

Global City Indicators Program





Summary Report of Global Indicators




Through extensive consultation and collaboration with participating cities, a comprehensive system of indicators for measuring and monitoring city performance and urban quality of life has been developed. The Global City Indicators Program is structured around 22 “themes” organized into two broad categories, city services and quality of life. Each of these themes is further broken down into a set of indicators. These indicators were developed and tested with the active participation of the pilot cities. A process is being developed for annual review of the existing indicators, via technical workshops and consultation with member cities, so that this initial set of city indicators can continue to be refined and grow in the coming years.



The following document is a summary of all current indicators organized by themes, separated into categories of city services and quality of life. There are currently 32 core indicators with 27 supporting indicators. Some are aggregate indicators that are divided into sub-indicators allowing for a more comprehensive comparison amongst cities. In addition to these core and supporting indicators, the pilot cities identified several future indicators and indices that would be useful measures of city performance, but for which global methodologies for collection have not yet been agreed upon. A more detailed summary of indicators including how each indicator is calculated can be found in the appendix of this document. Please accept this list of indicators as iterative and one that will continue to evolve with your assistance.



The Global City Indicators are now being translated into the seven languages that the Facility accommodates. The summary of these indicators will be made available (in addition to English) in French, Spanish, Portuguese, Chinese, Japanese and Arabic.





Table 1: Global City Indicators






<u>Theme</u>	<u>Global City Indicators</u>	<u>Future Indicators – under discussion</u>
City Services		
Safety 	<ol style="list-style-type: none"> 1. ** Number of homicides per 100,000 population 2. ** Number of sworn police officers per 100,000 3. Violent crime rate per 100,000 population 	<ol style="list-style-type: none"> I. Perception of safety II. Juvenile crime (gangs and youth related crimes)
Education 	<ol style="list-style-type: none"> 1. ** Percentage of children completing primary and secondary education: survival rate <ul style="list-style-type: none"> ○ Percentage of students completing primary education ○ Percentage of students completing secondary education 2. ** Percentage of school-aged children enrolled in schools by gender <ul style="list-style-type: none"> ○ Percentage of male children enrolled in schools ○ Percentage of female children enrolled in schools 3. Student/teacher ratio 	<ol style="list-style-type: none"> I. Number of libraries per 100,00 population II. Number of visits to library per 100,000 population III. Performance on standardized tests IV. Number of institutions of higher learning within 500km V. Percentage of city population enrolled in institutions of higher learning
Energy 	<ol style="list-style-type: none"> 1. ** Percentage of city population with authorized electrical service 2. Total electrical use per capita 3. The average number of electrical interruptions per customer per year 4. Average length of electrical interruptions (in hours) 	<ol style="list-style-type: none"> I. Share of renewable energy use out of primary energy supply II. Residential energy use per household by types of energy III. Total energy use index
Finance 	<ol style="list-style-type: none"> 1. ** Debt service ratio (debt service expenditures as a percent of a municipality's own-source revenue) 2. Tax collected as percentage of tax billed 3. Own-source revenue as a percent of total revenues 4. Capital spending as percentage of total expenditures 	<ol style="list-style-type: none"> I. Disaggregate of own-source revenue as a percent of total revenues into categories of property tax, sales tax, user fees and charges and other revenue sources
Fire and Emergency Response	<ol style="list-style-type: none"> 1. ** Number of firefighters per 100,000 population 2. ** Number of fire related deaths per 100,000 population 3. Response time for fire department from initial call 	<ol style="list-style-type: none"> I. Emergency medical services indicator II. Number of medical personnel per 100,000 III. Number of fire trucks per 100,000 IV. Number of ambulances per 100,000

