

5.2 Ensuring Strong Viable Nodes

The clustering of various activities at appropriate and accessible nodal locations provides the City with a network of opportunity centres. These nodes have benefited from significant public and private sector investment in services and infrastructure, which needs to be managed, maintained and protected. Although the City's nodes have contrasting characters, profiles and management issues cumulatively they accommodate the majority of economic activities and employment prospects, as well as an existing/growing residential stock. The strength and feasibility of the City's nodal points is directly linked to the functioning and health of the City as a whole.

Relationship to the Growth Development Strategy

i. Development Paradigms

A well-defined and managed nodal network linked by an efficient and affordable transport routes will actively support the following GDS development paradigms:

- Proactive absorption of the poor;
- Balanced and shared growth;
- Facilitated social mobility; and
- Settlement restructuring.

Relationship to the GMS

In terms of the growth management areas earmarked by the GMS, various priority areas were identified, of which nodal areas are either directly part of or indirectly linked. These include the high priority areas of Public Transport Priority Areas and Marginalised Areas, to be focussed on in the short term, i.e. 2009-2012 Capital Investment and immediate Service Upgrading). Any remaining nodes are indeed part of the consolidation areas identified by the GMS, and are therefore within the medium priority focus, i.e. 2012 – 2016 for new capital investment. Also within the medium term is the expansion area focus, which includes some nodal areas that were previously isolated from the greater urban area of the City, but which will become part of the urban fabric.

ii. Sector Plans

The Nodal strategy addresses the following IDP sector plans and associated long-term strategic interventions and indicative 5-year strategic objectives:

SECTOR PLAN	LONG TERM STRATEGIC INTERVENTIONS	INDICATIVE 5-YEAR STRATEGIC OBJECTIVES
Spatial Form and Urban Management	Establish a clear structure of nodes (concentration of activity) well integrated with movement systems in the city, with an emphasis on new economic nodes in disadvantaged areas and mixed use, mixed income nodes in other parts of the city	Enhancement of the intensity of existing well-functioning nodes and transformation of declining nodes to enable mixed-use mixed-income high density development Planned development of 3 new economic nodes in selected marginalised areas
	Promote densification in strategic locations, in accordance with clear principles and criteria, as defined in the Spatial Development Framework and Regional Spatial Development Frameworks	Increase in densities in nodes and along public transportation routes in support of defined spatial structure
	Within a clear structure for movement and accessibility, ensuring that movement systems in the city directly link with, and are supported by, strong high-intensity, mixed-use nodes and higher residential densities	Corridors and mobility routes planned, developed and managed in the way that supports the overall development framework of high intensity nodes on a lattice of connecting routes
	Encourage and enforce a compact urban form through a range of mechanisms	Minimised demand for investment and services on the urban periphery Optimal utilisation of investment within the urban core (land, infrastructure and capital expenditure)
	Within all new housing developments ensure that the minimal SHS thresholds are adhered to and implemented.	Increase in investment of affordable housing in close proximity to public transportation and designated nodes Increased accessibility to social, economic and environmental infrastructure (thresholds to be determined)
	Develop principles, frameworks, and practices to ensure that spaces and specific development adhere to good standards of urban design.	Design and implement codes to create safer communities, legibility, functionality and aesthetics of the urban environment.
	Lead large-scale urban renewal projects to ensure disadvantaged areas, with inequitable and deteriorating built environments are spatially integrated into the City.	Increased investor confidence in declining areas and under performing areas. Public investment in marginalised areas to facilitate crowding in of private sector spending
Human and Community Development	Promote spatial equality through the creation of sustainable human settlements	Improved proportion of residents within 5km of key social infrastructure
Economic Development	Reduce spatial economic disparity across the city and enhance the social and economic integration of previously disadvantaged areas into the wider city region	Economic base of underdeveloped areas of City Increased over five years
Housing	Ensure that residents in the inner city and older locations are able to enjoy acceptable standards of accommodation (better-buildings programmes, targeted partnerships for upgrade, by-law enforcement etc)	Structure partnerships with stakeholders to promote inner city and older centres residential accommodation programme.
	Ensure the provision, of affordable home-ownership and rental accommodation at scale addressing the needs of a range of housing segments, with a special focus on the needs of poorer residents not currently catered for.	Through both the City's own means, and in partnership with other actors and stakeholders, deliver 100,000 well-located and good quality housing units over the next five years, which includes the delivery of 15,000 rental housing units, 30,000 housing units through the Community Builder Programme and 50,000 mixed income housing units.
Transportation	Support the underlying logic of a compact, multi-nodal city form, with well-integrated land-use and transport systems, in particular by providing a legible public transport 'grid' of focused high-frequency public transport routes connecting key high-density nodes	N/S, NASREC and Ellis Park flagship components of the SPTN completed Reduced average public transport travel times on selected SPTN routes as measured by a five-yearly survey.

