



City Region's Eastern Corridor

March 2016

MANAGING A ROBUST TRANSITION TO THE DELIVERING CITY

'THEORY OF CHANGE'

Catalytic Development
Projects, Nodes and
Corridors



CONTENT

- Spatial Policy
- Gauteng Vision 2055
- Spatial Economy
- EMM GDS 2055
- EMM Spatial Planning Framework
- 10 Pillars
- EMM GDS 2055 Pillars spatial context
- Catalytic Projects
- Projects facilitated and implemented



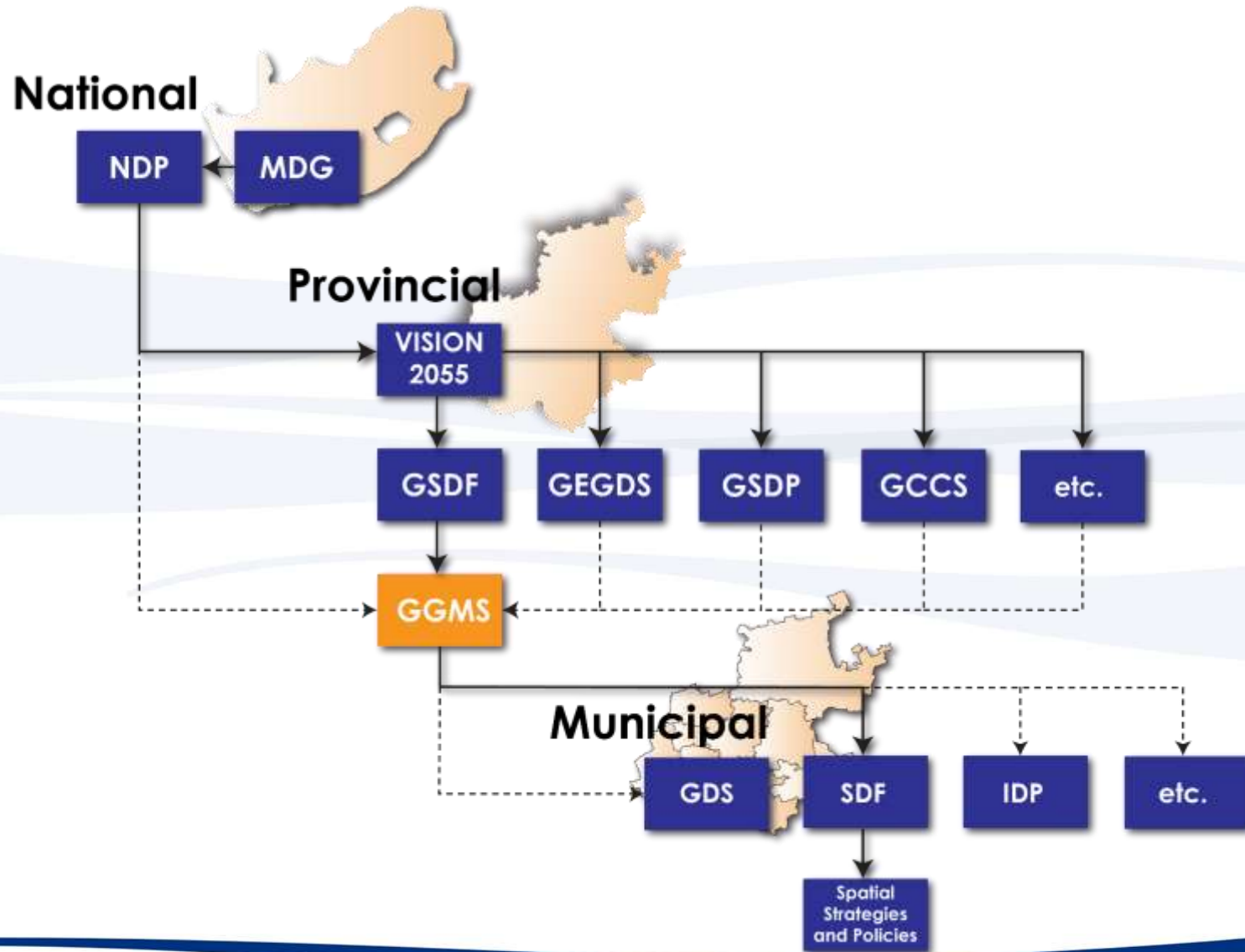
Gauteng City Region Spatial Policy

Gauteng City Region Spatial Policy



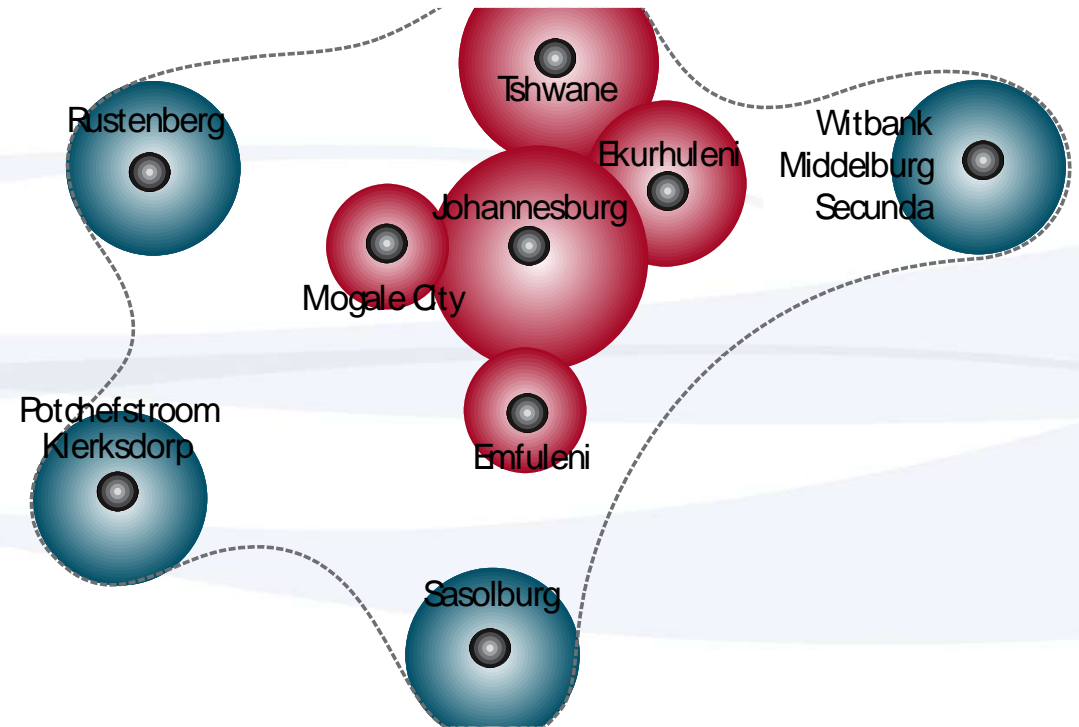
City of
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POLICY FRAMEWORK



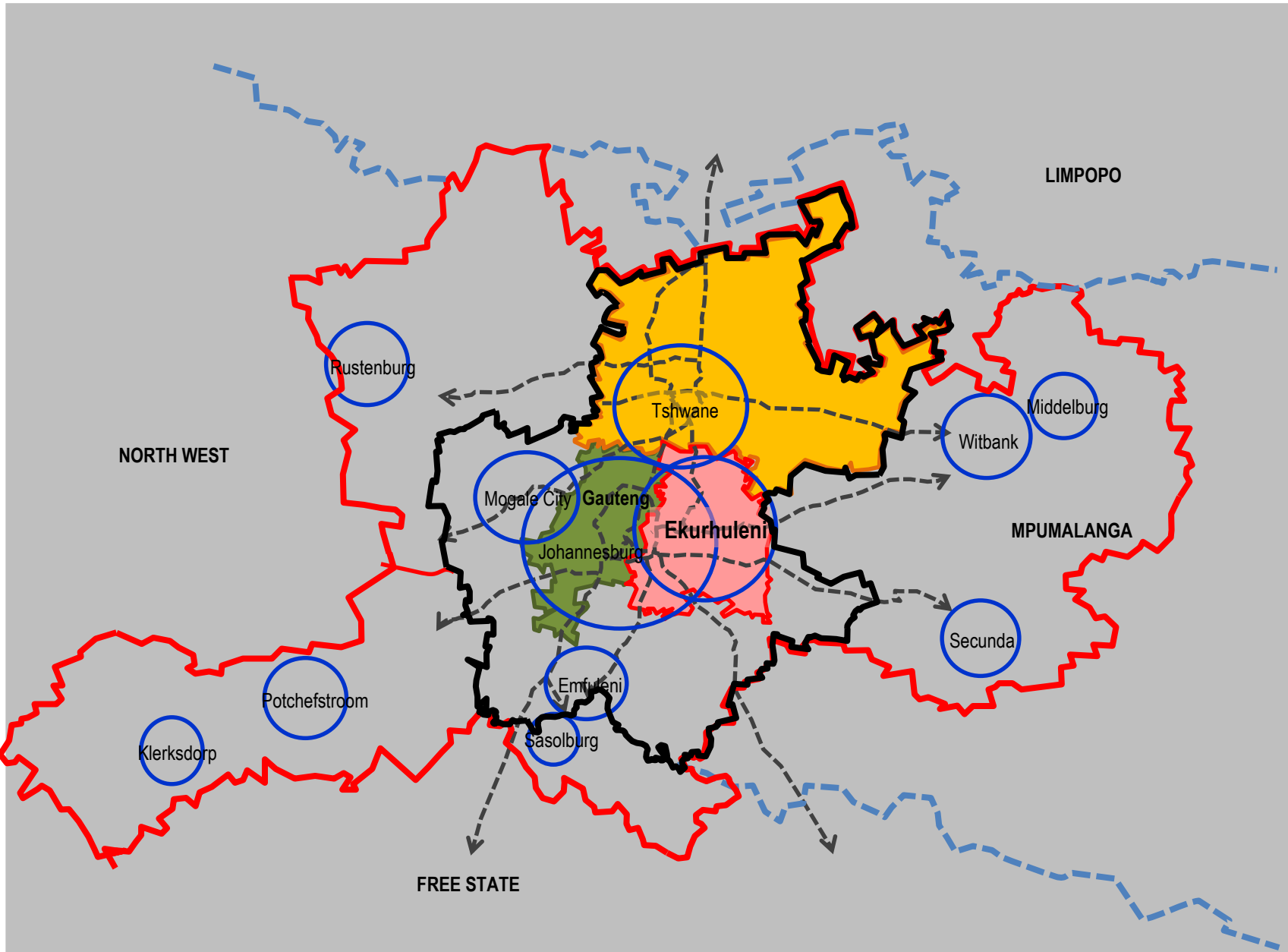
Gauteng City Region – EMM

- The Gauteng City Region includes a cluster of cities, towns and urban nodes
- It incorporates the Gauteng province in its entirety, with its three large metropolitan municipalities and a range of smaller urban centres across and beyond the province to create an almost continuous urban agglomeration
- While it has no official border, and does not benefit from the support of dedicated administrative or political agents, it represents a coherent economic and geographic space within which regional competitiveness may be harnessed



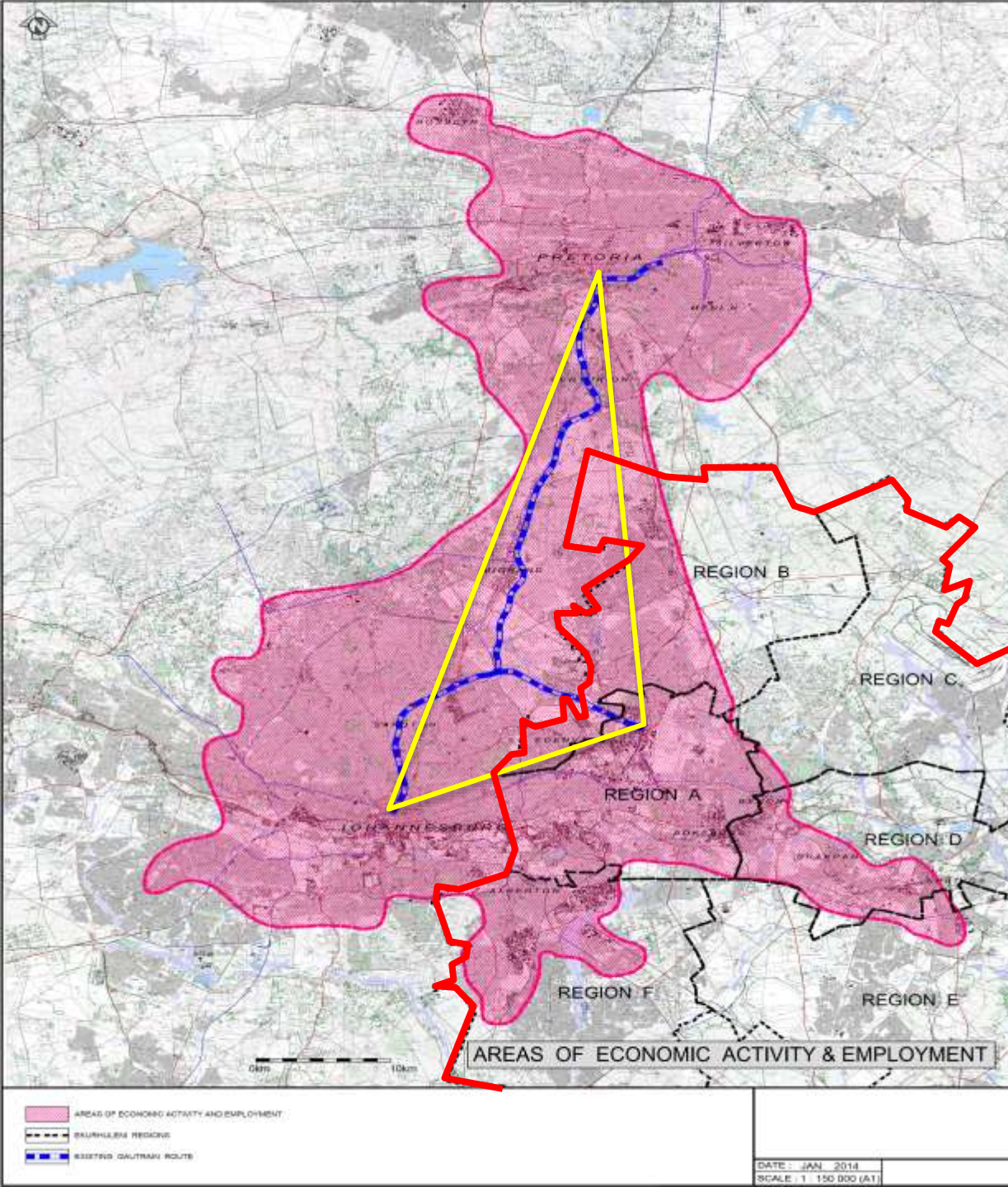
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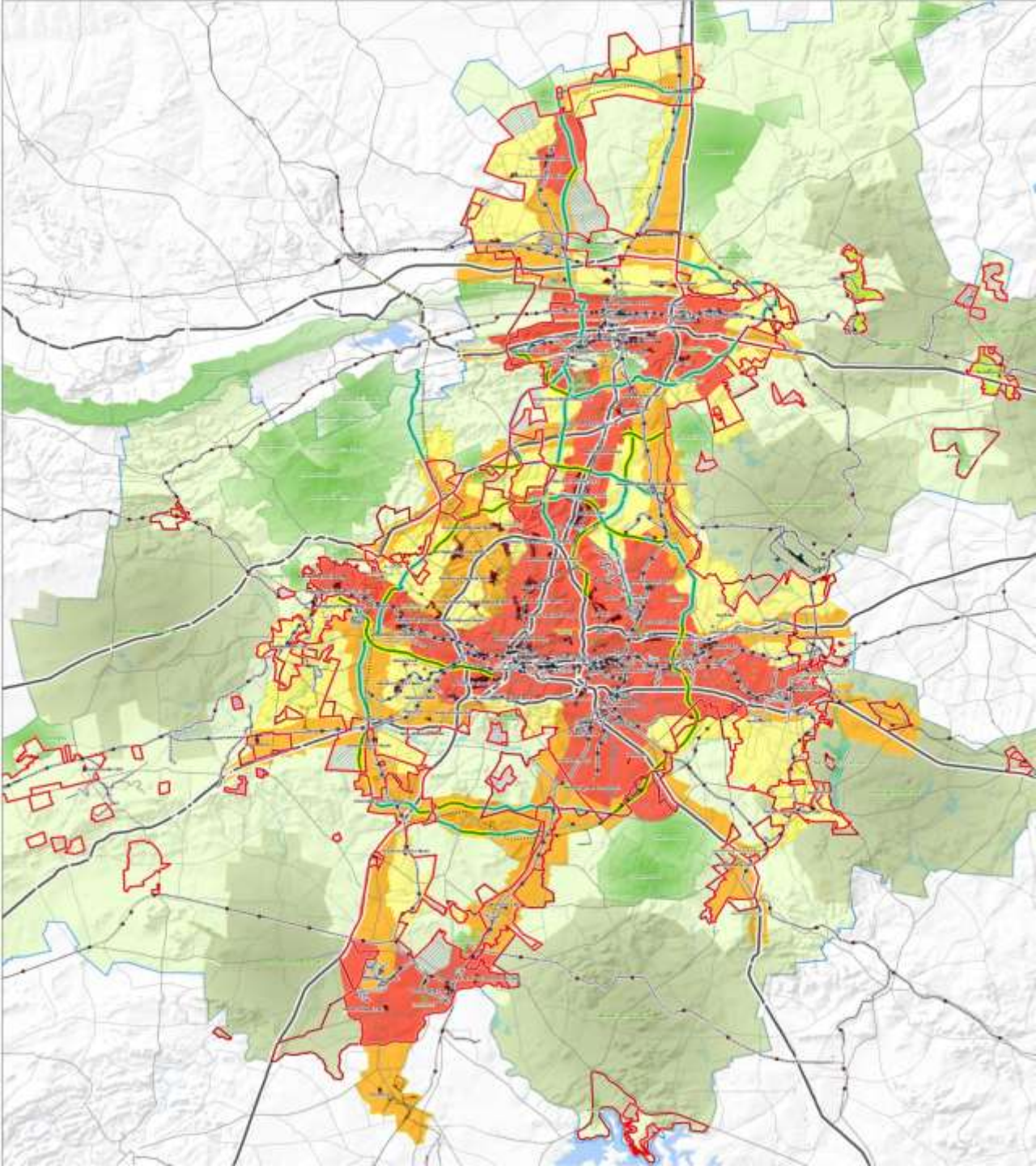


Gauteng City Region Core Economy

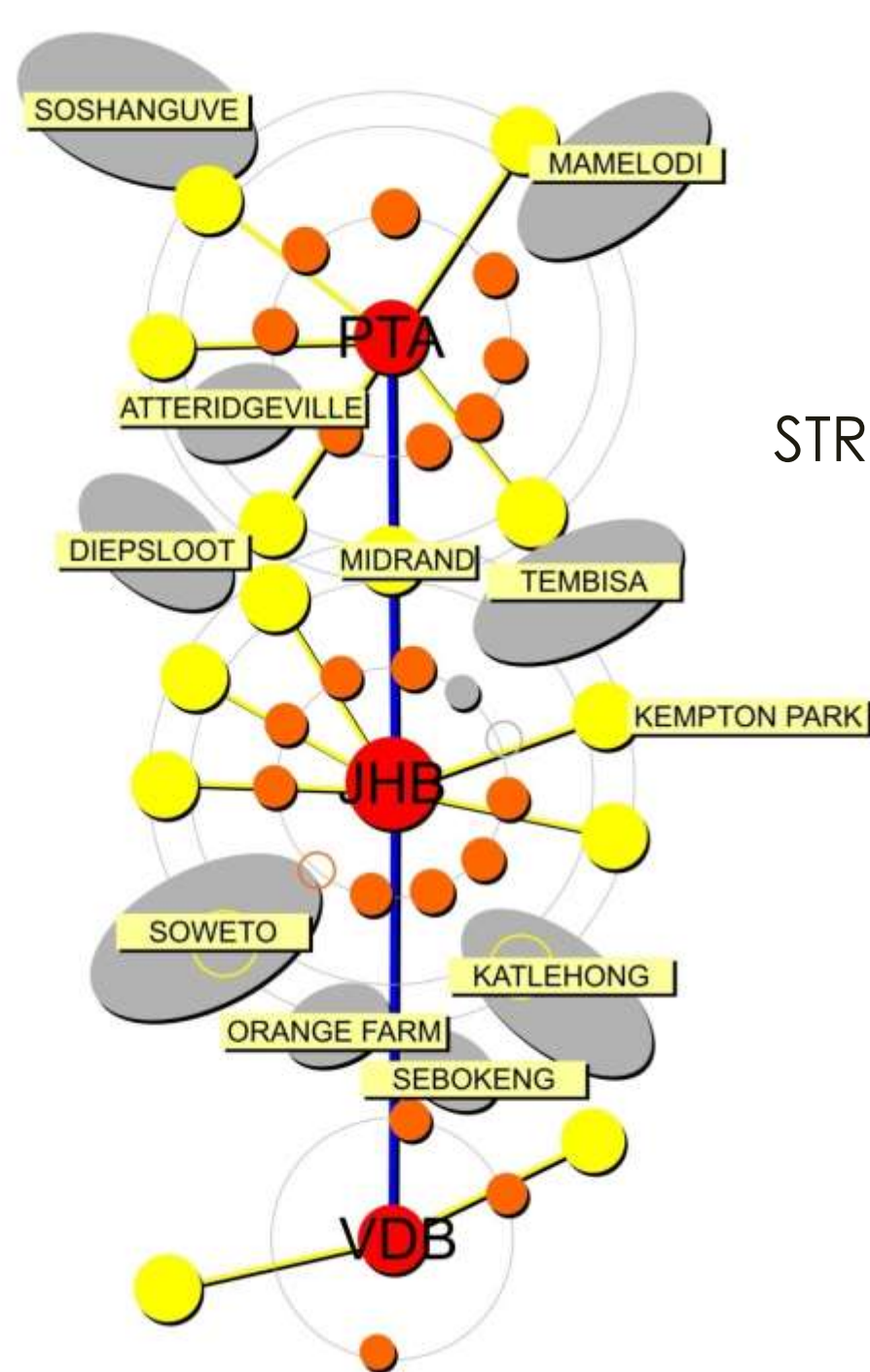
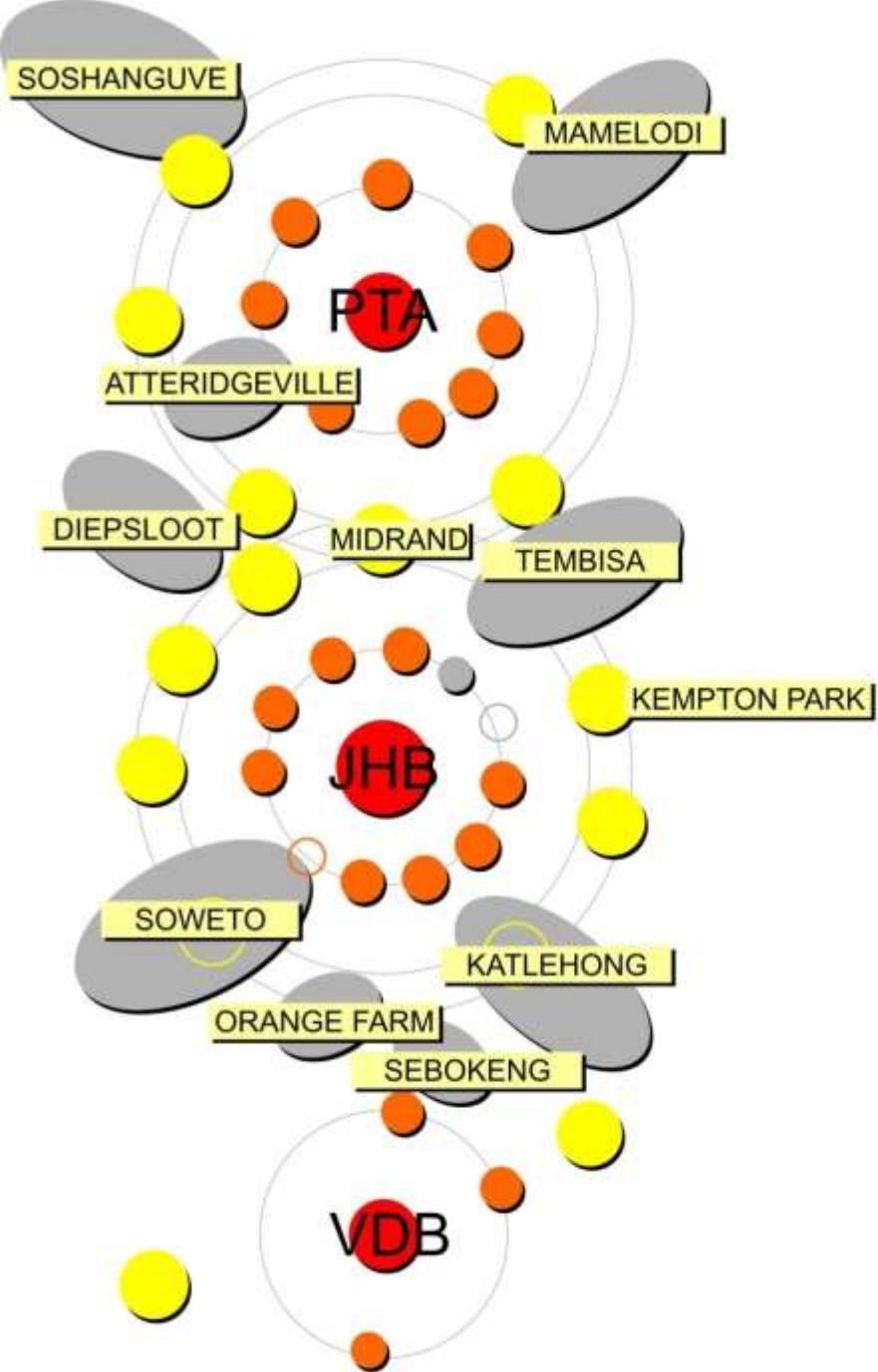
Favourably located in the Economic Activity and Employment Area of the Gauteng Province.



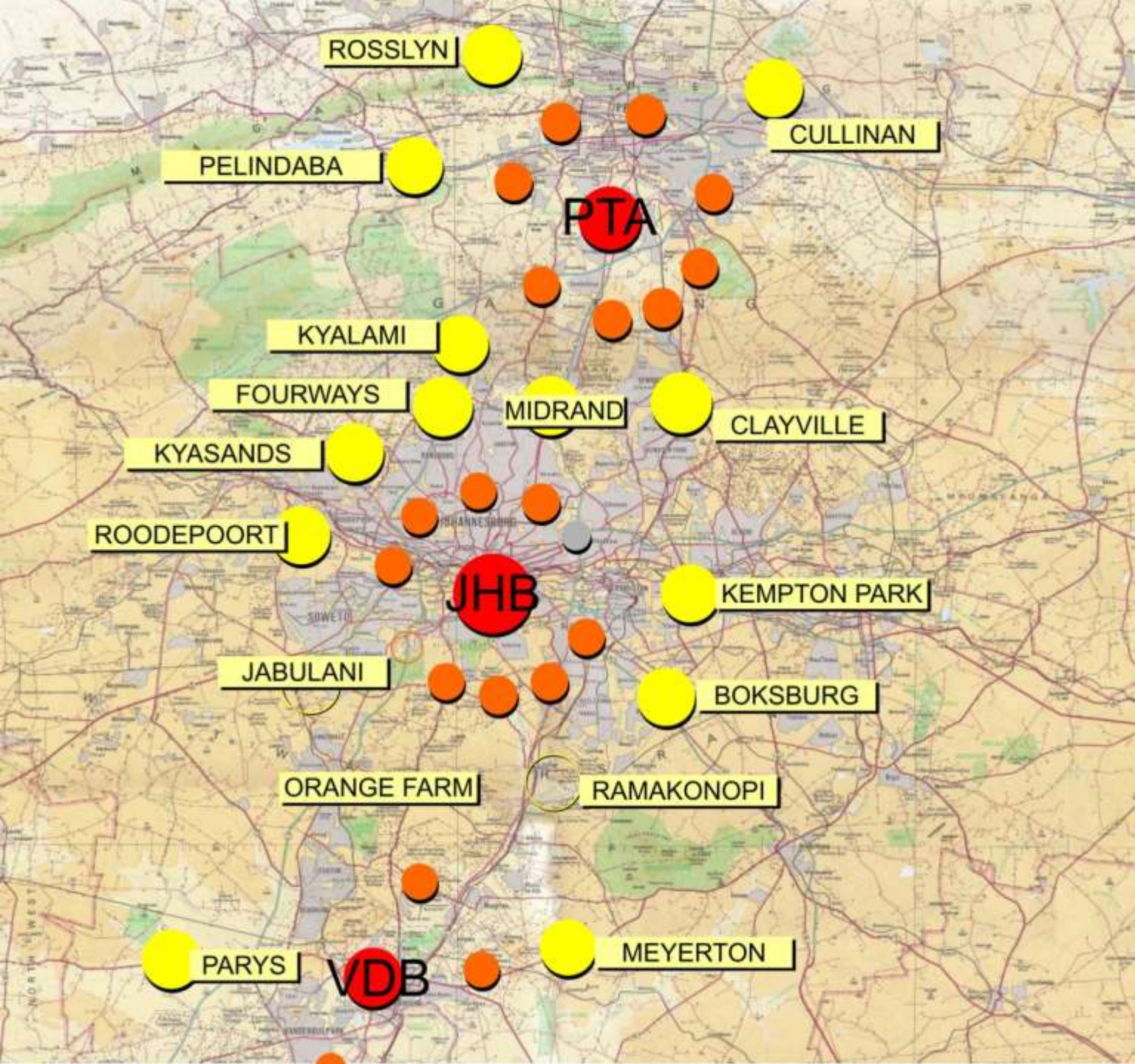
GSDF COMPOSITE SPATIAL STRUCTURE



- Rail network
- Strategic Rail connectors
- Gautrain Rapid Rail
- Strategic Road connectors - New
- Strategic Road connectors - Upgrade
- Passenger Ring Rail
- Freeway and Primary
- Secondary
- Tertiary
- Urban nodes
- Protected Areas/Natural Systems
- Urban consolidation zones
- Future urban consolidation within the urban edge
- Rural centres
- Existing Residential Estates
- /// Current urban expansion proposals subject to review
- Designated Agricultural Hubs
- Extensive general agricultural hinterland
- Waterbodies
- Future corridors
- Urban development corridors
- Anticipated extend of urban development by 2055*
- Existing mining settlements



CITY STRUCTURING MODEL



CITY STRUCTURING MODEL



City of
Ekurhuleni

10 Pillars

Ten Pillars for Radical Transformation, Modernisation and Re-Industrialisation

1. Radical Economic transformation
2. Decisive spatial transformation
3. Accelerated social transformation
4. Transformation of the state and governance
5. Modernisation of the public service
6. Modernisation of the economy
7. Modernisation of human settlements and urban development
8. Modernisation of public transport infrastructure
9. Re-industrialisation of Gauteng province
10. Taking the lead in Africa's new industrial revolution

EMM GDS 2055 PILLERS

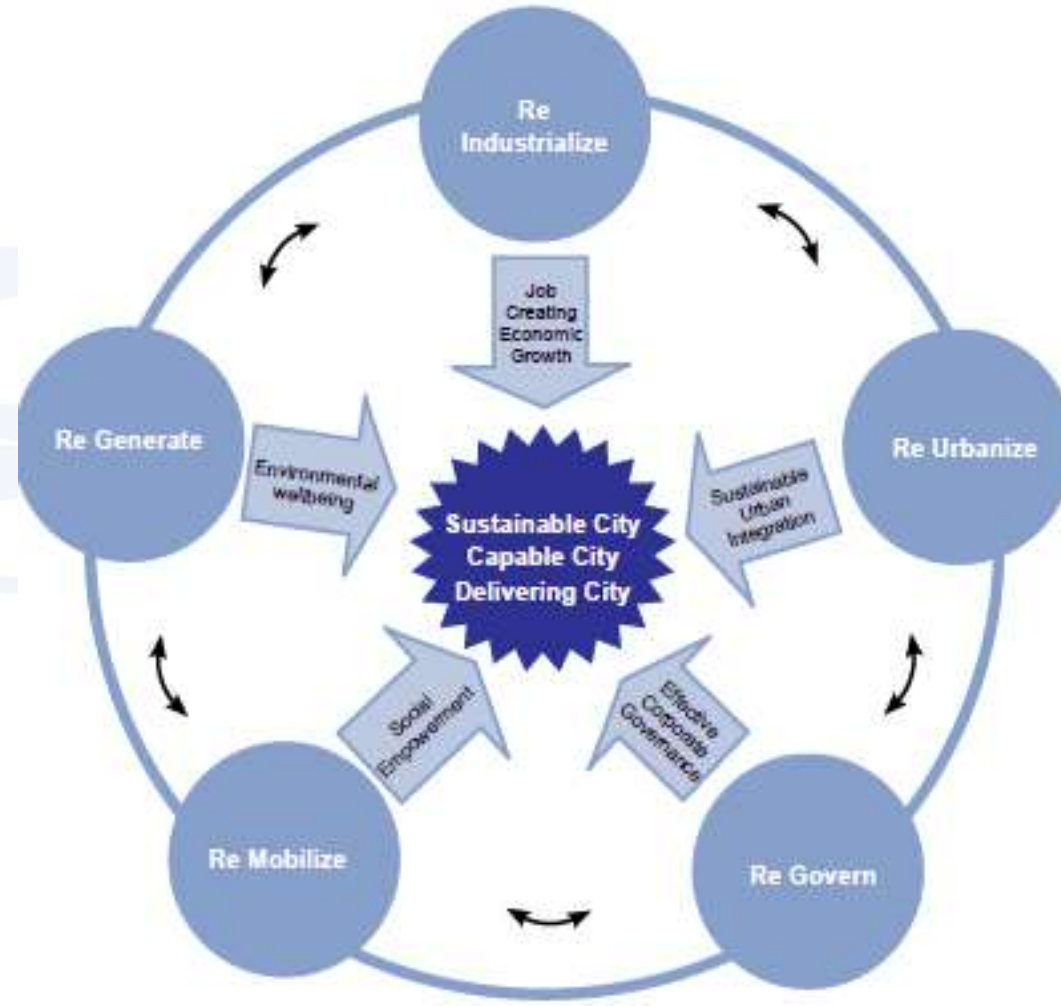
GDS 2055 PILLERS



City of
Ekurhuleni

EMM Growth Development Strategy 2055

- Re-Urbanise - to achieve sustainable urban integration
- Re-Industrialise – to achieve job creating economic growth
- Re-Generate – to achieve environmental well being
- Re-Mobilise- to achieve social empowerment; and
- Re-Govern- to achieve effective co-operative governance



INFLUENCING FACTORS

Growth and development strategy

- Re-urbanise
- Re-industrialise
- Re-generate
- Re-mobilise
- Re-govern

Human settlements

- Mega housing projects
- Densification and housing typologies
- Informal settlements
- Backyard shacks
- Housing backlog

Planning Dynamics

- Fragmented urban structure
- Metropolitan identity – Image of the City
- Peripheral urban development
- Nodes and Corridors
- Transport Oriented Development (TOD)
- Large open spaces and agriculture
- Regional opportunities
- National focus – air, rail
- Strategic land parcels

