United States Conference of Mayors
Business Council 2018 Best Practices Report:

Mayors and Businesses Driving Economic Growth

2018

THE UNITED STATES
CONFERENCE OF MAYORS

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The U.S. Conference of Mayors is the
official nonpartisan organization of
cities with populations of 30,000 or
more. There are 1,393 such cities in
the country today, each represented
in the Conference by its chief elected
official, the Mayor.

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Foreword

The United States Conference of Mayors is proud of the members of the Mayors Business Council and the work they have accomplished with cities to improve the quality of life in America's cities. Working together, our cities have become more livable and more competitive, and the economy is growing stronger every day.

The United States Conference of Mayors Business Council Best Practice Report: Mayors and Businesses Driving Economic Growth showcases outstanding and innovative public/private partnerships submitted by the Mayors Business Council to inspire other cities and companies to work together in addressing the economic challenges facing cities and our nation.

Mayors and business leaders agree that creative public/private partnerships are a major force in shaping cities of the 21st century and experience has shown when businesses and local governments work together, our cities benefit and our nation is stronger.

The Mayors Business Council has been an integral part of the structure and activities of The United States Conference of Mayors for over 15 years. Central to the mission of our Business Council is the goal of both improving the business environment in cities and sharing the successful public/private partnerships that take many forms with benefits ranging from economic development and environmental improvements to better schools, a more educated workforce, and connected cities through technology.

In an era of diminishing federal funds and increasing unfunded federal mandates, the Conference must continue to strengthen its relationship with the business community by nurturing and celebrating the new and creative partnerships between cities and businesses.

Tom Cochran
CEO and Executive Director
The United States Conference of Mayors

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3M: City of LA Using Cool Roof Ordinance to Combat Urban Heat Island Effects

Challenge: The urban heat island (UHI) effect is a phenomenon in which metropolitan areas are typically warmer than nearby rural areas mainly due to the large areas of paved surfaces and buildings that capture the sun's energy, hold it and slowly radiate the heat back out into the air. The concentration of heat in these densely populated regions creates additional health risks for residents due to heat exposure and the enhanced formation of air pollutants, especially ozone.

Recognizing that rising air temperatures lead to increased public health issues, peak electricity demand, power outages, smog and pollution, Climate Resolve and Los Angeles city officials worked to develop a plan to reduce UHI effects. Together, they helped inform and empower area residents and property owners about the imminent, relevant climate challenge—to further drive local change in their community and demonstrate the positive benefits everyone would experience.

Description: Rooftops, roads and parking lots comprise a large percentage of the surface area in Los Angeles, serving as a key driver to the UHI effect. When analyzing effective UHI mitigation strategies, scientists at the Lawrence Berkeley National Laboratory determined that widespread deployment of cool roofs and cool pavements would decrease urban temperatures, which in turn could offset some or all of the projected future warming in the area.

Since rooftops alone comprise at least 20-25% of the man-made surface area in Los Angeles, city officials decided to start with cool roofs as a primary focus in reducing the harmful UHI effects. Installing cool roofs would provide instant benefits to both the residents and the environment. Outdoor air temperatures are also positively influenced since the cool roofs reflect the sunlight back into the atmosphere, rather than absorbing it and creating radiant heat. Additionally, a variety of cost effective roofing options were already available to roofing contractors and residents.

Impact: Overall implementation of Los Angeles' ordinance is progressing positively—in part due to an enhanced rebate program made available by the Los Angeles Department of Water and Power. City efforts to review mitigation strategies and their positive benefits to the community are underway.

As a solution provider and cool roofing material expert, 3M became involved to support roofing manufacturers with a variety of options that are compliant with the new city ordinance. Assisting with increased demand for cool roofs, 3M along with others in the roofing industry are positively influencing Los Angeles and helping other communities adopt similar programs.

Installing a cool roof could reduce a homeowner's utility bill 10-20% annually[1] by lowering indoor air temperatures 3-12° F, creating cumulative savings for the city of up to $30 million per year.[2]

1. Ban-Weiss, G., Wray, C. P., Delp, W.W., Ly, P., Akbarik, H., and Levinson, R. M. (2013). 'Electricity production and cooling energy savings from installation of a building-integrated photovoltaic roof on an office building." Energy and Buildings, 56. 210-220.
2. Fink, D. (2014). Hot City, Cool Surfaces [PDF file]. Climate Resolve.

How-To:

Between 2013 and 2014, Los Angeles developed its new ordinance amending the California Green Building Standards Code by mandating cool roofs for new residential construction and many renovation projects. Los Angeles unanimously passed the local amendment, with the new law officially taking effect January 1, 2015.

The first of its kind, the Los Angeles Cool Roof Ordinance is intended to help the city become more resilient and healthier on hot days; reduce heat-related hospitalizations; improve air quality by reducing the formation of ozone; inoculate against power outages; reduce homeowners' electricity bills; reduce greenhouse gas emissions; and provide a more pleasant home environment. By helping keep temperatures down, cool roofs can help protect lives and help combat global climate change at the local level.

By taking proactive measures to reduce indoor and outdoor air temperatures, Los Angeles is leading the way and helping its residents experience improved temperature comfort and an improved quality of life.

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Tags: Environmental Impact

Airbnb: Super Bowl – Project 612

Challenge: Even with a recent hotel boom, the Twin Cities possess only about 40,000 hotel rooms, which is less than half of Houston, the host city for the 2017 Super Bowl. The Twin Cities was expected to host about 125,000 visitors for the game, over three times the number of hotel rooms able to accommodate them.

Nearly half of those hotel rooms were reportedly snapped up immediately by the NFL and Minneapolis hotels were reported to have been already sold out a full year prior to the game. This left the Twin Cities in a predicament: too many people traveling, not enough places for them to stay. It begged the need for a flexible, scalable platform to expand lodging capacity and allow as many people (and their spending dollars) as possible to stay within the Twin Cities. Said Saint Paul Councilman Chris Tolbert prior to the game: "I don't think there's enough hotel rooms in the Twin Cities for the amount of people that are coming. [...] We're going to need Airbnb for the Super Bowl."

Airbnb and our local hosts faced with a monumental challenge and opportunity -- to help expand lodging capacity during the Super Bowl and maximize the economic opportunity for the Twin Cities.

Description: Airbnb collaborated with the Twin Cities to substantially expand lodging capacity for the 2018 Super Bowl, thereby welcoming thousands of additional guests and maximizing the region's economic impact.

Impact: Airbnb exceeded a 2,000-host goal within seven months. By February 2018, there were over 5,500 active Airbnb hosts in Minneapolis and Saint Paul alone, which quadrupled the original growth goal set a year ago. This ensured that anybody who wanted to stay within Minneapolis and Saint Paul -- particularly fans of the Patriots and Eagles -- could find a safe, affordable option within close proximity to the stadium and downtown Minneapolis.

This led to over 7,000 guest arrivals staying in Minneapolis and Saint Paul through Airbnb for the Super Bowl -- people who objectively would not have been able to stay in the city otherwise due to the sold out hotels. Through these guests, Twin Cities homeowners earned $3.7 million in supplemental income. And these guests injected an additional $11 million in spending to the local economy, based on a third party report for the Minnesota Super Bowl Host Committee that projected Super Bowl guests to spend $465 per day, not including lodging

In all, Project 612 brought a $14.7 million economic impact just for Minneapolis and Saint Paul.

How-To:

In February 2017 -- a year prior to the Twin Cities Super Bowl -- Airbnb announced Project 612. This was a first-of-its kind initiative aimed at activating the Twin Cities home sharing community to help Minneapolis and Saint Paul take full economic advantage of the 2018 Super Bowl. The goal was to use existing resources -- people's homes --- to keep as many visitors (and their spending dollars) as possible within the corporate limits of Minneapolis and Saint Paul during Super Bowl Week. It represented Airbnb's comprehensive strategy to ally the cities and its local host community to ensure the event makes a positive long-term economic impact on the region.

Project 612 encompassed a number of tactics, including:

• Building relationships between Airbnb hosts and local merchants

• Activating interested hosts as early as possible

• Launching a local host club (now known as Homeshare Twin Cities)

• Pricing tutorials for new hosts

However, the most important tenet of Project 612 was what seemed like an ambitious goal at the time: doubling the size of the Twin Cities Airbnb host community from 1,000 to 2,000 by February 2018 in order to expand lodging capacity as much as possible and provide affordable and safe accommodations for visitors.

Funding: Airbnb's activities were funded all using preexisting budget, resources and personnel

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We worked with the Super Bowl Host Committee as well as various policymakers in both Minneapolis and Saint Paul.

Tags: Innovation, Impact on City Economy, Increased Tourism

American College of Sports Medicine: ACSM American Fitness Index

Challenge: Regular physical activity is one of the most important ways people can improve and maintain their health. Media messages encouraging exercise and advertisements for fitness-related gear have become commonplace as health organizations and businesses recognize the growing interest in adopting healthy behaviors. While a significant proportion of Americans are physically active, less than 25 percent of adults meet national physical activity guidelines. Emerging public health research suggests that to improve health and fitness, prevent disease and disability, and enhance quality of life for all Americans through physical activity, we must create a culture that integrates physical activity into our daily lives. Since the 2008 ACSM American Fitness Index (Fitness Index) rankings, Cincinnati has scored well for community resources and policies that support physical activity. However, area residents rank poorly on preventative health behaviors and prevalence of chronic disease conditions. High rates of smoking, obesity, and cardiovascular deaths outweighed the city's parks and recreation amenities and farmers' markets in the overall Fitness Index rankings.

Description: The Fitness Index celebrates physically active lifestyles and encourages city leaders to enact policies and make system changes to promote these behaviors. The Fitness Index focuses on three strategies: Inform: The Fitness Index ranks the largest cities in the US on a composite of health behaviors, chronic diseases, and community infrastructure to give city leaders the necessary information. Engage: Inspire city leaders and residents to celebrate the factors that contribute to their city's culture of fitness. Build: Through tailored assistance and resources, expand local capacity and partnerships to implement changes to facilitate physically active lifestyles. The dichotomy between Cincinnati's health outcomes and community resources prompted the Anthem Foundation to invest in the Fitness Index technical assistance program to guide Cincinnati's Creating Healthy Communities Coalition (CHCC). Working with CHCC, ACSM's Fitness Index staff conducted a root cause analysis and surveyed local stakeholders to identify areas with the greatest need for improvement. The priority areas identified were then integrated into a strategic plan with a multi-sector approach.

Impact: The Fitness Index's tailored assistance helped initiate locally driven health improvement efforts and sparked community-wide impact. After working with the Fitness Index to establish a strategic plan, CCHD implemented local policies and initiatives to get residents physically active, eating healthy, and to stop smoking. While there is still work to be done, Cincinnati is making important improvements to the health and fitness of residents with the help of CCHD.

