

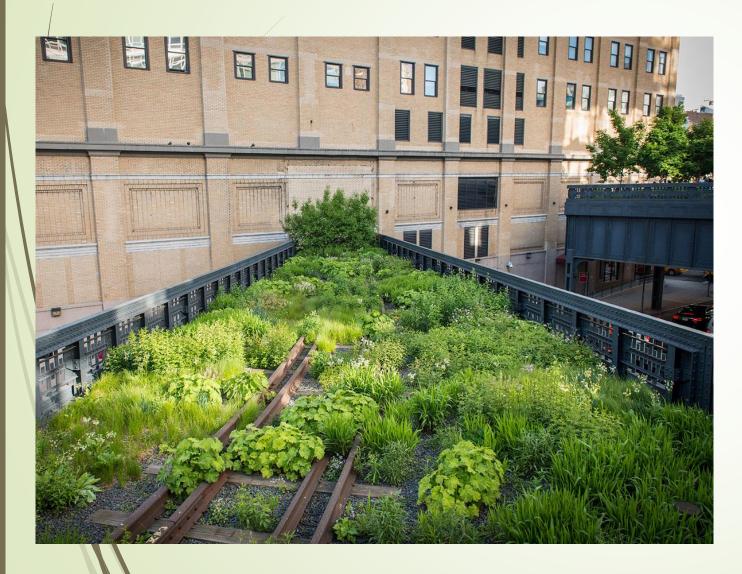
By 2030 eThekwini will be Africa's most caring and liveable city



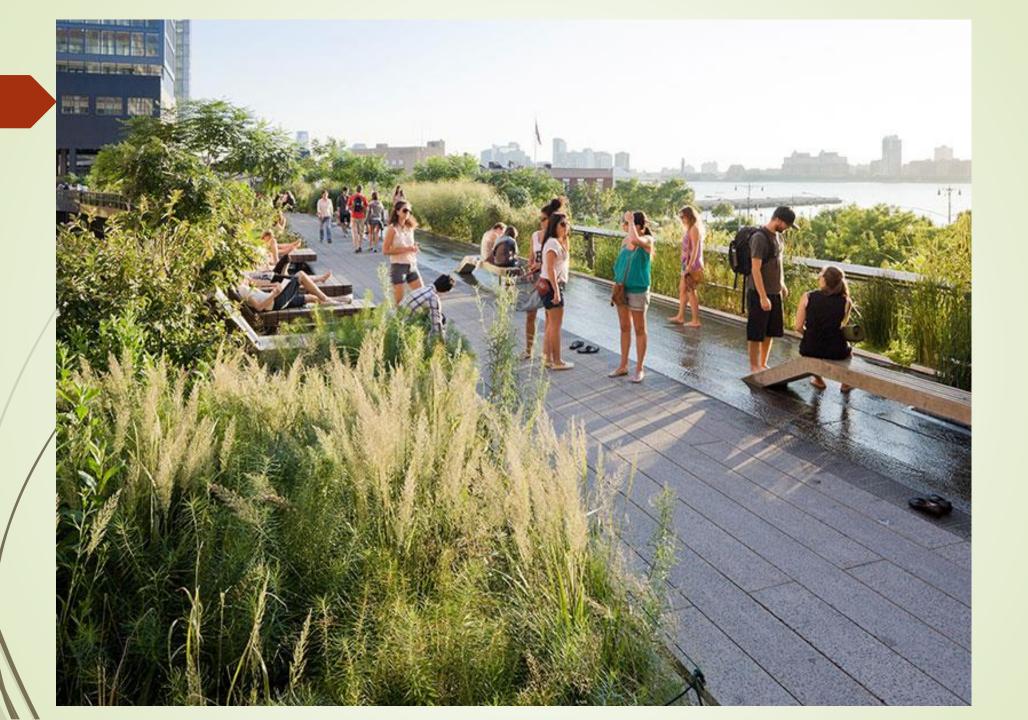
Rethinking precincts in urban green space revitalisation:

the role of place identity and social cohesion within urban horticultural practise

High Line, New York - planting design



- Inspired by self-seeded landscape of disused railway line.
- Native species of perennials, grasses, shrubs and trees selected for hardiness, sustainability, and textural and colour variation.
- Species originally growing on the High Line's rail bed incorporated into overall landscape. http://www.thehighline.org/about



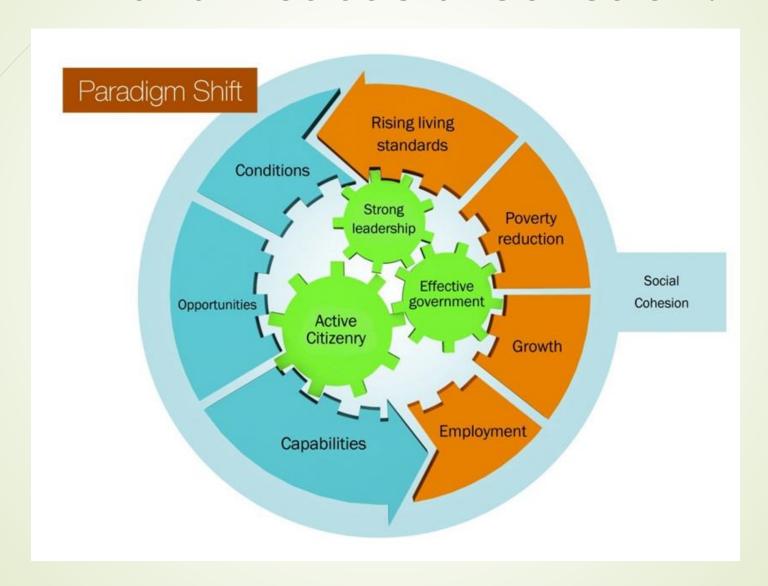
eThekwini's GREEN STRATEGY

The purpose of the Green Strategy is to contribute to the conservation and preservation of our green environment and a well treed Green City, developing sustainable programmes to achieve the same, in so doing assisting in reducing the impact of climate change, the preservation of our biodiversity and the offset/minimization of carbon emissions and other "green house" gasses within the eThekwini Municipality

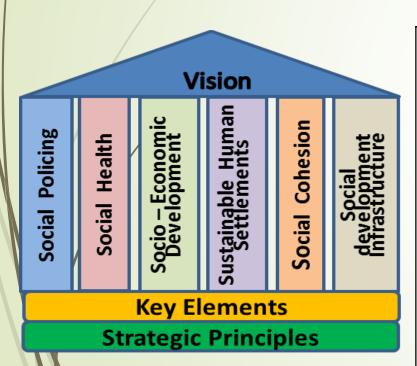




What drives social cohesion?



Precinct management- City's Social Development Policy



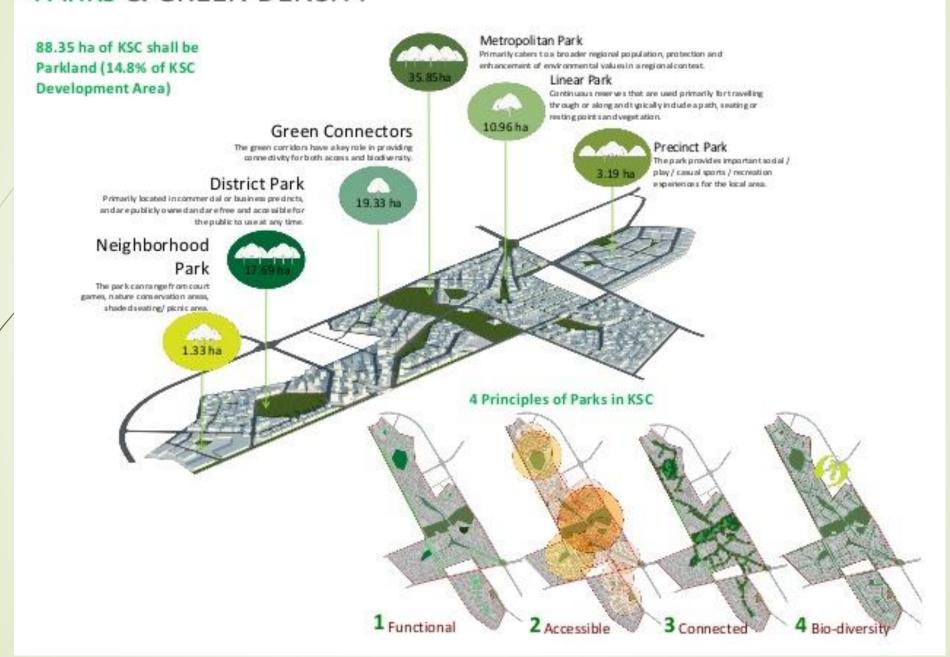
Parents Empowerment Nurtured Children Happy Play School Centre for Community Peaceful Learning Well Managed Parks Self-Sustaining Community Community Cohesion Good Role Models for Youth Many Leisure Choices	SIX PILLARS	KEY ELEMENTS	INFRASTRUCTURE NEEDS
Young people make good choices Build Strong Families		 Parents Empowerment Nurtured Children Happy Play School Centre for Community Peaceful Learning Well Managed Parks Self-Sustaining Community Community Cohesion Good Role Models for Youth Many Leisure Choices Young people make good choices 	 Parks Community Halls Schools Libraries Museums Arts and Culture Centres Sports Fields Theme Parks

