

# APWA REPORTER

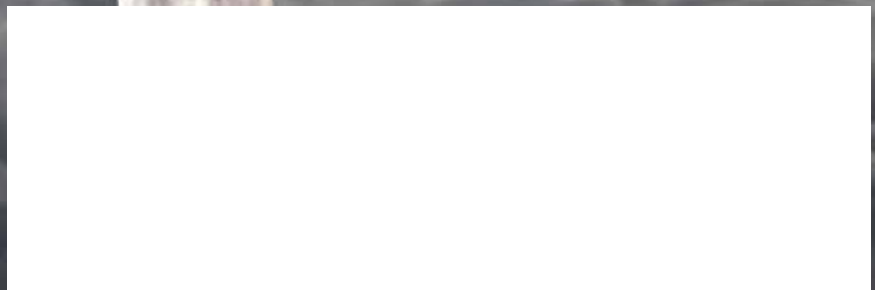


## The Seven Habits of Highly Dysfunctional Leaders

*Also inside:*

APWA Public Works  
Compensation Report  
and Salary Calculator

*See Page 6*



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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.

# APWA REPORTER

December 2018 / Vol. 85, No. 12

## LEADERSHIP & MANAGEMENT ISSUE



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Original cover artwork by Kelly Meyer, APWA.



# The leader who matters the most: you

**David L. Lawry, P.E.**  
APWA President

One of the great things about the field of public works is its tremendous and inherent variety. For most local governments, from city to city, the operational departments are fairly homogenous. If you've seen one police department, you've seen them all. Oftentimes, the only difference between fire departments across the country is the color of the trucks.

But, there are tens of thousands of public works agencies across the United States and Canada and there's no two of them alike. Some have streets, some have sewers, some have airports and transit systems, while others have parks, beaches and even cemeteries in their portfolio. Some have solid waste, many more don't. Some do building permits and code enforcement while others are the water utility and electric distribution for their community. A quick scan through the chapters of the accreditation manual show off the incredible variety of things different public works departments are tasked with.

Part of the challenge of an association like APWA is to bring value to their members. So, we have Technical Committees to define and refine the leading trends of the industry and educational resources to share our lessons learned from our peer experts to the rest of the association. But it's hard to find one thing that's of interest to all the

members of the association. Fleet managers have very different demands on them than stormwater coordinators or collection system supervisors. And street cleaning section chiefs often pay attention to very different things than the typical public works director. But there is one thing that speaks across all the wonderful variety of responsibilities entrusted to public works agencies: leadership. Every single one of our workplaces requires good leadership because of all the people working in every public works department.

That's the common connection between all our workplaces: us, the people in the workplace. Whether you work in streets or sewers or cemeteries. Whether you build projects or maintain them afterwards. Whether you work for a city, a county, or a private company. Whether you lead a workgroup or a small team. Or maybe you are just a member of a team. Maybe you even work by yourself, supervising no one else. We are the common ingredient. Every workplace has people in it.

Many of us in the public works industry do not think of ourselves as "leaders." That's always someone else: the director, the manager, the supervisor. But if you interact with people in any way, even if you are an office of one or at the humblest height of a hierarchy, you are a leader. And this issue of the *APWA Reporter* is for you. All of you.

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 To alert us of a change to your membership record, contact an APWA Membership Specialist at (800) 848-APWA or [membership@apwa.net](mailto:membership@apwa.net).

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The collection of articles at the heart of this month's issue is a take-off from that self-help blockbuster, *The Seven Habits of Highly Effective People*, but with a humorous twist: The Seven Habits of Highly Dysfunctional Leaders.

Chances are, as soon as you saw the title of the series, you had a particular person come to mind—perhaps a boss from your past. Hopefully not your present! But that first thought—"I know someone who fits that description"—comes easily to mind because of our own natural ability to find fault in other people first. It's just part of human nature.

But I'd like to invite you to take a closer look at the leader most easily examined but so frequently overlooked—yourself. Self-reflection, especially of the critical kind, does not come easily to many of the types of people who find themselves in service to the public—we get enough criticism in our daily work, right? But it's a nec-

essary part of improving how we work and how we better lead our workplaces and our communities.


The seven habits start out as a tongue-in-cheek way to get us to start thinking about our own habits by pointing first at those in others that we may not have remembered fondly.

A key part of the examination of each of the habits is learning how to recognize behaviors for what they are, in yourself and others. Just having a name to put to that bad behavior is helpful to begin curbing it, not just in yourself, but also in others. If you don't know what passive-aggressive behavior looks like, you can't recognize it when shows up.

There's also some tips and suggestions for how to deal with these bad habits, again, in yourself and in others. There are ways to deal with each of these habits that treat everyone with dignity and respect while remaining assertive and proactive.

## The seven habits start out as a tongue-in-cheek way to get us to start thinking about our own habits.

I think you'll find each of the articles a helpful tool for managing not only your interactions with vexing people, but also useful for helping ensure you are not yourself turning into someone else's idea of a dysfunctional leader.

While the business of public works is serious work, let's not take ourselves too seriously. Take some time to enjoy this issue and the articles in it and see how they apply to the leader who matters the most: you. 



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# Public Works: A Partner and First Responder

Scott Grayson, CAE, Executive Director, American Public Works Association

*Reprinted with permission from the International Association of Fire Chiefs, On Scene online newsletter, October 31 edition*

*In July, APWA reached out to IAFC leaders regarding their plans to launch its Public Works as First Responders campaign. We met with them to learn more about the effort. They assured us that public works directors will discuss this with their local municipalities and local organizations. We asked APWA to write an article for On Scene, summarizing the campaign's intent and purpose and how it may affect fire departments. Fire service leaders are encouraged to contact their local public works director for more information and be actively engaged in the discussion of how this designation will be used and addressed in your jurisdiction. – Mark Light, IAFC CEO and Executive Director*



Scott Grayson

In November 2017, the board of directors of the American Public Works Association (APWA) passed a motion to launch a campaign to promote Public Works as First Responders. So how did this come to be?

Recently, APWA developed and approved a new strategic plan involving all of our stakeholders in the development. This plan

will guide our association into the future. Our vision is “advancing quality of life for all.” Our mission is to “support those who operate, improve, and maintain public works and infrastructure through advocacy, education and member engagement.”

Two of our strategic goals focus on serving as the voice for public works and showing the value of public works to communities throughout North America. Why is this important? Much like firefighters and police, those who work in public works do not do what they do for recognition and kudos—although it is always nice when they are received. To this end, APWA has taken it upon itself to be the voice of public works and share with the public in the

United States and Canada the value of public works. One of the many important roles of public works is to serve as a first responder.

In 2003, George W. Bush, through a Homeland Security Presidential Directive (HSPD-8), declared that:

*The term “first responder” refers to those individuals who in the early stages of an incident are responsible for the protection and preservation of life, property, evidence, and the environment, including emergency response providers as defined in section 2 of the Homeland Security Act of 2002 (6 U.S.C. 101), as well as emergency management, public health, clinical care, public works, and other skilled support personnel (such as equipment operators) that provide immediate support services during prevention, response, and recovery operations.*

For APWA, it is not enough to just be called a first responder. We have embraced this title and realize it is important to us that we engage as first responders since we are responsible for emergency management and protecting, operating and maintaining critical infrastructure throughout the U.S.

Public works is charged with different duties during emergency situations than are firefighters; our skills, tools and professional experiences complement those of our first-responder partners.

I have been told by both firefighters and police that they would have great difficulty getting to an emergency scene if the roads have not been cleared of snow, ice or debris.

Public works and firefighters work hand-in-hand in many communities. For example, last year, two days after the Thomas fires had stopped burning, I was taken into the hills in Ventura, California, by the interim public works director and the fire department’s battalion chief. The battalion chief turned to the interim public works director, as we looked at the devastation and impending mudslides, and said, “We put out the fire, but now you and your team are on next to deal with the potential mudslides.”

Another way APWA members work with partners in emergency preparedness, response and recovery is by fully engaging and serving on many committees and task forces within nongovernmental organizations and government agencies, such as:

- **Emergency Management Assistance Compact** – The American state-to-state mutual-aid system established under PL 104-321.
- **Stafford Act Coalition** – A Washington-based coalition of associations and organizations dealing with federal-level responses to disaster mitigation, recovery and relief.
- **National Homeland Security Consortium** – Supported by the National Emergency Management Association, consisting of 21 national organizations representing local, state and private emergency response professionals.
- **SAFECOM** – Managed by the Department of Homeland Security’s Office of Emergency Communications. Through collaboration with emergency responders and elected officials across all levels of government, SAFECOM works to improve emergency responders’ emergency-communication interoperability across local, regional, tribal, state, territorial and international borders and with federal government entities.
- **Federal Highway Administration’s Traffic Incident Management** – Consisting of a planned and coordinated multidisciplinary process to detect, respond to and clear traffic incidents so that traffic flow may be restored as safely and quickly as possible.
- **Public Safety Advisory Committee** – Assisting the First Responder Network Authority in carrying out its duties to build, deploy, operate and maintain the FirstNet network. The current Committee consists of 42 representatives from associations and organizations from all disciplines of public safety responders as well as local, state, territorial, tribal and federal government.
- **FirstNet** – The first high-speed, nationwide, wireless broadband network dedicated to public safety. The FirstNet network provides a single, interoperable platform for emergency and daily public-safety communications.

Lastly, as part of the Public Works as First Responders campaign, APWA has launched a new public works symbol. The Public Works First Responder symbol uses familiar colors—orange, black and white—and a design reminiscent of road-construction signs, safety cones and construction barrels.

By displaying the symbol wherever appropriate, public works agencies can raise awareness among community members, government officials and other first responders about the critical role public works plays in emergency man-



The Public Works First Responder symbol

**I believe that there is widespread cooperation and respect among emergency first responders. Let’s work together to protect our communities everywhere.**

agement efforts. Public works directors that I have spoken with have shared with me that they have sought approval to use the symbol from their city managers, administrators, mayors and council and that other department heads such as fire chiefs and police chiefs have embraced this new symbol as well.

I believe that there is widespread cooperation and respect among emergency first responders. APWA is committed to working with the IAFC to improve relations and cooperation among fire, police and public works to protect the safety, health and welfare of our communities.

Rest assured that the launch of the Public Works as First Responder campaign should in no way diminish the critical importance of firefighters, nor is it our intent to take away any funds or recognition that other first responders receive. Let’s work together to protect our communities everywhere.

*Scott Grayson, CAE, is the Executive Director of the American Public Works Association.* 

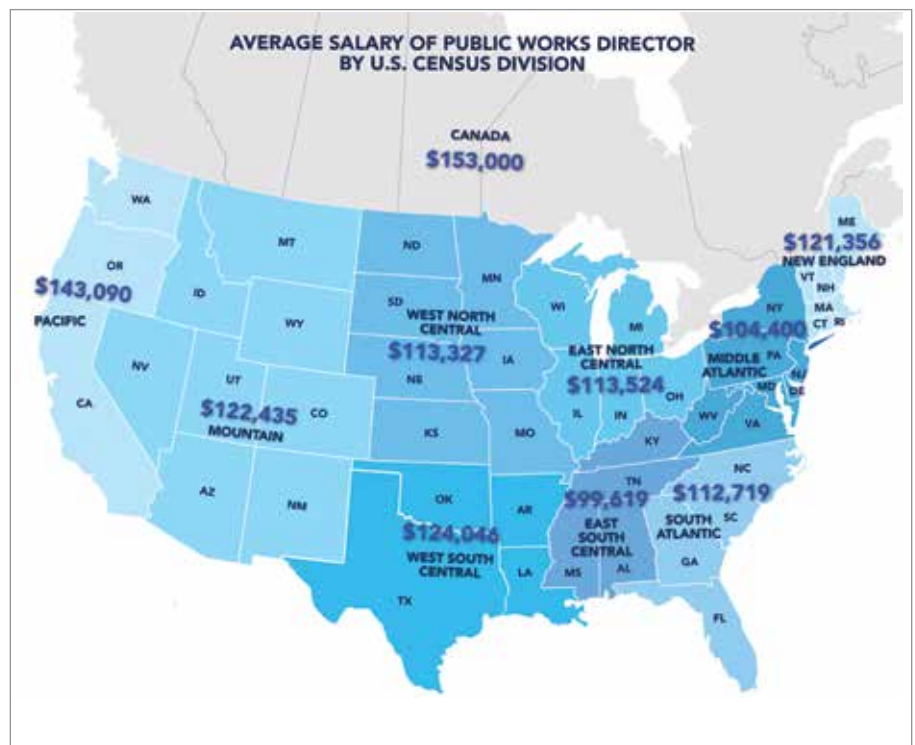
# APWA Public Works Compensation Report and Salary Calculator offers new member benefit

## Study reveals some promising trends

**David Dancy**, Director of Marketing and Web Services, American Public Works Association, Kansas City, Missouri

The American Public Works Association boasts a proud tradition of excellence and serves as a fantastic resource for public works education and information. But one thing APWA has been missing for years is a compensation study of the public works profession. Not since the 1989 *Profile of Local Service Organizations and Managers*, or as some would call it the *APWA Special Report 57*, has APWA completed a full compensation study of its members.

“We want to continuously meet the needs of our members,” said Scott Grayson, APWA’s Executive Director since 2016, “which is why we felt it was important to complete this study at this time. As the Association for Public Works, our members and their agencies come to us looking for information that will help them to be successful in their communities and in their careers. We want to provide quality education in public works and be the best resource for public works technical and career information.”



The 2018 APWA Public Works Compensation Report, released in the fall of 2018, is the result of a study

conducted by Industry Insights, Inc, an independent professional survey research firm located in Dublin, Ohio.



The company specializes in conducting industry operating surveys, compensation and benefit studies, and member attitude surveys.

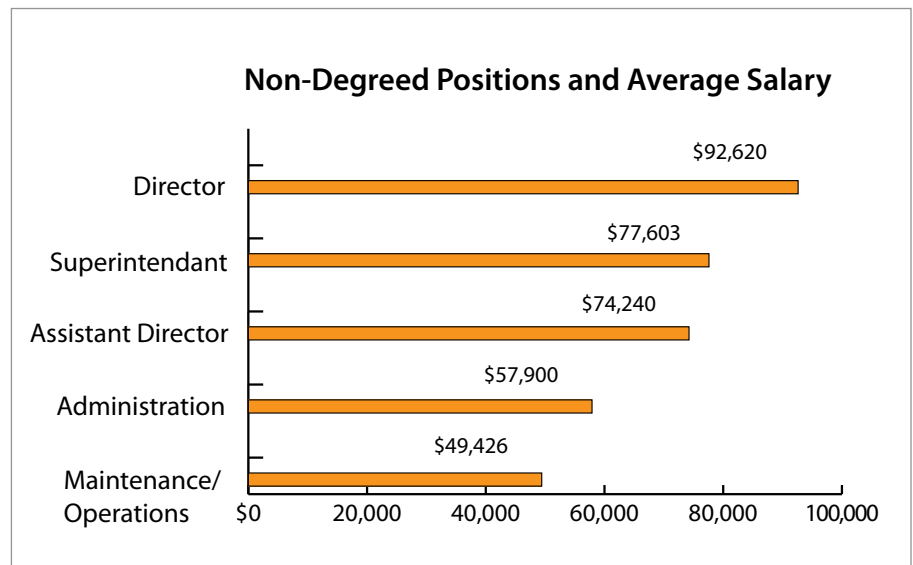
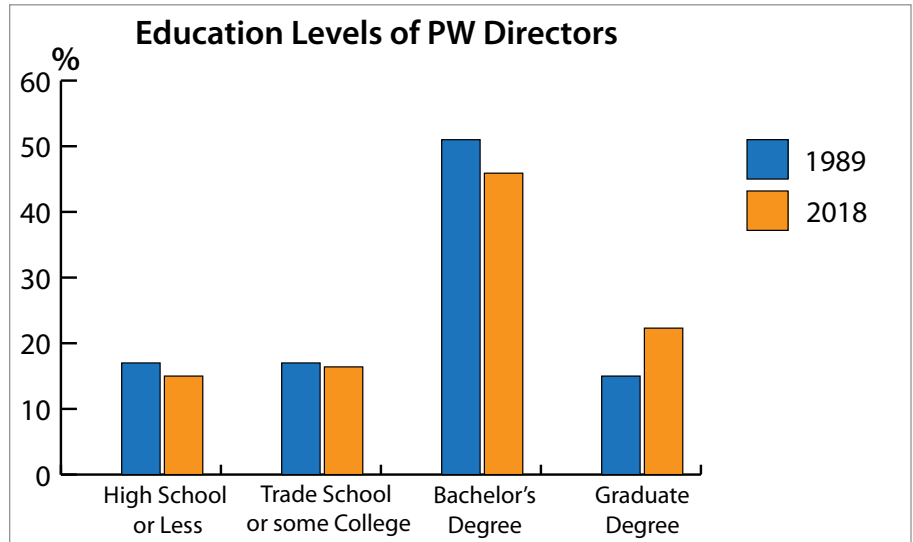
The survey was sent to more than 20,000 public works professionals in both the United States and Canada. We were surprised with how good the response rate was for a first-time compensation survey. With over 2,600 respondents and a 13% response rate, we are very satisfied with the results. APWA surveyed all levels of people working within public works. These groups included administrative, operations, supervisory and senior management as well as public works directors throughout the U.S. and Canada.

The study revealed some very important information about public works compensation. Starting at the top, Directors of Public Works in most areas are averaging six figure incomes. Directors on the Pacific Coast tend to be the highest paid, and those in the East-South-Central region tend to be the lowest. In Canada, Public Works Directors average \$153,000, significantly higher than their U.S. counterparts.

The study shows that level of education directly corresponds with levels of salary:

- Directors with graduate degrees earned an average of \$10K more than Directors with bachelor's degrees
- Directors with bachelor's degrees earned on average \$40K more per year than Directors without a college degree

However, a person without a college degree can rise to the level of Director and can still earn a comparable salary. Ten percent of respondents at the Director level did not have a college degree. And, many respondents without a college degree have risen to the level of Superintendent or Assistant Director and are making salaries above \$70,000 per year.



**We want to provide quality education in public works and be the best resource for public works technical and career information."**

### Employer-Sponsored Benefits

The 2018 study reveals that many agencies are offering a full benefits package including several work-life balance options such as the ability to work from home and flextime. While public works may not be a profession that lends itself well to working from home, employers appear to be getting away from the strict 8:00-5:00 routine and being more flexible in their approach.

Responses	Percentage
Tuition Reimbursement	46.1%
Laptop, iPad or Tablet	55.7%
Car allowance/mileage reimbursement	30.9%
Employer-provided smart phone	63.8%
Flextime or flexible work hours	46.5%
Ability to work from home	13.7%

With only a few exceptions, the higher the level of the employee, the higher the response was for each benefit with Directors receiving the highest level of benefit.

Wellness programs and Employee Assistance programs are also very popular benefits that contribute to work-life balance. Nearly 95% of employers now offer full or partially paid Employee Assistance and nearly 90% offer Wellness programs.

Across the board at all levels, employees receive a minimum of three weeks of vacation and a minimum of 10 sick days per year.

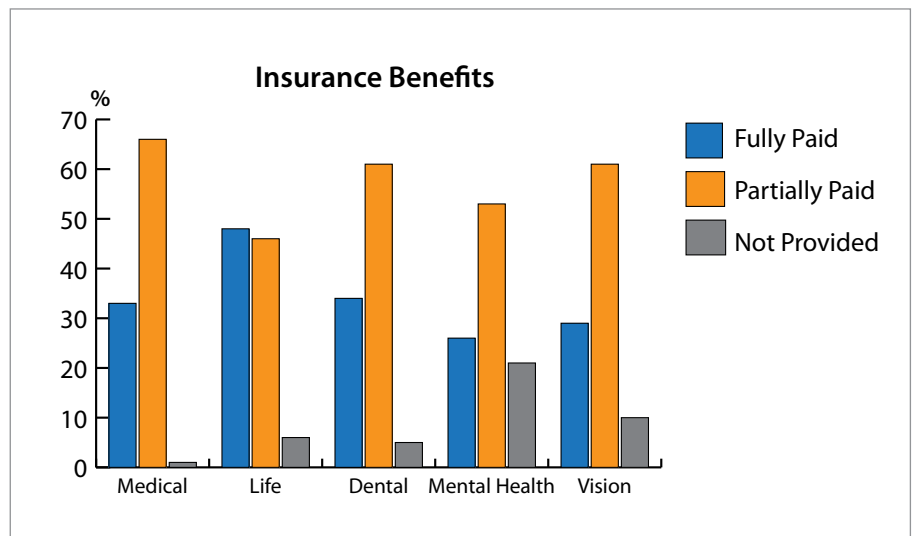
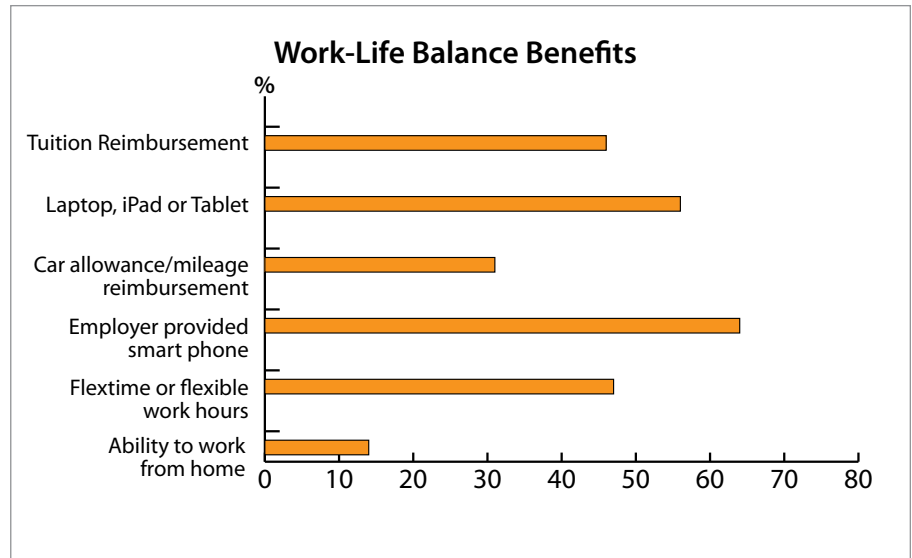
### Insurance

Nearly all respondents receive some type of medical, life, and dental insurance benefits from their agency. In the United States, one-third of respondents said their medical insurance and dental insurance are fully paid and nearly two-thirds of the respondents receive partially paid medical and dental insurance benefits. Nearly half of the respondents receive fully paid life insurance benefits. In Canada, the fully paid percentages are much higher with two-thirds medical insurance fully paid and one-third partially paid and other insurances were 50-60% fully paid.

Currently, many employers are now offering some form of payment for mental health insurance, something that was not seen in the 1989 survey.

Responses	Fully Paid	Partially Paid	Not Provided
Medical Insurance	33.4%	66.3%	.3%
Life	48.5%	45.9%	5.6%
Dental	34.2%	61.0%	4.8%
Mental Health Insurance	25.7%	52.7%	21.6%
Vision Insurance	29.4%	60.9%	9.7%

An exciting feature of the compensation report is an **online interactive salary calculator** that uses the data from the survey. Individuals, manag-



## An exciting feature of the compensation report is an online interactive salary calculator that uses the data from the survey

ers, human resource directors and employers can use the calculator to filter salaries by title, region, public works sector, years of experience and much more. “We are very excited to offer this type of information to the public works industry,” said Grayson. “With this report and the new online salary calculator, public works agencies can now benchmark compensation to provide the most competitive salaries in an effort to attract the best talent.”

The complete 2018 APWA Public Works Compensation report is available at [www.apwa.net](http://www.apwa.net) for \$99 for members and \$249 for nonmembers. APWA has also built an online Salary Calculator tool that allows you to search or filter salaries by region, age, budget size, staff size, education levels and population.

David Dancy can be reached at (816) 595-5250 or [ddancy@apwa.net](mailto:ddancy@apwa.net).



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## Leadership & Management Committee Update 2018

**Chas Jordan**, MPA, PWE, Technical Representative, Pavement Technology, Inc.;  
Chair, APWA Leadership & Management Committee

Last year at this time, I wrote an article saying how much it had been an honor and privilege to serve as a member of the APWA Leadership & Management Committee (LMC) for the previous four years. Now, in my second term as the committee's Chair, I can say the honor is only multiplied and enhanced. There is no finer example of public works professionals than the men and women who serve on this committee and they have done some amazing work in the past year.

The last twelve months have been extremely busy for myself and my five good friends who compose the committee: Wendy Springborn, Laura Kroeger, Harry Lorick, Jim Proce, and Jonathan Gano. These individuals have worked hard to improve APWA programs through some major initiatives:

- The first was the review of the new Certification Programs for Public Works Professionals. The committee supplied subject matter experts to the Task Force to review the new certifications and served as a review board to check the work of the Task Force after it was completed. This past year the CPWP-S and CPWP-M certifications were both unveiled, rolled out, and are doing very well.
- The second was the pilot project to begin working towards APWA benchmarks for our members. This project was undertaken in cooperation with the Solid Waste Management Committee and was a resounding success. We came out of this process with a great view of how to move this project forward and what we hope to receive as a deliverable.
- The third was to build a new educational process for use electronically with APWA staff called the "Twelve Habits of Highly Dysfunctional Leaders" in hopes of reminding all of us what challenges and pitfalls we all make and accidentally do in our careers as public works leaders.

