

LEADING PRACTICES IN

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Dear Reader:

In 1960, the American Public Works Association (APWA) designated the third full week in May each year as National Public Works Week. This designation provided an opportunity to educate the public—at both national and grassroots levels—about the important role public works plays in every aspect of our daily lives.

Without the hard work of the professional local government employees who, according to APWA, focus on “the combination of physical assets, management practices, policies, and personnel necessary for government to provide and sustain structures and services essential to the welfare and acceptable quality of life for its citizens,” the cities, towns, and counties in which we live, work, and play would cease to exist. Now more than ever, the state of our infrastructure plays a major role in the quality of life in our communities.

In recognition of National Public Works Week, the International City/County Management Association (ICMA) and APWA have partnered to develop this complimentary e-book. This collection of articles originally published online and in ICMA’s *PM (Public Management)* magazine and the APWA Reporter discuss leading practices in public works management as well as the importance of professional certification and accreditation.

We hope you find these articles informative and enlightening and that after reading them, you will take a moment to consider the value of the services that the men and women who are part of the public works profession provide to all of us.

Sincerely,

Robert J. O’Neill, Jr.
Executive Director
ICMA

Sincerely,

Scott Grayson
Executive Director
APWA

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MANAGING SUCCESSFULLY IN A COMPLEX BUILT ENVIRONMENT

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Today's commitment to sustainability and energy efficiency in the built environment is placing increased demands on the local government departments that oversee new construction and renovation of existing buildings. Energy conservation codes, green building codes, stretch codes, smart rehab codes, and LEED rating systems, for example, require broad technical expertise to ensure code-compliant, safe, and energy-efficient construction that also meets economic development goals.

The development of the International Energy Conservation Code and the International Green Construction Code provide model language for state and local codes designed to ensure safe, energy-efficient, and sustainable construction. They also create a need for education and information as well as new approaches to local enforcement that link traditional building codes with the priorities of energy efficiency and green construction practices

Among the challenges local government managers face in the increasingly complex built environment are:

- Ensuring that the building regulatory system promotes, supports, and sustains economic development while incorporating sustainability and energy efficiency goals.
- Keeping policymakers informed about and engaged in emerging code options and requirements, including understanding the difference between legally binding codes and voluntary rating systems.
- Ensuring that staff know about all the technical dimensions of code enforcement, energy efficiency, building system performance, and building safety.
- Creating an organizational infrastructure that maximizes collaboration among the various departments involved in all phases of construction, from initial concept through certificate of occupancy.

- Training staff to be partners, problem solvers, and advisers to the public and the construction and development community while still ensuring compliance with all municipal codes.

The building boom of the early 2000s led many local governments to streamline their building and code enforcement operations to keep up with service demands. As goals and expectations for construction and renovation change, it is important for local government managers to assess the mission, philosophy, structure, and culture of the departments that support construction and renovation to ensure that they are ready for the challenges that lie ahead.

This article highlights strategies that local governments have used to improve building services operations and staff performance in recent years. These practices can be effective in dealing with today's changing environment.

MAXIMIZING BUILDING AND ECONOMIC DEVELOPMENT SUCCESS

In Carrollton, Texas, a reorganized division, Development Services, combines building inspection, planning, and transit-oriented development around the mission of managing the ebbs and flows of the building process has become one of the city's biggest challenges "Today, we are competing for every development so you need to set yourself apart from the competition in order to be successful," said Carrollton City Manager Leonard Martin. "You can't go out and recruit new development and then have them tied up for a year in a traditional siloed organization."

Carrollton's director of Development Services, Ravi Shah, believes that centralization of regulatory functions into a faster, friendlier, and flatter department is essential in today's tough economy "where governmental efficiency is measured by the ability of its regulatory departments to innovate and function cohesively as a single unit."

In addition to structural changes, Carrollton emphasized these new performance expectations:

- Making sure all staff members are aware of the city's economic development vision and plans.
- Assigning one point of contact—a project champion—to provide coordinated responses and ensure timely completion.
- Using checklists to define roles and responsibilities among departments and establish an institutional memory for every project even when various staff members are involved.
- Taking city hall to the client whenever possible, such as providing on-site plan reviews.
- Promoting an orchestrated permitting process that maximizes collaboration, consistency, and efficiency.

Carrollton advertises its permitting efficiency as one of the top five reasons to locate in the city. It guarantees a turn-around of 10 days or less on building permits, including review of all codes and ordinances related to private development and associated public infrastructure.

“Predictability and consistency are essential to producing safe and sustainable building projects,” Martin added. “The building official’s primary job is to promote development within the code, not hinder development.”

FAST, PREDICTABLE

Bellevue, Washington, reorganized its building and development operations to keep up with a massive construction boom in the early 2000s. City Manager Steve Sarkozy said the effort was designed both to ensure that code compliance services supported economic development and to change the mind-set of building staff from regulators to partners with the development community.

The city used three guiding principles—quick response time, predictability, and seamless and collaborative processes that presented “one city”—to shape its new operation, and it established performance metrics for all departments involved in construction on the basis of these three principles. Those metrics emphasize that city staff work closely with developers in order to encourage, not squelch, successful development.

During Bellevue’s construction boom, a 900,000-square-foot, \$1 billion retail, residential, hotel, and office complex requested on-site inspection and approval within 20 minutes of request. “As long as the developer is willing to pay for that level of service, the city must be prepared to respond,” Sarkozy said.

With a significant drop in new construction in recent years, Sarkozy said that managing the ebbs and flows of the building process has become one of the city’s biggest challenges. Because building development services are designed to be self-supporting through fees, slow building periods create financial challenges in maintaining top-quality staff who understand and are committed to the city’s development philosophy.

“It is important to put enough money aside during the boom times to retain the best building and development staff during the ebbs,” Sarkozy said. “The economic climate will change, and the city has to be ready to deal with the next boom and changing development expectations.”



It is important for local government managers to assess the mission, philosophy, structure, and culture of the departments that support construction and renovation.

PROBLEM SOLVERS AND TRUSTED ADVISERS

As the regulatory environment becomes more complex, building officials need to see themselves as problem solvers and trusted advisers more than enforcers. The new role of facilitator requires a different set of skills, a different mind-set, and constant reinforcement:

- Ensure that staff members are well schooled in all required codes, advisory standards, and energy rating systems.
- Provide training on how to work effectively with developers as partners and customers; focus particularly on listening and problem-solving skills.
- Work with builders and developers to incorporate codes into their plans from the outset to eliminate potential violations before they occur.
- Emphasize collaboration as the local government’s approach to managing the built environment.
- Reward employees for solving problems rather than issuing citations.

“It requires a long-term philosophy that balances protecting the city from risk and liability while facilitating efficient development,” said Ed Daley, city manager of Hopewell, Virginia. “Code enforcement can be both a public protector and a facilitator of economic development—but that is a cultural change for many building officials.”

