

LIFTING

# SOUTH AFRICA TO NEW HEIGHTS

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**50-YEAR**  
DURBAN  
AEROTROPOLIS  
MASTER PLAN



# PLEASE YOUR FIND SEATS

## Table of Contents

Executive Summary 03

Social Influences: Global and Regional Trends 04  
Economic Influences: Transformation & Investment 06  
Physical Influences: Study Area Analysis 08

Master Plan Vision 12  
Intensity Zone Framework 14  
Phasing Strategy & 50-Year Growth 16  
Transit, Mobility & Infrastructure 17  
Niche Nodes 18

Connected Economy 22  
Integrated Community 23  
Inclusive Opportunity 24  
Smart City 25

Lead Initiatives For Positive Transformation 28  
Implementation Framework 34

Project Process 35  
Project Team 36

Understanding &  
Analysis

The Master  
Plan

Master Plan  
Pillars

Lead Initiatives &  
Implementation

Team &  
Process



Anchored by the King Shaka International Airport, the **Durban Aerotropolis** is a purpose-built city that will enhance urban and national competitiveness through improved multi-modal transport access and planned, coordinated, aviation-linked commercial development, making the airport, surrounding areas, and the entire province more economically efficient, attractive and sustainable.

## Growth Opportunity

### PROVINCE OF KWAZULU NATAL

**2<sup>nd</sup> largest**

regional contributor to South African GDP

Source: STATS SA

### Key Sectors

- Manufacturing
- Transport & Communication
- Wholesale, Retail & Trade
- Catering & Accommodation

### KING SHAKA INTERNATIONAL AIRPORT

Capacity:

**7.2M**

current pax.

Source: Dube TradePort

**45M**

2066 pax.

Capacity:

**0.1M**

current cargo tons

Source: Dube TradePort

**1M**

2066 cargo tons

CLEARED  
AND  
READY  
FOR

# TAKE-OFF

**32 000**

hectares of  
total land

**42M m<sup>2</sup>**

of total  
development

## Executive Summary

An **Aerotropolis** is a purpose-built city around an airport, offering local businesses speedy connectivity to their suppliers, customers, and enterprise partners, nationally and worldwide.

**10 000**

hectares of  
green space

**R 1 trillion**

potential investment

## Durban Aerotropolis

The **Durban Aerotropolis Master Plan** constructs a development framework for the next 50 years of growth in the region's premier airport precinct. By anticipating and responding to the region's potential trends and challenges, the master plan creates a favourable physical environment for investment through integrated and coordinated spatial planning, integrated multi-modal transport networks, place marketing, infrastructure and engineering services, and environmental sustainability.

**1.5 million**

residents

**750 000**

permanent jobs

The Durban Aerotropolis has the potential to:

- catalyse social, spatial, and economic transformation, and
- localise the benefits of global trends through a robust and flexible master plan framework.

**1-8**

FAR range

**50**

year planning  
horizon



**NOTE:**  
The crossing of the conservation area at Mount Moreland is subject to a detailed study where the exact delineation of the crossing of Umdloti River at Mount Moreland should be investigated and refined where possible to ensure that the best route is defined from an ecological and urban connectivity points of view. There are current offset agreements that dictate a longer route crossing through possibly a larger sensitive area. The intent is to allow for a more direct route through the broader wetland system and thereby reducing the spatial footprint of the crossing. The current alignment depicted on the DURAMP is based on the original alignment, and it is recommended that this is further investigated as a project emanating from the DURAMP process.

At present the DURAMP encourages mixed use development, however for the proposed 'High Intensity' land use within the noise contour would not include 'noise sensitive land uses' until a detailed assessment can be undertaken to re-evaluate the noise contour position and to explore potential mitigation strategies to accommodate mixed uses within the 2035 55 db

noise contour. The position taken in the development of the 50 year DURAMP framework is to promote a more mixed use development across the DURAMP study area including areas within the 2035 55 db noise contour that aligns to the shared stakeholder vision of a "work, live and play" environment developed at the inception of the DURAMP process. It is anticipated that the DURAMP framework will be evaluated every 5 years. Therefore, based on current trends on rapid innovation in Aircraft design and noise level reductions, this position should be reviewed accordingly. With this approach it does not compromise the DURAMP vision but allows for a more strategic and sustainable approach in developing in the noise contour areas.

Open space zones indicated on the plan are subject to further detailed studies where the exact delineation of sensitive/ ecological areas will be refined through detailed environmental studies at a project specific level, and therefore, the Aerotropolis Masterplan merely serves to indicate development intent.

# A VIEW TOWARD THE HORIZON

## Global and Regional Trends Shaping the Aerotropolis

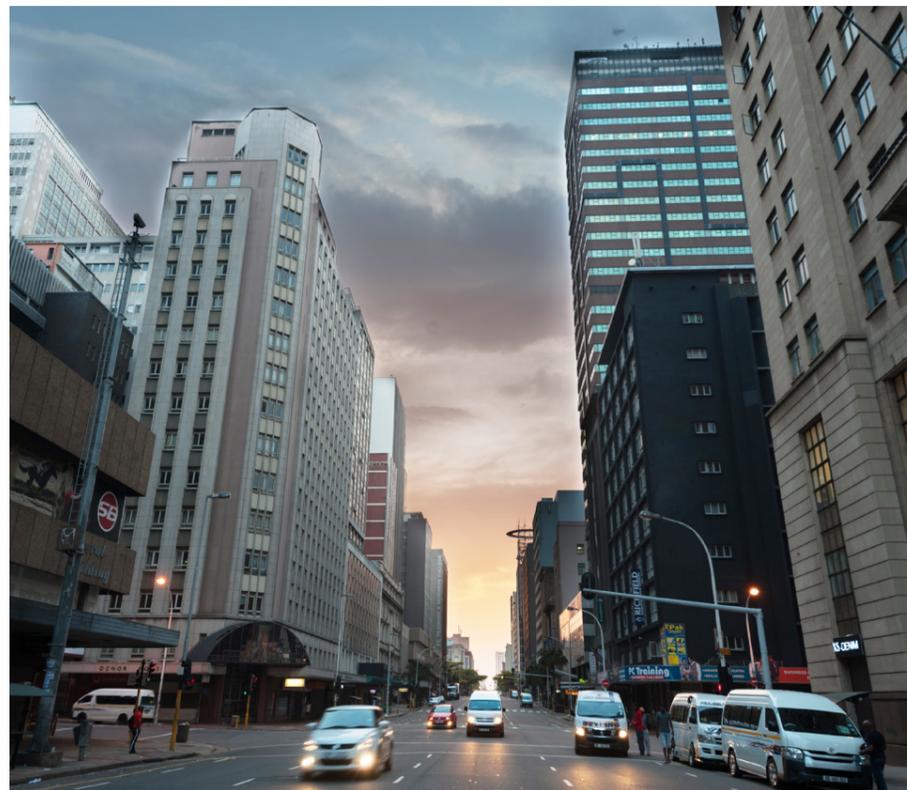
### Big Data and the Tech Tidal Wave

Through seamless connectivity, automation, and the digital delivery of services, harnessing technology at an urban scale improves the way people inhabit cities.



### Rapid Urban Growth

Countries are experiencing unprecedented urban growth and migration of those seeking a better life through the urban promise of economic growth, productivity, and wellbeing.



### Hyperconnectivity

The world is experiencing an ever increasing need for connectivity. This drives economic growth, international trade, expands spatial boundaries and enables access. Physical and digital connectivity is vital to the success of cities in a global age.

### Competition for Investment

Cities increasingly compete at regional and global scales to attract transformative investment resources and the best and brightest talent.

### Finite Resources

City Leaders increasingly need to serve larger populations with more efficient and responsive infrastructure solutions. Designing for sustainability is an imperative.

### **Economic Transformation**

To achieve future growth, South Africa must address inherited imbalances and ensure that the benefits derived from global connectivity are localised equitably, driving broader radical economic transformation.



### **Spatial Transformation**

Connectivity creates belonging and access creates opportunity. Both help societies develop culturally, economically, and politically.



### **Growing Middle Class with Rising Consumption Expectations**

An emerging middle class is an engine of economic growth, fueling demand for a larger and more diverse range of goods and services.



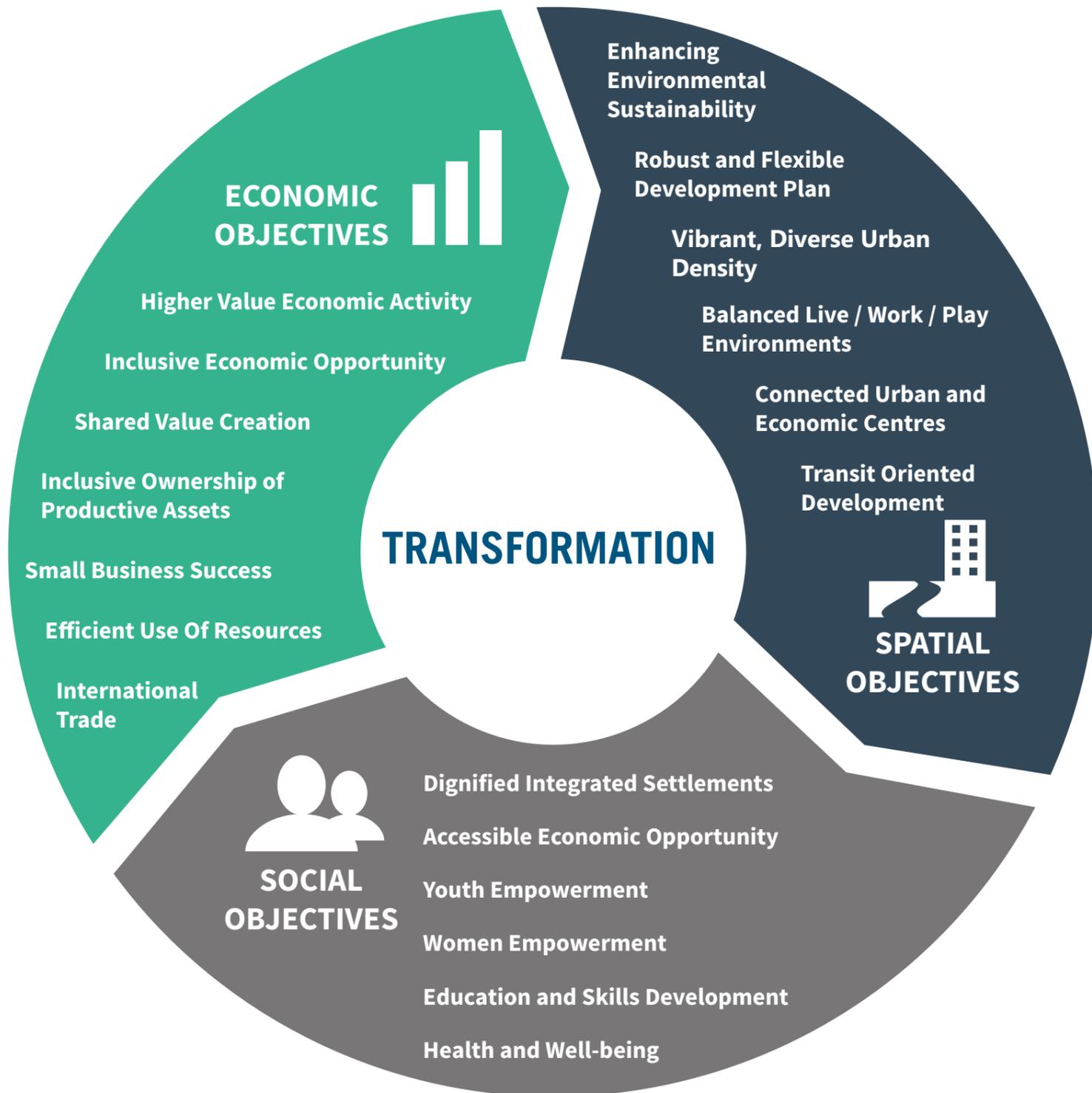
### **Demographic Change**

The growing segment of urban youth requires a city environment for learning and employment, powered by the digital infrastructure required to ensure their future participation in a world marked by disruption and change.

# CHARTING

## OUR COURSE

Driving Transformation Through the Aerotropolis



The master plan is firmly rooted in a transformative agenda and is based on three fundamental pillars of transformation.

Economic transformation is about broadening opportunities for all South Africans, but particularly for the historically disadvantaged. It is about raising employment, reducing poverty and inequality, and raising standards of living and education. It is also about equity in life chances and encompasses an ethos of inclusiveness that is presently missing.

National Development Plan (NDP) 2030 - Our Future Make it Work, the National Planning Commission, Republic of South Africa

### The Transformation Path

Transformation strives to achieve inclusive growth and shared prosperity for the benefit of a broader population of South African citizens. Inclusive growth requires structural change; development programmes that grow the economy by facilitating the participation of all South Africans and ensuring access to socio-economic opportunities and job creation.

The **Durban Aerotropolis** will accelerate transformation through spatial and programmatic interventions that generate sustainable urban growth and economic development. It presents an integrated economic and spatial master plan positioned to address poverty, inequality, and growth for the next fifty years.

# KEY INVESTMENT SECTORS



**ADVANCED  
MANUFACTURING**



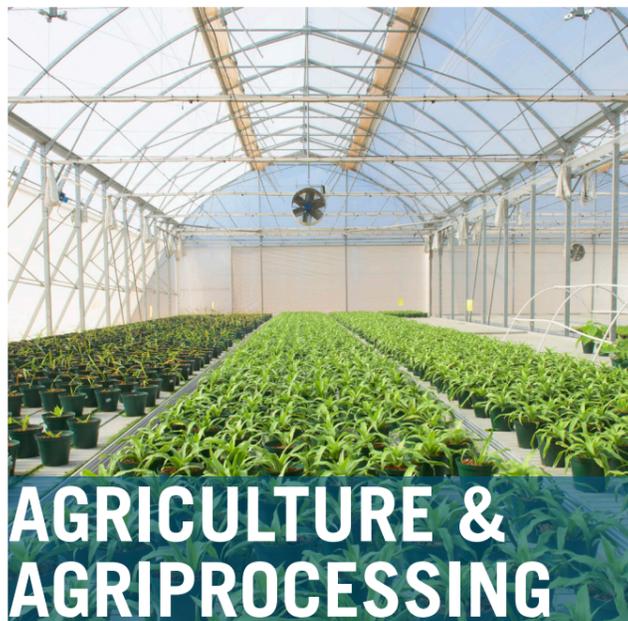
**HEALTH &  
PHARMACEUTICALS**



**AVIATION &  
AEROSPACE**



**TOURISM**



**AGRICULTURE &  
AGRIPROCESSING**



**ELECTRONICS &  
ELEC. COMPONENTS**

## The Transformation Agenda

As South Africa looks toward its next decades of growth, the Aerotropolis master plan facilitates a platform for public and private investment – a platform for economic transformation.