These videos can be found shortly on the website, and the articles are in this very issue of the *APWA Reporter*.

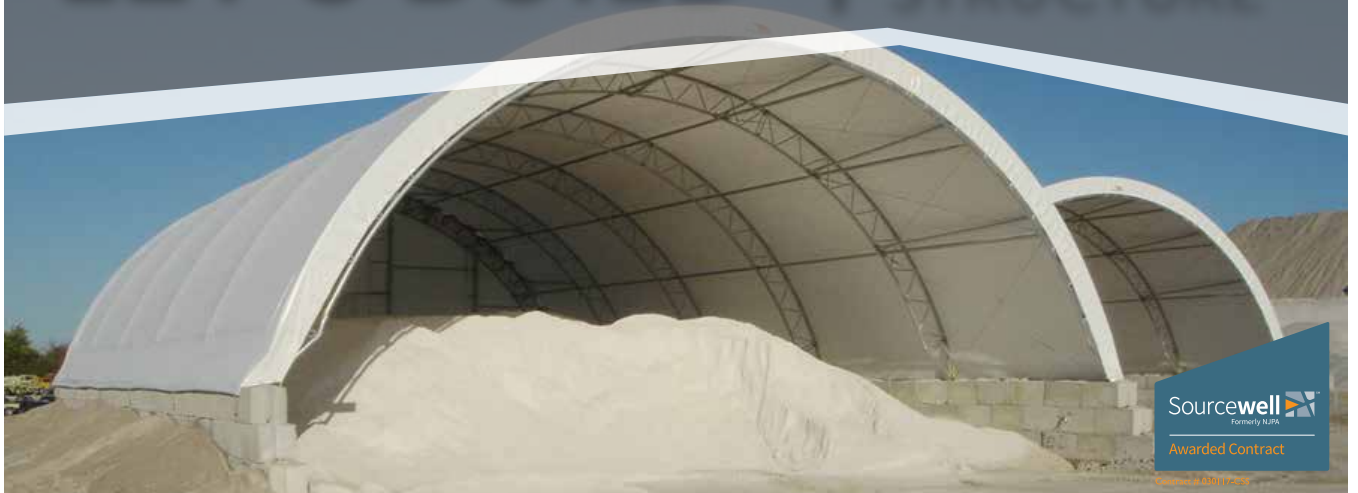
- The fourth was the final revision and re-publishing of the "Blue Book" or *Public Works Administration: Operations*. This project incorporated many authors, revisions, and reviews to get to this point, and our committee thanks Vitaly Troyan from California for his work on this effort, and Connie Hartline with the national staff for the hard work in putting it all together.
- Finally, we continued our regular work of building our Knowledge Team, reviewing current publications for updates and sunseting, and other educational programs that benefit our organization as a whole.

Yes, the LMC has definitely been hard at work in the past year doing great work for you, our fellow APWA members. That being said, that is nothing compared to the year that is coming up. We unfortunately had to say goodbye to our longtime member and former Chair, Wendy Springborn (we miss you Rabble Rouser!), but we welcomed our newest member, Bill Stogsdill from Fairway, Kansas. In 2019, we intend to take on some great undertakings:

- The Leadership & Management Committee will be launching the largest collaboration effort and project in the history of APWA with the rest of our Technical Committees in developing the first survey and set of APWA benchmarks for public works agencies. This project will incorporate assistance from every Technical Committee, our Knowledge Team, subject matter experts throughout the organization, and especially YOU our members. This project will develop the first-ever set of benchmarks for public works operations to be used by each of you in learning about new roles in your organization, to provide you backup for presentations to elected officials and administrators, and to set goals for

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future improvement of your organization. This project will be an immense effort, the result of which will be a great benefit to the whole association.

- The Emerging Leaders Academy (ELA) program is now in its second decade and we will be launching a subcommittee to review the structure and long-term strategy for it to continue, grow, and build upon its great legacy, as well as improve the program, its logistics, and benefits over time. This subcommittee will help in selecting the academy program participants each year, as well as assist the facilitators in reviewing projects and topics for the ELA class. This program is a shining star in the association, and we want it to shine even brighter for our future graduates.
- The APWA *Communication Manual* has been a great resource for public works leaders. We intend to sunset this manual and build upon its purpose in hopes of creating the first-ever *Public Relations for Public Works* publication. This will incorporate other topics to not only assist our leaders in determining how to communicate effectively but also how to build positive public support for public works initiatives.
- Finally, in 2019, our committee intends to work with the Engineering & Technology Committee to develop

technical articles to present in the *APWA Reporter* to present different types of technology that is important for today's public works leader, and the leadership traits, goals, and management techniques required to implement them and use them effectively. This will hopefully assist our members in doing the job of today's public works professional even better.

The Leadership & Management Committee continues to be a leader (imagine that!) in developing new and important projects to benefit our association. We have set some lofty goals for 2019, and we can only hope to get the best achievement out of them, with your assistance. If you would like to assist our committee in working on these projects, we invite you to join our Knowledge Team! These individuals work with us all year in executing the projects we have set, and working to improve public works leaders throughout North America. If you are interested, please let Matt Harper with APWA staff know at [mharper@apwa.net](mailto:mharper@apwa.net).

We look forward to another great year of serving APWA, and you, our fellow members. Thank you for your support, and we look forward to seeing how 2019 will set a new bar for the American Public Works Association. 



The sponsors of the National Snow Rodeo still consider training and testing of operator skills to be the primary objective of the event. (Photo by Mike Kaufman)

# 33rd Annual National Snow Rodeo

**Pete Adler**, PWLF, Managing Principal, Adler Consulting LLC, Thornton, Colorado; Delegate, APWA Colorado Chapter

**T**he 33rd Annual National Snow Rodeo was held at the Larimer County Fairgrounds in Loveland, Colo., on September 26, 2018. This event was held on the first day of the 38th Annual APWA Western Snow and Ice Conference. The event has long been recognized as the national rodeo for snow removal equipment,

and was officially designated as the National Snow Rodeo by the APWA Board of Directors in August 2016.

The National Snow Rodeo was originally introduced as a training device as part of the Western Snow and Ice Conference in 1985. Participants and observers were encouraged to

use the Rodeo concept to train snowplow and equipment operators. The sponsors of the National Snow Rodeo still consider training and testing of operator skills to be the primary objective of the event. Since teamwork is an important concept in any successful snow removal operation, plowing events are performed by a two-person team. Loader, motor grader and skidsteer events are all individual competitions.

The National Snow Rodeo is not only a test of equipment operation skills, but also a test of the knowledge of participants of the equipment with which they compete. Each participant and team perform a pre-trip inspection of the equipment they compete on. This is a timed event, with a limit of four minutes for the inspection. During that inspection, competitors must identify four pre-determined defects on the equipment during that four-minute period. This can be a major factor in the overall results; many times the scores are close enough that missing one item in diagnostics can be the difference between winning the event or finishing in the middle of the pack.

The National Snow Rodeo courses are developed on a bi-annual basis. New driving courses were introduced in 2018 and will be utilized again in 2019. Development of new courses and testing potential new obstacles takes great care and much time, thus the use of a course for two consecutive

## The National Snow Rodeo is not only a test of equipment operation skills, but also a test of the knowledge of participants of the equipment with which they compete.

years. There are many other courses that have been developed over the past three decades for events, and the Rodeo Committee decides every other year whether to develop a new course or to reuse an older setup with a few modifications. The course layouts for the 2018 National Snow Rodeo can be found at [westernsnowandice.com/rodeo](http://westernsnowandice.com/rodeo).

There were 225 rodeo participants this year, representing not just Colorado but Arizona, Connecticut, Delaware, Idaho, Iowa, Kansas, Maine, Maryland, Massachusetts, Montana, Nebraska, New Hampshire, New Mexico, South Dakota, Washington, and Wisconsin. A great example of the

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Since teamwork is an important concept in any successful snow removal operation, plowing events are performed by a two-person team. (Photo by Mike Kaufman)



diversity of winners was in 2017 with champions from Massachusetts, Maine, Washington, and Colorado. The national champions for 2018 are listed below.

#### **Single Axle (53 entries):**

- 1st Place – Ramon Moreno and Doyle Stwally, City and County of Denver, Colorado
- 2nd Place – Rick Anderson and Efrain Arellano, City of Greeley, Colorado
- 3rd Place – Curtis Lewis and Mark Merrill, Maine Department of Transportation

#### **Tandem Axle (54 entries):**

- 1st Place – Chuck Dietz and Chris King, Delaware Department of Transportation
- 2nd Place – Doug Brown and Cody Miller, Colorado Department of Transportation
- 3rd Place – Tom Bucholz and Andy Stephens, City of Arvada, Colorado

#### **Loader (63 entries):**

- 1st Place – Steve Emanuele, City of Lakewood, Colorado
- 2nd Place – Clint Walker, Missoula County, Montana
- 3rd Place – Manny Ruiz, City and County of Denver, Colorado

#### **Motor Grader (39 entries):**


- 1st Place – Luke Granden, Ada County, Idaho

- 2nd Place – Bill Kreis, Missoula County, Montana
- 3rd Place – Robert Giese, Sarpy County, Nebraska

#### **Skidsteer (62 entries):**

- 1st Place – Joe Sack, City of Thornton, Colorado (with a perfect score!)
- 2nd Place – Brad Lattin, Town of Pagosa Springs, Colorado
- 3rd Place – Juan Salas, City of Westminster, Colorado (Juan won this event in 2017)

The 2019 National Snow Rodeo will be held on Wednesday, September 25, at the Larimer County Fairgrounds in Loveland, Colorado. The National Snow Rodeo Committee reserves two slots for each event for winners of rodeo events of each chapter. Chapters in the south may not have snow removal, but we welcome their winners in loader, motor grader and skidsteer events to compete in Colorado in September. The Washington, Wisconsin, New England, Iowa and Nebraska chapters support their local winners to attend the National Snow Rodeo, and all chapters are welcomed to join that trend in supporting local winners to attend this event, as chapters support winners of their backhoe competitions to attend the National Equipment Rodeo at PWX annually. Contact Doug Legg, Snow Rodeo Committee Chair at [doug.legg@denvergov.org](mailto:doug.legg@denvergov.org) or Pete Adler, Colorado Chapter Delegate at [rockies325@gmail.com](mailto:rockies325@gmail.com) for more information on the 2019 National Snow Rodeo.

*Peter Adler can be reached at (303) 349-3394 or [rockies325@gmail.com](mailto:rockies325@gmail.com). *





The members of the Young Professionals Committee include (front row) Michael Altieri, Cate Thompson, April Miller, Amy Lindeman and Kati Horner Gonzalez; (back row) Mary Joyce Ivers, Eric Dundee, Matt Brown and Chris Gallagher

# Continuity of Success: Second year of the Young Professionals Committee

**Matt Brown**, Street Manager – South Operations, City of Surrey, British Columbia; Chair, APWA Young Professionals Committee

The APWA Young Professionals (YP) Committee celebrated its one-year anniversary at PWX in Kansas City. In its first year, the committee worked on tasks related to its mission of creating opportunities for engagement of students, young professionals and emerging leaders.

Completed tasks include assisting APWA staff with a content-rich young professionals web page (<http://www2.apwa.net/DR/index.asp?ID=8740>), young professional involvement in public works awareness, developing and celebrating young professionals' success, student outreach materials and marketing, and the young professional experience at PWX.

As with any task or work plan, it takes numerous volunteers to make it successful. Our YP committee would like to thank all individuals that responded to our e-mails and calls for help. We

would also like to thank our outgoing chair, Eric Dundee, for his leadership and Brad Patterson, our APWA staff liaison, for his guidance.

Looking to the future, the YP Committee plans to maintain platforms created last year and look at several long-term goals. These goals include options for a national young professionals' workshop, increasing YP education and credentialing, and finally to refine the recognition of the YP segment of APWA's membership. Anyone with an interest in volunteering on one of these task forces, feel free to reach out to one of the committee members.

The committee was formed with nine individuals, one from each of the APWA Regions. Committee members are:


- Region IX – Matt Brown, Street Manager – South Operations, Surrey, BC, British Columbia Chapter (Chair), [mkbrown@surrey.ca](mailto:mkbrown@surrey.ca)

- Region I – Chris Gallagher, Town Engineer, Town of Foxborough (MA), New England Chapter, cgallagher@foxboroughma.gov
- Region II – Michael Altieri, Civil Engineer, Bernier, Carr and Associates, Watertown, NY, New York Chapter, maltieri@thebcgroup.com
- Region III – Amy Linderman, Engineer III, Fairfax County PW, Annadale, VA, Mid-Atlantic Chapter, amy.linderman@fairfaxcounty.gov
- Region IV – Cate Thompson, Florida Regional Engineer, Advanced Drainage Systems, Inc., Neptune Beach, FL, Florida Chapter, cate.thompson@ads-pipe.com

**Goals include options for a national young professionals' workshop, increasing YP education and credentialing, and finally to refine the recognition of the YP segment of APWA's membership**

- Region V – Eric Dundee, Director of Wastewater Operations & Reliability, Madison Metropolitan Sewerage District, Madison, WI, Wisconsin Chapter (former chair), ericd@madsewer.org
- Region VI – Kati Horner Gonzalez, City Engineer, City of Independence, MO, KC Metro Chapter, khorner@indepmo.org
- Region VII – Fred Lopez, formerly Assistant Director of Public Works, El Paso, TX, Texas Chapter, lopezar@elpasotexas.gov
- Region VIII – April Miller, Project Manager, BKF Engineers, San Rafael, CA, Northern California Chapter, amiller@bkf.com
- APWA Board Liaison, Mary Joyce Ivers, Director-at-Large, Fleet & Facilities, Interim Public Works Director, City of Ventura (CA), mjivers@cityofventura.ca.gov

For more information on your region, go to the YP website: <http://www2.apwa.net/DR/index.asp?ID=8740>

Matt Brown can be reached at (604) 591-4847 or at [mkbrown@surrey.ca](mailto:mkbrown@surrey.ca). 

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Members of the Metro Nashville Public Works Department at the Metro Council chambers. Front row from left to right: Tommy Jones, Sharon Smith, Ashley Marlow, Director Mark Sturtevant, Rick Kirkpatrick, Rocky Robinson, Herb King, Deputy Director Sharon Wahlstrom and Cortnye Stone. Back row from left to right: Charles Boddie, Cody Osborne, APWA Past President Bo Mills, Katrina Jones, Kristen Kumrow, Brian Baker, Assistant Director Don Reid and Assistant Director Phillip Jones. All the people pictured are from Metro Nashville Public Works, with the exception of Past President Bo Mills.

# Public Works gets the job done in Music City



**Cortnye Stone**, Public Information & Communications, Metro Nashville Public Works Department  
City of Nashville, Tennessee

Nashville is known for many things. We're known as "Music City, USA." We make some mean hot chicken, host raucous bachelorette parties, have an awesome NHL franchise—and now we can add "APWA Accredited Public Works Department" to the list of credentials. On July 3, 2018, Metro Nashville Public Works became the 141st city in North America to receive the prestigious designation. Nashville becomes only the second accredited agency in the state of Tennessee, and the largest city in Tennessee to receive accreditation.

The effort was managed by Technical Specialist Rocky Robinson, and supported by the leadership team including Assistant Director Phillip Jones and Director Mark Sturtevant.

"I've always known how hard our employees work to make Nashville a great place to live, but it's incredible to see them acknowledged as topnotch professionals in the field," said Sturtevant. "Every single member of our team stepped up in a big way, began reviewing their practices and procedures, attended work sessions, and provided peer-reviewed feedback. One of the reasons I love working here so much is the

**"One of the reasons I love working here so much is the people. The people make our Public Works Department really special."**

**- Director Mark Sturtevant**

people. The people make our Public Works Department really special."

Metro Nashville Public Works initially applied for Accreditation in November 2017, but the decision to apply began a while before that. Assistant Director Phillip Jones brought the idea to Sturtevant after learning about the process at the national American Public Works Association conference, and Sturtevant immediately agreed that the agency should apply.

"From that point on, I was all in. I relied on Rocky (Robinson) to serve as accreditation manager, and we began gather-

ing senior staff from all across the department—operations, engineering, beautification, communications, and human resources among others—and we workshopped and brainstormed in the conference room for hours at a time. We really kicked off the process of self-evaluation to see if we were ready to apply,” said Jones.

**“The ability to take a hard look at not just how we do things but why we do them that way is an intangible benefit of the process.”**

**- Rocky Robinson**

Once MNPW submitted the initial application, Robinson and Jones began working with small groups to review each practice and procedure and talked them through next steps. They sat down with employees from crews working out in the field and interviewed them about how they do their jobs, their best practices, and areas that could be improved. Employees from every part of Public Works participated in providing feedback. This feedback was essential to the process of refining and understanding how Metro Nashville Public Works really *works*.

“I would say that we learned a lot about what we have been doing right for all these years, but during our internal review process we also learned where we might be able to improve, and that might be the most important lesson of all from this. The ability to take a hard look at not just how we do things but why we do them that way is an intangible benefit of the process. I really enjoyed that part,” said Robinson.

In June 2018, Metro Nashville was evaluated by a team of public works professionals from Glenview, IL, Lakeland, FL, Lincoln, NE, and Kansas City, MO. The evaluation was thorough, with MNPW employees sitting down with members of the review team to discuss and defend the department’s operational policies and procedures. The review took place over the course of two days. One employee described their experience as “a little nerve-wrecking, but not as scary as my college mid-terms.”

At the end of the process, the APWA Review Team asked MNPW staff to gather and they announced the good news. The agency received 100% compliance on all 362 practices that applied. Additionally, Metro Nashville Public Works had four model practices that will be used as a reference for other public works agencies looking to receive accreditation.

Everyone in the room breathed a collective sigh of relief, especially Phillip Jones and Rocky Robinson. Both men had put so much time and energy into the process and couldn’t imagine having to start the process over. The department formally received Accreditation a couple of weeks later.

“For us to receive Accreditation on our first attempt is really a testament to the work put forth by all of us. I can’t wait for all of our employees to wear the accreditation logo on their uniforms with pride,” said Phillip Jones. “I’ve been telling them all along how great a job they do and that logo on their uniform is proof.”


Nashville’s Metropolitan Council passed a resolution on September 4, 2018 commemorating Public Work’s Accreditation from APWA. The resolution highlighted many of the department’s accomplishments and commitment to keeping Nashville a great place to live, work and visit.

**“For us to receive Accreditation on our first attempt is really a testament to the work put forth by all of us. I can’t wait for all of our employees to wear the accreditation logo on their uniforms with pride.”**

**- Phillip Jones**

Metro Nashville Public Works was honored by the Nashville Metropolitan Council on September 18, 2018, with a presentation led by the chairman of the Public Works Committee, Councilman Jeremy Elrod. Elrod works closely with Public Works staff and said of the achievement, “Nashville should be proud of its Public Works Department, both because of this recognition and because of what they do for the city every day. The men and women in the Metro Public Works Department are some of the most hard-working in Nashville, and I congratulate them on this well-deserved honor.”

The Accreditation award plaque hangs proudly in the Director’s conference room at the Public Works Department’s office. The team encourages any other public works department interested in learning more about the process to come on down to Nashville, eat some of our famous hot chicken, and enjoy all that our city has to offer.

*Cortnye Stone can be reached at (615) 862-8799 or [cortnye.stone@nashville.gov](mailto:cortnye.stone@nashville.gov). *

# Meet your APWA National Committee for Diversity & Inclusion

One of the many roles a member of the National Committee for Diversity & Inclusion (D&I) has is to serve as a liaison between the national committee and your local chapters. As representatives of this committee, we are focused on advancing diversity issues throughout the association, placing value on all individuals and the different perspectives of those individuals, and promoting the process for all to feel included as part of the whole. If you are seeking assistance, have suggestions for the national committee, have questions, or simply want to share what you are doing in your chapter, please contact your regional diversity liaison.

So, who are the regional Committee for D&I liaisons? We're glad you asked. Here is a brief introduction through our members "spotlight" of each of the regional liaisons, diversity committee members, and our APWA staff and Board liaisons.

## Region I

### Mary Monahan

Associate/Director of Business Development  
Fuss & O'Neill  
Quincy, Massachusetts  
mmonahan@fando.com



### What would someone find interesting about your job?

Public works includes many varied initiatives. In a given day I can be talking to a community about bridge funding, stormwater regulations, climate change impacts, and more. I love the opportunity to help communities understand the connection among all these.

### What does diversity mean to you and how does it affect your job?

Diversity means making sure everyone has equal opportunities to pursue their career and personal growth. That means in a culture, like public works, where men are the significant majority, thought and action need to be given to making sure women are called upon to join the teams. For many

men this is reaching outside their comfort zones, but, once women become more visible in the industry, the assumed differences between the genders will begin to diminish.

## Region II

### Renee Tyler

Assistant Public Works Director  
Dubuque, Iowa  
rtyler@cityofdubuque.org



### What is your hobby or outside interest?

Hobby! Outside interest????  
What's that? Seriously, I am currently working on my graduate degree so that takes a lot of my time. My graduate work focuses on public service, so it is assisting me in cultivating one of my outside interests which is helping other people. I am a Junior Achievement volunteer with middle school children. I also work with ex-felons in the community. In the past I have job coached and mentored others.

### What does diversity mean to you and how does it affect your job?

Providing an equitable environment for anyone who wishes to work in the profession of public works. My position allows me to show others what can be accomplished. It is my desire to provide inspiration to others who feel that they are not welcomed due to their race, gender, age, religion or sexual orientation.

## Region III

### Kimberly Strong

Public Information Specialist  
City of Chattanooga, Tennessee  
kstrong@chattanooga.gov



### Why did you choose public works as your career field?

I chose to work in the field of public works because I fully enjoy working with people

and providing topnotch customer service. I love having an impact on making our citizen's lives a little bit better.

**What does diversity mean to you and how does it affect your job?**

Diversity to me means to have respect for individuals who have human characteristics that are different from mine. This would include but not be limited to race, gender, age, ethnic group, educational background and disability. I incorporate diversity in my job by making sure that with any public outreach program I provide or participate in, it is sensitive and accessible to all and that each person who is part of an outreach program I provide feels respected and appreciated.

**Region IV**

**Ram Tewari**

Director of Solid Waste Operations, Retired  
Broward County, Florida  
trnarayan1@gmail.com



**What would someone find interesting about your job?**

Interaction with the "public" (our customers). The job is personally and professionally fulfilling because of cooperatively working with an outstanding staff of diverse background and talent. For me, it has been a gratifying and valuable life learning experience.

**What does diversity mean to you and how does it affect your job?**

To me diversity, inclusion, and equity are essential in the public services because of the changing demographics. America is getting more diverse every year. It has become more ethnically and racially diverse over the past century and this trend will continue. Being a member of the Diversity and Inclusion Committee, and an immigrant, I have learned to appreciate it.

**Region V**

**Tiffany Engelhardt**

Marketing Director  
Engineering Resource Associates, Inc.  
Warrenville, Illinois  
tenglehardt@eraconsultants.com



**Why did you choose public works as your career field?**

I happened to fall into the field of public works by chance. I was two years out of college and already looking for a career change, so I took a marketing position for an engi-

neering firm. I knew the only way to get acclimated to a new industry was to dive right into an association and I happened to choose APWA. This was seven years ago, and I am so thankful I fell into this group because of all the amazing public works friends and colleagues I have met over the years.

**What does diversity mean to you and how does it affect your job?**

Diversity is bringing together different viewpoints in order to work together towards one solution or goal. Having a diverse employee base of both men and women of all ages and ethnicities is so important within any organization. At my own company, we are lucky enough to have so many different personality types, ages, genders, and ethnicities. The great thing is everyone brings their own unique perspective to the table when working together on a project to help us come up with creative solutions. If everyone thought and felt the same way all the time, then I feel like we would never get anywhere.

**Region VI**

**Beverly Farraher, P.E., PTOE**

Public Works Operations  
Manager  
City of Saint Paul, Minnesota  
Beverly.Farraher@ci.stpaul.mn.us



**What would someone find interesting about your job?**

It is extremely dynamic and it requires an ability to be comfortable with constructive conflict. Working with field operations, developing and applying standards/best practices/strategic measures and targets, improving processes, and managing equipment and materials makes for days and years that simply fly by. It is both a challenge and a joy to effectively share our story of doing our best to deliver exemplary products and services within a constrained budget. Improving working conditions and our culture are very satisfying but also long-term projects that require constant attention.

**What does diversity mean to you and how does it affect your job?**

Diversity describes all the differences between any of us. To make the best decisions, and to accomplish the best products and services as part of our jobs, we need people who apply cultural competency skills to make inclusive work environments. Inclusive work environments, with diverse people who recognize and appreciate the differences among us, are the most effective and successful work groups. It is my job to increase our workforce's diversity, cultural competency, and inclusivity such that we successfully deliver the best possible field operations' products and services.

## Region VI

### Jeffrey Powell

Public Works Solid Waste  
Manager  
City of Roanoke, Virginia  
Jeffrey.Powell@Roanokeva.gov



#### Why did you choose public works as your career field?

I was mentored into the public works field after working in the telecommunications and public utilities fields. I have had an opportunity to learn the engineering, transportation, public space, parking, solid waste, stormwater, fleet, and facilities operations.

#### What does diversity mean to you and how does it affect your job?

Inclusion and educating industry leadership that the long-term viability of public works is rooted in our ability to accept difference and nurture all.

