
TO: GENERAL COMMITTEE

SUBJECT: WORLD COUNCIL ON CITY DATA

WARD: ALL

PREPARED BY AND KEY CONTACT: D. CLARKE, INNOVATION ANALYST, x4781

SUBMITTED BY: R. BUNN, EXECUTIVE DIRECTOR OF INNOVATE BARRIE

GENERAL MANAGER APPROVAL: R. BUNN, EXECUTIVE DIRECTOR OF INNOVATE BARRIE

CHIEF ADMINISTRATIVE OFFICER APPROVAL: M. PROWSE, CHIEF ADMINISTRATIVE OFFICER

RECOMMENDED MOTION

1. That the Mayor and City Clerk be authorized to execute an agreement with the World Council on City Data to obtain certification and registration for ISO 37120 Indicators for City Services and Quality of Life, in a form acceptable to the Executive Director of Innovate Barrie and the Director of Legal Services.
2. That staff in Innovate Barrie report back to General Committee in Quarter 1 of 2018 regarding the City of Barrie's 2017 performance associated with the ISO 37120 indicators.

PURPOSE & BACKGROUND

Report Overview

3. The purpose of this Staff Report is to provide information to General Committee regarding the World Council on City Data standardized city data program and gain approval for beginning the certification process.

Background

4. In 2014, the City of Barrie exited the Ontario Municipal Benchmarking Initiative (OMBI). The Municipal Performance Measurement Program (MPMP) was discontinued by the province in 2015 for the 2014 reporting year. The provincial government continues to collect limited city service performance data through the Financial Information Record (FIR).

ANALYSIS

5. "The World Council on City Data (WCCD) hosts a network of innovative cities committed to improving services and quality of life with open city data. The WCCD is globally operationalizing ISO 37120 – the first international standard for sustainable cities, and hosts the Global Cities Registry™ for ISO 37120. For the first time, this new standard allows for the generation of globally comparative, independently verified open city data from global cities with the goal of creating a global network dedicated to building more sustainable, prosperous, resilient and smart cities. Please feel free to watch and share with others this [short video](#) highlighting the benefits of joining the WCCD network and becoming ISO 37120 certified."

Dr. Patricia McCarney, President & CEO, World Council on City Data.

6. The International Organization for Standardization is an independent, non-governmental international network that was founded in 1946 to provide global standards for products, services and industries. The ISO defines an international standard as “a document containing practical information and best practice...an agreed way of doing something or a solution to a global problem.” (Appendix C, pg 4)
7. ISO 37120 Sustainable Development of Communities: Indicators for City Services and Quality of Life is the first International Organization for Standardization (ISO) standard on city metrics. The international standard, published in May 2014, was developed in conjunction with Global City Indicators Facility, and tested by more than 250 cities globally. The standard includes 100 indicators, across 17 themes related to city services and quality of life. The themes include: economy, education, energy, environment, finance, fire and emergency response, governance, health, recreation, safety, shelter, solid waste, telecommunication and innovation, transportation, urban planning, wastewater, water and sanitation. For a full list of indicators, see Appendix B.
8. The World Council on City Data offers 5 levels of certification from aspirational to platinum. The certification process includes independent, third party verification of city data, to ensure city data is globally comparable. The open and standardized data provided by the certification and reporting process enables evidence-based decision making, improves transparency and accountability, and promotes best practice sharing between municipalities.
9. Since May 2014, 66 cities have certified with ISO 27120, including 6 Canadian cities in 2016 (Cambridge, Oakville, Saint-Augustin-de-Desmaures, Surrey, Toronto and Vaughan), all with platinum certification status.
 - a) The City of Toronto was involved from the outset in developing and testing the international standard. They have used their performance to drive strategic planning internally and with other levels of government. The economic development department uses the global data to present Toronto as an attractive investment option to the international business community.
 - b) The City of Vaughan was the second city in Canada to be recognized by the WCCD. The indicators are being used to improve strategic planning, drive business plans and marketing strategies, and has been integrated into their 2018 business planning and budget process. Vaughan has seen benefits across the organization, including an increased confidence in data driving improved collaboration across departments and partnerships, and transforming culture toward evidence-based decision making.
 - c) The City of Cambridge certified as platinum in 2016. Using the data gathering framework developed by Vaughan, Cambridge was able to certify and report for 2016 in just 105 staff hours. Cambridge is using the standardized data to drive strategic action plans related to community priorities such as their water conservation programs. Cambridge has integrated the ISO 37120 data into their corporate performance measurement and reporting framework, as well as their continuous improvement activities.
10. Other levels of government have engaged with the WCCD to understand how standardized city data can be used to drive partnership, enable prioritized investment and report on investment impact.
 - a) The Ministry of Infrastructure and Communities is working with the WCCD to model and track the impact of infrastructure investment through the performance indicators. They have identified annual monitoring reports and 5 year benchmarking reports based on performance indicators within 11 of 17 themes.
 - b) The Open Data for Ontario Municipalities Initiative is a project by the WCCD to source, gather and pre-populate data required for ISO 37120 certification to simplify the process

for Ontario municipalities. WCCD is working with the province of Ontario and the federal government on initiatives to optimize.

