditka is one of only two people to win the Super Bowl as a player, assistant coach, and head coach.

With a presentation entitled “ACE: Attitude, Character and Enthusiasm,” Ditka delivered a powerful message highlighting the key characteristics people need to achieve their personal and professional goals. Ditka used his own experiences as a player and a coach to share uplifting and motivational stories with the attendees. He later participated in a terrific Q&A session including discussions of some of the best players and coaches he ever worked with.

“If you’re a CEO or a president or a coach, you have to define your game plan,” Ditka said to the audience members. “You’ve got to have a game plan, then you’ve got to get the right people and you have to execute that game plan. And it’s not always going to work. You’re going to fail some of the time. But if you don’t have the right people, you’ve got to replace them with the right people. If I’m the CEO of any company, I want team players. I want guys who understand that they want to achieve individually, but they also want to make the team better. When you find people like that you can’t miss.”

On to Toronto
All in all, the 2013 International Public Works Congress & Exposition was exhilarating, impactful and an important opportunity to share the best solutions to challenges encountered every day by public works professionals. Now it’s time to carry that enthusiasm and value up to our neighbors in the north. Start making plans today to attend the 2014 Congress in Toronto, Ontario, August 17-20, 2014. Save the dates, and reach out to our APWA team to find ways you can participate actively to benefit your own department and career. Congress just seems to get better and better every year, so if you haven’t yet been to one of our annual shows, be sure to come to the beautiful city of Toronto and find out for yourself.

Kevin Clark can be reached at (816) 595-5230 or kclark@apwa.net; Laura Bynum can be reached at (202) 218-6736 or lbynum@apwa.net.

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APWA Donald C. Stone Center at Congress: Awards, baseball, and career planning

Joan Awald
Professional Development Coordinator
American Public Works Association
Kansas City, Missouri

At APWA’s Donald C. Stone Center (DCS) Awards Ceremony at Congress in August, the Public Works Leadership Fellow (PWLF) designation was awarded to 56 senior executive public works professionals who will serve as mentors to candidates in the DCS Center programs. With these newest PWLFs, there are now 246 highly experienced Fellows who are committed to guide aspiring leaders through the Public Works Supervisor, Manager, and Executive programs; working one-on-one with candidates, they will share their accumulated wisdom with the next generation of public works leaders.

Along with the PWLF awards at this year’s ceremony, the Public Works Executive (PWE) and Public Works Manager (PWM) designations were awarded for the very first time, representing a milestone in the development of the DCS Center’s credentialing program. Candidates who have completed these rigorous programs have developed the skills to effectively lead and implement changes to move their organizations forward. The PWM program is designed for mid-level and emerging leaders who focus on all functions within public works and how those functions should work together as a system. The PWE program addresses the policy and strategic aspects of public works.

Charles (Chas) Jordan, the first recipient of the PWE designation, submitted an exemplary final project entitled Fleet Life Cycle Replacement Methodology and Associated Operating Cost Impacts; his mentor was Brian Usher of Largo, Florida. Chas has been in public works in the state of Florida for over eight years; he is currently a Management Analyst for the City of Largo. In 2007, he completed his Master of Public Administration degree. Chas is an Emerging Leaders Academy alumnus (Class of 2008) and has been the recipient of several awards, including APWA’s Young Leader Award this year.

