City of Markham List of Indicators ISO 37120 Certification

	In	dicator		Verified Value	Sourced	Source
Theme	Core	Supporting	Description		Ву	
Economy	5.1		City's unemployment rate	7.26%	WCCD	2016 Census-Statistics Canada
		5.2	Assessed value of commercial and industrial properties as a % of total assessed value of all properties	12.76%	WCCD	Markham Financial Information Return
		5.3	% of persons in full employment	52.25%	WCCD	2016 Census-Statistics Canada
		5.4	Youth unemployment rate	20.92%	WCCD	2016 Census-Statistics Canada
		5.5	Number of business per 100k Population	3,094	WCCD	Markham Employment Survey
		5.6	Number of new patents per 100k population	90	WCCD	United States Patent Office
		5.7	Annual number of visitor stays (overnight) per 100k population	130,673	City	Economic Development Department
		5.8	Commercial air connectivity (number of non stop commercial air destinations)	345,011	WCCD	Statistics Canada
Education	6.1		% of female school aged population enrolled in schools	93.13%	WCCD	Ministry of Education, Ontario (Markham)
	6.2		% of students completing primary education survival rate	100%	WCCD	Ministry of Education, Ontario (Markham)
	6.3		% of students completing secondary education survival rate	90.70%	WCCD	Ministry of Education, Ontario (York
	6.4		Primary education students/teacher ratio	12.95	WCCD	Ministry of Education, Ontario (Markham)
		6.5	% of school aged population enrolled in schools	93.14%	WCCD	Ministry of Education, Ontario (Markham)
		6.6	Number of higher education degrees per 100k population	47,160	WCCD	2016 Census-Statistics Canada
Energy	7.1		Total end use energy consumption per capita (GJ/year)	95	City	City of Markham Municipal Energy Plan
	7.2		% of total end use derived from renewable sources	32.45%	WCCD	Independent Electricity System Operator (Ontario)
	7.3		% of city population with authorized electrical service	99.31%	City	Sustainability and Asset Management
	7.4		Number of gas distribution service connections per 100k population	81,222	City	Sustainability and Asset Management
	7.5		Final energy consumption of public buildings per year (GJ/Cu.M)	1.86	City	Sustainability and Asset Management
		7.6	Electricity consumption of public street lighting per km of lighted street (kwh/year)	12,500	City	Operations Department
		7.7	Average annual number of electrical service interruptions per household (in hours)	Not reporting	-	
Environment	8.1		Fine particulate matter (PM 2.5) concentration (microgram/m ³)	7.35	WCCD	Ministry of the Environment and Climate Change
	8.2		Particulate matter (PM 10) concentration	Not reporting		

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	8.3		GHG emissions measured in tonnes per capita	5.7	City	City of Markham Municipal Energy Plan
		8.4	% of areas designated for natural protection	32.39%	City	Planning & Urban Design
		8.5	Nitrogen dioxide (NO2) concentration (microgram/m ³)	19.73	WCCD	Ministry of the Environment and Climate Change
		8.6	Sulphur dioxide (SO2) concentration (microgram/m ³)	1.21	WCCD	Ministry of the Environment and Climate Change
		8.7	Ozone concentration (microgram/m3)	48.32	WCCD	Ministry of the Environment and Climate Change
		8.8	Noise pollution	Not reporting		
		8.9	% change in number of native species	Not reporting		
Finance	9.1		Debt Service Ratio	0.29%	WCCD	Markham Financial Information Return
		9.2	Capital spending as a % of total expenditures	12.22%	WCCD	Markham Financial Information Return
		9.3	Own source revenues as a % of total revenue	67.58%	WCCD	Markham Financial Information Return
		9.4	Tax collected as a % of tax billed	97.33%	WCCD	Markham Financial Information Return
Governance	10.1		Women as a % of total elected to city-level office	23.08%	WCCD	City of Markham Website
		10.2	# of convictions for corruption and/or bribery by city officials per 100k population	0	City	Clerks Department
		10.3	Number of registered voters as a % of the voting age population	Not reporting		
		10.4	Voter participation in last municipal election (as a % of total voters)	38.26%	City	Clerks Department
Health	11.1		Average life expectancy (years)	85.3	WCCD	York Region Seniors Strategy Report
	11.2		Number of in patient hospital beds per 100k population	120	WCCD	Markham Economic Profile
	11.3		Number of physicians per 100k population	155	WCCD	Ontario Physician Human Resources Data Centre
	11.4		Under age five mortality per 1,000 live births	5.3	WCCD	Statistics Canada (Ontario)
		11.5	Number of nursing and midwifery personnel per 100k population	508	WCCD	Canadian Institute for Health Information (York Region)
		11.6	Suicide rate per 100k population	5.72	WCCD	Ontario Coroner's Office
Housing	12.1		% of city population living in inadequate housing	2.52%	WCCD	Statistics Canada, Core Housing Need
	12.2		% of population living in affordable housing	65.71%	WCCD	Statistics Canda-2016 Census
		12.3	Number of homeless per 100k population	32.65	WCCD	icount: York Region 2018 Homeless Count Report
		12.4	% of households that exist without registered legal titles	Not reporting		
Population & Social Conditions	13.1		% of city population living below international poverty line	0%	WCCD	Assumed for all Canadian cities
		13.2	% of city population living below the national poverty line	12.24%	WCCD	Statistics Canada-2016 Census
		13.3	Gini coefficient of inequality	0.37	WCCD	Calculated by WCCD analysts from Statistics Canada figures