8 features of smart cities





PARKS & GREEN DENSITY



Food gardens as social connectors

Ecosystem Services provided by urban gardens*

Habitat services	Habitat for biodiversity
Provisioning services	Medicinal resources and aromatic plants; Food supply (quantity and quality)
Regulating services	Air purification; Local climate regulation; Global climate regulation; Maintenance of soil fertility; Pollination
Cultural services	Social cohesion & Integration; Place-making; Political fulfillment; Biophilia (connection with nature); Aesthetic information; Nature & Spiritual experiences; Relaxation & Stress reduction; Entertainment & Leisure; Exercise & Physical recreation; Learning & Education; Maintenance of cultural heritage

^{*}These results were based on 44 in-depth interviews with allotment and community gardeners in Barcelona.

Food is not only essential to our health and wellbeing, but it also often plays a pivotal role in the social connections and cultural traditions that help define both our communities and sense of self.

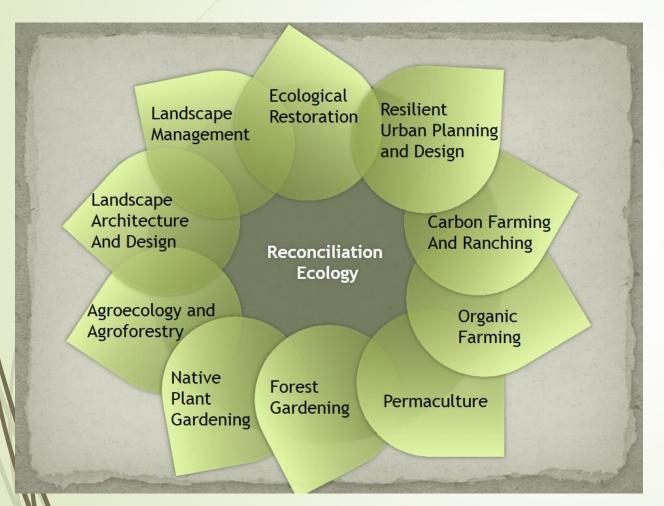
www.urbesproject.org

Radical Ecological Democracy (R.E.D.



- Multiple crises of ecological unsustainability, poverty, food and water insecurity, and economic collapse.
- urgency to forge paths of human well-being that are equitable and ecologically sustainable.
- Alternatives: sustainable food production, holistic rural development, sustainable cities, community-based conservation, meaningful educational and health security, decentralized governance, economic democracy etc.
- Point a new future paradigm: Radical Ecological Democracy (R.E.D.).

Reconciliation ecology...where people live, work and play



Reconciliation ecology: "the science of inventing, establishing and maintaining new habitats to conserve species diversity in places where people live, work and play."

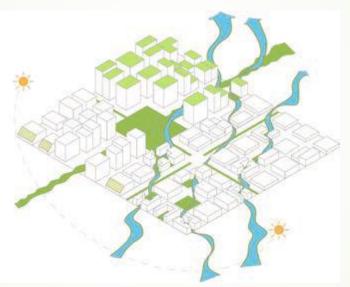
Michael J. Rosenzweig in 2003

Embedding Climate Change in Urban Planning and Design

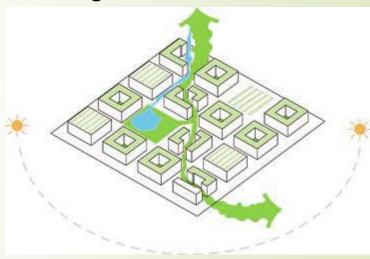
Efficiency of Urban Systems



Form and Layout



Vegetative Cover



Rosenzweig C., W. Solecki, P. Romero-Lankao, S. Mehrotra, S. Dhakal, T. Bowman, and S. Ali Ibrahim. 2015. ARC3.2 Summary for City Leaders. Urban Climate Change Research Network. Columbia University. New York.

Belonging • Inclusion • Participation • Recognition • Legitimacy • Shared values • Cooperation • Belief



Precinct Social cohesion • Place

urbanperi-urbanrural



precinct/'pri:sin(k)t/

- British An area in a town designated for specific or restricted use, especially one which is closed to traffic. 'a pedestrian precinct'
- a part of a city or a town in which vehicles are not allowed, used for a special purpose, such as shopping:
- North American A district of a city or town as defined for policing purposes.



Centred on Mary Fitzgerald Square in downtown Johannesburg, Newtown is at the heart of the city's rejuvenated centre.

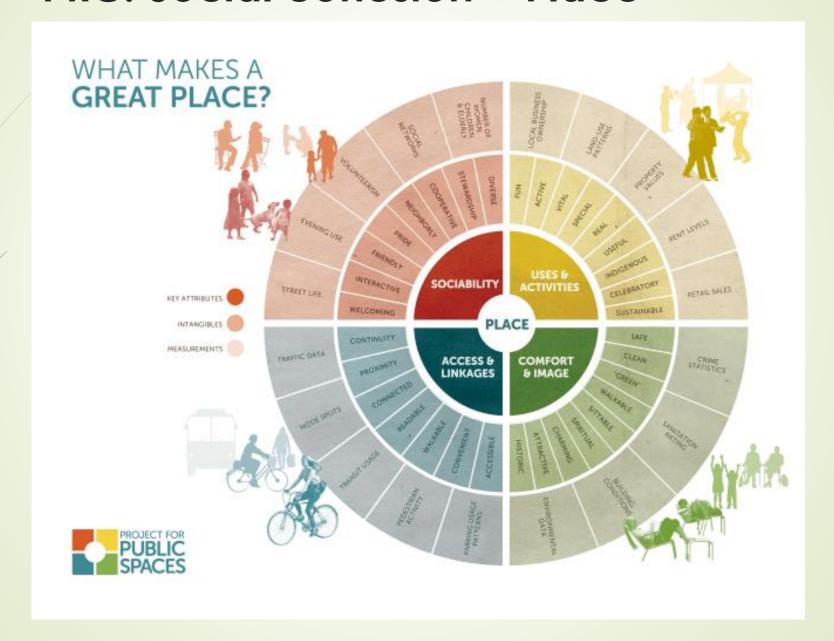
rural precinct guidelines

- identifying key areas where rural precincts can sustain rural industry
- preventing inappropriate fragmentation of land
- enhancing infrastructure and investment opportunities in rural precincts
- managing land use conflicts
- enabling rural industries to diversify, adjust, innovate and value-add
- identifying alternative economic uses of rural land
- protecting and promoting productive activities within a rural precinct
- protecting and promoting regional landscape values
- sustaining benefits to the community derived from the natural environment.
 - http://www.statedevelopment.qld.gov.au/resources/guideline/rural-precinct-guidelines-aug2007.pdf

What makes a successful precinct?

