

THE WORLD COUNCIL ON CITY DATA



WCCD

WCCD ISO 37120

Platinum Certification

City of Markham

Patricia McCarney
President and CEO

James Patava
Vice President

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

Twitter: @WCCityData

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Justine Hamilton-Arvisais
Manager – City Relations



CELEBRATING THE CITY OF MARKHAM 4 YEARS OF WCCD ISO 37120 CERTIFICATION

ISO 37120



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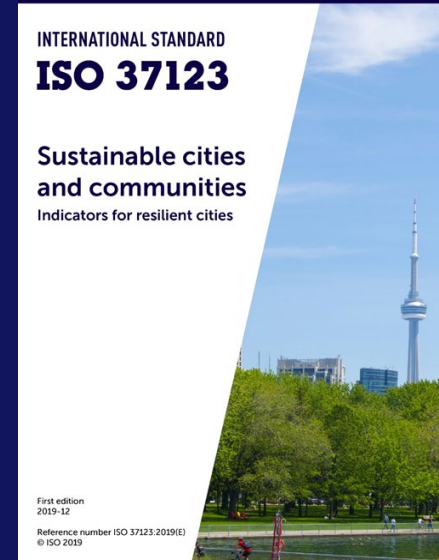
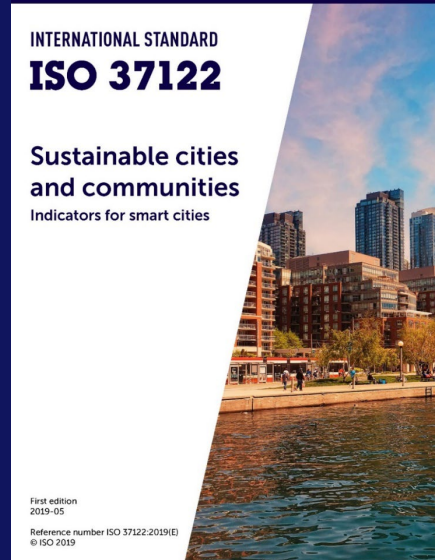
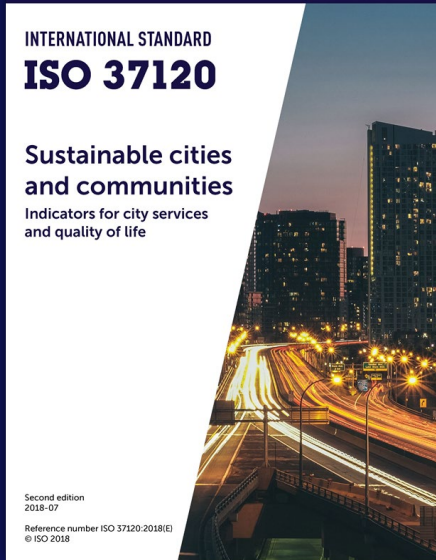
WORLD COUNCIL
ON CITY DATA

THE ISO 37120 SERIES

SUSTAINABLE

SMART

RESILIENT



+

ISO 37125
ESG
Indicators
for Cities

ISO 37120

Indicators for City Services and Quality of Life

The **1st** ISO Standard for cities

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

ISO 37122

Indicators for Smart Cities

Cities globally are becoming early Adopters and demonstrating that **data** is the essential starting point for **Smart Cities Tracking Data** that is Citizen Focused

ISO 37123

Indicators for Resilient Cities

Cities globally are becoming Early Adopters and demonstrating that **data** is instrumental in building more **Resilient Cities** to plan for, and recover from, shocks and stresses

WCCD – A Longstanding Partner of UNDRR



WCCD

WORLD COUNCIL
ON CITY DATA



UNDRR

United Nations Office for
Disaster Risk Reduction

A Core Partner of MCR 2030



**Making
Cities
Resilient**

How can WCCD-certified ISO data now be put to work in Markham? Data applications for globally standardized data



