(ENERGY AND ELECTRICITY)

INDICATOR ASSIGNMENT	EE1.1
A1 Indicator short name	Percentage of households with access to electricity
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of households
A5 Rationale	Important in order to understand whether the principles of the Constitution are being fufilled of providing social equity and development in terms of access to a basic electricity service; meeting Sustainable Development Goals; and identifying the percentage of households enabled through the benefits of a regular energy source.
A6 Definition	Percentage of households that have access to electricity services within the municipal area.
A1 Indicator Formula	
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	EE1.11
A1 Indicator short name	Number of dwellings provided with connections to mains electricity supply by the municipality
A1 Results-chain level	Output
A1 Unit of measurement	Number of connections
A5 Rationale	The city needs to ensure that all new dwelings are provided with an electricity connection. Additionally, they need to clear backlogs of existing dwellings that do not have electricity connections which fall under their responsibility (as opposed to Eskom's). This indicator which measures the city's progress in this area will contribute to overall access to electricity for the municipality.
A6 Definition	The number of new residential electricity connections to dwellings provided by the municipality
A8 Frequency of reporting	Quarterly
When	Now
B2 Frequency of collection	Quarterly

INDICATOR ASSIGNMENT	EE1.12
A1 Indicator short name	Number of new dwellings provided with connections to mains electricity supply by Eskom within municipal jurisdiction
A1 Results-chain level	Output
A1 Unit of measurement	Number of connections
A5 Rationale	The city needs to ensure that all new dwellings are provided with an electricity connection. Additionally, they need to be aware of progress by Eskom in clearing backlogs of existing dwellings that do not have electricity connections which fall under Eskom's responsibility but within municipal jurisdiction. This indicator which measures Eskom's progress in this area will contribute to overall access to electricity for the municipality.
A6 Definition	The number of new residential electricity connections to dwellings provided by Eskom within municipal jurisdiction
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	EE2.1
A1 Indicator short name	Households receiving Free Basic Electricity as a percentage of all households with electricity connections
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of households
A5 Rationale	Access is not only about the provision of infrastructure but also the affordability of using electricity services. Electricity prices should be affordable. Support should be provided to those that cannot afford electricity by themselves. The municipality should be providing FBE to all those indigent households who have access to electricity to support them. Whether the indicator should increase or decrease will depend on the municipalitiy's own economic context.
A6 Definition	This indicator is the percentage of households receiving free basic electricity of all the households receiving elelctricity within the municipal jurisdiction.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	EE2.11
A1 Indicator short name	FBE provision levels as a percentage of total residential electricity provision (in terms of MWh)
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of MWh
A5 Rationale	This indicator will indicate the level of dependence municipal customers have on FBE for their electricity supply. High reliance by municipal residents on FBE indicates that the price of electricity is unaffordable for the economic activity levels of the municipality.
A6 Definition	This indicator measures the reliance of municipal residents on FBE for affordable access to electricity by measuring how much of electricity provided by the municipality in MWh is subsidised through FBE. In other words, this indicator measures the extent of support provided by the municipality to its residents.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	EE2.2
A1 Indicator short name	Percentage of low-income households that spend more than 10% of their monthly income on electricity
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of households
A5 Rationale	The lower this indicator, the more affordable electricity is. This is especially important in the lower income level categories where proportionate spend on electricity is high; intent should be to lower this.
A6 Definition	The indicator measures the percentage of the household's income spent on electricity services for low income households.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	EE3.1
A1 Indicator short name	System Average Interruption Duration Index
A1 Results-chain level	Outcome
A1 Unit of measurement	Average interruption minutes
A5 Rationale	Reliability is a key pillar of service delivery. Interruptions result in: revenue loss to the utility; cost of unserved energy which in turn has an impact on the economy; impact on customer satisfaction
A6 Definition	Key measure from system perspective to understand how long the average customer went without electricity supply in the given time period.
A8 Frequency of reporting	Quarterly
When	Now
B2 Frequency of collection	Quarterly

INDICATOR ASSIGNMENT	EE3.11
A1 Indicator short name	Percentage of unplanned outages that are restored to supply within industry standard timeframes
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of outages
A5 Rationale	Once an unplanned outage has occurred, the municipality should strive to restore power to the affected groups as soon as possible. Quick turn around implies greater reliability of the municipal electricity service. This indicator is a distribution of MTTR (Mean Time to Restore), which is the average time it takes to restore supply once an interruption takes place.
A6 Definition	The proportion of MTTRs that are within industry standards where MTTR is the average time it takes to restore unplanned outages
A8 Frequency of reporting	Quarterly
When	Now
B2 Frequency of collection	Quarterly

INDICATOR ASSIGNMENT	EE3.2
A1 Indicator short name	Customer Average Interruption Duration Index
A1 Results-chain level	Outcome
A1 Unit of measurement	Average interruption minutes
A5 Rationale	Reliability is a key pillar of service delivery. Interruptions result in: revenue loss to the utility; cost of unserved energy which in turn has an impact on the economy; impact on customer satisfaction
A6 Definition	A measure of the average time to restore service for a customer who suffered a sustained interruption in their supply
A8 Frequency of reporting	Quarterly
When	Now
B2 Frequency of collection	Quarterly

INDICATOR ASSIGNMENT	EE3.21
A1 Indicator short name	Percentage of Planned Maintenance Performed
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of planned/preventative maintenance hours
A5 Rationale	Planned maintenance helps the utility to ensure that infrastructure is maintained and equipped to promote reliability and security of supply. Planned maintenance that is carried out as per plan should reduce the number of unplanned outages which are more cumbersome to restore. It should thus also reduce the total number of interruption minutes for the municipality, thereby improving all the outcome indicators.
A6 Definition	Actual planned/preventative maintenance effort (hrs) as a percentage of budgeted planned/preventative maintenance effort (hrs)
A8 Frequency of reporting	Quarterly
When	Now
B2 Frequency of collection	Quarterly

INDICATOR ASSIGNMENT	EE3.3
A1 Indicator short name	System Average Interruption Frequency Index
A1 Results-chain level	Outcome
A1 Unit of measurement	Average number of interruptions
A5 Rationale	Reliability is a key pillar of service delivery. Interruptions result in: revenue loss to the utility; cost of unserved energy which in turn has an impact on the economy; impact on customer satisfaction
A6 Definition	Key measure from systems perspective of how often the average customer experiences a sustained interruption over a predefined period of time
A8 Frequency of reporting	Quarterly
When	Now
B2 Frequency of collection	Quarterly

INDICATOR ASSIGNMENT	EE3.4
A1 Indicator short name	Customer Average Interruption Frequency Index
A1 Results-chain level	Outcome
A1 Unit of measurement	Average number of interruptions
A5 Rationale	Reliability is a key pillar of service delivery. Interruptions result in: revenue loss to the utility; cost of unserved energy which in turn has an impact on the economy; impact on customer satisfaction This indicator is useful to identify chronological trends in the reliability of the system
A6 Definition	Average frequency of sustained interruptions for those customers experiencing sustained interruptions
A8 Frequency of reporting	Quarterly
When	Now
B2 Frequency of collection	Quarterly

(ENVIRONMENT AND WASTE)

INDICATOR ASSIGNMENT	EE4.1
A1 Indicator short name	Renewable energy capacity available within the municipal jurisdiction as a percentage of Eskom supply capacity to the municipality
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of energy capacity (MW)
A5 Rationale	As the South African energy landscape evolves, there is a shift to diversify energy supply within the municipality to sources outside of Eskom (national mix). Additionally, there is an increasing trend for customers to produce their own energy. Municipalities should be aware of how their traditional model is changing and the extent of the shift towards cleaner green energy.
A6 Definition	The total renewable energy capacity that is available within the municipal jurisdiction via the IPPs, own generation and embedded generators.
A8 Frequency of reporting	Quarterly
When	Now
B2 Frequency of collection	Quarterly

INDICATOR ASSIGNMENT	EE4.11
A1 Indicator short name	Total renewable energy capacity available through IPPs
A1 Results-chain level	Output
A1 Unit of measurement	Total capacity available to the metro from renewable energy IPPs
A5 Rationale	A greater capacity of renewable energy available through IPPs will indicate that the municipality is putting in effort towards diversifying their energy mix and moving towards cleaner green energy.
A6 Definition	a. Sum of (Capacity available from a renewable IPP)
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	EE4.12
A1 Indicator short name	Installed capacity of approved embedded generators on the municipal distribution network
A1 Results-chain level	Output
A1 Unit of measurement	MW
A5 Rationale	The municipality encouraging SSEG (small scale embedded generation) among its customer base is a sign that the municipality is evolving its business model as well as embracing the shift to cleaner green energy.
A6 Definition	The total capacity of the SSEG installations in the municipal distribution network
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	EE4.2
A1 Indicator short name	Electricity usage per capita
A1 Results-chain level	Outcome
A1 Unit of measurement	kWh:person
A5 Rationale	This indicator gives an indication of how much elelctricity is supplied by the municipality on average per person. It assists in indicating the demand for electricity in the municipality.
A6 Definition	The average amount of electricity usage per person living in the municipal area
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	EE4.3
A1 Indicator short name	Road transport fuel usage per capita
A1 Results-chain level	Outcome
A1 Unit of measurement	kWh:person
A5 Rationale	This indicator gives an indication of how much road fuel energy is consumed within the municipality on average per person. It assists in indicating the demand for liquid fuels in the municipality.
A6 Definition	The average amount of liquid fuels usage per person living in the municipal area
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	EE4.4
A1 Indicator short name	Percentage total electricity losses
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage kWh
A5 Rationale	The purpose is to measure the percentage loss of potential revenue from Electricity Services through electricity units purchased and generated but not sold as a result of losses incurred through technical constraints, theft (illegal connections), non or inaccurate metering . It is expected that implementation of the free basic service policy is included in the calculation for sale of electricity.
A6 Definition	Electricity losses have two components: technical and non-technical. Technical losses occur naturally and consist mainly of power dissipation in electricity system components such as transmission and distribution lines, transformers, and measurement systems. Non-technical losses are caused by actions external to the power system and consist primarily of electricity theft, faulty or inaccurate meters, and errors in accounting and record-keeping. Losses is a measure of unaccounted for energy. Thus non-payment is not included as losses.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	ENV1.1
A1 Indicator short name	Metro Air Quality Index (MAQI)
A1 Results-chain level	Outcome
A1 Unit of measurement	Air quality index level
A5 Rationale	Outdoor air pollution results in adverse environmental and health effects. In most developing countries ambient air quality is deteriorating. These are South Africa's most common air pollutants, and are a good indicator of air quality. Monitoring and reporting on ambient air quality is a municipal responsiblity.
A6 Definition	The Metro Air Quality Index (MAQI) provides a measure of the status of the most problematic air pollution in relation to accepted air quality standards. The MAQI is defined as the maximum value of the normalized ratios of the annual averages of PM10 and SO2 measured by the air quality monitoring station network in metro areas for each year. MAQI values of 1 and above, means that air quality does not meet ambient air quality standards. MAQI values below 1 means that air quality complies with ambient air quality standards.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	ENV1.11
A1 Indicator short name	Percentage of atmospheric emission licenses (AELs) processed within guideline timeframes
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of emission licenses
A5 Rationale	There are 2 main routes for AELs: One where the AEL has to be considered along with an EIA, and another where the AEL is granted independently: (renewal - 60 days; or amendment of an existing license - 10 days). The efficiency with which these routes is administered is assessed based on their respective guideline approval times.
A6 Definition	The percentage of AEL applications processed within the guideline turnaround times as specified in the Manual for Licensing Authorities (2009). Decisions which are made within the guideline timeframes will be 100%, with lower percentages indicating longer processing times.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	ENV1.12
A1 Indicator short name	Proportion of AQ monitoring stations providing adequate data over a reporting year
A1 Results-chain level	Output
A1 Unit of measurement	Percentage AQ stations
A5 Rationale	The presence of functional monitoring stations within a metropolitan area is essential to provide information on air quality throughout the metropolitan area. The presence of non-operational monitoring stations provides an indication of capacity to report and monitor, a key metro responsibility. Faulty monitoring stations may result in certain areas not being fairly represented in the AQ data.
A6 Definition	The proportion of AQ monitoring stations which are sufficiently functional to provide an accurate indication of air quality over a full reporting year in the muncipal area. This is currently defined as providing at least 80% of a full years worth of anticipated data.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	ENV1.13
A1 Indicator short name	Proportion of municipal AEL applications captured on the National Atmospheric Emissions Inventory System
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of applications
A5 Rationale	This indicator is a pre-condition to the successful reporting of the related outcome, which requires the implementation of the National Atmospheric Emissions Inventory System. It is the responsiblity of the Atmospheric Emission License (AEL) Authority to monitor and capture this information in the National Atmospheric Emissions Inventory System, and by so doing enable national level reporting.
A6 Definition	The proportion of AEL licenses issued by the municipality, for which information is available on the National Atmospheric Emissions Inventory System.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	ENV1.2
A1 Indicator short name	Number of days where PM2.5 levels exceeded guideline levels
A1 Results-chain level	Outcome
A1 Unit of measurement	Number of days
A5 Rationale	While air pollution results in adverse environmental and health effects, PM10 and P2.5 (broadly referred to as particulate matter) are a specific source of concern for health reasons. By reducing air pollution levels, the burden of disease from stroke, heart disease, lung cancer, and both chronic and acute respiratory diseases, including asthma, can be reduced. Inhalable particles, or small particulates have been designated as a Group 1 carcinogen. There is a close, quantitive link between exposure to high concentrations of small particulates (both PM10 and PM2.5) and increased mortality or morbidity, both daily and over time. Small particulate pollution have health impacts even at very low concentrations. There are no established safe levels of exposure, so it is worth noting that the national standard is higher than the WHO and EU standard.
A6 Definition	Number of days (per municipal financial year) where the levels of PM2.5 exceed the national standard, in excess of the permitted maximum of 4 exceedances per annual reporting period.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Daily