There is an established and natural tendency for economic activities to group together. The spatial configuration of these activities can take many forms and may be to the benefit or determinant of the City's urban form. Examples of all four of these typical configurations can be found in the City. The most common are considered in **Table 5.11**.

Table 5.11: Economic Development Configurations

CONFIGURATION	TYPICAL CHARACTERISTICS
Point	<ul style="list-style-type: none"> • Contained within one building or development • At the intersection of two routes • Has good access • Has single land use and owner • Low intensity development • Neighbourhood significance (e.g. filling stations / Café corner shop)
Strip	<ul style="list-style-type: none"> • Linear form • Along arterial – preferably on a service road • Single or mixed land uses • Single or multiple land owners • Movement is vehicle related not pedestrian focused • Has a district or regional significance (e.g. 7th Avenue, Parktown North)
Activity Street	<ul style="list-style-type: none"> • Mixed use, the 'traditional' high street • Pedestrian dominated with slow moving traffic (possibly prohibited) • On street parking • Fine-grain urban fabric, short blocks, low rise buildings • Neighbourhood, District or regional significance (e.g. 7th Street, Melville)
Node	<ul style="list-style-type: none"> • At the intersection of metropolitan movement routes and enjoy good access (from district node and up) • Well served by public service • Mixed land use activity or distinct function due to dominant land use • Public and private investment • Intense concentration of activities • Multi Ownership • Size determined by access • Neighbourhood, District, Regional, Metropolitan significance (e.g. Randburg, Kliptown, Roodepoort, Lenasia)

The most significant of these from an urban form and structuring perspective is the 'Node' configuration.

The City defines a node as a well-defined and legible urban environment where highly accessible, mixed and compatible land uses are concentrated and serviced.

The following attributes provide an overview of the characteristics of an “ideal” node:

- **Land use:** Activities are clustered to achieve economic efficiency and a vibrant combination of compatible land uses.
- **Urban form:** The node is contained within a clear boundary and a recognisable core. It has a pedestrian focus but does not necessarily exclude vehicular traffic. Developments provide a fine-grain, pedestrian friendly interface. Public spaces such as parks and squares are linked to the pedestrian network.
- **Movement and transport:** The node has a strong pedestrian focus and pedestrian connectivity. Accessibility via private transport is convenient but does not dominate movement within the node. Public transport is integral to the design and functioning of the node.
- **Infrastructure and services:** Services are adequate and support the intensification and densification of the node.
- **Public amenities:** Public amenities and community and social facilities are linked to pedestrian routes and integrated with commercial activities.
- **Management:** The node is managed as a cohesive entity and not merely as a series of separate properties, landowners and activities. Public areas are beautified and maintained as image-building and unifying elements of the node.

As Johannesburg has grown, a number of distinct nodes have developed within its boundaries. Irrespective of which sector (i.e. private market or public) or use (retail, commercial, institutional or industrial) stimulated their development, these nodes have benefited from significant public investment in infrastructure (road, water, power etc.). New nodal points place increased demands on the City’s existing infrastructure network.

Most nodes endure cyclical phases of growth and development. Typically, a node emerges, matures and invariably declines or re-emerges in a different guise in terms of this theoretical cycle. The nodal cycle is closely related to the recession, recovery, boom phases of the property market. The City has acknowledged the emergence of three nodal stages, namely (Nodal Study 2001/02):

1. A public sector-led intervention and investment development stage: i.e. nodal development arising from public investments and public development, forming development catalysts. The major areas occur from the Johannesburg Central Business District southwards, including Soweto, Lenasia, Ennerdale and Orange Farm.
2. A “mature” development stage: i.e. nodal development that displays many of the desired characteristics of a node. These mature nodes are typically found in an east-west band from Parktown northwards to Randburg, Rosebank and Sandton.
3. A “speculation” development stage: i.e. nodal development driven by property speculation, new investment and developments in growing and expanding areas of the City. The supply driven market is typically situated in a band north of the “mature” market to Fourways, Rivonia and Sunninghill as well as specific areas in the south (e.g. Gleneagles/Oakdene).