Learn more about at www.americanfitnessindex.org.

City of Cincinnati

How-To:

Making changes for a healthier, physically active city is similar to most improvement processes; however the Fitness Index encourages an emphasis on meaningful engagement of local residents early in the process of improving the places where they live, learn, work, and play.

- Build a team of local leaders, community based organizations, and residents.

- Using the ACSM American Fitness Index rankings as an assessment tool, share local strengths and areas of opportunity.

- Identify community priorities and create a plan to address areas of opportunity.

- Gather the necessary tools, resources, and community support. Find creative funding sources when traditional funding is unavailable.

- Implement the plan to make changes. Work toward policy and system changes when possible, but don't overlook community engagement through local programming.

- Review progress. Celebrate what went right, learn from what didn't, and then repeat the improvement process.

General Tips:

- Determine a decision-making process and stick with it when building a community coalition.

- Effective planning provides a clear focus; supports monitoring and assessment of results; facilitates new program development; and enables a coalition to work in an orderly and systematic way.

Funding: Foundations and Philanthropy, Federal Grants

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City of Cincinnati

Tags: Service Delivery Improvement, City Planning/ Development

Anthem Blue Cross Blue Shield (Anthem): Blue Triangle Housing Program (Blue Triangle)

Challenge: This program provides individuals experiencing homelessness with a temporary, safe, short term place to stay, while working to connect them with permanent, stable housing. The program also assisted the City of Indianapolis with relocating individuals who were displaced by the closing of a long-term homeless encampment previously situated on private property. By linking individuals experiencing homelessness with a full-service program to address not only health care needs, but other health and social determinants, the program seeks to lower costs for both partners, while improving the quality of life for Indianapolis residents. We anticipate the City will see reduced costs in the utilization of services, such as police, ambulance and jail. Anthem has already seen a reduction in the utilization of high-cost services, as individuals who are housed generally have more appropriate utilization of preventive care and success in accessing other necessary services to improve health outcomes. Additionally, many residents of the program have seen improved health and social outcomes; many have obtained connections to primary and behavioral health care as well as reconnected with family.

Description: Blue Triangle is a partnership between Anthem and the Indianapolis Mayor's Office. Anthem is the largest Medicaid Managed Care Organization (MCO) in the state of Indiana, with approximately 435,000 members. It is estimated some of these members are experiencing homelessness and due to limitations of living on the street, have uncontrolled health conditions, including mental health and substance use disorders. Mayor Joe Hogsett is committed to finding long-term, permanent housing for Indianapolis residents experiencing homelessness. The City used Housing Trust Fund money to pay housing costs, while Anthem provides access to healthcare, wrap-around and other navigation services.

Anthem and the City, partnered with Partners in Housing (PIH) to provide the physical dwelling for the program. PIH maintains the physical building location, but also assists program residents with finding placement in permanent housing. Anthem has also contracted with a local Community Mental Health Center, Adult and Child Health (A&C), to provide wrap-around services to participants. A&C have two full-time staff working to help connect residents to services and programs.

Impact: The Blue Triangle has provided a temporary safe haven for over 90 individuals in its first year of operation; with 25 people being connected to permanent housing and lifted out of homelessness. This has opened up availability of beds in shelters to serve additional individuals, reduced utilization of city services including crisis response, and helped streamline Indianapolis' Continuum of Care (CoC) process. Additionally, by helping program participants navigate health care and other social services, Blue Triangle participants have increased utilization of physical and behavioral health care, utilization of prescription drugs, substance use disorder treatment, and other supportive services such as transportation. Program participants have also been connected to other supportive services, such as employment. We are hoping the success of the program illustrates the need for the development of additional affordable and/or supportive housing as well as encourages the Medicaid program to more broadly cover tenancy and housing support services for Medicaid recipients. We are also hoping this may encourage other cities to develop programs of this nature as well.

How-To:

The initial concept for the program began with discussions between Anthem and PIH about finding a way to use their "Blue Triangle" property, which had some vacancy. While the idea was being discussed, PIH suggested it would be wise to engage the Mayor's Office. PIH had been in discussions with the Mayor's Office about using this property and thought it would be prudent to get all parties together. The partnership with the Mayor's Office turned out to be critical, as Anthem is not permitted to pay for housing with Medicaid funds; therefore funding from the City was essential to launch this program. Once all parties agreed, we worked to find an organization who had experience engaging with individuals experiencing homelessness and could provide wrap-around services and help navigate members to physical, behavioral and other care. A&C made a great partner as not only do they have experience with these functions already, but also have primary care and behavioral health clinic facilities in close proximity to Blue Triangle property.

To begin implementation of the program, including assigning roles and responsibilities, we had a day-long meeting with a large working group with representatives from Anthem, the City, PIH and A&C. We developed a list of outstanding items, a plan for identifying, engaging and moving residents into the property, and assigned tasks to all meeting participants. The group created a communication and referral plan to help spread the word about the program to community organizations and identify residents for the program. We established an implementation team with key people from each organization. We began holding daily meetings with the implementation team, culminating in an all-day meeting at the property the day before move-in.

General Tips: All the partners engaged in this program must have the same philosophy and approach to working with individuals experiencing homelessness. For example, the housing provider, wrap-around services provider, City and MCO, must all agree on the same fundamental principles—such as following the housing first model—and offering participants a choice in directing their housing and care plan. Even more important, the staff selected to administer the program must embody and practice these values in their day-to-day work with participants. It is critical to get agreement among all participants upfront.

Budget: $620,000

Funding: Private Financing, Indianapolis Housing Trust Fund

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Tags: Innovation, Public Health, Housing Placement

MuniServices LLC/Avenu: Hotel Tax Audit

Challenge: El Paso's nine auditors have responsibility to review every type of tax in the city, and they were only able to handle audits for two hotels per year.

Description: El Paso, Texas followed a program that increased compliance and more than doubled the amount of tax remitted from hotels.

Impact: Using a partnership model El Paso now audits more than 20 hotels per year.

How-To:

El Paso's partner Avenu 1) reviews ordinances to show areas needing updates 2) conduct on-site audits 3) review hotel reports on rents earned, guest folios and housekeeping 4) require monthly payments 5) train hotel staff on allowable exemptions 5) review permits and online data for discrepancies re: short-term rentals through sites such as VRBO

Budget: approximately $2000 per hotel

Funding: General Purpose City Funds

Before and after statistics for El Paso's hotel audit program

El Paso's challenge: 9 auditors to cover all tax types

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Tags: Service Delivery Improvement, Innovation, Environmental Impact, Impact on City Economy, Business Benefits

Bank of America: Bright Lights, Smart City

Challenge: The partnership with the City of Los Angeles included swapping out the old, power-hungry lights that gave the City a yellow-orange glow and replacing them with efficient LEDs the color of the full moon.

Description: Los Angeles has more than 180,000 street lights of which roughly 140,000 have been converted, with 40,000 remaining. The $105.5 million project was financed by Bank of America.

Impact: The $105.5 million loan will be paid back over the next 10 years. Due to the inherent efficiencies in LED lighting, the City is repaying the loans from the $10 million annually that it expects to save on electricity, and from $2 to $3 million in reduced maintenance costs. The LEDs also open up new possibilities for the burgeoning city, which is slated to host the 2028 Olympics. The light posts can now be used as critical communication devices, conveying weather data, CO2 levels – even enabling gunshot detection. The 140,000 streetlights from the conversion's first phase reduced energy usage by 63 percent and reduced carbon emissions by almost 50,000 metric tons a year. In the second phase of the project, the bureau retrofitted 400 different styles of decorative fixture. The financing, however, has been much simpler. In 2016, the bank gave the City a second loan for $26.4 million, and then in 2017 a third loan for $39.3 million. The only limits to the system's applications will be the imagination of city officials. The efficient lights, for example, will lighten the load on power circuits, which has allowed the City to install 82 curbside electric vehicle charging stations.

How-To:

Provided unique structure which allowed the City to finance the deal.

Budget: Bank of America provided $105.5 million in financing.

Funding: Private Financing

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Tags: Innovation, Cost Savings, Environmental Impact, Impact on City Economy

Best Buy Co.: Best Buy Investing in Houston's Post Hurricane Recovery

Challenge: In August 2018, Hurricane Harvey hit the greater Houston area, bringing unprecedented levels of flooding. Tens of thousands of people were displaced from their homes, with many losing everything.

Description: After meeting basic needs, communicating with family and friends, including internet access to begin the recovery process, is often the next essential. That's why we partnered with relief organizations in Houston, such as the Salvation Army and American Red Cross, to bring technology to those affected by Harvey. BEST Buy employees delivered 10,000 charging units to shelters. At one shelter, Geek Squad Agents set up a fully functional internet café. We also provided 50 iPads to the Salvation Army's mobile "canteen" trucks, which delivered food and Wi-Fi connectivity to people throughout the Houston area. Being displaced by a natural disaster is extremely stressful, so we also helped provide escape through entertainment. Geek Squad Agents set up entertainment centers in long-term shelters–complete with large-screen TVs, Blu-ray players and family friendly movies.

While we addressed our employees' immediate needs, and brought tech help to the community, we also knew the path to full recovery for the Houston community would be a long one. We made a $580,000 commitment to put technology and tech education programs into Houston schools and local community organizations that serve youth.

Impact: The hands-on help in Houston is happening in multiple ways, such as:

- A $160,000 donation to the Houston Independent School District (HISD) will bring a variety of new technology to Fleming Middle School, and helped 150 8th graders build their own Kano computers.

- In summer 2018, Houston will be home to two Geek Squad Academy camps, offering hundreds of teens free interactive experiences to spark students' passion for technology.

- A Best Buy Teen Tech Center will open in Houston this year in partnership with the Boys and Girls Clubs of Greater Houston. It's a place where teens will have access to state-of-the-art technology like 3-D printers, digital media, robotics and coding.

This total donation has enabled more than 5,000 students to receive high-tech education and training.

How-To:

Best Buy is committed to preparing 1 million teens from underserved communities for tech-reliant jobs each year by 2020. We will reach this goal both through our signature programs and national and local grants programs.

Geek Squad Academy partners with local nonprofits and other organizations to introduce students to the latest technology in a fun, interactive setting. Best Buy employees teach workshops on a variety of topics such as robotics, coding and digital music mixing. The program reaches nearly 10,000 students every year. Learn more or apply for one in your area at https://academy.geeksquad.com.

