City of Cape Town Built Environment Performance Plan (BEPP) 2016/17

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Commonly Used Acronyms and Abbreviations

ACSA Airports Company South Africa
BEPP Built Environment Performance Plan

BNG Breaking New Ground
CBD Central Business District
CCT City of Cape Town

CRU Community Residential Units

CSIR Council for Scientific and Industrial Research

CSP Cities Support Programme

CTSDF Cape Town Spatial Development Framework

CTZS Cape Town Zoning Scheme
DORA/Bill Division of Revenue Act / Bill

ECAMP Economic Areas Management Programme

EGS Economic Growth Strategy

EMT Executive Management Team (of the CCT)

EPWP Expanded Public Works Programme
GPRC Grant Projects Review Committee
GIS Geographic Information System

HSDG Human Settlements Development Grant
ICDG Integrated City Development Grant
IHSF Integrated Human Settlements Framework

IDA Incremental Development Area IDP Integrated Development Plan

IGR Inter-Governmental Review (session as per Mid-Year Budget Review)

INEPG Integrated National Electrification Programme Grant

IPTN Integrated Public Transportation Network

ITP Integrated Transport Plan

IZSIP Integration Zone Strategy and Investment Plan

IZ Integration Zones

Mayco Mayoral Committee (of the CCT)
MFMA Municipal Finance Management Act
MSEIZ Metro South-East Integration Zone

MTIIF Medium Term Infrastructure Investment Framework
MTREF Medium Term Revenue and Expenditure Framework

MURP Mayoral Urban Renewal Progamme

NDP National Development Plan

NDPG Neighbourhood Development Partnership Grant

NLTA National Land Transport Act
PTNG Public Transport Network Grant
SDF Spatial Development Framework

SDBIP Service Delivery Business Implementation Plan

SOE State Owned Entity

SPLUMA Spatial Planning Land Use Management Act

TAP Transit Accessible Precinct
TAZ Transportation Analysis Zone
TCT Transport for Cape Town
TOD Transit Oriented Development

TOD-C Transit Oriented Development Comprehensive (land use model)

TRA Temporary Relocation Area

UISP Upgrading of Informal Settlements Programme

UNS Urban Network Strategy

USDG Urban Settlements Development Grant VRCIZ Voortrekker Road Corridor Integration Zone

WCG Western Cape Government

A. Introduction

The 2016/17 Medium Term Revenue and Expenditure Framework (MTREF) is the 3rd annual cycle of the Built Environment Performance plans (BEPPs). The BEPP and associated processes articulate a Metropolitan Municipality's investment rationale and institutional arrangements to address spatial and sectoral integration. The annual document submission acts as compliance instrument for the following Capital Grants allocated to the City via the Division of Revenue Act:

- **Public Transport Network Grant (PTNG)** Schedule 5B (specific purpose allocations to municipalities fund managed by Transport for Cape Town (TCT);
- **Urban Settlements Development Grant (USDG)** Schedule 4B (supplements municipal budgets) fund managed by Human Settlement Directorate;
- Human Settlements Development Grant (HSDG) Schedule 5A (specific purpose allocations to provinces) – fund managed by Western Cape Department of Human Settlements:
- Integrated City Development Grant (ICDG) Schedule 4B (supplements municipal budgets) – fund managed by Department of Spatial Planning and Urban Design (SPUD);
- Neighbourhood Development Partnership Grant (NDPG) Schedule 5B & Schedule 6B (allocation-in-kind to municipalities for designated special programmes) - fund managed by Department of Spatial Planning and Urban Design (SPUD); and
- Integrated National Electrification Programme Grant (INEPG) Schedule 5B fund managed by Utilities Directorate.

The BEPP outlines the City's planning and financial arrangements (emphasising the grant funding component of capital spending) that support national policy objectives of inter alia: integration, inclusivity and sustainability. The National Development Plan (NDP), Integrated Urban Development Framework (IUDF) and more recently the Spatial Planning Land Use Management Act, Act 16 of 2013 (SPLUMA) have clearly articulated these objectives within the national context. The City's Integrated Development Plan (IDP), Spatial Development Framework (SDF) and growth strategies have provided the policy and institutional foundations for future investment and framed localised developmental targets and outcomes.

The BEPP has become an integral part of the municipal package of strategic plans and instruments (**Diagram 1**). It is uniquely positioned, being required to annually structure content that is reflective of:

- the founding strategic principles and targets established in the Integrated Development Plan (IDP) and Spatial Development Framework (SDF) approved in 2012;
- the current financial, planning and infrastructure initiatives and risks managed by the City via sector and Master plans;
- the broader annual City budget and MTREF with an emphasis on the capital grants mentioned above;
- the investment rationale of other state departments and entities;
- an increasingly structured and transversal framework for content preparation and strategic themes of national importance emphasised in guidelines issued periodically by National Treasury.

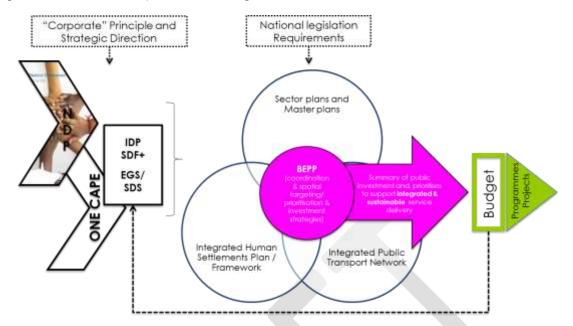


Diagram 1: BEPP Relationship to Other Strategic Plans and Instruments

The BEPP document and process has developed significantly within the City in the past three years of review. Integration Zones within the context of an Urban Network Strategy have been defined and planned; catalytic projects identified; outcome indicators considered and the process has driven key alignment themes via transversal working groups within the administration.

The City's broad development rationale in relation to the built environment has been extensively covered in preceding BEPP documents. Consequently, this review is prepared in a concise manner that seeks to eliminate duplication whilst still maintaining a coherent narrative and focused on the following aspects:

- focus of the Integrated Human Settlement Framework (IHSF) Implementation Plan;
 and
- modelling outcomes and implications of Comprehensive Transit Oriented Development (TOD-C) and the TOD Strategy Toolkit;
- identification and prioritisation of precincts and local areas within the City's two identified Integration Zones (IZs);
- key strategy components that are emerging from the planning in these zones;
- urban management techniques and land value capture mechanisms being considered by the City;
- alignment principles informing the screening of grant projects for 2016/17; and
- Intergovernmental working group proposals re: TOD-aligned catalytic public sector property pipeline.

The National Treasury's BEPP Guidance Note for 2016/17-2018/19 - issued on 21st October 2015 - directs the focus of this year's review to the following issues:

- Prioritisation of Integration Zones;
- Developing a strategy for the prioritised Integration Zone that includes both investment (financing options for the pipeline of catalytic urban development projects) and non-investment elements (land and development rights regulation, partnerships for precinct planning and management, etc. as outlined in further detail in the following section);
- Implementation of key catalytic urban development projects;

- Improving intergovernmental planning alignment effecting changes in metropolitan spaces at the metropolitan sphere requires changes in planning from the provincial and national sphere, as well as State Owned enterprises; and
- Introducing a Progression Model for BEPPs.

Nationally, the BEPP process and plan recognises that planning and fiscal arrangement should be results focused and places urgency on progressing plans into clear implementation programmes that can be effectively monitored against established targets and outcomes ("Outcomes led planning").

Additionally, the concept of a Built Environment Value Chain (BEVC) has been introduced by Treasury this year. The BEVC emphasises a structured inter-governmental process illustrated in **Diagram 2** and has influenced the content and format requirements for 2016/17.

Diagram 2: Built Environment Value Chain (BEVC)



Editorial Note:

This Draft BEPP 2016/17 was produced in the weeks of October 2015. Preparation largely and content preceded the publication of the guidelines on 21st October 2015. The requirements and format specified in the newly published guidelines will be used to prepare content for both the Inter-Governmental Session in February 2016 and the final document in the last financial quarter of 2015/16 prior to submission in May 2016.

A. BEPP Process Since May 2015

Within the City of Cape Town, the **BEPP Technical Committee** continues to provide technical oversight to the work of the BEPP Team. The Department of Spatial Planning and Urban Design (SPUD) within the Directorate of Energy, Environment and Spatial Planning (EESP), continues to act as the co-ordinator of the BEPP Technical Committee.

The Technical Committee met shortly after the May 2015 approval of BEPP 2015/16 to discuss lessons learned during the preceding year and reflect on the review documents distributed and coordinated by the National Treasury.

The aims for the 2016/16 BEPP related to improvements in vision consolidation amongst the different directorates and the political arenas. Initiatives ensured that line department leadership, serving on the **Executive Management Team (EMT)** led by the City Manager, had greater ownership of the formulation of BEPP document content; were involved earlier in the process; and became part of a Review Framework discussion.

BEPP Champions from the Directorates were reconfirmed by the EMT in July. In August, the BEPP Champions had to present their view on the 2015/16 BEPP, as well as the improvements they intend to make towards sectoral content in the document. A significant outcome of this internalisation process was a range of briefings to **Portfolio Committees** (PCs) by sector-specific BEPP Champions in July/August on the current BEPP. The briefing outlined the BEPP focus, importance of and impact on the PC and the process envisaged leading to an approval by Council in May 2016¹. This communication process developed awareness of and confirmed the strategic importance of the BEPP within the political structures of the City.

These interactions and the inclusion of BEPP-related questions and co-ordinators into the **Budget Steering Committee** hearings have replaced the internal BEPP-specific bilateral process of the previous year leading to more direct involvement of Directorates. However, since the initial draft BEPP Guidelines of August 2015 content specifications have changed significantly. This led to a restructuring of the drafting process to get the draft document formulated in time according to that initial framework.

In the first quarter specific attention was given to working with the **Mayor's Office** to set up and facilitate the Strategic Analysis process for the capital investment programmes. This initiative was aimed at evaluation of all the grants projects for year 2016/17 and those not yet contractually committed, as well as projects initiated and under review.

A **Strategic Analysis Questionnaire** with a supporting spatial targeting tool was developed in association with the BEPP Team in SPUD. The project was directed under the Capital Programme Monitoring Unit (CPMU) and the Strategic Policy Unit (SPU), reporting directly to the Mayor. These units set up a programme to facilitate municipal wide evaluation of all capital projects and the majority of the highest cost operational budget projects, in order to assess the budget on the basis of the agreed criteria for capital project evaluation and prioritisation, prior to confirmation. The prioritisation criteria were reflected in an on-line internal <u>platform</u> which effectively acts as a spatial targeting tool, supporting the qualitative analysis of all capital projects and supporting operational projects.

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¹ A contingency for the BEPP process and approval will need to be considered and discussed between the cities and City Support Programme for this review given the Municipal elections and the potential risks associated if Council does not sit in May 2016.

The CPMU had a large group of contractual project managers who undertook the Project Readiness and Strategic Analysis as recorded in the Project Portfolio Management (PPM) System (a SAP-based capital programme and project management tool for long term pipeline progress tracking). The CPMU process was established to ensure that key components of the BEPP process were more strategically embedded in the grant prioritising process. The outcomes of the project readiness and strategic analysis aimed at confirming a project's adherence to the spatial targeting criteria set by the Mayor and senior management. Effectively this process substituted the early stages of work in the Grant Process Review Committee (GPRC) a Section 80 Committee established in 2015 to prioritise grant funding applications. This Strategic Analysis process increased awareness of the spatial targeting focus of the capital programme into the project management level of the organisation and effectively implied that wider awareness was established to preferred locations for investment.

The automation of the capital project strategic targeting analysis and prioritisation initiative is to be expanded in 2016/17 through the integration of a spatial targeting tool and the Strategic Analysis Questionnaire into the SAP-based PPM system once technology adaptions have been concluded. The value of the project lies specifically in the pre-analysis of projects and clearer direction for the grant allocation (within the constraints of the grant conditions).

Given that the City's **PTNG application** documents are prepared in advance of other capital grant prioritisation discussions it was important to understand the thinking and planning that was being expressed and how that would impact on the planning and alignment of other sectors. Accordingly, the BEPP Technical team allocated dedicated time to understand the PTNG application process, content and plans in September 2015. The current BEPP has reflected significantly on the alignment aspects of this and other grants and this review expands on some of those themes and spatial targeting initiatives of the City.

