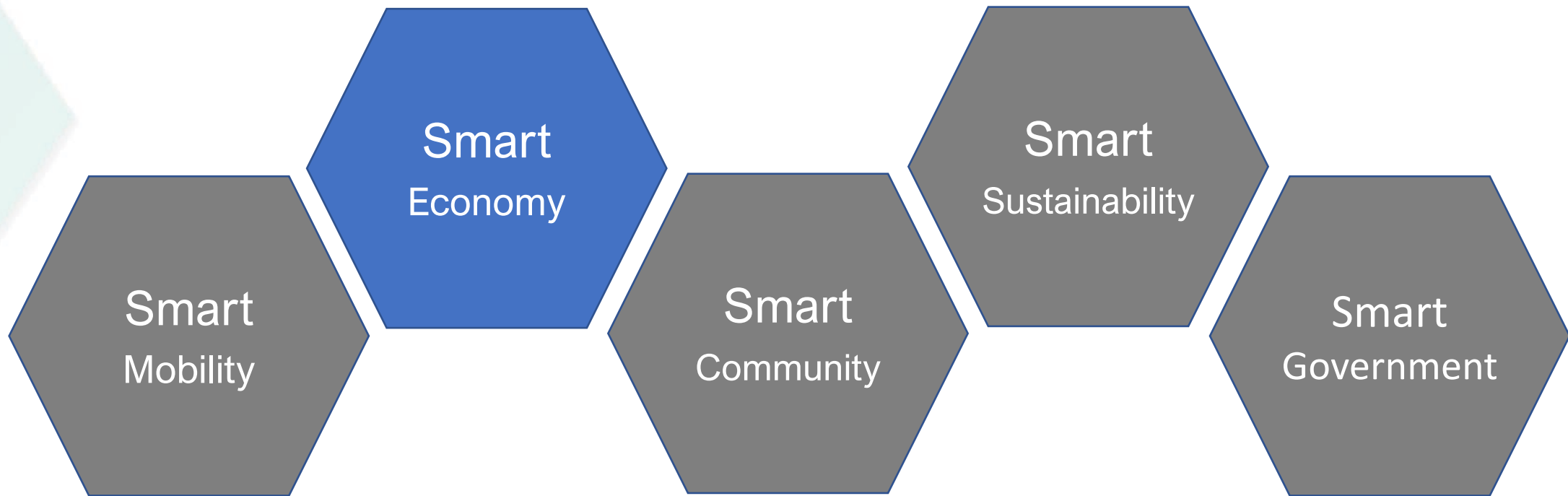


**Communication : C 2  
Smart City Task Force  
June 22, 2021  
Item # 1**

# **Smart City Task Force**

**June 22, 2021**

## 5 Strategic Themes



# Smart Economy Goals

**Sustain a globally competitive economy  
by attracting a cluster of smart city  
companies – emerging and disruptive  
technology hub**

**Smart ecosystem development,  
a vibrant entrepreneurship and  
innovation support ecosystem**

**Embark on transition towards circular  
economy (i.e. reuse and sharing  
resources)**

**Attract and retain innovative and highly  
skilled workforce**



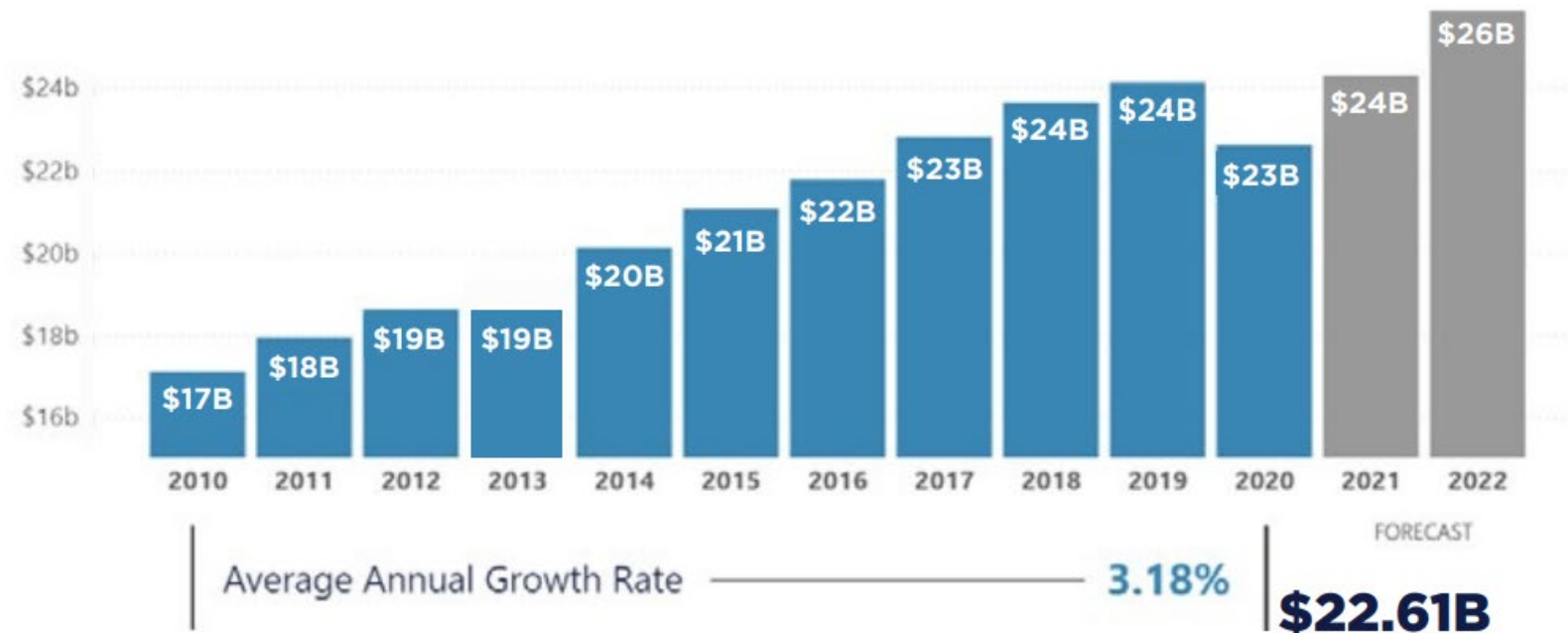
# **Vaughan** **By the Numbers**

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# Vaughan By the Numbers

## REAL GROSS DOMESTIC PRODUCT

With exceptional economic growth pre-pandemic, **Vaughan is anticipated to make a strong recovery.**



GDP growth rate  
**nearly double** the provincial  
and national rates (2010-2019)

