

**CITY OF VAUGHAN  
SMART CITY TASK FORCE  
AGENDA**

**This is an Electronic Meeting. City Hall will not be open to the public.**

**Tuesday, December 1, 2020**

**9:00 a.m.**

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	<b>Pages</b>
<b>1. CONFIRMATION OF AGENDA</b>	
<b>2. DISCLOSURE OF INTEREST</b>	
<b>3. COMMUNICATIONS</b>	
<b>4. DETERMINATION OF ITEMS REQUIRING SEPARATE DISCUSSION</b>	
1. 2021 SCHEDULE OF MEETINGS Administration / information item – Office of the City Clerk.	2
2. VAUGHAN DATA DRIVEN INSIGHTS Presentation by Dr. Patricia McCarney, President and CEO, World Council on City Data (WCCD).	3
3. SMART CITY DATA AND PRIVACY Discussion facilitated by the Project Manager, Smart City Business Program.	
<b>5. ADOPTION OF ITEMS NOT REQUIRING SEPARATE DISCUSSION</b>	
<b>6. CONSIDERATION OF ITEMS REQUIRING SEPARATE DISCUSSION</b>	
<b>7. NEW BUSINESS</b>	
<b>8. ADJOURNMENT</b>	



## **SMART CITY TASK FORCE 2021 SCHEDULE OF MEETINGS**

**All meetings are Electronic using the Microsoft Teams platform,  
due to COVID-19 pandemic restrictions.**

**Friday, March 5, 2021 @ 9:00 a.m.**

**Wednesday, April 21, 2021 @ 1:00 p.m.**

**Tuesday, June 22, 2021 @ 8:30 a.m.**

**September 14, 2021 @ 9:00 a.m.**



# WCCD

# THE WORLD COUNCIL ON CITY DATA

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Communication : C1  
Smart City Task Force  
December 1, 2020  
Item # 2

## City Data Supporting Vaughan's Smart City Task Force

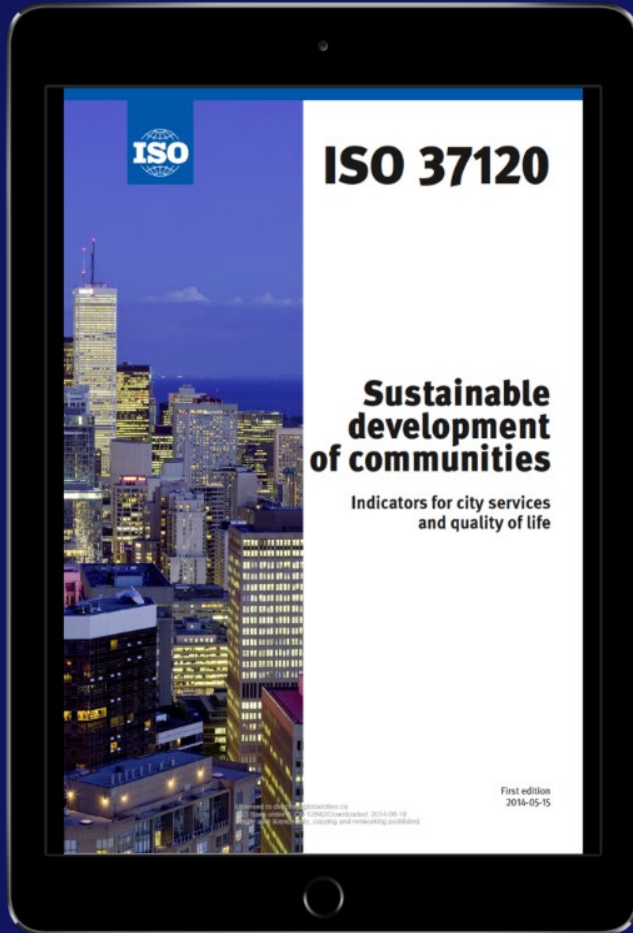
Patricia McCarney  
President and CEO

James Patava  
Vice President

<http://www.dataforcities.org/>

Twitter: @WCCityData

Facebook: WCCityData



# ISO 37120

The *1st* ISO Standard for cities

WCCD is implementing this global first in over *100 cities* across 35 countries



19 themes

104 indicators



Economy



Education



Energy



Environment &  
climate change



Finance



Governance



Health



Housing



Population &  
social conditions



Recreation



Safety



Solid Waste



Sport & Culture



Telecommunication



Transportation



Urban/local agriculture  
& food security



Urban Planning



Wastewater



Water

# WCCD CERTIFICATION LEVELS

**ISO 37120**



**WORLD COUNCIL  
ON CITY DATA**

**ISO 37120**



**WORLD COUNCIL  
ON CITY DATA**

**ISO 37120**



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ON CITY DATA**

**ISO 37120**



**WORLD COUNCIL  
ON CITY DATA**

**ISO 37120**



**WORLD COUNCIL  
ON CITY DATA**

ASPIRATIONAL	BRONZE	SILVER	GOLD	PLATINUM
30-44 Core Indicators	45-59 Indicators  45 Core + 0-14 Supporting	60-74 Indicators  45 Core + 15-29 Supporting	75-89 Indicators  45 Core + 30-44 Supporting	90-104 Indicators  45 Core + 45-59 Supporting