TECHNOLOGY IMPROVES OPERATIONS

Technology and e-government services support efficiency and effectiveness in the built environment, particularly as new codes and rating systems broaden development requirements and expand the breadth of inspection and review processes. A pilot project in “smart permitting” in California’s Silicon Valley in the late 1990s focused on linking technology, standardized regional processes, and well-trained employees.

Launched on the front end of the e-government movement, the project emphasized “smart technologies, smart people, and smart process.” It also predicted that regional collaboration—several local governments working together to achieve a common goal—would be the foundation of smart permitting and efficient building department operations in the future.¹

Regional collaboration is an important component of the e-government alliance among 11 cities and one county in the Puget Sound region. The alliance provides a selection of portals for cross-jurisdictional service delivery, including MyBuildingPermit.com. Sarkozy said standardization of processes among the participating jurisdictions has produced a good business climate for contractors and suppliers.

“The alliance has helped the region attract and nurture a lot of really good contractors because they can get work done more efficiently here,” Sarkozy said. “It has also

helped a group of suburbs provide a sophisticated level of building services that they couldn't do on their own. And that is particularly important in today's environment."

Continued advancements in technology are essential to ensuring responsive and effective local building and development services. Technology-based field inspection tools, for example, accelerate development decisions, support problem solving, and promote consistency in carrying out inspections. The field inspection technology of the Institute for Building Technology and Safety makes use of a handheld tablet with a Windows-based inspection system to provide efficient data collection and management.

Forms on the tablet are pre-populated with applicant information, site data, and digital photos to eliminate guesswork. Objective questions, inspection guides, checklists, and decision trees facilitate on-site action and transmit inspection results in real time for immediate processing, eliminating the need for dual entry of inspection data or written follow-up reports.

CHALLENGES AHEAD

The commitment to sustainability and environmentally responsible building practices will continue to broaden the expectations of local departments responsible for supporting economic development and ensuring code compliance. Building officials play an important role in enhancing safety, welfare, and quality of life by enforcing sound building practices, and they are also part of a much larger context dealing with the community's long-term economic, social, and environmental health. Building services in today's environment cannot be viewed as a technical responsibility best handled entirely by technical staff.

Important components of a successful approach to development services include:

- An up-to-date and flexible organization structure that supports broad policy goals around economic development, green building practices, energy conservation, and sustainability.
- The most current technology solutions to support efficient day-to-day operations and data management.
- Standardization of processes and code requirements across jurisdictions whenever possible.



As the regulatory environment becomes more complex, building officials need to see themselves as problem solvers and trusted advisers more than enforcers.

- Well-trained and committed staff who understand the technical requirements of the built environment, the organization’s vision for sustainable development, and the important role they play as strategic partners with the development community.

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SUSTAINABILITY

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In this article, Jen Winter and Mary Pat Baldauf interview one another regarding leadership and management skills from their perspectives within the sustainability arena.

Define leadership and management in your perspective as it relates to sustainability. An organization can only be as sustainable as its leaders. In order to become more sustainable, an organization has to be open to change. Leadership is critical in driving and motivating change. Good leaders provide motivation and inspiration for others. As it relates to sustainability, leaders must provide the motivation for change, which includes encouraging a sustainability mindset, being open to new ideas, and a willingness to give recognition to those who embrace it.

Where does an organization start? While sustainability is often considered an environmental term, many public works leaders define it as a priority that encompasses all aspects of investing in the long-term good of the community. That means making decisions that are simultaneously beneficial for the environment, residents, development, community character, overall quality of life and more. Executing a holistic approach requires involving everyone from the public works director to residents and from across divisions, cities and counties. Those concepts are not revolutionary, but they are driving how public works departments are being reshaped.

Focusing on leadership, what is the vision as it relates to improving sustainability within public works? The vision as it relates to improving sustainability within public works is to implement more environmentally friendly, economically sound, and socially responsible long-term solutions. To do this, we must continually analyze our projects and processes to find new and better ways to build and maintain the infrastructure of our communities. Often, in both the public and private sectors, the most sustainable organizations are also considered some of the most innovative. These organizations embrace change and are open to new ideas as well as failure. As

leaders of these organizations we must support these new ideas and also accept that they may not always work, at least not at first. We have the ability to create a culture of continuous improvement, where we operate under almost constant change to implement the solutions that work best for our organizations and communities.

Transitioning from leadership to management, what are the goals of building a sustainability mindset within public works? Public works has an impact on everyone. We make decisions that affect people's lives, and building a sustainability mindset helps guide those decisions. We are not just making decisions that impact people today; we are making decisions that will affect generations to come. A sustainability mindset means that we are doing the right project, and have considered the social, economic, and environmental impacts of that project. Good management helps support this through proper planning, budgeting, goal setting and tracking.

Why does it matter? If the global population attained the quality of life we have as Americans, we would need five planets to support these natural resource demands. Currently, global consumption is outpacing natural systems' regenerative capacities by 150%.

Human development coupled with climate change is on pace to cause 50% of all species to go extinct by 2100. The fuel we use to power our lives and comforts are destroying ecosystems that took thousands of years to become what they are.

Locally, we use energy, which has local and global air, water, and land implications. Our transportation systems use energy, impact community cohesion, and dictate health. If we wish to have clean water, clean air, and healthy soil to grow food and enjoy nature into perpetuity, it is our responsibility to face these challenges head-on, determine low impact, thoughtful scenarios, and make decisions that prioritize our health and abilities to live long, prosperous lives.

What leadership and management skills are especially important? Excelling in a sustainability role requires an extensive science and/or engineering background, right? Not quite. The going notion may be that technical skills will help you tackle environmental impact at work—but that's only part of the picture. For the majority of really effective sustainability leaders, soft skills are far more critical to getting the job done. So how do you know if you've got what it takes? Whether you're looking to initiate conversation inside your company or spearhead a new program, here are three soft skills every sustainability leader should develop: big picture thinking, strong communication skills, and keen "peripheral vision."

Where can someone start? What happens when it does not work? Pursuing sustainability begins with self-educating and exploring efforts and frameworks that already exist, and it persists with strong social capital, organizational integration, and management skills.

Use available tools and resources. The APWA Center for Sustainability (C4S) is a great resource for public works agencies. C4S provides tools and resources to APWA

members and community leaders that allow decision makers to implement more sustainable, economically sound, and socially responsible long-term solutions. New information is continually being added to the C4S webpage (<https://www.apwa.net/centerforsustainability>) to assist members and communities.

APWA is also a founding member of the Institute for Sustainable Infrastructure and Envision. Envision is a tool that can be used for infrastructure projects of all types, sizes, and complexities. It can help you achieve higher levels of sustainability at each step of the process—from assessing costs and benefits over the project life cycle to evaluating environmental benefits and using outcome-based objectives. By going through the credentialing program employees will broaden their understanding of sustainability as it relates to public works, and they will gain access to additional tools such as the Envision checklist and the online rating system.