To facilitate this transformation, the Aerotropolis Master Plan spatially envisions 50-year growth scenario between the benchmark of 3% GDP growth per annum and a goal of 6% growth per annum. In addition, it reflects the importance of the KwaZulu-Natal economy – and the particular advantages of the Aerotropolis site – in its ability to attract development and investment.

Six specific economic sectors were identified, and corresponding sectoral nodes have been identified within the master plan to cluster investment, leverage

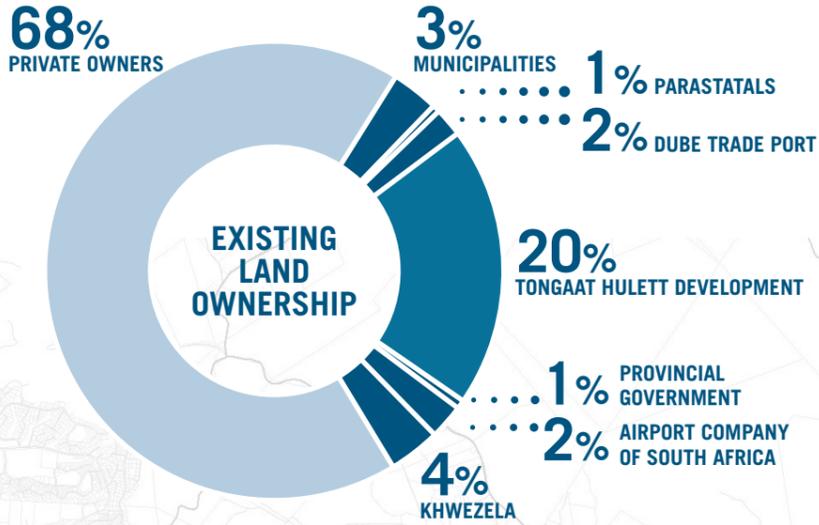
synergies, and exploit the airfreight and other local advantages of the Aerotropolis to propel these industries forward in South Africa. The master plan also provides diversity and intensity of residential options to enable local residents to be co-located with employment opportunities in a live/work/play urban model.

Beyond providing a world-class platform for economic growth and industry, the Aerotropolis Master Plan also creates a new paradigm for inclusive, integrated urban communities. The implementation framework actively seeks the participation of black industrialists and the growth of an entrepreneurial class able to own, manage and develop businesses within these targeted sectors, positioning youth and women to engage effectively not just as workers, but as leaders in the future economy.

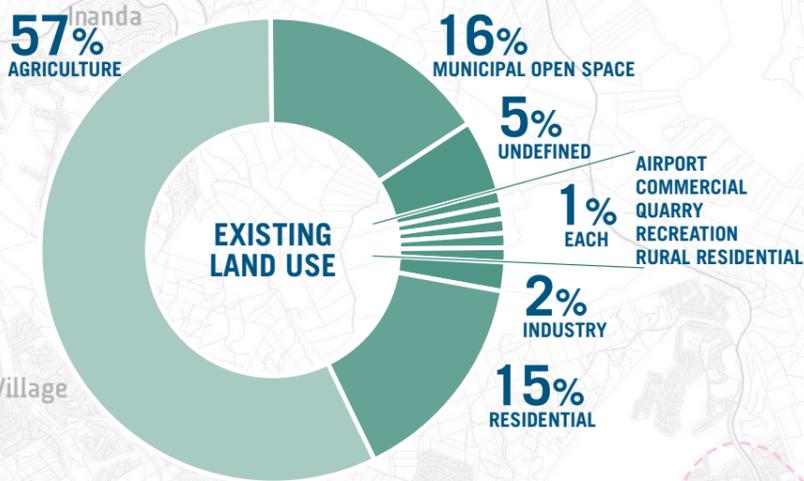
Through the innovative integration of economic analysis and spatial planning techniques, the Aerotropolis Master Plan represents a paradigm shift in integrated urban centres positioned for growth within the South African context.

# ON OUR RADAR

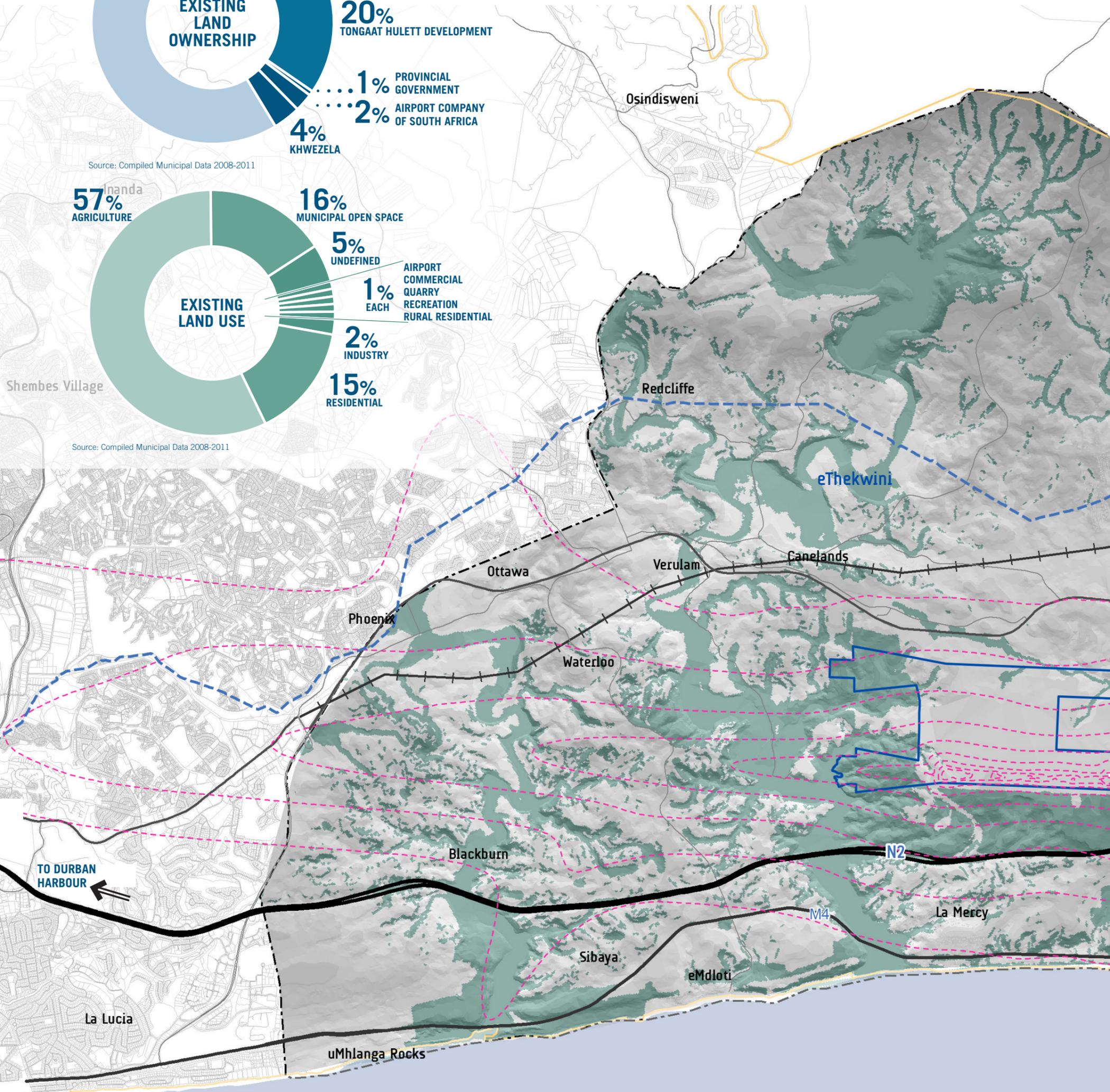
## Opportunities and Constraints of the Durban Aerotropolis Study Area



