

PM

PUBLIC MANAGEMENT

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STEP BY STEP: BECOMING A SMART COMMUNITY

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BY KEVIN DUGGAN, ICMA-CM

PAY ATTENTION TO ETHICS IN THE HIRING PROCESS

Steps you can take to highlight ethical conduct

You can take a number of actions to improve the odds that you and your staff will avoid an ethical crisis. It often goes unsaid, however, that one of the most important things you can do is to make sure your organization, to the greatest degree possible, is composed of individuals with a clear understanding and appreciation of ethical conduct.

It's a given that it is much easier to hone the ethical IQ of basically honest people versus rehabilitating those with a marginal appreciation of ethical conduct. So, why do most organizations put so little (if any) emphasis on ethics as part of the employee recruitment and selection process?

Several factors may contribute to this lack of attention:

Complacency. Organizations can take a lack of ethical problems for granted. In many cases, those that have not had an ethics challenge recently will allow the topic to fall off their radar. A focus on ethics and honesty can fade as overconfidence and complacency grow.

Other priorities. Competing priorities in the selection process can cause the topic of ethics to be left by the wayside. Technical skills and knowledge, interpersonal skills, experience, and many other factors are appropriately important factors in selection processes. Those involved in selection can often conclude that these characteristics need to be emphasized above other criteria.

Time. The pressure to fill vacant positions can be significant. Whether

it's a matter of the length of interviews or the background check process, time pressures can make it challenging to incorporate ethical considerations.

Special characteristics. At times, a specific skill or type of experience is critically important for a particular position. It can be tempting to hire someone with these attributes without delving into other important factors, including the individual's ethical framework.

Opting out. Organizations may believe that it is too difficult to truly get a feel for an applicant's ethical compass and therefore don't even really attempt to do so.

Addressing Ethics in the Selection Process

To make sure your organization gives a reasonable amount of emphasis to ethics in its employee selection processes, here are several steps to take:

- **Make it a priority.** Make room for ethical considerations in the hiring process. While it is not suggested that you monopolize the selection process with a focus on ethical considerations, spending at least some time can pay significant dividends.
- **Note the organization's commitment to ethical conduct in job announcements.** Assuming you want to hire ethical employees, and appreciating the impact of not doing so, why would you not make some mention of the organization's concern for ethical conduct and honest behavior?



PUBLIC MANAGEMENT

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How about clearly stating that ethical conduct and honesty is a basic organizational value? What does that communicate to prospective employees? What does being silent on the issue communicate?

- **Provide a code of ethics.** If your organization has a code of ethics, providing a copy of the code to prospective employees is a clear statement of organizational priority. While it is fine to provide the code after hiring, how about clearly communicating your organization's focus on the issue by providing it up-front during the recruitment process?
- **Solicit information in written exams.** Include some questions that help solicit information regarding the ethical thinking of prospective employees. Situational questions can be illuminating in regard to the thought process and values of prospective employees.
- **Address the issue in oral interviews.** While there are always many topics that need to be covered in oral interviews, how about at least one question on the topic of ethics? Again, a situational question can be extremely informative. Even if the applicant does not respond with the perfect answer, you can often get a sense of the person's thought process and values and how that aligns with the ethical values of the organization.
- **Conduct background checks.** Too many organizations conclude that it is no longer productive to try to do background checks on prospective employees (or that it is too difficult and expensive to do so). They fail to fully appreciate that the cost of hiring an employee who does not fit the ethical expectations of the organization is much greater than the cost of this additional effort in the selection process.
- **Pay attention during the probationary period.** In an organization that has formal probationary periods, there is no better way to fully assess an individual's ability to adequately do a job, including from an ethical



perspective. Supervisors who are willing to pay even a modest amount of attention to a new employee during the probationary period are likely to get a good feel for that person's understanding and commitment to honest and ethical conduct.

If a new employee's ethical conduct does not align with the organization's values, it is much easier to deal with this before rather than after the probationary period concludes.

If you don't find some room for ethical considerations in your hiring processes, you are increasing the odds of having to deal with the consequences of ethical missteps by your organization's staff.

Warren Buffet communicated this concern in the following way: "In looking for people to hire, look for three qualities: integrity, intelligence and energy. And if they don't have the first, the other two will kill you."

If it's important to you to employ individuals who are honest and ethical, and therefore to have an ethical organization, it should be a priority to include ethical considerations in the selection process. **PM**



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WHAT ARE THE TOP THREE TECHNOLOGY PURCHASES YOU HAVE ON YOUR SHOPPING LIST FOR WORK?



RYAN PELLETIER

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On the Aroostook County telecommunication horizon, we are looking at replacing our 15-year-old phone system with a hosted PBX phone system to improve internal and external functionality. Hosted PBX phone systems fall under operational expenditure rather than capital expenditure, which also makes hosted PBX service attractive.

We are also looking at updating existing bonded copper at remote locations to fiber optics in order to meet the growing demands of our network.

And with these planned upgrades to our network, there will be less of a need for ELAN connectivity; therefore, we plan on acquiring a lower level of ELAN connectivity for use in managing our remote locations only, rather than using it as part of our overall network backbone.



CARA PAVLICEK

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Oak Park is in the process of selecting a uniform parking technology system to include hourly parking, parking permits, vehicle registrations, and parking citations linked to a license plate recognition system.

New technology will allow the operating departments to be more efficient, as current systems were developed in-house as far back as 2005 and are costly to maintain.

The village is also in the process of introducing mobile surveillance cameras as a crime apprehension tool for use by the police department.

We are in the planning phase of upgrading fiber infrastructure to replace outdated equipment. The goal is to increase transmission speeds, build data infrastructure resiliency, and allow for anticipated future capacity of services for at least 10 years.



SETH HOFFMAN

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Lone Tree continues to invest heavily in technology that helps the staff deliver better service to the community.

First, we are investing in adaptive traffic signal technology to improve safety and traffic throughout arterial roadways. Second, we are in the process of implementing a new cloud-based project management and collaboration platform that allows us to work cross-functionally with internal teams and external partners.

Third, the police department has deployed body-worn cameras for several years, and we are extremely happy with the safety benefits they provide for the public and for our officers. This year, we will be looking at ways to maintain all of the qualities of the current system and making data storage more manageable. **PM**

Make Way for SMART COMMUNITIES

BY AMY AHNER

We live in an information age. Technological innovation in the forms of computers, telecommunications, and data is and will continue to change the way local government managers deliver efficient services to residents.

The smart communities' movement supports local governments as they consider, adopt, and use new technology to improve how the business of towns, cities, districts, and counties is performed.

We have a responsibility as government professionals to stay informed, to keep up on new technology being introduced to the market, and to be aware of the implications of its adoption and use. ICMA understands that responsibility, which is why the ICMA Smart Communities Advisory Board was created in 2017.

I serve as the advisory board's chair, and the board members' charge is to provide ICMA members with the content and resources needed to stay abreast of technology trends and to invest public dollars wisely.

Advisory Board's Purpose

The board has been charged with enabling and educating local governments on technology and management in the smart community field. For the past three years, members of the board have been reading, sharing experiences, and tracking what's happening in the technology field.

Board members advise ICMA on technology reports and focus their efforts on providing ICMA members with a broad understanding of smart community concepts and opportunities. This is done by writing book reviews, speaking at the annual conference, and blogging about our experiences.

In short, we work to provide our management colleagues with the knowledge they need.

Becoming a Smart Community

The board hopes this issue of *Public Management (PM)* magazine will guide your next smart community initiative. The path to becoming a smart community begins with one step and then another.

We invite you to take a step now to learn more about the concrete actions needed to create a strategic, smart community plan.



AMY AHNER is director of administrative services, Glenview, Illinois (aahner@glenview.il.us), and serves as chair of the ICMA Smart Communities Advisory Board.



By Susan Cosner and
Francine Ramaglia

SMART CITY SOLUTIONS

APPLICATIONS THAT POWER CONNECTIVITY

Aging infrastructure; increasing congestion; greater needs for energy, utilities, public safety, and a variety of other local services; and continuing overall need for speed and reliability in service delivery present critical challenges for local government professionals.

With limited resources, local leaders are looking for ways to meet these demands while also making their communities responsive and efficient. Many are moving to smart city solutions.

With innovations and new technology developing at a phenomenal rate, from working with mainframe computers to working in the cloud in less than three decades, local government managers find themselves looking to what “next practices” are on the horizon.

Strategic Broadband Deployment

Not just a popular buzzword, the smart city concept has been around since the 1990s. Viewed as a holistically functioning machine, a local government delivers an extremely diverse set of services, and it is expected to provide these in smart, intelligent, and connected ways; no longer can these services be delivered in isolated working environments.

All things are interconnected and in today's Internet of Things (IoT) world, systems and services have to be designed and delivered in smart, connected, and



performance-based ways. Developing smart systems, be it transportation, public safety, law enforcement, or any other community-delivered service, the key is to start with the planning and execution of strategic broadband deployment (see Figure 1).

Smart city applications can only function with reliable, redundant broadband. When done correctly, planning for broadband will provide technologies to:

- Optimize all local government operations and reduce operating costs.
- Result in the development of implemented policy that is based on automated data collection.
- Respond proactively to business and industry needs.
- Auto-manage large-scale development projects.
- Anticipate customers' unarticulated needs.
- Begin to predict disruptive events.