Economic Development



Infrastructure Investment



Localizing Global Agendas



Internal Benchmarking



Global Benchmarking



Strategic Planning

NEW: WCCD INVESTMENT ATTRACTION TOOL

6 DOMAINS



ECONOMIC VIBRANCY



HUMAN CAPITAL &
INNOVATION



MOBILITY & CONNECTIVITY



LIVABILITY



STATE OF THE CITY





HUMAN CAPITAL & INNOVATION

Knowledge Economy

Number of new patents per 100 000 population per year	78
Percentage of the labour force employed in occupations in the education and research and development sectors	Not reported
Percentage of the labour force employed in occupations in the information and communications technology (ICT) sector	Not reported
Percentage of city population with professional proficiency in more than one language	Not reported
Number of science, technology, engineering and mathematics (STEM) higher education degrees per 100 000 population	Not reported
Number of higher education degrees per 100 000 population	56 669

Quality Education

A Global Talent Pool

- Employment Outlook
- Growth Trajectory
- Land, Property, and Housing

- Commitment to a Healthy Community
- Citizen Well-being
- Sustainable & Resilient Environment

- Commitment to Safety
- Sound Financial Management and Good Governance

- ICT Infrastructure
- Efficient Transportation



ECONOMIC VIBRANCY



LIVABILITY



STATE OF THE CITY



MOBILITY & CONNECTIVITY



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Economic Development



Infrastructure Investment



Localizing Global Agendas



Internal Benchmarking



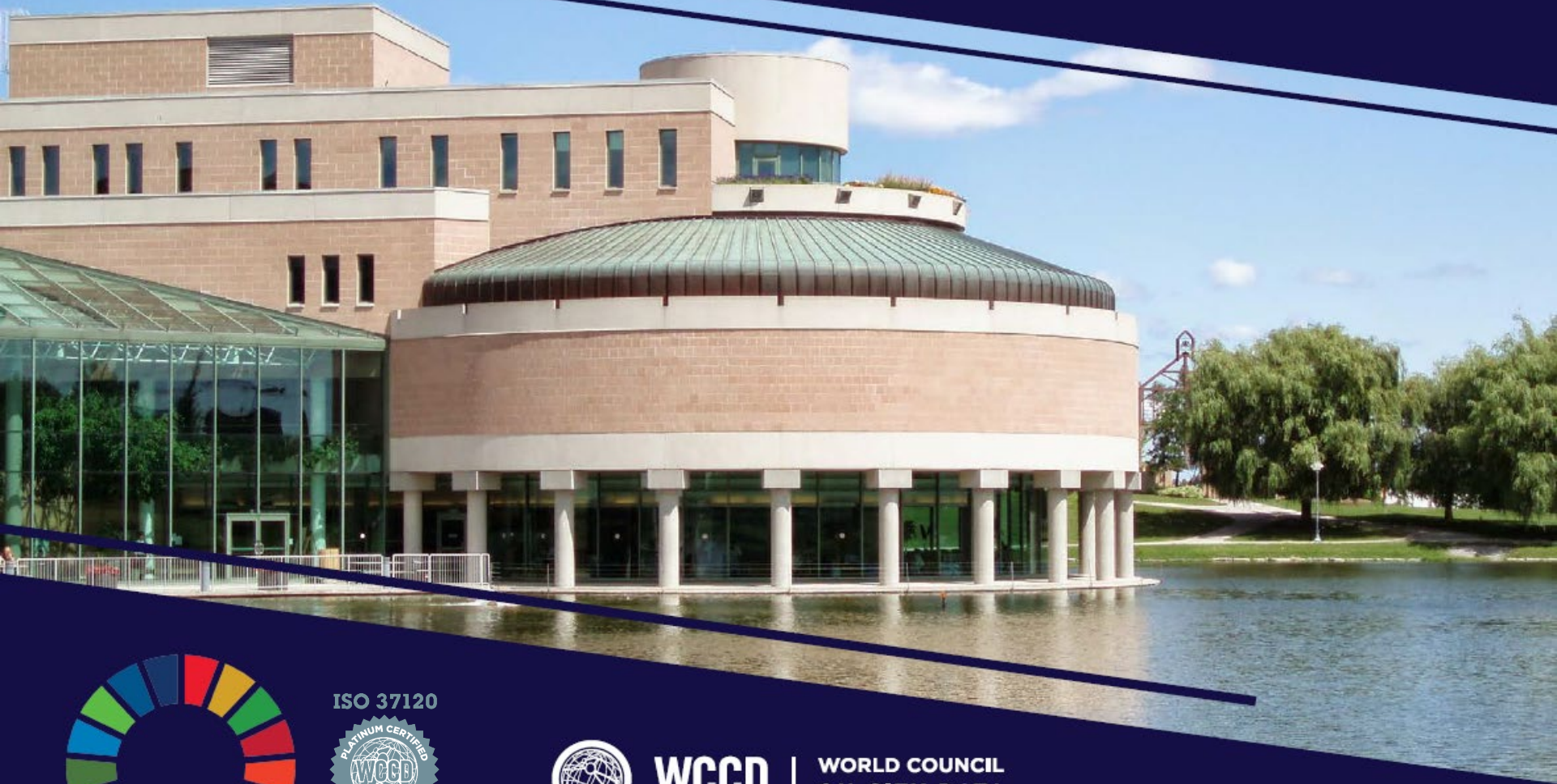
Global Benchmarking



Strategic Planning

CITY OF MARKHAM

DATA DRIVEN INSIGHTS



ISO 37120



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WCCD ISO 37120 Certification Year 2022

SUPPORTING CITY OF MARKHAM STRATEGIC GOALS: SAFE, SUSTAINABLE, AND COMPLETE COMMUNITY

A TREND OF DENSIFICATION

Population density

ISO 37120

(/km²)