Source: Compiled Municipal Data 2008-2011

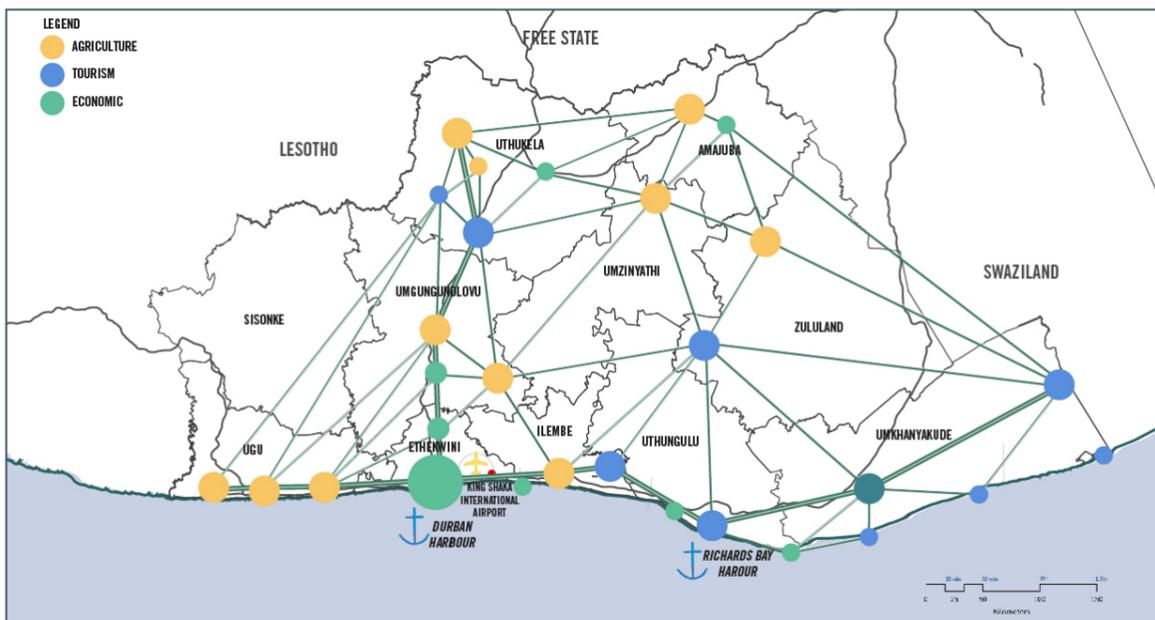


Source: Compiled Municipal Data 2008-2011



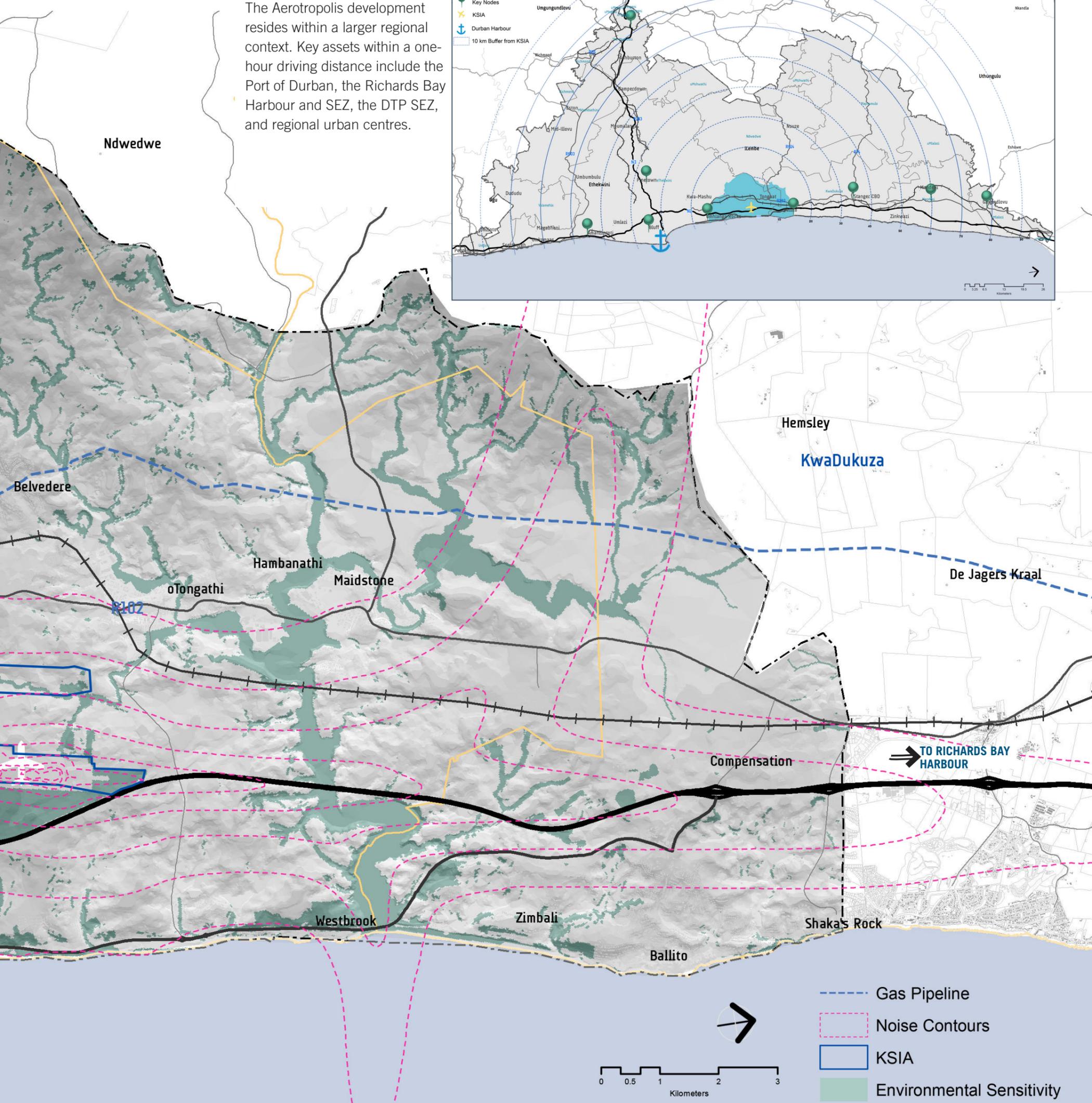
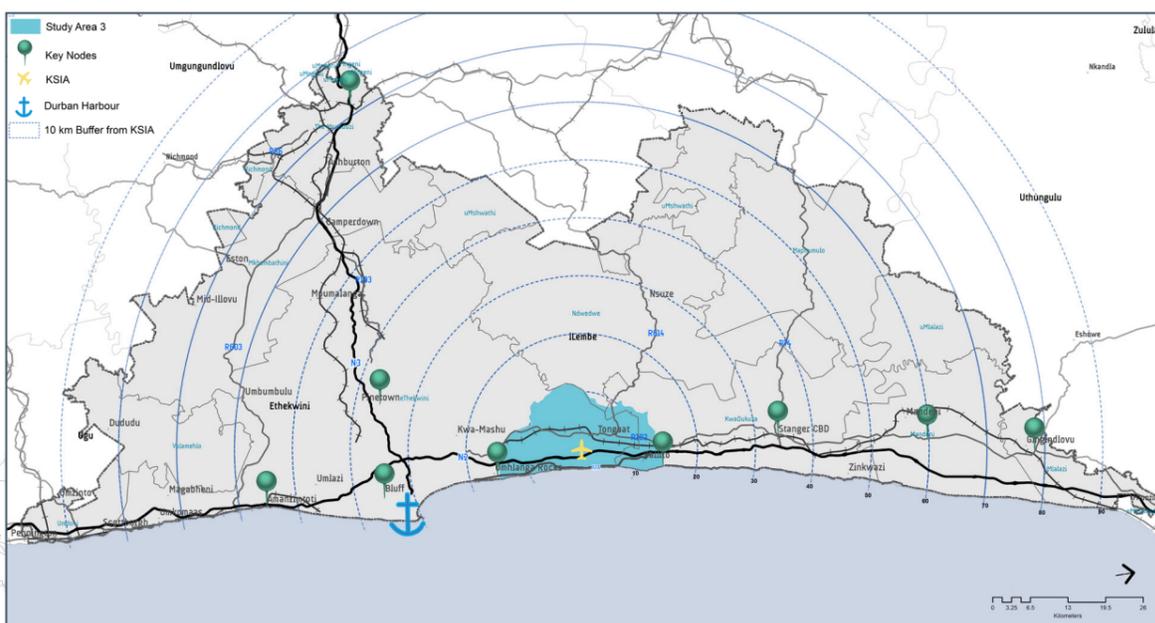
### Satellite Zones

The Durban Aerotropolis development creates synergies with other areas of KZN. The uniqueness of these satellite zones lies in the characteristics of their geography, natural environments, rich cultural heritage, sporting events, local produce and economic production.



### Regional Context

The Aerotropolis development resides within a larger regional context. Key assets within a one-hour driving distance include the Port of Durban, the Richards Bay Harbour and SEZ, the DTP SEZ, and regional urban centres.







# THE VIEW

FROM 36 000 FEET

The Aerotropolis 50-Year Master Plan

# THE DURBAN AEROTROPOLIS MASTER PLAN

**32 000**

hectares of total land

**42M m<sup>2</sup>**

of total development

**750 000**

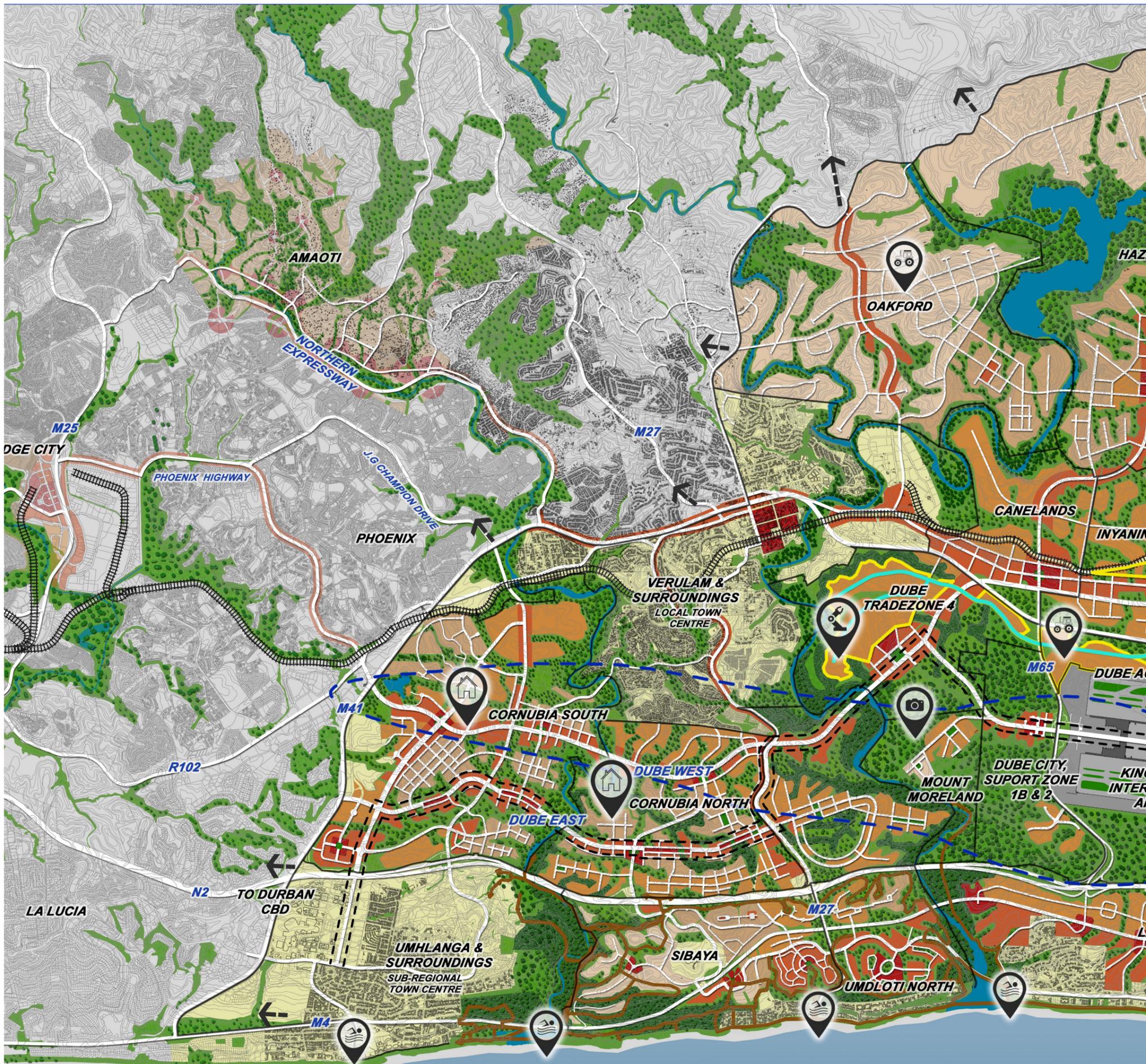
jobs

**1.5M**

residents

**10 000**

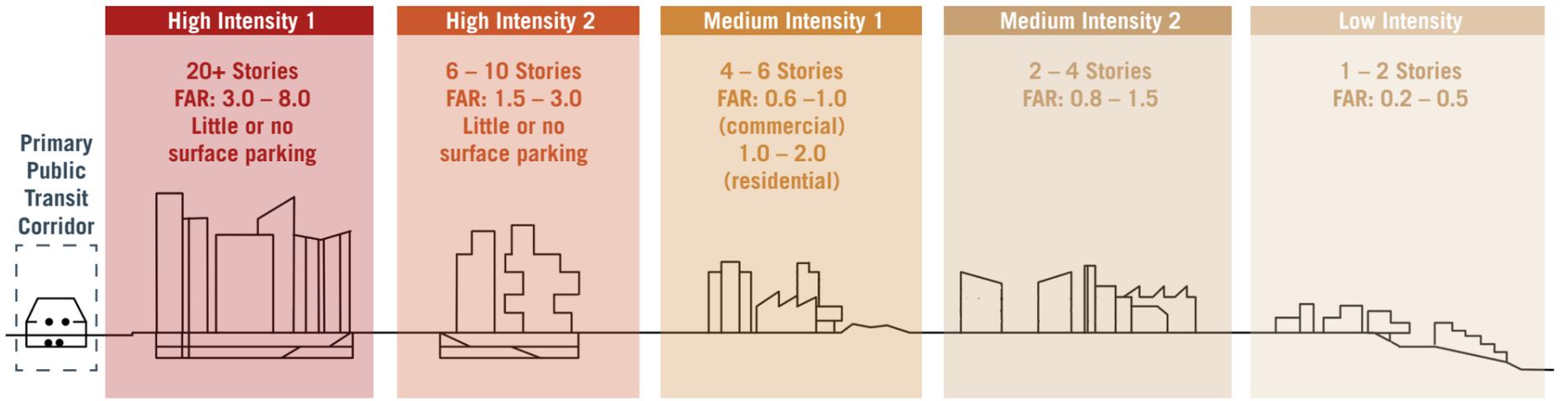
hectares of green space



0 500m 1km 2km 5km



INDIAN OCEAN



# CHARACTER & INTENSITY ZONES

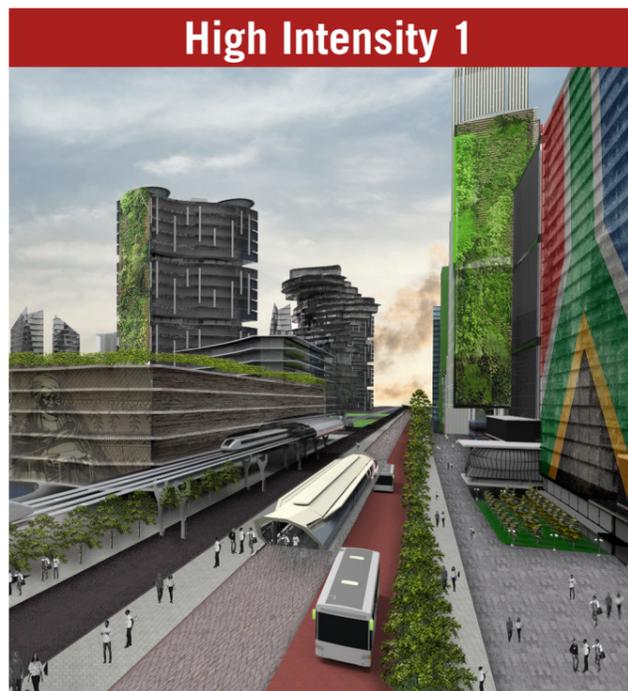
## A Flexible Spatial Framework For Development

### Intensity Zones: A Flexible Planning Framework

The intensity zone model moves away from a prescriptive and static land-use allocation approach, instead providing a dynamic and adaptable solution where a variety of land-uses are proposed within defined zones of specific character and intensity.

This approach is ideal for a plan of this nature, allowing developers and investors flexibility for growth over a 50-year development horizon. The intensity zones also facilitate improved spatial connection, characterised by more compact and diverse uses that empower economic transformation within the Aerotropolis region and its surroundings.

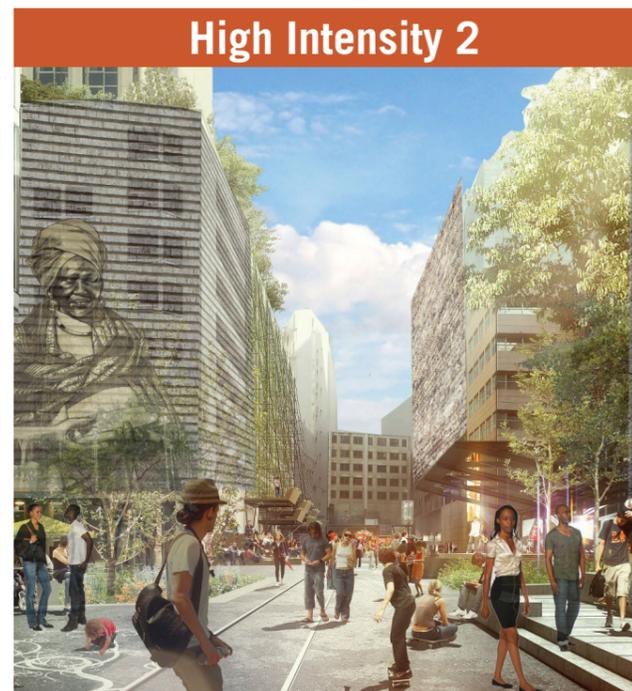
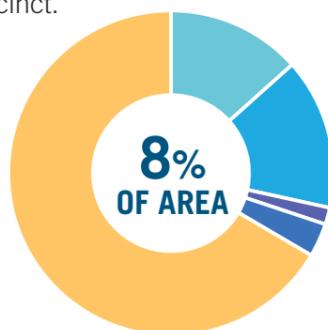
Innovating South Africa's existing development paradigm – and in line with global urban trends – the Aerotropolis' five intensity zones reflect a growing need for an increased densification. Since the cost of infrastructure to support low-density development across the site, would inhibit the master plan's ability to sustainably support growth and transformation, intensity zones instead create a framework to shift residential and other uses to higher densities, thereby increasing accessibility to employment, transportation and city services for approximately 40% of the developable master plan area. Medium- and low-intensity uses are still flexibly accommodated on a smaller percentage of the developable area toward the hinterland.