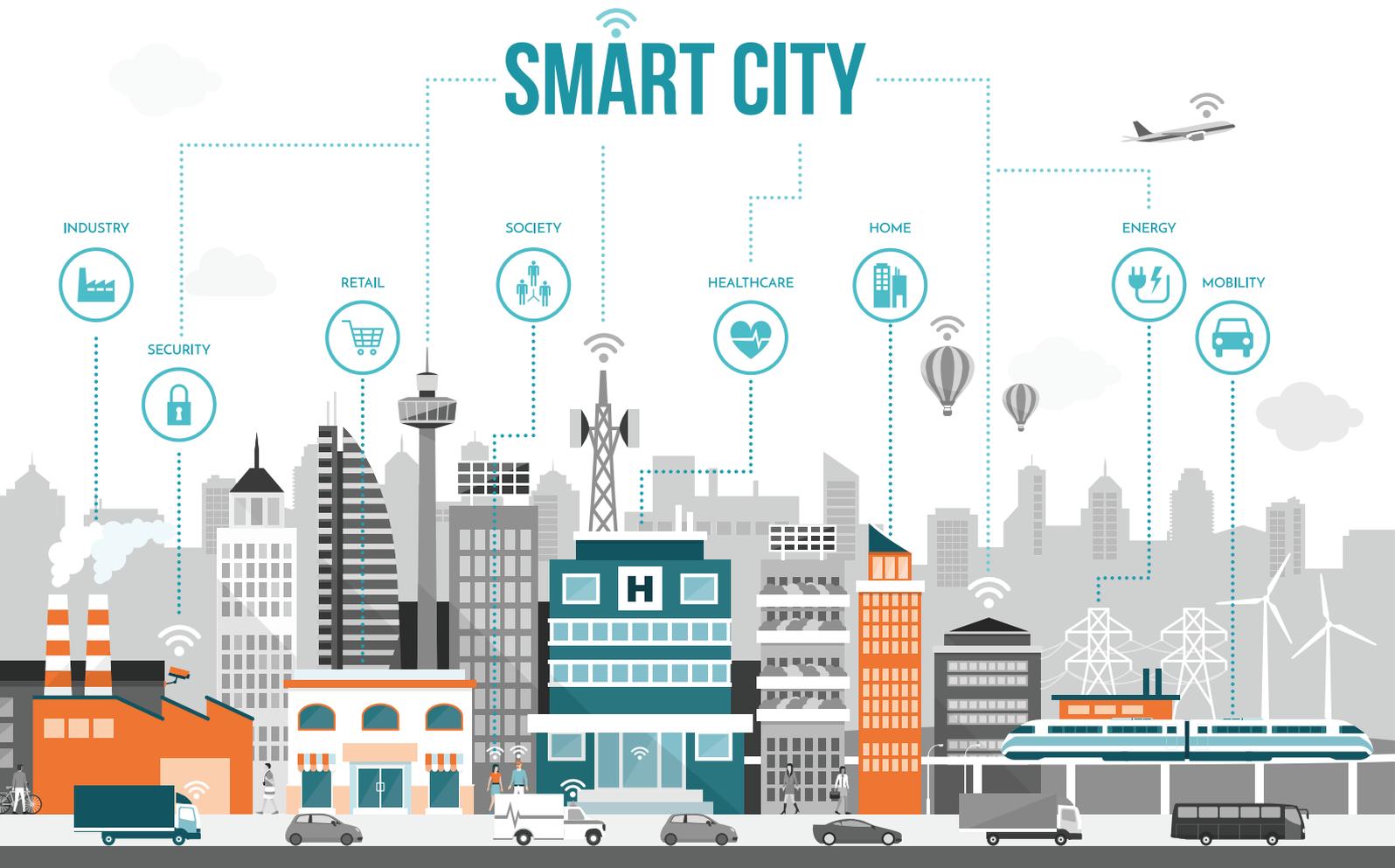
We are not there yet, far from it. Globally, less than 30 cities are expected

Figure 1. The Internet of Things (IoT).

ACCESS	APPLICATIONS
Broadband-enabled technology (fiber, wireless)	<ul style="list-style-type: none"> • Smart grid • Free public Wi-Fi • Smart meters • Smart street lighting • Solar roadways • Unmanned aerial drones • Surveillance cameras • License plate recognition (LPR)
Mobility	<ul style="list-style-type: none"> • Automated vehicle (AV) technology • Autonomous trucking and transit • Peer-to-peer car services/ride sharing • Smart parking • Real-time bus and transit scheduling • On-demand urban air transportation
Energy	<ul style="list-style-type: none"> • Green and renewable energy • Real-time energy monitoring • Energy-efficient retrofits and new construction

Source: IDC Government Insights, 2013.

SMART CITY



to become truly smart cities in the next 10 years, with half of them being in the United States and Northern Europe. There are, however, many communities making the shift towards smart city applications and using technological tools, methods, and policies—in wide-ranging areas, not solely for infrastructure and public engagement.

In ICMA's 2016 Smart Cities Survey, respondents most frequently identified smart city technologies as a priority in the public safety sector, with almost half of respondents (48.9 percent) identifying these initiatives as a top priority in this area.

Customer service/public engagement (32.9 percent), water and wastewater

(29.7 percent), telecommunications (26.5 percent), and transportation (26.3 percent) were also among the top five sectors in which smart city technologies were identified as a top priority by respondents.

Cities and counties not officially doing so will be forced to, due to external pressures resulting from disruptive technologies, economic shifts, and commercial changes. These changes include the sharing economy—car transportation/bikes/housing—and the “Amazonification” of retail that is overtaking traditional brick-and-mortar stores.

According to Frost and Sullivan, a Growth Partnership Company, “The smart city concept is the future of every modern urbanized city” and it “will be worth—not just in the tech sector—\$1.5 trillion by 2020.” (<http://www.frost.com/prod/servlet/press-release.pag?docid=28928203>)

Elements of a Smart City

What, then, are the elements of a smart city? Smart city solutions, which connect operations, infrastructure, and the community from top to bottom and cross-function with external organizations and providers, rely upon:

- Technology and innovation using data, integration, sensors, and data analytics.
- Energy deployment and use.
- Urban planning and building.
- Sustainability design and practices.
- Mobility.
- Security.

The key technologies and infrastructure for smart cities are high-speed, redundant broadband, cloud computing, open platforms, smart metering, and wireless sensor networks. See Figure 1 for examples of common smart city applications that integrate information networks and the built environment.

Developing smart systems, the key is to start with the planning and execution of strategic broadband deployment.

Harnessing the Power of the Internet

Bottom line, smart cities must rely on broadband connectivity to harness the power of the Internet of Things (IoT), which has and will continue to change the world. The IoT or the number of connections is growing at an ever-increasing rate: Worldwide, individual connections to devices is currently estimated at four per person. In the United States, it is at 13 per person (<https://www.mediapost.com/publications/article/302663/north-american-consumers-to-have-13-connected-devi.html>).

Online publishing resources *Mediapost* and *Statistica* anticipate that the number of connected things and devices worldwide will more than double between 2018 to 2021. IoT, however, is not limited to personal devices. It is built

into the interconnection of all local services.

The Smart Cities Council (SCC) produced the internationally recognized *Smart Cities Readiness Guide* (<https://rg.smartcitiescouncil.com>), which helps local government employees and stakeholders better understand how communities use smart technology to enhance their livability, workability, and sustainability.

Earlier this year, ICMA and ICMA Strategic Partner Siemens released the report *Smart Communities: Rethinking Infrastructure* (<https://icma.org/documents/smart-communities-rethinking-infrastructure-report>), which illustrates specific examples of smart city applications in the energy and water sectors.

The report also examines challenges of smart city applications. Some of

the insights and lessons learned from the ICMA-Smart Cities Council survey can be found at https://icma.org/sites/default/files/308621_smartcity_snapshot.pdf.

Key Principles

Smart city systems should be planned, developed, and implemented as a microcosm enterprise that spans across all local government departments and functions with these adopted principles:

1. Broadband Is Essential Infrastructure.

- Recognize the infrastructure aspect of broadband technology as a first step in the development of smart city applications at the policy, planning, and implementation levels.
- Implement your broadband (network) infrastructure right the first time with collaborative partners.
- Create a broadband IP infrastructure that is scalable, manageable, and secure by design.
- Accept that mapping broadband systems is clearly a public planning task and useful to non-municipal partners.

2. Adopt an IoT Culture.

- Accept that all things are connected; your city is a complex microcosm of infrastructure, humans, and machines.
- Create an IoT infrastructure that is scalable, manageable, and secure by design.
- Create cross-department ecosystems and cultivate interdepartmental connected collaboration.

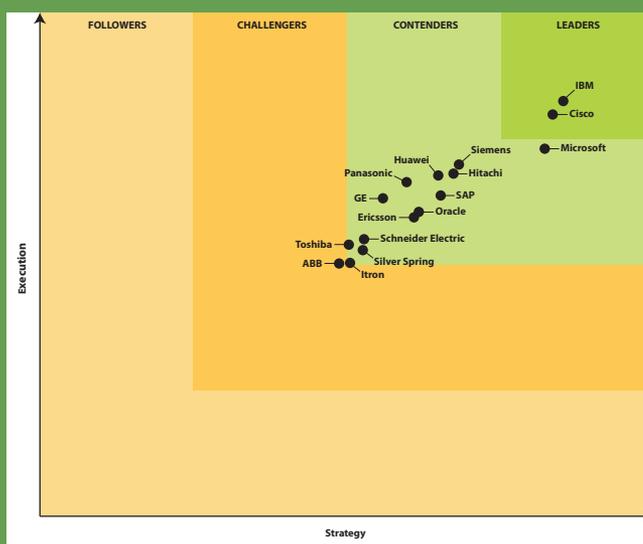
3. Leverage Public-Private Partnerships.

