As America's cities and towns experience exploding growth, the challenges they face continue to grow. Finding ways to expand their infrastructure and maintain services is putting pressure on local governments to perform like never before. Municipal leaders are searching for a smart response. How can they connect the dots of growth in a simple and affordable way that can enhance both citizen services and experiences? And how can they do so while improving the morale and productivity of their public servants? It seems a daunting task, but with the convergence of big data, mobility and the cloud, becoming smart plus connected is easier than they think.

## Game Changer: The Internet of Everything

The convergence of big data, mobility and cloud has given birth to the <u>Internet of Everything (IoE)</u>. It is connecting people, processes, data and things in ways never seen before and the impact has already been dramatic. Mobile applications and devices are the key in how cities interact with people - and how people interact with cities. This has created a game-changing opportunity for them to become smarter and more connected. They can now enjoy real-time, networked applications that improve everything from traffic flow and parking to water usage and citywide energy consumption. And they can do so at a more affordable price while improving the quality of life for both residents and public servants.



The Internet of Everything is changing the very way communities work. Check it out in this exciting new video.

To maximize the benefits of the IoE, Cisco has developed <u>Smart+Connected</u><sup>™</sup> Communities. It connects digital devices to networks, allowing government workers, citizens and even businesses to experience better service while increasing sustainability. Thanks to the early adoption of the IoE by some, Cisco has already been able to install solutions that have resulted in real costs savings. This has included sensors in public water pipes and parking meters around the nation (reducing costs by about \$3.1 billion a year) and helping municipalities grow "smarter." The result of connectivity ranges from improved building management to more efficient traffic flow. The IoE is also unleashing the creativity of public servants as they develop new ways to use the technology to provision basic services.

## What is It Like to be Smart+Connected in America?

The Cisco <u>Smart+Connected Communities</u> solution can help municipalities improve the quality of life for everyone. By thinking smart and connecting street lighting, waste management, infrastructure maintenance, public safety and communications these communities can see costs savings across the board. Citizens can benefit from safer streets and neighborhoods in which to raise their families and cleaner, more attractive communities. The renewed sense of pride can have positive impacts on how residents perceive their towns and can spur a renewed spirit of community. This can help reduce vandalism, crime and general nuisance issues in Cisco Smart+Connected Communities. Public servants are also benefiting. For them, Smart+Connected means improved planning, analytics and use of resources. It can also have a major impact on public safety, enabling faster and more successful interactions between officers and citizens, which improves the image citizens have of public servants.

## How do you Become Smart+Connected?

Becoming a Cisco Smart+Connected city requires buy-in from every city department, civic leaders and residents. Working together, they can ensure successful implementation and acceptance of Cisco Smart+Connected solutions. But it will also require:

- Network connectivity
- Easy access through a Cisco Smart+Connected City Wi-Fi network
- A technology platform with easy, secure access and cloud services
- Smart city solutions such as smart lighting, parking and traffic
- Ability to be monetized for advertising, data analytics and subscriptions
- Shared platform to consolidate management, customer care and service
- Support for systems integration, planning and design
- Leadership to manage implementation, operations and ecosystem

A smart-cities initiative should be centered on a long-term strategy. Start by sitting down with key municipal leaders to have an honest discussion about your current and future needs as a city. Set a primary goal and map out individual objectives that will help you achieve it. Any strategic approach should also consider how and where users and devices will connect, opportunities to raise revenue and scalability. Plus, the user interface should be welcoming and simple to use. Also, consider the possible services that can be enhanced, including:

- Public safety: Keeping cities safe is critical. Safe cities attract investments, businesses and skilled labor for economic growth and development. With Cisco <u>Smart+Connected Communities City Safety and Security</u> solutions, you can help keep your city safe. It helps to protect cities against crime, terrorism and civil unrest. It helps law enforcement monitor public areas, analyze patterns, and track incidents and suspects. This enables quicker responses. By combining information from video surveillance cameras, social media, citizen reports and other sensors, the solution provides a richer view of urban safety.
- City traffic: Did you know traffic accidents cause more than 25 percent of traffic congestion in America? Detecting incidents early and responding to them effectively can reduce congestion and smooth flow. With the Cisco <u>Smart+Connected City Traffic</u> solution, we combine IP cameras, sensors, applications and Wi-Fi to provide real-time information for traffic managers. This solution lets traffic authorities make better decisions in times of crisis and engage in more successful long-term transportation planning.
- **City parking:** Thirty percent of all traffic congestion in urban areas is caused by drivers looking for a parking space. This time waster is frustrating and increases pollution. Cisco <u>Smart+Connected City Parking</u> helps by giving citizens real-time information on available parking. It gathers and delivers data through Wi-Fi from IP cameras, sensors and smartphone apps throughout the city. It is also integrated with enforcement applications, pushing expiration notices to traffic officers for ticketing. It also provides visibility into parking analytics, including usage and vacancy periods, to help with long-term planning.
- Public lighting: Electricity prices are always going up, so turn lighting into a strategic resource to ensure safety for citizens and help optimize resources. Street lighting is one of the largest expenses in a municipality's utility bill, accounting for 10 to 38 percent of the total. Cisco <u>Smart+Connected City Lighting</u> responds by using LED based lights and flexible, intelligent control. it also empowers cities to centrally monitor and report individual street lights. And better maintenance equals lower energy costs. It can also be combined with other infrastructure, such as traffic lights, for an integrated solution.
- Citizen access: Good government means transparency for your citizens. Cisco <u>Remote Expert</u> Smart Solution for Government Services does just that, providing the public with convenient, cost-effective face-to-face access to public servants and services, even from remote locations. Cisco Remote Expert Manager software lets citizens and government share documents and collaborate together more easily. It uses a touchscreen monitor and document

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scanner housed in a single point of delivery (POD), which can be placed in a location convenient for citizens. This can include residences and workplaces.

## The Last Traffic Jam

The impact of convergence on America's cities and towns will continue for decades to come. So now is the perfect time for your municipality to become smarter and more connected. We encourage you to start by watching <u>The Last Traffic Jam</u>. Then learn more about improving the quality of life for your residents and public servants by visiting Cisco <u>Smart+Connected</u> <u>Communities</u>.



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