**YORK REGION'S LARGEST ECONOMY:**  
Vaughan accounts for **37%**  
of York Region's total GDP.

**\$22.61B**  
2020 Real GDP  
(chained in 2012 CAD)

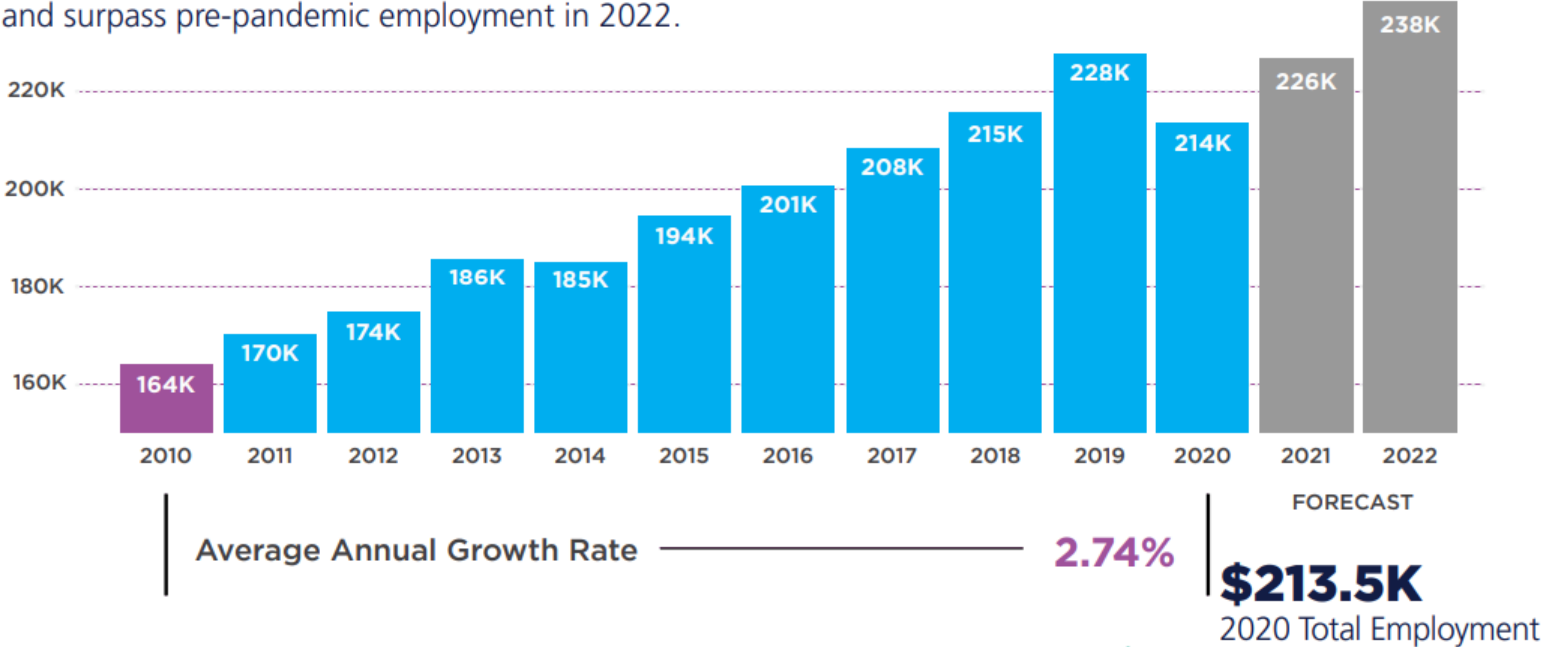
*The Conference Board of Canada. 2021. Regional Municipality of York Economic Forecast, 2009-2020.  
Statistics Canada. 2021. Gross domestic product (GDP) [chained 2012 dollars], 2009 to 2019.*

# Vaughan

## By the Numbers

### TOTAL EMPLOYMENT

Vaughan's highly educated and skilled workforce to rebound in 2021 and surpass pre-pandemic employment in 2022.



**Employment growth rate more than double** the provincial and national rates

**2020 UNEMPLOYMENT RATE: 9.1%—** better than the provincial and national rates



**HIGHLY EDUCATED WORKFORCE:**  
**70% post-secondary educated**, ages 25 to 64

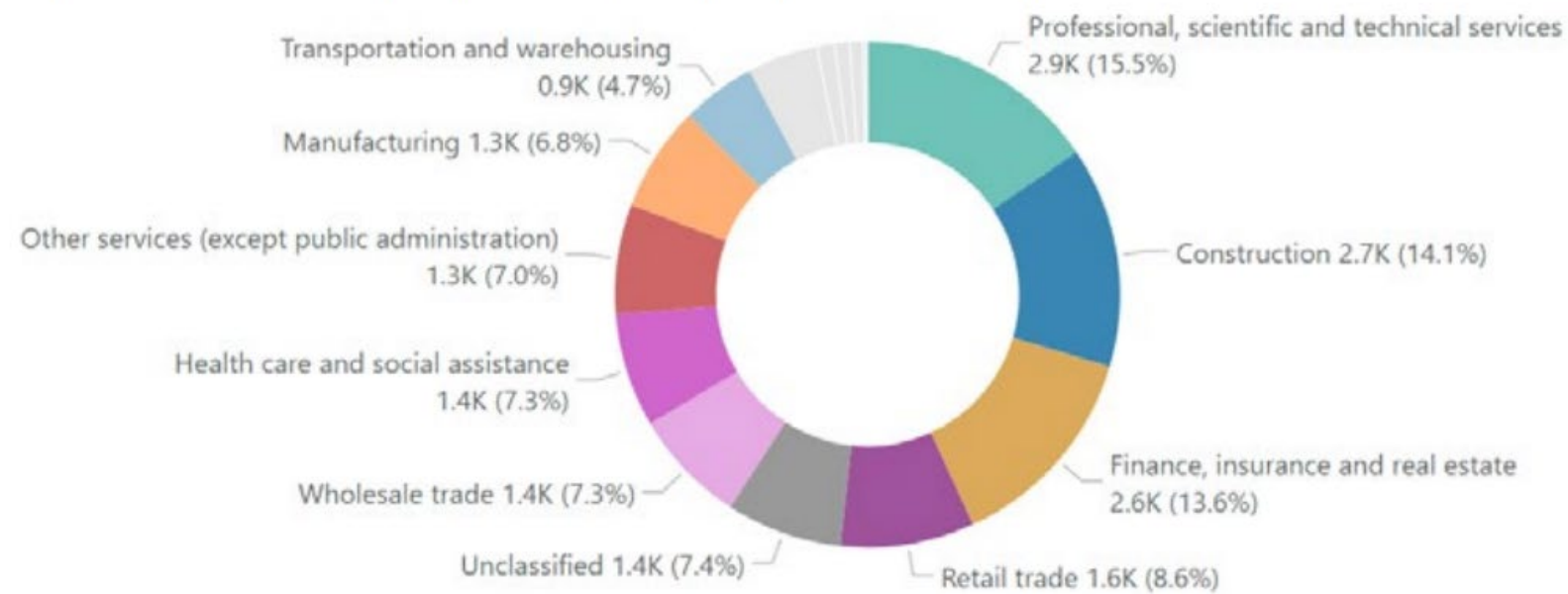
*The Conference Board of Canada. 2021. Regional Municipality of York Economic Forecast, 2009-2020.*  
*Statistics Canada. 2017. Vaughan, CY and Canada. Census, 2016.*  
*Statistics Canada. 2021. Labour force characteristics, 2009-2020.*