Best Buy Teen Tech Centers are free after-school programs that provide a creative learning environment where teens can explore, build confidence and gain employable skills through access to state-of-the-art technology such as 3-D printers, digital media, robotics and coding. Best Buy employees are engaged as mentors and volunteers. See where Best Buy Teen Tech Centers are located and learn more at https://corporate.bestbuy.com/teen-tech-centers.

Career Pathways is our newest signature program, designed to facilitate technology training and skills development for underserved teens in high demand fields such as cyber security, coding and IT support. The program starts with a structured training program and culminates in an internship at a local company to provide real-world experience. We partner with businesses to design curriculum and create meaningful placements so teens are prepared for a successful career.

Funding: Private Financing, Foundations and Philanthropy

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Tags: Tech Education

Black & Veatch: Black & Veatch Helps Enable DC Entry Into Electric Buses

Challenge: Ambitious investments such as mass deployment of public buses required deeply coordinated, committed partnerships among forward-thinking municipalities and other stakeholders, each appreciative of the buses' role in sustainability. Vital to Washington's entry into electrified mass transit was electric utility Pepco, an Exelon Corp. subsidiary, which placed high priority on powering the charging infrastructure. Each electric bus was provided with a Proterra-provided 50kw charger.

Description: Cities across the United States want to reduce greenhouse gas emissions while saving money on the maintenance of their mass transit systems, and the solution gaining momentum is electric buses. Consider Washington, D.C., the latest U.S. city to roll out battery-powered buses after reimagining how to sustainably move people across urban landscapes and experience the benefits of clean transportation – both on and off the bus. The DC Circulator transit agency's May 2018 deployment of 14 battery-powered Proterra Catalyst E2 buses – at the time, one of the nation's most visible electric bus fleets – required relationships between diverse public and private stakeholders, keyed by administrators of the District of Columbia's Department of Transportation and its DC Circulator agency. Proterra enlisted Black & Veatch to build the charging infrastructure for the new buses, with power supplied by regional electric utility Pepco.

Impact: Electrified mass transit immediately raises quality of life, given that battery-powered buses essentially are silent during vehicle idling and give off no emissions, contributing to cleaner air. Powered entirely by high-capacity batteries and expected to serve millions of riders each year, Washington's 14 electric buses eliminate a projected 244,000 pounds of CO_2 emission each year. Taxpayers benefit because those buses will cut the fleet's fuel and maintenance bills by more than $6 million over the vehicles' typical 12-year life cycle because electric vehicles present fewer opportunities to fail mechanically than their diesel or hybrid counterparts. The buses also will displace nearly 90,000 gallons of diesel fuel annually. While pressing that "a growing city needs growing transportation options," District of Columbia Mayor Muriel Bowser shared that "with this greener, more modern fleet of buses on the road, we are building a safer, stronger and more sustainable DC."

How-To:

As cities increasingly prize electrified mass transit – more than 850 battery-powered municipal buses are on order, with active proposals for hundreds more – one maxim prevails: Begin planning now. Such high-power projects require months and, at times, years to plan and ultimately construct the required infrastructure, including interconnection with the power grid. Project schedules and lead times may be affected by the project's scale and may encompass plans to charge the buses at the depot or along the routes. Fleet managers focus on total cost of ownership considering both the capital and operational impact of charging facilities needed to dispense electricity as their new fuel. And according to Black & Veatch's 2018 Strategic Directions: Smart Cities & Utilities Report survey, more than half of smart services providers said the need for charging infrastructure was the most prohibitive barrier to large-scale electric fleet adoption. Municipalities also must appreciate that the engineering and design stage is highly dependent upon the local utility's engagement, their design approval processes and the availability of sufficient detail for the utility design to be finalized. Agencies and cities thinking about electrifying their fleets need to plan now, understanding that transit agencies that don't electrify will be polluting more with and spending more on their legacy fleets.

Funding: General Purpose City Funds

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Tags: Service Delivery Improvement, Innovation, Cost Savings, Environmental Impact, Impact on City Economy

Boston University Initiative on Cities: Engaging Youth: An Evaluation of Youth Lead the Change: Participatory Budgeting Boston

Challenge: Cities are often searching for new ways to engage young people in civic life. Research shows that involving youth in community processes, whether in school or local government, can increase their civic interests and social skills, and improve the likelihood that a young person votes later in life. But meaningful youth civic engagement requires interested adults, careful program design and the inclusion of diverse youth populations.

In 2013, Boston became the first city in the U.S. to create a youth-led participatory budgeting process, *Youth Lead the Change*. Each year, young people between the ages of 12 and 25 determine how to spend one million dollars of the city's capital budget. The program enjoyed tremendous early success and won a City Livability Award from the US Conference of Mayors in 2015.

As the program matured, the City was interested in documenting its process and evaluating areas for improvement. A team from Boston University was enlisted to conduct a rigorous program evaluation based on interviews with Mayor's Youth Council members, observation of Council meetings, focus groups with *Youth Lead the Change* Subcommittee "Change Agents", and analysis of submitted and balloted ideas. The intent was to identify opportunities for improvement in the pre-planning, idea collection, proposal development and voting stages, and to understand what the process revealed about the needs and priorities of Boston youth.

Description: *Youth Lead the Change* allows young people not only to vote on how to spend the funds, but also enables youth to play a role in identifying and shaping particular projects to propose for voting, via the Mayor's Youth Council. In Boston, the Mayor's Youth Council is comprised of mayoral-appointed youth delegates from neighborhoods citywide. As part of *Youth Lead the Change*, young people from across the city are asked to suggest ideas for capital projects that will bring long-term physical improvements to parks, streets, schools, and neighborhoods on city-owned property. Youth volunteers, called Change Agents, review submitted ideas for feasibility, community need, and community impact. They may visit sites where particular projects are proposed, and meet with City Departments, staff and experts who provide feedback on project eligibility and cost. Change Agents then turn the ideas into concrete infrastructure projects, with associated price tags, for the ballot. The final proposed projects need to benefit the public, cost at least $25,000, and have a lifespan of at least five years. Young people from throughout Boston vote on their top priorities for funding. Voting is held primarily at schools and public assemblies over several days, as well as at voting stations in public places, and through digital ballots.

Impact: Project Goals for *Youth Lead the Change* included:

1) Increase Youth Power 2) Allow All Voices to Be Heard 3) Build Stronger, Safer, and Healthier Communities 4) Strengthen City-wide Sense of Pride, Solidarity, and Equality 5) Pathways into Civic Life

Findings from the program evaluation show that the process generated great enthusiasm from Boston's youth. Change Agents reported a stronger appreciation for how city government works and valued the involvement of the Mayor and other city officials. Youth were enthusiastic about "making a difference" and perceived success in outreach to previously underserved communities, such as homeless youth and criminally and justice involved youth. In the year of study, 718 ideas were submitted during idea collection and winnowed to ten projects for the ballot. Nearly 4,500 votes were cast by youth in the voting stage. Of the 70% of voters who attend Boston Public Schools, 56% were female and there was strong racial diversity including White (26%), Black (26%), Hispanic (27%) and Asian (19%) youth.

While the participatory budgeting process appeared successful in terms of youth involvement, ideas generated and total votes, youth participants identified some areas in need of improvement, including maintaining member engagement and employing a targeted recruitment strategy.

How-To:

The analyses included in the report are based on a number of original data sets and sources, including a nationally representative survey of American mayors, network membership rolls, interviews with network representatives, and supplemental information from online sources.

In addition to reviewing publicly available documents and information, interviews or written exchanges were conducted with senior staff of the networks in an attempt to understand their origins, gauge key points of difference and ultimately create robust, comparative definitions of the organizations' missions and activities. To better understand their relationships to one another and assess relative visibility, additional analyses were conducted on the interconnectivity among the networks as well as their share of voice in online media.

A first of its kind city data set was developed to evaluate the network memberships of all US cities with populations over 75,000 and examine links between joining behavior and relevant city traits, such as city size and resident voting behavior. That data set, comprising 468 cities, also incorporates findings from the 2017 Menino Survey of Mayors.

The annual Menino Survey of Mayors explores a mix of timely urban issues and challenges, and includes both closed and open-ended questions. The 2017 Survey is based on interviews with a representative sample of 115 US mayors leading cities with populations over 75,000. Among other topics, mayors were asked about their views on city-to-city networks.

The full report is available at **www.surveyofmayors.com**

General Tips: The full report, *Youth Lead the Change: Participatory Budgeting Boston 2016*, is available at http://www.bu.edu/ioc/research/faculty-publications/. A corresponding academic research paper, *"She treated us like we bring valid ideas to the table:" Youth experiences of a youth-led participatory budgeting process,* was published in CHILDREN AND YOUTH SERVICES REVIEW in May, 2017.

New Report: Cities Joining Ranks—Policy Networks on the Rise

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Tags: Research

CGI Communications, Inc.: The Community Showcase Video Program

Challenge: Waterloo, the seat of Black Hawk County, IA, has a population of just under 68,000 people. Like many cities nationwide, Waterloo was looking for new ways to market and promote their community. However, budget restrictions can make this a challenge.

Designated by the State of Iowa as a "great place", Waterloo is a city eager to share its small town charm and beautiful surroundings with the rest of America, and the Community Showcase Video Program was the perfect vehicle to accomplish that.

Description: CGI Communications, Inc. works in partnership with the United States Conference of Mayors and over 3,000 communities nationwide. Every municipality is unique and it's CGI's mission to showcase this in a way that is affordable. Now, when we say affordable – we mean free to your city.

Over the past 30 years, we've learned the importance of public and private partnerships and Tom Cochran, CEO and Executive Director of the United States Conference of Mayors said it best, "Mayors and business leaders agree that creative public/private partnerships are a major force in shaping cities of the 21st century and experience has shown that when businesses and local governments work together, our cities benefit and our nation is stronger."

Local businesses are able to gain exposure to potential new clients by becoming a sponsor on their community's program. Streaming video content, online reputation management services, and search engine optimization are just a few examples of the services they can take advantage of. With an easily viewable interface on the official city website, this video program will encourage viewers to not only learn more about the area, but also the businesses supporting the program.

Impact: CGI Communications, Inc. was able to further enhance community and business awareness, expose Waterloo's hidden gems, and welcome new families and tourists without the city ever receiving an invoice. They created a series of eight videos for the city highlighting quality of life, economic development, business and industry, things to do, education, downtown, local attractions, parks and recreation, and community organizations. The program also offers cities the opportunity to enhance their website through various digital media tools.

With over 60,000 views in 2017 alone, the Community Showcase Video Program has allowed future residents and visitors the ability to walk through Waterloo without ever stepping foot in the city.

How-To:

With just over 300 employees, we provide the video production services your community would need to make a lasting first impression with high-definition and aerial content. From script writing, story-boarding, filming, editing, background music and voice-overs, communities get the opportunity to showcase their best assets and attributes.