Aerotropolis

- Multi-core districts
- Areas of influence
- Research and manufacturing
- Creative cluster
- Agri-business
- Logistics
- Mixed use infill

EMM SPATIAL DEVELOPMENT STRATEGY

Growth Management

- Capital investment framework
- Human Settlements
- Sustainable environment
- Legislation
- Policies
- Municipal Departments
- Provincial and National Government

Public Sector

Private Sector

Community

Community

CATALYTIC PROJECTS

GEOGRAPHIC INFORMATION SYSTEMS

GDS 2055
WHERE TO?
"IDEA"
"VISION"

LONG TERM DEVELOPMENT
FRAMEWORK

INTEGRATED DEVELOPMENT PLAN

SPATIAL DEVELOPMENT FRAMEWORK

REGIONAL SPATIAL DEVELOPMENT
FRAMEWORKS

PRECINCT PLANS

LAND USE SCHEME

Investment

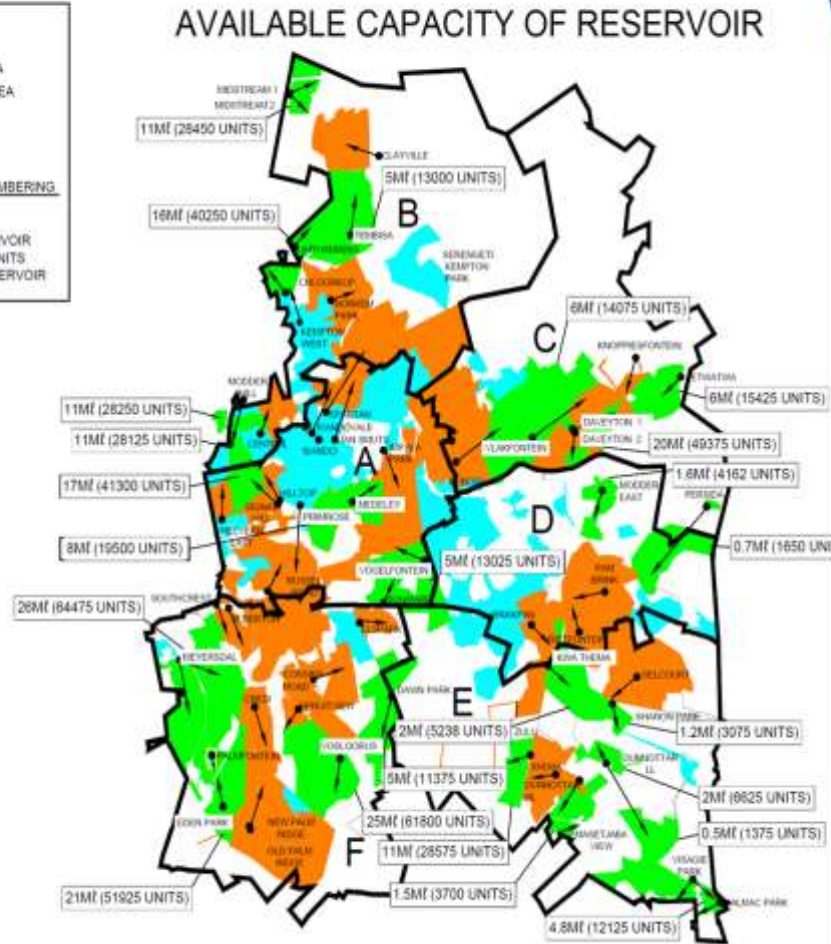
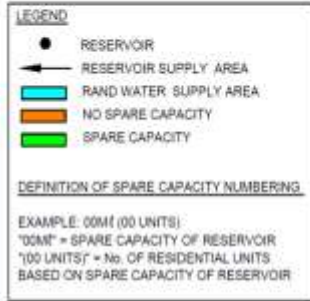
- Expectations
- Development
- Growth
- Job creation
- New urban form



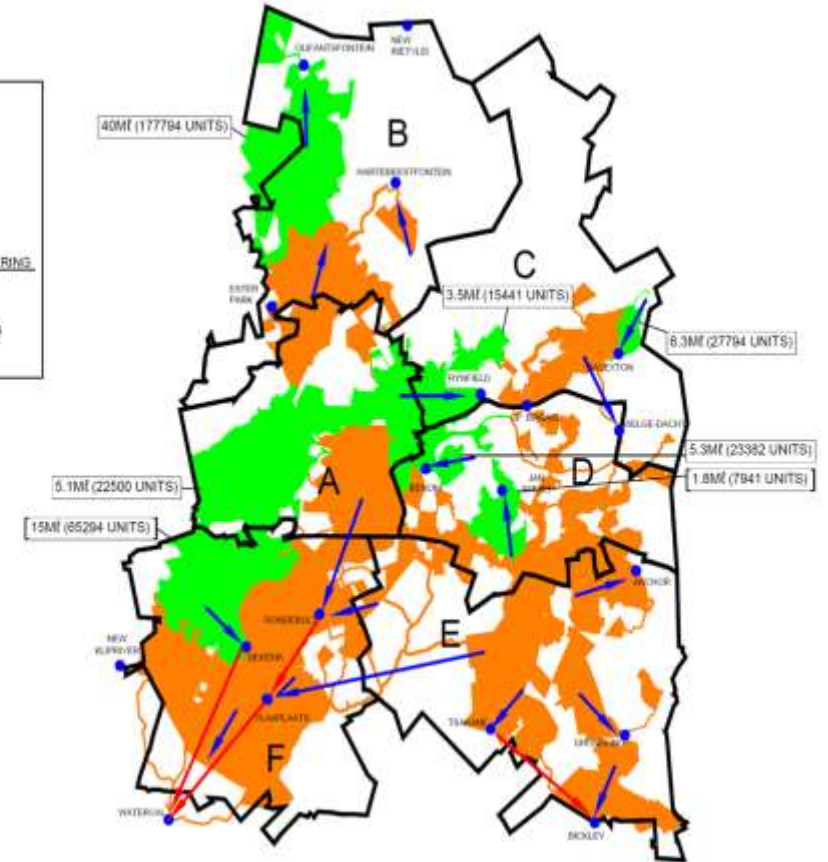
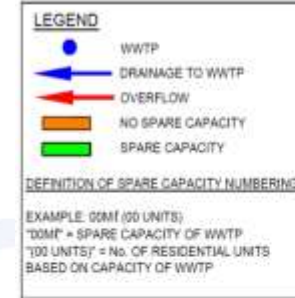
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Bulk infrastructure - availability capacity:

Water

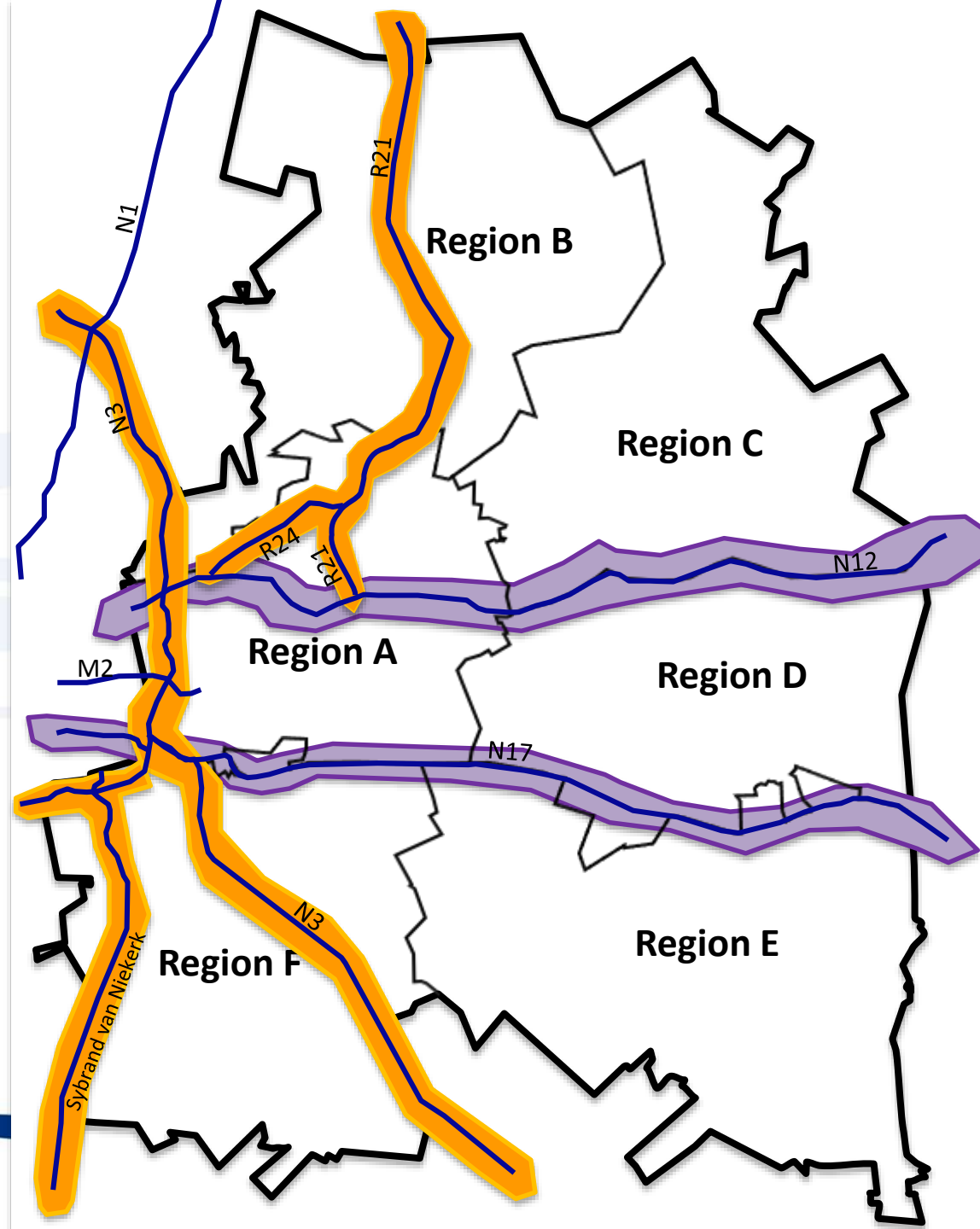


AVAILABLE CAPACITY AT WASTE WATER TREATMENT PLANTS



Connectivity

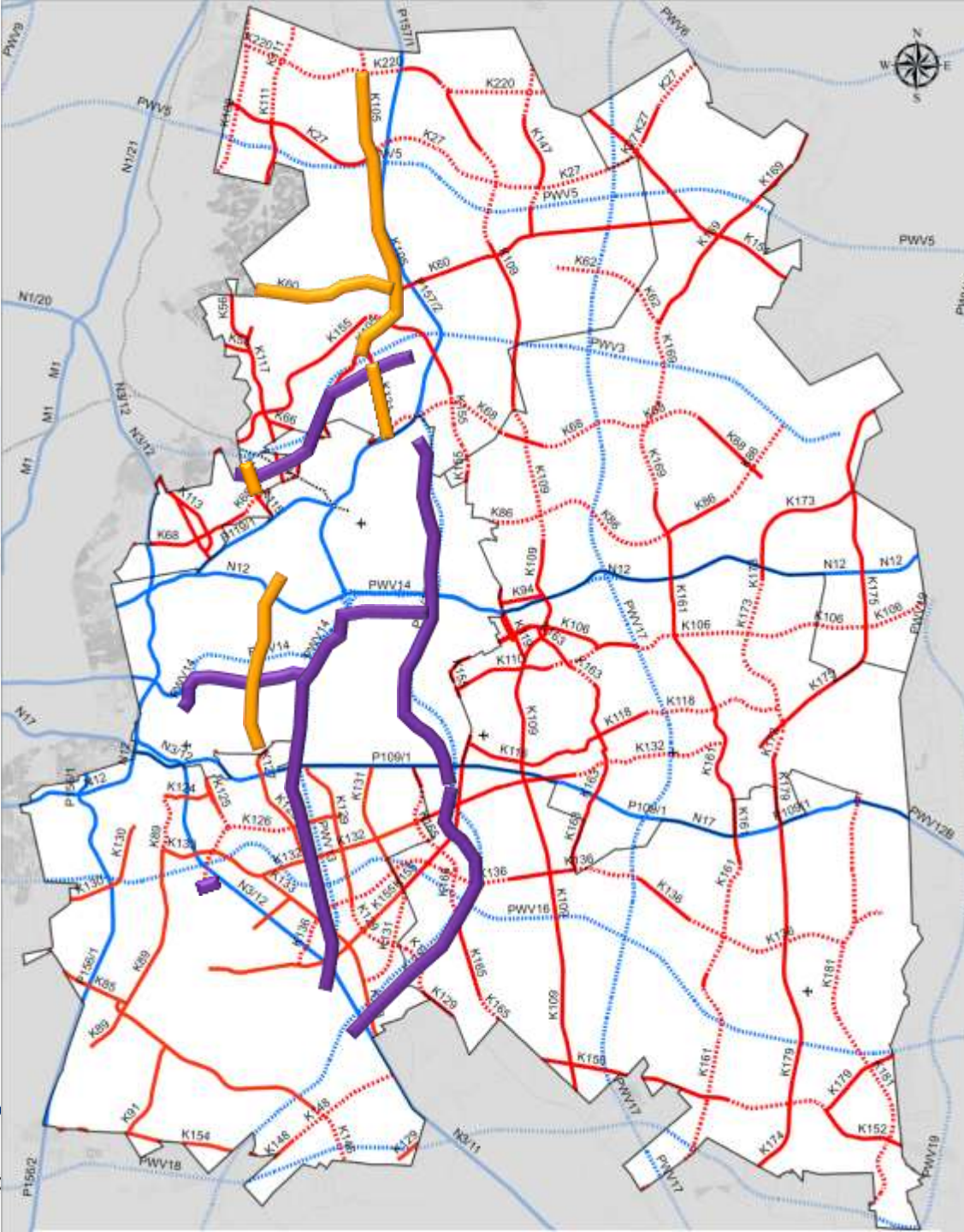
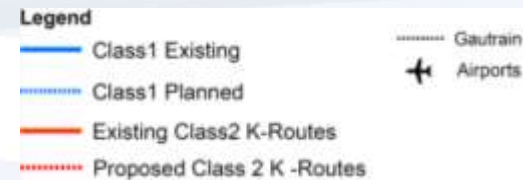
- Regional Accessibility – National Roads



Main findings: Accessibility

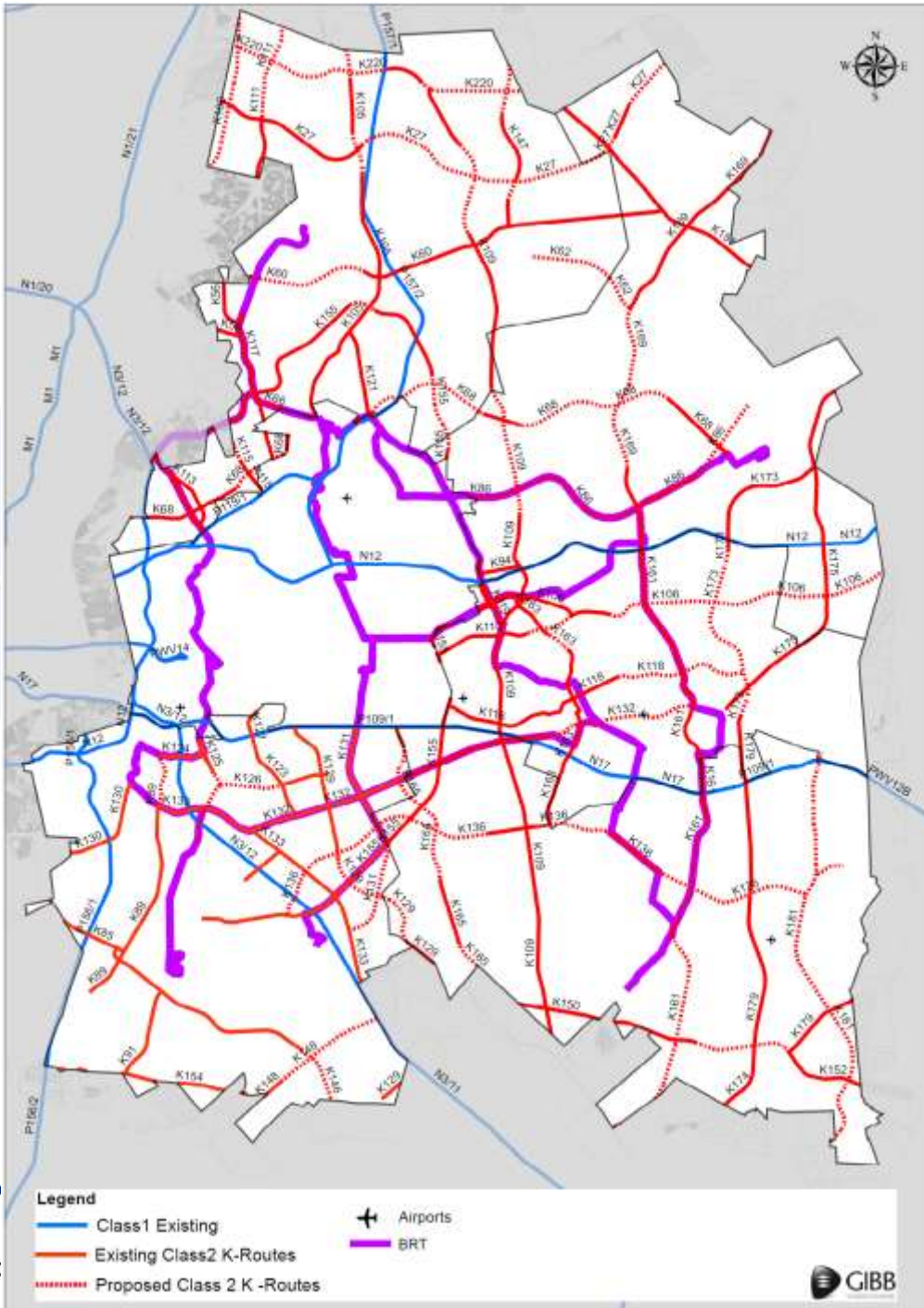
Priority roads in terms of
the EMM Road Master
Plan, June 2013

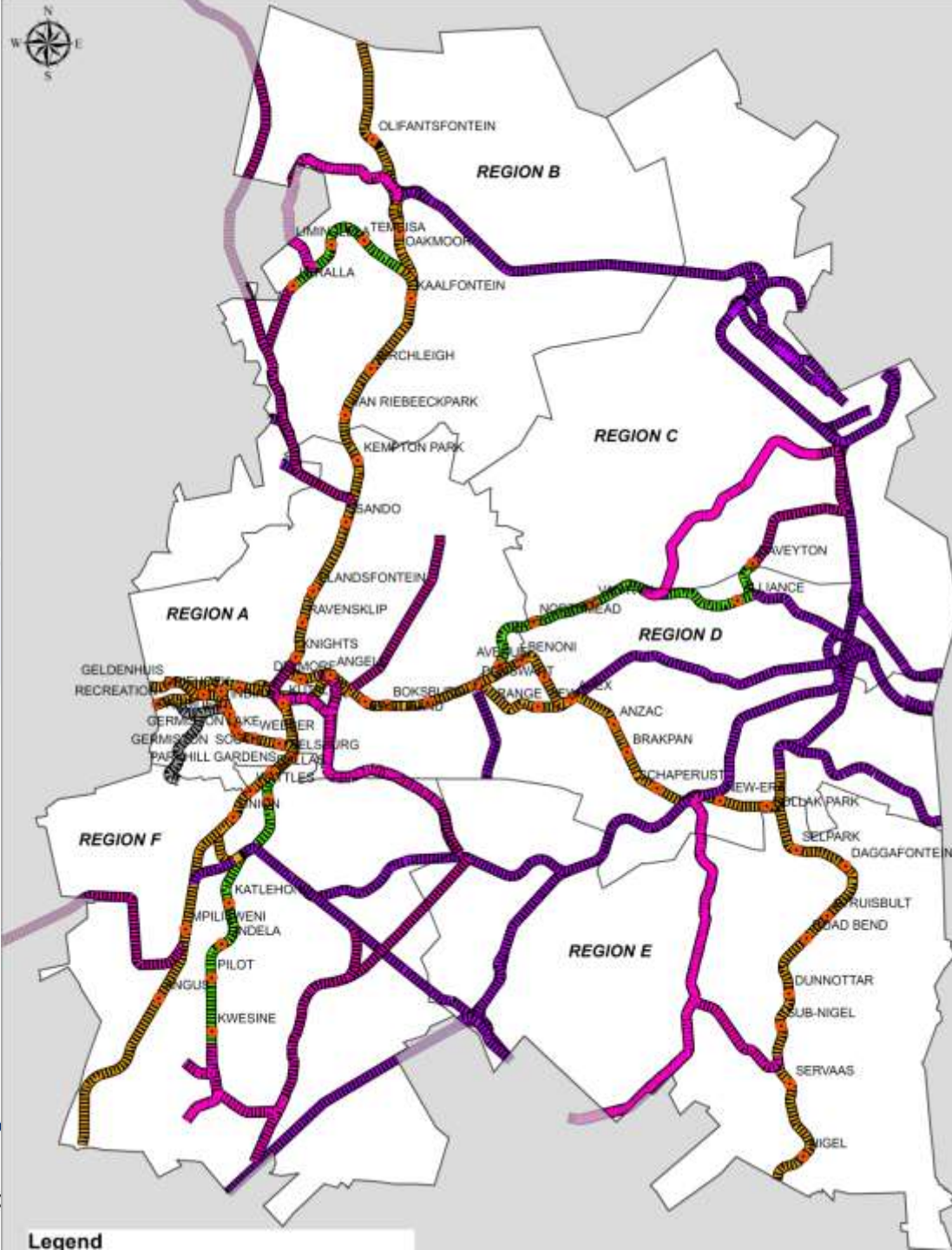
- Class 1
- Class 2



Main findings: Accessibility

Proposed BRT network



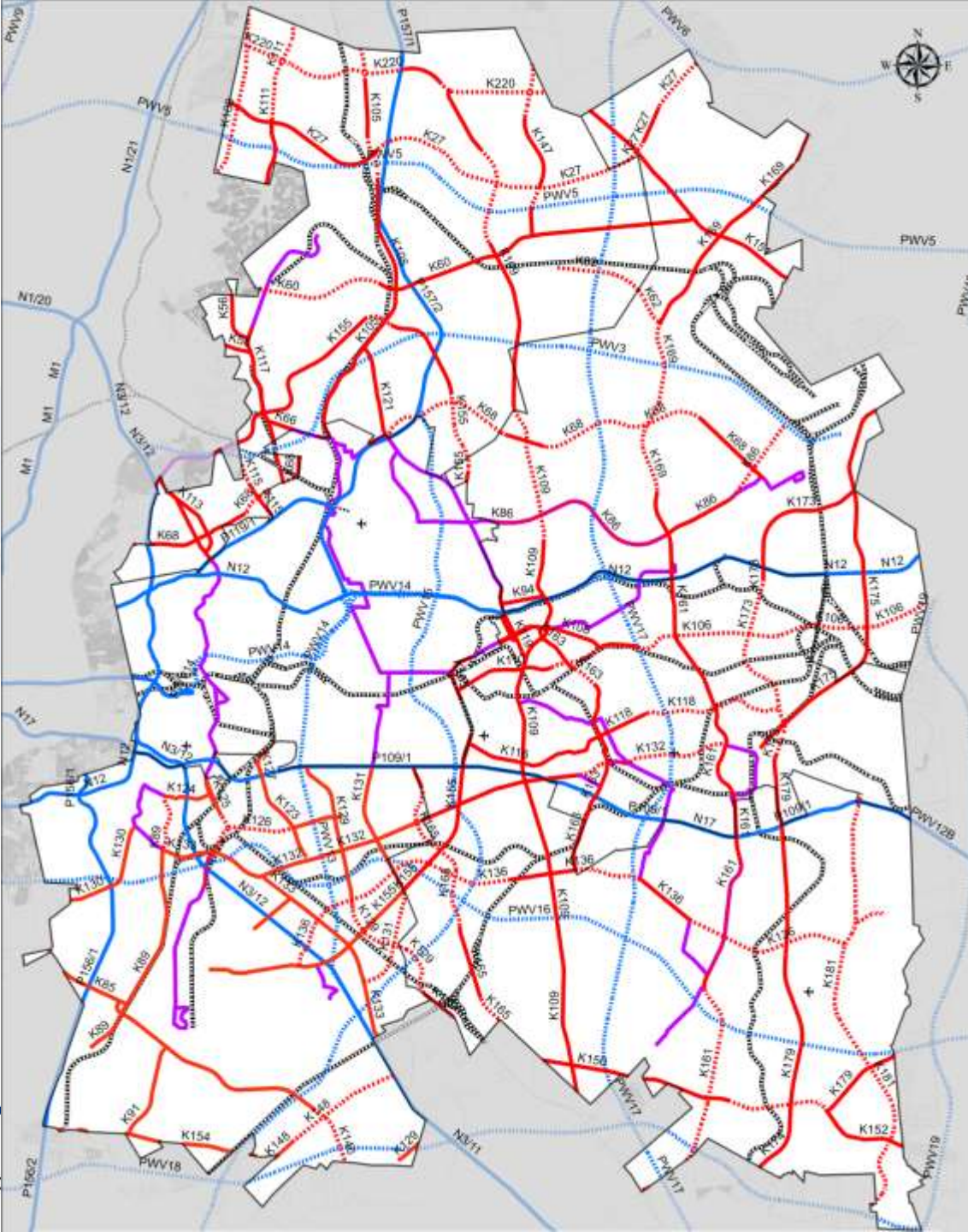


Main findings: Accessibility

Rail network (existing and proposed)

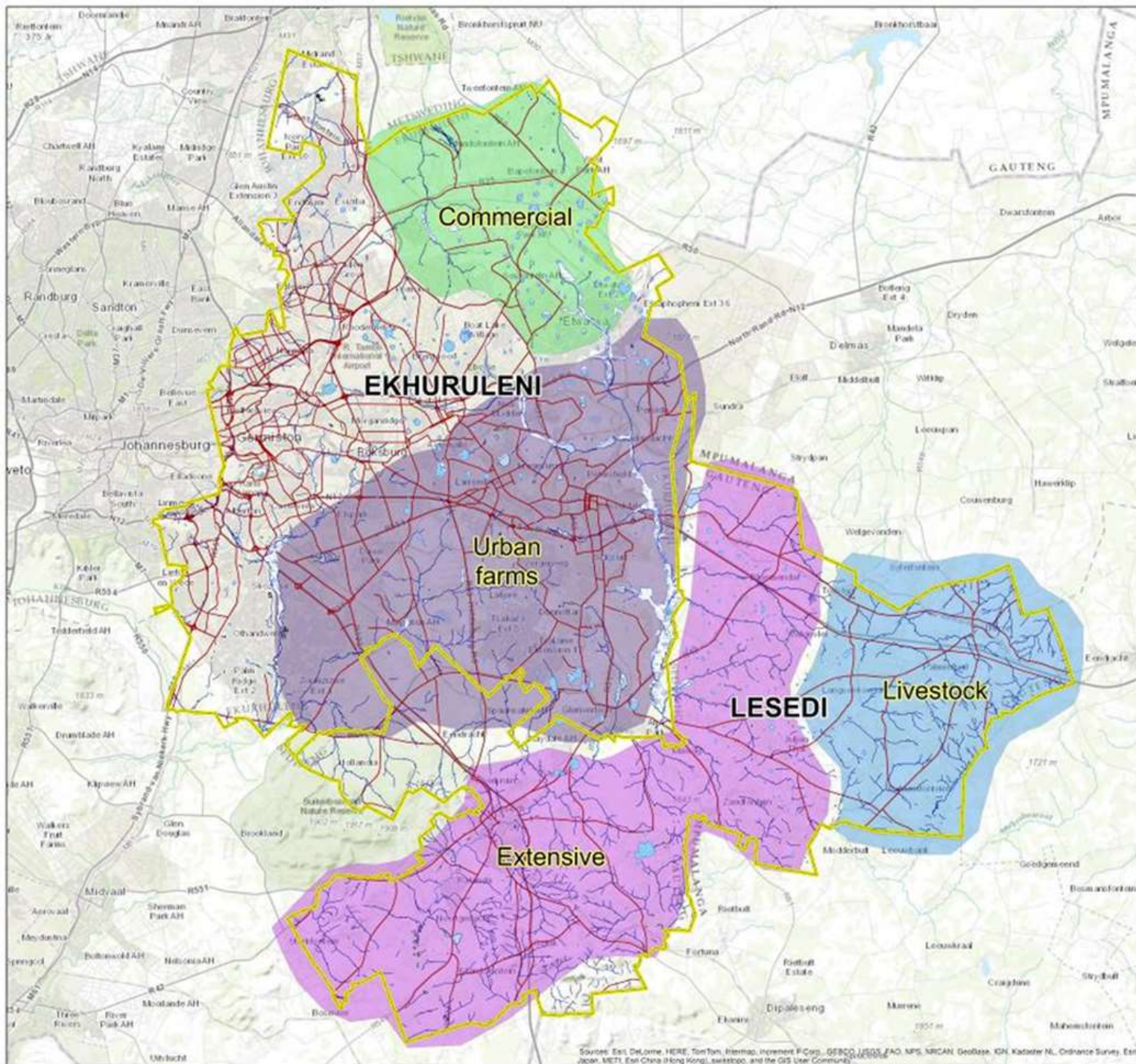
Main findings: **Accessibility**

Road, BRT and Rail
network



Re-Govern

Spatial reconfiguration – Agricultural potential



Spatial Transformation

Spatial Transformation

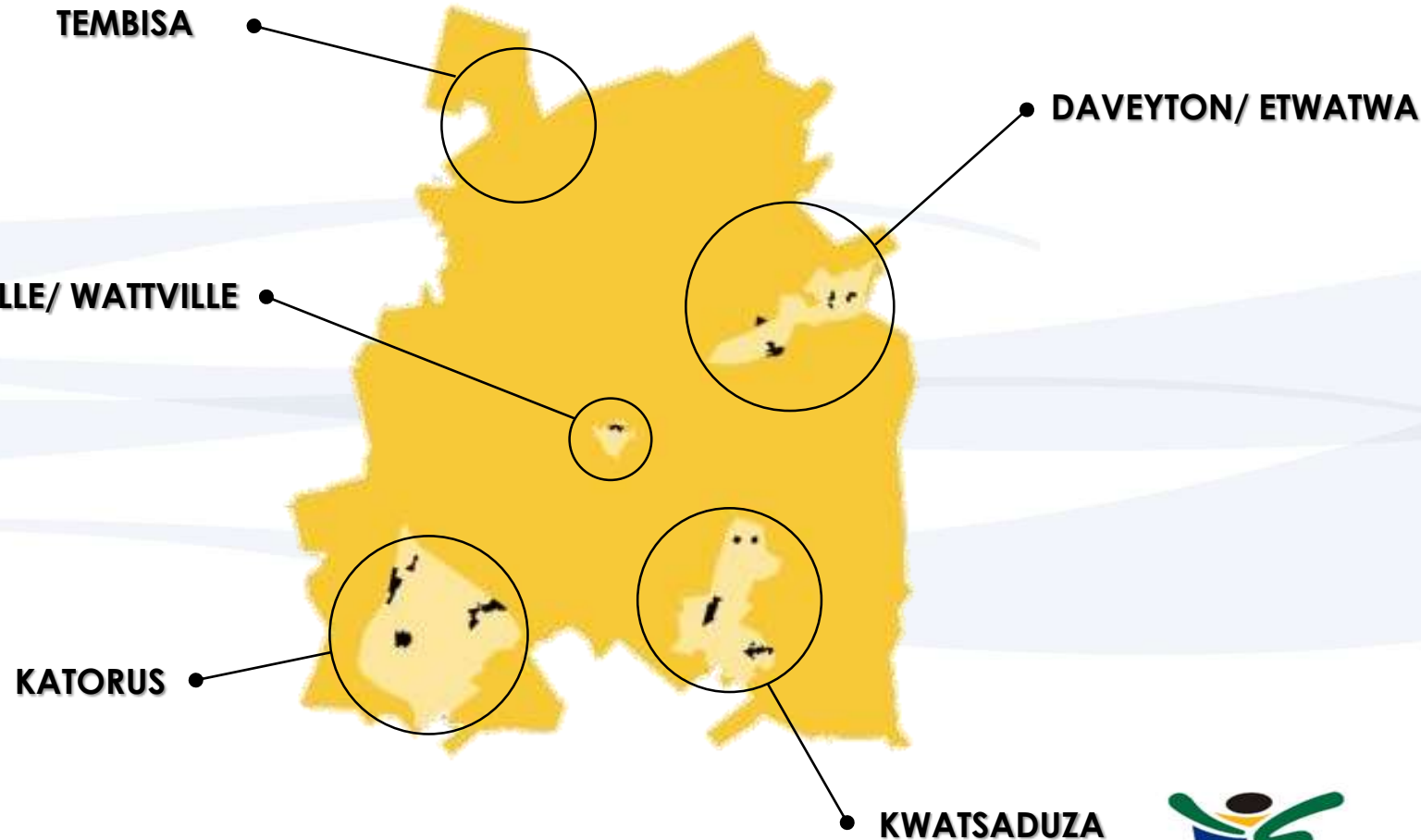


City of
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Township Suburbia

This polarised city form is further exacerbated by the fact that the residential concentration is in townships located in peri-urban areas

17 Townships



Nodal Development Frameworks: Node Selection

Node Selection:

Katorus Complex:

- Kwesine Node
- Vosloorus Node

Kwatsaduza Complex:

- Tsakane Node

Actonville/Wattville Complex:

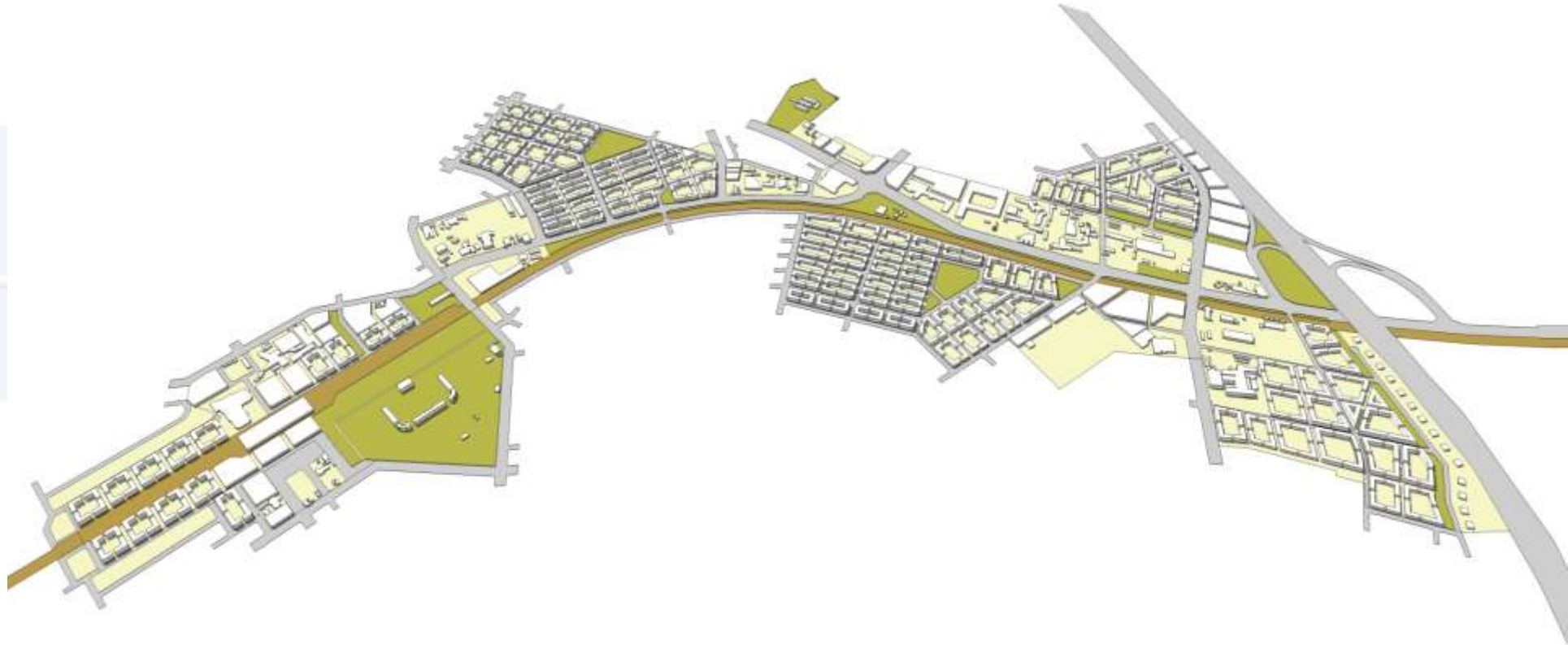
- Actonville/Wattville Node

Tembisa

- Civic, Winnie Mandela, Lerralla Oakmoore, Swazi Inn, Esselen park and Hospital (include Nodes, Corridors and Precincts)