# Vaughan By the Numbers

## BUSINESS COUNTS - INDUSTRY SECTOR

Vaughan's diverse economy key to stability and post-pandemic recovery



2020 Business Count (with employees): **18,955**

### 2020 BUSINESS COUNT: EMPLOYMENT RANGE:

- Small Business (1-19): 87%
- Medium (20-99): 11%
- Large (100-499): 2%
- Very Large (500+): 0.16%

**SMALL BUSINESSES  
DRIVE** Vaughan's economy

*Statistics Canada, 2021. Canadian Business Counts, December 2020.*



# **Vaughan's Innovation Economy**

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# Connected to Talent

## Within a one-hour drive:

**Large and growing talent pool**  
3 million workers

**Educated and in demand**  
68% post-secondary attainment  
2.25 million post-secondary educated workers

**Robust pipeline**  
20 universities and 28 colleges  
170,000+ university students  
118,000+ college students  
Niagara University in VMC

**Diverse**  
160+ languages spoken





# Embedded in Innovation

**Part of Canada's second largest tech hub**

## **York Region tech hub**

4,300+ tech firms

60,000+ tech-based jobs

## **Ecosystem assets**

ventureLAB

Incubators

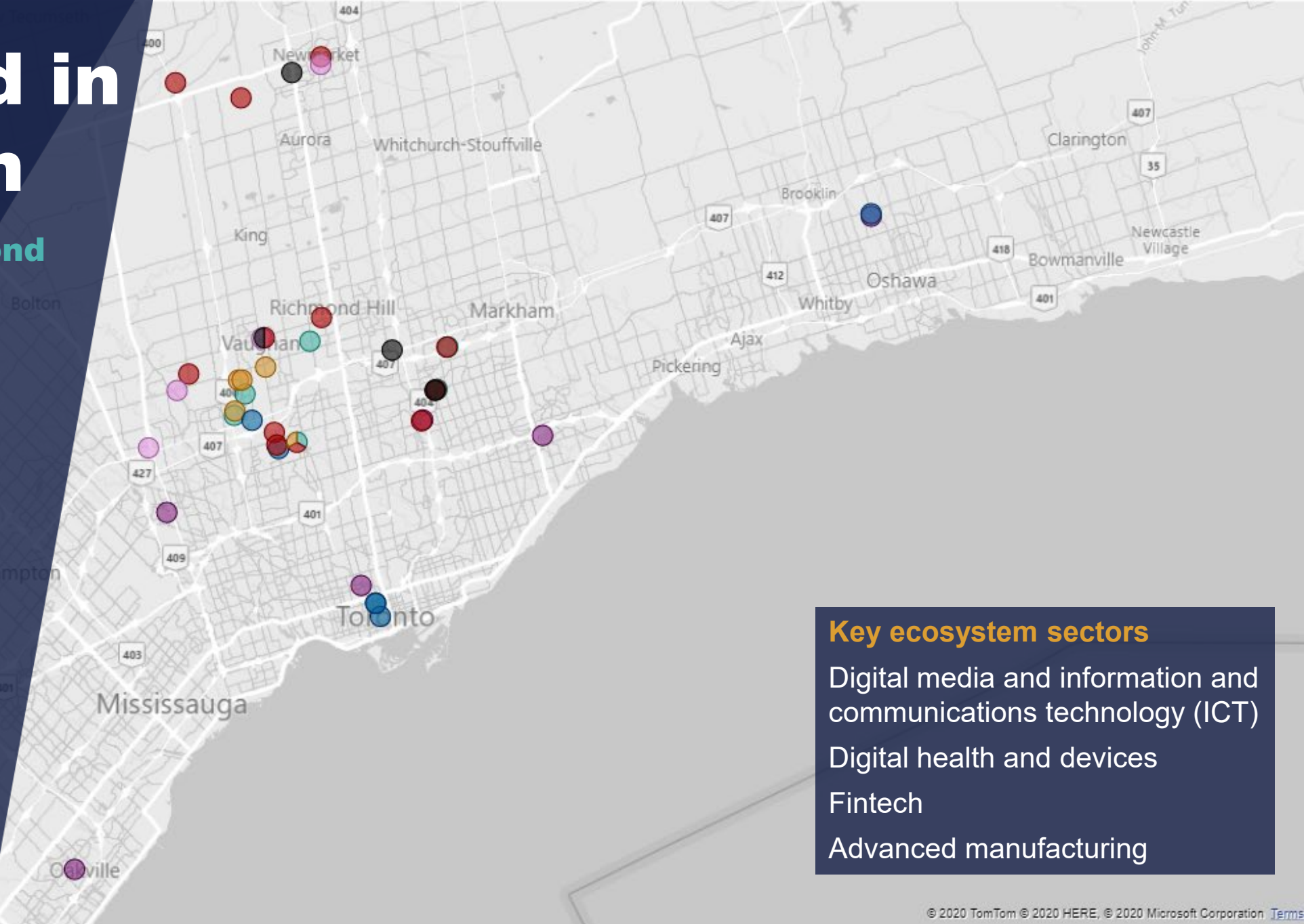
Innovation hubs

Campus-linked accelerators

Coworking and shared offices

48 colleges and universities\*

*\*Including satellite campuses*



## **Key ecosystem sectors**

Digital media and information and communications technology (ICT)