INDICATOR ASSIGNMENT	ENV1.3
A1 Indicator short name	Percentage of households experiencing a problem with noise pollution
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of households experiencing a problem with noise pollution
A5 Rationale	Most municipalities have by-laws regulating acceptable levels of noise and the periods of time when loud noise is acceptable. Sustained periods of loud or unnatural noise from industry is disruptive to the environment. The indicator seeks to use the number of households reportedly affected by noise pollution during survey to provide an indication of the extent of noise pollution within the municipality.
A6 Definition	The percentage of households that report "Excessive noise/noise pollution" as an environmental problem experienced in their community.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	ENV2.1
A1 Indicator short name	Tonnes of municipal solid waste sent to landfill per capita
A1 Results-chain level	Outcome
A1 Unit of measurement	Tonnes
A5 Rationale	Many cities generate more solid waste than they can dispose of. Even when municipal budgets are adequate for collection, the safe disposal of collected waste often remains a problem. Open dumping and unsanitary landfills are sometimes the main disposal methods, particularly in lower income cities. Sanitary landfills are only the norm in a limited number of cities worldwide.
A6 Definition	The percentage of the city's solid waste that is disposed of in licensed (sanitary) landfills
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	ENV2.2
A1 Indicator short name	Tonnes of municipal solid waste diverted from landfill per capita
A1 Results-chain level	Outcome
A1 Unit of measurement	Tonnes
A5 Rationale	Many cities generate more solid waste than they can dispose of. Diverting recyclable materials from the waste stream is one strategy for addressing this municpal problem. A proper solid waste system can foster recycling practices that maximises the life cycle of landfills and create recycling micro-economies, and it may help to provide alternative sources of energy that help reduce the consumption of electricity and/or petroleum based fuels.
A6 Definition	The tonnage of the city's solid waste that is recycled at centralised recycling centres, divided by the total population of the municipality. Recycled materials include those materials diverted from the waste stream, recovered and processed into new products following local government permits and regulations (International Solid Waste Association).
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	ENV2.3
A1 Indicator short name	Total collected municipal solid waste per capita
A1 Results-chain level	Outcome
A1 Unit of measurement	Number of tonnes/capita
A5 Rationale	This indicator provides a measure of how much waste a city is producing and the level of service a city is providing for its collection. Higher levels of muncipal waste contribute to greater environmental problems and therefore levels of collections, and also methods of disposal, of municipal solid waste are an important component of municipal enviromental management. Collection of muncipal solid waste is also an indicator of city management with regard to cleanliness, health and quality of life. Solid waste systems contribute in many ways to public health, the local economy, and the environment.
A6 Definition	The total amount of municipal waste (expressed in tonnes) collected per capita. Municpal waste refers to waste collected by or on behalf of municipalities. It includes household, commercial, bulky, garden and open space cleaning waste, but excludes wastewater, builders or hazardous waste.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	ENV3.1
A1 Indicator short name	Percentage of households with basic refuse removal services or better
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of households
A5 Rationale	the percentage of households served by regular solid waste collection is an indicator of city health, cleanliness and quality of life, and is recognised as a right within the South Africa Constitution
A6 Definition	Households with basic refuse removal services or better (defined as a minimum of once weekly collection as defined in the Back to Basics framework) as a percentage of total municipal households
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	ENV3.11
A1 Indicator short name	Percentage of known informal settlements receiving integrated waste handling services
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of informal settlements
A5 Rationale	Solid waste collection is one of the core services that local government provides, and is a key element in both creating decent living conditions, and maintaining a healthy environment. It is not possible to provide formal services to all informal dwellings, as this many encourage the development of illegal settlements. This indicator only reports on the presence of services provided to "recognised" informal settlements.
A6 Definition	The proportion of recognised informal settlements within the metropolitan area which are receiving integrated refuse collection and cleaning services
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	ENV3.2
A1 Indicator short name	Waste removal complaints due to non-collection as a percentage of total consumer units/billed accounts
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of waste removal complaints
A5 Rationale	Solid waste collection is one of the core services that local government provides, and is a key element in both creating decent living conditions, and maintaining a healthy environment. Collection complaints reflect instances when citizens are not receiving the services which they expect. Complaints regarding non-collection provide an insight into the effectiveness of the municpal collection system.
A6 Definition	The number of waste collection complaints received over a year, as a percentage of the number of consumer units at the end of the reporting period.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	ENV4.1
A1 Indicator short name	Ecosystem/vegetation type threat status
A1 Results-chain level	Outcome
A1 Unit of measurement	Index/category
A5 Rationale	Evaluation of the current condition of each ecosystem/vegtation type against its respective biodiversity target, in order to assign an ecosystem threat level category. One of 2 key high-level assessment indicators recommended. Ecosystems are components of biodiversity as defined by the Convention on Biological Diversity. If an area decreases drastically it will have a negative influence on species dependent on that habitat. In that sense this indicator is particularly important for specialist species and endemic species that are dependent on particular habitats in the vegetation type and cannot survive in other ecosystems. It is useful to categorise ecological condition into a few categories based on the degree of modification from natural. Natural or near-natural areas are considered to be in good ecological condition, semi-natural or moderately modified areas to be in fair ecological condition, and severely or irreversibly modified areas to be in poor ecological condition.
A6 Definition	An indicator of how threatened local vegetation types are, in other words, the degree to which vegetation types are still natural or near-natural, or are alternatively losing vital aspects of their structure, function or composition. Ecosystems can be classified into threat status categories, such as Critically Endangered, Endangered, Vulnerable and Least Threatened. At the city level vegetation types will be the unit of analysis
A8 Frequency of reporting	Biennial
When	Later
B2 Frequency of collection	n/a

INDICATOR ASSIGNMENT	ENV4.11
A1 Indicator short name	Percentage of biodiversity priority area within the metro
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of land in hectares
A5 Rationale	The presence of natural or near-natural areas, aslo defined here as biodiversity priority areas, is used as a proxy for species richness, which is a costly and time-consuming indicator to develop data for. This proposed indicator measures the total area of available habitats across a municipal area, irrespective of condition. The intention is to capture the pace at which the built urban environment is replacing undeveloped land capable of supporting biological functioning.
A6 Definition	Proportional share of land cover categories aggregated to relate to biological priority areas within the municipality, relative to the total municipal area. It indicates the presence of available habitats across a municipal area important for maintaining ecological processes, expressed in ha. A decline over time indicates a loss of land supporting biodiversity and local ecosystems. Biodiversity priority areas, or areas of high biodiversity importance, are defined by SANBI (2016) as "Natural or semi-natural areas in the landscape or seascape that are important for conserving a representative sample of ecosystems and species, for maintaining ecological processes, or for the provision of ecosystem services."
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	ENV4.2
A1 Indicator short name	Ecosystem/vegetation type protection level
A1 Results-chain level	Outcome
A1 Unit of measurement	Category
A5 Rationale	Evaluation of the current protection of each ecosystem/vegetation type against its respective biodiversity target , in order to assign an ecosystem protection level category. One of 2 key high-level assessment indicators recommended. Ecosystems are components of biodiversity as defined by the Convention on Biological Diversity. If an area decreases drastically it will have a negative influence on species dependent on that habitat. In that sense this indicator is particularly important for specialist species and endemic species that are dependent on particular habitats in the ecosystem and cannot survive in other ecosystems.
A6 Definition	An indicator of the extent to which different vegtation types are adequately represented in the existing protected area network at the city level. Vegetation types can be categorised into different levels of protection, for example, well represented, moderately represented, poorly represented or not represented. This should be based on performance against the current biodiversity targets for each vegetation type. The scoring methodology should be aligned with implementation of a similar indicator at the national level.
A8 Frequency of reporting	Biennial
When	Later
B2 Frequency of collection	n/a

INDICATOR ASSIGNMENT	ENV4.21
A1 Indicator short name	Proportion of biodiversity priority areas protected
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of land in hectares
A5 Rationale	This indicator captures the proportion of "biodiversity priority area" land which has been identifed through muncipal planning processes as being of high biodiversity value, and is protected through some mechanism.
A6 Definition	The proportion of land identified through municipal strategic environmental assessments and EMFs as biodiversity priority areas, which is protected through some mechanism. Mechanisms may include stewardship agreements, conventional protected areas, & biodiversity agreements, among others.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	ENV4.3
A1 Indicator short name	Wetland condition index
A1 Results-chain level	Outcome
A1 Unit of measurement	Wetland condition index
A5 Rationale	Wetlands are present through-out metros, and are increasingly recognised as playing an important role in the broader ecosystem, as well as providing other goods and services to the built environment. Wetlands need to be protected and improved where they exist.
A6 Definition	Refers to the overall index level rating for wetland conditions within the municipality.
A8 Frequency of reporting	Biennial
When	Later
B2 Frequency of collection	TBC

INDICATOR ASSIGNMENT	ENV5.1
A1 Indicator short name	Recreational water quality
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage
A5 Rationale	The goal in the management of coastal systems is to keep the resource suitable for all designated uses. The recreational use of coastal marine water can be affected by aesthetic, safety and hygienic concerns. While all are important, the current indicator focusses on human health risks stemming from the presence of microbiological indicator organisms.
A6 Definition	The percentage of annual recreational water samples taken which met the minimum requirement for recreational water quality, namely sufficient or above.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Will depend on frequency of metro sampling programme, but should at a minimum be once every 2 weeks.