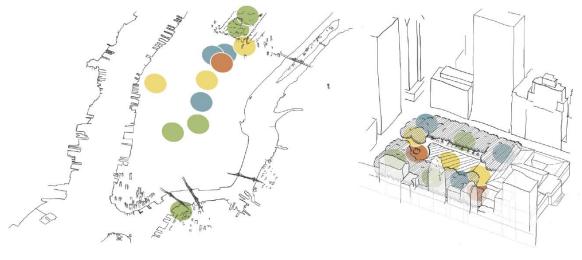
- A successful precinct may arise from an assembling of land opportunities or the purchase and redevelopment of old properties....
- Central vision and creation of its own identity.
- Potential creation of a successful precinct...high traffic zone with ageing buildings that have the potential to be redeveloped.
- A precinct may also arise from a particular requirement, for example a student accommodation precinct...
- The aesthetics and ambience of a precinct need to be considered as a whole...
- Relatively old shopping centres, which tend to have all the necessary services required such as supermarkets, banks, dry cleaners, post office and so on, and because they are in a densely developed and trafficked area they continue to thrive
- Important to acknowledge the financial undertow that has a major influence on the life cycle of a precinct.
- Stakeholders or landlords have a management role in that precinct http://www.sapropertynews.com/what-makes-a-successful-precinct/

PRC: Social cohesion • Place



POWER OF 10+

HOW CITIES TRANSFORM THROUGH PLACEMAKING

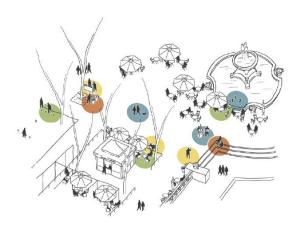


City/Region

10+ MAJOR DESTINATIONS

Destination

10+ PLACES IN EACH



Place

10+ THINGS TO DO, LAYERED TO CREATE SYNERGY

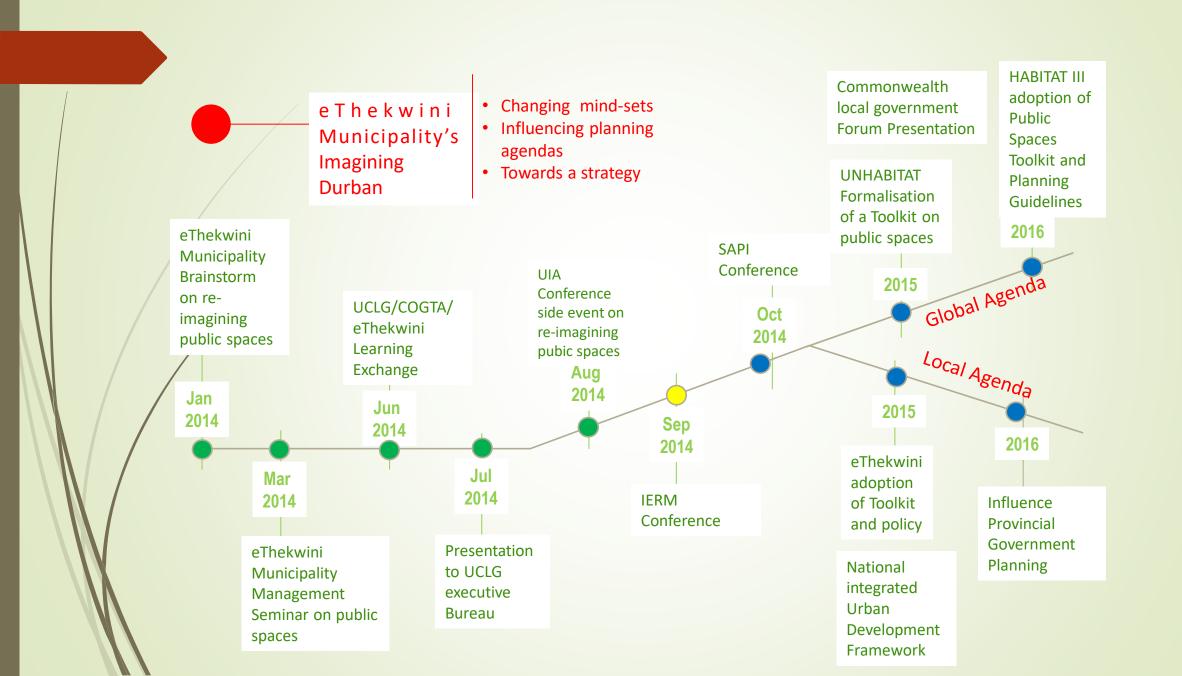


Place making is

- Community-driven
- Visionary
- Function before form
- Adaptable
- Inclusive
- Focused on creating destinations
- Context-specific
- Dynamic
- Trans-disciplinary
- Transformative
- Flexible
- Collaborative
- Sociable

Place making is not

- Top-down
- Reactionary
- Design-driven
- A blanket solution or quick fix
- Exclusionary
- Car-centric
- One-size-fits-all
- Static
- Discipline-driven
- One-dimensional
- Dependent on regulatory controls
- A cost/benefit analysis
- Project-focused

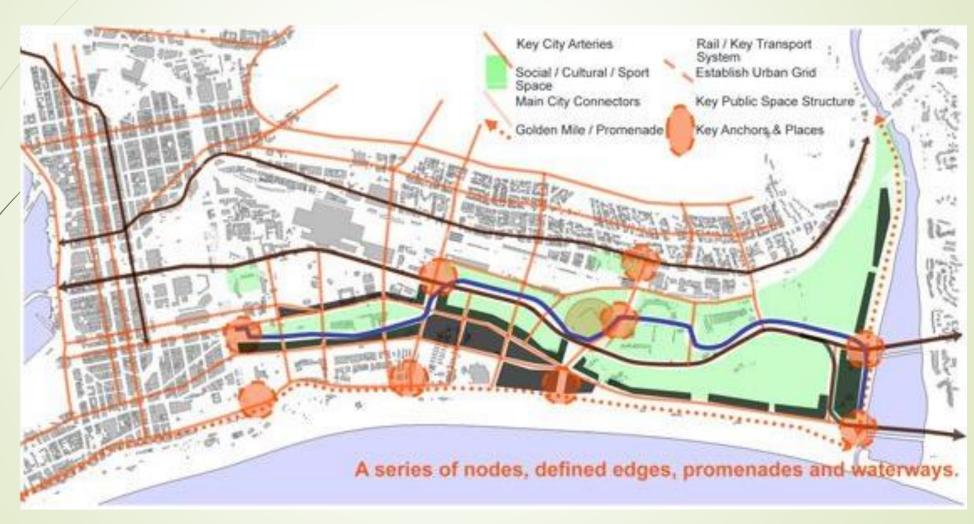




Global Public Space Toolkit
From Global Principles to
Local Policies and Practice



Precinct example: Moses Mabhida Stadium



Station Drive Precinct



- •The Station Drive Precinct is Durban's first urban renewal & creative district.
- •Home to a wide range of creative businesses in a dynamic setting.

STRATEGIC PRC PROJECTS/PROGRAMMES

- HERITAGE CEMETERIES
- KWA MUHLE MUSEUM
- STATUES
- MONUMENTS
- CATO MANOR MUSEUM
- 20YRS OF THE CONSTITUTION
- SOCIAL COHESION PROGRAMME
- → 9TH ETHEKWINI LIVING LEGENDS
- ESSENCE FESTIVAL DURBAN
- ARTISTS IMBIZO
- MISS ETHEKWINI MUNICIPALITY
- SOCCER ACADEMY
- POINT ROAD DEVELOPMENT
- LAHEE PARK DEVELOPMENT

- SPORTS STRATEGY
- MOSES MABHIDA STADIUM
- KWAMASHU CRICKET STADIUM
- SALGA GAMES
- MAYORAL CUP
- ONE NATION CUP
- COMMONWEALTH GAMES
- VULAMEHLO MUNICIPALITY
- GREENING STRATEGY
- GRASS CUTTING
- AGRICULTURAL PROGRAMMES
- GOSPEL ID
- K CAP LEARNING CENTRE
- CEMTRUM SITE
- POP-UP PARKS

CULTURAL PRECINCTS

Umlazi W Hall

- Conversion to Multipurpose Art Centre
- At Concept stage and Community Consultations at advanced stage
- Budgeted
- KwaMashu KCap Development of Precinct and Extension of Theatre
 - At Concept Stage and initial drawings developed
 - In budget
- Rivertown Beerhall Development of Cultural Precinct
 - Cultural Precinct Initiated and operational
 - Gallery Developed (Rivertown Beer Hall Gallery operated by PRC)
 - 8Morrison Street Private Investment complete and operational following initial Council investment and an additional 3 properties in the same precinct to open this year 2016.