Find trusted science, advocacy, and news sources—broadly speaking—like the EPA, Natural Resources Defense Council, National Geographic, Governing.com, or Planetizen.com. Sustainability is beginning to take root as a core competency in many institutes of higher education. And because many cities have cared about sustainability—whether calling it that or not—enough have hired sustainability coordinators and created sustainability plans that there is no need to reinvent the wheel. As in many industries, professional groups and standardization are important, and cities now have comprehensive and broad sustainability benchmarking standards—such as STAR Communities—to refer to for taking the next steps to improve.

New ideas aren't always easy for institutions, and sustainability advocates' ideas matter no more than they are embraced by others. To spread interest and traction building social capital, pointing to success stories from other cities and speaking to an audience's interests are critical in gaining buy-in. Arguments can be framed from different angles; when resistance is met, seek constructive feedback so the person's interests can be understood better and approached again with a more thoughtful case. And if the case cannot be made, it can be good to build a pocket of success rather than seek a paradigm shift for an organization, or there are always other areas that can be addressed. Sustainability is big and can include anything under the umbrella of environmental, social, and economic health, so look for more opportunities and willing partners.

What our agency is doing now currently works, why change? It's easy to rush change. Applaud success and a smooth operation where due. Focus on relationship building and understanding of an operation, and then build an argument by identifying peer operations that look at things differently and promote success. Is there a cost or health argument that can be made? Is there a publicity argument to be made? Should the case for change be coming from a different person in the organization?

It's easy for a sustainability-focused professional to become predictable and too ambitious before learning the nuances of an operation. Offer appreciation and time to a prospective partner, learn what will be most appealing, and keep in mind the importance of humility when seeking to understand—and possibly change—a person's fine-tuned operation.

INFRASTRUCTURE INVESTMENT

Harnessing Long-Term Capital for Local Development

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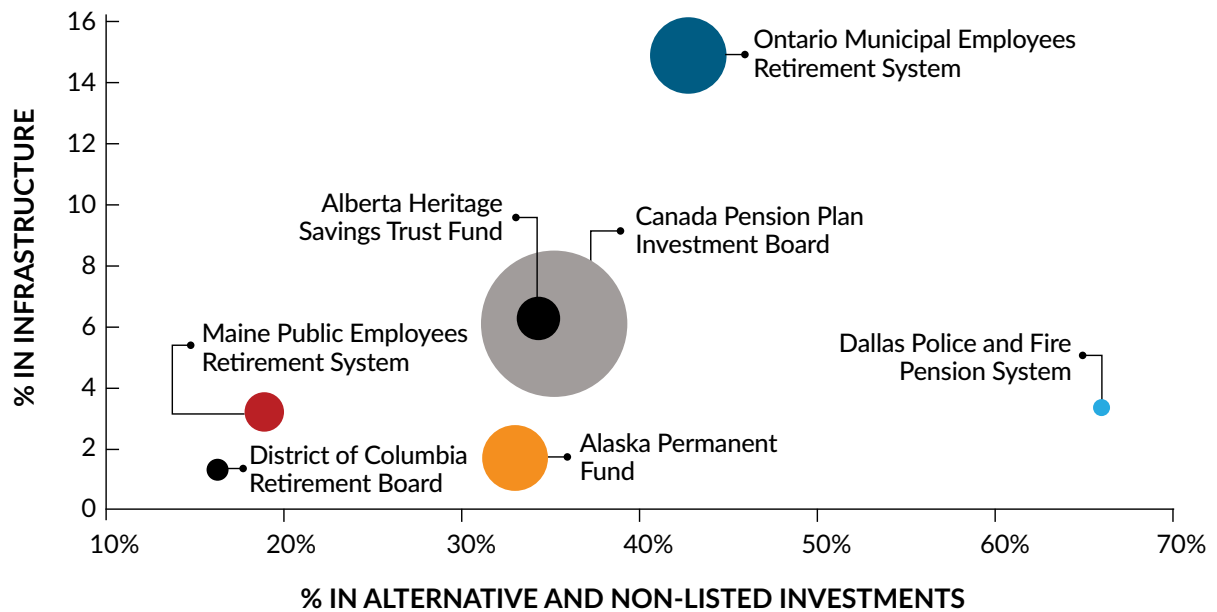
Given the continued discussions in Washington, D.C., state capitals, and council meetings about the expenditures needed to maintain and update infrastructure systems, what other sources of investment should local government managers be keeping their eyes on now and in the future? Public pension funds, with their natural preference for long-term investments and tradition of “capital stewardship,” could become key investors in this socially beneficial asset class.

In the wake of the 2008 economic downturn, considerable attention has focused on the topic of local government infrastructure investment in the United States, often with an eye toward ensuring adequate funding for maintenance and multimodal expansion. This discussion includes varying opinions regarding the current state of infrastructure assets,¹ the roles and relationships of the public and private sectors, and key priorities going forward.

Underpinning local government infrastructure financing are sizable portions of the \$3.7 trillion municipal bond market,² as well as roughly \$220 billion in direct capital outlay by local governments annually,³ and \$61 billion in transportation grants from the federal government to states and localities,⁴ among other sources.

While these sources constitute the primary way local infrastructure is funded, it is also important to note the growing role of public pension funds and U.S. sovereign wealth funds in both direct and indirect infrastructure investment (see Figure 1 for a snapshot of the allocations used by several of the funds mentioned in this article). Some nonfederal, public pension and sovereign funds invest relatively small portions of their total assets—typically 5 percent or less—into infrastructure projects outside of municipal bonds, while many others have not yet entered the infrastructure space.

FIGURE 1 Public Funds: Infrastructure versus Overall Alternative and Non-Listed Investments. (Circle size represents size of fund.)



Source: Information based on 2012-2014 fund documents referenced in this article.

This variation may be linked to the sponsoring government allowing these types of investments (or not), fund officials identifying a useful role for the asset class within their overall asset allocation, or funds having the in-house organizational capacity needed to invest directly in infrastructure assets, or, at the least, to effectively monitor the work of specialized third-party asset managers.

In the context of this article, our definition of public funds will include all public pension, sovereign wealth, and reserve funds at federal and local (regional, state, and municipal) levels. In the United States, the connections between public fund assets and infrastructure investments and needs are receiving increased attention from government officials (e.g., U.S. Rural Infrastructure Opportunity Fund and Build America Investment Initiative), a range of think tanks and nongovernmental organizations,⁵ and also private institutional investors, among others.

This article focuses on the increasing role public funds play in helping provide part of the additional financial resources needed for infrastructure, including at the local level.