- Recognize that broadband partners, technology vendors, and other private industry partners have a key role to play in developing smart cities. Think smart collaboration. **PM**

CORPORATE LEADERS

In June 2017, the market research team *Navigant Research* identified the top 10 companies building smart communities. The research firm uses these criteria in its vendor ranking: vision; go-to-market strategy; partners; product strategy; geographic reach; market presence; sales and marketing; product performance and features; product integration; and staying power. This *Navigant Research* ranking of the top 10 divides the firms by leaders, contenders, and challengers:

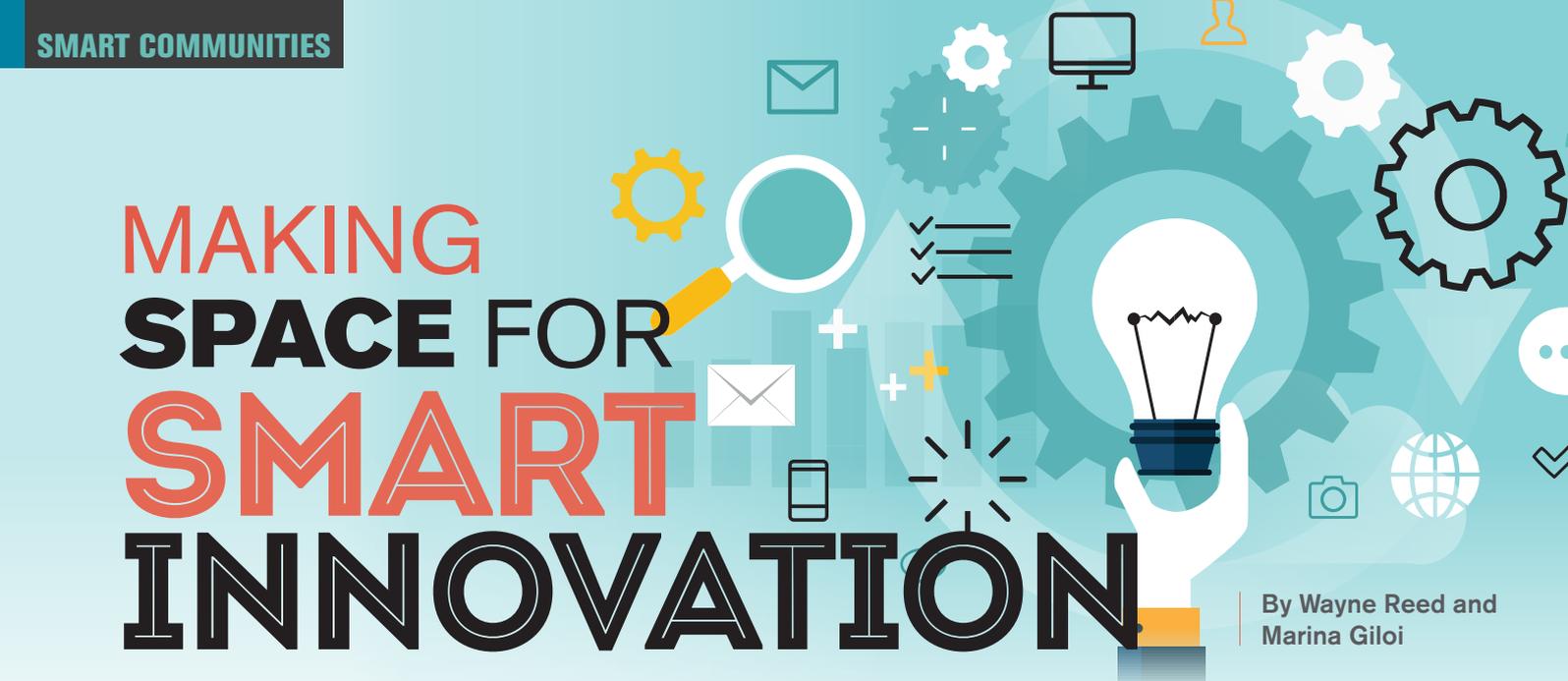
Cisco
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Source Image: Navigant Research, 2017, <https://www.navigantresearch.com/research/navigant-research-leaderboard-smart-city-suppliers>.



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MAKING SPACE FOR SMART INNOVATION

By Wayne Reed and
Marina Giloi

Defining your path forward

If necessity is the mother of invention, then innovation must be its sibling. Before starting on the road to become a smart community, local governments must foster an atmosphere that supports innovation and invention. Employees need to feel comfortable sharing their ideas to improve the way business is done, to experiment and take risks, and to be supported in their creative endeavors.

Today's world is experiencing an exponential growth in innovation¹ and a dramatic reduction in time between idea creation, adoption, and deployment. This pace of innovation benefits consumers, as well as businesses, on a daily basis at home, at work, and at play.

In the private sector, companies seek innovative solutions for services and products to remain competitive, control costs, increase market share, and/or improve profitability. On the public side, communities need to drive innovation to sustain strong local economies and sustain a high quality of life.

Hallmarks of an Innovation Plan

Local governments can best harness their capacity to innovate by creating a strategy and a plan to innovate. It is not necessarily tied to specific funding sources, leaders, or partnerships. Innovation for each community will be different

and customized to areas of focus. It is akin to thinking about and deciding where to take a trip.

In the case of smart communities, an innovation plan provides a strategic road map for developing smart initiatives with defined goals and measures of success, which are tailored to the organization's current and long-term maturity, community needs, resources, and technologies.

An innovation plan's components include its vision statement, purpose, areas of innovation, strategy, performance management, maturity assessment, results, timeline, budget coordination, and transparency.

Vision statement. A successful innovation plan, much like other types of strategic plans, should have a well-articulated vision statement that describes its high-level, long-term objectives. Organizational leadership, stakeholders, and community partners should be involved in drafting and refining the vision statement, as it provides the guiding purpose for the plan's realization.

Purpose. An innovation plan will explain why a community is investing in innovation and how it intends to go about it. In short, this document recognizes that a community can only improve on its current state by evaluat-

ing different approaches, often thinking outside the box, to alter its future course. It lays out a comprehensive approach to address short-term and long-term problems, issues, and opportunities.

Areas of innovation. In general terms, innovation in the public sector spans four broad categories: services, processes, regulations, and policies. The aim of innovation in these four areas is to identify, analyze, and improve upon existing problems, issues, and opportunities to better serve a community.

A local government should start an innovation plan by building consensus on what it thinks innovation means and the benefits innovation can bring to the community. Here are the four categories:

- 1. Services.** Service innovation involves evaluating existing services and developing new services to better align delivery with the needs and desires of the community. Service innovation is intended to address a current or projected community need and should include development of multiple options on how to achieve the desired outcome that consider levels of service, necessary resources, required professional expertise, potential partnerships, and estimated costs.
- 2. Processes.** Process innovation has to do with identifying, analyzing,

and improving a portion of or an entire business process. A community may want to use one or more of a variety of methodologies, including Six Sigma, Lean Management, Lean Six Sigma, Total Quality Management, Process Excellence, that are available for process improvement. Outcomes of process innovation can include improved quality, increased productivity, and/or higher customer satisfaction.

3. Regulations. Regulatory innovation is concerned with evaluating the intent, impacts, and outcomes of ordinances. The primary aim of regulatory innovation is for a community to develop a better understanding of an issue by analyzing the underlying causes, defining the desired outcomes, identifying necessary resources, contemplating unintended consequences, and calculating costs associated with the governmental action.

4. Policies. Policy innovation involves an examination of alternatives to guide present and/or future decisions and actions in response to a set of facts, events, and assumptions. Its goal is to make well-informed decisions in a timely manner that are in the best interests of a community. They may be in response to the needs of constituents, lingering community issues, actions by other organizations or governmental entities that will impact the community, or a natural or manmade disaster.

As to selecting what areas to focus its resources, a community could look to a recent resident survey, an organizational risk assessment, and/or conduct “open houses” to solicit public input. In addition, staff could work directly with elected officials to build consensus on specific areas to start with and then determine where resources can be dedicated and are perceived to produce the greatest benefit to the organization or the community.

Strategy. A community needs to determine its approach to managing innovation. It is common for both employees and

service areas to be involved in innovative efforts in both small and big ways. This approach does produce benefits to the community, but in a decentralized manner. In the absence of an innovation strategy, organizations lack processes for innovation, leadership support or awareness, comprehensive budget preparation or implications, organizational recognition, and performance management.

A community that wants to promote innovation and maximize its investment in it should consider dedicating staff resources to guide initiatives. This could be achieved through the creation of an office of innovation or possibly dedicated staff within a department.

Whatever course is taken, a community will be successful in promoting innovation by providing assistance in project management, employee development, performance management, and communication.