The strength and vibrancy of a node will have a significant effect and impact on the surrounding areas. Declining and stagnant nodes are likely to have a detrimental impact on both public and private investments. Conversely, strong and lively nodes are likely to have a positive impact on investment. It is therefore imperative that the City’s nodal assets are managed in a strategic manner.

In order to protect and enhance the existing amenity of the City's nodes and the associated infrastructure investments and to minimise the encroachment of non-residential uses into the residential suburbs, the City is intent on:

- Regulating speculative growth of new nodal points;
- Eliminating linear creep along mobility spines and roads;
- Defining a clear network of nodes (as destination points) that contributes directly to an aligned public transportation network;
- Ensuring that re-investment occurs, rather than flight to 'new' nodes serving the same or similar market;
- Ensuring adequate levels of infrastructure to support development;
- Densifying within and on the periphery of defined nodal boundaries;
- Supporting Inner City and traditional town centre regeneration initiatives;
- Embracing public / private partnerships such as Central Improvement Districts (CIDs) to stimulate growth and provide additional services;
- Monitoring the "health" of each node; and
- Building a distinct and positive identity for each node.

What's new in the Strategy?

The City is in the process of finalising a study on industrial land for the City, and intends to identify high priority industrial nodes together with key implementation strategies and mechanisms to facilitate economic growth.





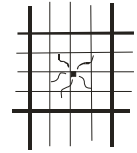
Neighbourhood nodes are in the process of being categorised and prioritised in terms of function and location within the various RSDFs. Key issues and problems which have arisen during the study are discussed briefly in this chapter.

5.2.1 Nodal Hierarchy

The City has identified a Nodal hierarchy based on Neighbourhood, District, Regional, Metropolitan and Central Business District (CBD) definitions. **Table 5.12** reflects this hierarchy and the associated attributes and characteristics of each.

For the purpose of this SDF review, a distinction is made between nodes of a mixed use and specialist use (including industrial uses). **Annexure A** of this document profiles 33 of the City's mixed-use nodes. **Annexure B** profiles 29 Specialist nodes.

Table 5.12: Nodal Hierarchy

	CBD	Metropolitan node	Regional node	District node	Neighbourhood node
					
Description	The CBD is the historical origin and core of the metropolitan city. The CBD serves national and international communities.	These nodes are of metropolitan significance in terms of attracting people from areas beyond the metropolitan boundaries of the city.	These nodes are of regional significance, with reference to the regions making up the metropolitan area of the City. They serve specific sub-regional areas or large districts.	These nodes serve one or more neighbourhoods (sub-areas).	This type of node is of significance for a specific neighbourhood.
Dynamics / characteristics of the node	<ul style="list-style-type: none"> • Situated at the confluence of metropolitan routes and freeways, in the area of highest accessibility. • Diversity of activities and public facilities across the range, from industrial and manufacturing primary activities, secondary services, tertiary activities to quaternary services. • Full range of public transport facilities. • Established high-density residential component. • Fully-fledged service infrastructure and support services. 	<ul style="list-style-type: none"> • Situated on mobility spines supported by mobility roads and have access to urban freeways • A variety of goods, services and speciality products are offered at the node. • Distinct profile. 	<ul style="list-style-type: none"> • These nodes are situated on mobility spines supported by mobility roads. • Fulfil a variety of functions with sufficient mix of uses. • Not necessarily a distinct profile, with nodes in tight competition against each other. 	<ul style="list-style-type: none"> • These nodes are predominantly located on mobility roads and / or activity streets (but not necessarily in all cases). • Activities are of a local nature providing for convenience, daily needs and social services. • Pedestrian activity is relatively easy. 	<ul style="list-style-type: none"> • Pedestrian-preferred access. • Activities serve the immediate neighbourhood / suburb and are convenience based (not office dominated)
Nodal development issues to address	<ul style="list-style-type: none"> • Promote and acknowledge as the core of the city. • Symbiotic relationship with decentralised nodes. 	<ul style="list-style-type: none"> • Intensity and pedestrian-friendliness in spite of being a very large node. 	<ul style="list-style-type: none"> • Oversupply of nodes causes business to easily move out and not committing to the upgrading and maintenance of an area. 	<ul style="list-style-type: none"> • Easy and pedestrian movement. 	<ul style="list-style-type: none"> • Integration in surrounding environment
Required management approach	<ul style="list-style-type: none"> • The focus should fall on revitalisation and marketing in order to change perceptions. 	<ul style="list-style-type: none"> • The focus should fall on the creation of a clear profile for each metropolitan node. The design approach should focus on integrating various uses and different precincts visually and physically into a cohesive whole. 	<ul style="list-style-type: none"> • The focus should be on the monitoring and management of nodes to prevent an oversupply. The design approach should focus on integrating various parts of the node in one cohesive whole, as well as integrating the node within its surrounding environment through pedestrian linkages. 	<ul style="list-style-type: none"> • The design approach should focus on integrating these nodes within their immediate environment by providing sufficient, safe and pleasant pedestrian linkages. 	<ul style="list-style-type: none"> • The design approach should focus on the creation of attractive public spaces even on a very small scale. Leftover spaces should be avoided at all cost.