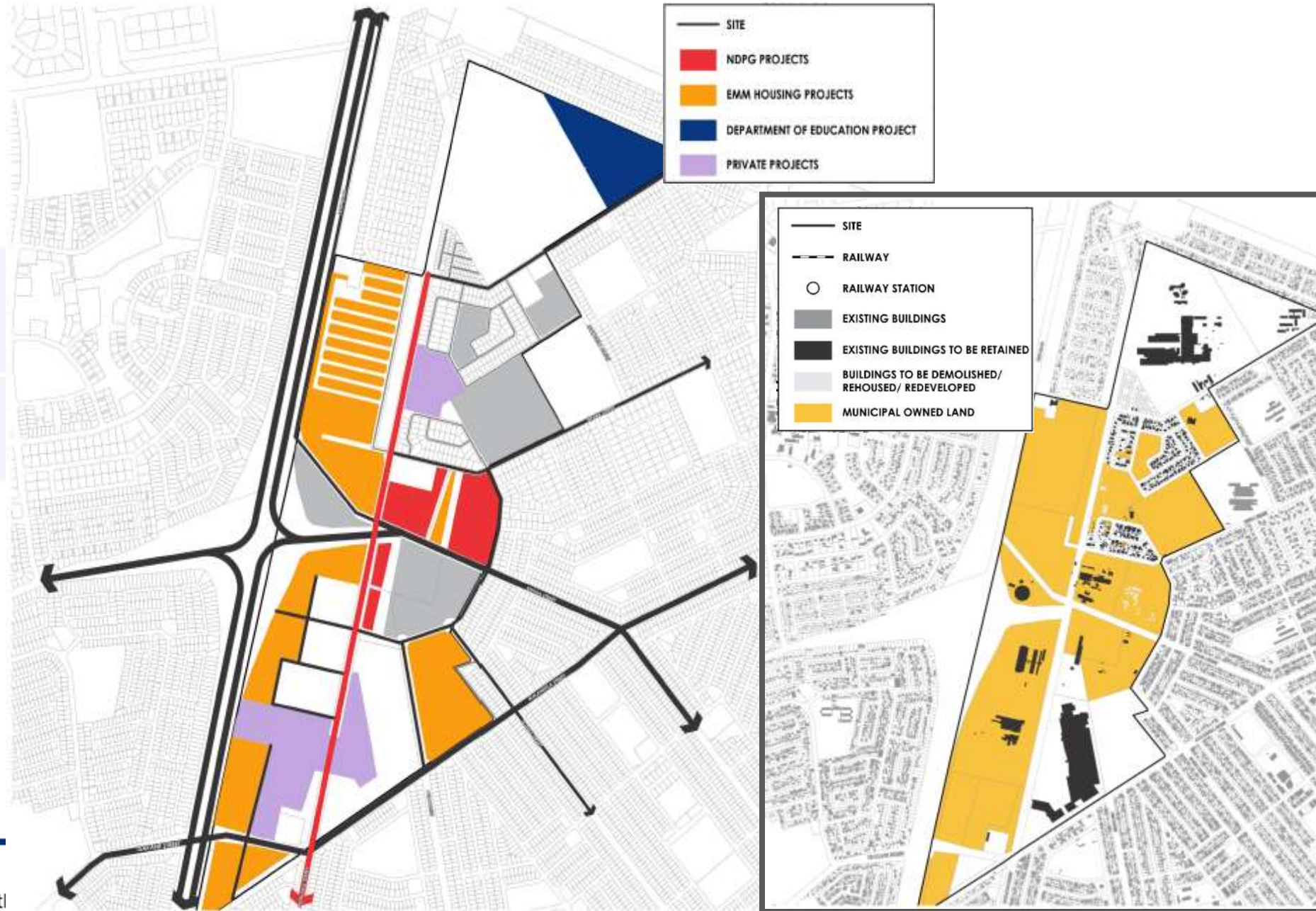
VOSLOORUS DEVELOPMENT VISION



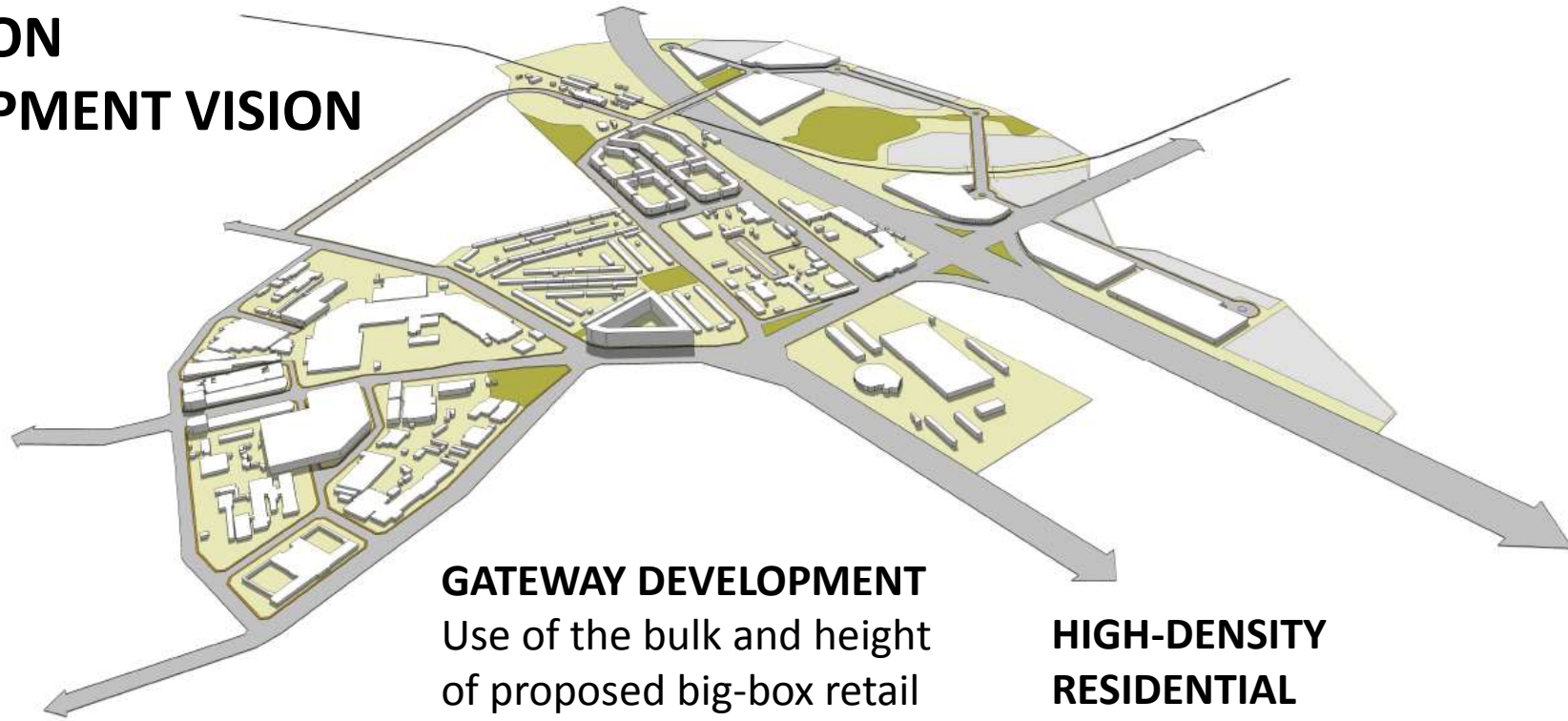
NODAL DEVELOPMENT FRAMEWORKS: KWESINE



TSAKANE PROJECT IDENTIFICATION



DAVEYTON DEVELOPMENT VISION



NODE URBAN FORM

Densifying the Daveyton Node through infill development, using higher-density housing, retail development and other spatial elements, creates an identifiable nodal form.

GATEWAY DEVELOPMENT

Use of the bulk and height of proposed big-box retail centres to edge the main entrances to the Tsakane Node from the N12 Freeway.

Proposed bridge crossing over the N12 Freeway to extend the Daveyton Node south of the freeway

HIGH-DENSITY RESIDENTIAL

Construction of high-density residential buildings between Daveyton Station and Daveyton Mall to increase densities near the commuter railway station is support the public transportation facility.

THEMBISA CIVIC NODE VISION



EMM Spatial Development Framework

EMM Spatial Development Framework

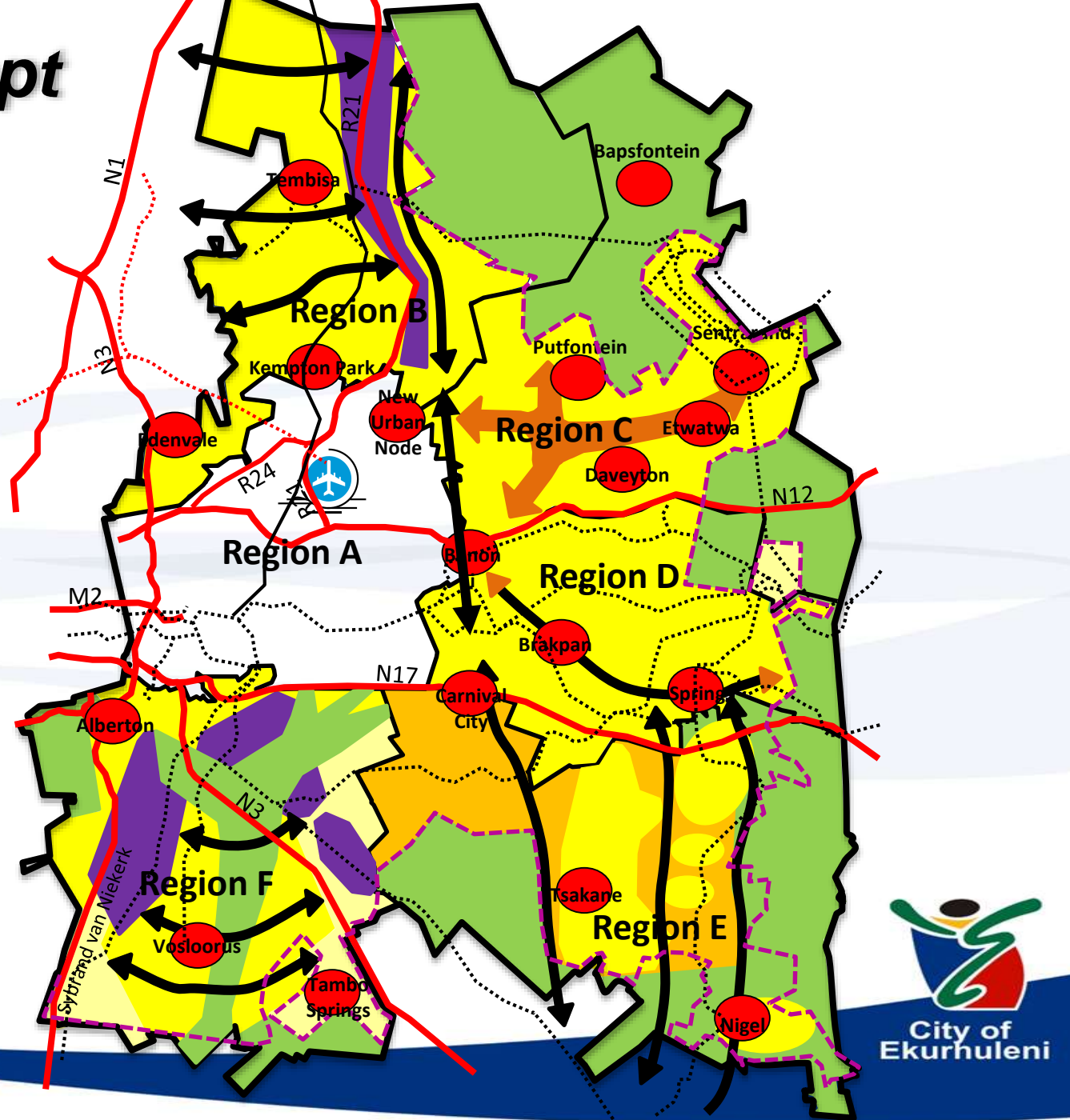


City of
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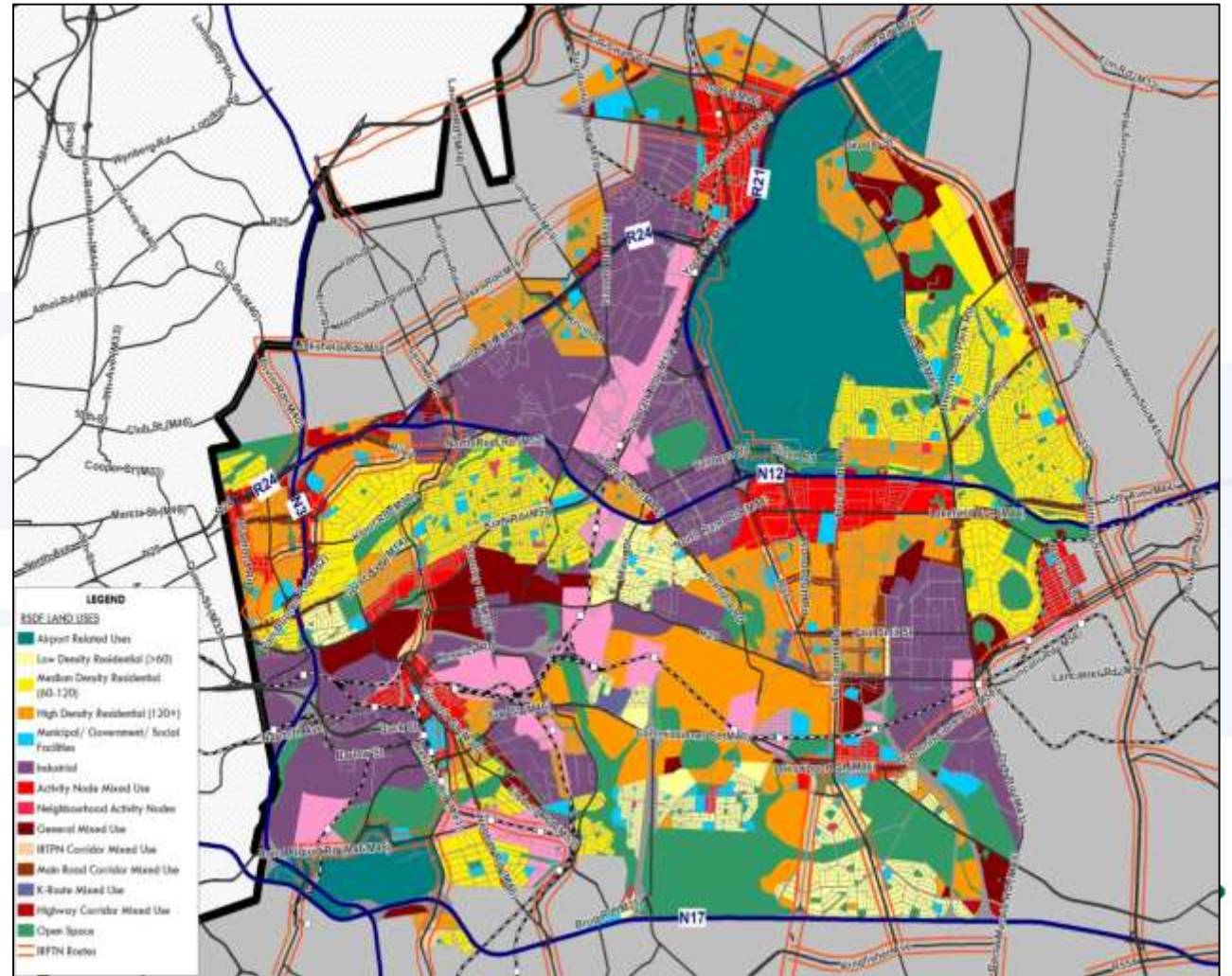
Spatial Development concept

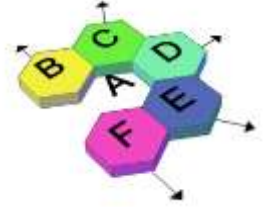
The development concept for Regions B, C, D, E and F relates to **five** basic **development strategies**, these being:

- Effective growth management;
- An effective movement system;
- Sustainable housing/ urban development;
- Sustainable environmental management; and
- Effective engineering services delivery.



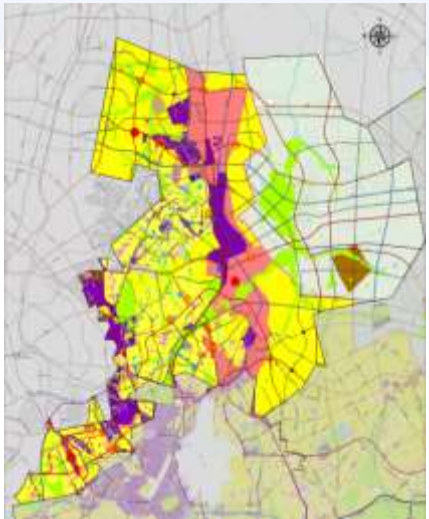
Approved Regional Spatial Development Framework for Region A





Approved Regional Spatial Development Frameworks for Regions (RSDFs 2015 B – F)

RSDF **B**



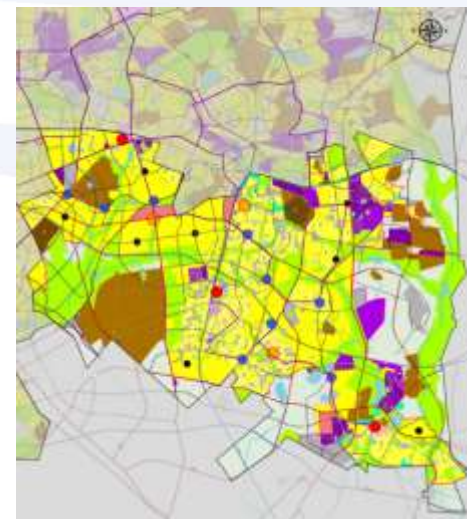
RSDF **C**



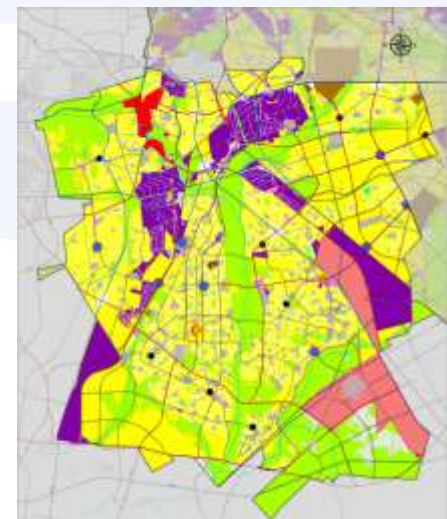
RSDF **D**



RSDF **E**

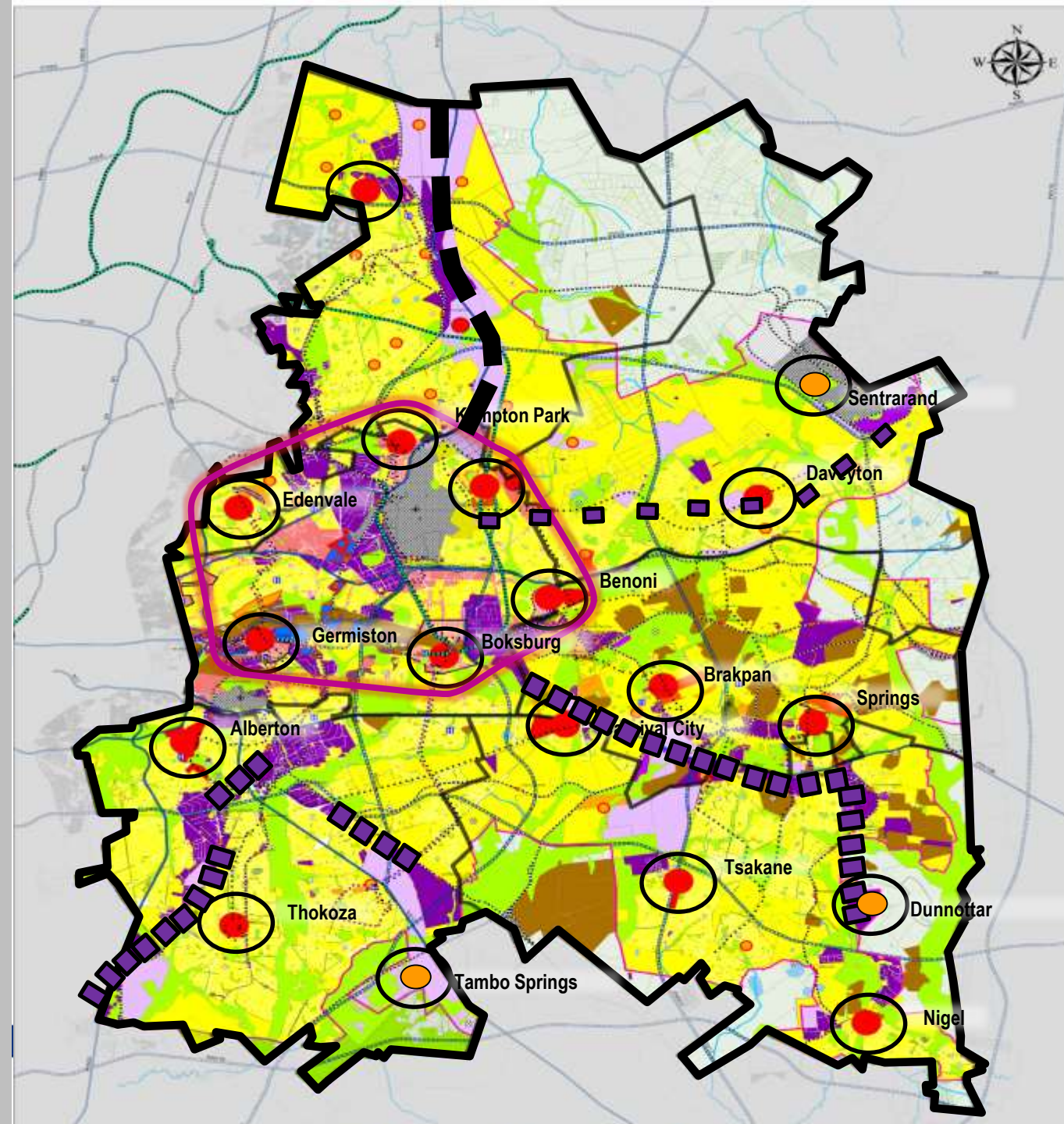
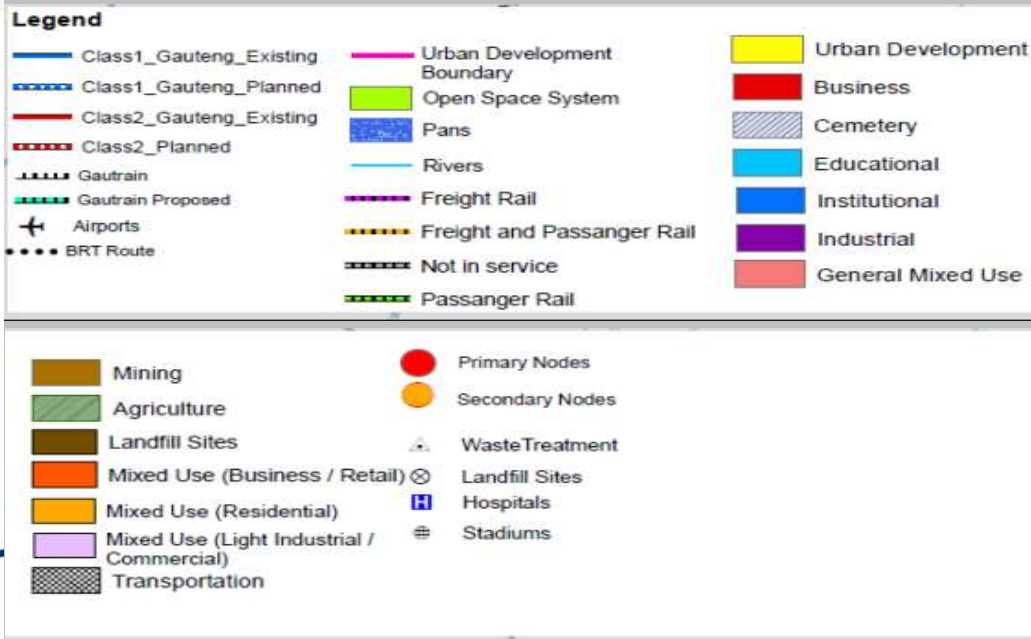


RSDF **F**



Approved MSDF 2015

- Metropolitan identity
- Urban boundary
- Growth management
- Strategic densification
- Extended zones of opportunity
- Conservation, consolidation and linkage



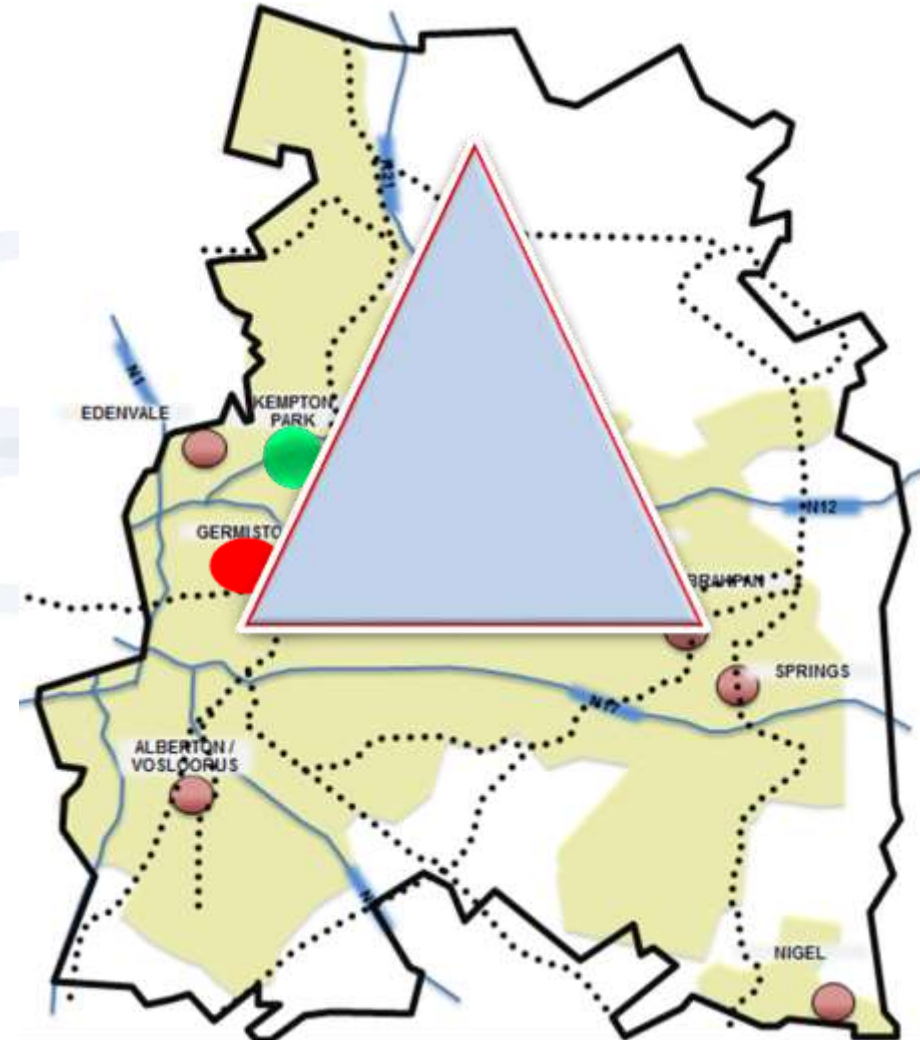
Current form of City and Beyond

Nine Fragmented urban satellites towns of PWV complex, is a challenging discourse that continues to stretch infrastructure development

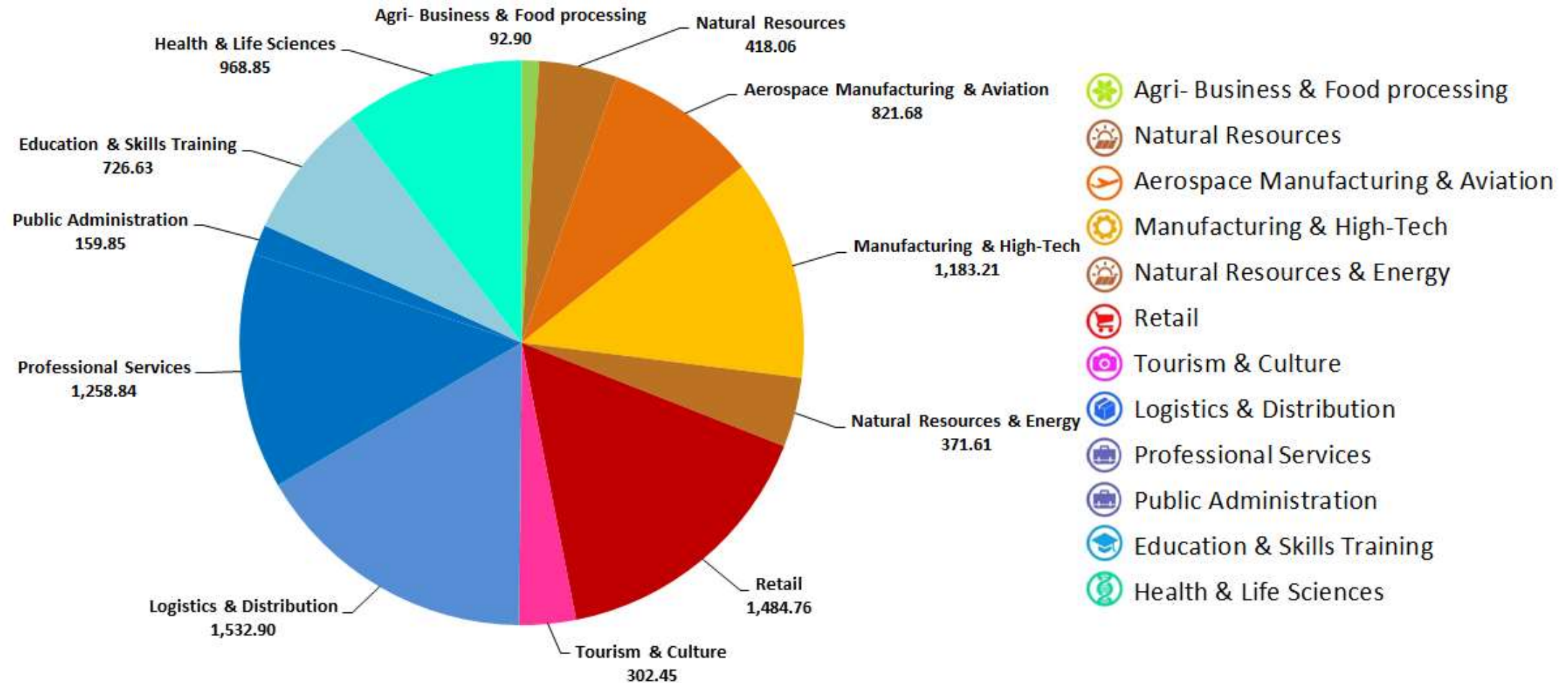
- 9 towns

The **dual city core** consisting of two primary nodes that complement and support each other, that is;

- **Germiston** as an Administrative headquarters of EMM
- **Kempton park** as a cultural and economic hub encored by the Aerotropolis



Aerotropolis preliminary yield and Land requirements



Capital Investment Framework

Capital Investment Framework



City of
Ekurhuleni

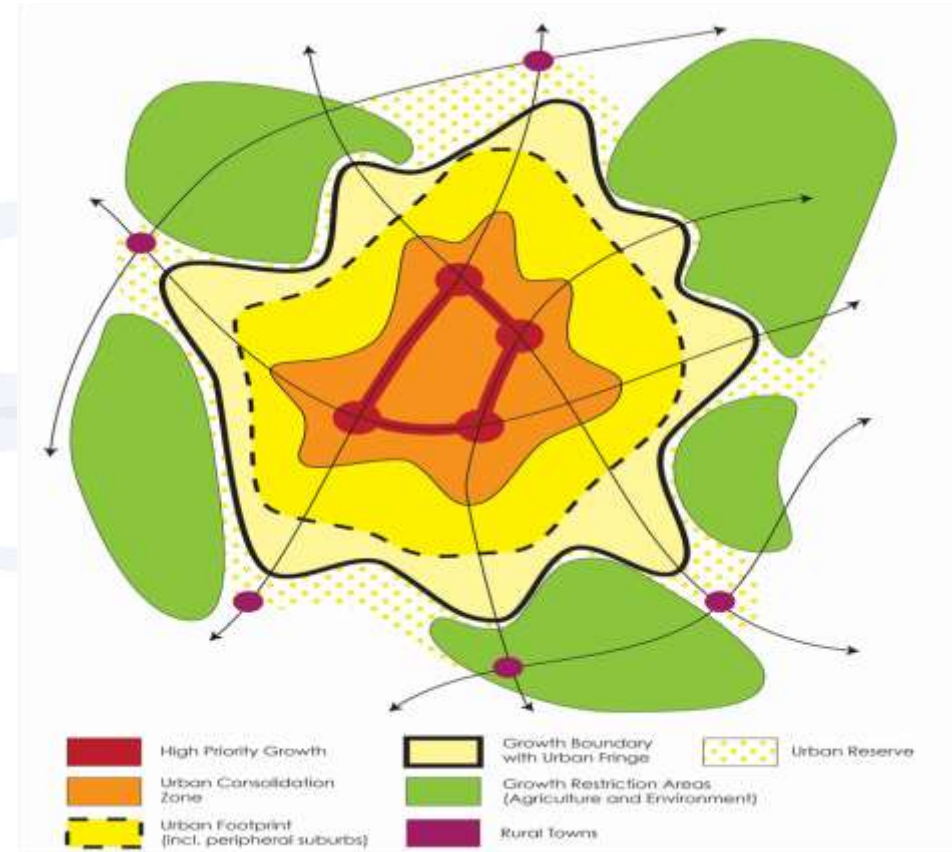
Understanding Growth Management

To sustain a Sustainable City the City should have a clear stance on Gauteng Growth Management in order to properly manage growth, there are four important steps or actions to be taken, namely:

- Step 1: Understanding growth, its extent and its implications
- Step 2: Planning for growth
- Step 3: Creating the necessary conditions
- Step 4: Taking Responsibility for growth

Policy and Planning, which includes inter alia Urban Growth Boundaries (Urban Edge) and Spatial Development Frameworks;

- Land Use Management;
- Fiscal instruments such as rates and taxes and bulk service contributions;
- Capital investment in terms of infrastructure, public transport, social facilities and the public realm; and
- Urban Management



Urban development principles

The following principles will inform the RSDFs:

1. Urban Development Boundary

The purpose of the urban boundary is to create an **urban edge for the city beyond which no further development will be allowed** in order to achieve a sustainable **compact city** in the interest of all its citizens.

