

NO: R227

COUNCIL DATE: November 16, 2015

REGULAR COUNCIL

TO: **Mayor & Council** DATE **November 16, 2015**

FROM: **General Manager, Planning and Development** FILE: **0512-02**
General Manager, Finance & Technology
Sustainability Manager

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

RECOMMENDATION

The Planning and Development Department and the Finance & Technology Department recommend that Council:

1. Receive this report as information; and
2. Approve proceeding with certification under *ISO 37120 Sustainable Development of Communities: Indicators for City Services and Quality of Life*.

INTENT

In September 2008, Council adopted the Surrey Sustainability Charter (the "Charter"), which is a comprehensive framework for a sustainable Surrey. Subsequently, a suite of sustainability indicators and targets were developed with community input to monitor progress towards the City's sustainability vision, with regular reporting to Council and the community accomplished through the Sustainability Dashboard (www.surrey.ca/dashboard). This report provides Council with information on City monitoring efforts and a new global standard for measuring the sustainable development of communities, and seeks Council approval to proceed with certification under this standard.

POLICY CONSIDERATIONS

The City of Surrey has been asked to participate in the newly created World Council on City Data (WCCD) and a new international standard for cities: *ISO 37120 Sustainable Development of Communities: Indicators for City Services and Quality of Life*. This certification aligns with current City reporting through the Sustainability Dashboard and with the Charter as the overarching policy document for the City.

BACKGROUND

Part 4 (Implementation Strategy) of the Charter notes that:

"The City's ability to achieve its vision of sustainability requires the setting of targets and the establishment of "indicators" or mechanisms to monitor progress towards meeting these targets. Indicators and targets will be established to support achieving the vision, goals and scope items of the Sustainability Charter".

At its Regular Meeting on December 13, 2010, Council considered Corporate Report No. R253;2010, which documented the list of indicators and targets that would be used to monitor progress on sustainability for the City. A Sustainability Dashboard (www.surrey.ca/dashboard) is posted on the City's website to provide a visual representation of the City's performance on the selected indicators and targets. Annual updates are made to the Sustainability Dashboard and form the basis of annual progress reports to Council on sustainability trends, the most recent of which was brought to the Regular Meeting of Council on July 27, 2015 (Corporate Report No. R151;2015). These monitoring efforts inform the development of, and refinements to, City policies, plans and programs.

Since 2010, the City has also been reporting to the Global Cities Indicator Facility (GCIF), and the Federation of Canadian Municipalities' Quality of Life Reporting System (QOLRS), for the large cities in Canada. Based at the University of Toronto, the Global Cities Indicator Facility provided an established set of city indicators with a globally standardized methodology that allowed for global comparability of city performance and knowledge sharing.

Using the GCIF framework and with the input from GCIF member cities, a new international standard for cities has now been developed with the International Organization for Standardization, entitled *ISO 37120 Sustainable Development of Communities: Indicators for City Services and Quality of Life*. The organization leading these efforts is now known as the World Council on City Data (WCCD). As a participant in the former Global Cities Indicator Facility, the City of Surrey has been invited to participate in the new ISO 37120 standard.

ISO 37120 is called "the first international standard on city metrics", although other rating systems related to City sustainability do exist such as the US-based "STAR" Sustainable Community Rating System. An analysis has been completed comparing the Sustainability Dashboard to STAR metrics. While there is significant overlap and the City would be well placed to pursue STAR certification, the STAR system is not yet readily applicable to the Canadian context due to data differences. Current efforts are underway to streamline the STAR system and develop a subset of metrics that could form the basis for future reporting. ISO 37120 includes 46 core indicators that cities must report on and another 54 supporting indicators; a list of these indicators is included as Appendix I to this report. Several levels of ISO 37120 certification exist based on the number of metrics reported:

- **Platinum** – 91 to 100 indicators (46 core indicators and 45 to 54 supporting indicators)
- **Gold** – 76 to 90 indicators (46 core and 30 to 44 supporting)
- **Silver** – 60 to 75 indicators (46 core and 14 to 29 supporting)
- **Bronze** – 46 to 59 indicators (46 core and 0 to 13 supporting)
- **Aspirational** – 30 to 45 core indicators

The World Council on City Data worked with 20 foundation cities to pilot ISO 37120, including the City of Toronto. The pilot culminated with a meeting in November 2014 to celebrate the completion of the pilot and roll out this new international standard to all cities globally. The WCCD is now seeking expressions of interest from other cities to join WCCD and become ISO 37120 certified. Other Canadian cities that have expressed interest so far include Edmonton, Mississauga, Pickering, Markham, and the Regional Municipality of Peel.

The WCCD will host the global registry for ISO 37120 and an open data platform; only cities that are registered to report will have access to all the reporting cities' data through a web platform on an annual basis. Reporting is to be completed annually, although WCCD is taking into consideration the fact that some data is dependent on the national census, which in Canada is every five years while in some other countries is every 10 years.