### Urban Core

20+ Stories  
Floor Area Ratio (FAR): 3.0 – 8.0  
Little or no surface parking

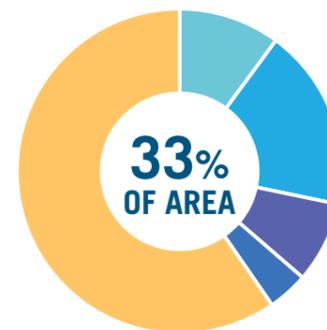
High Intensity 1 areas are the most dense areas along the main transportation spine and serve as urban core areas within the Durban Aerotropolis. They provide high intensity residential opportunities accommodating densities of 400 dwelling units per hectare (Du/Ha) with supporting commercial options. The intent is for this zone to facilitate higher order intensity, value, and transit access as well as access to a range of mixed uses that create a hub of activity and promote a live, work and play environment in a 24-hour precinct.

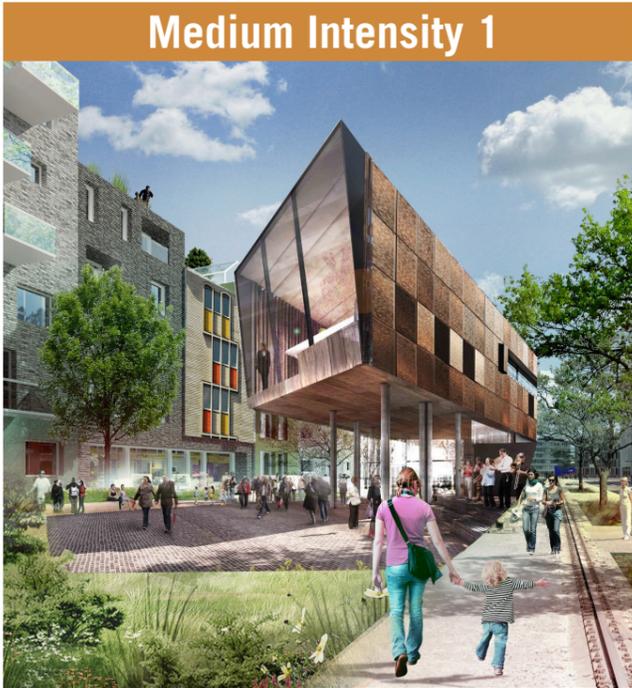


### Urban Nodes

6 – 10 Stories  
FAR: 1.5 – 3.0  
Little or no surface parking

This zone is less dense than High Intensity 1, but still predominantly residential with commercial support. It promotes walkability, NMT and public transportation through compact design. Apart from residential use, the zone is also characterised by office, banking and retail related uses. The zone reflects the future city as an environment that offers multiple residential options with access to a variety of economic opportunities.

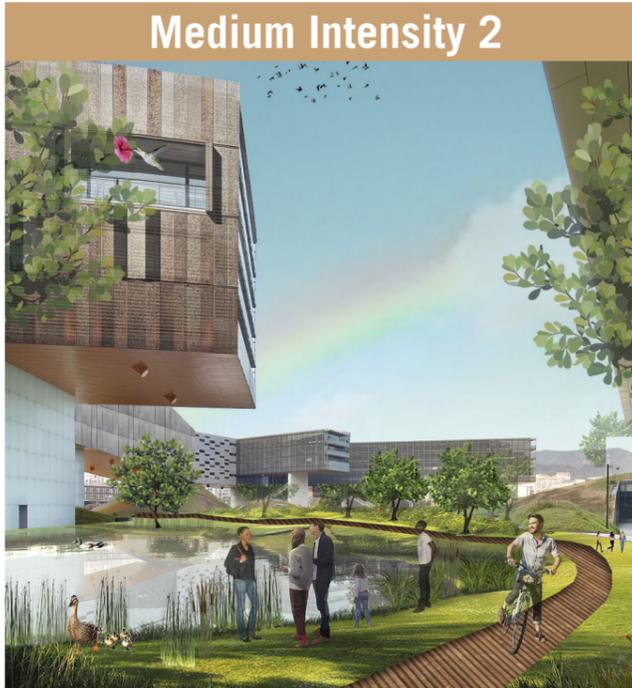
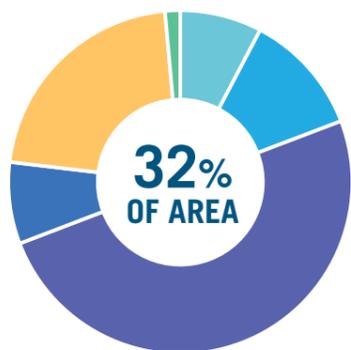




### Urban Frame

4 – 6 Stories  
 FAR: 0.6 – 1.0 (commercial)  
 1.0 – 2.0 (residential)

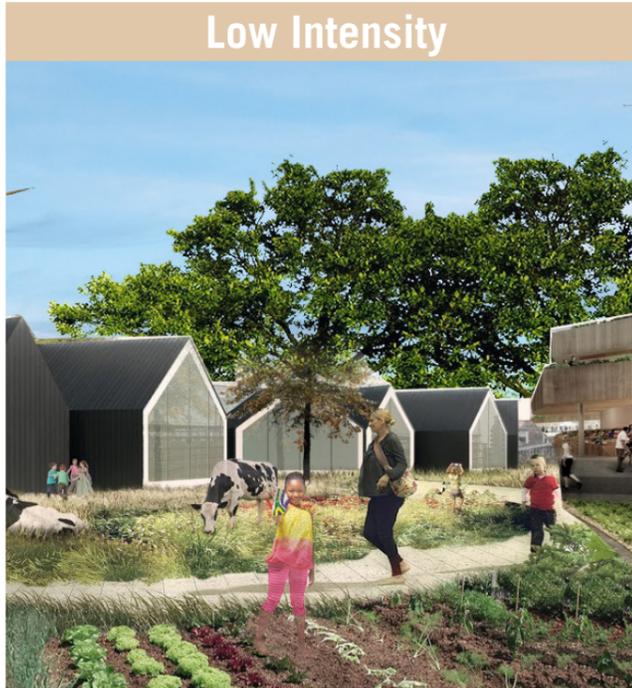
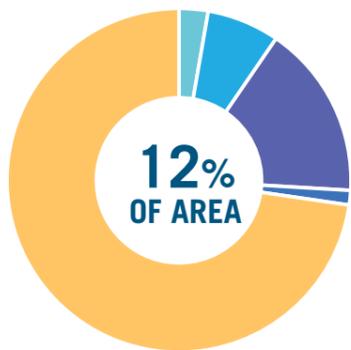
The Medium Intensity 1 zone is aimed at accommodating developments that are predominantly employment orientated but require a less intensive land use than the two High Intensity zones. This area envisions more industrial and wholesale/warehouse facilities, with back office commercial space and a small percentage of residential use supporting employment in the area.



### Development Parks

2 – 4 Stories  
 FAR: 0.8 – 1.5

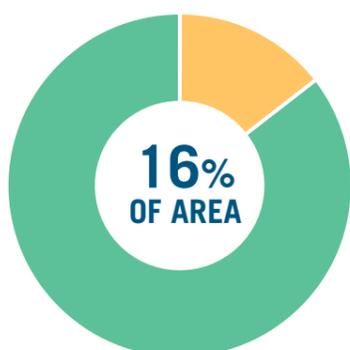
The Medium Intensity 2 zone represents one of the smallest percentages of developable area and accommodates the least dense commercial industrial uses and residential. Sustainable long range planning dictates that this zone remains a small percentage of new development because the cost of providing infrastructure to support this level of density would be prohibitive to the build out of the master plan.



### Eco Developments

1 – 2 Stories  
 FAR: 0.2 – 0.5

The Low Intensity Zone is different to all other intensity zones as it is predominately agricultural in character with small residential areas supporting agricultural uses.