The PWM designation was awarded to two individuals: Doug House and Chris Thompson. Doug’s project was entitled Participation in a Dirty Work Exercise: Using a Change Model to Support and Reinforce Current Best Practices in Emergency Management. Doug offered the following comment about his DCS Center experience: “The requirements of this program are well defined and lead the person seeking credentialing through a systematic approach challenging the applicant to use critical thinking to demonstrate their project and by benchmarking, strengthening and then testing their public works knowledge.” Larry Lux of Plainfield, Ill., served as his mentor. Doug has been in public works since 1984 and has been the Municipal Services General Manager for the City of Moline, Ill., for the past 12 years. In 2006, he received APWA’s State Project of the Year Award. Currently, Doug is vice president of the APWA Illinois Chapter. Because of his extensive experience with disaster preparedness, he was appointed to the Illinois Terrorism Task Force.
Chris Thompson’s final project for the PWM program was *Marshaling Public Support and Creating Funding for Public Works*. Regarding his topic, he said, “…funding ultimately drives most aspects of the field. It is especially important during our present downturn in the economy for a Public Works Director to have the necessary skills and knowledge for obtaining sufficient funding.” Chris was mentored by Richard Keeney of Punta Gorda, Fla. Chris has been with the City of Tavares, Fla., since 1997 and is currently the Public Works Director there. Chris holds a number of certifications and recently received the Project of the Year Award from the APWA Central Florida Branch.

The ceremony featured a special presentation by Dr. Howard Rosen and Stephen Pudloski about Donald C. Stone’s legacy. Both men are from the University of Wisconsin and knew Dr. Stone personally. Drawing on their in-depth interview with him in 1992, their presentation was an inspiring explanation of why his vision for public works is still relevant today.

The day was not without some fist-clenching excitement! Following the awards ceremony, several Public Works Leadership Fellows attended the Chicago White Sox – Houston Astros game where the home team narrowly lost when the Astros hit back-to-back solo home runs with two outs in the ninth inning to break a tie.

The DCS Career Center had an ideal location in the main lobby of the convention center making it a great place for attendees to stop by and explore all of the educational programs offered by APWA. Visitors had opportunities to talk about their personal career paths with APWA’s Professional Development Department staff, institute and university representatives, Technical Committee members, and current candidates in the various programs.

With so many wonderful memories of this year’s Congress, the Professional Development Department staff is looking forward to creating an even better experience for members next August in Toronto.

*Joan Awald can be reached at (816) 595-5217 or jawald@apwa.net.*
Diversity: Alive and well at 2013 Congress

Several events took place at the Chicago Congress which were diversity-related or sponsored by the Diversity Committee. Below are reports from committee members.

APWA First-Timers Meeting
By Catherine Schoenenberger, 2013-2014 Diversity Committee Chair, New England Chapter
The 2013 First-Timers Meeting was once again held and coordinated by the Diversity Committee, a very successful 17-year tradition at Congress. Nearly 200 members attended who heard from incoming President Ed Gottko, Executive Director Peter King, Chicago Metro President Laura McGovern and Young Professionals Chair Eric Dundee. Diversity Committee members, Board of Directors and Past Presidents greeted and welcomed guests.

Board member Cora Jackson-Fossett woke up this early-morning audience with her sheer enthusiasm and raw talents for networking; caffeine has nothing on Cora!

The Diversity Committee passed the Chair position from Young Leader Award recipient, Chas Jordan, to me for the 2013-2014 year. Chas’ efforts on this committee over the past three years have been greatly appreciated, or, shall we say, in New England terms, “wicked pissah”!

Thank you to Stantec, Parsons Brinkeroff, and Cartegraph, who sponsored this event. We hope to see even more First Timers in Toronto!

Young Professionals Network Meeting
By Chas Jordan, Chair, 2012-2013 Diversity Committee, Florida Chapter

The Young Professionals (YP) Network Steering Committee met and welcomed YPs from around the country to the second annual YP Network Roundtable. The YP Network, chaired by Eric Dundee, an engineer with the City of Madison, Wis., discussed best practices for chapter YP Groups, development of the APWA YP Website, and future goals for the Network in general. All areas of the U.S. and Canada were represented and brought ideas from their regions that could help other chapters in building a YP presence.
Young Professionals Reception
By Chas Jordan, Chair, 2012-2013 Diversity Committee, Florida Chapter

The house was packed for this year’s Young Professionals Reception. The YP Network (a Diversity Committee initiative) planned one heck of a party at Buddy Guy’s Legends on Monday night following the Awards Reception. With three sponsors—Stantec, Parsons Brinkeroff, and Cartegraph—the bar opened to a record-setting 160 attendees including young professionals, international delegates, and members of the APWA Board of Directors. The billiards tables were packed, the music was fantastic, and everyone got a great chance to network and meet other members of the growing APWA YP community. Special thanks to Eric Dundee, YP Network Chair, and Brad Patterson, Staff Liaison, for putting on one heck of a party. Let’s see if we can break that record again next year in Toronto!