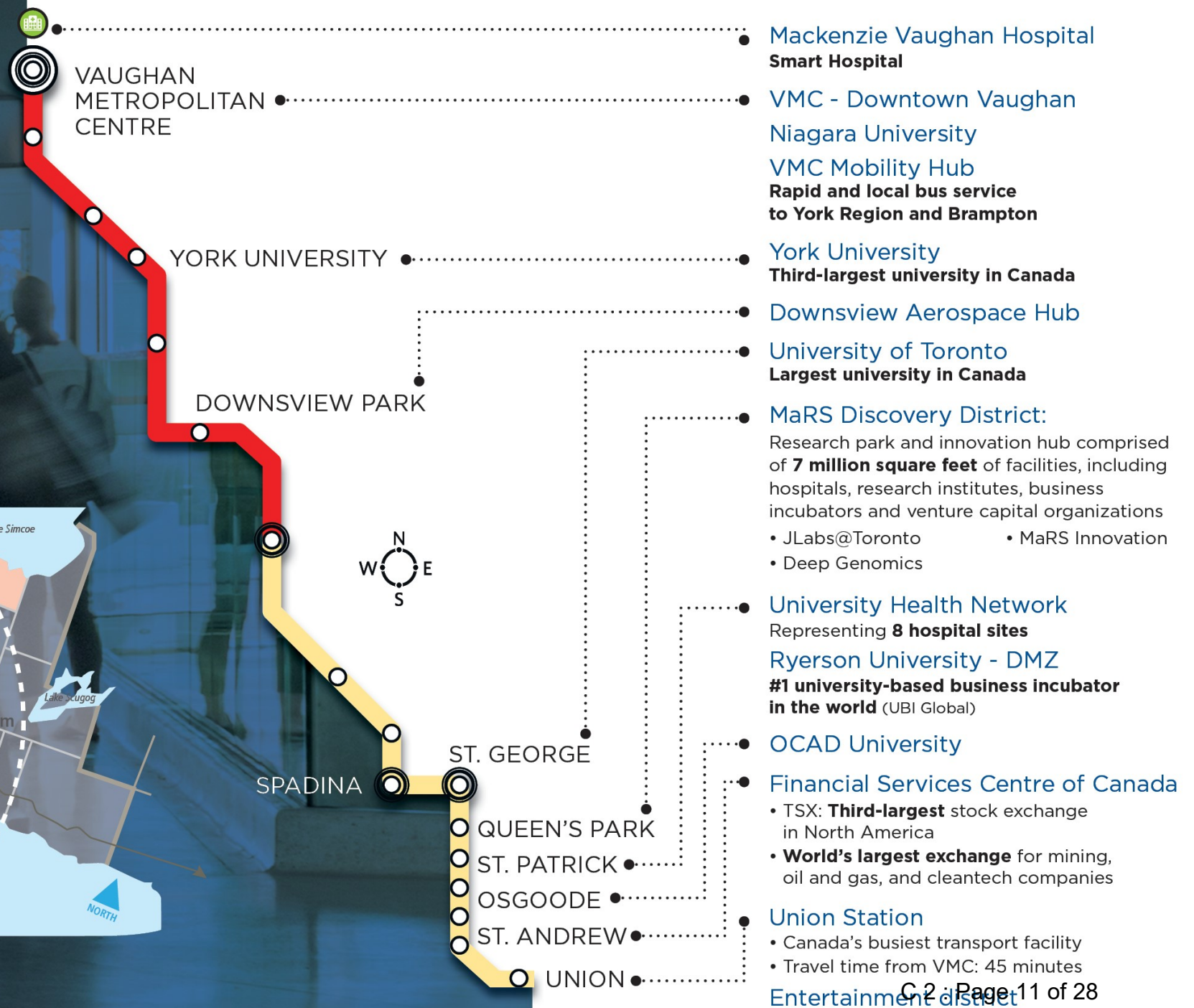
Digital health and devices

Fintech

Advanced manufacturing

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# Innovation Corridor

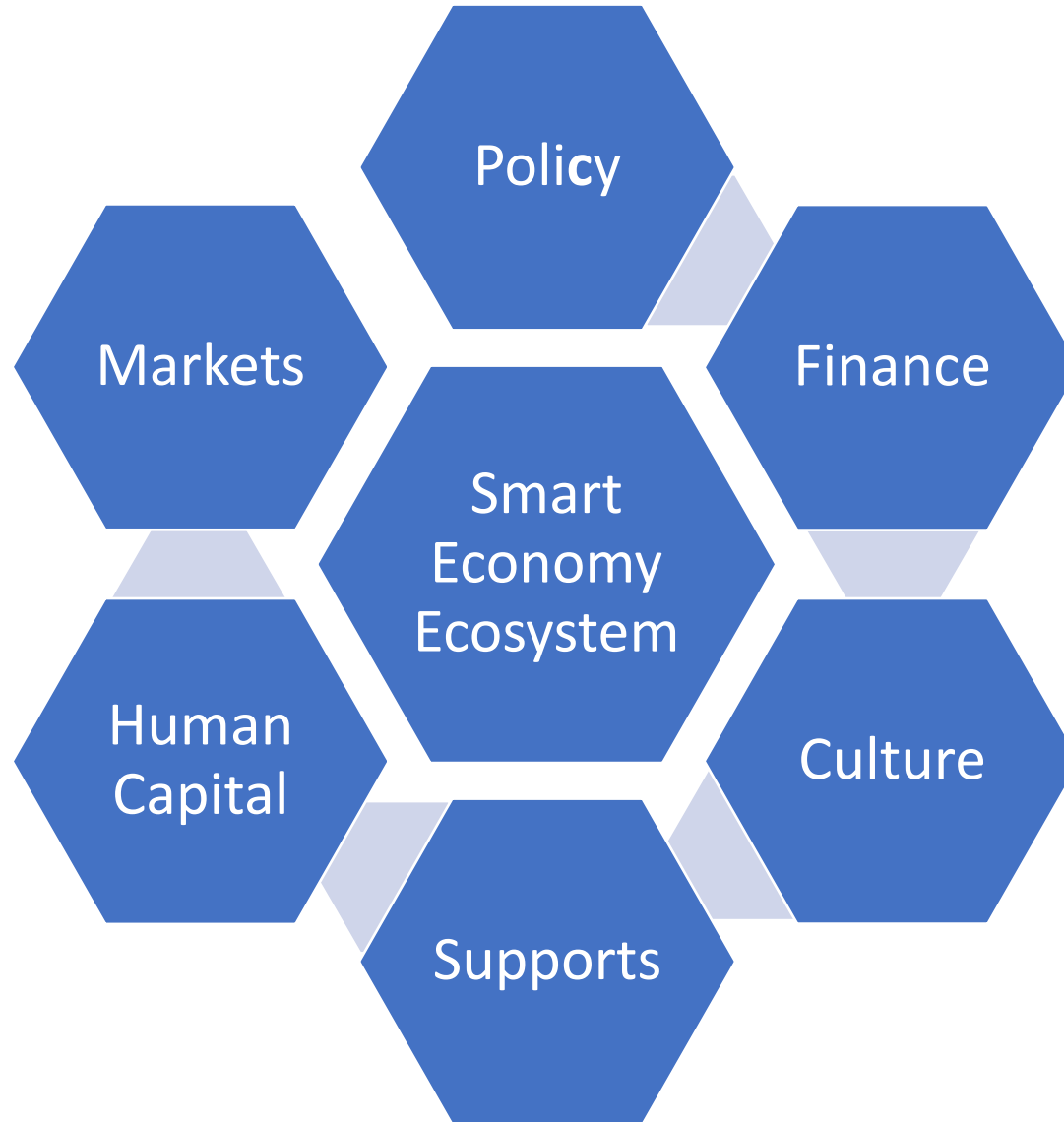




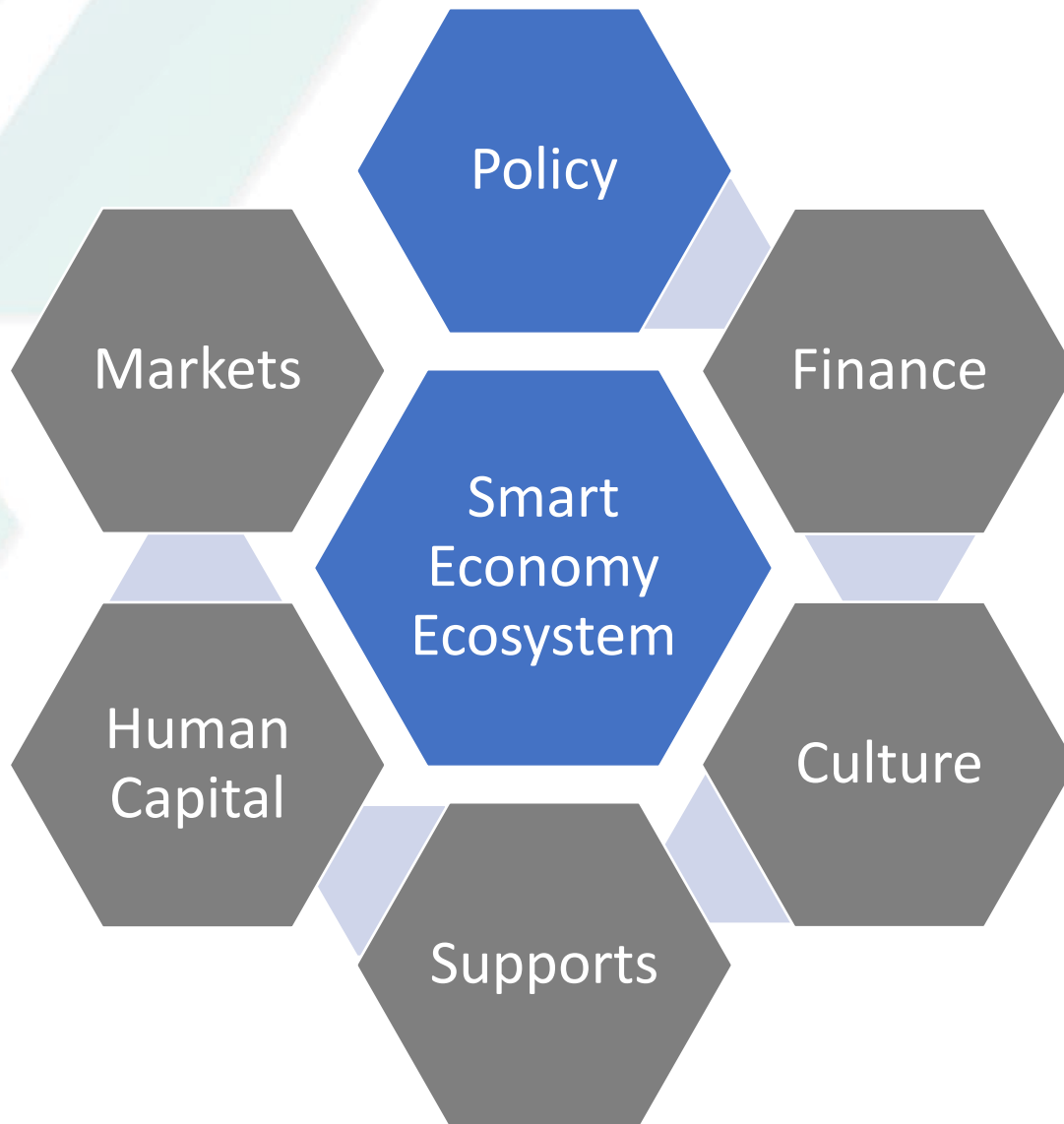


# Ecosystem Pillars

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Source: Daniel Isenberg: <https://www.forbes.com/sites/danisenberg/2011/05/25/introducing-the-entrepreneurship-ecosystem-four-defining-characteristics/?sh=6fa81cda5fe8>