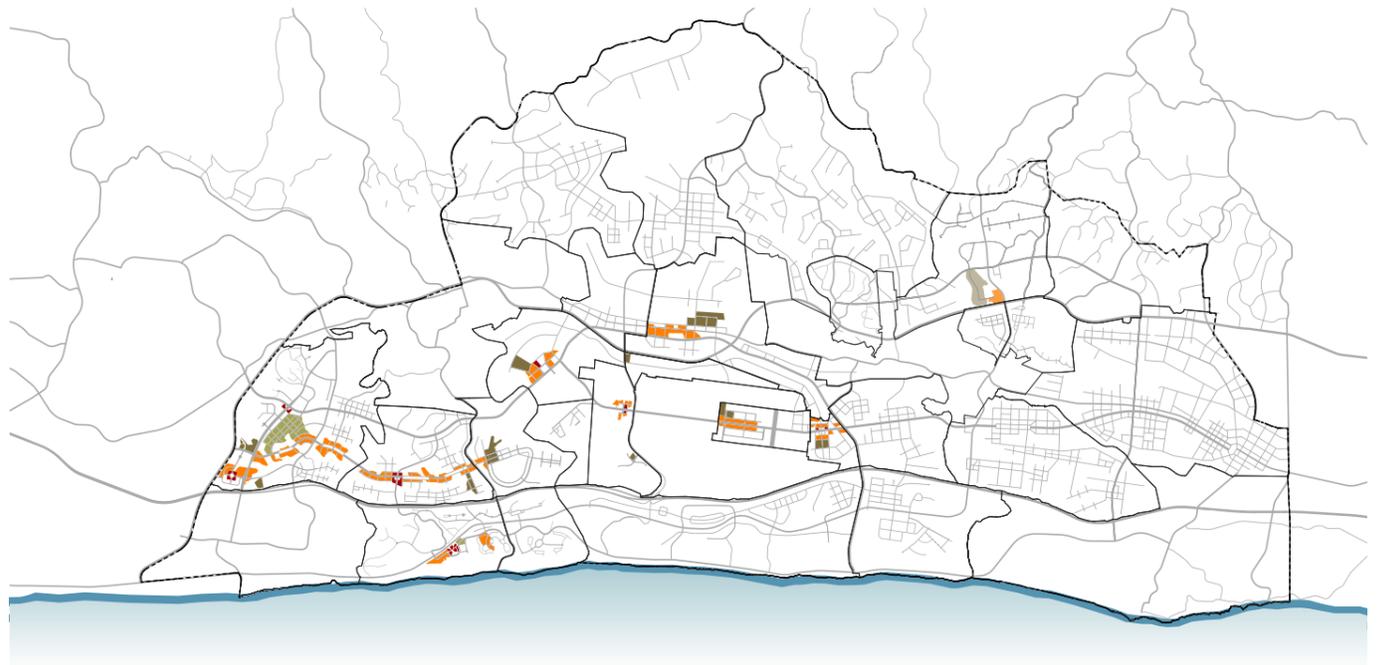


# TAKING FLIGHT

Achieving the Aerotropolis Vision through Fifty Years of Growth and Development

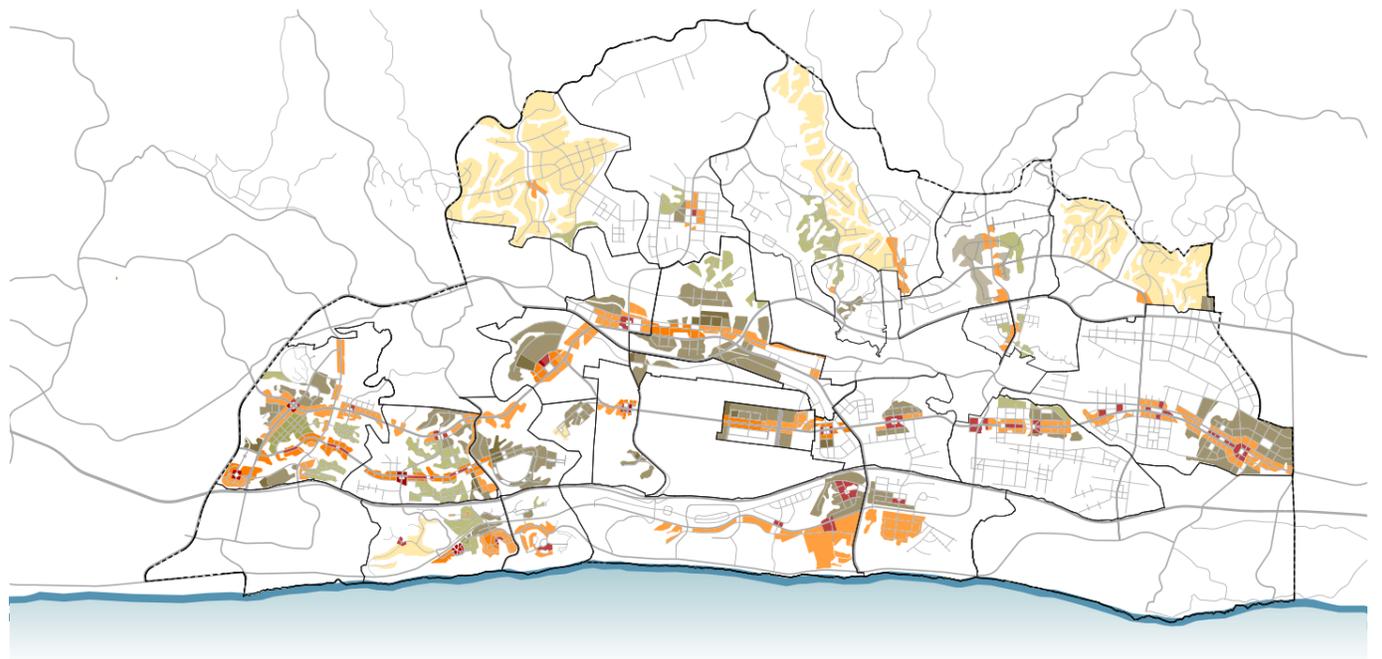
## Short Term Phase

25 000 jobs  
125 000 residents  
10M m<sup>2</sup> of development



## Medium Term Phase

300 000 jobs  
865 000 residents  
25M m<sup>2</sup> of development

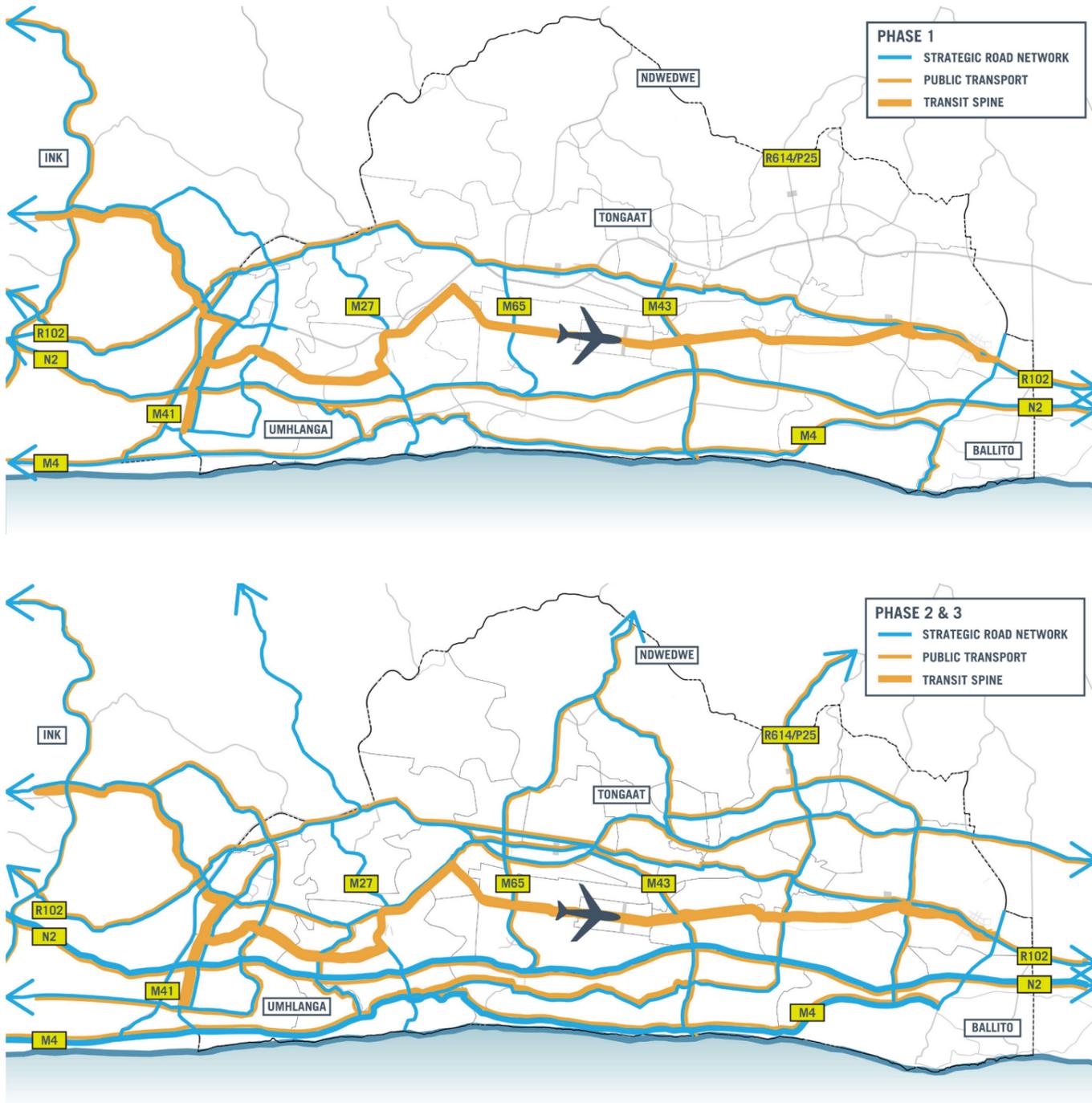


## Long Term Phase

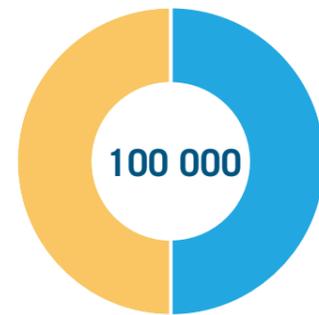
750 000 jobs  
1 500 000 residents  
42M m<sup>2</sup> of development



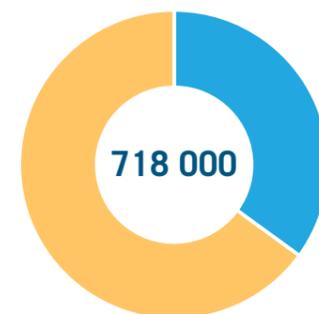
# PUBLIC TRANSIT & MOBILITY



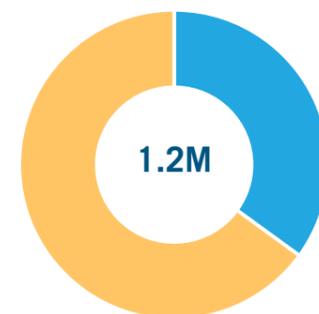
## PEAK PERIOD (3hr) PERSON TRIPS



### EARLY YEARS



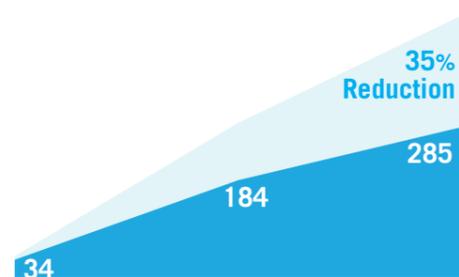
### YEAR 25



### YEAR 50

UP TO **40%** REDUCTION IN TRAVEL DISTANCE

# INFRASTRUCTURE

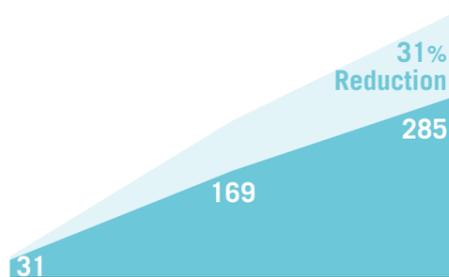


**WATER**  
(MI/day)

## Water Strategies

By driving changes in consumption habits and adoption of smart technologies, the ultimate demand is anticipated at 198 mega litres per day (MI/day).

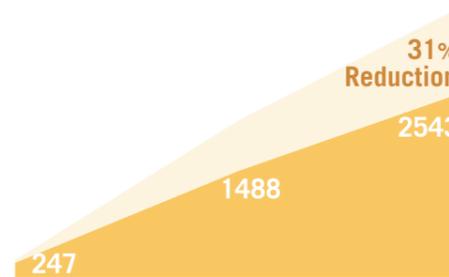
Sources: 30% Dam & River extraction | 30% Recycled | 20% Desalination | 10% Rainwater harvesting | 10% Other



**WASTE WATER**  
(MI/day)

## Waste Water Strategies

The changes in water consumption will have follow-on impacts for waste water treatment where an ultimate volume of 195MI/day is projected. Approximately 80% of this will be recycled locally and 20% regionally treated for discharge into dams and rivers.



**ELECTRICITY**  
(MVA/day)

## Electricity Strategies

Reductions in demand by smart technologies and decentralised mini grids minimises dependency on central grids with an expected demand of 1 742 mega-volt ampere per day (MVA/day).

Sources: 0-20% Wind | 50-70% Solar | 10% localised storage



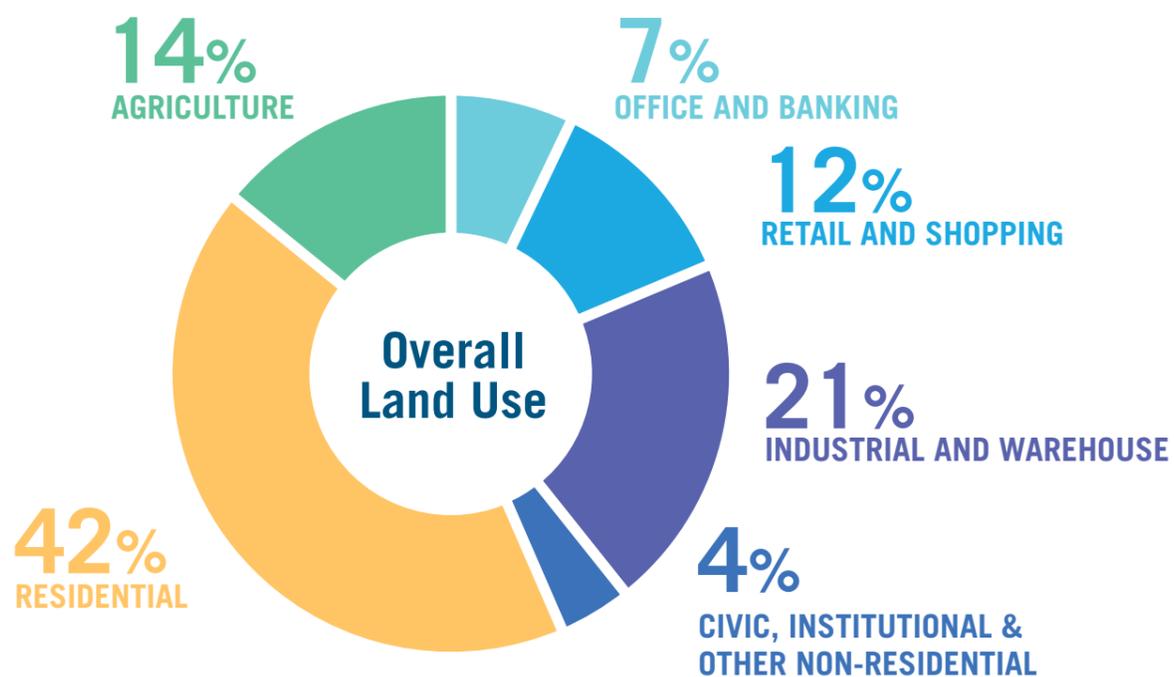
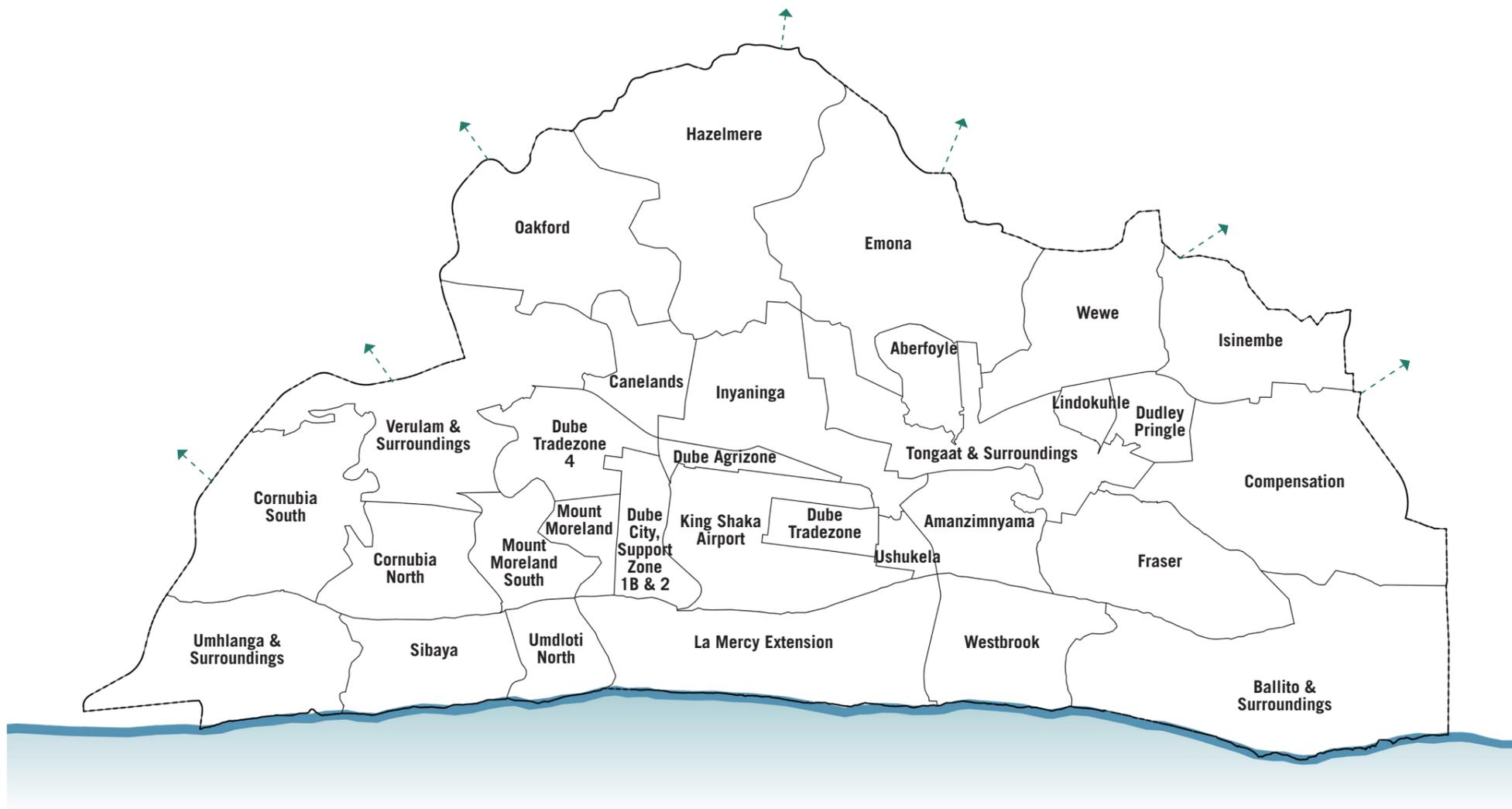
**SOLID WASTE**  
(Kilo-Tons/year)

## Solid Waste Strategies

Reduction of waste through behavioural shifts by industry and consumers combined with reuse and recycling will mitigate landfilling of waste while creating new economic opportunity.