**WCCD**

**WORLD COUNCIL  
ON CITY DATA**

Page 6

@wccitydata



**CITY OF VAUGHAN  
WCCD ISO 37120  
PLATINUM CERTIFICATION  
THE HIGHEST LEVEL OF CERTIFICATION**



**WCCD**

**ISO 37120**

**ISO 37120**



WORLD COUNCIL  
ON CITY DATA

**ISO 37120**



WORLD COUNCIL  
ON CITY DATA

# THE WCCD ISO FAMILY OF STANDARDS

## THE ISO 37120 SERIES

SUSTAINABLE DEVELOPMENT OF COMMUNITIES

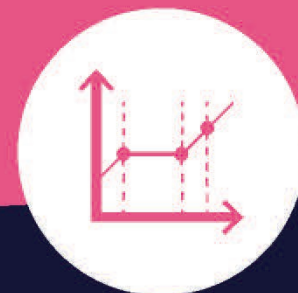
ISO 37120  
Indicators for City Services & Quality of Life

ISO 37122  
Indicators for  
Smart Cities

ISO 37123  
Indicators for  
Resilient Cities



# ECONOMY



## ISO 37120 Sustainable Cities

- City's unemployment rate
- Assessed value of commercial and industrial properties as a percentage of total assessed value of all properties
- Percentage of persons in full-time employment
- Youth unemployment rate
- Number of businesses per 100 000 population
- Number of new patents per 100 000 population per year
- Annual number of visitor stays (overnight) per 100 000 population
- Commercial air connectivity (number of non-stop commercial air destinations)
- Average household income (USD)
- Annual inflation rate based on the average of the last 5 years
- City product per capita (USD)

## ISO 37122 Smart Cities

- Percentage of service contracts providing city services which contain an open data policy
- Survival rate of new businesses per 100 000 population
- Percentage of the labour force employed in occupations in the Information and Communications Technology (ICT) sector
- Percentage of the labour force employed in occupations in the Education and Research & Development sectors

## ISO 37123 Resilient Cities

- Historical disaster losses as a percentage of city product
- Average annual disaster loss as a percentage of city product
- Percentage of properties with insurance coverage for high-risk hazards
- Percentage of total insured value to total value at risk within the city
- Employment concentration
- Percentage of the workforce in informal employment
- Average household disposable income (USD)



# ENVIRONMENT AND CLIMATE CHANGE



## ISO 37120 Sustainable Cities

- Fine particulate matter (PM2.5) concentration
- Particulate matter (PM10) concentration
- Greenhouse gas emissions measured in tonnes per capita
- Percentage of areas designated for natural protection
- NO2 (nitrogen dioxide) concentration
- SO2 (sulphur dioxide) concentration
- O3 (ozone) concentration
- Noise pollution
- Percentage change in number of native species

## ISO 37122 Smart Cities

- Percentage of buildings built or refurbished within the last 5 years in conformity with green building principles
- Number of real-time remote air quality monitoring stations per square kilometre
- Percentage of public buildings equipped for monitoring indoor air quality

## ISO 37123 Resilient Cities

- Magnitude of urban heat island effects (atmospheric)
- Percentage of natural areas within the city that have undergone ecological evaluation for their protective services
- Territory undergoing ecosystem restoration as a percentage of total city area
- Annual frequency of extreme rainfall events
- Annual frequency of extreme heat events
- Annual frequency of extreme cold events
- Annual frequency of flood events
- Percentage of city land area covered by tree canopy
- Percentage of city surface area covered with high-albedo materials contributing to the mitigation of urban heat islands



# The WCCD and ISO 37120 Indicators help to:

- ✓ **Create Data-driven Municipalities and incentivize performance**
- ✓ **Inform and Direct Federal Spending Across The Country**
- ✓ **Showcase the impact of Federal spending to citizens and communities across the country**
- ✓ **Drive Job Creation And Economic Development**
- ✓ **Track progress by cities on our climate agenda**
- ✓ **Embrace the United Nations SDGs at a local level**