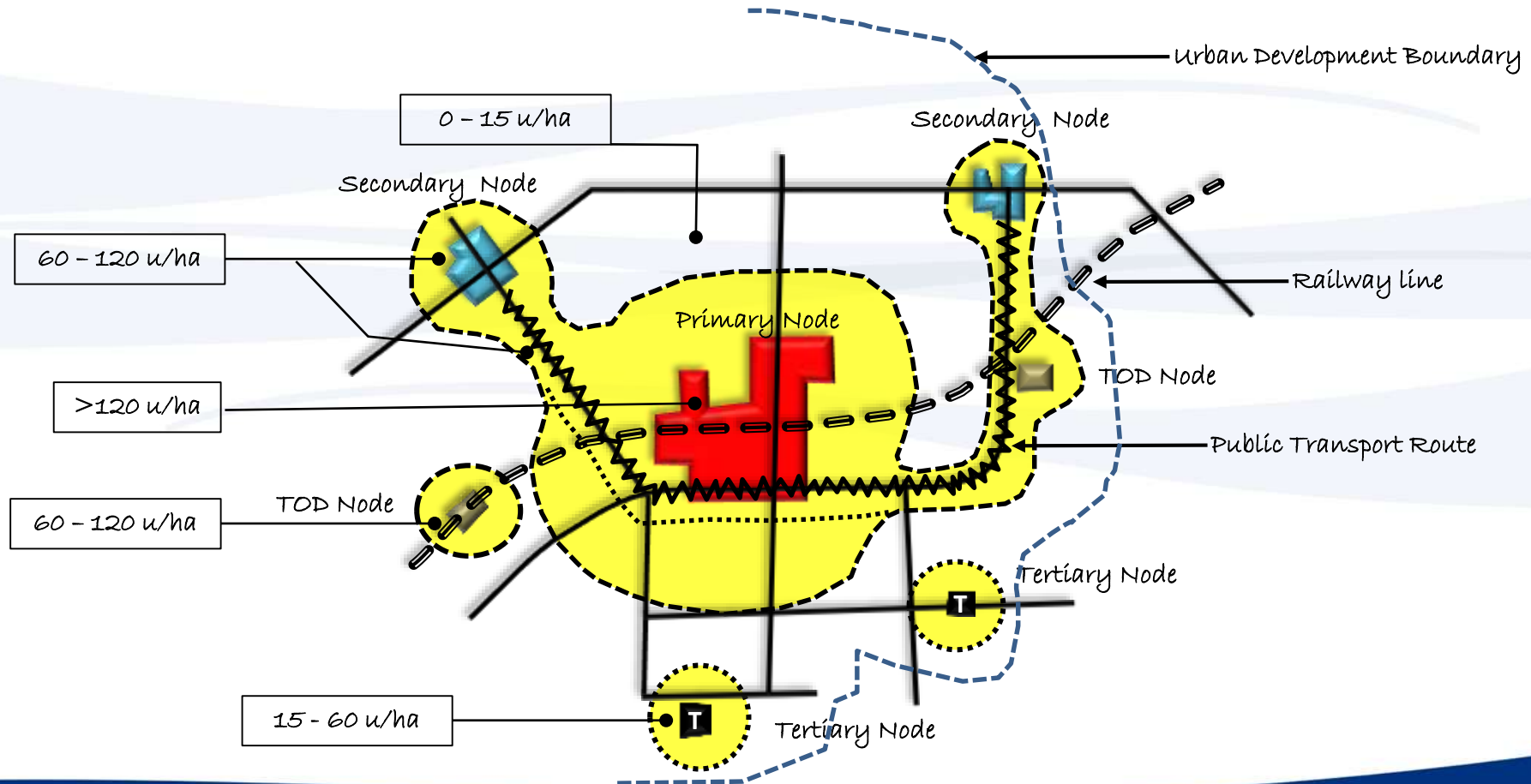
The following **criteria** were applied to determine the boundary:

- Protection of the agricultural resource;
- Present growth trends at a regional and local level;
- Creating a compact urban footprint;
- Allowance for realistic urban growth; and
- Reduction of peripheral urban growth.

Urban development principles

Densification

Densification is fundamental to restructure the EMM towards a compact city, which optimises its resources and services.



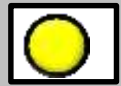
RE-URBANISE



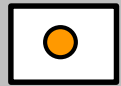
Metro Core



Nodal retrofit



New nodal development



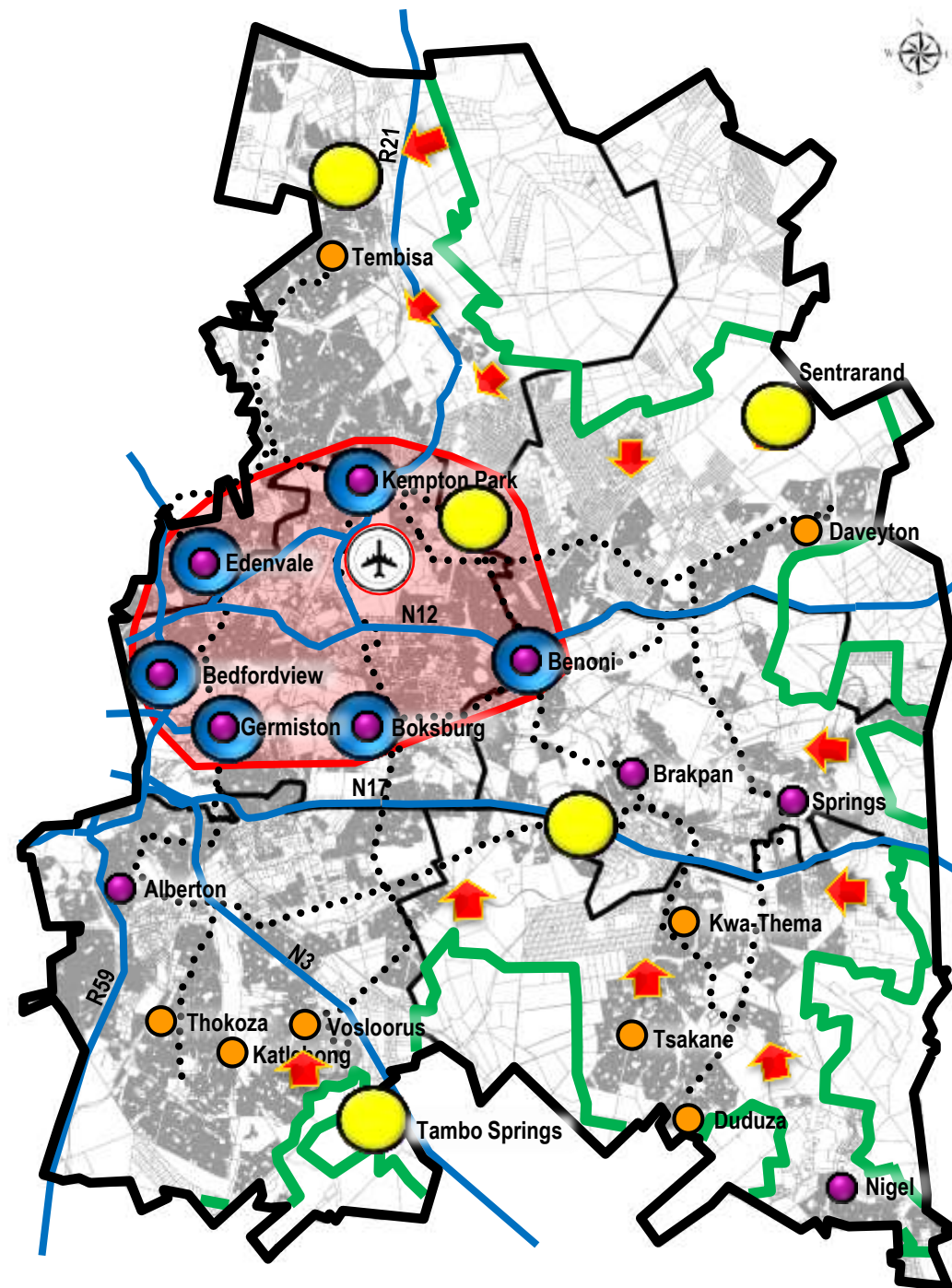
Regeneration areas



Public transport

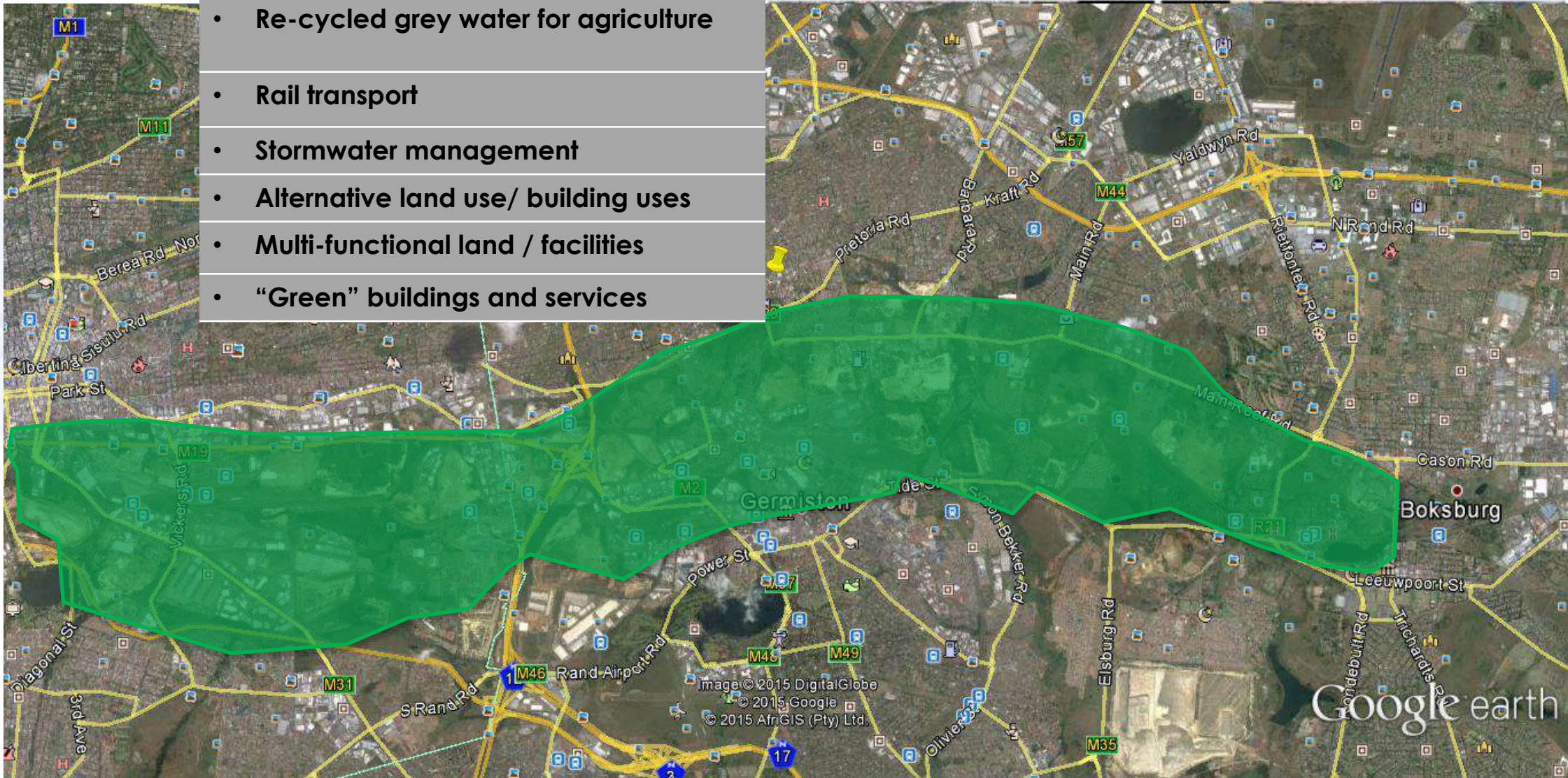


Permanent urban boundary



RE-GENERATE

- Re-cycled grey water for agriculture
- Rail transport
- Stormwater management
- Alternative land use/ building uses
- Multi-functional land / facilities
- “Green” buildings and services



RE-GENERATE Mega Spatial Projects



RE-GENERATE Mega Spatial Projects

Develop a transit oriented development



RE-GENERATE Mega Spatial Projects

Residential & Education & Innovation



RE-GENERATE
Mega Spatial Projects
Retail & Maker & Industrial

Commercial & Research & Medical



a partnership

RE-GENERATE Mega Spatial Projects

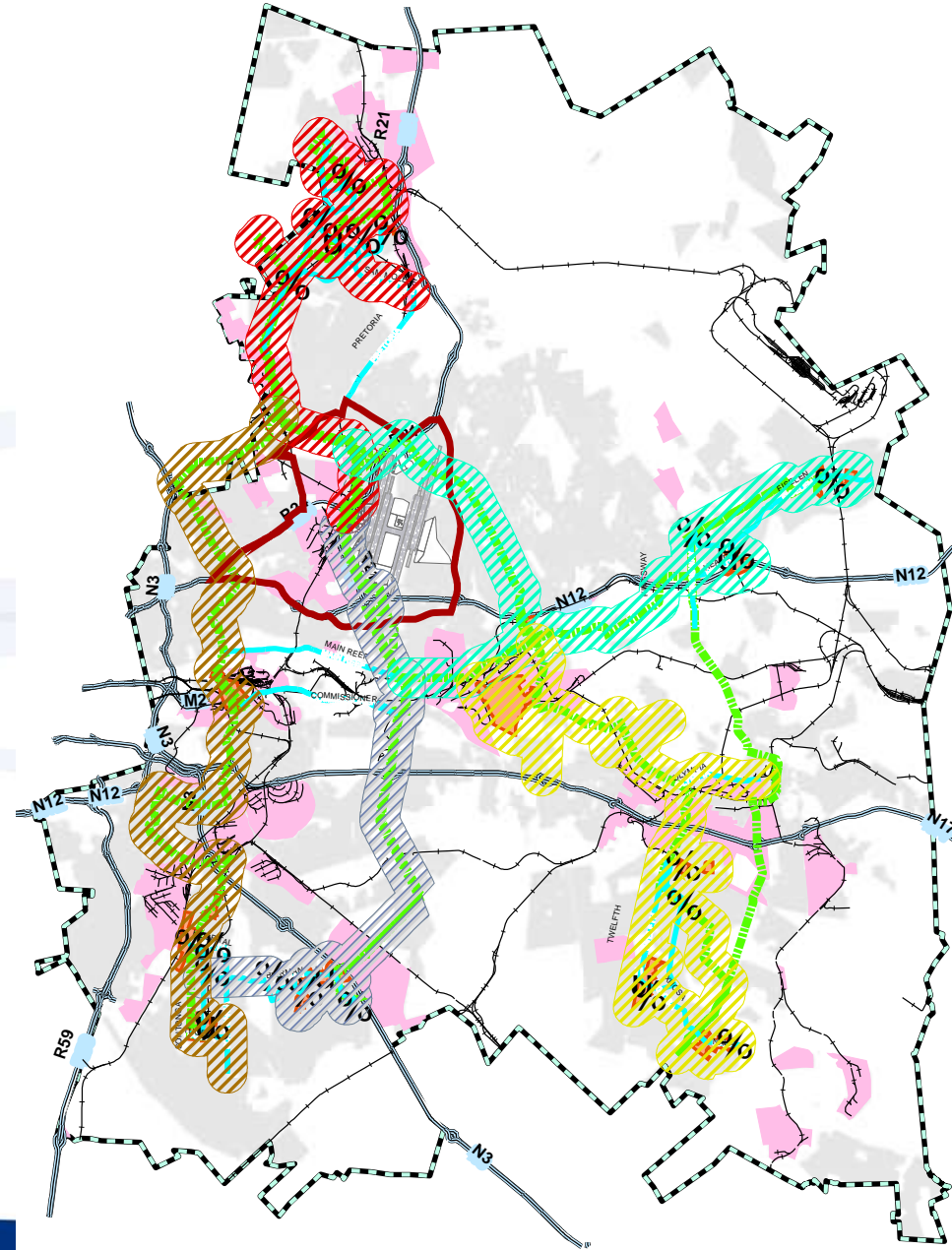
3 500 000m²Retail & Maker & Industrial

Green Reef's Innovation District



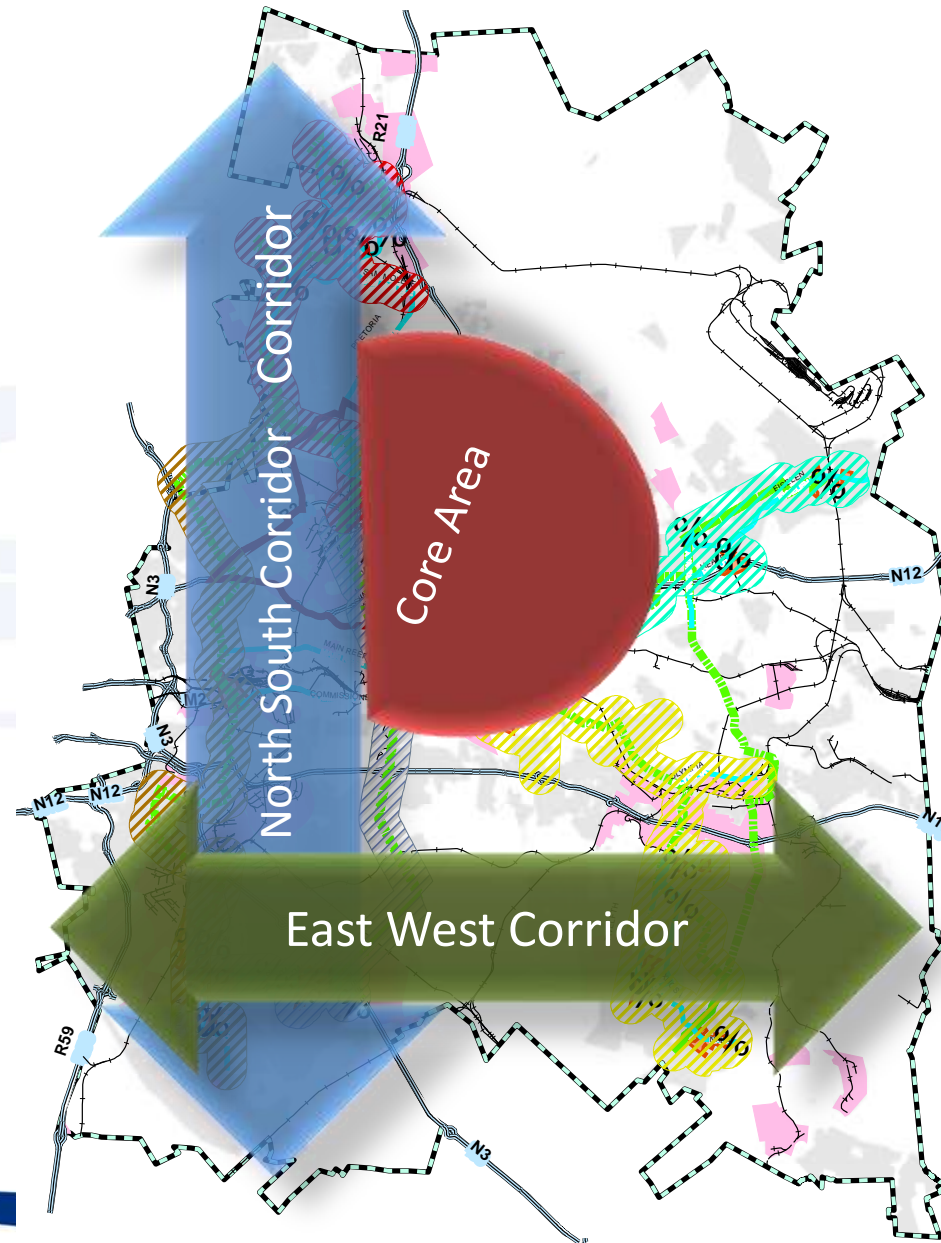
Geographic priority area

- Industrial Townships
- National Highways
- Railway Network
- Township regeneration Projects
 - Tembisa
 - Tsakane
 - Katlehong
 - Vosloorus
 - Daveyton
- Primary Transport Links (IRPTN Network)
- Secondary Linkages (Local roads/Bus routes/ Taxi Routes)
- CBD (Aerotropolis Core)
- Urban Hubs
- Secondary Nodes (Economic potential)
- Integration Zone 1 (Tembisa-CBD)
- Integration Zone 2 (Vosloorus-CBD)
- Integration Zone 3 (Katlehong-CBD)
- Integration Zone 4 (Daveyton- CBD)
- Integration 5 (Tsakane-CBD)



Geographic priority area

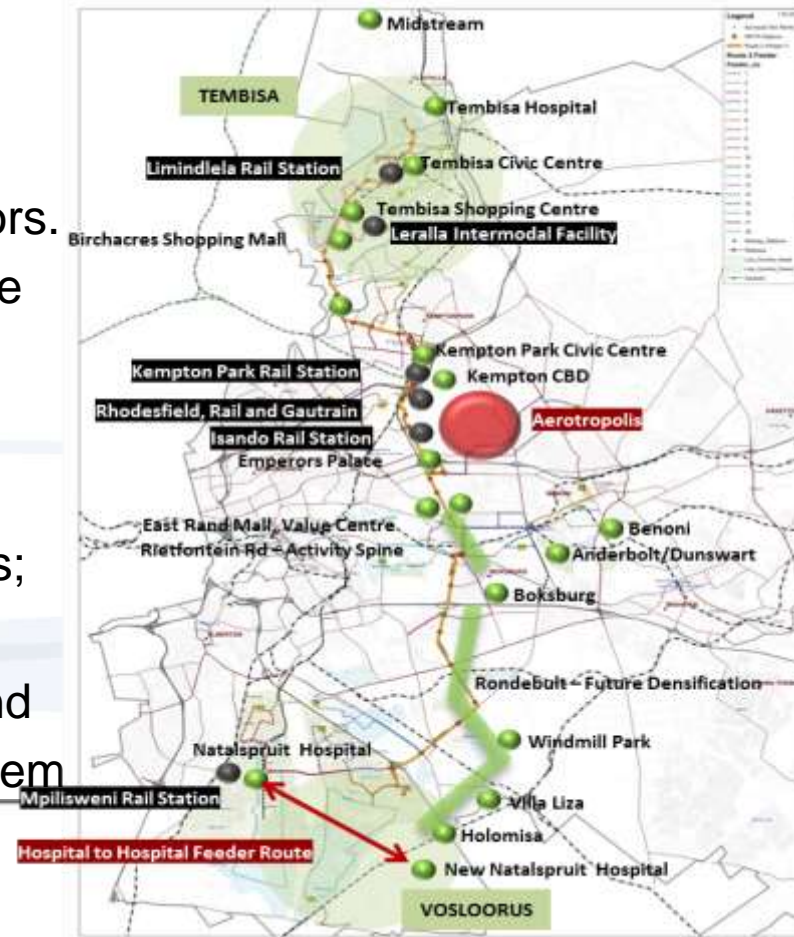
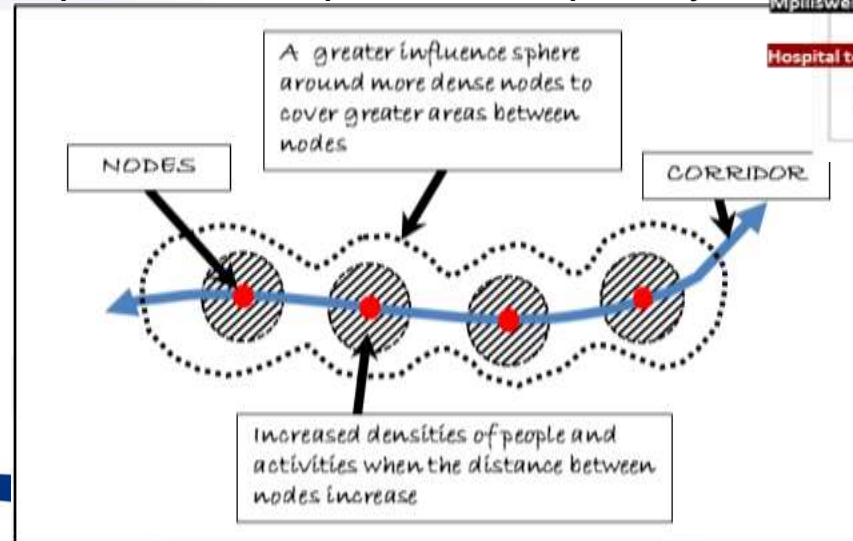
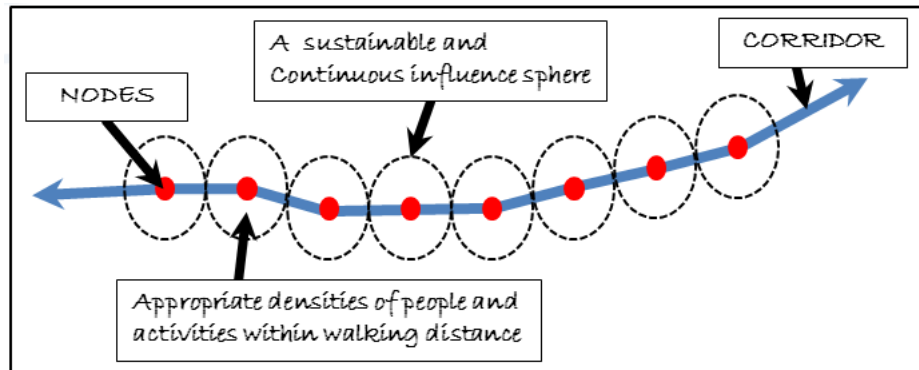
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Urban development principles

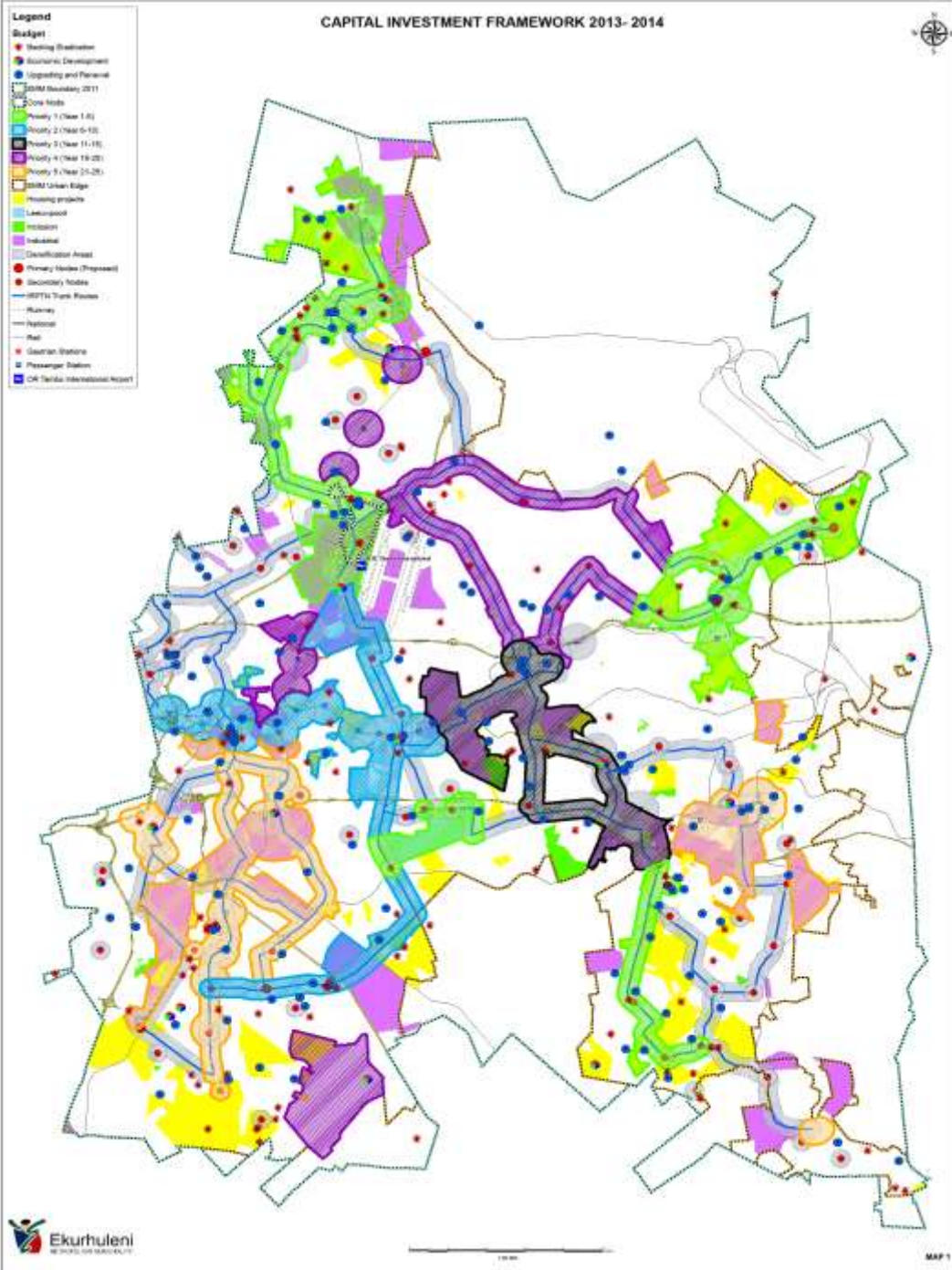
Nodes and corridors

- **Beads-on-a-string** development is preferred to define development corridors.
- The **BRT network** within the regions presents key features for a sustainable public transport system and support the beads-on-a-string model. The key features are:
 - ✓ nodes being connected by viable links along the route;
 - ✓ mixed land use developments with increased densities at suitable nodes;
 - ✓ walkable distances to and from stations;
 - ✓ tertiary nodes that incorporate the social facilities which are required; and
 - ✓ the accompanied NMT services to complement the public transport system

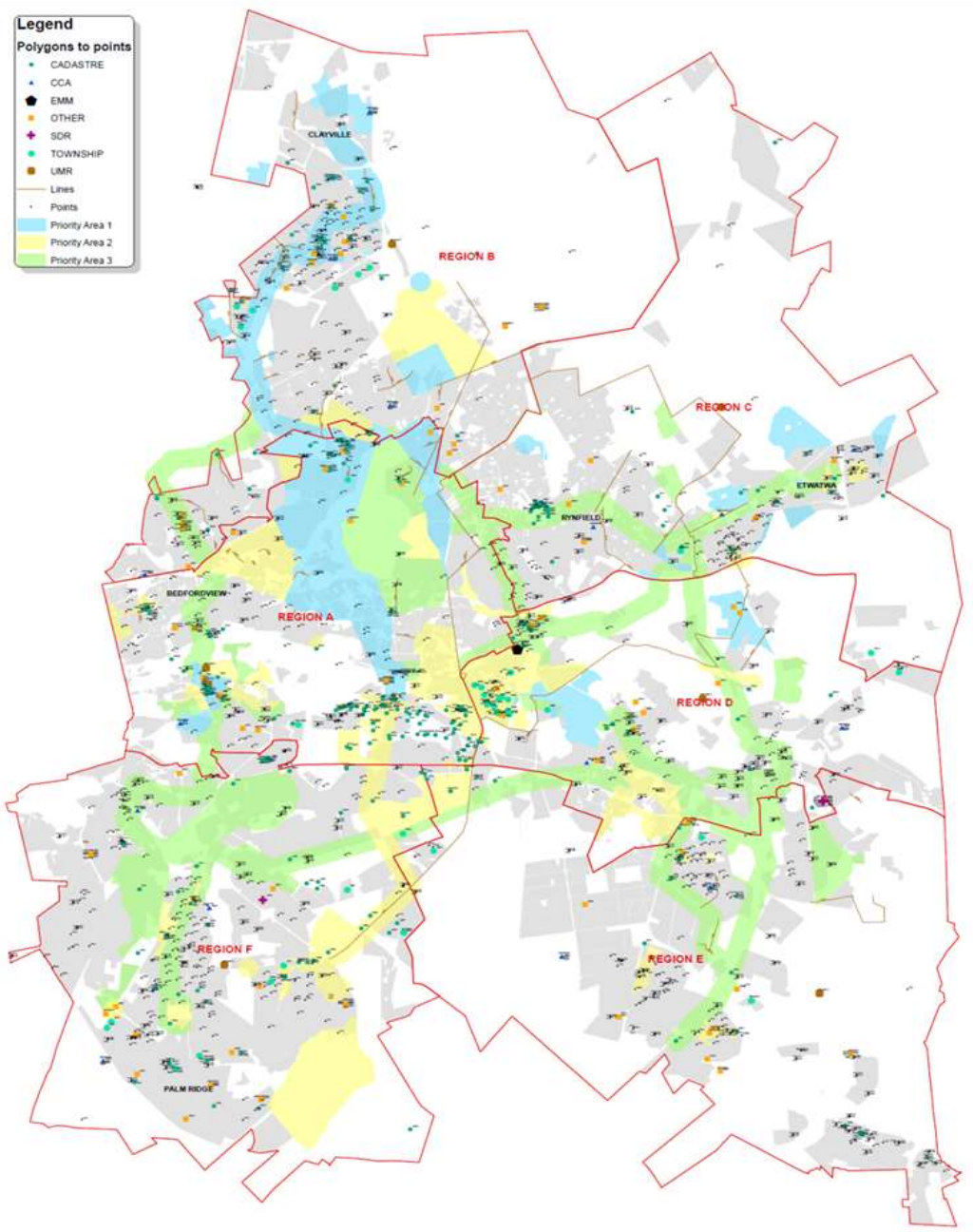


CIF Principles

- Economic growth
- Job creation
- Revenue Generation
- Sustainability
- Urban Restructuring
- Densification
- Budget must follow spatial rational
- Spatial & sectoral integration
- Spatial & sectoral prioritization
- Investment confidence
- Area based interventions [central growth area & eastern intervention]
- Community engagement process (public education)



Capital Projects 2013/14



Capital Projects 2014/2015



CATALYTIC PROJECTS



AIR CARGO LOGISTICS HUB & AIRPORT

The Airport Development (D) 2014 includes related infrastructure and commercial development within the airport precinct.



AEROTROPOLIS SPORTS & ENTERTAINMENT HUB

The development includes a mix of sports, entertainment, and commercial facilities.



AEROTROPOLIS TECH R&D HUB

The development includes a mix of research, development, and commercial facilities.



AEROTROPOLIS INTERMODAL CREATIVE HUB

The development includes a mix of creative, office, and retail facilities.