Consolidation of the pre-planning of infrastructure and budgets in association with the **Provincial Government, State Owned Entities (SOEs) and relevant National Departments** are progressing. The Bilateral process with Provincial Departments were successfully brought forward into October 2015 (compared to January 2015 for the 2015/16 document process) and resulted in a half day workshop and presentation by the Provincial Governments on the results of their co-planning initiatives with the City; accumulating in their capital budget (in its adjustment phase) for implementation from 1 April 2016. Presentations were made by the Provincial Departments of Education, Health, Transport and Public Works (regeneration and special projects), Human Settlements and Roads. Whilst the parallel planning processes between the City's sectoral departments and their provincial counterparts during the course of the year is working reasonably well, there remains uncertainty in relation to delegations on Health provision and Human Settlements. The former appears more a provincial matter and the latter is significantly influenced by the National Department of Human Settlement's Strategy.

Specific requests were made by the Education as well as the Health Department for a special co-planning process where the Metropolitan and Regional Spatial Planning Departments join the Provincial Infrastructure Planning Departments of Health and Education on a more structured quarterly process. This will ensure coordination of the capital investment programme with the City's Human Settlement's Department (which is the largest developer of housing projects in the City). Another focus on the collaborative planning process yet to be established, is the requirement to realise direction on sub-metropolitan level in "brownfields" locations and not only on a metropolitan level. These initiatives will be embarked upon in the 2016 calendar year.

With specific reference to the BEPP Guidelines (paragraph 3.2.4), it should be highlighted that the City's BEPP 2015/16 contained the GIS locations of Provincial projects for Education, Health, Roads and this was presented in the IGR session held in Feb 2015. In support of the principle, the research project: "Social Facility 2032: Forward Planning" completed by the City in November 2014, fulfilled the long term strategic focus of required collaboration between the City's and the Province's Departments. The project focussed on provision of community infrastructure (such as schools, libraries, clinics, fire stations, sport and recreation facilities and community halls). The extensive collaboration process in forward planning for capital investment in community facilities, culminated in the Investment Framework being represented on a map, which is used by different departments as one of their strategic, direction-giving tools in investment prioritisation in space.

The Mayor and the Premier of the Western Cape established the 'Game Changers' initiative in 2015. Its specific focus is to get the catalytic projects (driven by the Special Projects Unit in the Province) to be evaluated in association with the City's Catalytic Projects (selected both by the Mayor's office as well as the EMT). During 2015, an analysis was undertaken by KPMG under the auspices and with the financial support of the Cities Support Programme (CSP) (as a component of the Capacity Support Implementation Plan) to determine the project readiness of the different catalytic projects. These initiatives have supported the principle of collaborative planning and will support the two Integration Zone Strategies and Investment Plans (IZS&IP), the Urban Regeneration Programme and the prioritising of the capital budget.

Collaborative planning with the SOEs and National Departments has also been brought forward in the current BEPP Process and expanded. A workshop on 10 November 2015 will include ESKOM, ACSA, various divisions of Transnet including the Ports Authority, Metrorail/PRASA as well as South Africa Social Security Agency (SASSA). It is intended to improve on and consolidate the GIS information of the SOEs investment beyond what was reflected in the 2015/16 BEPP.

Other interactions with the National Department of Energy (regarding the potential expansion of the Koeberg Nuclear Power Station) as well as the Strategic Fuel Assets are already underway through other mechanisms. In addition, interactions with the National Department of Human Settlements and Housing Development Agency with a focus on the **Master Spatial Plan** for Human Settlements, the **Mega-Projects** and Land Approach have also taken place periodically.

B. Context: CTSDF, IPTN and IHSF

The City has developed a comprehensive suite of plans and strategies to address economic growth and social development, environmental protection and climate adaption. All of these are supportive of the 5-year term-of-office City's Integrated Development Plan (IDP) initiated in 2011/12. This 2015/16 financial year is the last of that 5 year IDP period and during 2016/17 the IDP will be reviewed significantly.

In addition to the those components mentioned above, the City's Spatial Development Framework approved in 2012 provides the longer term spatial vision and policy environment to frame planning decisions and investment approaches. The Spatial Planning and Land Use Management Act, Act 16 of 2013 (SPLUMA) places an increased emphasis on this plan and the processes associated with it.

New council approved policy and strategy directing the human settlement and transportation sectors have in the last two financial years had significant impacts on this spatial vision and the structuring elements associated with them (inter-alia approaches to, typologies and locations associated with settlement upgrading programmes and rental accommodation programmes and the basis of a single integrated public transport system incorporating road and rail based, motorised and non-motorised transport). These aspects and importantly, the modelling associated with the resultant products, the Integrated Human Settlements Framework (IHSF) and Integrated Public Transportation Network (IPTN) will have an impact not only on the imminent IDP review but also the SDF review envisaged during the 2016/17 year. As the key strategic informants of the built environment and public investment in the City these three elements are considered in turn below.

Cape Town Spatial Development Framework (CTSDF)

The Cape Town Spatial Development Framework (<u>CTSDF</u>) was approved by Council in May 2012. It will be subject to a review during 2016/17 during which time newly introduced strategies and tools – many of which are well understood within the BEPP - will be integrated into the reviewed document.

The remit of the CTSDF is to establish the broad principles and policies to manage growth and land use changes in the city, and ensure that urban growth happens in a sustainable, integrated and equitable manner. In practical terms, the City needs to: address a fragmented spatial pattern that marginalises high-density, low-skilled, low-income groups from the economic opportunities of the central and northern of the City (*Diagram 3*); facilitate economic growth and urbanisation trends (9 mill m² of non-residential bulk and 500,00 new residential units estimated by 2032); and preserve the ecological and environmental assets of the City.

Key strategies included in the framework focus on:

- Planning for employment and improving access to economic opportunities;
- Managing growth (balanced between urban development and environmental protection); and
- Building an inclusive, integrated, and vibrant city.

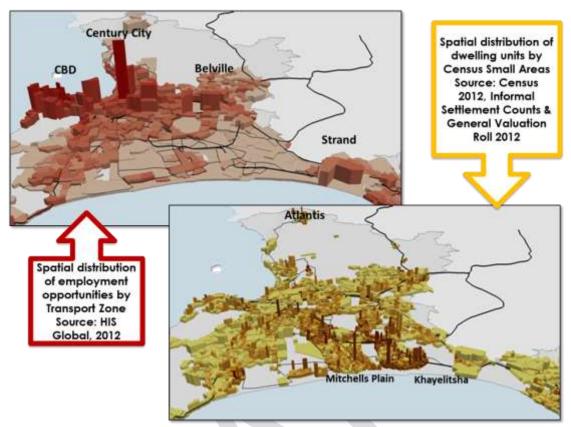


Diagram 3: Spatial Fragmentation of Employment and residential densities

Each strategy is accompanied by a set of sub-strategies, policies and guidelines including:

- A multi-directional accessibility grid, as opposed to the original radial system focused on the CBD, enabling convenient access and multi-directional movement. Areas of land use intensification in accessible, high opportunity locations (including Development Corridors, Urban Nodes, Strip Development and Civic Precincts).
- **Development edges** and growth directions to contain sprawl and protect valued natural, heritage and urban areas, while directing urban expansion in the medium/longer term.
- **Destination places** which are significant existing or potentially significant points of attraction that form part of Cape Town's unique identity.

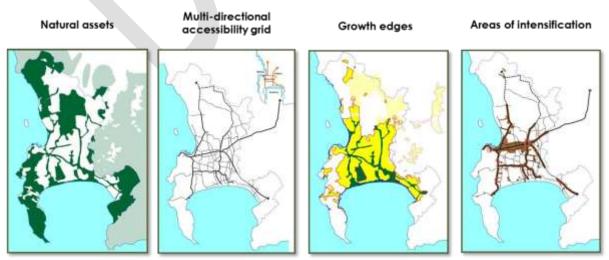


Diagram 4: Spatial Structuring Elements of the CTSDF

The CTSDF recognised that rapid and continuous low-density development is threatening the long-term sustainability of Cape Town and had adopted a Densification Policy in February 2012.

Key directives and considerations of the policy include: encouraging densification in density priority zones and urban civic upgrade areas; supporting multi-storey forms and locations of subsidised housing; encouraging the development of state owned land within strategic locations and; innovative design and financing solutions for informal settlements and new subsidised housing areas; and where appropriate the relocation of some households to alternative sites where densities are unsustainable.

These directives were further augmented in June 2014 when the City approved an Integrated Public Transportation Network (IPTN – approved June 2014) and extended the scope of the Integrated Human Settlements Framework (IHSF) into an Implementation Plan (2015). These were extensively discussed in the previous BEPP submission and are summarised in the following section with an emphasis of the progress made since May 2015.



Integrated Public Transportation Network (IPTN)

Endorsed politically in June 2014, the IPTN commits the City to an expanded transport network inclusive of rail, BRT, bus, minibus-taxi, metred taxi and non-motorised transport.

The foundation of the approved IPTN 2032 is a road and rail based trunk network supported by a road-based feeder and distributor network (*Diagram 5*). The feeder network is indicative and will be refined on a corridor-by-corridor basis as concept planning for each trunk corridor is completed. In addition, the public transport network is supported by depots, stops, stations, staging areas, etc. the details of the City's approach to and request for funding is included in the application made to the National Department of Transport for Public Transport Network Grant (PTNG) Funding.

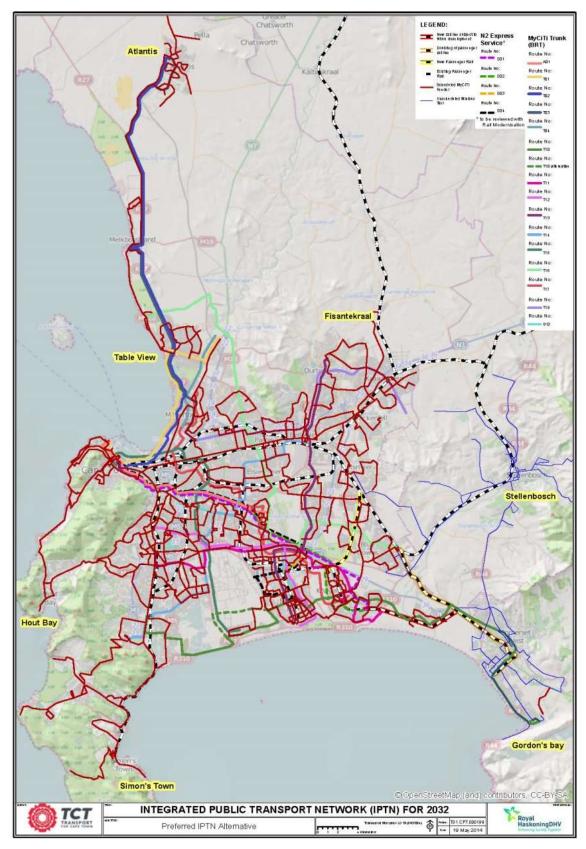
The IPTN has been built on a premise of intermodal, interoperable and integrated transport and the restructuring of the development premise of the city both from the public and private sector so as to facilitate efficiencies over time. The focus of this development must be in terms of the principles of Transit Oriented Development (TOD). Therefore, integrated public transportation, planned and prioritised on the basis of robust integrated spatial planning, will be the City's primary lever to achieve the City's development agenda and the basis on which the City's programmes and projects will be prioritised, whilst maintaining the principles of fiscal sustainability and in particular with regard to the importance of sustaining existing infrastructure.

The most significant public transportation interventions within the City are the R4.5 billion Blue Downs Rail Link (BDRL) investment initiated by PRASA and MyCiti network expansion – sequentially illustrated in *Table 1*.

Significant planning and investment is focused on the supporting Inter-Modal Interchanges and these are highlighted in the BEPP for the first time (Annexure A). These essential upgrades and new-build facilities – many of which are located within the Integration Zones - serve not only the public transport needs of commuters but could also provide TOD nodal points around which social facilities could be clustered to serve broader catchments of communities in need of these facilities.