## Region VII

### Justin Miller

Asst. Engineering Services  
Supervisor  
City of Durham, North Carolina  
justin.miller@durhamnc.gov



#### What is your hobby or outside interest?

I really enjoy woodworking and find it very therapeutic. It allows me to be creative, challenges me, and it is very gratifying to see a finished product. I appreciate the craftsmanship in other woodworkers' builds as well.

I also have a true passion for being an outdoor sportsman. My son and I hunt deer and turkey and we enjoy fishing. Anyone who knows me knows I can talk hunting for hours.

#### What does diversity mean to you and how does it affect your job?

Diversity is all the ways we are different from someone else, and through creating an inclusive environment we can attract new talent and capitalize on those differences with increased creativity and productivity. An inclusive environment creates a space where people, regardless of how they're "different," are comfortable being themselves and are happy to come to work. We should strive for a diverse and inclusive organization not only because it's the right thing to do, but because it's the smart thing to do.

## Region VIII

### Lauren Behm

Airport & Ferry Administrator  
Pierce County Planning &  
Public Works  
Pierce County, Washington  
laurenjbehm@gmail.com



#### Why did you choose public works as your career field?

I came to my career in public works by chance. My first professional job out of college was as a marketing coordinator for an engineering firm. I loved the projects, the variety of the work, and partnering with public sector clients. I found my true passion in public works. This experience drove me to work with the Student Outreach Network to educate students about the opportunities available to them in the public works field and in APWA.

#### What does diversity mean to you and how does it affect your job?

I appreciate APWA's broad definition of diversity. I got involved in Washington State's Diversity Committee because I felt like job discrimination was something that needed to be addressed in the industry. Planners, biologists, communicators, administrative assistants, maintenance workers and many other positions are just as important as engineers but are not always treated that way. Diversity means valuing people who are different than you and making room for their voices in the conversation.

## Region VIII

### Vic Bianes, P.E.

Public Utilities Director,  
Retired  
San Diego, California  
bianes@cox.net



#### What is your hobby or outside interest?

I enjoy giving back to the community by being involved in my church, cultural activities and community initiatives, such as coaching youth soccer.

#### What does diversity mean to you and how does it affect your job?

Diversity is understanding and acknowledging that "all people" bring their different backgrounds, talents and strengths to an organization. As a leader, I recognize this fact and utilize their abilities to the benefit of an organization.

## Region IX

**Kandace Thomas, PWS**  
Administrative Program  
Manager 1  
Pierce County Human  
Resources  
Pierce County, Washington  
kandace.thomas@  
piercescountywa.gov



### What would someone find interesting about your job?

I recently was promoted to a position within Pierce County Human Resources. Human Resources is implementing a Diversity, Equity, Inclusion Initiative, which I am a part of. Because of this unique position, HR has determined that my work with APWA as the Diversity Committee Chair allows HR and PW to create a partnership where diversity is concerned. I find this one of the most interesting and engaging parts of my current position.

### What does diversity mean to you and how does it affect your job?

Diversity to me is everything that makes us different and unique which also makes us the same. It is the one thing we have in common. It is worth and should be celebrated. I feel that we need to broaden our understanding of what diversity means, specifically within the workplace. It is not just about race, gender, ethnicity, but also about classification, position standing, manager, line workers, planners, office assistants, engineers, etc., it is about recognizing, celebrating, and learning to work with our differences that will make strong successful teams.

## Region IX

**Jeffery Maxwell, P.E., PTOE**  
Director of Public Works  
Adams County, Colorado  
jmaxwell@adcogov.org



### What is your hobby or outside interest?

I continue to enjoy all the great outdoor activities that my home state of Colorado affords. I'm looking forward to another great ski season and as always, I'm hoping for more snow.

### What does diversity mean to you and how does it affect your job?

It is important to provide an environment where people of differing backgrounds and perspectives are valued for their unique contributions. I believe we are making inroads

within the public works community to ensure all of our highly desirable careers are available to people from all walks of life, which truly makes our profession stronger.

## Diversity Committee APWA Staff Liaison

**Nahid Paiman**  
Associate, APWA  
Washington, DC  
npaiman@apwa.net



### What would someone find interesting about your job?

In addition to working with the Government Affairs Department of APWA, I serve the national Committee for Diversity and Inclusion as staff liaison. It is interesting and exciting that I can connect some legislations to public works workforce and D&I topics.

### What does diversity mean to you and how does it affect your job?

Diversity means to respect all individuals regardless of our similarities and differences. Diversity is being able to understand that everyone holds an important role in creating an organization whole. I believe a diverse and inclusive workgroup can contribute to the success of an organization in greater measure than a less diverse and inclusive group.

## Diversity Committee Board Liaison


**W. Gary Losier, P.Eng.**  
Director, Region I  
Director of Engineering and  
Works  
Quispamsis, NB  
glosier@quispamsis.ca



### What would someone find interesting about your job?

There is something different going on every day, for example last week one day I was answering press inquiries about our \$1.2 million street resurfacing program and the next day the same reporter called asking if our community permitted goats as pets.

### What does diversity mean to you and how does it affect your job?

It means being able to respect people's similarities as well as their differences so that everyone feels that they can make a worthwhile contribution to the success of their organization. In my day to day it means recognizing my own opinion may not be the only way to deal with an issue. 



# Reasonable Means Reasonable

**Michele S. Ohmes**, ADA disABILITY Specialist, Kansas City, Missouri

I was supposed to present at the APWA PWX 2018 Conference but ended up in the hospital and could not follow through. This article doesn't detail the whole issue of the ADA regulation, but it will give you a very brief overview of the concept of "reasonable accommodation" in relation to employment and the Americans with Disabilities Act.

The Americans with Disabilities Act made sure to allow reasonable accommodations (RA) for the many varied situations in employment, general public activities and facilities accessibility. The problem I am made aware of on a regular basis is how often the reasonable accommodation is:

1. Misunderstood
2. Misused
3. Disallowed for all the wrong reasons
4. Neglected to include the person with the disability in the process
5. Decided inappropriately because they are made with the wrong or most expensive solution due to false workplace professionals

Consider the following situations:

1. Once the need for the RA has been approved, with whom do you interact first for finding the best RA that benefits everyone?
  - a. The company attorney
  - b. The employee
  - c. The management
  - d. Outside resources

**Too often the reasonable accommodation is misunderstood, misused, disallowed, neglected and decided inappropriately.**

The answer is the employee. Who knows better what will work? Now if the employee is being unreasonable, then yes, you probably will need to use all of the above.

1. Which situation is NOT an RA?
  - a. Employee requests for six weeks off for treatment of a severe back problem.
  - b. Employee tells his supervisor that he would like a new chair since his chair is uncomfortable.
  - c. Employee is a wheelchair user. She informs the supervisor the wheelchair doesn't fit under the desk.

The answer is the request for a chair since his chair is uncomfortable.

1. Employee with a hearing loss has the essential function of his position to contact the public via phone. He proposes using a TTY to call the relay operator who will relay the conversation between the parties. Is his solution an RA? Answer: Yes.
  - a. TTYs are reasonably priced, commonly used devices.
  - b. It allows the employee to perform the essential function of his job.

1. A cashier is easily fatigued due to lupus. Standing makes getting through the shift almost impossible. She requests a stool to sit on, which greatly reduces the fatigue. Is this a reasonable accommodation?
  - a. Yes, it easily removes a workplace barrier.
  - b. It is effective since it addresses the problem with minimal cost for the stool.
  - c. It enables her to perform the position's essential function.

However, in this case the employer refused, saying being seated would make the employee look lazy and nonprofessional.

BY THE WAY, Walmart had to pay \$65 million to settle a class-action lawsuit from roughly 100,000 California-based cashiers who accused the retail giant of failing to provide seating during their shifts.

1. A cleaning company rotates their staff to different floors monthly. One member of the crew with a psychiatric disability has difficulty adjusting to monthly floor changes, so he requested an RA with three different suggested solutions:
  - a. Stay on the same floor permanently.
  - b. Make floor changes every two months.
  - c. Allow a transition period to adjust to floor change.

Are any of his suggestions reasonable? YES, all three are effective to allow the employee to perform the essential function with no cost and no increased burden for the rest of the crew.

Staying on the same floor was mutually agreed upon.

1. The company's employee with advanced diabetes has severely affected her feet and legs. This makes walking extremely painful and difficult enough to have to use a walker. She requested a close parking space and presented a supporting letter from her doctor who is a specialist in this field. The doctor presented a cogent explanation of her situation. Is this an RA? YES.
  - a. It is easy to accomplish.
  - b. Cost is minimal.
  - c. Outcome is effective and helps the employee achieve the essential functions by decreasing the pain while saving energy to perform her job.

THE EMPLOYER REFUSED. The reason was that the management and stockholders are too important to lose a parking space. (Stockholders only meet once a month)

1. A new employee tells her supervisor that the lights were too bright for her sensitive eye condition. She had two suggestions that would solve the problem with no cost or effort for the company.
  - a. Be allowed to wear a hat with a brim to shade her eyes from the light; or
  - b. Wear her shaded glasses that would also protect her eyes.


MANAGEMENT AND THEIR ATTORNEY REFUSED stating both the hat and shaded glasses were unprofessional. Their solutions were:

- a. Remove the accountant from his office and put the employee there where dimmer light switches could be installed. NOTE: accountants usually have files with sensitive information that needs to be protected. Usually their offices are locked when the accountant is not present.
- b. Buy her special glasses to use while at work.

Hopefully I don't have to ask you which solutions you would choose. This is a perfect example of the misuse of RA and what is professional.

- a. Also, this is an office location. There is no meeting with the general public.
- a. Buying personal items such as glasses not related to special safety glasses required for everyone in certain jobs is clearly addressed by the ADA as not a solution.

The Equal Employment Opportunity Commission offers technical assistance on the ADA provisions applying to employment; it also provides information on how to file ADA complaints. For employment questions, call 800-669-4000 (voice), 800-669-6820 (TTY). For employment publications, call 800-669-3362 (voice) and 800-800-3302 (TTY). The website is [www.eeoc.gov](http://www.eeoc.gov).

*EDITOR'S NOTE: If you would like a copy of the PowerPoint Michele uses during her presentations on reasonable accommodation, you may e-mail Michele directly at [michele@michele-able.com](mailto:michele@michele-able.com). *



Michele Ohmes with Sufra, her super Service Dog

# APWA announces newly credentialed agencies and professionals

## **A** PWA announces 14 public works agencies achieved Accreditation or Re-Accreditation during 3rd Quarter 2018

APWA has announced that 14 public works agencies from across North America have achieved the prestigious APWA Accreditation or Re-Accreditation designation during the third quarter of 2018. The APWA Accreditation program recognizes public works agencies that go beyond the requirements of the management practices established nationally in the public works industry, as contained in the *APWA Public Works Management Practices Manual*.



The public works agencies to have achieved Accreditation or Re-Accreditation during the 3rd quarter of 2018 include:

- City of Schaumburg, IL Engineering and Public Works Department – *Re-Accredited* October 13, 2018
- Village of Cherry Hills, CO Department of Public Works – *Re-Accredited* October 11, 2018
- City of Fishers, IN Public Works Department – *Re-Accredited* October 4, 2018
- City of Ft. Worth, TX Transportation and Public Works Department – *Re-Accredited* September 25, 2018
- Village of Libertyville, IL Public Works Department – *Re-Accredited* September 1, 2018
- Columbus Consolidated Government, GA Public Works Department – *Accredited* August 20, 2018
- City of Plano, TX Public Works Department and Engineering Department – *Re-Accredited* August 7, 2018
- City of Plano, TX Public Works & Engineering Department – *Re-Accredited* August 7, 2018

- Town of Lexington, MA Public Works Department – *Re-Accredited* August 7, 2018
- Hillsborough County, FL Public Works Department and Real Estate & Facilities Services Department – *Re-Accredited* July 31, 2018
- Hillsborough County, FL Fleet Services Department – *Accredited* July 31, 2018
- City of Corinth, TX Public Works Department – *Accredited* July 30, 2018
- City of University Park, TX Public Works Department – *Accredited* July 26, 2018
- Wayne County, MI Department of Public Services – *Accredited* July 17, 2018

For more information about APWA Accreditation, please contact APWA Accreditation at [accreditation@apwa.net](mailto:accreditation@apwa.net).

## **APWA announces new credentialed Certified Public Fleet Professionals**

APWA has announced the public works fleet professionals who recently received the Certified Public Fleet Professional (CPFP) credential for the third quarter of 2018. The CPFP credential is for the seasoned, government public fleet manager, and for those professionals who supervise, manage, oversee or administer fleet services within or for a public fleet entity. The APWA CPFP program has credentialed 99 Certified Public Fleet Professionals in North America.



The purpose of APWA's Public Fleet Professional Certification is to promote excellence in fleet management by advancing the knowledge and practice of public fleet professionals to

benefit their communities through quality fleet services. The field continues to have public fleet applicants who strive for excellent public works service in their communities.

The most recent APWA Certified Public Fleet Professionals for the third quarter, 2018:

- David Albanese, CPFP, USAF, Goldsboro, NC
- Chris Collins, CPFP, City of Leavenworth, KS
- Bryan J. Lundquist, CPFP, City of Springfield, MO
- Erik C. Metzger, CPFP, City of Conroe, TX
- Michael B. Wallace, CPFP, City of Tulsa, OK

For more information on the Certified Public Fleet Professional (CPFP) program, the Certified Stormwater Manager (CSM) program, or the Certified Public Infrastructure Inspector (CPII) program, please contact [certification@apwa.net](mailto:certification@apwa.net) or contact Phyllis Muder, APWA Career Development Manager, at (816) 595-5211 or [pmuder@apwa.net](mailto:pmuder@apwa.net).

## APWA announces 17 public works professionals earned Certified Public Infrastructure Inspector credential

APWA has announced that 17 public works professionals from across North America earned the Certified Public Infrastructure Inspector (CPII) credential during the third quarter of 2018. Since its inception, the APWA certification in public infrastructure inspection program has credentialed a total of 352 U.S. and Canadian professionals with the CPII certification.

The purpose of the CPII certification is to promote quality infrastructure by advancing the knowledge and practice of construction inspection to benefit communities and public agencies. This APWA certification program is intended for individuals that inspect the construction of public infrastructure (e.g., roadways, highways, utilities, bridges, dams) and facilities (e.g., pump stations, treatment plants, water storage facilities) and other types of construction work and materials to ensure compliance with plans and specifications.

The most recent APWA Certified Public Infrastructure Inspectors include:

- Ben Barajas, CPII, City of Houston, TX
- Paul J. Constable, CPII, City of Ocala, FL
- Christopher A. Cooper, CPII, MNS Engineers, Santa Barbara, CA
- Joshua L. Davidson, CPII, City of Houston, TX
- Jonathan W. Derden, CPII, Houston Public Works, Deer Park, TX
- Charles N. Jones, CPII, City of Houston, TX



- Dennis D. Lillie, CPII, Pinal County, San Tan Valley, AZ
- Zachary L. McCall, CPII, Keithline Engineering Group, PLLC, Bixby, OK
- David J. McClintock, CPII, City of Buckeye, AZ
- Ryan James Moyers, CPII, City of Scottsdale, AZ
- Nathaniel D. Norwood, CPII, MNS Engineers, Oakland, CA
- Christopher J. Ott, CPII, Engineering Enterprises, Inc., Sugar Grove, IL
- Robert A. Silva, CPII, City of Newport Beach, CA
- Donald J. Spates, CPII, MNS Engineers, Santa Barbara, CA
- Timothy J. Stover, CPII, MNS Engineers, Paso Robles, CA
- Tim R. VanDamme, CPII, Carollo Engineers, Riverside, CA
- Douglas R. Weston, CPII, MWH Constructors, Pasadena, CA

For more information on the Certified Public Infrastructure Inspector (CPII) program, the Certified Public Fleet Professional (CPFP) program, or the Certified Stormwater Manager (CSM) program, please contact [certification@apwa.net](mailto:certification@apwa.net) or contact Phyllis Muder, APWA Career Development Manager, at (816) 595-5211 or [pmuder@apwa.net](mailto:pmuder@apwa.net).


## APWA announces new credentialed Certified Stormwater Managers

APWA announces the public works professionals who recently received the Certified Stormwater Manager (CSM) credential during the third quarter of 2018. The APWA CSM certification is intended for water experts in both the public and private sectors who coordinate and implement stormwater management programs for city, county, state, provincial, and federal agencies. These professionals assist in administering drainage, flood control, and water quality programs.

Since its inception, the APWA CSM program has credentialed 89 Certified Stormwater Managers in North America.

The most recent APWA Certified Stormwater Managers for the third quarter, 2018:

- John C. Costner, CSM, City of Monroe, NC
- David Andrew Herndon, CSM, City of Hopkinsville, KY
- Robert C. Van Den Akker, CSM, City of Buckeye, AZ

For more information on the Certified Stormwater Manager (CSM) program, the Certified Public Fleet Professional (CPFP) program, or the Certified Public Infrastructure Inspector (CPII) program, please contact [certification@apwa.net](mailto:certification@apwa.net) or contact Phyllis Muder, APWA Career Development Manager, at (816) 595-5211 or [pmuder@apwa.net](mailto:pmuder@apwa.net). 





On November 5, APWA Executive Director Scott Grayson and APWA Director of Sustainability and CPWA Advocacy Anne Jackson met with Canadian Infrastructure Minister François-Philippe Champagne, Parliamentary Secretary to the Minister of Infrastructure Marco Mendicino, and CPWA President Steve Blayney. The meeting took place in Ottawa and covered CPWA public policy priorities including infrastructure and autonomous vehicles. From left to right: Anne Jackson, Scott Grayson, Minister Champagne, PS Mendicino, and Steve Blayney.



Larry Head, Dean of Engineering at the University of Arizona, explained SMARTDrive technology during a live demonstration in Maricopa County, Arizona. The goal of the demonstration was to showcase technology designed to enhance traffic signal operations, and improve vehicle prioritization at intersections; thus, making roadways safer for drivers, pedestrians and all first responders.

# Water, Water Everywhere

**Sean Garcia**, Government Affairs Manager, American Public Works Association, Washington, D.C.

Every so often, Congress does work in a bipartisan fashion to enact legislation that helps build our country. “America’s Water Infrastructure Act” of 2018 is just such an occasion. In September, the House of Representatives voted unanimously to pass the legislation, while the Senate voted 99-1 the following month. Those vote margins are about as bipartisan as you’ll ever find.

But in a time of catchy bill titles and explosive floor speeches, should we be excited about the enactment of the biennial water resources development act? In a word, yes. In addition to authorizing several U.S. Army Corps of Engineers projects throughout the country, this legislation does several things that will assist public works departments across the country.

First and foremost, the bill reauthorizes the Drinking Water State Revolving Fund (DWSRF) for three years at substantially increased levels. The language in the bill authorizes over \$4.4 billion in appropriations over three years for capitalization grants awarded to state drinking water revolving loan funds. The DWSRF program had been unauthorized for several years and had not received an increase in funding for nearly a decade. Communities across the country rely on these loans, and increased funding will allow for more assistance to more drinking water systems.

The legislation also includes tweaks to the DWSRF program to make it more “user-friendly.” The bill allows states to increase the amount of SRF loans they make to economically disadvantaged

communities and allows an additional 10 years for repayment of these loans. Moreover, the bill amends the SRF program to make clear that loans can be used to replace or rehabilitate aging treatment, storage, or distribution facilities to meet standards under the Safe Drinking Water Act (SDWA). Finally, the Environmental Protection Agency (EPA) is required to collect information on best management practices for the SRF, as well as ensuring that the Agency’s national drinking water needs survey includes a report on lead pipes.

In addition to these provisions, there are several pieces of the bill that APWA has been pushing Congress to support. Included in the final legislation is language from Senator John Boozman (R-AR) and Senator Cory Booker (D-NJ), called the “Securing Required Funding for Water Infrastructure Now” Act, or SRF WIN Act. Including the SRF WIN Act allows state SRF programs to use the leveraging power of the Water Infrastructure Finance and Innovation Act (WIFIA) program, which is critical as the state financing authorities are all AAA bond rated. These elements allow for states to leverage at a ratio of over 100:1 (i.e., for every federal dollar invested, 100+ non-federal dollars are available). Critically, the WIFIA program is also reauthorized for two years at \$50 million each year. There is also language in the bill to ensure that DWSRF and WIFIA funds are protected. No funds shall be made available under SRF WIN in any fiscal year in which the total amount appropriated for the DWSRF and WIFIA is less than either the amount made available in fiscal 2018 or 105%

of the previous fiscal year’s appropriation—whichever is greater.

Another item that was included in the bill with APWA support is language related to the Water Infrastructure Resiliency and Sustainability Act. APWA supported the standalone legislation when it was introduced in the House, and its inclusion in this legislation is a boon for community water systems. The language provides grant opportunities for states to assist or otherwise carry out activities concerning contaminated drinking water. The program is authorized at \$8 million over two years.

There is also language in the bill that would help community water systems and public works departments deal with contamination of source water. Source water protection has become a larger priority for many systems, as preventing contamination at the source removes the need for treatment later in the process. The bill includes language that permits states to use a portion of their DWSRF funding to protect source water in areas delineated by that state in its source water protection plan.

Workforce issues have become more prominent in the water sector, as public works departments are trying to replace retiring personnel with the next generation of water sector employees. The bill includes language that establishes a competitive grant program at EPA to assist in the development and utilization of innovative activities relating to workforce development and career opportunities in the water utility sector. APWA is continuing to work with federal agencies across

the spectrum of public works to create and sustain programs to encourage employment in public works.

While there are many positives in this legislation, there are still elements that did not make the final cut. In looking towards the 116th Congress, which will be sworn into office on January 6, 2019, there are several legislative proposals APWA supports and will be pushing.


First is integrated planning. APWA and many others in the water sector are urging the federal government to end the isolated approach to permitting and move towards a “One Water” stance, applying a comprehensive, integrated approach to all SDWA and Clean Water Act (CWA) permitting (drinking water, wastewater, stormwater, combined sewer overflow) so that maximum flexibility and cost-effectiveness is implemented into the

## Should we be excited about the enactment of the biennial water resources development act? In a word, yes.

decision-making process. There have been multiple versions of this concept introduced in Congress, and APWA is continuing to work on seeing it become law.

Another agenda item is assistance programs for low-income water customers. There are twin problems that feed off one another. First, utilities need to set appropriate rates to maintain infrastructure and meet federal health and environmental obligations. Second, as these rates increase, the cost of water services pushes or exceeds affordability for many households. APWA supports legislation that will start addressing

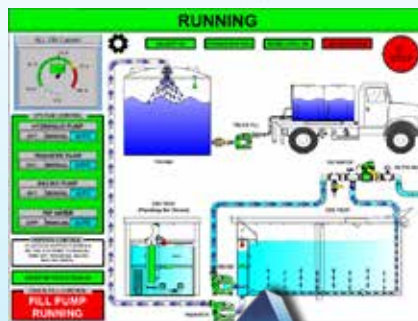
this problem in a variety of communities through a pilot program that would target federal dollars to places with the greatest need.

But these items are not the only ones we want to address. The APWA Government Affairs team wants to hear from you about the issues you are facing every day. The more we hear from our membership, the clearer the picture we can provide to Congress and federal agencies about what is needed to ensure our water systems have the necessary resources. Please contact Sean Garcia at [sgarcia@apwa.net](mailto:sgarcia@apwa.net) with issues related to water in public works. 



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Walnut Creek flooding in Clive, Iowa, June 2018

# Record Storms, Floods, Rainfall Intensity—What now?

**Ted Payseur**, Vice President Business, Veenstra Kimm Engineers/Planners, West Des Moines, Iowa, and member, APWA Government Affairs Committee; **Marty Williams**, Government Affairs Manager, American Public Works Association, Washington, D.C.

**C**entral Iowa, on June 30 and July 1, 2018, received 6" to 10" of rain in less than three hours. This intense event caused record floods and damaged more than 2,000 properties and one fatality. The Corps of Engineers Saylorville reservoir emergency spillway nearly reached the 1993 record elevation; had this occurred there would have been an uncontrolled discharge into the downstream Polk County area, worsening the flooding event. This event was followed by 22 reported tornadoes on July 19. The estimated property damage is \$16 million.

Iowa, which is bordered by the Mississippi and Missouri Rivers, has a long history of flooding, including the historic 1993 flood. Our second largest city, Cedar Rapids, has had a number of flood events including 2008, 2014 and most recently in 2018. The 2014 event included 4"-6" of rain in six hours. The record 2008 event, which was a declared FEMA disaster, is still being reconsidered for eligible FEMA funding.

**Des Moines and Cedar Rapids Funding Solutions.** Des Moines plans to raise their stormwater utility fees to accelerate stormwater improvements and buy out \$12 million of impacted properties. Polk County is also providing \$1 million for watershed/flood control improvements. Cedar Rapids is planning to spend an estimated \$750 million over the next 20 years, funded by municipal bonds and grants.

**Current Flooding Events.** As this article is being written, the final costs for flooding in the Carolinas caused by Hurricane Florence is yet to be determined. The costs most likely will be in the billions. This does not include the hurricanes that damaged Houston, Florida and Puerto Rico recently, or the damage caused by Level 4 Hurricane Michael on the Florida panhandle.