Point Waterfront Arts Studio

- Concept Stage
- Building identified from Province on Mahatma Gandhi Street
- City Hall- Playhouse Bat Centre
 - Concept Stage
 - National Department expressed interest in partial funding





CSIR Social Facility and Location Planning Project

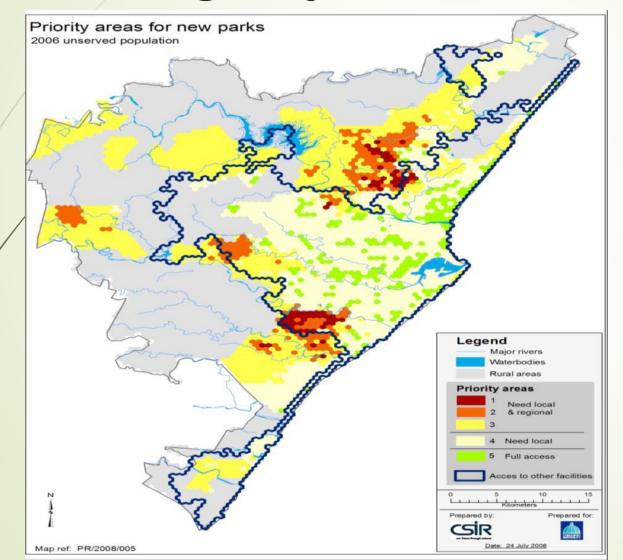
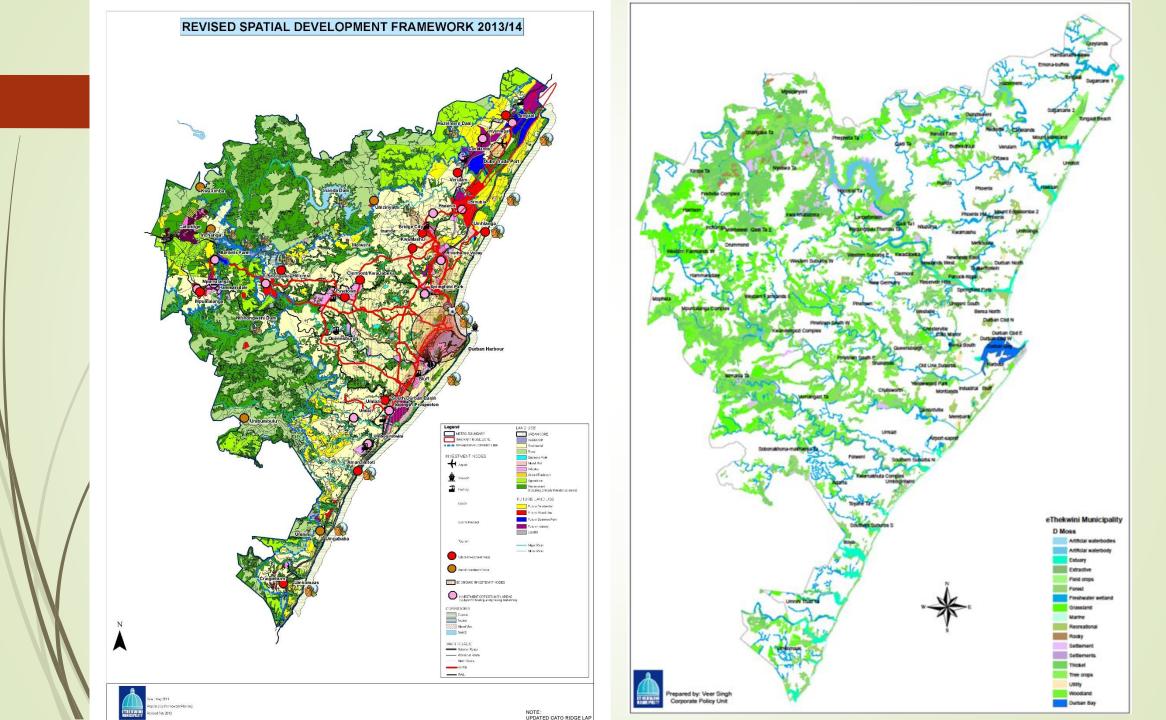
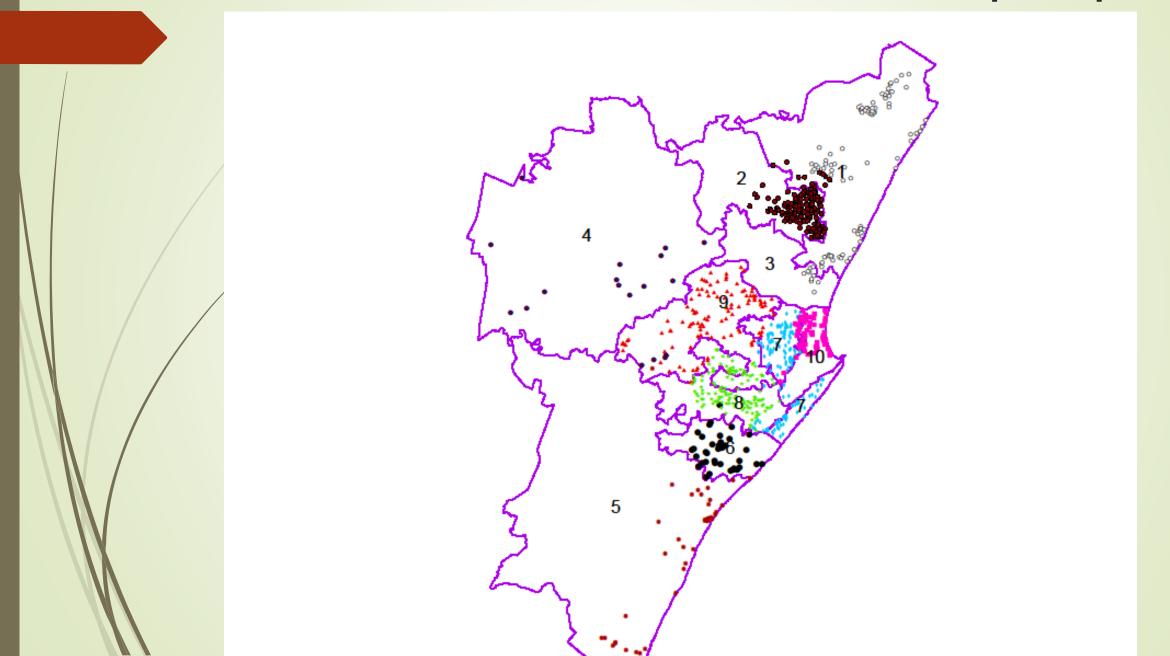


