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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.

**FLEET SERVICES ISSUE**

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September 2014  APWA Reporter  1
The ability to serve the public is our primary reward

Larry Stevens, P.E., PWLF
APWA President

Editor’s Note: As has become tradition, each new APWA President is interviewed by the APWA Reporter at the beginning of each presidential term. In this manner, presidential plans are laid out, hopes revealed and observations noted.

First, some background on President Larry Stevens, P.E., PWLF, Project Director with HR Green, Inc., Johnston, Iowa. Since 1976, Stevens has served in numerous leadership roles, including Assistant City Engineer, City of Grinnell, Iowa; City Engineer, City of Oskaloosa, Iowa; and City Engineer/Public Works Director at Oskaloosa. After serving as the Director of the Statewide Urban Design and Specifications (SUDAS) Program at the Institute for Transportation at Iowa State University, Stevens joined HR Green, Inc., Johnston, Iowa, in 2010 as a Senior Project Manager. He now serves HR Green, Inc., as a Project Director.

Stevens was elected to the APWA Board of Directors in 2007 as the Region VI Director. He has chaired the Finance Committee, has served as the APWA Board liaison to the Canadian Public Works Association (CPWA) Board of Directors, and is a former APWA Board liaison to the Small Cities/Rural Communities Committee. He was appointed in 2011 by APWA (as a founding member) to the Board of Directors of the Institute for Sustainable Infrastructure. Stevens has served in all of the Iowa Chapter officer positions, including eight years as the Chapter Delegate, and has also been a member of the National Nominating Committee (2005) and the Strategic Planning Task Force (2005). He is member of the Iowa Engineering Society and the National Society of Professional Engineers.

How did you get involved in public works? Oftentimes I feel so blessed, because it was almost by blind luck that I stumbled into public works. When I graduated from South Dakota State University, we were in the throes of a recession and unemployment was quite high, and there were not a lot of engineering job openings. I was working for a geotechnical firm in Sioux Falls, South Dakota, and it was not what my long-term plans in engineering were because it was more technician-type work. Luckily I had a brother who lived in Grinnell, Iowa, who told me about an opening as an Assistant City Engineer. So I gambled, quit my job, and moved down to Grinnell, where I applied for and eventually got the job as the Assistant City Engineer. It was a smaller community where I could learn all facets of municipal engineering from planning, to surveying, to drafting and design, assembling contract documents, doing construction observation, and closing out projects. It afforded me the opportunity to learn every aspect of the engineering process, and to get actively involved in public works, including operation and maintenance.
The City of Grinnell was an agency member of APWA, and I was immediately enrolled as a member of APWA as soon as I went to work in the summer of 1976. So, for thirty-eight years I’ve been a member of APWA and the profession. Again, I’m lucky I was immediately exposed to APWA as soon as I got into the profession. As a member of APWA, I was provided education and training during my formative years in public works. And, maybe as important, it introduced me to public works professionals from around the state, from whom I learned so much.

**What are some of the changes that you have seen in public works?**

One of the big changes is obviously in technology and how technology is used in engineering and in public works operations and maintenance functions. I started off doing surveying with a self-leveling meter, a steel tape, and a transit (not that much different than how George Washington did surveying), and then I would take that information from a notebook and put it onto hand-drawn plans. That’s evolved into automatic data collection and surveying to CADD [Computer Automated Drafting and Design]. We went from typewriters and true cut-and-paste editing to our first computers in 1987, when we could do word processing and spreadsheets, which was extremely beneficial in saving time.

Another big change, in my viewpoint, is in the design and construction of our infrastructure. When I first got into this profession, we were almost a throw-away society—we were building infrastructure with a short life. More emphasis was placed on quantity of work getting done, and not necessarily the quality. We’re now designing and building our infrastructure for long life. To me, that’s the key to our future sustainability—not just the ability of our communities to survive, but to be able to thrive in the future. I believe we’ve taken great strides and are doing a much better job of designing and constructing our infrastructure to maximize that long life.

The other big changes are in management. Not that long ago, we in the profession were not provided with adequate training in management of our public works functions. It was a matter of learning on the job. Oftentimes, city managers and administrators wore many hats, and it was not uncommon to have city managers who were also engineers. Public works directors were typically engineers. But, leadership skills were taught by immersion, on the job. And what I see now is the profession emphasizing professional leadership, with education, knowledge, and experience. APWA’s efforts in credentialing our future leaders are extremely important. The whole aspect of the background of public works leaders has changed. When I got into the profession, it was
presumed that public works directors should be engineers. That has changed dramatically to the point where it’s become readily apparent, that while public works directors need to understand the design and operations and maintenance of our public infrastructure, the leadership skills are even more important. And, what is being stressed in the Leadership and Management tracks of the APWA DCS [Donald C. Stone] Center are the leadership capabilities as opposed to the technical capabilities of our public works leaders.

**What do you see as the critical issues today for public works professionals?** Infrastructure financing and management. Those issues encompass almost everything that we do every day. Adequate long-term financing and managing our public works infrastructure are key to the sustainability of our communities. Those happen to be two of the initiatives that we as a Board are looking into to see what APWA’s role would be in advancing the knowledge in those two areas.

Another critical issue that we face is simply politics. There are so many competing interests for tax dollars, and it is increasingly difficult to convince the public and our elected officials to adequately fund our infrastructure. The regulations that we face are daunting. The public has become so much more demanding. What I’ve experienced is that in the past when we did public improvements and inconvenienced the public, they expected it, they appreciated the improvements, and we didn’t hear many complaints from them. Now, whatever we do seems to come with a lot of criticism for any inconvenience that they might have, and less appreciation for the services that are provided.

Staffing and finding qualified staff is a huge problem, so training and succession planning will be critically important in public works.

And obviously, one that I mentioned earlier is technology in the workplace, and I think that will be even more challenging as we move forward. It’s going to continue to evolve. Technology doesn’t necessarily make our jobs easier, but it certainly does provide us additional opportunities to provide the services that we do.

**What are some of your major accomplishments?** I spent twenty-seven years in local government. I was then at Iowa State University for over six years in an academic environment. And now I’ve spent five years in the private side and consulting business. So I’ve pretty much covered the full gamut of the public works profession, including public, private, and academia.

My first five years in Grinnell, Iowa, were the formative years of my public works career and knowledge and experience. I learned many good things there because the city was fairly progressive and we just did a lot of improvements. It built a very good foundation for the rest of my public works career.

When I moved to Oskaloosa, Iowa, where I was for twenty-two years, the City had not been aggressive in doing public works projects. It was languishing to find funding for public improvements. One of the things that we did there was to create the first capital improvement program for the City. We mapped out a ten-year plan for all the infrastructure improvements, primarily focusing on street work. They had tried previously to do a large bond-funded project for street work and it failed. To me I thought they were trying to bite off too much at one time. I’m not sure where I heard it, but at that time I just thought of the phrase that “You can eat an elephant if you take it a bite at a time.” We had a system that we couldn’t adequately maintain with the dollars that were available. So we needed to get a number of our streets with permanent pavement as opposed to temporary pavement with seal coat. We created a ten-year plan to address the needs of approximately fifteen percent of the network that needed to be improved to a much higher level. We accomplished that plus more. In addition, we had major problems with sanitary sewer and storm sewer, and we created long-range plans to address the problems and make significant progress towards that.

Another major accomplishment during the time that I was in Oskaloosa was a redevelopment project, a public/private partnership, where we demolished and redeveloped forty percent of the commercial space in the community. It was somewhat controversial, very necessary, and provided a significant result. Obviously with something like that you need to do planning for the entire community.

In those twenty-two years that I was in Oskaloosa, we completed at least two updates to the City’s comprehensive plan, which chartered a path to significant improvements even outside of the public infrastructure. It created a significant opportunity for the city to grow and develop and be able to sustain in the future. We did significant amounts of quality-of-life projects, from park improvements to another public/private partnership that brought a series of trails that encircled the city, redevelopment of the City’s central park, and a number of other projects.
Another highlight, after spending twenty-seven years in public service, was the opportunity to go to Iowa State University and take over as the director of the Statewide Urban Design and Specifications program (called SUDAS, for short). In partnership with ISU, the Iowa Department of Transportation, and twenty-seven transportation planning agencies in the state, we developed a program, which is a one-in-the-nation program, whose primary mission is to maintain and develop improvements for two public improvements manuals. One is a design manual to guide engineers in the design of all common public improvements that you will find in the right-of-way—streets, sewers, water mains, traffic signals, streetlighting, etc. The other is an accompanying manual with construction specifications to aid the contractor in constructing all of those facilities. The design and construction standards are for all the cities and counties in the state, and the use of the Iowa Department of Transportation in urban areas. It involves the collaborative effort of over three hundred engineers from all around the state, who serve on various committees. Also, staff from the SUDAS Program conducts research from various sources, and then incorporates the results of that research into the two manuals. It is a tremendous program, and quite honestly, I consider it to be the highlight of my career.

What will be your priorities as APWA President? I’ve been asked that question many times lately. My priorities as the APWA President will be the same priorities of the Board of Directors. They will be the higher-level strategic priorities that were established by the Board, including education, advocacy, and support and strengthening of chapters. We will continue to emphasize those as priorities.

In regard to education, we must continue to ensure the DCS Center continues to improve and evolve in its efforts to provide education and professional development and the leadership credentialing for our future leaders. Another aspect of education is to continue to seek ways to improve how APWA National can collaborate with the chapters in the delivery of education and training.

We will also continue in our efforts to promote the involvement of young professionals and our emerging
leaders—we want to create more opportunities for them. We want to assure the success of the refocusing of the Council of Chapters, and we will make use of them much more going into the future as they form their committees and provide guidance to the Board on strategic initiatives.

**You've been very active in APWA over the years at both the national and chapter levels.** What are some of the highlights of your involvement with APWA? Well, obviously the highlight has been my involvement at the national APWA Board level, and the interaction that it has allowed me with various chapters and individuals as we’ve travelled around, first within the region and then around the country. It has been a true pleasure to visit with public works professionals around this country. I am very passionate about public works. I am so proud of our folks who have devoted their lives to public works, whose primary reward is the ability to serve the public.

I’ve spent so many years deeply involved with the Iowa Chapter. After about five years of attending meetings and meeting people, I became much more engaged with my first official involvement with the Chapter’s Executive Committee. I served on the Chapter’s Legislative Committee and Municipal Engineers Institute before election to the Executive Committee as a Director. I also served as Secretary/Treasurer, Vice President, and then President for two years. After that, I served in numerous other capacities and as the Chapter Delegate for eight years. The Chapter Delegate’s role is one of not only being a liaison back and forth to APWA National, but being a mentor to the Executive Committee members in the chapter.

After about twenty-five years of being involved at the Executive Committee level of the Iowa Chapter, I joined the Board of Directors as the Region VI Director.

**Tell us about your work with HR Green, Inc.** With HR Green I’m actually doing a lot of the same work that I did previously when I was in the public sector. I serve as City Engineer for a couple of cities. I guess I’m back to my roots doing the city engineering-type work and helping those communities grow and prosper. But I also act as a mentor in the company. Because of my role with SUDAS and my knowledge of the design and construction specification manuals, I am the go-to guy when it comes to urban specifications and design elements. So I help a lot of the young engineers in our company, in mentoring and helping them with design issues for municipal infrastructure.

**Who have been your mentors and who inspires you?** Well, seemingly wherever I went, I had mentors in the public works arena.

When I first started in Grinnell, the Public Works Director, Barney Garwood, was an old-school guy who had started with the City of Grinnell in the wastewater department, then advanced to the Wastewater Superintendent’s position, and then they created the position of Public Works Director for him. Barney took me under his wing and showed me the ropes of public works operations and maintenance. So while I was the Assistant City Engineer, I got hands-on experience from him learning the operations and maintenance side, and the importance of doing good engineering to benefit operations and maintenance. I learned many of the right ways to do it, made a lot of mistakes, but I learned by those mistakes and moved on.