		<p>V. Response time for emergency services from initial call</p> <p>VI. Outcome indicators such as rates of fire or property damage and ultimate health/survival rates of patients</p>
<p>Governance</p> 	<ol style="list-style-type: none"> 1. ** Total score for the presence of representative mechanisms that ensure accountability and transparency in the operational functions of the local government (expressed as a score out of 100) <ul style="list-style-type: none"> ○ Weighted score (out of 20) for formal publication of contracts, tenders, budget and accounts ○ Weighted score (out of 15) for control by local government (vs. higher levels of governments) ○ Weighted score (out of 10) for Codes of Conduct ○ Weighted score (out of 10) for facility to receive complaints ○ Weighted score (out of 15) for anti-corruption commission ○ Weighted score (out of 15) for disclosure of personal income and assets ○ Weighted score (out of 15) for regular independent audits 2. Percentage of women employed in the city government workforce 3. Percentage of minorities employed in the city government workforce 	<ol style="list-style-type: none"> I. Average number of days to get a business license II. Requests for service response time III. Under discussion to incorporate civic engagement in governance indicator IV. <i>City governance Index</i>
<p>Health</p> 	<ol style="list-style-type: none"> 1. ** Under age five mortality per 1,000 live births 2. ** Immunization against infectious childhood diseases (percent of eligible population that have been immunized) 3. Number of in-patient hospital beds per 100,000 population 4. Number of physicians per 100,000 population 	<ol style="list-style-type: none"> I. Annual HIV/AIDS death rate per 100,000 population II. Disaggregation of immunization against infectious childhood diseases III. Number of health care professionals per 100,000 (physicians, nurses, other)
<p>Recreation</p> 	<ol style="list-style-type: none"> 1. ** Square meters of public recreation facility space per capita 2. City expenditures on public recreation as a percentage of overall city budget 	<ol style="list-style-type: none"> I. An indicator of recreational use levels
<p>Social Services</p> 	<p>UNDER DEVELOPMENT</p>	

<p>Solid Waste</p> 	<ol style="list-style-type: none"> 1. ** Percentage of city population with regular solid waste collection 2. ** Percentage of the city's solid waste that is disposed of in an incinerator or burned openly/open dump/sanitary landfill/other means <ul style="list-style-type: none"> ○ Percentage of the city's solid waste that is disposed of in an incinerator or 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 recycled ○ Percentage of the city's solid waste that is disposed of in a sanitary landfill ○ Percentage of the city's solid waste that is disposed of by other means 3. Total solid waste generation per capita 	<ol style="list-style-type: none"> I. Percentage of population participating in recycling program II. Indicator to capture informal waste (waste-pickers, sorters, etc.)
<p>Transportation</p> 	<ol style="list-style-type: none"> 1. ** Km of transportation system per 100,000 population (separated by mode – road/dedicated busway/passenger rail/bicycle path/pedestrian path) <ul style="list-style-type: none"> ○ Total lane-kilometres of public roads within the city, per 100,000 population ○ Total lane-kilometres of dedicated busways within the city, per 100,000 population ○ Total centerline-kilometres of passenger rail within the city (includes train, subway, streetcar, light rail), per 100,000 population ○ Total centerline-kilometres dedicated to pedestrian paths within the city (sidewalks, pedestrian trails, etc) per 100,000 population ○ Total centerline-kilometres dedicated to other (specific) transportation infrastructure within the city, per 100,000 population ○ Total centerline-kilometres dedicated to bike paths within the city, per 100,000 population 2. ** Annual number of public transit trips per capita 3. ** Percentage of commuters working in the city using cars (as single occupant) as their primary way to travel to work 4. ** Modal Split (percentage of commuters using travel mode other than a personal vehicle) 	<ol style="list-style-type: none"> I. Total municipal road and transit expenditure per capita II. Indicator regarding shape/condition of infrastructure

	<ul style="list-style-type: none"> ○ Percentage of commuters working in the city using car pools as their primary way to travel to work ○ Percentage of commuters working in the city using bus/minibus as their primary way to travel to work ○ Percentage of commuters working in the city using trains as their primary way to travel to work ○ Percentage of commuters working in the city using trams as their primary way to travel to work ○ Percentage of commuters working in the city using light rail as their primary way to travel to work ○ Percentage of commuters working in the city using motorcycles as their primary way to travel to work ○ Percentage of commuters working in the city using bicycles as their primary way to travel to work ○ Percentage of commuters working in the city who primarily walk to work ○ Percentage of commuters working in the city using other modes of travel as their primary way to travel to work <p>5. Commercial Air Connectivity (number of nonstop commercial air destinations)</p> <p>6. Average travel speed on primary thoroughfares during peak hours (km/h)</p> <p>7. Transportation fatalities per 100,000 population</p>	
<p>Urban Planning</p> 	<p>This set of indicators is under development</p> <p>Current indicators in use:</p> <ol style="list-style-type: none"> 1. ** Latest approval date of Master Plan/ official plan (year) 2. Green area (hectares) per 100,000 population 	<ol style="list-style-type: none"> I. Frequency of official reviews of master plan/ official plan II. Percentage of land parcels with a registered title III. Jobs/housing ratio IV. Mechanisms for enforcement; regulation, planning standards (building codes, zoning by-laws, informal)
<p>Wastewater</p> 	<ol style="list-style-type: none"> 1. ** Percentage of city population served by wastewater collection 2. ** Percentage of the city's wastewater that has received no treatment 3. ** Percentage of the city's wastewater receiving primary treatment 4. ** Percentage of the city's wastewater receiving 	<ol style="list-style-type: none"> I. An indicator of wastewater treatment effectiveness II. Percent of assimilative capacity of receiving water body used