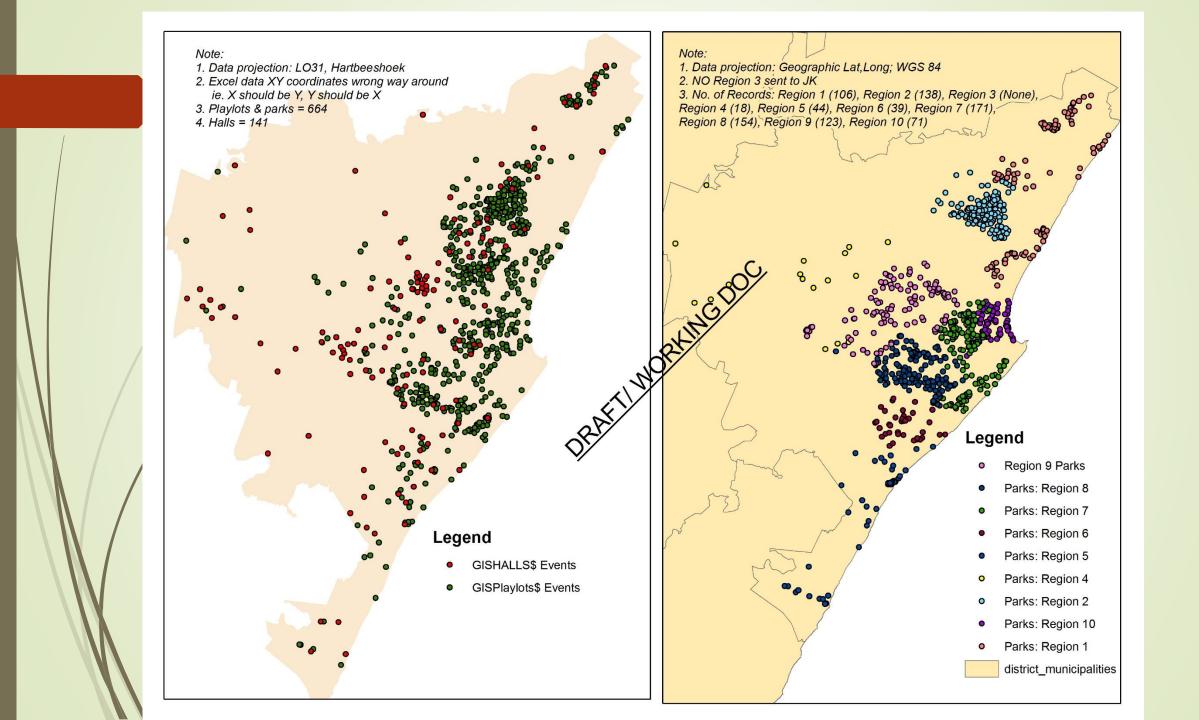
Table 10.1: Summary of criteria and analysis process for parks

Facilities analysed	Combination of: Local parks Regional parks
Travel network access distance	2 km travel distance to the nearest park 1 km travel distance was used for the optimisation of new facilities
Demand	Total population of eThekwini Municipality 2011 (3 667 188) (0.4 ha for every 1 000 people).
Supply	Available 688 ha = 1 721 103 people provided for
Analysis undertaken	 Unconstrained travel distance to nearest park Constrained travel distance and capacity analysis Optimised locations for new parks



Overview of Parks Districts with CSIR data superimposed





AGRICULTURAL HUBS

Northdene Agroecology Research & Development Centre

A production hub at the old Northdene waterworks. This hub drives innovation and provides material support to implement polycultural delivery. Currently there is a fish hatchery and broodstock ponds for the Aquaculture programme and nurseries for plant propagation.

Newlands-Mashu Bio-intenstive Propagation— East zone hub

This hub was originally established by the NGO Newlands-Mashu as the hub for the East agri-zone it continues as a site of Bio-Intensive demonstration and learning site. Many volunteers work in the gardens to take produce home as well as distributing to social facilities in the area. A pilot BORDA baffle bioreactor unit has been built to process sewage from 83 adjacent homes to produce biogas and nutrient-rich water. The UKZN is currently running tests on water's safety and efficacy in fertilising crops.

Inchanga – North zone hub

Land with a small house has been acquired alongside the taxi rank and has been upgraded as a training and operational base for the northern agri-zone horticulturist. The development of demonstration gardens has begun.

AGRICULTURAL HUBS

Scorpio Place in Mariannridge – Central zone hub

This small but established hub offers on-site training and a demonstration garden. Support is also provided for various value-adding initiatives, including bottling and drying of excess produce, and making liquid composts and organic pesticides.

Umbumbulu – South Zone hub

This hub provides a training, packing, marketing and coordination venue for growers in South region. Seventy-seven growers received direct training, ongoing mentoring and marketing support.





Existing and proposed precincts & linkages

District	1

- Tongaat
- Tongaat Beach
- Umhlanga Rocks
- Gateway Precinct
- Cornubia
- Verulam
- Hambanati

District 2

Phoenix Central

Stanmore

JL Dube School

Ghandi

Inanda Heritage Route

Virginia

Umgeni River

District 3

Kwamashu

Bridge City

Pufara Park

Newlands

District 1: Tongaat Beach Precinct



District 1: Verulum CBD Precinct Plan

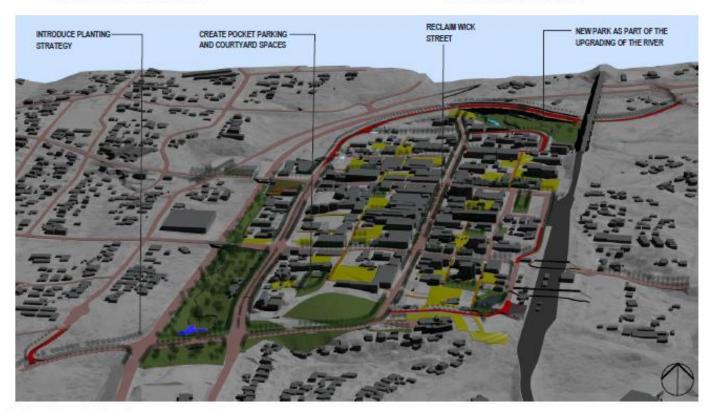
10.2 SUPPORTIVE PUBLIC SPACE SYSTEM

Upgrading and investment in the public realm within the Town Centre will occur though a number of initiatives.

These include;

- . The reclaiming of Wicks Street;
- . Developing civic Precincts
- · Creating pocket parks and courtyards within the core;
- Developing external space at transport nodes;

- Creating formal gateways and approaches;
- Introducing a planting strategy;
- Improve access to recreational spaces; and
- Enhance the quality of the Umdlot corridor.



District 2: Nature-based play, Inanda





- Early Childhood Development
- natural playground
- play furniture could be abstract in design so that children can use their imagination and creativity to play
- Students from the Inanda Seminary can use the project for community service work with younger children
- The eNanda Childrens Wilderness will be a protected natural area with outdoor recreation facilities and an education program benefiting the local community and supporting eco-tourism into the area.
- Outdoor play and exposure to nature is of great value in the development of children in their early years.

Existing and proposed precincts & linkages

District 4

- Mpumalanga
- Hillcrest CBD
- Kloof
- Cato Ridge
- Waterfall/Molweni
- Giba Gorge
- KwaXimba
- Shongweni