PRASA commitments to Philippi, Nolungile, Bonteheuwel, Mandalay, Lentegeur station upgrades within priority rail corridors were extensively covered in the previous BEPP submission and will be reconfirmed in a BEPP Coordination session in November 2015. These collective investments represent key missing links in the city's public transport network and infrastructure that will enhance the accessibility of those living in the eastern and metro south-east locations of Cape Town to the economic centres and core of the city. These investments represent key levers in relation to TOD and the integration of land uses to support an integrated, interoperable and intermodal transport network. The approach to TOD and the role it can play in increasing efficiencies of the IPTN is considered in the next section.

Diagram 5: IPTN Route Network (Full Extent)



CITY OF CAPE TOWN: DRAFT 2016/17 BUILT ENVIRONMENT PERFORMANCE PLAN (BEPP)

Table 1: IPTN Preliminary Implementation Plan: Preliminary Trunk Corridor Prioritisation and N2 Express (as @July 2015)

Priority / Status	ROUTE	ROUTE NAME	BRIEF DESCRIPTION (suburbs)
Operational	Phase 1A A01	AIRPORT - CBD	AIRPORT / CBD / WATERFRONT
Operational	Phase 1A TO1	DUNOON - WATERFRONT	WATERFRONT / CBD / TABLE VIEW / DUNOON
Operational	Phase 1A TO2	ATLANTIS - CBD	ATLANTIS / TABLE VIEW / CBD
Operational	Phase 1A TO3	ATLANTIS - MONTAGUE GARDENS	MONTAGUE GARDENS / TABLE VIEW / ATLANTIS
Operational	Phase 1B TO4	DUNOON - CENTURY CITY	DUNOON / MONTAGUE GARDENS / CENTURY CITY
Operational	N2 Express D01	KHAYELITSHA EAST TO CAPE TOWN (CIVIC CENTRE)	KUYASA SOUTH PUBLIC TRANSPORT INTERCHANGE, LEFT NTLAZANE ROAD, RIGHT UNNAMED ROAD, LEFT LINDELA STREET, LEFT LANSDOWNE ROAD, RIGHT SPINE ROAD, LEFT N2, LEFT HERTZOG BOULEVARD, CIVIC CENTRE STATION.
Operational	N2 Express D03	MITCHELLS PLAIN EAST TO CAPE TOWN (CIVIC CENTRE)	MITCHELLS PLAIN TOWN CENTRE BUS TERMINUS, CONTINUES FIRST AVENUE NORTH, RIGHT WESPOORT DRIVE, LEFT A.Z. BERMAN DRIVE, RIGHT R300, LEFT N2, LEFT HERTZOG BOULEVARD, CIVIC CENTRE STATION.
7	T10*	RETREAT - GORDONS BAY	RETREAT / STEENBERG / STRANDFONTEIN / MITCHELL'S PLAIN / KHAYELITSHA / STRAND / GORDON'S BAY
1	T11**	WYNBERG - KHAYELITSHA (LWC)	WYNBERG (WYNBERG COUPLET) / SOUTH ROAD – OTTERY/ HANOVER PARK – GUGULETU / PHILIPPI / KHAYELITSHA
1	T12***	CLAREMONT - MITCHELL'S PLAIN (LWC)	CLAREMONT – LANSDOWNE – HANOVER PARK– GUGULETHU - PHILIPPI / MITCHELL'S PLAIN
6	T13	DURBANVILLE - MITCHELL'S PLAIN (SYMPHONY WAY)	DURBANVILLE / BELLVILLE / DELFT – PHILIPPI / MITCHELL'S PLAIN
9	T14	WESTLAKE - BELLVILLE	WESTLAKE / RETREAT / HANOVER PARK / EPPING / PAROW / BELLVILLE
8	T15	STRANDFONTEIN -CBD	STRANDFONTEIN / PELICAN PARK / ATHLONE / PINELANDS / MAITLAND / CBD
5	T16	EERSTERIVIER - BLOUBERG	MFULENI / DELFT / PHILIPPI – ELSIES RIVER / PAROW / MONTE VISTA / BOTHASIG / PARKLANDS / BIG BAY
4	T17	KHAYELITSHA - CENTURY CITY	KHAYELITSHA – PHILIPPI – BORCHERDS QUARRY / EPPING / MAITLAND / CENTURY CITY
10	T19	KRAAIFONTEIN - CENTURY CITY	CENTURY CITY / PAROW / BELLVILLE / DURBANVILLE / WALLACEDENE
3	D12	KLIPFONTEIN - CBD	MITCHELL'S PLAIN – PHILIPPI / GUGULETHU – ATHLONE – MOWBRAY - CBD
2	FEEDER	BLUE DOWNS RAIL CORRIDOR (CITY IMPLEMENTING FEEDERS)	
***	N2 Express D02	KHAYELITSHA WEST TO CAPE TOWN (CIVIC CENTRE)	KUYASA SOUTH PUBLIC TRANSPORT INTERCHANGE, RIGHT NTLAZANE ROAD, LEFT SPINE ROAD, RIGHT MEW WAY, LEFT N2, LEFT HERTZOG BOULEVARD, CIVIC CENTRE STATION.
***	N2 Express D04	KAPTEINSKLIP TO CAPE TOWN (CIVIC CENTRE)	KAPTEINSKLIP RAIL STATION, CONTINUE YELLOWWOOD STREET NORTH, RIGHT KILIMANJARO STREET, LEFT A.Z. BERMAN DRIVE, RIGHT R300, LEFT N2, LEFT HERTZOG BOULEVARD, CIVIC CENTRE STATION.

Notes:

^{*} Operates through to Dennehof (Gordon's Bay) as a trunk extension ** Operates through to Chris Hani Station as a trunk extension *** Operates through to Kapteinsklip Station as a trunk extension ****N2 express routes to be reviewed with rail modernisation

Linking IPTN to Transit Orientated Development (TOD)

The IPTN recognises that the operational and financial sustainability of the network is contingent on effective linkages and dependencies between land use (mixed, appropriate densities), transportation and sequenced infrastructure provision (inclusive of social amenities) resulting in a city form and structure that supports the following TOD principles:

- Affordability reducing costs of public transport to commuters and public transport operators.
- Accessibility facilitating equitable access to social and economic activity through balanced urban development and the provision of safe public transport.
- **Efficiency** providing a level of service that reduces trip lengths and dependence on private vehicles.
- Intensification and Densification transforming the currently fragmented urban form
 (as represented in Diagram x) to a desired form and structure that optimises current
 infrastructure and economic opportunity; provides a mix of typologies and
 affordability for residents of the City; and is conducive to affordable, accessible and
 efficient public transport.

These principles give effect to a series of inter-related sustainability objectives associated with transport and land use (*Diagram 6*)

The City has placed an increasing emphasis on the value and role of land use and transportation modelling that can influence these desired efficiencies and objectives. The next section expands on this work and the linkages between the modelling and TOD strategy that is presently being tested within the administration.

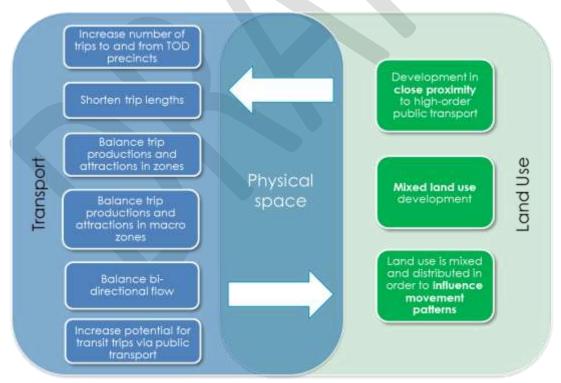


Diagram 6: Transport Objectives and Associated Land Use Interventions

Land use and Transportation Modelling: Projected Quantification of Future Land Use

A significant, post 2012 SDF, progression in thinking within the City has been the development of land use scenarios to shape and inform strategy and policy approaches. These have developed from pre-SDF "best-guess(es)" of anticipated development, emphasising future pressure areas and infrastructure risks, to a more data intensive and sophisticated approaches, linked to Transportation Zones. These data driven land use scenarios have informed a variety of projects and strategies including infrastructure master planning and the IPTN (as illustrated in **Table 2**).

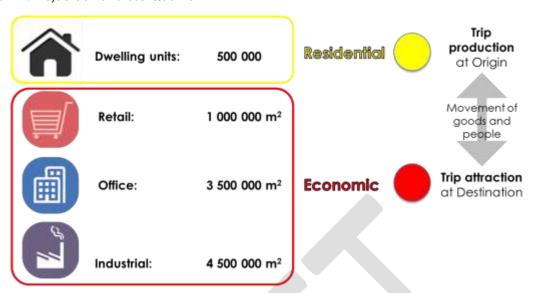
Table 2: Land Use Modelling Methodology and Scenarios 2012 – 2015

Year Scenario		Spatial Allocation / emphasis	Assumptions	Practical Application	
Pre 2012	Urban growth model (UGM)	Citywide growth	Anticipated development ("best guess")	Identification of future pressure points / risk identification	
2012	Medium to Long- Term Cape Town Growth Options	NE & NW greenfield growth corridors	Greenfield / expansion	Infrastructure costing and phasing for the growth corridors	
2013	Business as Usual (BAU) Land Use Scenario	Citywide growth	Development trends continue and not encumbered by urban edge etc.		
2013	Pragmatic Densification (PD) Land Use Scenario	Citywide growth	Development intensity and density more compact and more constrained within the urban edge	Utilities Master Planning Development Contribution Policy Social Facility Planning (CSIR) MTIIF (initial assessment)	
2013	Pragmatic TOD (PTOD) Land Use Scenario	Citywide growth	Greater density and intensity in respect of new development located in relation to the public transportation network (DP)	IPTN MTIIF (initial assessment)	
2015	TOD Comprehensive (TOD-C) Land Use Scenario	Citywide growth - Public Transit nodes	Land use allocated in a way that supports a range of Transportation related sustainability and efficiency outcomes	MTIIF (training scenario 2016)	

Diagram 7 illustrates the anticipated expansion of four broad land use categories between 2015 and 2032. These quantums have been determined by using past growth trends to project future growth and informed by:

- verifying dwelling growth projections against population growth estimates;
- including informal dwellings and second dwellings; and
- using long term trend data for non-residential uses to minimise the impact of market cycles and reflect structural changes in the economy such as deindustrialisation.
- Reflecting the drivers of demand noting that these differ for industrial, office and retail space. Except for retail which tracks residential development, other non-residential land uses are more inert in their choice location and less susceptible to relocation.

Diagram 7: Projected Land Use Quantum



The challenge presented to the City is to develop an approach that addresses both the historic spatial fragmentation of residential and economic land use patterns illustrated in **Diagram 3** and facilitates the anticipated new growth in land uses (quantified in **Diagram 7**) in a more balanced and efficient manner. This dual mandate has encouraged the City to explore a more thorough approach to TOD development and led to the development its most recent land use scenario: TOD Comprehensive (TOD-C).

The outcomes and key indicators derived from the TOD-C modelling were reflective of those in **Diagram 6.** Assumptions² made were far-reaching and included:

- Household income and land value would not impact on the location of residential development;
- Development would be allocated to priority transit areas using existing theoretical maximum permissible/ deliverable rights, and then if additional development is required rezoning/ amendment of land use rights will be applied³.
- Parking requirements would be adjusted according to the provisions of Public Transport (PT) zones.
- Land use intensity and mix would be allocated according to the optimal location for transit capacity utilisation (thereby disregarding the inertia trend of the location of non-residential uses as discussed above) AND development would be geo-fenced to existing and planned higher order public transport infrastructure.

Modelling work in support of TOD-C has emphasised latent land use rights that are theoretically available and have been derived from the integration of property valuation and zoning data sets. This approach has established a quantifiable baseline of i) utilised and ii) latent land use rights which have been applied to each of the City's Transportation Analysis Zones (TAZ). Latent rights refer to rights that are conferred by existing zoning via the land use management scheme but are yet to be utilised (and may never be utilised for practical reasons e.g. financial constraints, property market dynamics etc.).

-

 $^{^2}$ Annexure B: TOD-C Land Use Assumptions from the 2032 Approved IPTN Plan details the intentions and approaches used in the modelling.

The baseline also established a land use mix per Transportation Analysis Zone (TAZ) illustrating clearly areas of the City which contribute to directional peak hour "tidal" flows of traffic from trip origins (residential land uses reflected in yellow) to trip destinations (non-residential land uses reflected in red) and undermine the spatial and mobility efficiency of the urban form (**Diagram 8**).