AEROTROPOLIS GATEWAY TRADE HUB

The development includes a mix of trade, office, and retail facilities.



INNOVATION AND TECH DISTRICTS

Clear tech and light industrial district featuring flex development types, including office and retail services.



COMMUNITY ENTREPRENEURIAL DISTRICTS

District that incorporates light industrial, community supportive retail and land re-utilization strategies.



JUST-IN-TIME OFF-AIRPORT DISTRICT

The development includes a mix of office, retail, and community facilities.



LOGISTICS PLATFORMS

The development includes a mix of logistics, office, and retail facilities.



LOGISTICS PLATFORMS WITH STORAGE

The development includes a mix of logistics, office, and retail facilities.



MASTER PLANNED COMPLETE COMMUNITY

Mixed-use district that emphasizes mid-density residential, and balances lifestyle retail with class-A office.



MANUFACTURING & PRODUCTION CENTRES

The area described do not preclude related industrial and commercial development, rather than, but prioritize.

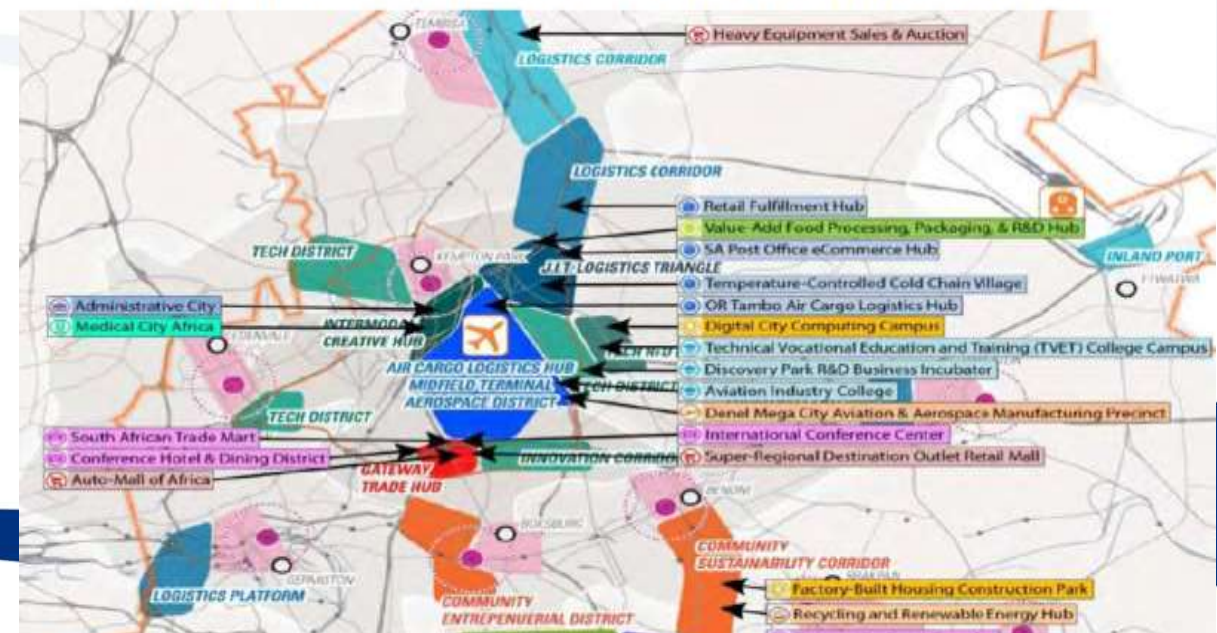


COMMUNITY ORIENTED DISTRICTS

The development includes a mix of office, retail, and community facilities.



CATALYST PROJECT LOCATION MAP



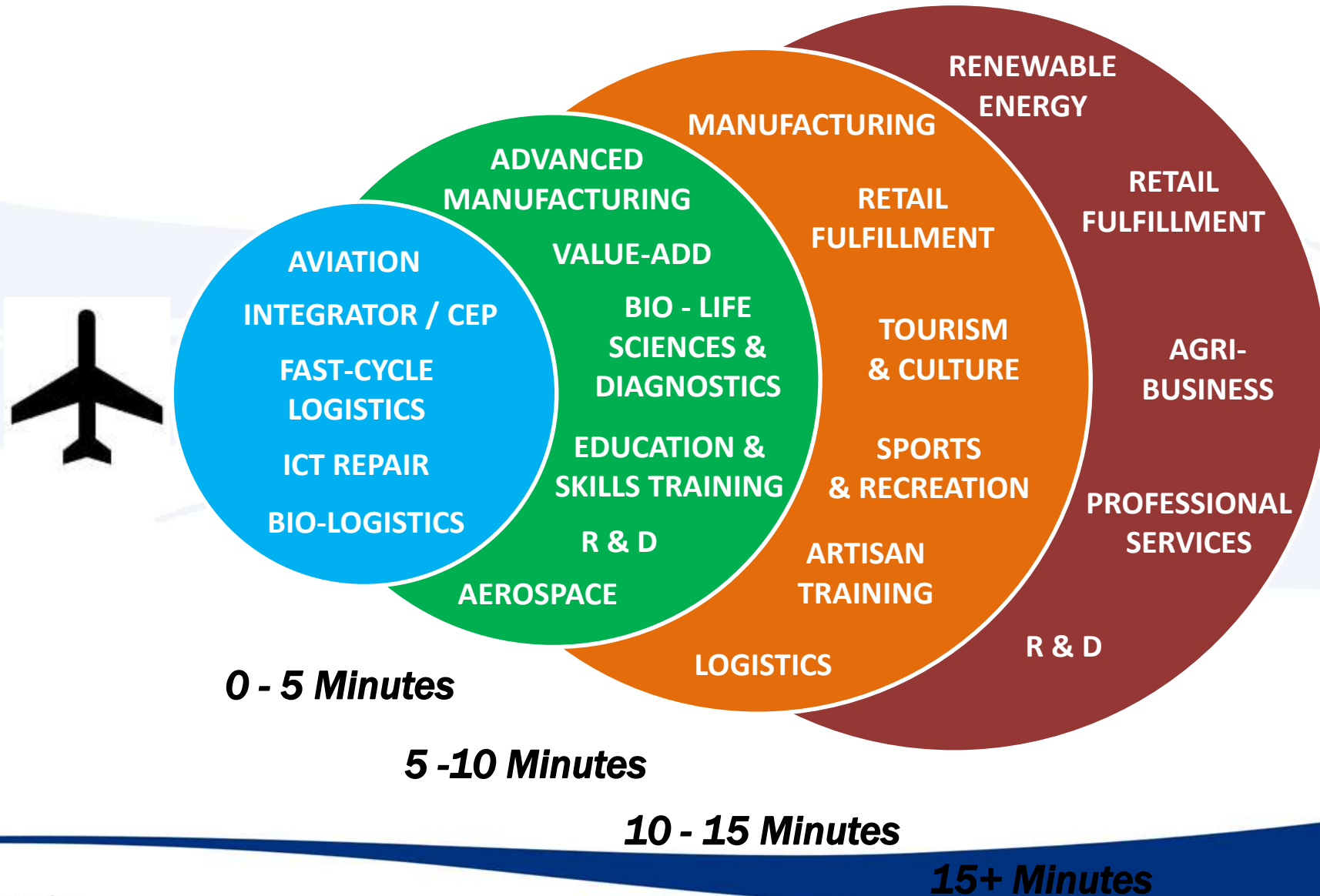
Land Assembly Catalytic Profiles

Land Assembly Catalytic Profiles



City of
Ekurhuleni

DRIVE-TIME DISTANCE BY ECONOMIC ACTIVITY



Gauteng Jewellery Precinct IDZ

LOCATION IN EMM



LOCATION AS IDENTIFIED



LAND PROFILING (Only suitable land)

Property Description	Re Portion 30 Witkoppie 64-IR
Zoning	Agriculture
Current Land Use	Mostly Vacant
Size	Approx 29 ha (However to be reduced by impact of K90)
Ownership	Private
RSDF & MSDF Considerations	Earmarked for 'Airport Related Uses' in RSDF A.

PROJECT DETAILS

Project Purpose / catalytic effect	Focus on jewellery manufacturing, from cutting to polishing and finishing, as well as support services, including logistics, insurance, finance and licensing.
Location	Just-In-Time off airport district
Implementing Agent	Industrial Property Developer
Project Value	R 267m
Project Schedule	Unknown
Project status and documentation available	Started
Land Size Required	725ha (Total IDZ)



OR Tambo Air Cargo Logistics Hub

LOCATION IN EMM



LOCATION AS IDENTIFIED



LAND PROFILING (Example along R21)

Property Description	Portion 282 Witkoppie 64IR (OR Tambo Airport)
Zoning	Transportation
Current Land Use	Mostly vacant – Portion under consideration.
Size	Approx 52ha
Ownership	ACSA
RSDF & MSDF Considerations	Earmarked for 'Airport Related Uses' in RSDF A.

PROJECT DETAILS

Project Purpose / catalytic effect	Expand Cargo Facilities at OR Tambo Situated adjacent proposed mid-field terminal
Location	Logistics Hub – International Airport
Implementing Agent	ACSA with PPP
Project Value	R 1 738m
Project Schedule	2-3 years
Project status and documentation available	Unknown
Land Size Required	60 ha



Strategic Land Parcels

Strategic Land Parcels



City of
Ekurhuleni

SLP 1.1 : GERMISTON LAKE – GOLF COURSE

LOCATION IN EMM



SLP CATEGORY

CATEGORY 4: LAKES & DAMS

SLP OVERVIEW

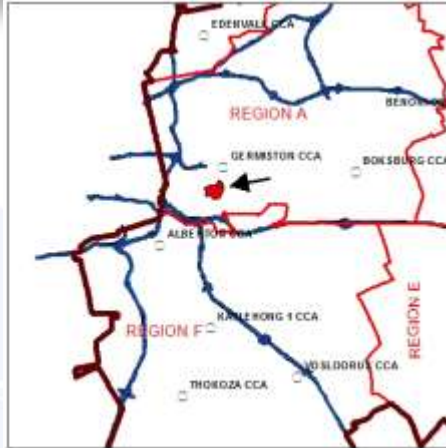
SLP Objective	Release and redevelopment of Germiston Golf Course to better optimize facilities.
Ward	Ward 36
Region	Region A
Location	Germiston CBD
Existing Land Use	Golf Course
MSDF Alignment	In line with RSDF & MSDF.
Special Considerations	Environmentally Sensitive

LAND PROFILING

SLP Sub Area	Property Description	Zoning	Size	Proposed Transfer	Market Value
None	Remainder of Portion 99 of the Farm Elandsfontein 108,	Private Open Space	31.3ha	Lease	R204 000
	Remainder of Portion 149 of the Farm Elandsfontein 108	Private Open Space	39.1ha		
	Erf 58 Airport Park Extension 1	Public Open Space	79.8ha		

SLP 1.2 : GERMISTON LAKE – LAKE PARK

LOCATION IN EMM



SLP CATEGORY

CATEGORY 4: LAKES & DAMS

SLP OVERVIEW

SLP Objective	Release and redevelopment of Germiston Lake area to better optimize facilities.
Ward	Ward 36
Region	Region A
Location	Germiston CBD
Existing Land Use	Germiston Lake Park
MSDF Alignment	In line with RSDF & MSDF
Special Considerations	Environmentally Sensitive

LAND PROFILING

SLP Sub Area	Property Description	Zoning	Size	Proposed Transfer	Market Value
Residential 4	Erf 58 Airport Park Extension 1	Public Open Space	2.8ha	Sale	R 1 492 000
Business: Hotel	Erf 57 Airport Park Extension 1 (not part of SLP)	Public Open Space	28.7ha	Lease	R 385 320
Open Space				Lease	R 399 000

SLP 1.2 : GERMISTON LAKE – LAKE PARK



SLP 17 : ALBERTON CIVIC NODE



SLP 20.3: CARNIVAL NODE (SOUTH – COMM)

LOCATION IN EMM	SLP CATEGORY	SLP OVERVIEW														
	CATEGORY 1: QUICK WINS MARKET VALUES <R50m & READY FOR DEVELOPMENT	<table><tr><td>SLP Objective</td><td>Development of vacant land</td></tr><tr><td>Ward</td><td>Ward 31</td></tr><tr><td>Region</td><td>Region E</td></tr><tr><td>Location</td><td>Brakpan (Carnival Node)</td></tr><tr><td>Existing Land Use</td><td>Vacant Land</td></tr><tr><td>MSDF Alignment</td><td>In line with RSDF & MSDF</td></tr><tr><td>Special Considerations</td><td>None</td></tr></table>	SLP Objective	Development of vacant land	Ward	Ward 31	Region	Region E	Location	Brakpan (Carnival Node)	Existing Land Use	Vacant Land	MSDF Alignment	In line with RSDF & MSDF	Special Considerations	None
SLP Objective	Development of vacant land															
Ward	Ward 31															
Region	Region E															
Location	Brakpan (Carnival Node)															
Existing Land Use	Vacant Land															
MSDF Alignment	In line with RSDF & MSDF															
Special Considerations	None															

LAND PROFILING					
SLP Sub Area	Property Description	Zoning	Size	Proposed Transfer	Market Value
Residential(Business 2)	Erven 208 – 211, Van Eck Park X2	Business	2.87ha	Sale	R 6 900 000
Light Industrial	Erf 640, Van Eck Park X2	Residential 3	15202m ²	Lease	R 1 665 000
Public Garage	Erven 250 – 255, Van Eck Park X2	Residential 1	3.2ha	Lease	R 116 000
Retail	Erven 258 and 259, Van Eck Park X2	Residential 1	1.3ha	Lease	R 320 000
Community Facility	Erven 606 – 610, Van Eck Park X2	Public Garage, Business 3, Social Services	2.7ha	Lease	-
Open Space	Erf 638, Van Eck Park X2	Social Services	10233m ²	Lease	-

Development structuring elements

- Urban Consolidation Zones
- Urban Corridors
- Nodes
- Strategic land parcels
- Activity Streets/Spines/High Streets
- Urban Edge
- Urban design
- Eco-systems/Open Spaces
- Transport Oriented Development (TOD)
- Priority Growth Areas
- Rural Towns and Service Centres
- Small scale intensive farming areas
- Ekurhuleni Town Planning Schemes (ETOPS)
- Capital Investment Framework

EMM Structuring initiatives

- **R21 Cluster Development**
 - +/-2500 hectare development of mixed used development to unlock development towards Tshwane MM.
- **The Riverfields Development**
 - Residential, Retail – Super Regional Mall, Automotive, Offices, Education Private school, Education – College, Medical & Other and Hotel
- **Tambo Springs Inland Port**
 - Inland port and logistics Gateway expected to be the largest port in Africa when complete
- **Aerotropolis**
 - One of flagship projects of the City which is poised to be the first Aerotropolis in Africa
- **Rhodesfield Precinct Development (proposed ICC)**
 - Re-thinking of Rhodesfield as area of opportunity in as part to the Aerotropolis development and re-urbanization
- **Glen Gory Nodal Development**
 - A super regional nodal development of new upmarket Mixed use urban precinct incorporating a super regional Mall
- **Donnottar Rail Industrial Park**
 - 580 trains to manufactured at a new industrial park in Dunnottar on the East Rand. The facility should produce 65 trains a year
- **Reading Junction**
 - Residential, Retail – Super Regional Mall, Automotive, Offices
Education – Private school, Education – College, Medical & Other and Hotel
- **Modderfontein**
 - A new Urban Node to re-energise this growth nodes by creating sustainable developments which offer ideal area for business, industry, and communities to prosper

INVESTMENT PROJECT FACILITATED AND REALISED

RHODESFIELD DEVELOPMENT

Rhodesfield Redevelopment
as per Urban Development
Framework and OR Tambo
International Airport Link



GAUTENG SEZ - JEWELLERY



Precinct Plans Precinct Plans



City of
Ekurhuleni



The **Bredell Precinct** is large in size, measuring a total of 2783ha in extent. It is located to the east of the Kempton Park CBD area, and north east of O.R Tambo Airport. It primarily comprises residential area and agricultural smallholdings, and is scattered with fairly small scale commercial and industrial sites.

The north of the site is most densely covered by agricultural land, with larger tracts of farming land located beyond the Bredell area to the east.

The Bredell area could principally be defined as an agricultural production area which also offers wider outdoor recreation activities such as horse riding and BMX racing.

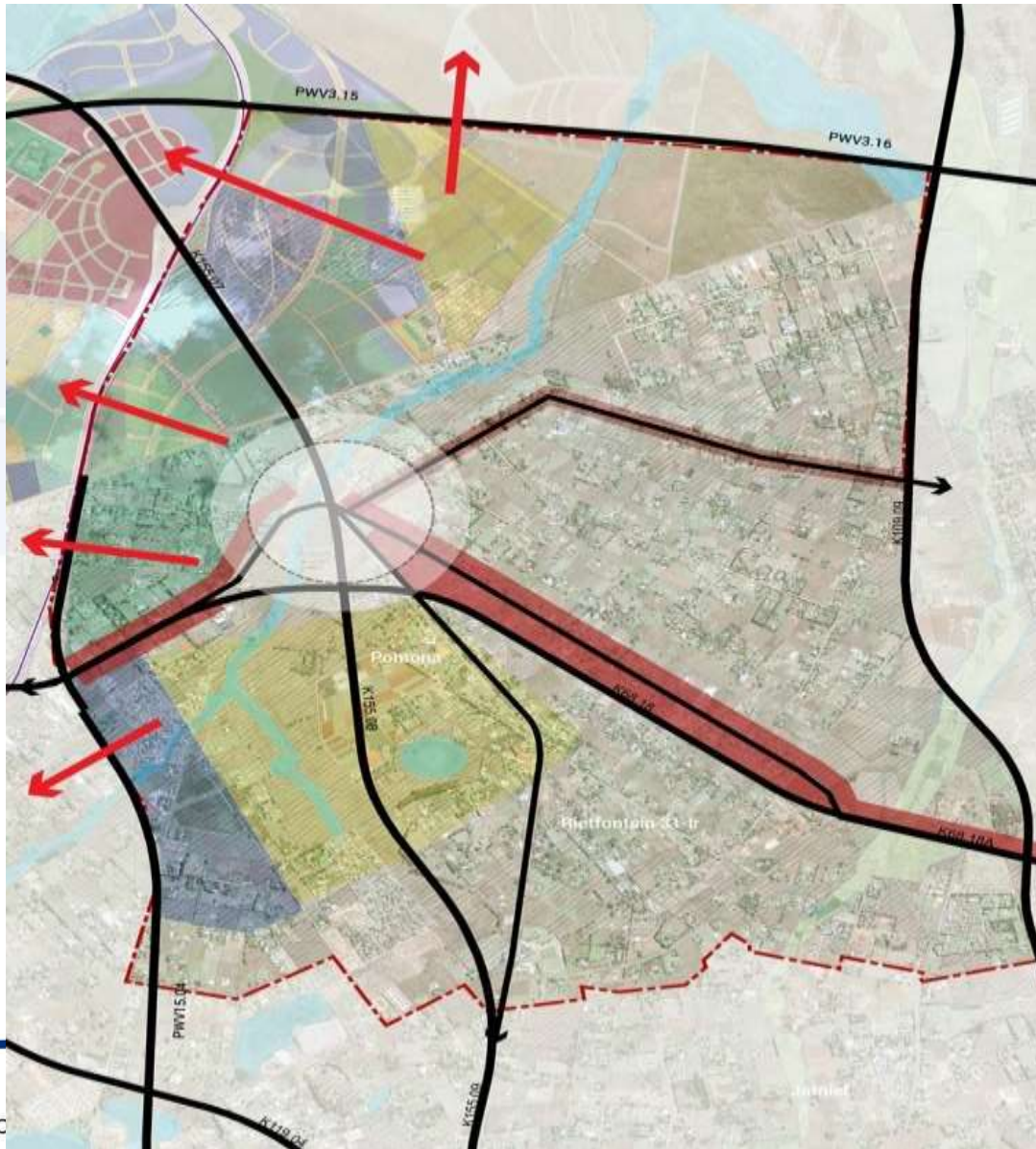
It is considered a supportive area to its more densely urbanised neighbouring areas such as Kempton Park.

KEY STRATEGIES

Promote supportive land-uses in proximity to the Aerotropolis – such as light industry, warehousing, logistics, agri-processing, mixed uses (office and commercial) and a range of housing types (as per Aerotropolis PLUG proposals);

Intensify and/or beneficiate agricultural production to tie into Aerotropolis objectives; Improve connectivity to the Aerotropolis and capitalise on the proposed new K and P routes traversing the site;

Capitalise on Bredell's role as an eastern gateway to the Aerotropolis core, with a focus on the Third Avenue, High Road and Pomona Road Gateway 'junction' (denoted by the circle on the adjacent plan);



KEY STRATEGIES



The Bredell precinct requires a more positive interface in key areas outlined as

- Between existing uses and new development;
Between varying land-uses;
- Between built and open space; Onto key movement routes; and
- All the while, it needs to retain its existing, defining agricultural character where appropriate.

3D CONCEPTS





• THE DRIES NIEMANDT PRECINCT

- The Dries Niemandt Precinct is located just east of the Kempton Park Central Business District and the Precinct itself straddles two administrative regions of the City, being located predominantly in Region A, with a small portion of the Precinct falling within Region B.
- The Precinct measures approximately 566Ha in extent, and is bounded by C.R Swart Road and Edleen to the north, the main Railway Line to the east, the suburbs of Esther Park to the west, and Plane Street and the suburbs of Cresslawn and Spartan to the south.

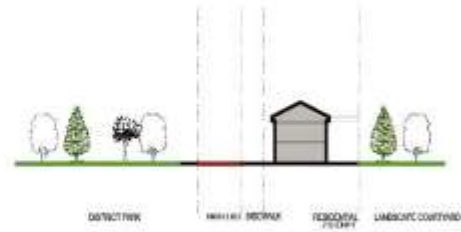
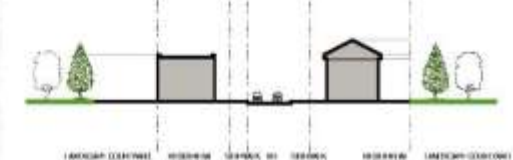
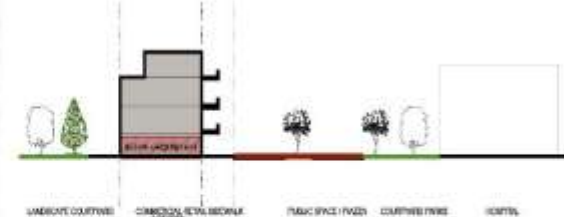
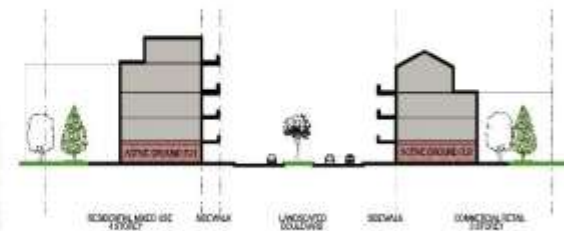
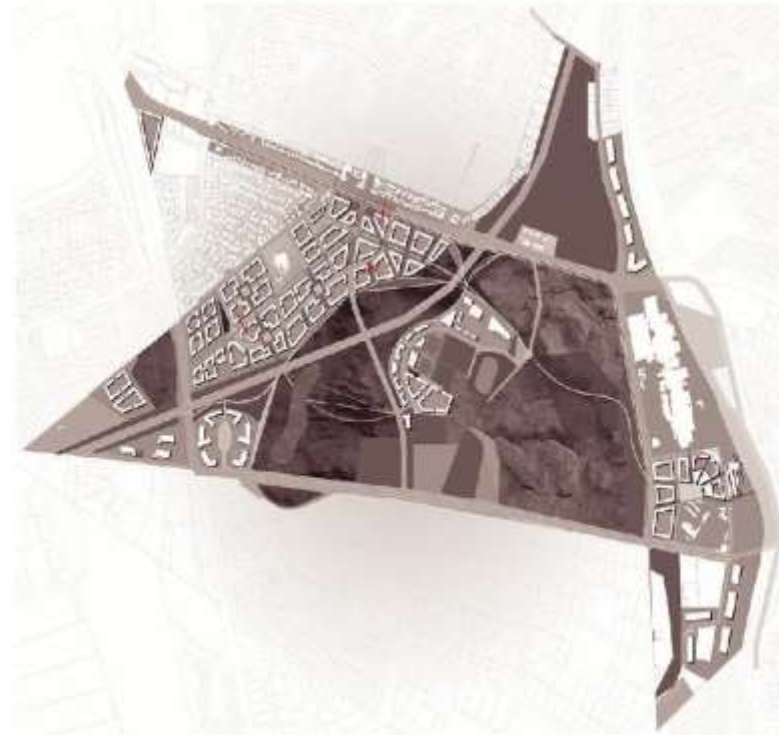
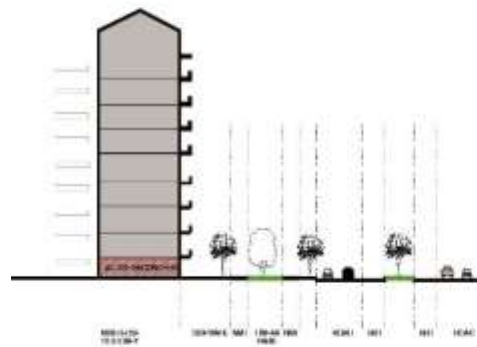
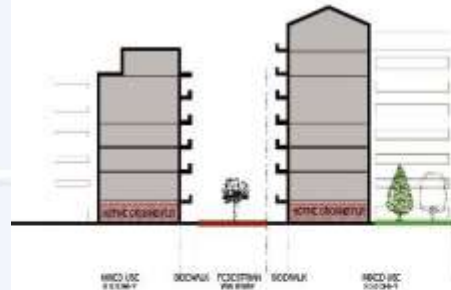
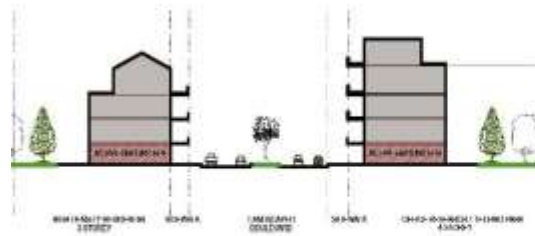


VISION & CONCEPT

- Initial sketch concept for the Precinct



City of Ekurhuleni



Dries Niemandt Kempton Park



Dries
Niemandt
Kempton
Park

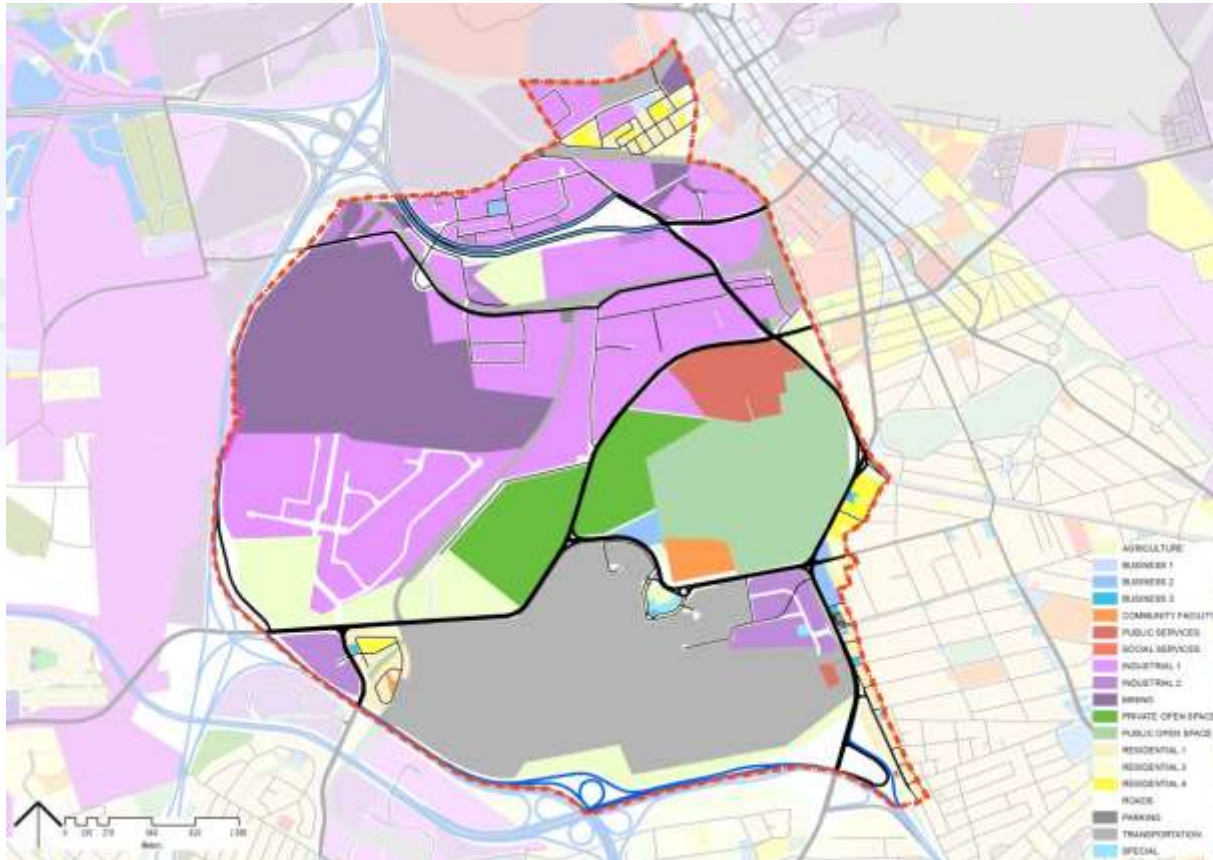


a partnership that works

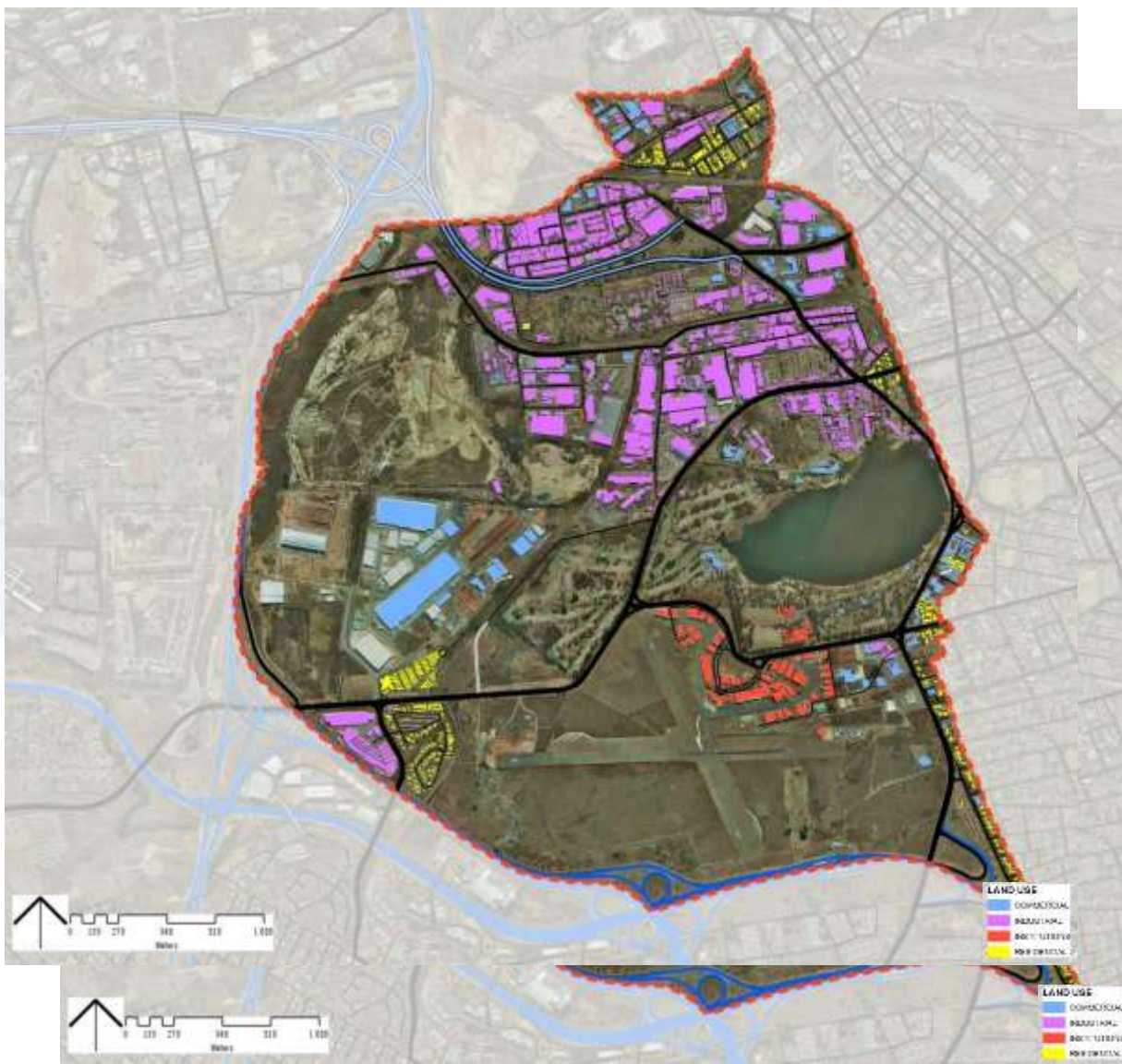


- The **Germiston Precinct** is located in the Eastern Witwatersrand area and is approximately 1572ha in extent. It is located in the immediate vicinity of the mining belt and as such was established directly in response to gold mining activity.
- The precinct is anchored by a large and attractive lake system with recreational parks surrounding it, as well as the country club to the west. Surrounding the lake as a core area, are the Rand Airport (south), the country club's golf course (west), industry such as refineries (north) and residential area with a stadium to the east.
- Beyond these areas, the nearby highways act as distinct barriers to the site, such as the N3 and N17 highways to the south and west, while the railway lines in the north and east also serve to physically separate Germiston from adjacent areas.
-
- Importantly, Germiston is part of Ekurhuleni's broader economic focus area comprising the CBDs of Kempton Park, Germiston, Boksburg and Benoni. Conceptually, this economic 'triangle' of CBD nodes was identified as being the potential optimum location for future core economic focus area

RICHNESS OF ACTIVITIES & LIVING SPACE

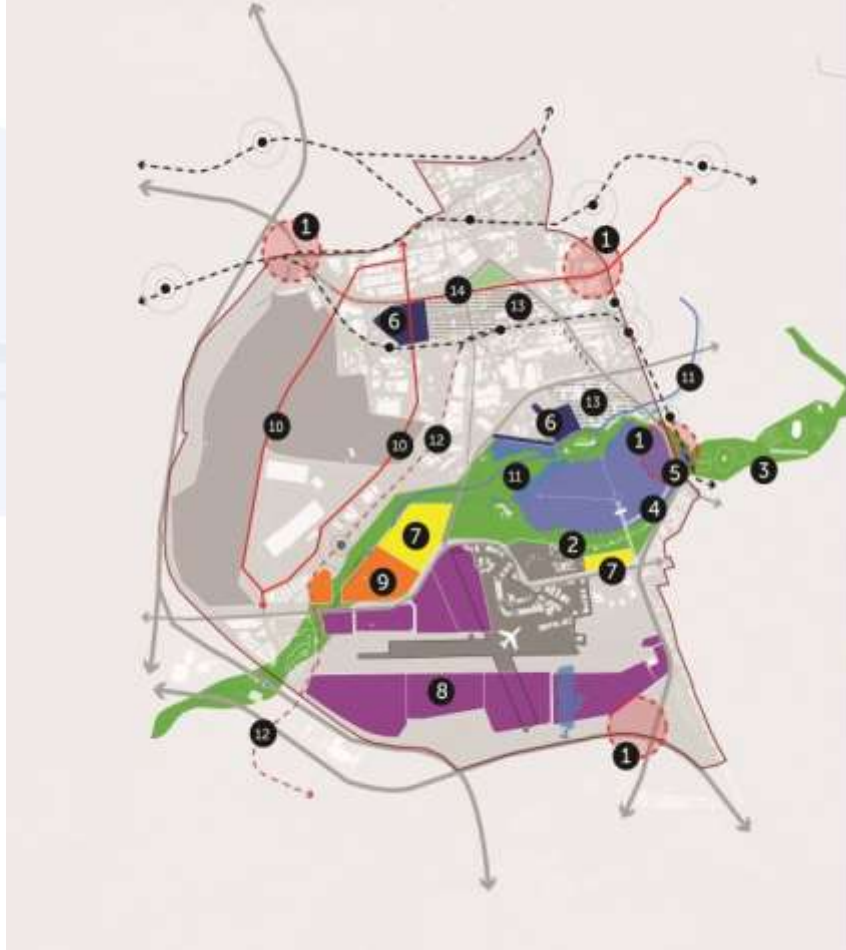


ZONING	AREA	%
AGRICULTURE	870166.82	7.28
BUSINESS1	11567.54	0.1
BUSINESS2	77529.9	0.65
BUSINESS3	10662.53	0.09
COMMUNITY FACILITY	96153.09	0.8
INDUSTRIAL 1	3202202.75	26.78
INDUSTRIAL 2	351437.69	2.94
MINING	1702397.89	14.24
PARKING	14852.12	0.12
PRIVATE OPEN SPACE	693846.11	5.8
PUBLIC GARAGE	7996.87	0.07
PUBLIC OPEN SPACE	1031269.62	8.62
PUBLIC SERVICES	297087.21	2.48
RESIDENTIAL 1	225574.3	1.89
RESIDENTIAL 3	47984.42	0.4
RESIDENTIAL 4	101565.68	0.85
ROADS	180742.77	1.51
SOCIAL SERVICES	2.5	0
SPECIAL	17362.16	0.15
TRANSPORTATION	3016983.99	25.23



RICHNESS OF ACTIVITIES & LIVING SPACE

Key land uses (commercial, residential and industrial) were assessed in terms of their built form. Distinct 'clusters' of these land uses are noted and this aids in consolidating future planning interventions for these areas.