When I was in Oskaloosa I had another good friend, Bruce Sedrel, who was a contractor. He was a very nice gentleman who retired after I’d been there about ten years. We brought him on as a construction inspector. He taught me a lot of good things from the contractor’s side. At the same time, he brought a wealth of knowledge and experience on the contracting side to construction observation and design of public improvements.

At Iowa State, it was Dale Harrington, who initiated the development of the SUDAS Program, who shared with me his many years of wisdom gained from his engineering career in public works and private consulting. Dale inspired me with his ingenuity, perseverance, and hard work ethic.

But the one that inspired me the most was probably Larry Frevert [APWA National President, 2007-08]. When I joined the Board as the Region VI Director, I was almost a reluctant candidate for it. There were others in the region, who I felt were probably more appropriate candidates for the Region VI position, but for one reason or another couldn’t seek the position. So they reached out to me and encouraged me to run for the office of the Region VI Director, and I was lucky enough to get chosen. When I came on the Board, Larry Frevert was the incoming President. And one of the first things he said to me was, “Larry, prepare yourself to be the President of APWA.” I was taken back by that, because the thought had certainly not occurred to me. I credit Larry for so many good things that he showed in his leadership, his
ability to listen and act in the most appropriate ways, and his vision for this association. He inspired many of us. Larry’s a good friend, and I appreciate all he’s done for us.

**What is the greatest benefit you see in being a member of APWA?**
Obviously, first and foremost, are the educational benefits of APWA. That’s why we exist. Certainly, other important benefits are the peer relationships that we develop and chapter involvement. All of that goes hand in hand. The educational opportunities that we have at both the chapter and national levels and the knowledge that is shared are astounding. But the peer relationships may yield as much dividend or more. I remember when I was in both Grinnell and Oskaloosa working as the Assistant City Engineer and City Engineer, I didn’t have a lot of people to turn to for advice, guidance, and seeking ideas. The acquaintances and the peers that I was able to make in APWA were the folks that could help me do my job and do a better job. And likewise, I could share my knowledge with other folks that may have been less seasoned. These peer relationships, I think, are extremely important within APWA. In my opinion this goes along with chapter involvement. Some of my best friends personally are the folks that I have met through APWA. That’s at the chapter level, the regional level, and now nationwide. Every one of them, they’re great people.

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**Board of Directors election results**

The 2014 Board of Directors election closed on July 30, 2014, at midnight. On July 31, 2014, Robert J. Miller, Kansas City Metro Chapter Past President, serving as Head Teller, verified the results. A total of 708 ballots were cast. A ballot for every position was not necessarily cast. At the closing of the ballot, there were 28,615 current members of APWA. Regional Directors are elected by members voting in their specific region. The membership of each region varies in number.

Election results are as follows:

- **Brian R. Usher**, PWLF, President-Elect: 644 votes; Write-ins Aggregated: 32 votes
- **David L. Lawry**, P.E., Director-at-Large, Engineering & Technology: 669 votes; Write-ins Aggregated: 2 votes
- **William E. (Bill) Spearman, III**, P.E., Director-at-Large, Environmental Management: 660 votes; Write-ins Aggregated: 2 votes
- **Cora Jackson-Fossett**, PWLF, Director-at-Large, Leadership and Management: 658 votes; Write-ins Aggregated: 8 votes
- **Kathleen B. Davis**, Director-at-Large, Transportation: 667 votes; Write-ins Aggregated: 3 votes
- **William (Bo) Mills, Jr.**, PWLF, Director of Region III: 66 votes; Write-ins Aggregated: 0 votes
- **Tommy Brown**, PWLF, Director of Region IV: 93 votes; Write-ins Aggregated: 0 votes
- **Maher Hazine**, P.E., PWLF, Director of Region VII: 71 votes; Write-ins Aggregated: 14 votes
- **Jill M. Marilley**, P.E., PWLF, Director of Region IX: 89 votes; Write-ins Aggregated: 1 vote

**Voting on the Proposed Amendment to APWA Bylaws Establishing the Council of Chapters**

- 583 votes cast
- 569 Yes
- 14 No

Adoption of proposed amendments to the APWA Bylaws requires an affirmative vote of two-thirds of the qualified votes cast (Article XIV, Section 1 of the Bylaws). The amendment to the Bylaws is approved, with 98% of members voting in favor.
On April 21, the Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (USACE) released a proposed rule that would define “waters of the U.S.” to determine which waters are subject to the jurisdiction of the Clean Water Act (CWA). According to the agencies, the proposed rule is necessary to provide clarity on what waters are subject to the jurisdiction of the CWA after two Supreme Court cases confused jurisdiction.

The new rule could affect project development and operations for public works departments across the country because it expands the types of waters that will be considered jurisdictional and subject to the CWA permitting requirements. Under the proposal, all tributaries of jurisdictional waters and all waters located within the riparian area or a floodplain which has historically been subject to case-by-case determinations will be considered “waters of the U.S.” A tributary can be a natural, man-altered, or man-made water, and includes waters such as rivers, streams, lakes, ponds, impoundments, canals, and ditches.

Additionally, certain isolated wetlands and ditches dug in uplands, which were categorically excluded from jurisdiction under prior agency rules and guidance, will be subject to CWA jurisdiction and certain other waters that are deemed to have a significant nexus to jurisdictional waters will be considered jurisdictional under the new rules if they proceed as proposed.

The proposed rule does not change any of the current exemptions for ponds and lagoons used in waste treatment systems; prior converted cropland; upland ditches; ditches that do not contribute flow to traditional navigable waters, interstate waters, territorial seas or jurisdictional impoundments; groundwater; artificially irrigated areas, lakes, and ponds; ornamental waters, artificial pools or swimming pools; collected water from construction activity; and gullies, rills and non-wetland swales.

Section 404 permits are required for some ditch maintenance activities such as drainage and removing weeds and vegetation. Expanding “waters of the U.S.” jurisdiction to ditches owned and operated by local public works agencies will unnecessarily increase the cost and delay the completion of routine maintenance. The new rule could also adversely affect stormwater management. Municipal separate storm sewer systems, or MS4s, are conveyances that include catch basins, curbs, gutters, ditches, man-made channels, pipes, tunnels, or storm drains that discharges into waters of the United States. If waterways that are part of MS4s become jurisdictional waters under this new rule, then the local governments that own and operate MS4s will be required to fund improvements and the time required to comply with federal permitting regulations are likely to result in delays in project delivery.

EPA is accepting comments from public works agencies and other stakeholders on how the rule affects them and how it can be improved. You’re encouraged to submit comments to EPA on behalf of your agency. Please send a copy to APWA at tokoroike@apwa.net. The deadline to submit comments is October 20, 2014.


To submit comments to EPA, visit: http://www.regulations.gov/#!documentDetail;D=EPA-HQ-OW-2011-0880-0001.

Tracy Okoroike can be reached at (202) 218-6702 or tokoroike@apwa.net.
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Giving you the tools you need to make procurement easier—we’re built for that challenge.
The APWA Fleet Services Committee: Your center of expertise

Teresa Hon
Professional Development Program Manager
American Public Works Association
Kansas City, Missouri

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our APWA Fleet Services Committee is continually working to address the needs and concerns of public works fleet professionals. Members serving on the committee are Chair Sam Lamerato, CPFP (City of Troy, MI); Tom Collins, CPFP (Town of Natick, MA); Jeffrey Tews, CPFP (City of Milwaukee, WI); J.D. Schulte, CPFP (City of Moline, IL); Jon Crull, CPFP (Daytona Beach, FL) and Lloyd Brierley (City of Toronto, ON). Mary Joyce Ivers, CPFP (City of Ventura, CA) serves as the At-Large Director and board liaison to the committee.

One of the most pressing needs the committee has identified is the recruitment and retention of mechanics and fleet management professionals. With the aging workforce and the lure of higher wages in the private sector, public works professionals must make a greater effort to promote the benefits of a career in public works. Encourage employees to prepare and sit for the Certified Public Fleet Professional (CPFP) test. The CPFP certification promotes excellence in fleet management by advancing the knowledge and practice of public fleet professionals to benefit communities through quality fleet services. Employing a CPFP designee demonstrates the municipality’s commitment to hiring knowledgeable and qualified professionals. As a means of recruiting, consider including financial assistance to take the test as part of your employment benefits or offer preference for hiring for individuals who are already certified.

Retention of employees who exhibit leadership capabilities could be facilitated by identifying those candidates for advancement and encourage them to expand their knowledge to include technical skills required to manage: budgeting; personnel management; written and oral communication skills; performance evaluations; and interpersonal skills. The APWA Members’ Library has a variety of articles, videos and recordings which can be used to foster those skills.

Another way the committee is addressing this issue is by sponsoring a Click, Listen & Learn program on September 11. “Creating a Succession Plan Advantage” will highlight two methods for training future managers and supervisors. Michael J. Coffey will provide information on the Alaska DOT and Public Facilities Maintenance Leadership Academy. Ken Allen will provide an overview of the City of Winnipeg’s Streets Foreman Apprentice Program. The two-hour block will allow the speakers to expand on the information they shared during the 2014 Snow Conference program. If you haven’t already registered, check the APWA Calendar of Events on the website for registration information.

Fleet professionals are resourceful individuals who take care of their own by sharing expertise and training opportunities. Several of the Fleet Services Committee members are instrumental in providing training within their chapter. Committee member Tom Collins and the New England Chapter started a mechanics workshop in 1994. Held in the spring and summer this year with another program scheduled for the fall, the chapter takes advantage of vendor support by scheduling them as speakers and trainers. Different agencies throughout the New England Chapter agree to host the mechanics workshops. Many vendors are happy to conduct the training at no cost. The arrangement works well in that it provides important training for staff and affords the vendors the opportunity to introduce their products to potential customers. This year’s training features programs on snow equipment maintenance, technical presentations on liquid systems, new flex blade cutting-edge design, street sweeper service and transmission preventive maintenance. The popularity of the program results in a “sell out” of 100 attendees for every event. These programs are available exclusively for APWA members and are a great way for attendees to obtain factory training at an affordable price. Of course, the networking is an invaluable, added benefit.

The Michigan Chapter conducts their fleet training by means of a 2½-day conference which focuses entirely on fleet maintenance issues.
for fleet managers, parts personnel and technicians. In its 17th year, the event reinforces management skills and introduces attendees to the latest repair technologies, as well as a vendor/trade show.

APWA Fleet Services Committee members are leaders in their field. The July/August issue of Government Fleet magazine featured their annual recognition of the Top 50 public sector fleet organizations. The agencies of three committee members appear in the top 20: City of Ventura, California (Mary Joyce Ivers, former committee chair); City of Milwaukee, Wisconsin (Jeffrey Tews); and the City of Moline, Illinois (J.D. Schulte). Additionally, the City of Ventura was chosen as the Number 1 small fleet (499 or fewer assets).

The Fleet Services Committee would like to recognize the inaugural Public Fleet Hall of Fame inductees. We are very proud that all 10 honorees are APWA members and over half are CPFPs:

- Richard Battersby, CAFM, CPFP – City of Oakland, CA
- Larry Campbell, CPFP – City of Fort Wayne, IN
- John Clements – City of San Diego, CA
- Bill DeRousse – Hendon Media Group (previously City of Everett, WA)
- John Hunt, CPFP – City of Portland, OR
- Sam Lamerato, CPFP – City of Troy, MI
- Rick Longobart – City of Santa Ana, CA
- John McCorkhill, Jr., CFM, CAFM, CEM, CPFP – City of Lynchburg, VA
- Win Mitchell (deceased) – King County, WA
- Bob Stanton, CPM, CPFP, PWLF – City of San Antonio, TX (retired)

Recognition of the accomplishments of committee members would not be complete without noting the prestigious honor bestowed to Sam Lamerato—the Legendary Lifetime Achievement Award. Congratulations to you, Sam, for a well-deserved honor.

As you can see, the Fleet Services Committee is truly the center of expertise for the public fleet industry. Whether it is serving as a resource on cutting-edge technologies and practices or identifying topics and speakers for Click, Listen & Learn programs, Congress or the Snow Conference, the committee members are working to serve you, the APWA fleet professional.