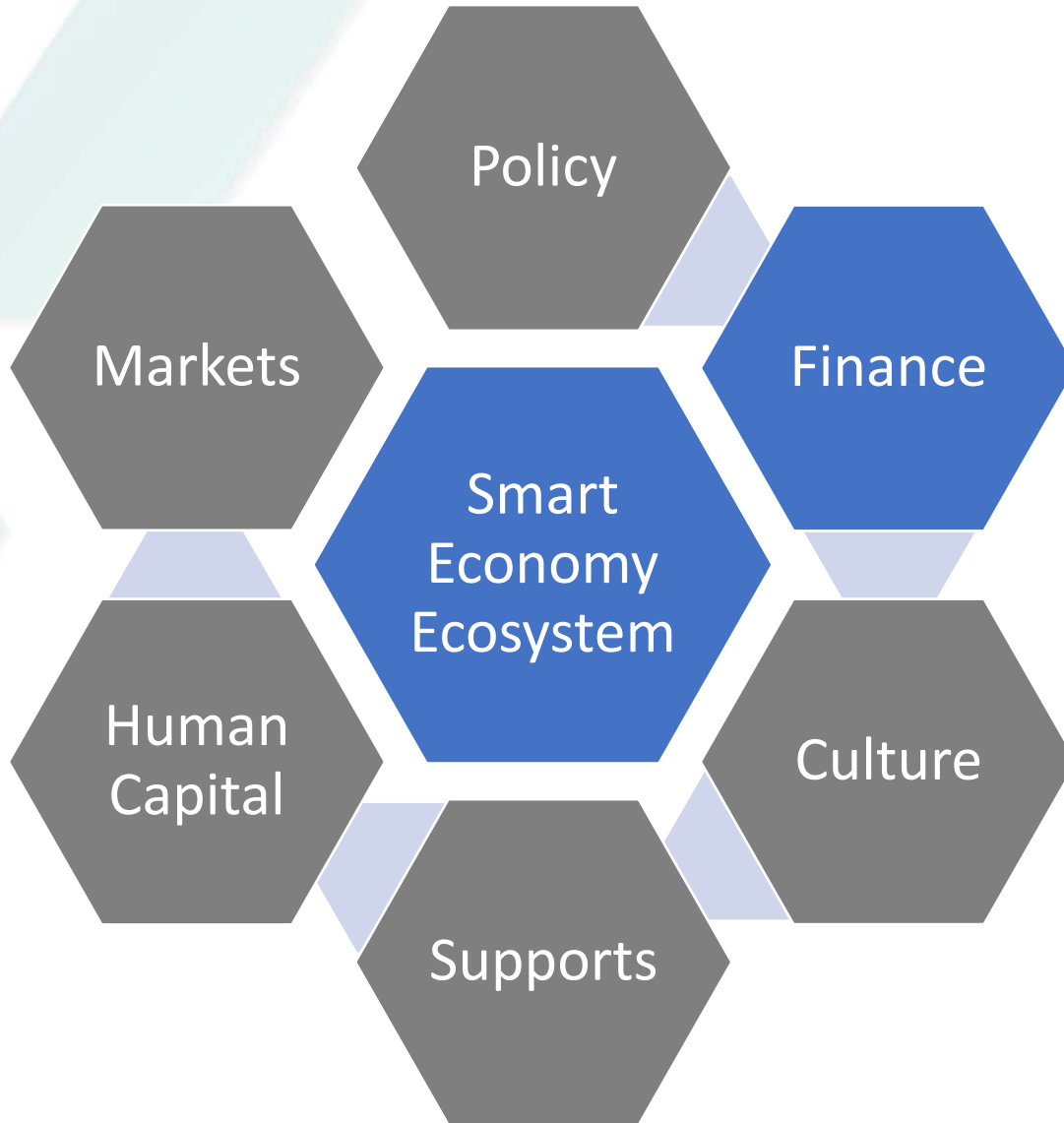
### Leadership

- Unequivocal support
- Social legitimacy
- Transparent advocacy process
- Recognizes the value

### Government

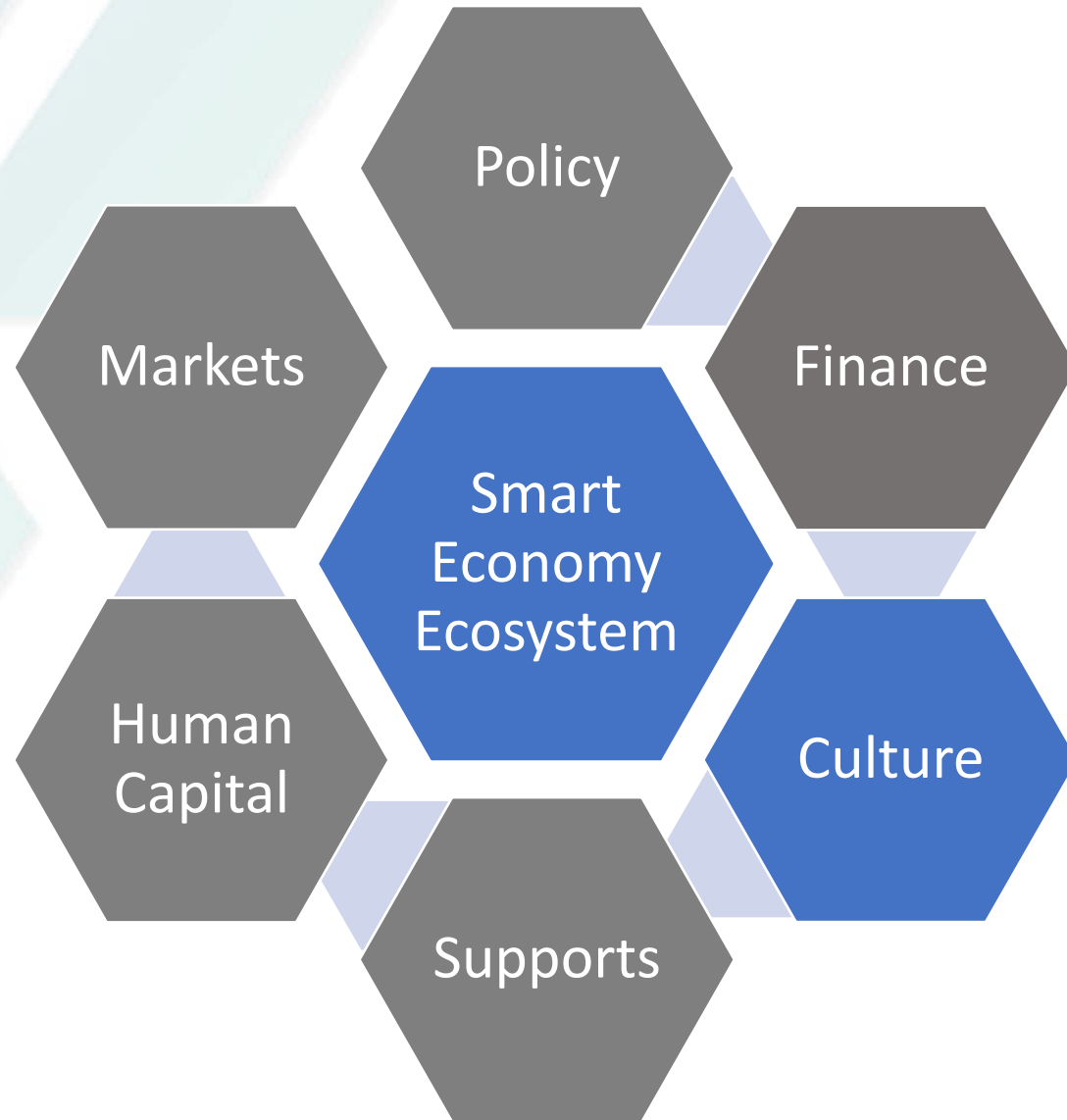
- Institution e.g. investment and support
- Financial support e.g. for R&D, jump start funds
- Regulatory framework
- Research institutes
- Venture-friendly legislation, contract enforcement, property rights and labour