PENSION FUNDS

While about half of the \$3.7 trillion (Quarter 1, 2014) in assets held by state and local pension funds are in domestic and international equities, about a quarter are in such fixed-income investments as corporate and foreign bonds (\$381 billion), U.S. Treasuries (\$206 billion), federal agency and government-sponsored enterprise securities, for housing and farm credits⁶ (\$206 billion), short-term credit (\$51 billion), mort-

gages (\$8 billion), and municipal bonds (\$400 million).⁷

For more than a decade, in the aggregate, these pension funds increased their overall allocations into alternative and non-listed investments, a portion of which are infrastructure investments, from 5 percent to about 17 percent.⁸ This unprecedented increase was driven by the belief in expected benefits ranging from increased diversification, potentially superior risk-adjusted returns over long periods, the need for asset versus liability cash-flow matching and, after 2007, the quest for yields in a low-interest rates environment.⁹

Here are examples of U.S. state and local public pension systems that had or currently have holdings in infrastructure:¹⁰

- The Dallas Police and Fire Pension System (DPFP) had an infrastructure asset allocation of 3.4 percent (\$108 million) in 2012. The 2012 DPFP Annual Report noted these investments included hospital and water treatment plant projects in Asia and managed highway lanes in Texas.
- The Maine Public Employees Retirement System (Maine PERS) had an infrastructure asset allocation of 3.3 percent in 2014 (\$419 million). These investments were in renewable energy, toll roads, seaports, airports, and telecommunications infrastructure projects, among others, in the United States and internationally. This was reported in a Maine PERS “Asset Allocation,” June 30, 2014, and a Maine PERS “Private Investment Markets Summary” dated March 31, 2014.
- The Pension Trust Fund of the District of Columbia, managed by the District of Columbia Retirement Board, had 1 percent (\$86 million) of its assets in infrastructure investments in 2014. It has partnerships with firms that invest in ports, natural gas pipelines and distribution, transmission cables, waste services, bridges, toll roads, and rail, among other infrastructure assets, primarily in North America. This was reported in the D.C. Retirement Board’s “Quarterly Summary June 30, 2014” and the D.C. Retirement Board’s “Private Investments Summary as of December 31, 2013.”

Also, several U.S. states have established non-pension trust funds to receive and invest revenue from severance taxes, and related taxes/fees, from natural resources. Eight of the larger non-pension U.S. funds manage \$123 billion in assets.¹¹ According to its 2013 Annual Report, the Alaska Permanent Fund (\$50 billion in total assets) had about \$900 million in transportation, water, waste, and other infrastructure investments in the United States and internationally.



It is important to note the growing role of public pension funds and U.S. sovereign health funds in both direct and indirect infrastructure investment.

The Permanent Wyoming Mineral Trust Fund (\$6.1 billion in total assets), among other investments, provides loans to irrigation, municipal pipeline treatment plants, airports, and other similar projects in Wyoming, as reported in the “Wyoming State Treasurer’s Investment Report, Fiscal Year 2013.”

CANADIAN INVESTMENT

By investing early on in non-listed assets (private equity, real estate, infrastructure, forestry, and commodities) both domestically and abroad, Canadian public pension and sovereign funds have attracted attention on both sides of the Atlantic: “They own assets all over the world, including property in Manhattan, utilities in Chile, international airports, and the high-speed railway connecting London.... They have won the attention both of Wall Street firms, which consider them rivals, and institutional investors, which aspire to be like them. These giants are Canada’s largest public pension-fund groups.”¹²

Aside from Japan, Norway, Brunei, Singapore, and Gulf nations, Canada is the only large developed jurisdiction where public sector pensions hold more assets collectively than their private sector peers: \$798 billion out of \$1.4 trillion for the pension sector as a whole.¹³ Interestingly, this means that Canadian public pension funds, including local funds, possess the equivalent of the sixth of all assets held by their U.S. public pension peers, a remarkable feat considering Canada’s economy is 11 times smaller than the United States in GDP terms.¹⁴

Large Canadian public pension funds at both federal (e.g., Canada Pension Plan Investment Board, Public Sector Pension Investment Board) and provincial level (e.g., Ontario, Quebec, Alberta, British Columbia) generally allocate at least a third of their total investments to alternative and non-listed assets¹⁵ (i.e., excluding listed stocks, bonds, and money market instruments), a remarkably high figure by both international and North American standards.

Infrastructure and real estate alone, excluding private equity, commodity, forestry, and hedge funds, typically account for approximately two-thirds of their average allocation to alternative and non-listed assets, which represents roughly more than 20 percent of their overall asset mix.¹⁶

Relative to the United States, the research and consultancy firm Preqin in a February 2014 analysis noted that “As of Q1 2014, U.S. public pension funds, which invest in infrastructure, had an average current allocation of 1.9 percent and a target allocation



Canada is the only large developed jurisdiction where public sector pensions hold more assets collectively than their private sector peers.

of 4 percent. On the other hand, Canada-based public pension funds had an average current allocation of 5.9 percent and a target allocation of 8 percent. Stated simply, Canada-based public pension funds on average plan to invest more, and actually do invest more than their U.S. counterparts.”¹⁷

Several Canadian public pension and sovereign wealth funds have sizable holdings in infrastructure. Firzli and Bazi have previously analyzed the investment policy of Canada’s largest provincial public pension fund, the Ontario Municipal Employees Retirement System, which co-owns—with the Ontario Teachers’ Pension Plan—some of the UK’s most valuable transportation and energy distribution assets. Notably the 67-mile HS1, the high-speed rail that connects the UK’s Channel Tunnel to London.¹⁸

Another key example is the Alberta Heritage Savings Trust Fund. This fund, managed by the Alberta Investment Management Corporation (AIMCo), a hybrid public pension and sovereign wealth asset management organization, collects and invests a portion of the province’s oil revenues.

According to its 2013–2014 Annual Report, the fund had an infrastructure asset allocation of 6.3 percent (C\$1.1 billion) at the end of FY 2014 (3/31/2014), with 18.4 percent of assets allocated to real estate (C\$ 3.22 billion) and 2.2 percent to timber or a 26.9 percent overall allocation to real assets.

The fund invests both directly in assets (more than 50 percent of the total and most new investments) and through externally managed mandates.

The Alberta Heritage Savings Trust Fund has a clear predilection for high-income, developed jurisdictions recognized as having stable political, legal, and fiscal regimes (for example, U.S., United Kingdom, Belgium, Denmark, and Chile) in such steady sectors as traditional transportation, with midsize stakes in central, hub airports located near capitals (Copenhagen or Brussels), and small to midsize stakes in various toll roads and U.S. energy infrastructure companies investing locally in central Canada, notably in the strategic pipelines bringing Albertan oil to Seattle and the Great Lakes.

Over the years, the fund has invested in several infrastructure and private equity assets directly dependent on the fortunes of the Albertan oil sector, the backbone of the province’s economy and a rather volatile boom-and-bust industry.

To those who have criticized such pro-cyclical investments in the past, the Alberta Heritage Savings Trust Fund has argued that “this is not an aid project, this is an investment,”¹⁹ insisting that, to avoid any potential conflict of interests that may arise, the province’s finance minister himself is never told about a financial choice until the decision has already been made by the fund’s investment officers.

