The City of Mississauga Leverages *eduroam* to Build a City-Wide "Virtual Campus"

Smart cities are the next step in the evolution of urban life; people, companies, and governments all need ubiquitous connectivity to work, learn, and play. Creating citywide intelligence and connectivity, however, is no small feat; it employs Wi-Fi or wireless access on top of a robust foundation of fibre, involvement from numerous stakeholders, and a strong commitment to the future.

The City of Mississauga first began its pursuit of "Smart City" status in 2015 with an innovative IT master plan. Since that time, they've been rolling out their digital strategy to become one of the first truly smart cities in Canada. The current phase of the plan is to empower Mississauga's youth and foster innovation with a CANARIE partnership that offers *eduroam* connectivity throughout the city.

Connected Beginnings

The seed was planted in the late 1990s when Mississauga became one of the first Canadian cities to install a comprehensive fibre infrastructure for ubiquitous high-speed connectivity. The network, which stretches over 850 kilometres and connects 291 city sites and critical infrastructure, was never intended for strictly municipal purposes but for creating a breeding ground of innovation and collaboration. Leveraging this investment, the city rolled out free Wi-Fi for the community in libraries, arenas, and other public buildings, and then pursued partnerships with Sheridan College, the University of Toronto at Mississauga (UTM), and CANARIE. "One of our main goals when creating the fibre backbone was to create a citywide culture of innovation with an added focus on inspiring youth," says Shawn Slack, the city's Director of Information Technology and Chief Information Officer. "Partnerships were always key to our vision and academia was a perfect fit."

An Easy, Cost-Effective Investment in Ubiquitous Connectivity

According to Shawn, working with CANARIE and incorporating *eduroam* into their rollout was easily justified: "It was a low-cost to no-cost investment for us because we already had the infrastructure in place; this one connection facilitated so much opportunity for us." Although originally initiated with Sheridan College and UTM, *eduroam* opens up Mississauga's virtual campus to students, faculty and staff from a huge number of post-secondary institutions throughout Canada and around the world.
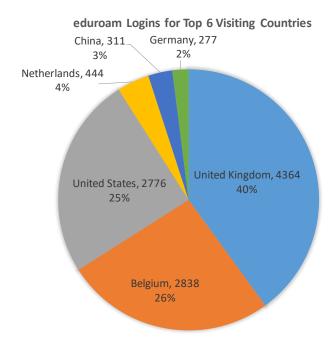
1,044,282

Number of times students & researchers visiting the City of Mississauga connected via *eduroam*

(May 2017 - May 2018)

The uptake on the service has been phenomenal and the number of people using it has grown organically since day one, and includes not only Mississauga but visiting international students and faculty whose institutions participate in *eduroam*. According to Shawn, young people pay attention: "The first week it was in place, students from Australia, Germany, the UK, the US, and throughout Canada connected to it without any advertising from us or our partners." Today there are thousands of students from as many as 20 different worldwide universities – from Austria through Nicaragua to South Africa – securely and seamlessly connecting to the *eduroam* network throughout Mississauga on a monthly basis. And because *eduroam* is available in more than 70 countries and 17,000 locations worldwide, Sheridan and UTM students also benefit from having secure wireless access wherever in the world they may be.

Accelerating Economic Development and Entrepreneurship

Mississauga's progress is not going unnoticed. The city is generating excitement across Canada and even globally, attracting international investment, serving on federal advisory panels, and welcoming partners from around the world eager to demonstrate their technology in a smart-city context.

And while partnering with CANARIE to offer *eduroam* may have been the city's first step to focusing on youth empowerment, it's definitely not its last. The recent introduction of hackathons and accelerator programs are successfully engaging

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tech-minded young people to create solutions that leverage the city's open digital infrastructure and improve the lives for its 750,000+ residents. According to Shawn: "It's yet another way to provide lift for youth so they can become successful and another step in our master plan to create a vibrant, socially responsible city through accelerated innovation and collaboration."

The city's initiatives have been so effective that in June, 2018, the City of Mississauga, in its partnership with UTM, Sheridan College, and CANARIE, was awarded the 2018 Municipal Information Systems Association of Ontario Excellence in Municipal Systems Award for Canada's first "virtual campus". The award is presented to an Ontario municipality that has successfully undertaken a significant initiative or set a new standard that other municipalities may follow.

The launch of *eduroam* throughout Mississauga has allowed Canada's sixth largest municipality to truly advance its vision for a fully connected and engaged city.

- Learn more: Mississauga's "Virtual Campus" Wins Excellence in Municipal Systems Award

eduroam Logins for Top 6 Visiting Countries

China, 311 3%
Germany, 277 2%
Netherlands, 444 4%
United States, 2776 25%
United Kingdom, 4364 40%
Belgium, 2838 26%

Could your municipality benefit from *eduroam*?
Contact caf@canarie.ca