District 5

Amanzimtoti CBD

Kwamakhutha

Umgababa/Umnini

Adams Mission

Vulamehlo

Maghabeni

Folweni

Craigieburn

District 6

Umlazi S/T

Megacity

King Zwellitini Stadium

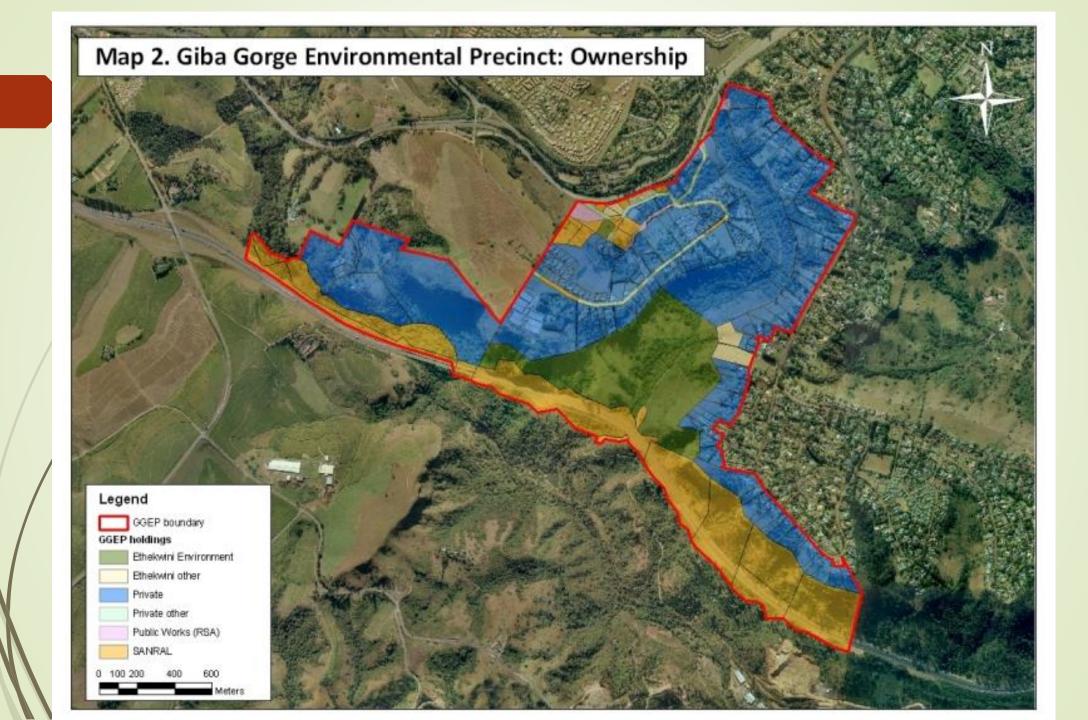
Glebelands Hostel

Isipingo Rail

Umlazi W

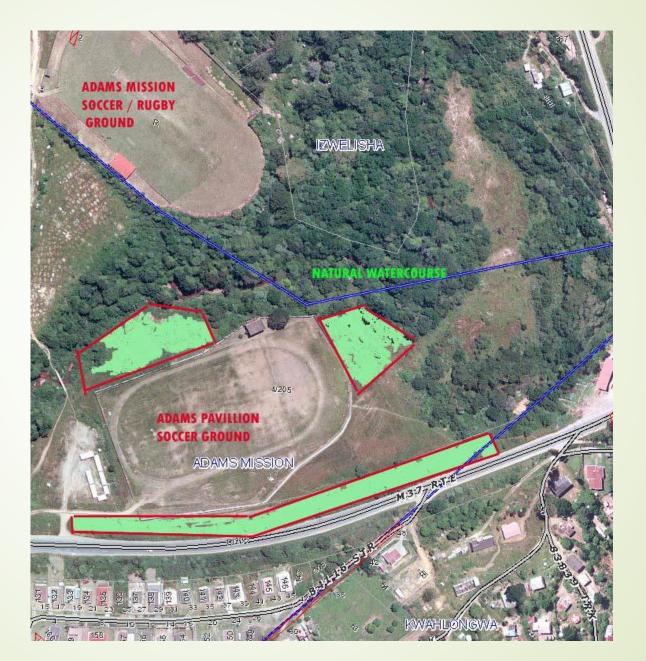
How Long Park

Umlazi G



District 5: Forest of Remembrance: Adams

Mission



District 5: Mfundi Mngadi Drive kwaMakhutha



Existing and proposed Precincts & linkages

District 7

- Florida Road UIP
- Resistance Park / Congella
- Umbilo Business Forum
- Cato Manor
- Sydenham/Randles
- Chesterville

District 8

Northdene Agricultural

Chatsworth Central

Montclair

Yellowwood Park

Ansteys/Brighton

Bulwer Park

District 9

Pinetown CBD

Lahee Park

Westville CBD

Reservoir Hills/Siriphat

Mariannhill Monastery

Ashley/Cowies Hill

Kwadabeka

Hill Street

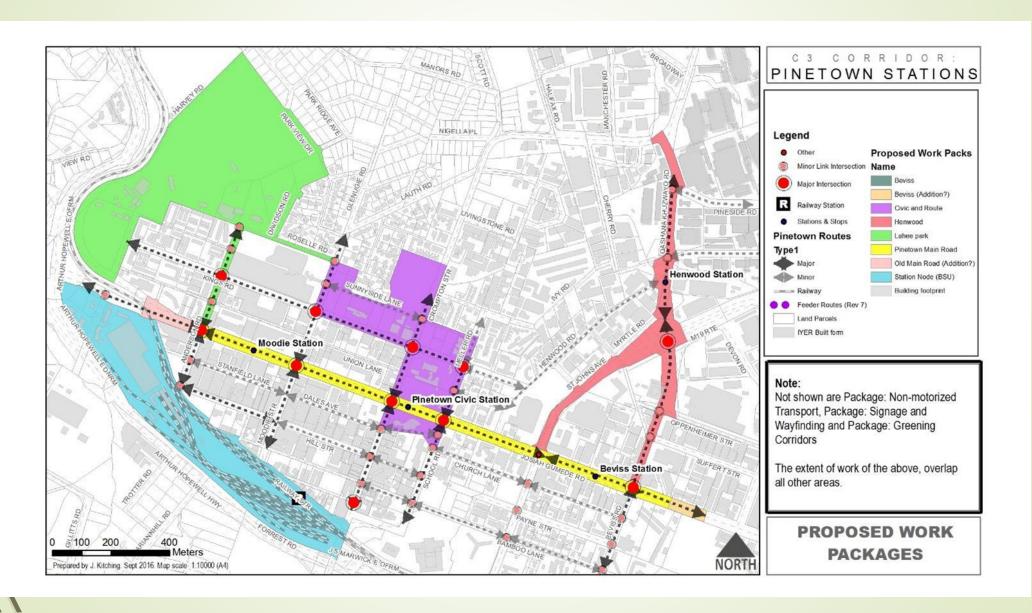
Clermont

Wyebank

Mpumalanga



District 9: Go!Durban Pinetown Transport Precincts



Existing and proposed precincts & linkages

District 10

- Beachfront /Promenade
- Kings Park
- Rivertown
- Point Waterfront Development
- Albert Park
- City Hall
- Warwick Triangle
- Centrum Site
- Hoy Park
- Station Street
- Sutton Park

PLANS TO REJUVENATE THE RIVERTOWN PRECINCT UNDERWAY



Arbor city award criteria

- Greening policy and strategy
- The conservation and protection of existing trees
- Space for future tree planting , planning and development of wide sidewalks
- The development And conservation of greenbelts , natural assets in new and existing residential settlements
- Greening in (townships), low-income cost housing
- Public participation
- Future and current tree planting programmes
- Maintenance operations
- Tree administration
- Programmes on eradication of undesirable alien invasive
- Involvement in partnerships, national and provincial greening campaigns
- Use of trees to give the town/ city a definitive character
- Tree awareness and education
- Resource allocation to greening

Tree Care Community Campaign 2017









What's in a tree inventory

- Location of the tree,
- Tree species
- Size DBH (diameter at breast height)
- tree height,
- crown width,
- overall condition (health and maintenance needs),
- overcrowding,
- possible problems,
- presence or absence of insects or diseases. characteristics of the site (i.e. soil type and condition, root space, and safety).



Tree inventory form example

	Tree Information					Tree			Planting Location				Conditions				Maintenance Needs				
						Condition							Weak	Over.	Dead						Comments
<u></u>	ree #	Code	DBH	G	FF	P D	C	Swlk	< <	:3'	>3'	Lwn	Fork	Wires	Wood	Cav.	Clean	Raise	Red.	Rem.	