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ONE MAN'S STORY: CHRISTOPHER ANDERSCH

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American Public Works Association, Kansas City, Missouri

Christopher Andersch is a reporter's dream. I called him to talk about this article and, with the zeal of someone who has been reborn, he launched into his story with almost no prompting from me. You see, Chris has a very good story to tell, and he is very excited to tell it.

He's excited that he no longer has a job—he has a career! He's excited because now he has a self-confidence he never had before, and he says he owes it all to the Public Works Supervisor (PWS) program. Chris is so grateful for these changes in his life that he says, "It is a debt I can never repay!"

Chris, who is APWA's first official graduate of the Donald C. Stone Center's Public Works Supervisor program, is the maintenance and operations supervisor for Charlotte County, Florida. Virtually his entire job experience has taken place in that agency. His first day on the job was in 1987 when he was 19 years old. He laughingly related to me the big surprise he got on his first day with the County.

Thinking he was being hired into the building maintenance division, Chris noticed a group of very dirty, sweaty guys in orange T-shirts who had been out filling potholes as he was being shown around. He remembers commenting to the man who was showing him where he would be working that he was really glad he would not be doing that kind of work. That's where the surprise came in. Chris was actually being assigned to the maintenance and operations division, so by the end of the day he had his own orange T-shirt and set of potholes to fill! He describes himself as a "lamb in a room full of lions" and said at that point, all he knew about equipment was what he had learned with his Tonka trucks in the sandbox.

But Chris stuck with it. He rose through the ranks, steadily progressing through the first, second, and third levels of maintenance operator. He became highly proficient in operating and maintaining all of the equipment he came in contact with, but he never got a chance to be a supervisor. In 2006 that changed when a temporary, 45-day



Christopher Andersch (*right*) stands with his program mentor, George Recktenwald, at the DCS Center graduation ceremony during the 2014 APWA Congress in Toronto.

foreman’s job became available. Afterward, the temporary position became a permanent position.

Unfortunately, though, the promotion came at a time when the agency’s budget constraints made it necessary to put its in-house training program on hold. Although Chris was anxious to do a good job, the best he could hope for was that he would get some formal supervisory training when the budget was restored and the training program would be reinstated. Of course, the rest of this part of the story is an all-too-common occurrence with public works budgets, and Chris had to make do as best he could.

He says of that time, “Trial and error is not recommended as a primary training tool.” As an equipment operator, he had “supreme confidence” in his abilities, but as a supervisor, he lost confidence in himself. He even started thinking about leaving public works. Note, I said HE lost confidence, NOT his employer lost confidence in him. But sometimes, being on the frontline, feeling like you’re making it all up as you go along takes a toll on self-confidence.

Fortunately, Chris didn’t let this tunnel vision totally shut him down. Instead, he went to his public works director and talked with him about his need for more training so that he could do his job better. His director’s response was not only encouraging, it was eye-opening for Chris. “Why did you wait so long for someone else to make the decision about **your** career,” he asked Chris. Then he told Chris to find the training he thought he needed.

Thus empowered to begin looking for training the agency could send him to, Chris began reading everything he could. At first he was concerned that he might need a college degree, but he persisted. In the meantime, his agency was going through organizational transitions, but Chris kept looking and—finally—he found what he was looking for in an ad in the *APWA Reporter*. What caught his eye was the bold assertion that “You’ve spent time in the public works trenches, now make the move to a desk!”

It was as if the ad were speaking just to Chris, as if it were on that page—just waiting for Chris to find it. At the lowest point in his career, by accident, a new world was suddenly opened up to him. He took the information to his director and got permission to enroll, and suddenly he was on a whole new road to success.

Of the program, Chris says he was dragged out of his personal comfort zone. He was exposed to different things he never would have thought of, which gave him new insights into how to solve his everyday challenges on the job. The program, which took him a full 18 months to complete, included:

- benchmarking his current status through a knowledge assessment,
- developing a professional development plan,
- creating a project with practical application to public works,
- documenting execution of the professional development plan by keeping a journal,
- creating a professional portfolio,
- completing an APWA-authorized Institute, and
- passing the post-program assessment.

He admits that he was dragged “kicking and screaming” through the process sometimes, but he also proclaims that he has gotten more than he ever dreamed from the experience. One valuable facet of that is the interaction he has had with other public works professionals at conferences and in classes. Where once he would have been reluctant to talk with supervisors and directors in those settings, now he realizes he has a rightful place at the table with them. And now, not only does he seek them out for advice, but also he is finding that others are seeking him out for his expertise as well. “That never happened to me before, and I like it,” he says.

Chris also points out that another huge asset to his success in the program was the relationship he developed with his program mentor, George Recktenwald, who is director of public protection for Volusia County, Florida. After being initially foiled by George’s office spam filter, the two men have formed a bond they find mutually beneficial. With George’s help, Chris has learned, in part, to see his own agency through new eyes, to look at it from the outside in.

Part of what he saw was that his County was slightly behind in some ways and that they had internal and external communication problems. “We treated ourselves as an

island,” Chris says. To remedy that, he started building his own little network of people he could go to for guidance and commiseration about the challenges of his job. He credits George with helping him find the confidence to do that.

Part of the PWS program involves developing a theoretical project, which Chris took as an opportunity to improve his agency’s brand within the community. After noticing that the County’s vehicles bore smaller door emblems than they used to, he did some research and found a surprising reason behind the downsizing. Door emblems used to be large (more than 14 inches) and easily visible at a distance, but they had been systematically replaced over the years by emblems small enough to be covered up by three fingers on a man’s hand. The reason for the change was that when vehicles were changed out, scraping off the large decals was a problem, hence someone made a decision to use the smaller decals when new vehicles were brought into the fleet. Working with the County’s public information officer, Elaine Jones, Chris’ project is restoring brand recognition by once again using larger emblems.

There is so much more to Chris’ story. For instance, he says “fear and intimidation are not acceptable management tools,” so he has come to understand supervising as a walk-around activity where supervisors aren’t just there to dispense orders. They are supposed to facilitate communication and teamwork. He may have finished the PWS program, but Chris says he isn’t finished with education. He’s thinking about going on to college, and sometime in the future he can even see himself in the position of assistant public works director—probably the best ever seen!

“I have a solid stepping stone now. I know I am not alone. With the support of people below you and the understanding of people above you, you can do anything.” Of the debt he can’t repay, Chris says, “All I can do is do all I can to help others. Anybody can make a difference!”

It’s a story worth telling.

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CSM ALIGNS STORMWATER MANAGERS

Teresa Welch, P.E., CSM, Water Resource Manager,
City of Eugene, Oregon

The APWA's stormwater certification program promotes excellence and commitment to public service by advancing the knowledge and practice of stormwater management. Since its inception, the program has certified 91 stormwater managers in the U.S. and Canada. I would like to share a little about my background and experience with the Certified Stormwater Manager (CSM) program and its significant benefits to the profession and to our communities.