	<p>secondary treatment</p> <p>5. ** Percentage of the city's wastewater receiving tertiary treatment</p>	
<p>Water</p> 	<p>1. ** Percentage of city population with potable water supply service</p> <p>2. Domestic water consumption per capita</p> <p>3. Number of interruptions in water service per 1,000 hectares of service area</p>	<p>I. Disaggregate of percentage of city population with potable water supply service into three classes of household connection: shared facility, private distribution (trucks, donkeys, head etc.) and other</p> <p>II. Percent of treated water lost during distribution</p> <p>III. Water quality (relative to national standards and boil water advisories)</p> <p>IV. Incidence of water borne diseases</p>
<p>Quality of Life</p>		
<p>Civic Engagement</p> 	<p>1. ** Voter participation (as a percent of eligible voters)</p> <p>2. Citizen's representation: number of local officials elected to office per 100,000 population</p> <p>3. Number of civic organizations per 100,000 population</p>	<p>I. Under discussion to incorporate into governance indicator</p>
<p>Culture</p> 	<p>1. ** Number of cultural establishments per 100,000 population</p> <p>2. City expenditures on culture as a percentage of overall city budget</p>	<p>I. Attendance at cultural events per capita</p> <p>II. Multiculturalism - under discussion</p> <p>III. <i>Creative cities index</i></p>
<p>Economy</p> 	<p>1. ** City product per capita</p> <p>2. Percentage of persons in full time employment (both sexes and all ages)</p> <ul style="list-style-type: none"> ○ Percentage of male residents in full-time employment – ages 15-19 ○ Percentage of male residents in full-time employment – ages 20-24 ○ Percentage of male residents in full-time employment – ages 25-34 ○ Percentage of male residents in full-time employment – ages 35-44 ○ Percentage of male residents in full-time employment – ages 45-54 ○ Percentage of male residents in full-time employment – ages 55-64 ○ Percentage of male residents in full-time employment – ages 65 and over ○ Percentage of female residents in full-time employment – ages 15-19 ○ Percentage of female residents in full-time employment – ages 20-24 	<p>I. Commercial/Industrial assessment as percent of total assessment</p> <p>II. Investment levels</p> <p>III. <i>Competitiveness index</i></p>

	<ul style="list-style-type: none"> ○ Percentage of female residents in full-time employment – ages 25-34 ○ Percentage of female residents in full-time employment – ages 35-44 ○ Percentage of female residents in full-time employment – ages 45-54 ○ Percentage of female residents in full-time employment – ages 55-64 ○ Percentage of female residents in full-time employment – ages 65 and over 	
Environment 	<ol style="list-style-type: none"> 1. ** Greenhouse gas emissions measured in tonnes per capita 	<ol style="list-style-type: none"> I. Number of days with PM10 exceedences II. Indicator linking air quality to respiratory problems III. Sustainable cities/Climate change Plans IV. Greenhouse gas emissions from municipal operations
Shelter 	<ol style="list-style-type: none"> 1. ** Percentage of city population living in slums 2. Areal size of informal settlements as a percent of city area 	<ol style="list-style-type: none"> I. Housing price/income ratio II. Housing rent/income ratio III. Homelessness
Social Equity 	<ol style="list-style-type: none"> 1. ** Percentage of city population living in poverty 	<ol style="list-style-type: none"> I. Cost of basic necessities or Market Basket Measure II. Percentage of population receiving government financial assistance III. Social Programs IV. Gini co-efficient/ income distribution V. <i>Social Capital Index</i>
Subjective Well-Being 	<p>UNDER DEVELOPMENT</p>	<ol style="list-style-type: none"> I. <i>Subjective well-being index</i>
Technology and Innovation 	<ol style="list-style-type: none"> 1. ** Number of internet connections per 100,000 population 2. Number of telephones (landlines and cell phones) per 100,000 population <ul style="list-style-type: none"> ○ Number of landline-telephone connections in the city ○ Number of cell phone connections in the city 	<ol style="list-style-type: none"> I. Venture capital investment II. Broadband penetration rate III. <i>Creativity index</i>