ALTERNATIVES

11. The following alternatives are available for consideration by General Committee:

Alternative #1

General Committee could maintain the status quo related to performance measurement in the business plan and annual reports.

This alternative is not recommended as the singular focus on purely internal performance data reduces our ability to benchmark our performance on strategic municipal indicators against other cities.

FINANCIAL

12. The costs associated with WCCD certification are \$7500 USD annually, and will be covered within the existing operating budget for 2018.
13. Using lessons learned from City of Vaughan and City of Cambridge, we expect the staff time to collect the data related to certification and reporting to be minimal, less than 150 hours across the organization in the first year. No additional staff resources will be required to implement the recommendation as existing staff involved in strategic and/or business performance management will be requested to provide the data on services within their operational expertise.

LINKAGE TO 2014-2018 STRATEGIC PLAN

14. The recommendation(s) included in this Staff Report support the following goals identified in the 2014-2018 Strategic Plan:
- Responsible Spending
15. The certification of the City of Barrie with the WCCD, and reporting on globally comparable performance indicators, will improve citizen trust in municipal government, enable evidence-based decision making to improve spending practices and promote the identification and implementation of best practices in municipal service delivery.



APPENDIX "A"

World Council on City Data Invitation to Mayor Lehman – City of Barrie



WCCD | WORLD COUNCIL ON CITY DATA

170 Bloor Street W, Suite 1103 | Toronto, Canada M5S 1T9 | T +1.416.966.2368

September 21, 2017

Mayor Jeff Lehman
City of Barrie
70 Collier Street, Box 400
Barrie, ON L4M 4T5

Dear Mayor Lehman,

The World Council on City Data (WCCD) has created the first international certification system and Global Cities Registry™ for ISO 37120. It is the first ISO standard on globally comparative city indicators, developed by cities, for cities. We invite your city to become ISO 37120 certified and join this global network dedicated to building more sustainable, prosperous, resilient and smart cities.

The WCCD hosts a network of innovative cities committed to improving services and quality of life with open city data. Cities certified in accordance with ISO 37120 become recognized in the WCCD Global Cities Registry™. In May 2015, the WCCD proudly launched its WCCD Open City Data Portal in Los Angeles at the National League of Cities' *Big Ideas for Cities 2015*. A worldwide first, the WCCD Open City Data Portal showcases verified data for WCCD ISO 37120 certified cities of all sizes, from around the world. The Portal allows for city-to-city comparisons and displays data using cutting-edge visualizations and tailored trend analyses. To explore the WCCD Open City Data Portal and learn more about the WCCD, please visit our website at <http://www.dataforcities.org>.

The WCCD certified its first Foundation Cities including Amman, Amsterdam, Barcelona, Boston, Bogota, Buenos Aires, Dubai, Guadalajara, Haiphong, Helsinki, Johannesburg, London, Los Angeles, Makkah, Makati, Minna, Melbourne, Rotterdam, Shanghai, and Toronto. We are now inviting cities of all sizes to join this global initiative and to become certified under ISO 37120.

Cities can achieve WCCD ISO 37120 certification, according to the following five categories:



| ASPIRATIONAL | BRONZE | SILVER | GOLD | PLATINUM |
|-----------------------|---|--|--|---|
| 30-45 Core Indicators | 46-59 Indicators (46 Core + 0-13 Supporting) | 60-75 Indicators (46 Core + 14-29 Supporting) | 76-90 Indicators (46 Core + 30-44 Supporting) | 91-100 Indicators (46 Core + 45-54 Supporting) |



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More information and details on the certification process can be found in the WCCD Certification Information package (also enclosed). Please let us know if you are interested in joining this global initiative. We look forward to welcoming your city to the World Council on City Data.