Diversity Brunch
By Charles Pinson, Diversity Committee Member, South Carolina Chapter

The Diversity Brunch was held on August 27 at 10:00 a.m. with approximately 60 people in attendance. Diversity Chair Catherine D. Schoenenberger welcomed everyone and introduced the featured presenter, Rex W. Huppke, a columnist for the Chicago Tribune who writes workplace and humor columns. In one of his most famous columns, “I Just Work Here,” Mr. Huppke stressed that since work is an important part of our lives it should reflect the area in which we work. We should become diverse because, “it’s the right thing to do” and “it’s the smart thing to do,” according to Mr. Huppke. He feels we blame managers and set rigid rules that box them in. He recommends that we need to (1) form a task force, (2) provide mentoring and (3) offer management training programs. Also on a person-to-person level try to

Everyone got a chance to network at the Young Professionals Reception which was held at Buddy Guy’s Legends on Congress Monday.
have a positive intent, build trust, and collaborate. He stressed, “Above all, make every effort to be a decent human being so people will trust and want to work with you.” Mr. Huppke can be contacted at IJustWorkHere@tribune.com or Facebook.com/RexWorksHere.

A View from the Top: Women in Public Works Talk about Their Lives and Careers
By Judi Hines, Diversity Committee Member, Mid-Atlantic Chapter
This has been a popular session for several years with many great speakers and role models. That trend continued this year with a panel consisting of Jennifer Hughes, P.E., Director of Public Works/Village Engineer for the Village of Lincolnshire, Ill.; Suzette Robinson, Director of Public Works for the City of Evanston, Ill.; Joline McFarlane, Public Works Management Specialist for the City of Airdrie, Alberta; and Jill Marilley, P.E., PWLF, Associate Senior Project Manager for HDR in Bellevue, Wash., and Director, Region IX of APWA. APWA Board members Sue Hann, P.E., PWLF, and Cora Jackson-Fossett, PWLF, moderated the session.

Each panel member discussed challenges and opportunities encountered during her career, followed by a lively question and answer session. The experiences, knowledge and advice shared were invaluable. Attendees were encouraged to celebrate the journey, to take care of each other by being a mentor and supporter, to establish standards with everyone on your team, to laugh and have fun with what we do, to take responsibility for ourselves and to learn to not take things personally or too literally. The panel stressed to consistently do your best, be yourself, and you will come out ahead.

Diversity is what makes everyone in public works better.

Workforce Diversity: Recruiting and Retaining Minorities and the Disadvantaged
By Rebecca Bilderback, Diversity Committee Member, Kansas City Metro Chapter
This session shared ideas for individual agencies, local chapters and regional collaborative groups to recruit and retain a diverse workforce. Diversity Committee member Charles Pinson began the discussion by asking, “What is your measuring stick for diversity in your workforce?” The answer, he explained, are the demographics of the community that you serve. Charles then shared ways that an organization can recruit members from all groups within your community. Ideas included developing relationships with local groups such as churches, colleges, Urban League, Goodwill, and National Council of La Raza, and utilizing employee referrals, minority headhunters, and websites such as www.workplacediversity.com, www.monster.com and www.employdiversity.com.