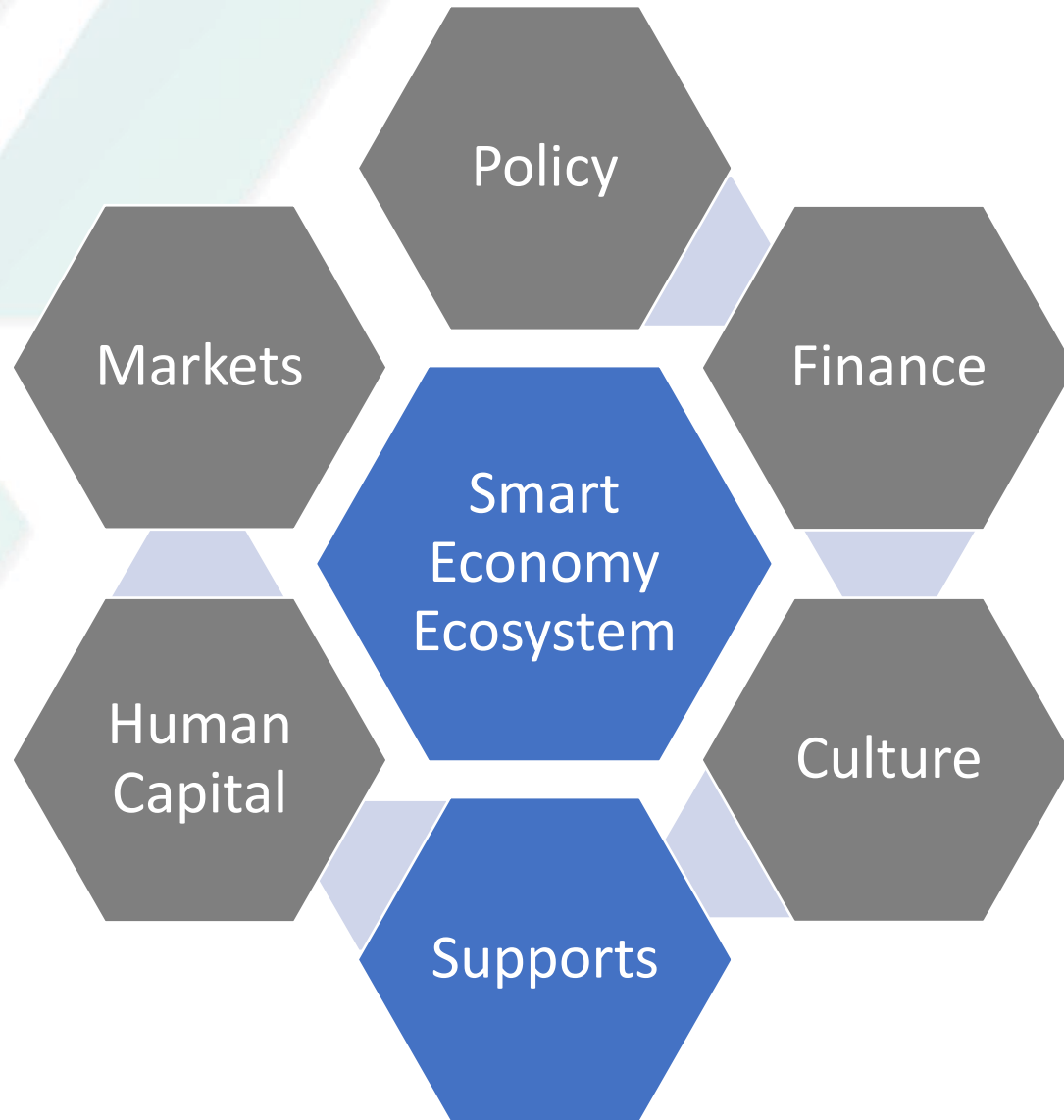
### Financial Capital

- Micro-loans
- Angel investors, friends, family
- Venture capital funds
- Private equity
- Public capital markets
- Debt



### Societal/Commercial Norms

- Visible successes
- International reputation
- Tolerance of risk, mistakes, failure
- Innovation, creativity, experimentation
- Social status of entrepreneur
- Society wellbeing
- Wealth creation
- Ambition, drive, hunger
- Collaborative
- Openness
- Equity and accessibility



### Infrastructure

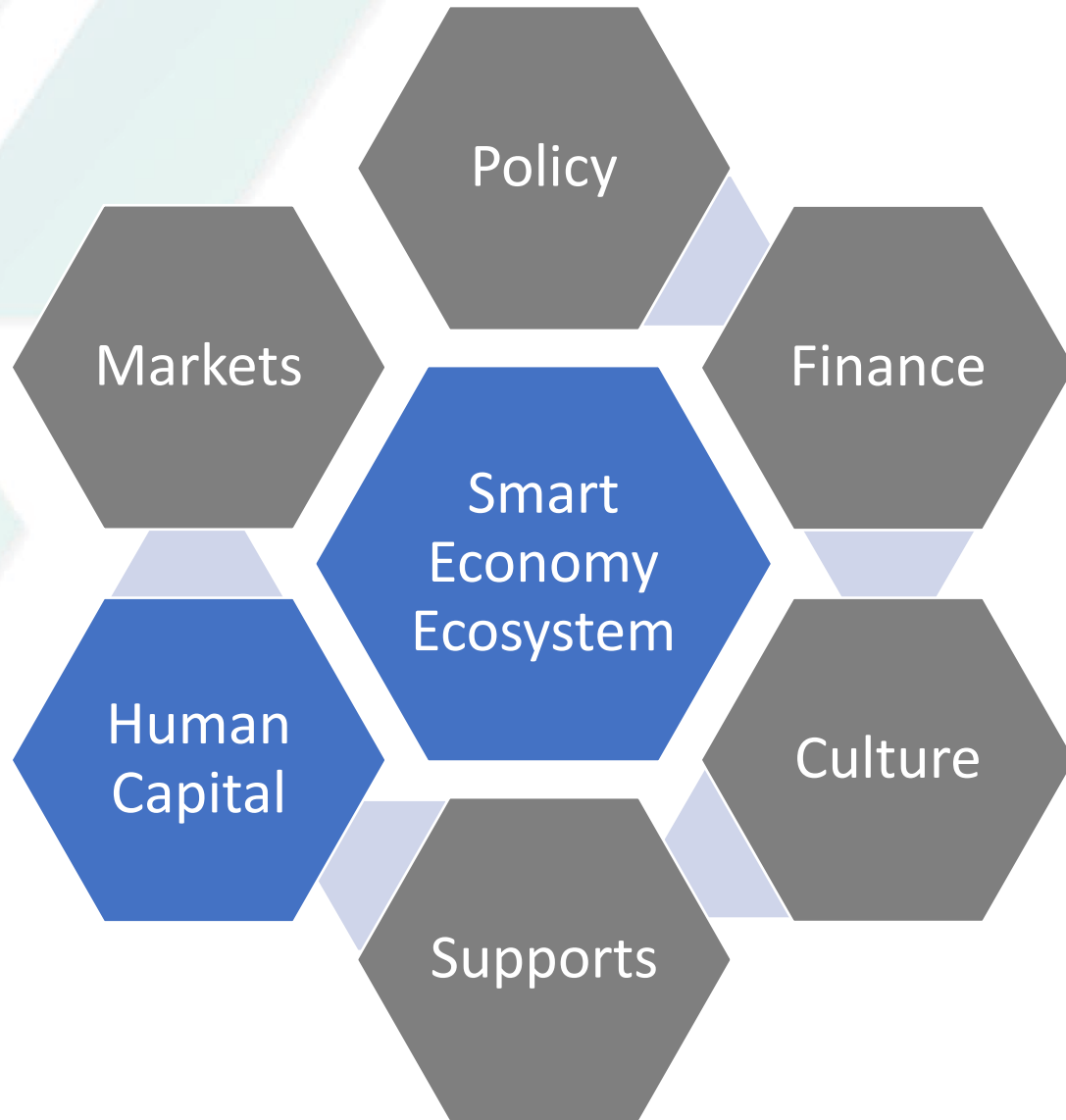
- Telecommunications
- Transportation & logistics
- Energy
- Zones, incubators, co-working, clusters