Sincerely,

Senator Art Eggleton
Chair, Global City Leaders Advisory Board
World Council on City Data

Dr. Patricia McCarney
President and CEO
World Council on City Data



APPENDIX "B"

ISO 37120 Indicators

ISO 37120 INDICATORS

| Theme | Core Indicator | Supporting Indicator |
|--------------------|---|---|
| ECONOMY | <ul style="list-style-type: none"> City's unemployment rate Assessed value of commercial and industrial properties as a % of total assessed value of all properties % of city population living in poverty | <ul style="list-style-type: none"> % 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 |
| EDUCATION | <ul style="list-style-type: none"> % of female school-aged population enrolled in schools % of students completing primary education: survival rate % of students completing secondary education: survival rate Primary education students/teacher ratio | <ul style="list-style-type: none"> % of male school-aged population enrolled in schools % of school-aged population enrolled in schools Number of higher education degrees per 100 000 population |
| ENERGY | <ul style="list-style-type: none"> Total residential electrical energy use per capita (kWh/year) % of city population with authorized electrical service Energy consumption of public buildings per year (kWh/ m²) % of total energy derived from renewable sources, as a share of the city's total energy consumption | <ul style="list-style-type: none"> Total electrical energy use per capita (kWh/year) Average number of electrical interruptions per customer per year Average length of electrical interruptions |
| ENVIRONMENT | <ul style="list-style-type: none"> Fine particulate matter (PM2.5) concentration Particulate matter (PM10) concentration Greenhouse gas emissions measured in tonnes per capita | <ul style="list-style-type: none"> Nitrogen dioxide (NO₂) concentration Sulphur dioxide (SO₂) concentration Ozone (O₃) concentration Noise pollution % change in number of native species |



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ISO 37120 INDICATORS

| Theme | Core Indicator | Supporting Indicator |
|------------------------------------|---|---|
| FINANCE | <ul style="list-style-type: none"> Debt Service ratio (debt service expenditure as a % of a municipality's own-source revenue) | <ul style="list-style-type: none"> Capital spending as a percentage of total expenditures Own-source revenue as a percentage of total revenues Tax collected as a percentage of tax billed |
| FIRE AND EMERGENCY RESPONSE | <ul style="list-style-type: none"> Number of firefighters per 100 000 population Numbers of fire related deaths per 100 000 population Number of disaster related deaths per 100 000 population | <ul style="list-style-type: none"> Number of volunteer and part-time firefighter per 100 000 population Response time for emergency response services from initial call Response time for fire department from initial calls |
| GOVERNANCE | <ul style="list-style-type: none"> Voter participation in last municipal election (as % of eligible voters) Women as a % of total elected to city-level office | <ul style="list-style-type: none"> % of women employed in the city government workforce Number of convictions for corruption and/or bribery by city officials per 100 000 population Citizen's representation: number of local officials elected to office per 100 000 population Number of registered voters as a % of the voting age population |
| HEALTH | <ul style="list-style-type: none"> Average life expectancy Number of in-patient hospital beds per 100 000 population Number of physicians per 100 000 population Under age five mortality per 1 000 live births | <ul style="list-style-type: none"> Number of nursing and midwifery personnel per 100 000 population Number of mental health practitioners per 100 000 population Suicide rate per 100 000 population |



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ISO 37120 INDICATORS

| Theme | Core Indicator | Supporting Indicator |
|-----------------------------------|---|---|
| RECREATION | | <ul style="list-style-type: none"> • Square meters of public indoor recreation space per capita • Square meters of public outdoor recreation space per capita |
| SAFETY | <ul style="list-style-type: none"> • Number of police officers per 100 000 population • Number of homicides per 100 000 population | <ul style="list-style-type: none"> • Crimes against property per 100 000 • Response time for police department from initial call • Violent crime rate per 100 000 population |
| SHELTER | <ul style="list-style-type: none"> • % of city population living in slums | <ul style="list-style-type: none"> • Number of homeless per 100 000 population • Percentage of households that exist without registered legal titles |
| SOLID WASTE | <ul style="list-style-type: none"> • % of city population with regular waste collection (residential) • Total collected municipal solid waste per capita per year • % of the city's solid waste that is recycled | <ul style="list-style-type: none"> • % of the city's solid waste that is disposed of in a sanitary landfill • % of the city's solid waste that is disposed of in an incinerator • % of the city's solid waste that is burned openly • % of the city's solid waste that is disposed of in an open dump • % of the city's solid waste that is disposed of by other means • Hazardous Waste Generation per capita (tonnes) • % of the city's hazardous waste that is recycled |
| TELECOMMUNICATIONS AND INNOVATION | <ul style="list-style-type: none"> • Number of internet connections per 100 000 population • Number of cell phone connections | <ul style="list-style-type: none"> • Number of landline phone connections per 100 000 population |