Teresa Hon is an APWA Professional Development Program Manager in the Kansas City office and serves as the staff liaison to the Fleet Services Committee and the Emergency Management Committee. She is also the staff contact for the MicroPAVER™ pavement management software programs. She can be reached at thon@awpa.net or (816) 595-5224.

**Lamerato receives highest honor**

Sam Lamerato, CPFP, APWA Fleet Services Committee Chair and Fleet Maintenance Superintendent for the City of Troy, was recently selected by colleagues to receive the 2014 Legendary Lifetime Achievement Award. Lamerato was presented with the award on June 4 at the Government Fleet Expo & Conference.

Sam’s career path was not what he expected—he had planned to open his own repair facility. In 1974 he began as an intern with the City of Troy. Following his graduation from MOTECH Automotive Education Center he became a full-time technician with the City. In six short years he was promoted to Superintendent of Fleet Maintenance. Over the years Lamerato and the City of Troy’s fleet have earned numerous accolades and recognition. Throughout his career Lamerato has shared his passion and knowledge with others. He helped start the Southeast Oakland County Fleet Managers Association, became the Education Committee co-chair of the APWA Michigan Chapter, joined two Chrysler advisory councils/boards and frequently speaks at local, regional, state and national events.

Anyone who knows Sam Lamerato will agree that he is worthy of receiving the 2014 Legendary Lifetime Achievement Award.

“Look! Look! Look deep into nature and you will understand everything.”

– Albert Einstein (1879-1955), German-born theoretical physicist
Newport News Public Works prepares for fourth accreditation process

Karen Self
Management Analyst
Public Works Department
City of Newport News, Virginia

With each accreditation process, Newport News Public Works gets a little more creative at finding ways to increase their efficiency and effectiveness. Not only does this enhance their accreditation processes, it also increases productivity within their day-to-day operations. Employees are held accountable to maintain a level of service that is above industry standards. In addition, employees feel they are part of the bigger picture, and are working hard toward a mission and vision that is greater than them. Newport News Public Works Director, H. Reed Fowler, Jr., was involved in Newport News’ initial accreditation in 2003, and has been involved in the last two reaccreditations. He is looking forward to the upcoming reaccreditation in November. “There are many positive aspects to becoming an APWA Accredited Agency. For example, many of our practices are multi-faceted and require the input from a wide variety of City departments. It is our practice to involve representatives from the departments in our review activities. Many times, the interaction between our teams leads to improved practices, policies and procedures that benefit the entire City organization. This is great for relationship building!”

The City of Newport News is preparing for their fourth accreditation process. Currently, their Accreditation Manager has the practices broken up into eleven groups. These eleven groups include Administration, Asset Management, Building Services, Emergency Management, Non-Applicable, Safety, Solid Waste, Stormwater, Street Maintenance, Sustainability and Wastewater. The Accreditation Manager meets with each group separately to review each of their assigned practices. For each accreditation meeting, the Accreditation Manager sends out an agenda in advance with the practices that will be reviewed. Each group is encouraged to review their assigned practices as a smaller unit team before coming to the accreditation review meeting. Then, any necessary changes or updates will be communicated to the Accreditation Manager to be linked and finalized in the practice. This process enables the Department to make consistent and significant progress through these meetings.

A spreadsheet is maintained to track progress of each group and their practice responsibilities. The Accreditation Manager updates the spreadsheet during each meeting and in between meetings as work is completed. Completion percentages are calculated for each group and for the entire Department as a whole. The percentages create some friendly competition among the groups. This spreadsheet, called Review Status, is the go-to document during reaccreditation preparation. At any time, each group is able to access the document to review or print their to-do list, to see what they have accomplished and what needs to still be completed. The Review Status spreadsheet mirrors the APWA Assessment Software data and typed notes.
Frank James, Stormwater Division Administrator explained, “The accreditation process not only allows Newport News Public Works to meet industry standards, it also helps them define their methods and fine-tune what tasks are in place.” One example is tracking maintenance activities in all sections which lead to more visual inspections to determine if benchmarks are met or if further tweaking is required. Another example is enhanced dialog with other municipalities concerning the efficiencies and distinctive methods that separate Newport News’ operations from others. Newport News has a standalone Stormwater Division that operates separate equipment from their Wastewater Division. In addition, the Department has been able to research equipment needs more thoroughly to make sure what is required to adequately maintain infrastructures is being purchased.

Public Works does not do accreditation alone. The Department meets with employees from the Department of Engineering and the Department of Emergency Management on a regular basis. In addition, Public Works contacts various other departments throughout the City to get their input and feedback when necessary.

The accreditation process affords each division the opportunity to meet with their employees to review their practices. Each Division Administrator realizes and appreciates what other divisions do. “This action broadens their knowledge of the diverse missions of the division, and also helps each division see how they are integrated to accomplish the overall mission of the organization. Having the supporting documents associated with the compliance statement for each group’s practices also creates a convenient continuity file for any newcomer wishing to understand the organization’s mission. “The supporting documents serve as excellent samples for products they might have to generate themselves,” described Tim Shockley, Solid Waste Division Administrator. Last but definitely not least, morale has increased within the Department of almost 400 employees. The employees take pride in knowing their work, commitment and dedication stands out because of the accreditation designation. Extra effort is put forth by the employees to maintain and improve the programs they have in place to keep them at the top in the industry.

In preparation for their next accreditation, Newport News will do a work session presentation to City Council and the City Manager to inform them of the upcoming evaluation and the importance of being an accredited agency. With each upcoming accreditation, these presentations give Public Works the opportunity to keep City Council and the City Manager up-to-date on why Public Works is accredited. It also gives the Department time to explain what processes are being refined and created for accreditation which, in turn, provides their customers and citizens with a more efficient and effective level of service. City Council and City Manager support are key to a successful accreditation. Newport News Public Works is grateful to their City Council and City Manager for their continued support over the past twelve years and future years to come.

Karen Self can be reached at (757) 269-2728 or kself@nngov.com.

Explore International Public Works!

Travel, Discover, Experience Another Culture
Applications are now being accepted for the Jennings Randolph International Fellowship Program funded through the Eisenhower World Affairs Institute.

The Jennings Randolph International Fellowship Program supports participation at a public works conference of one of APWA’s international partners and a public works study tour in that country. Fellowships granted for travel to our partner countries are limited to a maximum of $2,500 (USD) to assist with travel costs and other expenses that may be covered by the award.

For details and application go to: www.apwa.net/About/International or contact Lillie Plowman at 1-800-848-2792, ext. 5253, or lplowman@apwa.net.

Application deadline: November 14, 2014, midnight CST.
CPII as a standard of practice

Emin Kayiran, CPII
Construction Manager
AKM Consulting Engineers
Irvine, California

After reading and responding to what seemed like hundreds of Requests for Proposals from public agencies seeking consulting inspection services, it dawned on our staff that there was no consistency amongst public agencies regarding what qualifications they sought from their consulting inspectors. Some agencies simply asked for “competent and qualified inspectors”; some licensed professional civil engineers; some were requesting materials testing certifications for soils, concrete and masonry. Oftentimes construction inspectors are the key to the success of a project. These project team members are responsible for the day-to-day communications with contractors and the public, and in many ways, their effectiveness will dictate how efficiently and successfully the projects are completed. Because the public works construction inspector plays such a vital role in the success of a project, our staff pondered why there was not a certification process specifically covering the body of knowledge, experience, and skill sets required for such an important position.

In 2010, I learned of APWA’s Certified Public Infrastructure Inspector (CPII) certification process. I was initially drawn to the certification because it covered the specific nature of the work our firm inspects, public works construction. The CPII eligibility includes a requirement that candidates possess a minimum of five years of experience inspecting public works construction, which represented to me that inspectors who have attained the CPII certification have real-world experience in our specific line of work rather than having simply studied and passed a test. After reviewing the comprehensive recommended study material, it was clear that the certification required a broad understanding of public works inspection standards of practice.

Having attained my CPII certification in the spring of 2010, I reflected on my experience preparing for the CPII exam and concluded that the body of knowledge that the exam and certification covers is more than construction inspection. It is synonymous with the growing body of knowledge expected by clients. CPII certification requires knowledge in areas of public works such as project management, scheduling, public relations, and communications. As public budgets continue to shrink and consulting service providers are asked to do more with less, public works inspectors are required to take on a broader scope of work on projects. The role is not limited to simply observation and reporting. Having obtained a certification that covers this expanded scope of services is a representation to our clients that we possess the highest level of competency in our field. Clients can then be assured that the individuals who they rely on to be their “eyes and ears” in the field are well versed in their discipline and can manage all project challenges. One of the important benefits of an Inspector’s services to public agencies is risk mitigation. Staffing projects with inspectors holding CPII certifications provides public agencies with a strong additional layer of risk protection.

As our inspection practice continues to grow and evolve, our staff regularly uses the CPII recommended study materials as reference in their day-to-day efforts inspecting public works construction. Our inspection team members

“The highest result of education is tolerance.”

– Helen Keller (1880-1968), American author, political activist and lecturer
who have attained the requisite experience are currently pursuing CPII certification. Additionally, we have used the recommended study materials as training resources for our new members including the sample questions for the exam. They have greatly benefited from the comprehensive nature of the materials as they cover the entire array of services required during a project lifecycle. As such, AKM Consulting Engineers has made it a goal for all new inspection staff team members to attain the CPII certification.

The goal on any public works construction project is to see that quality facilities are constructed on time and within budget, so that such facilities will be a benefit to the community for their full useful life. The CPII certification process, as well as the continuing education requirements, has bolstered our ability to continue to meet these goals for our clients.

It has been made abundantly clear that out of the recession was born a new age of construction with new realities. As budgets get tighter, project schedules get shorter, and more is expected out of the public works inspector, the professionals providing this important service must find ways to evolve and hone their skills in these areas that extend beyond construction observation. Attaining CPII certification is a vital step in acquiring and refining such skills. It has better equipped our team to serve our clients’ best interests and continues to aid in reaching project goals. I would recommend pursuing CPII certification to any inspector, agency or consulting firm engaged in providing public works construction inspection and seeking the highest level of competency in this critical field.

Emin Kayiran can be reached at (949) 753-7333 or ekayiran@akmce.com.
When your best employee retires, what’s the best gift to give? What can convey how special their contribution to your team has been?

Clocks and watches are traditional gifts, but who ever thought they were appropriate for someone who can finally forget about time?

Plaques are another way to show appreciation, but they rarely go with one’s décor.

Recently, North Wildwood’s Department of Public Works faced the imminent retirement of one particularly valued employee named Frank McAnaney.

Superintendent Harry Wozunk came up with a refreshingly different kind of gift, one that not only honors the person who receives it, but it also encourages others to aspire to the honor themselves.

It’s called a Challenge Coin.

Basically, a challenge coin is a metal coin that bears the insignia of an organization and is meant to be carried at all times. It’s sometimes called an “honor coin.”

Many organizations claim to have been the originator of the idea.

There’s one pervasive legend about an incident that occurred during World War I.

When war broke out, many from all walks of life enlisted. One wealthy young man became a lieutenant in one of the newly formed flying squadrons. He had medals struck for everyone in the squadron as a sign of their membership and solidarity.

One of these pilots was shot down behind enemy lines in Germany and was stripped of all identifying uniform clothing, but he still had the coin in a pouch tied around his neck.

He made his way to the French countryside, but the locals were suspicious of him, afraid he might be a German spy. He had nothing to prove that he wasn’t except for the coin. As the story goes, he produced the coin and the people produced a bottle of wine!

Branches of the military have used them for years, often giving them in recognition of an accomplishment like completing a grueling training program.

Sometimes they are given to guests who visit the organization’s headquarters. Those whose job involves traveling to various branches of an organization accumulate quite a collection.

Former President Bill Clinton had an extensive collection which can be seen on a credenza behind him in his official presidential portrait.

The notion of the “challenge” has spawned many traditions. First, along with proving membership in the organization, there’s a tradition of testing others to produce the coin. If he or she can produce it, the person who challenged must buy the other a drink. And vice versa!

Another tradition surrounding challenge coins uses a different meaning of the word.

