



CITY OF
TSHWANE
IGNITING EXCELLENCE

CITY OF TSHWANE

BUILT ENVIRONMENT PERFORMANCE PLAN



Sub-Section G – Reporting & Evaluation

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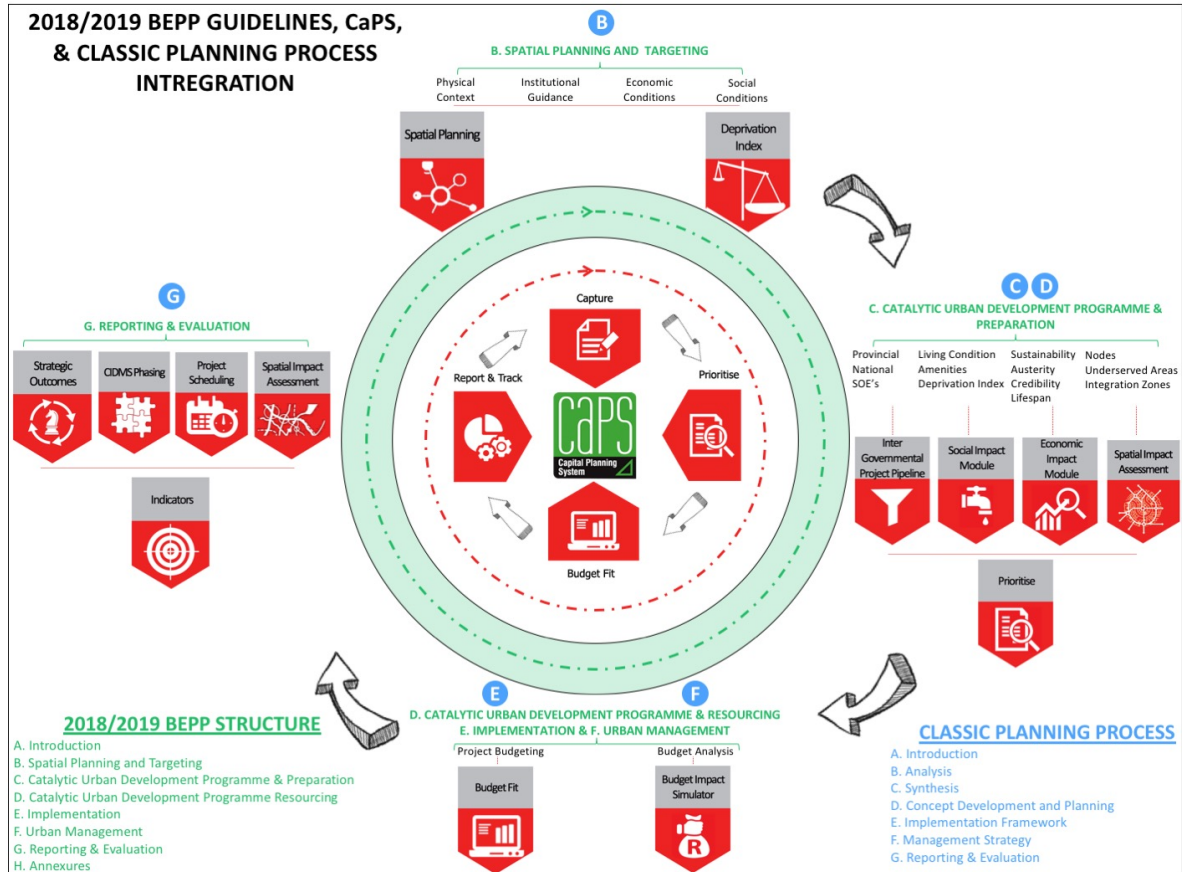
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G Reporting

Figure G-1: CaPS Process



The BEPP indicators aims to assist in understanding the performance of a metropolitan municipality in order to ensure that metropolitan municipality are strategically aligned with legislative, planning and budgeting requirements.

The CaPS system not only allows for project identification and implementation based on certain spatial targeted areas, but it continues to evaluate and track implementation. Section G of the Classic planning process refers to reporting and evaluation and so does the 2018/2019 BEPP Guidelines. Both processes require some sort of reporting feedback that reflects that the goals set by national Treasury (or the City itself) has been met by that year's Capital Expenditure.

The CaPS system provides a platform for reporting and evaluation and in doing so provides more credibility to the City's prioritisation process. Specific elements to which the said system can report include:

- Specific spatial impact of projects;
- Capital expenditure versus a multitude of spatial filters;
- Capital expenditure in terms of strategic direction of various tiers of government;
- CIDMS Phasing of projects; and
- Requested expenditure versus Planned expenditure versus Actual expenditure.

During this reporting period, the City has come to the understanding that a need exists to express municipal expenditure in terms of National, provincial and municipal strategic outcomes as these

outcomes are the milestones set out by the various spheres of government. The City is in process to revise the IDP, however the strategic outcomes are not in flux.

This section aims to shed a light on the various performance indicators as required by the BEPP, but also to show the expenditure of the City in terms of the various spheres of governments' outcomes.

G.1 Reporting

The BEPP Performance indicators, as described by National Treasury, is a set of criteria which measures the progressive improvements within the urban built environment on which measurable targets can be established. These targets serve to ensure practices that strategically align with legislated planning and budgeting requirements for local and other spheres of government, as well as to monitor and evaluate progress (Cities Support Programme, National Treasury).

In comparison to the BEPP for 2017/18, the initial list of 54 outcome indicators was reduced for purposes of the 2018/19 BEPP reporting period. The below table indicates an overview of the BEPP Performance Outcome Areas in relation to the governing body (National/Metro) responsible for reporting performance, as per the Guideline on BEPP Indicators for 2018/19.

Table G-1: BEPP Indicator Reporting Framework

BEPP Outcome area	Number of Indicator baselines that should be set by National	Number of Indicator baselines that should be set by the City
Well governed (WG)	1	3
Compact (CC)		3
Inclusive (IC)	4	7
Productive (PC)		1
Sustainable (SC)		
Total	5	14

Source: BEPP Supplementary Guidance 2018/19 -2020/21 v5

Reporting of the BEPP Performance indicators are either achieved through reporting targets or trends per baseline that have been set by national/metro governing bodies, in order to establish measurable trends within the urban built environment.

The 14 reported integrated outcome indicators are WG8, WG13, WG17, CC1, CC2, CC3, IC1, IC2, IC3, IC4, IC5, IC6, IC7, and PC4. With the additional national indicator information provided and sourced from the BEPP document guidelines that was populated to the extent of information available.

Table G-2 indicates the reported outcome indicators as per the BEPP Supplementary Guideline 2018/19. For purposes of reporting, the corresponding section reference; the spatial filter and category has been listed.

Table G-2: Reporting outline

Code	BEPP Outcome Area	Indicator	Category	Target or intention	Spatial Filter	Sub Section Reference
WG8	Well governed	The budgeted amount of municipal capital expenditure for catalytic programmes contained in BEPP, as a percentage of the municipal capital budget.	City	Target	-	Chapter G.1.1

Code	BEPP Outcome Area	Indicator	Category	Target or intention	Spatial Filter	Sub Section Reference
WG13	Well governed	Percentage change in the value of properties in Integration Zones	City	Intention	Integration Zones	Chapter G.1.2
WG16	Well governed	BEPP Evaluation Score.	National	Target	-	Refer to Section H
WG17	Well governed	Number of new partnerships entered into to strengthen the intergovernmental project pipeline.	City	Target	-	Chapter G.1.3
CC1	Compact	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.	City	Target	Urban Edge	Chapter G.1.4
CC2	Compact	Number of land use applications processed in integration zones as a percentage of the total number of land use applications submitted city-wide.	City	Intention	Integration Zones	Chapter G.1.5
CC3	Compact	Number of building plan applications processed in integration zones as a percentage of the total number of building plan applications city-wide.	City	Intention	Integration Zones	Chapter G.1.6
IC1	Inclusive	New subsidised units developed in Brownfields developments as a percentage of all new subsidised units city-wide	City	Target	Municipal Area	Chapter G.1.7
IC2	Inclusive	Gross residential unit density per hectare within integration zones	City	Target	Integration Zones	Chapter G.1.8
IC3	Inclusive	Ratio of housing types in integration zones	City	Target	Integration Zones	Chapter G.1.9
IC4	Inclusive	Ratio of housing tenure status in integration zones	City	Intention	Integration Zones	Chapter G.1.10
IC5	Inclusive	Ratio of land use types (residential, commercial, retail, industrial) in integration zones	City	Target	Integration Zones	Chapter G.1.11

Code	BEPP Outcome Area	Indicator	Category	Target or intention	Spatial Filter	Sub Section Reference
IC6	Inclusive	%households accessing subsidy units in integration zones that come from informal settlements	City	Target	Integration Zones	Chapter G.1.12
IC7	Inclusive	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	City	Intention	Integration Zones	Chapter G.1.13
IC8	Inclusive	Percentage share of household income spent on transport costs for different household income quintiles city-wide	National	Intention	-	Not Reported on
IC9	Inclusive	Capital expenditure on integrated public transport networks as a percentage of the municipal capital expenditure	National	Target	-	Not Reported on
IC11a	Inclusive	% learners travelling for longer than 30 minutes to an education institution	National	Intention	-	Not Reported on
IC11b	Inclusive	% of workers travelling for longer than 30 minutes to their place of work	National	Intention	-	Not Reported on
PC4	Productive	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.	City	Intention	-	Chapter G.1.14

For purposes of this section the methodology for calculating targets/trends, as set out by National Treasury, are only discussed for the indicators identified as the metro's responsibility. Each chapter will discuss the methodology used to calculate the targets for years 2016/2017 – 2020/2021 using the following format:

Target – outlines the factors (data) required in order to calculate each of the BEPP Indicators.

Source data – outlines the datasets that have been collected for purposes of the calculation method as well as the corresponding source of each dataset.

Data Integrity and comments – outlines a summarised data audit of the datasets collected as well as limitation factors that need to be taken into account during the calculation process.

Assumptions – outlines assumptions made to conform to the criteria as set out by National Treasury.

Calculating the BEPP Performance Indicator – outlines the methodology process used to calculate the indicator.

Results– outlines the results from the methodology followed within the reporting format as set out by National Treasury.

Proposed Methodology and Data Improvements – outlines solutions to the limitation factors described within the data audit process as well as factors that need to be taken into account for future calculation of the BEPP indicators.

For the indicators that could not be calculated a proposed methodology has been included for implementation once the outstanding/adequate datasets have been collected.

G.1.1 The budgeted amount of municipal capital expenditure for catalytic programmes contained in BEPP, as a percentage of the municipal capital budget (WG8).

G.1.1.1 Target

To calculate the percentage of capital expenditure allocated to catalytic projects in relation to the municipality's total capital expenditure.

- Capital expenditure for catalytic projects (MTREF period 2017/18 – 2019/20),
- Total capital expenditure for the municipality (MTREF period 2017/18 – 2019/20),

The outcome of this indicator will provide an indication of whether the municipality is emphasizing catalytic projects in percentage rand value.

G.1.1.2 Source Data

For purposes of calculating this indicator, the MTREF budget for 2018/19 – 2020/21 as well as the approved Annexure B 2017/18 was extracted.

- Catalytic Projects as indicated by Metropolitan Spatial Planning
 - Projects located within the integration zone (Based on the 2018/19 BEPP delineation)
- Capital budget based on the 2017/18 Annexure B from the Department of Finance
- Capital budget based on the latest 2018/19 MTREF Draft Annexure A.

G.1.1.3 Data integrity and comments

The data that has been used to calculate this indicator is sourced from Tshwane Capital Planning System (CaPS) as captured by departments through one-on-one sessions together with data received from the Department of Finance.

The new delineation of the Integration zones was used for the calculation of this indicator as it includes the targeted spatial economic/social infrastructure investment areas. The city has defined catalytic programmes as projects vested within these areas.

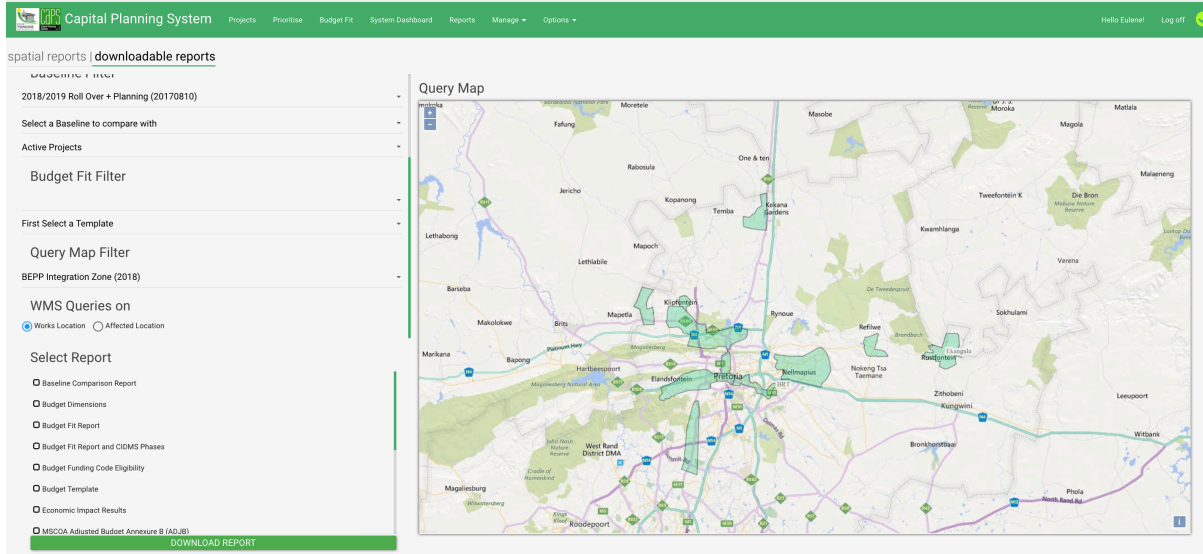
G.1.1.4 Calculating the BEPP Performance Indicator

In order to calculate the target, the data first had to undergo preparation in order to align the project locations captured onto CaPS to the delineation of the targeted spatial economic/social infrastructure investment areas.

Preparation of data:

To indicate whether projects fall within or outside of the targeted spatial investment areas, the projects were spatially filtered using an intersect query to that of the delineation of the spatial layer. The spatial

filtering of projects was done on the CaPS system’s reporting tool and reported the project’s capital budget for 2016/17 – 2020/21, as well as the relation to the targeted spatial investment areas (within or outside of these areas).



Calculating of the indicator:

The preparation process described above, resulted in a dataset which included the capital budget from 2016/17 – 2020/21 based on its spatial relation. The data elements consisted out of projects within the integration zone (Data element 1) and the remaining projects not within the integration zone (Data element 2). Table below indicates the total capital budget for 2016/17 – 2020/21, split according to both data elements.

In order to express the target as a percentage of rand value, Data element 2 was divided by the total capital budget.

- $(\text{Budgeted expenditure on catalytic projects}) / (\text{Total municipal capital budget}) \times 100$

Table G-3: BEPP Indicator WG8 Calculation

Data elements	2016 / 2017	2017 / 2018	2018 / 2019	2019/ 2020	2020/ 2021
Outside of targeted spatial investment areas	R2 496 658 882 56%	R1 699 577 257 45%	R2 135 675 265 61%	R2 569 163 214 65%	R2 384 055 715 58%
Within targeted spatial investment areas	R1 986 737 949 44%	R2 076 932 180 55%	R1 339 091 095 39%	R1 401 701 266 35%	R1 729 045 865 42%
Grand Total	R4 483 396 831	R3 776 509 437	R3 474 766 360	R3 970 864 480	R4 113 101 580

G.1.1.5 Results

The calculation of the performance indicator resulted in percentage capital budget allocated to catalytic programmes as a percentage rand value of the city’s total capital budget. The results indicate that the city is investing more or less 50% of its capital budget within the targeted spatial investment areas and subsequently catalytic programmes.