### Support Professions

- Legal
- Accounting
- Investment bankers
- Technical, experts, advisors
- Researchers

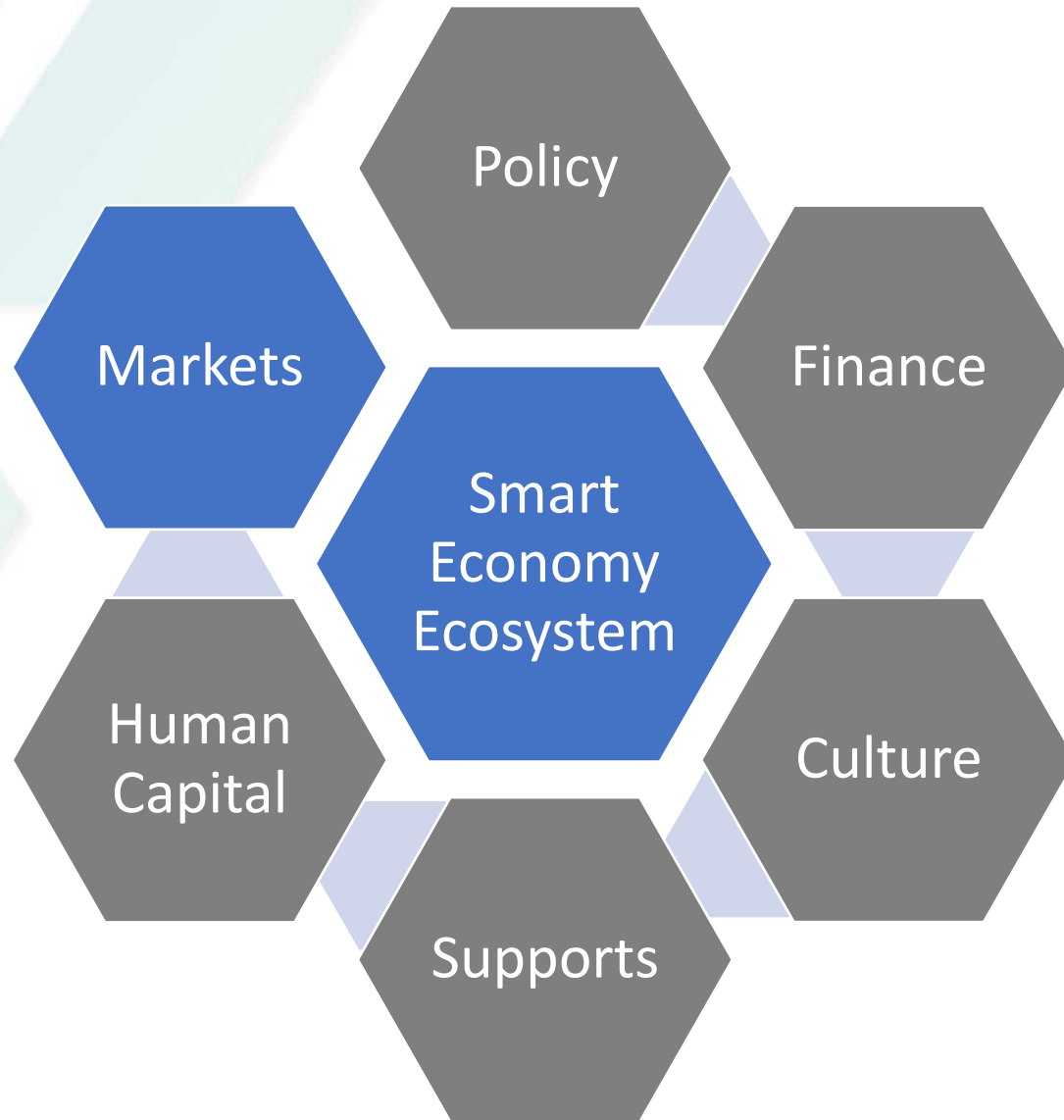
### Non-governmental institutions

- Business advisory services
- Conferences
- Business associations e.g. Chamber
- Post-secondary institutions



### Labour

- Skilled and unskilled
- Corporate innovators
- Serial entrepreneurs
- Community mentorship
- Postsecondary degrees (professional and academic)
- Entrepreneurship and innovation training



### Early Adopters

- Early adopters for proof of concept
- Expertise in commercialization
- Reference customer
- First reviews
- Distribution channels
- Co-development opportunities

### Networks

- Entrepreneur networks
- Diaspora networks
- Multinational corporations



# **Activate!Vaughan Innovation Program**

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# Activate!Vaughan Innovation Program

## Entrepreneurship program

Market-driven  
Problem-based challenges  
Connects startups and  
industry leaders

## Program Components

Co-creation  
Pilot opportunities  
Business advisory services  
Accelerator programming  
Mentorship  
Funding opportunities

## Challenges

Fall 2019: Sustainable  
Transformation  
Fall 2020: Health Innovation  
Spring 2021: Smart City





# Activate!Vaughan Innovation Program

## Sustainable Transformation Challenge

**Partners:** Alectra, IKEA  
Canada, Nature's Emporium

**Solutions:** clean tech and  
clean energy, sustainable  
food products, circular  
economy

## Health Innovation Challenge

**Partners:** Mackenzie Health,  
SE Health & Sterling  
Industries

**Solutions:** digital health,  
electronic medical records,  
medical devices



# ACTIVATE! VAUGHAN

## SMART CITY CHALLENGE

Pitch your smart city technology.  
Collaborate and co-develop with industry leaders.

[vaughanbusiness.ca/activate](http://vaughanbusiness.ca/activate)





# Smart City Challenge

## Challenge #1: Electric Mobility

Alectra & CoV Environmental Sustainability

## Challenge #2: Route Optimization

CoV Public Works

## Challenge #3: Age-friendly Communities

Social Isolation – Vaughan Public Libraries  
Access to Healthcare – Mackenzie Health

## Challenge #4: Intelligent Placemaking

CoV VMC Team



# Smart City Challenge

## What's next?

### Successes

Scoping of authentic smart city challenges in Vaughan

Sophistication of participating scale-ups

Interest from partners

### Opportunities

Engage new partners from other industries

Enhance funding for solutions

Develop partnership framework required to enable full-scale pilots



**vaughan**

ECONOMIC & CULTURAL  
DEVELOPMENT



**Thank you.**  
**Questions?**

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# **Smart Economy** **Discussion**

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# Discussion Questions

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1. Which ecosystem pillar(s) should we focus on in order to attract a cluster of disruptive and emerging technology companies to Vaughan?
2. What opportunities are there to support a stronger innovation culture in Vaughan?
3. How can we position Vaughan as the place for disruptive and emerging technology hub? What strategies and tactics should we consider?
4. How can you/organization help contribute to Vaughan's smart city ecosystem?