By partnering with CGI Communications, Inc. we will work hand in hand with your city to provide you the best possible experience with the highest quality of video to make your website a destination.

Budget: It's FREE for municipalities!

Funding: Private Financing, Business sponsorships

Waterloo's custom Video Tour button featured on their city's official homepage.

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Tags: Cost Savings, Increased Tourism, Business Benefits

Waterloo's video interface with local business participants featured.

Citi (Citi Community Development): Earned Income Tax Credit Awareness

Challenge: For many low-income households, tax refunds such as the Earned Income Tax Credit (EITC) are the largest lump-sum payment they receive all year, making tax season a key opportunity to pay down debt, save money and start to build assets for a secure financial future. In California, eligible filers may qualify for approximately $9,000 in cash back through the State and Federal Earned Income Tax Credit (EITC). 2.9 million tax filers received $6.8 billion in credits in the state in 2017.

But only four out of five eligible workers claim their EITC – and many who do are paying hundreds of dollars to file instead of using free tax preparation services provided through the Volunteer Income Tax Assistance (VITA) program. Each year California residents leave approximately $2 billion in tax credits on the table, with one of the nation's lowest rates for filing for the credit. Los Angeles is home to 30% of California's population and nearly 60% of its residents are eligible EITC filers. In Los Angeles County, eligible workers miss out on $580 million in unclaimed credits.

Description: In 2018 for the second year, Citi Community Development invested in a collaboration to expand awareness, accessibility and capacity of Volunteer Income Tax Assistance (VITA) sites and the Earned Income Tax Credit (EITC) in Los Angeles.

The Free Tax Prep Los Angeles campaign is a public-private collaboration led by the City of Los Angeles Housing + Community Investment Department (HCIDLA), in partnership with the Los Angeles County Department of Consumer and Business Affairs (DCBA), Citi Community Development, Youth Policy Institute (YPI), Koreatown Youth + Community Center (KYCC), and the United Way of Greater Los Angeles.

As the most comprehensive EITC public awareness and outreach effort in City and County history, Free Tax Prep Los Angeles empowers hard working families with the tools and services they need to build a stronger financial future. In the City of LA, the initiative leverages the City's network fo 16 FamilySource Centers to assist families with claiming their refunds. For more information about this campaign, please visit www.FreeTaxPrepLA.com

Impact: As a result of multi-sector collaboration, the City, County, and nonprofit VITA preparers were able to implement a modular, unified brand identity that links several partners together as a coherent nonprofit network and improves overall recognition of VITA services. Last year, more than 100,000 Los Angeles County residents were served through the campaign.

How-To:

- When applicable, ensure that City and County governments collaborate on EITC and VITA campaigns to ensure consistent approach.

- Create a clear, modular, unified Free Tax Prep brand that standardizes efforts across the City, establishes the high quality and professionalism of the service, and accommodates the branding of nonprofit VITA service providers.

- Harness this brand to create standard marketing materials across the City, including but not limited to: subway ads, bus shelter ads, newspaper ads, radio spots, flyers, posters, and TV commercials.

- Create a landing page that leverages the unified branding for use as clear call to action in all marketing materials.

- Translate ads to languages prevalent in the region, matching language to respective neighborhoods and transit patterns.

- Leverage nonprofit networks that have capabilities to provide tax preparation services.

- If the city ultizes a financial empowerment center model, leverage those spaces to provide free tax preparation services.

- Expand awareness by hosting highly visible tax preparation events and promoting via ongoing social media campaigns, press releases and media coverage.

Funding: Private Financing

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Tags: Service Delivery Improvement, Innovation, Impact on City Economy

Comcast: Comcast's machineQ Deploys Smart City Solution in Philly Holiday Hotspots

Challenge: During the holiday season, many cities get into the holiday spirit and organize activities to celebrate with residents and visitors. In Philadelphia, two of the holiday hotspots were just a few blocks from Comcast's offices in Center City – City Hall's Dilworth Plaza, with a giant Christmas tree, and the Christmas Village at LOVE Park. Visitors enjoyed both attractions from morning well into the evening, and with the sun setting earlier and earlier with each passing winter day, the City of Philadelphia's Streets Department wanted to make sure these areas were well lit, as well as ensure appropriate lighting levels, better gauge energy consumption, and respond more quickly to power outages. Comcast worked with the City to install a smart lighting solution leveraging an Internet of Things (IoT) service that allowed the City to address the specific lighting needs for the 2017 holiday season and into 2018.

Description: Comcast's industrial Internet of Things (IoT) service, machineQ, uses a LoRaWAN™ network, a global communications standard similar to cellular or Bluetooth, but one that uses significantly less power and is specifically designed to wirelessly deliver small amounts of data over larger geographical areas. B2B solution providers, like smart lighting provider Flashnet, integrate Comcast's machineQ technology into their IoT devices. Data gathered by these devices is then wirelessly transmitted to end users – like the Philadelphia Streets Department – using machineQ's network. In Philadelphia, this turnkey street lighting solution has the capability to easily be scaled to stretch across an entire metropolitan area. And the network can be used for many other IoT devices that monitor soil moisture, leak detection, parking, water metering, pest control, and garbage collection, to name a few.

Impact: According to Richard Montanex, Deputy Streets Commissioner for Transportation, "The MachineQ smart lighting system has added so much to the festive mood around City Hall this holiday season, but the capabilities give us other huge benefits: we can ensure appropriate lighting levels, better gauge energy consumption, and respond more quickly to power outages. It's a great way to ring in the New Year."

How-To:

The project uses the LoRaWAN™ network the machineQ team installed in Philadelphia. Comcast worked with Flashnet, a supplier of industrial lighting controls and management systems, to attach controllers to the streetlights. The streetlight controllers send and receive data over the LoRaWAN network to the Streets Department, enabling City officials to remotely turn lights on and off, set energy-saving dimming schedules, monitor energy consumption, and proactively manage outages.

General Tips: From streetlights and road signs, to critical underground infrastructure, LoRaWAN networks like the one Comcast built in Philadelphia are an effective and cost-efficient way for forward-thinking municipalities to meet their smart city objectives. To provide two case study examples, Neptune – a Software and hardware provider to the water industry, serving more than 4,000 utilities across North America - leverages machineQ's IoT network to provide a connectivity solution to help water utilities boost efficiencies and accelerate sustainability efforts at the best possible total cost of ownership.

Second is Pansofik which provides cost-effective, digital solutions to help SMBs and city building/MDU owners integrate IoT and data analytics within their organizations. Leveraging its cost-effective and easy-to-deploy IoT sensors, the machineQ platform, and LoRaWAN™ networking technology, the company has created a broad suite of environmental and energy monitoring solutions that delivers enterprise-level security, service, and availability at a price point previously unattainable using existing systems. The full list of IoT case studies is at machineQ.com.

Budget: This was a pilot program using existing machineQ infrastructure in the City and Flashnet devices provided on a complimentary basis.

Developer using the lighting control system

City Streetlights with Flashnet Controller on Top

Philadelphia's City Hall Tree Lighting

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Tags: Smart City/IoT Tech

Dog Parker: Dog Parker Pilot in Brooklyn, 2017

Challenge: Currently, there are more dogs than children living in NYC and 97% of dog owners consider them to be family members. Meanwhile, 57% of retail establishments are legally prohibited from allowing dogs inside. This leaves dog owners with limited options like tying their dogs up outside, but unfortunately, dogs are stolen or get loose while pedestrians get scared or bitten. Some leave their dogs in cars, but as laws acknowledge, dogs can and do die in cars. Others leave their dogs at home and subject their pets to their own busy schedules resulting in a lack of exercise, stimulation, and bonding. Due to these circumstances, retailers suffer because of the loss of traffic as many dog owners end up all together avoiding stores that do not allow their dog out of necessity. Further, research shows that dogs facilitate more community interaction than church or children, allowing neighbors a free and easy way to interact and connect. With the inability to bring dogs on walks this community connection gets lost. Dog Parker has provided a solution to this challenge with our smart dog houses.

Description: Dog Parkers are pay-per-use dog houses that sit outside of stores that do not allow dogs inside. We establish partnerships with local retailers and/or cities to provide this service to communities that are seeking innovative ways to be dog friendly. We strategically work with our partners to find the perfect locations for the placement of Dog Parker. A priority of our partnership is to operate with respect to local priorities like economic growth and innovation as well as preservation and safety. We also offer opportunities like revenue share and sponsorship. Our services to the city or retailer are all-inclusive, we provide daily maintenance, liability insurance, and 24/7 customer service.

Our primary goal is to make cities better places to have a dog and be a dog. We offer business owners an avenue to be dog friendly without circumventing public safety considerations. This ultimately transforms cities by supporting brick and mortar shopping, encouraging walkable communities, and adding to the joy of the many urban citizens who have invited furry family members into their homes and lives.

Impact: Dog Parker piloted our innovative pet amenity concept in Brooklyn, NY for the duration of 2017. During this time, membership grew to 1,000 members, growing month-over-month at 23%. Sessions averaged 15 minutes and total usage was 52,000 minutes. We supported a network of 45 houses and the impact of Dog Parker was measurable. Consumer behavior shifted – 48% switched stores in favor of those near Dog Parkers and 63% stayed longer in stores because their dog was safe in a Dog Parker while they shopped.

For dog owners, Dog Parker offered the convenience of a leash hook without danger to the animal and the ability to take dogs with them without neglecting dogs' needs. Cities accommodated their dog owning residents by providing a safe and innovative way for them to enjoy their community with their dog. For local business owners, Dog Parker offered a liability-free way to accommodate customers who are joined by their dogs, a powerful differentiation from competitors, and a draw for customers to patronize brick and mortar retail instead using online shopping services.

Dog friendly cities.

A safe spot for your dog to wait.

How-To:

The responsibilities of the city are minimal. We ask that the city helps Dog Parker with the following:

- Written letter of invitation from the office of the Mayor
- An initial meeting whether in person or on the phone to discuss city regulations and any other pertinent issues with bringing Dog Parker to public or private properties
- Introductions to any individuals or departments that we will need to collaborate with to make Dog Parker a benefit to the community

Dog Parker manages every other aspect of research, relationship development, deployment and operations. We cover everything from:

- Location scouting and business partnerships
- Community partnerships including animal societies, rescue organizations, veterinarians, and pet store owners
- Pre-launch events and demonstrations
- Press and promotion
- Community mobilization and education
- Delivery, installation, training, and maintenance of the house

General Tips: Dog Parker ensures at every level of local government we have not only a "green light" to operate in a city but an enthusiastic invitation from leadership. We begin by obtaining a written letter of invitation from a city's mayor. We then work with City Hall and appropriate urban planning departments at the government level to understand regulatory issues and the city's unique needs and obstacles to this innovation. Once those barriers become known, we address them prior to deployment.