Table G-4: BEPP Indicator WG8 Results

Code	Indicator	Category	Target or intention	16/17 data	17/18 Target	18/19 Target	19/20 Target	20/21 Target
WG8	The budgeted amount of municipal capital expenditure for catalytic programmes contained in BEPP, as a percentage of the municipal capital budget	City now	Target	44%	55%	39%	35%	42%

G.1.1.6 Proposed Methodology and Data Improvements

Due to the nature of the data generated from the CaPS system, this indicator could not be calculated in an accurate manner and was based on the planned capital budgets as received by the Finance Department. Once the actual expenditure has been received, the targets will be updated for years 2016/17 – 2017/18.

G.1.2 Percentage change in the value of properties in Integration Zones (WG13).

G.1.2.1 Target

To calculate the percentage rand value change for properties within the Integration Zone.

- Latest approved version of the valuation-roll erf/stand number
- Previous version of the valuation-roll per erf/stand number
- Integration Zone Delineation,

The outcome of this indicator will indicate if there is an increase in economic activity as well as private sector participation, by indicating either an increase or decrease in property value.

G.1.2.2 Source Data

At the time of calculating the indicator the valuation roll data was not available. The latest valuation roll has been published in 2017 and will be valid for the next 4 years. The previous version of the valuation role was published in 2013. The calculation of this indicator will be dependent on the receipt of the data from Metropolitan Corporate Geo-Information Management (Corporate GIS), the custodian of the data. The delineation of the Integration zones is still under review, for purposes of this calculation the delineation of the integration zones used was based on the 2017/18 BEPP delineation.

G.1.2.3 Proposed Methodology and Data Improvements

- Intersect both valuation roll layers with that of the integration-zone layer in order to distinguish between erf/stand numbers that fall within/outside of the integration zone.
- Apply spatial filter to both valuation roll layers, indicating only data within the integration zone (intersecting erf/stand numbers).
- Calculate total value of properties for both the 2013 (**Data element 1**) valuation roll layer and the 2017 (**Data element 2**) valuation roll, within the Integration Zone.
- $((\text{Data element 2} - \text{Data element 1}) / \text{Data element 1}) \times 100$
 - $((\text{Total 2017 Valuation role} - \text{Total 2013 Valuation role}) / (\text{Total 2013 Valuation Role})) \times 100$

G.1.3 Number of new partnerships entered into to strengthen the intergovernmental project pipeline. (WG17).

G.1.3.1 Target

The City of Tshwane aims not only to have sight on the capital investment by public entities within the City’s jurisdiction, but also aim to work collaboratively with the public entities in order to streamline development, reduce wasteful expenditure and collectively focus on areas with the highest potential of efficient investment and sustainable development. The following public entities has been identified as a target group with whom the City should start collaborating with:

Table G-5: Intergovernmental Entities

National Government	Gauteng Provincial Government	State Owned Entities	Public Private
National Department of Education National Department of Health National Department of Human Settlements National Department of Energy National Department of Social Development National Department of Economic Development National Department of Public Works National Department of Rural Development and Land Reform National Department of Sports and Recreation National Department of Water and Sanitation	Infrastructure Development Health Human Settlements Sports and recreation	Airports Company of South Africa Limited (ACSA) Broadband Infrastructure Company (Pty) Ltd Development Bank of Southern Africa Eskom Land and Agricultural Development Bank of South Africa South African Express (Pty) Limited Transnet Limited	Gautrain

G.1.3.2 Source Data

The City has sourced data regarding the Planned Capital Expenditure of the following entities for 2018/2019 – and has been used in the 2018/2019 BEPP:

- PRASA
- Gauteng Provincial Government (All departments)
- National Department of Public Works
- City of Johannesburg
- City of Ekurhuleni

G.1.3.3 Proposed Methodology and Data Improvements

The City are part of a Tri-Metro Forum (Forum still in process of being established) which enables a platform for other public entities to engage with the City, neighbouring cities and provincial government. The purpose of this forum will be to collaboratively prioritise capital investment. Once the Capital Planning and Prioritisation model has been set up for the Tri-Metro Forum, then data standardisation and data improvement requirements can be finalised in order to work towards a continuous work stream between different public entities.

G.1.4 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 (CC1).

G.1.4.1 Target

Calculation of the percentage of approved future development outside the urban edge in relation to all allocated future developments.

- The outline of the 2015 urban edge,
- Approved developments in hectares (Land use planning department),
- Allocated developments in hectares (City SDF).

The outcome will indicate whether authorities within the municipality are adhering to long term plans for the city as well as indicate the sprawl that the city is undergoing. The ratio should be calculated and expressed as a percentage hectare value.

G.1.4.2 Source Data

The source data used to calculate the indicator includes the following:

- Build and under Construction Spatial layer sourced from Tshwane Development Trends 2012 – 2015 (Development trends within the city over the past 3 years, City of Tshwane City Planning and Development)
- Trends and Applications layer sourced from Tshwane Development Trends 2012 – 2015 (Development trends within the city over the past 3 years, City of Tshwane City Planning and Development),
- Both the Build & under Construction and Trends & application layers consist of the following: Bonded_Low_End; RDP; High Density Housing; Industrial; Offices; Retail; Community.
- Urban Edge Boundary (SDF).
- Cadastral Data (Department of Rural Development and Land Reform)
- Land Use Data (City of Tshwane City Planning and Development).
- Zoning Data (City of Tshwane Corporate GIS).

G.1.4.3 Data integrity and comments

As described above, the target result for this indicator is to calculate the percentage hectares approved developments in relation to allocated developments. Both the “Build and under construction” and “Trends and Applications” layers contain point geometries which doesn’t give any indication of development area.

The “Build and under construction” and “Trends and Applications” layers are packaged ESRI shapefiles (based on type). For the purposes of this calculation, the topology errors were only addressed briefly. The “Build and under construction” and “Trends and Applications” layers have been recorded as a trend running from year 2012 – 2015.

G.1.4.4 Assumptions

The following assumptions were made with regards to the datasets:

- The “Build and Under Construction” layer will be used for approved developments,
- The “Trends and Applications” layer will be used for allocated or planned developments,
- The allocated erf/stand number is based on the intersecting centroid (midpoint) of either the “Build and Under Construction” and “Trends and Applications” layer.
- In cases of a one to a many spatial join, the lowest value (hectares) should be kept and other information disregarded.

G.1.4.5 Calculating the BEPP Performance Indicator

In order to calculate the target, the data first had to undergo preparation in order to achieve spatial layers with area data associated with it.

Preparation of data:

The data for both the “Build and Under Construction” and “Trends and Applications” layers were separated into individual ESRI shapefiles (type classification). In order to proceed with assigning area geometries to these layers, multiple layers were merged into two main layers. Both of these layers contained “Type” as part of its attribute data.

To assign area geometry to the two layers created in the above process, area geometries were spatially joined from cadastral layers to that of the point datasets. Due to the noticeable gaps within the cadastral, land use and zoning datasets, the following priorities were applied to the 4 different spatial joins in order to avoid “null” values:

- Priority 01: The first spatial join was based on the erven boundaries that form part of the cadastral dataset,
- Priority 02: The second spatial join was based on the land use boundaries (erven)
- Priority 03: The third spatial join was based on the zoning datasets (land parcels)
- Priority 04: The fourth spatial join was based on the farm portions that form part of the cadastral dataset

The figure below illustrates the methodology followed in order to create the various joins:

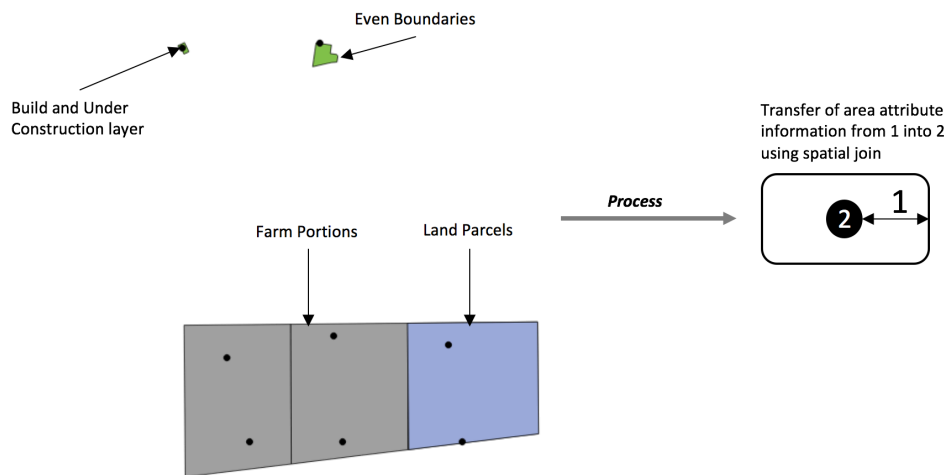


Figure G-2: Process of assigning area to point features (Indicator CC1)

Once all the joins were complete, the smallest area (hectares) remained as the intersecting area and the rest were omitted, based on assumption 4. In cases where spatial joins did not take place, the closest area geometry was allocated. The resulting layers contained type; area in metres, area in hectares and the source of the cadastral data used. Based on the resulting spatial layers the target was calculated based on the urban edge boundary.

Calculation of the indicator:

In order to distinguish between approved developments within the urban edge, a spatial join was executed between the “Build and Under Construction” layer and the delineation of the urban edge boundary. The intersecting features were populated with a data field indicating whether features fall within or outside the urban edge.

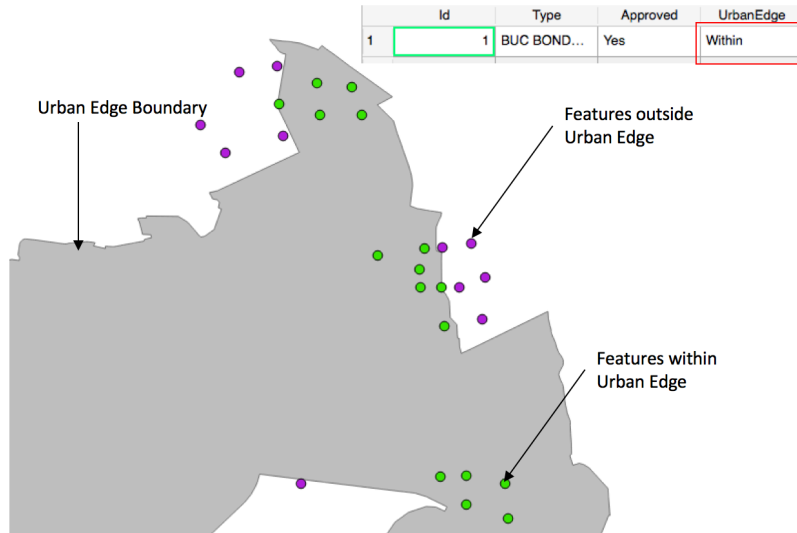


Figure G-3: Spatial filtering process (Indicator CC1)

Once all the data was populated for both of the “Build and Under Construction” and “Trends and Applications” layers, attributing data was exported into an excel format. In excel the tabular data was listed as two different data sheets, one for the “Build and Under Construction Layer” (Data Element 1) and one for the “Trends and Applications” (Data Element 2) layer.

- **Build and Under Construction Sheet (Data Element 1):**

To calculate the first data element, a total of the areas of approved developments within the urban edge was obtained. This was achieved through applying a filter to include only values indicating features outside of the urban edge. The resulting data element indicated total hectares in terms of approved developments outside of the urban edge.

- **Trends and Applications sheet (Data Element 2):**

The calculation of the second data element followed the same methodology as data element 1. The resulting data element indicated total hectares in terms of allocated/planned developments outside of the urban edge.

Based on the data available from both data elements, the correlation between approved developments and allocated developments were calculated and expressed as percentage hectares.

Build and Under Construction (Data Element 1):		Trends and Applications sheet (Data Element 2):	
Urban Edge	Total Area h	Urban Edge	Sum of Area h
Outside	4487,2007	Outside	4796,8486
		Within	18769,5329
		Grand Total	23566,3815

Indicator Result = Data element 1/Data element 2 x 100

Figure G-4: Calculation method (Indicator CC1)

G.1.4.6 Results

The calculation of the performance indicator resulted in percentage hectares approved for future development outside of the urban edge in relation to allocated or planned developments.

The percentage of hectares approved for future development outside the urban edge in relation to city wide future development resulted in 19%. This indicates that the majority of developments still take place within the urban edge and conforms to focusing development within the urban edge as defined by the SDF.

Table G-6: BEPP Indicator CC1 Results

Code	Indicator	Category	Target or intention	16/17 data	Notes
CC1	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.	City now	Target	19%	Due to unavailability of data the latest trends was used for the 16/17 data requirements

G.1.4.7 Proposed Methodology and Data Improvements

Due to the nature of the data received, this indicator could not be calculated in an accurate manner and was based on a number of assumptions. The data trend has been recorded for years 2012 – 2015, once data becomes available the indicator will be updated using the above-mentioned methodology for more recent reporting purposes. For the calculation of the approved developments as well as all allocated developments data should be recorded in a spatial manner in order to indicate area in hectares.

G.1.5 Number of land use applications processed in integration zones as a percentage of the total number of land use applications submitted city-wide. (CC2).

G.1.5.1 Target

Calculation of the number of land use applications processed within integration zones in relation to the total number of land use applications city-wide. In order to calculate this indicator, the following factors needed to be taken into account:

- City-wide land use applications
- Area and delineation of Integration zones

An increase in the number of land use applications within a targeted area is a good indication of development interest from the private sector. The ratio should be calculated and expressed as a percentage of applications.

G.1.5.2 Source data

The source data used to calculate the indicator included the following:

- Trends and Applications layer sourced from Tshwane Development Trends 2012 – 2015 (Development trends within the city over the past 3 years, City of Tshwane City Planning and Development), which is made up of a number of individual items within a geodatabase (Bonded_Low_End; RDP; High Density Housing; Industrial; Offices; Retail; Community)
- New delineation of Integration zones for purposes of the 2018/19 BEPP.

G.1.5.3 Data integrity and comments

The “Trends and Applications” layer was packaged within a geodatabase (based on type) which made it challenging to manage and to conduct analysis going forward. The “Trends and Applications” layer was recorded as a trend running from year 2012 – 2015.

The delineation of the Integration zones is still under review, for purposes of this calculation the delineation of the integration zones used was based on the 2017/18 BEPP delineation.

G.1.5.4 Assumptions

The “Trends and Applications” layer used during the calculation of the previous BEPP Performance Indicator was used as the city-wide land use applications layer.

G.1.5.5 Calculating the BEPP Performance Indicator

In order to proceed with calculating the target for this indicator, the spatial layer used had to first undergo a process of preparation.

Preparation of data:

The “Trends and Applications” layer was separated into individual layers within a geodatabase (based on the type classification), multiple layers were merged into one layer. The prepared layer was used in conjunction with the 2017/18 BEPP Integration Zones.

Calculating of the indicator:

To distinguish between land use applications within or outside of the integration zones, the “Trends and Applications” layer was intersected with integration zone boundaries. This was done by applying a spatial join which resulted in features intersecting the integration zones. The intersecting features were populated with a data field indicating whether features fall within or outside of the integration zone boundary. The resulting data was exported to an excel data sheet (Land use applications – **Data element 1**).