Appendix

Theme	Global City Indicators
City Services	
Education	<ol style="list-style-type: none"> 1. ** Percentage of children completing primary and secondary education: survival rate <ul style="list-style-type: none"> ○ Numerator: Number of children completing primary and secondary education ○ Denominator: Number of pupils in school cohort • Percentage of students completing primary education <ul style="list-style-type: none"> ○ Numerator: Number of children completing primary education ○ Denominator: Number of pupils in school cohort • Percentage of students completing secondary education <ul style="list-style-type: none"> ○ Numerator: Number of children completing secondary education ○ Denominator: Number of children in school cohort 2. **Percentage of school-aged children enrolled in schools by gender <ul style="list-style-type: none"> ○ Numerator: Total number of school aged children enrolled at primary and secondary schools in public and private schools ○ Denominator: Total number of school aged population • Percentage of male children enrolled in schools <ul style="list-style-type: none"> ○ Numerator: Number of male school aged children enrolled at primary and secondary levels in public and private schools ○ Denominator: Total number of male school aged population • Percentage of female children enrolled in schools <ul style="list-style-type: none"> ○ Numerator: Number of female school aged children enrolled at primary and secondary levels in public and private schools ○ Denominator: Total number of female school aged population 3. Student/teacher ratio <ul style="list-style-type: none"> ○ Numerator: Number of students ○ Denominator: Number of teachers
Energy	<ol style="list-style-type: none"> 1. ** Percentage of city population with authorized electrical service <ul style="list-style-type: none"> ○ Numerator: Population with authorized electrical service ○ Denominator: Population 2. Total electrical use per capita <ul style="list-style-type: none"> ○ Numerator: Total electrical use ○ Denominator: Population 3. The average number of interruptions per customer per year <ul style="list-style-type: none"> ○ Numerator: Total number of customer interruptions ○ Denominator: Total number of customers served 4. Average length of electrical interruptions (in hours) <ul style="list-style-type: none"> ○ Numerator: Sum of all customer interruption duration ○ Denominator: Total number of customer interruptions
Finance	<ol style="list-style-type: none"> 1. ** Debt service ratio (debt service expenditures as a percent of a municipality's own-source revenue) <ul style="list-style-type: none"> ○ Numerator: Total long-term debt servicing costs ○ Denominator: Total own source revenue 2. Tax collected as percentage of tax billed <ul style="list-style-type: none"> ○ Numerator: Tax collected ○ Denominator: Tax billed 3. Own-source revenue as a percent of total revenues