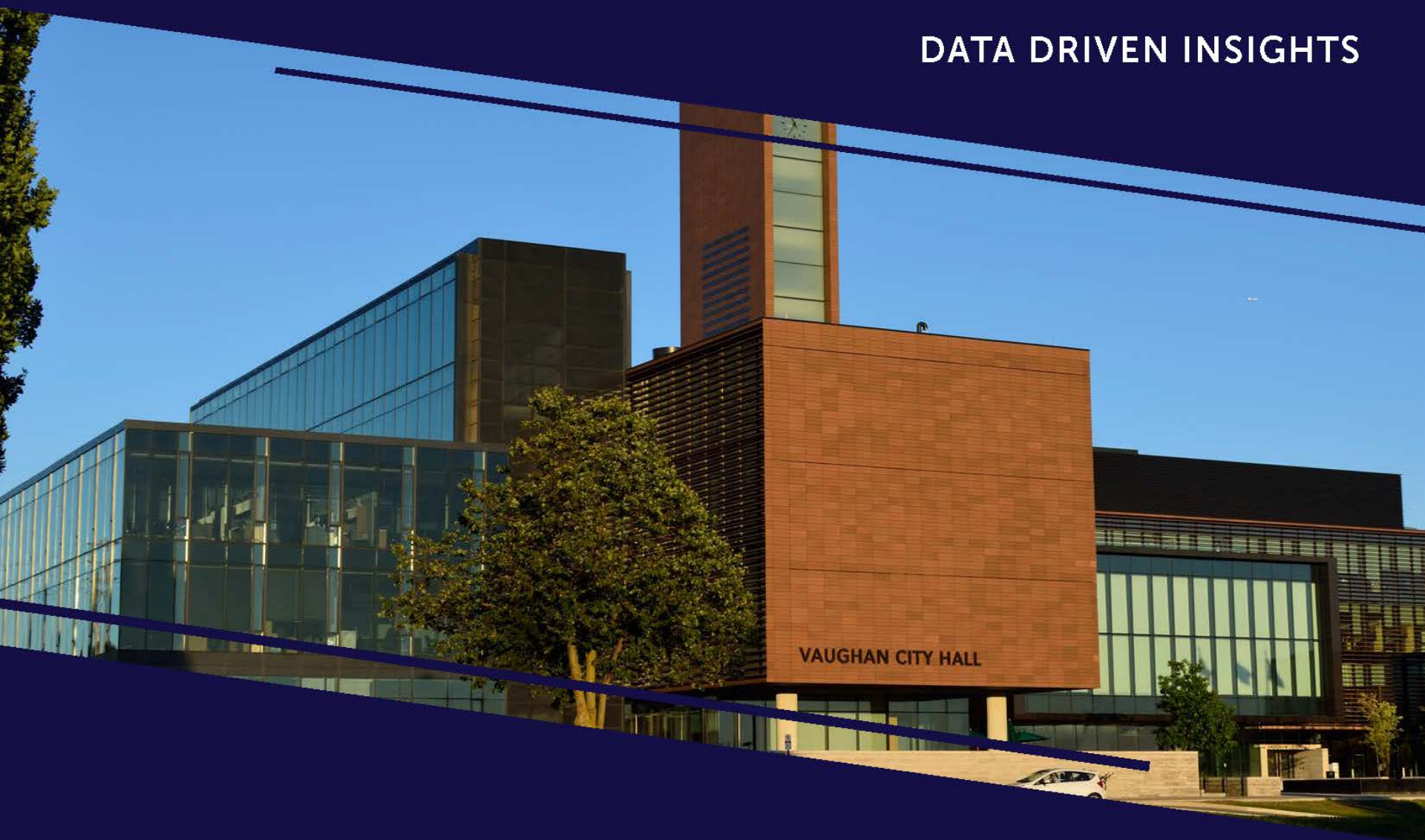


# **Vaughan in a Global Context – Celebrating Successes**



# CITY OF VAUGHAN

DATA DRIVEN INSIGHTS



**WCCD**

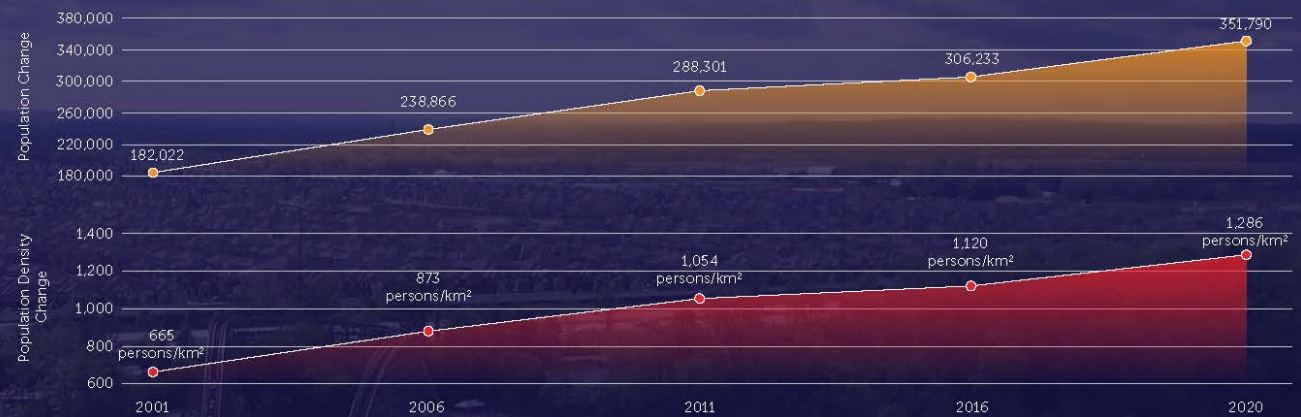
WORLD COUNCIL  
ON CITY DATA

VAUGHAN: EMBRACING URBAN  
GROWTH

## A TRAJECTORY OF SUSTAINABLE GROWTH

### Population and Population Density

ISO 37120



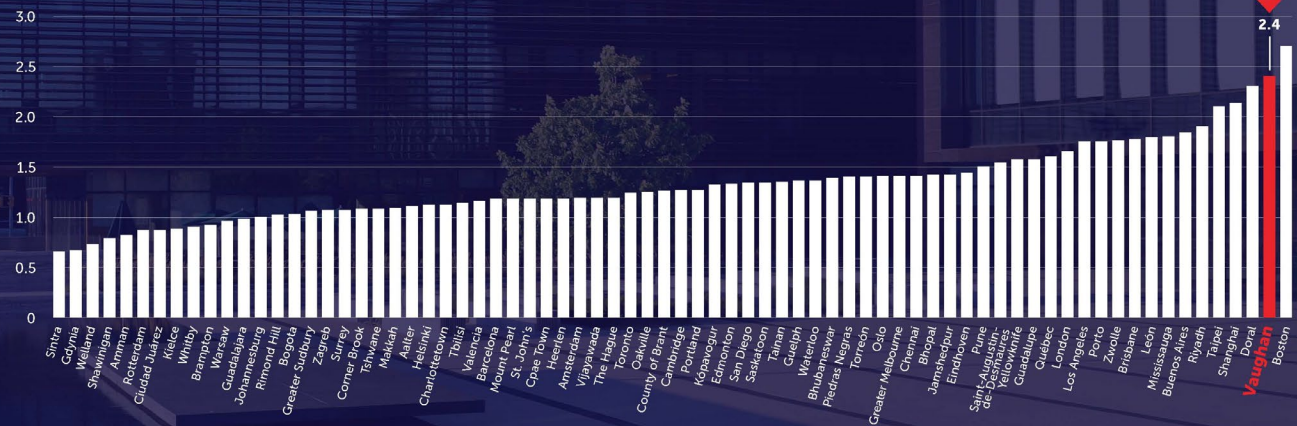


## VAUGHAN: EMBRACING URBAN GROWTH

## PLANNING AND DESIGN FOR A SUSTAINABLE FUTURE

### Jobs/Housing Ratio

ISO 37120 Indicator 21.3

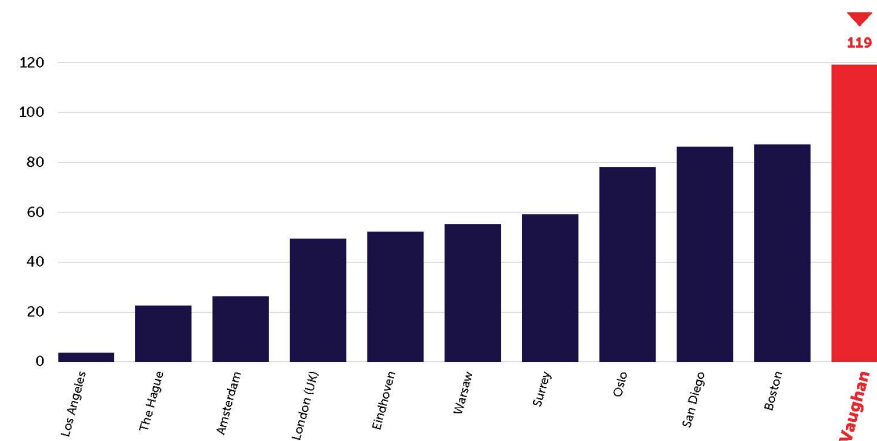


VAUGHAN: SUPPORTING  