# NICHE NODES

Creating Unique, High-Value Places within the Aerotropolis



## Land Use By Node



### ABERFOYLE

3 600 Jobs    1 700 Housing Units    1.3 Average FAR



### AMANZIMNYAMA

13 600 Jobs    6 600 Housing Units    1.3 Average FAR



### CANELANDS

39 100 Jobs    19 300 Housing Units    1.6 Average FAR



### COMPENSATION

99 800 Jobs    48 500 Housing Units    1.1 Average FAR



### CORNUBIA NORTH

10 800 Jobs  
5 300 Housing Units

2.1 Average FAR



Integrated Human Settlement



### CORNUBIA SOUTH

45 000 Jobs  
21 900 Housing Units

1.7 Average FAR



Integrated Human Settlement



### DUBE AGRIZONE

2 800 Jobs  
1 400 Housing Units

0.6 Average FAR



Agriculture & Agri-processing



### DUBE CITY & SUPPORT ZONE 1B & 2

10 500 Jobs  
5 200 Housing Units

2.3 Average FAR



### DUBE TRADEZONE 4

36 100 Jobs  
17 700 Housing Units

1.6 Average FAR



Advanced Manufacturing



### DUBE TRADE ZONE

30 100 Jobs  
14 700 Housing Units

1.5 Average FAR



Aviation & Aerospace



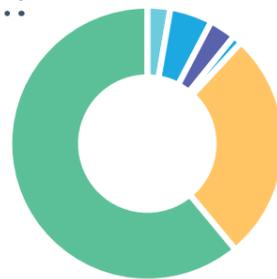
### DUDLEY PRINGLE

3 600 Jobs  
1 700 Housing Units

1.4 Average FAR



Secure & Bonded Logistics Platform



### EMONA

21 800 Jobs  
10 800 Housing Units

1.1 Average FAR



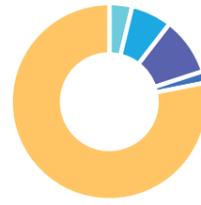
Agriculture & Agri-processing



### FRASER

69 400 Jobs  
33 800 Housing Units

1.6 Average FAR



### HAZELMERE

19 600 Jobs  
319 600 Housing Units

1.2 Average FAR



### INYANINGA

67 500 Jobs  
32 900 Housing Units

1.3 Average FAR



Electronics & Elec. Components



### ISENEMBE

21 900 Jobs  
10 700 Housing Units

1.1 Average FAR



Agriculture & Agri-processing



### LA MERCY EXTENSION

61 300 Jobs  
30 000 Housing Units

1.5 Average FAR



Tourism



### LINDOKUHLE

3 500 Jobs  
1 700 Housing Units

2.0 Average FAR



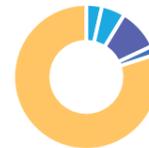
### MOUNT MORELAND

3 900 Jobs  
1 900 Housing Units

2.4 Average FAR



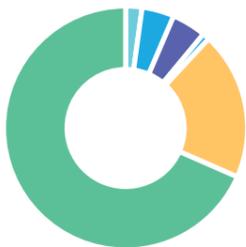
Tourism



### MOUNT MORELAND SOUTH

7 000 Jobs  
7 000 Housing Units

1.9 Average FAR



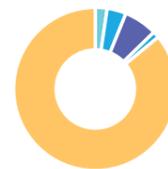
### OAKFORD

14 500 Jobs  
7 100 Housing Units

1.4 Average FAR



Agriculture & Agri-processing



### SIBAYA

6 100 Jobs  
3 000 Housing Units

1.8 Average FAR



### UMDLOTI NORTH

9 000 Jobs  
4 400 Housing Units

1.9 Average FAR



### USHUKELA

19 300 Jobs  
9 400 Housing Units

1.8 Average FAR



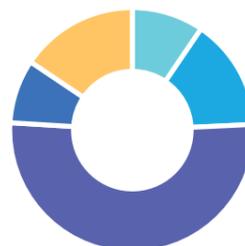
Pharmaceuticals



### WESTBROOK

35 800 Jobs  
17 600 Housing Units

1.5 Average FAR



### WEVE

90 700 Jobs  
43 900 Housing Units

1.5 Average FAR



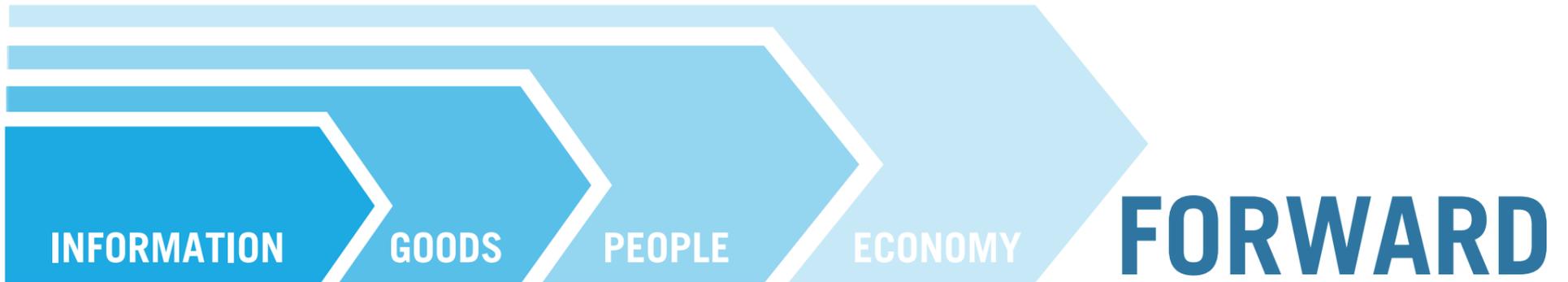
# SETTING THE COMPASS

Aerotropolis Planning Pillars



# CONNECTED ECONOMY

## MOVING



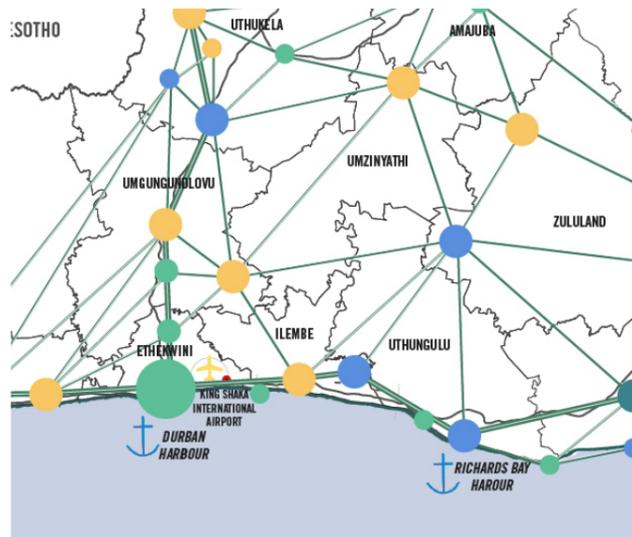
### Connecting South Africa to Global and Regional Markets

The Aerotropolis Master Plan develops and improves multiple passenger, freight, logistics, road, rail, marine and air connections, enabling South Africa to be better connected to fast-growing global and regional markets.



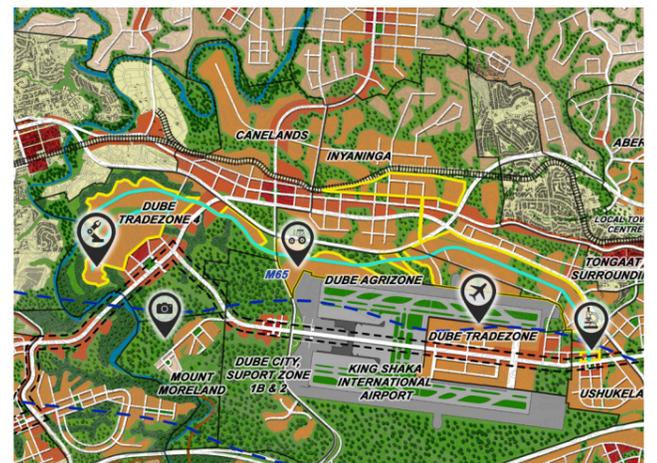
### Reconnecting Regional Assets

The master plan improves the national and regional road and rail networks, facilitates access to the Durban and Richards Bay harbours. It aims to connect to Johannesburg and other national and regional centres.



### Creating a Logistics Platform

Initiatives like the Dube Inyaninga Logistics Gateway and Industrial Zone aid in achieving a connected economy. The development incorporates rail, multi-modal logistics and industrial / special economic zone functions with a secured and bonded dedicated freight link to the Dube Tradeport.



### High-Value, Diverse & Accessible Beach Front

The master plan includes a high-density, mixed use beach front strategy, augmented by dynamic public recreational space. This strategy provides opportunity and access to recreation. The beach front capitalises on its real estate and tourism value.



### Transit Orientated Development

The Aerotropolis leverages multi-modal transport networks, co-locating the highest intensity zones along major transport routes. Strong public transport corridors, complete street design principles, priority lanes, and multi-modal interchanges will catalyse growth and optimize development value through efficient mobility.



### Leveraging Digital Infrastructure

Proximity to EASSy, SEACOM and SAT3/SAFE undersea cables, deployment of backbone fibre connectivity, and expanding LTE and LTE Advanced networks facilitate global connectivity. By democratising technology through open internet access for previously disadvantaged communities, citizens are empowered to engage with their government and their world.

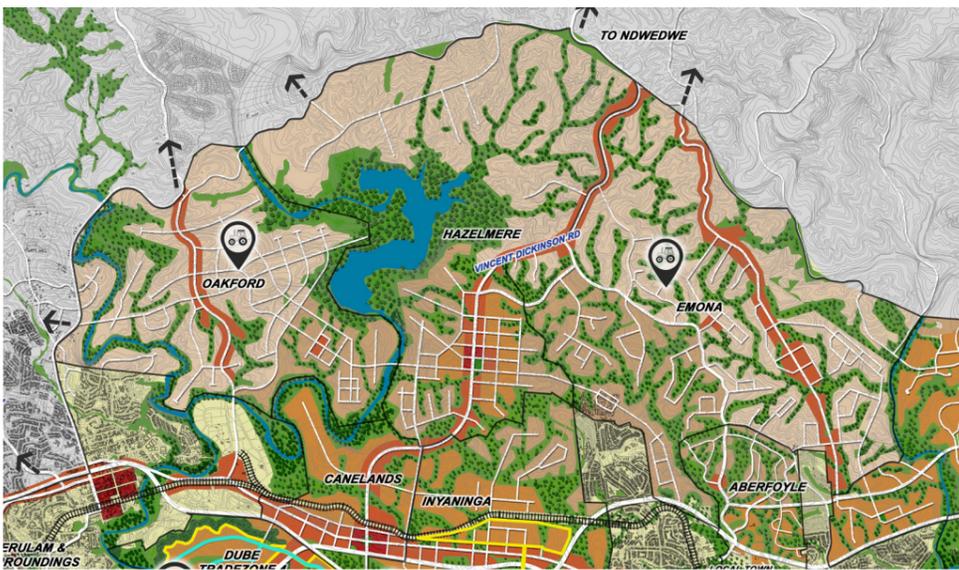
# INTEGRATED COMMUNITY

## Live, Work, Play Community



## Live / Work / Play Balanced Secure Communities

Sustainable cities offer a wide range of opportunities at a local level. The Aerotropolis' intensity zone model facilitates a greater mix of land-uses and supports a careful balance between of local residents and employment opportunity.



## Integrating the Western Periphery

Through an expanded road network, east - west linkages integrate the communities on the western periphery of the Aerotropolis, facilitating safe and secure access to economic opportunities as well as social, civic, and community facilities.



## Economics-led Land Use and Spatial Planning

Economic modeling techniques help align the Aerotropolis land use and spatial planning with the growth and development of the South African economy. The master plan includes insights about key investment sectors, housing and employment preferences, and a view toward ambitious national growth.



## Walkable Communities

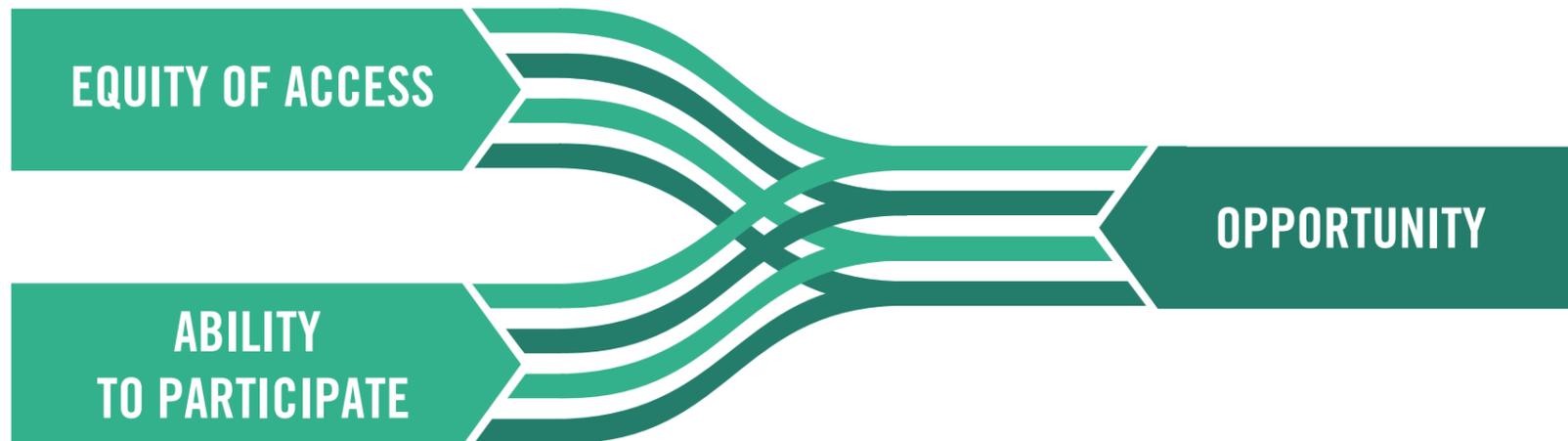
Walkable communities create a platform for people to live out a healthy lifestyles while reducing infrastructure burden. By promoting mixed-use development in town centres, accompanied by security monitors, within 5-10 minute walking radii of a variety of residential typologies, residents enjoy greater choice and variety of services.