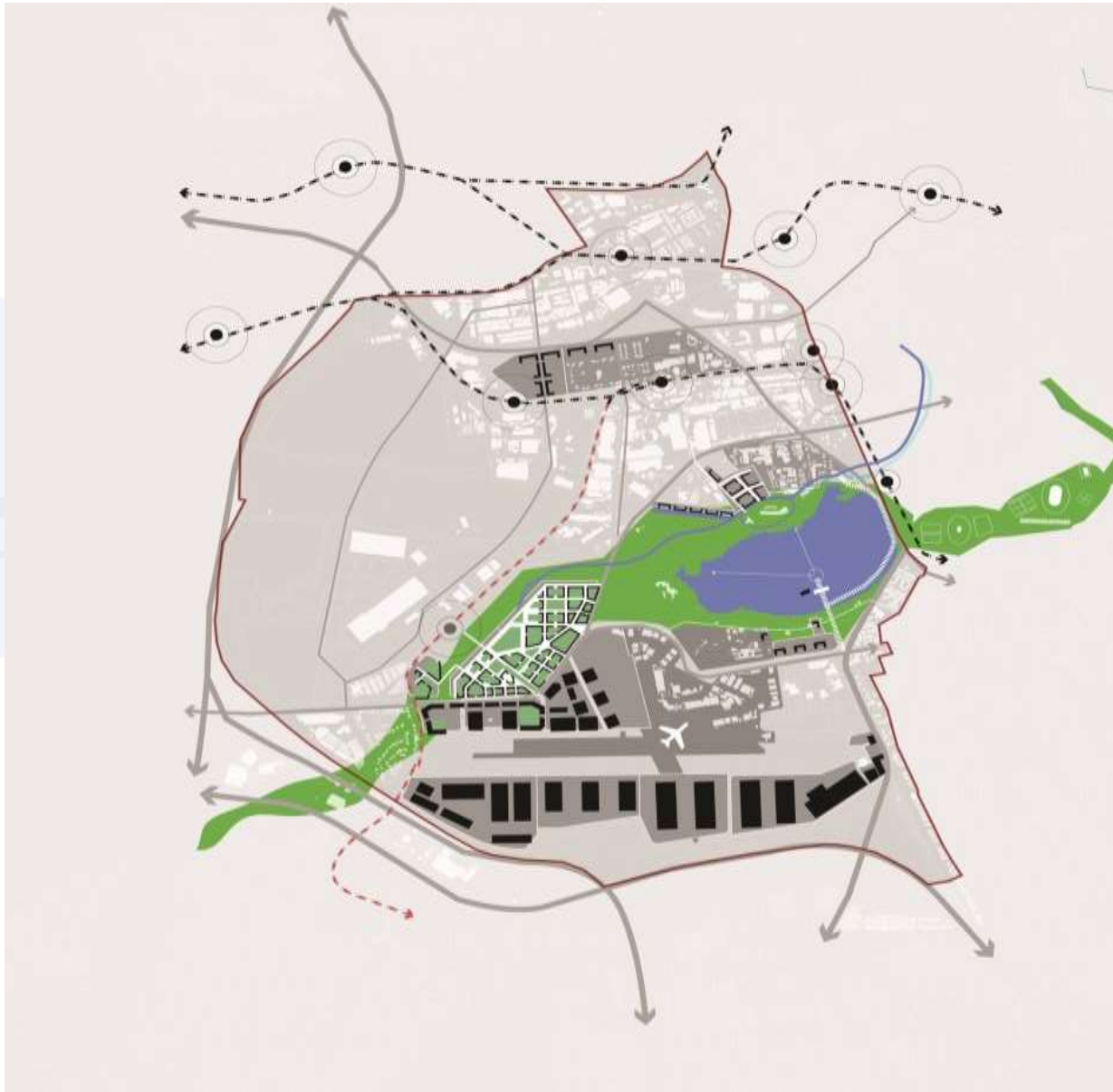
ACTIVATING THE PRECINCT

- 1 Gateway development
- 2 Park Upgrade
- 3 Sports Precinct upgrade
- 4 Promenade and event pier
- 5 Improved connection
- 6 Business / Commercial
- 7 Residential
- 8 Rand Airport Logistics
- 9 Mixed-use
- 10 New connection
- 11 Canal system
- 12 Railline NMT
- 13 Adaptive re-use industrial
- 14 Improved connection

KEY STRATEGIES FOR INTERVENTION

The precinct has a diverse set of offerings which should be bolstered for future enhanced liveability. The strategies proposed are as follows:

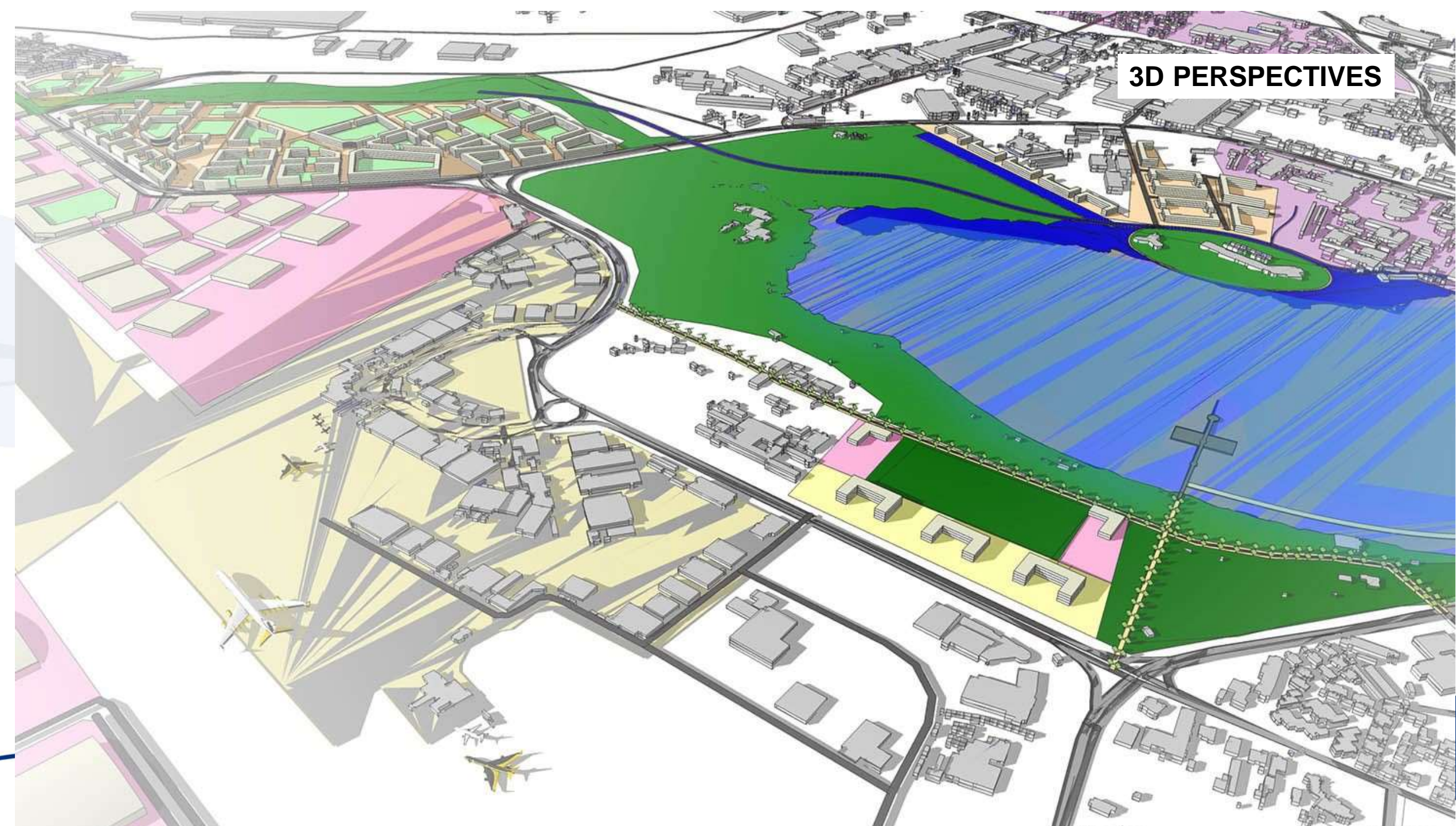
- Improving liveability through further diversification – introducing a more mixed use profile, with expanded housing opportunities (particularly near the lake and golf course); Enhancing and marketing Germiston Lake precinct as a destination – with a mixed use, vibrant and active interface and the ability to operate as a 24hour city;
- Ensuring the precinct is more walkable, clean and secure, with appropriate digital infrastructure, for improved liveability; Promoting the adaptive reuse of old heritage buildings in the precinct, to create a renewed urban feel;
- Developing a ‘central’ promenade and/or activity circuit around the lake, with direct and easy connections to nearby areas of interest.



KEY STRATEGIES FOR INTERVENTION

The adjacent development framework plan is a portrayal of the overall concepts making up the strategy for Germiston Lake precinct. This has been generated as a 3D plan (see perspectives overleaf).

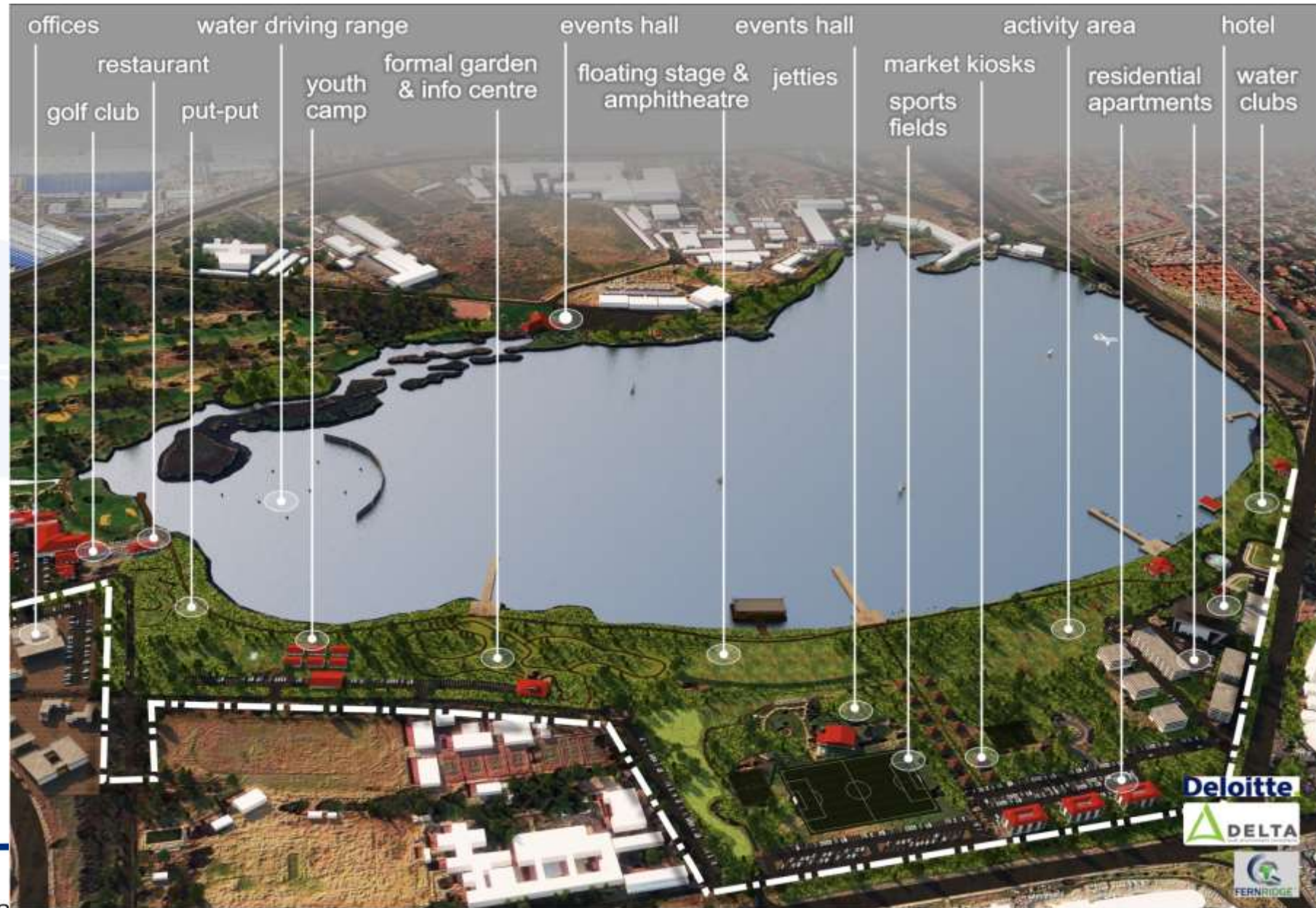
3D PERSPECTIVES



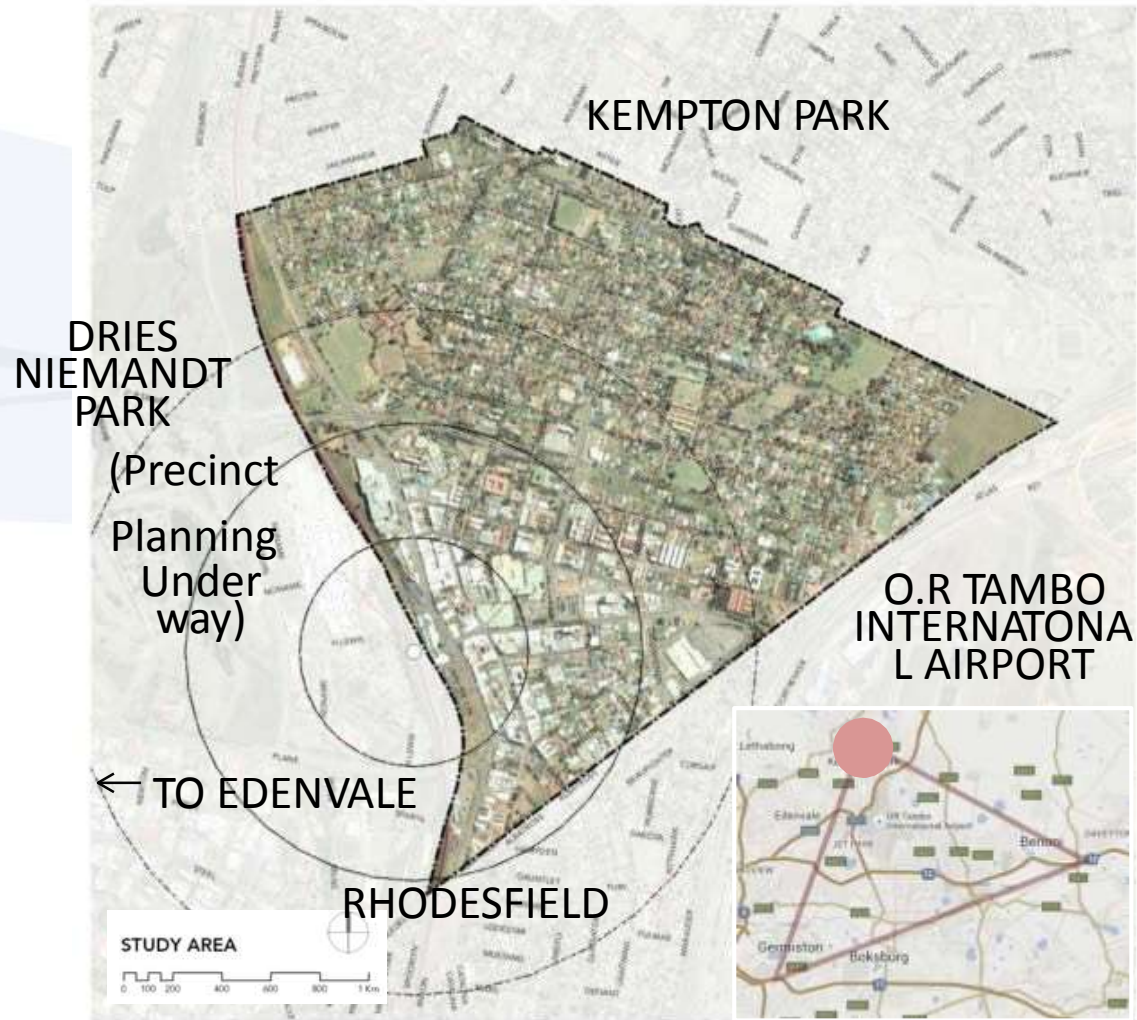
3D PERSPECTIVES



GERMISTON LAKE PRECINCT PLAN



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- **The Kempton Park CBD Precinct** is approximately 365ha in extent. The Kempton Park CBD forms the core of the study area, while O.R Tambo Airport, Rhodesfield and Edenvale are located to the south and south-west. It is surrounded by low-density suburban area making up the rest of the broader Kempton Park area in the north and Bonaero Park in the south. To the east, the typology is dominated by agricultural small holdings (Pomona, Nortons Home Estates, Benoni North, Brentwood Park and Bredel AH).
- Industrial areas in this broader region include areas such as Spartan, Isando, Elandsfontein, Jet park, Germiston and Anderbolt.
- Kempton Park CBD is considered an urban core according to the Municipal SDF and is part of a broader economic triangle comprising the CBDs of Kempton Park, Germiston, Boksburg and Benoni. Conceptually, this so-called triangle of CBD nodes was identified as being the potential optimum location for future core economic focus area.
- Importantly, the Dries Niemandt Park area is located to the west, immediately over the railway tracks. Integration between the two areas through precinct planning is underway.



LEGEND

- Land Use Proposals**
- Retail
 - Mixed Use
 - Civic
 - Transport

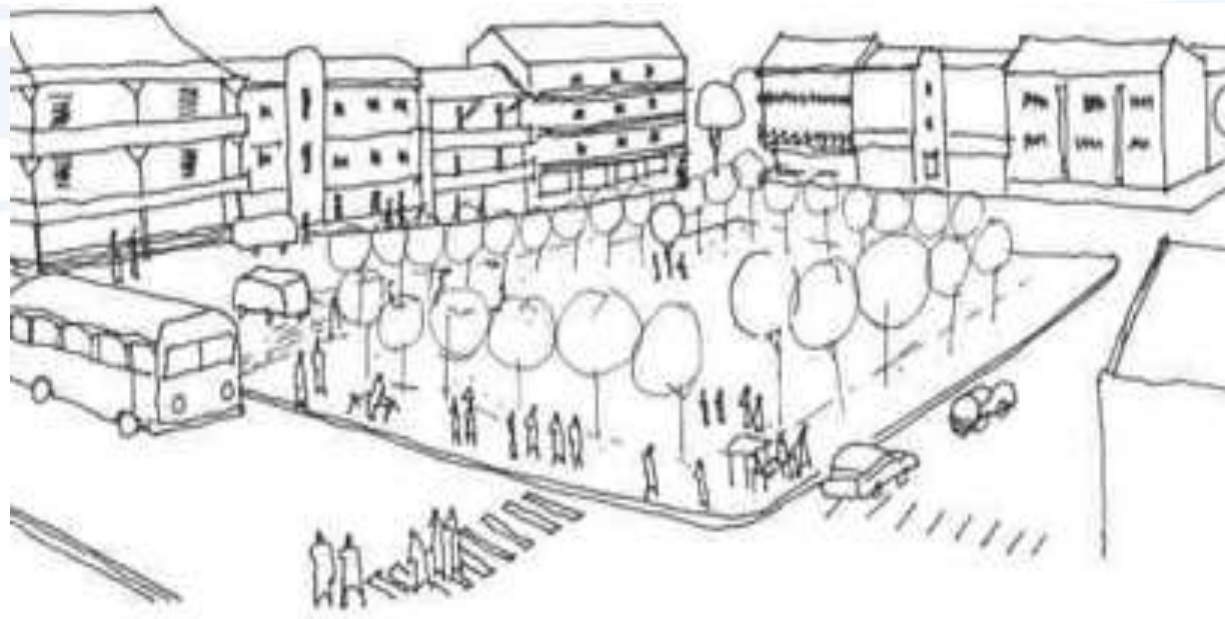


LEGEND

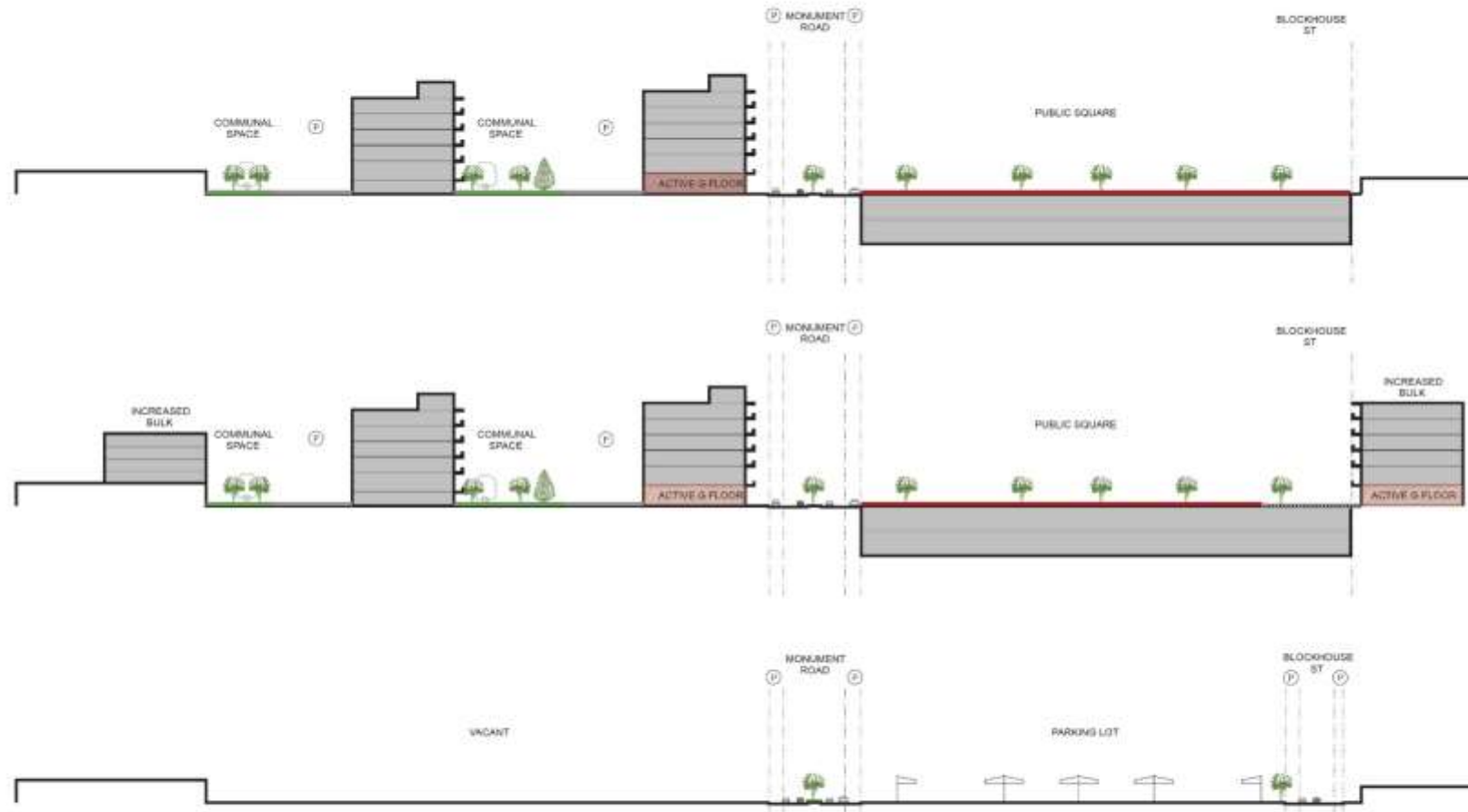
- Transportation Proposals**
- Central Avenue Corridor Section
 - Pretoria Road Corridor Section
 - RTV Trunk Route
 - Potential Intermodal Facility
 - Kington Park Rail Station Upgrade
 - Tembusa Rail Yard
 - Proposed PRVW Station Location

PRETORIA RD, REGION A & AEROTROPOLIS PLUG

NAME OF AREA	MAIN FUNCTION IN RELATION TO THE AEROTROPOLIS	DESIRED LAND USES	UNDESIRABLE LAND USES	CONNECTIVITY WITHIN THE AEROTROPOLIS FOOTPRINT
Kempton Park CBD	Regional retail (medium & low income), offices, entertainment, service industries, transport modal interface, high density residential.	<ul style="list-style-type: none"> Airport related development. Retail Accommodation in terms of guest houses and hotels, B&Bs etc. Conference facilities Government offices & services Mixed use business, retail, residential High density residential Community facilities Airport related businesses Tourism facilities 	<ul style="list-style-type: none"> Low density residential Heavy and noxious industries Large land users 	<ul style="list-style-type: none"> The R21 connects Kempton Park CBD with the airport, as well as Pretoria and Hatfield northwards. Route K105/K90/K131. This route links Tembisa, Kempton Park CBD, Isando and Spartan, Jet Park, O.R. Tambo, Boksburg CBD, Sunward Park and Vosloorus



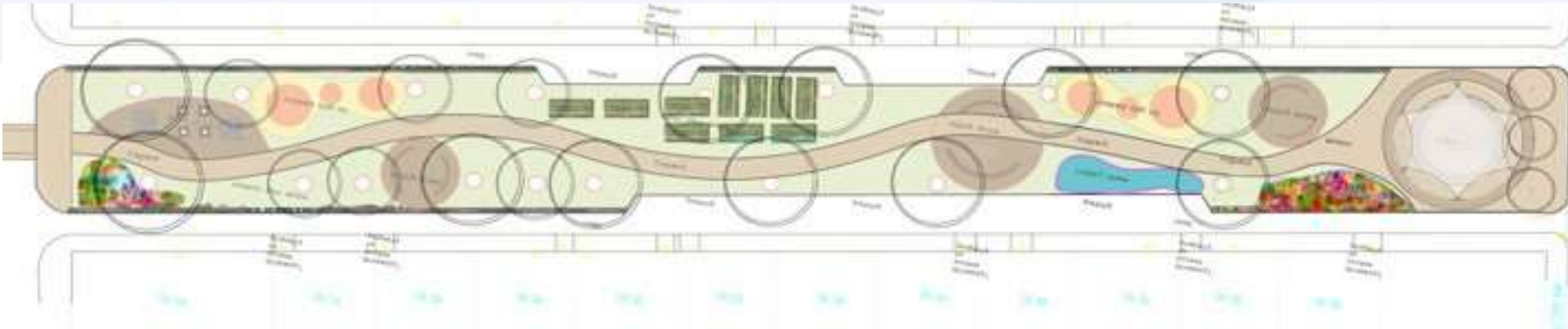
Proposal for a Civic Square at the intersection of Central and Monument Roads. It is proposed that the square be seen as the surface of basement parking structure that could be developed jointly between the EMM and the private sector (Arwyp Hospital)



Sections of the proposed square and parking structure



**City of
Ekurhuleni**



Indicative plan (left) of a possible linear park or similar response in the CR Swart road reserve area (above) as a means of giving focus and functional space in an area that will densify and grow over time



Eastern Gateway

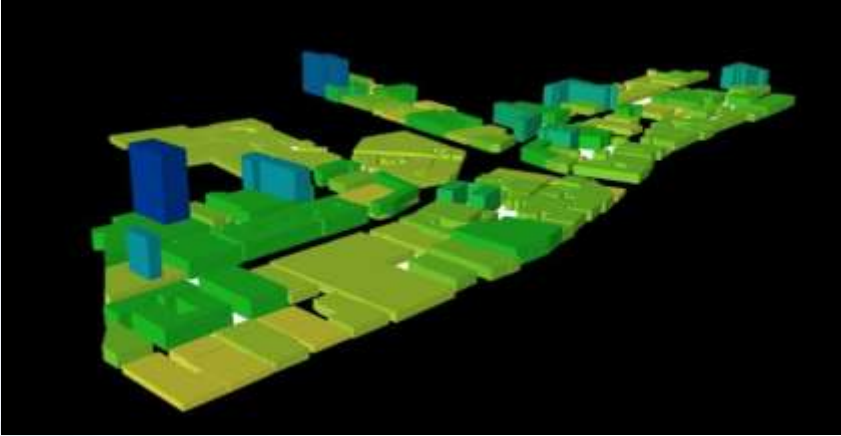
The Eastern Gateway to the Kempton Park CBD provides the point of interface with the OR Tambo Airport, as well as the higher order freeway system that ties the airport region into the City Region. Significantly, this gateway also provides a direct connection to the Pomona Road spine and the future R21 Expressway, important elements facilitating much of the short to medium term growth of the Aerotropolis vision

Western Gateway

The Western Gateway is the second key movement connection into the CBD, providing access from the west. It connects the precinct to the northern and eastern parts of Johannesburg, as well as the proposed developments around Modderfontein & Linbro Park. The Civic Centre and City Hall buildings are located in this area, although visually they do not significantly reinforce the gateway function

Southern Gateway

The Southern Gateway provides an important connection between the CBD Precinct and the southern parts of Kempton Park. This gateway is particularly significant in terms of its potential role in integrating the precinct with the proposed Rhodesfield development area, and established industrial areas to the south and south-west of the CBD.



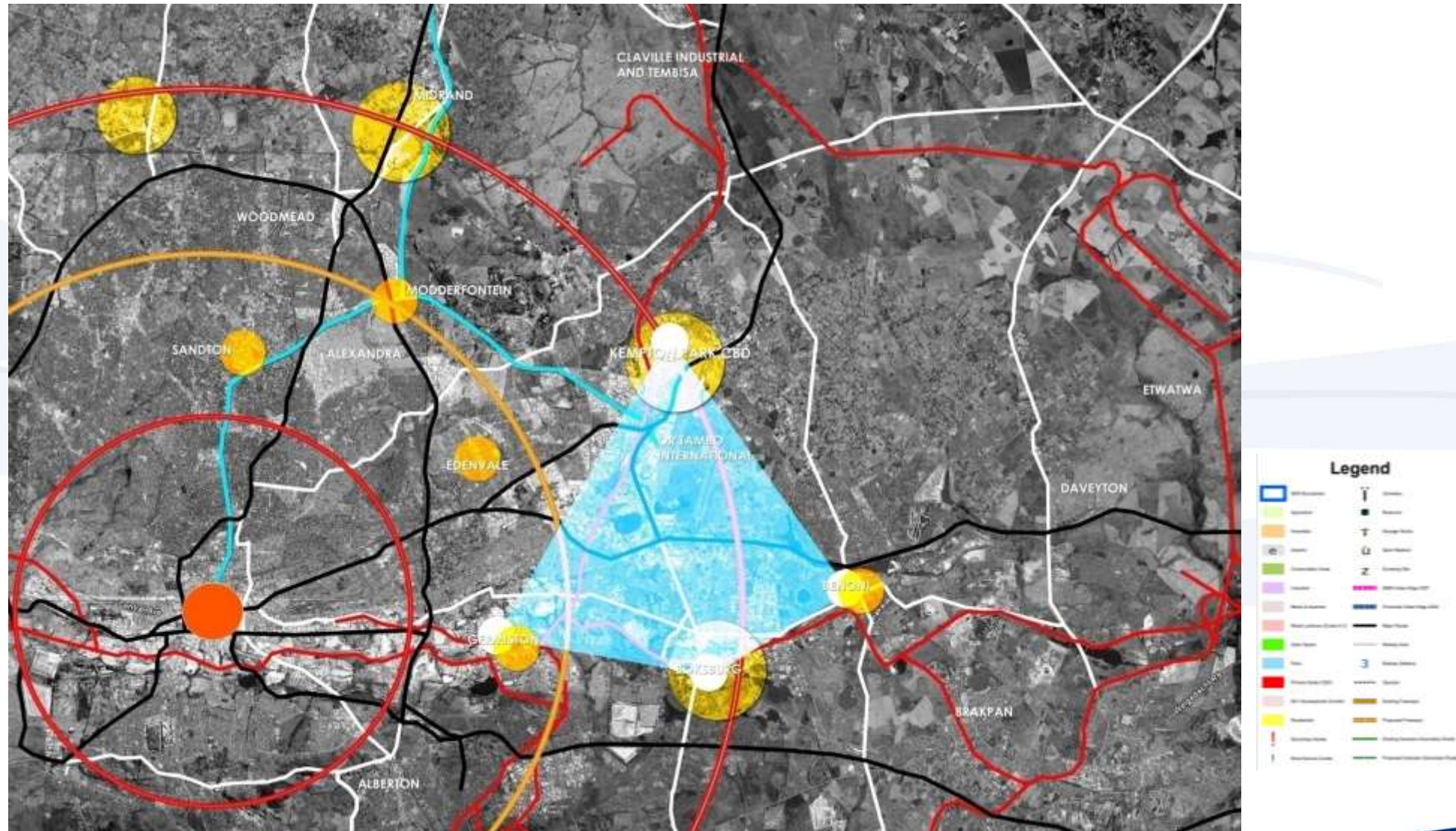
There is a greater intensity of built form towards the railway station. There are gaps in the urban fabric towards the south of the station area

Some areas close to the station show scope for infill and/or more responsive development. There is also a generally good form response to streets.

