CISCO

Transforming to an engaged and connected city

The City of Mississauga leverages the Internet of Everything to improve services, reduce costs, and drive efficiency with real-time data.

The Internet of Everything provides tangible service improvements and actionable information that we can use every day to deliver and improve our services."

- Shawn Slack, Director Information Technology and Chief Information Officer, City of Mississauga

Your city is growing. Budgets aren't. You can view IT as a cost center, or connect systems, people, and processes to drive efficiency. What do you do?

Challenges

- · Provide open and accessible government
- Enable decisions through research and analytics
- Create a connected and engaged workforce
- Improve services through innovation

Economic opportunity and a reputation as "Canada's safest city" have boosted the City of Mississauga's population to nearly 800,000 residents, and it's growing fast. To support this growth, Mississauga's IT strategy established goals to improve services and drive operational efficiencies using the Internet of Everything-the intelligent connection of people, process, data, and things.

"Just about every piece of equipment the city buys has the ability to connect to a wireless network," says Shawn Slack, director IT and ClO. "Snowplows, buses, fire trucks, HVAC units, and traffic lights are all capable of transmitting real-time data. Collecting and using that data to make better decisions will enable more responsive and efficient operations."

The city is enhancing its Advanced Traffic Management System to make real-time traffic system changes to reduce congestion and prioritize Transit and Emergency Response. In the future, this will allow for prioritization of Snow Operations vehicles.

Case Study | City of Mississauga

Size: 7,300 Employees Location: Ontario, Canada

Industry: Government



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The Internet of Everything gives us visibility across our people and systems.

Solutions

- Built a private fiber network using Cisco routing, switching, and security solutions
- Launched citywide wireless network using Cisco controllers and access points

Real-time decisions improve public service and public safety

"The Internet of Everything enables the collection of data from sensors and cameras, which can be used to improve and accelerate service delivery," says Slack.

The results? Traffic can be monitored in real time allowing signal and traffic movement changes in response to accidents, construction, or other issues. Flood-response decisions can be made and public communications and operations can be put into action immediately.

All city operations field staff have mobile access to service work orders in the field with real-time information access to enable quick and accurate maintenance decisions. In the future, traffic signals could allow snowplows to pass through intersections without stopping, reducing service time, vehicle wear and tear, and fuel consumption.



More timely communication with the public

In the past, the city was challenged to quickly notify the public about road closures, storm damage, flooding, and other events. Now, it can post near real-time updates to its website.

Supporting adoption of new technologies

The city now has a formal BYOD policy and paperless initiatives, supported by the 10GbE wireless network. City leaders and employees are becoming more mobile. "Within the next few years, we'll require less office space while exponentially improving productivity," says Slack.

Reducing costs through efficiencies

The Internet of Everything will help the city achieve service objectives and also drive efficiencies and savings.

Partnering for success

The city will continue working with Cisco and OnX, a Cisco Gold Partner, for network design and enhancements. "Cisco and OnX are extensions of our team," says Slack. "They help us realize the benefits of the Internet of Everything faster."





Results

- Allows operations teams and emergency services to respond faster
- · Enables new services while keeping IT budget flat
- Improves public safety with immediately actionable information

Building the city of the future

The city plans to gradually add more sensors and devices to improve visibility, efficiency, and management agility.

"We'll be able to automate certain field services, connect people with real-time information, and introduce more self-service options via our website," says Slack. "The Internet of Everything is having a very positive business impact on our city."

To find out more about Cisco Smart+Connected Communities solutions, please visit: http://cs.co/SmartCityStories

Products & Services

Wireless

- · Cisco Aironet 1550 Series
- Cisco 5500 Series Wireless Controllers

Routing and Switching

- Cisco Catalyst 2960-C and 2960-S Series Switches
- Cisco Catalyst 3750-X and 3650
 Series Switches
- Cisco Catalyst 4500 Series Switches
- Cisco ASR 1002-X Routers
- Cisco Catalyst 6506-E Switches with Sup 720-3b
- Cisco 3925 Integrated Services Routers

Datacenter

- Cisco Nexus 7009 Switches
- Cisco Nexus 5548UP Switches

- Cisco Nexus 2000 Series Fabric Extenders
- Cisco UCS C220 M3 Rack Servers

Security

- Cisco ASA 5585-X and ASA 5500
 Series Adaptive Security Appliances
- Cisco IOS Intrusion Prevention
 System
- Cisco Network Admission Control (NAC) Appliance
- Cisco AnyConnect Secure Mobility Solution

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- Cisco Services for Deployment and Support
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