Bill Dunlop discussed ways that his local APWA chapter is using hands-on presentations and activities to get youth excited about careers in public works. Presentations are made to local groups such as the Boy Scouts and Boys & Girls Club. “College Club” is a program targeted to traditionally underserved high school students that includes partial day presentations from APWA members to expose the youth to the nuts and bolts of public works. For example, a visit to a water treatment plant allowed the students to see the water system, SCADA controls, tanks, and pumps. One hands-on exercise had the students using actual survey equipment. Another activity was
riding in snowplows and seeing other heavy equipment.

2012-2014 Diversity Committee Chair Chas Jordan gave a presentation on pTEC Public Works Academy that has been successfully preparing high school and older students for skilled public works jobs for 15 years. The academy is a collaboration between cities within the county and the county school district through which it is publicly funded. The program is free for high school students. Post-high school students must pay tuition but scholarships are available. Classes include Traffic Signals, Signs & Marking, Mapping and Surveying, to name a few. The academy provides beneficial training for individuals who might not be able to afford college and skilled laborers looking for work while supplying ready-for-work employees for local employers; a win-win for everyone.

The bottom line: having a diverse workforce increases productivity and creativity, helps attract and retain talent, and increases market share to create a satisfied customer base. The information presented in this session provided excellent ideas to recruit and retain groups in your community that may be under-represented in public works.

Growing up in Public Works: A Young Professional’s View
By Eric Dundee, Chair, Young Professionals Network, Wisconsin Chapter
As three members of the emerging professional demographic, the presenters found key topics in the public works profession to present and discuss between current public works leaders and the leaders of tomorrow. The presentation was an open discussion between the audience and presenters discussing career advancement, workplace behavior, communication with coworkers, media and the public, change and ethical situations. Throughout the presentation the audience was asked to answer questions and share their thoughts. This integral part of the presentation helped managers and young professionals understand the differences between the two groups’ thoughts and actions. The audience commented on how great it was to hear from the “other” side and hoped the presentation would be given again next year at Congress so look for it to be repeated in Toronto.
CPWA Monday at Congress

Gail Ann Clark
Canadian Advocacy and Outreach Manager
American Public Works Association
Washington, D.C.

At each annual Congress, CPWA provides a series of outreach events that focus on current issues and updates on advocacy in Canada. These events are hosted by the Canadian Public Works Association and its Board of Directors which includes eight Directors—one for each provincial chapter of APWA in Canada. Here is a synopsis of CPWA Events at Congress 2013:

Participants at the CPWA-hosted “International Infrastructure Round Table” gathered for their 10th anniversary meeting. The group enjoyed breakfast—followed by an international discussion of public works and infrastructure issues in the respective countries.

Participants at this year’s Round Table represented the countries of Australia, Canada, Finland, New Zealand and the United States. CPWA President Darwin Durnie hosted the event and Doug Drever, Vice President of the International Federation of Municipal Engineering and Project Director, City of Saskatoon, SK, served as moderator for the discussion. Noting the importance of such discussions in an increasingly interconnected world, Darwin Durnie commented that “the breadth of topics and information exchanged increases the value of such discussion with each passing year.”

CPWA also hosted an educational session on Monday morning to update members on CPWA’s advocacy and outreach programs for the previous year and to outline priorities for the upcoming year. CPWA President Darwin Durnie briefed participants on CPWA’s role in the Municipal Infrastructure Forum which provided input to the federal government on the next long-term infrastructure plan to take effect upon the expiry of the Build Canada plan (2014). In addition, he reported on the first Canadian “Report Card for Infrastructure” which was launched in September 2012—this was the first such assessment of Canadian infrastructure assets (roads, drinking water, wastewater/seaer). Durnie noted that the recognition of inadequate municipal asset management surfaced as a side issue from this report and is an issue of which the government has taken note.

CPWA Legislative Consultant Alan Young, Tactix Consulting, Ottawa, gave an update on issues and events on the Hill and within government.