Recreation		14.1	Sq. m of public indoor recreation space per capita	0.33	City	Recreation
		14.2	Sq. m of public outdoor recreation space per capita	18.36	City	Recreation
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Safety	15.1		Number of firefighters per 100k population	69	City	Fire & Emergency Services
,	15.2		Number of fire related deaths per 100k population	0.58	City	Fire & Emergency Services
	15.3		Number of natural hazard related deaths per 100k population	0	WCCD	Ontario Coroner's Office
	15.4		Number of police officers per 100k population	131	WCCD	Statistics Canada
	15.5		Number of homicides per 100k population	0.96	WCCD	Statistics Canada
		15.6	Number of volunteer and part-time firefighters per 100k population	0	City	Markham Financial Information Return
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						Ministry of Health and Long-Term Care
		15.7	Response time for emergency response services from initial call (minutes and seconds)	9.7	WCCD	Land Ambulance Program (Ambulance
						and Fire Only)
		15.8	Crime against property per 100k population	1,693	WCCD	Statistics Canada
		15.9	Number of deaths caused by industrial accidents per 100k	Not reporting		
		15.10	Number of violent crime against women per 100k population	Not reporting		
	16.1		% of city population with regular waste collection (residential)	98.09%	City	Environmental Services
Solid Waste	16.2		Total collected municipal solid waste tonnes per capita	0.24	City	Environmental Services
	16.3		% of the city's solid waste that is recycled	31.08%	City	Environmental Services
	16.4		% of city's solid waste that is disposed of in a sanitary landfill	2.54%	City	Environmental Services
	16.5		% of solid waste that is treated in energy from waste plants	15.59%	City	Environmental Services
		16.6	% of city's solid waste that is biologically treated and used as compost or biogas	50.79%	City	Environmental Services
		16.7	% of city's solid waste that is disposed of in an open dump	0%	City	Environmental Services
		16.8	% of city's solid waste that is disposed of by other means	0%	City	Environmental Services
		16.9	Hazardous waste generation per capita (tonnes)	0	City	Environmental Services
		16.10	% of city's hazardous waste that is recycled	76%	City	Environmental Services
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Sports & Culture	17.1		Number of cultural institutions and sporting facilities per 100k population	157	City	Culture
-		17.2	% of municipal budget allocated to cultural and sporting facilities	20.36%	WCCD	Markham Financial Information Return
		17.3	Annual number of cultural events per 100k population (e.g. exhibitions, festivals, concerts)	Not reporting		
Telecommunications		40.4		00.000		Communication Monitoring Report
		18.1	Number of internet connections per 100k population	86,000	WCCD	(Ontario)
		10.2		00 700		Communication Monitoring Report
		18.2	Number of mobile connections per 100k population	89,700	WCCD	(Ontario)
	19.1		Km of public transport system per 100k population	277	City	Engineering
Transportation	19.2		Annual number of public transport trips per capita	48	City	Engineering
		19.3	% of commuters using a travel mode to work other than a personal vehicle	14%	City	Engineering
		19.4	Km of bicycle paths and lanes per 100k population	56.5	City	Engineering
		19.5	Transportation deaths per 100k population	1.44	City	Engineering
		19.6	% of population living within 0.5km of public transit running at least every 20 min during peak periods	63%	City	Engineering
		19.7	Average commute time (in minutes)	37	WCCD	Statistics Canada

Urban/local agriculture and food security	20.1		Total urban agricultural area per 100k population Planning	1,610.76	City	Planning & Urban Design
		20.2	Amount of food produced locally as a % of total food supplied to the City	2%	WCCD	Ontario Ministry of Agriculture, Food, and Rural Affairs
		20.3	% of city population undernourished	Not reporting		
		20.4	% of city population that is overweight or obese – Body Mass Index (BMI)	Not reporting		
Urban Planning	21.1		Green area (hectares) per 100k population	1,387	City	Planning & Urban Design
-		21.2	Area size of informal settlements as a % of city area	Not reporting		
		21.3	Jobs/housing ratio	Not reporting		
		21.4	Basic service proximity	34.48%	City	Planning & Urban Design
Wastewater	22.1		% of city population served by wastewater collection	98.57%	City	Environmental Services
	22.2		% of city's wastewater receiving centralized treatment	100%	City	Environmental Services
	22.3		% of population with access to improved sanitation	100%	City	Environmental Services
		22.4	Compliance rate of wastewater treatment	100%	City	Environmental Services
Water	23.1		% of city population with potable water supply service	99.24%	City	Environmental Services
	23.2		% of city population with sustainable access to an improved water source	100%	City	Environmental Services
	23.3		Total domestic water consumption per capita (litres/day)	186	City	Environmental Services
	23.4		Compliance rate of drinking water quality	99.86%	City	Environmental Services
		23.5	Total water consumption per capita (litres/day)	235	City	Environmental Services
		23.6	Average annual hours of water service interruption per household	Not reporting		
		23.7	% of water loss (unaccounted for water)	10.80%	City	Environmental Services