The profiles include an assessment of the nodal attributes identified earlier in this section, namely:

- Land use;
- Urban form;
- Movement and transport;
- Infrastructure and services;
- Public amenities; and
- Management.

It is acknowledged that the classification of nodes is a dynamic and ongoing process given the emergence of new and expansion of existing nodes (e.g. Modderfontein, Jerusalem / Fairlands – Cresta / Beyers Naude node) and the progressive development / intermittent decline of existing nodes.

Each node has a distinct character, land use profile, and unique management issues. Some require specific interventions to make them work in a more efficient manner. Others are rapidly expanding and require management controls. Each profile is inclusive of a nodal boundary, status quo report and list of specific management issues that need to be addressed. **Table 5.13** Indicates a comprehensive classification of the City's nodes. The spatial location of these nodes is indicated in **Map 29**.

In specific reference to the Northern Areas Development Framework Study 2007/08, a number of new nodes were proposed on the Metropolitan, Regional and District Levels. These nodes have been earmarked for development at accessible points within a largely greenfields environment, and needed to address the demands of the expanding population foreseen within this City expansion area, refer to **Map 30**.

Development within these nodal areas were only be considered provided the infrastructure capacity was confirmed and provided that the proposed uses addressed the requirements outlined in the Northern Areas Development Frameworks. The land use requirements, density bonus system etc are captured within the relevant RSDF, i.e. Region A.

5.2.2 The Current Approach to Neighbourhood Nodes

Neighbourhood nodes fulfil specific function for neighbourhood residents and the functioning of neighbourhoods as a whole. Their importance is related to the provision of convenience related uses such as:

- Social and Community Facilities (libraries, crèches etc.);
- Open space may be included in neighbourhood nodes;
- Doctors' Consulting Rooms;
- Convenience related shopping/services which may include uses such as Convenience Grocers, Dry Cleaners, Butchers, Local Fruit and Vegetable Shop, Laundromat, Video Rental Stores;
- Public Garage;

- Restaurants, Coffee Shops and Take Away Shops; and
- Hairdressers/Beauty Parlours.

Many neighbourhood nodes have developed incrementally and in an ad-hoc manner, frequently resulting in inappropriate land uses and zonings. Consequently, managing the scale of development, land use control and law enforcement becomes problematic and limits opportunities for integration and the sustainability of these nodes and the areas in which they are located.

There is an increasing acknowledgement that these nodes need to be better managed and during 2008/09 an exercise to define and categorise neighbourhood nodes in the Regional Spatial Development Frameworks (RSDF) took place.

Key issues related to neighbourhood nodal management includes:

- The nodes do not follow the same structure or function across the City or even within the same region.
- Land use applications are difficult to assess as policies do not relate directly to neighbourhood nodes or specify how they should be monitored or managed;
- The nodal extent is undefined, resulting in undesirable non-residential uses expanding into residential areas;
- In particular instances, the zoning may allow for incompatible uses to be established in neighbourhood areas; and
- The varying typologies and structure that neighbourhood nodes retain needs to be investigated and understood to allow for the categorisation and classification of these nodes.

Those neighbourhood nodes identified in this cycle of the review, are listed and illustrated on the Regional Nodal Maps contained in the respective RSDF of each Region. The lists contained in the RSDFs are not exhaustive and will be further investigated to obtain a sustainable management solution for these nodes.