## Integrated Ecology

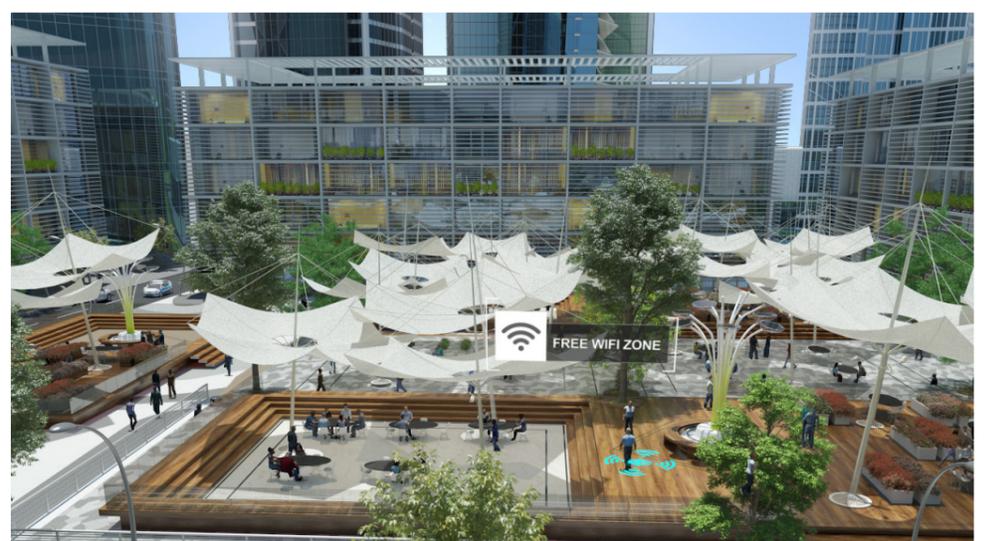
Ecological infrastructure is vital to the economic and social performance of cities. The Aerotropolis leverages its ecological infrastructure by carefully siting development and integrating ecological assets into social and economic objectives through agri-hubs, eco-tourism opportunities, and ecologically-based public space.

# INCLUSIVE OPPORTUNITY



## Enhancing Agricultural Productivity Alongside Urban Development

The Aerotropolis Master Plan has been developed to have net-positive impact on the agricultural sector. Spatial and economic strategies include an effort to redeploy the existing agricultural workforce toward denser, higher value cultivation, resulting in net gains for the sector and its participants.



## Small Business Connector & Target Projects

The Aerotropolis Master Plan aims for the realisation of a truly inclusive economy through the support and promotion of small business, small scale agricultural activities, and business and entrepreneurial centres to build a future business class of industrialists from the disadvantaged sector.

## Empowering Youth & Human Capital

Increased investment in human capital empowers individuals to participate and compete in the economy. The master plan provides various recommendations for the development of social infrastructure facilities and human capital development programmes. By enhancing access to facilities and tools, the master plan sets the foundation for the Durban Aerotropolis to lead a truly inclusive economy.



## Integrated Settlement Nodes

Consistent with South Africa's vision for integrated human settlements, the master plan's intensity zone approach provides a framework for the development of a range of diverse income and socially integrated residential opportunities. The land-use flexibility of the intensity zone approach also allows for the inclusion of social and economic facilities directly integrated within residential areas.



# SMART CITY



## Smart Human Settlement Planning

Tools such as GIS provide the capability for dynamic query and analysis, allowing for a clear indication of the most desirable and appropriate land for future development. GIS assists in the planning and delivery of integrated, accessible, social facilities, helping to overcome the deficiencies created by apartheid through the delivery of healthier and well planned human settlements that become a platform for the realisation of overall human well being.

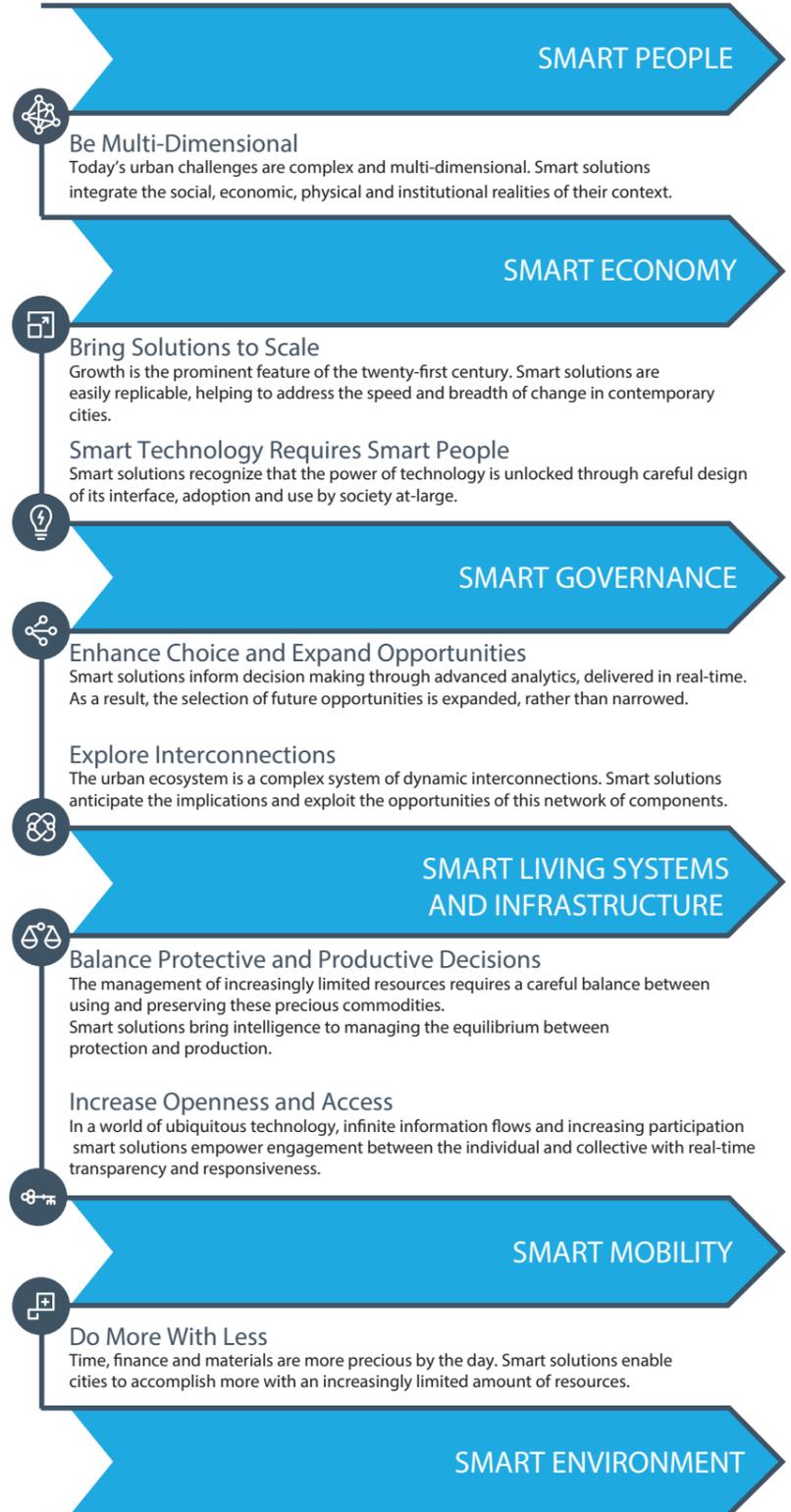


## Flexible, Intensity-Based Planning Approach

The use of the intensity zone approach to framework planning applied in the development of the master plan as compared to the conventional land-use approach helps ensure that the master plan creates greater choice and flexibility. This flexibility means that the plan is able to adapt to any future changes in innovation or the demands of future live, work, and play environments.

## Planning for Smart Mobility

By bringing residential and employment opportunities closer together, commuter travel distance is dramatically reduced by up to 40% over time, lowering the overall cost of travel. Transit investments will strive to accommodate up to 70% of peak period of trips, reducing demand for road space. Highest land-use densities are planned adjacent to prominent transit corridors, enhancing transport accessibility and system sustainability.



## Smart Urban Utilities

Sustainability within the Aerotropolis can be achieved through decentralisation and variation in supply of energy and water. Electrical energy will be primarily renewable and stored locally for peak demand situations, while water will be locally treated and recycled into a decentralised network. Changes in behaviour combined with technological systems implementation will reduce consumption, while smart utility networks will reduce losses and optimise performance. Advanced recycling will reduce waste streams.





# NEXT UP FOR DEPARTURE

## Lead Initiatives For Positive Transformation

The Durban Aerotropolis is both a premier development platform for transformation and a sustainable framework for private and public sector investment. Lead initiatives will attract and enable investment that is economically, spatially, and socially transformative.



## Lead Initiatives For Positive Transformation

# AEROTROPOLIS INSTITUTE AFRICA (AIA)

Providing optimum knowledge support, thought leadership and human capital that meet the industrial and commercial needs of the growing Durban Aerotropolis with potential to export such skills and knowledge.

### Transformation Goals

- Specifically targeting the youth in terms of skills development within the technology sector through, subsidised learning programs
- On-the-job training opportunities for young graduates
- Apprenticeship and internship programs
- Fast track the supply of critical and scarce skills through educational programs
- Enhanced access to international level skills and capacity



# PUBLIC TRANSIT DEVELOPMENT SPINE

Create a development corridor of high quality public transport to connect Durban's central business district, Bridge City, and the King Shaka International Airport, via Cornubia.

### Transformation Goals

- Achieve 70% of future trips by public transport
- Increase access to employment opportunities for poorest communities
- Enhance public transit connectivity for a world-class airport
- Address historic spatial imbalances
- Drive denser sustainable urban growth and investment
- Reduce dependence on private vehicle transport and associated economic and environmental challenges



# INVESTIGATE AND CONSIDER A NEW TOWN CENTRE AT COMPENSATION

With Ballito reaching its development potential, Compensation presents an ideal opportunity for developing a New Urban Hub. Whilst large portions of the precinct will have predominately a logistic focus, there is ample opportunity to develop a Technology/ Innovation Hub and related activities such as Laboratories, in this precinct. New mixed-use opportunities can develop along the Transit spine.

### Transformation Goals

- Increase access to employment opportunities for poorest communities.
- Address historic spatial imbalances.
- Drive denser sustainable urban growth and investment.





**2018** | **ZAR 36M**  
start date | annual investment

## INCLUSIVE AGRICULTURE PROGRAMME

Create sustainable agricultural livelihoods through establishing small scale, high impact agricultural businesses and defining related technology, processes, business models, markets, and logistics. Provide support through establishing an agricultural high-performance centre, grants, and competitive commercial loans.

### Transformation Goals

- Enhanced utilisation of agricultural land
- Achieve greater food security
- Reduce barriers to entry for black farmers with limited commercialisation opportunities
- Raise the value and diversity of activity in the agricultural sector
- Maintain rural lifestyles within a productive economic space
- Export greater diversity of agricultural products to global markets and increase domestic availability of goods



**2018** | **ZAR 30M**  
start date | annual investment

## INCLUSIVE HUMAN SETTLEMENT PROGRAMME

Coordinate and champion the provision of affordable housing opportunities and social facilities for low income earners within the Aerotropolis to further transformational objectives.

### Transformation Goals

- Address substantial backlog in housing provision and relieve pressures to settle informally
- Minimise travel time and cost through well located housing programmes close to employment opportunities
- Provide dignified settlements that enhance the quality of life
- Grow employment opportunities within the construction sector



**2018** | **ZAR 2B**  
start date | investment

## REGIONAL WASTE WATER TREATMENT WORKS

Upgrade the Umdloti Waste Water Treatment Works and Tongaat Treatment Works through a PPP framework to increase waste water treatment capacity, incorporate co-generation of energy, and manage funding, operational, capacity and other risks.

### Transformation Goals

- Increase bulk services, particularly of waste water treatment
- Ensure access to services for integrated settlements and related social facilities
- Meet increasing demand for service in a rapidly growing region
- Provide opportunities for private sector investment

## Lead Initiatives For Positive Transformation

# SMALL BUSINESS CONNECTOR

Create an agency to support business and entrepreneurial development and partnership with sectors of growth within the Aerotropolis, relevant state institutions and private sector partners to ensure growth of local business.

### Transformation Goals

- Enable entrepreneurs and small businesses to share in the growth of the Aerotropolis region and related industries
- Create skills, development, and capacity to enable small businesses to participate effectively in the 4th generation industrialisation
- Enhance investment while encouraging an inclusive economy
- Facilitate connections between investment and effective local business partners
- Facilitate ownership of one's economic future



# AVIATION MAINTENANCE REPAIR & OPERATIONS

Develop hanger and maintenance facilities for lease by airlines, supported by incentives for use and associated skills development programs. Expand and grow food preparation facilities for the aviation industry.

### Transformation Goals

- Service numerous airlines that operate from KSIA, including their projected growth over coming decades
- Reduce congestion at alternate hubs and enhance local employment through relocation of maintenance and repair operations to KSIA
- Migrate workforce to higher skills and higher value activities
- Leverage KSIA investment to create downstream opportunities
- Diversify economic opportunity within the province



# ECO-TOURISM HUBS

Establish feasibility for land acquisition, design and management of a eco- and business tourism hub, including conference, convention, and hotel facilities. Explore natural resource engagement through an expanded network of open space connections from the hub, to river and estuary in places such as, KwaDukuza, Mount Moreland and Oakford.