TRANSPORTATION AND MOBILITY

DEVELOPING  
TRANSIT  
INFRASTRUCTURE

## Kilometres of Light Passenger Public Transport System per 100 000 Population

ISO 37120 Profile Data



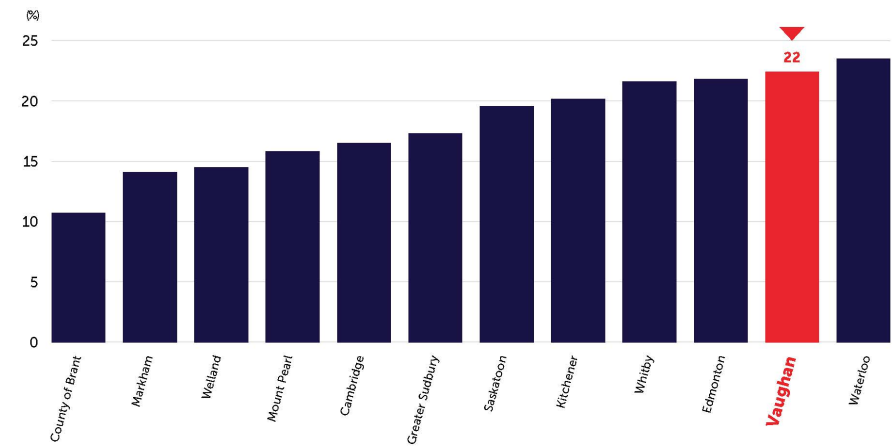


## VAUGHAN: SUPPORTING TRANSPORTATION AND MOBILITY

# A CANADIAN LEADER IN RESPONSIBLE COMMUTING

## Percentage of Commuters Using A Travel Mode to Work Other Than a Personal Vehicle

ISO 37120 Indicator 19.3



# VAUGHAN

A LEADER IN  
ENVIRONMENTAL  
STEWARDSHIP



WCCD | WORLD COUNCIL  
ON CITY DATA

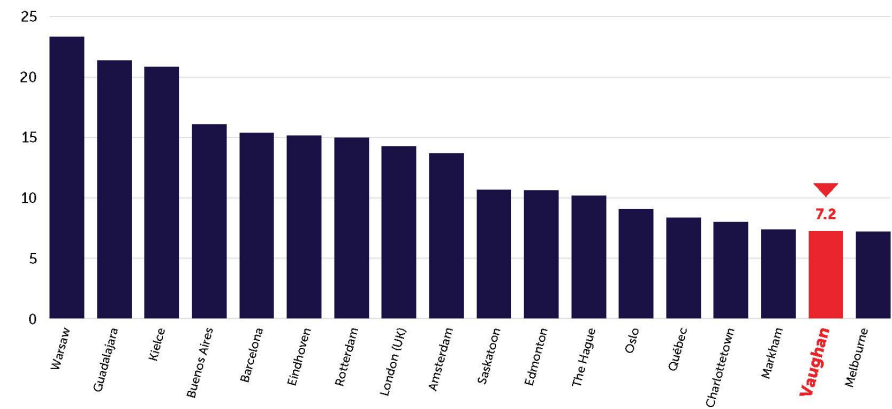


VAUGHAN: A LEADER IN  