The CPWA Luncheon offers a perfect opportunity for Canadians to network and to hear a keynote presentation on a Canadian-specific topic. This year’s keynote speaker, Mary Lou O’Reilly, SVP, Insurance Bureau Canada, addressed the timely topic of risk assessment in relation to municipal infrastructure and increased challenges such as climate change.
Reputed as a “good drop-in spot” for our international attendees, the Luncheon attracts international visitors as well. Pictured here is the Australian delegation tipping their hats to CPWA. What a lively and well-rehearsed looking crowd of Aussies!

Always the perennial favorite, the awards for the CPWA National Public Works Week (NPWW) were also announced at the CPWA Luncheon. This year’s awards winners included: Small Centre: District of Squamish, British Columbia; Medium Centre: Town of Richmond Hill, Ontario; and Large/Metro Centre: City of Brampton, Ontario. Honourable mentions went to the City of Kamloops, British Columbia and City of Mississauga, Ontario. NPWW Chair Kealy Dedman, City of Cambridge, Ontario, noted “all municipalities who celebrated NPWW are winners.”

CPWA continues to value the input of our members and looks forward to Congress 2014 in Toronto! Please keep in touch with the Board of Directors to advise us of your municipal issues and challenges at gc Clark@apwa.net.
PWHS activities at the APWA Congress – Chicago 2013

Rylan Wadsworth
Public Works Director
Town of Montreal West, Québec
Member, Public Works Historical Society Board of Trustees

The rich public works history of the Chicago metro area provided a perfect setting for the activities of the Public Works Historical Society at Congress. The McCormick Convention Center, surrounded by architectural and engineering wonders, as well as beautiful parks and cityscapes, provided physical confirmation of Chicago’s public works history for all Congress attendees.

PWHS President Larry Lux, who also served as one of the 2013 Congress co-chairs, led a lively Board of Trustees meeting that was focused primarily on addressing the future of the PWHS. The animated discussion was enhanced by the participation of former PWHS President Howard Rosen, as well as APWA Executive Director Peter King, PWHS Board liaison Elizabeth Treadway, APWA President-Elect Larry Stevens, and past APWA Presidents Win Westfall and Richard Ridings. Current APWA Board members Jimmy B. Foster, Tommy J. Brown, Brian R. Usher, William “Bo” Mills and Linda Petelka provided inspired vision and guidance that the PWHS Board of Trustees optimistically hope will help revitalize the organization in the years to come.

The Board of Trustees meeting was followed by the PWHS Luncheon.
The luncheon guest speaker, Richard “Dick” Lanyon, gave a spirited presentation on how the flow of the Chicago River was reversed over 100 years ago. That was once again well attended. At the luncheon individual chapters were honored for membership distinction (Chicago Metro and Louisiana for 80 years, Iowa for 60 years, South Carolina and Kansas for their 50th anniversary and Delaware for 20 years). The PWHS also handed out the Abel Wolman award, presented annually to the best new book published in the field of public works. This year’s winner was Dr. Christopher Sellers for his book, *Crabgrass Crucible: Suburban Nature and the Rise of Environmentalism in Twentieth Century America*. The Michael Robinson award, recognizing the single best article in the public works field, was presented to Dr. Louise Nelson Dyble for her article, “Tolls and Control: The Chicago Skyway and the Pennsylvania Turnpike.”

The luncheon guest speaker, Richard “Dick” Lanyon, former Executive Director of the Metropolitan Water Reclamation District of Greater Chicago, gave a spirited presentation on how the flow of the Chicago River was reversed over 100 years ago. The history of this engineering marvel, thoroughly detailed by Mr. Lanyon in his book *Building the Canal to Save Chicago*, was named one of the top ten public works projects of the 20th century by APWA.

Tuesday at Congress was highlighted by Joshua Salzmann’s educational session, sponsored by the PWHS, on Daniel Burnham’s successful transformation of the Chicago waterfront into a post-industrial landscape that millions of Chicagoans and tourists enjoy daily.

Overall it was another informative and educational year at Congress for the Public Works Historical Society. PWHS events in Toronto in 2014 should be as stimulating since Toronto is another fascinating city with an intriguing public works history that all Congress attendees should be eager to explore.

