Vaughan Smart City Task Force (SCTF):
Project Idea from Alectra

September 14, 2021

The City of Vaughan's Smart City Vision

Vaughan will become a leading, exciting and resilient smart city through collaborative transformation that enhances quality of life for all residents.

Project characteristics:

- **Vision** – Ideas should be bold, creative and tackle the City of Vaughan's challenges

- **Impact** – Ideas should have the potential to significantly improve citizens' lives

- **Implementation** – Ideas should have a viable path within a 5-year timeframe

- **Unique and Transferable** – Ideas should be new and repeatable in another municipality

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The Idea and The Problem

Leverage Alectra's Advanced Metering Infrastructure (AMI) for smart municipal services with customer experience (CX) at heart

How does the smart city deliver value that is experiences by the customer/citizen?

- Solutions would apply digital technologies (sensors and communication networks) combined with a thoughtful customer experience-focused design to have a positive impact on how people live, work, and play in Vaughan

How can municipal services be enhanced when they are "smart"?

- Enhanced efficiency

- Urban problem solving

- Cost reduction

- Better living conditions

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Applications and Implementation

Water · Public Safety · Lighting · Environment · Transportation · Customer Experience

Education · Industry · Buildings · Logistics · Medical

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What makes this idea innovative?
Focus on the **Customer Experience (CX)**

- Customer experience is key and is a foundation for all smart city capabilities
- All capabilities will be measured against the customer perception and experience
- Municipalities are already investing in digital transformation which is a component of the overall customer experience
- For technology deployments, customer experience is key
- Alectra is making significant investments in the areas of customer experience and how we interact with our customers
- Combined efforts create valuable smart municipal services for our shared customer and citizen base
- Shared costs and risks together with mutual brand enhancement
- Leverage existing networks and investments wherever possible

Smart Cities CX
(Customer Experience)

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Use Cases

Next generation AMI networks can power digital services that encourage diverse economic participation to deliver value to the community.

Lighting	Transportation	Economic Development	Emergency Response	Health	Public Safety
• Outage monitoring • Dimming • Adaptive lighting and colour controls • Emergency response lighting	• Smart parking • EV charging • Traffic signal coordination • Adaptive lighting	• Community Wi-Fi • Digital signage • Building retrofits	• Lighting guidance • Water/snow level/ drainage detection	• Air quality • CO_2 detections	• Video surveillance • Push-to-talk system • Intrusion detection • Gunfire detection

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Additional Use Cases

Streetlight Controls

Traffic Monitoring

Parking Monitoring

Digital Street Signage

Environmental/Air Quality Monitoring

Water Meter Network

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