	<ul style="list-style-type: none"> ○ Numerator: Own-source revenue ○ Denominator: Total revenue <p>4. Capital spending as percentage of total expenditures</p> <ul style="list-style-type: none"> ○ Numerator: Capital spending ○ Denominator: Total expenditures
<p>Fire and Emergency Response</p>	<ol style="list-style-type: none"> 1. ** Number of firefighters per 100,000 population <ul style="list-style-type: none"> ○ Numerator: Number of firefighters ○ Denominator: Total population divided by 100,000 2. ** Number of fire related deaths per 100,000 population <ul style="list-style-type: none"> ○ Numerator: Number of fire related deaths ○ Denominator: Total population divided by 100,000 3. Response time for fire department from initial call
<p>Governance</p>	<ol style="list-style-type: none"> 1. ** Total score for the presence of representative mechanisms that ensure accountability and transparency in the operational functions of the local government (expressed as a score out of 100) <ul style="list-style-type: none"> ● Weighted score (out of 20) for formal publication of contracts, tenders, budget and accounts <ul style="list-style-type: none"> ○ Existence of a formal publication (to be accessible) by the local government that consists of contracts, tenders and budgets and accounts ● Weighted score (out of 15) for control by local government (vs. higher levels of government) <ul style="list-style-type: none"> ○ Measures the control of the higher levels of government (National, State/Provincial) for closing the local government and removing councilors from office ● Weighted score (out of 10) for Codes of Conduct <ul style="list-style-type: none"> ○ Existence of a signed published statement of the standards of conduct that citizens are entitled to from their elected officials and local government staff ● Weighted score (out of 10) for facility to receive complaints <ul style="list-style-type: none"> ○ The existence of a facility established within the local authority to respond to complaints and a local facility to receive complaints and information on corruption ● Weighted score (out of 15) for anti-corruption commission <ul style="list-style-type: none"> ○ Existence of a local agency to investigate and report cases of corruption ● Weighted score (out of 15) for disclosure of personal income and assets <ul style="list-style-type: none"> ○ Are locally elected officials required to publicly disclose their income and assets (and those of their immediate family) prior to taking office? ● Weighted score (out of 15) for regular independent audits <ul style="list-style-type: none"> ○ Is there a regular independent audit of municipal accounts, the results of which are widely disseminated? 2. Percentage of women employed in the city government workforce <ul style="list-style-type: none"> ○ Numerator: Number of women employees in the city government workforce ○ Denominator: Total number of employees in the city government workforce 3. Percentage of minorities employed in the city government workforce <ul style="list-style-type: none"> ○ Numerator: Number of minority employees in the city government workforce ○ Denominator: Total number of employees in the city government workforce
<p>Health</p>	<ol style="list-style-type: none"> 1. ** Under age five mortality per 1,000 live births <ul style="list-style-type: none"> ○ Numerator: Under age five mortality ○ Denominator: Number of live births divided by 1000 2. ** Immunization against infectious childhood diseases (percent of eligible population that have

	<p>been immunized)</p> <ul style="list-style-type: none"> ○ Numerator: Immunized population ○ Denominator: Eligible population <p>3. Number of in-patient hospital beds per 100,000 population</p> <ul style="list-style-type: none"> ○ Numerator: Number of in-patient hospital beds ○ Denominator: Total population divided by 100,000 <p>4. Number of physicians per 100,000 population</p> <ul style="list-style-type: none"> ○ Numerator: Number of physicians ○ Denominator: Total population divided by 100,000
Recreation	<p>1. ** Square meters of public recreation facility space per capita</p> <ul style="list-style-type: none"> ○ Numerator: Public recreation facility space in square meters ○ Denominator: Population <p>2. City expenditures on public recreation as a percentage of overall city budget</p> <ul style="list-style-type: none"> ○ Numerator: Expenditures on public recreation ○ Denominator: Overall city budget
Safety	<p>1. ** Number of homicides per 100,000 population</p> <ul style="list-style-type: none"> ○ Numerator: Number of homicides ○ Denominator: Total population divided by 100,000 <p>2. ** Number of sworn police officers per 100,000</p> <ul style="list-style-type: none"> ○ Numerator: Number of sworn police officers ○ Denominator: Total population divided by 100,000 <p>3. Violent crime rate per 100,000 population</p> <ul style="list-style-type: none"> ○ Numerator: Number of violent crimes ○ Denominator: Total population divided by 100,000
Social Services	<p>UNDER DEVELOPMENT</p>
Solid Waste	<p>1. ** Percentage of city population with regular solid waste collection</p> <ul style="list-style-type: none"> ○ Numerator: Population with regular solid waste collection ○ Denominator: Total population <p>2. ** Percentage of the city's solid waste that is disposed of in an incinerator or burned openly/open dump/sanitary landfill/other means</p> <ul style="list-style-type: none"> ○ Numerator: Tonnes disposed of in an incinerator or burned openly/open dump/sanitary landfill/other means ○ Denominator: Total amount of solid waste <ul style="list-style-type: none"> ● Percentage of the city's solid waste that is disposed of in an incinerator or burned openly <ul style="list-style-type: none"> ○ Numerator: Tonnes disposed of in an incinerator or burned openly ○ Denominator: Total amount of solid waste ● Percentage of the city's solid waste that is disposed of in an open dump <ul style="list-style-type: none"> ○ Numerator: Tonnes disposed of in an open dump ○ Denominator: Total amount of solid waste ● Percentage of the city's solid waste that is recycled <ul style="list-style-type: none"> ○ Numerator: Tonnes recycled ○ Denominator: Total amount of waste ● Percentage of the city's solid waste that is disposed of in a sanitary landfill <ul style="list-style-type: none"> ○ Numerator: Tonnes disposed of in a sanitary landfill ○ Denominator: Total amount of solid waste