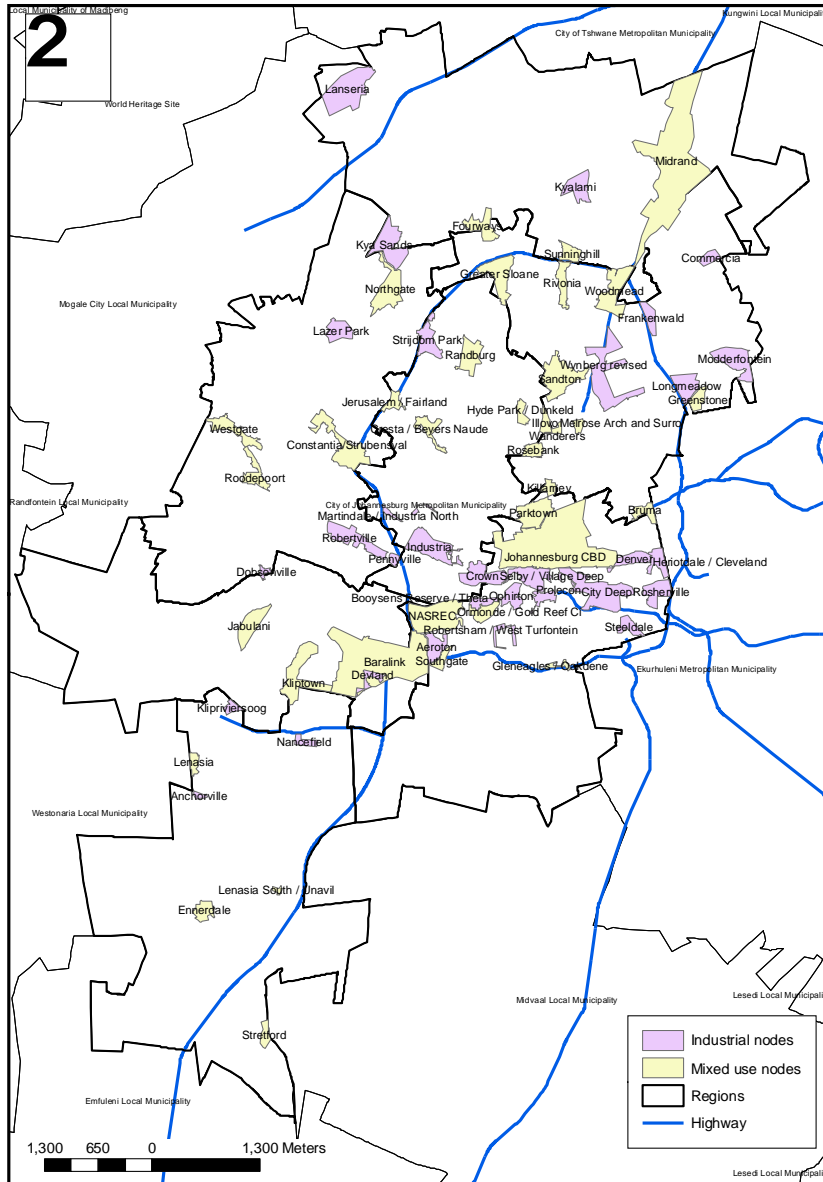
The sub area management tables in the RSDFs provide more detailed information relating to the management guidelines neighbourhood nodes and include, but are not limited to:

- Design guidelines;
- Containing or expanding the nodes;
- Specific uses which are desirable in the nodes;
- Surrounding land uses which will be supported;
- Specific density requirements in and around the nodes; and
- Specific land use controls, which may be supported.