ENVIRONMENTAL STEWARDSHIP

## CELEBRATING AIR QUALITY

### Fine Particulate Matter (PM2.5) Concentration

ISO 37120 Indicator 8.1



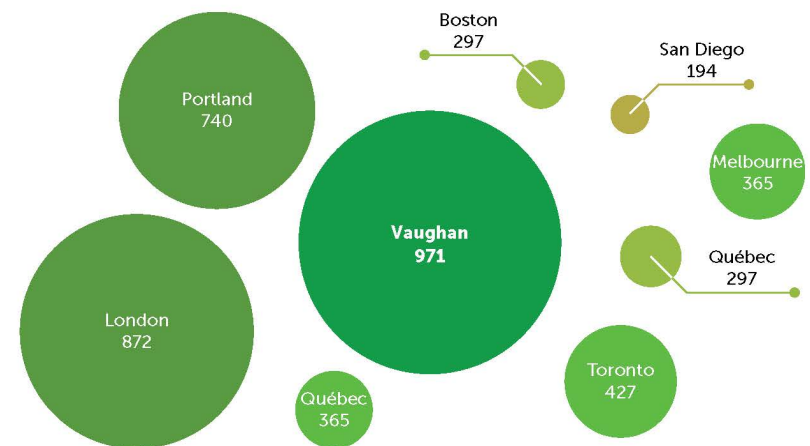


**VAUGHAN: A LEADER IN  
ENVIRONMENTAL STEWARDSHIP**

## ACCESS TO URBAN NATURE FOR ALL

### Green Area (hectares) per 100 000 Population

ISO 37120 Indicator 21.1





# VAUGHAN

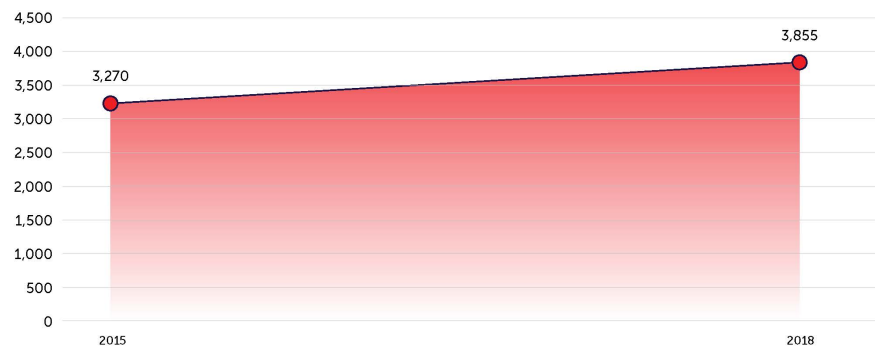
ENCOURAGING  
PROSPERITY



## VAUGHAN: ENCOURAGE PROSPERITY SUPPORTING ENTREPRENEURIALISM

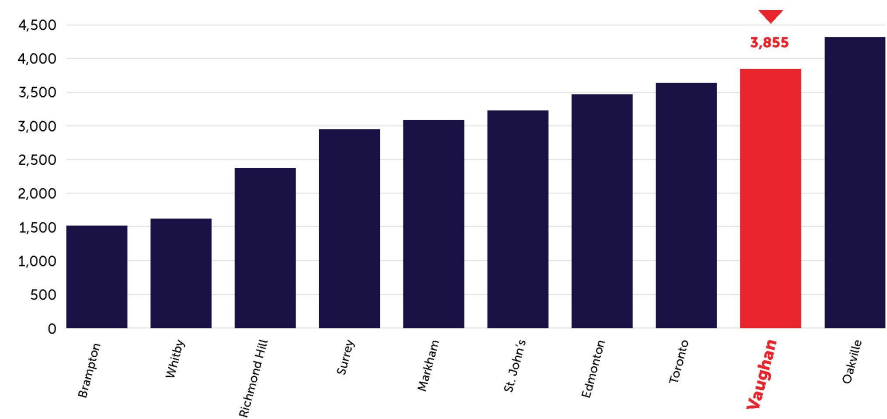
### Number of Businesses per 100 000 Population - Trend