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ISO 37120 INDICATORS

| Theme | Core Indicator | Supporting Indicator |
|-----------------------------|--|---|
| TRANSPORTATION | <ul style="list-style-type: none"> • Km of light passenger public transport system per 100 000 population • Annual number of public transport trips per capita • Number of personal automobiles per capita | <ul style="list-style-type: none"> • Number of two-wheel motorized vehicles per capita • Km of bicycle paths and lanes per 100 000 population • Transportation fatalities per 100 000 population • Commercial air connectivity (number of non-stop commercial air destinations) |
| URBAN PLANNING | <ul style="list-style-type: none"> • Green area (hectares) per 100 000 population | <ul style="list-style-type: none"> • Annual number of trees planted • Areal size of informal settlements as a percentage of city area • Jobs/housing ratio |
| WASTEWATER | <ul style="list-style-type: none"> • % of city population served by wastewater collection • % of the city's wastewater that has received no treatment • % of the city's wastewater receiving primary treatment • % of the city's wastewater receiving secondary treatment • % of the city's wastewater receiving tertiary treatment | |
| WATER AND SANITATION | <ul style="list-style-type: none"> • % of city population with potable water supply service • % of city population with sustainable access to an improved water source • % of population with access to improved sanitation • Total domestic water consumption per capita (litres/day) | <ul style="list-style-type: none"> • Total water consumption per capita (litres/day) • Average annual hours of water service interruption per household • % of water loss (unaccounted for water) |



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APPENDIX "C"

ISO in Brief 2015



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ISO in brief
Great things happen **when the world agrees.**

We are ISO,
the International Organization
for Standardization



We are an independent,
non-governmental organization.



We are a global network of
national standards bodies with
one member per country.



Our job is to make International
Standards.



We are coordinated by a Central
Secretariat in Geneva, Switzerland.



We are not for profit : selling our
standards allows us to finance
their development in a neutral
environment, to maintain them
and to make new ones.



ISO provides a platform for
developing practical tools through
common understanding and
cooperation with all stakeholders.

163* members

21 350*
International Standards

100
new standards each month

238*
technical committees

ἴσος

Notice that our acronym
doesn't match our name ?

It's not meant to.

"ISO" is derived from
the Greek word *isos* (equal),
so that it's the same in
all languages.

* September 2016

We bring together experts to share knowledge
and develop International Standards
that provide solutions to global challenges.

What is an International Standard?

An International Standard
is a **document containing
practical information and
best practice.**

It often describes **an agreed
way of doing something
or a solution to a global
problem.**



In short, ISO standards help:



Make products **compatible**,
so they fit and work well with
each other



Identify **safety issues**
of products and services



Share **good ideas** and
solutions, technological
know-how and best
management practices

Paper sizes

Standards for paper sizes (A4 family) **make life easier for printer, photocopiers and office supplies manufacturers**, because they know their products will work with available paper formats.

Examples of standards
in our everyday life.

Freight containers

More goods can **travel the world smoothly by air, sea and land** thanks to containers defined in International Standards, boosting the global economy.

Credit cards

Credit cards can be used anywhere **because they meet standards** that specify dimensions, **technology and communication** protocols to work with dispensers and payment systems.

Codes for countries

The world sees eye to eye by using standardized codes for countries and currencies.

Currencies

How do you benefit from International Standards?



Industry:

- Become more competitive by offering products and services that are accepted globally.
- Enter new markets easily.
- Raise profits by offering products with increased quality, compatibility and safety.
- Reduce costs by not reinventing the wheel and using available resources better.
- Benefit from the knowledge and best practice of leading experts around the world.

Regulators:

- Harmonize regulations across countries to boost global trade.
- Increase credibility and trust throughout the supply chain.
- Make it easier for countries to outsource and specialize.

Society:

- Wider choice of safe and reliable products and services at competitive prices.
- Best practice and concerted action at the organizational level to practically address global challenges like climate change and sustainability.



Why are we unique ?

Our global network. ISO members come from virtually every country in the world.

Our brand. ISO is recognized globally and associated with confidence.

Our integrity. We have been publishing the standards the world needs since our creation in 1947. Today the ISO brand is recognized globally.

Our commitment to consensus. We work with more than 700 organizations and over 100 000 experts from different industries and sectors.

Our partnerships. We work closely with the International Electrotechnical Commission (IEC) and the International Telecommunication Union (ITU). We also have a strategic partnership with the World Trade Organization (WTO) to promote free and fair trade.