	<ul style="list-style-type: none"> • Percentage of the city’s solid waste that is disposed of by other means <ul style="list-style-type: none"> ○ Numerator: Tonnes disposed by other means ○ Denominator: Total amount of solid waste 3. Total solid waste generation per capita <ul style="list-style-type: none"> ○ Numerator: Total solid waste collected per year in tonnes ○ Denominator: Total population
<p>Transportation</p>	<ol style="list-style-type: none"> 1. ** Km of transportation system per 100,000 population (separated by mode – road/dedicated busway/passenger rail/bicycle path/pedestrian path) <ul style="list-style-type: none"> ○ Numerator: Total km of transportation system ○ Denominator: Total population divided by 100,000 • Total lane-kilometres of public roads within the city, per 100,000 population <ul style="list-style-type: none"> ○ Numerator: Lane km of public roads within the city ○ Denominator: City population divided by 100,000 • Total lane-kilometres of dedicated busways within the city, per 100,000 population <ul style="list-style-type: none"> ○ Numerator: Lane km of dedicated busways within the city ○ Denominator: City population divided by 100,000 • Total centerline-kilometres of passenger rail within the city (includes train, subway, streetcar, light rail), per 100,000 population <ul style="list-style-type: none"> ○ Numerator: Centreline km of passenger rail within the city ○ Denominator: City population divided by 100,000 • Total centerline-kilometres dedicated to pedestrian paths within the city (sidewalks, pedestrian trails, etc) per 100,000 population <ul style="list-style-type: none"> ○ Numerator: Centerline km dedicated pedestrian paths within the city ○ Denominator: City population divided by 100,000 • Total centerline-kilometres dedicated to other (specific) transportation infrastructure within the city, per 100,000 population <ul style="list-style-type: none"> ○ Numerator: Centerline km dedicated to other transportation infrastructure ○ Denominator: City population divided by 100,000 • Total centerline-kilometres dedicated to bike paths within the city, per 100,000 population <ul style="list-style-type: none"> ○ Numerator: Centerline km dedicated to bicycle paths within the city ○ Denominator: City population divided by 100,000 2. ** Annual number of public transit trips per capita <ul style="list-style-type: none"> ○ Numerator: Number of transit trips ○ Denominator: Population 3. ** Percentage of commuters working in the city using cars (as single occupant) as their primary way to travel to work <ul style="list-style-type: none"> ○ Numerator: Number of commuters using cars (as single occupant) as their primary way to travel to work ○ Denominator: Total number of commuters 4. ** Modal Split (percentage of commuters using travel mode other than a personal vehicle) <ul style="list-style-type: none"> ○ Numerator: Number of commuters working in the subject city who typically use a mode other than a private SOV as their primary way to travel to work ○ Denominator: All trips to work, regardless of mode • Percentage of commuters working in the city using car pools as their primary way to travel to work <ul style="list-style-type: none"> ○ Numerator: Number of commuters using car pools as their primary way to travel to work ○ Denominator: Total number of commuters