ISO 37120 Indicator 5.5



### Number of Businesses per 100 000 Population

ISO 37120 Indicator 5.5

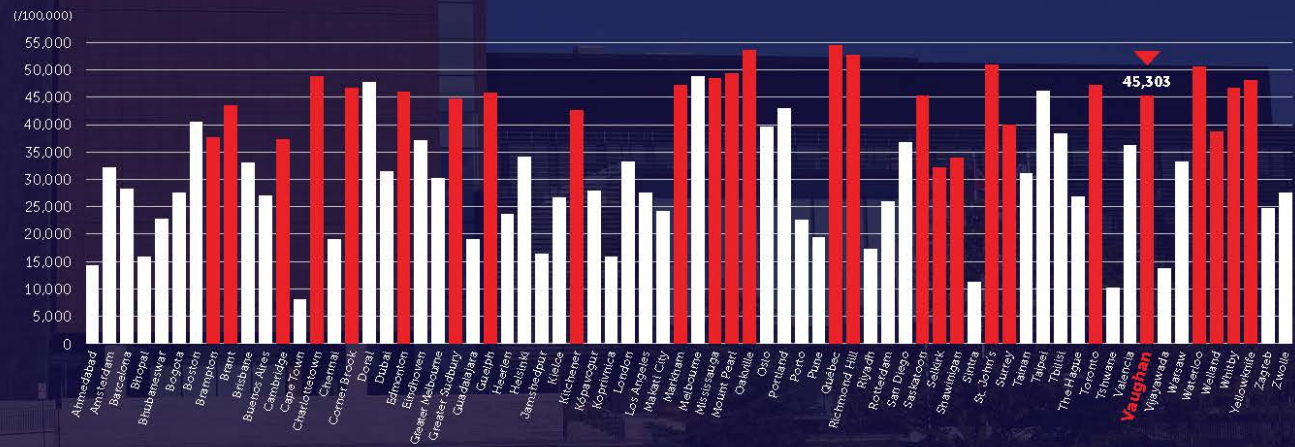


VAUGHAN: ENCOURAGING  
PROSPERITY

A HIGHLY  
QUALIFIED  
WORKFORCE

## Number of Higher Education Degrees per 100 000 Population

ISO 37120 Indicator 6.6





# **Harnessing WCCD Data to Support Vaughan's TERM OF COUNCIL STRATEGIC PRIORITIES**



# WCCD

## Transportation and Mobility

**Strategic Goal Statement:** To be a fully connected and integrated community, the City will undertake initiatives to improve the municipal road network, support the development of transit and increase cycling and pedestrian infrastructure.

### Objectives:

- Improve local road network
- Support regional transportation initiatives
- Advance active transportation



Vaughan In a Canadian Perspective

ISO 37120 Indicator 19.4 Kilometers of Bicycle Paths and Lanes per 100,000 population

Kilometres of bicycle paths and lanes per 100 000 population



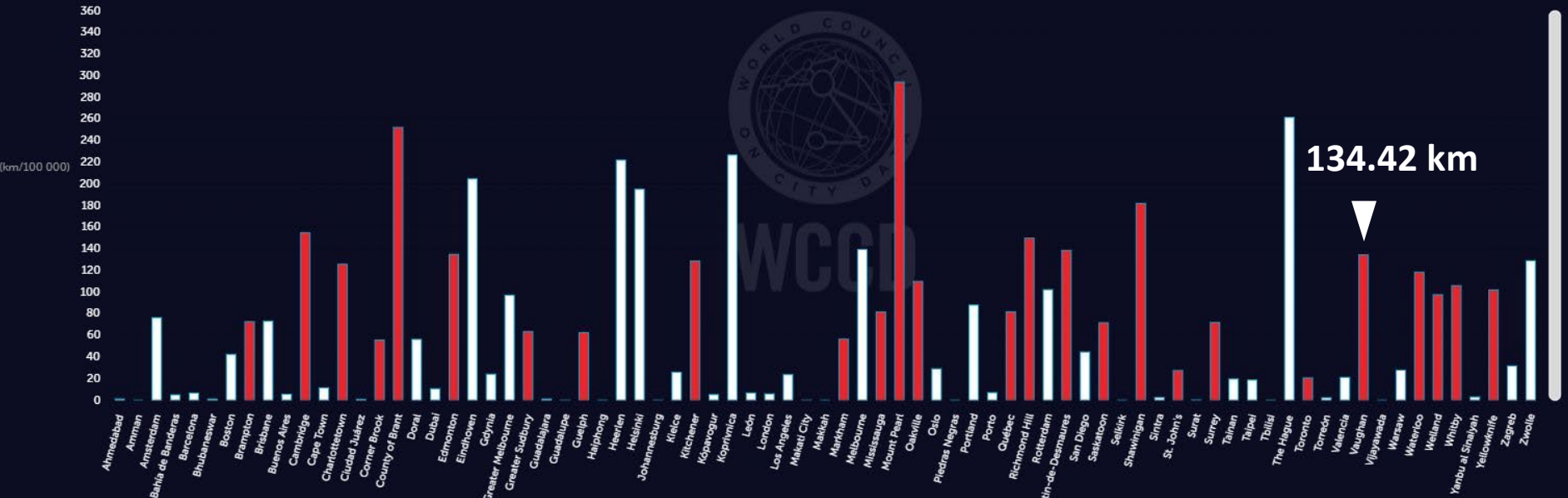


Vaughan In a Global Perspective

ISO 37120 Indicator 19.4 Kilometers of Bicycle Paths and Lanes per 100,000 population