Teresa Welch

There are many different paths one could take to becoming a stormwater manager. Mine began as a youngster, always outside playing in the puddles after a storm. I have always had an affinity for water, plants, and math. In college, I initially majored in forestry, switched to land surveying (more math!), and ultimately landed in the civil engineering program. I received a B.S. in Civil Engineering from Michigan Technological University. Then I worked in a consulting engineering office and local building department. During that time I obtained my Professional Engineers license. My attraction to water led me toward managing public water and wastewater projects after which I returned to school for an M.S. in Water Resources Engineering. Following graduation I began working for the City of Eugene, my current employer, as Water Resources Manager.

I learned about the CSM program from a colleague in Eugene and enthusiastically participated in the development of the fledgling program as a member of the first CSM Council. It was apparent to me at that time that APWA was “on” to something with the CSM program. I was aware that there were many diverse paths to becoming a stormwater manager and that mine, an engineering path, was just one of them. I

was aware of the growing need for stormwater managers especially in smaller cities and towns, potentially with fewer resources and staff expertise, where Clean Water Act requirements were being extended. I had also, by this time, personally worked with many other very competent stormwater managers whose education and work experience were in such diverse fields as public education, ecology, administration, and operations and maintenance. I appreciated APWA's goal with the CSM certification of respecting the diversity of backgrounds and setting the bar for what it takes to be a competent stormwater manager.

In addition, in the last decade, certain factors have made the job of a stormwater manager more complex and that trend is likely to continue. These factors include changing environmental regulations, aging infrastructure, sustainability initiatives, financial stability goals, emerging pollutants, and new treatment technologies.

CSM eligibility can be met with various combinations of education and work experience. Once eligibility is verified by APWA, candidates take a multiple choice test which is computer-based and can be administered at their place of employment. The test covers the following areas: overall stormwater management, program administration, communication/education, planning and design, regulatory programs, structural best management practices, hydrology and hydraulics, and operations and maintenance. A content outline is provided on the APWA website.

My advice to individuals applying to the program is to spend some time on the APWA website. Review the exam content outline and the recommended reading list. Reflect on what you think your strengths and weaknesses are and consider asking trusted coworkers for input. Focus your exam preparation in those content areas that need bolstering. For example, if your background is in planning and design, focus your preparation on the areas with which you are less familiar. For me, that would have been operations and maintenance. For candidates more familiar with operations and maintenance, focus your preparation in the areas you are less familiar with. Perhaps that would mean learning and applying the basics of hydrology. In any case, do not hesitate to ask for help from colleagues in your office or by reaching out to the other CSMs.

APWA's CSM program enhances the credibility of our profession. Communities in the U.S. and Canada benefit from having certified professionals with the breadth and depth of knowledge and expertise necessary to meet the demands of the job.

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EFFICIENT FLEET MANAGEMENT

Communities find ways to trim costs

Kaitlin Feldman

Managing and maintaining a fleet of government service vehicles can cost local taxpayers hundreds of thousands of dollars each year. As a result, fleet managers, among them city and county managers, are constantly seeking creative and innovative ways to keep costs down. (See “Maximizing Savings in Fleet Fuel Costs” in the September 2013 PM.)

Since fleets operate in hundreds of different ways, there is not one specific management solution for all. Here is a closer look at what some local governments are doing to achieve efficient, cost-effective fleet management.

FUEL HEDGING

In fiscal year 2011, **Palm Bay, Florida**, saved taxpayers nearly half a million dollars using a practice called fuel hedging, which has continued to result in savings totaling nearly that much each subsequent fiscal year.¹ Fuel hedging allows fuel commodities to be bought at a fixed rate, reducing the cost of each gallon of gas used.

Jim Proce, public works director at the time the Palm Bay program began, acknowledged that “Palm Bay must do everything it can to trim fuel costs because the city maintains a fleet of 650 vehicles, including police cars, fire engines, dump trucks, and heavy equipment vehicles. The city’s fuel consumption amounts to approximately 440,000 gallons annually.”²

By buying fuel commodities at a fixed cost not only is a locality able to save money, but it also is able to create a budget with certainty. As former Palm Bay City Manager Lee Feldman, who is the current manager of **Fort Lauderdale, Florida**, where this program is also in place, observes: “When we start budgeting, we don’t want to artificially inflate our budget to make sure we have enough money in the fuel budget to protect against price increases.”³

CLEAN DIESEL FUEL TECHNOLOGY

Some communities seek to reduce fleet costs through initiatives that also have environmental benefits. **Durham, North Carolina**, for example, has embraced clean diesel fuel technology. As part of a public-private partnership with the Southern Research Institute, Triangle Clean Cities Coalition, Engine Control Systems, and NETT Technologies, Inc., Durham installed a new emissions-reducing system on 16 heavy-duty diesel vehicles used by the solid waste management, public works, and water management departments.⁴

These new systems reduce significant amounts of nitrogen oxide (NOx) emissions from the exhaust of these vehicles and equipment, resulting in positive impacts on Durham's air quality. NOx emissions contribute to the formation of harmful particulate matter, ground-level ozone, and acid rain. These emissions form when fuels are burned at high temperatures, with typical major sources being fuel combustion in vehicles and engines.

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SHARED MOTOR POOLS

In **Washington, D.C.**, the department of public works (DPW) and the department of environment (DDOE) reduced vehicle emissions by initiating a one-of-a-kind motor pool operation called Fleet Share.⁵

This initiative, which is based on the Zipcar model, eliminated more than 300 vehicles from its fleet. While that reduction is merely 8 percent of the fleet, the city government expects to save \$6.6 million over a five-year period by consistently cutting down the number of fleet vehicles.

This program works through an online service, which allows D.C. government employees to reserve a vehicle on a first-come, first-served basis. The online aspect of this program allows for maximized use of fleet vehicles, ensuring that a high number of trips can be supported by a small number of vehicles. Similar programs are being piloted in such metropolitan areas as New York and San Francisco.

INNOVATIVE HYBRID TECHNOLOGY

Ann Arbor, Michigan, has begun to employ a new fuel-saving technology promoted right in its jurisdiction by the Clean Energy Coalition (CEC). On behalf of the city, CEC was able to secure approximately \$120,000 under the American Recovery and Rein-

vestment Act of 2009, which it is using to help defray the incremental cost of purchasing hydraulic hybrid trucks.⁶

Using technology pioneered by the Environmental Protection Agency's National Vehicle and Fuel Emissions Laboratory in Ann Arbor, new trucks have a unique hybrid system known as hydraulic launch assist (HLA) that stores brake energy in hydraulic fluid, rather than in a battery pack as most hybrid vehicles do.

This can be better for large trucks because of their constant stop and go, as well as overall efficiency and relatively low cost. The pent-up energy in the fluid is used as fuel, keeping the need for gas to a minimum.