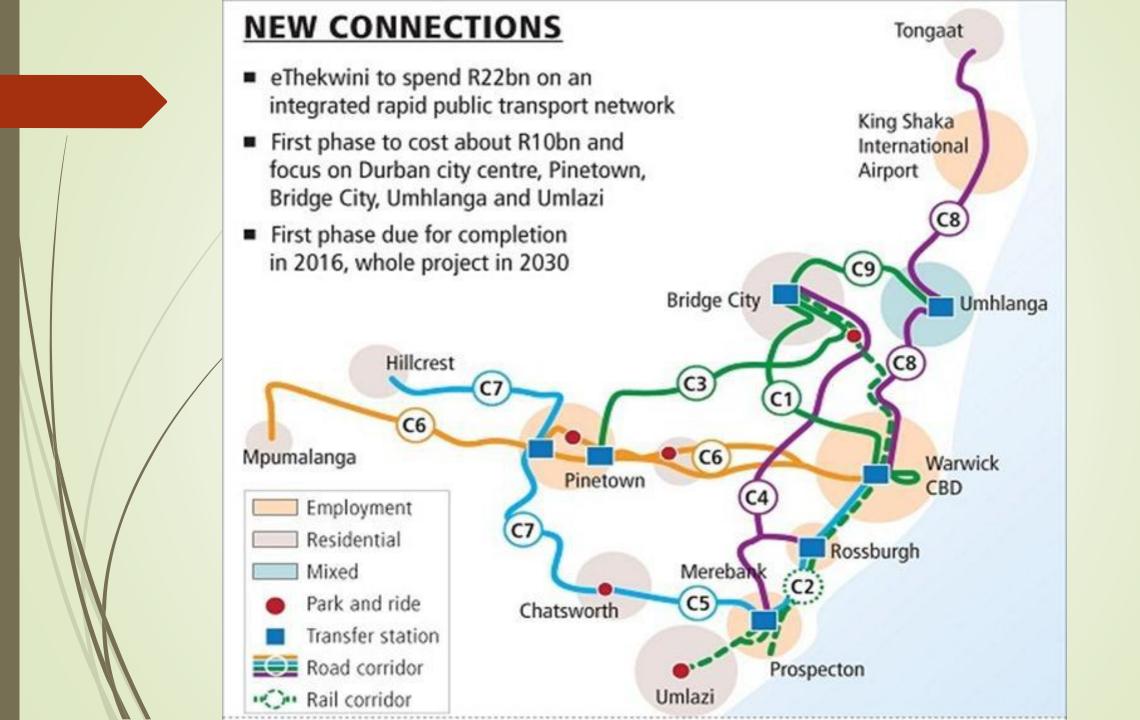
Green Highways policy: India



http://www.mapsofindia.com/my-india/government/green-highway-policy-to-promote-green-covers-along-nh-corridors

The Plan

- The government plans to convert 96,000 km of national highways into green corridors.
- Space technology will be use to monitor the progress of the scheme.
- Indian Space Research Organisation's BHUVAN and GAGAN satellites, with remote sensing system and GPS aided, will help in monitoring the progress.
- Geo mapping will help gauge the survival rate of the planted trees.
- Payment to contractors will be made only on the basis of the survival rate of planted trees.
- State Highways will also join the scheme of Green Highway.
- All upcoming expressways will include green corridors.
- The entire ambitious project will involve nearly 1,000 contractors.

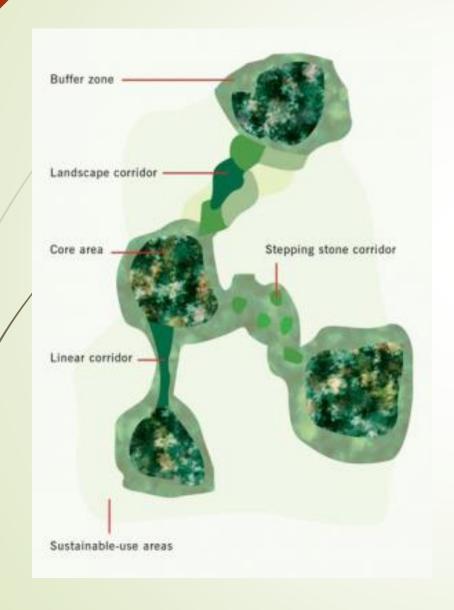


Space to Place: Pinetown.....

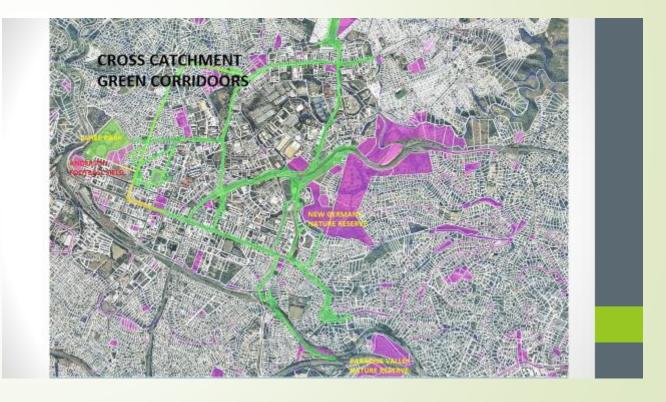


Revitalise Pinetown CBD in conjunction with the development of the GO Durban project through a process of integration of Urban Landscaping and Horticulture, History and Culture, Urban Reforestation, Urban Agro-ecology demonstration projects and the Lahee Park Sports Grounds.

Roadside Ecological Networks

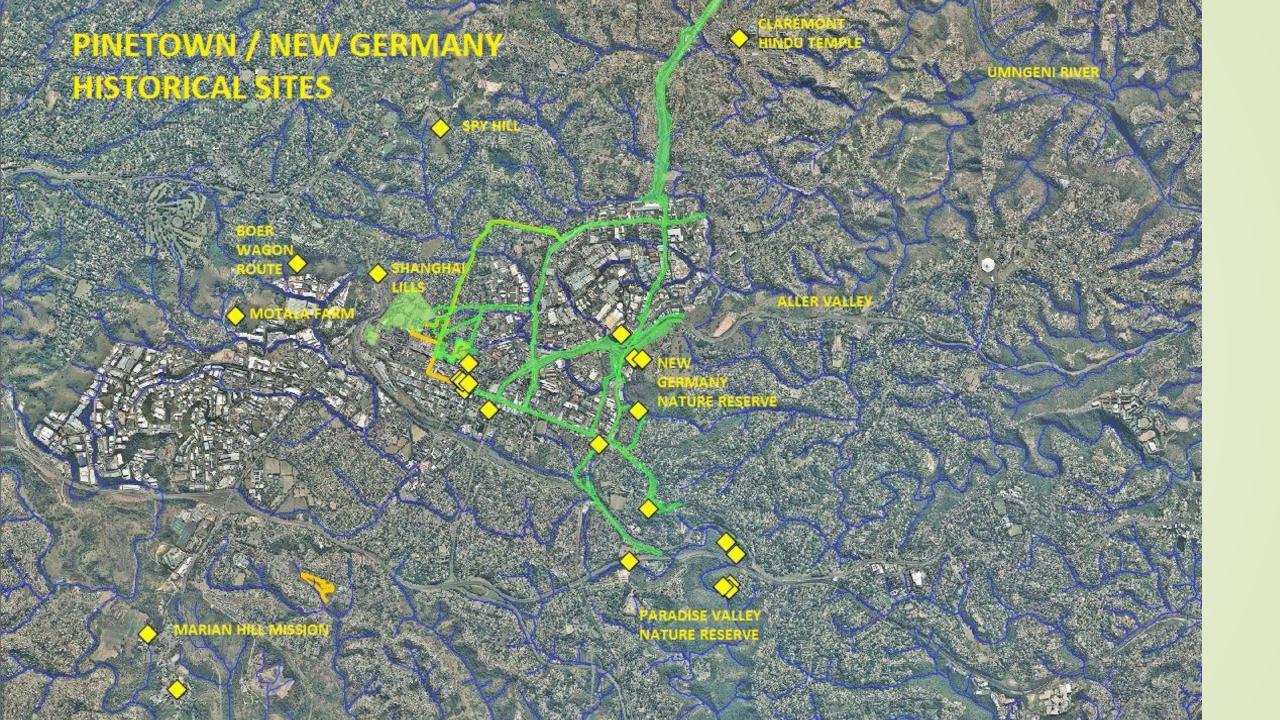


Ecological networks consist of core areas, corridors and buffer zones. Corridors create a permanent connection between core areas. http://www.sicirec.org/definitions/corridors