Diagram 8: Current Land Use Mix and Intensity per Transport Analysis Zone

CURRENT SITUATION

Pie size depicts intensity of use (largest pie $= 24000 \, \text{Ps} + \text{As}$) Pie split depicts diversity of use (Residential Vs. Non-residential



Table 3 illustrates the 2015 baseline and projected quantum for 2032. The quantum of land use rights projected to 2032 in **Diagram 7** were allocated to latent land use rights and vacant land within each of the TAZ. A number of development constraints were considered and applied to the modelling of these values inter alia the noise contours from the Cape Town International Airport, exclusion zones associated with the Koeberg nuclear facility, floodlines and environmental / conversation areas.

Table 3: Baseline vs 2030 Estimates

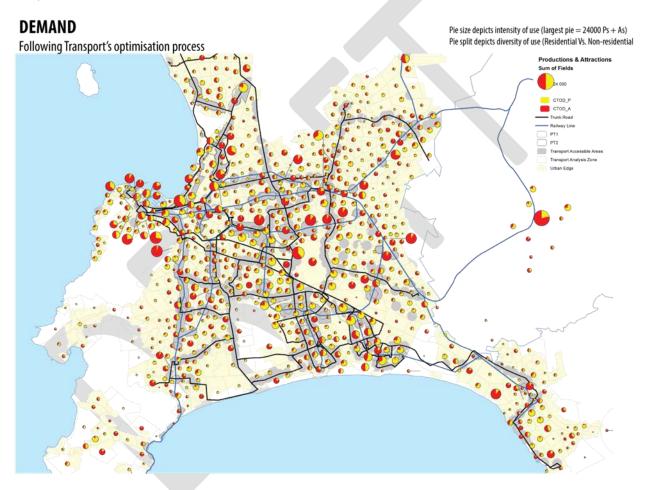
	Baseline (estimated units /sq metres)	2032 (projected units / sq metres) to be completed by Final BEPP
Residential	750, 000 (formal units)	
Retail	7,500,000	
Office	6,175,000	
Industry	18,400,000	

Following a transport optimisation process, **Diagram 9** shows the optimal location of new trips in 2032 per TAZ based on the previously highlighted from **Table 3**. The yellow depicts new trip productions (generated by trip attracting land uses from future non-residential development).

A comparison of the baseline and future optimised scenario i.e. (*Diagrams 8 and 9*) indicates the following key shifts envisaged:

- An increase in residential land uses along transport corridors and key economic nodes including the Cape Town CBD – to increase the trip productions within these corridors:
- An increase in non-residential land uses within areas presently dominated by residential development, most notably the Metro South Eastern corridor to balance the productions and attractions.
- A more intense, compact distribution of future growth and less intense allocation on the margins of the City.

Diagram 9: Existing and Future Land Use Mix and Intensity per Transport Analysis Zone based on TOD-C Transport Demand



The translation of this "transport demand" scenario into the available land supply via latent rights and vacant land informed the next modelling phase. Results from this exercise indicated that in theory, most TAZs could accommodate requirements in terms of future trip origin or trip production land uses via residual floor area from latent rights and / or vacant land. However, a number of the primary economic nodes within the City (inter alia the CBD, Century City and Bellville) did not have sufficient capacity to absorb demands for increased residential development (i.e. trip producing land uses). To address this shortfall in land supply, the following variables were adjusted to optimise this supply:

- a. Adjustment of land use mix and intensity of use of building floor space (persons per m²: household size / employment density);
- b. Space recovered through parking zone change (lower parking requirement);

- c. [a] and [b] further optimised through rezoning/ departure from standard development rules (height, coverage, floor factor);
- d. Relocation to the nearest adjacent TAZ with spare floor area capacity.

The final product representing the aspirational Transit Orientated Development Comprehensive land use scenario is reflected in **Diagrams 10 and 11** showing the future allocation of land uses and the "complete" picture at a citywide scale.



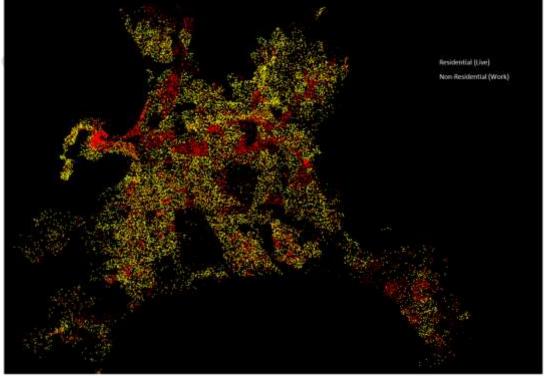
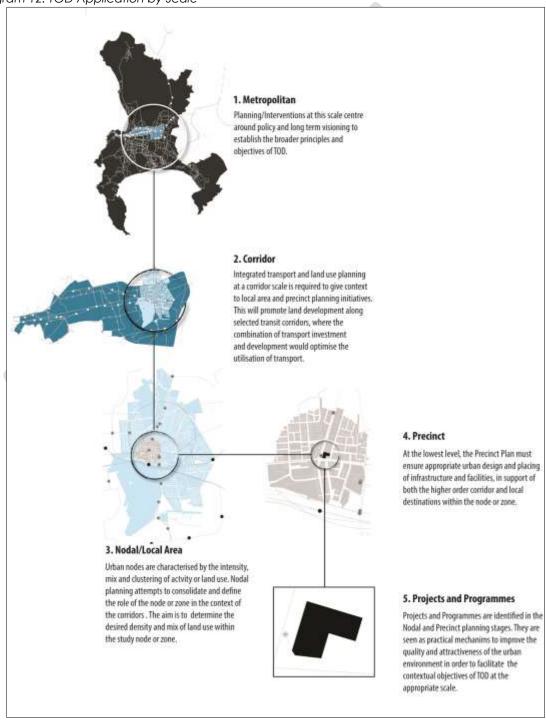


Diagram 10 (Top) Future Optimised Land Use Location – Projected Growth Only (2015 – 2032) Diagram 11 (Bottom) Composite Baselines and Projected Growth 2032

Throughout the development of the TOD-C land use scenario, multiple policy levers and tools were identified that could support practical and policy responses to a more compact and mixed use spatial form in relation to the public transport network. This was particularly important given the nature and extent of assumptions made in the scenario. What changes to the existing regulatory environment would be necessary? How could the market be encouraged to respond to a more aggressive approach to TOD? These and other aspects have fed into a TOD Strategy and TOD 'toolkit' responding to differentiated 'scales of intervention' i.e. Metropolitan level, Corridor level, Nodal and Precinct level. The toolkit unpacked in **Annexure C** reflects mechanisms and tools within the City's control, which can be applied at a corridor, node and precinct level (**Diagram 12**) to facilitate the outcome of TOD-C.

Diagram 12: TOD Application by Scale



Integrated Human Settlement Framework Implementation Plan

During 2014/15 the City completed a detailed review of the as-is housing (or shelter) situation in Cape Town and, given specific assumptions, the projected housing situation by 2032.

In summary, Census 2011 indicated that the City of Cape Town has a population of approximately one million households being accommodated as follows:

- 46% (489,833) of households live in formal dwellings (owned);
- 31% (328,135) live in formal dwellings (rented);
- 13% (143,823) live in informal settlements;
- 7% (74,957) are live in backyard shacks; and
- Less than 1% (12,297) live in hostels.

Furthermore, the Census 2011 indicated the following socio-economic profile of the City's households:

- 47% fall into the R0 R3,200pm category;
- 14% into the R3,201 R6,400pm category;
- 13% into the R6,401 R13,000pm category;
- 12% into the R13,001 R26,000pm category; and
- 14% into the R26,001+ pm category

In-migration and population growth will be responsible for an approximately 500,000 new households by 2032. Estimates suggest that 650 000 families earning less than R13,000 or living in sub-optimal conditions will be reliant on the state for some kind of assistance with respect to their shelter between now and 2032.

Current and prospective funding, land and human resources at Council's disposal is inadequate to address existing and future human settlement challenges. This recognition formed the basis of an "Integrated Human Settlements Framework" (IHSF). The IHSF recognised that the default approach to supply and demand interventions would not deliver on existing and projected housing need and would necessitate a strategic and institutional review.

In 2015/16 the IHSF has been progressed on the basis of a multi-departmental Implementation Plan with a series of supportive Project Charters to address:

- i. Upgrading of informal settlements emphasising a shift from a pipeline of comprehensive upgrade projects to a broad based (i.e. all settlements) ongoing improvement of services, public space and tenure provided while households formalise their top structures. NB: Densities must be sufficient to minimise the need to relocate households.
- ii. Encouraging and supporting backyard dwellings and supporting household densification to increase supply of new housing opportunities by private households via rental units and subdivisions;
- iii. New areas for housing development emphasising increased densities and starter units that support incremental completion of the house over an indefinite period.
- iv. Supporting higher density development in transport corridors and priority nodes via Social Housing Institutions and private developers incentivised approaches to support these sectors and judicious use of public land key to this approach;
- v. Enabling low income households to participate more effectively in the housing market consideration of a programme to improve home-ownership related credit worthiness for lower-income households;
- vi. Communication programme focussed on promoting the new strategic approach and adjusting the expectations of stakeholders; and
- vii. Longer-term, focussed approach to reducing City ownership of Community Rental Units.

There are approximately 140 discreet Project Charters that relate to these IHSF programmes. The transversal nature of the work streams which include land and property related interventions; infrastructure standards, planning tools and regulatory reform has ensured the mandating of most of the city's Directorates and Working Groups. These include but are not limited to Human Settlements, Utilities, Finance, CORC, EESP and the Sustainable Communities Working Group.

Human Settlement Area Planning and Catalytic Projects

The objective of current comprehensive area planning initiatives such as Langa, Macassar, Greenville, Darwin Road and Maroela is to create integrated settlements inclusive of commercial, community and industrial land uses, appropriate transport routes and infrastructure networks. The latter three projects are integral to the Catalytic Human Settlement North-Eastern Corridor project as submitted to the National Department of Human Settlements. They represent a private-public sector commitment to deliver 22,000 accommodation opportunities utilising a mix of housing programmes/typologies (i.e. Site & service, BNG, Social housing, GAP and Open Market).

The <u>Southern Corridor</u> Catalytic Project (*Diagram 13*) endorsed by the Province and City is focused on the implementation in the short-medium term of the N2 Phase 1 and 2 projects and 27 linked informal settlements upgrades in the vicinity benefiting more than 50,000 households.



Diagram 13: Spatial Extent of Southern Corridor Human Settlement Catalytic Project

The most recent and significant land purchase to support human settlement initiatives is the formerly owned AECI Paardevlei land in the south-east of the City. This land purchase will support the extension and anchoring of the Southern Development Corridor Catalytic Project in the medium to long-term. Contingent on infrastructure, budget and detailed planning the commencement of development on this site is anticipated by 2020.

The opportunities afforded in the VRIZ to support rental accommodation and a more effective human settlement approach to Transport Orientated Development (TOD), are recognised in the <u>Voortrekker Road Social Housing</u> project (**Diagram 14**). A potential yield of 1,600 units relating to five targeted sites was submitted as a third catalytic project submission to National Department of Human Settlements.



Diagram 14: Precincts Forming Basis of VRC Social Housing Catalytic Project

Informal Settlements Upgrading

Improving the living environments of residents of Cape Town's informal settlements is a key focus for the City. It actively pursues interventions and solutions that are responsive to upgrading initiatives - in-situ or new areas - and management approaches that prevent the establishment of new and further densification of existing settlements. This approach aligns with the national strategy of creating sustainable human settlements and improving the quality of life of households and communities.

The latest update of the informal settlements database indicates that there are 204 informal settlements in Cape Town. Most have been surveyed and numbered for the purpose of prioritising service delivery and upgrade initiatives. The City is progressively working towards the consolidation and transformation of these settlements areas into integrated human settlements with secure tenure supported by social and economic amenities. In order to create a pipeline for upgrading of informal settlements the City has developed a model / matrix that: assesses the status quo of all informal settlements; categorises and prioritises upgrading work to be done; allocates land to informal settlements (for de-densification or complete relocation); and facilitates programming and budgeting.