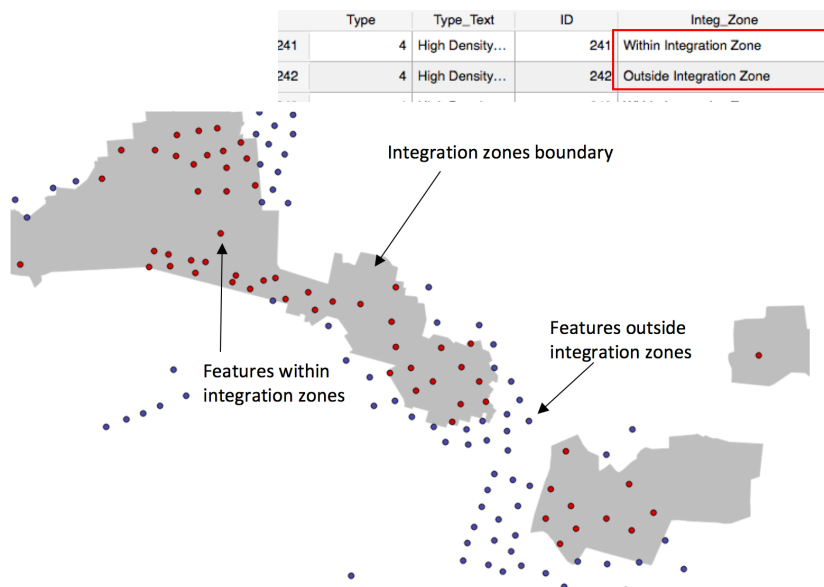


Figure G-5: Spatial Preparation of data (Indicator CC2)

Land use applications within the integration zone (**Data element 1**), was calculated by applying a filter indicating features that fall within integration zones and counting the number of features returned after the filter was applied.

City-wide land use applications (Data element 2):

To obtain information for data element 2, the total number of features within the “Trends and Applications” data sheet was recorded.

The relationship between data element 1 and 2 was used to calculate the target, the results from the land use applications within integration zones was divided by the results from the city-wide land use applications and multiplied by 100 to obtain a percentage value ($A/B \times 100$).

Integration zone	Count of features
Outside Integration Zone	1166
Within Integration Zone (Data element 1)	166
Grand Total (Data element 2)	1332

$$\text{Indicator Result} = A/B \times 100$$

Figure G-6: Calculation method (Indicator CC2)

G.1.5.6 Results

The percentage of land use applications within integration zones in relation to city wide land use applications resulted in 12%. This indicates that the interest from the private sector to develop within integration zones are low.

Table G-7: BEPP Indicator CC2 Results

Code	Indicator	Category	Target or intention	16/17 data	Notes
CC2	Number of land use applications processed in integration zones as a percentage of the total number of land use applications submitted city-wid	City now	Target	12%	Due to unavailability of data the latest trends was used for the 16/17 data requirements

G.1.5.7 Proposed Methodology and Data Improvements

Due to the nature of the data received, this indicator could not be calculated in an accurate manner and was based on a number of assumptions. The data trend has been recorded for years 2012 – 2015, once data becomes available the indicator will be updated using the above-mentioned methodology for more recent reporting purposes. The updated delineation of the integration zones will be used for the calculation of the 2017/2018 & 2018/2019 targets.

G.1.6 Number of building plan applications processed in integration zones as a percentage of the total number of building plan applications city-wide. (CC3).

G.1.6.1 Target

The objective of this indicator is to calculate the number of building plan applications processed within integration zones in relation to the total number of building plan applications. In order to calculate this indicator, the following factors need to be taken into account:

- City-wide building plan applications (City building plan applications department)
- Latest Delineation of Integration zones

The results obtained will indicate whether there is interest from the private sector to develop within integration zones. The ratio should be calculated and expressed as a percentage value.

G.1.6.2 Source Data

At the time of calculating of this indicator, critical input data was not available. The calculation of this indicator will be finalised once the required datasets have been made available.

The delineation of the Integration zones is still under review. Future calculation of the target will be used in relation to the delineation of the 2018/19 BEPP integration zones.

G.1.6.3 Data integrity and comments

Due to incomplete data sources this indicator could not be calculated at the time. The proposed calculation methodology will be applied once data has become available.

G.1.6.4 Proposed Methodology and Data Improvements

To calculate this indicator the same methodology could be applied as described under section G.1.5. The calculation will be undertaken as follows:

- Intersect the building plan applications spatial layer with that of the integration zones to distinguish between building plan applications within integration zones and those falling outside of integration zones. Export resulting data into an excel data sheet.
- Obtain data element 1 by recording the total of features within integration zones, by applying a filter that only returns the features applicable.
- Obtain data element 2 by recording a number of features within the building plan applications layers.
- Use the results recorded for data element 1; divide by the recorded number of features from data element 2; multiply the result by 100 to obtain a percentage value ($A/B \times 100$).

G.1.7 New subsidised units developed in Brownfields developments as a percentage of all new subsidised units city-wide (IC1).

G.1.7.1 Target

The objective of this indicator is to calculate the number of new subsidized units developed within Brownfields developments as a percentage of all new subsidized units. In order to calculate this indicator, the following factors need to be taken into account:

- Number of new subsidised housing units in brownfields development (Department of Human Settlements)
- Total number of newly provided subsidised housing units city-wide (Department of Human Settlements)

Brownfields developments are usually associated with urban infill and in-situ upgrading of informal settlements which is preferential to further urban expansion and sprawl. The target should be expressed as a percentage of subsidised units.

G.1.7.2 Source Data

At the time of calculating this indicator, critical input data was not available. The calculation of this indicator will be finalised once the required datasets have been made available.

G.1.7.3 Data integrity and comments

Due to incomplete data sources this indicator could not be calculated at the time. The proposed calculation methodology will be applied once data has become available.

G.1.7.4 Proposed Methodology and Data Improvements

For future reference, the calculation of the indicator target will be undertaken as follows:

- Once the spatial delineation of the brownfields developments has been obtained the location of the subsidised housing units (as per the Housing code) will be intersected with the spatial delineation of the brownfields development areas.
- Obtain data element 1 by recording the total of subsidised housing units within brownfields developments, by applying a filter that only returns the features applicable.
- Obtain data element 2 by recording the total number of subsidised housing units.
- Use the results recorded for data element 1; divide by the recorded number of features from data element 2; multiply the result by 100 to obtain a percentage value ($\text{Data element 1}/\text{Data element 2} \times 100$)

G.1.8 Gross residential unit density per hectare within integration zones (IC2).

G.1.8.1 Target

The objective of this indicator is to calculate the ratio between the number of households within Integration Zones in relation to the area of the integration zone in hectares. The following data elements form part of the calculation methodology:

- Number of households expressed in a spatial manner (per smallest area)
- Total coverage area of the integration zone

The calculation of the residential density within the integration zones is good measure of services utilized (public transport) as well as a good indication of spatial transformation through densification. The target should be expressed as a ratio in its simplest form.

G.1.8.2 Source Data

Due to the spatial distribution of households required for this indicator, the data obtained from STATSSA could not be sufficiently used to calculate the target based on the unavailability of the spatial distribution element. Once this data has been collected and made available the target will be calculated based on the below proposed methodology.

The delineation of the Integration zones is still under review. Future calculation of the target will be used in relation to the delineation of the 2018/19 BEPP integration zones.

G.1.8.3 Proposed Methodology and Data Improvements

For future calculation of the indicator, the following methodology will be applied together with the new delineation of the Integration zone:

Preparation of the data:

Intersect the number of households' spatial layer with the integration zones layer in order to obtain a new layer only indicating the spatial distribution of the number of households within integration zones. Calculate and record the total area of the integration zone in hectares (Data element 2) based on the spatial layer.

Import the resulting data into an excel spreadsheet.

Calculation of the indicator:

Record the total of households within the integration zone by applying a filter that only returns the number of households within integration zones (Data element 1).

Express the results calculated above as a ratio, thus the total number of households recorded above to the total integration zones area (Data element 1: Data element 2).

G.1.9 Ratio of housing types in integration zones (IC3).

G.1.9.1 Target

The objective of this indicator is to calculate the ratio of different housing types within the integration zone. The following factors need to be taken into account:

- Housing typologies based on the Housing Code BNG; CRU; Social Housing; FLISP/GAP etc.
- Area and delineation of the latest Integration Zone

The target outcome for this indicator indicates a good understanding of the mix and type of households vested within the integration zone, which are intended to have mostly formal households. The results of this indicator should be calculated and expressed as a ratio.

G.1.9.2 Source Data

Due to the limited data available, STATSSA data was used to calculate the target. The source data used to calculate this indicator included the following:

- Geography by type of main dwelling, as recorded by STATSSA during the 2011 Census (per ward level)
- Municipal Ward Boundaries in order to align a spatial location to the STATSSA dataset

- Delineation of Integration zones based on the 2017/18 BEPP.

G.1.9.3 Data integrity and comments

The above-mentioned datasets were sourced from open-sourced platforms and conforms to the measures needed in order to manipulate the data and to calculate the performance indicator. The data has been recorded for year 2011. The STATSSA datasets does not conform to the data elements required for the target calculation as set out in the BEPP Indicator toolkit but provides some indication of the targeted outcome.

The delineation of the Integration zones is still under review. Future calculation of the target will be used in relation to the delineation of the 2018/19 BEPP integration zones. For purposes of this calculation the 2017/18 delineation will be applied.

G.1.9.4 Assumptions

The categorization of dwelling types as recorded by STATSSA has been grouped into the following housing types in order to conform to the data element requirements used for purposes of the BEPP Performance indicator:

Table G-8: Assumption 1 (Indicator IC3)

		STATSSA Categorization						
BEPP Performance Indicator guidelines	Formal Dwelling	House or brick/concrete block structure on a separate stand or yard or on a farm	Flat or apartment in a block of flats	Cluster house in complex	Townhouse (semi-detached house in a complex)	Semi-detached house	House/flat/room in backyard	Room/flatlet on a property or larger dwelling/servants' quarters/granny flat
	Traditional dwelling	Traditional dwelling/hut/structure made of traditional materials						
	Other households	Caravan/tent	Other					

An equal distribution assumption has been applied with regards to the location of the dwelling units, thus if a ward has 500 dwelling units its assumed to be distributed equally across the ward extent as delineated by the ward boundary.

The STATSSA dataset was based on the 2011 census data, in order to conform to the reporting period of the target, the statistical data for years 2013 – 2020 are required in order to calculate more accurate results. For the purpose of this indicator the 2011 result will be used as a proxy result for 2016/2017.

G.1.9.5 Calculating the BEPP Performance Indicator

To proceed with calculating the indicator target, the data had to first undergo a process of manipulation and preparation.

Preparation of the data (Intersecting wards and integration zone):

The first objective was to calculate the wards that intersect the integration zone. This was achieved by spatially joining integration zones to the wards layer. The resulting layer was then exported as a separate spatial layer indicating only the wards that intersect the integration zone. The area of the wards was recorded in hectares (A).

The spatial layer created above (A - integration zone wards) was clipped with the delineation of the integration zone where it intersects, and a second layer was created. The area was recorded for the second clipped layer (B) in hectares.

To calculate the percentage distribution of the wards that falls within integration zones (A) and the wards that are clipped by the integration zone (B), the area for layer B was divided by the area calculated for layer A and multiplied by 100 to express the result as a percentage.

The resulting data was imported into excel per ward id/number with the corresponding distribution factor calculated above.

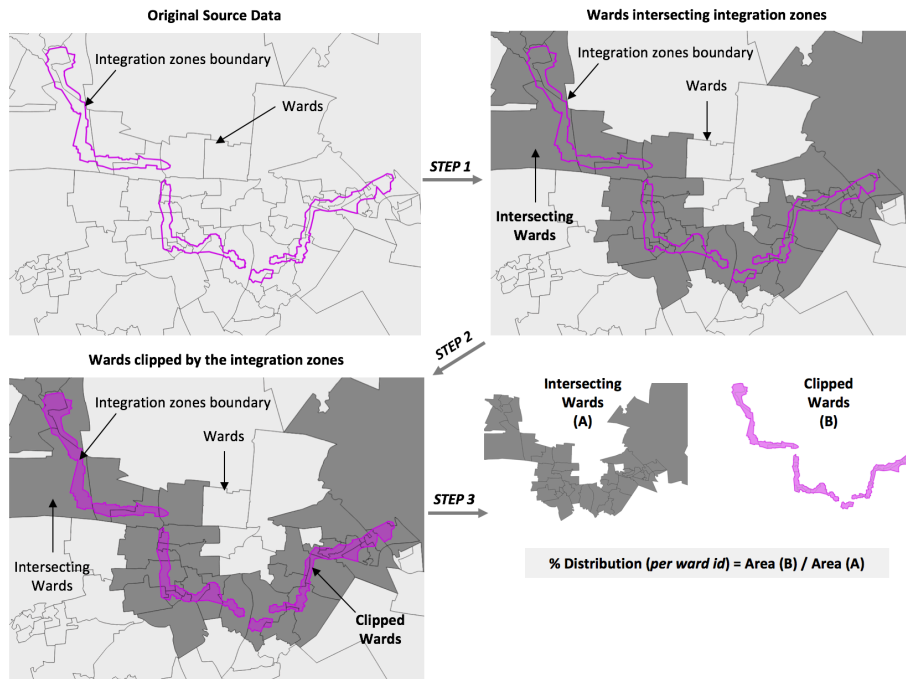


Figure G-7: "Clipped" wards data concept (Indicator IC3)

Preparing the Data (STATSSA Data):

The STATSSA datasets contained the ward id/number with the corresponding dwelling unit types. The wards that form part of the integration zone went through a filtering process, by joining the ward id from the above dataset to the ward id in the STATSSA dataset, this resulted in data only displaying wards within the integration zone.

The above calculated distribution was then joined by the ward id to the STATSSA dataset, after it has been filtered. Once the STATSSA data (intersecting wards within the integration zones) was carried over to a new datasheet, the reclassification of the dwelling types took place by grouping classes together as indicated in the table above, resulting in three major types of dwelling units (formal, informal and other) with a recorded total number of dwellings.

Preparing the Data (Applying the distribution factor):

With the dataset in the format as outlined above, the distribution factor was applied to the three types of dwellings (Formal dwellings x distribution factor % = intersecting number of dwelling units). Once the distribution factor was applied to the dwelling unit types, the data was ready to be used in order to determine the indicator target.

Calculation of the indicator:

To achieve a target expressed as a ratio, the total of each dwelling type (Data element 1: Data element 2: Data element 3) was calculated as well as the grand total of all the dwelling types (Data element 4). Each dwelling type total (Data element 1: Data element 2: Data element 3) was divided by the grand total (Data element 4) to obtain a percentage value. The calculated percentages were multiplied by 100 to achieve a number value.

The final result indicated the ratio between the three different housing types.

Table G-9: Calculation method (Indicator IC3)

Total Formal dwelling (Data element 1)	/ Grand Total (Data element 4)	x 100	88,04705799	88
Total Informal dwelling (Data element 2)	/ Grand Total (Data element 4)	x 100	10,96722916	11
Total Other (Data element 3)	/ Grand Total (Data element 4)	x 100	0,556625463	1

G.1.9.6 Results

The ratio of housing types resulted in 88 (formal) to 11 (informal) to 1 (other). The above calculated result aligns with the criteria of having mostly formal housing types within the integration zone.

Table G-10: BEPP Indicator IC3 Results

Code	Indicator	Category	Target or intention	16/17 data	Notes
IC3	Ratio of housing types (formal, informal, other) in integration zones	City now	Target	88:11:1	Due to unavailability of data the STATSSA datasets was used for the 16/17 – 18/19 data requirements

G.1.9.7 Proposed Methodology and Data Improvements

Due to the nature of the datasets, this indicator could not be calculated in an accurate manner and was based on a number of assumptions. To calculate a more accurate indicator which conforms to the requirements as set out in the 2018/19 BEPP Guideline, the City Human Settlements and Planning Department datasets were required. As mentioned above, for the purpose of this indicator the 2011 result will be used as a proxy indicator for 2016/2017 – 2018/2019.

The delineation of the Integration zones is still under review. Future calculation of the target will be used in relation to the delineation of the 2018/19 BEPP integration zones.

G.1.10 Ratio of housing tenure status in integration zones (IC4).