Project management is key to effective and efficient innovation. To increase success and to assist owners of ideas (innovation), an organization should provide training to individuals and teams assigned to a project or process improvement. This can be in the form of a formal scoping exercise that will:

- Refine the business case for the innovation.

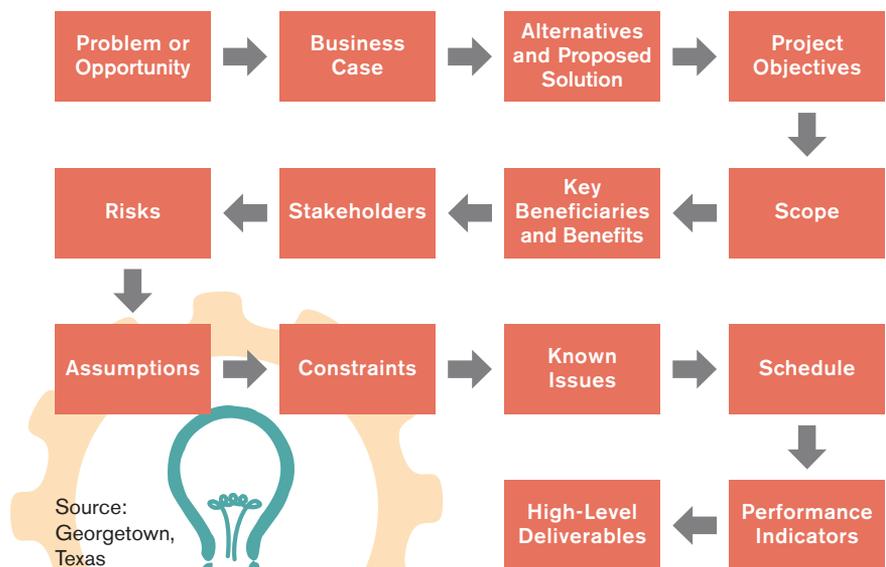
- Describe what the scope will and will not deliver.
- Identify stakeholders.
- Acknowledge risks and how they may be mitigated.
- Understand the impact of assumptions and constraints.
- Outline a schedule.
- Develop a budget.

There is tremendous value in this type of preparation, because it requires the individuals to think long term and to sufficiently describe what they are aiming to achieve. In some instances, the scoping exercise may reveal that it is not the right time to pursue a particular innovation.

Performance management. Government needs to hold individuals and teams accountable for their innovation projects. Once an innovation idea is deployed or implemented, it is important to monitor performance and provide a feedback loop. An innovation may still be successful, but the feedback may indicate the need to tweak the solution to optimize the outcome.

Likewise, performance may exceed expectations and an analysis can provide an explanation and may instruct future innovations. Performance management

Innovation Project Scoping Exercise, City of Georgetown, Texas.



should be included in a government's transparency efforts.

Maturity assessment. Especially in developing an innovation plan related to smart communities and technology, it is important to assess the organization's current maturity. Understanding skill sets, organizational initiatives, and resources currently in place informs realistic short-term and long-term goals and identifies areas with the largest maturity gaps or areas of high risk.

Further, a maturity assessment will serve to identify and refine specific areas of focus (e.g., public safety, transportation, energy) and outline on a detailed level the current level of maturity of technologies being used in these areas.

These organizations have published smart city readiness assessment tools and approaches:

- The Scottish Government and the Scottish Cities Alliance: https://www.scottishcities.org.uk/site/assets/files/1103/smart_cities_readiness_assessment_-_guidance_note.pdf.
- Deloitte: <https://www2.deloitte.com/content/dam/Deloitte/tr/Documents/public-sector/deloitte-nl-ps-smart-cities-report.pdf>.
- City of Bellevue, Washington: https://bellevuewa.gov/UserFiles/Servers/Server_4779004/File/pdf/IT/mc2352A-Smart-Cities-Strategic-PlanWEB.pdf.

Results. The completion of a maturity assessment asks the question, "How and in what areas is the community currently using smart technologies?" The results component of an innovation plan should outline answers to the subsequent question, "In what areas do we identify initiatives for smart technology, and how will we measure successful integration and evidence-based outcomes of those technologies?"

In the case of smart communities, publishing data sets associated with both the current state and eventual implementation of those technologies and their results provides valuable, full transparency to the public.

Many communities may choose to tie their outcomes to already established performance or strategic measures. Bellevue's Smart Strategic Plan, for example, outlines the city's overarching outcome measures such as livability, sustainability, and resiliency, and connects to how the implementation of its innovation plan will specifically impact these outcome measures and how that impact will be measured.

Other smart community frameworks may frame objectives around specific infrastructure areas. The 2016 White House Report to the President: *Technology and the Future of Cities* (https://www.whitehouse.gov/sites/whitehouse.gov/files/images/Blog/PCAST%20Cities%20Report%20_%20FINAL.pdf) outlines the table on infrastructure areas and their potential technologies, concepts, and objectives (see Figure 2).

Timeline. As is common with many other types of strategic plans, an innovation plan should include a high-level timeline for each initiative that has received buy-in from organizational leadership, stakeholders, and community partners.

The timeline may include several phases that reflect an initial phase of investment, skill set building, and funding efforts; one or multiple phases for technology and data integration efforts; and a refinement and "go-live" phase where smart technology and outcome assessment may be deployed in real time.

Budget coordination. An innovation plan should be updated on a regular basis (two to five years) and coordinated with the budget process. The budget development process can include budget requests that include multiple criteria, including innovation. Considering innovation in the budgeting process further demonstrates an organization's commitment to it.

At a minimum within the first phase, an innovation plan should provide a timeline for specific initiatives within each outcome area including areas of investment, hiring, data collection, pro-

urement, and so forth. This information should be presented to elected officials along with recommendations on the next round of innovation.

When coordinated with the budget process, it allows for policy support through the allocation of funds.

Transparency. Internally, staff and service partners need to receive updates and stories about how individuals and teams are driving innovation. Organizations can communicate successes and shortcomings along with lessons learned. It is important to celebrate accomplishments and find time to recognize those involved with innovation. This will foster confidence in individuals and reinforce that they are the source of innovation.

To increase accountability and transparency, a community should make its innovation plan accessible on its website. Regular updates and reports will help communicate benefits and progress to both decision-makers and the general public.

Successful innovation can be a powerful way to demonstrate how local governments are wisely using local tax dollars in a measurable way to produce services that meet the needs of their communities.

In the case of smart communities, publishing results and datasets associated with before and after implementation of the services, processes, regulations, and policies found in the innovation plan, especially new technologies, will provide valuable, full transparency to the public. Public datasets should be easily accessible online and cleaned so stakeholders can readily use the data.

Especially as smart technologies are implemented, live datasets should be available and refreshed in real time and application programming interfaces (APIs) to the data should be defined and published for community and research use.

An Important Tool

Innovation is an important tool for governments to continue to optimize resource allocation, enhance quality of life, drive economic development, and provide

Figure 2. Table of City Infrastructure Technologies.

Urban Sector	Technologies / Concepts	Objectives
Transportation	Multi-modal integration via ICT applications and models On-demand digitally enabled transportation Design for biking and walking Electrification of motorized transportation Autonomous vehicles	Save time Comfort or productivity Low-cost mobility and universal access Reduced operating expenses to transportation providers Zero emissions, collisions, fatalities Noise reduction Lifestyles Tailored solutions for the underserved, disabled, and elderly
Energy	Distributed renewables Co-generation District heating and cooling Low-cost energy storage Smart-grids, micro-grids Energy-efficient lighting Advanced HVAC systems	Energy efficiency Zero air pollution Low noise Synergistic resource management with water and transportation Increased resilience against climate change and natural disasters
Building and Housing	New construction technologies and designs Life-course design and optimization Sensing and actuation for real-time space management Adaptive space design Financing, codes, and standards conducive to innovation	Affordable housing Healthy living and working environments Inexpensive innovation and entrepreneurial space Thermal comfort Increased resilience
Water	Integrated water systems design and management Local recycling Water efficiency via smart metering Re-use in buildings and districts	Active ecosystem integration Smart integration of water, sanitation, flood control, agriculture, and the environment as a system Increased resilience
Urban Manufacturing	High-tech, on-demand 3D printing Small batch manufacturing High-value-added activities requiring human capital and design Innovation parks	New job creation Training and education Urban space conversion and re-use Close integration of living and work
Urban Farming	Urban agriculture and vertical farming	Lower water use Cleaner delivery Fresher produce

Source: White House report found at https://www.whitehouse.gov/sites/whitehouse.gov/files/images/Blog/PCAST%20Cities%20Report%20_%20FINAL.pdf.

quality services. As more local governments embrace innovation, they will need to develop a strategy to improve the time it takes to work through idea generation, development, and implementation, while reducing risks and maximizing benefits.

Successful innovation that helps communities address problems, issues,

and opportunities will justify further investments. An innovation plan is an important step on the journey to developing an innovative culture. **PM**

ENDNOTES AND REFERENCES

1 "It took decades for the telephone to reach 50% of households, beginning before 1900. It took five years or less for cellphones to accomplish the same penetration in 1990. ... innovations introduced more recently are being

adopted more quickly." From "The Pace of Technology Adoption is Speeding Up" by Rita Gunther McGrath, *Harvard Business Review*, November 25, 2013.