The person who earns a challenge coin by doing something extraordinary—or doing the ordinary in an extraordinary way—becomes an example to his or her peers, encouraging them to ramp up the quality of their work.

And this is how North Wildwood Department of Public Works decided to honor Frank McAnaney: by presenting him with the first “Frank McAnaney Challenge Coin.”
The coin bears the City seal against the background of the American Flag. The flip side bears McAnaney’s image surrounded by the words: The Frank McAnaney Challenge Coin; Vision, Dedication, Integrity.

These words were chosen very deliberately to capture McAnaney’s contribution to the Department over his 33-year tenure.

His image on the coin is from a photo taken when he received the APWA Employee Award in December 2013. In nominating him, Superintendent Wozunk described two situations where McAnaney demonstrated these qualities.

In 2006, when our City was preparing to celebrate its 100th anniversary, McAnaney went above and beyond his routine duties to create beautiful pieces to commemorate the occasion.

The first was giving personality to a plain round window on the front of City Hall near the roof. McAnaney designed a stained glass window with “NW 2006” in the City’s classic blue, had it fabricated, and installed it.

He also designed a commemorative clock that stands outside City Hall. The foundation and wiring were problematic, but McAnaney resolved it with a design so well-conceived that the company that constructed it, Verdin Bells and Clocks of King of Prussia, Pa., uses it to this day as its standard.

And so, the Frank McAnaney Challenge Coin was struck in his honor and given as his retirement gift in March of this year.

And now it remains to be seen who will transcend the ordinary to earn the next one!

Carolyn Mee can be reached at (609) 522-4646 or spoilyourself@northwildwood.com.

Simply put, diversity is good for business

Mark A. Riley, CPM
Supervisor
City of Dublin, Ohio
Chair, APWA Ohio Chapter Diversity Committee

Diversity is generally defined as acknowledging, understanding, accepting, and valuing the differences among people with respect to age, class, ethnicity, gender, physical and mental ability, race, sexual orientation, and religions. In the workplace, diversity brings people of different backgrounds together and with them, different ideas and different strengths. Studies have shown that workplace diversity increases both employee creativity and productivity. But as of today, some agencies have not moved as quickly towards creating diverse workforces that include individuals of varying cultures which would further ensure their compliance with anti-discrimination laws.

Workplace diversity has become a tool that is used to recruit or produce the best in today’s competitive labor market. Many governmental and private businesses are constantly looking at their diversity policies, and staying up-to-date on the ever-changing legal regulations and requirements.

Employers should be mindful and understand that diversity can strengthen an organization as a whole. Managing diversity in the workplace through training will reinforce and encourage employees to work together to achieve departmental common goals.

The net effect of a diversity focus can develop a greater pool of ideas from employees; more teamwork; better recruitment, selection and retention of employees; fewer unproductive staff interactions; increased receptivity and adaptability to changes; and better service delivery through awareness of community needs.

Issues concerning workforce diversity will remain a hot topic for years to come. Even with the controversy, the benefits of creating both diverse business practices and a diverse workforce are clear; an employer must and should struggle to sort through the legal issues to successfully implement diversity in the workplace.

Many governmental agencies could greatly benefit from a focus on diversity. Corporate America is doing it—why shouldn’t your agency?

Mark A. Riley can be reached at (614) 214-4691 or mriley@dublin.oh.us.

Special Reminder: Please make sure you update your personal membership profile, including answering the optional questions 13-16 (see page 10, November 2013 Reporter). Please refer to APWA’s 2013 Diversity Resource Guide 2nd Edition and the Diversity Toolbox for more ideas in celebrating the diversity in your chapter.

Don’t miss this chance....

...to get in the APWA Reporter’s Winter Maintenance issue

By advertising in the APWA Reporter, news of your equipment, product or service will be sent to more than 28,500 APWA members, most of whom are key decision makers in their agencies.

So, don’t miss this opportunity to advertise in the November issue which focuses on winter maintenance in public works, including snowfighting operations, planning and management; equipment; training and education; and innovative technologies.

The deadline to reserve your space is October 10; the materials are due by October 13.

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Our U.S. military builds great leaders who bring their leadership skills with them into civilian life, and in particular, to public works. Retired Marine Captain Max Withrow, Assistant Director of Public Works for the City of Lakewood, Calif., is a stellar example of how our former service men and women contribute to our communities after completing their military service.

The Marine Corps is our Nation’s Expeditionary Force in Readiness. Marines are trained to respond faithfully, courageously, and decisively. They lead with honor and hold warrior traits with citizen values. Every Marine is trained to lead and they are imbued with 14 leadership traits: Justice, Judgment, Dependability, Integrity, Decisiveness, Tact, Loyalty, Initiative, Endurance, Bearing, Unselfishness, Courage, Knowledge and Enthusiasm. These traits are also very helpful to leaders in civilian life, and especially those in public works leadership roles.

Max Withrow earned his bachelor’s and master’s degrees in civil engineering, along with his P.E., during his career of over twenty years as a Marine. After retiring from the Marine Corps, he worked for the City of Corona Public Works Department, also earning an MPA. He joined the City of Lakewood in September 1996 as the Assistant Director. I interviewed several candidates and Max was at the top of the list. When he and I first met in that interview, he pledged his loyalty and assured me that he knew how to be both a leader and a second in command. Initially, I worried if I would mesh with a former Marine officer. Would he be a rigid, “by the book” guy, or would he have enough flexibility to deal with the ever-changing needs of the community and the profession? Could he deal with an angry resident, a demanding City Manager and a City Council with high expectations? Would he be able to step in for me at a moment’s notice? We hit it off in the interview—I really liked the loyalty aspect of his answers—and for the last 18 years, we have formed a great public works leadership team.
I started with the belief that he would know how to work effectively with the public works field employees. He quickly earned the respect of all our employees—in the field and the office. He occasionally likes to pull out the “drill sergeant” bluster in a meeting, but our workers all enjoy his personality. He is fair and compassionate, and he is loyal to our employees, making sure that they have the tools and equipment that they need to be safe, productive and efficient. He conducts our infrequent personnel investigations or disciplinary proceedings in a very professional manner. His military training easily transferred to public works field operations and the management of our employees, and he provides a shining example of leadership and dedication.

Max can be proud of the multi-year program he led to pave every street in the City of Lakewood. He spent twelve years planning, advocating, estimating, designing, bidding, and administering almost $50M in rubberized asphalt overlay and hardscape contracts for our residential and arterial streets. Max took on all the responsibility for this program, from start to finish, and our residents have received the benefit. He sought out funding outside our normal sources, such as specialized recycled rubber grants, particularly during the downturn in the economy. Leading this program with the highest of technical and quality standards assured that our City Council would continue to fund it through completion.

Marines get the tough jobs. To ensure every Marine has the ability—and the authority—to make important decisions in the midst of chaos, or in the absence of specific orders, Marines operate according to the philosophy of “Commander’s Intent.” When a subordinate leader finds himself in a situation where he needs to make an immediate decision, he has the bias for action that allows him to make the decision that best supports his commander’s desired end state. Max embodies all the best qualities of a Marine and a public works professional. I urge you to consider hiring more former soldiers, sailors, airmen, or Marines—you can’t go wrong!

Lisa Ann Rapp can be reached at lrapp@lakewoodcity.org.

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For more information about these programs or to register online, visit 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)  = Certification Exam
= Live Conference (Paid Registration)  = Web-based training

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/

2015 North American Snow Conference, Grand Rapids, MI – Call for Speakers

The North American Snow Conference is renowned for its top-notch education program and now is your chance to be a part of it!

The North American Snow Conference offers education to public works snowfighters and those that support them. The conference provides opportunities for more than 40 education sessions, roundtable discussions, and technical tours. We are looking for speakers with new perspectives, solid best practices and/or innovative twists to the usual winter maintenance topics such as:

- Clever solutions to age-old problems
- Best practices for winter maintenance planning and operations
- Anti-icing techniques and tips
- Chemical usage and selection
- Environmental impacts of winter maintenance practices
- GPS/AVL uses
- Snowfighting equipment
- Strategies for plowing and disposal
- Effective operator training programs
- Community outreach/citizen interaction
- Winter fleet operations
- Emergency management of severe winter events

Submission Deadline: Mid-September 2014

Go to the 2015 North American Snow Conference Call for Presentations webpage at http://www.apwa.net/conferences/cfp/Snow to submit your presentation for consideration.
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Branding your department

Laura A. Kroeger, P.E.
Assistant Manager (DCM)
Urban Drainage and Flood Control District, Denver, Colorado
Member, APWA Leadership and Management Knowledge Team

If you don’t already have a tattoo, at some point, you probably at least entertained the idea of getting one, am I right? What did that thought process consist of?

On the one hand, you may have considered something deeply personal and meaningful to you to help express your individuality. On the other hand, everywhere you look, people of all ages, occupations, and social classes have tattoos (over one-fifth of Americans to be precise), so how do you stay original and unique? That’s as far as I got with my personal struggle of whether or not to permanently brand myself.

What about designing a tattoo or brand for your organization or department? What would that look like?

Just as you would want a personal tattoo to express your individuality and character, a brand for a department could serve the same type of purpose. In a world with short attention spans, branding can be very effective for public agencies. If your agency or department can instantly provide the public with a sense of trust, integrity, and dedication to the community through branding that’s identified on the side of a company vehicle or on a project sign, why not give it a shot? As public works agencies, this is critical particularly since there can be a negative, or perceived negative, experience that has triggered public interest. Setting the right tone through branding can help promote a positive image and get on the right track.

How can branding affect employees? A well-conceived department brand not only creates a feeling of trust and commitment to outsiders but also to everyone within the department. A department brand that solidifies a clear identity and bigger purpose is motivating. It establishes behavioral expectations and values of the department. A good example of branding that engages outside people as well as employees is the Walt Disney World brand, “The Most Magical Place on Earth.” That is a big promise and Disney has been quite successful at delivering it. Ask any child who has been there or the fact that people are willing to pay $95 a day for a park ticket speaks volumes to the success of their image. The Disney brand has successfully created a “magical experience,” whether it is just watching a commercial or walking down Main Street in the Magic Kingdom.

What about the employees at Disney World? Do you think they play a part in the success of Disney’s branding? Absolutely! While at the park or staying at a Disney resort,
what is noticeable is how employees are focused on ensuring their guests have an amazing, magical experience. After all, it is the *Most Magical Place on Earth*, right? Each employee understands the commitment and vision of their brand and does their part to fulfill it. This ranges from memorable guest interactions with characters to the custodial cast members maintaining trash receptacles from overflowing.

Who wouldn’t want a department brand that was inspirational and motivating to employees? Waking up at 3:00 a.m., with temperatures below zero, to plow snow-covered streets is not an easy task for anyone, but it is essential for the community to safely function. Everyone relies on the roads to get safely to work, school, and to businesses. What if a department brand was painted on the wall of the shop to remind drivers and technicians that their dedication is what keeps the city moving safely? A brand is the reminder and offers a sense of pride and maybe even a feeling of appreciation to the dedicated employees fulfilling the promise made to the community to provide safe and reliable transportation.

It sounds great to have a brand but the reality of coming up with a WOW brand is the same reason why I still don’t have a tattoo. It’s not easy to create your brand. The following are a few ideas on what makes an effective brand and how to develop one, but if you are serious about tackling this effort, it is worth having a professional assist you.

**Keep it Simple and Focused**

During the course of a day, we are exposed to hundreds of advertisements and marketing campaigns. If you want your brand to stand out it needs to be focused, personal and simple. What makes simple so challenging is there are most likely several things that make your department great and choosing just one to focus on can be difficult and also somewhat risky. After all, we are often told not to have all our eggs in one basket, but a multi-focused message can be confusing and, therefore, not very effective. *Like a Rock*, Chevy Trucks, is a great example of simple, yet effective, messaging. It clearly comes across as a tough, solid, and dependable vehicle. While developing that brand, I would venture to say there were others who thought the smooth and comfortable ride would be a better pitch to promote. Either way, at some point someone had to make the tough decision to have the simple message of dependability. The encouraging part of this approach is that once you have the audience’s interest there are other opportunities to provide more information. Websites are great resources for additional details and branding will help people be engaged enough to go there.