G.1.10.1 Target

The objective of this indicator is to calculate the ratio of housing tenure status within the integration zone. The following factors need to be taken into account:

- STATSSA General Household Survey:
 - Number of fully owned households (STATSSA General Household Survey).
 - Number of partially owned households
 - Number of rented households
 - Number of households with other tenure status arrangements
- Area and delineation of the latest Integration Zone

The target outcome indicates a good understanding of the different housing types vested within the integration zone, which are intended to have a mixed range of housing typologies. The results of this indicator should be calculated and expressed as a ratio.

G.1.10.2 Source Data

STATSSA data was used to calculate the target. The source data used to calculate this indicator included the following:

- Geography by housing tenure status, as recorded by STATSSA during the 2011 Census (per ward level).
- Municipal Ward Boundaries in order to align a spatial location to the STATSSA dataset.
- Delineation of Integration zones based on the 2017/18 BEPP.

G.1.10.3 Data integrity and comments

The above-mentioned datasets were sourced from open-sourced platforms and conforms to the measures needed in order to manipulate the data and to calculate the performance indicator. The data has been recorded for year 2011.

The delineation of the Integration zones is still under review. Future calculation of the target will be used in relation to the delineation of the 2018/19 BEPP integration zones. For purposes of this calculation the 2017/18 delineation will be applied.

G.1.10.4 Assumptions

The categorization of housing tenure status as recorded by STATSSA has been grouped in order to conform to the data element requirements used for purposes of the BEPP Performance indicator:

Table G-11: Assumption 1 (Indicator IC4)

BEPP Performance Indicator guidelines	STATSSA Categorization		
	Rented	Rented	
	Partially owned	Owned but not yet paid off	
	Fully owned	Owned and fully paid off	
	Other	Occupied rent-free	Other

An equal distribution assumption has been applied with regards to the location of the housing tenure status, thus if a ward has 500 units its assumed to be distributed equally across the ward extent as delineated by the ward boundary.

The STATSSA dataset was based on the 2011 census data, in order to conform to the reporting period of the target, the statistical data for years 2013 – 2020 are required in order to calculate more accurate results. For the purpose of this indicator the 2011 result will be used as a proxy result for 2016/2017.

G.1.10.5 Calculating the BEPP Performance Indicator

To proceed with calculating the indicator target, the data had to first undergo a process of manipulation and preparation.

Preparation of the data (Intersecting wards and integration zone):

The first objective was to calculate the wards that intersect the integration zone. This was achieved by spatially joining integration zones to the wards layer. The resulting layer was then exported as a separate spatial layer indicating only the wards that intersect the integration zone. The area of the wards was recorded in hectares (A).

The spatial layer created above (A - integration zone wards) was clipped with the delineation of the integration zone where it intersects, and a second layer was created. The area was recorded for the second clipped layer (B) in hectares.

To calculate the percentage distribution of the wards that falls within integration zones (A) and the wards that are clipped by the integration zone (B), the area for layer B was divided by the area calculated for layer A and multiplied by 100 to express the result as a percentage.

The resulting data was imported into excel per ward id/number with the corresponding distribution factor calculated above.

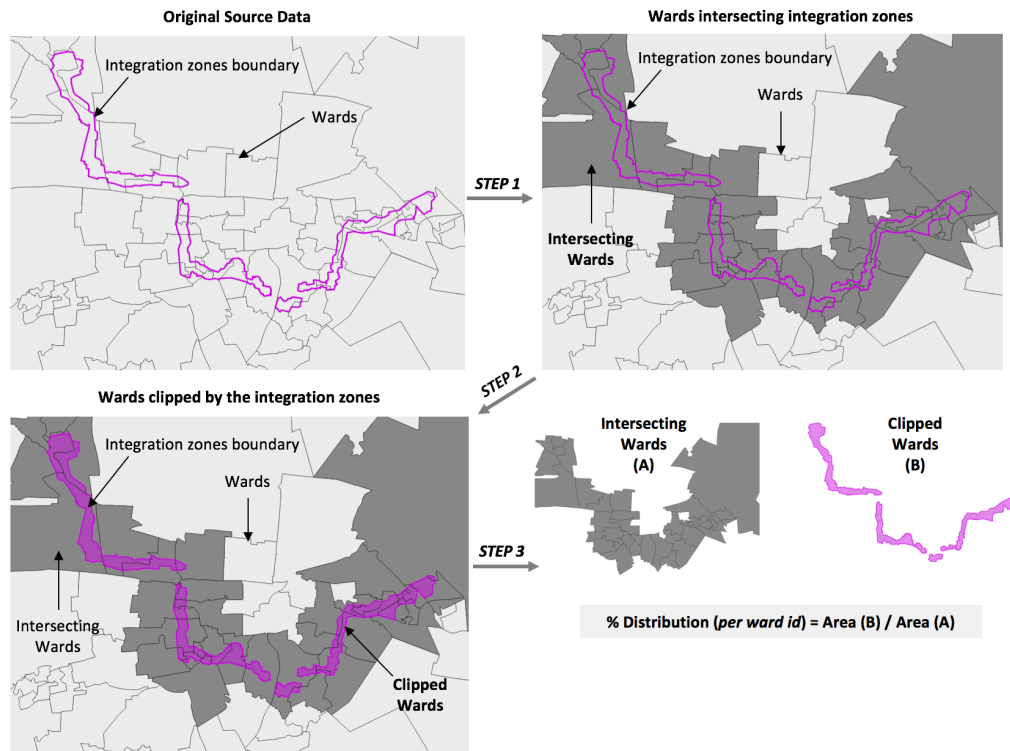


Figure G-8: “Clipped” wards data concept (Indicator IC4)

Preparing the Data (STATSSA Data):

The STATSSA datasets contained the ward id/number with the corresponding housing tenure status types. The wards that form part of the integration zone went through a filtering process, by joining the ward id from the above dataset to the ward id in the STATSSA dataset, this resulted in data only displaying wards within the integration zone.

The above calculated distribution was then joined by the ward id to the STATSSA dataset, after it has been filtered. Once the STATSSA data (intersecting wards within the integration zones) was carried over to a new datasheet, the reclassification of the housing tenure status types took place by grouping classes together as indicated in the table above, resulting in four major types of housing tenure status types (rented; partially owned; fully owned and other) with a recorded total number of units.

Preparing the Data (Applying the distribution factor):

With the dataset in the format as outlined above, the distribution factor was applied to the four housing tenure status types (Partially owned x distribution factor % = intersecting number of units). Once the distribution factor was applied to the housing tenure status types, the data was ready to be used in order to determine the indicator target.

Calculating the indicator:

To achieve a target expressed as a ratio, the total of each housing tenure status type (Data element 1: Data element 2: Data element 3: Data element 4) was calculated as well as the grand total of all the housing tenure status types (Data element 5). Each housing tenure status type total (Data element 1: Data element 2: Data element 3: Data element 4) was divided by the grand total (Data element 5) to obtain a percentage value. The calculated percentages were multiplied by 100 to achieve a number value.

The final result indicated the ratio between the four housing tenure status types.

Table G-12: Calculation method (Indicator IC4)

Total Rented (Data element 1)	/ Grand Total (Data element 5)	x 100	85,04705799	85
Total Partially Owned (Data element 2)	/ Grand Total (Data element 5)	x 100	8,96722916	9
Total Fully Owned (Data element 3)	/ Grand Total (Data element 5)	x 100	2,000625463	2
Total Other (Data element 4)	/ Grand Total (Data element 5)	x 100	3,568684369	4

G.1.10.6 Results

The ratio of housing tenure status in the integration zone resulted in 49 (Rented) to 15 (Total Partially Owned) to 24 (Fully Owned) to 12 (Other). The above calculated results define a mixed range of housing typologies, which is characteristic of housing tenure status types within the integration zone.

Table G-13: BEPP Indicator IC4 Results

Code	Indicator	Category	Target or intention	16/17 data	Notes
IC4	Ratio of housing tenure status (rented, partially owned, fully owned and other) in integration zones	City now	Target	49:15:24:12	Due to reporting year (2011) of the STATSSA datasets, the data will remain unchanged for the 16/17 – 18/19 data requirements unless growth factors are applied

G.1.10.7 Proposed Methodology and Data Improvements

Due to the nature of the datasets, this indicator could not be calculated in an accurate manner and was based on a number of assumptions. To calculate a more accurate indicator which conforms to the requirements as set out in the 2018/19 BEPP Guideline, a growth factor for the datasets was required in order to report the target on an annual basis. As mentioned above, for the purpose of this indicator the 2011 result will be used as a proxy indicator for 2016/2017 – 2018/2019.

The delineation of the Integration zones is still under review. Future calculation of the target will be used in relation to the delineation of the 2018/19 BEPP integration zones.

G.1.11 Ratio of land use types (residential, commercial, retail, industrial) in integration zones (IC5).

G.1.11.1 Target

The objective of this indicator is to calculate the ratio of land use types within the integration zone. The following factors need to be taken into account:

- Land use types, per erven boundary (in hectares):
 - Commercial Space
 - Retail Space
 - Industrial Space
- Number of Households
- Area and delineation of Integration Zones

The target measured for this indicator is a good indication of the relative land use split. The integration zone is intended to have a mixed land use split. Once these factors are known, the relationship should be calculated and expressed as a ratio.

G.1.11.2 Source Data

The source data used to calculate this indicator was based on the latest RSDF land use layers as well as the delineation of the integration zone based on the 2017/18 BEPP.

G.1.11.3 Data integrity and comments

The land use layer sourced from Tshwane RSDF was very incomplete and contained a large number of gaps. The features contained polygon geometries with assigned area geography. The attribute table distinguished between the different land use types (Mixed Use; Educational; Municipal; Airport; Retail; Residential; Campus; Industrial; Protected; Residential Area; Cemetery; Office; Regional Cemetery; Mining; Service Industry).

The delineation of the Integration zones is still under review. Future calculation of the target will be used in relation to the delineation of the 2018/19 BEPP integration zones. For purposes of this calculation the 2017/18 delineation will be applied.

G.1.11.4 Assumptions

The categorization of the original land use types as recorded in the RSDF has been grouped into the following land use types in order to conform to the classification used for purposes of the BEPP Performance indicator, some of the land use classifications listed above have been removed from the criteria as it does not conform to the BEPP Performance indicator outline:

Table G-14: Assumption 1 (Indicator IC5)

BEPP Performance Indicator guidelines	Original Land use layer		
	Households	Mixed Use (Split by 1/3)	
	Commercial	Mixed Use (Split by 1/3)	Office
	Retail	Mixed Use (Split by 1/3)	Retail
Industrial	Industrial		

As indicated in the above table, the “Mixed use” land use type from the original land use layer was split equally into the three classes within the BEPP indicator guidelines (Households, Commercial, Retail).

G.1.11.5 Calculating the BEPP Performance Indicator

To proceed with calculating the indicator target, the data had to first undergo a process of manipulation and preparation.

Preparing the Data:

The first objective was to intersect the land use layer with the integration zone in order to distinguish between land use erven that fall within or outside of the integration zone. This was done by applying a spatial join which resulted in features highlighted within the integration zone. Once the features were highlighted an additional data field was added to the land use layer. The highlighted features were populated with a data value to indicate whether features fall within or outside of the integration zone.

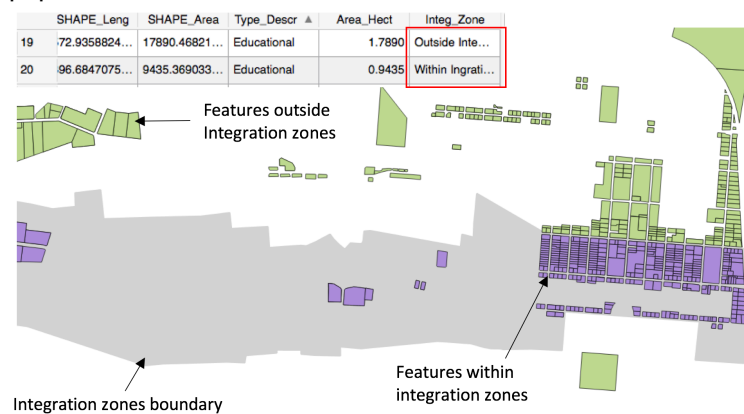


Figure G-9: Spatial filter process (Indicator IC5)

The data populated based on the above spatial join was imported into excel and a filter was applied to only indicate the data that fall within the integration zone.

Preparing the Data (Applying assumption 1 and 2):

The original land use types had to be grouped into the categories as outlined in Assumptions. The total area per land use type was calculated, before proceeding with the reclassification of the land use types. The mixed-use land within the original land use layer was split into equal thirds, as outlined in Assumptions. This was achieved by dividing the total area (hectares) into three equal parts. Resulting in total area for households, commercial and retail. The other land use types from the original land use layer was then added to the equal parts. The resulting dataset contained the total area per land use type category (conformed to the BEPP indicator guideline).

Table G-15: Data sheet layout (Indicator IC5)

Total area - Households (Hectares) – Data element 1
Total area - Commercial (Hectares) – Data element 2
Total area - Retail (Hectares) – Data element 3
Total area - Industrial (Hectares) – Data element 4

Calculating the indicator:

To achieve a ratio the total of each land use area (Data element 1: Data element 2: Data element 3: Data element 4) was calculated as well as the grand total of all the land use areas within integration zones (Data element 5). Each land use area total was divided by the grand total (E) to obtain a percentage value. The calculated percentages were multiplied by 100 to achieve a number value.

The final result was the ratio between the four different land use types.

Table G-16: Calculation method (Indicator IC5)

Total area - Households (Data element 1)	/ Grand Total (Data element 5)	x 100	22,54	23
Total area – Commercial (Data element 2)	/ Grand Total (Data element 5)	x 100	24,30	24
Total area - Retail (Data element 3)	/ Grand Total (Data element 5)	x 100	52,57	53
Total area – Industrial (Data element 4)	/ Grand Total (Data element 5)	x 100	0,59	1

G.1.11.6 Results

The ratio of land use types within integration zones resulted in 23 (Households) to 24 (Commercial) to 53 (Retail) to 1 (Industrial). The results calculated for this indicator indicates that the majority of the land use types are of mixed use, which is characteristic of integration zones.

Table G-17: BEPP Indicator IC5 Results

Code	Indicator	Category	Target or intention	16/17 data	Notes
IC5	Ratio of land use types (residential, commercial, retail, industrial) in integration zones	City now	Target	23:24:53:1	Due to the unavailability of update versions to the land use data as well as the data gaps, the data will remain unchanged for the 16/17 – 18/19 data.

G.1.11.7 Proposed Methodology and Data Improvements

Due to the nature of the data received, this indicator could not be calculated in an accurate manner and was based on a number of assumptions. To calculate a more accurate indicator, the complete land use dataset was required per erven boundary in order to accurately calculate the ratio between the types of land use present within integration zones.

The delineation of the Integration zones is still under review. Future calculation of the target will be used in relation to the delineation of the 2018/19 BEPP integration zones.

G.1.12 %households accessing subsidy units in integration zones that come from informal settlements (IC6).

G.1.12.1 Target

The objective of this indicator is to calculate the percentage of households that have access to subsidised housing units within the integration zone by taking into account the following factors:

- Number of subsidy units provided in integration zones (Department of Human Settlements)
- Number of households from informal settlements accessing subsidy units within the integration zone.

This indicator measures the extent to which people from informal settlements are being catered for in the subsidised housing opportunities created within the integration zone. This measure is aimed at de-densifying existing settlements or to cater for people from settlements that cannot be developed because of environmental constraints. The calculated target should be expressed as a percentage of households.

G.1.12.2 Source Data

At the time of calculating this indicator, critical input data was not available. The calculation of this indicator will be finalised once the required datasets have been made available.

G.1.12.3 Data integrity and comments

Due to incomplete data sources this indicator could not be calculated at the time. The proposed calculation methodology will be applied once data has become available.