**Conflicted Design Standards and Old Weather Records.** Who is in charge? It depends. Most stormwater/flood control improvements are based on historic rainfall records. In addition,



depending on the source of funding the design standards are not the same. In Iowa the following agencies may impact the design of improvements: USDA/IDALS [U.S. Department of Agriculture/Iowa Department of Agriculture and Land Stewardship] (rural runoff standards and farm pond construction); Army Corps of Engineers (reservoir sizing, operations and flood control levees); FEMA [Federal Emergency Management Agency] (design considerations and funding); EPA [Environmental Protection Agency] (NPDES [National Pollution Discharge Elimination System] stream flows); County (watershed/flood control) and local (standard design specifications for sizing subdivisions' runoff). NOAA [National Oceanic and Atmospheric Administration] provides historic weather data and USGS maintains river gauging stations. Finally, Homeland Security/FEMA provides flood mapping designations for flood insurance. For example, the current event in the Carolinas has identified that less than 10% of homeowners have flood insurance, under the belief that the current flood mapping showed that the properties weren't in danger.

**Homeland Security State Hazard Mitigation Team Data.** In addition, during the 2018 State Hazard Mitigation Plan Review for Iowa's Homeland Security, data was presented showing a modest increase in temperature and rainfall in the upper Midwest during the last 30 years. This NOAA data did state that the number and intensity of storms was expected to increase.

**Summary of Climate Change in Iowa and Effects upon Hazards.** From the reports previously cited, the significant climate change trends and their effects on hazards in Iowa can be summarized as follows:

- An increase of 8% more precipitation from 1873-2008.
- An increase in extreme heavy precipitation in summer in the last 40 years, with more precipitation coming in the first half of the year and less in the second.

Yearly Trends in Mean Temperature (degrees Fahrenheit per year) for Iowa			
Period of Analysis	1873-2008	1895-2010	1981-2010
Source of Analysis	Ch. 2 of <i>Climate Change Impacts on Iowa 2010</i>	Ch. 2 of <i>Climate Change in the Midwest</i>	Ch. 2 of <i>Climate Change in the Midwest</i>
Average Change in Winter Temperatures	0.018 degrees warmer per year	0.014 degrees warmer per year	0.031 degrees cooler per year
Average Change in Spring Temperatures		0.014 degrees warmer per year	0.010 degrees cooler per year
Average Change in Summer Temperatures	0.003 degrees warmer per year	0.004 degrees warmer per year	0.006 degrees cooler per year
Average Change in Fall Temperatures		0.001 degrees warmer per year	0.062 degrees warmer per year
Average Annual Temperature Change		0.009 degrees warmer per year	0.007 degrees warmer per year

Yearly Trends in Mean Precipitation (inches per year) for Iowa		
Period of Analysis	1895-2010	1981-2010
Source of Analysis	Ch. 2 of <i>Climate Change in the Midwest</i>	Ch. 2 of <i>Climate Change in the Midwest</i>
Average Precipitation Change in Winter	Increase of 0.002 inches per year	Increase of 0.031 inches per year
Change in Spring Precipitation	Increase of 0.017 inches per year	Increase of 0.044 inches per year
Change in Summer Precipitation	Increase of 0.020 inches per year	Increase of 0.079 inches per year
Change in Fall Precipitation	Increase of 0.000 inches per year	Decrease of 0.081 inches per year
Annual Precipitation Change	Increase of 0.040 inches per year	Increase of 0.075 inches per year

- A larger increase in precipitation in eastern Iowa than in western Iowa.
- Long-term winter temperatures have increased six times more than summer temperatures.
- Nighttime temperatures have increased more than daytime temperatures since 1970.
- A substantial rise in humidity, especially in summer, providing more water to fuel convective thunderstorms that provide more summer precipitation.
- The increase in precipitation has contributed to a rise in stream-flow levels and the potential for more frequent and greater flooding. The changes in precipitation patterns and higher winter and spring temperatures contribute to summertime becoming the new seasonal flood norm. The rise in the number of large summertime rainfall events increases the probability of summertime floods, while higher winter and spring temperatures result in snow


melting earlier and more slowly, reducing springtime flooding.

**Rethinking Future Stormwater/Flooding Improvements.** APWA should be the umbrella organization that leads the way. APWA members and the general public during the recent storms contributed 6,000 hours of labor to clean up their cities (included in this effort was the 4th of July).

**Recommendations:**

- Watershed improvements must be considered for downstream impacts.
- Current storm events must be used rather than historic averages.
- Floodways must be cleared.

Finally, APWA should be able to answer the question from our citizens, "What is being done so this doesn't happen again?" No matter how you feel about climate change, what we are dealing with now are historic events.

*Ted Payseur can be reached at (515) 225-8000 or tpayseur@v-k.net; Marty Williams can be reached at (202) 218-6732 or mwilliams@apwa.net. *



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## Antibiotic resistant

Canadian wastewater treatment plants are contributing to the persistence of antibiotic resistant bacteria. The cost to Canadians is significant.

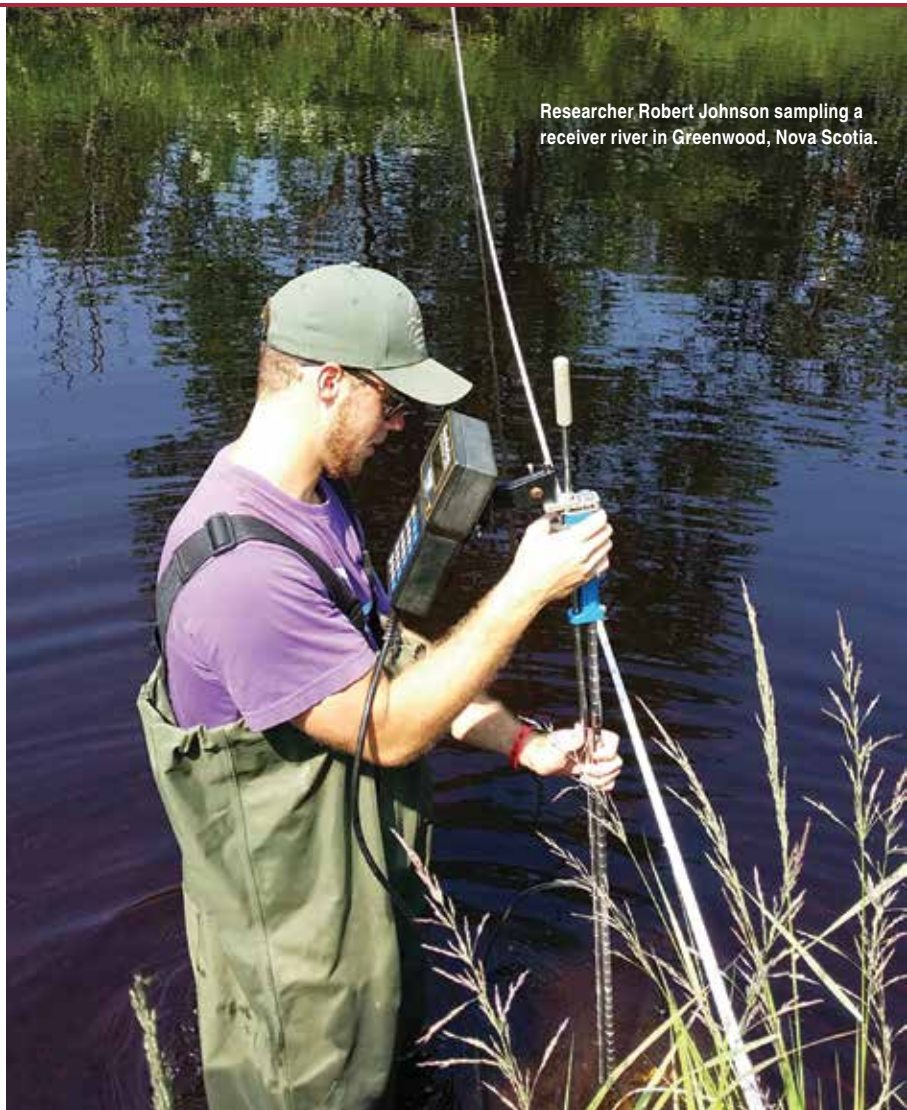
**T**he golden age of antibiotics from the 1940s to the 1990s has ended, with antibiotic resistance quickly becoming a risk to public health, and wastewater treatment processes are playing a role.

The misuse and overuse of antibiotics in healthcare and agriculture has increased the prevalence of antibiotic resistant bacteria. Studies have estimated that, in the United States alone, antibiotic resistance adds \$20 billion in excess direct health care costs, with

A wastewater treatment plant in Iqaluit discharges effluent into Frobisher Bay.



Researcher Robert Johnson sampling a receiver river in Greenwood, Nova Scotia.



additional costs to society for lost productivity as high as \$35 billion a year. A 2014 Review on Antimicrobial Resistance estimated that 10 million deaths per year globally in 2050 will be attributable to antibiotic resistance, with a cumulative cost of US\$100 trillion.

Efforts have been implemented to mitigate antibiotic misuse, such as the European Union's policy on the regulation of clinical prescriptions and their use in animal husbandry and the 2017 Pan-Canadian Framework for Action (Tackling Antimicrobial Resistance and Antimicrobial Use). However, antibiotic resistant outbreaks remain prevalent. Some of this is driven by conventional wastewater treatment systems, which can act as reservoirs for antibiotic resistant elements. Worse, this factor is not often considered in planning for the mitigation of the spread and growth of the problem.

A multidisciplinary team of academic researchers from the University of Regina (Dr. Chris Yost), Acadia University (Dr. Anthony Tong), and the University of Dalhousie (Dr. Lisbeth Truelstrup Hansen and Dr. Rob Jamieson) have been researching wastewater treatment plants as potential antibiotic resistant reservoirs. Their research has examined treatment processes in Saskatchewan, Nova Scotia, Prince Edward Island, and Nunavut.

The project began in the summer of 2015 by investigating the abundance and diversity of antibiotic resistant genes (or ARGs) and comparing their values in influent and effluent samples between the different wastewater treatment plants. These comparisons are being used to help identify mechanisms that control or contribute to the presence of antibiotic resistant bac-

teria in wastewater treatment plants, with a particular focus on clinically relevant ARGs.

As the move towards a climate-friendly circular economy grows, the reuse of wastewater increases, with biosolids being particularly beneficial to agricultural practices. Despite this, removal of antibiotic residues and antibiotic resistant bacteria is not a topline objective. Recent wastewater treatment plant upgrades have primarily focused on the removal of nitrogen and phosphorus from influent. Therefore, it presents the question: How is this type of circular economy contributing to the enrichment of antibiotic resistant reservoirs and their spread throughout the environment?

Overall, the type of wastewater treatment plant and source of wastewater (e.g., agriculture or health care) did

This wastewater treatment plant in Greenwood, Nova Scotia, was one the researchers examined.



affect the prevalence of ARGs observed in effluent receiving waters. Select ARG enrichment was observed throughout the treatment process in some facilities, but not all wastewater treatment plants observed this trend. One study site in Nova Scotia expanded the examined area to include the watershed upstream of the plant. The researchers found that upstream ARG concentrations were greatly impacted by human activity, meaning as human impacted areas decreased, overall ARG levels also decreased. One surprising result was the presence of these ARGs in headwater river samples, suggesting their ubiquitous presence in the watershed despite the absence of obvious pollution sources.

This is clear evidence that even though the current wastewater treatment systems are meeting strict effluent quality guidelines, they are not removing ARGs, and in some cases, they are contributing to ARG enrichment. The incubation and spread of ARG into the environment by our current water treatment regime is a risk to public health; many of these genes are associated with mobile genetic elements that can promote the spread of ARGs between both environmental and pathogenic bacteria.


Although more research is still needed to fully understand all contributors



(L-R) Dr. Kara Neudorf and Joanna Poltarowitz sampling in Iqaluit.

to the presence and enrichment of antibiotic resistant elements, it's clear that wastewater treatment plants play a large role. Since wastewater reuse and waste mining are becoming more prevalent in the approach to optimize resource management, the spread of these ARGs should be of concern and solutions considered. Increased monitoring of their presence and spread throughout the treatment and

reuse process will help our understanding the problem and provide insights on how to prevent future enrichment of antibiotic resistance. Additionally, improvements to current treatment facilities present a perfect opportunity to improve upon the removal of both antibiotic residues and ARGs throughout the treatment process.

*Dr. Kara Neudorf is a postdoc at Dalhousie University. *



As the treated septage flows into the wetland, cattails seen in this narrow, shallow trench feed off the nutrients.

## Opening the honey pot

### *Septage review sparks interest in best practices*

**Saul Chernos**

Freelance journalist  
Toronto, Ontario

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All eyes are on better practices as Ontario's environment ministry reviews rules that allow untreated septic and holding tank sewage to be spread on farmland and emptied into municipal wastewater systems. Current standards have long been a concern.

Back in 2000, *The Globe and Mail* pointed to a 1998 ministry reference document that said up to 1.75 million cubic metres of sewage is pumped from more than a million septic tanks in

Ontario every year. Much of this septage can be dumped directly onto rural land, regardless of heavy metal and pathogen levels. For private sewage haulers, all that is required is a ministry certificate of approval spelling out the setbacks from roads and neighbours and how long sewage-soaked soil must sit before it can be used for crops and livestock.

Ontario is in good company. Two years ago, 30 people protested in Clinton, British Columbia, after a truck hauling



René Goulet's reed beds were built first by installing cement sand over the two types of gravel, with a felt liner at the bottom to ensure the bed would not contaminate the water table.

raw sewage, destined for use as fertilizer, overturned on an icy road near Big Bar Lake. “A lot of people weren’t aware that biosolids were being dumped in the Big Bar region for years,” the *Vancouver Sun* quoted protest spokesperson Amanda Bourgeois. The regional district responded with a statement noting that the biosolids were non-toxic and not considered to be a hazardous material, maintaining they were “a treated, nutrient-rich by-product of the wastewater treatment process used to enrich soils and stimulate plant growth.” However, the incident sparked concerns that were not easily quelled.

Even with relatively lax rules regarding treatment, illegal activity occurs. Earlier this year, a Prince Edward Island septage hauler was sentenced to four months in jail and ordered to pay more than \$10,000 in restitution after dumping untreated sewage onto farmland without a permit.

## We need to determine how much raw sewage ends up on farmland and in local treatment systems, define acceptable levels of treatment, and ensure municipalities are adequately funded to build out receiving capacities.

### Ontario review

When Ontario launched a review of the province’s hauled sewage policy two years ago, the ministry said it was considering a range of approaches, from geographically-based rules to something more province-wide. After the provincial election in June saw the Conservatives replace the incumbent Liberal government, the ministry has been waiting for direction, said spokesperson Gary Wheeler. “At this stage, providing comment about the policy and the review would be premature,” he said.

Rick Esselment, government relations chair with the Ontario Onsite Wastewater Association, said he hopes Ontario’s review will determine how much raw sewage ends up on farmland and in local treatment systems, define acceptable levels of treatment, and ensure municipalities are adequately funded to build out receiving capacities.

“A lot of Ontario has no wastewater treatment plant within a reasonable distance that would have the receiving capacity,” said Esselment. “We really need a blended approach.”



This tiny lagoon is the first stop for septage at Baird Septic Tank Pumping's treatment facility in Nova Scotia. Floating sludge, as seen in the middle, will be skimmed off. Water from this lagoon passes through a filter and drains to a much larger lagoon.

Esselment noted that personal hygiene products, pill bottles, and other inorganics people flush down the toilet should be filtered out prior to land application. “Maybe not a full wastewater treatment process, such as a municipal treatment plant, but something at the very least to screen out non-biodegradable materials and then stabilize the waste so there’s less pathogenic risk being dispersed onto the environment.”

Esselment pointed to Goulet Septic Pumping and Design in Green Valley, near Cornwall, Ontario, which operates a lagoon and reed bed filtration system, as an example of an innovator in processing septage.

Owner René Goulet said his 18-hectare site, built in 2006 on former agricultural land, has shallow soil atop limestone and is zoned for waste disposal. The system was launched as part of a province-wide pilot and, while the research

## Goulet Septic Pumping and Design in Green Valley, near Cornwall, Ontario, operates an innovative lagoon and reed bed filtration system for processing septage.

has concluded, Goulet continues to abide by his certificate of approval.

“We have to stay 100 feet away from the road and from neighbours as a buffer zone,” Goulet said.

Goulet’s system operates much like a giant septic system. When his truck brings in a load, a homemade bar screen weeds out plastics and other debris before dumping the organic matter into reed beds, where it percolates before the liquid is pumped into an adjacent 56-by-100-metre lagoon. The solids settle and, when the lagoon fills, the water on top is pumped through a 2,000-metre-long pipe and

water cannons spray it onto poplar trees, which absorb the nutrients, ultimately delivering clean water to the aquifer.

“The poplar trees grow very fast and suck up a lot of juice,” Goulet said.

Holding tank waste goes directly into the lagoon, as it is mostly effluent with some sludge. So does septage that exceeds what the reed beds can handle. The key to the system’s overall functionality is the clay base covered by a double liner—one felt, the other rubber—which prevents rocks from intruding. Ten-centimetre perforated PVC pipes, placed on top of the liner



Allan Baird looks down from a wharf overlooking his largest lagoon. The green pipe leads towards a filter that traps solids and drains to a third, smaller lagoon, which, in turn, drains into a wetland.

and covered with layers of differently-sized gravel and sand, provide air flow to assist the reed beds.

The dewatered sludge from the reed beds is removed every seven-to-ten years and spread on nearby farmland, while sludge from the lagoon decomposes onsite. Goulet hauls inorganic waste—everything from beer caps and sanitary napkins to golf balls and underwear—to the local landfill.

Goulet sends samples from his monitoring wells to Ontario’s environment ministry for analysis and reports the number of septic and holding tanks his

company pumps and the total volume deposited at his site.

Having seen his system go from trial to fully operational, Goulet is keen to see the results of Ontario’s review. “It’s 2018,” he said. “Spreading sludge directly on land without being treated is not the way to go anymore.”

#### **Atlantic approach**

Ontario could look to Nova Scotia, which has made considerable strides since banning land application of untreated septage in the 1990s and auditing all lagoons in 2000. “None

**“Spreading sludge directly on land without being treated is not the way to go anymore.”**

**- René Goulet**

of us was in total compliance,” Baird’s Septic Tank Pumping owner Allan Baird recalled. “They gave us until 2010 to be in total compliance.”





Allan Baird points towards the lower part of the wetland where the treated water ends up. "There's no cattails, because there's no nutrients left in the water," Baird said.

Realizing his lagoons are his biggest asset, Baird participated in a government program to offset the \$400,000 price tag of an upgrade and by the end of the fourth year was fully compliant. "I was probably one of the first ones to put in a wetland," he said. "The effluent that leaves my lagoons and wetland goes into a brook that's cleaner than what comes out of any municipal sewage treatment plant."

Baird's three lagoons are separated by filters to screen out solids and other undesirables. Gravity serves as the main actor, with the lagoons flowing

into a maze-shaped wetland where cattails absorb the waste. "The last two or three rows before the water is discharged, there's no cattails because there's no nutrients left in the water," Baird said. "I wouldn't drink it, but it's visibly clear."

Baird uses an excavator to dredge solids from his middle lagoon, places the sludge on a drying pad that drains all liquid back into the lagoon, and hauls the dried waste to a nearby composting site, after which it can be land applied.

Others in Nova Scotia have followed Baird's lead. "Mine was the first my

engineer ever designed, but since then he's done several other ones," Baird said.

Lamenting the illegal dumping he hears about all too often, Baird said the jail sentence awarded in P.E.I. "surprised a lot of people." Still, after spending a small fortune to do the right thing, he expressed little sympathy. "When there's other people who aren't in compliance, it irks you."

*Saul Chernos is a Toronto-based freelance journalist and frequent contributor to Water Canada. *



## Ready to educate

*Mohawk College opens its doors to net zero energy*

**Andrew Macklin**, Editor, *ReNew Canada* magazine, Toronto, Ontario

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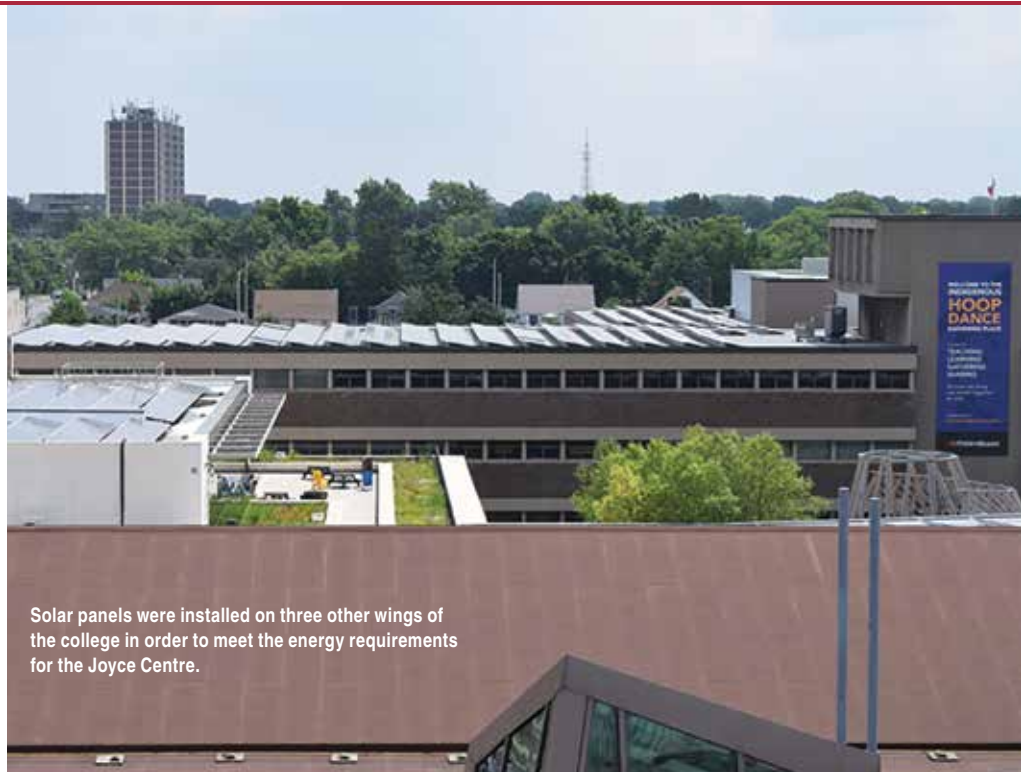
**WATER**  
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**S**lide open the door on the ground level of the new \$54.25-million Joyce Centre for Partnership and Innovation at Mohawk College in Hamilton and it doesn't take long to realize that you have walked into something different. Natural light pours into the atrium from seemingly all directions, and the prominence of interior wooden elements present a warmth rarely felt at an academic institution.

The Centre marks Canada's first-ever net zero energy academic building, and one of the country's first zero-carbon buildings. The seven-floor building's energy budget, set at 73 ekWh/m<sup>2</sup>/yr, is supported through an extensive solar panel network and 24 geothermal wells at a depth of 180 metres.

But nothing about the building's materials, designs, or resources are anything new to the Canadian construction market; they are just

The new Joyce Centre for Partnership and Innovation features a solar-panel terrace that students will have access to.



Solar panels were installed on three other wings of the college in order to meet the energy requirements for the Joyce Centre.

packaged in one of the most efficient ways that the Canadian construction market has ever seen. The structure is a mix of concrete and steel, with wood façades throughout the interior. The building envelope is designed for maximizing heating, cooling, and natural light. Triple-glazed windows have been installed to improve energy efficiency and reduce noise. There is sensor-controlled LED lighting in place throughout the building, and in classrooms it contains an automatic shut-off feature so that lights do not

remain on in rooms that are empty. The heating, cooling, plumbing, and stormwater harvesting systems are all built for efficiency, but all can be found within the industry already.

What you won't find is a furnace, or a natural gas backup system. Those have been eliminated thanks to the capacity of the renewable energy systems in place.

And based on that same capacity, the building as constructed could go beyond just net zero energy.

"Now we're really looking at net positive, and whether we can deliver that," said Lisa Bate, regional managing principal for North America at B+H Architects. "The energy of this building will probably over-deliver, so it's set up to feed back to the rest of the grid of Mohawk." Having the ability to feed power back to the rest of the campus will significantly improve the campus' energy resilience, putting the school in a position where it could keep the lights on if power is knocked out in the area.

### Back to school

Before the building opened to students this fall, staff were first educated on

## The Centre marks Canada's first-ever net zero energy academic building, and one of the country's first zero-carbon buildings.

how the new building will function. Implementing net zero energy for a building, especially one that's 96,000 square feet, fails without changes in occupant behaviour. That includes appreciating the need for reduced plug loads, actions to be taken to keep the climate of the building consistent, and appreciating how to use natural light, rather than artificial light, wherever and whenever possible. It's a disruptive change, but at a time in history where disruptive changes are being embraced, the changes have been adopted by college staff fairly seamlessly.

"We just need to get to the next level," explains Tony Cupido, the college's building and facilities manager. "And the next level is having the acid test of



Thirty-two heat pumps were installed as part of the building's heating and cooling system.

having a thousand students show up [...] and really giving it a workout.”

Once those students arrive, they will have an opportunity like no other at college campuses across the country—because the students will have unfettered access to a building that they will monitor, and become responsible for meeting the aggressive targets set by its constructors.

“There’s seven levels of learning here. We’ve created all of the spaces that are usually hidden from students and made it fully available to them,” said Ron McKerlie, president of Mohawk College. “The entire building is a lab. The data will be available to them (the students); we’re creating an application so they can actually run it on their iPhone some day.”