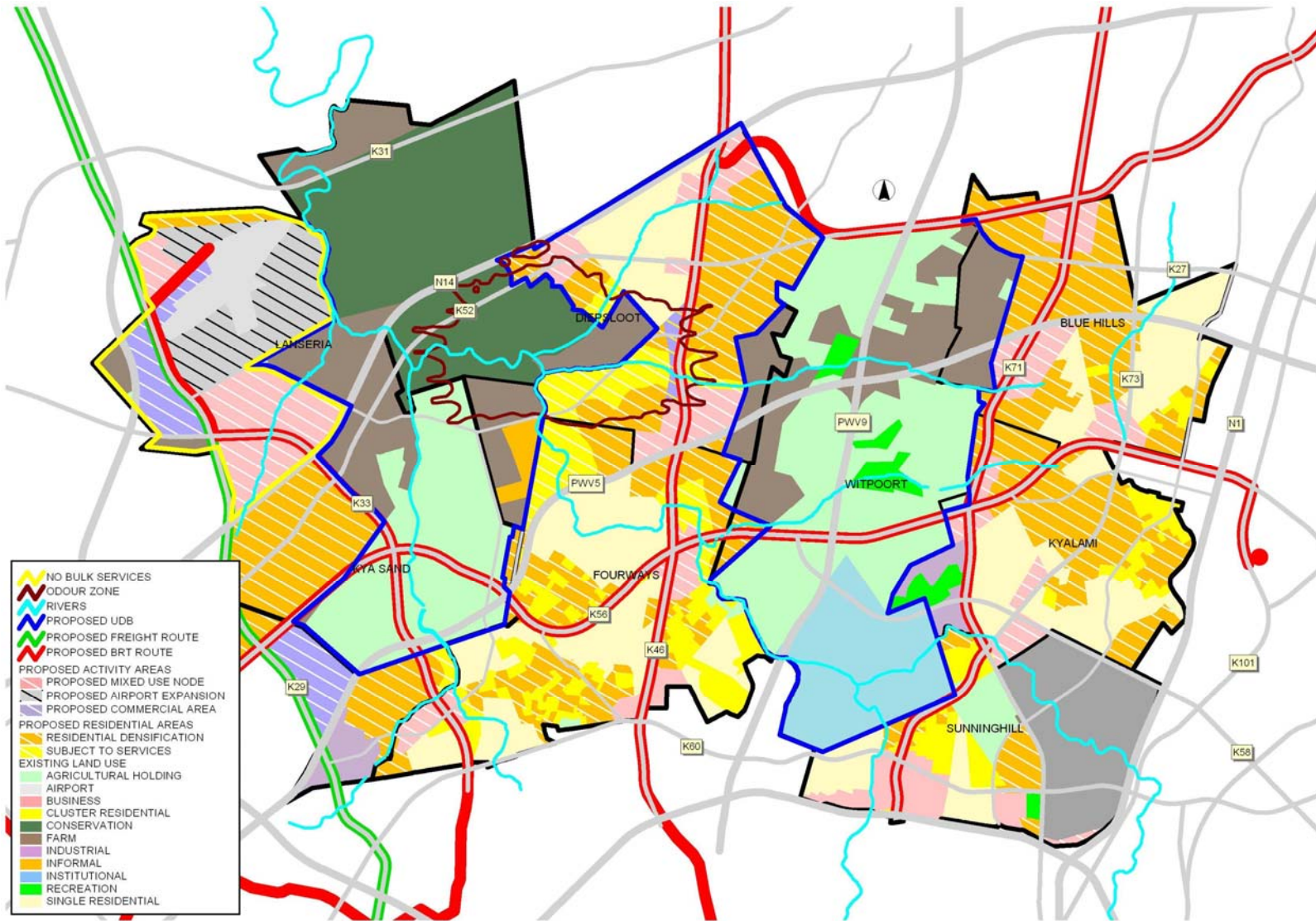
Table 5.13: Nodal Classification

Annexure A		
Classification	Map	Node
CBD	1	Johannesburg
Metropolitan	2	Sandton
	3	Midrand
Regional	4	Baralink
	5	Bruma
	6	Constantia/Strubensvalley
	7	Cresta / Beyers Naude
	8	Fourways
	9	Greater Sloane
	10	NASREC
	11	Northgate
	12	Ormonde/Gold Reef City
	13	Parktown
	14	Randburg
	15	Rivonia
	16	Roodepoort
	17	Rosebank
	18	Southgate
19	Sunninghill	
20	Westgate/Princess	
21	Woodmead	
22	Greenstone	
23	Illovo	
Marginalised Area District	24	Ennerdale
	25	Jabulani
	26	Kliptown
	27	Lenasia
	28	Lenasia South / Unaville
29	Stretford	
District	30	Gleneagles/Oakdene*
	31	Hyde Park / Dunkeld
	32	Killarney
	33	Melrose Arch and Surrounds

Annexure B		
Classification	No.	Name
Specialist i.e. nodes identified which are mono-use or unique within the City	34	Wanderers
	35	Aeroton
	36	Amalgam/Crown 3, 7
	37	Anchorville
	38	Benrose
	39	Booyens Reserve/Theta
	40	Booyens/Reuven/Ophirton
	41	Prolecon
	42	City Deep
	43	Cleveland/Heriotdale
	44	Commercia/Chloorkop/Modderfontein
	45	Denver
	46	Devland
	47	Frankenwald/Linbro Park
	48	Industria/Industria North/Industria West
	49	Klipriviersoog
	50	Kya Sands/Northlands
	51	Kyalami/Barbeque Downs
	52	Lanseria
	53	Laser Park/Honeydew
	54	Longmeadow
	55	Nancefield
	56	Robertsham/West Turfontein
	57	Robertville/Lea Glen/Stormill
	58	Rosherville
	59	Selby/Village Deep
	60	Steeledale/Tulisa Park
61	Strijdom Park	
62	Wynberg/Marlboro/Kew	



Map 29 Nodes



Map 30 Northern Areas Development Framework

Table 5.14 provides general guidelines for nodal management and development in order to achieve the characteristics as indicated in the nodal type section.