1 700

1 600

1 500

1 400

1 300

2010

2011

2012

2013

2014

2015

2016

2017

2018

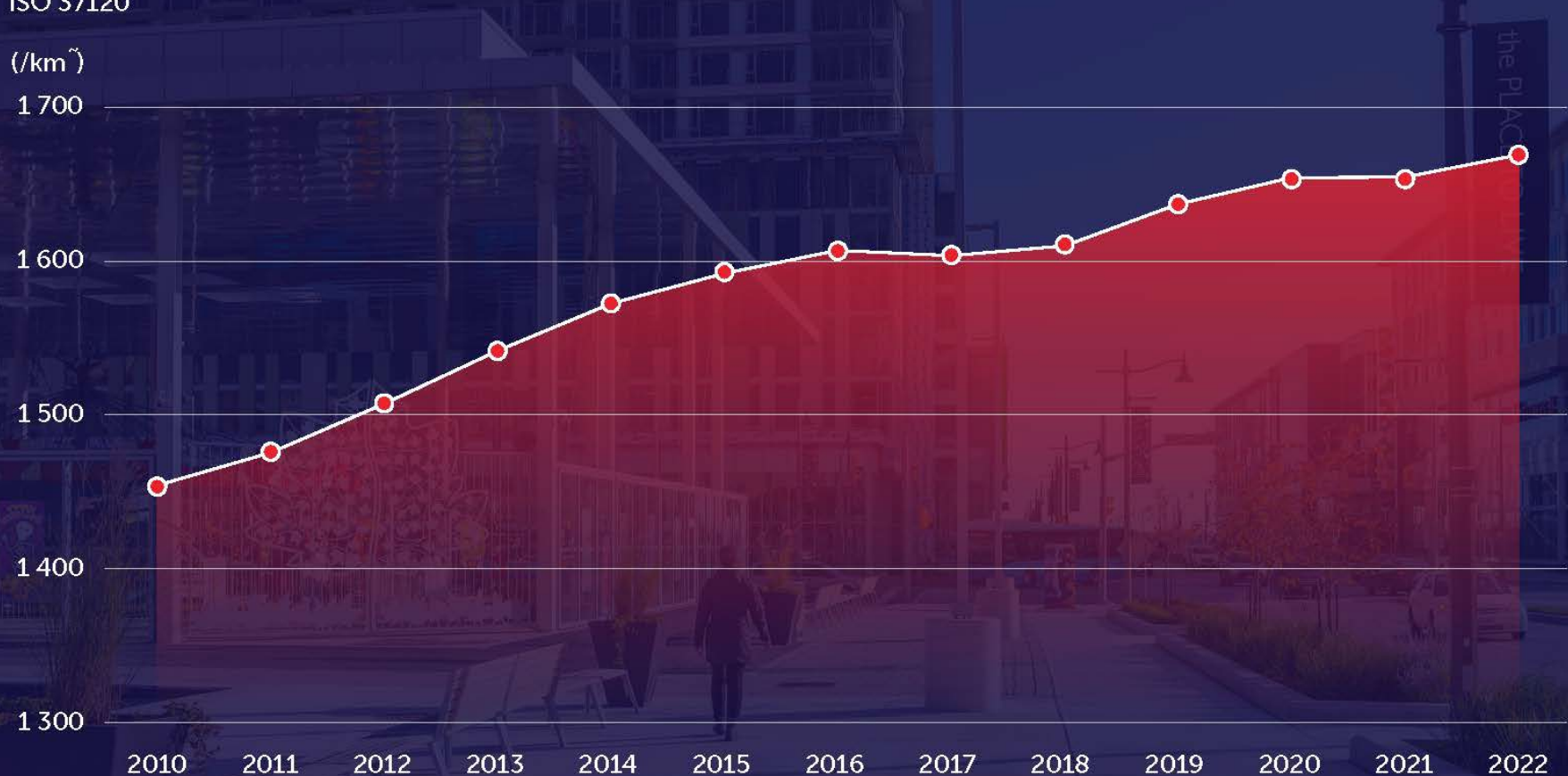
2019

2020

2021

2022

Data derived from Statistics Canada (2021)