**Having the ability to feed power back to the rest of the campus will significantly improve the campus’ energy resilience, putting the school in a position where it could keep the lights on if power is knocked out in the area.”**

**- Lisa Bate, regional managing principal for North America at B+H Architects**

And that data could provide the backbone for future net zero energy and zero carbon projects across Canada, not just for education institutions, but commercial, residential, and infrastructure projects across the country.

With the Joyce Centre having opened its doors to the incoming class in the fall, the industry prepares to learn about operating net zero energy buildings right alongside them.

*Andrew Macklin is the editor of ReNew Canada magazine.* 

# Brand Management Crisis Communications: A high-level outline your team can implement!

**Emily Dowsett**, Government Affairs Media Manager, American Public Works Association, Washington, D.C.

**W**e never know when a crisis may happen, but it is important to be prepared when it does. Having a crisis communications plan in place now, allows you to more efficiently and effectively handle the fallout—at least from a public relations perspective!

Perhaps there is a water contamination incident, a wide-spread power loss event, a sinkhole, a disgruntled customer slandering your organization, and the list goes on. No matter what kind of crisis your team is facing, it is imperative that you control the message going out to your stakeholders and the media.

Here are a few general steps that you can take before, and after, a crisis occurs:

## Before a Crisis

- **Assess and Identify Potential Risks or Crises:** Crises can fall into a long list of categories which can all require differing action/responses. It is important for your organization to identify a list of potential crises which could impact your organization (contamination, natural disaster, cybersecurity breach, human, etc.). Once you've got your list, write down the best-case/worst-case outcomes for those crises' scenarios.

**No matter what kind of crisis your team is facing, it is imperative that you control the message going out to your stakeholders and the media.**

- **Identify Your Crisis Communications Team:** Your crisis communications team should be a small group of leaders/employees who will immediately meet in the case of a crisis to assess the actions to be taken. Some ideas for who might be on your team are the Public Works Director, the Public Information/Affairs Officer, and the leader of your communications efforts.
- **Answer Your Organization's Crisis Communications Basics:** Some of these will vary depending on the type of crisis/situation, but there are a few crucial questions that you'll want to have the answers to ahead of time:
  - Who will speak on behalf of your organization?
  - What will the messaging be?
  - When (how often and how soon after the crisis) will they speak?

- Why is this person the best to speak on behalf of your organization in this instance?
- Where/how will they communicate (written statement or press conference, etc.)?
- **Train Spokesperson(s):** Now that you have figured out who might speak on behalf of your organization (depending on the scenario), it is imperative that they undergo some sort of training to help them best address the situation at hand to stakeholders or the media. If you don't have this sort of budget for training, have them practice speaking to a large group, or with a camera and lights in their face. Any practice is better than the alternative!
- **Develop Holding Statements:** It is important to have "holding statements" in place for a variety of scenarios that can buy you time before you have developed full statements which include specific details about the crisis at hand. These are simple statements, that can really help when you are in the throes of a crisis situation! Some examples might be:
  - "We have implemented our crisis response plan, which places the highest priority on the safety of our community members and employees."
  - "We will be supplying additional information when it becomes available. The most immediate way to learn of any updates will be through our website."
- **Make a Media Outreach List and Reach Out Now:** When a crisis occurs, you will likely need to communicate your message through media outlets. Make a list of local media outlets, and take the time to introduce yourself and your organization now. It's better to have made contacts with these companies/reporters ahead of time so they are familiar with you before crisis strikes. Remember, they are the ones likely reporting your story, so get to know them with a friendly introduction and share some facts about your operation. This may go a long way when you're in the thick of it handling a crisis!


## Post-Crisis Occurrence

- **Complete a Post-Crisis "Checklist":** The immediate steps that you take after a crisis can vary greatly depending on the type of event that has occurred. There are a few things you should do no matter what, that should always be on your "checklist":
  - Notifying your Crisis Communications Team and any other pertinent internal stakeholders.
  - Assessing the extent of the crisis situation.
  - Assessing the perceptions of the media and public if possible.

## Take time to ensure that your plan is up-to-date, and fresh in the minds of your crisis communications team.

- Deciding if this is a situation where you need to distinguish between law and public opinion to determine if you are liable in this situation.
- **Create Key Messages:** Your earlier developed "holding statements" are a great place to start, but now, including information relevant to the exact crisis, your team can develop specific messaging. These should be brief, and to the point, but ultimately address exactly what stakeholders should know about this particular crisis. Some examples of information to include would be: what happened, how it's being handled, what stakeholders can do (or shouldn't do), and when you will next update everyone.
- **Convey Your Messages:** Now is the time that you pass along your messages to external stakeholders, your customers, and the media. Whether it is a press conference, a written statement that you issue via media outlets or on your website, or another form of communication that is situation-appropriate, you must make sure everyone who needs to hear your message does.
- **Post-Crisis Analysis:** A crisis communications plan is a living document. You don't just make one once, and then leave it alone. You must also learn from any and all crises that occur, and from that point, improve. Ask yourself and your team a few simple questions:
  - What did we learn from this?
  - What could we have handled better?
  - What else can we prepare for?

Now, I would love nothing more than for you to never need to think about crisis communications; however, in the expansive world of public works, we know crises can arise for a variety of reasons, at a variety of times, and you need to be ready. Of course, this is by no means an exhaustive list of all the things that you can do to prepare for and respond to a crisis, but hopefully I've at the very least gotten you thinking of how you might handle your communications to the public if and when the need arises.

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# Inventing the future

**Andrew C. Lemer, Ph.D.**, Senior Program Officer, the National Academies of Sciences, Engineering, and Medicine, Washington, D.C.; Member, International Affairs Committee

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

**N**eglecting the future momentarily and looking back, I found that this column has been running for about five years, more than 50 articles!

Finding tidbits of new science and technology that might be turned to advancing practice in public works has been an enjoyable challenge, and I have been gratified (trusting that we all are guided by parental advice similar to what I was taught, “If you can’t say something nice, say nothing at all!”) by occasional encounters with people who admitted, without prompting, to being readers. Nevertheless, I have decided it is time for a change.


I doubt that any of the topics covered here will show up on a list of top technologies likely to change the face of public works in the next five years. For public works practices, shaped as they are by long-lived and slow-changing capital investments and public priorities, a full decade is not much time. Even fields that we view today as fast-paced take more time to evolve than we often imagine. The January 1975 issue of *Popular Electronics* magazine featured a cover story on the “first minicomputer kit,” the Altair 8800. The technology behind this precursor—of Apple, Microsoft, and hundreds of other companies; and of sweeping changes in how we work—began earlier. Solid waste compactors and warm-mix asphalt are not as interesting to the popular press, perhaps, but have evolved over similar time periods to have important consequences in public works.

A key feature of these and many more cases is that people imagined that things might be different and acted to make their imaginings real. Guiding me since the column’s start has been Yogi Berra’s observation, “It’s tough to make predictions, especially about

the future.” The numbers of baseball fans who remember this great catcher, manager, and coach may be diminishing, but his often-amusing quotes live on and, in this case, account for my effort to focus on topics that someone could use and develop. It has seemed to me that all of us who are engaged with public works—from the person holding on to the back of the recycling collection truck to the agency’s director, from the new hire to the veteran of decades, from the municipal employee to the university professor, from small town to major city—are inventing the future without a road map. Some of us may try to make predictions, and very occasionally we may be able to say, “I told you so!” But the odds of making successful predictions are against us.

What we all can do successfully is look for ways to make improvements in how we do our jobs and otherwise go about our business. Small incremental changes can add up, and sometimes what seems like a small change at first can grow into something major. The aphorisms of acorns to oaks, for-want-of-a-nail, and the like may seem trite but remain true.

There’s another Yogi Berra quote that I enjoy: “The future ain’t what it used to be.” It never is, of course, because each new day is different, bringing new challenges and opportunities. All of us have the opportunity every day to invent the future of public works and through our invention to make a contribution to the communities we serve and our quality of life. I imagine we will all keep at it, just not the way we used to.

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

## Planning for the future

**Wilfrid Nixon**, Ph.D., P.E., PWLF, Vice President, Science and the Environment, Salt Institute, Naples, Florida; Member, APWA Winter Maintenance Subcommittee

**T**he winter season is well and truly upon us now, so it might seem a bit strange to be talking about planning, but in the midst of all your hard work providing safe and sustainable snowfighting to your community, you might want to think a little about how your agency can continue to provide that snowfighting in the long term.

Just in case you might think I am talking about how our weather might change over the long term, I am most emphatically not doing that! None of the climate models are good enough at present to be able to tell us whether the winter climate in a particular location will get warmer or colder, wetter or drier. The ability of the climate models to predict, for example, the number and intensity of hurricanes is essentially zero (which is another way of saying the model predictions have been wrong) and there is no reason to think that the ability to predict how winters in, for example, the Midwest or Northeast U.S. is any better than this (in other words, the models cannot predict how winter will be). So, I am not talking about possible changes in the weather.

There are some things that are more predictable than the weather, and these can have important impacts on our winter maintenance activities—especially if we fail to plan for them. And that is the point of this article—not that we plan to fail, but that if we do not specifically do so, we simply fail to plan.

One area that is reasonably predictable is population growth. The U.S. Census bureau puts out numbers regularly estimating how our population (which is currently about 326 million people) will grow. Right now, they estimate that by 2040 there will be about 380 million people in the U.S.

That is, in the next 22 years the population of the U.S. will grow by about 54 million people. To put that in context, about one and a half times the current population of Canada will be moving to the U.S. over the next 22 years. They will need quite a bit of infrastructure when they arrive, and a lot of that infrastructure is going to be maintained by streets departments around the U.S.

Again, to put that number of extra people in context, that represents about a 20% growth above our current population levels. Are you ready to increase your lane miles by 20%? The good news is that this increase will not happen overnight, but slow gradual growth brings its own challenges. If your lane miles grow by 1% a year or even less, you may try to squeeze that growth into your current framework, which is fine, until it isn't!

So, how do you deal with this sort of long-term issue? That growth in infrastructure may not be impacting you today, but do you have a plan for dealing with it when it happens? Part of this can be as simple as talking with your own agency's planning department. What growth are they anticipating, and have they given thought to how that will impact your winter maintenance operations? The answer to the second question is almost certainly no, they haven't, which means that if you want someone to consider that issue, you will have to be the one to raise the issue.

While population changes are fairly easy to predict (and sometimes the predictions are even reasonably close to correct!), changes in behavior are a little harder. Yet it seems more than likely that the nature of driving and of highway transportation is going to change radically over the next couple of decades. Autonomous vehicles (or self-driving




cars, if you prefer) may seem like a pipe dream today, but many of their features are already on production vehicles and more “pieces of the puzzle” are being addressed by automakers every year. The implications of this transition in vehicle technology are far from clear, but it does seem that one expectation is that without clearly visible road markings, much of the current technology will not work (or will not work as well). That means you should expect growing pressure not only to get your roads clear of snow and ice as quickly as possible after a storm, but also to keep them clear during a storm, which is a hugely difficult task. Nonetheless, those sorts of changing expectations are another part of how things will change in winter maintenance over the next couple of decades.

Making sure that winter maintenance operations are considered as part of your agency’s planning is just another part of safe and sustainable snowfighting. It is keeping your eye on the long-term goals of making sure that your agency can provide safety and mobility to the traveling public during the worst winter weather.

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**You should expect growing pressure not only to get your roads clear of snow and ice as quickly as possible after a storm, but also to keep them clear during a storm, which is a hugely difficult task.**

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Wilfrid Nixon can be reached at (239) 231-3305 or wilf@saltinstitute.org. 

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## There's a Pilot at the Point!

**Jim Proce**, ICMA-CM, PWLF, MBA, City Manager, City of Anna, Texas; member, APWA Leadership & Management Committee; North Central Texas Branch Secretary

**R**ecently I had the opportunity to engage in a small city in Denton County, Texas, Pilot Point. A good friend of mine and former classmate is the City Manager and he was faced with some challenges that were sort of the type of thing I have done in my public service adventures.

So, as luck would have it, I had some capacity and thought let me give this a try and at worst I would be working with a guy that I know, who is a good friend, and I would be helping him out, for mutual reward in serving local government.

Upon arrival, I found a cool little place, that I had not previously heard of, where there are lots of horse farms, tractors, and hay fields and a neat little downtown area with some really cool historical buildings. Since moving to Texas in 2011, I have visited many of the really cool old downtowns throughout Texas and, well, I take pictures of old water towers too, not sure why I do it, it's just this thing I

do. Well, my task was to figure out the public works department on this mission. The current director was planning to retire and after a career of varied accomplishments, he was looking for a new adventure, having worked tirelessly for a couple of decades. NEWSFLASH: By the time you read this, he should be well on his way to building a new sewage treatment plant for the city, if things are going as planned, and I know how much he cares so it should be an awesome project.

Well, as I got to know the staff and this community and all of its challenges and opportunities, I had the great pleasure of meeting a guy named Trent Vandagriff, who was recently promoted to assistant director in the public works department. Trent had been working for Pilot Point for about 15 years and was the glue that was apparently holding this place together. He was an informal leader that has served the prior director with loyalty and dedication in the trenches for many years. Prior

to being in Pilot Point Trent had quite an interesting history, working on cars and trucks, construction of varying sorts, electrical and plumbing, and even building airplanes and helicopters (maybe even rockets?) so he is really sort of a handy guy who knows how to fix just about anything, even stuff that flies. He really helped me navigate the facilities, the projects, the staff and the community. He was well-liked, well-known, and he was here to serve, not only me as I began an evaluation and audit of everything around there, but the community, his staff, his peers, the contractors and consultants, and most importantly his family, who he talks about every chance he gets. (I have been fortunate enough to meet them and they are super great folks!) He was a breath of fresh air and for me, having spent the last two months at a sewage treatment plant, I could use really some fresh air without the extra flavorings.

What was most notable was this mild-mannered giant of a guy, both in per-

sonality and stature, was he so revered and respected, perhaps more than anyone I have ever worked with in four decades of public service adventures. His personality was infectious if not contagious. Even under the most challenging of times that we encountered in my brief time there, his attitude was positively invigorating and brought a smile to my face daily. So why this is so important is that this city had been dealing with some very old infrastructure challenges that resulted in lots of excitement on a daily basis. Oh, and there is a really cool water tower there too, and it is over 100 years old and it works perfectly. But even on the worst days [Sidebar: even a bad day of (fishing, hunting, relaxing, mountain biking, playing the guitar, or anything else you like to do) is better than a good day at the sewage treatment plant, just saying...] this guy was the cheerleader for overcoming all that was evil. The infrastructure demons were scared off and we always managed to embrace the brighter side of life. Now, I have to say that I am a guy with a good sense of humor and I generally like people and I have a lot of friends all over this planet, and I am in awe of this guy and the positive energy he emits. When the walls are crashing down, he is there to brighten up everyone's day, and not occasionally, but always, every day, no matter what the circumstances.

### But why?

Magnetism, charisma, sense of humor, ethical behavior, caring attitude? Well, he is all that, but the fact is, there's more.

He is the definition of servant leadership, exhibiting every one of the textbook attributes, effortlessly, and it's real. When I look in the mirror and I know I can make people crazy, just ask my wife or my former bosses, and I work hard at this servant leadership stuff, but in Pilot Point, I met this guy that I want to work for, watching him do it so naturally and effortlessly.

So, what are the takeaways to write down and try to emulate to be a better servant leader or be more Trent-alicious Leader?



Well, aside from following Trent around as he navigates the trials and tribulations of Pilot Point, Texas...

- Listening – He has patience and listens to people, no matter how crazy, no matter how difficult, no matter how angry.
- Empathy – He walks in the shoes of others before jumping to conclusions and feels their concerns and works to make things better, seeing through the eyes of others to get perspective.
- Healing – He is always without regard for himself and is there for those in need, helping everyone navigate hurdles, in work, play or life.
- Awareness – He is self-aware, humble, inspiring and caring of others' needs and often spotting those needs before they engage him or know they could use a helping hand.
- Persuasion – He makes the team want to follow him into battle, the broken water main, malfunctioning lift station, the clogged sewer line, the angry customer, and they willingly follow him most often without words being

spoken, because they trust and believe in him.

- Conceptualization – He is a visionary, about the work, the community, and life, and he shares that vision with all around him.
- Foresight – He knows and understands the outcomes of decisions and guides himself and others well for success.
- Stewardship – He is a servant first, without exception.
- Growth – He is a natural teacher, coach, supporter, trying to make everyone better, as well as a student striving to understand that which challenges him (which is not that much). He shares his talent and others accept that sharing.
- Community – He understands the purpose of our collective duty is to serve community.
- Calling – He recognizes that what we do is important, being for the greater good of community and that this work is a privilege and the reward is not a plaque on the wall, it is the feeling we get when we get the sense of accomplishment, even if only we ourselves are the only ones to know it.

He is the definition of servant leader, “The servant-leader is servant first... It begins with the natural feeling that one wants to serve, to serve first.” – Robert K. Greenleaf. This is “Leading from the Frontlines” in Pilot Point, Texas! And Trent is the Pilot at the Point!

*Trent Vandagriff, at the recommendation of Jim Proce, was recently promoted to Public Works Director for the City of Pilot Point, Texas. Trent can be reached at [tvandagriff@cityofpilotpoint.org](mailto:tvandagriff@cityofpilotpoint.org).*

*Jim Proce is a member of APWA's Leadership & Management Committee, Secretary for the APWA North Central Texas Branch in the Dallas area, a recurring speaker at APWA's PWX, and the current City Manager for the City of Anna, Texas. He can be reached at [jproce@annatexas.gov](mailto:jproce@annatexas.gov). **R***



## An extremely rewarding Jennings Randolph Fellowship study trip

**Helena Sullivan**, Construction Engineer III, McHenry County Division of Transportation, Woodstock, Illinois; 2018 Jennings Randolph Fellow

I recently completed my public works study tour for the 2018 Jennings Randolph International Fellowship Program by researching how a nation with a similar climate and roadway system maintains its bridge inventory. In September, I traveled to Sweden, which is my birth country. Though I have established my career as a civil engineer in the United States, I was curious how Sweden maintains repair records of its bridges, funds bridge repair and replacement projects, prioritizes its aging infrastructure system, and builds its bridges. Sweden was also a logical choice, as I believe bridges in their rural areas would likely be similar in size to those we have in McHenry County, Ill., which has mostly rural roads and where we are responsible for about 130 bridges.

### Study Tour Objectives

My main bridge study tour objectives were:

- Understand Sweden's bridge maintenance program
- Learn how Swedish bridge construction is planned and funded
- Visit project sites to observe routine repairs and maintenance
- Become familiar with new construction methods and materials
- Share a brief summary of bridge repair and replacement projects with corresponding public works agencies in Sweden

Due to my diligent research and planning, I can say I not only accomplished

what I expected, but also gained many new friendships and networking contacts related to bridge construction and maintenance. My trip was divided into visits to three cities: Gothenburg, Stockholm and Uppsala, where I also finished my study tour and attended a conference hosted by the Swedish Public Works Association. The conference was focused on city planning, but attendees said they enjoyed learning about bridge repairs and listening to my presentation.

My first priority was meeting with the Swedish roadway agency, *Trafikverket*, to learn more about their bridge repair and inspection program. Since Sweden is a long and narrow country, I started my journey on the southwest coast, in Gothenburg, where *Trafikverket* has a

regional office and the bridge repair program is managed. The national bridge office manager, Fredrik, showed me their organizational structure and explained how his office oversees the national maintenance program and manages their bridge inventory using an Internet database program called *BatMan* (Bridge and Tunnel Management).

### **BatMan – Sweden’s Internet-based bridge management database**

This resource is comparable to the U.S. Federal Highway Administration’s *National Bridge Inventory* (NBI) database; however, *BatMan* appears to have more user-friendly interfaces and easier search functions. The homepage features an interactive GIS map that shows location dots and identifies structures with basic construction details such as ID number, type, the year built, the agency responsible for maintenance, and file photos. Users can gain access to more detailed information and enter data regarding structures with approval from the program administrator.

One of Fredrik’s colleagues, Adriano, shared his background at our overview meeting and said he had been a bridge field inspector and assisted with some of the development of the early *BatMan* program. He explained the history of the database started with inspectors writing on paper forms on a clipboard, then improved to an electronic file stored on a field laptop, and finally evolved into *BatMan*. I was impressed by this useful online bridge resource available to users in a variety of areas, such as government and transportation agencies, engineering design firms, planning officials, inspection companies and members of the public.

Despite its differences, I am sure our bridge inventory management tools have many common features. Bridges in the United States are registered with unique seven-digit structure numbers which are used to track periodic bridge inspections and create reports. In Sweden, bridges also are routinely inspected but the inspection interval is six years, unless a recent inspection



Trafikverket maintains any structure with a span greater than two meters, so metal culverts are included in their inventory. Double culverts in this location need periodic cleaning to remove cattails and overgrown vegetation.

notes a repair category rated as urgent (repair must be completed within a year or is classified an emergency). If the *BatMan* indicates such a delinquency, the inspection timeline is shortened, and the bridge is inspected annually until repairs are completed. At this point, the structure returns to a six-year inspection interval.

### **Trafikverket Regions and Bridge Maintenance**

Sweden’s roadway agency is divided into five geographic regions, similar to the Illinois Department of Transportation (IDOT) which also has five regions. According to the *BatMan* webpage, Sweden’s roadway network has more than 21,000 structures and 900 tunnels. The Gothenburg office coordinates the national maintenance program on an annual basis. After bridge repair projects have been prioritized and funding obtained from the annual budget, a list is forwarded to the respective regions. Each regional office receives their recommended projects, and the local staff requests contractor proposals for five-year maintenance contracts. In my research, some of the consulting engineering and construc-

tion firms which serve as “entrepreneurs” for bridge maintenance and repair work include NCC, Svevia, Skanska, Peab and ABTK. As a final portion of my trip, I met with a representative from ABTK at an active project, and a highlight of this field visit is described later in the article.

### **Gothenburg, Sweden – Bridge Visits**

After our office meeting, Fredrik and I drove throughout the Gothenburg area and looked at some typical bridges. I learned *Trafikverket* has responsibility for any structure which spans greater than two meters, including metal culverts. We visited a double culvert, and with the replacement of the culverts, the creek bed had been realigned to slow the incoming flow. However, this created an adverse result—the cattails and vegetation grows more quickly when the water is stagnant during low flow periods.

Another impressive structure was a large sweeping concrete bridge where, obviously, all concrete was poured onsite. I observed that many of the structures we visited had imprints from

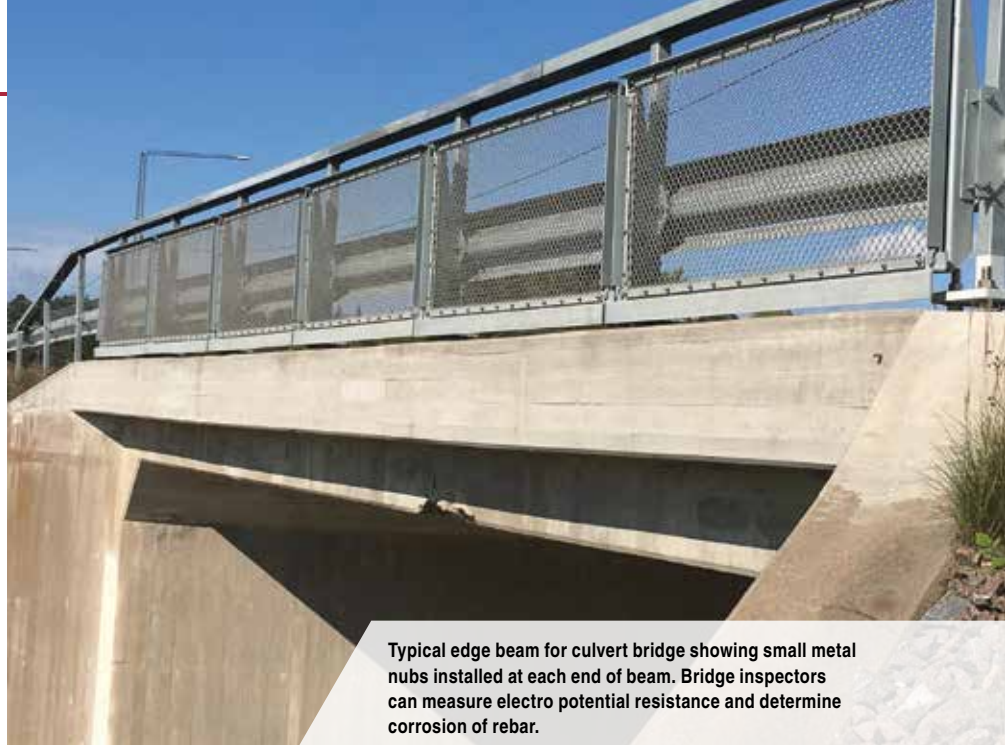
narrow decorative strips, and I was informed this is from the formwork lumber and is a required standard detail. It seems time consuming and labor intensive to build all structural components with this finish, but Sweden has an abundance of forest and timber, and using local lumber as framework material is more sustainable than shipping heavy precast concrete sections or storing and transporting pre-made formwork sections.

Most of Sweden's bridges incorporate construction methods that assist the inspection and maintenance process. Along the outside edge, the outside edge beams will have an elevation "nub" for measuring the final construction elevation, and then the height and any possible settlement is monitored with the periodic inspections. In the attached photo, it is located near the anchor bolts for the mesh panel railing. There are also two horizontal metal nubs which are used to measure electrostatic potential. This identifies problems with possible corrosion in the rebar.