Kilometres of bicycle paths and lanes per 100 000 population

ISO 37120 Indicator 19.4





# WCCD

## Environmental Stewardship

**Strategic Goal Statement:** To protect the environment and foster a sustainable future, the City will act as a steward to preserve the natural environment by encompassing principles of environmental protection into our social and economic initiatives.

### Objectives:

- Protect and respect our environment
- Proactive environmental management
- Build the low-carbon economy and a resilient city



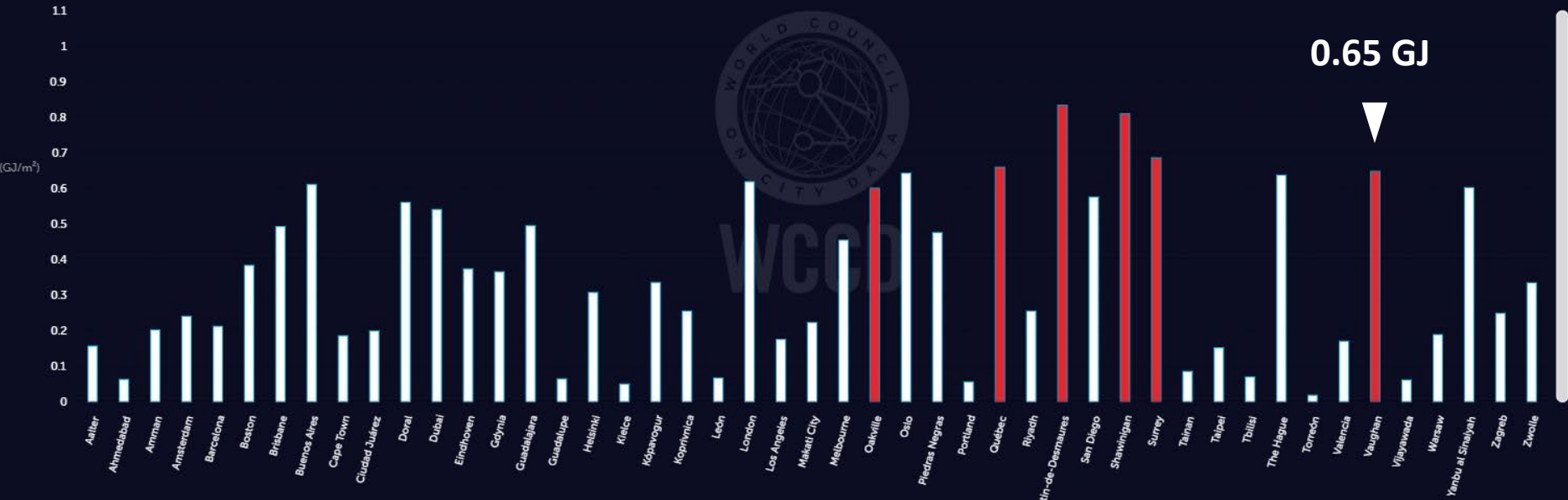
Objectives:            Protect and respect our environment  
                             Proactive environmental management

Vaughan In a Global Perspective

ISO 37120 Profile Data – Energy (Electricity) Consumption of Public Buildings Per Year

Energy (electricity) consumption of public buildings per year

ISO 37120 Profile Data





# WCCD

## Active, Safe and Diverse Communities

**Strategic Goal Statement:** To ensure the safety and well-being of citizens, the City will commit to engagement and cohesiveness by supporting and promoting community events, arts, culture, heritage, sports and fire prevention awareness.

### Objectives:

- Enhance community well-being
- Enrich our communities
- Maintain safety in our community