The following approaches have been utilised to support the upgrade programme: (examples illustrated in **Diagram 15**).

- Greenfield serviced sites (for de-densification) (Incremental Development Areas and Temporary Relocation Areas);
- In Situ serviced sites;
- Reblocking;
- Other interventions like flood mitigation;
- Improvement of service levels, etc.
- Emergency Housing (USDG and HSDG)

Diagram 15: Human Settlement Implementation Initiatives



The average density in existing informal settlement areas is approximately 180 du/ha. Some are as high as 480 du/ha. An effective approach to managing density is fundamental to a broader human settlement response to urbanisation and land budgeting. Historically, the City employed a standard approach to the provision of housing opportunities of plot sizes of 100m^2 and single free-standing 40m^2 dwelling unit. Progressively, these standards were amended to accommodate 2-storey, semi-detached housing units on $60-80 \text{m}^2$ serviced sites.

Presently, in-situ upgrading initiatives are realising net densities in excess of 100du/ha on incremental sites (as employed in Sweethomes and Aloe Ridge **Table 4** and **Diagram 16**). Consideration is being given to 3-storey buildings along main roads (e.g. Monwabisi Park) where live/work units. These units are constructed on the basis of the resident running a small business/workshop on the ground floor and living on the first floor. A variety of top structure models on serviced sites have been discussed including a serviced site and wetcore (i.e. water and sanitation reticulation) and progressing to a serviced site, slab and firewall.

Extent: 20ha (3 Expected density after upgrading: 133du/ha Informal dwelling units Expected density after upgrading: 112/du/ha

Diagram 16: Sweethomes and Aloe Ridge Projects

Table 4: Land Utilisation of Current Upgrading Projects

Project	Circulation	Res	POS/Com	Erf sizes	Net density
Sweethomes (In situ)	34%	56%	10%	45m ² - 55m ²	± 112du/ha
Aloe Ridge (Incremental)	29%	59%	12%	75m²	± 133du/ha

Under the auspices of the Sustainable Communities Working Group, a multi-departmental team will be discussing standards (such as road widths and parking requirements) impacting on project layouts with a view to amending standards and the common application thereof. It is clear that there is a shift in the way informal settlement upgrading is being approached, especially with regards to urban form and the delivery mechanism.

These approaches to density and design serve many outcomes including: the maximisation of housing interventions within the limits of funding provisions; the minimisation of displacement of families and the retention of densities that are appropriate from an urban management perspective, bulk infrastructure utilisation and public transport threshold.

Backyarder Improvement Programme

Another programme that is materially improving the living conditions and quality of environment is the Provision of Services to Backyarders at Council Rental Units (CRUs). The following services are rendered as part of this programme:

- Provision of extra wheelie bin per erf/rental unit to accommodate the extra waste generated by backyarders and address capacity constraints.
- Water supply;
- Sanitation through the provision of shared wash troughs and toilet to restore individual dignity;
- Electricity supply through a ready board, providing free basic units per month per backyard structure (to a maximum of 3 structures per yard/erf) to avoid risks related to illegal connections and improve study conditions

By providing services to backyards, living conditions are improved more efficiently and timeously for those living in backyards while waiting for state-funded housing opportunities. This has an immediate impact on the dignity of individuals and quality of the neighbourhood. Further, the dignity of individuals and quality of the neighbourhood amenity is more immediately realised via the provision of sanitation and basic services. The basic premise of the upgrading approach per service category is considered below.

Basic Services: Factreton and Hanover Park have been supplied with water, sanitation and electricity. The bulk infrastructure provided caters for the maximum loading of accommodating 3 backyarders per erf, for the entire area (Council and privately-owned units are included).

Projects are proceeding in in the following areas have commenced Bonteheuwel; Eastridge; Heideveld; Gugulethu; Manenberg; and Valhalla Park – all located within the Metro South East Integration Zone. Other areas include Atlantis; Grassy Park and Lotus River; Lavender Hill; Ocean View; Parkwood; Scottsdene; and Uitsig/Elsiesrivier.

Although the projects in Parkwood and Bonteheuwel are advanced in the process and are receiving electricity, most water and sanitation services will be completed in other areas within this financial year.

These interventions affect more than 2,700 households and most will be completed within this financial year (2015/16).

Waste Management: The capacity of existing waste containers is routinely exceeded by the extra waste generated by backyarders. Discussions are on-going with the view to provide extra bins to cater for backyarders living at privately owned dwellings. Currently, additional bins are available at a cost to the property owner – if requested by the owner.

A pilot is currently being investigated whereby additional bins will be considered for the formal households in Imizamo Yethu, adjacent to the Imizamo Yethu Informal Settlement Area, It is anticipated that the pilot will prove the business case through the reduced operational costs and environmental improvements of using bins instead of managing and cleaning on an on-going basis the spill-over which results from inadequate provision of bins.

To date all CRUs have received the wheelie bin service.

Electricity: Bulk electricity infrastructure for new development is presently being implemented to accommodate future backyarder growth. In most instances the provision of electricity to backyarders requires an increase in the capacity of bulk infrastructure which impacts on the lead times and sequencing with other services. Delaying other services to be in line with the provision of electricity would serve no purpose: it does however create the unfortunate impression that the provision of services is not coordinated.

The provision of electrical connections has other social, health safety benefits. As examples: scholars can study under better lighting conditions, households are less prone to fire risk as a consequence of unsafe and illegal electricity connections, candlelight, open flame heating/cooking. Bulk electricity infrastructure for new development is presently being implemented to accommodate future backyarder growth.

Areas to be considered for electricity services to backyard-dwellers – in addition to the current services to backyard-dwellers in City-owned CRU's - would be: privately owned CRUs that were historically owned by the City; all RDP/BNG houses (oldest to newest); and individual cases in formal privately owned properties.

Tenure and Formalisation Approaches

There are a number of policy and practical initiatives underway to remedy and advance tenure security within the City. The following examples are indicative of commitments made to support new settlement initiatives for both individual households and social housing institution partners.

Tenure certificates: In partnership with the Violence Prevention through Urban Upgrading (VPUU) non-profit company, the City has issued Tenure Certificates to 80% of the 6,480 families in Monwabisi Park prior to the implementation of a UISP project. The certificates have been introduced to enhance the sense of security of tenure enjoyed by the resident households on a GIS registered plot. This confirms the size and configuration of plots and builds community ownership of the project as well as preventing further unplanned densification which can compromise the deliverability of the project.

The tenure certificate does not constitute a legal document and is not a title deed. Once the land use application is approved, a process of sub-division can begin with the end goal being the handover of title at as early a stage as possible. Title can be transferred from the City to the benefitting individual upon receipt of a serviced site and wet core. This allows top structure development as soon as the owner has the resources to do so.

This approach to tenure reform and progressive ownership is being discussed with other NGO partners like Community Organisation Resource Centre (CORC) to plot existing "erven" electronically and upload onto a GIS application for the purposes of widening the scope and reach of the programme.

Leasehold to Freehold title conversion: Under a directive from the State Attorney's Office leasehold titles will be converted to freehold titles in all former African townships directly benefiting existing leasehold tenants. Within the City this directive will impact on 2,400 serviced-site plots that are still to be finalised and 4,500 houses registered in the name of the National Housing Board.

Issuing of Title Deeds on project completion: Provincial Government policy guarantees the delivery of Title Deeds upon future project completion. To address historical backlogs in issuing Title Deeds the City is drafting policy to guide the rectification program, and has signed a co-operation and financing agreement with the *Free-market Foundation*.

Rental Accommodation and Partnership with Social Housing Partners: Well-located parcels of municipal land supportive of rental, mixed income and higher density developments have been made available to social housing partners and banks to build homes with bond finance. Twelve such parcels have been released for development by banks, while 90 have been released to emerging developers.

Legislative Reform to encourage household densification to increase supply of new housing opportunities by private households via rental units: Amendments to Municipal Planning Bylaw have been advertised to include a Third Dwelling Overlay zones. This provides certain areas with land use rights permitting a second and third dwelling on an erf and will enable private property owners to contribute to the provision of affordable rental housing stock.



Social Amenity Provision

The provision of social amenities is integral to the City's planning processes for upgrading and establishing new settlements. The sequencing and operationalization of facilities remains a significant challenge; particularly given the inter-governmental dependencies on Provincial Departments when health and education facilities are required. This remains a key workstream and process associated with and monitored via the BEPP process. This challenge was a key strategic theme considered at the IGR session in February 2015 was tested with Provincial Department in October 2015 and will be revisited in February 2016 at the next IGR session.

Public open space, community facilities, early childhood development facilities and food gardens are supporting amenities and land uses that are considered during the planning stage; in consultation with the community.

Examples include the following:

- The planning 8ste Laan Informal Settlement in Valhalla Park (due to commence in March 2016). Internally, all relevant line departments were consulted with a view to clustering facilities and reserving appropriately positioned erven for food gardens and early childhood centres. Supportive social programs dealing with alcohol and substance abuse are also integrated into the implementation of the project.
- 2. Wolwerivier Emergency housing Project (EHP) has reserved land for food gardening, animal grazing, a play park, crèches and a community centre.
- 3. Monwabisi Park's social facilities include a "kick-about" area, neighbourhood centres, Emthonjeni and early childhood centre. These have already been constructed, preceding the implementation of servicing the sites through formal processes.

It is acknowledged that planning for and accommodating these amenities is easier in Greenfields developments. Beyond the provision of land and the initial commissioning of the facilities, the aim is to transfer the running of some facilities to the communities themselves. This is easiest achieved in food gardens, looking after day-to-day running of crèches and common areas and arranging program interventions (e.g. crime prevention).

Governance and Institutional Benefits of Upgrading Initiatives

A recurring theme in discussions with and queries from National Treasury has been the derived financial and governance benefits to the City (e.g. revenue collection, progressive expansion of the City's rates base) accruing from the upgrading initiatives beyond just the social benefits.

Present financial policy exempts revenue collection on houses valued less than R400,000 (this threshold is periodically reviewed). Accordingly, the absorption of households within informal settlements into a formal and structured property rates-base remains a long-term and speculative outcome.

Nevertheless, there are some direct and in-direct savings accruing from the upgrading and servicing initiatives. With respect to backyarder service provision, the direct income derived from electricity and water and sanitation use is obvious, especially purchasing additional supply after allocation of free units are used.

Indirect financial impacts relate to potential reductions in expenditure on reactive servicing of backyard structures, fires and patient care (as a result of improved living conditions

decreasing rates of water-borne infections and diseases and fire risk) and solid waste management. These aspects also have an indirect impact on the environmental amenity and quality of neighbouring wetlands, detention ponds and stormwater systems.

With respect to informal settlements upgrade, immediate income is generated when free flowing water points are replaced with individual water connections. The installation of water meters also results in the water resource and cost savings accruing from the improved management of wastage from broken or inappropriately utilised communal standpipes. Furthermore, water consumption can be pinpointed to individual erven and consumers as opposed to an unidentified group. This is also a benefit derived from the installation of ready boards to facilitate prepaid meter operations for electricity consumption.

Human Settlement Alignment with Spatial Targeting Initiatives

An assessment of the alignment of the human settlements and transportation sectors was incorporated into the last BEPP review process. In this Draft Review, the human settlement projects outlined in the IDP have been further assessed in relation to a series of spatial targeting initiatives, namely:

- Integration Zone: (MSE / VRC established in support of the Urban Network Strategy and the targeting of the ICDG grant)
- ECAMP monitored node (industrial, commercial, or mixed use nodes monitored by the City's Economic Areas Management Programme)
- Prioritised Trunk route of MyCiti
- Transit Accessible Precinct (TAPS)(existing / future public transport infrastructure nodal points)
- Public Transport Zone 1 or 2 (existing rail / MyCiti trunk route locations where parking requirements have been significantly reduced)
- Restructuring Zones (Designated areas within the City where Restructuring Capital Grant funding in support of social housing can be accessed)
- Urban Development Zone (Designated areas within the City where a tax incentive to encourage private sector-led residential and commercial development is applicable)

The spatial extent of these initiatives is represented in **Diagram 17**.

The City's committed Humans Settlements programme is based on three phases indicating the state of preparedness of the project namely: Construction; Planning; and Pipeline (i.e. 5 year time horizon). **Diagram 18** and **Table 5** reflect the spatial extent of the programme and the degree of alignment to the spatial targeting initiatives.