How does ISO work?

ISO only develops a standard if there is a market need for it.



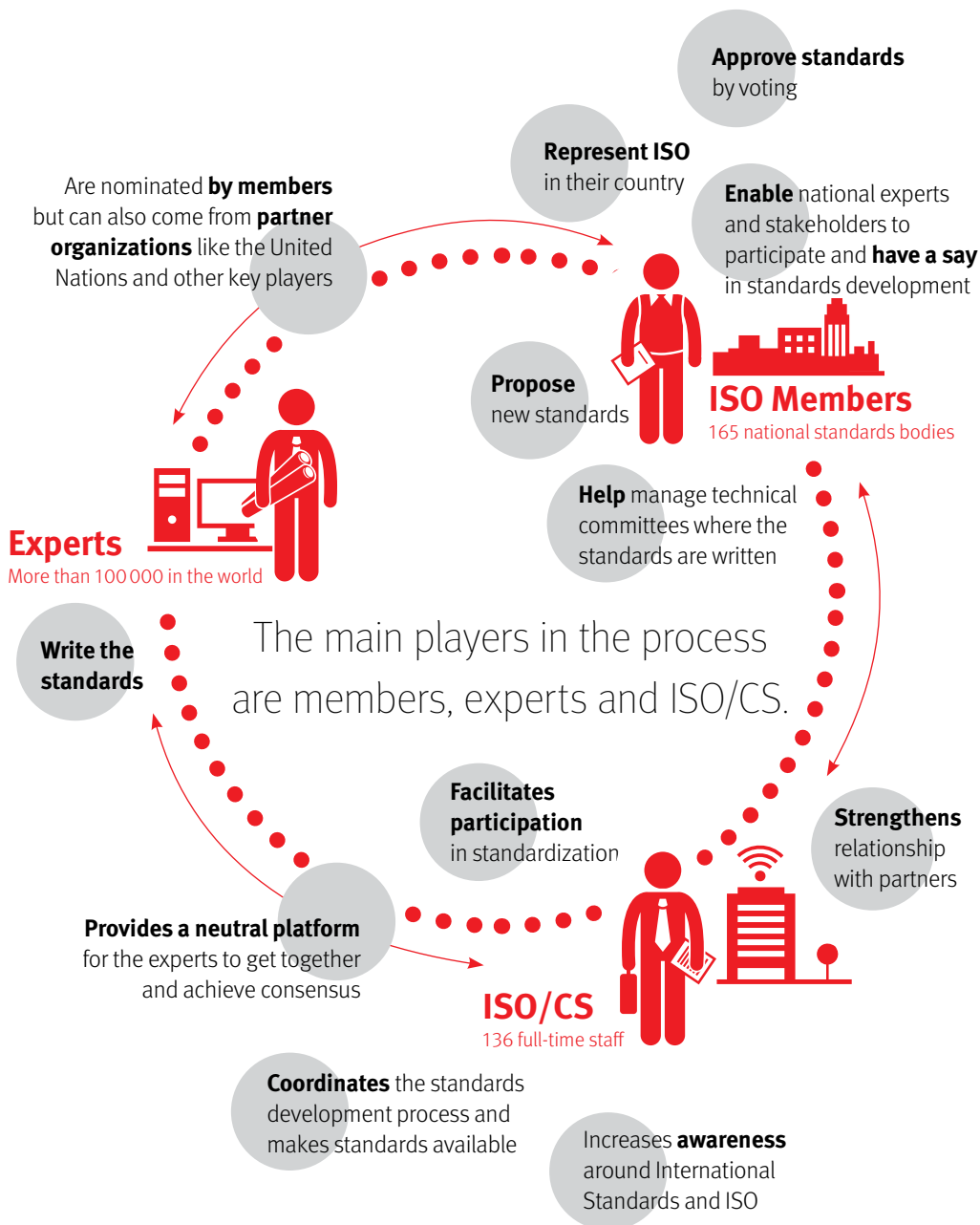
International standards are created by the people who will use and be impacted by them. We call them **EXPERTS** and they come from industry, government, consumer organizations, academia, non-governmental organizations, and more.



It is the **MEMBERS** role to identify the experts and ensure an active voice for their country.



The ISO Central Secretariat – **ISO/CS** – coordinates the development process and publishes the standards.



Get involved!



Would you like to have your say on the rules governing world trade?



Do you want to know which standards can benefit your business?



Do you have a good idea for a much needed standard?

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Contact your ISO member at
www.iso.org/isomembers

**International
Organization
for Standardization**

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