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SMART CITY INFRASTRUCTURE

Initiatives that can transform community services | By Michael Cannon

Residents' expectations of their local governments are constantly increasing. To meet this demand requires communities to change how they do business. The communities that will thrive will be the ones where planners, technologists, and government leaders work together to plan for and take the necessary steps to make their communities 21st century smart cities.

Every local government is unique and while some of the most advanced smart cities and counties share common qualities, the approach will be different for each one. Unless a city is being built from scratch with an unlimited budget, most smart city initiatives will be incremental.

A well-thought-out assessment serves an important first step in the journey to becoming a smart community. A smart city readiness assessment defines what resources are available, what needs exist, and where priorities and opportunities exist when it comes to a community's infrastructure and technology. Given the speed at which technology is evolving, assessing opportunities for smart cities needs to be done constantly.

Global management adviser McKinsey

and Company summed it up well in a October 2012 report, "The Smart-City Solution" by Wim Elfrink¹: "When you get a critical mass, the data on the benefits [of a smart city] is so compelling: a 50 percent reduction over a decade in energy consumption, a 20 percent decrease in traffic, an 80 percent improvement in water usage, a 20 percent reduction in crime rates."

Transforming a community into a smart city offers benefits in several areas:

Quality of life. Smart urban planning and building sensors and other technology into an urban infrastructure (e.g., new construction, buildings, roads, parking systems), establishes the building blocks for smart cities, and helps "future proof" a community.

Economic development. The infrastructure found in smart communities attracts new businesses and technology-oriented workers.

Service enhancements. The ability to make information available to residents through real-time access allows them to

pay bills and access such local government data as land-use information, budget information, and crime statistics.

Transportation. Smart city applications and infrastructure can improve traffic flow, parking, public transportation; support autonomous vehicles personal transport systems; and improve pedestrian safety.

Public safety. Gunshot detectors, resident alert systems, and smart cameras (video analytics) are just a few possibilities.

Environmental. Energy management options include pollution sensing, smart metering, and real-time energy consumption tracking, as well as advancements in alternative energy management (solar and wind systems).

Many of the building blocks of a smart city are technologies that are advancing rapidly, including sensors and Internet of Things (IoT), machine learning, artificial intelligence, 5g wireless networks, fiber networks, and big data. Securing these technologies is also a critical component of smart cities.

If your community is like most communities that have not started a smart city initiative, you may want to consider starting with a readiness assessment.



Learning by Defining

Let's start by defining these technologies and how they fit into smart cities. IoT describes the world of Internet-connected devices that can communicate with each other and share data. IoT devices are expected to grow to more than 20 billion by 2020 and account for \$7.1 trillion in business according to Cisco.

In a smart city, these devices can be sensors in roads, street lights, buildings, and air quality systems. They are designed to communicate with each other and can often be controlled remotely and share large amounts of data.

To prepare your community for autonomous vehicles, for example, you may need to have sensor and IP-based beacons throughout your road systems, parking lots, parking garages, traffic lights, and crosswalks. These IoT are infrastructure elements that will communicate with and help guide autonomous vehicles safely through your community.

An excellent source for smart community and IoT applications is through Esri, a GIS company (<http://www.esri.com/smart-communities>). Amazon and Cisco are also industry leaders in building IoT software and tools.

On a more basic level, sensors in roads can monitor temperature and be wirelessly communicating with road signs to warn drivers of icy conditions and dynamically adjust speed limits. To ensure the most efficient roads of the future, some cities may choose to make autonomous vehicle-only streets that will control traffic lights and minimize stopping and going and improve pedestrian safety.

Palo Alto, California, is building sensors into parking surfaces and configuring these sensors to upload to the cloud. Once the information is in the cloud, drivers can find available parking in real time using a smartphone.

Another example is using smart metering technology for utilities. Smart meters can provide monitoring in real time of electricity demand and make it easier to institute variable pricing based on peak demands.

When electricity usage is lower during evening and nights, it is cheaper to supply electricity and rates can be lowered accordingly. Coupled with battery and electric storage systems, peak demand during daytime hours can be reduced further.

Artificial intelligence (AI) and machine learning can also be important elements of smart cities, and they are often confused with each other. Artificial intelligence at the most basic level refers to computers that can mimic human decision making.

Just like a child, these computers learn from past experiences and can make better decisions through time. Autonomous vehicles use AI to navigate. AI can be used to dynamically set toll rates based on traffic congestion.

Machine learning is a form of AI and analyzes large amounts of data to improve decision making. The quality and format of the data are essential for machine learning to work and may often involve data scientists to ensure it is working.

Next-generation (5G) wireless networks and fiber throughout a community are critical infrastructure for smart communities. These can be used to connect sensors, cameras for video analytics, and enable smartphones to access information.

As a community goes about building or repaving roads, managers should consider installing conduit and fiber if the budget permits since the incremental cost of doing so is minimal compared to constructing these after the fact. This reduces the overall cost by as much as 70 percent.

Improving Quality of Life

Giving the public access to wireless Internet throughout a community can improve the quality of life of residents and provide instant access to information from parking and bus transit apps to budget data and energy consumption information.

Stafford County, Virginia, uses Pulse Point, a smartphone app with which the 911 center's CAD system communicates. A user downloads the PulsePoint app and then agrees to be notified in the event of a life-threatening health event.

The county has more than 2,000 PulsePoint users who have voluntarily signed up to receive alerts when someone is experiencing a cardiac arrest or other health emergency. App users within a quarter-mile radius of the incident receive a description of the emergency and the location. The app also provides information on the nearest automated external defibrillator (AED) device.

These alerts provide an extra line of help for victims where those first few minutes can make a difference between life or death, and in most cases, can aid the victim before public safety personnel can arrive on the scene, which might take six minutes or more.

Big data and data analytics also play a role in smart cities. Cities are sharing data with residents, and governments are collecting data from residents. People and businesses are using open data initiatives to create apps of their own, and local governments are using this information to improve services. Open data is simply what many communities do to publish data they generate in an easily downloadable format.

The city of Los Angeles, for example, supports the GeoHub (<http://geohub.lacity.org>), a new public platform for exploring, visualizing, and downloading location-based open data. Stakeholders can analyze and combine open data layers using maps, as well as develop new web and mobile applications.

Government transparency can be dramatically improved with the open data. Stafford County's open data portal (data-staffordva-gis.opendata.arcgis.com) sums it up well: "This is the community's public platform for exploring and downloading open data, discovering and building apps, and engaging to solve important local issues."

Another important part of smart city infrastructure is making sure all these IoT devices, sensors, along with other wireless and connected devices, are secure. The sheer scale of these interconnected devices presents security challenges never before seen or anticipated.

ARTIFICIAL INTELLIGENCE AT THE MOST BASIC LEVEL REFERS TO COMPUTERS THAT CAN MIMIC HUMAN DECISION MAKING.

Since these devices communicate and can send a large amount of data, it is essential that advanced encryption protocols, access control systems, and redundancy are in place should these systems get hacked. An excellent resource for more detailed information on securing smart cities can be found at securitysmartcities.org.

If your community is like most communities that have not started a smart city initiative, you may want to consider starting with a readiness assessment. The assessment should begin with a clear vision of your smart city future. The development of the plan should involve all stakeholders, planners, IT, department heads, residents, and elected officials.

I recommend that local governments examine if they need to include outside expertise. A jurisdiction, for example,

may want to form a team of staff composed of technologists, planners, public works and utilities engineers, and data experts. Then learn what other communities are doing and determine if any initiatives can be replicated and whether expertise exists in-house or whether outside experts are needed.

Ideally this would involve developing a multi-year plan. Since most smart cities are not built quickly, a plan should cover a planning period of five to 10 years. It should identify specific goals and objectives that can be easily tracked and updated on an annual basis.

Once a plan has been developed a community may want to start with a pilot initiative to gain some experience and provide a proof of concept for the public and elected officials.

The state of Georgia is making a concerted effort to help communities by creating a smart city competitive grant program, where four winning jurisdictions will receive grants to explore issues

around “mobility, equity, and resilience.” The program—called the Georgia Smart Communities Challenge (smartcities.gatech.edu)—is being led by Georgia Tech University in partnership with Georgia Power and eight nonprofit local associations, which will award grants of up to \$50,000 to four cities.

The program involved workshops held during Spring 2018; applications were due in May 2018. Winning community award announcements will be made in August 2018 for one-year projects.

With the right planning that involves key stakeholders and provides necessary funding, your community can become the next smart city. **PM**

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By Alison Ortowski
and Dale Dean

FOCUSING ON INNOVATION

NEW MANAGEMENT MODEL SUPPORTS STRATEGIC OBJECTIVES

Well-managed private and public sector organizations generally use some type of foundational management framework. More than a decade ago, the city of Southlake, Texas (population 29,000) adopted the balanced scorecard system as its foundational framework.

This framework enabled the city to realize benefits from improved city council ownership, buy-in and support from boards and commission members, fully integrated and cascading objectives from corporate to employee levels, and increased employee engagement.

Each year, staff, in partnership with the council, evaluates the system for refinement opportunities to ensure a continuous hyper-focus on customers—residents, business owners, and visitors. This year, Southlake is taking that refinement one step further by implementing a new Southlake-specific model rooted in the balanced scorecard approach.

Executing Complex Strategies

Southlake Performance Excellence (SPx)

is a distinctive model created by the city's staff to assess, formulate, communicate, and execute complex strategies within all levels of the organization, both internally and externally.