The delineation of the Integration zones is still under review. Future calculation of the target will be used in relation to the delineation of the 2018/19 BEPP integration zones.

G.1.12.4 Proposed Methodology and Data Improvements

For future reference, the calculation of the indicator target will be undertaken as follows:

- Once the number of number of households from informal settlements accessing subsidy units in integration zones has been obtained from the department of housing and human settlements, data element 1 will be based on the input number of households.
- Once the number of subsidy units provided in integration zones has been obtained from the department of housing and human settlements, data element 2 will be based on the input number of households.
- Use the results recorded for data element 1; divide by the recorded number of features from data element 2; multiply the result by 100 to obtain a percentage value (Data element 1/Data element 2 x 100)

G.1.13 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 (IC7).

G.1.13.1 Target

The objective of this indicator is to calculate the number of dwellings that have access within a 800m radius of an integrated public transport network in relation to the total number of dwellings, within the integration zone. In order to calculate this indicator, the following factors need to be taken into account:

- The spatial distribution and density of dwelling units
- Facilities that serve the integrated transport system (stations)
- Area and Delineation of Integration zones

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. Once these factors are known, the total number of dwelling units should be calculated and expressed as a number value.

G.1.13.2 Source Data

At the time of calculation of this indicator, critical input data was available. The calculation of this indicator will be finalised once the required datasets have been made available.

The delineation of the Integration zones is still under review. Future calculation of the target will be used in relation to the delineation of the 2018/19 BEPP integration zones.

G.1.13.3 Proposed Methodology and Data Improvements

For the calculation of the indicator target in future, the following methodology will be used once the data inputs become available.

Preparing the data:

- Intersect the dwelling units layer with that of the integration zones layer, resulting in a new layer which only indicates the spatial distribution and density of dwelling units within integration.
- Create an 800m buffer surrounding the integrated transport system facilities (stations).
- Intersect the dwelling units within the integrations zone, with the buffers created above, populate the selected data to indicate whether the dwelling units fall within or outside of the 800m buffer.

Calculating the indicator:

- Record the total number of features after applying a filter that only returns the features within the 800m buffer surrounding the integrated transport facilities (Data element 1).
- Record the total number of the dwelling units within the integration zone (Data element 2)
- Use the results from the dwelling units within the 800m buffer and divide by the results from the dwelling units within integration zones, multiply by a 100 to obtain a percentage value (Data element 1/Data element 2 x 100).

G.1.14 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. (PC4).

G.1.14.1 Target

The objective of this indicator is to calculate the rateable value of commercial and industrial land use within the integration zone as a percentage of all commercial and rateable value for the metro. In order to calculate this indicator, the following factors need to be taken into account:

- City valuation roll
 - Commercial/Industrial rateable value of land within the integration zone
 - Commercial/Industrial rateable value of metro
- Delineation of the latest integration zone

The comparison between the rateable value of commercial and industrial land in integration zones to that of the whole city shows the can also be used as a proxy measure of the extent and intensity of the commercial and industrial activity within the integration zone. Once these factors are known, the target should be expressed as a percentage value.

G.1.14.2 Source Data

At the time of calculating the indicator the valuation roll data was not available. The latest valuation roll has been published in 2017 and will be valid for the next 4 years. The calculation of this indicator will be dependent on the receipt of the data from Metropolitan Corporate Geo-Information Management (Corporate GIS), the custodian of the data.

The delineation of the Integration zones is still under review, for purposes of this calculation the delineation of the integration zones used was based on the 2017/18 BEPP delineation.

G.1.14.3 Proposed Methodology and Data Improvements

For the calculation of the indicator target in future, the following methodology will be used once the data inputs become available.

- Obtain land-use/zoning information for the valuation roll data in order to determine whether it is commercial/industrial land.
- Intersect valuation roll layer with that of the integration-zone layer in order to distinguish between erf/stand numbers that fall within/outside of the integration zone.
- Apply spatial filter to the valuation roll layer, indicating only data within the integration zone (intersecting erf/stand numbers).
- Calculate total value of properties for both the commercial/industrial layer within the integration zone (**Data element 1**) and the total metro value of commercial/industrial land (**Data element 2**).
- (Data element 1/Data element 2) x100
 - (Commercial/Industrial valuation roll within the integration zone/Total commercial/industrial valuation role) x 100

G.2 City's Strategic Outcomes versus BEPP Outcomes

G.2.1 City's Strategic Outcomes

Even though a new administration has taken over, the strategic direction of the City still remains the same in essence. The implementation towards achieving the vision of the City are anchored around service delivery excellence and innovation; growing the economy and creating jobs; promoting a safe and healthy city; promoting social cohesion, inclusion and diversity; and fostering participation, collaboration and diversity.

G.2.2 BEPP Strategic Outcomes

The current BEPP Outcomes are structured to enable growth, sustainability, equality and good governance, with the following indicator groups:

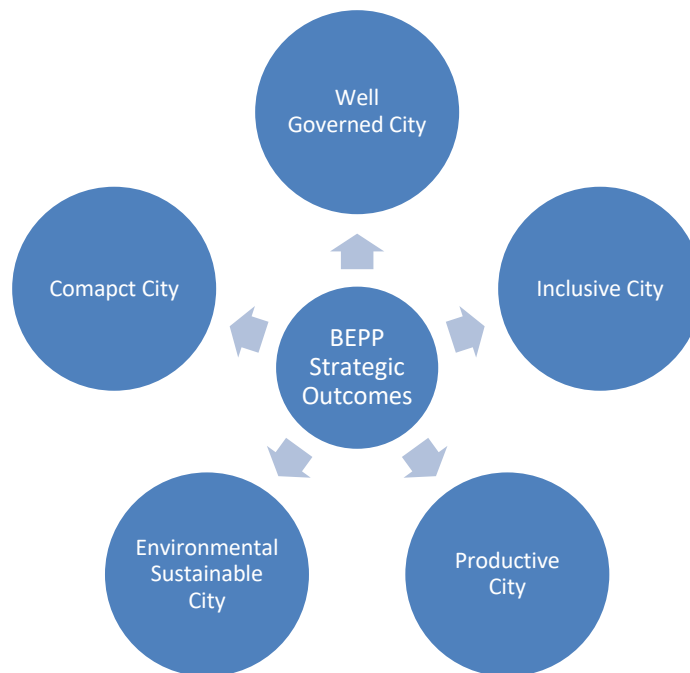


Figure G-10: BEPP Strategic Outcomes

G.2.3 BEPP Strategic Outcomes in terms of the City's Outcomes

The BEPP guideline clearly stipulate that strategic outcomes are unique to all cities. There is however a correlation between the BEPP Strategic Outcomes and the City's Outcomes – otherwise referred to as Strategic Pillars. A description of the strategic pillars follows:

G.2.3.1 Pillar 1: A City that facilitates economic growth and job creation

The City's plan for the next five years is to create a city of opportunity. The plan centres around five focus areas, which we believe will create economic growth, which in turn will be labour-absorbing, provide many more residents with new employment opportunities and develop the city further. Making it easier to do business, supporting entrepreneurship, empowering individuals, investing in infrastructure and encouraging new industries will lead to economic growth and employment.

G.2.3.2 Pillar 2: A City that cares for residents and promotes inclusivity

The City of Tshwane is committed to redressing historical injustices and addressing the neglect of poorer communities by the previous administration.

Many communities in Tshwane do not have access to basic services and still experience, on a daily basis, the spatial legacy of apartheid. Although some gains have been made to improve service provision to poorer communities since 1994, too many people still do not have access to formal services, live far away from job opportunities and do not have access to basic healthcare services.

There are more than 170 informal settlements in Tshwane with varying levels of services. This has led to many people living in poor conditions without access to adequate sanitation, running water or electricity. Informal areas were left dirty without regular refuse removal or area cleaning. The City is committed to addressing these challenges over time in order to redress our hurtful past and provide people with dignified living spaces.

G.2.3.3 Pillar 3: A City that delivers excellent services and protects the environment

In order to achieve this goal, the City's service delivery needs to be improved and expanded in a sustainable manner. Water and energy resources along with the environment need to be protected.

The City is committed to redressing the historical unequal service provision and to addressing the inherited delivery backlogs. The City is working towards providing quality services to all residents, adopting innovative solutions to service delivery challenges, and reprioritizing resources so as to deliver services where they are needed the most. The provision of services also includes the delivery of housing opportunities.

G.2.3.4 Pillar 4: A City that keeps residents safe

Ensuring the safety and well-being of residents is one of the key priorities of the City. Residents need to feel safe and be safe in the city they call home. Drug abuse and related crime are currently one of the biggest challenges faced by the City.

G.2.3.5 Pillar 5: A City that is open, honest and responsive

The City is committed to transparent and accountable governance with zero tolerance of corruption. City processes and systems will be run in an open and effective way and only the best officials will be retained and attracted to improve the City's performance. The City prioritises being responsive to residents, and to work together on the issues that impact communities so as to find solutions.

G.2.3.6 BEPP Strategic Outcome sin terms of the City's Outcomes summary

There exists a clear correlation between the City's Strategic Pillars and the BEPP outcomes – expressed in the table below. It is however the prerogative of the City that the detailed BEPP indicators be expressed in terms of the BEPP Strategic Outcomes.

Table G-18: BEPP Strategic Outcomes in terms of the City’s Strategic Outcomes

		BEPP Strategic Outcomes				
		Well Governed City	Inclusive City	Productive City	Environmental sustainable City	Compact City
CITY STRATEGIC OUTCOMES (PILLARS)	Pillar 1: A City that facilitates economic growth and job creation					
	Pillar 2: A City that cares for residents and promotes inclusivity					
	Pillar 3: A City that delivers excellent services and protects the environment					
	Pillar 4: A City that keeps residents safe					
	Pillar 5: A City that is open, honest and responsive					

G.3 Capital Expenditure in terms of Strategic Outcomes

With joint inputs from City Planning, Planning and Strategy and the IDP office of the City, into the capital prioritisation system, the City has managed to not only identify the current strategic outcomes by the city, but also on the different tiers of government, i.e. Provincial and National level of government. Each Capital expenditure project were linked to the Strategic intent of different levels of government. The expressed strategic outcomes per level of was identified and can be summarised in the table below.

Built Environment Performance Plan

National Key Performance Areas ¹	National Development Plan ²	National Integrated Urban Development Framework ³	Provincial Outcomes ⁴	Municipal Pillars ⁵	Municipal Priority ⁶	Municipal Action ⁷
1. Basic Service Delivery	Outcome 1: Improve quality of basic education	1. Spatial Integration	1. Liveability- Urban Form	1. A City that facilitates economic growth and job creation	1. Attracting Investment and encouraging growth by making it easy to do business in Tshwane	Making Investment simple and Easy
2. Local Economic Development (LED)	Outcome 2: A long and healthy life for all South Africans	2. Inclusion and access	2. Concentration- Infrastructure	2. A City that cares for residents and promotes inclusivity	2. Revitalizing and supporting Tshwane's entrepreneurs	Enabling the Informal Trader
3. Good Governance and Public Participation	Outcome 3: All people in South Africa feel safe	3. Growth	3. Connectivity - Connectivity	3. A City that delivers excellent services and protects the environment	3. Empowering individuals to take advantage of opportunity	Supporting small and micro business to have longer lifespans and increased turnover
4. Municipal Institutional Development and Transformation	Outcome 4: Decent employment through inclusive economic growth	4. Governance	4. Conservation- Natural Resources	4. A City that keeps residents safe	4. Infrastructure-led growth to catalyse and revitalize existing nodal economies	Empowering individuals
5. Municipal Financial Viability and Management	Outcome 5: A skilled and capable workforce to support inclusive growth path		5. Diversity - Human Settlements	5. A City that is open, honest and responsive	5. Encouraging tourism and recreation	Addressing the City's infrastructure challenges

¹ Regulation 26 van die Municipal Performance Regulations for Municipal Managers and Managers

² National Development Plan, 2011

³ National Integrated Urban Development Framework

⁴ Gauteng Spatial Development Framework 2030

⁵ Integrated Development Plan 2017/2021, 2018/19

⁶ Integrated Development Plan 2017/2021, 2018/19

⁷ Integrated Development Plan 2017/2021, 2018/19

Built Environment Performance Plan

National Key Performance Areas ¹	National Development Plan ²	National Integrated Urban Development Framework ³	Provincial Outcomes ⁴	Municipal Pillars ⁵	Municipal Priority ⁶	Municipal Action ⁷
	Outcome 6: An efficient, competitive and responsive economic infrastructure network		6. Viability- Space Economy		6. Upgrading of Informal Settlements	Addressing infrastructure and service delivery inadequacies which are preventing existing or fledgling industries from growing and/or threatening their survival
	Outcome 7: Vibrant, equitable and sustainable rural communities with food security for all				7. Support vulnerable residents	Aligning tourism industry efforts in Tshwane with strategic demands
	Outcome 8: Sustainable human settlements and improved quality of household life				8. Building integrated communities	Mainstreaming services to informal settlements
	Outcome 9: A Responsive, accountable effective and efficient local government system				9. Promoting a safe, reliable and affordable transpiration system	Addressing the spatial development challenges of informal settlements to improve quality of life
	Outcome 10: Environmental assets and natural resources that are well protected and continually enhanced				10. Improving access to public healthcare services	Improving the indigent support programme

Built Environment Performance Plan

National Key Performance Areas ¹	National Development Plan ²	National Integrated Urban Development Framework ³	Provincial Outcomes ⁴	Municipal Pillars ⁵	Municipal Priority ⁶	Municipal Action ⁷
	Outcome 11: Create a better South Africa and contribute to a better and safer Africa and World				11. Delivering high quality services	Providing support for poorer residents
	Outcome 12: An efficient, effective and development orientated public service and an empowered fair and inclusive citizenship				12. Safeguarding water and energy and protecting the natural environment	Creating spaces and housing opportunities that bring people together
	Outcome 13: A comprehensive, responsive and sustainable social protection system				13. Creating safe Communities	Providing a high-quality public transportation
	Outcome 14: A diverse, socially cohesive society with a common national identity				14. Addressing drug abuse	Improving City-run healthcare initiatives
					15. Protecting communities from disaster	Delivering high quality and sustainable basic services
					16. Building a capable city government	Providing housing opportunities
					17. Fighting corruption	Improving policing and law enforcement efforts

Built Environment Performance Plan

National Key Performance Areas ¹	National Development Plan ²	National Integrated Urban Development Framework ³	Provincial Outcomes ⁴	Municipal Pillars ⁵	Municipal Priority ⁶	Municipal Action ⁷
					18. Communicating regularly and effectively with residents	Involving the community in making areas safer
						Building safer communities
						Drug and substance abuse prevention
						Drug and substance abuse suppression
						Drug and substance abuse intervention
						Establishing professional and effective government processes
						Improving the revenue system
						Putting measures in place to root out corruption

After the City identified all strategic outcomes as determined by the latest approved strategic documents per tier of government, the City attempted to draw relationships between National, Provincial and Municipal Strategic Outcomes. During a three month process it was found that strong relationships exists between national and municipal level strategic outcomes, however once relationships between either municipal or national outcomes and provincial outcomes are drawn, it becomes an unmanageable task as there exists in some cases a many to one alignment, and in some cases a none to none alignment.

The City therefore concluded that no sensible alignment exists between the three levels of government. The city also understands that there is some benefit in reporting capital expenditure in terms of every level of government and in order to express the 2018/2019 CAPEX budget in terms of each level of government’s strategic outcomes, each project was related to either one or more strategic outcome per tier of government via CAPS.

The analysis enables a view on the 2018/2019 CAPEX budget like never seen before. It shows where the municipality’s focus is in terms of the different strategic outcomes of different levels of government.

G.3.1 National Key Performance Areas

National Key Performance Areas were set out in the Municipal Performance Regulation (regulation 26) page 303. In the table and graph below, it is clear that the 2018/2019 CAPEX budget is mainly focussed on basic service delivery, as the majority (77%) of the 2018/2019 CAPEX budget is allocated to Basic Service Delivery.