Budget: Dog Parker's business model provides the Dog Parker service FREE to the city. There is also an opportunity for revenue share with either the city or the retailer. Additionally, Dog Parker maintains and services the houses as part of the program.

Funding: Private Financing, At the time of launch, Dog Parker received a small initial grant from the city of New York, through the New York City Economic Development Corporation (NYCEDC). The program is devoted to supporting urban innovations and technology based.

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Tags: Innovation, Impact on City Economy, Business Benefits, Dog Friendly Communities

EDI: Partnering with Palm Beach County Water Utility, Palm Beach, FL to Assess, Develop & Implement an Enterprise Asset Management Program

Challenge: Re-engineer Business Processes, Extend Asset Lifecycles, Track Costs at the Asset Level

While the Palm Beach County Water Utility has completed multiple major capital improvement projects, they were still missing visibility into the lifecycle and costs of their assets. They required a solution to improve tracking of all maintenance work and to extend asset lifecycles. After years of using a Work Management System with the addition a homegrown solution, the Utility required a more robust Enterprise Asset Management Platform (EAM). A Solution that would support Advanced Asset Management, including Reliability Centered, Predictive and Prescriptive Maintenance. The business processes assessment documented informational gaps and opportunities for improvement. The Water Utility worked with EDI to implement a system utilizing industry best practices which supports predictive and prescriptive based maintenance and minimizes organizational risk.

Description: Partnering with Palm Beach County Water Utility, Palm Beach, FL to Assess, Develop and Implement an Enterprise Asset Management Program

The Palm Beach County Water Utility, servicing the Florida Suncoast with more than 2.3 Million residents was formally created in 1998. The newly created Utility currently operates as a wholesaler to three neighboring counties and multiple other municipalities. The Water Utility has a diverse collection of plants and assets spread across three counties. These include water treatment, desalination, well fields, and the Bill Young 15.5-billion-gallon water reservoir. The Utility has operated on multiple disparate enterprise systems such as GIS, ERP, Document Repository, and a Second Tier Work Management system that lacked the required function and ROI desired by the Organization. Palm Beach County Water Utility Management was seeking timely information to make financial and organizational decisions

Impact: EDI and Palm Beach County Water Utility reviewed the current and future processes of the Utility and identified opportunities for predicative asset management. The Team provided several critical improvements for lifecycle tracking as well as resource and asset performance indicators. EDI mapped these essential processes to the Maximo Enterprise Asset Management Program and shared information throughout the organization to ensure early user adoption. Bringing together the team of experts, EDI facilitated workshops to identify and quantify Organizational Change Management initiatives.

How-To:

EDI identified metrics allowing the Water Utility to track and report all Maintenance and Operations activities at the Asset Level. This determines future customer rates and provides justification based on detailed, reportable, operating costs. EDI's asset hierarchy provides the Utility with powerful planning and scheduling by utilizing direct and indirect asset system connections throughout the Utility as well as longevity of items and the deterioration of assets. Integration to Enterprise Resource Planning (ERP) and Geographical Information Systems (GIS) provides powerful inventory controls, PO tracking, and Route planning. This project put the Water Utility on the cutting edge of ISO 55001.

The Enterprise Asset Management Solution implemented best industry practice business flows for implementation and subsequent information. Improved business flows, integration with other enterprise systems and targeted metrics provide an enterprise view of the Utilities' assets and service delivery. This allows for educated financial decisions and operational initiatives through the availability of information

Understanding and documenting the success factors at the beginning of the project provides a sustainable framework. Enterprise Asset Management (EAM) is the foundation for Smart City initiatives and is critical for understanding historical and current information before planning infrastructure projects. Connecting other systems such as an Enterprise Resource Planning (ERP), a Geographical Information System (GIS) and a Customer Information System (CIS) will provide improved decision-making for future planning and operations. Citizens will experience improved quality of life through planned proactive City services.

General Tips: The goal of Smart Cities and Smart Services is to provide information that will lead to sustainable city services supporting economic development objectives. Intelligent technologies when utilized to collect actionable information will enable services to be delivered, supporting effective City projects, aiding job growth and attracting new businesses and residents.

Budget: $500K - $1M+ dependent on Scope

Palm Beach County Aeration Facility

EDI – Enterprise Asset Management Value Pyramid

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Tags: Service Delivery Improvement, Innovation, Cost Savings, Environmental Impact, Impact on City Economy, Business Benefits

HDR: Division 14 Rail Operations and Maintenance Facility

Challenge: Faced with a tight site and keen community interest, the team designed a facility that not only delivers the functional and operational requirements Metro needs, but also a facility the community embraces as a good neighbor. Key to this success was collaboration, both within the team and with the community. The design team, Metro, the City of Santa Monica and the Expo Construction Authority worked together to ensure the design addressed community interest in noise, vibration, safety and aesthetics.

Using modern, inclusive design practices that addressed community concerns regarding noise and increased rail traffic, the team ensured that innovative techniques such as providing sound mitigating noise walls and a buffer space that is now being utilized as a thriving community park, created a facility that not only was shaped by the community needs, but helps shape the community itself.

Description: The facility site serves the Expo line, which now provides rail service from downtown Los Angeles to Santa Monica, a popular route for residents and visitors wishing to visit Santa Monica or spend a day at the beach. By allowing effective, efficient travel from downtown Los Angeles to the beach, the new Expo line has proved a positive change, shaping the physical and psychological landscape of Southern California.

Noted as one of the most ambitious rail extensions in the country, the Expo line was a major point of growth for LA Metro and the Division 14 facility was a major lynchpin in that development. With the Expo line expansion, LA Metro hit a major milestone by providing rail service from Los Angeles to downtown Santa Monica (and the beach) for the first time in over 50 years. Estimates have shown that the Expo line ridership for this leg has exceeded expectations with approximately 1.5 million passengers per month.

The Division 14 Rail Operations and Maintenance Facility ensures that the agency has been able to effectively service the railcars for this incredibly popular rail line.

Impact: A historically diverse neighborhood, the surrounding community was sensitive to the social and economic impact such a project might have on the area. The site had previously housed a parking lot and several dilapidated warehouses, and neighbors did not want to see more of the same or feel the impact from increased rail traffic. The community had expressed a desire for cultural and natural diversity, and wished for the project to incorporate these elements:

- Aesthetics which create a visually-pleasing facility
- Screening adjacent to sensitive receptors, which provides both visual separation and safety/security
- Placement and orientation of buildings and equipment, including PA speakers, the TPSS, and the facility's generator to minimize impact to adjacent areas
- Space for a buffer park to minimize visual and sound impact and provide a community amenity

LA Metro Facility Exterior

How-To:
Santa Monica residents and businesses were integral in helping determine the design of the facility through a collaborative effort with the design team. A series of community workshops were conducted, where we met with the community and invited input before putting pencil to paper, then held internal design charrettes to come up with a series of designs.

These designs were presented at a second community meeting and input from that meeting was incorporated into the future designs. This was an iterative approach.

Located just outside the facility, the 2.35 acre park space was designed as a buffer between the facility and the adjoining neighborhood. The extended space for the park allows the park to stretch the length of the facility and serve the entire neighborhood. Community needs were met, neighborhood residents were inspired by the project, and the surrounding area had a natural and communal space that highlights the facility design itself.

Sustainability was a key concern as well. The facility achieved Gold-NC LEED certification and net-zero energy status. Passive strategies such as harvesting daylight to reduce electrical demands and using the mild Southern California climate to help reduce mechanical demand were combined with innovative design strategies for water, energy use and ventilation.

General Tips: The site where Division 14 stands came with some limitations that made designing the buildings a challenge. While there are 9.7 acres of space, the site is narrow, requiring a unique solution of overlapping some of the building spaces over the rail yard and maintenance area. The moment frames that span over two train tracks are 34 feet long, and the main hallway hangs over a part of the maintenance area, using space as efficiently as possible.

The typology of a rail maintenance facility requires tall, unimpeded bags in the direction of train travel to accommodate the OCS and pantograph while still meeting the seismic requirements of southern California. To account for this, open span moment frames allowing train travel were used in the north/south direction in combination with brace frames in the other direction.

The control suite, which serves as the heart and brain of the facility needed exceptional visibility of the site, the two lead tracks to the main line, and the other remote buildings. To address that need, the team designed this particular room to cantilever out from the north elevation to provide views to both sides of the yard.

Budget: $115,982,425.00

Funding: LA Metro

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Tags: Service Delivery Improvement, Innovation, Cost Savings, Environmental Impact, Impact on City Economy, Increased Tourism, Business Benefits

Philips: BMORE Bright: A City Partnership

Challenge: In 1817, Baltimore was the first city in the country to illuminate its streets with hydrogen gas lamps. Fast forward to today and you'll see how Mayor Pugh leads the country again. The mayor recognized the opportunity to make the city brighter, safer and smarter by using its street lighting infrastructure as an asset. Lighting can better serve city residents by creating light equity, service response time, energy and cost savings and by creating a greater sense of safety.

Though the Bmore Bright Program, the City is converting current streetlight fixtures to LED and adding thousands of lights to brighten dark areas providing better lighting for ALL residents. With the assistance of the Philips R&D team, the city was able to cross reference its 311 data regarding light outages, crime and traffic incidents with information about its street lighting infrastructure. This activity helped to confirm priority areas for lighting upgrades.

The connected lighting pilot will further explore how the City could monitor and manage its lighting assets, monitor energy usage, cost savings while improving nighttime safety around entertainment districts and improve response for light outages.

Description: In support of Mayor Pugh's commitment to public safety and improving the quality of life throughout the city, she partnered with Baltimore Gas and Electric and Philips Lighting on a connected lighting pilot.

The connected lighting pilot involves the installation of Philips City Touch "nodes" on 20 city owned streetlights in a downtown entertainment district. The nodes can wirelessly dim or brighten the lights to save energy, support nightlife activities and public safety. The remote dimming capacity allows for the city to provide comfortable and safe lighting levels.

The nodes also monitor energy consumption and provide data about the street lighting infrastructure. The city will know exactly how much money and energy it is saving. Additionally, city is also excited about how the pilot will assist in measuring impact on their sustainability goals. The LED lights last 15 years longer than existing lights and can reduce maintenance costs by 60%.

Lastly, the connected lighting pilot will support the mayor's goal of greater accountability and transparency in city operations. The lighting system will now be able to self-report outages or other issues with the streetlights.

Impact: The pilot is only one part of the continued collaboration between the unique partnership between the city, the utility, the police department and citizens.