The goals of SPx are to:

- **Align and coordinate efforts citywide—strategic and tactical level.** Combine a collection of ongoing activities and processes that are then used to systematically coordinate and align resources and actions with the city's mission, vision, and strategy.
- **Become more strategically agile.** Create a flexible framework where operations, systems, and processes are developed that lets staff members sense, create, and respond quickly and confidently to the needs of residents, business owners, and visitors. In a strategically agile organization, staff members understand their connection to the mission and vision and then feel empowered to make decisions and to perform their work.
- **Ensure Southlake remains radically focused on its customers.** Enhance

the staff's focus on the voice of its residents, business owners, and visitors, which acts as a strategic management guidepost and ensures that the city stays committed to exceeding people's expectations.

- **Improve the city's strategic cadence.** Ensure that the communication flow of the performance excellence framework continues throughout all levels of the city.
- **Use predictive modeling and analysis.** Use statistical analysis, where specific data signals are monitored and evaluated in real time, to enable the city to anticipate and respond more quickly on potential future conditions. The model's innovation and smart cities initiatives are designed to fill this role.
- **Enhance a continuous process improvement program.** Use Lean Six Sigma methodology and toolsets to evaluate and improve under-performing, yet key, accountability metrics.
- **Enhance strategic performance development programs.** Focus on strengths-based management and leadership through the lens of employee engagement elements and a performance development environment to allow management to partner with employees at all levels of the organization to achieve high standards of success.
- **Enable innovation and foster future readiness.** Encourage and support creative, even unorthodox,





thinking while also giving employees a platform to manage their ideas into reality. As part of the SPx initiative, the city is focusing on improving its efforts toward one of its core values—innovation. In early 2018, Southlake hired a chief strategic performance and innovation officer to oversee the creation and implementation of its innovation strategy.

Strategy Before Implementation

The desire to jump into the innovation deep end without first considering the strategy for doing so can result in chasing the proverbial shiny penny only to find that the chase costs time, effort, money, and potentially customers' trust.

As a strategically led organization, Southlake is taking the time to develop a well-thought-out innovation strategy that will include a smart cities readiness

assessment. The plan will also consider improvements to existing technology, as well as a systematic evaluation of such new systems as blockchain and various smart cities technologies.

Blockchain technologies. Blockchain technology records an ongoing history of related transactions; for example, ownership titles of property. As blockchain infrastructure software technologies continue

to evolve, Southlake will be reviewing potential opportunities for providing secure, easy-to-use services to customers. While some uncertainty exists around future viability, particularly with cryptocurrency—

for example, the exchange of bitcoins—the consideration of this technology will be included in the overall innovation strategy.

Future blockchain-connected enhancements to services might encompass

currency, bonds, building permits, court records, voting procedures, and accounting transparency in tracking account transactions, contracts, human resource records, recreation center membership cards and locker keys, and police weapons unlock codes.

Smart city technologies. Numerous vendors are engaging with communities around the nation to enable smart city technologies. As part of its innovation strategy, Southlake is evaluating new technologies from the perspective of achieving higher-quality services coupled with reducing cost and is currently engaged in discussions with vendors in these areas:

- Intelligent transportation systems.
- Economic health monitoring via cellular data.
- Improved public Wi-Fi connectivity.
- Improved emergency response times.
- Smart parking.
- Public lighting.
- Safety monitoring systems.

With the development and implementation of SPx and a supportive innovation strategy, 2018 represents a year of evolution for the city's management approach, which is designed to increase operational agility, promote stronger connections to the strategy, and enhance future-readiness.

The continued quality and success of the community does not happen without the diligent effort of a committed team of residents, businesses, community leaders, and staff. Years of consistent planning and strategic thinking have brought Southlake where it is today. SPx continues that tradition. **PM**



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TECH

TALENT

By Kip Harkness and
Frank Benest, ICMA-CM

HOW TO ATTRACT AND RETAIN TECH-SAVVY PROFESSIONALS

Lounging on the couch, you pull out your phone. Any consumer experience you want is right there. You can watch any movie, shop for groceries, buy a new dog collar, book a vacation, or sell Bitcoin.

Although if you try to interact with your local government to reserve a park, submit a permit, ask a question about your garbage service, or sign up for summer camp, you might be out of luck depending on where you live.

People are increasingly expecting their local governments to solve problems and deliver services in the ways that they experience as private consumers on Airbnb, Netflix, or Amazon.

Almost on a daily basis, however, the gap between the user experience in the private and public sectors is growing further apart.

This gap creates an innovation imperative for local governments if they are to meet the expectations of their constituents.

Many local governments are trying to bridge this gap by becoming a smart city, which you are reading about in the articles published in this issue. A smart city uses data and process improvement to do what local governments must do, better, and are already doing today.

Many smart cities, for example, are now using LED street lighting and programmable controllers; a 311 mobile app that allows easy reporting and quicker

response for common service issues; and networked fleet sensors to predict breakdowns, reduce maintenance costs, and improve response times.

Since the smart city is a destination at which an agency never really arrives, innovative organizations are “learning cities.” They are always searching for ways to use technology and data in their efforts to become better and better in solving problems and delivering services.



It is this focus on people at the center, learning from data, and an interactive approach to execution that are the key ingredients in innovation and improved service delivery. To become smart communities, local governments need to develop an environment that supports tech talent—an environment that relies on effective hiring processes, as the following mini-case study illustrates.

San Jose Tackles Innovation Initiatives

San Jose, California, in the heart of the Silicon Valley, is the 10th largest city in the United States, with a diverse population of more than 1 million people. Mayor Sam Liccardo and the San Jose City Council have adopted a smart city vision that challenges local government to be as innovative as the community it serves.

To respond to this challenge, here is what City Manager Dave Sykes did:

- Created a deputy city manager position as part of the executive team to champion innovation and coordinate cross-departmental innovation.
- Elevated the information technology director to a chief information officer with broader authority across departments.
- Convened an innovation cabinet of department heads and senior leaders who identified a backlog of more than 70 potential innovation projects or initiatives.

To evaluate potential projects, the innovation cabinet asked three key questions of each project:

- **Is it important?** Is the problem that the staff is trying to solve causing a lot of people pain or annoyance?
- **Is it core?** Is this problem something our city can and should try to address?
- **Is it achievable?** Can the problem be solved, at scale, with improved technology or process improvement?

Asking these questions narrowed the innovation work to a focused roadmap

of 20 projects and initiatives that were important, core, and achievable. If innovation is about saying “Yes!,” then governance is often about saying “No.” The innovation roadmap is where innovation and governance meet, and provides a focus for the innovation efforts of the entire organization.

Projects on the innovation roadmap include negotiating with telecommunications companies to deploy fiber and “small cells” to deliver the next generation of connectivity, using data analytics to send limited police capacity to the right locations at the right time, and moving business processes from paper to digital.

Each of these tech projects requires skilled staff. One of the problems causing a lot of pain for the San Jose organization was its staff vacancy rate. Of the 6,200 full-time positions, the city had 870 vacancies. It was simply not hiring enough good people fast enough.

To address this talent recruitment challenge, a new team composed of human resources (HR) and departmental recruiters, as well as labor partners and analysts, was asked, “How might we re-imagine the hiring process in San Jose?” The team took a customer-driven approach to innovating hiring by:

1. Gaining empathy for the customer (in this case the internal customers who are the hiring managers) by interviewing them and listening to their perspectives.
2. Mapping out the internal customer journey, including all the steps required to hire a new employee and the relative pain or joy experienced by the hiring manager along the way.
3. Identifying root problems.
4. Exploring, prototyping and evaluating potential solutions.
5. Piloting several experimental efforts and learning from the data.
6. Refining and scaling an effective solution for the entire organization.

The results from the newly revised hiring process were stunning. The pilot effort reduced the number of HR-required ap-

provals from 15—each with a lag of days or weeks—to just two.

As a result, the city realized a 275 percent increase in the amount of hiring its team of recruiters was able to accomplish. The refined process has been scaled to the entire organization, and the city now is seeing dramatic reductions in vacancies.

Tech Talent

To become smarter, cities need both technology and talent. The right starting point is talent because, in the end, technology is powered by people.

Hiring tech talent means entering into a global war for technologists and technology leaders in direct competition with the private sector. Even when offering competitive salary and benefits, local governments often lose this war for talent because they do not understand what attracts, engages, and motivates different kinds of tech talent.

At a session at the 2017 ICMA Annual Conference, participants identified these challenges in recruiting and retaining tech talent:

- Tech talent does not know about opportunities in local government or the problems that we need to solve.
- Tech professionals do not perceive local government organizations as “cool” places to work.
- The top tech manager in a local government agency does not typically sit at the executive team table making top-management decisions.
- The organization may be vulnerable if the technology leader leaves the agency since it is often difficult to find a replacement.
- Local governments are not making significant investments in technology; therefore, tech talent does not want to join us.

Four Key Insights for Managers

To attract and retain tech talent, local government leaders need to understand what makes tech-savvy professionals tick. While local governments must

offer reasonably competitive salaries and benefits, the winners in the war for tech talent will be those that offer the working culture and environment where technologists thrive.