Table G-19: 2018/2019 MTREF Budget expressed in terms of National Key Performance Areas Outcomes

National Key Performance Areas	2018/2019	2019/2020	2020/2021
1. Basic Service Delivery	R2 565 909 749	R3 071 883 060	R3 272 400 580
2. Local Economic Development (LED)	R125 912 650	R139 306 420	R5 601 000
3. Good Governance and Public Participation	R13 500 000	R13 500 000	R7 500 000
4. Municipal Institutional Development and Transformation	R112 500 000	R156 500 000	R165 000 000
5. Municipal Financial Viability and Management	R19 000 000	R23 250 000	R31 000 000
No Selection	R480 144 661	R367 455 000	R497 000 000
Grand Total	R3 316 967 060	R3 771 894 480	R3 978 501 580

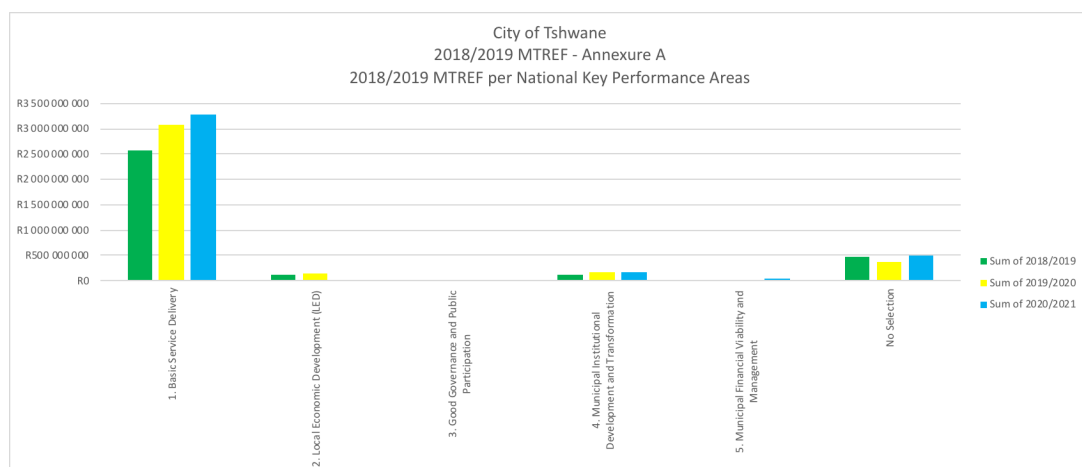


Figure G-11: 2018/2019 MTREF Budget expressed in terms of National Key Performance Areas Outcomes

Built Environment Performance Plan



Legend

- Administrative Boundary
- 25km Radius
- IRPTN 2017
- Integration Zone
- Development Corridor

Road Network (Class)

- 00 National Freeway
- 01 National Route
- 02 Provincial Freeway
- 03 Provincial Route
- 32 Gautrain Rail

National Key Performance Areas

2018/2019 Budget

- 1. Basic Service Delivery
- 2. Local Economic Development (LED)
- 3. Good Governance and Public Participation
- 4. Municipal Institutional Development and Transformation
- 5. Municipal Financial Viability and Management
- No Selection

R20 000 000

R40 000 000

R60 000 000

R80 000 000

R100 000 000

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2018/19 BEPP - City of Tshwane
National Key Performance Areas

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G.3.2 National Development Plan Outcomes

The NDP aims to eliminate poverty and reduce inequality by 2030. According to the plan, South Africa can realise these goals by drawing on the energies of its people, growing an inclusive economy, building capabilities, enhancing the capacity of the state, and promoting leadership and partnerships throughout society. The majority of the 2018/2019 Capital Book of the City is directed towards Outcome 8: Sustainable human settlements and improved quality of household life.

Table G-20: 2018/2019 MTREF Budget expressed in terms of National Development Plan Outcomes

National Development Plan Outcomes	2018/2019	2019/2020	2020/2021
No Selection	R493 144 661	R400 955 000	R499 000 000
Outcome 1: Improve quality of basic education	R20 000 000	R30 500 000	R47 500 000
Outcome 10: Environmental assets and natural resources that are well protected and continually enhanced	R7 500 000	R9 250 000	R1 000 000
Outcome 11: Create a better South Africa and contribute to a better and safer Africa and World	R0	R0	R0
Outcome 12: An efficient, effective and development orientated public service and an empowered fair and inclusive citizenship	R29 000 000	R44 000 000	R35 000 000
Outcome 13: A comprehensive, responsive and sustainable social protection system	R10 500 000	R11 000 000	R5 000 000
Outcome 14: A diverse, socially cohesive society with a common national identity	R63 500 000	R38 000 000	R30 000 000
Outcome 2: A long and healthy life for all South Africans	R136 000 000	R91 636 000	R70 750 000
Outcome 3: All people in South Africa feel safe	R37 500 000	R57 500 000	R45 500 000
Outcome 4: Decent employment through inclusive economic growth	R106 412 650	R26 256 420	R11 000 000
Outcome 5: A skilled and capable workforce to support inclusive growth path	R20 000 000	R0	R0
Outcome 6: An efficient, competitive and responsive economic infrastructure network	R932 441 280	R1 136 903 409	R1 148 382 978
Outcome 7: Vibrant, equitable and sustainable rural communities with food security for all	R0	R0	R0
Outcome 8: Sustainable human settlements and improved quality of household life	R1 400 468 469	R1 802 893 651	R1 950 368 602
Outcome 9: A Responsive, accountable effective and efficient local government system	R60 500 000	R123 000 000	R135 000 000
Grand Total	R3 316 967 060	R3 771 894 480	R3 978 501 580

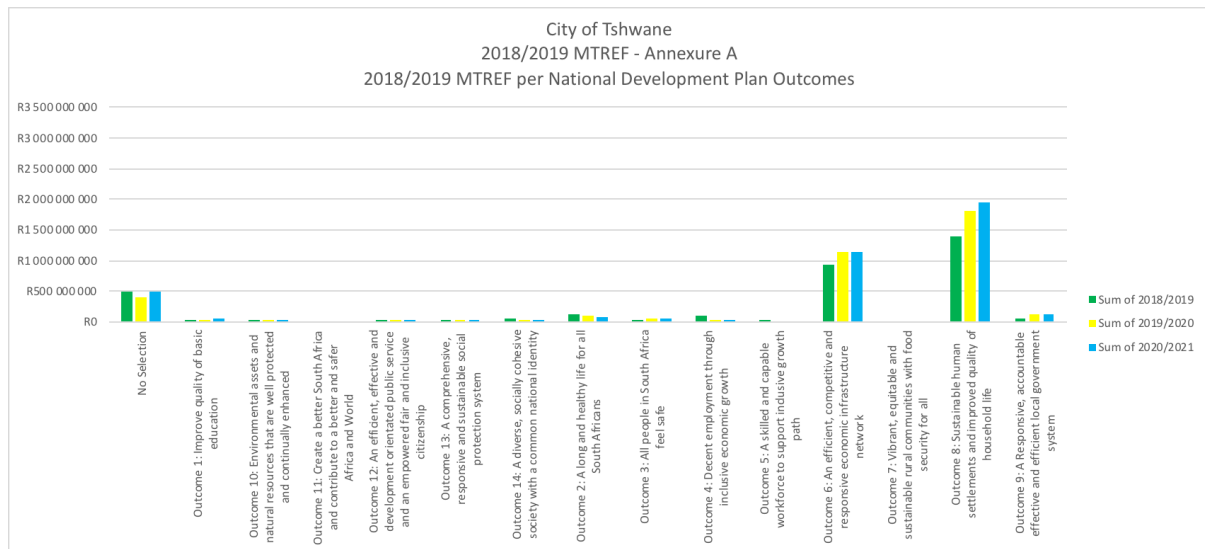
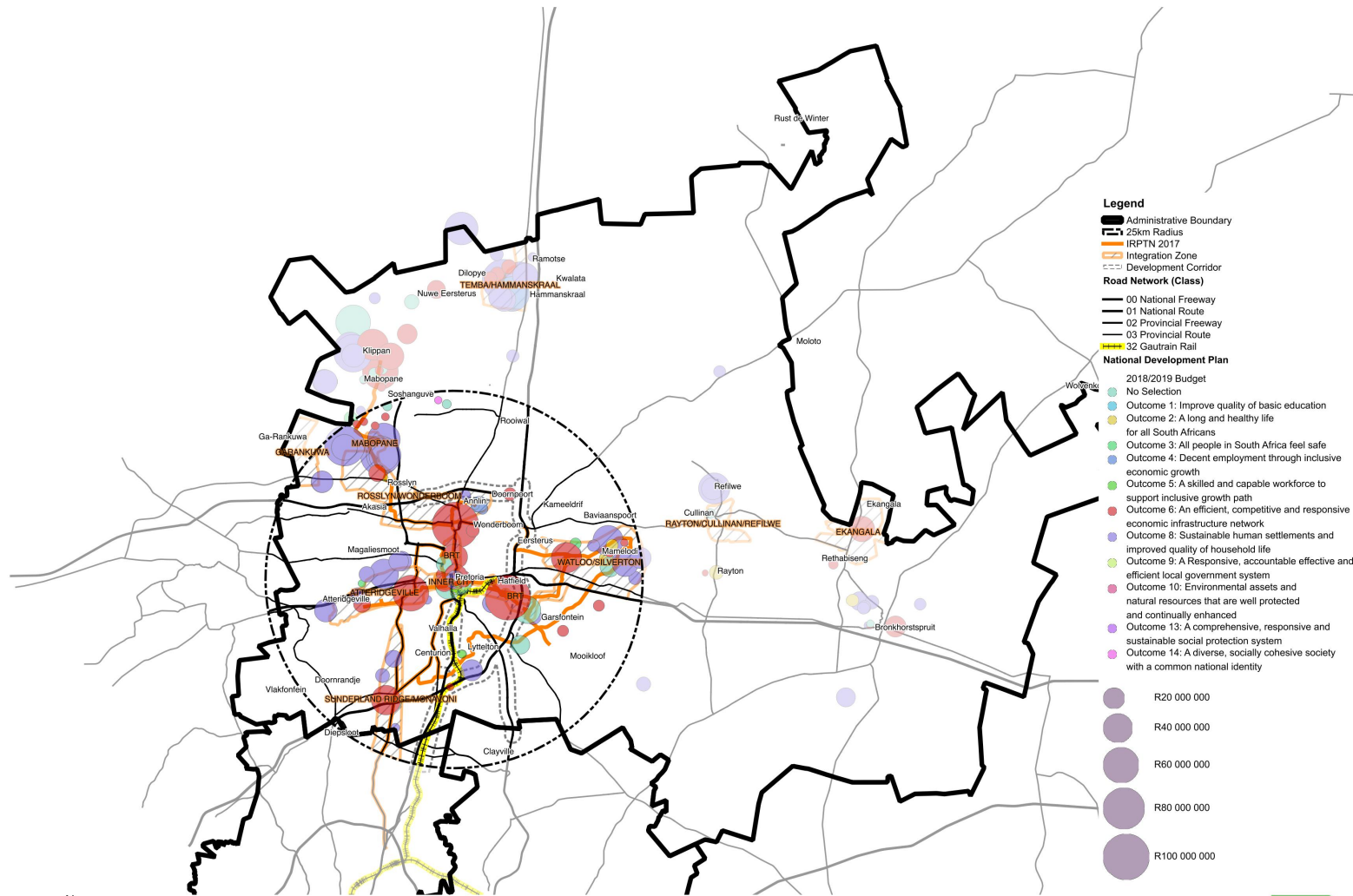


Figure G-12: 2018/2019 MTREF Budget expressed in terms of National Development Plan Outcomes

Built Environment Performance Plan



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2018/19 BEPP - City of Tshwane
National Development Plan



G.3.3 National Integrated Urban Development Framework

The IUDF sets out a policy framework to guide the development of inclusive, resilient and liveable urban settlements, while squarely addressing the unique conditions and challenges facing South Africa’s cities and towns. It provides a new approach to urban investment by the developmental state, which in turn guides the private sector and households. The IUDF seeks to provide a roadmap to reach its vision which is “Liveable, safe, resource-efficient cities and towns that are socially integrated, economically inclusive and globally competitive, where residents actively participate in urban life”.⁸

The Strategic Goals set out by the NIUDF is as follows:

- Access: To ensure people have access to social and economic services, opportunities and choices.
- Growth: To harness urban dynamism for inclusive, sustainable economic growth and development.
- Governance: To enhance the capacity of the state and its citizens to work together to achieve social integration.
- Spatial Transformation: To forge new spatial forms in settlement, transport, social and economic areas

The majority of projects are linked to Spatial integration. This can be a function of poor data capturing or actual interpretation of the options available.

Table G-21: 2018/2019 MTREF Budget expressed in terms of National Integrated Urban Development Framework Outcomes

National IUDF	2018/2019	2019/2020	2020/2021
1. Spatial Integration	R2 654 322 399	R3 161 689 480	R3 193 501 580
No Selection	R662 644 661	R610 205 000	R785 000 000
Grand Total	R3 316 967 060	R3 771 894 480	R3 978 501 580