DISCUSSION

Value Proposition

The perspective of the City of Toronto is that "having an international standard methodology to measure city performance allows the City of Toronto to share its better practices in service delivery, learn from other global cities, rank its results relative to those cities, and address common challenges through more informed decision making". According to the Smart Cities Council, ISO 37120 "provides city leaders and citizens, for the first time, (with) a set of clearly defined city performance indicators and a standard approach for measuring each. Though some indicators will be more helpful for some cities than others, cities can now consistently apply these indicators and accurately benchmark their city services and quality of life against other cities".

Pursuing ISO 37120 certification will allow Surrey to benchmark itself against other leading world cities in a number of areas including core city services, leading to potential performance improvements. Reporting to a globally significant and rigorous standard will also elevate the importance of monitoring through the Sustainability Dashboard, and focus performance on the sustainability targets that have already been established.

Readiness

Staff have reviewed the ISO 37120 metrics, the existing GCIF indicators, and the Sustainability Dashboard indicators. Of the 100 ISO 37120 indicators, 77 are former GCIF indicators that the City had already reported and 18 are part of the Sustainability Dashboard.

Staff recommend that the City pursue 93 of the 100 ISO measures, thus aiming to achieve Platinum certification. Of these 93 measures, data is readily available for 83 measures (including all 46 core measures) and the remaining 10 measures require data collection. As such, the City is in a good position to be considered ISO ready. In some cases, there will be an initial investment of staff time to compile or extract the data on the schedule required for reporting. These efforts would be led by the Director of Information Technology connected with the City's Open Data efforts, and supported by the Sustainability Office.

Linkage with Existing Reporting

The Sustainability Dashboard is the City's main reporting tool on progress towards the sustainability vision for the City. Currently, 77 measures are reported on the Dashboard and these were developed with significant community input. With the Sustainability Charter update underway, some of these indicators and targets may be updated and community input will be sought as part of the Charter update engagement. It should be noted that the lack of overlap between the ISO 37120 measures and those of the Sustainability Dashboard (only 18 measures are in common) is due to several factors including a lack of socio-cultural measures on the ISO list (e.g., there are currently no measures in ISO 37120 relating to arts and culture), and the fact that many Dashboard measures are "made in Surrey" such as trees planted on City property and the Green Infrastructure Network related to the Biodiversity Conservation Strategy. These local measures are critical to measuring sustainability outcomes and it is not intended that the Sustainability Dashboard measures will be eliminated. Rather, it is expected that the ISO measures – which focus on City services – will complement the existing Dashboard measures.

At the same time, a project is also underway to improve the look and utility of the city Dashboard. Once the Charter update is completed, the new Dashboard will be unveiled and there will be alignment with the new organizing themes of the updated Charter.

Costs Implications

The costs to join ISO 37120 are \$4,500 US in the first year at a special rate offered to GCIF cities, followed by annual costs of up to \$7,500 US (annual registration fee of \$4,500 and annual certification costs of up to \$3,000 US).

Next Steps

If Surrey chooses to pursue ISO 37120 certification, staff would complete an Expression of Interest form. The City would receive a proposal with the terms and next steps outlined, and if that proposal is acceptable, receive an audit workbook to commence the data collection process. Given that much of the required data has already been collected for 2013/2014, the data collection process should be completed by early 2016.

Being involved with ISO certification will also allow the City to be involved in discussions around the next iteration of the standard, which might include measures related to social inclusion, arts and culture.

SUSTAINABILITY CONSIDERATIONS

ISO 37120 is a new global standard for measuring the sustainable development of communities. Pursuing this certification aligns with current City reporting through the Sustainability Dashboard, and with the Sustainability Charter as the overarching policy document for the City.

CONCLUSION

ISO 37120 certification would elevate Surrey to a high level of standard among leading world cities, and facilitate benchmarking against these cities with the goal of improving City performance in a number of areas. In addition to alignment with current monitoring and reporting through the Sustainability Dashboard, linkages also exist with the Open Data and Smart Surrey initiatives which have focused on City accountability, innovation and transparency.

Based on the above discussion, it is recommended that Council approve proceeding with certification under *ISO 37120 Sustainable Development of Communities: Indicators for City Services and Quality of Life*.