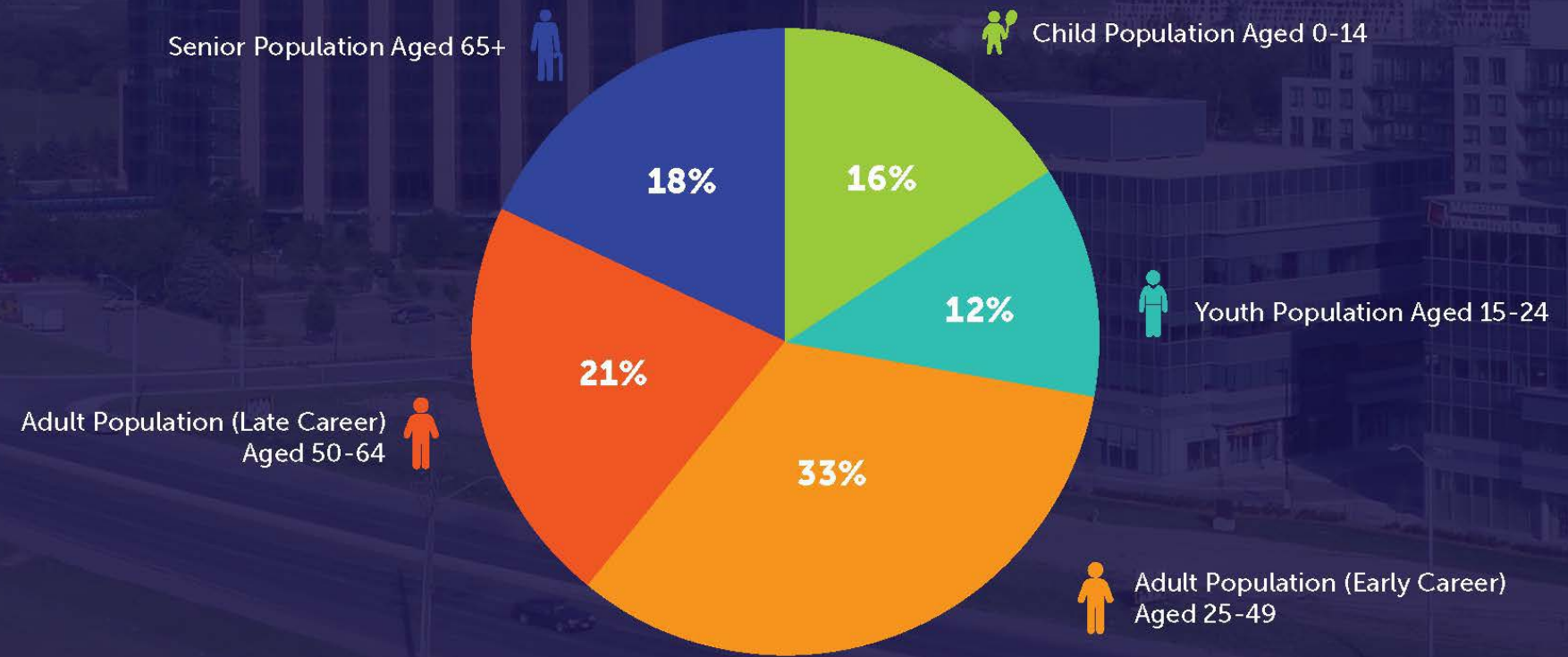


SUPPORTING CITY OF MARKHAM STRATEGIC GOALS: **ENGAGED, DIVERSE, THRIVING, AND VIBRANT CITY**

A YOUTHFUL CITY

Markham demographic profile