Diagram 17: Spatial Targeting Initiatives

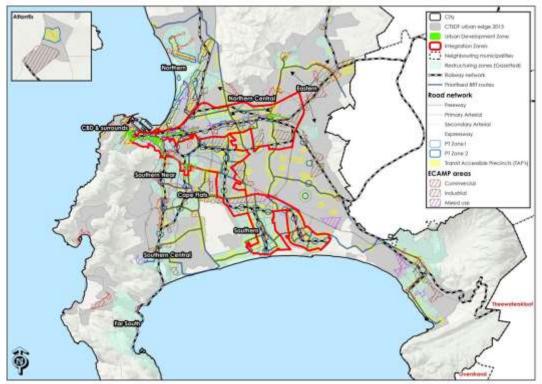


Diagram 18: Human Settlements Programme in Relation to Spatial Targeting Initiatives

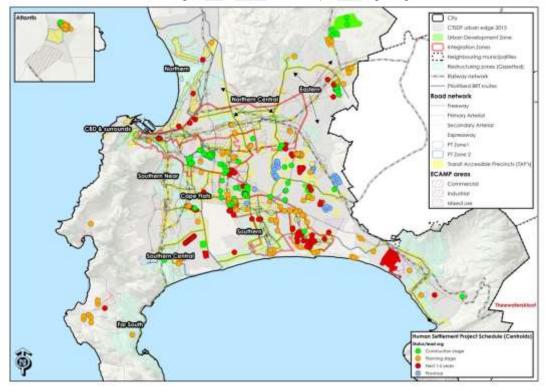


Table 5: Assessment of Human Settlements Programme in Relation to Spatial Targeting Initiatives

Construction Stage (5 yr)		luda a		ı	lleb ere	Transit	T
Project	Restructu ring	Integration Zones		ECAMP	Urban Develop- ment	Transit Acces- sible	Public Transport
	Zones	VRC	MSE		Zone	Precincts	Zones
8ste Laan			Х			Х	Х
Atlantis Kanonkop (Ext 12) Phase 1							
Bardale Phase 5A							
Belhar Pentech Infill		Х					
Belhar Social Housing		Х					
Delft - The Hague Phase 1 & 2							
Delft Eindhoven Delft Roosendaal							
Freedom Park	X						
Garden Cities Housing Project	^					X	Х
Green Park						X	
Gugulethu Infill (Erf 8448)			х			X	Х
Gugulethu Infill (Mau-Mau)			X			X	X
Hazeldene Services			X	Х		X	Х
Hazendal Infill, Bokmakierie Sites	Х		х			Х	
Heideveld/Duinefontein Road			Х			Х	
Khayelitsha CBD			Х	Х			
Kleinvlei - Erf 901						Х	
Langa CRU (Hostel Redevelopment)			Х				
Los Angeles						Х	
Manenberg Infill - The Downs			Х	Х		Х	
Nyanga Upgrade			Х			X	
Pelikan Park Phase 1 GAP, BNG & Open Mkt						Х	
Scottsdene Phase 2 Social Housing				X		X	
Sir Lowries Pass IDA						X	Х
Steenberg Station Phase 3	X					Х	
Sweethomes IDA			Х			Х	Х
Sweetlips						Х	
Thabo Mbeki			X	Х		X	X
Thambos Square Walturginian IDA			Х			X	Х
Wolwerivier IDA Atlantis Kanonkop (Ext. 12) Phase 2 & 3						^	
Beacon Valley Infill	Х		х				
BM Section	^		X			Х	Х
Bonteheuwel Infill			X				
Braaf/Sheffield			X				
BRT Relocation			х				
Darwin Road	Х						
Deep Freeze							
Dido Valley	Х						
Doornbach				Х			
Edward Street: Ottery							Х
Elsies River Housing Development		Х		Х		Х	
Enkanini							Х
False Bay IDA (Greenfields)							
Glenhaven Social Housing		Х					
Green Point Phase 3			Х			Х	
Imizamo Yethu Phase 3						Х	Х
Kalkfontein							Х
Kapteinsklip Kantavar lafill CRU	X		X				
Kewtown Infill CRU	X		X			X	
Lotus Park			Х			X	.,
Macassar Erf 3968						.,	Х
Maroela and Surrounding properties Masiphumelele Phase 4				v		X X	Х
Mfuleni Ext 1				Х		X	X
Monwabisi Park						X	
Monwood			Х	Х		X	Х
Morkels Cottage	X		^	^		X	^

Construction Planning Pipeline Stage (5 yr)							
	Restructu	Integi Zor		ECAMB	Urban Develop-	Transit Acces-	Public
Project	ring Zones	VRC	MSE	ECAMP	ment Zone	sible Precincts	Transport Zones
Morningstar	Х					X	
Oceanview Infill						Х	
Ottery Enslin Road Social Housing	х						
Phola Park			Х			Х	
Pine Road	Х		Х	Х		Х	Х
PRASA Relocation			Х				
Scottsdene BNG (Pocket 2)				X		Х	Х
Somerset West 10ha	Х					Х	
Sweethome			X			Х	
The Heights						Х	
Valhalla Park Integrated Housing Project			Х			Х	
Vygieskraal	X					Х	Х
Wallacedene TRA						Х	
Aloeridge						Х	Х
Backstage, Erf 36638			Х			Х	Х
Belhar School Sites		Х				Х	Х
Blueberry Hill						Х	
Brackenfell - Everite Land				Х			
Brackenfell Site							
Brooklyn Regeneration Social Housing				Х			
Erf 794 and Others				Х			
Garden Close	X					Х	
Grassy Park (Buffer Strip)							
Gugulethu Hostels			Х			Х	Х
Hanover Park infill						Х	
Harare Infill			X			Х	Х
Highlands Drive Infill	Х		Х			Х	
Ilitha Park Infill			Х			Х	Х
Joe Slovo Park				X		Х	Х
Kensington infill		X				Х	Х
Khayelitsha 28804			Х	Х		Х	Х
Khayelitsha, Erf 28019 & 29155			X	X		Х	Х
Los Angeles and Green Park							
Lwandle Hostels							
Mahama Infill			X			Х	Х
Nooiensfontein							
Nyanga Hostels						Х	
Ottery, 44ha site	X					Х	
Pelikan Park Phase 2						Х	
Philippi Wedge							
Potsdam Outspan, CA 235-0						Х	Х
Salt River Market Social Housing	Х	Х	Х	Х	Х	Х	Х
Scottsville GAP/Social						Х	Х
Solele, CA 951-39							
Wolwerivier							
	_						
	Restructu	Integ			Urban	Transit	Public
Human Settlements project schedule	ring	Zor	162	ECAMP	Develop-	Access-	Transport
2015/16: Provincial lead	Zones	VRC	MSE		ment Zone	ible Precincts	Zones
Langa Log Clay-					Tolle	1 recirios	
Langa - Joe Slovo	Х	 	Х				
Boys Town	_						
Delft 7	_						
Delft infill sites				Х		Х	
Delft Symphony Precinct 3	-					Х	
Delft Symphony Precinct 5	-	ļ			-	Х	
Forest Village	-	ļ			-	Х	
Nuwe Begin Fontainshead FLISP		.				Х	
Penhill		ļ				Х	Х
Sheffield Road			X		1	X	•

C. Infrastructure Review

The City's Infrastructure is valued at more than R21.2 billion and is a dominant feature of the budget: allocations to Utility Services and TCT in 2015/16 represents just over R4 377m (76% of the total capital budget).

Bulk purchases – of electricity and water from suppliers – to the value of over R700m forms a large component of the City's total operating expenditure of R31 687m in 2015/16.

A detailed assessment of infrastructure challenges and approaches employed by the City was included in the 2015/16 BEPP approved document⁴.

The commitment and intent is to structure the final, approved BEPP submission around the following structure:

- Executive Summary contextualising application for funding upgrades and extensions or new infrastructure;
- Reflection on alignment/ non-alignment National Treasury objectives;
- Projections of technical needs in terms of priority and budget (specifically quantifying the grant funded portions of projects);
- Presentation of growth and backlog needs informed by population and economic projections linked to infrastructure availability and serviceability, and future need/supply/demand
- Presented in map (GIS) format;
- Risks in terms of budget constraints, different critical needs, catalytic projects, etc. (not all projects are bound to receive funding);
- Timelines and milestones for these projects and expenditure;
- Budget summary in terms of grant-funded projects;
- Highlighting key private sector investment projects (incorporating the Water Infrastructure Demand Management System (WIDMS); and
- Update on progress and relating to the Medium Term Infrastructure Investment Framework (MTIIF).

The following section on Water Resource Management is included in the Draft Review for the first time.

Water Resource Management

For the past three years the City has paid attention to its own infrastructure, and decreased its water demand by introducing various water conservation and water demand management (WCWDM) initiatives. Most of the maintenance activities of the Reticulation Branch also have a WCWDM impact, for example the **Pipe Replacement Programme**. WCWDM initiatives include the creation and analysis of District Metered Areas (DMA's), installation of pressure relief valves in high-pressure areas, thus decreasing the quantity of water losses through leaks and burst pipes. In addition to the **Pressure Management Programme**, further initiatives implemented include the **leaks detection and repair programme repair programme** (for indigent consumers), retrofitting, the **meter replacement programme** and **meter audits, installation of water management devices**, retrofitting, treated-effluent reuse, and consumer education and awareness.

<u>Strategy Documents</u> guiding the City's approach to water service provision are based on:

- Water Services Development Plan updated every 5 years
- Water Conservation and Water Demand Strategy

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⁴ CCT 2015/16 BEPP Section B.3

• Water Service Business Plan – Reviewed annually

The City of Cape Town has used a Master Planning Process since 2010 to manage, plan, budget and upgrade water and sanitation infrastructure. This planning process covers bulk water infrastructure, water and sewer reticulation infrastructure and wastewater infrastructure. A 20 year planning horizon was used for the process and was based on the land use modelling Pragmatic Densification Scenario (described in **Table 2**).

Based on population counts a projected growth in demand for water is expected to be 2.8 % per annum over the next 20 years from an average Annual Average Daily Demand – AADD - of 793,000 to 976,255 kl/d). The sewer projections over a 20 year period are reflected in **Table** 6:

Table 6: Summary of sewer flows increase expected over 20 years

	Water Demand AADD (kl/d)	Sewer flow AADD (kl/d)
Present	735 799	585 499
Fully zoned	912 633	685 622
Densification	96 550	66 705
Future development areas	311 877	198 459
	1 321 060	950 786

The current assets and anticipated Master Planning costs associated with the 20 year scenario as included in **Table 7**:

Table: 7: Assets Replacement Value and future Master Planning costs

		Total (R I	Cost on)
		Replacement Cost	Master Plan Items
\A/artar	Pipelines	8 719	719
Water Reticulation	Reservoirs	1 371	104
Reliculation	Pumping stations	95	18
	Pipelines and pumping stations	8 899	1 975
Water Bulk	Reservoirs	2 333	752
	WTW	2 877	504
		24 294	4 072
	Gravity mains	17 657	1 657
Sewer	Pump stations	156	64
sewei	Rising mains	783	715
	WWTW	5 350	1 883
		23 946	4 319

D. Urban Network Strategy (UNS) and Integration Zones (IZs)

To give effect to spatially targeting and the performance-related Integrated City Development Grant (ICDG), the City has identified and commenced detailed planning for two Integration Zones namely, the Metro South-east Integration Zone (MSEIZ) and the Voortrekker Road Corridor Integration Zone (VRCIZ). The IZs represent a joint commitment between the City and the National Department of Treasury to plan, fund and implement projects and approaches that are most able to transform the spatial structure of the City.

The City's previous BEPP submissions have progressively outlined the broad rationale and planning processes for the determination of these IZs and how they constitute the City's response to Treasury's Urban Network Strategy (UNS).⁵ The UNS seeks to link and integrate emerging urban hubs with Central Business Districts (CBDs) through effective transport links and spatially defined activity corridors.