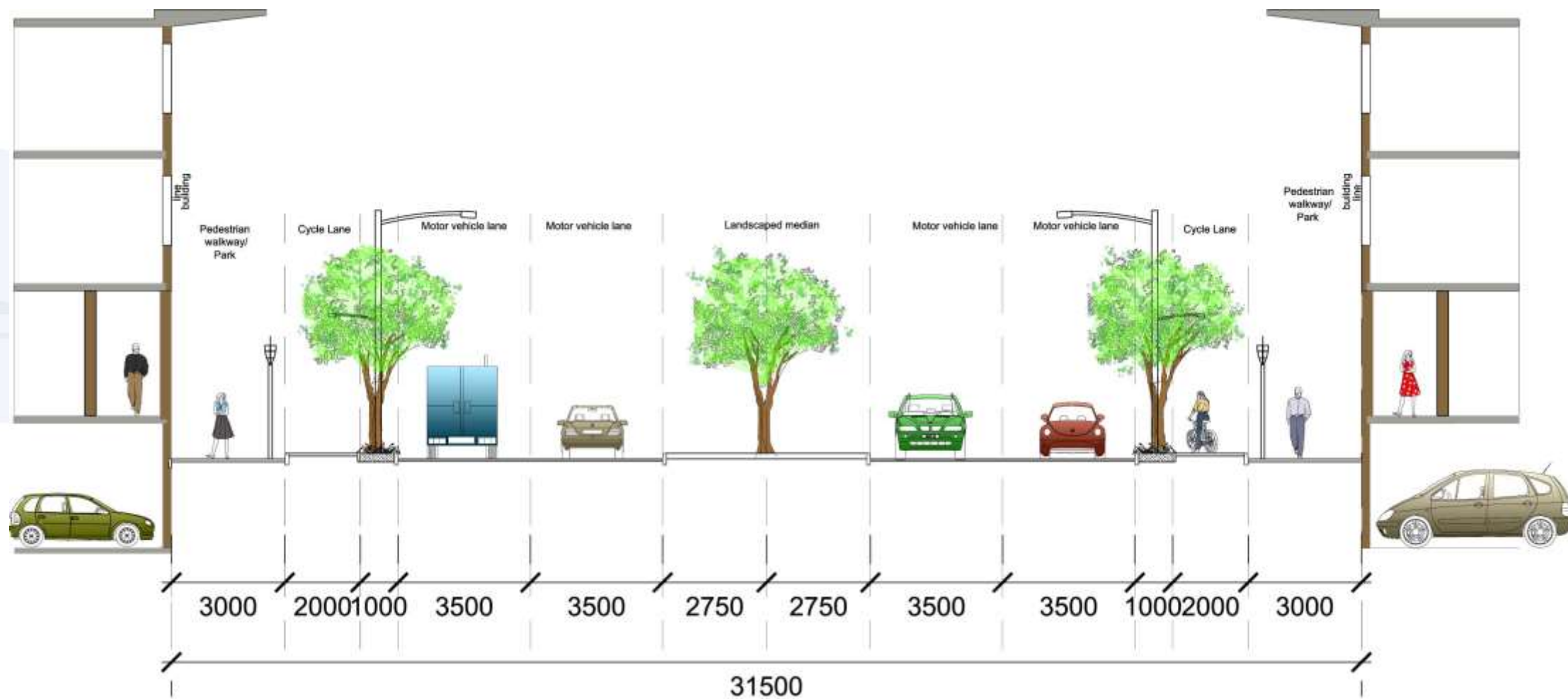


Alongside, the stretch of Pretoria Road activity street, immediately adjacent to the railway station, is represented in 3D, showing relative building heights and forms

EMM TRIANGLE STUDY IN CITY STRUCTURE

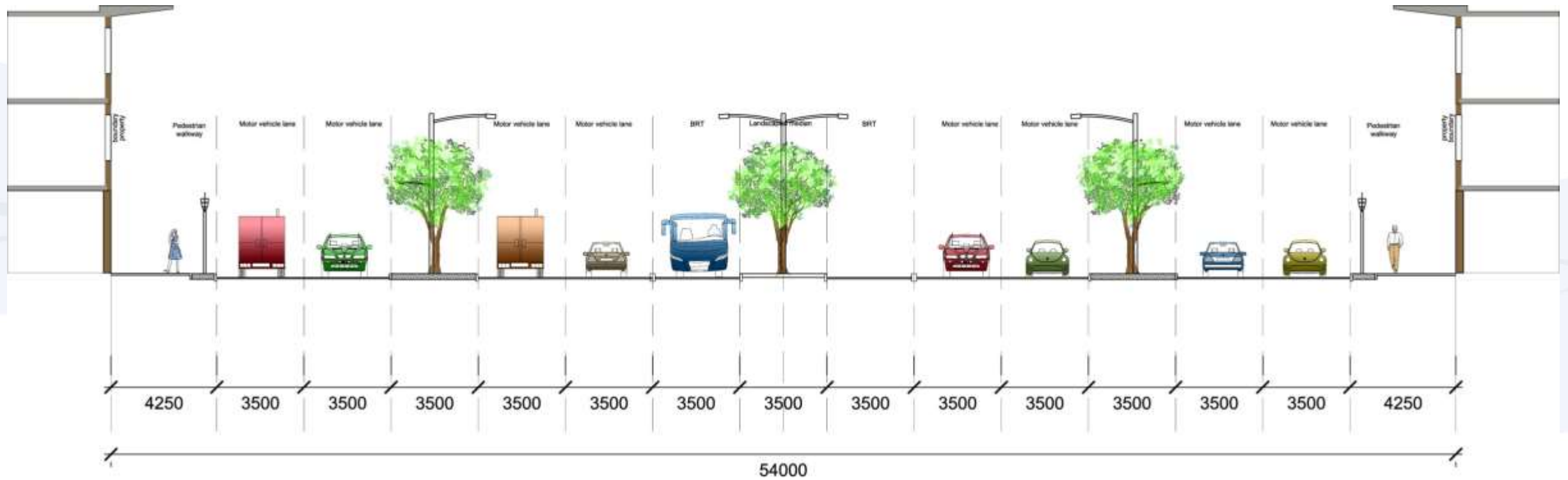


STREET SECTIONS – WELLINGTON STREET



City of
Ekurhuleni

STREET SECTIONS – PRETORIA STREET

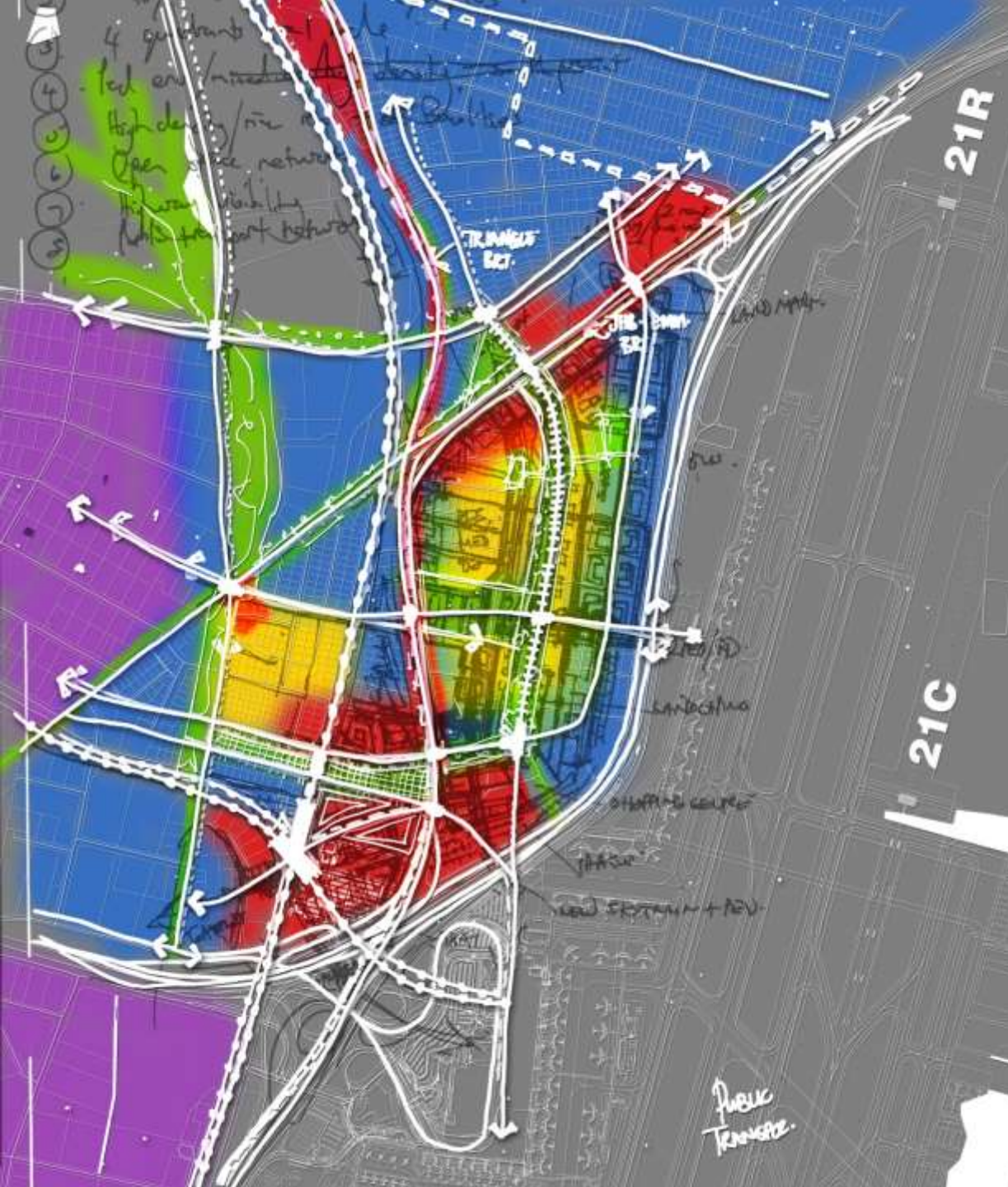




- Extract from the **Rhodesfield Urban Design Framework**. The Rhodesfield precinct is directly adjacent to Kempton Park CBD and the airport, and there is an opportunity for these areas to interface and complement each other



- *Extract from the Rhodesfield Urban Design Framework. The Rhodesfield precinct is directly adjacent to Kempton*
- *Park CBD and the airport, and there is an opportunity for these areas to interface and complement each other*



CONCEPTUAL LAND USES











City of
Johannesburg

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City of
Johannesburg

a partnership that works



City of
Durban

a partnership that works





a partnership that works



a partnership that works



a partnership that works



City of
Ekurhuleni



Rhodesfield



City of
Ekurhuleni

CBD – Germiston Precincts



precinct 1: **civic precinct** CBD – Retrofit Germiston

The Civic Precinct is the focus of the Ekurhuleni Metropolitan Municipality (EMM), and its aim to develop Germiston as its **Administrative Capital** (Metropolitan Headquarters)

Precinct is structured around the **pedestrianisation** of Queen Street and its conversion into a **Civic Spine**, where the civic functions are expressed.

The civic spine stretches from a public square in front of the Civic Centre, past a second square edged by a variety of Civic functions at the corner of Lambert and Queen Streets, to the Church Square in front of the Presbyterian Church on F.H. Odendaal Street.

Civic Precinct Master Plan, should be **expanded** to include the area between Queen Street, the railway line and India Station.

The Civic Spine should take care not to **exclude** this part by turning the backs of building facing onto Queen street, and **ignoring the Long Street edge**.

Additional residential developments and densification of under-utilized land is proposed.

Within the Germiston Inner City, **Lambert Street** and India Station play an important role. Lambert Street becomes the **link** between the **Civic, Commercial and Transport and Market Precincts**.

CBD – Retrofit – Civic Precinct Germiston



CBD – Retrofit Fire Station Precinct



CBD – Retrofit Pirrowville Transport Precinct Germiston



City of
Ekurhuleni

CBD – Retrofit Cultural Precinct Germiston



City of
Ekurhuleni



The **Thelle Mogoerane Hospital Precinct** is located in the southern part of Vosloorus, in Region F of the Ekurhuleni Metropolitan Municipality. By virtue of its location, the precinct remains largely marginalised from mainstream urban activity in the broader Ekurhuleni Urban System.

The investment related to the new Hospital, however, does provide scope for exploring the longer term role of the areas as a new nodal area, with potential to provide a range of social and commercial opportunities, linked into the broader context through the current IRPTN system proposals that connect into the precinct.

The Vosloorus area of Ekurhuleni is one of the most impoverished in the Municipality, with high levels of unemployment and low income levels

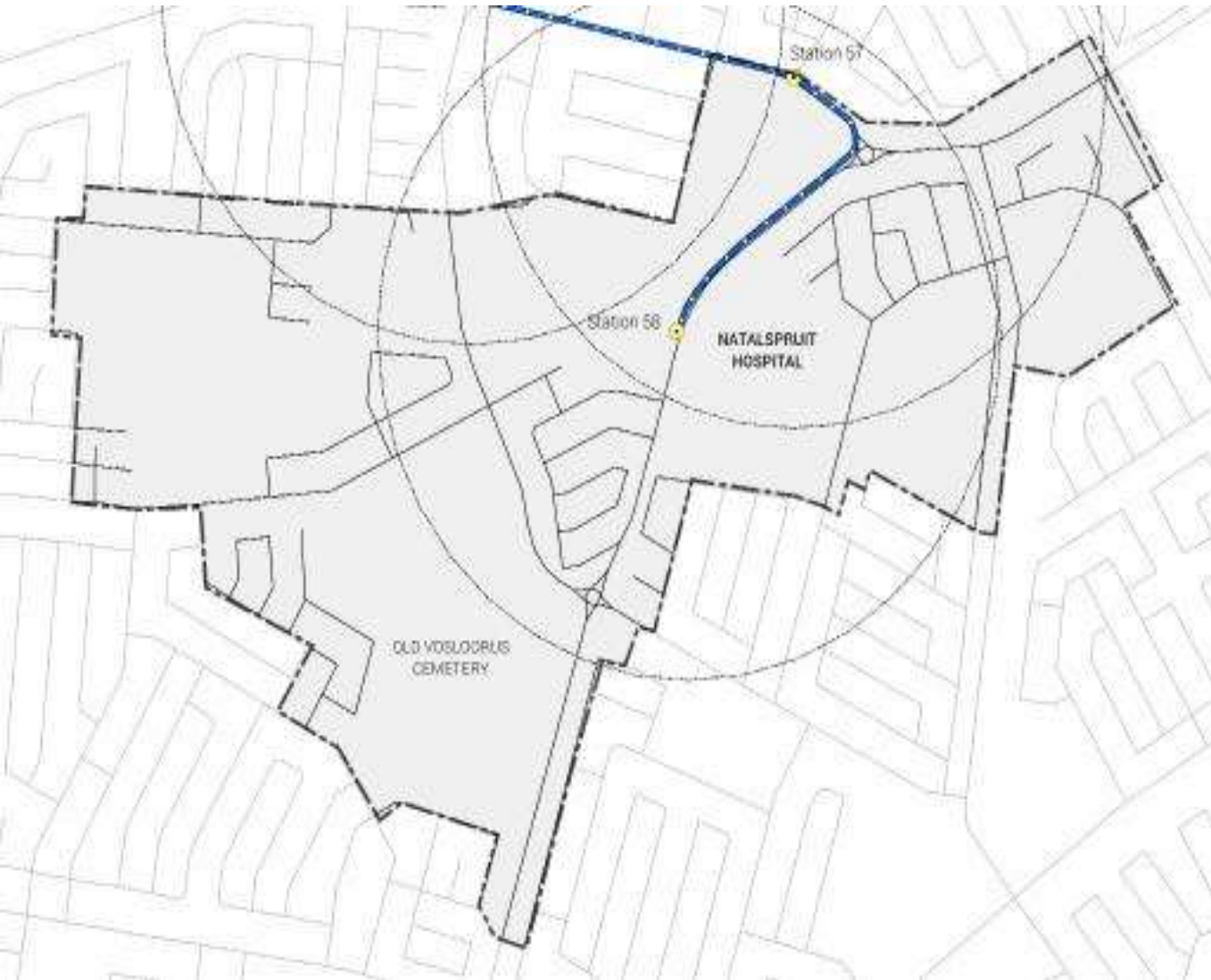
Time distance



MOVEMENT NETWORK

The key road infrastructure that connects the study area to its context, and provides accessibility within the precinct, is reflected in the plan alongside

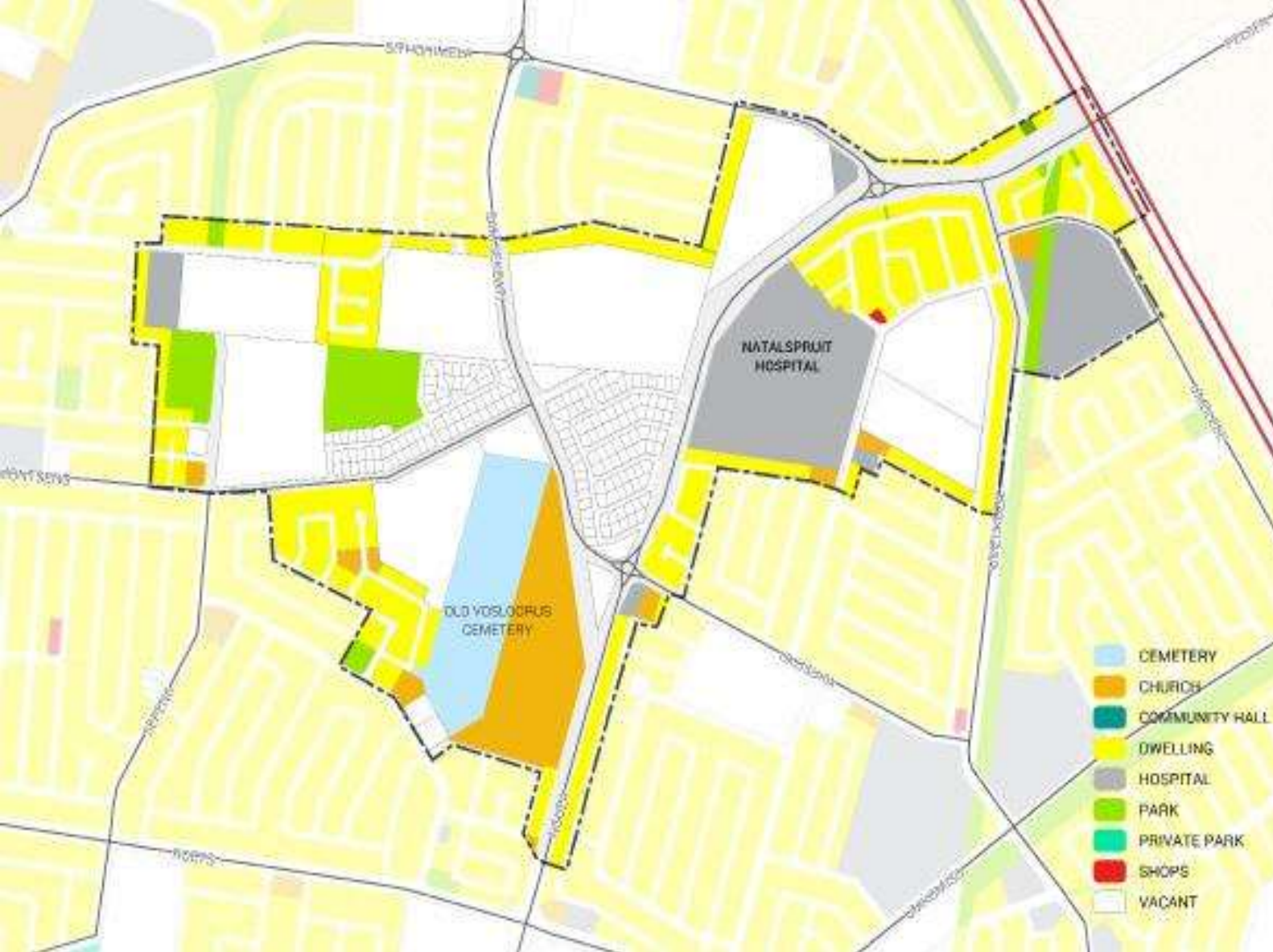
From the map, it is clear that movement is compromised between the hospital itself and the north-western parts of the precinct, a challenge that has been worsened by the closure of the main north-south link alongside the hospital.



IRPTN PHASE 1



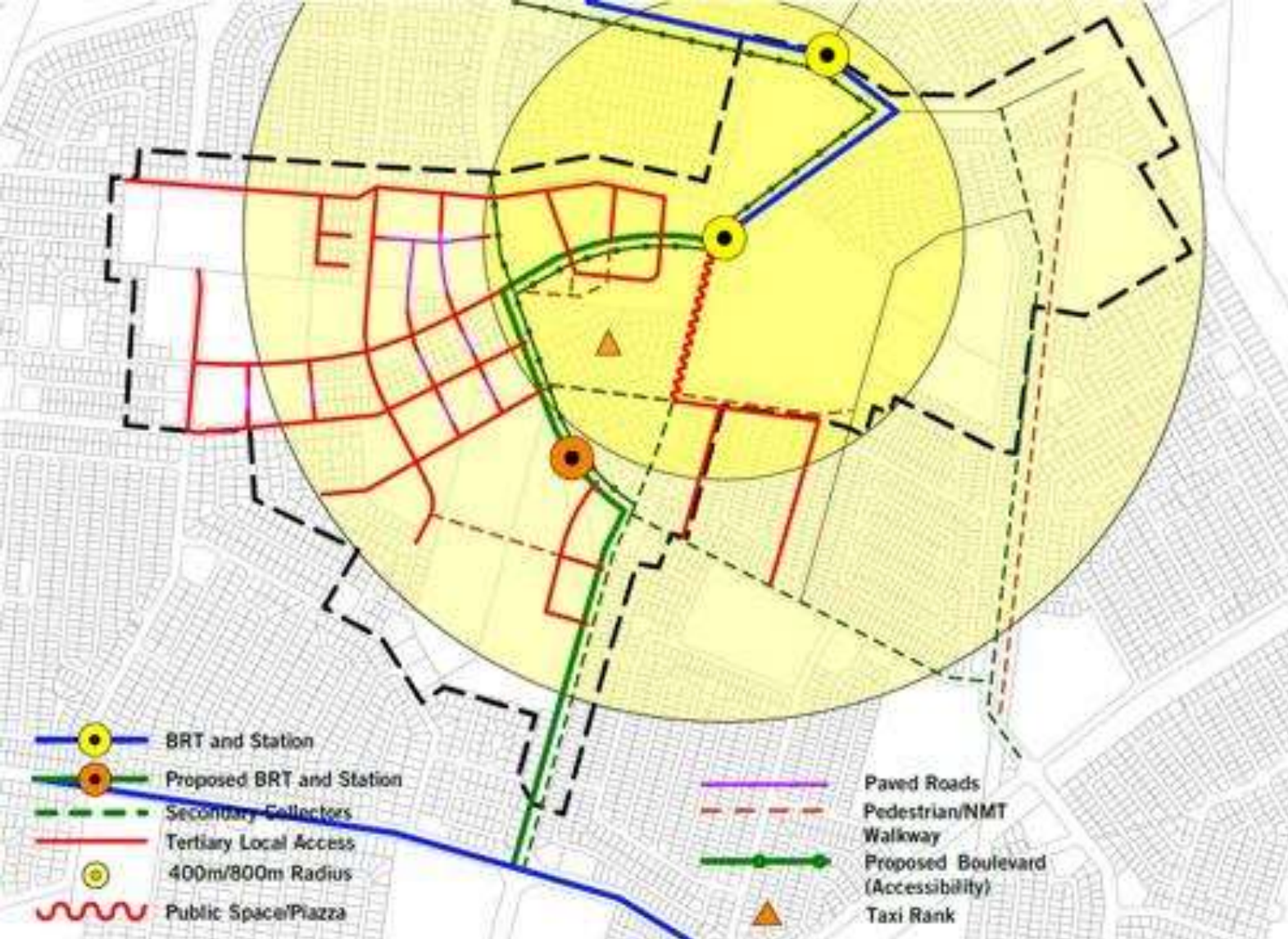
The first phase of the IRPTN is currently under construction with the city having broken ground in Tembisa on Angie Maphetho street. The routes running through the Thelle Magoerana study area would be mainly complimentary routes and local feeder routes.



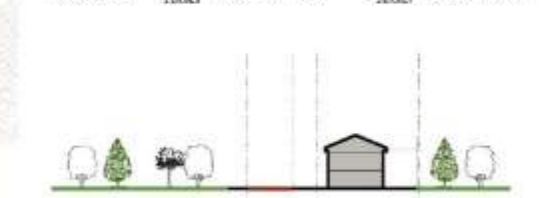
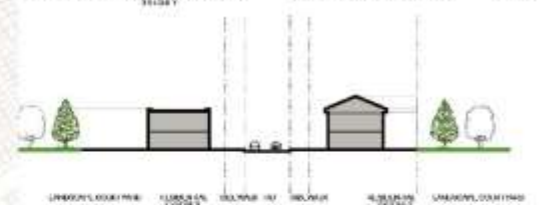
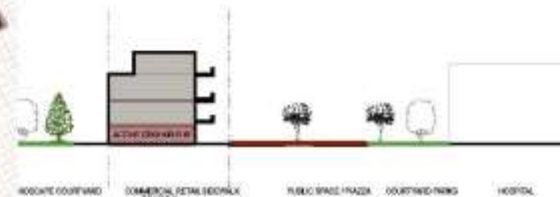
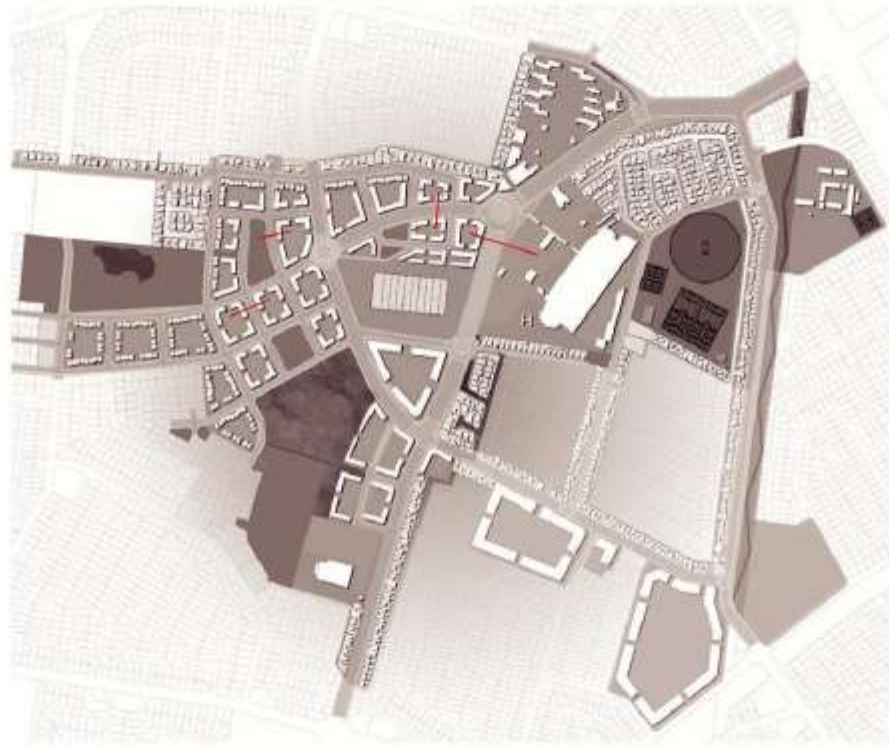
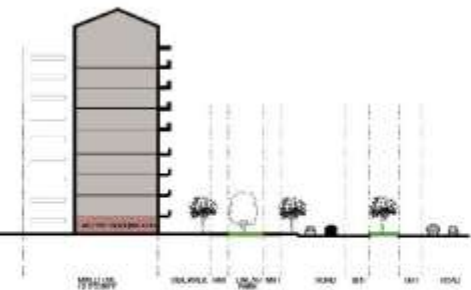
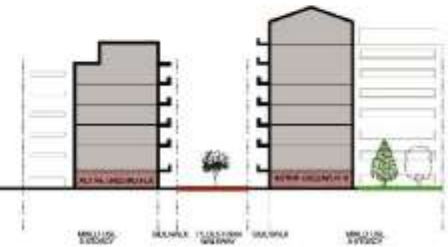
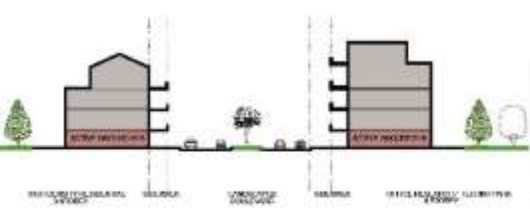
LAND USE PATTERN



City of Ekurhuleni



MOVEMENT & CIRCULATION FRAMEWORK



Street Sections and
Public Space
Delineation across the
study area



City of
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Broad sub precincts and use categories.





- Residential
- Residential/Mixed Use
- Commercial/Retail
- Shopping Centre
- Medical/Residential
- Social Facility
- Hospital
- Future Re-development Opportunity
- Taxi Rank
- Public Space/Piazza
- Park
- Sportsfield
- Open Space
- Cemetery
- Proposed BRT Station

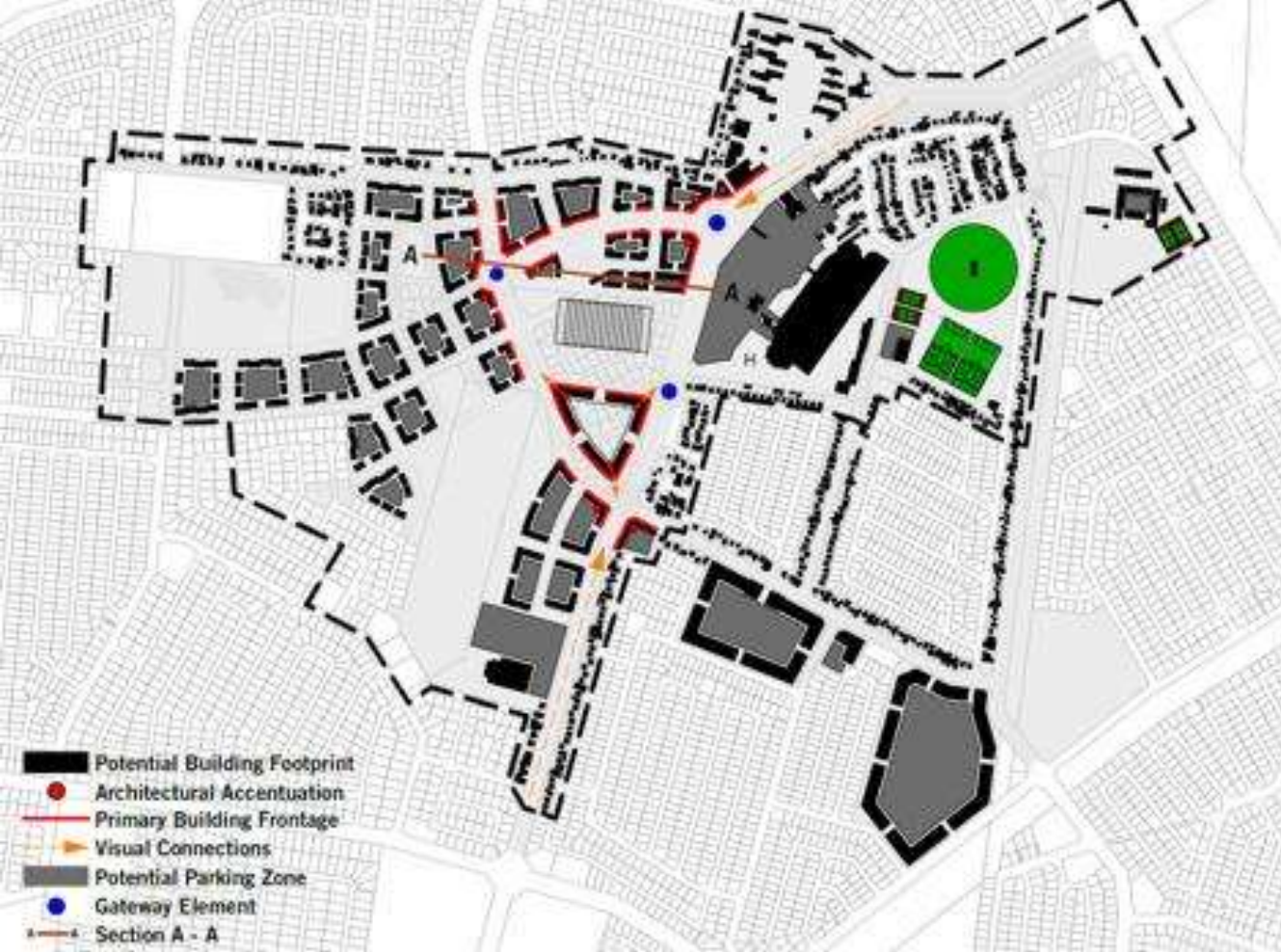
Proposed Land Use Overlay



City of
Ekurhuleni

Reference Plan for Bulk Calculation Tables that follow





BUILT FORM FRAMEWORK



New Park Area

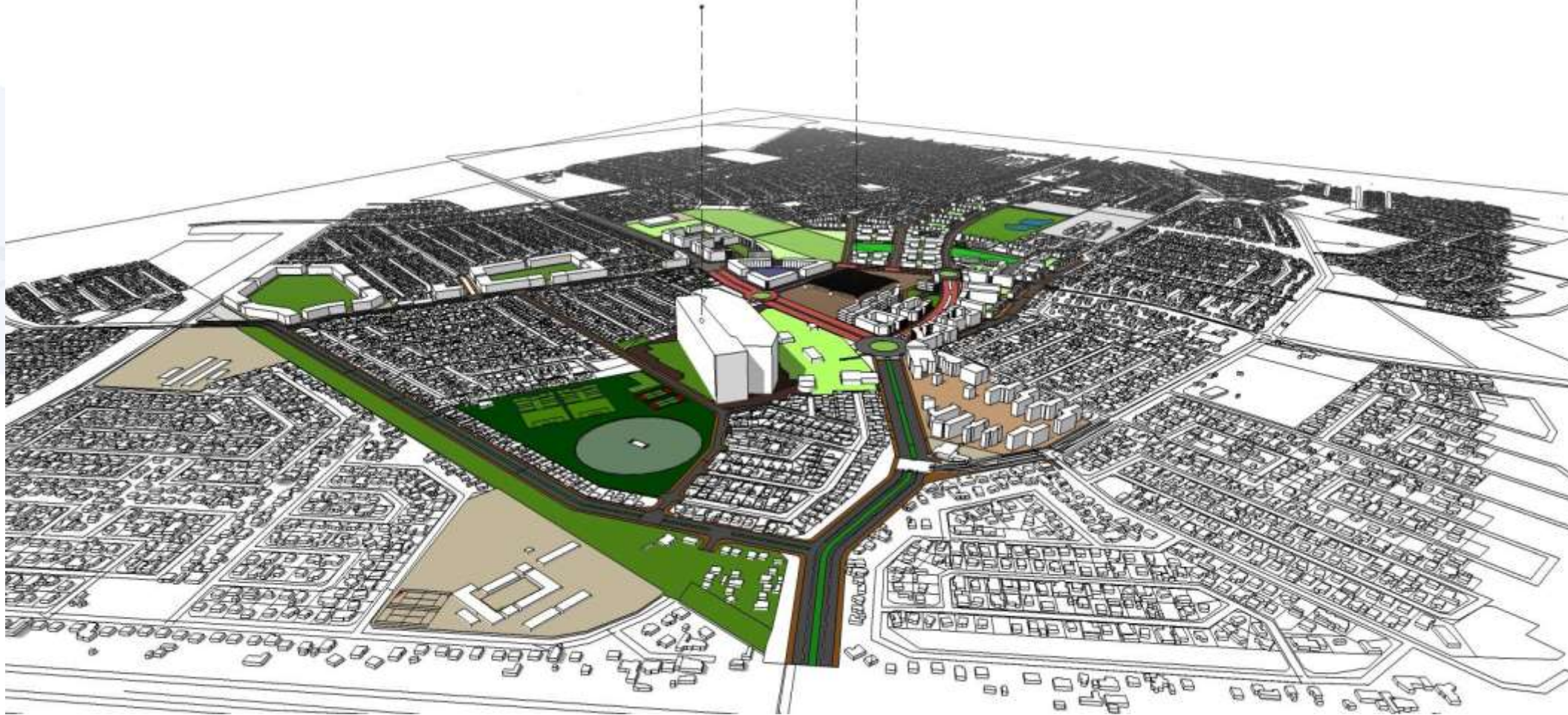
Taxi Facility
as a focus
of activity
patterns