ISO 37120
Age Cohort



Data derived from Statistics Canada

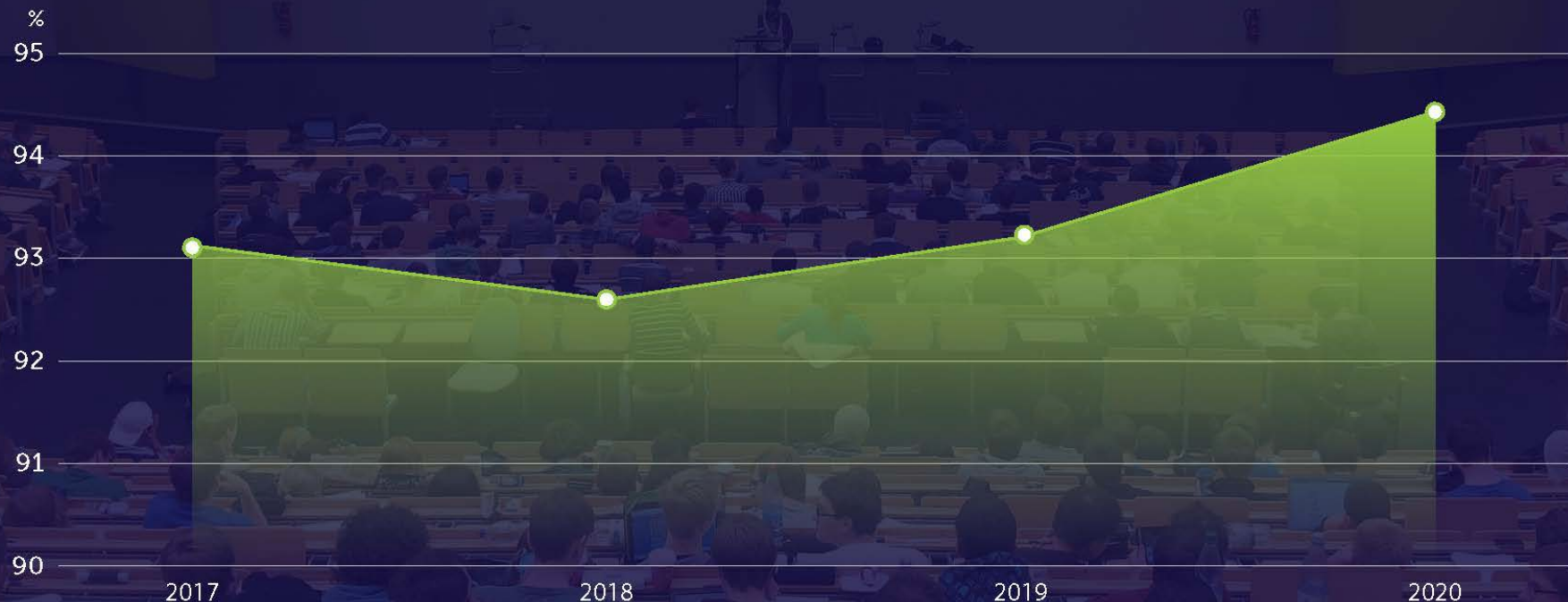
SUPPORTING CITY OF MARKHAM STRATEGIC GOALS: ENGAGED, DIVERSE, THRIVING, AND VIBRANT CITY