TRADITIONAL ALTERNATE FUEL VEHICLES

Hybrid vehicles have gained popularity among fleet managers as both environmentally friendly and fuel-efficient. **Indianapolis, Indiana**, is on track to become the first city in the nation with an entirely fuel-efficient fleet.⁷

Mayor Greg Ballard's intention is to lessen the city's dependence on foreign oil as well as lighten the financial burden of maintaining a 3,100-vehicle fleet on an ever-tightening budget. As older vehicles retire, new vehicles will be purchased that use hybrid technology, electricity, or compressed natural gas to fuel them.

The swap will be completed in 2025. This switch will save taxpayers an estimated \$12,000 per vehicle over a 10-year span, even though the vehicles currently cost more than the gas-powered sedans they replace. In addition to the savings to taxpayers, there is also the possibility of a \$7,500 federal credit for each alternative fuel vehicle added to the city's fleet.

SMALLER, EASIER CHANGES.

In addition to major strategies, local governments can turn to some simple and creative ways to reduce fleet management costs:

- Institute non-idling policies; idling a vehicle for five minutes a day can waste more than 13 gallons of gas a year. A no-idling policy also reduces wear and tear on a vehicle, which helps keep costs down for maintenance.
- Plan more fuel-efficient travel routes. Localities are investing in GPS systems for fleet vehicles, which allow for the quickest, most cost-effective routes to be taken. In addition to GPS, employees are encouraged to carpool. This is not only to and from work, but also during the workday for such job-related errands as surveying property.

Lynchburg, Virginia, has distributed a list of suggestions, ideas, and facts to its staff members regarding such fuel conservation measures as making only right-hand turns (similar to a U.S. Postal Service policy) and observing speed limits to improve fuel economy.

NO UNIVERSAL PANACEA

Any cost-cutting strategy is employed because it is found to work best for a particular local government's situation. Some solutions can be applied in varying types of local governments, while others will only work in a government structured almost identically to the community that came up with the solution. Any strategy also has potential drawbacks that must be considered.

Fuel hedging, for example, merits careful evaluation from the outset. If a community buys futures and they do not pay off as they were expected to, it could end up paying more for fuel than if it had not done anything at all.

When buying fuel commodities, a manager needs to be extremely cautious and be aware of fuel trends as they have happened and as they are predicted to happen. Often this means bringing in an adviser who can best explain the market and suggest the most cost-effective options. If a city or county is able to successfully invest in fuel futures, then the payout can be extreme and the budget can benefit.

As for clean diesel fuel technology, the original cost could give taxpayers sticker shock, making it more difficult for them to initially accept the new type of fleet. The way that Durham, North Carolina, was successfully able to switch many of its vehicles over to clean diesel fuel was through a successful public-private partnership.

Fleet sharing, which has been proven to be an effective cost-efficient way to manage a fleet in larger communities, might not be well-suited for smaller, more rural areas. Larger places might have the space to offer a centralized, urban location for a motor pool while rural areas can have multiple, smaller motor pools that might not be as easily accessed by all employees.

Notwithstanding the obvious benefits of lower fuel costs, alternative fuel and hybrid vehicles have some not-so-obvious downsides. The cost of maintenance can almost always be higher for alternate fuel vehicles. They use full synthetic oil, require specialized parts, and skilled workers to fix them.

There is also the issue of drivability. Alternate fuel vehicles, whether they are hybrid, hydraulic, or compressed natural gas, do not have nearly the same abilities that a standard fleet vehicle has. The frames of these vehicles need to be lighter to cut down on fuel costs, which mean that safety may be compromised in certain situations.



When buying fuel commodities, a manager needs to be extremely cautious and be aware of fuel trends as they have happened and as they are predicted to happen.

So there is a lot for local government managers to consider when contemplating changes in fleet management. Just remember, that while there is no universal panacea, solutions do exist for cutting costs. It can be helpful to network with communities that have launched such new initiatives as those highlighted in this article.

ENDNOTES

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- 3 Barsewski, Larry. "Fort Lauderdale Plans to Hedge Its Fuel Costs." *Sun Sentinel*. 2012.
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ACCREDITATION FOR SMALL AGENCIES: FISHERS, INDIANA

Eric Pethtel, *Director of Public Works,*
Town of Fishers, Indiana

Located in central Indiana, the Town of Fishers is a bedroom community of nearly 85,000 that shares a jurisdictional boundary with Indianapolis. Although the size of our community may not sound like we fit within the mold of Small Cities/Rural Communities, the guiding principles of our Town Manager, Scott Fadness, and our elected officials find the employees of the Town of Fishers operating as though we are a small city or rural community. The fiscal management and leadership that encourage our staff to find new and innovative ways to provide equal or better services to our constituency at reduced costs are what allowed Fishers to double our cash reserves in the four years immediately following the recession of 2008.

Prior to 2008 many of our departments worked as independent agencies that rarely communicated with each other. There weren't many conversations that centered on identifying areas where we as a local government could reduce or eliminate redundant services, there wasn't any interest in sharing the expertise of the skilled labor force that each department possessed, nor was there ever any strategic communications between departments that centered on efficient delivery of services to the community or how we could be better. With the recession at hand and seeing hard financial times ahead, our organization was forced to make wholesale philosophical changes. The story of how our Town Manager orchestrated a reorganization of local government was documented in an article in the June 2010 APWA Reporter entitled "Plowing Through the Boundaries." In the years since, the silos of responsibilities of once standalone departments within the organization now fall under the authority of the reorganized department of public works. No longer the traditional street department, the new Fishers DPW is now responsible for the maintenance of



Chuck Williams (*front row, far left*), APWA director of Region VI and public works director for the City of Lenexa, Kansas, made the formal presentation of the Accreditation plaques to the Town of Fishers on Tuesday, December 16.

all assets that are dedicated to the Town. Along with the existing street division the organizational chart now reflects the inclusion of wastewater treatment, the storm-water utility, and the staff and responsibilities from facilities maintenance and parks maintenance.

Since the reorganization Fishers DPW has experienced numerous successes as well as growing pains. In part, many of our successes are a direct result of combining our workforces, equipment and collective energy all for a common cause. With so many employees with varying disciplines under one roof it was soon noticed that each division had differing or no prior BMPs; they had differing policies, plans and procedures, and it really was a challenge to get everyone focused on the same goal and to get all divisions pulling the same direction.

For Fishers DPW, one of the answers that addressed our newfound growing pains was the APWA Accreditation process. This was a process that the department had started prior to the recession of 2008. Our accreditation process literally collected

dust for two years. It was evident to us that one way to get a firm grip on the many policies, plans and procedures that each division brought into the reorganized Department of Public Works was to resurrect the self-assessment phase of accreditation.