The most magnificent bridge in the Gothenburg area is Tjörnbron (Tjörn Bridge), which is a steel cable suspension bridge connecting the island of Tjörn (pronounced tschoorn) to the mainland. It replaced the former Almö Bridge, which when it was opened in 1960 was the longest arch bridge in the world. That bridge collapsed in 1980 when a freightliner boat rammed into the main span on a foggy morning, causing the bridge deck to collapse and killing eight people in seven vehicles that plunged into the sea below. The Tjörn Bridge was built in two years, and during the closure, island residents commuted to the mainland by ferry. The new bridge design raised the clearance and uses steel cable design to provide a wider opening across the waterway.

### Stockholm – Bridge Visit

Next, I spent several days in Stockholm, and the first day I met with *Trafikverket* staff, who showed me a bridge job site where a hydrodemoli-



Typical edge beam for culvert bridge showing small metal nubs installed at each end of beam. Bridge inspectors can measure electro potential resistance and determine corrosion of rebar.

tion robot was being used to blast off the concrete deck at the piers. It was interesting to see rebar installed in the 1930s, and we noted it was very clean and free of corrosion.

### Edge Beam Design Innovation

While in Stockholm, I also met with two design firms that are researching and implementing their ideas to improve bridge design and reduce maintenance issues. NCC provided details on their integral steel and concrete abutment bridge, called "Samverkansbro" in Swedish. This design uses steel girder beams, and the abutments are poured in place to encase the beams. Since the deck and abutments are fixed, this allows slimmer steel beams and saves on costs as well as weight. When the deck pour takes place, the concrete pour starts at the center and works outward toward the abutments, which straightens the beams and provides a structure without any bearings or construction joints; these are the bridge components that usually create maintenance problems and require replacement.

NCC also is innovating in the area of edge beam design. This bridge component is the most common item needing repair on Swedish bridges, and since the railing is attached with bolted posts to the edge beam, it is important to maintain the integrity of the concrete. Unfortunately, at the end of

their service life (at approximately 60 years), most edge beams require complete replacement. This involves sawcut and removal of the deteriorated beam and then building formwork to pour new concrete. This construction effort impacts traffic, is time consuming, and requires a skilled crew. In many cases, the bridge is located over a railroad, and construction access is very difficult or dangerous.

NCC impressed me with their concept for a metal edge beam where the outside edge serves as formwork for the concrete pour. In their parking lot, I witnessed a prototype/mockup of their design, and the mini bridge deck is used to explain their concept at trade shows and other events. Their designer, Johan, was a former carpenter and concrete foreman who pursued his college degree in civil engineering in his thirties. His practical knowledge as a former journeyman is clearly useful in his design concepts.

Next, I met with an accomplished design engineer from a consultant firm called Ramböll. Ulf Nilsson, who holds a Ph.D. in structural engineering, shared details of his case study he featured at *Brosamverkan*, which is an annual bridge conference. His colleagues selected him as bridge engineer of the year both in 2015 and 2016, so his contributions to this industry are obviously highly valued. His solution



Metal edge beam and integrated bolted railing—NCC research and development prototype for edge beam repairs.

to concrete edge beam replacement is a sequence of prefabricated metal beam segments furnished with a large horizontal bolt that anchors the segments into the deck. He said that replacing edge beams should be similar to replacing brake pads for your car—required maintenance that is simple to accomplish yet inexpensive.

### Uppsala Community and Flottsund Bridge Visit

My final destination was Uppsala, which is about 45 minutes north of Stockholm. I was warmly welcomed by the Uppsala Kommun roadway and bridge staff. After a short slideshow explaining the growth and demands

they are experiencing as a community, and how a proposed bridge in central Uppsala is the key to their future transportation system, we then toured the recently completed Flottsundsbron (Flottsund Bridge).

This structure is a hinged bridge that can be opened either manually onsite or remotely with video screens. During construction, traffic demands would not allow a bridge closure with a detour, so it was necessary to build a temporary bridge adjacent to the construction site. The temporary bridge was later dismantled and some of its pieces will be reused.



Giant geared Panama wheel and electric motors which open the hinged bridge at Flottsund.

**"Replacing edge beams should be similar to replacing brake pads for your car—required maintenance that is simple to accomplish yet inexpensive."**

- Ulf Nilsson, engineer

We toured inside the mechanical room which protects the opening mechanism. I was awestruck by a giant Panama gear with an enormous counterweight the size of two passenger cars. Only two of the four electric motors are used to drive the gear—the other two are backup in case of a failure. The advantage of this system is that it eliminates using hydraulics, which could leak fluid and contaminate the stream. The Flottsund bridge deck, piers and edge beams are made of concrete, except the opening deck portion, which is galvanized steel to reduce maintenance and eliminate the need to repaint.

## Bridge Edge Beam Site Visit – ABTK Construction

My last objective was to visit an ongoing bridge rehabilitation project. Christopher, project manager/superintendent with ABTK, showed me a project outside Uppsala. The Åltomta Bridge crosses a set of railroad tracks, and as we traversed down the embankment, I noted the slopewalls were very steep. However, I was dazzled by the sub-structure underneath, and I enjoyed the beautiful trumpet-shaped pillars, which again were imprinted with the lumber formwork pattern. The carpentry skills to form the cylindrical pillars was truly extraordinary.

ABTK was awarded a five-year contract in the Uppsala region, and they will repair a total of 22 bridges. Christopher manages the construction sites and prioritizes the workload, and next season his firm will complete eight bridge projects. He shared project drawings for the bridge we visited, and it was inter-



Helena with Uppsala Kommun road and bridge team members.


esting for me to read plan construction notes and details in Swedish!

### Bridge Study Summary

My bridge study trip was extremely rewarding, and I learned about different bridge construction techniques and how the design of a bridge component will lead to common maintenance problems. Though our bridge construction components may not be

identical, the upkeep and repairs of aging infrastructure is an ongoing problem in every country. From one of my contacts, I also received a copy of a maintenance matrix listing preventive maintenance recommendations for various bridges. The matrix documents the bridge type and shows typical actions which can be used to extend the life of various components, such as annual deck washing, clearing of shrubbery at the abutments and slope walls, inspection and sealing of joints, and applying surface sealants which penetrate and waterproof concrete.

As a final note, I am very appreciative of everyone I met on my trip and thank my contacts for their time and interest. I am also so grateful to my supervisor, my construction team and the leadership team at the McHenry County Division of Transportation, all of whom supported me in pursuing this fellowship and allowed me to travel overseas for several weeks. I also value the lifetime honor and responsibility I carry as an international fellow, and I hope to inspire other public works professionals to pursue their interests and seek technical knowledge by networking in other countries. All the effort in planning a study trip is definitely worthwhile, and I highly recommend applying for the Jennings Randolph International Fellowship.

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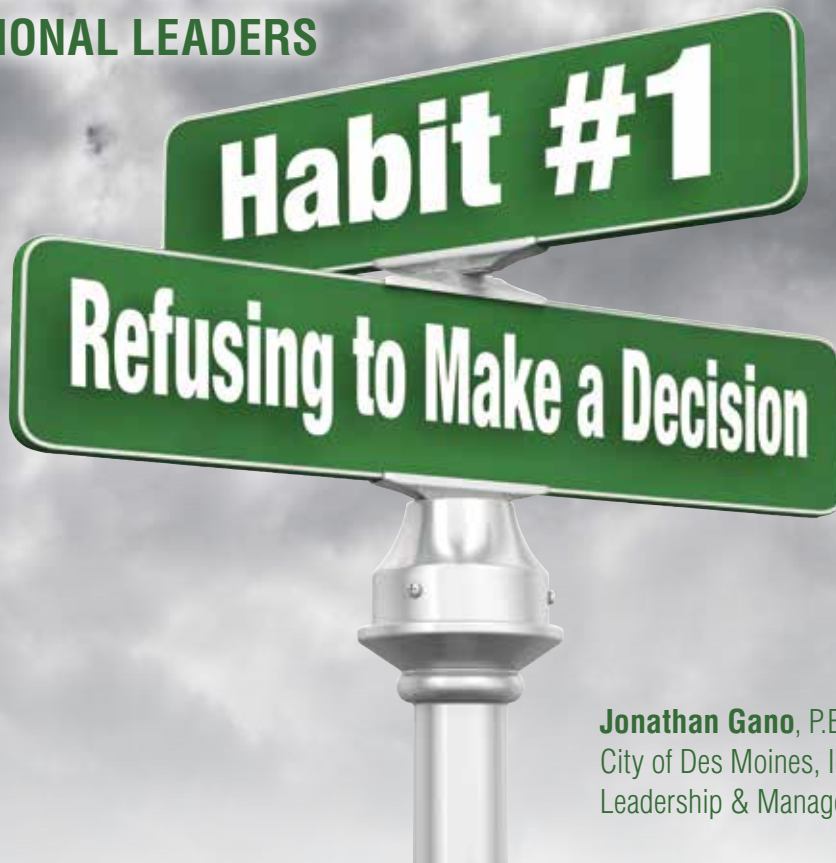
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# THE SEVEN HABITS OF HIGHLY DYSFUNCTIONAL LEADERS



**Jonathan Gano, P.E.**, Director of Public Works, City of Des Moines, Iowa; member, APWA Leadership & Management Committee

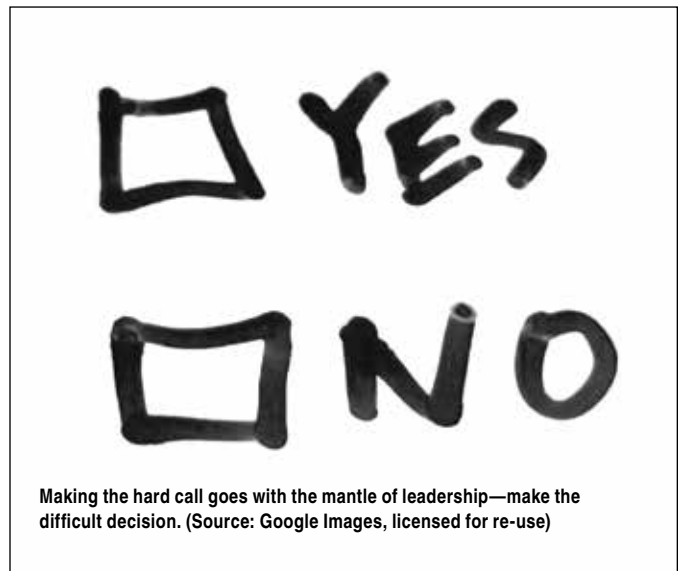
**T**he first habit of highly dysfunctional leaders is that they will often refuse to make a decision. Though it's rarely an overt refusal, do you find it more common than not that dysfunctional leaders will delay and defer decisions as long as possible?

How often is the finished product of a meeting “let’s have another meeting”?

If all the right people are in the room, and all the relevant data is readily available, and all the analysis is done, what are you waiting for?

Indecision and delay are frequently associated with thorny personnel issues because obvious solutions are easy and difficult decisions are difficult. Making the hard call goes with the mantle of leadership—make the difficult decision. But there’s no point in agonizing over it. Make the decision and move out.

Indecision and delay come from an inherent unwillingness to accept risk, a reluctance to be wrong. No one likes to be wrong, but no one reasonably expects to always be right either. It’s oftentimes much better to work in an environment where leaders quickly and confidently make decisions that are usually right but occasionally wrong, rather than to try to work in an environment where leaders



take no risk and make no decisions unless assured of being absolutely correct.

This faulty habit is the kind of perspective that comes from living in the short-term. The really short term! It completely ignores the cost of delay, lost opportunity, and any of the intangible benefits to the team of decisive action.

So, here's some common delaying tactics and some tips, tricks, and techniques for dealing with indecision. If you see a bit of yourself in any of these, take note.

Dysfunctional leaders are always asking for more data when pressed for a decision. There can always be more data, and it can always be sliced and diced finer and finer, and presented in a different kind of chart, but don't let perfect become the enemy of good. The distance between nothing and something is infinitely larger than the distance between something and perfection—it's barely noticeable. Not every decision needs a dissertation.

High-stakes decisions that bear great financial or reputational risk should rightly be exhaustively analyzed and justified, but let's be real, not every decision is a high-stakes venture.

A way to contain this oftentimes never-ending search for perfect data is to straight up ask if the context, or the understanding the missing piece of data will furnish, will make the difference. If the answer is yes, you have narrowed the search for additional data down to one last piece. Get it and circle back.

One manifestation of indecision is not even answering e-mail that asks for a decision. Another is answering a question with a question. Every leader knows that asking questions will delay everything.

Use the concept of tacit approval: "If I don't hear otherwise within the next week, I'll assume your approval and we will proceed."

Or, an even better way to get a decision from an indecisive leader is to present your question in person. E-mail is easy to ignore while somebody standing in one's office—who doesn't leave—is quite a bit harder.

Ever heard "This isn't the right time" for that decision? Rather than asking "when will be?" go ahead and suggest an interval of time to revisit the situation and the next meeting.

Some broader brush survival techniques:

Determine your comfort level with ambiguity—it can create opportunity space for exercising your own initiative. If you're in charge of your subordinate workgroup, go ahead and make decisions inside that ambiguity, it'll probably be alright.

Create an artificial sense of urgency by using externally imposed deadlines where possible. Put something on the agenda of an advisory committee if you have one or have other similar arrangements.

You will find that indecisive leaders will almost always be more responsive to an external authority, even if it's outside

**It's oftentimes much better to work in an environment where leaders quickly and confidently make decisions that are usually right but occasionally wrong, rather than to try to work in an environment where leaders take no risk and make no decisions unless assured of being absolutely correct.**


the chain of command, than to subordinates inside their own workgroup. Even a modicum of external accountability can provide motivation to even the most indecisive leader.

Don't ask for decisions when that thing should really just be an FYI. You have a job to do, and you don't need to ask your boss for permission to do it. Know your job description and what you have authority over, both formally and even informally. Too many junior leaders seek approval for work that's well within their sphere of influence when really it could just be a courtesy notice, a heads-up, to the boss.

Lastly, recognize that perhaps not everything requires a decision. Not everything necessarily needs to be standardized, and fair does not necessarily mean equal. Standards and norms will vary from workgroup to workgroup based on a variety of factors, depending on what's important to those team members and their experiences in the workplace.

A leader who refuses to make a decision can be one of the most frustrating kinds of bosses to have so if you saw any of yourself in any of these examples, take note of what you're doing to your team and fix it. Short of changing jobs, we really don't have much of a say in who our boss is or what will be their leadership style. If your leader is indecisive, there are ways to manage that—not just with techniques to secure faster decisions but also to broaden your own understanding of your role in your workplace.

We're all in this together, let's make the most of it.

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# THE SEVEN HABITS OF HIGHLY DYSFUNCTIONAL LEADERS



**Charles R. (Chas) Jordan**, MPA, PWE, LEED GA, ENV SP, President, Radiant Training & Consulting, LLC, Largo, Florida; Chair, APWA Leadership & Management Committee

**A**s we continue to discuss the Seven Habits of Highly Dysfunctional Leaders, our second trait of a dysfunction is “Not doing what you say you will do.” This sounds pretty obvious, right? In positions of leadership your credibility and the expectation of follow-through is paramount. As employees we are expected to provide work for our organizations, and as leaders we are expected to make sure that work is accomplished through human and material resources. If something doesn’t get done, or more specifically someone continues to not deliver, we have a problem.

What we sometimes forget, though, are the simple failures—the little things that require little planning or follow-through, but because of that we prioritize them lower than our normal job duties. These are items and responsibilities that we would normally say are “ok” to pass by and focus on other things, but as leaders, we are held to a standard that they are not “ok” but need to be considered all of the time, especially as public works professionals.

These “minor failures” for public works professionals are in three areas: to the public, to your staff, and in emergencies.

Let us start with the public. When it comes to working with the public, every communication and interaction is open to perception and response. This could be something as basic as returning a phone call or responding to an e-mail from a citizen or customer. Think about your experience in responding to a citizen complaint by e-mail to say you would check on something. It has definitely happened to me, on a number of occasions. I’ll get a citizen request or report and I’ll take their information, give them mine, and then go about my day, as busy as it may be with all of the work I already planned on doing, completely forgetting about

**What we sometimes forget, though, are the simple failures—the little things that require little planning or follow-through, but because of that we prioritize them lower than our normal job duties.**

this complaint or the fact that this person is waiting for my response about it.

In public works we are not only leaders but keepers of the public trust. When we do not deliver, specifically on things we commit to, we lose credibility and our ability to politically manage our departments and operations. Our commitments to the public make or break our ability to build trust with residents and are what separate a fairly normal day of dealing with a public complaint and a possible bad day where you now have to explain things to a city administrator or elected official. In our positions as leaders, we now take on this job responsibility higher than the normal day-to-day business of our departments. We hire good leaders below us to continue that work on our behalf as we tend to the larger decisions and vision for our organization.

Now let us take it a step further and talk about your staff. Have you ever spoken to an employee and assured them that you will work on something and then couldn’t deliver? For functional leaders this has probably only happened once or twice in your life. That’s because with employees, as leaders, trust is everything and one decision to not follow through is



all that is needed for the ability to manage and work with that person to be harmed forever.


My first realization of this was when trying to work with an employee to improve their performance. I inadvertently guaranteed that I would be available all the time to assist him through that process (I know, rookie move) and I just could not be. It made it very difficult for that employee to continue to improve in the manner in which I asked, because he felt I wasn't holding up my end of the bargain.

I used this experience to change my focus as a manager. I looked into budgeting a portion of my time for employee improvement and performance at the same level I was budgeting time for meetings and routine work assignments. This gave me the ability to have time to commit when I needed employees to reach the next level. It also showed them that my time with them was as important to me as time for other items. This gave me the ability to improve the relations with my staff, as well as improve their skills, knowledge and abilities.

Finally, our role as first responders and emergency managers places special emphasis on this habit. In times of emergency, crisis, or what I like to call "Normal Operations" for my friends in the north during the winter...reliability is key. In these instances of great stress, the only way an organization can work is if every single person can complete the tasks assigned or taken on. We've all heard the saying that "This chain is only as strong as its weakest link." Well, your consistency and ability to deliver, especially in emergency situations, is all that stands between you and the disaster, or the disaster that can come from the disaster.

As first responders, we need to place special emphasis on committing to our role, and completing our tasks so that we can guarantee the best outcome for ourselves, our departments, and our communities.

So, in closing out Habit #2, be thinking about ways to communicate to your staff the importance of reliability and maybe even offer to hold yourself accountable to their thoughts, feelings, and considerations when you are "dysfunctional." Follow through on your commitments and do what you say will do. That way, in your chain, you are never the weakest link.

*Chas Jordan can be reached at (727) 586-7397 or [chasj@apwafloida.org](mailto:chasj@apwafloida.org). *



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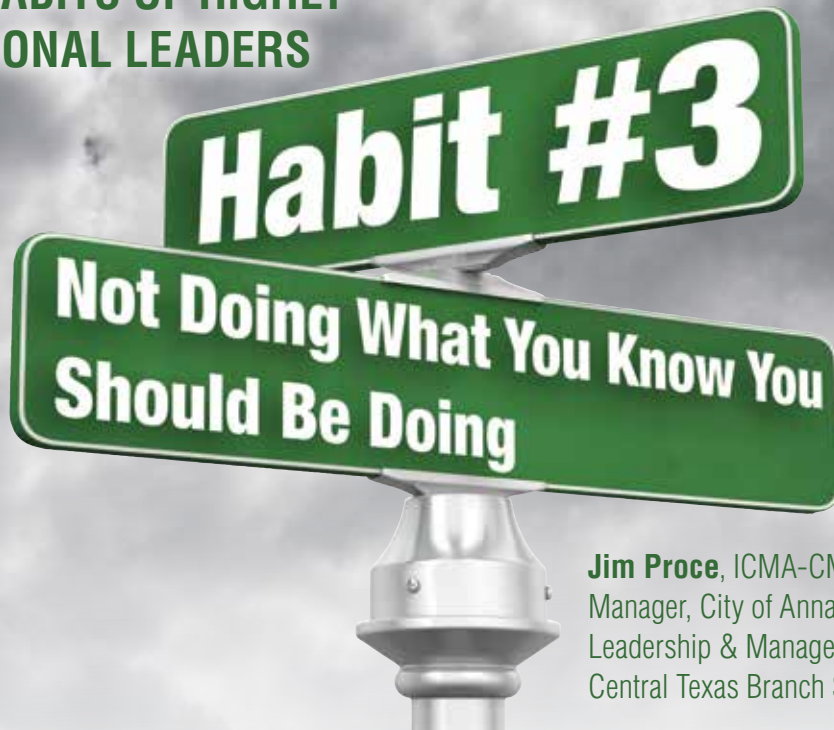
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# THE SEVEN HABITS OF HIGHLY DYSFUNCTIONAL LEADERS



**Jim Proce**, ICMA-CM, PWLF, MBA, City Manager, City of Anna, Texas; member, APWA Leadership & Management Committee; North Central Texas Branch Secretary

So, when the idea of the Seven Habits of Highly Dysfunctional Leaders was pitched to the APWA Leadership & Management Committee (thanks Jonathan), I thought how much fun will this be! To talk about Not Doing What You Know You Should Be Doing... AKA: Habit #3, seemed like it would be fun, exciting, and when I thought about it, very useful. In fact, I can't wait to read the other six habits and get this issue and share it with my staff.

Habit #3 is an interesting topic and is certainly one most of us would not admit we have done, so for the sake of this discussion let's just assume we are talking about people we have observed, maybe even in another organization, if that makes you feel safe. Deal? OK!

In thinking about this I came up with a list of behaviors that I call "The Not Doing What You Know You Should Be Doing" list. Really, I did...

The Not Doing What You Know You Should Be Doing list includes:

- Passive resistance
- Procrastination
- Over-commitment
- Mediocre Work Product
- Prioritization (poor)
- Execution (poor)
- Planning (lack of)
- Evaluating (lack of)
- Celebrating (forgotten)

In looking at each of these I thought that just simply identifying these behavioral attributes would not be enough if



I didn't explore the reasons (or excuses) people rationalize such behaviors or lack thereof, even when you know that you are not doing what you know you should be doing and not only that, but failing to talk about what you know should be doing, when you are not doing what you know you should be doing (phew... try to say that fast three times...and I hope you are still with me!)

Or the shorter version: rationalizing NDWYKYSBD or failing to talk about NDWYKYSBD, I think that's easier to follow.

So, in breaking that down I came up with this stuff, which is less confusing, I promise.

**Passive resistance** – Have you ever thought, this project assignment or task is dumb, this is not worthy of my time, I am really busy on other priorities, the boss won't remember, so I won't worry about it, or worse yet, if it's really important he'll ask me again.

Just STOP! If you are already doing this, remember that you are in a service industry and if you are doing this, or allowing others to do this, or even think someone is doing this, just fix it, sooner than later.

But if you are unfortunately doing this yourself, perhaps a better approach to passive resistance might be to get clarification on deliverables, set specific expectations about what you can accomplish, explain your challenges, and finally seek agreement consensus for a compromise. If you don't, then the alternative won't likely be your desired outcome.

**Procrastination** – Why do people procrastinate? Think about it. Sometimes it's the delivery of bad news, but bad news doesn't get any better with time, in some cases it may get worse, so it is probably best to do this ASAP! Think about it, in this circumstance wouldn't it be better if you craft the story and deliver a positive slant on a bad situation?

Or simply waiting until the last moment, like writing this article on the day it was due, making Matt and Kevin stress, or worse yet being late while everyone is waiting for you to write this article. (If you are reading this I made the deadline!)

Process interruption is another dynamic of procrastination by derailing others in the process. Generally, this is where you get to say that your lack of planning does not constitute

an emergency on my part. Respect your teammates and give them plenty of time to do their part and don't interrupt their schedules to suit your own schedule or lack of schedule. Such failed dependencies or interdependencies result in reputation building (in a bad way).

So, if you're in any of these traps you need to dig out and get some small wins to rebuild and get some new habits.

**Over-commitment** – This is inadvertent procrastination, often self-imposed, and you can't help yourself from being involved, and you want to help, and you have all good intentions, and it's really nice of you to do, and you want to help and to participate, and you want to be a good teammate, and make your boss look good, and to do cool stuff... Had enough? OMG learn the word NO!

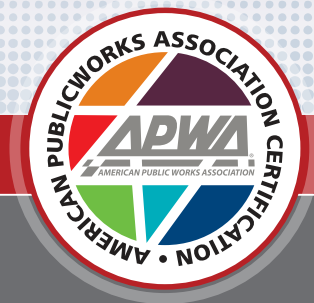
This happens when:

- you can't say no to anyone or anything
- you are involved in too many things
- you are actually good at what you do and everyone knows it and you get loaded down
- you are otherwise distracted by other things in your life
- you are chasing the next promotion, job, or goal

Be realistic, learn to say no, it's OK, really.

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**Mediocre work product** – This is where you do what you should be doing, but you just do the bare minimum, just enough to get by, but certainly not your best work and maybe what is otherwise expected.

I have supervised many good employees over the years, and more often than not some of my stars often do projects (that are interesting) and hit it out of the park, but when I assign a menial task, I get a C-minus work effort, albeit on time, under budget, with positive final reports, all wrapped up with a nice little bow, like I am supposed to be impressed, but it's a C-minus and I know you can do better. So, do better. You need to give things your best effort, always, and at worst get help and enlist others who may like the undesirable task, it will make you look good, even when it is someone else on your team getting it done.

Don't set a bad example and chase the A-plus!