	<ul style="list-style-type: none"> • Percentage of commuters working in the city using bus/minibus as their primary way to travel to work <ul style="list-style-type: none"> ○ Numerator: Number of commuters using bus/mini-bus as their primary mode of transportation to work ○ Denominator: Total number of commuters • Percentage of commuters working in the city using trains as their primary way to travel to work <ul style="list-style-type: none"> ○ Numerator: Number of commuters using trains as their primary mode of transportation to work ○ Denominator: Total number of commuters • Percentage of commuters working in the city using trams as their primary way to travel to work <ul style="list-style-type: none"> ○ Numerator: Number of commuters using trams as their primary mode of transportation to work ○ Denominator: Total number of commuters • Percentage of commuters working in the city using light rail as their primary way to travel to work <ul style="list-style-type: none"> ○ Numerator: Number of commuters using light rail as their primary transportation to work ○ Denominator: Total number of commuters • Percentage of commuters working in the city using motorcycles as their primary way to travel to work <ul style="list-style-type: none"> ○ Numerator: Number of commuters using motorcycles as their primary mode of transportation to work ○ Denominator: Total number of commuters • Percentage of commuters working in the city using bicycles as their primary way to travel to work <ul style="list-style-type: none"> ○ Numerator: Number of commuters using bicycles as their primary mode of transportation to work ○ Denominator: Total number of commuters • Percentage of commuters working in the city who primarily walk to work <ul style="list-style-type: none"> ○ Numerator: Number of commuters walking as their primary way of travel to work ○ Denominator: Total number of commuters • Percentage of commuters working in the city using other modes of travel as their primary way to travel to work <ul style="list-style-type: none"> ○ Numerator: Number of commuters using other modes of travel as their primary mode of transportation to work ○ Denominator: Total number of commuters 5. Commercial Air Connectivity (number of nonstop commercial air destinations) <ul style="list-style-type: none"> ○ The number of airports that can be accessed via nonstop commercial (i.e., scheduled) flights from airports serving the city (maximum of two hours land travel from the subject city) 6. Average travel speed on primary thoroughfares during peak hours (km/h) <ul style="list-style-type: none"> ○ The average travel speed for all private motorized vehicles and public transit vehicles that use roads (e.g., excluding trains or trolleys), across all locally defined “thoroughfares,” during the peak commuter hours (typically, morning and evening) 7. Transportation fatalities per 100,000 population <ul style="list-style-type: none"> ○ Numerator: Transportation fatalities ○ Denominator: Total population divided by 100,000
<p>Urban Planning</p>	<p>This set of indicators is under development:</p> <ol style="list-style-type: none"> 1. ** Latest approval date of Master Plan/Official plan (year) <ul style="list-style-type: none"> ○ Latest approval date by City Council of the current city master plan in effect. This is

	<p>intended to include the whole plan and not simply amendments to it.</p> <ol style="list-style-type: none"> 2. Green area (hectares) per 100,000 population <ul style="list-style-type: none"> ○ Numerator: Green area in hectares ○ Denominator: Total population divided by 100,000
Wastewater	<ol style="list-style-type: none"> 1. ** Percentage of city population served by wastewater collection <ul style="list-style-type: none"> ○ Numerator: Number of people served by wastewater collection ○ Denominator: Population 2. **Percentage of the city’s wastewater that has received no treatment <ul style="list-style-type: none"> ○ Numerator: Volume of water receiving no treatment ○ Denominator: Volume of all wastewater collected 3. ** Percentage of the city’s wastewater receiving primary treatment <ul style="list-style-type: none"> ○ Numerator: Volume of water receiving primary treatment ○ Denominator: Volume of all wastewater collected 4. ** Percentage of the city’s wastewater receiving secondary treatment <ul style="list-style-type: none"> ○ Numerator: Volume of water receiving secondary treatment ○ Denominator: Volume of all wastewater collected 5. ** Percentage of the city’s wastewater receiving tertiary treatment <ul style="list-style-type: none"> ○ Numerator: Volume of water receiving tertiary treatment ○ Denominator: Volume of all wastewater collected
Water	<ol style="list-style-type: none"> 1. ** Percentage of city population with potable water supply service <ul style="list-style-type: none"> ○ Numerator: Population with potable water supply service ○ Denominator: Population 2. Domestic water consumption per capita <ul style="list-style-type: none"> ○ Numerator: Water consumption in litres per day ○ Denominator: Population 3. Number of interruptions in water service per 1,000 hectares of service area <ul style="list-style-type: none"> ○ Numerator: Number of interruptions in water service ○ Denominator: Service area in hectares divided by 1,000
Quality of Life	
Civic Engagement	<ol style="list-style-type: none"> 1. ** Voter participation (as a percent of eligible voters) <ul style="list-style-type: none"> ○ Numerator: Participating voters ○ Denominator: Eligible voters 2. Citizen’s representation: number of local officials elected to office per 100,000 population <ul style="list-style-type: none"> ○ Numerator: Number of local officials elected to office ○ Denominator: Total population divided by 100,000 3. Number of civic organizations per 100,000 population <ul style="list-style-type: none"> ○ Numerator: Number of civic organizations ○ Denominator: Total population divided by 100,000
Culture	<ol style="list-style-type: none"> 1. ** Number of cultural establishments per 100,000 population <ul style="list-style-type: none"> ○ Numerator: Number of cultural establishments ○ Denominator: Total population divided by 100,000 2. City expenditures on culture as a percentage of overall city budget <ul style="list-style-type: none"> ○ Numerator: Expenditure on culture ○ Denominator: Overall city budget
Economy	<ol style="list-style-type: none"> 1. ** City product per capita <ul style="list-style-type: none"> ○ Numerator: City product