### Transformation Goals

- Achieve vision for the “greenest” global Aerotropolis
- Attract investment and tourism toward the stewardship of Mt. Moreland's significant natural systems
- Create positive development with sustainable benefits that support stewardship of large open spaces
- Create social institutions for demonstration of environmental and sustainability objectives within the Aerotropolis
- Grow tourism and service sectors





## ALTERNATIVE ENERGY CLUSTER

Establish an alternative energy cluster to evaluate applicability of alternative energy technologies, prototype technologies and local manufacture processes, and produce components for alternative energy systems.

### Transformation Goals

- Respond to future Aerotropolis energy demands through alternative sources
- Develop sustainable, resilient, and secure future energy options
- Support a more efficient energy value chain by avoiding high transmission losses and centralised capacity constraints
- Enable investors and manufacturers in meeting global “green” production practices
- Enhanced service to rural and integrated human settlements
- Create an entirely new value chain of employment opportunities in the manufacture, generation and servicing of energy needs as well as growing local industrialists.



## OPEN WIFI PROGRAMME

Provide open Wifi access for communities to enable access to knowledge and opportunity.

### Transformation Goals

- Facilitate the democratisation of technology, providing access to information for current and future generations
- Enhance connection to local and global opportunity through technology
- Enhance communication between government and citizens
- Provide private investment opportunities for advertising
- Create employment opportunities in the installation, operation, and maintenance of digital infrastructure



## TECHNO-HUBS

Support the growth of the creative class and young innovation entrepreneurs through the establishment of techno-hubs. Provide access to the most cutting edge technology support and training, including: 3D printing labs, a robotics centre, and design and innovation studios.

### Transformation Goals

- Engage youth in the next generation of industrialisation and technology
- Address skills shortage and youth unemployment by reducing barriers-to-entry in the technology sector
- Attract international skills, investment, and capacity to nurture and grow local talent.



# NOW ARRIVING

Toward An Aerotropolis Implementation Framework



# MOVING TO IMPLEMENTATION

## AN IMPLEMENTATION FRAMEWORK

The implementation framework for the Durban Aerotropolis, comprises both strategic and tactical interventions needed to pivot the Aerotropolis from plan to implementation. Recognising the large and long-term nature of the master plan, the implementation framework is crafted to:

**Generate immediate recognisable benefit** without compromising long term objectives, by creating early opportunities for investment focus.

**Maximise inclusivity and benefit distribution**, even in the short term.

**Create clear communication and coordination platforms** among all the stakeholders, government entities and agencies responsible for implementation and statutory development approvals.

**Ensure longevity and continuous improvement** by embedding the outputs of the Aerotropolis master plan in statutory planning processes and planning documents.

**Communicate clearly** the physical manifestation of the Aerotropolis master plan and the investor opportunity.

**Identify alternative delivery models** that could help overcome constraints.

### Statutory Plan Updates

Statutory plans that inform development definition, prioritisation and government budgeting are aligned to reflect the cabinet approved Durban Aerotropolis Master Plan.

### Governance & Institutional Arrangements

The Dube TradePort is the agency established to drive the implementation of the Durban Aerotropolis Master Plan, with a mandate to coordinate with stakeholders: inter-alia, planning, approvals, budget prioritisation, implementation and investor attraction.

Statutory Plan Updates

Governance & Institutional Arrangements

### Lead Initiatives

Lead initiatives – initiatives with a short to medium term focus – initiate the transformation agenda of the Durban Aerotropolis Master Plan and catalyse further development.

### Funding & Finance Options and Incentives

The funding plan sets out an outline of various tools and options for the Aerotropolis development. There are a number of different ways by which projects can be funded and incentivised to ensure viability and sustainability including, inter-alia:

- Rate Ring Fencing
- Land Value Capture
- Tax Incentives
- Grants and Concessionary Loans
- Government Guarantee
- Municipal Bonds
- User Pay Principle

Lead Initiatives

Funding & Finance Options and Incentives

### Delivery Model Options & Procurement

The implementation of the Aerotropolis master plan will rely on newer delivery models that are more relevant to prevailing global trends. Suitability of these models are assessed and the procurement principles that apply will be value and innovation centric with localisation, black economic empowerment and youth participation being an integral part of implementation.

### Communication & Exhibition

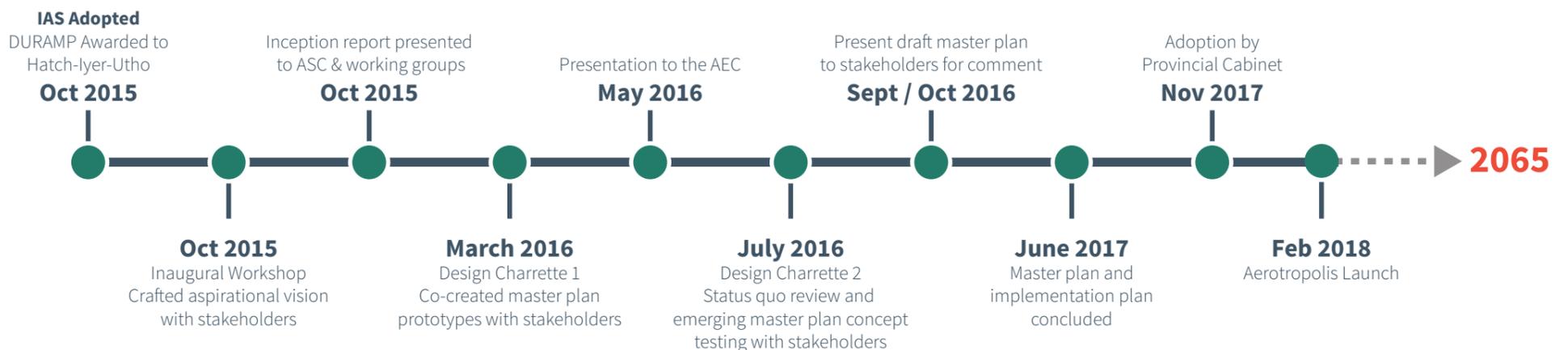
The Dube TradePort as the cabinet mandated Durban Aerotropolis Development Corporation, is a single port of call for investors and other stakeholders that have an interest in the Aerotropolis, providing a clear and engaging experience for investors.

A Durban Aerotropolis exhibition and engagement space with physical scale models, multi-media experiences live engagement opportunities has been established at Dube TradePort headquarters (29° South, Dube TradePort) to amplify the understanding of the scale of development and to support the mobilization of investors.

Delivery Model Options & Procurement

Communication & Exhibition

# ABOUT THE PROCESS



As innovation continues in a non-linear manner, we need to adapt and be flexible in planning for a sustainable future Aerotropolis. This must prompt us as co-creators of this new space, room to dream up the many possibilities for this exciting new region, and to differentiate it as best we can.

DURAMP Team, Design Charrette 1, March 2016

The process of creating the Durban Aerotropolis Master Plan was designed as a multi-disciplinary, multi-sector, multi-agency, and multi-jurisdictional effort to achieve a product that balances the needs of a variety of stakeholders.

Utilising previously established Aerotropolis working group structures that comprise KZN Provincial line departments, transit and other transport agencies, municipal authorities, and various special stakeholder groups, the development of the Aerotropolis Master Plan was underpinned by the principle of co-creation with stakeholders and owned by all. Through a series of design charrettes, workshops, and one-on-one engagements, shared concerns, ideas and solutions were socialised and incorporated into the plan.

The master plan represents the physical manifestation of the aspirational vision for a live, work, play urban development that makes a meaningful contribution to the local and national economy, drives social cohesion, and addresses legacy issues related to economic, social and spatial transformation. The master plan incorporates global trends and influences, but is strongly grounded in local realities, acknowledging the challenges and opportunities of South Africa's diverse communities and businesses.

# THE TEAM



The KwaZulu-Natal Department of Economic Development, Tourism and Environmental Affairs (EDTEA) is mandated to oversee the socio-economic transformation in the province. It leads policy and strategic initiatives focused on promoting development and growth in various sectors of the economy.  
[www.kznedtea.gov.za](http://www.kznedtea.gov.za)



Dube TradePort (DTP) Special Economic Zone (SEZ) is a world-class development offering globally integrated logistics and manufacturing infrastructure. The benefits that are offered to businesses operating within the SEZ are geared towards promoting business growth, revenue generation, employment creation, the export of value-added commodities, and the attraction of both foreign and local investment – all enhancing South Africa's manufacturing and export capabilities. Owned by the KwaZulu-Natal Provincial Government, DTP is the province's flagship infrastructural development and priority, forming part of South Africa's National Infrastructure Plan. DTP is strategically located 30km north of Durban.  
[www.dubetradeport.co.za](http://www.dubetradeport.co.za)



Hatch is a global engineering, development, and management consultancy with more than 11,000 staff in 65 offices on six continents. Its Urban Solutions practice helps reshape the world's cities through innovative technical and strategic consulting services, including master planning, real estate strategy, policy advisory, economic feasibility, triple bottom line analysis, and climate and resiliency planning.

#### Key Projects

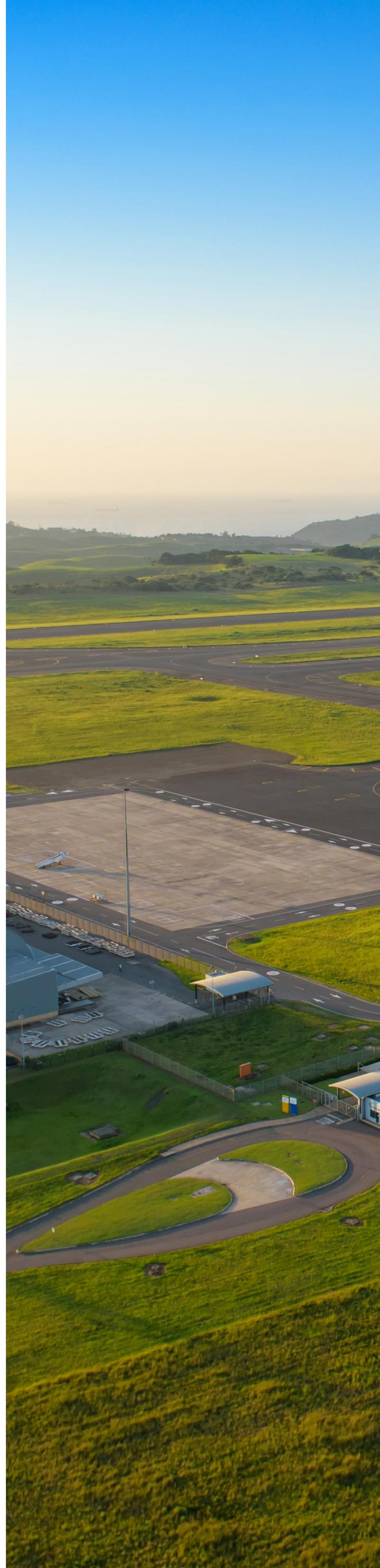
Bandar Malaysia Master Plan, Kuala Lumpur, 200 ha  
Calgary Green Rail Line Extension, Canada, 40km, 350,000px  
Oakland International Boulevard Development Strategy, USA  
Cerro Norte Master Plan, Leon, Mexico, 60ha  
Berkeley Micro Grid Feasibility Analysis, City of Berkeley, CA, US  
[www.hatch.com](http://www.hatch.com)



Iyer is an interdisciplinary design practice that seamlessly weaves together planning, urban design and architecture in a purposeful, people-centred approach to place-making. Founded in 1996, Iyer has a diverse range of specialisations, but a single-minded philosophy. Iyer designs spaces by considering how they should be experienced as much as how they should look. The firm has offices in Durban and Johannesburg, and has been the driving force behind the built environment and planning for a number of iconic projects.

#### Key Projects

Point Waterfront Development, Durban, South Africa  
Moses Mabhida Stadium Precinct, Durban, South Africa  
Cornubia Development, Durban, South Africa  
Sibaya Coastal Precinct, Durban, South Africa  
GO!Durban Transit Stations, Durban, South Africa  
[www.iyer.co.za](http://www.iyer.co.za)



# ACKNOWLEDGEMENTS

The Durban Aerotropolis Master Plan team would like to thank a diverse range of stakeholders whose contributions and insights were invaluable to shaping the future of the Aerotropolis:

Aerotropolis Management Unit  
Aerotropolis Social Accord  
Aerotropolis Institute Africa  
KZN Department of Cooperative Governance and Traditional Affairs  
Airports Company South Africa  
Department of Trade and Industry  
Enterprise ILembe  
Eskom  
eThekweni Municipality  
ILembe District Municipality  
Ithala Bank  
KwaDukuza Local Municipality  
KZN Department of Human Settlements  
KZN Department of Transport  
KZN Office of the Premier  
Msunduzi Local Municipality  
National Housing Development Agency  
Ndwedwe Local Municipality  
South Africa Property Owners Association  
Tongaat Hulett Developments  
Tourism KZN  
Trade and Investment KZN  
Department of Public Works  
KZN Treasury  
PRASA  
SANRAL  
Durban Tourism  
Umgeni Water  
Transnet  
Durban Chamber of Commerce and Industry  
KZN Department of Agriculture and Rural Development

# IMAGE CREDITS

Page	Art	Credit
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04	Highway	eThekweni Municipality
04	Farming	Dube TradePort
07	Manufacturing	Dube TradePort
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07	Electronics	Dube TradePort
19	Microscope	Maxim Kulikov, Noun Project
19	Processor	Shastry, Noun Project
19	Camera	Adrien Coquet, Noun Project
19	Tractor	Px Icon, Noun Project
19	Crane	Creative Stall, Noun Project
17, 19	Aeroplane	Focus, Noun Project
19	Home	Mahmure Alp, Noun Project
28	BRT	Go!Durban
28	Logistics	Dube TradePort
29	Agriculture	Dube TradePort
31	Solar Panels	Dube TradePort
31	Techno-Hub	Dube TradePort
37	KSIA Tower	Dube TradePort

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