The two zones were premised on i) opportunities afforded by public transport to restructure urban form along Transit Orientated Development principles; ii) capacity to link concentrations of economic opportunity and mono-use settlement patterns; iii) opportunities to diversify and intensify land uses; and iv) infrastructure improvements and related catalytic urban development projects. A high-level summary is included below:

The Metro South-East Integration Zone linking Mitchells Plain / Khayelitsha with the CBD. The rail corridor is the backbone of this Integration Zone. Significant IZ projects and investments include: The N2 Express MyCiti (CCT), the Central Line Modernisation Programme (PRASA and Metrorail), Phase 2a MyCiti (CCT), the redevelopment of the Nolungile Public Transportation Interchange, Khayelitsha CBD, and the Station Deck Precinct Development.

Significant **human settlements projects** that are active and planned in this Integration Zone and would directly benefit from the enhanced public transportation infrastructure include: Langa Joe Slovo (N2 Gateway programme), BM Section (In-situ Upgrading programme) and Valhalla Park Infill (New Mixed-Use programme).

Additional engineering infrastructure capital investment in capital infrastructure to support the Integration Zone includes: the Mitchells Plain intake (Erica substation), Cape Flats 3 sewer line installation and rehabilitation of lines 1 & 2. Many areas targeted by the Mayoral Urban Regeneration Programme fall within this Integration Zone.

This zone is also host to a **number of potentially catalytic urban development property projects** including the redevelopment of the Athlone Power Station, the Two Rivers Urban Park (TRUP) and District Six.

• The Voortekker Road Corridor Integration Zone linking Bellville CBD with the Metro South-East Corridor boundary in the Cape Town CBD is the economic core of the city and also provides critical opportunities to i) optimise land-use in support of transit investments ii) intensify development and iii) balance transit demands (key to an efficient and sustainable public transport network). Most prominent of these opportunities from a public transport perspective is the Bellville Public Transport Interchange which provides the City an opportunity to reconsider its considerable land holdings and to leverage opportunities of integrated, mixed land use within the context of this inter-modal facility.

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⁵ CCT 2015/16 BEPP Section C.11

A separate integrated strategically-orientated forward planning exercise is underway (referred to as the Bellville Integrated Transport Local Area Plan - BITLAP) consolidates planning efforts by the City's TCT and SPUD as well as other SOEs (Transnet, PRASA/Metrorail) and the Provincial Departments.

Other substantial development opportunities linked to **strategically located public landholdings include Wingfield** and old provincial hospital sites. The human settlements emphasis in this Integration Zone is focused on social housing that would provide affordable rental opportunities at densities supportive of the public transport network and TOD principles.

Additional **engineering infrastructure** to support the Integration Zone includes the Northern Area sewer line replacement, and the Bellville WWTW upgrade.

One of the key themes highlighted in this year's BEPP guidelines is the call for prioritisation of Integration Zones. The emphasis of this draft submission is the prioritisation of local area precincts within the two IZs. The reflection of these Prioritised Local Areas (PLAs) is the culmination of two internal planning processes that have analysed and determined potential and priorities. These PLAs have been tested with community and political forums and represent a transitioning from a planning to implementation and prioritised capital investment for the IZs.

The tables in **Annexure D** are indicative of the planning progress made within each of the IZs and the degree of prioritisation that is occurring within the zones.

E. Urban Management Area-based Initiatives and Land Value Capture Tools

This year's BEPP guideline highlights the significance of urban management as an integral component of the Built Environment Value Chain. It recognises the importance of maintaining and protecting public and private investments and assets in a formal and institutionalised manner. This section recaps the approaches being employed within and beyond the Integration Zones.

Since the National Government launched the Urban Renewal Programme (URP) in 2001, a number of initiatives commenced in the City to address urban poverty and underdevelopment in the two pilot areas of Khayelitsha and Mitchells Plain. The URP has received support from the Violence Prevention through Urban Upgrading initiative (VPUU), the community, KfW (the German Development Bank), numerous non-governmental organisations and the private sector. In recent years, the URP has made use of NDPG funding. The programme has delivered numerous benefits, including work-live units, public facilities and spaces (including the Harare Library in partnership with the Carnegie Foundation) and the upgrade of other municipal services.

The City has recently reviewed and expanded the URP – now named the Mayoral Urban Renewal Programme (MURP) – to incorporate other needy areas in the city. The expanded MURP introduces a sustainable system of public infrastructure and facilities operated and managed in partnership with communities in a manner that will stabilise communities and provide a platform for effective further public and private investment. In each area, a specific package of interventions is negotiated with communities through a representative community structure and formulated in a "Community Action Plan". Coordination of services is enabled through Area Coordination Teams and is active in the following areas (*Diagram* 19):

- 1. Athlone CBD (Urban Hub as per Urban Network Strategy and Metro South-East Integration Zone);
- 2. Bellville Transport Interchange and Voortrekker Road Corridor;
- 3. Bishop Lavis, Valhalla Park, Bonteheuwel;
- 4. Gatesville CBD (Metro South-East Integration Zone);
- 5. Harare and Kuyasa Transport Interchanges (Metro South-East Integration Zone);
- 6. Khayelitsha CBD(Metro South-East Integration Zone);
- 7. Macassar;
- 8. Manenberg, Hanover Park, Lotus Park (Metro South-East Integration Zone);
- 9. Mitchells Plan Town Centre (Urban Hub as per Urban Network Strategy and Metro South-East Integration Zone);
- 10. Nyanga/Guguletu (Metro South-East Integration Zone).
- 11. Ocean View;
- 12. Parow (Voorterkker Road Corridor); and
- 13. Wesfleur Business Node (Atlantis).

Other area based initiatives

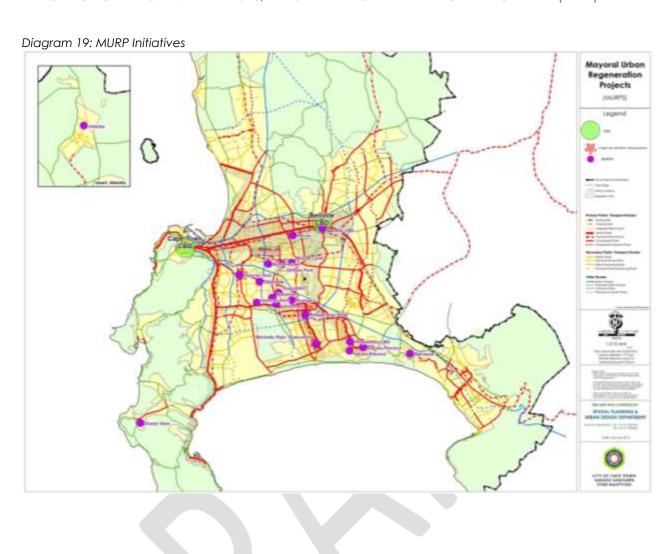
Other than the MURP, the City is engaged in a large number of area based initiatives related to development and management of the built environment. A number of these are summarised in **Table 8**:

Table 8: Area based initiatives

INTERVENTION	EXPLANATION
City Improvement	CIDs are presently in place in the following locations: Airport*; Athlone*;
Districts (Special	Blackheath; Brackenfell; Cape Town Central*; Claremont; Epping*; Fish Hoek;
Rating Areas) *	Glosderry; Green Point; Groote Schuur*; Kalk Bay St James; Llandudno;
indicates located	Maitland*; Muizenberg; Observatory*; Oranjekloof; Paarden Eiland*; Parow
within or adjacent to	Industria*; Salt River*; Stikland*; Sea Point; Triangle Farm*; Vredekloof;
Integration Zone	Woodstock*; Wynberg; Zeekoevlei Peninsula; Zwaanswyk Association.
Corridor Growth	An inter-disciplinary team has undertaken a detailed exploration of growth
Management Study	options (and the potential yield of opportunities) for the western and north-
(greenfields	eastern development corridors, including in-depth understanding of
completed). To be	"infrastructure triggers" enabling/inhibiting human settlement (2012).
incorporated and	Together, these two corridors could accommodate some 430 000 housing
methodology to be	opportunities (more than half the anticipated 30-year need).
transposed onto the	The project is now replicated for the built-up area of the City and is called the
built-up area (called	MTIIF (Medium Term Infrastructure Investment Framework). Together with the
the Growth	Corridor Growth Management work, it will form the basis of the 2027 Growth
Management Plan)	Management Plan (a 15 year plan to direct capital investment in engineering
	infrastructure). It will contain elements relating to repair and maintenance
	and refurbishment as well as backlogs (and not only focus on new
	infrastructure development).
Pro-active planning for	The City's on-going call for the acquisition/ transfer of key strategic land
strategic sites	holdings across the city (e.g. Wingfield) as well as development pressure on
	other landholdings (e.g. parts of the Philippi Horticulture area and Paardevlei)
	have prompted the preparation (or active participation in the preparation)
	of detailed urban design frameworks and an understanding of the development yields of these landholdings. This work will enable rapid
	planning of strategic sites if acquired or when decisions are made to proceed
	with development.
Economic Areas	ECAMP processes an array of City, open source and proprietary data sets into
Management	accessible and themed information illustrating area-specific business
Programme (ECAMP)	conditions by means of a web-based application (accessible via the
Trogramme (LCAWI)	hyperlink).
Public space	The City's Quality Public Spaces Programme and the Smart Park Programme
improvement	are efforts to implement, through design, the principles of equity, integration
in provenieni	and sustainable development in poor areas. In so doing, the City aims to
	improve accessibility, quality of life, and dignity for all. The idea behind the
	programme is that urban design can be a catalyst for positive change; a
	visible and tangible way of reconnecting communities and addressing issues
	of equality and social justice. The programme has grown to include the
	provision of a dignified community space as part of each informal settlement
	upgrade project. This sees a move away from the traditional approach in
	which the menu of services provided is limited to engineering services. Many
	projects include the recognition and celebration of places of cultural,
	historical, and social significance in communities. Since 1999, the programme
	has delivered more than 100 projects.

Land Value Capture Approaches

In addition to these on-going urban management interventions and in support of a more responsive approach to land and property management governance, the City is considering a suite of Land Value Capture tools and mechanisms. Although the work is in its infancy a summary table of approaches in included in **Annexure E**.



F. Grant Alignment and Transversal Management Approach 2015/16

The BEPP process and product is co-ordinated under the auspices of the Growth Management Working Group, reporting formally to the Economic Cluster and the Social Cluster, in the Transversal Management System of the City (a consolidated political and technical environment). It is also a vertically aligned with the Executive Management Team, under the City Manager whereby each of the Line Department's Executive Directors provides the technical inputs required for the BEPP process and product.

During 2014/15 significant progress was made in terms of the casting a vision for transversal alignment of Human Settlements and Transportation sectors that resulted in the political approval alignment principles to inform and direct corporate strategy - via future reviews of the IDP, SDF other sectoral plans - and project-level decisions to ensure more effective sectoral alignment. The BEPP process was pivotal in facilitating the discussion and presentation of findings prior to the approval of the report. The subsequent reflections of the process in BEPP 2015/16 worked towards illustrating a coherent and aligned public investment strategy within the City and with its public sector partners – a key requirement of the BEPP process and plan. It also began to amplify a number of shortcomings within the approaches (see conclusion of BEPP 2015/16).

Notwithstanding the report's emphasis of the human settlements and transportation sectors, the majority of the principles were transversal in nature and had far-reaching implications for land assembly; route prioritisation of public transport; the integration of social facilities with transport infrastructure and the implementation of the IHSF. Further, the report recognised the critical importance of continuing to invest in the maintenance and performance of existing City-owned infrastructure that enables service delivery.

A longer-term goal for the City is to **institutionalise strategic screening of candidate grant funding projects and their alignment to Strategic Criteria aimed at achieving spatial restructuring** via the SAP Portfolio and Project Management (PPM) module. Work is on-going to develop the thinking and technical approaches to realise a more systematic institutional solution. In the interim, a strategic screening tool – comprising a questionnaire and supportive GIS viewer - has been introduced in this year's capital budgeting process test the spatial and strategic alignment of grant funded capital projects. It was aimed at improving the quality of data to the disposal of grant prioritising decision makers. It was used to direct technical and political assessments of alignment and potential prioritisation. The tool incorporates the principles of the Growth Alignment Report into the following inter alia spatial targeting themes:

- Strategy alignment
- Spatial consolidation
- Transit-Oriented Development
- Basic service infrastructure
- Integrated investment programme
- Socio-economic need
- Enabling economic growth
- Impact

Scoring criteria have been assigned to each identified theme (reflected in detail in **Annexure F**). Where appropriate this scoring has been linked to an assessment of the location of a project in terms of a particular spatial location (or the project's influence on a catchment / distribution area). The tool is in process of being used to assist in assessing the strategic alignment of the Top 100 capital projects and all new grant-funded projects (roughly covering 90% of the opex and capex budgeted amounts).