A strategy laid by Greg Stine, President of Polaris, Inc. Branding Solutions, recommends that when developing a brand, to first start with a list of the qualities that describe the department. This may be a long list that gets trimmed down when certain measures are applied: What qualities are unique to your department? What is your single promise or commitment to the community? What differentiates your department from the other departments or organizations? What best describes your community’s values? The list is then trimmed even further to the five or fewer items that are the most focused and understood. This short list will be the essence of the brand. The last step is to develop a phrase and/or logo that symbolizes your brand most effectively. This is when the help of a professional is most critical.

Of course you could take the old fashion approach to branding, sitting at a bar with some colleagues, a cocktail, a pen, and several bar napkins. While out with a group of friends, the topic of what was valued about each other’s agencies, was discussed. Jeff Shoemaker, Executive Director of the Greenway Foundation, a nonprofit organization located in Denver, announced that he simply liked **Making Stuff Happen** (MSH). We all smiled at the simplicity of the words and the powerful meaning behind them. Jeff then proposed a toast to MSH, and from that moment on, a powerful new brand was created. Everywhere Jeff went, he distributed MSH stickers and to this day, I can’t attend a conference or meeting without seeing an MSH sticker slapped on the cover of a laptop, notebook, or tablet. MSH reminds us to stay focused and keep moving forward. Jeff has even gone as far as getting a tattoo.

As for me, with every milestone I reach, the urge to commemorate it in the form of a tattoo presents itself and I will, once again, weigh the pros and cons. One of these days, the pros may outweigh the cons, and I’ll conjure up enough nerve to carry through with it.

Laura Kroeger can be reached at (303) 455-6277 or lkroeger@udfcd.org.

![Branding to whole new level, Jeff Shoemaker's tattoo](image)
For the people of New Zealand, 2010 and 2011 marked the beginning of a “new normal,” brought on by a series of earthquakes, forever changing their communities. On September 4, 2010, the central Canterbury region (including Christchurch) experienced a 7.1 magnitude earthquake, earning its spot in history as the largest earthquake to affect an urban area since the 1930s (see photo #1). Thankfully, no lives were lost. The community quickly developed a rebuild strategy due to the approximate $5 billion in damages and began working toward a “business as usual” status.

The people of Canterbury were challenged by Mother Nature again on February 22, 2011, delivering a 6.3 magnitude earthquake. Thought to be an aftershock, its proximity to a fault line near the city resulted in catastrophic damage, this time leaving 185 people dead and several thousand more injured. Compounding the destruction of the September event, thousands of homes, businesses, churches, and infrastructure networks were left significantly damaged. Buildings collapsed and transportation routes became impassible. Rough estimates suggest that the cost to repair all aspects of the damage could reach well over $20 billion.

Furthermore, the earthquake “shaking” caused liquefaction to occur. The U.S Geological Survey (USGS) defines liquefaction as “a process by which water-saturated sediment temporarily loses strength and acts as a fluid, like when you wiggle your toes in the wet sand near the water at the beach.” This process is said to be responsible for causing over 400,000 tons of silt to surface, in turn creating extensive damage. Thousands of aftershocks have occurred since the 22nd of February. The New Zealand government has allocated $4.8 billion to rebuild infrastructure in the greater Christchurch area, with the Crown committing $2.9 million and the Christchurch City Council providing $1.9 million in funding.

As a 2014 Jennings Randolph Fellow, I was afforded the opportunity to witness firsthand the aftermath of the earthquakes, which have done a good job of shaking up the region’s infrastructure but the spirit of the Kiwi has remained resilient. The strength of New Zealand’s community is something to aspire to. The rebuild process has by no means been easy but the community has pulled together to keep moving forward.

Arriving first in Auckland, I attended the Institute of Public Works Engineering Australasia New Zealand (IPWEA NZ) national conference. As a keynote speaker, I discussed the role of public works professionals as first responders in the United States. The conference theme was “Leading Tomorrow’s Infrastructure: Collaborate, Transform, Deliver” and in true fashion delivered exceptional educational sessions, discussing asset management, demography, economics, leadership and many other key topics focusing on strategies for planning tomorrow’s infrastructure needs. Strong networking relationships were formed with my new Kiwi, Aussie and even American public works friends.

At the conclusion of the conference, I spent the next two weeks conducting a work study tour. With the help of IPWEA NZ, I had the opportunity to meet and tour with ten different organizations ranging from local councils to central government agencies throughout Auckland, Wellington and Christchurch.

My first stop on the study tour was Auckland Council. As New Zealand’s largest city, Auckland is home to 1.5 million people.
million people and 180 ethnicities. I spent the day meeting with Auckland Council staff who shared knowledge and best practices for emergency management, asset management, infrastructure, stormwater, and water/wastewater.

Next, I traveled to the nation’s capital, Wellington (see photo #2). As the southernmost city on the North Island, approximately 449,000 people call Wellington home. The studios responsible for films like *King Kong* and the *Lord of the Rings* trilogy are also based in the region. I had the opportunity to spend the day at The Ministry of Civil Defence & Emergency Management and even got to tour the National Crisis Management Centre, which activates during a state of national emergency (see photo #3). I learned that New Zealand’s emergency management practices are more aligned with our practices than I had anticipated. They even use a similar incident management system, known as
Coordinated Incident Management System (CIMS) and it is comparable to our National Incident Command System (NIMS).

Wellington City Council staff took me on a tour of the city’s horizontal infrastructure. Wellington Regional Emergency Management Office (WREMO), which is responsible for the region’s nine local authorities, exchanged knowledge regarding their successes with community resilience strategy and various plans regarding the 4 R’s of emergency management (Reduction, Readiness, Response and Recovery).

The third part of my tour brought me to Christchurch, home to approximately 460,000 in the Greater Canterbury region (see photo #4). Upon arrival, it is clear that there is still much work to be done with the rebuild process (see photo #5). Despite the construction, it is also evident that the community is resilient. Bright colors are infused into the scenes, including building murals and eclectic art structures representing the mission to keep the community moving forward. One of my favorite parts of the city was the Re:START Mall. Located in the heart of the city, shipping containers have been painted vibrant colors and transformed into retail stores, banks and food vendors.

Photo #4: View of the City Centre from my hotel room in Christchurch

The mall and artwork are just a few examples that represent the strength, teamwork and adaptability that Kiwi communities embody (see photo #6 on page 29).

A country of approximately 4.2 million, New Zealand traditionally has a strong volunteer network participating in a wide range of community functions. However, a unique movement developed after the September 2010 earthquake—University of Canterbury students unified and created the Student Volunteer Army. Created through a Facebook page, students could find out how to volunteer during the different phases of emergency events. First the group organized volunteer placement to provide transport, food and support for students. Additionally, they focused on projects such as clearing over 65,000 tons of silt caused from liquefaction. The group continues to evolve today.

The University of Canterbury has continued to make earthquake research a priority with the development of the Quake Centre. I was able to tour their facilities and was impressed with the work they are doing regarding earthquake engineering. Another important story to share is the development of Stronger Christchurch Infrastructure Rebuild Team (SCIRT). SCIRT was organized to rebuild the city’s earthquake damaged roads, freshwater, wastewater and stormwater networks. The organization’s model is a unique partnership between Christchurch City Council, Canterbury Earthquake Recovery Authority (CERA), New Zealand Transport Agency (NZTA), City Care, Downer, Fletcher Construction, Fulton Hogan, and the MacDow Fletcher Joint Venture.

I also met with CERA and Christchurch City Council staff members for individual meetings. Southern Response, an insurance company that holds many of the residential claims in the area, also graciously allowed me to tour some of their project sites and project management operations. Fulton Hogan, a New Zealand-based construction company, took me on a tour of their facilities and operations, which included their quarry and asphalt plant.

In summary, this experience has surpassed my expectations. There is so much more to say that I cannot fit into the confines of this article. Just like us, New Zealand public works professionals are the “first to respond” and “the last to leave.” I have made strong networking connections and I know the knowledge exchange will endure beyond the fellowship timeframe. New Zealanders proved to be leaders in the public works, emergency management, and asset management whelms. Each agency
I met with showcased topnotch strategies and work plans, as well as innovative processes for keeping the community informed and engaged.

I would like to take this opportunity to thank my Kiwi and Aussie friends that I have met along the way, beginning with Ross Vincent, Chief Executive of IPWEA NZ and the IPWEA NZ leadership for being a key resource in coordinating my study tour. I would also like to thank all of the staff with the organizations listed throughout the article for taking time out of your day to share your best practices. You truly made my trip a “once in a lifetime opportunity.” You were so welcoming, open to exchanging information and exuded a high level of professionalism. I will continue to share my findings and implement the best practices learned abroad to strengthen the local emergency management framework in my public works department.

Thank you to the City of Palm Bay, and APWA (National, Florida Chapter, and Central Florida Branch partners) for supporting me on this journey as it would not have been possible without you.

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Debris plows in Florida: Thinking outside the box

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City of Largo, Florida
APWA President-Elect

ince beginning my career in public works many years ago, one thing I have always marveled at is the ability our folks have to adapt existing equipment to unexpected conditions, as well as finding new uses for old technology. Our employees’ continual penchant to innovate is one of the things I like most about working in this field. During a comprehensive review and update of our department’s Emergency Operations Plan, staff determined the details of the plan could not be supported by the City’s current conditions. The largest regular threat to City-wide safety and operations on the west coast of Florida is debris blocking roadways after wind-generated events. These roadway blockages can occur following not just tropical storm/hurricane events, but also following the numerous heavy thunderstorms which pass through the area on an almost daily basis during the annual summer “rainy” season.

For many years our emergency plans were written around “The Big One,” a hurricane with catastrophic winds and storm surge. However, in over 100 years, this event has luckily not occurred—despite a number of close calls. Our written plans called for the placement of a piece of heavy equipment and a chainsaw crew to be stationed in each fire station during tropical storm or hurricane warnings. The City Fire Department operates out of six fire houses across their jurisdictional area, meaning we would need to assign six loaders or backhoes with operators. The problem in our planning arose when it was determined that the City did not have six such pieces of equipment, meaning a primary component of our road clearing plan could not be implemented. How this was originally placed in the plan given the obvious deficiency is still not clearly understood, but the plan obviously needed a fresh look. Additionally troubling was that in reviewing historical events, we average one non-hurricane wind event every two years, either tornado or micro-burst, showing that our planning had not been truly an all-hazards focus and that more common events needed to be considered and included.

Staff was in the process of preparing the annual updates to the Capital Improvement Plan (CIP) for the upcoming five years, and decided the now-noted deficiency warranted requesting additional equipment capable of performing road-clearing operations. A subsequent request was made for two additional front-end loaders, predominantly to be placed on stand-by for debris events, with some daily work tasks. In discussions during CIP review, City Administration was reluctant to add two expensive pieces of equipment to the City’s fleet for potential use only once or twice a year. The options of leasing seasonally were discussed, but the cost-to-benefit ratio was not favorable, so this option was discarded. City Administration asked us if there were any other alternatives available that could be used to clear debris in emergency situations.

With tongue somewhat planted in my cheek, I responded that in areas which experience snow, many communities had successfully used their snowplows to move light debris from the roadways after wind storms, tornados, and micro-bursts. Surprisingly, I was asked how many such plows we might need to make a dent in our deficiency, and what they might cost. After some discussion our staff agreed that two such plows would be a good start, and surprisingly funding for two “debris plows” was added to our annual CIP request for the next year. This proposed purchase was the subject of some good-humored questions and comments during that budget cycle, and the next year’s as well, when the plows were actually scheduled for purchase. At both the CIP hearings and the annual budget hearings, the plows were openly discussed, and remained an approved purchase.

Already scheduled to attend the 2013 North American Snow Conference in Milwaukee, Wisconsin as part of my official APWA duties as Director-at-Large for Fleet and Facilities, I took that opportunity to approach several plow vendors, asking them for information and pricing, much to the amusement of many sales staff, and far too many jokes about selling igloos.
and icebergs. Two of those vendors followed up with us, and after review a request for pricing was sent to those vendors. Subsequently two plows were ordered from Falls Manufacturing based primarily upon their cost, as both vendors’ equipment had been determined capable of fulfilling the intended purpose.