INDICATOR ASSIGNMENT	ENV6.1
A1 Indicator short name	GHG emissions per capita
A1 Results-chain level	Outcome
A1 Unit of measurement	Tonnes of CO2e/capita
A5 Rationale	The greenhouse gas emissions from all activities within the city are an indicator of the adverse contribution the city is making to climate change.
A6 Definition	The greenhouse gas emissions measured in tonnes per capita measured as the total amount of greenhouse gases in tonnes (equivalent carbon dioxide units) generated over a reporting year by all activities within the city, including indirect emissions outside city boundaries (numerator) divided by the current city population (denominator). It uses the methodology developed under the GPC Global Protocol for Community-Scale Greenhouse Gas Emission Inventories (GPC), as this methodology is currently used by many of the metro's in SA currently.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

(HOUSING AND COMMUNITY FACILITIES)

INDICATOR ASSIGNMENT	HS1.1
A1 Indicator short name	Percentage of households living in adequate housing
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of households
A5 Rationale	Government seeks to increase the number of households residing in adequate housing in line with constitutional imperatives and the strategic goals over the medium term.
A6 Definition	Adequate housing' has seven elements: legal security of tenure, services, affordability, habitability, accessibility, location and cultural adequacy. For the purposes of this indicator, adequate housing is defined as 'formal' housing in terms of the Statistics South Africa definition used in the General household Survey, which is "A structure built according to approved plans, i.e. house on a separate stand, flat or apartment, townhouse, room in backyard, rooms or flatlet elsewhere", thereby excluding informal (whether in in informal settlement or back yard) and traditional dwellings. The indicator is therefore the number of households residing in formal dwellings as a percentage of the total number of households within the municipality.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	HS1.11
A1 Indicator short name	Number of subsidised housing units completed
A1 Results-chain level	Output
A1 Unit of measurement	Number of housing units
A5 Rationale	Municipalities accredited to perform some of the housing functions are able to construct housing units as part of the national housing programme using the Human Settlements Development Grant. The indicator seeks to track an annual performance output for subsidised housing units constructed by the metro.
A6 Definition	The number of all subsidised housing units (in terms of minimum levels of service) completed by the metro in the municipal financial year.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	HS1.12
A1 Indicator short name	Number of formal sites serviced
A1 Results-chain level	Output
A1 Unit of measurement	Number of serviced sites
A5 Rationale	A basic level service for the core services of water, electricity and sanitation is a prerequisite for 'adequate housing'. This indicator tracks the number of new sites to which the municipality has provided a minimum service level for the three basic services in terms of infrastructure provision (e.g. water, sanitation and electricity). Waste removal is a recurring service that is not based on infrastructure provision to a site and is therefore excluded.
A6 Definition	The number of all sites serviced with new connections for all three services of electricity, water and sanitation to a basic level within the municipality in the financial year. These sites do not include the construction of top structures. A basic level of service is defined an individual service to each site (not shared) meeting the national minimum standard (the Regulations in terms of the

INDICATOR ASSIGNMENT	HS1.12
	Water Services Act in the case of water and sanitation and the Policy Guidelines for the Integrated National Electrification Programme (INEP) 2016/17 in the case of electricity), or the minimum standards defined by the municipality, whichever is higher.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	HS1.2
A1 Indicator short name	Title deed backlog ratio
A1 Results-chain level	Outcome
A1 Unit of measurement	Ratio: serviced stands completed to property title backlog
A5 Rationale	The provision of title deeds for subsidised housing is the most secure form of tenure and is integral to asset value formation for beneficiaries of subsidised housing. It is required for legal transfer once the requisite period has passed and is necessary as collatoral for loans against the asset. There have been historic problems with delays in issuing title deeds for subsidised housing units, with the result that these households do not enjoy the benefits of security of tenure. This ratio will indicate in the first instance, the number of completed sites for which there may not yet be registered title, i.e. the maximum backlog that should occur. It then compares this figure with the number of completed subsidised serviced stands for which title deeds have not been registered (the backlog).
A6 Definition	The number of serviced residential stands completed by the State (including Municipal/Provincial/National) in a single financial year, compared to the number of serviced residential stands (with or without top structures) historically provided by the State (including Municipal/Provincial/National) for which titled deeds have not yet been registered.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	HS1.21
A1 Indicator short name	Average number of days taken to register the title deed (subsidised stands and units)
A1 Results-chain level	Output
A1 Unit of measurement	Number of days: Title deed
A5 Rationale	The provision of title deeds for subsidised housing is the most secure form of tenure and is integral to asset value formation for beneficiaries of subsidised housing. It is required for legal transfer once the requisite period has passed and is necessary as collatoral for loans against the asset. Delays in the issue of title deeds are commonplace and this indicator will measure the processing efficiency between completion of the housing and formal register of the title deed.
A6 Definition	The indicator measures the average number of days it takes to register a title deed for subsidised housing beneficiaries in the metro, from the date of completion of the house until the date of formal registration at the deeds register, on average per housing unit completed within the metro. Applies only to housing units completed by the metro. Includes all deeds registered in a finanical year, regardless of which finanical year the housing unit was completed.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	HS1.3
A1 Indicator short name	Percentage of households in informal settlements targeted for upgrading
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of households in informal settlements targeted for upgrading
A5 Rationale	Providing security of tenure to inhabitants of informal settlements is integral to the uplifment of communities. Security of tenure provides the household with a fixed asset, surety of location and the incentive to invest in the incremental upgrading of their property and wider community. Security of tenure is provided incrementally, with the first step being recognition by the muncipality and then targeting for upgrading.
A6 Definition	The number of households living in dwellings in informal settlements that have been designated for permanent in-situ upgrade (ie. NUSP Category A and B1) as a percentage of all households living in informal settlements within the municipality.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	HS1.31
A1 Indicator short name	Number of informal settlements enumerated and classified (in terms of NUSP or equivalent classification)
A1 Results-chain level	Output
A1 Unit of measurement	Number of informal settlements
A5 Rationale	Providing security of tenure to inhabitants of informal settlements is integral to the uplifment of communities. By classifying informal settlements according to the UISP the settlements are comprehensively appraised, enumerated and marked for intervention in the form of upgrade or relocation. This classification is an important pre-requisite for incremental security of tenure on a tenure spectrum.
A6 Definition	The number of designated informal settlements within the municipal area enumerated and classified according to the NUSP categorisation, or equivalent. Enumeration includes the collection of household level data of informal settlment residents, as well as the levels and status of services in the settlement.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	HS1.32
A1 Indicator short name	Percentage of informal settlements using a participatory approach to planning or implementing upgrading
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of informal settlements
A5 Rationale	The Upgrading Informal Settlements Programme (UISP) and the process of particpatory planning is one of the key Programmes contained in the National Housing Code and highly prioritised by National Human Settlements strategic policy. The number of informal settlments identified for participatory upgrading is critical to providing fast-tracked tenure security to households, promoting health and security through the provision of basic necessity infrastructure and services, as well as empowering residents to take control of housing development directly.

INDICATOR ASSIGNMENT	HS1.32
A6 Definition	Percentage of informal settlements in which a participatory approach to planning or implementing upgrading is being used. A participatory approach is defined as including the settlement residents, the ward committee and ward councillor in a process in which they are able to influence the development priorities and the settlement layout. Involvement of the ward councillor or ward committee only, or processess that provide information about proposed muncipal plans at public meetings do not qualify as participatory processes.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	HS2.1
A1 Indicator short name	Percentage of property market transactions in the gap and affordable housing market range
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of unit residential transactions
A5 Rationale	South African metro municipalities tend to have large property market distrortions, due to a number of historical and current market interventions. The result is a residential property market which is commonly exclusionary of middle and lower income households due to a shortage of appropriate, well located, housing stock. The results of this shortage are market phenomena including the growth of the 'gap market', residential down-raiding, and a contributing factor to the proliferation of informal backyard housing as well as informal settlements. In order to address these urban issues, all metros, which are experiencing significant population growth, require increased supply of available stock across almost all income groups. This indicator is designed to measure the progress in achieving this by measuring the proportion of affordable housing market (subsidy and gap) transactions specifically. This reflects both the demand and supply dynamics of the metro and by proxy the stock available to specific income groups. This not only supports an indicator of progress but further informs intervention requirements.
A6 Definition	The indicator measures the number of unit residential transactions per financial year for all properties within the municipal area falling within the affordable housing market range (subsidy and gap housing in the range of <R500k property value). This number is divided by the total number of unit residential transactions within the municipal area. The result is an indicator which shows a resulting combination of supply and demand for the gap market within the overall property market.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	HS2.2
A1 Indicator short name	Rateable residential properties as a percentage of total households in the municipality
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of rateable residential properties
A5 Rationale	This indicator is designed to track the creation of formalised, rateable, residential properties in a metro, relative to the total number of households. As an ongoing indicator it monitors the rate of formalisation against the rate of household growth in a metro. It further assists in informing financial sustainability of the metro's rates income and cross subsidisation requirements. The closer the

INDICATOR ASSIGNMENT	HS2.2
	measured percentage is to 100%, the more formal properties are available to house the metro population, which is an indication of a functional property market.
A6 Definition	This indicator measures the total number of formalised residential properties on the municipal valuation roll at a standard collection time. This number is divided by the total number of households in the municipal area at the same point in time.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	HS2.21
A1 Indicator short name	Number of rateable residential properties in the subsidy housing market entering the municipal valuation roll
A1 Results-chain level	Output
A1 Unit of measurement	Number of subsidised residential properties entering the valuation roll
A5 Rationale	This indicator is designed to track the creation of formalised, rateable, residential properties subsidised by the state in a metro. A rateable residential property receives services from the metro and in return the metro collects revenue. This is an important component of a functional property market since the lack of services inhibits the value of the asset. A metro's financial viability is also linked to its rates base. Tracking the formalisation of state subsidised housings onto the municipal valuation roll provides an indication of whether new housings are enhancing the financial viability of the metro and increasing the formal property market in the low-income band.
A6 Definition	The indicator is defined as the number of housing units built within the municipal area (on the HSS) that benefited from a state subsidy, entering the municipal valuation roll.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	HS2.22
A1 Indicator short name	Average number of days taken to process building plan applications
A1 Results-chain level	Output
A1 Unit of measurement	Number of days: Applications
A5 Rationale	This is an efficiency measure of the average processing time of the building plan applications submitted to the metro. Delays in the processing of building plan applications affect the time taken to build new housing within the municipal area and may become a deterrent to property development. Removing unnecessary delays or uncertainties related to the efficiency of building plan applicaiton processes supports a functional property market within the metro.
A6 Definition	The indicator measures the number of days a building plan application to the metro takes to be processed, from the date of submission of all required information to the date of communication of the initial adjudication results of that application, on average, per application. Excludes time taken to process appeals of the initial decision.