Table 5.14: Nodal Management Guidelines

Issues	Guidelines
Transportation	<ul style="list-style-type: none"> • Pedestrian movement should dominate within the nodes. Design of buildings, open spaces, walkways etc. to reflect this. • Visible and accessible public transport facilities need to be an integral component of the node. • Parking for both public and private vehicles should not inhibit pedestrian movement and social activities. • Limited on-street parking should be provided on the main roads – unless these roads are classified as a Mobility Spine or Road (in which case the mobility function must be retained). • Precinct Plans should be developed for all major existing and proposed stations and major inter-modal transport facilities in nodes. • The Precinct Plans need to consider: <ul style="list-style-type: none"> ○ Residential densification; ○ Pedestrian access, linkages and movement; ○ Dedicated road-based feeder and distribution systems; ○ Road network improvements, (road intersections, station access intersections, parking areas and facilities); and ○ An assessment and the upgrading of service infrastructure.
Development Management Land Use / Intensity	<ul style="list-style-type: none"> • The highest intensity of land use must be located within the nodes. • Appropriate scaling down of the density and intensity of land uses on the interface and beyond the nodal boundary must be managed and facilitated to protect existing residential areas. • Establish a mixed- and multi-use approach to activity patterns to achieve an urban (as opposed to suburban) scale of intensity. • Horizontal spread / growth of nodes to be contained within defined boundaries (as defined in Annexure A or in the RSDF/Precinct Plan) and regulated according to the supporting transport and engineering infrastructure capacities and the neighbourhood character. • Health, education, social, religious and other public / social facilities that attract a constant flow of people should be used as nodal 'anchors' (aim to maximize private investment in proximity to these facilities). • Market places and facilities for trading to be accommodated in the design.
Design Aspects	<ul style="list-style-type: none"> • Security can be enhanced when open spaces are well utilised and lit. This aspect can be further enhanced when buildings (particularly residential) face and interact with the open spaces. • Accentuating the elements of the public environment such as landmarks and outstanding features to create a 'sense of place' and legibility. • Provision of extensive landscaping / covered walkways for beautification and protection from the elements. • Outdoor spaces must cater for the elderly, young and disabled – e.g. ramps, seating, shade. • Buildings need to front directly onto the street and have active ground floor uses. • Linkages between nodes need to be identified and enhanced.
Urban Management and Maintenance	<ul style="list-style-type: none"> • Promote property owners' association or Business or City Improvement Districts (BIDs or CIDs). • Private sector investment has to be encouraged to locate around public spaces (e.g. public transport facilities).
Nodal Growth Management	<ul style="list-style-type: none"> • Regulate the development of new nodes beyond identified locations • Support the upgrading / re-investment within existing nodes • Integrate new nodal development with public transport and the Strategic Public Transport Network where possible. • Encourage residential densification as an integral component of the node.

Issues	Guidelines
	<ul style="list-style-type: none"> • Ensure a balance between parking at the node and public transport infrastructure. <p>Proposals for new nodes will only be considered:</p> <ul style="list-style-type: none"> • At appropriate sites with supporting access (e.g. intersection of Mobility Roads / Spines). • Traffic impact assessment indicates reasonable impact on existing / planned network. • Access controls are indicated and design mitigates against negative impact on amenity of surrounds. • An assessment of neighbouring nodes capacity / health indicators (e.g. vacancy / composition). • Need and desirability for new node needs to be motivated based on the above assessment / constraints / opportunities. • Where there is infrastructure and service capacity for a node – if infrastructure is to be provided for by the developer /applicant MOE must indicate ability to maintain new infrastructure. • Environmental impacts of the proposed node are articulated in the form of an independent report submitted as a supporting motivation.

5.2.3 Study on Industrial Land in the City

Johannesburg has long been a centre for mining and manufacturing. Critically, a major transportation network emerged in the late 19th century to carry the City's new-found mineral wealth. The City's role as a transportation hub supported the development of industrial facilities fed by a rapidly-expanding labour supply. Within its brief history, the relatively new City of Johannesburg rose to become Africa's industrial powerhouse.

An important goal for the City is to promote the successful development of Johannesburg's economic base in part by ensuring that industrial land is maximised for its highest and best use. Ultimately, it is in the City's interests to direct manufacturing, warehousing, or other industrial activities to the most competitive new or existing locations for such activity, so that these sectors may flourish and create jobs and income for local residents.