*Rylan Wadsworth can be reached at (514) 485-1004 or rwadsworth@montreal-west.ca.*
Past President Larry Frevert was selected by Past President Elizabeth Treadway to receive the 2013 Presidential Leadership Award. Leadership is an art that advances individual and organizational goals through the collective works of all. Leadership is recognized as empowerment while offering challenging achievement that can stretch resources, individuals and supporters to think and act beyond their own individual sense of capabilities to achieve greater results as a whole than any single person alone.

Past President Treadway said, “Larry’s continuing commitment to service, professional excellence, leadership and mentorship represent the highest standards we all strive to achieve in our public works career. Best friend, dedicated husband, father, counselor, coach—all attributes that are embodied within and...
demonstrated by him in his everyday life.” Larry’s 36-year public career, both state and local, earned him the right to “retire” but that is not a word that fits into his vocabulary. Larry continues service to our public works industry through private sector employment (first at HDR and now with TREKK Design Group) but more importantly, he continues to give back to the profession in which he has been engaged for over 40 years. Whether he is leading a People to People International outreach to Cuba or China, or meeting with elected representatives to carry the message of needed support for our nation’s infrastructure, Larry is there to serve our profession, our priorities, our legacy.

Larry’s service to APWA continues as well; his contributions to his chapter today focus on the establishment of a Public Works Institute and on guidance and mentorship to younger professionals, encouraging participation in APWA as part of their career management. “He is the ‘energizer bunny’ of APWA; he sets the bar high and then strives to exceed it in all that he does and gives to our industry,” said Past President Treadway.

His contributions will continue on and are best represented by the inspiration given to the Minnesota Chapter. Larry is a vocal advocate for public infrastructure and during his year as president he challenged all of us to understand the future demands for public infrastructure by sharing the “America 2050” report from the Regional Plan Association. He inspired the Minnesota Chapter to embrace the message in a concrete way, leading to the building of a coalition of organizations in support of Minnesota 2050 – Collaboration and Education for Long-term Infrastructure Success. This initiative is but one example of the leadership that Larry has provided throughout our Association.

Larry, totally humble, always inspiring, and completely committed to his family, profession, friendships, and values, is known by us all as the standard-bearer for professional excellence and outstanding leadership.

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“The other day as I was driving home, I got behind a cement truck at a stoplight. We were on an incline and when the light turned green and the truck began to move, a big glop of fresh cement fell off the back of the truck and landed on the street just ahead of my car. Now, several days later, that cement has hardened into concrete and there’s actually a fair amount of it there. I would think it would be hard on car tires, not to mention dangerous for motorcyclists to drive over. My question is, what can be done about it? Is the cement company responsible for the cleanup, or is it too much “after the fact” now for them to be contacted? Is it something that our public works department should fix at this point? Thank you very much.”

Kevin Clark, Editor, APWA Reporter

There’s nothing more frustrating than to have gravel or rock hit your windshield from a truck that isn’t properly covered to keep it in place, or to have tree limbs and debris fall off in the street, or garbage bags and household items blow off the back of vehicles that are not properly loaded and/or tied down. The instance you shared is just the same. Not only is it dangerous for motorcyclists and bicyclists, but low-riding vehicles could also be damaged from driving over it or accidents could happen if one vehicle swerves to miss the nuisance and hits oncoming traffic. While it seems the responsibility should be with the concrete company, unless you got the contact information, license number, date and time of the mishap, you will probably not get any satisfaction going to the company owner. That’s what public works is all about: doing what no one else wants to do and cleaning up others’ messes! I would contact the Department of Public Works in your jurisdiction and explain the situation and ask them to send someone to remove the obstruction. Be certain you tell them just as you told me so they will understand it is definitely a hazard. Thanks for the question!

“I recently saw a reference to Automated Flagger Assistance Devices (AFADs) but I didn’t fully understand what they were or how they are being used. Any help?”