The plows arrived in sunny Florida shortly after, and in the midst of a Florida winter. They were placed in the back of the equipment yard with installation scheduled in late April prior to the start of our tropical storm season.

Shortly after arrival, the City began receiving calls from a local news outlet’s investigative team asking for purchase orders and meeting minutes related to “snow plows.” Being proactive we reached out to the reporter making the requests, and found that someone had called to report a “waste of taxpayer dollars” from this obviously wasteful purchase. Staff met with the local reporter, explained the reasons behind the purchase and the cost differential between the purchase/lease of heavy equipment as opposed the purchase price for the two plows, and participated in a taped interview. The reporter saw the benefit, what we were attempting to accomplish, and in the subsequent on-air report praised the City for thinking outside the box and being fiscally creative.

In addition to these plows, the City also purchased large debris magnets, usually used on airport runways and taxiways. On the vehicles equipped with plows these 10-foot-wide magnets will be mounted between the plow and the front wheels to collect the majority of metal debris prior to driving over it, reducing the frequency of tire failure. Additional magnets were also purchased to be mounted on the front bumpers of the City’s ambulances, a few police vehicles, and a few public works trucks during tropical storm/hurricane warning periods, as well as in the events of other wind events. When compared to the cost associated with tires, the costs of the magnets will show benefit the first time they have to be used. The combination of the plows for light debris, magnets for metal components, and heavy equipment for larger debris and trees has greatly improved the flexibility and response capacity of Public Works to both the common and extraordinary weather-generated events.

In all honesty, we in the City of Largo hope we never have to use any of these devices in a real action event. However, it is comforting to know that we have the plan and now the equipment to respond properly and quickly if the need arises.

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One of the 14’ debris plows mounted on a City of Largo truck for tropical storm season. Paired with a 10’-long magnet these units will remove lighter debris and small metal objects from the roadway following heavy wind events including micro-bursts, tornados, and straight-line winds common during summer storms. If needed they will be indispensable following a hurricane to clear the 20 miles of six-lane highways within the city, allowing for access by Fire Department and EMS services to and from local hospitals.
Fire apparatus collective purchasing: better prices, more peace of mind

Thomas Collins, PWLF  
Deputy Director of Public Works and Supervisor of Equipment Maintenance Division  
Town of Natick, Massachusetts  
Member, APWA Fleet Services Committee

The acquisition process for purchasing new fire apparatus is a necessary evil every fleet manager is familiar with. We have all experienced the expense, delays, intricacies of procurement, and above all, the imperative to safeguard mission and personnel.

This is where an innovative group purchasing program run by the Fire Chiefs’ Association of Massachusetts (FCAM) comes to the rescue. The FCAM program is a convenient, cost-effective way to purchase a wide range of National Fire Protection Association (NFPA)-compliant pumper engines, aerial equipment, platform trucks, ambulances, and other equipment from multiple vendors at competitive prices. FCAM is available to fleet managers nationwide via the membership of their Fire Chief.

The procurement process is handled by the Metropolitan Area Planning Council (MAPC), which is the regional planning agency for greater Boston and the Purchasing Agent for FCAM. MAPC is rightly known for its expertise in procurement and its responsiveness to the needs of FCAM members.

Participation in this program offers a welcome sense of predictability, in that it allows departments to streamline the specifications and ordering process. It is a type of “one-stop shopping” that allows fleet managers the choice of apparatus, manufacturer, and price. This procedure stands to save taxpayers tens of thousands of dollars, all while affording them peace of mind that their apparatus acquisition has been conducted efficiently and in compliance with relevant law.

Before Natick began purchasing through FCAM, I participated in the acquisition of many vehicles: ten ambulances, two ladder trucks, twelve pumpers, and numerous support vehicles for the Chief, Deputy Chief, fire inspectors, and fire prevention. Between the time spent with committees, designing, writing specifications, advertising, and the bid process, we devoted hundreds of hours and hundreds of thousands of dollars to a process made unnecessary by the FCAM program.

Our participation in FCAM has reduced the number of meetings we need with fire personnel, manufacturers and vendors. This saves a great amount of time, which is always in short supply.

The money saved is significant, as well. For example, our most recent purchase through FCAM is a pumper engine that will be delivered in mid-August. The FCAM municipal group purchasing program has saved us approximately $45,000 to $50,000 in comparison with our previous purchases of same-

An example of the apparatus purchased by Thomas Collins through FCAM. Pictured with Natick Firefighter/Paramedic Matthew Mullen II, Town of Natick Fire Station, Natick, Massachusetts, July 24, 2014. (Courtesy Marilyn Humphries)
There is no shortage of places to invest the money saved—including additional equipment, such as hoses and tools, to outfit the truck. As always, there is the fine print, but for this procurement, it is minimal. The low 1.5% transaction fee is built into the vendor pricing and is payable by the vendor. Furthermore, this fee is capped at $6,000 per apparatus—an amount usually far exceeded by the savings. Additionally, if the FCAM program exceeds a certain sales volume, rebates are given. Last year, rebate checks were issued to every department that purchased apparatus, and this year is looking even better.

To see if your municipality might benefit from the FCAM program, visit www.mapc.org/collective-procurement#fcam.

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We’ve all seen the headlines: “Middle East Unrest Causing Instability in World Oil Markets”¹ and “Hurricane Threatens Refineries – Expect Gas Price Spikes.”² Inevitably, these headlines lead to… “Fuel Prices Squeeze Cities,”³ “Police Struggle with Fuel Costs”⁴ and “Volunteer Fire Departments Struggle with Rising Fuel Prices,”⁵ headlines that really hit close to home if you are a municipal fleet manager!

All municipalities have had to deal with shrinking budgets due to declining revenues and rising pension costs. The so-called “Great Recession” has forced all who are charged with Municipal Fleet Management to look for new ways to do more with less and stop the bleeding when it comes to vehicle operating costs. Ask any city finance director and he or she will tell you that personnel costs account for the lion’s share of any municipal budget. Since 2009, cities have been faced with layoffs, cancelled contracts with small businesses and vendors, and sizable budget shortfalls. Most organizations have cut personnel to the bare minimum and are now struggling to provide basic services with fewer boots on the ground. Any further reductions in the workforce would most likely come with a loss of services so municipalities are looking at other ways to reduce their operating costs in all departments including their fleets.

In a normal year, the cost of fuel may only be as low as 1% to 2% of a department’s operating budget. While this in itself is not a huge portion of the overall operating costs, with budgets as tight as they are, an unexpected and significant increase in any one line-item can send the whole budget into a tailspin.

According to the U.S. Energy Information Administration (EIA), the highest U.S. average retail price for a gallon of regular gasoline ($4.11) was recorded on June 7, 2008. On an inflation-adjusted basis (expressed in real June 2014 dollars using the Consumer Price Index) the highest monthly average price was $4.43 per gallon in June 2008. Not coincidentally, many municipalities had to make significant changes in their operations that summer in an effort to conserve energy as well as their dwindling fuel budgets. Some agencies had expended an entire year’s fuel budget in only six months and were forced to go back to their governing bodies and request emergency budget amendments in order to keep operating.

There are many reasons why gasoline and diesel fuel prices fluctuate. In the summer of 2008 the high prices were blamed on commodities traders who drove up the price of oil, even though supply increased and demand fell. The EIA cited an increased flow of investment money into commodities markets. In other words, money that used to be invested in real estate or the global stock market was instead being invested in oil futures. Whether fuel price spikes are caused by commodities traders, global political unrest, extreme meteorological events or refinery shutdowns, fleet managers cannot prevent or even predict when these spikes will occur. But there is a tool they can use to help smooth out those spikes and budget for energy costs more confidently and accurately.

Airlines and other large fuel-consuming companies have been using a tool called “fuel hedging” for many years now. Fuel hedging is used to reduce or eliminate a company’s exposure to fluctuating fuel costs. It is a contractual tool allowing a company or organization to fix or cap a fuel price at a certain level and period of time. Until recently, this tool has been utilized exclusively by larger organizations where fuel is a significant portion of their overall operating costs and erratic price spikes can negatively affect the bottom line.

Several years ago, a fuel supplier in the northwest suburbs of Chicago started offering what they call a “Fuel Freeze” program. This is a hedging program that provides the opportunity for a fuel provider’s clients to take control over fuel prices and also provides a budgeting tool to predict future costs. Participants can secure pricing for all or part of their expected purchases since there are no minimum volume requirements. Customers do not pay for the fuel upfront so it does not diminish your cash flow. This is an agreement between both parties to buy “X” amount of gallons of gasoline
and diesel fuel at “X” price per gallon in a future month.

Historical data going back fifteen years shows that in the first two months of the year, fuel prices are typically at or near the low price point for any calendar year and this is when prices are usually locked in. Locking in prices before summer demand pressures kick in provides an excellent opportunity to flatten out the volatility and risk matrix associated with buying petroleum-based products. This program gives the fleet administrator the tool to budget real fuel numbers that cannot and will not fluctuate, even in the most volatile markets. Program participants know their delivered fuel rate for each month going out one full year into the future and can then contract to purchase as many gallons as they choose at those locked-in rates. When the forward months arrive, customers are billed the delivered rate, regardless of where the market has moved. Of course there is risk involved. If the price of fuel declines, the organization will effectively be forced to pay an above-market rate for fuel. For this reason most entities that participate in a fuel hedging program only hedge a portion of the fuel they expect to purchase during the contract period.

Fuel can be a fleet’s largest variable cost and significant fuel price swings can play havoc with any fleet budget. Better up-front risk planning using a fuel price protection plan can help protect against fuel price increases and eliminate fuel budget variability. Hedging should not be viewed as betting, investing, or a way to guarantee savings. Hedges should be embraced as a chance to avoid some volatility in operational costs. As with any strategy, fleets must weigh the pros and cons to determine if a fuel hedging strategy is suitable to their specific needs.

Webster’s Dictionary defines the word hedge as “a means of protection or defense” (as against financial loss). If this kind of protection is important to your organization, then fuel hedging may be worth looking into.

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1 Oil and Gas Financial Journal, March 1, 2011
2 CNN Money, October 29, 2012
3 Los Angeles Times, June 30, 2008
4 The Spokesman Review, August 7, 2008
5 Station KSWO, Lawton, Okla., June 16, 2008
For today’s public works sector fleets there is one source of pressure that supersedes all the others—budget. Continued requirements to lower capital expenditures and reduce operating costs to compensate for tax revenue shortfalls has become the daily toil for many public works managers.

Faced with the reality that less revenue equals less budget, public works managers are constantly searching for opportunities to cut costs while trying to maintain their fleets at an acceptable operating level. Still, tightening budgets does not address the key variables that can impact an operating fleets’ bottom line: the overall unpredictability of fuel prices and the always-pending compliance with new regulations.

For any public works fleet focused on its bottom line, the management of time and the establishment of reliable resources can occupy an enormous amount of personal energy every day. The employment of the newest technologies in fuel management systems can help consolidate data, track fuel storage and use, and provide assistance projecting maintenance expenses.

**Fuel Supervision**

A successful public works operation requires daily coordinated fuel supervision. The newest fuel management programs create great value by saving time, eliminating stress and boosting the bottom line. New technologies are capable of centralizing various fuel-related processes into one place for seamless access and unparalleled efficiency.

Tracking fuel inventories for daily vehicle usage is the most obvious benefit of a fuel management system, but today’s most comprehensive fuel services also meet additional,
more complicated essential needs such as environmental compliance management, remote monitoring/alarm management, and even service contractor database management.

Current fuel and transportation costs remain unpredictable, and public sector management that focuses on improving their fueling operations will see today’s automated fuel-management systems as a real chance to positively impact their overall operations. The modern automated fuel management system can effortlessly centralize all the potential data associated with the fueling operation. Indeed, where there was once a scattering of variable data streams to follow and attempt to bring together for a bigger picture understanding of the business, there is now a one-stop shop where all of it can be accessed and analyzed.