Not only is the pilot demonstrating energy cost savings upwards of 50% but it demonstrates the ability for improved response time to light outages or streetlight issues down to 24 hours.

Lastly, the pilot is revealing unique opportunities to assist in crowd control after night time events as well as the opportunity to better collaborate with public safety officers using light levels to facilitate safer environments.

How-To:

1. Identify pilot project team (City, Department of Transportation, Utility, Philips Lighting, etc.)

2. Discuss and finalize goals for the pilot

3. Determine Pilot Location(s)

4. Provide LED specification information to connected lighting equipment provider

5. Install connected lighting control nodes (five minute "plug and play" installation process)

6. Schedule training

7. Schedule ongoing check in calls and workshops

8. Analyze data

9. Finalize outcomes and results

10. Identify connected lighting implementation next steps

General Tips: One of the key ingredients to the success of the project was the time invested between the stakeholders, the mayor's office, the Baltimore City Department of Transportation, Baltimore Gas and Electric and Philips Lighting.

Budget: The pilot was offered at no charge to the city for a period of four months.

Baltimore's Hippodrome

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Tags: Service Delivery Improvement, Innovation, Cost Savings, Environmental Impact, Impact on City Economy, Jobs Created, Increased Tourism, Business Benefits

Philips Lighting Connector Node

Siemens Corporation: City Landfill Transformed Into Renewable Energy Showcase

Challenge: In the midst of an economic comeback, the city of Lake Worth, Florida, built a renewable energy station on top of what used to be a landfill. This 2-megawatt solar farm is one step in a much larger plan to revitalize the area, both aesthetically and economically.

Description: The City of Lake Worth has a long tradition of environmental responsibility, water conservation, power efficiency and customer concern. As part of that tradition, the City is working to improve the safety, reliability, efficiency and environmental sensitivity of City infrastructure.

Lake Worth strives to be a national leader in municipal renewable energy and only the 3rd city in Florida to construct a solar farm.

Impact: While a few Florida cities, such as Jacksonville and Orlando, are buying solar power, Lake Worth is the state's first municipality to own and operate a solar farm. The solar farm currently generates approximately 2 percent of the city's load – enough to power more than 230 homes per year and reduce carbon dioxide emissions by more than 4 million pounds, or the equivalent of taking 445 cars off the road. The longer term plan is to expand the site to generate 10 megawatts of solar energy which would in turn provide as much as 15 percent of the city's energy needs.

Mayor Triolo Participates in Solar Farm Ribbon Cutting

Solar farm atop Lake Worth landfill

How-To:

Following a solicitation process, the City selected Siemens as their Energy Savings Performance Contracting partner

• Working with the City team, a local civil engineering, and a South Florida solar firm, the Siemens' team explored both the technical and financial feasibility of installing solar on the approximate 60 acre landfill site that had been closed/capped for several years and was considered unusable as well as an "eye sore" for local residents.

• Identified funding through the Siemens performance contract for 2MW of solar (no City funds were required)

• Due to restrictions to any penetrations into the landfill's cap, a ballasted solar design was developed that would not only eliminate the need to penetrate the cap, but also withstand Florida's hurricane-force winds

• Following design, implementation began on the 2MW system. Approximately 5 acres (of the landfill's 60+ acres) were used for this design

• Once the solar panels were constructed, the interconnect (transformers) was installed to allow direct feed into the City's electric grid system

• Today, approximately 250 of Lake Worth's homes are powered with the City's renewable energy

Funding: Siemens Energy Service Performance Contract, utilizing a 3rd Party Tax—exempt municipal lease

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Tags: Innovation, Cost Savings, Environmental Impact, Impact on City Economy, Business Benefits

Socrata: How LA Is Growing and Managing Its New Cannabis Industry

Challenge: In January of 2018, the City of LA launched a new endeavor: legal, recreational cannabis sales. In this 500-square mile area hosting nearly 400 million people, staff from 30 different departments and the Office of Mayor Eric Garcetti are working together to determine how they will manage and monitor this multi-million dollar industry. In just a few months, legal cannabis sales tax revenues topped $3 million and are expected to grow further as more shops take foot.

But, what about these shops? Are they unlicensed, selling to minors, allowing onsite consumption? The Business Experience Unit at the LA City Office of Finance, namely Vikram Jadhav and Juan Vasquez, has taken on a request by Mayor Garcetti to approach cannabis sales operations in a very practical way. Jadhav and Vasquez, with the support of the City's IT Agency, are taking complaints - from activists, neighbors to shops, and anyone who feels impacted. And, as about 60 complaints arrive per day, the Business Experience Unit leads a cross-departmental effort to collect and triage them into a dashboard that informs the public complaint portal, and more importantly, the city's route to stability in this new venture.

Description: The complaints database is helping chip away at a number of policy questions. Everyday citizens and activists can email the Department of Cannabis Regulation with their complaints which go into a Google form. The data from that form feeds a Socrata dataset which in turn feeds a Datalens dashboard. The team is in the final stages of configuring a formal complaint management system to triage complaints to different departments, such as LAPD, LAFD, Building and Safety, and Finance. Vasquez says that the movement of the complaints is already helping a very complex city structure determine the sort of workflows that will allow the industry to be regulated but also thrive. Mayor Garcetti wanted this complaint portal to ensure that every department involved is a collaborative partner and understands its role.

For example, cultivation of cannabis is a legal activity when licensed. If the Department of Water and Power sees a sudden spike in usage, perhaps a quadrupaling, that can indicate a grow operation, which can inform other public agencies to follow-up to make sure the operation is licensed.

Impact:

- The city has identified most common complaints, such as the consumption of cannabis by customers outside of storefronts, selling to minors, operating without a license, and operating outside of normal business hours.

- The common complaints have helped working groups - including about 30 city departments as well as neighborhood councils, the Mayor's Office, advocates, and activists - get smarter about what sort of workflows and policies need to be established in the coming months and years.

- The dashboard insights are helping the team understand how to get unlicensed businesses licensed, how to reduce criminal activity, and which departments need to be involved in which issues.

- LA's government is determining how to regulate the industry so that it can come out from underground. Too heavy of taxes and licensing fees could keep cannabis businesses in the informal economy and operating illegally.

- Policy decisions must also consider LA County and State of California regulations. The data from the Complaints Database helps the LA City team discover possible areas of accord and discord in policies.

How-To:

- The complaints flow from a Google Sheet directly to Socrata through a publish-to-web csv. Anytime there is an update in the Google Sheet it is reflected in Socrata. From the Socrata dataset the complaints move to Datalens to update the dashboard.

- The dashboard keeps track of number of complaints in a time period, number of licensed businesses, the most common types of complaints, and maps the source of the complaint to more easily identify clusters of issues.

- A workflow management tool on the backend will triage the complaints and send them to various stakeholders, like the City of Attorney's Office or the Department of Cannabis Regulation.

- The dashboard is not public, but the formal complaint portal soon will be. Complaints have been submitted by the general public, neighborhood council board members, community advocates, and city staff like the City Attorney and City Council offices.

Funding: General Purpose City Funds

Cannabis 1

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Tags: Service Delivery Improvement, Cost Savings, Environmental Impact, Impact on City Economy, Business Benefits

SP+ (SP Plus Corporation): City of Portland Parking Management Services (SmartPark)

Challenge: Prior to SP+ taking over parking operations, the City of Portland's off-street parking program was primarily run using cashiers in parking booths to process a high volume of cash and credit card transactions, and the validation program was stamp-based.

Description: Since assuming parking management services for the City of Portland in 2011, we are responsible for the operation, maintenance, janitorial, administration and auditing for approximately 3,500 parking spaces in six parking garages located in the Downtown Core. We were hired to offer visitors and employees convenient access and consistent, high-caliber customer service—while implementing state-of-the-art automated systems and revenue controls.

Impact: The City benefits in terms of efficiencies and revenue generation through reduced operating costs, new technology, customer service training and streamlined staffing across its parking facilities. Annual revenue collected has increased, customer survey ratings have improved and EPA guidelines have been met. Under SP+ management, the City has recovered tens-of-thousands-of-dollars in past due funds that existed prior to the new program. Revenue controls are now in place to mitigate losses.

The automated system accepts both cash and credit, but eliminating cashier booths made credit cards the preferred payment choice. With more than 90% being credit card payments, costs associated with auditing/processing cash transactions reduced. SP+ updated a labor-intensive stamp-based system into a PARCS integrated electronic validation system. We created a website for customers to order/pay for validations.

While Parking Ambassadors were onsite during most hours, SmartPark's goal was 24/7 customer service. SP+ Remote Management Services (RMS) was integrated during unattended hours. Customers simply press a button to be connected with a live person for assistance.

How-To:

SP+ assisted in the procurement and installation of Amano McGann automated parking equipment that complemented the existing Amano McGann equipment in the SmartPark garages. The new pay stations integrated seamlessly with existing gate ticket dispensers, gate arms, computer servers and software, providing a plug-and-play solution that minimized system downtime during the upgrade.

A broad communications plan was created to inform all customers and stakeholders of the changes at the SmartPark garages. A new signage package was designed and installed to help customers acclimate to the new equipment and procedures.

Training was also provided to onsite employees who assumed roles as parking ambassadors who were now available to assist customers, troubleshoot technical issues and provide a high level of customer service.

General Tips: A great communications plan for customers and stakeholders was key to the success of this program. The plan included preliminary communication before any changes occurred, on-site communication during the transition (from parking ambassadors), and continued communication into the future as customers adapt to changes within the system.

Automated parking systems require a lot of preventative maintenance and first-level technical support. SP+ invested in the training our own employees to provide as much of this service as possible. The training reduced system downtime and costly repair and maintenance bills from equipment vendors.

Funding: General Purpose City Funds

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Tags: Service Delivery Improvement, Innovation, Cost Savings, Impact on City Economy, Increased Tourism, Business Benefits

SUEZ: SUEZ Brings SOLUTION to Bayonne, NJ

Challenge: By late 2012, the Bayonne Municipal Utilities Authority, the water and sewer utility created and managed by the City of Bayonne, had not raised rates in six years. Subsequently, the BMUA experienced financial stress from decreased revenue resulting from water conservation, loss of a major industrial customer, an aging system with increased capital and maintenance costs, loss of key staff members the BMUA could not afford to replace, and deferred debt obligations that came due at the same time revenue decreased. The BMUA was also troubled by a number of operational challenges, including high levels of non-revenue water, attributable to leaks, theft, and poor metering practices.