The Texas Department of Transportation (TxDOT) has begun using new road safety features which include the use of the Automated Flagger Assistance Devices, temporary rumble strips and flashing-yellow, left-turn arrows. The devices increase worker safety by allowing TxDOT crews to route traffic using various visual cues via remote control. The device involves the use of seven-foot-tall Stop/Slow signs, red and yellow lights, movable arms and reflective materials. Black rumble strips, placed five feet apart and leading to road work zones, are designed to help alert drivers to upcoming road construction. The rumble strips are intended for motorists to drive over and will not damage vehicles. Flashing yellow turn signals are used outside of work zones and will eventually replace traditional green circular signals at traffic lights where motorists yield to turn left. They differ from green arrow signals, which mean left-turning traffic has right-of-way. TxDOT intends to implement the tools throughout the state. Should be interesting to see how successful the new tools actually are. The flashing yellow turn signals are gaining popularity in high traffic intersections and seem to be working very well in our area.

“I know there has been discussion about assessing a vehicle-miles-traveled (VMT) tax fee in some areas, and even at the federal level as an alternative funding source to the gasoline tax. But has anyone actually used the process yet?”
The state of Oregon is replacing the state’s gas tax with a “pay per-mile road usage charge.” Don’t get all upset just yet! They are offering the option of swapping your fuel tax for a VMT fee but only for those who want to volunteer to test the program. Those Oregonians who opt for VMT over pump payments will pay 1.5 cents for every mile they drive instead of 30 cents per gallon at the pump. They are limiting the trial to 5,000 drivers. This could be just the test the rest of the country needs. The state began preparing the per-mile road charge in 2007 when it completed a pilot program that demonstrated the viability of a VMT tax. The pilot had the dual effect of encouraging public support, with 9 in 10 participants liking the switch. Another pilot, which wrapped up earlier this year, tested five mileage reporting methods (from smartphone tracking to a simple odometer) to address the fears of Big Brother. This model of testing and transparency is the approach that experts have recommended to overcome the public’s perception problem toward road pricing. Time will tell how it works but it sounds like it might be coming to a state near you sooner rather than later!

Ask Ann
Please address all inquiries to:

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Kansas City, MO 64108-2625
Fax questions to: (816) 472-1610
E-mail: adaniels@apwa.net

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August 17-20, 2014
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www.apwa.net/congress

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**UPCOMING APWA EVENTS**

**International Public Works Congress & Exposition**
- **2014** Aug. 17-20  
  Toronto, ON
- **2015** Aug. 30-Sept. 2  
  Phoenix, AZ

For more information, contact Dana Priddy at (800) 848-APWA or send e-mail to dpriddy@apwa.net.

**North American Snow Conference**
- **2014** May 4-7  
  Cincinnati, OH

For more information, contact Brenda Shaver at (800) 848-APWA or send e-mail to bshaver@apwa.net.

**OCTOBER 2013**

3-5  
Valve Manufacturers Association Annual Meeting &  
75th Anniversary, Palm Beach, FL, www.vma.org

5-9  
Water Environment Federation WEFTEC 2013, Chicago, IL,  
www.weftec.org

7-11  
APWA CSM/CPII/CPFP Certification exams (computer-based testing), (800) 848-APWA, www.apwa.net

16-21  
American Association of State Highway and Transportation Officials  
Annual Meeting, Denver, CO, www.transportation.org

22-25  

24  

**NOVEMBER 2013**

4-8  
APWA CSM/CPII/CPFP Certification exams (computer-based testing), (800) 848-APWA, www.apwa.net

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13-15  
National Water Resources Association Annual Conference,  
San Antonio, TX, www.nwra.org

14  

15-18  
American Society of Landscape Architects Annual Meeting 2013,  
Boston, MA, www.asla.org

20-21  
Canadian Waste & Recycling Expo, Montreal, Québec, www.cwre.ca

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