**Prioritization** (or the lack thereof) – I am not going to tell you about the urgent versus important matrix and which box you need to be in. I hate boxes, rules, and matrices. So, read that on your own time, it's good book, someone you know read it I am sure, find it, it's worth the journey.

But the punch line is understanding that what is important is important. If you don't know then you are working on the wrong thing right now. So, put this down and read it later. Okay, not really, keep reading.

If you are busy, as most of us are these days, you need to have prioritization skills, a very specific process, and a regiment. Make lists, use technology, share them, get buy-in, get advice, review them, exhaust them. I live in Outlook and I have a giant white board covered with purple ink. And I wish I had a USB port in my forehead.

Leaving things to chance results in the wrong things getting done consistently. Find your way, now.

**Planning** (or the lack thereof) – This is likely the most obvious, or it should be.

As a manager or someone striving to be a manager, you have to think ahead, always. You have to think for (or about) your team and what they will be doing in the future. You have to think strategically (big picture) and predictively (what will be the outcome of your actions.) This can't happen without planning!

As a former public works director I made decisions for things that may not occur for years. As a city manager, while I deal with things that are current, my most important work is on things which are many years into the future, so that involves planning and lots of it.

Someone said this to me recently: If you are going to need a tree, you need to plant the seed today and those who need the tree today, failed to plant yesterday!

Sow your seeds now.

**Execution** (or the lack thereof) – You made a plan! Now follow the plan, but be prepared for changing conditions, and be agile enough to adjust. Yes, it sounds like having your cake and eating it too.

Think about it, this is binary, you are either working on it, or it's a dead issue, because standing still is falling behind, and we don't want to fall behind.

Remember to always do what you promised you would do, what, where, when, and how you promised it, no exceptions.

**Evaluating** (or the lack thereof) – You should be measuring what you do and evaluating the results to see if you met your targets and goals. Many agencies measure tons of stuff and produce monthly reports that no one reads. Does that sound like your agency? How do you fix it?

Let's pick no more than a half dozen things that are important and track those, with a strategy to overcome the challenge or deficit. Re-evaluate annually at a minimum and reset.

Think about these examples:

Failed inspections? Good or bad? If you want to eliminate failed inspections can you simply stop inspecting and solve your problem? Of course not since bad stuff is happening and you have no idea where, or do you?

Houses that are not getting regularly painted in neighborhoods and they look bad? Change the code to require the construction of brick houses only. Does that fix it? Of course not, because the other wood houses still need to be painted... still...Why? Because they are still not brick!

Number of work orders completed? Good or bad? Well, we did more in the month of March than in February and that's good, right? Should we report that as an increase in productivity? Do I have to explain this one?

Look for causal connections to determine if you are actually making a difference and if the things you are counting are actually results or just anecdotal conjecture for some report that no one reads.

And if you really want to be effective then do debriefing and after-action reports. Keep it simple at first and ask your teams upon the completion of a project or program the following questions and let them do the talking.

- What went well?
- What went poorly?
- What could we have done better?
- What did we learn from this?
- What actions do we need to plan for follow-up?

Try it, it's powerful stuff, just listen, and you might learn something from your team.

**Celebrating** (or the lack thereof) – When you do all those other things mentioned well, good things can happen in



# Fostering Relationships—Keys to the Vault

Strategic Priorities	Tactical Priorities	Operational Priorities
Community	City Manager's Office (CEO)	Employees
City Council	Budget	Maintenance
Management Team/Peers	City Secretary	Expenditures
Staff	Payroll	Variance Analysis
Self	Purchasing	Productivity
	Human Resources	Best Practices

your organization, but conversely when you don't, you'll be in chaos and among repetitive train wrecks.

So keep it simple:

- Celebrate successes
- Show folks you care
- Show folks you noticed
- Show folks you are paying attention

Which led to one last item I didn't have on the list:

**Relationships** (or the lack thereof) – As I thought about this habit and the impact of both sides of the coin, it dawned on me that this all involves people, relationships, and priorities that are common to us all. I have categorized these in three areas.

- Strategic priorities that are driven by community, city council, management, our staff and ourselves. Simply, these are the people that give us our purpose in the organization and the community. Foster these relationships and you will successfully externally.
- Tactical priorities which involve those people in the organization that can help us to be successful in the organization in executing the day-to-day activities. These include staff in the city manager's office, budget, city secretary/clerk, payroll, purchasing agent, and human resources. Foster these relationships and you will be successful internally.
- Operational priorities involve the things you need to do daily, and you need to be good at. Keeping your eye on the projects, people, and money that you manage and supporting those in your team that carry out those tasks. Tend to your business and you will be successful.

**This isn't rocket surgery. We all know someone or are even guilty of some of these things. We can do better and should.**

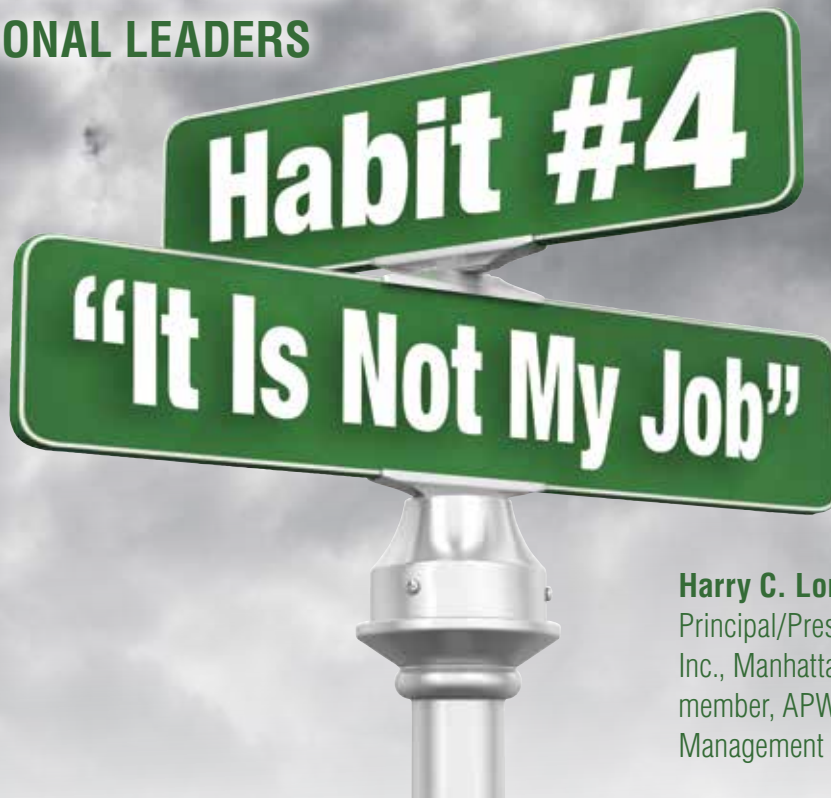
So, in summing it up... This isn't rocket surgery. We all know someone or are even guilty of some of these things. Just thinking about this and talking about it will give us a reminder that we can do better and should.

I hope you read all the habits and share them with your teams. If you do, have some fun with it too. We all did.

*Jim Proce, City Manager, having served as an assistant city manager, public works director, consultant, vice president of a water control district and more, serves the North Texas Branch and has served on several APWA committees. He was a 2016 Top Ten Public Works Leader and is an ICMA Credentialed Manager. Follow him on:*

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# THE SEVEN HABITS OF HIGHLY DYSFUNCTIONAL LEADERS



**Harry C. Lorick, P.E., PTOE, PWLF,** Principal/President, LA Consulting, Inc., Manhattan Beach, California; member, APWA Leadership & Management Committee

**T**he fourth Habit of Dysfunctional Leaders is “It Is Not My Job,” or evading or not acknowledging responsibility.

We often look up to certain types of leaders, such as Dr. Martin Luther King, who stood up to racial inequality and injustice, and Winston Churchill, who stood up to Hitler’s Third Reich. These are two historical figures that we all love to cite because they were successful and motivational leaders. Why do we habitually follow or reference these types of people? Not only did they work against powerful sociopolitical forces for the good of their countries, but they, as well as many other notable people, worked to fulfill the promises they made. They do what they say...they walk the talk...and they take responsibility for their decisions and actions and follow through on their commitments.

## **What is responsibility?**

**Responsibility** is an obligation to make decisions or to take action and to hold oneself accountable for the options selected, the actions taken, and the related outcome. Responsible people meet commitments they have made to themselves and to others (Beaumont, 2009).

There are many reasons that people may evade responsibility. Below, we outline six key reasons why this may happen, followed by possible ways to hold ourselves and others more accountable and encourage responsible behavior.

## **Why do we evade responsibility?**

The first key reason is that we **fear failure**. Once we experi-

**Responsibility is an obligation to make decisions or to take action and to hold oneself accountable for the options selected, the actions taken, and the related outcome.**

ence failure or diminished opinions, it is common to feel shame, which can have a long-lasting negative impact. We idolize successful people and an imagined idea of what it means to be successful, so the thought that we have fallen short summons feelings of guilt and inadequacy. We activate an avoidance process to help eradicate these negative feelings. For many of us, that fear of failure has a major impact on our self-worth. Even some of the best and the brightest people in the world are the most impacted by a fear of failure. I once knew a very capable engineer who was so afraid to be wrong that he would not finalize anything without another engineer reviewing and signing off on his work. The result...he stayed in the same role for over 10 years! We are programmed to avoid pain. Thus, avoiding responsibility of an action, which has a potential of a negative outcome and associated impact, is what we do.

## Responsibility is a choice! It is the basis of trust.

The second reason is that we **do not accept reality** and tell ourselves what we want to believe as the truth, whether by not telling the whole truth or completely fabricating a story to convince oneself or others of something false. This is typical of someone who is arrested of a criminal activity and maintains their innocence, even when proven guilty in court. However, this reason is not lost on criminals alone. Most of us have been in situations in which we may have left out details or disassociated ourselves, rather than accept the disappointment that could result. Sometimes we can weave fabrications into our stories so well that we can convince others and even ourselves of an alternate reality. If expectations or responsibilities do not match those that we have set for ourselves, we may choose not to accept them or deny them altogether.

The third reason that we avoid accepting responsibility is because we can **blame others or default to “everyone does it.”** Another common way to dismiss responsibility is by not holding ourselves accountable for our own actions by finding fault with others, shifting responsibility, or simply reducing the significance of the action by indicating that you have followed group consensus or behavior. This is done to alleviate the discomfort by relaying the blame to other people, only to perpetuate a negative cycle and culture.

Another common explanation in this regard is that **things happen “by chance,”** rather than a consequence of our actions. However, this may be refuted by actual documented information and the expertise of others. Another scapegoat is “what is right for you may not be right for me,” which eliminates any absolutes, standards, or means such that everyone is entitled to create their own facts and statements. They want to make it acceptable to “go with the flow” without being accountable for any values, which is sometimes the case with our elected leaders and executives. As Newton N. Minnow, a respected government servant who worked for President John F. Kennedy, once stated, “We have gotten to a point that everybody has got a right and nobody has got a responsibility.” (Kidder, 1994).

The fifth reason that helps us avoid responsibilities is that we **play the victim.** The average person will often sympathize with someone who is suffering and not hold them accountable for their actions, even if they are the perpetrator. A recent example of this occurred when a professional football player abused his wife and redirected the blame by reporting that he was a victim of the undue pressure from fans, agents, and owners to win the game, which caused him to behave that way. While he may have a valid point with the football league, agents, owners, and others, this does not excuse an individual of their actions and wrongdoings.

Sixth, **delaying or deferring a request** while hoping that it will go away or that someone else will handle it, is another approach to avoiding responsibility. Our elected U.S. leadership of both political parties is a perfect example of this.

Rather than using their positions and clout to push for change to solve the Social Security funding shortfalls that will impact us all, most have simply chosen to shift this issue to the following year.

### What can be done?


Public works agencies to address the need for accountability and responsibility will often use **rules, standards, and specific guidelines** that force us to act to manage the public trust. However, arbitrary rules or actions may be seen by employees as micromanaging and are not accepted, nor do arbitrary rules encourage employees to embrace responsibility.

If a superior is **avoiding responsibilities**, what do you do? The first thing you do is take responsibility for the pieces that you can control—your realm of influence, or those who report to you. Again, it is important not to place blame or criticism if that is not your role, but it may be possible to have a conversation with this person in confidentiality, to fully understand their position and how you can help them to fulfill or alleviate their duties.

What if someone has some **issues with what we do?** Responsibility is a choice! It is the basis of trust, so what can we do?

First, we should **control our impulses and act intentionally** according to defined values and beliefs. We must consider the needs of others and the community. We can move ahead by **integrating both theory and experience**, as well as acting rationally and consistently. Public works employees must be trustworthy, respect others, play by a fair set of rules and be willing to admit mistakes or be prepared to accept or share of the blame. Finally, we must always **maintain humility and keep our egos in check**, take on only what we can handle or that we are required to do, while **recalling that we are public servants.**

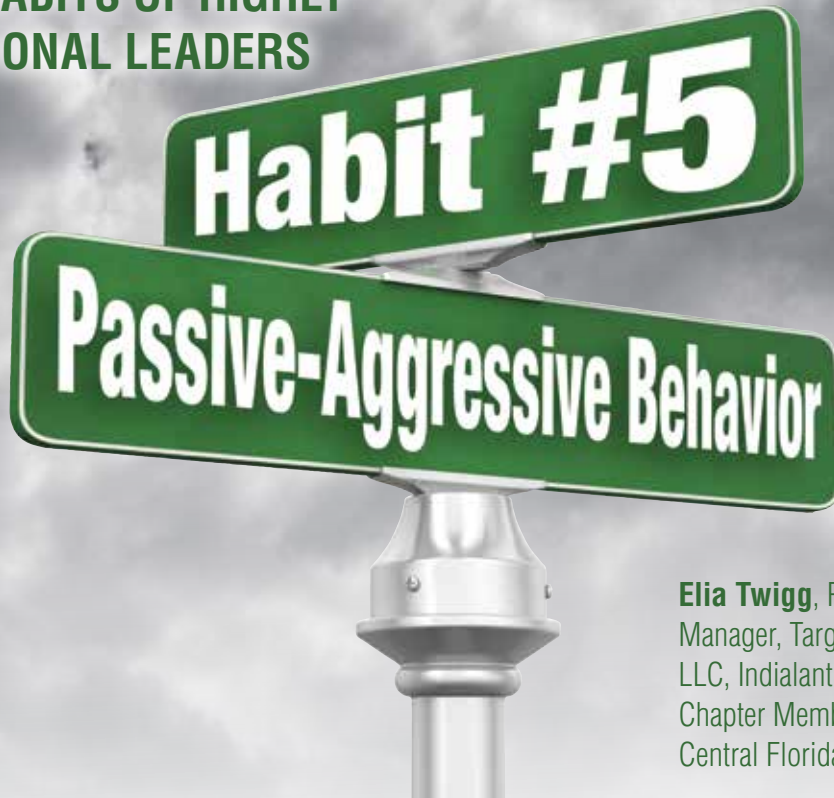
**Remember, it is not about us!** You can embrace the future and grow forward a complete leader by accepting responsibility and staying away from this dysfunctional habit!

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# THE SEVEN HABITS OF HIGHLY DYSFUNCTIONAL LEADERS



**Elia Twigg, P.E., Sr. P.E./Local Agency Manager, Target Engineering Group, LLC, Indialantic, Florida; APWA Florida Chapter Membership Co-Chair and Central Florida Branch Chair**

**T**he National APWA Leadership & Management Committee is working on the Seven Habits of Highly Dysfunctional Leaders, and Habit #5 is Passive-Aggressive Behavior. We see passive-aggressive behavior all the time, in our professional and personal lives—and within ourselves. Is it a personality flaw? Maybe. Or maybe it is deliberate. The bottom line is recognizing it and doing something about it.

Let's take it back to the basics—what is the definition of passive-aggressive behavior? In simple terms, it is “avoiding direct confrontation.” Just because the word “confrontation” is in the definition, you may automatically think of words like: fight, face to face, hostile, argument, conflict, etc. But, confrontation doesn't need to have a negative connotation.

The key word in the definition is “direct,” which is synonymous with words like candid, straightforward, outspoken, open, matter of fact, etc. When one “avoids” direct confrontation, then they are behaving in a passive-aggressive manner. In other words, confronting a situation in an “indirect” way. Other words or phrases to describe “indirect” include beat around the bush, ambiguous, longwinded, sneaky, sugar coating, etc.

Recognizing and managing passive-aggressive behavior in the workplace can be difficult. People display passive-aggressive behavior for various reasons and in many ways. They may have a fear of confrontation, they may not like to rock the boat, or they may not want to stir things up. This can be a sign of lack of confidence or indecisiveness in the indi-

**Assertive behavior is a social skill where an individual clearly and respectfully communicates their wants and needs. Being assertive doesn't mean you are rude or aggressive, it just means you are firm and not afraid to give your point of view.**

vidual. If you are a manager displaying passive-aggressive behavior, your subordinates may think of you as weak and will walk all over you. If you have a passive-aggressive subordinate, you may have other problems that could affect your team. Some of these individuals may badmouth you when you are not around or sabotage a project by not showing up to work on a day of an important meeting or presentation.

The great news is you can change yourself and change how you interact with others. The first step is being mindful of how you are feeling. If your mind is telling you to speak up and your mouth is sealed shut, then that is a sure sign to recognize it is time to change. The top three things to do go hand in hand: be assertive, be confident, and be decisive.



Assertive behavior is a social skill where an individual clearly and respectfully communicates their wants and needs. Being assertive doesn't mean you are rude or aggressive, it just means you are firm and not afraid to give your point of view. Confidence is believing in yourself or your ability to succeed. If you are an expert in your field, you must believe that you are. Others will also see you as that expert, which will help gain your credibility. Deciding is just as important as being assertive and confident, and in many ways is tied to both. Over-thinking things and being indecisive can lead to missed opportunities or missed deadlines. Sometimes you need to trust your gut feeling and make a decision.

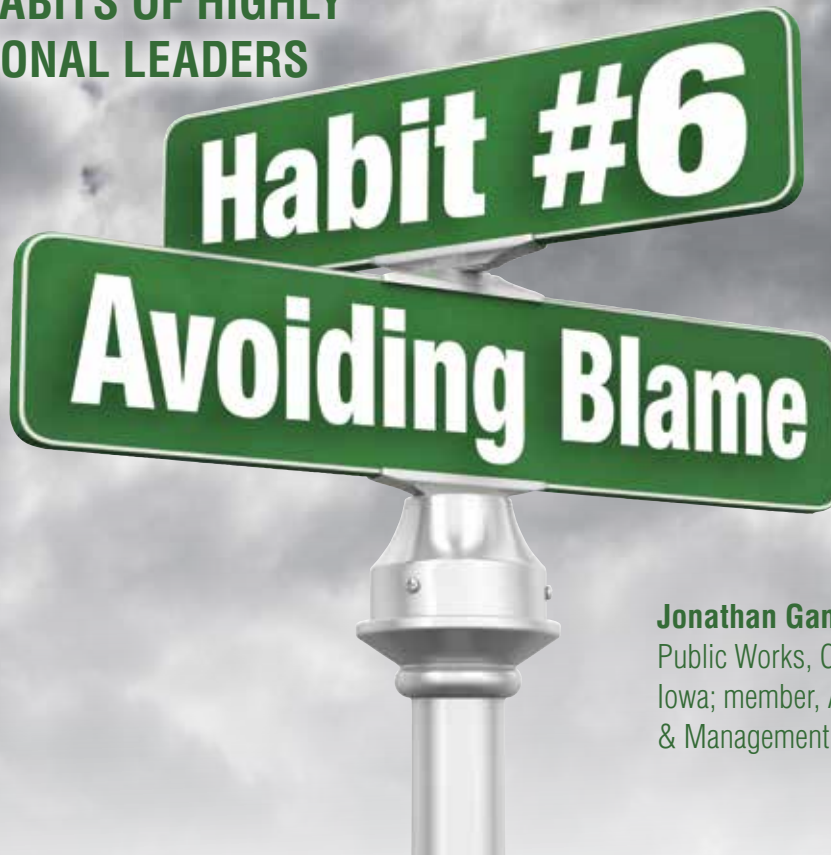
Maybe this is easier said than done for some of you, so to change your passive-aggressive behavior, you will need to start somewhere. Here is a simple exercise for you to implement this week. Plan a lunch with a colleague. When your colleague asks you where you want to go to lunch, your instinct may be to say, "It doesn't matter to me, where do you want to go?" This passive-aggressive response is the typical, common response. But that was the response of the "old you." The "new you" will decide with assertiveness and confidence. Make a decision of where you want to go, be assertive by saying where you want to go, and be confident with the decision you made.

As you build your confidence, managing your staff will be the next step. Having difficult conversations with your team members when they are not meeting their objectives is hard to do, but it's a necessary evil. You will continue to get the same results (or lack of results) if you hold back from saying what you need to say. The key is holding people accountable with direct conversations and feedback. And, as I stated above, this does not need to have a negative connotation. Sometimes it is just being honest, open and transparent. For another article I wrote regarding these conversations, refer to my article "Communication: Improve Performance and Productivity" on page 27 of the December 2017 *APWA Reporter*.

In summary, embrace confrontation instead of avoiding it. If you know what you want, be assertive and say it. Holding back will lead you on a path that may be counterproductive to your wants and goals. Sometimes you need to put yourself first and make a decision—then be confident in your decision. Sure, you will make bad decisions sometimes, but see that as another opportunity to make another decision. Take the baby steps, start with something simple—decide where you go to lunch.

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# THE SEVEN HABITS OF HIGHLY DYSFUNCTIONAL LEADERS



**Jonathan Gano, P.E.**, Director of Public Works, City of Des Moines, Iowa; member, APWA Leadership & Management Committee

**T**he sixth habit of Highly Dysfunctional Leaders is a little more subtle than the others. The other habits are easily identified in others and survival techniques are included to help deal with a dysfunctional leader in your workplace. But this one, the leader who avoids blame, is really aimed at you, dear reader. Passing the buck is something that only you can fix.

This behavior manifests itself most easily, but by no means exclusively, in junior leaders, particularly first-time leaders promoted out of the workgroup they now lead. Having been just “one of the team” for a long time, it can be difficult to see the psychological separation necessary to be an effective leader. Once entrusted with the mantle of leadership, we are no longer just “one of the team.” It is *our* team.

Junior and inexperienced leaders, however, can easily fail to make that transition in their own minds and can continue to try to seek the approval of the team as if they were still a member of that team. Certainly not limited to new leaders promoted out of a workgroup, this habit can afflict leaders at all levels of an organization.

The basic motivation for this habit is an easy one to understand—everybody wants to be liked. It can seem easy, in the moment, to blame bad things on higher authorities. “The boss” is easy to blame for unpopular policies or instructions while you get to take credit for the good things. Seems like a win-win. Just blame the guy (or gal) who’s not there for stuff the people don’t like.

In that penultimate book on the accumulation of raw power, *The Prince*, Machiavelli advises: “Princes should

delegate to others the enactment of unpopular measures and keep in their own hands the means of winning favors.” That’s good advice for an unethical and unprincipled monarch on the eve of the Renaissance, but it’s terrible advice for a leader in today’s modern workplace. Be willing to be the bearer of bad news.

When leaders blame-shift bad news to a superior leader, they are essentially taking themselves out of the chain of command, rendering themselves irrelevant. If you’re not responsible for what happens in the workplace, do your subordinates even need you? Who’s really in charge here?

Examples of blame-shifting:

- “You won’t believe what they’re telling us to do now.”
- “I don’t like it either, but the boss said we have to.”
- “City Hall is making us...”
- “The Mayor wants us to do this...”
- “John’s instructions are to...”

In each of these examples, the leader is blaming an external authority for the situation, seemingly avoiding responsibility and leaving themselves with clean hands. “*It’s not my fault*” is the unspoken part of these instructions.

Giving instructions or explaining policies like this massively increases the insecurity of the members of the workgroup. If even their boss feels powerless, they think, how much worse must it be for them? These subtle rhetorical flairs, intended to boost one’s popularity as a leader, really have the opposite



Habit #6, the leader who avoids blame, is really aimed at you, dear reader. Passing the buck is something that only you can fix. (Source: Pexels.com, licensed for personal or commercial re-use)

effect. It's a way of unnecessarily surrendering your credibility. It turns you into a mouthpiece for someone else, a lackey carrying around other people's orders, rather than a leader entrusted with a mission and a workgroup.

It is far better, instead, to personalize and re-interpret instructions or policies for your workgroup. Take the blame for unpopular measures. Issue the unpopular instructions. That flash of dissatisfaction is always temporary, anyway. Then we go to work.

Try instead:

- "Here's what we're going to do."
- "The policy for xyz is...."
- "Here's how I want us to tackle our next assignment."

It's much more direct and, importantly, shows that you have taken ownership of the assignment. It's your task, and the workgroup will do it because *you* said they will do it.


Your team will proceed with confidence simply because you started from a position of strength—your own leadership. Rather than blaming an external authority, your team will know that you put your own reputation behind whatever it is and, even if begrudgingly, proceed with their work because that's what their job is.

Not every unpopular policy or instruction will pass close scrutiny, even if implemented with complete confidence.