If your agency is contemplating the accreditation process and is hesitant because accreditation appears to be a daunting task, make no mistake—it is a daunting task. However, I can say with great certainty that if accreditation is something your agency wishes to pursue, if you make it a priority and have support from your local leaders you will be successful. As we dusted off our self-assessment campaign and dug our heels in, we set goals that would allow us to remain focused going forward throughout the duration of our process. We decided early that we could never have enough documentation, so we saved every e-mail, written note, and piece of existing correspondence that we could find to aid us in our efforts. One positive for us was that in our post-reorganization environment we now had healthy working relationships with the other departments within our organization, which allowed us to include them in our self-assessment of the chapters we had to review. We had representatives from human resources, engineering, IT, fire, and fleet management sitting shoulder to shoulder with us during our site visit. Their input during the self-assessment phase and participation when the site evaluators were in town and when all the cards were on the table was invaluable. I would encourage any of you considering the process of accreditation to include the subject matter experts within your organization early and often.

We were notified in November 2013 that we were compliant on 353 of the 354 practices reviewed. The APWA Accreditation Board approved as the nation's 87th accredited agency and the first in the state of Indiana. Since that time, we have recognized the benefits of accreditation in a number of ways:

- The process has put us on par with other accredited agencies of all sizes in the nation and we now have a plan in place for continuous improvement.
- The self-assessment phase forced us to review every function we perform. We identified and implemented the necessary changes into our daily routines.
- Accreditation has increased our performance, saved labor hours, and increased communications within our divisions, which equates to more effective use of the resources the citizens have provided to us.
- The process forced us to look inward to see where we were going as a public works agency. We had to ask ourselves what are our challenges this year, next year or in five years. These tough questions led to our department's first comprehensive strategic plan. We spent the better part of nine months in 2013 identifying what our strengths, weaknesses, opportunities and our threats were. We now have a clear direction and a road map for our department for the next five years.

- Because of the inclusion of staff at all levels during the accreditation and strategic plan process we have seen improved morale since the staff had ownership in the processes that has led to so many successes.

As an agency that competes for the almighty tax dollar just like everyone else I had to ask myself, what do I need to do to put myself in position to be the best steward of the funding we receive? What do we need to do to assure my constituents that Fishers DPW has sound procedures in place that maximize our resources? The answer to those questions is multi-faceted. For the many other agencies that have the values and principles of the SC/RC community, APWA Accreditation has to be part of the answer.

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APWA ACCREDITATION, A STEP IN HOUSTON'S CONTINUOUS IMPROVEMENT PROCESS

Karen F. Leback, Senior Staff Analyst & Accreditation Manager,
City of Houston, Texas

On June 5, 2013, the senior leadership of the City of Houston Department of Public Works and Engineering (PWE) breathed a collective sigh of relief when the department completed the first phase of its plan to improve all facets of its operations by successfully weathering the 20-day APWA accreditation evaluation.

The effective date of accreditation was June 15, 2013, when the 19-month journey of the Department APWA Accreditation Team and the Department as a whole ended with achieving Full Compliance in all applicable APWA practices. On top of this, 35 practices were identified as “model practices” with one entire chapter, Chapter 27, “Stormwater and Flood Management,” recognized as a model chapter. The City of Houston was the 84th public works agency and, by far, the largest agency to receive this accreditation. Houston Mayor Annise Parker and City Council recognized PWE officials and representatives for this accomplishment on July 30, 2013.

Director Daniel W. Krueger, in announcing to employees in the fall of 2011 that the department was undergoing the APWA self-assessment process, stated:

“As a department team, we are embarking on a self-assessment effort which essentially will evaluate every play we have, or need to have, in our playbook. The assessment will involve the collection and evaluation of department policies, practices and procedures in all areas of our operations. The goal is to gain a comparative evaluation of our practices against nationally recognized practices, so that we can set a foundation for improvement across every aspect of our operations, management and administration. This is the first time that the department has engaged in such an effort as a whole and I want to stress that this is a self-driven endeavor for our benefit and the benefit of the citizens of Houston. A team of your coworkers has been empowered to conduct this self-assessment.”



Houston's APWA Accreditation Team joins Mayor Annise Parker and Director Dan Krueger at the department celebration of receipt of this prestigious award.

Due to the size of the department (3,900 employees), PWE used a decentralized approach to address this project by creating a team of employees from all six divisions and the director's office. The director appointed two accreditation managers, Karen Leback and John Brown, with differing skill sets. The department team included the planning and development services division, engineering and construction division, traffic operations division, resource management division, director's office, street and drainage division, and information technology.

The APWA practices were assigned to these team members to coordinate their division review, response and document collection. The initial assessment was completed in a mind-numbing 10 weeks and indicated there was work to be done to become compliant in all applicable practices. Thereafter, two divisions reviewed and revised almost all of their standard operating procedures. The Department accreditation team created a standard operating procedure (SOP) template that can be used for new SOPs, and to document the review and revision of existing SOPs. The team met as a whole to review each chapter. Each division then selected a number of practices to present to the executive leadership for input.

Twelve months after completing the self-assessment, the team felt the department was ready for the mock evaluation offered by APWA. PWE Accreditation Manager, Karen Leback, highly recommends using all the tools offered by APWA in preparation for the actual evaluation. "Through our interaction with Ann Daniels, APWA Director of Accreditation, the input we received from accredited agencies such as Arlington,

Texas; San Francisco, California; and Richmond, Virginia, and the feedback from the mock evaluator, Bob Lowry, we continuously improved our documentation,” Ms. Leback reported. “Another important tool we created was a spreadsheet to track the comments and feedback received during these internal and external reviews to know what had to be achieved in order to reach compliance.”

APWA accreditation is the first phase of the department’s continuous improvement effort. It provided a structured tool to assess almost all aspects of PWE operations. Since accreditation, Director Krueger has issued a continuous improvement policy, which calls for each division to identify process(es) on which to concentrate for improvement in 2014 and each year thereafter. The policy provides a procedure for managing the process improvement effort as well as a change management methodology. Further, PWE’s response to each practice and related documents are available to all employees on the department’s intranet. It is anticipated that the availability of this information will expedite new employee onboarding as well as serve as a repository of knowledge for all employees to ensure consistent access to information within and between divisions.

The department accreditation team is working with the PWE IT branch to create an application to better manage the change function as policies and procedures are implemented, reviewed or revised to ensure PWE is ready for reaccreditation in 2017. Further, the application will allow the department to add its practices that are not part of the APWA self-assessment so that a complete repository of all “plays” in our play-book exists. It will also track the process improvement effort including documentation of internal reviews of existing processes by the internal audit section to ensure that what we say we do is consistently done throughout the department.

In closing, Director Krueger noted, “APWA Accreditation has been very beneficial for our department, and will continue to be as we move forward. I’m very appreciative of APWA members who contributed personal time to our evaluation. I am also very appreciative of the leadership of our PWE team of accreditation coordinators. Team members throughout the department demonstrated commitment to service and competency in infrastructure services that have allowed us to achieve this distinction. We now have a much better foundation for doing what we do every day, and for yet improving how we will serve Houston tomorrow. I’m very proud of our Houston PWE team; we are a better department for Houston citizens.”

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