To succeed in this talent war, here are four key insights for managers:

1. Talent (the people you need). It is crucial to distinguish three kinds of tech talent that you will need to succeed:

Technologists. The technologist is typically a subject matter expert and hard-core geek like an information technology systems engineer or architect. These tech experts are crucial to technology success. A core skill set for these technologists in local government is project or product management.

Technology leaders. Often overlooked are the people who are making the decisions about which technologies to adopt. Clearly the chief information officer is a key tech leader, but it is also essential to develop tech leadership across the organization. This involves a commitment to learning about new technologies and approaches by leaders outside of traditional IT functions.

The digitally fluent. In addition to hard-core technologists and leaders, successful technology adoption requires a much larger number of people to be digitally fluent, easily able to learn and apply new technologies and unafraid of technological change. Typically, young professionals are more apt to be digital natives, but digital fluency can come at all ages and can be trained.

2. Motivation (what they want).

Technologists as a group want to solve difficult problems using cool technology. This is where local government has a comparative advantage.

We have a wide range of problems that matter, and we can use cool tools and approaches that are actually surprisingly accessible. Using IBM's BlueMix, for example, one can grab information from Twitter's API and run all the tweets where people are talking about your community

through Watson's sentiment analysis to see what people think about your community.

3. Engagement (how to get them).

Tech talent wants to be compensated fairly and this may mean increasing the normal salary you offer. It may also mean paying some technologists or technology leaders more than the people they work for.

It is, however, not all about money. Daniel Pink in his book *Drive* argues that creative and effective workplaces generate engagement by providing purpose, autonomy, and mastery.

- **Purpose.** The desire to accomplish something larger than oneself. This is something local government offers as part of its very charter, to make the city or county greater and more beautiful than it was given to us.
- **Autonomy.** The urge to direct one's own life. Many local governments fall short here, but not necessarily so. Giving employees and teams more autonomy to solve problems could provide tremendous benefits for almost all employees and is crucial to engaging tech talent who have many choices on where to work.

Teams using such agile approaches as scrum, a simple iterative framework that allows teams to collaborate on complex products and problems, have increased autonomy and can show dramatic gains in productivity in everything from software deployment to policy development.

- **Mastery.** The drive to get better and better at what one does. Again, this is an area where local government could have the advantage. In a large tech company, it is easy to get stuck in a departmental silo or in a narrow IT range.

Local governments do not have that luxury and can offer employees the opportunity to learn a wide variety of skills and domains and

move towards mastery. A simple way to do this is create rotational opportunities and stretch assignments.

4. Retention (how to keep them).

The best way to retain tech talent is to gather a tribe of like-minded technologists and innovators and empower them to build a culture that champions the customer, learns from data, and iterates to improve. This will ensure that those who join your team find an environment they feel a part of and can thrive in.

Retention tip: Promote balance to meet the desire of tech professionals to have a fulfilling personal life as well as a great career. The technology industry is famous for the intense pressures and time demands on technologists and technology leaders. In the private sector, tech employees feel that the company owns your life and the purpose of your life is to relentlessly produce more and more.

The smart local government looking to recruit and retain top tech talent could turn this on its head. Offer people a life and the ability to do good in the world. Give them evenings and weekends free of responding to e-mails or global conference calls. Let them take regular vacations and completely unplug from the office while away.

Winning the War on Tech Talent

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In the process, smart cities must retool organizational cultures to align with the values and desires of tech-savvy professionals. These efforts will help the aspiring smart city attract, retain and grow the tech talent that it needs. **PM**



KIP HARKNESS is deputy city manager, leading innovation and digital strategy, San Jose, California (Kip.Harkness@sanjoseca.gov), and **FRANK BENEST, ED.D.,** ICMA-CM, is the former city manager, Palo Alto, California, and currently serves as ICMA Liaison for Next Generation Initiatives (frank@frankbenest.com).



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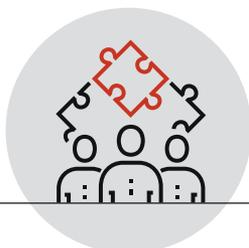
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BY PIYUSH PATEL

10 TIPS FOR HAVING A DIFFICULT CONVERSATION

You shouldn't try to avoid them

Marcus and I had just enjoyed a nice lunch filled with conversation about our shared interest in the local basketball team. When I got up from the table to leave, a confused look crossed his face.

"That's...that's it?" he stammered.

Sitting back down, I asked what he meant by his question. For the next few minutes, I reassured Marcus, who is a member of the team that I lead, that he wasn't getting fired. This really was a lunch between two people who were catching up. It was clear that Marcus had thought I, as the team leader, had ulterior motives when I asked him to lunch earlier in the day.

How productive do you think Marcus was that day? Fresh off thinking he might be about to lose his job, he probably didn't get a lot done that afternoon. The morning certainly wasn't productive either. With the thought of losing his job top of mind, he probably didn't get a lot done.

Setting Expectations

Now ask yourself how productive an employee will be if they're working with the uncertainty associated with little-to-no job security? Here are tips you can start implementing in your organization to help avoid situations like I had with Marcus.

Set expectations up-front. Anger and frustration are nothing more than unfulfilled expectations. You can go a long way to avoiding the number of uncomfortable conversations you have to begin with by striving to be as clear as possible.

Listen. It sounds simple. You might hear what they're saying, but are you listen-



ing to the message they're conveying? You'd be surprised how many people aren't actually listening, they're only waiting for their turn to talk.

Get buy-in before jumping to a decision. Everyone interprets things differently. Instead of assuming people don't know what they're talking about, make an honest effort to understand their position. It's not about always doing what someone else asks, but rather having accurate information before you make a decision.

People are more likely to back a decision they don't agree with if they know you've heard them out and also know you're making the decision that's in the best interest of the organization. That requires them to trust you to make that decision.

Constantly build trust with team members. This is where a lot of leaders fail with uncomfortable conversations. If you're waiting until you need to have this kind of conversation to start building trust with someone, it's too late. Building trust is something you need to be doing

with a team from Day One. Only then can people accept your decisions, even if they don't agree with them.

Be comfortable in being vulnerable.

No one is perfect. You know it. I know it. Team members know it. Why should they trust you if you're not willing to trust them first? Give them the benefit of the doubt that they know what they're doing when it comes to the job you hired them for, and maybe they'll reciprocate when it comes time to do your job.

Know your role as a leader. Speaking of your job, your role isn't to take care of residents and customers to improve a bottom line. Your role as a leader is to take care of people so they can take care of the resident or customer and that person, in turn, can take care of a bottom line. You hired great team members, so let them do what they do best.

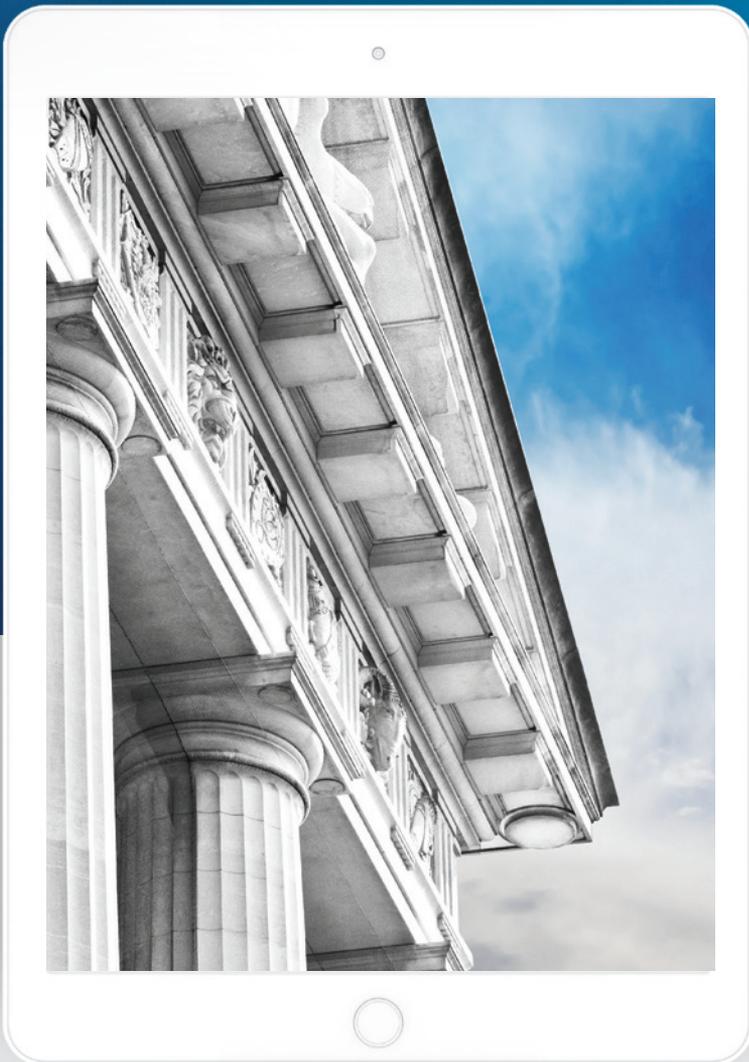
Embrace uncomfortable conversations. When people are passionate about their work, you can't avoid uncomfortable conversations. They're a part of the workplace. Instead of trying to avoid them at all costs, embrace these conversations as a way to enhance productivity.

Make uncomfortable conversations productive. The first step to productive uncomfortable conversations is already on this list: Set expectations up-front. Clarify the goal you had and how it doesn't match the current reality. Then let team members figure out what options can make the current reality hit the goal.