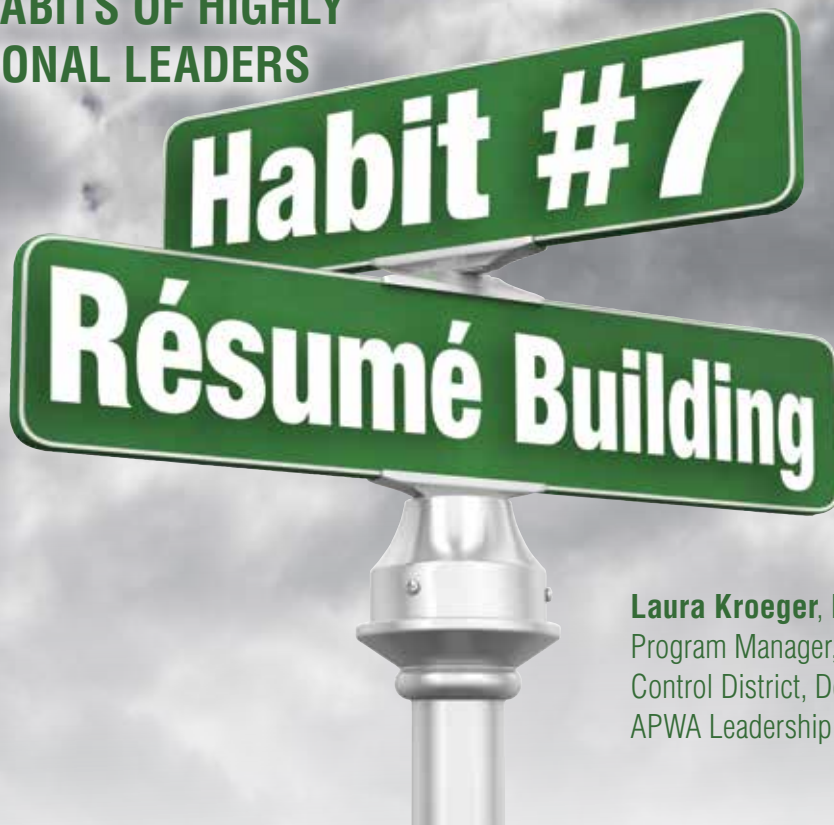
**Take the blame for unpopular measures. Issue the unpopular instructions. That flash of dissatisfaction is always temporary, anyway. Then we go to work.**

Trust that real, heartfelt disgruntlement over workplace policies and instructions has many ways to get itself heard. From grievances to surveys to sensing sessions and simple hallway conversation, a workplace's opinions of those really unpopular policies or measures will make their way back to the originators. Do not fear that you will stifle the free expression of your workgroup.

Avoiding blame seems like a good way to stay in the good graces of your employees, but they don't need a buddy, they need a leader. Leaders take responsibility for what happens within the confines of their workgroup, good or bad.

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# THE SEVEN HABITS OF HIGHLY DYSFUNCTIONAL LEADERS



**Laura Kroeger, P.E.**, Stream Service Program Manager, Urban Drainage and Flood Control District, Denver, Colorado; member, APWA Leadership & Management Committee

**Hi, I'm Steve.** I've been asked to share my story about the importance of building your résumé to show your leadership ability and be ready to beat out your competitors for that next job promotion.

We all know that a strong résumé is a great way to distinguish yourself from others. Here are a few tips on how to build a résumé to reach your personal leadership goals.

First, it would help if you always looked for opportunities that will help expand your skill set; these opportunities will, in turn, look great on your résumé. You never know when a new position or job will become available so always keep your résumé up-to-date, including recognizing (and documenting) when your responsibilities have increased or changed. The more responsibility you can show, the better. You don't necessarily have to be successful, but you do need to have a title. Most people hiring don't check on how well you performed a job, so as long as it's on paper, that is what counts most.

Here is an example of how this can be done.

### **Creating a résumé building opportunity.**

We had a new public works director start at our agency and I could tell he was eager to make an impact in our department. For several years, I've been trying to pitch the need for a Lead Stormwater Inspector for our department. I was tired of going out



into the field and liked the idea of being in charge of others, so it seemed like a perfect position for me.

What also made this so appealing was that the other Stormwater Inspectors in our department were well seasoned and very skilled, so they required little oversight making this a cake job for me. I made a case to the new public works director that by putting me in charge, I could increase our efficiency and effectiveness (whatever that means) and he bought it. That was my first step to

working myself up, and fortunately that happened quickly because the Stormwater Inspectors started having internal problems and it was good timing for me to move on.

The point of this story is that I saw an opportunity to take advantage of a new public works director to advance myself into a lead position, responsible for managing a large group. That allowed me to put on my résumé that I built a department and supervised several senior level staff. This helped me in my next interview for a position that would manage more



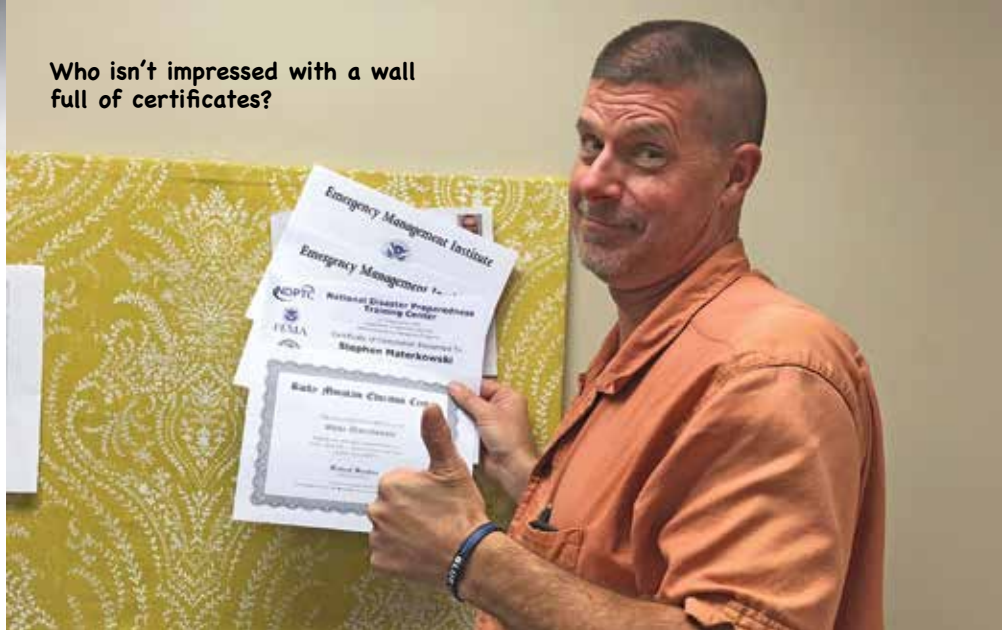
people and oversee a department budget.  
**A win for me!**

Another technique that works very well is taking as many classes and trainings as your organization will allow, perhaps even work towards a degree. There are several advantages to this strategy. One, by having several certifications and trainings, others will see how knowledgeable you are and this will build an impression of you as being irreplaceable. Two, the more trainings and classes you take, the more you can add to your résumé, and three, it's an easy few days out of the office.

Some organizations require those who attend trainings to bring back the information to share with others. I recommend not doing that because if too many people know what you know, you aren't setting yourself apart as being more qualified. You have to put yourself first before you can help others. This is just another way to get yourself ahead; then, as others need information, they will come to you and increase your status of importance and emphasize your leadership skills.

One more comment before leaving this topic. When you are picking a degree, class, or training, focus on what will look good on your résumé while requiring the least amount of work. Again, the emphasis is on getting credentials, not overworking yourself. You don't want to burn yourself out trying to get ahead.

My last piece of advice is that it's not what you know, it's who you know. We have all heard this phrase because it is true and it works! Not enough credit is given to those who are in the right place, at the right time, saying the right things to the right people! Look for these golden nuggets of opportunity whenever possible! So, by having a strong résumé that is built on the following:



Who isn't impressed with a wall full of certificates?



Never miss an opportunity to flatter the right people.

- Creating opportunities that show you are in charge;
- Obtaining or acquiring several certifications or degrees;
- Focusing on getting to know the right people that will get you ahead—you will easily climb the ladder of success.

This is a sure way to move yourself up into a leadership position in your agency, and as long as you aren't interested in making a difference in your community or organization, then you will have a very fulfilling career.

### Is Steve someone you would want to work for or who you would like to hire to lead a team? Why?

Steve spends more time working to improve his résumé and his image than actually being skilled at his job. When you are in a leadership position or striving to be in one, putting the goals of the team or organization above your own is what will be noticed and recognized as a strong leadership quality. People quickly recognize self-serving behaviors. Subordinates will typically still do what is required of them, but they will not respect their boss if they see they

are only doing things that will help build their résumé for their next position.

If you wish to increase your influence, have a servant heart. Leadership is about bringing out the best in others; therefore, you need to know those whom you wish to lead. The following three steps will help move you towards becoming a Servant Leader: Be Curious; Listen; and Say Yes.

**Be Curious** – Ask questions with a genuine interest to grow your knowledge and understanding of people and

situations. Curiosity will help you identify the larger systems you are working in and learn about others. Discovering other people's interest, strengths, and challenges are the first pieces to recognizing how you can support them.


**Listen** – Practice listening with an open heart and mind. Asking questions is the first step and then you need to follow up with active listening to the answers. Truly hearing what people are saying not for your own interest but to understand and learn about someone else will aid you in finding ways to serve them. Listening is a great way to develop relationships, build trust, and discover where there is a need and opportunity to serve.

**Say Yes** – When opportunities present themselves take the leap and say yes to lead a support effort. Oftentimes the decision to take action is the hardest part. Once we agree to the prospect, we are resourceful in getting it done. You don't have to have all the answers before you say yes, you just need to know who and where to find them. Fortunately, you are a part of a professional organization that has a wealth of information and servant leaders to help you. Take on new challenges,

## Being a servant leader is very much about finding your purpose

reach out to get the support you need, and give it your best effort. You will be surprised on what you can accomplish.

At PWX in Kansas City, Roy Spence, the Opening General Session Keynote Speaker, had a fantastic quote that resonated with me. "Your purpose is where your talent and the world's need intersect." Being a servant leader is very much about finding your purpose. By practicing being curious to increase your understanding and knowledge of others, by listening to find serving opportunities, and then by saying yes to provide support to others and your organization, you will find yourself being a servant leader. The results of this style of leadership are a happier you, an organization that will thrive, and an outstanding résumé that will speak for itself.

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



**TOP  
TECH**

## Talking Top Tech: Global Positioning System (GPS)/ Automatic Vehicle Location (AVL) Edition

**December 6, 2018  
10:00 a.m. Central**

Join us for a look at GPS and AVL through the perspective of different lenses including Public Works, Industry, and Consultants. Leaders in each field will participate in a panel discussion and answer APWA member questions.

To register for this free program visit:  
[www.apwa.net/events](http://www.apwa.net/events)

# Water & Wastewater Manager

**Organization:** Ephrata Borough

**Job Category:** Water and Sewers

**Job Type:** Full Time

**Country:** USA

**State/Province:** Pennsylvania (PA)

**City:** Ephrata

**Salary and Benefits:** Excellent

**Overall Objective:** This position is responsible for managing skilled individuals and the operations of a public water supply system and multiple regional wastewater treatment and conveyance systems with a total capacity of 6.1 mgd (3.8 at plant 1 and 2.3 at plant 2). The Water & Wastewater Manager will direct the day-to-day activities and multi-year capital projects of the water and wastewater treatment systems in order to provide operations that are cost effective, safe, and within permit limitations.

**Supervisor:** Superintendent of Electric, Water and Wastewater

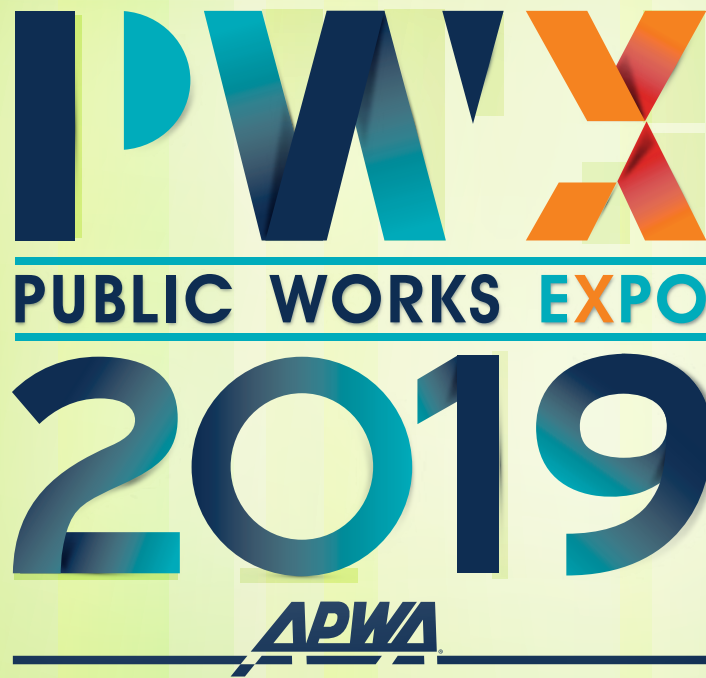
**Essential Duties and Responsibilities:** Manage the available resources to meet all permit limits for environmental compliance and to ensure cost-effective treatment associated with wastewater and water treatment operations. Engage employees on a regular basis regarding quality, cost, safety and continuous improvement of operations. Deliver timely performance feedback, recognize employee achievements and develop employee skills including technical, individual and teamwork. Administer the terms and conditions of the collective bargaining agreement fairly through collaboration with management and labor leaders. Administer programs for training and development of personnel to provide for a well-trained, safety-conscious, highly-motivated staff. Manage the use of available resources in regard to water and wastewater treatment to ensure compliance with all federal, state and local regulations. Make recommendations regarding staffing requirements, selection of personnel, materials, equipment and technologies needed to achieve system objectives. Prepare and manage water and wastewater treat-

ment multi-year capital and operating budgets, control operating expenses and meet annual budget objectives ensuring long-term, cost-effective operations. Prepare and implement programs designed to minimize costs, optimize treatment processes, and maximize the longevity and reliability of plant assets. Develop and maintain excellent customer relationships including residential, retail, commercial and industrial customers, and all municipalities served by the water and wastewater systems. Act as a liaison between the Borough and regulatory agencies, contractors, consultants, etc. to assure effective communication and compliance with regulatory requirements. Direct all plant employees and initiatives. Provide miscellaneous services and duties as required from time to time consistent with the position and role within the Borough Operations.

**Experience:** A minimum of two years managing a Class B-1 or higher (A-1 preferred) Wastewater Treatment or Class A Water Treatment facility along with five years of experience involving in-depth working knowledge of water and/or wastewater treatment techniques and industrial waste pretreatment and disposal of biosolids. Must possess either a Class A wastewater treatment or Class B water treatment license.

**Necessary skills, knowledge and abilities:** Demonstrated ability to use Microsoft Outlook, Word and Excel proficiently. Prior responsibility for maintenance of process equipment and upgrading technology is highly desirable. Ability to communicate effectively, verbally and in writing with employees, customers, government agencies, Union leaders, Council and Board members. Ability to plan, organize, delegate and implement management practices to achieve results. Ability to build and maintain respected work relationships with subordinates, peers, customer, government agencies and other public officials is essential. Working knowledge of chemical and biological process is highly desirable.

**For more information and to apply:** Skramer@ephrataboro.org. 



# **AWARDS PROGRAM**

APWA's Awards Program recognizes individuals, groups and chapters for their outstanding contributions to the profession of public works. Some of the awards presented include Professional Manager of the Year Awards, Myron Calkins Young Leader of the Year, Public Works Project of the Year, and Top Ten Public Works Leader of the Year, to name just a few.

Each award is listed on the APWA website. Criteria and nomination forms for the 2019 Awards Program are now available online.

**NOMINATE YOUR  
AWARD WINNER TODAY!**

**NOMINATIONS ARE DUE MARCH 4, 2019**

Visit [www.apwa.net/awards](http://www.apwa.net/awards)

# EDUCATION CALENDAR

For more information about these programs or to register online, visit [www.apwa.net/Events](http://www.apwa.net/Events). Program information will be updated as it becomes available.

Questions? Call the Professional Development Department at 1-800-848-APWA.

## 2018



**December 6**

Talking Top Tech: GPS/Automatic Vehicle Location (AVL)

## 2019



**January 22-25**

CSM, CPII and CPFP Certification Exams (computer-based testing)



**January 24**

Suspicious Activity Reporting: The Importance of "If You See Something, Say Something" in Public Works



**March 19-22**

CSM, CPII and CPFP Certification Exams (computer-based testing)



**May 19-22**

2019 North American Snow Conference, Salt Lake City, UT



**May 21-24**

CSM, CPII and CPFP Certification Exams (computer-based testing)



**July 16-19**

CSM, CPII and CPFP Certification Exams (computer-based testing)



**September 8-11**

2019 PWX, Seattle, WA



**September 17-20**

CSM, CPII and CPFP Certification Exams (computer-based testing)



**November 12-15**

CSM, CPII and CPFP Certification Exams (computer-based testing)



= Talking Top Tech



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



= Live Conference (Paid Registration)



= Certification Exam



= 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/](http://www.apwa.net/callforpresentations/)

## Talking Top Tech: GPS/Automatic Vehicle Location (AVL)

Thursday, December 6, 2018

11 ET/ 10 CT/ 9 MT/ 8 PT



# Products in the News



## Reduce your slip and fall liability this winter with STAND-UP Freeze Resistant Liquid Deicer

New STAND-UP helps facilities mitigate their slip and fall liabilities by completely clearing away slippery ice and snow pack from their steps, walkways and ramps. STAND-UP is a great alternative to salt around facilities since it keeps working even after the sun goes down. STAND-UP will not track into buildings, and it will not damage expensive stamped concrete and brick pavers like salt can. For more information, watch a short video of STAND-UP in action at [www.rhomar.com](http://www.rhomar.com) or call (800) 688-6221.

## Everyday Diesel Treatment

Hot Shot's Secret EDT (Everyday Diesel Treatment) is a fully formulated fuel additive designed to turn standard diesel fuel into premium diesel fuel.

EDT is extremely effective in middle distillate fuels to improve combustion and ignition efficiency, enhance fuel economy and maintain fuel in a clean, stabilized condition. When diesel ignition improves, emissions are reduced and noise levels are lowered. Controlling the pressure build-up allows more complete burning of the refractive molecules in the fuel, which steal power and produce deposits and wear. Hot Shot's Secret EDT has greatly reduced the need for regeneration cycles for the City of Columbus. Read the full case study here: [www.hotshotsecret.com/edt-everyday-diesel-treatment/](http://www.hotshotsecret.com/edt-everyday-diesel-treatment/).



## ClearSpan™ Public Works Solutions

ClearSpan Fabric Structures is the leading manufacturer of fabric buildings suited for any public works operation. Ideal for construction, snow management, and storage, the possibilities with ClearSpan are endless. The buildings feature high clearances and unobstructed, clear span interiors, so equipment of any size can be maneuvered, and floor plans can be laid out for convenience. Built to withstand even the most extreme weather conditions, they offer year-round protection from the elements. Fast installation and minimal foundation requirements allow the buildings to be temporary or permanent, perfect for relocation from one project to the next. For more information, please visit [www.clearspan.com](http://www.clearspan.com) or call 1-866-643-1010.

## Signify/Philips Color Kinetics LED lighting system

A multi-colored dynamic LED lighting system now illuminates two bridges in Green Bay, Wisc. using the Signify/Philips Color Kinetics LED lighting system. Valued at approximately \$900K, a total of 387 RGB high-performance LED fixtures were used to light the bridges, and are estimated to consume 25% less energy than the prior lighting system. The new installation enables Green Bay to light the bridge in different colors to celebrate major holidays and events, and ultimately, the city can create inspiring visual experiences and improve the ambience of the downtown area—all with dynamic LED lighting. For more information about Signify USA, please call (732) 563-3000 or visit [www.signify.com](http://www.signify.com).



## Factoria Recycling Center & Transfer Station wins awards



The Northwest Construction Consumer Council selected the rebuilt **Factoria Recycling Center & Transfer Station** in Bellevue, Washington as the “Green Project of the Year.” It also received a PAN Year in Review award for excellence in public art. The installation, *Still Spinning*, by artist Al Price, sets an expansive 4,200-square-foot retaining wall into motion, as more than 400 recycled-content stainless steel bicycle wheels catch and reflect the ever-changing light of Pacific Northwest weather. The sculpture was produced by **4Culture**, a public agency for funding and supporting arts and culture, in partnership with the King County Solid Waste Division. For more information about 4Culture, please visit [www.4Culture.org](http://www.4Culture.org). (Photo credit: Al Price, Still Spinning, 2017. Stainless steel. Factoria Recycling & Transfer Station, Bellevue, WA. King County Public Art Collection. Produced by 4Culture with photography by wiseknave.)

## Bergkamp's FP5 Flameless Pothole Patcher: New safety features



The advanced **FP5 Flameless Pothole Patcher** from **Bergkamp Inc.**, now offers new safety features and options. The FP5's new tack arm design supports the tack wand hose, making it easier to keep the hose out of fresh tack. This feature also is available as a retrofit option for existing FP5s. Additionally, Bergkamp is offering a 360-degree camera system as an option for its full patcher line. The Backeye®360


camera allows the driver to see all the way around the patcher from the inside the cab. Each of these features increases safety for the crew and public, as well as patcher efficiency. For more information, please visit [www.bergkampinc.com](http://www.bergkampinc.com).

## Digi International brings dual-connectivity to public transit

Ideal for challenging transportation and mobile environments, **Digi International's** newly introduced **Digi TransPort® WR64** is a high-performance cellular router with dual redundant communications for complex transit systems. This dual module LTE-Advanced router is designed to support the connectivity needs of transit agencies and their riders with cellular and Wi-Fi connectivity today, and the ability to simply add components for future 5G functionality. Along with enterprise class routing, the Digi TransPort WR64 integrates security, firewall and VPN functions. For more information, visit [www.digi.com](http://www.digi.com) or contact Steve Mazur, director of government sales, at [steve.mazur@digi.com](mailto:steve.mazur@digi.com).



## RoadResource.org: A single tool to improve network management

For agencies looking to expand their treatment toolbox and optimize budgets, the new **RoadResource.org** provides information, calculators, and decision-making tools on preservation, recycling, and network management into a single website—the likes of which has never before been seen in the industry. Powered by **The Pavement Preservation and Recycling Alliance (PPRA)**, the website gives users access to tools such as “What Treatment is Best for my Road?” and organized menus on 18 preservation, recycling, and emulsion treatments, including technical requirements, research, success stories, and expert advice in one easy-to-understand digital hub. To learn more, visit and explore [RoadResource.org](http://RoadResource.org). 

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So, don't miss this opportunity to advertise in the February issue which focuses on water treatment and distribution, stormwater management, sanitary sewer systems, and flood control.

**The materials are due by January 10**

**Call Fox Associates at (312) 644-3888**

## UPCOMING APWA EVENTS

### PWX

2019 Sept. 8-11 Seattle, WA

For more information, contact David Dancy at (800) 848-APWA or send e-mail to ddancy@apwa.net.

### National Public Works Week: May 19 – 25, 2019

Always the third full week in May. For more information, contact David Dancy at (800) 848-APWA or send e-mail to ddancy@apwa.net.

### North American Snow Conference

2019 May 19-22 Salt Lake City, UT

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

## DECEMBER 2018

3-6 National Ground Water Association, Groundwater Week, Las Vegas, NV, [www.ngwa.org](http://www.ngwa.org)

6 **APWA Talking Top Tech: "GPS/Automatic Vehicle Location (AVL), (800) 848-APWA, [www.apwa.net](http://www.apwa.net)**

28-31 U.S. Composting Council's 27th Annual Conference & Tradeshow, Phoenix, AZ, [www.compostingcouncil.org](http://www.compostingcouncil.org)

29-31 Underground Construction Technology International Conference & Exhibition, Fort Worth, TX, [www.uctonline.com](http://www.uctonline.com)

## JANUARY 2019

13-17 Transportation Research Board 98th Annual Meeting, Washington, DC, [www.trb.org](http://www.trb.org)

20-23 National Asphalt Pavement Association, 2019 NAPA Annual Meeting, Marco Island, FL, [www.asphaltpavement.org](http://www.asphaltpavement.org)

21-25 World of Concrete, Las Vegas, NV, [www.worldofconcrete.com](http://www.worldofconcrete.com)

22-25 **APWA: CSM, CPII and CFPF Certification Exams (computer-based testing), (800) 848-APWA, [www.apwa.net](http://www.apwa.net)**

24 **APWA Click, Listen & Learn: "Suspicious Activity Reporting: The Importance of 'If You See Something, Say Something' in Public Works, (800) 848-APWA, [www.apwa.net](http://www.apwa.net)**

## FEBRUARY 2019

5-7 Association of Modified Asphalt Producers, Annual Conference & Workshop, Fort Lauderdale, FL, [www.modifiedasphalt.org](http://www.modifiedasphalt.org)

8-12 American Traffic Safety Services Association, 49th Annual Convention & Traffic Expo, Tampa, FL, [www.atssa.com](http://www.atssa.com)

11-14 Society for Protective Coatings, SSPC 2019 Coatings+, Orlando, FL, [www.sspc.org](http://www.sspc.org)

12-14 World of Asphalt, Indianapolis, IN, [www.worldofasphalt.com](http://www.worldofasphalt.com)

17-20 American Rental Association, the ARA Show, Anaheim, CA, [www.therentalshow.com](http://www.therentalshow.com)

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**Legend:** IFC = Inside Front Cover; IBC = Inside Back Cover; BC = Back Cover

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