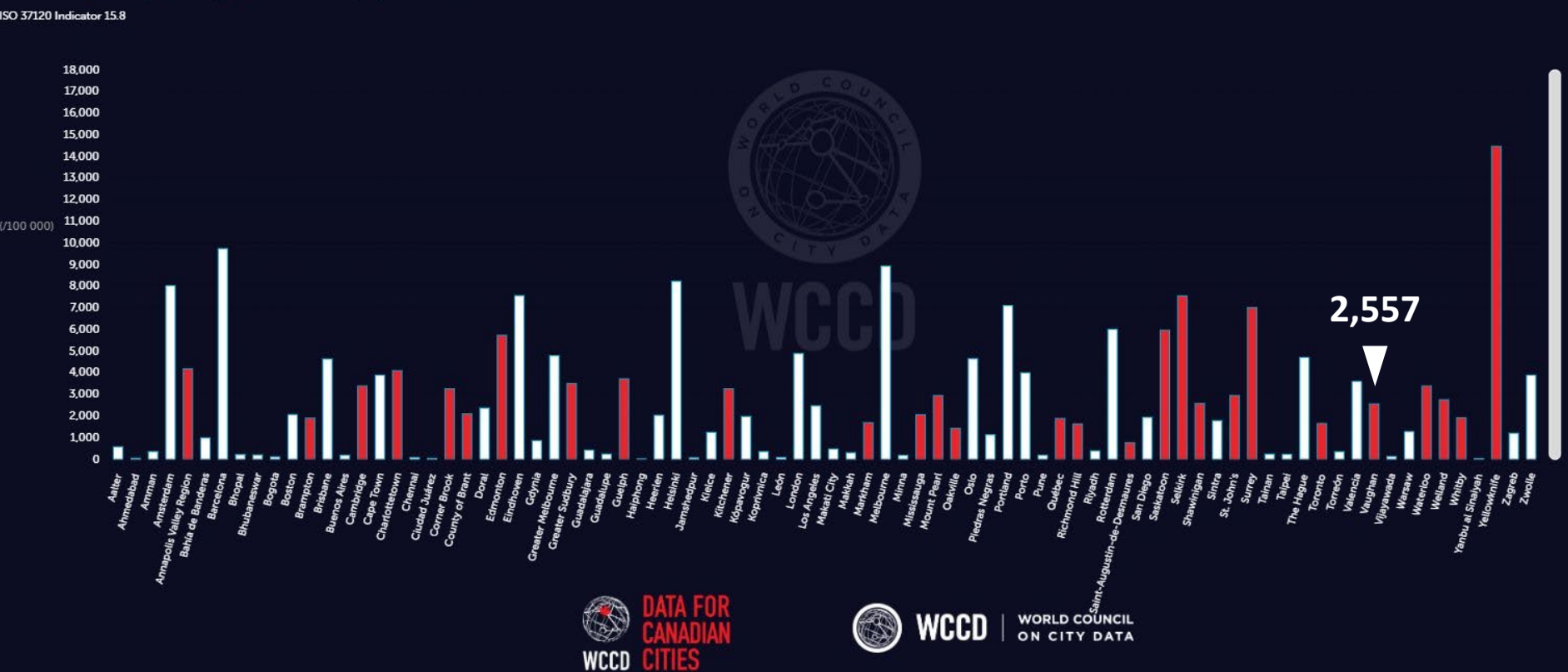


Objectives: Enhance community well being  
Maintain safety in our community

Vaughan In a Global Perspective

ISO 37120 Indicator 15.8 – Crimes against property per 100,000 population

Crimes against property per 100 000 population



Objectives: Enhance community well being  
Maintain safety in our community

Vaughan In a Canadian Perspective

ISO 37120 Indicator 15.8 Data – Crimes against property per 100,000 population







# WCCD

## Economic Prosperity, Investment and Social Capital

**Strategic Goal Statement:** To ensure Vaughan continues to be the place to be, the City will undertake initiatives to ignite economic prosperity and social capital, and celebrate Vaughan as an entrepreneurial city and the gateway to economic activity in the Greater Toronto Area, Ontario and Canada.

### Objectives:

- Advance economic opportunities
- Attract new investments
- Enable a climate for job creation



**Objectives:**      **Advance economic opportunities**  
                          **Attract new investments**  
                          **Enable a climate for job creation**

## Vaughan In a Canadian Perspective

### ISO 37120 Indicator 5.1 – City’s unemployment rate

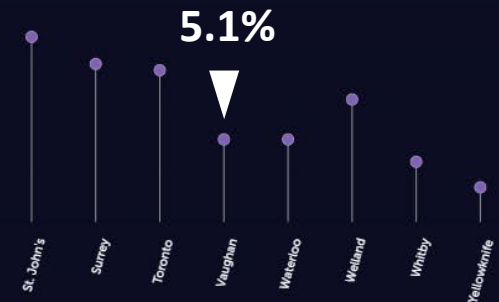
#### City’s unemployment rate

ISO 37120 Indicator 5.1



**WCCD**

WORLD COUNCIL  
ON CITY DATA



**Objectives:**      **Advance economic opportunities**  
                         **Attract new investments**  
                         **Enable a climate for job creation**

## Vaughan In a Canadian Perspective

### ISO 37120 Indicator 5.5 – Number of businesses per 100,000 population



**Objectives:** Advance economic opportunities  
Attract new investments  
Enable a climate for job creation

## Vaughan In a Canadian Perspective

### ISO 37120 Indicator 5.8 – Commercial Air Connectivity (number of non-stop commercial air destinations)

Commercial air connectivity (number of non-stop commercial air destinations)

ISO 37120 Indicator 5.8

500,000

400,000

300,000

200,000

100,000

0



Canada



**WCCD**

WORLD COUNCIL  
ON CITY DATA

**345,011**



# WCCD

# THE WORLD COUNCIL ON CITY DATA

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## City Data Supporting Vaughan's Smart City Task Force

Patricia McCarney  
President and CEO

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