Description: Under its SOLUTION business model, SUEZ and joint venture partner Kohlberg Kravitz & Roberts (KKR) entered into a unique partnership with BMUA to operate the city's water and wastewater systems. The city since dissolved the BMUA in a City streamlining measure (and KKR's interest was later bought by Argo Infrastructure Partners). The remaining partnership, Bayonne Water Joint Venture LLC, ensures an efficient and reliable water system for Bayonne residents for generations to come. The arrangement eliminated over $130 million of debt for Bayonne and provides the city with resources to fund capital infrastructure for decades to come. The Bayonne Water Joint Venture has helped modernize the Bayonne water system while continuing to provide residents with water that meets or surpasses safe drinking water standards. As a partner in the joint venture, SUEZ is executing a capital investment plan designed to improve and maintain a stable and secure water and wastewater system. The partnership had already made over $19 million in capital improvements by December 2017 when it celebrated five years of partnership.

Impact: Improvements throughout the network have included updating Bayonne's infrastructure to include an Automatic Metering Investment (AMI) system. AMI is an aggressive leak-detection tool used to drive down unaccounted for water. All meters, including every commercial meter, have been changed out throughout the city. In addition to AMI, SUEZ installed a Supervisory Control and Data Acquisition (SCADA) system, which detects any issues with water and wastewater throughout the city. The inclusion of a Geographic Information System (GIS) allows SUEZ to properly manage our assets by geo-plotting all of our assets so that we can pull them up on electronically on a Computerized Maintenance Management System (CMMS). This new addition allows SUEZ to locate an asset and track its maintenance right within the work order system instead of having to locate it on a traditional printed map.

How-To:

SUEZ continues to work closely with the municipality, residents, civic organizations, and other state and local stakeholders to ensure a safe, reliable supply of drinking water for the City of Bayonne. Here is a timeline of how the project unfolded:

August 19, 2011: SUEZ North America, operating then as United Water, responds to a Final Request for Qualifications and Proposals, issued by the BMUA in March 2011.

September 11, 2011: The BMUA qualified United Water as selected respondent and began negotiations.

March 20, 2012: A Memorandum of Understanding between United Water and the BMUA was reached.

August 8, 2012: Kohlberg Kravitz & Roberts (KKR) and United Water, acting as Bayonne Water Joint Venture, signed 40-year concession with the Authority to operate the city's water and sewerage systems.

December 21, 2012: Using a new model to address water infrastructure needs, United Water and KKR began operations.

April 9, 2013: SUEZ hosted a Stakeholder Dialogue in Bayonne, NJ, where our senior leadership conducted a productive conversation with attendees from the community. It included representatives from the city, the fire chief, the municipal utilities authority, the school district and board of education and a city-wide community outreach organization. They were also joined by some of the area's largest commercial consumers of water.

December 31, 2015: SUEZ, through the Bayonne Water Joint Venture, invested more than $14 million during the first three years of the contract, including $7.5 million in meter replacements and $6.5 million in other capital investments.

Meter upgrades in Bayonne reduce non-revenue water for the city

The partnership in Bayonne has helped build economic prosperity

Leak detection equipment has helped over 2,000 residents save water and money

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Tags: Service Delivery Improvement, Innovation, Cost Savings, Environmental Impact, Impact on City Economy, Business Benefits

Veolia North America: How a City Can Manage Harmful Household Products

Challenge: Did you know that the average U.S. household generates more than 20 pounds of harmful household products per year?

Many common household products - from batteries to motor oil to paint - contain hazardous chemicals that can threaten your health and the environment. The improper disposal of these harmful household products (HPPs) puts people and pets in danger of accidental ingestion, contaminates the environment including soil and water resources and deleteriously impacts critical infrastructure like wastewater treatment systems.

Veolia North America works with communities to ensure the safe and environmentally-responsible disposal of household hazardous waste. This protects public health and the environment while also contributing to the circular economy. By employing innovative recycling and reclamation processes, Veolia is able to turn these wastes into reusable materials.

Description: A person can produce up to four pounds of hazardous waste per year, and with more than 8.5 million residents in New York City, it's easy for some of this waste to be mismanaged. To keep the city safe, the New York Department of Sanitation (DSNY) sought to create a better, more sustainable solution for disposing harmful household products.

Starting in 2010, DSNY has partnered with Veolia to keep harmful waste products out of the environment. Five permanent collection sites have been established - one for each borough - whereby residents can drop off HHPs at any point during the year. Additionally, since 2012, annual collection events have been held throughout the city. These SAFE (Solvents, Automotive, Flammables, and Electronics) Disposal events provide an another way for New Yorkers to safely and conveniently dispose of harmful materials.

This year marks the eighth year of the partnership as Veolia continues to support collection events and provide environmental specialists, equipment, material and expertise to properly manage the HHP collected at a site or an event. These products are recycled or sent to one of Veolia's fully permitted hazardous waste treatment facilities.

Impact: NYC SAFE Disposal events are now some of the largest collection events in the world, diverting more than 4.8 million pounds of HPPs, including pesticides, paint, motor oil, mercury devices, batteries, fluorescent lamps, cleaning products, and electronics from landfills and wastewater treatment facilities. Over 90 percent of HHPs are processed for beneficial reuse, demonstrating how waste can be safely managed and turned into something useful.

Community receptivity has been overwhelmingly positive, as these events provide an opportunity for New Yorkers to make a positive contribution to their local community through proper environmental protection practices. Moreover, the success of these events is undeniable, reflected by the yearly double digit increases in both resident participation and volume of waste collected.

Cities with effective programs like this aid in the sustainability of the planet's resources and contribute to the circular economy. Veolia has helped more than 2,500 communities manage, organize, promote and implement convenient HHP collection programs to ensure these wastes are managed safely and in the most environmentally responsible manner.

How-To:

Transforming harmful household products and waste into useful materials is part of a resourceful city's commitment to the circular economy. In this economy, waste that is viewed as useless is used as a resource, creating new revenue streams and protecting the environment. The materials collected at events are recycled, blended for fuel or sent to one of Veolia's fully permitted hazardous waste treatment facilities to turn the waste into reusable byproducts. Here's how Veolia can be an effective partner in your community's efforts to manage harmful household products:

1. Coordinate the event - Veolia will help select the site and plan the collection.

2. Set up the collection site - Experienced Veolia personnel will be on-site to set up the collection containers. We can answer any questions about what constitutes household hazardous waste and our disposal plans.

3. Unload, segregate and classify wastes - All wastes are segregated and classified in accordance with applicable federal and state regulations.

4. Package, bulk, inventory and label wastes - There are strict requirements for packaging and labeling hazardous waste prior to shipment. Veolia personnel follow all necessary requirements.

5. Transport and recycle or dispose of collected materials - Veolia has extensive experience with all types of hazardous and non-hazardous waste disposal. Wherever possible, waste will be recycled. Otherwise, proper treatment or incineration will assure that the waste is appropriately managed.

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Tags: Service Delivery Improvement, Innovation, Cost Savings, Environmental Impact

VMware: North Las Vegas: A City Rises

Challenge: In 2013, the City of North Las Vegas was teetering on the brink of financial, social, and political collapse. The Great Recession had left this medium-sized city of 250,000 with more than $152 million in debt, the highest rate of home foreclosures in the nation, and the state of Nevada poised to take over the city and divide the municipality among its neighbors.

Prior to virtualizing its infrastructure, the city struggled to meet the demands of its 13 city departments and the citizens they collectively serve. Costly and difficult to service, the city's servers were constantly breaking down to the detriment of vital city services like the police and fire departments they were dedicated to support. Field operations by these departments and other city agencies were compromised as a result.

Description: Mayor John Lee envisioned a "business-friendly organizational structure" that promises "customer service as our number one priority" to businesses considering a move to North Las Vegas.

To help North Las Vegas deliver on that promise, Lee is leading a technology transformation of the city's infrastructure, aimed at enabling the city to cut bureaucratic red tape and slash costs while simultaneously improving city services and efficiencies. The result has led to an influx of new business investment and residential housing worth billions to the city's economy, and more than 14 million square feet of new commercial and industrial space in the planning stage or already under construction.

Under Mayor Lee's leadership, the city moved quickly to implement the technology infrastructure that would allow it to deliver on its promises to be a business-friendly city in every way. The city replaced its failing systems and virtualized its server infrastructure. The result led to a huge, and almost immediate improvement in city services. The new server infrastructure made the city's services far more agile and responsive.

Impact: VMware server virtualization enables North Las Vegas to improve city services and save millions of dollars. Moving to the VMware virtualized infrastructure also means that as North Las Vegas continues its revival, it does not have to add more personnel than it needs or can afford to the public payroll, even though the services themselves continue to improve and expand to meet growing demand.

VMware infrastructure allows the 3D mapping of crime scenes and fingerprint identification by police officers in the field, and "smart" utility metering of its vital water and sewage services that significantly enhances water conservation while reducing costs for customers. The virtualized infrastructure also supports the city's water treatment plant and its state-of-the-art Internet of Things (IoT) automated monitoring system.

How-To:

Key to the resurgence of North Las Vegas is the role of technology in allowing the city to do far more with far less. North Las Vegas is continuing to virtualize the city's infrastructure, beginning with its servers and now moving into its networking with VMware NSX® and storage with VMware vSAN™.

VMware was instrumental in helping North Las Vegas make this transition.

In addition to NSX and vSAN, technologies the city is using today include VMware ESXi™, VMware Horizon® View™, and VMware vRealize® Log Insight™.

All of the city's software applications, including cloud-based services and applications, now run over the VMware virtualized infrastructure. These apps make it possible to deliver more efficient services, reduce city costs, and react more responsively to the needs of its city agencies and citizens. Among the immediate benefits is how new applications allow the city to accelerate the approval process for new construction and business permits from weeks or months to just days or hours.

VMware server virtualization enables North Las Vegas to improve city services and save millions of dollars.

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Tags: Service Delivery Improvement, Innovation, Cost Savings, Environmental Impact, Impact on City Economy, Jobs Created, Increased Tourism, Business Benefits

The city's fully-virtualized, IoT-based, state-of-the-art water treatment plant.

Waste Management, Inc.: City of Lodi, CA and Waste Management Team Up to Reduce Recycling Contamination

Challenge: The City of Lodi located about 40 miles south of Sacramento is well known throughout California for its award-winning wineries in the heart of the Central Valley. Waste Management (WM) has provided garbage, recycling, and yard waste services to the Lodi community for many years, is deeply rooted in the community and proud of the strong public-private partnership. In 2017, WM and the City noticed the levels of contamination in the residential recycling and yard waste streams were increasing to extraordinarily high levels. General confusion about what was truly recyclable and misconceptions about how recycling materials are processed and who processes them were a few of the challenges residents expressed. Excessive contamination not only increases processing costs, which are ultimately passed back to the ratepayer, it also makes meeting state diversion goals and mandates more difficult. WM met with City staff in early 2017 to explain what was occurring and discuss ways to mitigate and reduce the recycling contamination levels. Together WM and the City of Lodi established a pilot program to "Recycle Right".