INDICATOR ASSIGNMENT	HS2.22
A8 Frequency of reporting	Quarterly
When	Now
B2 Frequency of collection	Quarterly

INDICATOR ASSIGNMENT	HS2.3
A1 Indicator short name	Percentage of households living in formal dwellings who rent
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of households in formal dwellings
A5 Rationale	The balancing of residential rental and ownership options in a city are vital component's of accessibility and household asset creation. The ratio of residential rent is further a lead indicator on property price dynamics within a city.
A6 Definition	The total number of all households in the metro which regurlarly pay a sum of money or provide a service in return for a place of residence to a second party for the use of residential purposes in formal dwellings as a proportion of all households living in formal dwellings. The tenure status in the General Household Survey will be the sum of the two categories: "1 = Rented from private individual" and "2 = Rented from other (incl. municipality and social housing institutions)".
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	HS3.1
A1 Indicator short name	Square meters of municipally owned or maintained public outdoor recreation space per capita
A1 Results-chain level	Outcome
A1 Unit of measurement	Ratio: Area of open space in square meters per capita
A5 Rationale	The provision of adequate recreational area is a core component of enhancing living environments for residents
A6 Definition	Square meters of municipally owned or maintained active outdoor space intended for recreational purposes. Public recreation space is defined broadly to mean land and open space available to the public for recreation. Recreation space shall include only space that primarily serves a recreation purpose. Includes: parks, outdoor sports facilities and public open space. Does not include beaches, resorts and nature reserves. Does not include pedestrianised streets and sidewalks, but may include pedestrian walkways with primarily a recreational purpose. Facilites charging an access fee may still be regarded as 'public' provided that no other access criteria are applied (annual membership fee, club affiliations, etc.).
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	HS3.2
A1 Indicator short name	Number of community halls per 100 000 population
A1 Results-chain level	Outcome
A1 Unit of measurement	Ratio: Count of community halls per 100 000 population
A5 Rationale	The number of community halls in a municipality is directly indicative of the level of this particular service provided to the community.
A6 Definition	The number of community halls per 100 000 population. A community hall is defined by the CSIR Guidelines for the Provision of Social Facilities in South African Settlements (2012) as a "Centre or hall for holding public meetings, training, entertainment and other functions and having a variety of facilities such as a kitchen, toilets, storage space, etc. which should be provided at nominal rates for hire, with rentals tied to socio-economic status of area to provide affordable service."
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	HS3.3
A1 Indicator short name	Number of public libraries per 100 000 population
A1 Results-chain level	Outcome
A1 Unit of measurement	Ratio: Count of libraries per 100 000 population
A5 Rationale	The number of libraries in a municipality is directly indicative of the level of this particular service provided to the community.
A6 Definition	The number of libraries per 100 000 population
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	HS3.4
A1 Indicator short name	Percentage utilisation rate of sports fields
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of hours of sport facility bookings
A5 Rationale	Utilisation rate is indicative of the supply and demand for community facilities. It can be used to inform planning and performance of facilities.
A6 Definition	The percentage of available hours across all sports facilites that are booked in a year.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	HS3.5
A1 Indicator short name	Percentage utilisation rate of community halls

INDICATOR ASSIGNMENT	HS3.5
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of hours of community hall bookings
A5 Rationale	Utilisation rate is indicative of the supply and demand for community facilities. It can be used to inform planning and performance of facilities.
A6 Definition	The percentage of available hours across all community halls that are booked in a year.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	HS3.6
A1 Indicator short name	Average number of library visits per library
A1 Results-chain level	Outcome
A1 Unit of measurement	Number of visits per library per year
A5 Rationale	Utilisation rate is indicative of the supply and demand for community facilities such as libraries. It can be used to inform planning and performance of facilities. The number of visits is a direct measure of utilisation, whether to access books or to use the space for one of its other community functions.
A6 Definition	The average number of library visits per library per year.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

(TRANSPORT AND ROADS)

INDICATOR ASSIGNMENT	TR1.1
A1 Indicator short name	Percentage of dwelling units within 500m of scheduled public transport service
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of dwelling units
A5 Rationale	To determine to what extent housing is located within walking distance to scheduled public transport services, thus indicating accessibility of these services, as well as more efficient spatial forms.
A6 Definition	This indicator measures the number of dwelling units located within a 500m radius of a scheduled public transport service (as the crow flies), as a percentage of all dwelling units in a municipality.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	TR1.11
A1 Indicator short name	Non-residential development approved within 500m of scheduled public transport service, by internal floor space
A1 Results-chain level	Output
A1 Unit of measurement	m2 of internal floor space
A5 Rationale	The sustainability and efficiency of public transport services are contingent on the extent to non-residential growth is guided towards, and intensification supported in, areas which are accessible to existing public transport access points. Non-residential growth results in work places, and generates trip destinations.
A6 Definition	The extent of internal floor space approved for non-residential building construction within 500m of a scheduled public transport service.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	TR1.12
A1 Indicator short name	Number of scheduled public transport access points added
A1 Results-chain level	Output
A1 Unit of measurement	Number of operational access points
A5 Rationale	The progressive roll-out of scheduled, high-quality public transport services to existing or new residential areas is a critical determinant of availability and convenience, thus modal shift.
A6 Definition	The number of new public transport access points which has been constructed and operational.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	TR1.2
A1 Indicator short name	NMT paths as a percentage of the total municipal road network length
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of NMT paths
A5 Rationale	The provision of NMT infrastructure encourages NMT as an alternative to motorised private transport. Dedicated cycling and footpaths and lanes are used to measure the extent of NMT infrastructure is provided, normalised by road network length.
A6 Definition	The sum total length of all NMT paths (in KMs) within the metropolitan area divided by the total length of municipal road network (in KMs)
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	TR1.21
A1 Indicator short name	Length of NMT paths built
A1 Results-chain level	Output
A1 Unit of measurement	Kilometers of NMT path
A5 Rationale	The provision of NMT infrastructure encourages NMT as an alternative to private transport use. Pedestrian footpaths and dedicated cycling lanes and paths, are used to measure the extent to which NMT infrastructure is provided, normalised by road network length.
A6 Definition	The total length (in KMs) of NMT paths (defined as surfaced pedestrian sidewalks, footpaths and cycling lanes) built and completed over the financial year.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	TR1.3
A1 Indicator short name	Percentage of commuters (city-wide) using private motorised transport
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of commuters
A5 Rationale	Realising a shift of commuting behaviour from private to public transport and non-motorised transport is a key outcome area.
A6 Definition	The number of commuters using private transport, as a proportion of the number of commuters citywide
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	TR2.1
A1 Indicator short name	Percentage share of monthly income spent on public transport, for households using public transport
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of monthly household expenditure (%)
A5 Rationale	The affordability of the public transport system is an important aspect of the effectiveness of the public transport system.
A6 Definition	Expenditure on all public transport modes as % of the average monthly household income, for households using public transport on a typical workday.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	TR3.1
A1 Indicator short name	Average public transport commuting time
A1 Results-chain level	Outcome
A1 Unit of measurement	Minutes
A5 Rationale	The amount of time spent travelling on a daily basis represents a significant social and economic cost on the individual and society.
A6 Definition	Average one-way weekday peak hour commuting time via the public transport system city-wide, to work or educational institution.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	TR3.11
A1 Indicator short name	Number of weekday scheduled municipal bus passenger trips
A1 Results-chain level	Output
A1 Unit of measurement	Number of daily trips
A5 Rationale	The number of scheduled passenger trips per weekday is a common and core indicator of the performance of the public transport system, which in turn is critical to modal shift and reduction in overall travel time.
A6 Definition	The number of passenger trips on scheduled municipal bus services, based on fare collection, per weekday.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	TR3.2
A1 Indicator short name	Average private transport commuting time
A1 Results-chain level	Outcome
A1 Unit of measurement	Minutes
A5 Rationale	The amount of time spent travelling on a daily basis represents a significant social and economic cost on the individual and society.
A6 Definition	Average one-way weekday peak hour commuting time of private transport users, from home to work or educational institution.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	TR4.1
A1 Indicator short name	Percentage of respondents indicating that they believe public transport to be "safe"
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of respondents

INDICATOR ASSIGNMENT	TR4.1
A5 Rationale	User experience, alongside accessibility, is an important condition to realise modal shift. In the South African context, safety is an important determinant of overall user experience.
A6 Definition	Percentage of respondents surveyed who indicated that they perceived public transport to be "safe" or "very safe"
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	TR4.2
A1 Indicator short name	Percentage of respondents indicating that they believe public transport to be "reliable"
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of respondents
A5 Rationale	User experience, alongside accessibility, is an important condition to realise modal shift. In the South African context, reliability is an important determinant of overall user experience.
A6 Definition	Percentage of respondents surveyed who indicated that they perceived public transport to be "reliable" or "very reliable"
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	TR4.21
A1 Indicator short name	Percentage of municipally-contracted scheduled bus services 'on time'
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of scheduled bus services reporting to metros
A5 Rationale	The scheduled municipal bus service on-time performance indicator indicates the reliability of the service, and directly impacts on the productivity and thus earnings potential of the commuter.
A6 Definition	The percentage of all scheduled municipal bus service arrivals on-time, per year.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	TR5.1
A1 Indicator short name	Percentage of households less than 10 minutes walk from scheduled public transport
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of households
A5 Rationale	Improving access to public transport access through appropriate route coverage is an important contributor to overall accessibility
A6 Definition	The percentage of households surveyed who lives less than 10 minutes walk from bus and rail, excl. MBT.
A8 Frequency of reporting	Annual

INDICATOR ASSIGNMENT	TR5.1
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	TR5.2
A1 Indicator short name	Percentage of persons with disability where access to public transport is problematic
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of households
A5 Rationale	Providing universally accessible public transport services integrated with universally accessible NMT paths is an important contributor to public transport access
A6 Definition	The percentage of households surveyed where one or more members are limited in daily travel activity due to disability.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	TR5.21
A1 Indicator short name	Percentage of municipally-contracted bus fleet that are low entry
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of buses
A5 Rationale	Providing universally accessible public transport services integrated with universally accessible NMT paths is an important contributor to public transport access. Upgrading buses for universal accessibility is an important step towards improving travel activity by persons who have a disability. The indicator tracks the percentage of the municipal fleet that are accessible for low-entry.
A6 Definition	The total number of operational municipal buses in the municipally-contracted fleet that have low entry access, as a percentage of the total number of buses in the municipally-contracted fleet.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	TR6.1
A1 Indicator short name	Percentage of fatal crashes attributed to road and environmental factors
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of fatal crashes
A5 Rationale	Road and environmental factors contribute directly to approximately 13% to the number of fatal crashes. It is therefore critical to measure to what extent these factors contribute in a municipality, as this directs attention to the role of adequate road management in preventing fatal crashes.
A6 Definition	The percentage of fatal crashes attributed to road and environmental factors in relation to overall fatal crashes per year within the municipal boundaries.