- Denominator: Population
- 2. Percentage of persons in full time employment (both sexes and all ages)
 - Numerator: Percentage of persons in full time employment
 - Denominator: Total city population
- Percentage of male residents in full-time employment – ages 15-19
 - Numerator: Number of male residents in full time employment ages 15-19
 - Denominator: Total male population ages 15-19
- Percentage of male residents in full-time employment – ages 20-24
 - Numerator: Number of male residents in full-time employment ages 20-24
 - Denominator: Total male population ages 20-24
- Percentage of male residents in full-time employment – ages 25-34
 - Numerator: Number of male residents in full-time employment ages 25-34
 - Denominator: Total male population ages 25-34
- Percentage of male residents in full-time employment – ages 35-44
 - Numerator: Number of male residents in full-time employment ages 35-44
 - Denominator: Total male population ages 35-44
- Percentage of male residents in full-time employment – ages 45-54
 - Numerator: Number of male residents in full-time employment ages 45-54
 - Denominator: Total male population ages 45-54
- Percentage of male residents in full-time employment – ages 55-64
 - Numerator: Number of male residents in full-time employment ages 55-64
 - Denominator: Total male population ages 55-64
- Percentage of male residents in full-time employment – ages 65 and over
 - Numerator: Number of male residents in full-time employment ages 65 and over
 - Denominator: Total male population ages 65 and over
- Percentage of female residents in full-time employment – ages 15-19
 - Numerator: Number of female residents in full-time employment ages 15-19
 - Denominator: Total female population ages 15-19
- Percentage of female residents in full-time employment – ages 20-24
 - Numerator: Number of female residents in full-time employment ages 20-24
 - Denominator: Total female population ages 20-24
- Percentage of female residents in full-time employment – ages 25-34
 - Numerator: Number of female residents in full-time employment ages 25-34
 - Denominator: Total female population ages 25-34
- Percentage of female residents in full-time employment – ages 35-44
 - Numerator: Number of female residents in full-time employment ages 35-44
 - Denominator: Total female population ages 35-44
- Percentage of female residents in full-time employment – ages 45-54
 - Numerator: Number of female residents in full-time employment ages 45-54
 - Denominator: Total female population ages 45-54
- Percentage of female residents in full-time employment – ages 55-64
 - Numerator: Number of female residents in full-time employment ages 55-64
 - Denominator: Total female population ages 55-64
- Percentage of female residents in full-time employment – ages 65 and over
 - Numerator: Number of female residents in full-time employment ages 65 and over
 - Denominator: Total female population ages 65 and over

Environment	<ol style="list-style-type: none"> 1. ** Greenhouse gas emissions measured in tonnes per capita <ul style="list-style-type: none"> ○ Numerator: Greenhouse gas emissions in tonnes ○ Denominator: Population
Shelter	<ol style="list-style-type: none"> 1. ** Percentage of city population living in slums <ul style="list-style-type: none"> ○ Numerator: Population living in slums ○ Denominator: Total population 2. Areal size of informal settlements as a percent of city area <ul style="list-style-type: none"> ○ Numerator: Size of informal settlements ○ Denominator: Total city area
Social Equity	<ol style="list-style-type: none"> 1. ** Percentage of city population living in poverty <ul style="list-style-type: none"> ○ Numerator: Population living in poverty ○ Denominator: Total population
Subjective Well-Being	UNDER DEVELOPMENT
Technology and Innovation	<ol style="list-style-type: none"> 1. ** Number of internet connections per 100,000 population <ul style="list-style-type: none"> ○ Numerator: Number of internet connections ○ Denominator: Total population divided by 100,000 2. Number of telephones (landlines and cell phones) per 100,000 population <ul style="list-style-type: none"> ○ Numerator: Number of telephones in the city including land lines and cellular connections ○ Denominator: Total population divided by 100,000 • Number of landline-telephone connections in the city <ul style="list-style-type: none"> ○ Numerator: Number of landline-telephone connections in the city ○ Denominator: Total population divided by 100,000 • Number of cell phone connections in the city <ul style="list-style-type: none"> ○ Numerator: Number of cell phone connections in the city ○ Denominator: Total population divided by 100,000