BUILD MARKHAM AS THE BEST PLACE TO LIVE, INVEST, WORK AND EXPERIENCE RICH DIVERSITY

Percentage of students completing secondary education

ISO 37120 Indicator 6.3

Sustainable Development Goals

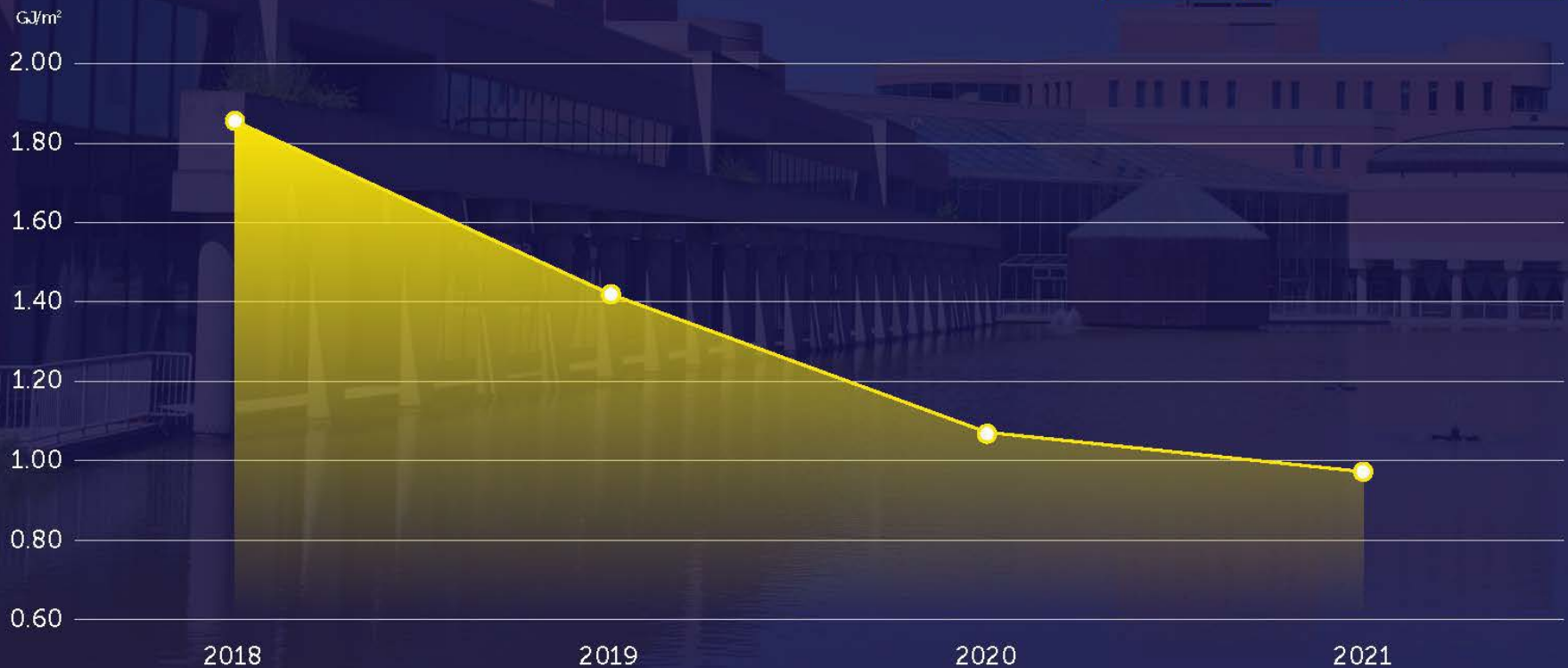


SUPPORTING CITY OF MARKHAM STRATEGIC GOALS: STEWARDSHIP OF MONEY AND RESOURCES

PROACTIVELY MANAGE OUR ASSETS TO MAXIMIZE THE RETURN (FINANCIAL, SOCIAL, ENVIRONMENTAL, AND CULTURAL) ON TAXPAYER INVESTMENT

Final energy consumption of public buildings per year (GJ/m²)