INDICATOR ASSIGNMENT	TR6.1
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	TR6.11
A1 Indicator short name	Percentage of unsurfaced road graded
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of unsurfaced road network, by length
A5 Rationale	Regular grading of unsurfaced roads increases the safety of municipal roads
A6 Definition	The length of unsurfaced road which has been graded as a percentage of overall unsurfaced road network
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	TR6.12
A1 Indicator short name	Percentage of surfaced municipal road lanes which has been resurfaced and resealed
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of surfaced road lanes
A5 Rationale	Regular maintenance of municipal roads increases the safety of roads
A6 Definition	The distance of surfaced municipal road lanes (class 3-5) which has been resurfaced
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	TR7.1
A1 Indicator short name	Road traffic fatalities per 100,000 population
A1 Results-chain level	Outcome
A1 Unit of measurement	Incidence of fatalities
A5 Rationale	A clear link exists between road safety and sustainable development. Road traffic injuries are the eighth leading cause of death globally. More than a million people die each year on the world's roads, and the cost of dealing with the consequences of these road traffic incidents runs to tens of billions of rands. The highest road traffic fatality rates are in middle income countries, particularly in the African region (26.6 per 100,000), with South Africa's 25.1 higher than the global rate of 17.4.. Encouraging sustainable transport policy must include making transport accessible and safe..
A6 Definition	Incidence of reported traffic fatalities per 100 000 population per year
A8 Frequency of reporting	Annual
When	Later

INDICATOR ASSIGNMENT	TR7.1
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	TR7.2
A1 Indicator short name	Average number of fatalities per fatal crash
A1 Results-chain level	Outcome
A1 Unit of measurement	Average number of fatalities
A5 Rationale	Prevention strategies for reducing fatalities from traffic collisions must focus on behaviours that place drivers, passengers and pedestrians in high risk circumstances.
A6 Definition	The number of road traffic deaths divided by the number of fatal crashes per year as reported within the municipal boundaries.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

(WATER AND SANITATION)

INDICATOR ASSIGNMENT	WS1.1
A1 Indicator short name	Percentage of households with access to basic sanitation
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of households
A5 Rationale	South Africa comes from a history of separate development which has resulted in many areas not having access to basic sanitation services. A dedicated basic services development programme was initiated in 1994 to eradicate the historic backlogs. The target was for all people in South Africa to have access to a functioning basic sanitation facility by 2014. This target was however not met and a new target date of 2019 has been set, as per the 2014 Medium Term Strategic Framework.
A6 Definition	Percentage of households accessing ("using") a toilet facility that meets minimum standards for basic sanitation out of all households within the municipality. Minimum standards are currently defined as a either a flush toilet (sewerage system) and/or flush toilet (septic tank), and/or a pit toilet connected to ventilation (VIP).
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	WS1.11
A1 Indicator short name	Number of new sewer connections meeting minimum standards
A1 Results-chain level	Output
A1 Unit of measurement	Number of sewer connections

INDICATOR ASSIGNMENT	WS1.11
A5 Rationale	South Africa comes from a history of separate development which has resulted in many areas not having access to basic sanitation services. A dedicated basic services development programme was initiated in 1994 to eradicate the historic backlogs. The target was for all people in South Africa to have access to a functioning basic sanitation facility by 2014. This target was however not met and a new target date of 2019 has been set, as per the 2014 Medium Term Strategic Framework.
A6 Definition	The total number of new sewer connections (defined as connections to a flush toilet connected to the sewerage system or a septic tank or a VIP toilet) made as part of state-subsidised human settlements development. This is inclusive of new sewer connections to communal facilities that meet basic sanitation standards.
A8 Frequency of reporting	Quarterly
When	Now
B2 Frequency of collection	Quarterly

INDICATOR ASSIGNMENT	WS2.1
A1 Indicator short name	Percentage of households with access to basic water supply
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of households
A5 Rationale	South Africa comes from a history of separate development which has resulted in many rural areas not having access to basic water supply. A dedicated basic services development programme was initiated in 1994 to eradicate the historic backlogs. The target was for all people in South Africa to have access to a functioning basic water supply by 2014. This target was however not met and a new target date of 2019 has been set, as per the 2014 Medium Term Strategic Framework.
A6 Definition	Percentage of households with access to basic water supply, defined as the household's main source of drinking water is piped (tap) water inside dwelling/house, piped (tap) water inside yard, and/or piped water to a community stand: <200 m.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	WS2.11
A1 Indicator short name	Number of new water connections meeting minimum standards
A1 Results-chain level	Output
A1 Unit of measurement	Number of water connections
A5 Rationale	South Africa comes from a history of separate development which has resulted in many rural areas not having access to basic water supply. A dedicated basic services development programme was initiated in 1994 to eradicate the historic backlogs. The target was for all people in South Africa to have access to a functioning basic water supply by 2014. This target was however not met and a new target date of 2019 has been set, as per the 2014 Medium Term Strategic Framework.
A6 Definition	Total number of new water connections meeting minimum standards (supply of water is Piped (tap) water inside dwelling/institution, Piped (tap) water inside yard, and/or Community stand: <200 m) as part of state-subsidised human settlements development. This is inclusive of new water connections to communal facilities that meet minimum standards.
A8 Frequency of reporting	Quarterly
When	Now

INDICATOR ASSIGNMENT	WS2.11
B2 Frequency of collection	Quarterly

INDICATOR ASSIGNMENT	WS3.1
A1 Indicator short name	Frequency of sewer blockages
A1 Results-chain level	Outcome
A1 Unit of measurement	Number of blockages
A5 Rationale	Operations and maintenance typically includes the day-to-day activities necessary for the water services system infrastructure and equipment to perform their intended function. To accomplish this, the municipality must operate the systems and equipment responsibly and maintain them properly. Maintaining infrastructure in sound condition is a key element of providing sustainable municipal services. If a poor maintenance regime is followed, an asset may not reach its design life and will have to be replaced early. Since 1994 the focus of Government has been on the provision of basic water and sanitation infrastructure. The effective operation and maintenance of this infrastructure is an essential part of service delivery that has been much neglected. An assessment of 1689 water schemes found that at least 10% were dysfunctional, while a further 20 to 24% were experiencing serious water security problems, and 48% needed urgent refurbishment. Functionality issues can mostly be ascribed to poor management. In order to ensure long term effective water services delivery, an asset management approach must be followed.
A6 Definition	Number of blockages in sewers per 100km of sewer length per year. Blockages are defined as reported or logged blockages that result in an obstruction of system flow which may be caused by roots, obstructive items or other pipeline disruption.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	WS3.11
A1 Indicator short name	Percentage of complaints/callouts responded to within 24 hours (sanitation/wastewater)
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of outages
A5 Rationale	Service quality or customer satisfaction is measured through customer surveys and the monitoring of complaints/ protests, continuity of supply, affordability and service level indicators. Municipalities face significant challenges as they strive to increase the quality and manage the costs of services to their customers. Service delivery protests have become a regular feature of South African life. Poor services can therefore make it difficult to attract business or industry to an area and will limit job opportunities for residents. Protest and unrest is bad for the local economy, leading to perceptions of instability. Without income from services, the municipality will either be running a bankrupt business or be highly reliant on grants. Resolving these challenges thus brings direct economic benefits to a municipality.
A6 Definition	Percentage complaints/callouts (outages logged with the municipality) responded to within 24 hours (sanitation/wastewater). Responded to means that someone is on site and has initiated a process of resolving the matter within 24 hours. This does not mean the complaint/callout was resolved, only that the matter was logged, appraised and responded to within 24 hours of notification.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	WS3.2
A1 Indicator short name	Frequency of mains failures
A1 Results-chain level	Outcome
A1 Unit of measurement	Number of mains failures
A5 Rationale	Operations and maintenance typically includes the day-to-day activities necessary for the water services system infrastructure and equipment to perform their intended function. To accomplish this, the municipality must operate the systems and equipment responsibly and maintain them properly. Maintaining infrastructure in sound condition is a key element of providing sustainable municipal services. If a poor maintenance regime is followed, an asset may not reach its design life and will have to be replaced early. Since 1994 the focus of Government has been on the provision of basic water and sanitation infrastructure. The effective operation and maintenance of this infrastructure is an essential part of service delivery that has been much neglected. An assessment of 1689 water schemes found that at least 10% were dysfunctional, while a further 20 to 24% were experiencing serious water security problems, and 48% needed urgent refurbishment. Functionality issues can mostly be ascribed to poor management. In order to ensure long term effective water services delivery, an asset management approach must be followed.
A6 Definition	Number of water mains failures per 100km of mains pipe per year. "Mains" refers to all transmission and distribution pipes for water, the ownership of which is vested in the metro for the purpose of conveying water to consumers.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	WS3.21
A1 Indicator short name	Percentage of complaints/callouts responded to within 24 hours (water)
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of outages
A5 Rationale	Service quality or customer satisfaction is measured through customer surveys and the monitoring of complaints/ protests, continuity of supply, affordability and service level indicators. Municipalities face significant challenges as they strive to increase the quality and manage the costs of services to their customers. Service delivery protests have become a regular feature of South African life. Poor services can therefore make it difficult to attract business or industry to an area and will limit job opportunities for residents. Protest and unrest is bad for the local economy, leading to perceptions of instability. Without income from services, the municipality will either be running a bankrupt business or be highly reliant on grants. Resolving these challenges thus brings direct economic benefits to a municipality.
A6 Definition	Percentage complaints/callouts (outages) responded to within 24 hours (water). Responded to means that someone is on site and has initiated a process of resolving the matter within 24 hours. This does not mean the complaint/callout was resolved, only that the matter was logged, appraised and responded to within 24 hours of notification.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	WS3.3
A1 Indicator short name	Frequency of unplanned water service interruptions
A1 Results-chain level	Outcome
A1 Unit of measurement	Number of service interruptions
A5 Rationale	Service quality or customer satisfaction is measured through customer surveys and the monitoring of complaints/ protests, continuity of supply, affordability and service level indicators. Municipalities face significant challenges as they strive to increase the quality and manage the costs of services to their customers. Service delivery protests have become a regular feature of South African life. Poor services can therefore make it difficult to attract business or industry to an area and will limit job opportunities for residents. Protest and unrest is bad for the local economy, leading to perceptions of instability. Without income from services, the municipality will either be running a bankrupt business or be highly reliant on grants. Resolving these challenges thus brings direct economic benefits to a municipality.
A6 Definition	Number of interruptions averaged per 1000 service connections per year. Interruptions are understood as occuring at the source and do not include the number of consumer units affected by an interruption.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	WS4.1
A1 Indicator short name	Percentage of Drinking Water Compliance to SANS 241
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of tested samples
A5 Rationale	If the water that is provided is of a poor quality, it will contribute to the creation of unhealthy and unsafe living environments. Monitoring the quality of drinking water helps protect health, and regularly monitoring water quality is a crucial part of identifying any existing problems, or any issues that could emerge in the future. Inadequate water supply and sanitation is a direct contributor to high levels of diarrhoea, dysentery and other diseases in Southern Africa and a 1997 study found that the total social cost of diarrhoeal disease was at least 1% of the GDP in South Africa (R3.4 billion). The 2010 General Household Survey showed that there were over 60,000 cases of childhood diarrhoea per month and approximately 9,000 child diarrhoeal deaths in the year.
A6 Definition	The percentage of water samples measured that comply with the SANS 241 requirements over a 12 month period. See the SANS 241 requirements for a detailed breakdown of the various tests involved.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	WS4.2
A1 Indicator short name	Percentage of wastewater samples compliant to water use license conditions
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of tested samples
A5 Rationale	Many WWTWs operate above capacity, are in poor condition and deteriorating due to inadequately trained operators and a lack of maintenance. Growing water scarcity (and associated increased reuse of treated effluent) will mean that effluent discharge