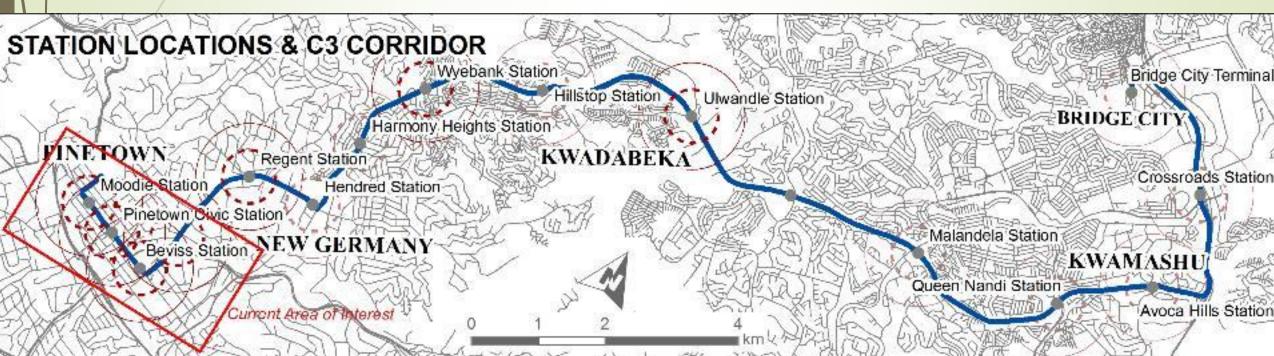


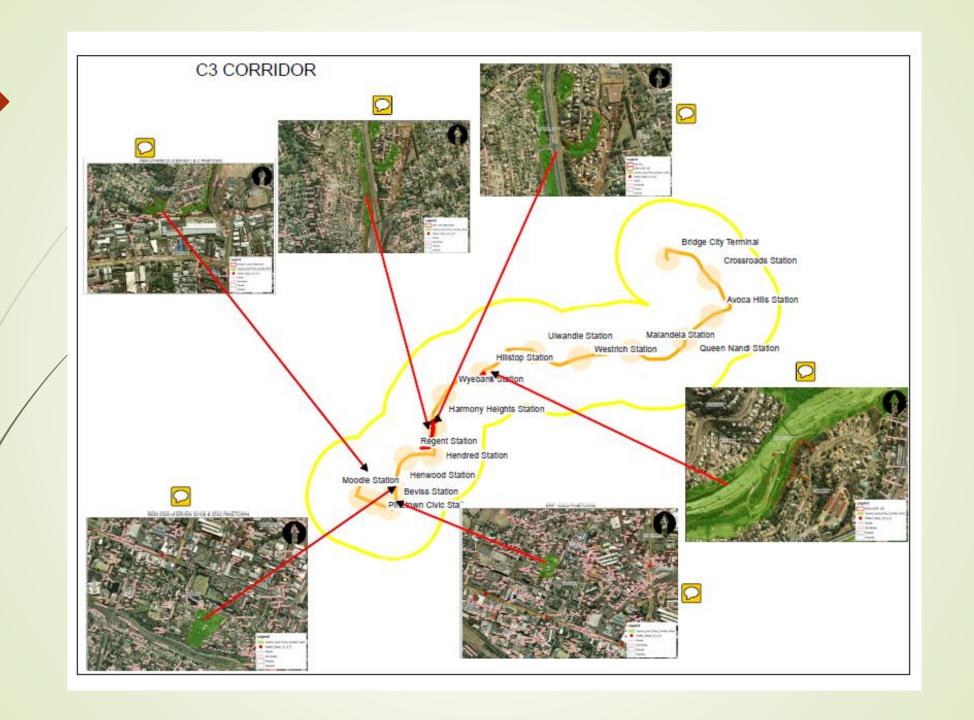
Library – Lahee Park Green Linkage

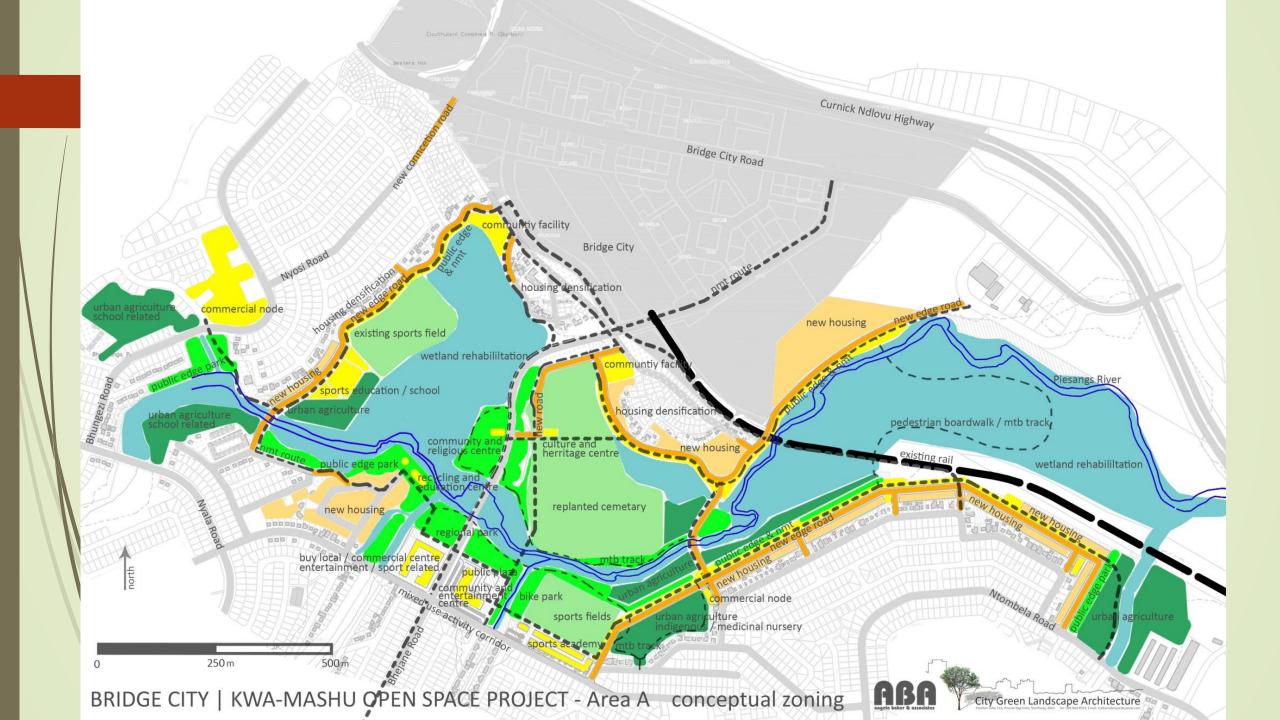












10 Principles for Liveable High-Density Cities

Lessons from Singapore

© 2013 Centre for Liveable Cities and Urban Land Institute

- 1. Plan for Long-Term Growth and Renewal Avoid making the city feel cramped and unliveable.
- 2. Embrace Diversity, Foster Inclusiveness a global and more diverse city
- 3. Draw Nature Closer to People Blending nature into the city helps soften the hard edges
- 4. Develop Affordable Mixed-Use Neighbourhoods Basic goods and services, as well as schools and recreation areas put within reach.

- 5. Make Public Spaces Work Harder make all space, including infrastructure spaces, serve multiple uses and users
- 6. Prioritise Green Transport and Building Options overall reduction in energy consumption and dependence adds to the sustainability of the city.
- 7. Relieve Density with Variety and Add Green Boundaries Interspersing high-rise and lowrise buildings. Putting green boundaries around neighbourhoods creates relief from concrete structures; helps create distinct precincts and communities of a friendlier size.

- 8. Activate Spaces for Greater Safety a stronger sense of personal security through a mix of well-thought-out urban design and government intervention.
- 9. Promote Innovative and Nonconventional Solutions - non-traditional solutions and innovative approaches / technology to overcome constraints
- 10. Forge 3P Partnerships enabling a collective responsibility towards the precinct / neighbourhood.

