

An architectural rendering of a modern urban plaza. The scene is filled with people of various ages, including children and adults, engaged in leisure activities. In the foreground, a large, multi-tiered fountain with cascading water is visible. To the right, a modern building with large glass windows and a sign that reads 'VWVH' is shown. A wide set of stairs leads up to a higher level of the plaza. The overall atmosphere is vibrant and community-oriented.

Markham Centre Secondary Plan Smart City Strategy

DSC Update. July 5th 2023





- Why is “smart” important?
- Key outcomes
- Smart strategy & roadmap
- Building blocks of the roadmap
- Unified digital infrastructure
- Smart Markham Centre Secondary Plan (MCSP) considerations
- Next steps

Why is “smart” important?



- The digital economy is transforming how we work, live, learn, and play
- The global smart cities market is growing 25.8% per year, from USD 660B in 2022*
- Leverage digital capabilities to achieve outcomes for Markham Centre
- Digital capabilities must be part of the DNA of tomorrow’s communities
- Markham as high-tech capital has an opportunity to lead the “smart city” movement
- A smart strategy and roadmap is foundational for the Markham Centre Secondary Plan



Input: Markham Centre Secondary Plan (MCSP) principles
City of Markham's Vision and Digital Strategy
Stakeholder consultation



...powered by technology.

Smart strategy & roadmap



Outcomes



Being intentional and intelligent about urban innovation:



Digital capabilities

- Smart Buildings
- Smart Grid
- Smart Energy
- Smart Water
- Smart Transit
- Smart Cars & Charging
- Smart Waste Management
- Smart Parking
- Smart Mobility
- Smart Operations
- Smart Lighting
- Smart Traffic Lights
- Smart Sensors
- Smart Wayfinding
- Smart Parks
- Smart Government
- Smart Healthcare
- Smart Education
- Smart Industries
- Smart Retail



The building blocks of the strategy and roadmap of a Smart Markham Centre must include:

1. People and outcomes
2. Partnerships & eco-systems
3. Governance and policy
4. Digital infrastructure
5. Smart solutions



Unified digital infrastructure



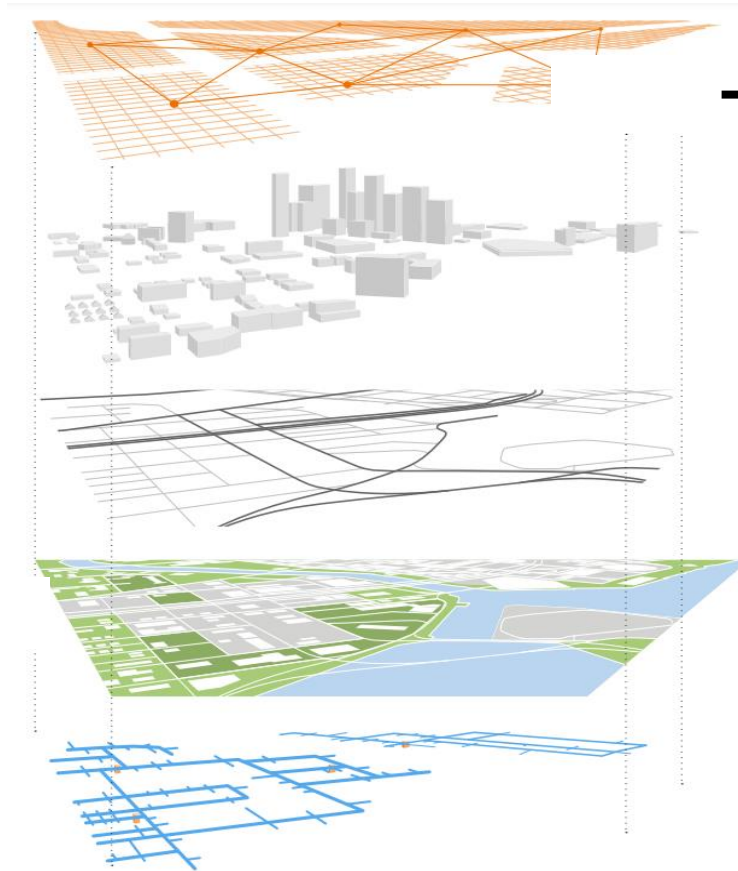
**PHYSICAL
LAYER**

Buildings

Mobility

Public spaces

Infrastructure



DIGITAL LAYER

**A digital foundation
for Markham Centre
that is:**

- Connected
- Sustainable
- Scalable
- Open
- Secure
- Future-ready



1. Physical infrastructure

- Conduits and accessibility
- Physical infrastructure that enables Wi-Fi network

2. Last-mile connections

- Micro-mobility considerations
- Improve efficiency of moving people, goods, and services

3. Internet of Things framework

- Standard data and interoperability framework for connected systems and devices
- Public and private data privacy policy

4. Unified digital infrastructure

- 5G/ wired and wireless network considerations
- Cybersecurity

5. Digital Twin

- Intelligent data and decision-making model for Markham Centre



1. Create policies for Markham Centre Secondary Plan from the considerations
2. Complete “Strategy & Roadmap” report