INDICATOR ASSIGNMENT	WS4.2
	standards become more important. Furthermore, water treatment works might be located downstream of wastewater treatment works, and untreated or poorly treated effluent is then used as raw water input to these water treatment works. Monitoring the quality of treated effluents from wastewater treatment facilities helps protect health, and aids identification and control of pollution impacts to the environment. Inadequate water supply and sanitation is a direct contributor to high levels of diarrhoea, dysentery and other diseases in Southern Africa and a 1997 study found that the total social cost of diarrhoeal disease was at least 1% of the GDP in South Africa (R3.4 billion). The 2010 General Household Survey showed that there were over 60,000 cases of childhood diarrhoea per month and approximately 9,000 child diarrhoeal deaths in the year.
A6 Definition	Percentage of Wastewater Quality Compliance to specified licence/permit/authorisation requirements tested during the municipal financial year. The percentage is calculated on the basis of aggregated results per Water Use License determinant.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	WS4.21
A1 Indicator short name	Percentage of industries with trade effluent inspected for compliance
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of industrial entities inspected
A5 Rationale	Many WWTWs operate above capacity, are in poor condition and deteriorating due to inadequately trained operators and a lack of maintenance. Growing water scarcity (and associated increased reuse of treated effluent) will mean that effluent discharge standards become more important. Furthermore, water treatment works might be located downstream of wastewater treatment works, and untreated or poorly treated effluent is then used as raw water input to these water treatment works. Monitoring the quality of treated effluents from wastewater treatment facilities helps protect health, and aids identification and control of pollution impacts to the environment. Inadequate water supply and sanitation is a direct contributor to high levels of diarrhoea, dysentery and other diseases in Southern Africa and a 1997 study found that the total social cost of diarrhoeal disease was at least 1% of the GDP in South Africa (R3.4 billion). The 2010 General Household Survey showed that there were over 60,000 cases of childhood diarrhoea per month and approximately 9,000 child diarrhoeal deaths in the year.
A6 Definition	Number of industries with trade effluent that are inspected during the assessment period as a percentage of the total number of registered industries with trade effluent, at the end of the municipal financial year
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	WS4.22
A1 Indicator short name	Percentage of wastewater safely treated
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of wastewater
A5 Rationale	Many WWTWs operate above capacity, are in poor condition and deteriorating due to inadequately trained operators and a lack of maintenance. Growing water scarcity (and associated increased reuse of treated effluent) will mean that effluent discharge

INDICATOR ASSIGNMENT	WS4.22
	standards become more important. Furthermore, water treatment works might be located downstream of wastewater treatment works, and untreated or poorly treated effluent is then used as raw water input to these water treatment works. Monitoring the quality of treated effluents from wastewater treatment facilities helps protect health, and aids identification and control of pollution impacts to the environment. Inadequate water supply and sanitation is a direct contributor to high levels of diarrhoea, dysentery and other diseases in Southern Africa and a 1997 study found that the total social cost of diarrhoeal disease was at least 1% of the GDP in South Africa (R3.4 billion). The 2010 General Household Survey showed that there were over 60,000 cases of childhood diarrhoea per month and approximately 9,000 child diarrhoeal deaths in the year.
A6 Definition	Proportion of wastewater generated both by households (sewage and faecal sludge), as well as economic activities (based on ISIC categories) safely treated compared to total wastewater generated both through households and economic activities.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	WS5.1
A1 Indicator short name	Percentage of non-revenue water
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of kilolitres
A5 Rationale	The purpose of this measure is to determine the percentage loss of potential revenue from water service through kilolitres of water purchased but not sold as a result of losses incurred through theft (illegal connections), non- or incorrect metering or wastage as a result of deteriorating water infrastructure. Water consumption is currently too high and there is poor water use efficiency, and little water conservation and demand management implementation. In particular, the increased percentage of the population with access to water services (as the current backlog is addressed), and the expected improvement in the standard of living, is likely to result in a greater per capita water consumption. New water augmentation schemes will also be costly and are likely to be detrimental to the environment. Effective water conservation and demand management brings about the required change to current water use management practices, and there are opportunities to increase water use efficiency in all water use sectors.
A6 Definition	Non-revenue water is defined as the sum of unbilled authorized consumption, apparent losses (unbilled unauthorised consumption and meter inaccuracies) and real losses (from transmission mains, storage facilities, distribution mains or service connections).
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	WS5.2
A1 Indicator short name	Total water losses
A1 Results-chain level	Outcome
A1 Unit of measurement	Litres per connection per day

INDICATOR ASSIGNMENT	WS5.2
A5 Rationale	Water consumption is currently too high and there is poor water use efficiency, and little water conservation and demand management implementation. In particular, the increased percentage of the population with access to water services (as the current backlog is addressed), and the expected improvement in the standard of living, is likely to result in a greater per capita water consumption. New water augmentation schemes will also be costly and are likely to be detrimental to the environment. Effective water conservation and demand management brings about the required change to current water use management practices, and there are opportunities to increase water use efficiency in all water use sectors.
A6 Definition	Total (apparent and real) losses, expressed in terms of annual volume lost per service connection per day.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	WS5.3
A1 Indicator short name	Total per capita consumption of water
A1 Results-chain level	Outcome
A1 Unit of measurement	Litres per capita per day
A5 Rationale	South Africa is a water scarce country. Current non-revenue water for South Africa is estimated to be 39% and associated water losses are 37%. Current indications are that non-revenue water costs South Africa approximately R7 billion Annual. Average per capita consumption is approximately 223 litres which is high for a water scarce country. Water consumption is currently too high and there is poor water use efficiency, and little water conservation and demand management implementation. In particular, the increased percentage of the population with access to water services (as the current backlog is addressed), and the expected improvement in the standard of living, is likely to result in a greater per capita water consumption. New water augmentation schemes will also be costly and are likely to be detrimental to the environment. Effective water conservation and demand management brings about the required change to current water use management practices, and there are opportunities to increase water use efficiency in all water use sectors.
A6 Definition	The total system input volume minus the total exported (raw and treated) water per population per day of the assessment period.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

(FIRE AND EMERGENCY SERVICE)

INDICATOR ASSIGNMENT	FE1.1
A1 Indicator short name	Number of fire related deaths per 1000 population
A1 Results-chain level	Outcome
A1 Unit of measurement	Ratio of deaths to population
A5 Rationale	One of the many measures used to demonstrate the effectiveness of a city's fire services is the number of fire related deaths that occur on an annual basis.
A6 Definition	Incidence of reported deaths attributed to fire or fire-related causes (e.g. smoke inhalation) normalised per population.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	FE1.11
A1 Indicator short name	Percentage compliance with the required attendance time for structural firefighting incidents
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of incidents
A5 Rationale	This indicator measures the overall compliance of the municipality to meet the average attendance time of 14 minutes for structural fire incidents in urban areas from time of call to time of attendance at least 75% or more of the time as required for a Category 1 Fire Brigade Service as stipulated in SANS 10090. The average response time (in minutes and seconds) it takes a fire department to respond to an initial distress call is an indicator of how protected a city's residents are from fires and related emergencies.
A6 Definition	Structural fire incidents are defined as incidents of fire outbreaks in habitable formal structures (buildings that have approved building plans) and habitable informal structures (informal residential dwellings where no approved building plans exist). The indicator measures the percentage of times that these incidents receive a response within the 14 minute standard. This measure of the attendance time is the difference between the time of call (the time an official call or notice is received at the offical call or reporting centre) and the arrival time (refers to the time captured for the first arriving firefighting response unit regardless from where dispatched or regardless of order of dispatch). The indicator therefore measures the number of all incidents where the attendance time was 14 minutes or less as a percentage of all incidents. • Attendance time is the difference between the time of call and the time of arrival of the first arriving firefighting response unit at the given address of the incident, (i.e.) Attendance Time = Time of arrival at given address –s- Time Call Received by ECC personnel and equipment in minutes and seconds for the year (numerator) divided by the number of fire department responses in the same year (denominator).
A8 Frequency of reporting	Quarterly
When	Now
B2 Frequency of collection	Quarterly

INDICATOR ASSIGNMENT	FE1.12
A1 Indicator short name	Number of full-time firefighters per 1000 population
A1 Results-chain level	Output
A1 Unit of measurement	Ratio of firefighters to population
A5 Rationale	Fire response is one of the fundamental services that all cities provide in its role of protecting life and property of its citizens. This indicator is a proxy for the extent to which the resourcing of this function is appropriate to service a city's needs normalised for its population.
A6 Definition	The total number of paid full-time firefighters employed by the municipality normalised to the population of the municipality. This excludes reservists or part-time firefighters.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	FE1.2
A1 Indicator short name	Number of natural disaster related deaths per 1000 population
A1 Results-chain level	Outcome
A1 Unit of measurement	Ratio of deaths to population
A5 Rationale	One of the many measures used to demonstrate the effectiveness of a city’s disaster management is the number of natural disaster related deaths that occur on an annual basis as a ratio of its total population.
A6 Definition	Incidence of reported deaths attributed to natural disasters, normalised per population. Natural disasters are understood as inclusive of calamities arising from natural events beyond the control or (immediate) influence of the municipal administration. This is inclusive of fires that are not considered specific structural incidents.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	FE1.21
A1 Indicator short name	Number of reservists and volunteer responders per 1000 population
A1 Results-chain level	Output
A1 Unit of measurement	Ratio of reservists and volunteer responders to population
A5 Rationale	Emergency response to disasters is one of the fundamental services that all cities provide in its role of protecting life and property of its citizens. This indicator is a proxy for the extent to which this service is provided based on an indication of the human resource allocation that is reservist or voluntary relative to population.