Description: In March 2017, WM presented a "Recycle Right or Lose the Right" pilot to the Lodi City Council. The program was a multi-pronged approach; educate residents about recycling do's and don'ts; inform customers that repeated occurrences of contamination would be subject to a charge to process the materials as trash, and eventual removal of the cart if warranted. WM partnered with a local organization, the Greater Valley Conservation Corp. to serve as Recycling Auditors for the pilot program. Recycling education was provided to residents for a full month prior to the onset of the pilot. Outreach included newspaper ads, direct mail, and phone calls. From May-July, the Recycle Auditors visited 300-500 homes per day, visually inspected carts, took pictures, and tagged carts with significant amounts of contaminated material. The non-acceptable materials were identified on the tags, residents were given tips on how to 'recycle right,' and steps were outlined if contamination were to occur again in the future. "Thank You" tags were given to residents who were recycling right to reinforce that positive behavior. Tagging data was compiled weekly to track progress and share with the City.

Impact: The pilot program generated a significant amount of media attention and reaction from the public – the biggest relative impact and behavioral changes were realized within the first two weeks of the program. Not all the recognition, however, was positive – many residents publicly objected to potentially losing their right to recycle. Working with Council, the program was modified to focus more on incenting residents to change their behavior, plus Thank You tags were given to residents already recycling right. After two weeks the number of contamination tags issued decreased significantly, and by week three, many customers voluntarily upsized their trash containers. By the time the pilot program finished, Waste Management did not have to charge a single customer for repeated occurrences or remove any carts. The City of Lodi had reduced their contamination levels by 26% across the City!

Lodi residential ad

Lodi Thank You for Recycling Right tag

Lodi Recycling Contamination tag

How-To:

2017
- January – April: Baseline recycling audits completed; Contamination Reduction Plan developed; month-long "Recycle Right or Lose the Right" education and outreach to residents.

- May – July: Carts audited and tagged; data collected and tracked; program modified to focus more on 'Recycle Right.'

- August – December – pilot program continues on limited basis.

2018
- March – presented final results to Lodi City Council

- May-July – Commencement of 'Round 2'

General Tips: For any public-private partnership to be successful, all parties must have complete buy-in of the program. This program was successful because we created a solid case for change to the Lodi City staff and Council with complete transparency, and shared the program and objectives with the community for an entire month prior to starting. We are very fortunate to have strong relationships in the Lodi community, built on trust, which made this program and partnership possible and successful. Mayor Nakanishi expressed it best, "Keeping a healthy environment is important for Lodi. We are pleased to work in a public/private partnership with WM and the Greater Valley Conservation Corp to decrease contamination and improve the recycling of city waste."

Budget: $5,100 - one-time costs for labor, equipment, and public education materials.

Funding: Private Financing

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Tags: Service Delivery Improvement, Cost Savings, Business Benefits

Waymo: Zoning Code Amendments for Ride Sharing and Autonomous Vehicles

Challenge: The demand for curb parking is waning as more people choose to reach their destination using a ride hailing service like Lyft, Uber, and eventually Waymo.

Description: The City of Chandler, AZ has proposed an amendment to their current zoning code that would make it easier for curb space to be converted from parking to pick up and drop off. This change is in response to the popularity of ride sharing services like Uber and Lyft and in preparation for the introduction of autonomous ride hailing services like Waymo.

Impact: TBD. This policy is going through the process of being adopted now.

How-To:

This policy was developed by the Chandler Office of Economic Development and Planning Department, with input from the private sector (both service providers, and local small businesses). It accounts for projected, ongoing parking needs, plus projected demand for pick up/drop off spaces to accommodate ride hailing services.

General Tips: More information can be shared via power point. If the policy needs to be adopted in order to be considered, we may need to resubmit for a future meeting.

Budget: $0 to date other than staff time

Funding: General Purpose City Funds, To date, almost no funds other than staff time have been spent.

AVRideSharingZCA

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Tags: Service Delivery Improvement, Innovation, Impact on City Economy, Business Benefits, Mobility Improvements

Willis Towers Watson: How the City of Memphis Used an Individual Marketplace to Reduce OPEB Liabilities

Challenge: The City of Memphis faced a $551 million pension deficit and $1.3 billion in other post-employment benefit (OPEB) liabilities. Its retirees were getting older and less healthy resulting in premium increases of more than 30% for its Medicare supplement plans. In 2015, Memphis eliminated its retiree premium subsidy to all but a small portion of retirees who retained a 25% subsidy.

The City needed to find more affordable retiree health care plan options and find a way to control their liability for the retirees still eligible for a subsidy.

Description: To control their retiree OPEB liability and provide retirees with more affordable health care options, the City of Memphis moved its pre-Medicare and Medicare-eligible retirees to Willis Towers Watson's private individual marketplace. The marketplace gives retirees access to a wide variety of plans and carriers, and enables the City to control its costs and liabilities. City officials determined that by using the individual Medicare marketplace, 99% of its Medicare-eligible retirees would save an average of $2,706 in annual health care costs. Using a Health Reimbursement Arrangement, the City funds national accounts that retirees use to buy guaranteed issue individual insurance through the privately managed marketplace.

Impact: By using the private individual Medicare marketplace, 99% of the City of Memphis' Medicare-eligible retirees could save, on average, over $2,700 in annual health care costs compared to their previous group plan. Memphis retirees rated their experience highly, with a customer satisfaction score of 4.45 (out of 5). Bottom line impact in the city now has a sustainable solution that allows it to provide retiree health benefits.

How-To:

General steps to determine the value of a private Medicare marketplace to your entity and retirees:

1. Meet with private Medicare marketplace providers and learn about the opportunity to provide equal to or better benefits at less cost to retirees and your entity.

2. Ask the Marketplace provider to run a financial impact analysis to determine value of the individual Medicare marketplace relative to your current group plan. This should be provided at no cost.

3. Socialize the opportunity with leadership and labor leadership.

4. Send a request for proposal asking about responders' qualifications including their history, customer satisfaction, range of available plans and carriers, retiree communication and support and more.

5. Evaluate the responses and select the right partner.

General Tips: A private individual marketplace offers a cost-effective and sustainable way for a public entity to maintain its commitment to provide retiree medical. It is the optimal solution for public entities struggling with health care costs. It offers retirees more choice and cost effective solutions while allowing the public entity to meet its obligation in a fair and cost controlled manner.

Funding: Private Financing, Federal Subsidies, City General Welfare Fund

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Tags: Innovation, Cost Savings, GASB

ZenCity: Measuring Outcomes of City Initiatives Addressing Homelessness

Challenge: Measure E, a 0.25% increase in the City's transition and use tax, was passed by voters to fund services and initiatives like reducing homelessness and enhancing the use of smart technologies. The Council's approach to Measure E included a focus on assuring its expenditures deliver returns in the form of positive community impact. This aligns with private philanthropic foundations and the private sector where return (typically measured in $) is a key driver for investment decisions. For the City, the challenge is that some community impacts are more easily measured than others. Designing an outcome-based measure on "reducing the community impacts of homelessness" is tricky because a key element of the desired outcome is residents' perceptions of safety.

According to 2017 Esri data, about 60% of West Sacramento's households use Facebook and 13% use Twitter. By using AI to automatically analyze thousands of publicly-available posts with City-related topics, ZenCity's tech can discern trends in the issues residents are posting about, as well as their sentiment towards those topics, particularly as the city begins to implement additional homelessness enforcement and services programs.

Description: In 2012, West Sacramento's City Council directed staff to renew efforts in addressing homelessness in response to increasing public concern. The City conducted a 2013 study with residents, the homeless, businesses, and social service providers, which, combined with the most current research on homelessness, generated the 2013 Homeless Update. An action plan was developed from the Update and City Council's guidance. Strategic initiatives deployed from the plan include cleanups, a UTV to provide services to hard to reach encampments, a housing-first pilot project, a homeless-to-work project, a homeless encampment app, and more. In 2017, the city began using ZenCity to measure public perception of these initiatives.

ZenCity, an AI-based city intelligence platform for wide-scale citizen feedback, has enabled the City to now track and measure community sentiment on key issues. ZenCity alert's the City to emerging community concerns and provides insights into the effectiveness of City programs. Measuring the outcomes of the City's initiatives addressing homelessness served as an early use case for how to understand and measure public sentiment towards city implementation of programs.

Impact: Through the successful project implementation, the City was able to understand public perception and satisfaction regarding the Cities homelessness enforcement and homelessness services efforts, and communicate with citizens more effectively.

The data showed that:

1. Homelessness is an important topic to citizens.
2. Strategic programs designed to support homeless populations are highly supported by residents.
3. Since 70% of publicly-available social media interactions during this period occurred on official City media channels, the City has an opportunity to take part in shaping the discussion regarding homelessness through public education and regular updates on City efforts issued through these channels.
4. A longer-term analysis with a larger sample size might allow the City to confirm the presence or absence of conversations in relation to specific efforts.

How-To:

The best practice was developed by:

1. Aggregating citizen feedback through ZenCity's data-collecting technology.
2. Narrowing in on data points which pertain to the city's various homelessness initiatives.
3. Reading the ZenCity dashboard which provides wide-spread trends based on the parsed data.
4. Analyze the data to generate a meaningful report with insights based on real citizen feedback.
5. Make actionable decisions based on the data.

General Tips: ZenCity is an AI-based dashboard for local governments that provides actionable insights based on citizen feedback from across all communication platforms. The dashboard provides access to citizen feedback on a wide scale, in real-time and on an ongoing basis across all fo the city's areas of responsibility.

Budget: Measuring citizen feedback on the city's specific homelessness initiatives is part of the general cost of the ZenCity platform, which measures data from multiple channels (including social media, city hotlines, and more), across all city-related topics.

Funding: Voter approved sales tax initiative
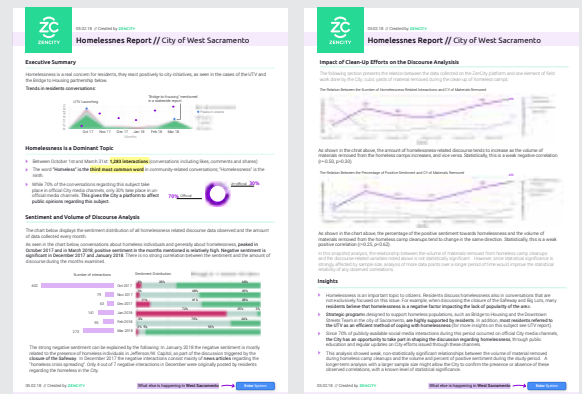
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Tags: Service Delivery Improvement, Innovation