ISO 37120 Indicator 7.5



Sustainable Development Goals



SUPPORTING CITY OF MARKHAM STRATEGIC GOALS: SAFE, SUSTAINABLE, AND COMPLETE COMMUNITY

PROTECT AND ENHANCE OUR NATURAL ENVIRONMENT AND BUILT FORM

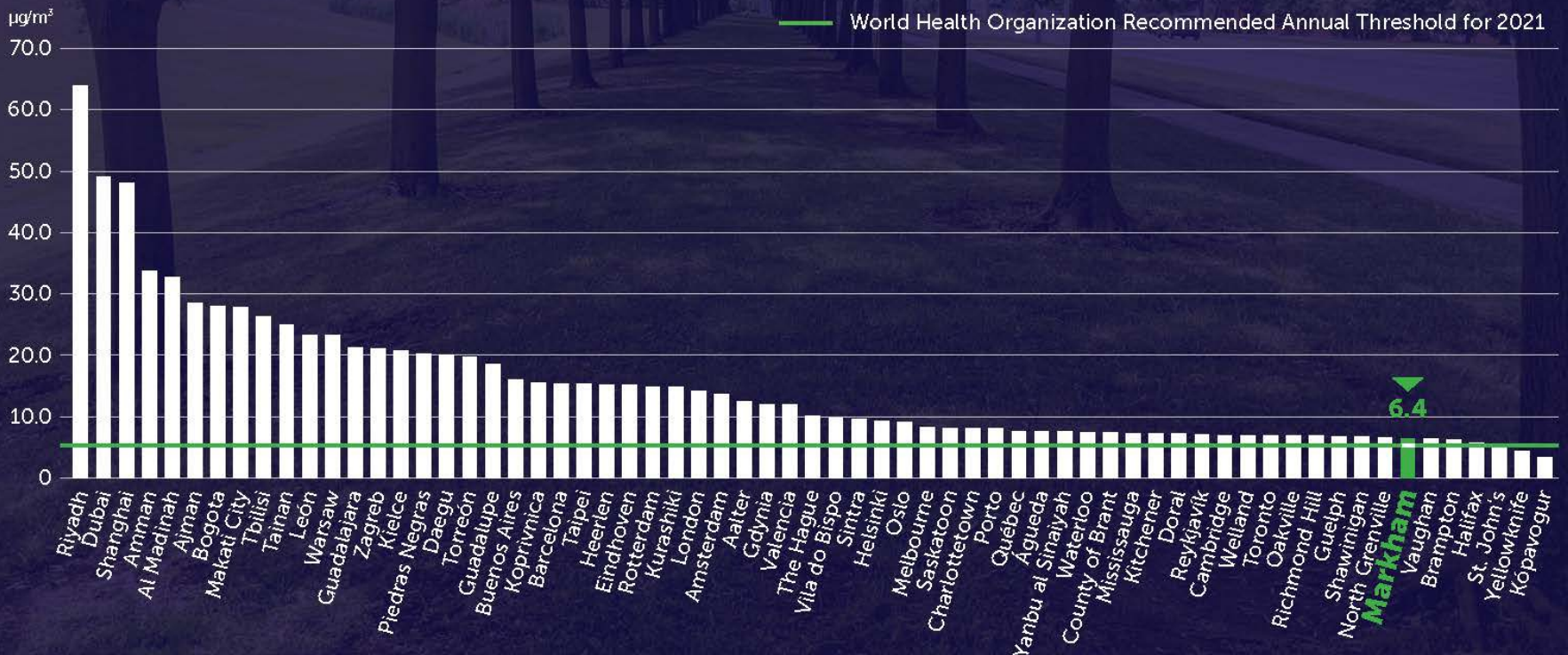
PM2.5 measures levels of fine particulate matter in the air, such as fine dust and soil particles, acids, metals and allergens. Health effects from high concentrations of particulate matter in the air are predominantly associated with respiratory and cardiovascular issues.

Sustainable Development Goals



Fine Particulate Matter (PM2.5) Concentration ($\mu\text{g}/\text{m}^3$)