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After that, a decision needs to be made on what's going to happen. Don't forget to clarify who's responsible for following through, and set a time up-front for you to follow-up on the completion.

Discuss in person. Studies have shown the actual words spoken only make up about 7 percent of communication. Body language (55 percent) and tone of voice (38 percent) make up the rest.

Uncomfortable conversations are difficult enough as it is. If you're already having an issue of unfulfilled expectations, don't make matters worse by trying to resolve it over the phone, with a team chat app, or with some form of technology. Have face-to-face conversations.

Create your "principal's office."

I developed this title after my lunch with Marcus. It is in homage to my days as a teacher. As a kid in school, you knew what it meant when you were called into the principal's office.

You also knew what behavior landed you there. When you have a principal's office at work where all uncomfortable conversations take place, people know they won't be blindsided by something at lunch.

Uncomfortable conversations happen in all shapes and sizes. What they shouldn't be, though, is a shock to those involved. You can avoid surprising people with difficult conversations by setting the expectations of acceptable behavior at work up-front.

If there is a miscommunication, take the time to honestly listen to what they have to say before jumping to a decision. Once you make a decision, a team that trusts you will support it entirely. If that's not team members or anyone who you might be talking with, then your job is to start building trust with them starting today. **PM**



PIYUSH PATEL, school teacher-turned-entrepreneur and the founder of Digital-Tutors, Oklahoma City, Oklahoma, is the author of *Lead Your Tribe, Love Your Work* published by Dream Big Imprint, LLC; February 6, 2018.

BY PATRICK IBARRA

QUALITY GOVERNMENT

Women managers share insights on moving ahead

While women comprised almost 47 percent of the U.S. labor force in 2017, as reported by the U.S. Department of Labor,¹ 5 percent of Fortune 500 chief executive officers are women,² and fewer than 19 percent of the House of Representatives and 22 percent of the U.S. Senate are women.³

Out of 195 countries, only 13 females are either prime ministers or presidents of their respective countries, which translates to 6 percent for the world. Also, 15 of 193 of UN recognized countries are led by females, or 7.8 percent, according to Pew Research Center.⁴

The influence and ability of women in various professions has recently received unprecedented focus, including these examples:

- International Women's Day was celebrated on March 8, 2018, to celebrate the social, economic, cultural, and political achievement of women (<https://www.internationalwomensday.com>).
- In New York, on April 12, 2018, Vanity Fair conferences presented "Founders Fair: Women Entrepreneurs Tell Their Stories."

Governing started a podcast titled "The 23%: Conversations with Women in Government." The 23 percent is a reference that while women comprise 50 percent of the population, only 23 percent serve as state and local government leaders in the United States.

On a personal level, during my 15 years in local government management, I worked with women in executive and senior manager roles, and within my own organization, had the opportunity to work with city and county governments managed by women.

My wife also has served in executive positions in both the public and private sectors, and we have been able to share thoughtful discussions on the unique challenges women encounter in their efforts to effect change and influence organizational success.

All these events and experiences have led me to focus this article on women who are working in local government.

I asked these four women who have spent their entire careers in local government to contribute to this article and share their personal opinions and perspectives:

- Tara Schultz, city manager, Claremont, California.
- Sheryl Sculley, city manager, San Antonio, Texas.
- Susan Sherman, assistant city manager, Olathe, Kansas.
- Jeana Woods, city administrator, Osage Beach, Missouri.

Unique Challenges

In response to the unique challenges women in local government management have historically faced, Sculley shared that, "40 years ago, I was told that a woman would not be appointed city manager of Kalamazoo, Michigan, and that I was setting my goals too high."

Contrary to those who voiced the idea of the glass ceiling, she ended up serving as city manager there for five years before embarking on her next role as deputy city manager of Phoenix, Arizona.

Offering advice to young women either entering local government management or who aspire to climb faster through the ranks, Woods shared that, "Women bring a different perspective to local government management compared to men in the same roles. A challenge can sometimes be that we, as women,

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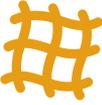
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Roger Kemp's background and professional skills are highlighted on his website. Dr. Kemp was a city manager in politically, economically, socially, and ethnically diverse communities.

He has written and edited books on these subjects, and can speak on them with knowledge of the national best practices in each field. Call or e-mail Roger for more information.

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often aren't as quick to be assertive on that perspective. I learned to overcome this early on!"

Sculley advised, "Take on untraditional roles and learn the budget process." Similarly, Schultz suggested, "Find meaning in learning new things through the experiences and challenges you'll face and the excitement you'll feel for what you do and the rewards you gain come from facing those challenges. Even the toughest moments can have meaning. Make the most of those challenges and experiences as they happen." Sherman echoed that and added, "Build relationships at all levels."

Regarding future challenges, Sherman offered that she thinks the public sector will continue to face the challenge of diversity, including, but not exclusive of, women. She adds that, "Women need to continue to build their confidence to pursue positions they might not believe they are qualified for but should pursue anyway. Furthermore, women in elected positions play a pivotal role in helping bust through glass ceilings."

On that point, Schultz and Woods shared that each had the good fortune of working for both male and female city managers, and that sometimes female elected officials were extremely supportive of their career pursuits.

Leadership Development

Another perennial issue for women leaders is how to improve existing leadership development programs to better help women seeking executive positions.

In 2014, Sculley initiated the San Antonio's Women's Leadership Mentoring Program, which includes one-on-one mentoring, a capstone project, and a bi-monthly speaker series. She encouraged women to get more involved in their state association and ICMA committees, including making presentations at conferences.

As another point of information, a Women Leading Government (WLG) initiative was established by Cal-ICMA in 2006 and continues today. It is focused on "helping women succeed in public service by enhancing career-building models that develop leadership skills and by networking professional women in government." An annual conference is scheduled for June 14, 2018, Phoenix, Arizona (<https://icma.org/events/2018-arizona-wlg-conference>).

In summary, the role of women in government will continue to be pivotal in the advancement of vibrant communities and strong, high-performing organizations. It is my intent for the content of this article to help accelerate those efforts. I urge readers to e-mail any comments and questions they have to me. **PM**

ENDNOTES AND RESOURCES:

- 1 <https://www.dol.gov/wb/factsheets/qf-laborforce-10.htm>.
- 2 <http://money.cnn.com/2017/12/18/news/women-ceos-2017/index.html>.
- 3 <http://www.cawp.rutgers.edu/women-elective-office-2018>, Center for American Women and Politics.
- 4 <http://www.pewresearch.org/fact-tank/2017/03/08/women-leaders-around-the-world>.



PATRICK IBARRA is a former city manager and partner, The Mejorando Group, Glendale, Arizona (patrick@gettingbetterallthetime.com).

WHAT HAPPENED HERE...?

An Internet search in December 2017 found these communities that are known for special and perhaps unusual reasons:

Oklahoma City, Oklahoma

(James Couch, City Manager): The world's first parking meter was installed here in 1935 and charged a nickel an hour.

Hastings, Nebraska

(Joe Patterson, City Administrator): Where Kool-Aid was invented in 1927 by Edward Perkins.

Carmel, Indiana

(James Crider, Director of Administration): Known as the city of roundabouts or traffic circles, Carmel is home to more roundabouts than any city in the United States.

Crystal River, Florida

(Dave Burnell, City Manager): Home of the Manatee (marine mammal).

Pittston, Pennsylvania

(Joseph Moskovitz, City Administrator): Tomato Capital of the World.

Suffolk County/Flanders, New York

(Franklyn Farris, Public Administrator): Home of the "Big Duck" – a ferrocement building in the shape of a duck that was built in 1931.



Orlando, Florida

(Bryon Brooks, Chief Administrative Officer): Theme Park Capital of the World.

Old Forge Borough, Pennsylvania

(Mary Lynn Bartoletti, Borough Manager): Pizza Capital of the World.

Marin County, California

(Matthew Hymel, County Administrator): Where mountain biking originated.

Bend, Oregon

(Eric King, City Manager): Most Beer Breweries per Capita in the USA.

Atlanta, Georgia

(Daniel Gordon, Chief Operating Officer): Where Coca-Cola was invented.

Ashland, Virginia

(Joshua Farrar, Town Manager): One city in the United States where a railroad track runs directly along public streets, without any separation. There are communities around the world that have this type of train track.

Hamilton, Ontario, Canada

(Chris Murray, City Manager): The Waterfall Capital of the World with a collection of more than 100 cascades within city limits.

Washington, D.C.

(Rashad Young, City Administrator): Charles Lazarus founded Children's Supermart, which would evolve into Toys "R" Us, during the post-war baby boom era in 1948 as a baby-furniture retailer.

Schiller Park, Illinois

(Brad Townsend, Village Manager): Twinkies were invented here on April 6, 1930, by James Alexander Dewar, a baker for the Continental Baking Company.



Denison, Iowa

(Terry Crawford, City Manager/City Engineer): Birthplace of actress Donna Reed, who is best known for the 1946 film *It's a Wonderful Life*.

Branson, Missouri

(Stan Dobbins, City Administrator): Known as the "live music capital of the world." The city has more than 40 theaters with 60,000 theater seats, more than 70 live theater shows, more than 200 lodging facilities with more than 23,000 lodging rooms, and 5,000 camping spaces. **PM**