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Attachment:

Appendix I List of ISO 37120 Indicators

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List of ISO 37120 Indicators

ISO 37120 Sustainable Development of Communities: Indicators for City Services and Quality of Life			
		46 Core Indicators	54 Supporting Indicators
Economy		City's unemployment rate	Percentage of persons in fulltime employment
		Assessed value of commercial and industrial properties as a percentage of total assessed value of all properties	Youth unemployment rate
		Percentage of city population living in poverty	Number of businesses per 100 000 population
			Number of new patents per 100 000 population per year
Education		Percentage of female school-aged population enrolled in school	Percentage of male school-aged population enrolled in school
		Percentage of students completing primary education	Percentage of school-aged population enrolled in school
		Percentage of students completing secondary education	Number of higher education degrees per 100 000 population
		Primary education student/ teacher ratio	
Energy		Total residential electrical energy use per capita (kWh/ year)	Total electrical energy use per capita (kWh/year)
		Percentage of city population with authorized electrical service	Average number of electrical interruptions per customer per year
		Energy consumption of public buildings per year (kWh/m ²)	Average length of electrical interruptions (in hours)
		Percentage of total energy derived from renewable sources, as a share of the city's total energy consumption	

ISO 37120 Sustainable Development of Communities: Indicators for City Services and Quality of Life			
Environment	Fine Particulate Matter (PM _{2.5}) concentration		NO ₂ (nitrogen dioxide) concentration
	Particulate Matter (PM ₁₀) concentration		SO ₂ (sulphur dioxide) concentration
	Greenhouse gas emissions measured in tonnes per capita		O ₃ (ozone) concentration
			Noise pollution
			Percentage change in number of native species
Finance	Debt service ratio (debt service expenditure as a percentage of a municipality's own-source revenue)		Capital spending as a percentage of total expenditures
			Own-source revenue as a percentage of total revenues
			Tax collected as percentage of tax billed
Fire and emergency response	Number of firefighters per 100 000 population		Number of volunteer and part time firefighters per 100 000 population
	Number of fire related deaths per 100 000 population		Response time for emergency response services from initial call
	Number of natural disaster related deaths per 100 000 population		Response time for fire department from initial call
Governance	Voter participation in last municipal election (as a percentage of eligible voters)		Percentage of women employed in the city government workforce
	Women as a percentage of total elected to city-level office		Number of convictions for corruption and/or bribery by city officials per 100 000 population
			Citizens' representation: number of local officials elected to office per 100 000 population
			Number of registered voters as a percentage of the voting age population

ISO 37120 Sustainable Development of Communities: Indicators for City Services and Quality of Life			
Health	Average life expectancy		Number of nursing and midwifery personnel per 100 000 population
	Number of in-patient hospital beds per 100 000 population		Number of mental health practitioners per 100 000 population
	Number of physicians per 100 000 population		Suicide rate per 100 000 population
	Under age five mortality per 1 000 live births		
Recreation			Square metres of public indoor recreation space per capita
			Square metres of public outdoor recreation space per capita
Safety	Number of police officers per 100 000 population		Crimes against property per 100 000
	Number of homicides per 100 000 population		Response time for police department from initial call
			Violent crime rate per 100 000 population
Shelter	Percentage of city population living in slums		Number of homeless per 100 000 population
			Percentage of households that exist without registered legal titles
Solid waste	Percentage of city population with regular solid waste collection (residential)		Percentage of the city's solid waste that is disposed of in a sanitary landfill
	Total collected municipal solid waste per capita		Percentage of the city's solid waste that is disposed of in an incinerator
	Percentage of the city's solid waste that is recycled		Percentage of the city's solid waste that is burned openly
			Percentage of the city's solid waste that is disposed of in an open dump
			Percentage of the city's solid waste that is disposed of by other means

ISO 37120 Sustainable Development of Communities: Indicators for City Services and Quality of Life			
			Hazardous waste generation per capita
			Percentage of city's hazardous waste that is recycled
Telecommunication and innovation	Number of internet connections per 100 000 population		Number of landline phone connections per 100 000 population
	Number of cell phone connections per 100 000 population		
Transportation	Kilometres of high capacity public transport system per 100 000 population		Percentage of commuters using a travel mode other than a personal vehicle
	Kilometres of light passenger public transport system per 100 000 population		Number of two-wheel motorized vehicles per capita
	Annual number of public transport trips per capita		Kilometres of bicycle paths and lanes per 100 000 population
	Number of personal automobiles per capita		Transportation fatalities per 100 000 population
			Commercial air connectivity (number of non-stop commercial air destinations)
Urban planning	Green area (hectares) per 100 000 population		Annual number of trees planted per 100 000 population
			Areal size of informal settlements as a per cent of city area
			Jobs/housing ratio
Wastewater	Percentage of city population served by wastewater collection		
	Percentage of the city's wastewater that has received no treatment		
	Percentage of the city's wastewater receiving primary treatment		

ISO 37120 Sustainable Development of Communities: Indicators for City Services and Quality of Life			
		Percentage of the city's wastewater receiving secondary treatment	
		Percentage of the city's wastewater receiving tertiary treatment	
Water and sanitation		Percentage of city population with potable water supply service	Total water consumption per capita (litres/day)
		Percentage of city population with sustainable access to an improved water source	Average annual hours of water service interruptions per household
		Percentage of population with access to improved sanitation	Percentage of water loss (unaccounted for water)
		Total domestic water consumption per capita (litres/day)	