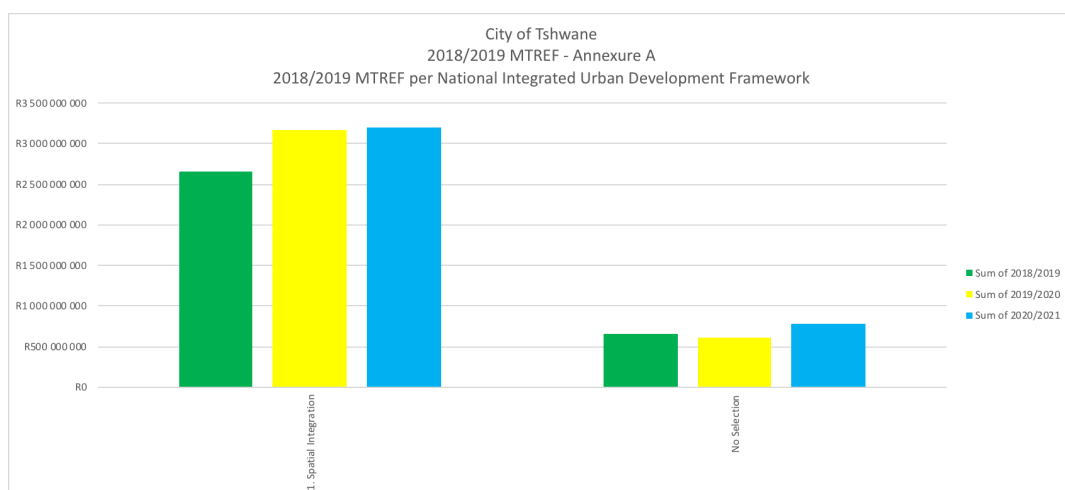
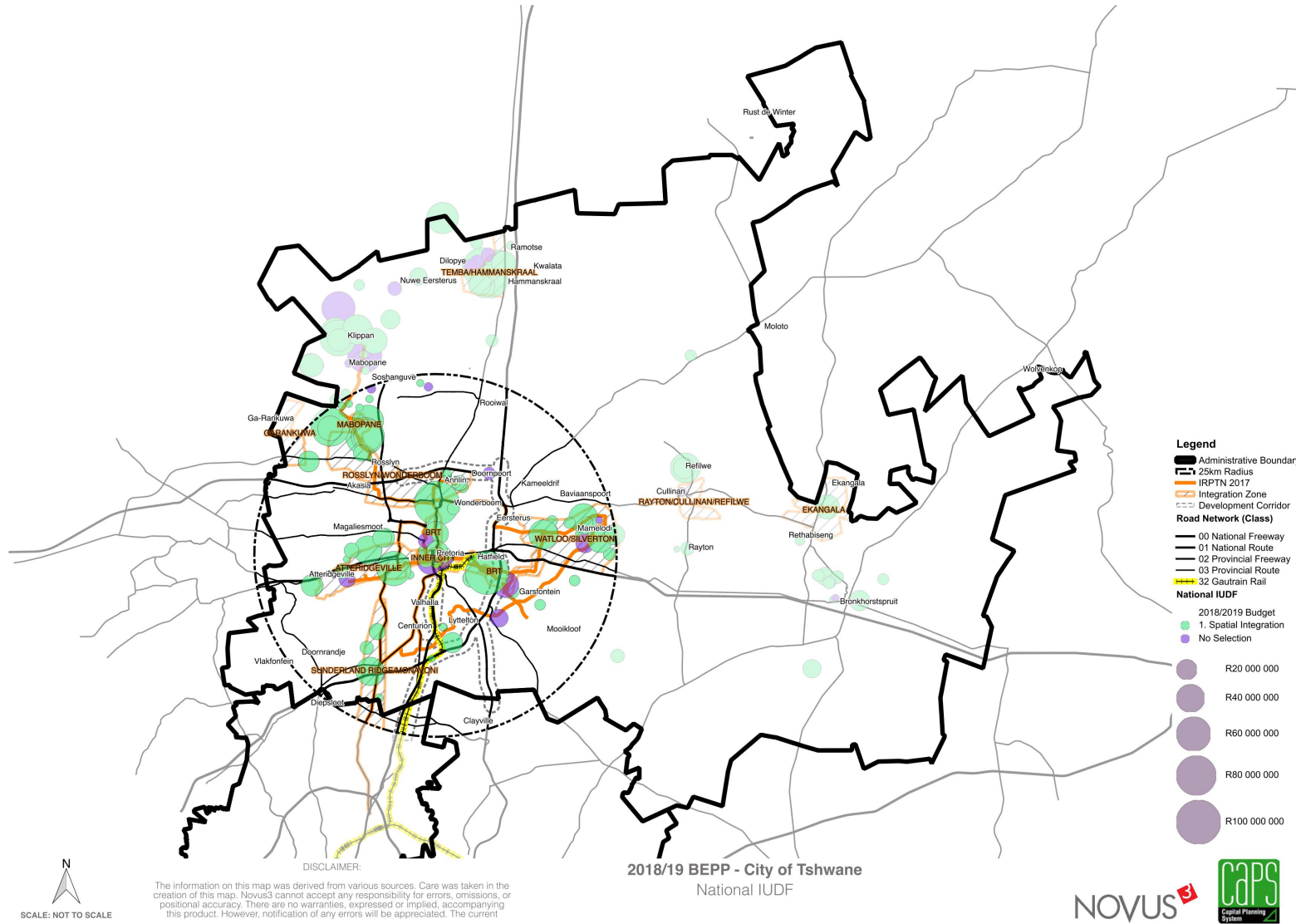


Figure G-13: 2018/2019 MTREF Budget expressed in terms of National Integrated Urban Development Framework Outcome

⁸ Direct extract from the IUDF, 2016: http://www.cogta.gov.za/cgta_2016/wp-content/uploads/2016/06/The-Integrated-Urban-Development-FrameworkIUDF.pdf



G.3.4 Provincial Spatial Development Framework Outcomes

The Gauteng of 2030 is an integrated, connected space that provides for the needs of all who are born in or drawn to the province. Economic growth is spread widely, beyond the core areas, to nodes and multi-modal activity corridors. These nodes and corridors provide safe, high-intensity and high-density mixed land-use settlements, where the young and old are able to walk, cycle and relax in public spaces. A range of public transport modes ensures affordable, province-wide interconnectedness and access to the full spectrum of economic, cultural and educational opportunities, placing the province on a far more sustainable growth trajectory. Places that were once seen as marginal, rural and peripheral are now desirable urban villages with dynamic economies. Differences in income are far less severe, and even those who earn the lowest incomes are living a life of dignity and have access to the benefits of living in the economic heartland of the country. The more compact urban form enables household services to be provided with less expense and reduces maintenance and upgrading costs. Unbuilt areas are protected and used for agriculture, agro- processing, relaxation and tourism, and the province is an energy-efficient, and less wasteful and polluting, urban conurbation.

To realise the spatial development vision, developments in the province need to adhere to six spatial development principles:

- Liveability;
- Concentration;
- Connectivity;
- Conservation;
- Diversity; and
- Viability.

The following table reflects the City's 2018/2019 Capital expenditure in terms of the Gauteng spatial development vision. Projects dominantly related to liveability only use 6% of the City's budget where 26% are directed towards concentration (which is the investment in infrastructure according to the GSDF). It is significant to one that 19% of the Capex has not been linked to GSDF principles at this moment in time and that only 1% has been linked to Human Settlements in terms of the GSDF descriptions and vision.

Table G-22: 2018/2019 MTREF Budget expressed in terms of Provincial Spatial Development Framework Outcomes

Provincial Outcomes	2018/2019	2019/2020	2020/2021
1. Livability- Urban Form	R190 000 000	R219 850 000	R250 750 000
2. Concentration- Infrastructure	R857 024 519	R867 294 400	R1 053 699 000
3. Connectivity - Connectivity	R905 000 000	R1 337 985 160	R1 290 493 620
4. Conservation- Natural Resources	R518 597 880	R530 292 500	R572 957 960
5. Diversity - Human Settlements	R24 500 000	R17 200 000	R9 400 000
6. Viability- Space Economy	R180 000 000	R259 267 420	R127 201 000
No Selection	R641 844 661	R540 005 000	R674 000 000
Grand Total	R3 316 967 060	R3 771 894 480	R3 978 501 580

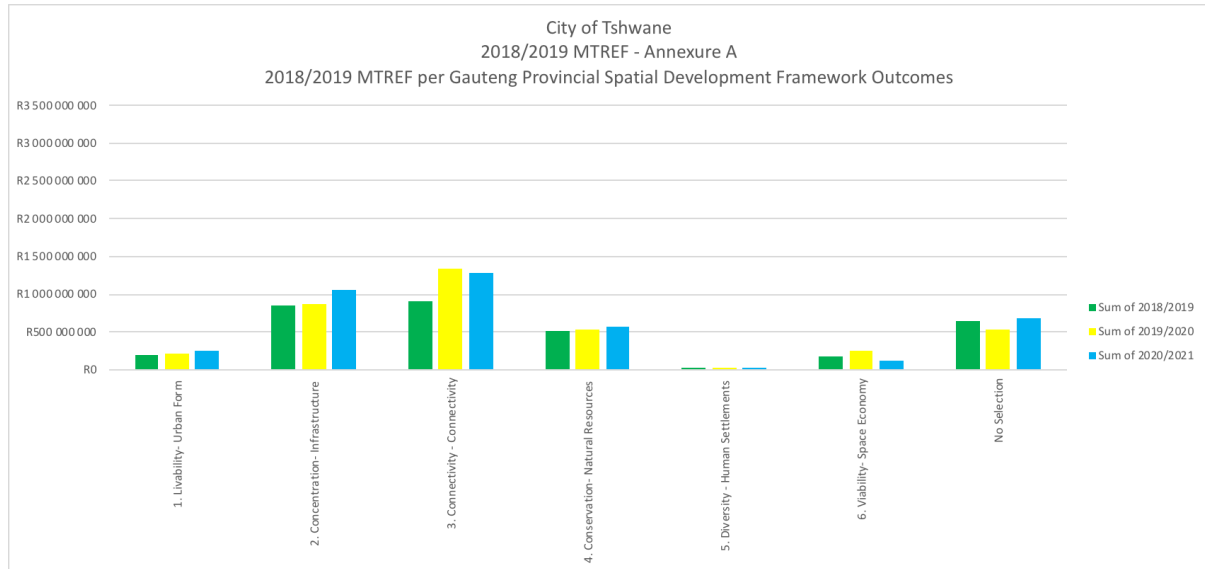
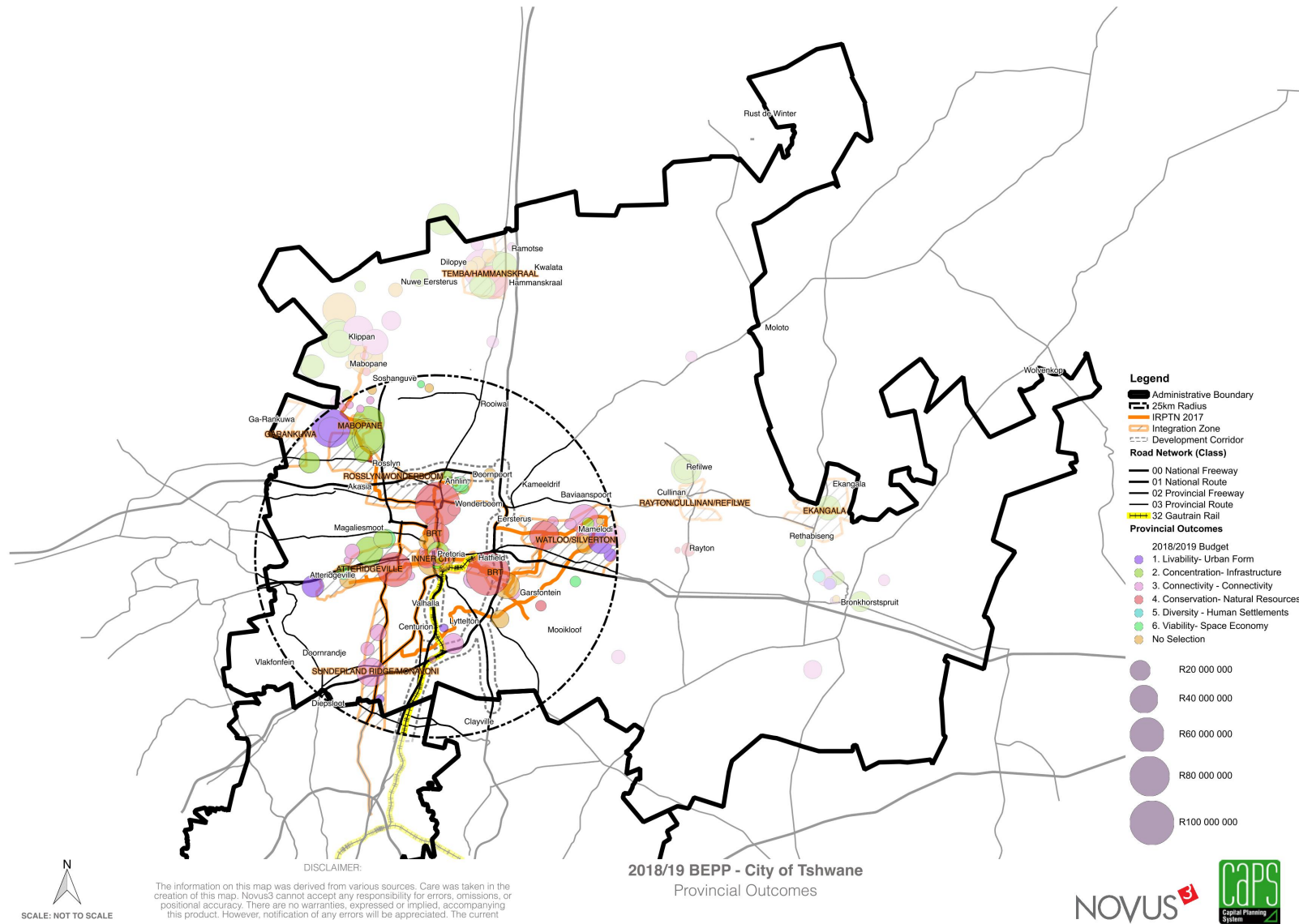


Figure G-14: 2018/2019 MTREF Budget expressed in terms of Provincial Spatial Development Framework Outcomes



G.3.5 Municipal Pillars

The Municipal Pillars has been described earlier in this section. The following table shows the expenditure per Municipal pillar in the 2018/2019 Capital Expenditure Book of the City. The City's Primary focus is on excellent service provision (30% of the budget, followed by keeping the City safe and that cares (25% and 18% respectively). One pillar that stand out – that does not receive money from the Capex budget is the pillar that refer to good governance. It is important to note that 19% of the budget has not been allocated at the time of this analysis.

Table G-23: 2018/2019 MTREF Budget expressed in terms of Municipal Pillars

Municipal Pillars	2018/2019	2019/2020	2020/2021
1. A City that facilitates economic growth and job creation	R204 000 000	R265 128 420	R145 500 000
2. A City that cares for residents and promotes inclusivity	R607 253 930	R623 004 900	R659 707 960
3. A City that delivers excellent services and protects the environment	R1 004 133 023	R1 127 168 580	R1 315 400 000
4. A City that keeps residents safe	R814 735 446	R1 210 087 580	R1 160 893 620
5. A City that is open, honest and responsive	R44 000 000	R10 500 000	R11 000 000
No Selection	R642 844 661	R536 005 000	R686 000 000
Grand Total	R3 316 967 060	R3 771 894 480	R3 978 501 580