INDICATOR ASSIGNMENT	FE1.21
A6 Definition	The total number of reservist and volunteer responders (combined) in the service of the municipality at the end of the reporting period normalised to the population. A reservist responder refers to a person trained and on-call in the event of a fire-related emergency whereas a volunteer responder refers to those unpaid individuals formally registered in the service of the municipality.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

(GOVERNANCE)

INDICATOR ASSIGNMENT	GG1.1
A1 Indicator short name	Percentage of municipal skills development levy recovered
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of R-value
A5 Rationale	The percentage of the municipal skills development levy recovered is a proxy indicator of the successful throughput of municipal staff (permanent and contract) and councillors through on-going skills and development training and courses by the municipality. It is indicative of the municipal spend towards building staff and councillor capability and fostering lifelong learning.
A6 Definition	The indicator is a measure of the R-value of the municipal skills development levy recovered for the financial year as a percentage of the total municipal skills development allocation which the municipality could have claimed.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	GG1.2
A1 Indicator short name	Top management stability
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of working days
A5 Rationale	The stability of top management is central to the ability of a muncipality to perform well. This does not mean there should not be exits, but that exits should happen in a planned way, ideally ensuring that there is a seamless handover to fully appointed successors. Extended period of acting arangements are not desired and negatively treated in this indicator.
A6 Definition	Top management is defined as Section 56 and 57 Managers, as per the Municipal Systems Act (2000). This refers to the number of working days in which all of the top management positions in the municipality are filled by full-time employees not in an acting position.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	GG1.21
A1 Indicator short name	Staff vacancy rate
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of posts
A5 Rationale	This indicator gives an indication of the munipality's progress towards building capable local government. It shows the extent to which the required staff complement in the organisational structure is met.
A6 Definition	The number of unfilled posts in the municipal organisational structure as a percentage of the total number of posts in the municipality's organisational structure.
A8 Frequency of reporting	Quarterly
When	Now
B2 Frequency of collection	Quarterly

INDICATOR ASSIGNMENT	GG2.1
A1 Indicator short name	Percentage of ward committees that are functional (meet four times a year, are quorate, and have an action plan)
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of ward committees
A5 Rationale	This indicator shows the level to which the city supports ward committees, how functional formal mechanisms for public participation are in the municipality, and that they are active and properly constituted.
A6 Definition	The percentage of ward committees that are deemed to be 'functional' out of all wards in the municipality. Functional is defined as- they have an agreed annual ward committee action plan by end of Q1 of the year under review and had at least four quorate meetings in that year.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	GG2.11
A1 Indicator short name	Percentage of ward committees with 6 or more ward committee members (excluding the ward councillor)
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of ward committees
A5 Rationale	This indicator demonstrates the extent to which ward committees are active in terms of filled representation, which is a proxy indicator for the level of community engagement in the public participation system via a formal structure such as the ward committee. The indicator shows the percentage of ward committees that have filled at least 60% of the seats available to them.
A6 Definition	The percentage of ward committees that had 6 or more members, excluding the ward councillor, as a proportion of the total number of wards at the last day of the reporting period.
A8 Frequency of reporting	Quarterly
When	Now
B2 Frequency of collection	Quarterly

INDICATOR ASSIGNMENT	GG2.12
A1 Indicator short name	Average number of councillor-convened community meetings per ward
A1 Results-chain level	Output
A1 Unit of measurement	Meetings
A5 Rationale	The indicator provides an indication of the extent of public participation opportunities in the municipality at ward level. Each ward councillor should convene at least one quarterly meeting in his/her ward.
A6 Definition	The number of community meetings that ward councillors convened per ward in the municipality. Community meetings refer to any public meeting for which public notice is given, held in the councillor's ward, and at which the ward councillor convenes the meeting.
A8 Frequency of reporting	Quarterly
When	Now
B2 Frequency of collection	Quarterly

INDICATOR ASSIGNMENT	GG2.2
A1 Indicator short name	Attendance rate of municipal council meetings by all identified Traditional Leaders
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage attendance rate
A5 Rationale	Where Traditional Leaders are officially recognised in terms of official traditional structures identified in the Municipal Structures Act of 1998, their attendance and participation in Council meetings is an indication of municipal responsiveness to their leadership and involvement in civic affairs.
A6 Definition	The number of officially identified and municipally acknowledged Traditional Leaders resident with the municipal area in attendance at Council meetings. Identified traditional leaders refers to those leaders within identified traditional structures in terms of the Municipal Structures Act.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	GG3.1
A1 Indicator short name	Audit Opinion
A1 Results-chain level	Outcome
A1 Unit of measurement	Qualitative audit result
A5 Rationale	The Audit Opinion of the Auditor-General gives an indication of the credibility of the municipal administration and provides assurance of financial reporting and adherence to governance and administrative legislation.
A6 Definition	The Audit Opinion is defined by the Auditor-General. It is given across a qualitative, ordinal scale including: Unqualified with no findings; Unqualified with findings; Qualified with findings; Adverse with findings;and Disclaimed with findings. For those who have not completed the process 'Outstanding audits' are recorded.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	GG3.11
A1 Indicator short name	Number of repeat audit findings
A1 Results-chain level	Output
A1 Unit of measurement	Number of audit findings
A5 Rationale	The 'basics' in municipal governance include compliance with legislation. The AG annually indicates in the findings on compliance whether municipalities are complying with the financial legislation and regulations – it is assumed that when a municipality cannot even comply with the financial legislation, it will also not comply with other legislation applicable to municipalities. By tracking the number of "repeat" findings, a municipality needs to account for why it allows its administration to continue to repeat non-compliant practices year on year. This includes all findings, both financial and non-financial.
A6 Definition	"Repeat" findings refer to those findings which have persisted from one year of reporting to the next. These are identified as repeat findings by the Auditor-General on the following administrative areas including but not limited to: i) annual financial statements and annual report ii) Strategic planning and performance iii) Consequence management iv) Human Resource management
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	GG3.12
A1 Indicator short name	Percentage of councillors who have declared their financial interests
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of councillors
A5 Rationale	All councillors are required by law to declare their financial interests annually. This provides an indication of whether municipalities are at least aware of potential conflicts of interest.
A6 Definition	The percentage of all councillors that have declared their financial interests for the financial year being reported against.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	GG3.13
A1 Indicator short name	Percentage of administrative staff who have declared their financial interests
A1 Results-chain level	Output
A1 Unit of measurement	Percentage of administrative staff
A5 Rationale	All administrative staff are required by law to declare their financial interests annually. This provides an indication of whether municipalities are at least aware of potential conflicts of interest.
A6 Definition	The percentage of administrative staff that have declared their financial interests for the financial year being reported against.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	GG4.1
A1 Indicator short name	Average percentage of councillors attending council meetings
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of councillors
A5 Rationale	This indicator shows the level of engagement councillors have in the affairs of the municipality and to what extent councillors are participating in the business for which they were elected.
A6 Definition	The average percentage of members of the municipal council that attended council meetings.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	GG4.11
A1 Indicator short name	Number of agenda items deferred to the next council meeting
A1 Results-chain level	Output
A1 Unit of measurement	Number of council decisions
A5 Rationale	This indicator shows to what extent municipal business is delayed due to the absence of councillors from council meetings or the concluding of the meeting without attending to all items, which gives an indication of the extent to which councillors are fulfilling their responibilities as elected represetatives of the municipality. Functional councils will process agenda items with resolutions or decisions rather than defer or leave unfinished business. Measuring the number of agenda items that are deferred to the next meeting is a proxy for dysfunction.
A6 Definition	The number of agenda items that have been deferred to the next council meeting because the council has failed to reach a quorum or withheld decisions on those items. Where multiple council meetings have been held, this is the sum total of those items deferred. This does not refer to agenda items referred to other structures, only items for which no decision or action is taken.
A8 Frequency of reporting	Quarterly
When	Now
B2 Frequency of collection	Quarterly

INDICATOR ASSIGNMENT	GG4.2
A1 Indicator short name	Functionality of prescribed municipal structures (as defined in the Municipal Structures Act 117 of 1998)
A1 Results-chain level	Outcome
A1 Unit of measurement	Functionality of structures
A5 Rationale	Council structures are central to administrative oversight, governance and effective functioning.
A6 Definition	DEFINITION TO BE REVISITED.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	GG5.1
A1 Indicator short name	Number of alleged fraud and corruption cases reported per 100 000 population
A1 Results-chain level	Outcome
A1 Unit of measurement	Number of alleged cases
A5 Rationale	Principles of good governance require accountability, clean administration and responsible use of public funds. The indicator provides a leading measure of the incidence of fraud and corruption based on alleged incidents.
A6 Definition	The number of alleged incidents of fraud and corruption reported to the municipality during the period under review, normalised per 100 000 of the population. Corruption is defined broadly in the Prevention and Combating of Corrupt Activities Act 12 of 2004 in Chapter 2(s3) and any criminal offence that may fall within the ambit of this definition is included for the purposes of this indicator.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	GG5.11
A1 Indicator short name	Number of active suspensions longer than three months
A1 Results-chain level	Output
A1 Unit of measurement	Number of suspensions
A5 Rationale	Individuals on suspension continue to receive salaries without executing their municipal functions. Tracking the suspensions lasting more than three months provides an indication of the processing efficiency in cases of alleged misconduct. This is one indicator of the processing of administrative justice as it relates to human resources.
A6 Definition	Refers to the total number of active suspensions at the time of reporting that were initiated more than three months prior and had not yet been resolved.
A8 Frequency of reporting	Quarterly
When	Now
B2 Frequency of collection	Quarterly

INDICATOR ASSIGNMENT	GG5.12
A1 Indicator short name	Quarterly salary bill of suspended officials
A1 Results-chain level	Output
A1 Unit of measurement	R-value salaries
A5 Rationale	Individuals on suspension continue to receive salaries without executing their municipal functions. Tracking the salary bill of suspended officials provides an indicator of the extent to which enduring suspensions are costing the municipality money without the benefit of service.
A6 Definition	The sum of the salary bill for all officials suspended from work or employment for the municipality for misconduct during the reporting period.
A8 Frequency of reporting	Quarterly
When	Now
B2 Frequency of collection	Quarterly