Thelle Mogoerane Hospital



Thelle Mogoerane Hospital

Taxi Facility
as a focus
of activity
patterns



City of
Ekurhuleni

Taxi Facility
as a focus
of activity
patterns

Thelle Mogoerane Hospital



Parkades
Germiston
Kempton Park

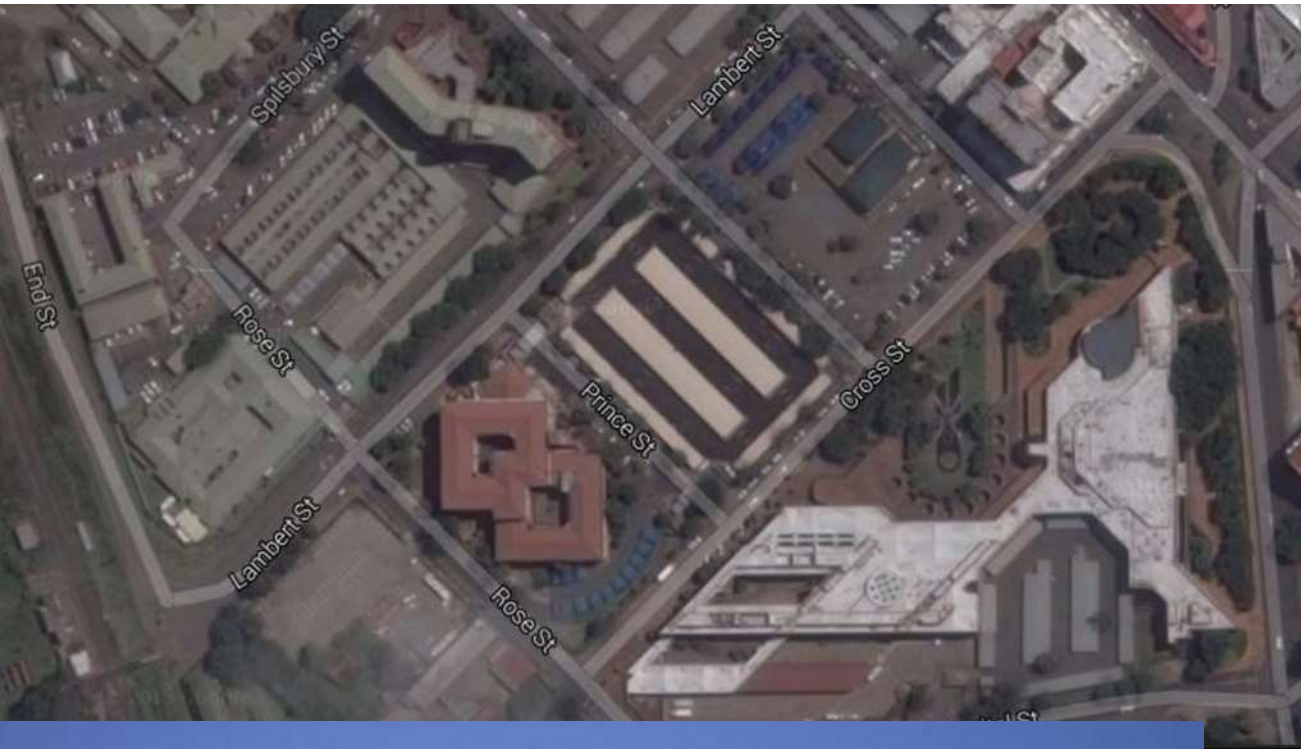


Parkades Mixed Use Development

Parkades Mixed Use Development



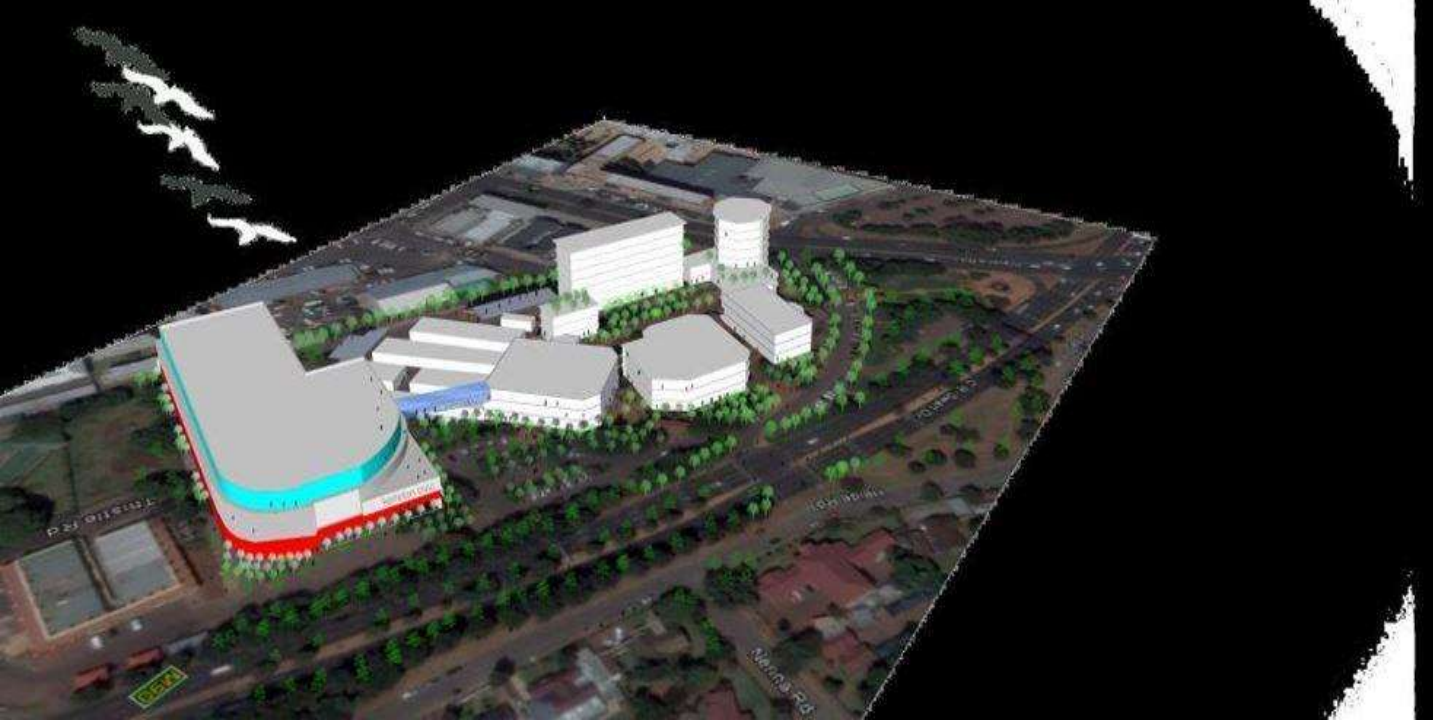
City of
Ekurhuleni

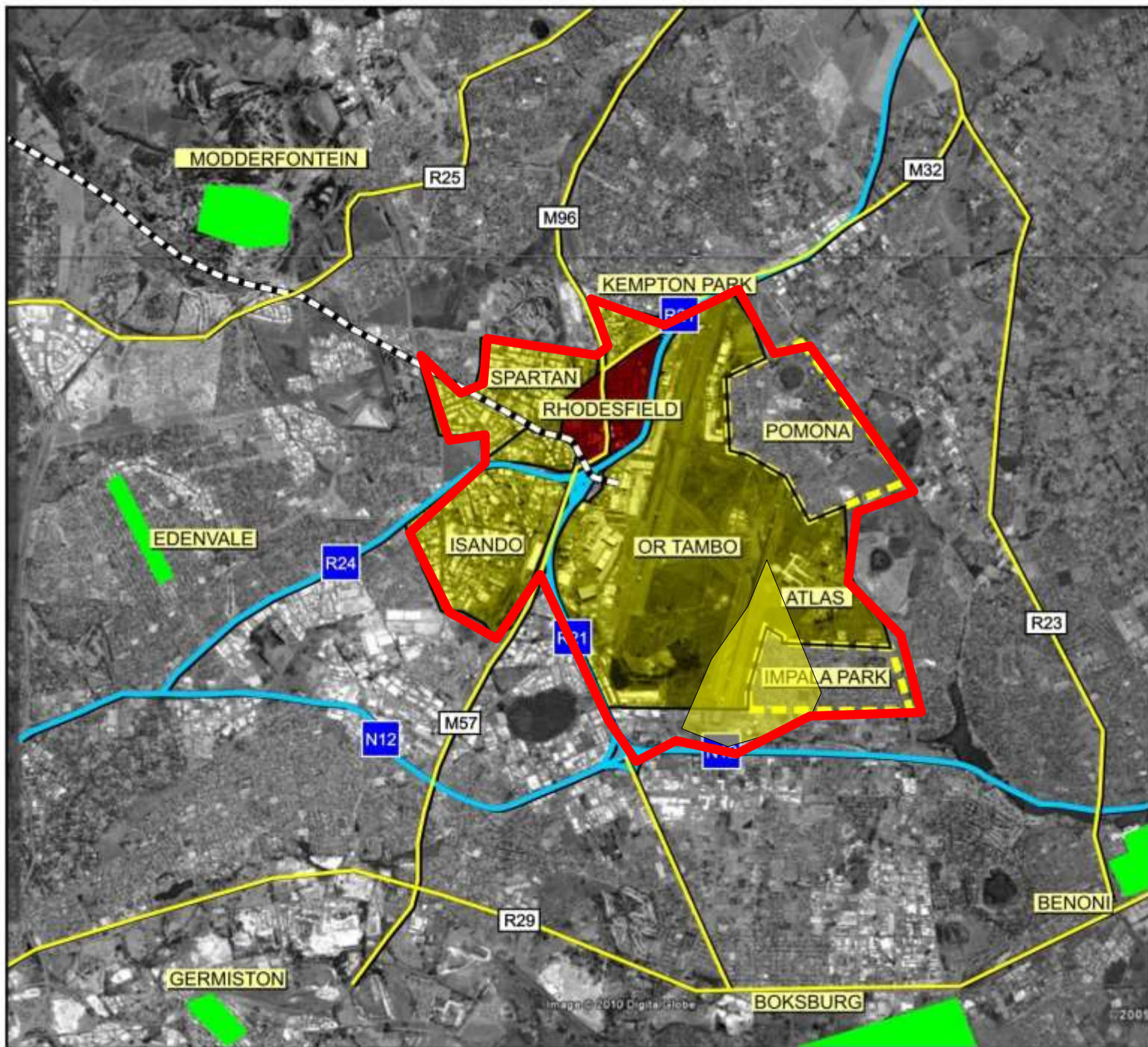


Germiston

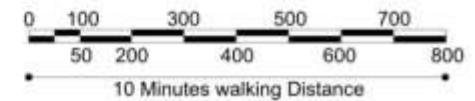


Kempton Park





- Primary Nods
- Possible future Nodes
- Secondary nodes
- Gautrain
- Highways
- Regional Distributors



Greater Kempton Park

New Vision

“Theory of Change”

- Locality

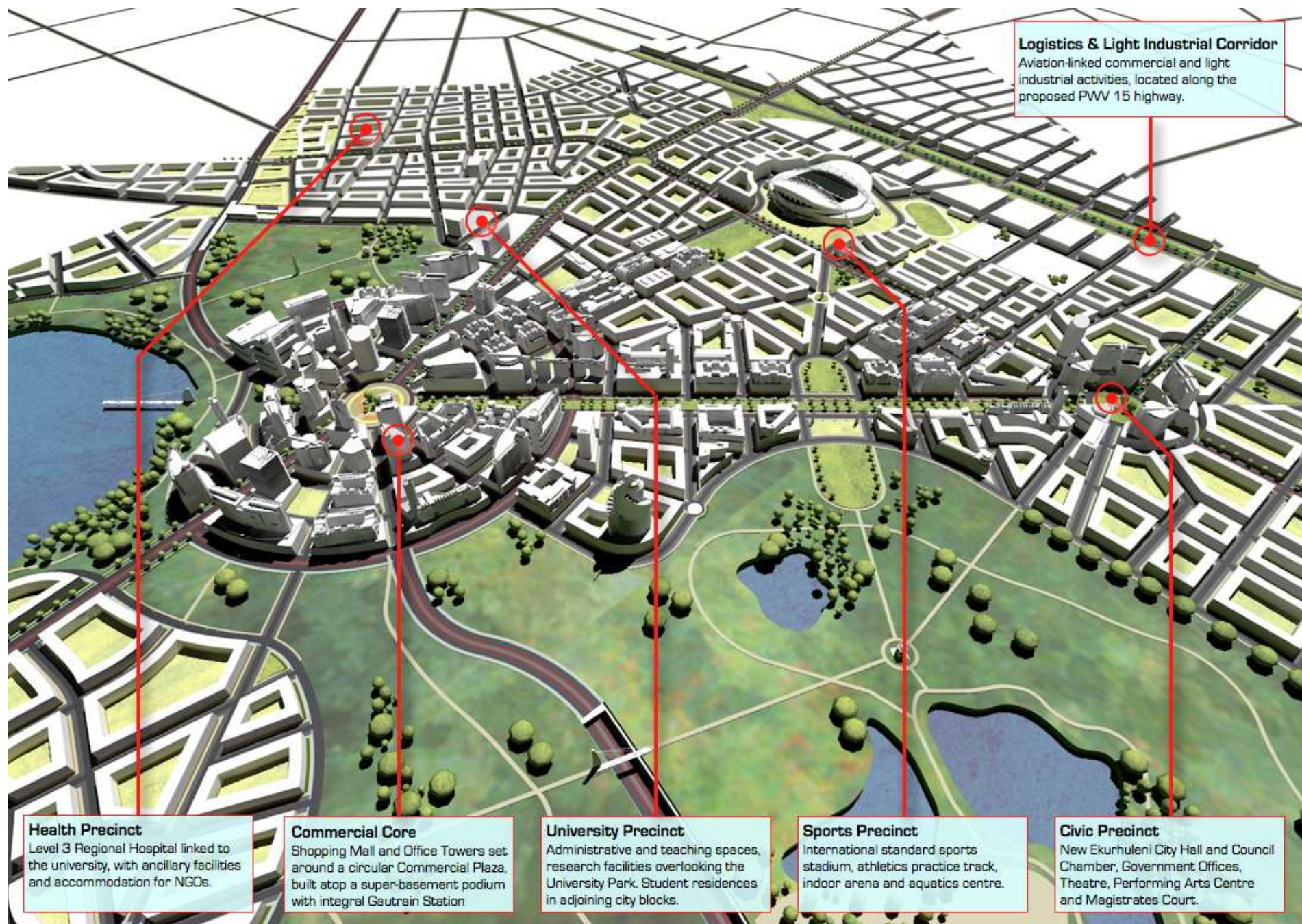


CORE

- Land use







Logistics & Light Industrial Corridor
Aviation-linked commercial and light industrial activities, located along the proposed PWV 15 highway.

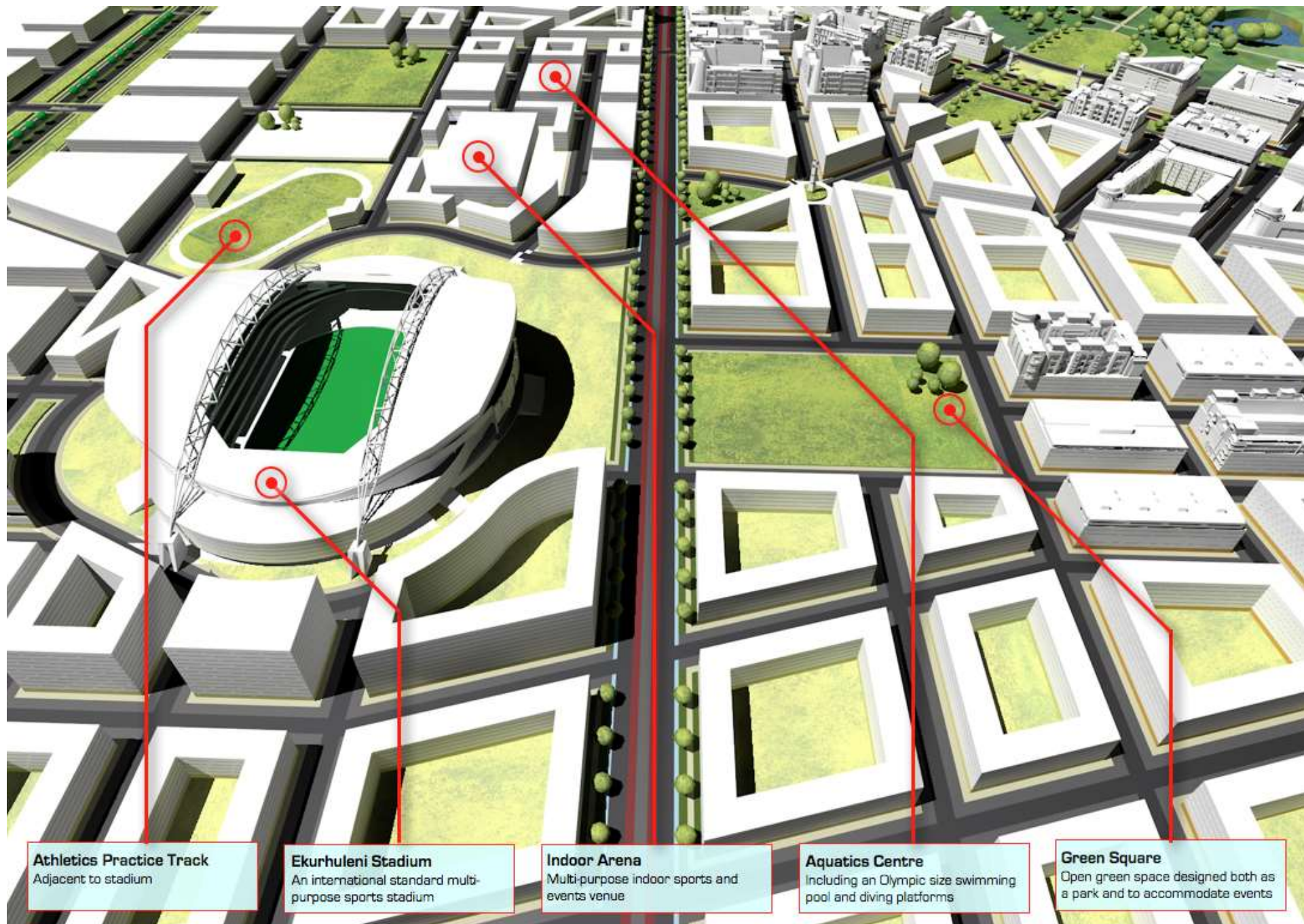
Health Precinct
Level 3 Regional Hospital linked to the university, with ancillary facilities and accommodation for NGOs.

Commercial Core
Shopping Mall and Office Towers set around a circular Commercial Plaza, built atop a super-basement podium with integral Gautrain Station

University Precinct
Administrative and teaching spaces, research facilities overlooking the University Park. Student residences in adjoining city blocks.

Sports Precinct
International standard sports stadium, athletics practice track, indoor arena and aquatics centre.

Civic Precinct
New Ekurhuleni City Hall and Council Chamber, Government Offices, Theatre, Performing Arts Centre and Magistrates Court.



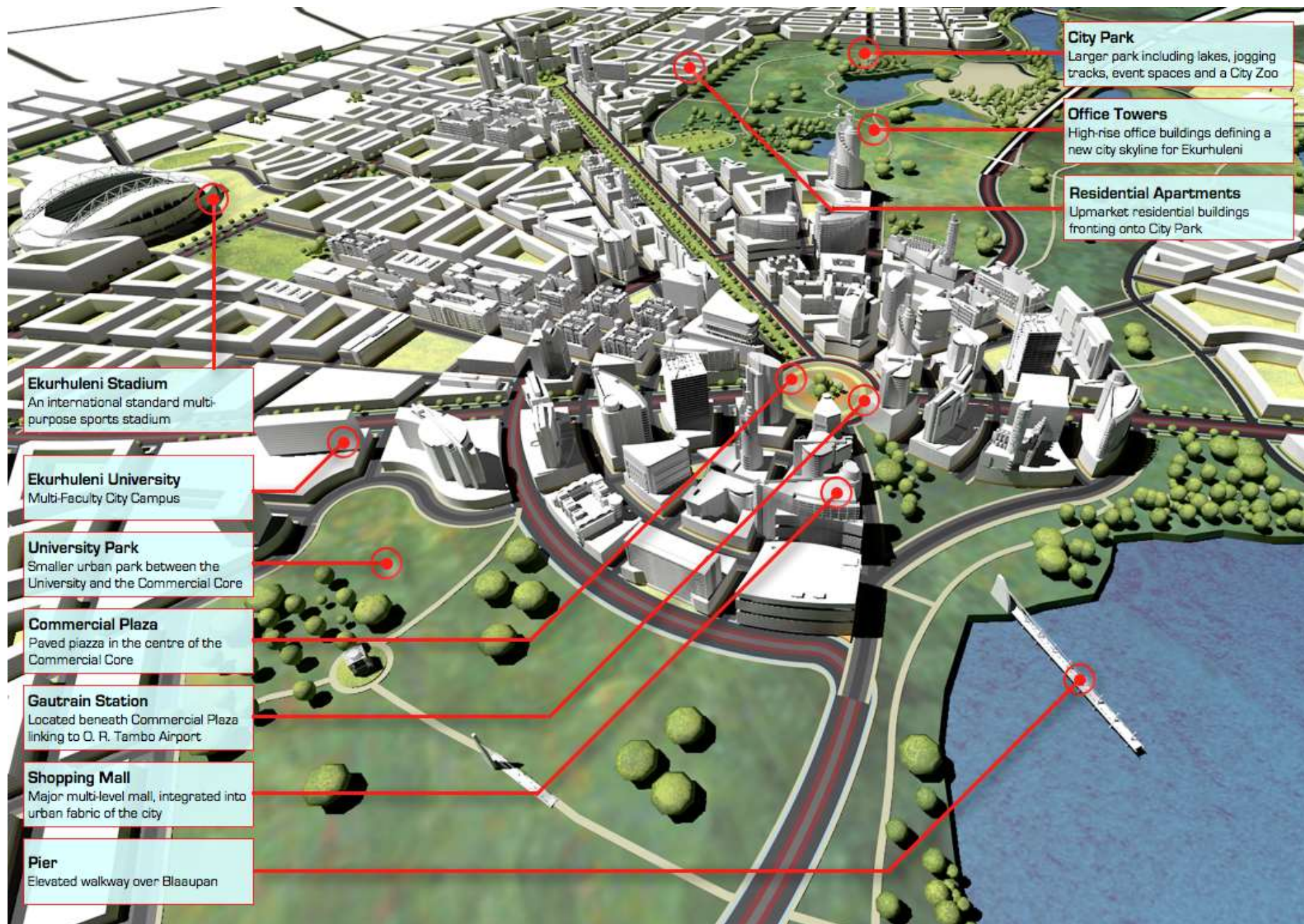
Athletics Practice Track
Adjacent to stadium

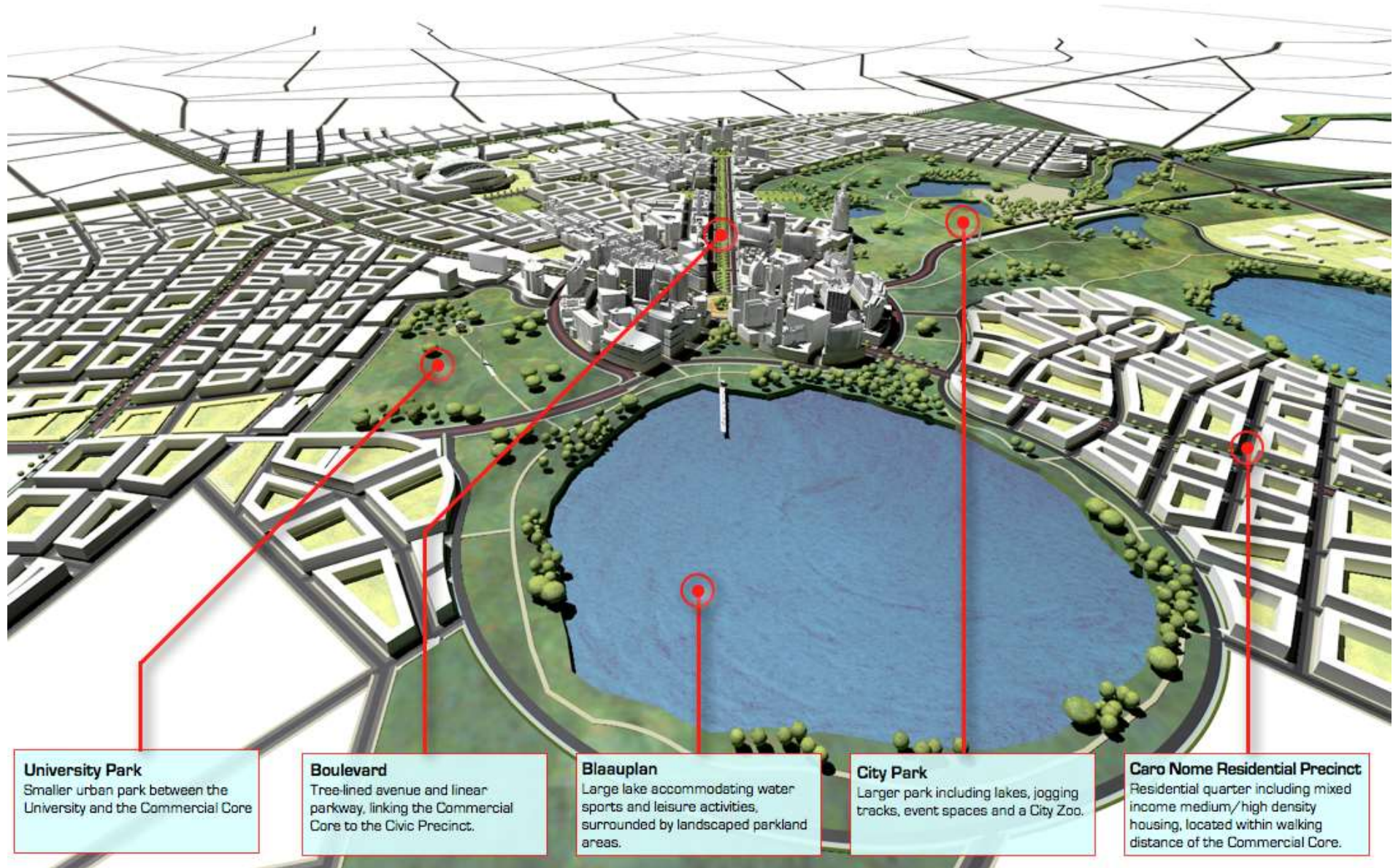
Ekurhuleni Stadium
An international standard multi-purpose sports stadium

Indoor Arena
Multi-purpose indoor sports and events venue

Aquatics Centre
Including an Olympic size swimming pool and diving platforms

Green Square
Open green space designed both as a park and to accommodate events





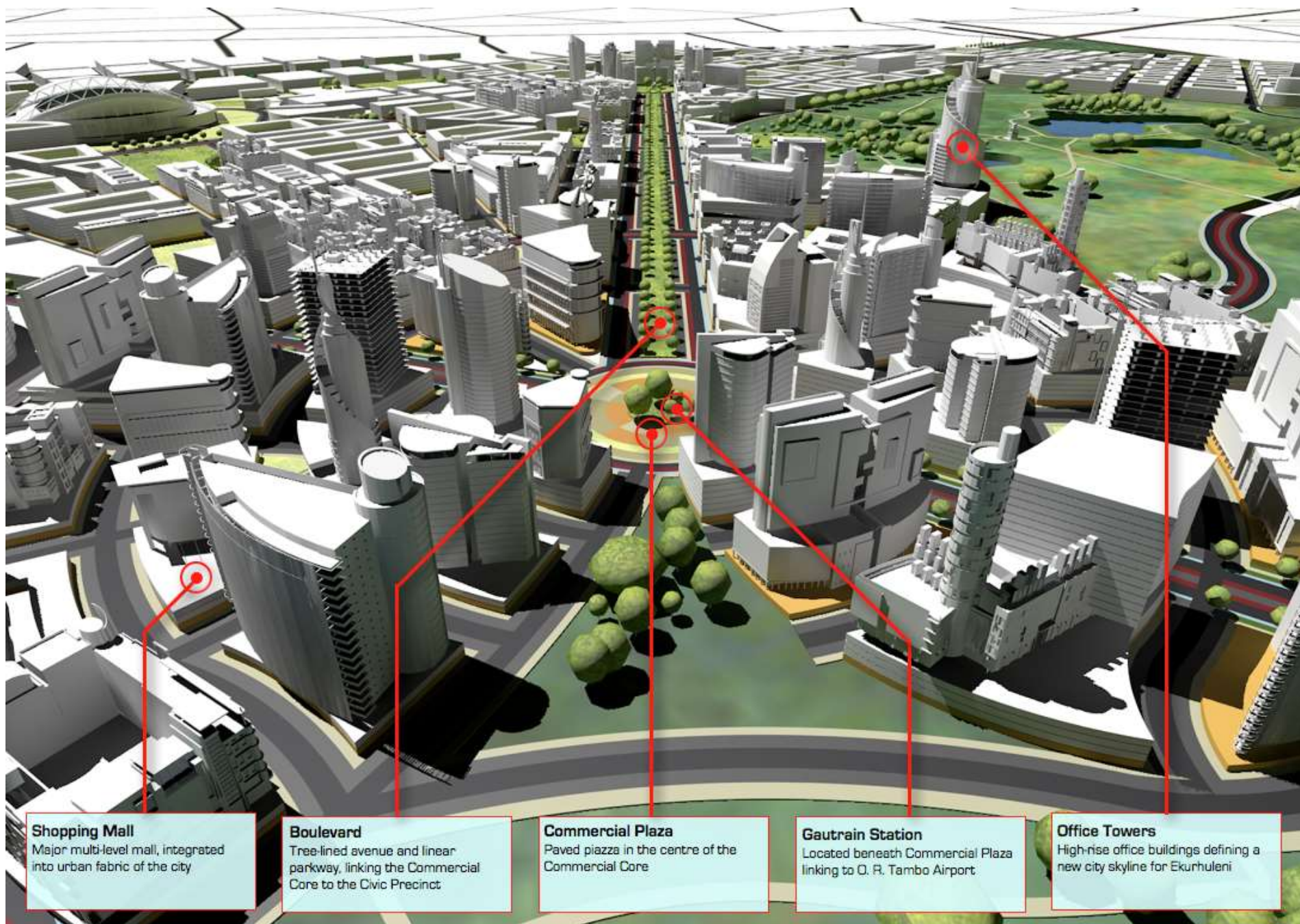
University Park
Smaller urban park between the University and the Commercial Core

Boulevard
Tree-lined avenue and linear parkway, linking the Commercial Core to the Civic Precinct.

Blaauplan
Large lake accommodating water sports and leisure activities, surrounded by landscaped parkland areas.

City Park
Larger park including lakes, jogging tracks, event spaces and a City Zoo.

Caro Nome Residential Precinct
Residential quarter including mixed income medium/high density housing, located within walking distance of the Commercial Core.



Shopping Mall

Major multi-level mall, integrated into urban fabric of the city

Boulevard

Tree-lined avenue and linear parkway, linking the Commercial Core to the Civic Precinct

Commercial Plaza

Paved piazza in the centre of the Commercial Core

Gautrain Station

Located beneath Commercial Plaza linking to O. R. Tambo Airport

Office Towers

High-rise office buildings defining a new city skyline for Ekurhuleni

Decisive Spatial Transformation: Key Milestones

Decisive Spatial Transformation: Key Milestones



City of
Ekurhuleni

GDS Theme	Key Outcome CP Strategic Objectives	Key Objective	Key Performance Indicator	Baseline	Targets			
					2015/16	2016/17	2017/18	2018/19
Re-Generate, Re-Urbanise, Re-Industrialise, Re-Mobilize, Re-Govern	Ensuring sustainability and order within built environment	Approval of the revised MSDF	Number of approved MSDFs	1 Draft Revised MSDF	1 Approved Revised MSDF			
		Approval of draft RSDFs	Number of RSDFs approved	5 Draft RSDFs	5 Approved RSDFs			
		Implementation of MSDF & RSDFs: Development of precinct plans	Number of precinct plans finalized	2 Draft Precinct Plans	3 Precinct Plans	4 Precinct Plans	3 Precinct Plans	3 Precinct Plans



City of
Ekurhuleni

GDS	Key Outcome CP Strategic Objectives	Key Objective	Key Performance Indicator	Baseline	Targets			
					2015/16	2016/17	2017/18	2018/19
Re-Generate, Re-Urbanise, Re-Industrialise, Re-Mobilize, Re-Govern	Determining the desired urban structure	Implementation of MSDF & RSDFs: Formulation of Urban Design Policy and establishment of Urban Design Review Committee	Number of urban design policies finalised	0	1 Urban Design Policy			
	Improving the Image of the city and urban fabric		Establishment of Urban Design Review Committee	0		Urban Design Review Committee established		



City of
Ekurhuleni

GDS	Key Outcome CP Strategic Objectives	Key Objective	Key Performance Indicator	Baseline	Targets			
					2015/16	2016/17	2017/18	2018/19
Re-Generate, Re-Urbanise, Re-Industrialise, Re-Mobilize, Re-Govern	Providing a sound spatial development concept for socio economic investment and opportunity	Implementation of MSDF & RSDFs: Development of the EMM Growth Management Strategy	Number of Growth Management Strategies developed	Draft MSDF	0	(Draft)	Final	Implementation
	Providing guidance and support to facilitate strategic economic land development)							



City of
Ekurhuleni

An aerial photograph of O.R. Tambo International Airport in Johannesburg, South Africa. The image shows the airport's terminal building, runways, taxiways, and several large commercial aircraft parked at the gates. A large, semi-transparent red rectangle is overlaid in the center of the image, containing the text "Thank You" in white. The background shows the surrounding urban landscape of Johannesburg.

Thank You



City of
Ekurhuleni