ISO 37120 Indicator 8.1



SUPPORTING CITY OF MARKHAM STRATEGIC GOALS: SAFE, SUSTAINABLE, AND COMPLETE COMMUNITY

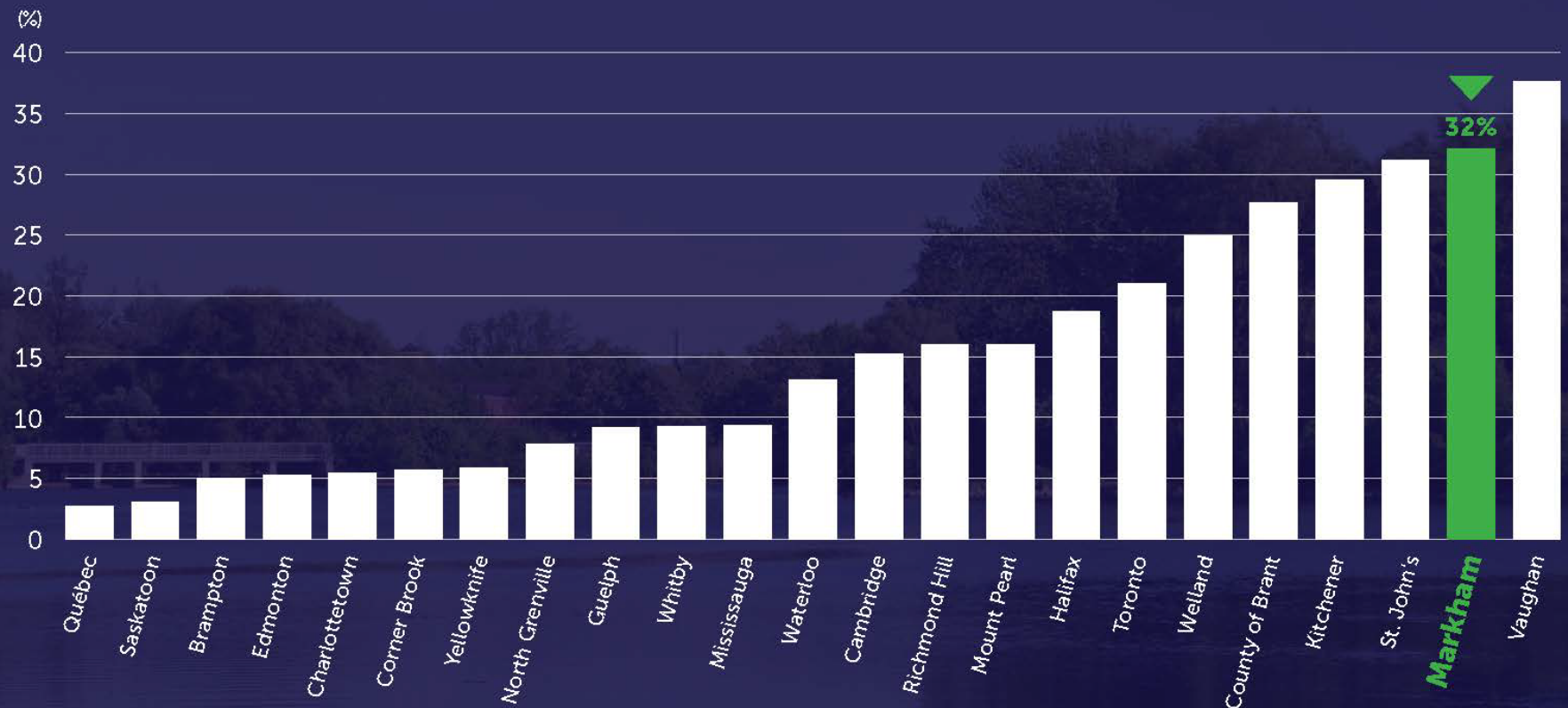
PROTECT AND ENHANCE OUR NATURAL ENVIRONMENT AND BUILT FORM

Sustainable Development Goals



Percentage of areas designated for natural protection

ISO 37120 Indicator 8.4



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

ISO 37120



**WORLD COUNCIL
ON CITY DATA**



ISO 37120



**WORLD COUNCIL
ON CITY DATA**

Certificate Of Registration

**ISO 37120 Sustainable Development of Communities:
Indicators for City Services and Quality of Life**

The World Council on City Data certifies that:

MARKHAM

Has reported indicators in conformity
with ISO 37120 at the

Platinum Level - ISO 37120

And has been added to the WCCD Global Cities Registry™

Reporting Year: **2022**

Certificate Registration Number: **2022-P-0217**

Certificate Expiry Date: **December 31, 2023**

A handwritten signature in black ink, appearing to read 'P. McCarney', positioned above a horizontal line.

Patricia McCarney
President and CEO
World Council on City Data



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ON CITY DATA

**DATA IS THE UNIVERSAL
LANGUAGE**



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