INDICATOR ASSIGNMENT	GG5.2
A1 Indicator short name	Number of alleged fraud and corruption cases reported per 100 000 population
A1 Results-chain level	Outcome
A1 Unit of measurement	Number of dismissals
A5 Rationale	Principles of good governance require accountability, clean administration and responsible use of public funds. The indicator provides a leading measure of the incidence of fraud and corruption based on dismissals.
A6 Definition	The number of dimissals for fraud and corruption reported to the municipality during the period under review, normalised per 100 000 of the population. Corruption is defined broadly in the Prevention and Combating of Corrupt Activities Act 12 of 2004 in Chapter 2(s3) and any criminal offence that may fall within the ambit of this definition is included for the purposes of this indicator.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	GG5.3
A1 Indicator short name	Number of convictions for bribery and/or corruption per 100 000 population
A1 Results-chain level	Outcome
A1 Unit of measurement	Number of convictions
A5 Rationale	Principles of good governance require accountability, clean administration and responsible use of public funds. The indicator provides a measure of the incidence of fraud and corruption based on conviction rates.
A6 Definition	The number of convictions for bribery and/or corruption arising from incidents reported to the municipality, normalised per 100 000 of the population. Corruption is defined broadly in the Prevention and Combating of Corrupt Activities Act 12 of 2004 in Chapter 2(s3) and any criminal offence that may fall within the ambit of this definition is included for the purposes of this indicator.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	GG6.1
A1 Indicator short name	Percentage of all qualifying households in the municipal area classified as indigent
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of households
A5 Rationale	Municipalities provide free basic services to households classified as indigent as a means of alleviating the affects of poverty. This indicator tracks the extent to which household poverty is officially recognised within the municipal area.
A6 Definition	The number of households officially registered on the municipalities indigent register as a percentage of all households within the municipal area.
A8 Frequency of reporting	Annual
When	Later
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	GG6.11
A1 Indicator short name	Percentage expenditure of the municipality's operating budget on free basic services to indigent households
A1 Results-chain level	Output
A1 Unit of measurement	Percentage expenditure
A5 Rationale	Measuring the percentage of the operating budget spent on free basic services is indicative of the portion of the budget expended on poverty alleviation and also of financial viability of the municipality.
A6 Definition	The amount municipal operating budget expended on free basic services to indigent households (R-value) as a percentage of the total operating budget of the municipality for the period.
A8 Frequency of reporting	Quarterly
When	Now
B2 Frequency of collection	Quarterly

INDICATOR ASSIGNMENT	GG6.12
A1 Indicator short name	Number of work opportunities through EPWP, CWP and other related infrastructure programmes
A1 Results-chain level	Output
A1 Unit of measurement	Number of work opportunities
A5 Rationale	Work opportunities created through state funded infrastructure programmes are an important means of poverty alleviation delivered by municipalities.
A6 Definition	Simple count of the number of individuals receiving short-term work opportunities through the municipality for Expanded Public Works Programme, Community Works Programme and other related infrastructure initiatives.
A8 Frequency of reporting	Quarterly
When	Now
B2 Frequency of collection	Quarterly

(CITY TRANSFORMATIONAL INDICATORS)

INDICATOR ASSIGNMENT	WG13.
A1 Indicator short name	Percentage change in the value of properties in Integration Zones
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage Rand value
A5 Rationale	The increased value of properties in integration zones shows that there is increased economic activity and private sector participation in the area. Performance on this indicator is strongly influenced by the quality of urban management practices.
A6 Definition	Buildings are valued according to a municipality's own valuation practices.
A8 Frequency of reporting	Every three years
When	Now
B2 Frequency of collection	Every three years

INDICATOR ASSIGNMENT	CC2.
A1 Indicator short name	Number of land use applications processed in integration zones as a percentage of the total number of land use applications submitted city-wide.
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of applications
A5 Rationale	The number of land use applications processed is a good measure of the appetite for development in a particular area. If the land use change applications are occurring in an integration zone, it shows that there is development interest from the private sector in this area.
A6 Definition	This indicator measures the number of land use applications processed in integration zones as a proportion of those processed city-wide. It does not matter whether the applications were successful or not.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Cumulative for financial year

INDICATOR ASSIGNMENT	CC3
A1 Indicator short name	Number of building plan applications processed in integration zones as a percentage of the total number of building plan applications city-wide
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of applications
A5 Rationale	The number of building plan applications processed is a good measure of the appetite for economic activity in a particular area. If the building plan applications are occurring in an integration zone, it shows that there is development interest from the private sector in this area.
A6 Definition	This indicator measures the number of building plan applications processed in integration zones as a proportion of those processed city-wide. It does not matter whether the applications were successful or not.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Cumulative for financial year

INDICATOR ASSIGNMENT	PC4.
A1 Indicator short name	Commercial and industrial rateable value within integration zone for a single metro as a % of overall commercial and industrial rateable value for that same metro.
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of rateable value
A5 Rationale	The normalising of the rateable value of commercial and industrial land in integration zones to that of the whole city shows the relative value of the industrial and commercial land in the integration zone. It can also be used as a proxy measure of the extent and intensity of the commercial and industrial activity in the integration zone
A6 Definition	The Valuation Rolls of the cities will contain the rateable values of land by land use types. The land uses will be defined and specified by the different cities.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	CC1.
A1 Indicator short name	Hectares approved for future development outside the 2015 urban edge as a percentage of Hectares allocated for future development as defined by the 2015 SDF
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of hectares
A5 Rationale	This indicator measures two things. The first is the extent to which the authorities in the municipality are adhering to the long term plans of the municipality, and the second is a proxy for the sprawl that a city is experiencing
A6 Definition	The urban edge is defined in the Spatial Development Framework. Development applications outside of this are counted towards this indicator. For developments which cross the urban edge, use on the area which is outside the urban edge for calculating this indicator.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Cumulative for financial year

INDICATOR ASSIGNMENT	IC1.
A1 Indicator short name	New subsidised units developed in Brownfields developments as a percentage of all new subsidised units city-wide
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of subsidised units
A5 Rationale	Brownfields developments are usually associated with urban infill and in-situ upgrading of informal settlements which is preferential to further urban expansion and sprawl.
A6 Definition	The provision of subsidised housing units is the responsibility of the city and the Department of Human Settlements. A housing unit is a dwelling unit and can consist of more than one household. Subsidised housing units are, at least in part, subsidised by the State. Brownfields developments occur on land which was previously used for residential, commercial or industrial purposes. In this case it can also include land parcels associated with urban infill (e.g. buffer zones and land zoned for uses for which there is no longer a need).
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	IC2.
A1 Indicator short name	Gross residential unit density per hectare within integration zones
A1 Results-chain level	Outcome
A1 Unit of measurement	Ratio of households per hectare
A5 Rationale	Greater residential unit density can lead to greater efficiencies of services, particularly public transport. Increasing residential density is an indicator of spatial transformation through compaction and densification.
A6 Definition	Residential unit density is the number of households over a certain area. In this case the area is an integration zone.
A8 Frequency of reporting	Every three years
When	Now
B2 Frequency of collection	Every three years

INDICATOR ASSIGNMENT	IC3.
A1 Indicator short name	Ratio of housing types in integration zones
A1 Results-chain level	Outcome
A1 Unit of measurement	Ratio of housing types
A5 Rationale	Integration zones are intended to have mostly formal households. Understanding the mix and type of households is important for understanding the dynamics of the integration zone.
A6 Definition	Housing typologies are based on those used in the Housing Code (eg BNG, CRU, Social Housing, FLISP/GAP housing etc), as well as those in the private market.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	IC4.
A1 Indicator short name	Ratio of housing tenure status in integration zones
A1 Results-chain level	Outcome
A1 Unit of measurement	Ratio of tenure status
A5 Rationale	Integration zones are designed to have a mixed range of housing typologies. Providing the ratio of the different housing types illustrates the frequency of the respective housing types within the integration zone.
A6 Definition	Housing tenure statuses are based on those used in the General Household surveys. The indicator should be presented as Fully owned:Partially owned:Rented:Other
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	IC5.
A1 Indicator short name	Ratio of land use types (residential, commercial, retail, industrial) in integration zones
A1 Results-chain level	Outcome
A1 Unit of measurement	Ratio of land use types
A5 Rationale	Integration zones are intended to be mixed use areas, and this indicator measure the relative land use splits.
A6 Definition	Land use types are defined in the cities' zoning schemes.
A8 Frequency of reporting	Every three years
When	Now
B2 Frequency of collection	Every three years

INDICATOR ASSIGNMENT	IC6.
A1 Indicator short name	Percentage of households accessing subsidy units in integration zones that come from informal settlements
A1 Results-chain level	Outcome
A1 Unit of measurement	% households
A5 Rationale	This indicator measures the extent to which people from informal settlements are being catered for in the subsidised housing opportunities created in integration zones.This meausre is aimed at de-densifying exsiting settlements or to cater for people from settlements that cannot be development becuase of environmental constrants. Relocation is to be treated as a last resort after in situ upgrading options have been explored.
A6 Definition	Informal dwellings are defined as a wood and/or iron structure, which does not meet basic building standards. The upgrading of informal dwellings is through Upgrading of Informal Settlements Programme(UISP) by provinces/municipalities own efforts.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	IC7.
A1 Indicator short name	Number of all dwelling units within Integration Zones that are within 800 metres of access points to the integrated public transport system as a percentage of all dwelling units within Integration Zones
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of dwellings
A5 Rationale	Access to a public transport system is an important component of an effective public transport system. 800m is generally accepted as the walkshed around a public transport node.
A6 Definition	This indicator measures the number of dwelling units in integration zones within a 800m radius of an access point to an integrated public transport network, as a percentage of all dwellings in integration zones.A dwelling unit is the unit of measurement for proximity to public transport nodes. 800m does not take route length into account.
A8 Frequency of reporting	Every three years
When	Now
B2 Frequency of collection	Every three years

INDICATOR ASSIGNMENT	IC8.
A1 Indicator short name	Percentage share of household income spent on transport costs for different household income quintiles city-wide
A1 Results-chain level	Outcome
A1 Unit of measurement	Ratio of percentage household expenditure on transport per quintile
A5 Rationale	The affordability of public transport systems is an important aspect of the effectiveness of the public transport system.
A6 Definition	A quintile consists of 20% of the households that are being investigated. Expenditure on transport includes all modes and types of costs associated with transport.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	IC9.
A1 Indicator short name	Capital expenditure on integrated public transport networks as a percentage of the municipal capital expenditure
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of expenditure
A5 Rationale	Investment in public transport infrastructure is linked to the spatial transformation of cities and is a key component of the Urban Network Strategy
A6 Definition	This indicator measures the extent to which capital expenditure of the municipality is focussed into the integrated public transport network
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Monthly

INDICATOR ASSIGNMENT	IC11a.
A1 Indicator short name	Percentage of learners travelling longer than 30 minutes to an education institution
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of learners
A5 Rationale	Trip time for learners is a good measure of the efficiency of the transport system of the metro and is a proxy indicator of spatial transformation. Trips lasting longer than 30 minutes are considered indicative of inefficiency or congestion at odds with spatial transformation imperatives.
A6 Definition	The number of learners surveyed who indicate that the average duration of the time it takes to travel from their home to their educational institution is longer than 30 minutes, as a percentage of all learners travelling to an educational institution.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual

INDICATOR ASSIGNMENT	IC11b.
A1 Indicator short name	Percentage of workers travelling for longer than 30 minutes to their place of work
A1 Results-chain level	Outcome
A1 Unit of measurement	Percentage of workers
A5 Rationale	Trip time for workers is a good measure of the efficiency of the transport system of the metro and is a proxy indicator of spatial transformation. Trips lasting longer than 30 minutes are considered indicative of inefficiency or congestion at odds with spatial transformation imperatives.
A6 Definition	The number of workers surveyed who indicate that the average duration of the time it takes to travel from their home to their place of work is longer than 30 minutes, as a percentage of all workers travelling to a place of work.
A8 Frequency of reporting	Annual
When	Now
B2 Frequency of collection	Annual