Given the diversity of potential daily tasks, wide variety of fleet equipment and vehicles, and a 24/7/365 responsibility, the public works sector presents its own unique challenges for fuel management. Centralizing the capture and storage of key fueling-site information through automated processes ensures the end-user creates and maintains consistent site operations, delivering maximized operational efficiencies and site accountability.

The key to any fuel-management system is that it can be tailored to any business’ needs and customized to focus on the most important aspect of the business. Today’s systems have become fully customizable. The very best systems are capable of offering their customers any number of individual fuel management services. The customer should have the option to choose enhanced management of very specific services or opting into a fully integrated solution, depending on their needs.

With the implementation of an automated fuel management system, a public works manager will have the ability to oversee all of the services. In addition to the time savings, the reduction of the carbon footprint is often a residual benefit of the new fuel management tactic.

Real-Time Fuel Tracking
Real-time access to fuel inventory levels and fueling habits at any time of
the day or night is a huge advantage for any public works operation. A municipal fueling operation can have many variables, from the amount of employees accessing the fuel to the diversity of equipment/vehicles being fueled, all of which can impact the bottom line.

Today’s best automated fuel tracking systems deliver an accurate account of fuel usage data from a facility, including exactly where that fuel is going. This can immediately eliminate any guesswork on expenditures for a day, week, or month, and it is often an opportunity to identify or deter theft.

All fueling activities, regional or national, may be monitored from a central office. Reporting on fuel volumes and individual routes is easily noted and monitored for immediate supervision. Increasingly, data can be monitored and analyzed for future planning.

The three most prominent features of a quality fuel management system capable of positively impacting a public works operation are:

- Service maintenance
- Alarm management
- Environmental compliance

**Service Maintenance**

This capability is all about reducing maintenance costs. If you reduce maintenance and the costs associated with it, you can save money and more effectively keep equipment and vehicles operating efficiently. Maintenance issues cause headaches, not only when a piece of equipment fails but also when the maintenance issue needs to be documented. If this data is not accurately recorded, the public works manager runs the risk of overpaying for a service call or repeating service calls.

Fuel management services can let the operator know how much time the technician spent onsite, which is something that can be hard to track by an onsite manager or clerk. By accurately tracking common maintenance issues, it becomes much easier to anticipate maintenance expenses, identify significant trends and plan accordingly for the cost to keep the fleet running.

**Alarm Management**

Alarm management is a critical function to ensure response to alarm notifications as quickly as possible. If mismanaged, this critical function can cost a municipality a significant amount of money through fines and/or potentially unplanned maintenance expenses.

While alarm management has been a traditionally labor-intensive manual job, an automated fuel management system allows this difficult task to be outsourced to a company that can diagnose, solve and document alarm conditions immediately. Detecting an alarm event at the earliest possible point is essential in identifying a potential environmental risk and mitigating the costs that can be associated with environmental remediation. Environmental fines and cleanup costs have been steadily escalating, and a quick response to a single alarm can mean the difference between being within budget or woefully in the red.

**Environmental Compliance**

Compliance management for environmental regulations can be one of the most complex and intimidating functions for any public works manager. Today’s top automated fuel-management systems have been designed to track and update compliance data and incidents 24/7/365.

Compliance management can never be allowed to fall off the radar or become a low priority; the risks and the possible monetary penalties are too potentially damaging. Automating the management of this process enhances the value of the system by helping assure compliance without increasing the amount of employee interactions or the need for a supervisor to understand the complex environmental policies.

**Key Public Works Data**

The public works sector presents its own very unique daily challenges that can create stress and immediate impacts on an operation’s annual budget. Fuel services represent an especially difficult aspect to managing an operation, but the newest fuel management systems can help centralize data and assist in a more efficient process that will provide some needed relief from zero-growth budgets and municipal cuts.

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Sharing fleet services

Angela Marazita, CPFP
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Fleet consolidation or shared services...which one is your municipality undergoing? Fleet consolidation lends itself to being a complete centralization project from procurement to disposal of vehicles. The alternative is to share services among entities by determining where these opportunities exist. The famous saying of “doing more with less” is still a common thread among so many organizations. At the City of Windsor, a Fleet Shared Services Project was initiated by City Council to investigate shared service opportunities between the City of Windsor’s Fleet Division and its Agencies, Boards and Commissions. Selected as one of five corporate priorities by City Council, the process to study shared opportunities among the various fleet entities began.

A project manager was assigned and a project team was established that brought together the fleet managers from the various entities as well as a finance representative from the City of Windsor:

First-of-its-Kind Mobile Weather Technology

The Vaisala Condition Patrol stands apart in a crowd of road weather products. Condition Patrol is a set of road weather sensors that attach to a patrol vehicle and display conditions to the driver. The data improves decision making by viewing it with fixed road weather information, or with other Condition Patrol vehicles.

To learn more visit us at www.vaisala.com/roads
or contact us sales@vaisala.com
• City of Windsor Operations Department – Fleet Division
• City of Windsor Parks and Facilities Department
• City of Windsor Fire and Rescue Services
• Transit Windsor
• Windsor Police Services
• Enwin Group of Companies

Each of the entities had their own fleet asset management strategy, their own staff and repair facility. Key factors of the review process are detailed below.

Fleet Managers Group
At the onset of the project, it came to light that all of these separate fleet groups were not communicating with each other on a regular basis. This spearheaded the formation of a Fleet Managers Group. The group experienced great success from its first meeting as information was exchanged regarding operations, trends and challenges. Benefits were achieved from each other’s experience and skills. The Group continues to meet regularly.

Constraints to Sharing Services
A review of collective agreements as well as provincial and federal legislation was completed to determine if there were any labour relations or legislative barriers. None were identified but there were concerns that would have to be addressed if work was shared. Some of the issues are as follows:

- how many collective agreements exist among the fleet areas
- how are reductions in the complement of employees addressed in each collective agreement
- how are layoffs due to outsourcing addressed in each collective agreement
- how is technological change or other change addressed in each collective agreement

Financial Model
The Fleet Managers Group adopted a financial model to calculate a shop door rate for fleet maintenance services. The exercise gathered all financial data including overhead costs and billable hours to determine how much each shop would have to charge a third party to break even. A shop door rate was determined for each fleet area with the acknowledgement that a more specialized shop may have a higher rate. The analysis allowed fleet managers to learn from each other and determine why some costs were higher and some were lower. This analysis was determined to be beneficial and has become an annual exercise to calculate and compare rates among the fleet areas.

Super Garage
With respect to a single facility or “super garage,” it was determined that a custom-built facility that is centrally located to share fleet service among fleet areas would not be attainable due to the capital construction costs. Also, there is a benefit from servicing vehicles where they are parked. Maintaining vehicles overnight or when vehicles are not being used avoids downtime as well as the additional costs related to shuttling vehicles to a central location for maintenance. There were also concerns with business continuity.
in the event of a work stoppage and the priority of workload if there was a centralized facility housing employees from different fleet areas with different collective agreements.

The City of Windsor’s review of a centralized service garage suggested that a “service where you park” approach and negotiating the increased use of afternoon and night shifts would be more efficient than consolidating maintenance facilities.

Successful Shared Services
The fleet shared services project highlighted the extent to which each of the fleet maintenance operations was unique and specialized. Some services were already being shared and each fleet area already contracted out significant portions of their work. It was during the project that the fleet areas became more familiar with each other and additional opportunities to share services emerged.

The fleet management system utilized by the corporate fleet and transit areas was expanded into the other fleet areas. This created an opportunity to share knowledge and resources to implement and maintain the system. Technical training for technicians was scheduled to include all the fleet areas and further training and development opportunities are planned on an ongoing basis. When appropriate, tenders are issued cooperatively to achieve competitive pricing. The fleet managers also contact each other when purchasing fleet-related goods in order to determine if there is a shared opportunity. Furthermore, vehicle acquisitions are being coordinated between fleet areas when feasible. From a servicing perspective, the fleet areas utilize each other’s services regularly. While sharing of repair and maintenance services existed prior to the shared services initiative, this project and the open communication process that exists among the fleet areas has created additional opportunities.

Prior to 2011, the fleet areas at the City of Windsor were already sharing some services; however, it was the Fleet Shared Services Project that highlighted this and brought it to the attention of senior management including the Chief Administrative Officer and City Council. Today, the Fleet Managers Group remains committed to continuous improvement in the delivery of fleet services. Whether your organization is considering consolidating fleet entities into a centralized structure or investigating opportunities to share services, the exercise is a beneficial one to optimize budgets and gain efficiencies.

Angela Marazita can be reached at (519) 255-6560 or amarazita@city.windsor.on.ca.
“With new technology and everyone wanting to be ‘connected’ we are receiving more and more requests from private firms, i.e., hospitals, schools, private businesses, that want to connect to all of their out-buildings via fiber optics; however, we do not have a process in place. We have indicated they could contact our local power company and see if the power company would let them install additional lines on their poles; however, this still may require the applicant being in the right-of-way to cross our road and does not answer the question with respect to moving during a city project. If the power company does not want them on the poles and we are looking at them being in the right-of-way, then we have concerns about locations, construction, responsibility, loss of use of our right-of-way, etc. What are other cities, large or small, doing with this issue?”

– Chris Davies, Public Works Director, Lewiston, ID

“Progress always brings new issues for us. This is one I have not seen discussed but I can certainly relate to your confusion and frustration. Getting broadband technology in rural areas and smaller cities has been a constant struggle. While some cities have entered the fiber optics arena, most have not. If your agency has addressed this issue, please share your experience with me and we’ll get the information out to others who are struggling with the same problem. Please send your response to be at adaniels@apwa.net. Thanks, in advance!

“Are we using the Complete Streets program to improve the streets in our city. Sometimes we get questions about whether what we are planning will really work well to accommodate all the transportation and healthy living for all generations. Is there something out there that might help?”

Have I got a deal for you. Congratulations on adopting the Complete Streets philosophy. By doing so you have already committed to creating streets that will meet many needs. The next useful step for you may be a new web portal—www.restreets.org—which is dedicated to improving city streets. The web portal answers the question: What would streets look like if they actually accommodated people of all ages and abilities, promoted healthy urban living, social interaction and business, and supported regeneration of the environment? Pretty major considerations. The objective is to provide clear design ideas for cities to revitalize American streets, so they serve a wide range of community needs, including transportation, commerce, education, recreation, and gathering. Building on the Complete Streets movement, re:Streets has developed a comprehensive design manual for creating streets that promote expanded functions and turn new design ideas into a series of best practices that can be applied to any community. The interactive web portal is focused on practical, implementable solutions with best practices, design ideas, and case studies. It’s organized by the functions of a street: mobility, way finding, commerce, social gathering, events and programming, play and recreation, urban agriculture, green infrastructure and image and identity. re:Streets is available to anyone who wants to design a better street and, as solutions are tried and streets are built or remodeled, the results will be added to the web portal, creating an evolving, collaborative reference for improving communities. For more information on re:Streets, visit www.restreets.org.

“I think we procrastinated too long in submitting an application for Accreditation so we can use the 7th edition of the Public Works Management Practices Manual. We have been working for the past year or so but haven’t been ready to fully commit until just now. Is it too late? I heard the 8th edition was released in Toronto in mid-August. Help!”

Never fear. All is not lost! You are correct that the 8th edition was released on Saturday, August 16, during the Self Assessment/Accreditation Workshop...
The new Manual has one new chapter, Environmental Management Systems, and a few revised and updated practices throughout the Manual. Having said that, if your agency is ready to commit to the full Accreditation process, you have until October 31, 2014, to do so and ensure that you can continue to finish the process using the software and documentation you are currently using. The three-year contract period will begin when the Agreement and Application are signed and you will NOT be required to meet all the new practices in the 8th edition. After October 31, anyone signing a contract will be required to utilize the 8th edition Manual and software. If you are not ready to commit by this deadline, we will be happy to sell you the 8th edition of the Manual and new software and import all you have entered into the new program. If you have questions or concerns, please contact me at adaniels@awpa.net.