The City is currently finalising a study, which focuses on the following key objectives as part of an Industrial Land Study for Johannesburg:

- Specify the industrial uses with growth potential in Johannesburg.
- Identify the competitive locations for industrial growth.
- Examine existing industrial areas and identify the highest-and-best use for older industrial zones.
- Recommend the policies, programmes, incentives, and strategies required to resolve key issues in the supply of industrial land and in the redevelopment of older industrial zones.

The following key issues and information were looked at as part of the research and analysis component:

- Economic Overview: Key economic trends are summarised along with an updated analysis of industrial land supply and demand.
- Employment Trends: Issues covered include the location of employers' and employees' places of residence and work and others.
- Industrial Property Market Update: Issues covered include how land/ building supply affects rentals and the ability of smaller industries to afford to move to better building space or even established industries to expand and ultimately create more jobs.
- Infrastructure Summary: Support infrastructure and its impact on the growth or decline of industrial development is discussed.

- Business Survey (questionnaire survey): Significant input was gathered through a survey of 100 manufacturing and other industrial businesses as a sample of the Chamber of Commerce).
- Key stakeholder issues: Key drivers and inhibitors for industrial business and property owners were obtained from the various interactions with stakeholders.
- Prioritisation Criteria: criteria for the selection of priority areas for industrial development review, based on input from the demand analysis, infrastructure assessment, surveys, interviews, focus groups, and City policy framework.

The **Table 5.15** below provides a list of the final set of criteria derived from the workshop with key City stakeholders along with the actual industrial nodes with an indication of the degree to which these nodes meet the criteria.

Table 5.15: Proposed Industrial Land Priority Nodes

Expansion of Existing Industrial Node/Zoning	
Criteria	Potential Industrial Node ²⁰
<ul style="list-style-type: none"> • Build-out • Sustainability • Infrastructure Capacity • Environmental Sustainability • Market Pressure/Potential • Accessibility (housing/employment) 	<ul style="list-style-type: none"> • Aeroton: Yes • Commercia / Chlookop, Modderfontein: Yes • Linbro Park: Qualified Yes • Midrand: Yes • Kiasha Park: Yes • Kya Sand / Northlands: Qualified Yes • Anchorville / Lawley: Undetermined • Nancefield: Yes, if possible
Regeneration of Existing Industrial Node	
Criteria	Potential Industrial Node
<ul style="list-style-type: none"> • Marketability • Management • Physical Crime & Grime • Location (proximity to low-income areas) 	<ul style="list-style-type: none"> • Benrose / Denver: Yes with modifications. • Selby & Booyens: Yes with modifications • City Deep: Yes with modifications • Wynberg/Marlboro South: Yes (Including Residential)
Change of Zoning Away from Industrial	
Criteria	Potential Industrial Node
<ul style="list-style-type: none"> • Location & Context (impact on surrounding uses) • Marketability • Existing Plans • Infrastructure Capacity (peak periods in network) • Accessibility (access to opportunity) • Changing character/use (use not aligned with zoning) 	<ul style="list-style-type: none"> • Fordsburg: Yes / Modification • Braamfontein Werf: Yes • Klipriviersoog: Undetermined • West Turfontein / Robertsham: Qualified Yes • Lanseria Airport Area: Yes.

²⁰ Potential Industrial Nodes are discussed in greater detail in Annexure B of this document.

New Industrial Areas	
Criteria	Potential Industrial Node
<ul style="list-style-type: none"> • Infrastructure (accessibility/availability of existing infrastructure): <ul style="list-style-type: none"> ◦ Capacity ◦ Service network • Location/Accessibility • Marketability • Environmental Sensitivity • State land ownership • Proximity to housing ("appropriate" work force for industry) • Existing Planning context (limiting industrial uses) • Target industrial sectors, integrated economic development • Cost of development 	<ul style="list-style-type: none"> • "Golden Triangle": Conditional Yes • Bassonia / Mulbarton: Undetermined • Modderfontein: Qualified Yes • Diepsloot: No • Orange Farm: Limited • Soweto: Emdeni I.P./ Zola, Dobsonville, Dhlamini, and Chiawelo • Crown Mines / Industria West / Stormill-Robertville

Note: New nodes or nodes that do not exist and discussed in the table include: Lawley, Fordsburg, Braamfontein, Bassonia, Mulbarton, and Soweto: Emdeni I.P./ Zola, Dobsonville, Dhlamini and Chiawelo.

The City is seeking the study's approval. When approved the study will form the basis for additional engagements with key internal and external stakeholders to further prioritise and phase future industrial nodal development.