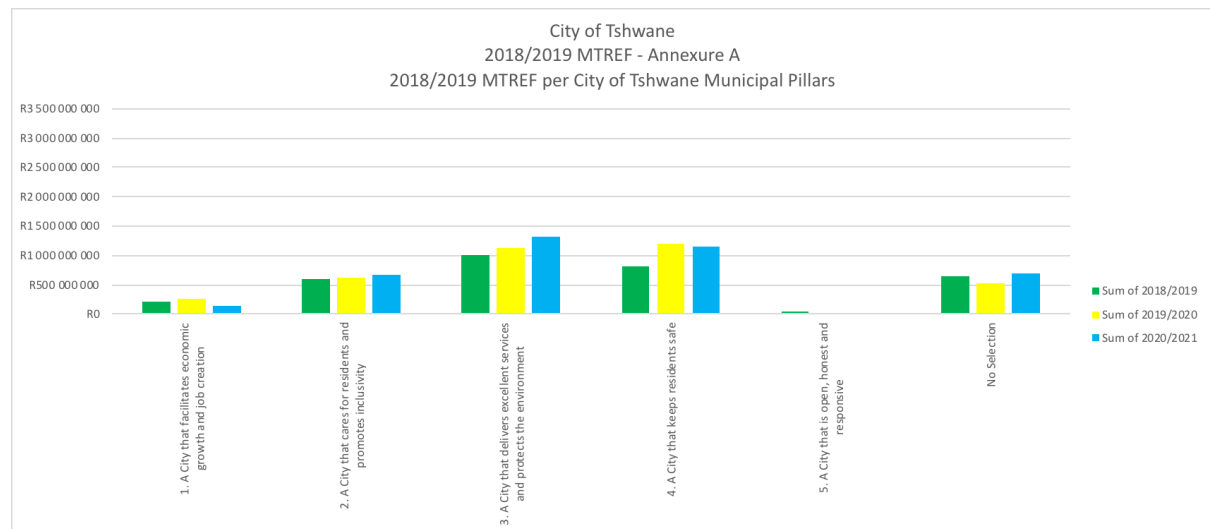
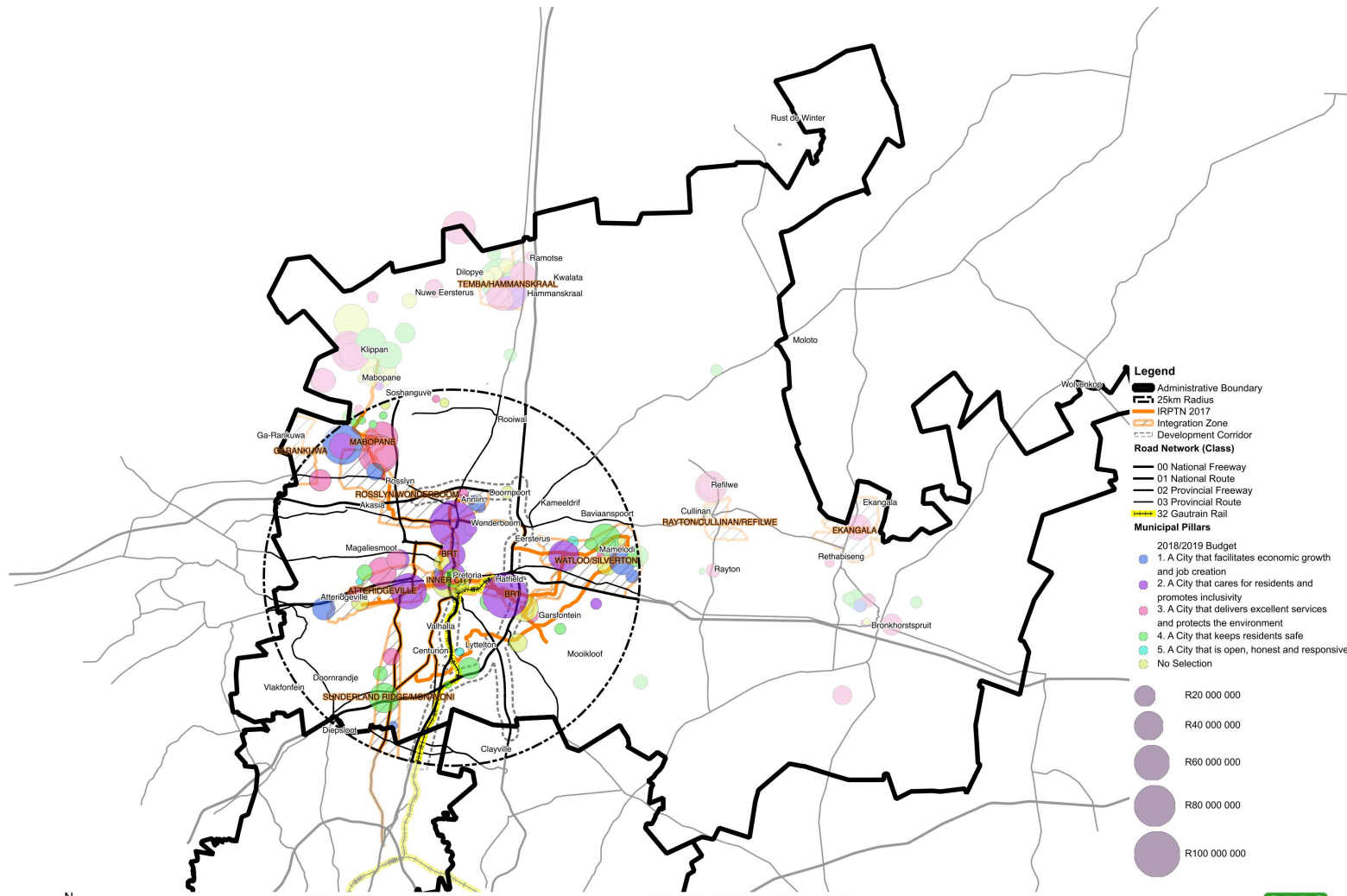


Figure G-15: 2018/2019 MTREF Budget expressed in terms of Municipal Pillars

Built Environment Performance Plan



Legend

- Administrative Boundary
- 25km Radius
- IRPTN 2017
- Integration Zone
- Development Corridor

Road Network (Class)

- 00 National Freeway
- 01 National Route
- 02 Provincial Freeway
- 03 Provincial Route
- 32 Gautrain Rail

Municipal Pillars

2018/2019 Budget

- 1. A City that facilitates economic growth and job creation
- 2. A City that cares for residents and promotes inclusivity
- 3. A City that delivers excellent services and protects the environment
- 4. A City that keeps residents safe
- 5. A City that is open, honest and responsive
- No Selection

R20 000 000

R40 000 000

R60 000 000

R80 000 000

R100 000 000



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2018/19 BEPP - City of Tshwane
Municipal Pillars



G.3.6 Municipal Priorities

Municipal priorities are directly linked to municipal actions. This part of the analysis should be read with the IDP 2017/2021. It should be noted that the majority of the Capex is directed towards delivering high quality and sustainable basic services.

Table G-24: 2018/2019 MTREF Budget expressed in terms of Municipal Priorities

Municipal Priorities	2018/2019	2019/2020	2020/2021
11. Delivering high quality services	R825 269 554	R957 168 580	R1 081 525 018
13. Creating safe Communities	R162 605 000	R273 526 071	R252 500 000
16. Building a capable city government	R35 000 000	R5 000 000	R5 000 000
2. Revitalizing and supporting Tshwane's entrepreneurs	R11 500 000	R120 000 000	R601 000
3. Empowering individuals to take advantage of opportunity	R114 307 650	R90 365 000	R49 899 000
4. Infrastructure-led growth to catalyse and revitalize existing nodal economies	R69 500 000	R20 767 420	R10 000 000
6. Upgrading of Informal Settlements	R0	R0	R0
9. Promoting a SAE , reliable and affordable transportation system	R0	R0	R0
No Selection	R226 363 469	R273 500 000	R327 750 000
Grand Total	R1 872 421 387	R2 031 567 409	R2 251 226 562

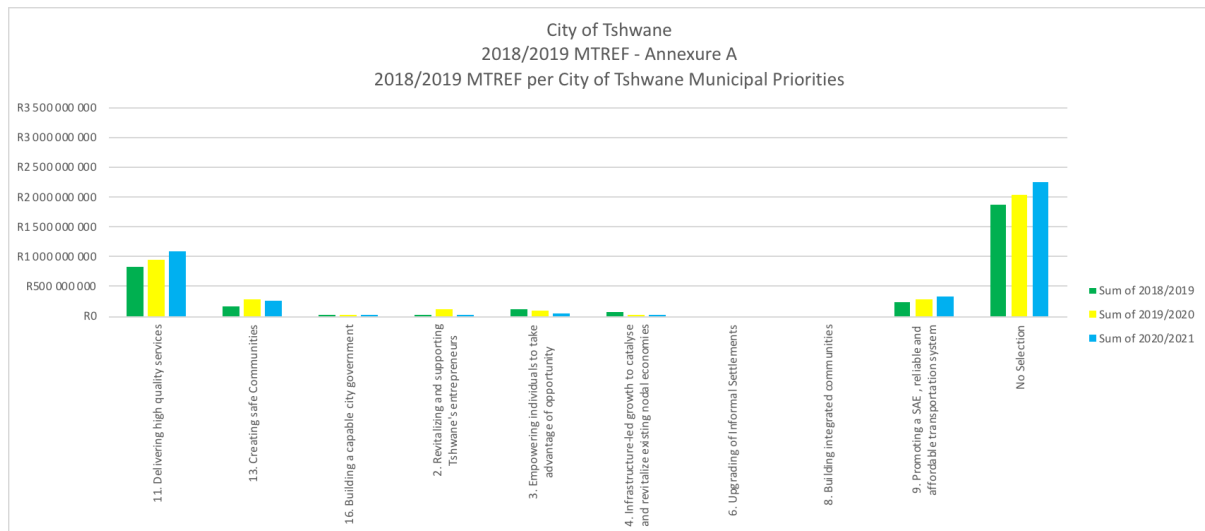


Figure G-16: 2018/2019 MTREF Budget expressed in terms of Municipal Priorities



Legend

- Administrative Boundary
- 25km Radius
- IRPTN 2017
- Integration Zone
- Development Corridor

Road Network (Class)

- 00 National Freeway
- 01 National Route
- 02 Provincial Freeway
- 03 Provincial Route
- 32 Gautrain Rail

Municipal Priorities

- 2018/2019 Budget
- 2. Revitalizing and supporting Tshwane's entrepreneurs
- 3. Empowering individuals to take advantage of opportunity
- 4. Infrastructure-led growth to catalyse and revitalize existing nodal economies
- 6. Upgrading of Informal Settlements
- 9. Promoting a SAE, reliable and affordable transportation system
- 11. Delivering high quality services
- 13. Creating safe Communities
- 16. Building a capable city government
- No Selection

Budget Allocation Legend

- R20 000 000
- R40 000 000
- R60 000 000
- R80 000 000
- R100 000 000

DISCLAIMER:
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2018/19 BEPP - City of Tshwane
Municipal Priorities



G.3.7 Municipal Actions

Municipal actions are directly linked to municipal priority. This part of the analysis should be read with the IDP 2017/2021. It should be noted that the majority of the Capex is directed towards delivering high quality and sustainable basic services.

Table G-25: 2018/2019 MTREF Budget expressed in terms of Municipal Actions

Municipal Actions	2018/2019	2019/2020	2020/2021
1. Addressing the City's infrastructure challenges	R69 000 000	R20 767 420	R10 000 000
1. Creating spaces and housing opportunities that bring people together	R0	R0	R0
1. Delivering high quality and sustainable basic services	R825 269 554	R957 168 580	R1 075 525 018
1. Empowering individuals	R88 307 650	R62 354 000	R10 000 000
1. Establishing professional and effective government processes	R35 000 000	R5 000 000	R5 000 000
1. Improving policing and law enforcement efforts	R0	R0	R0
1. Providing a high-quality public transportation	R22 000 000	R38 000 000	R41 000 000
2. Addressing infrastructure and service delivery inadequacies which are preventing existing or fledging industries from growing and/or threatening their survival	R528 446 280	R555 161 900	R656 856 960
2. Addressing the spatial development challenges of informal settlements to improve quality of life	R192 863 469	R212 000 000	R256 000 000
2. Inclosing the community in making areas safer	R160 500 000	R267 026 071	R233 250 000
2. Providing housing opportunities	R661 130 446	R948 161 509	R879 268 602
2. Supporting small and micro business to have longer lifespans and increased turnover	R11 500 000	R120 000 000	R601 000
3. Building safer communities	R13 605 000	R30 000 000	R50 000 000
No Selection	R709 344 661	R556 255 000	R761 000 000
Grand Total	R3 316 967 060	R3 771 894 480	R3 978 501 580

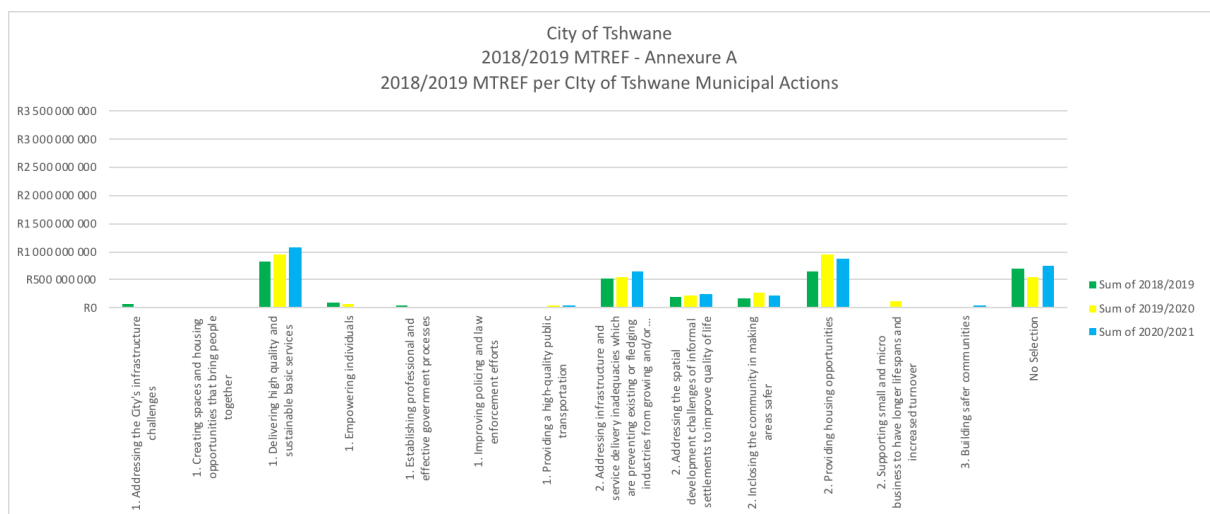
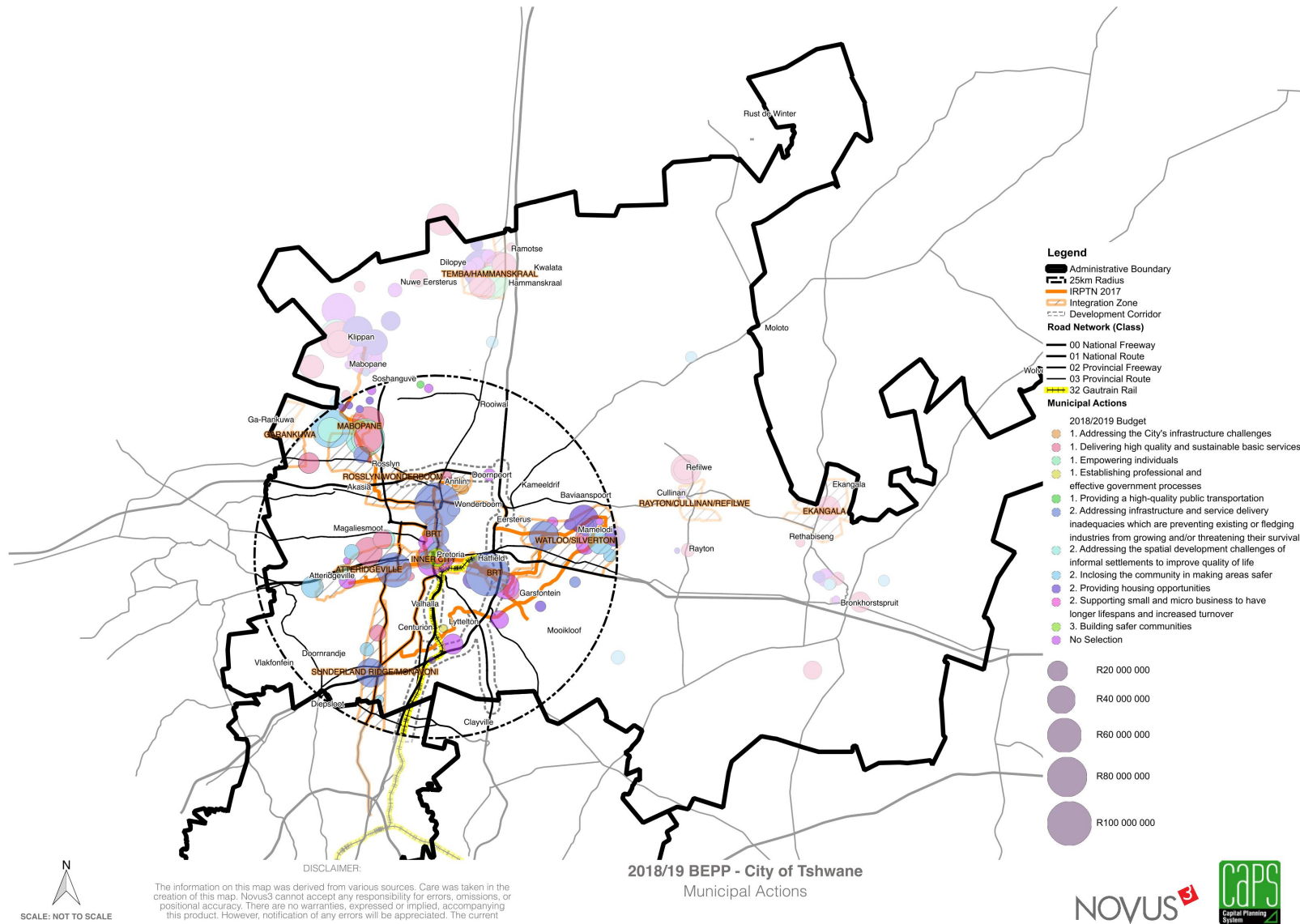


Figure G-17: 2018/2019 MTREF Budget expressed in terms of Municipal Actions



H Evaluation