Q  
“Here we go again. It’s been awhile since we heard much out of EPA about Global Warming or Climate Change but now I hear they have issued a new Policy Statement on Climate Change Adaptation. What’s this going to stir up with our residents?”

A  
Probably not much since the new Policy Statement issued by the Environmental Protection Agency is designed specifically to help states, tribes, and local communities to increase their resilience to extreme weather events and prepare for the impacts of climate change. While the debate continues to rage on Global Warming, the facts indicate the climate is changing dramatically in many parts of our country, and the impacts on our economies and quality of life are being severely impacted. The intent of this new statement commits the EPA to work with states, tribes, and local communities to increase their resilience to extreme weather events and prepare for the impacts of climate change. For more information visit the EPA website at www.epa.gov/climatechange/impacts-adaptation/fed-programs.html. Several agencies are involved in providing assistance.

Other ads from Nortrax Inc.
The all-new 2015 F-150 delivers an impressive combination of power, capability and efficiency—from advanced materials that improve durability and inhibit corrosion, to faster processors that enhance driving performance, to breakthrough cargo management and towing solutions.

Up to 700 pounds of weight have been saved from the body, helping the F-150 tow more, haul more, accelerate quicker and stop shorter, and contributing to efficiency. Ford engineers selected high-strength, military-grade, aluminum alloys because of the metals’ unique ability to withstand tough customer demands.

Power of Choice

The tougher, lighter 2015 Ford F-150 welcomes two new engines to its four-engine lineup, providing choices to meet almost any customer need—from hauling tools to towing trailers. A new, available 2.7-liter EcoBoost with standard Auto Start-Stop and a standard 3.5-liter V6 engine with twin independent variable camshaft timing join the proven 3.5-liter EcoBoost and 5.0-liter Ti-VCT V8 engines that are available.

The 2.7-liter EcoBoost features a lightweight, compact design to deliver the same power as many mid-range V8s. This high-output, turbo-charged V6 broadens engine lineup by providing mid-range V8-like towing capability of 8,500 pounds, payload of 2,250 pounds, 325 horsepower, 375 lb.-ft. of torque.

Ford Auto Start-Stop technology—specially tuned for truck customers—shuts off the engine to save fuel when the vehicle is stopped, except when towing or in four-wheel drive mode. The engine restarts in milliseconds when the brake is released.

All Ford F-150 trucks benefit from standard Active Grille Shutters. Active Grille Shutters stay open when extra engine cooling is needed, such as during low-speed stop-and-go driving or while working in hot weather. They automatically close to reduce aerodynamic drag at cruising speed.
Bestseller for four decades
F-150 is part of the Ford F-Series truck lineup, America’s best-selling truck for 37 consecutive years and America’s best-selling vehicle for 32 years.

Ford understands customer needs by offering a broad selection of trim levels in the full-size pickup segment. The five available primary trims are XL, XLT, Lariat, Platinum and King Ranch with corresponding engine options providing the right fit depending on customer demands.

The base XL and XLT trim levels cost just $395 more than the equivalent 2014 trucks with more capability and available technology.

Driver-assist tech
The all-new F-150 offers a suite of smart driver-assist technologies on a pickup for the first time, including lane-keeping assist, adaptive cruise control and a collision mitigation system.

Lane-keeping assist uses the truck’s front camera system to monitor lane markings, and can alert the driver if the vehicle drifts out of its lane—even providing steering torque to pull it back into the center of the lane if needed.

Adaptive cruise control uses onboard radar to automatically slow the truck down when cruise control is engaged and the truck is approaching slowed traffic. The system automatically resumes the previous speed once the slowdown is gone.

The collision mitigation system also uses the truck’s onboard front radar to alert the driver if the truck detects a possible collision. The system can pre-engage the brakes to help the driver slow the truck even more quickly.

Ford’s Blind Spot Information System (BLIS®) with cross-traffic alert is a driver-assist feature that helps detect vehicles in blind spots during normal driving and traffic approaching from the sides when reversing out of parking spots.

Extra visibility
F-150 provides drivers extra visibility with a new 360-degree camera system. The system—the first of its kind for pickups—provides a view of all four sides of the vehicle, making it easier to navigate into parking spaces or around tight corners. Images from cameras mounted in the grille, tailgate and under each sideview mirror are stitched together to provide the driver with an overhead bird’s-eye view, and visibility of as much as seven feet of surrounding space.

LED lights provide more capability as well with innovative LED side-mirror spotlights allowing customers to illuminate the side of the vehicle for accomplishing tasks after dark and segment-first LED headlights providing better quality of light that is more representative of daylight colors. Moreover, the LED lights consume less energy than traditional headlamp technology and are designed to last the lifetime of the truck.

Enhanced box
The all-new F-150’s list of innovations includes customer-centric enhancements to the pickup box:

- A remote tailgate release, which automatically lowers the tailgate with the push of a button on the key fob—a first for a pickup truck
- Ford’s pioneering tailgate step, reengineered so it fully integrates into the tailgate, making it virtually invisible when not in use. The tailgate drops down into position in one easy motion. The grab handle is now housed inside the tailgate, which keeps the inner surface of the tailgate uniformly flat.
- BoxLink™ cargo management system includes lockable, die-cast aluminum tie-down cleats, and provides a unique interface to the box for improved flexibility and organization, as well as additional locations for tie-downs. Available segment-first cargo ramps can be stowed on the sides of the pickup box via the BoxLink system and mounted quickly on the tailgate to enable easy loading of ATVs, motorcycles or mowers.

Customer-driven inside and out
All models deliver enhanced interior and exterior designs that are the result of customer feedback collected over decades. The interior was created with comfort and utility in mind, right down to the buttons and controls that are sized so that a person wearing work gloves can operate them.

Embarking on a complete redesign of its award-winning F-150 pickup truck, Ford knew what it needed to do—design and build a pickup for customers who want a truck that is tougher, smarter and more capable, but can still meet their growing demand for efficiency.

F-150 will continue to be manufactured at Ford’s Dearborn Truck Plant in Dearborn, Michigan, and Kansas City Assembly Plant in Claycomo, Missouri.

For more information, please call Scott Fosgard at (313) 323-7189 or e-mail him at sfosgard@ford.com.
Products in the News

Sewer Bypass Pumps
Griffin offers an ever-increasing line of pumps to fit nearly any bypass application. Whether it be above-ground diesel-driven pumps, above-ground self-priming diesel, hydraulic-driven submersible pumps, or electric-driven submersible trash pumps, Griffin can provide a pump to fit your bypass pumping need. If we do not have a pump in our standard line, Griffin will build a pump to fit your municipality’s need. Griffin’s exclusive installations and experience guarantee a quality pump and system for applications from a few gallons to several thousands of gallons per minute per pump. Pumps from as small as 2” up to 24” are readily available. Call 713-671-7000, visit www.griffinpump.com, or send e-mail to gpe@griffinpump.com.

“They are working out great!”
ClearSpan Fabric Structures, the preferred choice for sand and salt storage, provides design-build and energy-efficient solutions for municipalities on a budget. When the Stephenson County (Ill.) Highway Department lost their old salt storage facility in a storm, they turned to ClearSpan Fabric Structures to quickly replace the structure for the following winter season. Due to the low cost, durability and corrosion resistance, County Engineer Chris Isbell purchased two Hercules Truss Arch Buildings for their winter supply. “We now have one building large enough to hold a full year’s supply of salt and a second building that can hold a half year’s supply of our aggregate mix,” explained Isbell. “The buildings are also very low maintenance. Budget dollars have been freed up for road maintenance that would have otherwise been spent on the upkeep of a traditional storage facility. They are working out great!” For more information, call (866) 643-1010 or visit www.clearspan.com/ADAPWA.

SNO-FLO: Snow & Ice Anti-Stick Coating
SNO-FLO is a new anti-stick coating that makes the job easier for public works departments when removing snow from downtown areas. SNO-FLO prevents high moisture content snow from sticking to your truck beds and loader buckets so it slides right out when you get to the dumpsite. No more costly delays caused by manually removing the snow from your truck bed! Apply SNO-FLO in seconds with our 25-gallon or 60-gallon powered sprayers. No mixing. Call 1-800-688-6221 or visit www.rhomar.com.

FabEnCo introduces new universal hinge mount safety gate
FabEnCo, the world’s leading manufacturer of self-closing industrial safety gates, has added its first universal hinge mount safety gate to the company’s full line of safety gate products. Designated the G Series, the new
Gate is available in galvanized carbon steel, carbon steel with safety yellow powder coat and stainless steel. It provides 22” of vertical coverage and can be adjusted up to six inches laterally to allow for extra flexibility for fitting unprotected openings. To learn more about the new FabEnCo G Series Safety Gate, please visit the company’s website at http://www.safetygate.com/ggatepr.html.

**Pick up large roadside debris quickly and safely**

The Barber ROAD RAKE is the safest, fastest and most effective means of removing debris from roadways. Retreads, mufflers and other large debris can now be removed from the road without a worker leaving the safety of the vehicle.

The ROAD RAKE Model 200 is towed behind a truck and its diesel engine powers the gutter brushes and a bar flight conveyor fitted with hundreds of alloy steel tines. The tines lift debris from the pavement; the conveyor elevates and carries it into a four-cubic-yard hopper that can be raised to eight feet for dumping. For more information, visit www.hbarber.com.

**Sustainable approach to mosquito control expanding**

Public works officials can combat mosquitoes and meet sustainability goals. Public works departments within a growing number of Midwest communities have switched this season to EarthRight™, the only public health mosquito control program using two materials listed with the Organic Materials Review Institute (OMRI), meaning they’re approved for use in and around organic gardens and farms. Natular® larvicide won the U.S. EPA’s Presidential Green Chemistry Challenge Award in 2010. Merus™, with an active ingredient derived from chrysanthemum flowers, is the first adulticide listed with OMRI for wide-area mosquito control in and around organic gardens and farms. For more information, call (630) 671-3167 or visit www.clarke.com.

**Hyundai Construction Equipment presents new Interim Tier 4 HL740-9A wheel loader**

Hyundai Construction Equipment Americas, Inc., a leading earth-moving equipment manufacturer, is pleased to introduce its newest wheel loader model, the HL740-9A.

The HL740-9A joins Hyundai’s new lineup of 9A series wheel loaders, all of which provide unmatched power and productivity across a wide range of applications including construction, demolition and recycling, utility and agriculture. This new model will provide operators with many improvements from previous models including a certified Interim Tier 4 engine upgrade, improved durability and enhanced operator comfort. For more information about Hyundai products, visit www.hceamericas.com or call 877-509-2254.

**Frog-4000™ Portable GC Analysis of VOCs in water, soil and air**

New Star Environmental introduces the Frog-4000, a fully-contained purge and trap GC system with analytical capabilities that are comparable to a commercial lab with the advantage of its compact size. The hand-held GC is designed for real-time portable analysis of VOCs in water, soil, and air. This unit can be used as a portable GC PID for environmental testing in the field, in a mobile lab, portable lab, or in a commercial environmental lab. The system has a micro preconcentrator, micro GC column, and a photoionization detector (PID). The FROG-4000 scrubs ambient air to use as the carrier gas. For more information, call (770) 949-9409 or visit www.NewStarEnvironmental.com.
COM-1700 Potentiometric Titration for vanadium redox flow batteries

**JM Science’s Potentiometric Titrator (COM-1700)** is used in research for improving the performance and reducing the cost of vanadium redox flow batteries for large-scale energy storage. This technology is being used in vanadium battery production to measure a battery’s charge. The COM-1700 can run four titrations and stirrers that easily allow end users to do different types of titration including potentiometric, photometric, polarization, and conductometric titrations in parallel. Configuring multiple titration stations with an automatic sample changer is also available. The COM-1700 has reliable high-speed communications with no response time lag and results appear in real-time. The compact design reduces bench space by 25%. For more information, contact us at 1-800-495-1678 or visit us at www.jmscience.com.

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National Public Works Week: May 17-23, 2015
Always the third full week in May. For more information, contact Jon Dilley at (800) 848-APWA or send e-mail to jdilley@apwa.net.

North American Snow Conference
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