G. Development of a Catalytic Project Pipeline

The City of Cape Town has a diverse portfolio of investment projects and programmes that focus on needs-driven service delivery for the benefit of its citizens. Catalysts that can leverage private investment and improve and enhance service delivery are considered essential. The City's last BEPP submission included a detailed rationale and classification of Catalytic Projects that addressed the original and supplementary 2015/16 BEPP guidelines. It also provided the foundation for future submissions and engagements with other public and private partners. **Diagram 20** conveys the following "Catalytic" categorisations:

- Urban Development Projects (at-scale land assembly projects associated with the Integration Zones);
- Human Settlements Projects (that responded to the criteria established by the NDHS and HDA);
- Programmes (that respond to themes or localities broadly and include the Informal Settlement Programme);
- Infrastructure (including transportation infrastructure projects such as My Citi and PRASA's Blue Downs rail link and the Broadband roll out); and
- Interventions (typically potential land initiatives that require extensive unlocking prior to any inclusion into a formal pipeline or capital funding budgets).

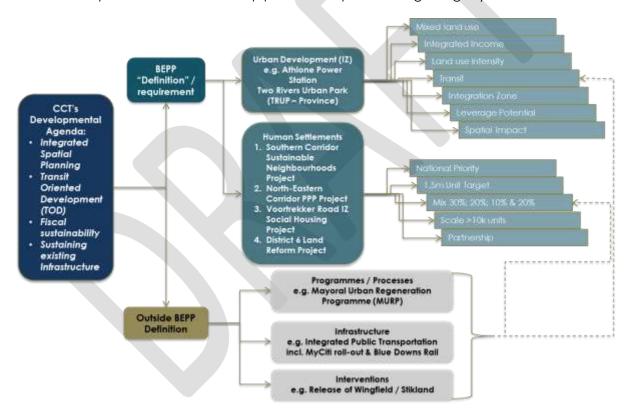


Diagram 20: Conceptual Categories of Catalytic Projects

A key consideration is how Cape Town's significant state owned property portfolio can be sequenced and developed to pursue fundamental changes to Cape Town's urban structure and balance the wide ranging principles associated with TOD, economic and social development and financial providence. To assist in clarifying the approach the City, with technical assistance provided via the Cities Support Programme, has completed a process to specify Cape Town's multi-year urban development project pipeline in partnership with Provincial and National Government.

This work has been completed under the auspices of the City's Growth Management Working Group as well as its Transit Oriented Development (TOD) Working Group, supported by an Inter-Governmental Working Group. A full report has been prepared that summarises the methodology employed in assessing projects; a high level portfolio risk assessment; a data repository and recommendations from the process. Most importantly the report identifies a portfolio of 27 potentially catalytic, TOD-aligned property development projects that could form the basis of a Provincial and City endorsed "pipeline" strategy that could:

- Potentially yield 4 million m² of Gross Leasable Area (GLA) and approximately 90 000 Dwelling Units (DU) based on high level, preliminary estimates.
- Provide a rational basis on which to prioritise to ensure best return on effort.
- Optimise resources and capacity across the local and provincial spheres of government in particular to work on land preparation and packaging consistently and efficiently to yield results within the next 5-8 years.
- Ensure that the market has the capacity to take up the land through clear signalling, good timing of the supply of land into the market, removing risk and sustaining the market once there is demand.
- Deliver spatially transformative projects that are reflective of TOD principles and design approaches.

This preliminary pipeline (<u>Annexure G</u>) was developed with the criteria outlined in **Table 9** used to screen and identify TOD property development projects.

Table 9: Eligibility Criteria Applied to Prospective TOD Property Development Projects

Eligibility Themes	Preliminary Criteria	Proposed Further "Weighting" Criteria
BEPP guidelines Catalytic Urban Development Project	 Integrated, potential for mixed and intensified land uses Significant impact on spatial form Require infrastructure investment; blend of finance approaches; skills and stakeholder management 	
TOD:	 Transport adjacent (1,600m distance) Inclusive (re: income) Mixed use – contribute to the land use mix of the area (as indicated in TOD-C Modelling work) Walkable Transport supportive Land use intensity 	800 m distance to PT
Spatial Transformation:	 Well located Brings people close to work/ work close to people Integrated income levels 	Situated within an integration zone
Market opportunities	Addresses critical market failureLeverage private sector funding involvement/participation	Multiplier effect (information dependent)
Resource Optimisation		 Complementing other programmes/ projects / investments – contributing to the crowding in effect Enhances safety, social & economic viability of local area, clustering
Timing		Yielding results within the next: 5 – 8 years

80 projects were scoped (including known national landholdings representing catalytic interventions such as Wingfield and PRASA property development projects). 27 of these projects met the eligibly criteria described above. These qualifying projects were further assessed in terms of i) estimated yield re: land use mix and bulk / units and ii) state of readiness. Nevertheless, the projections and reflection of these assessments must be considered preliminary and in a number of cases information is not yet available. Tables 10 reflects an assessment of the 27 Catalytic Projects (inclusive of estimated yields) in relation to Spatial Targeting Initiatives - employing the same approach as in the preceding section on alignment of human settlement and transportation investments. **Table 12** indicates the state of preparedness of each of the projects and **Diagram 21** illustrates their spatial location of each.

Advancing the pipeline is dependent on committed resources from all spheres of government, Province and City in particular, and established priorities based on a robust understanding of project objectives, feasibilities and property market dynamics (i.e. sequencing the packaging of projects at an appropriate time within a notional property cycle"). It should be noted that the engineering infrastructure required for these projects would be significant and heavily depend on the use of the USDG.

At the time of writing this Draft BEPP the TOD Working Group that directs the catalytic project planning work is committed to:

- presenting information on the assessed catalytic projects to the Mayor, Premier and Inter-Governmental Committee (IGC) for further endorsement and consideration of implications, prioritisation objectives and resource allocation;
- considering institutional recommendations arising from the findings of the assessment of the pipeline; and
- suggesting mechanisms to establish market demand and private sector modus operandi and implications for pipeline.

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Table 10: Assessment of Catalytic Projects in Relation to Spatial Targeting Initiatives

	TOD Gamechanger Catalytic project	Estimated GLA	Estimated	Restructuring	Integra	tion Zones		Urban	Transit	Public	
	identification: Catalytic projects	Yield	Residential Yield	Zones	VRC	MSE	ECAMP	Developm ent Zone	Accessible Precincts	Transport Zones	
1	Athlone CBD redevelopment	14,800	250	х		Х	Х	Х	Х	Х	
2	Athlone Power Station	303,895	1,177	х		Х					
3	Belhar CBD redevelopment		200								
4	Bellville Paint City/PTI	6,733	730	х	х		х		х	Х	
5	Bellville Park Campus development	650,000									
6	Conradie Hospital	98,230	4,226		X						
7	District 6 social housing	55,118	3,239	х		Х					
8	Ebenezar Depot	20,500		Х			х				
9	Gallows Hills Redevelopment	65,000		х			Х				
10	Granger Bay: Cape Town Stadium	138,000	3,860						х		
11	Kapteinsklip	21,800	1,200	х		Х			Х	х	
12	Khayelitsha Business District expansion.	10,000				Х	Х		Х	х	
13	Khayelitsha Industrial Park (proposed)	59,101				х	Х		Х	х	
14	Lentegeur social housing	1,000	982	Х		Х			х	Х	
15	Maitland Abattoir	95,230			x		х		х	Х	
16	Mowbray golf club	17,545	2,075			Х					
17	Ottery	130,000	750	Х					Х	Х	
18	Paardevlei (AECI land)	579,310	28,917								
19	Parow Golf Course	64,800	2,295		X				х		
20	Salt River social housing	1,000	279	Х	Х		х	Х	х	X	
21	Somerset Precinct Development	113,700	1,450						Х	Х	
22	Stikland Hospital	83,856	4,717		Х						
23	Stikland Triangle	47,107			Х		Х				
24	Three Anchor Bay Precinct	250,000									
25	Two Rivers Urban Park	386,323	6,278			Х					
26	Tygerberg Hospital		7,500		Х				Х		
27	Wingfield	460,400	17,770		Х						
		3,673,448	89,695								

Atlantis City CTSDF urban edge 2015 Urban Development Zane Integration Zones Neighbouring municipalities Restructuring zones [Gazetted] - Railway network Prioritised BRT routes Road network Freeway Primary Arterial Secondary Arterial Expressway PT Zone I PT Zone 2 Transit Accessible Precincts (TAP's) **ECAMP** areas Commercial Athlane CED redevelopment (orr Aden & Birwood) Industrial 2. Athlore Power Station Mixed use 3 Belfor CBD redevelopment 4 Belivite Point City/PD 5 Beliville Park Compus development **TOD Gamechanger: Catalytic projects** 6 Carvadie Hospital 100 Gamechanger: Catalytic projects 7 Datrict & social housing 8 Ebenesus Depot 9 Gallaws Hills Redevelopment 10 Granger Bay: Cape Town Stadium 11 Kaphenekip 12 Chayettsha Business District expansion. 13 Khayeltsha Industrial Park (proposed) 14 Lentegeur social housing 15 Maltland Abaltoli 16 Mewbray golf club 17 Offery Theewatersklool 18 Paardeviei (ABCI land) 19 Parow Golf Course 20 Salt River social housing 21 Samerset Precinct Development 22 Stikland Hospital 23 Stikland Triangle 24 Three Anchor Bay Precinct redevelopment 25 Two Rivers Urban Park 26 Tygerberg Hospital 27 Wingfield Overstrand .

Diagram 21: Spatial Analysis of Catalytic Projects in Relation to Spatial Targeting Initiatives

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Table 11: Assessment of Catalytic Projects and State of Preparedness

			Pre-Project			Inception		Implementation						
	TOD Gamechanger Catalytic project identification:		Development	Strategy	Programme	Identification	Selection	Prioritisation	Concept	Pre-	Feasibility	detailed	Procurement	Construction
	Catalytic projects	Identification	Approach	on diegy	Definition	laciiiii cailoii	0010011011	111011113011011	Сопсері	Feasibility	1 customity	Design	/ Contract	CONSTRUCTION
	Athlone CBD redevelopment (cnr Aden & Birwood)													
	Wingfield													
	Mowbray golf club													
4 18	Paardevlei (AECI land)													
	Bellville Paint City/PTI													
6 22	Stikland Hospital													
7 23	Stikland Triangle													
	Maitland Abattoir													
9 19	Parow Golf Course													
10 9	Gallows Hills Redevelopment													
11 8	B Ebenezar Depot													
12 24	Three Anchor Bay Precinct redevelopment													
	Khayelitsha Industrial Park (proposed)													
	Khayelitsha Business District expansion.													
15 5	Bellville Park Campus development													
	Conradie Hospital													
17 21	Somerset Precinct Development													
18 2	2 Athlone Power Station													
	Lentegeur social housing													
20 17	Ottery													
21 20	Salt River social housing													
	Tygerberg Hospital													
23 10	Granger Bay: Cape Town Stadium													
	Kapteinsklip													
25	Belhar CBD redev elopment													
26 25	Two Riv ers Urban Park													
27	District 6 social housing													
			Pre-Project			Inception				In	nplementation	on		

H. Reporting and Evaluation

The City of Cape Town has taken note of Section 5 of the BEPP Guideline Document (of 21 October 2015) relating to Reporting and Evaluation. The City remains an active participant to the Indicator Framework and BEPP/ Built Environment Indicator⁶ design process. To date CCT has submitted several sets of written comments to National Treasury / City Support Programme (NT/ CSP).

Note was taken of the progress with the BEPP/ BE (Built Environment) Indicators and the discussions at the workshop held in Pretoria on 30th October 2015 between City and NT officials. The content within this section reflects the understanding as it understood by City officials who attended this session and has not been tested further within the City.

The City has greater clarity regarding the "line-of-sight" and inputs to the "theory of change" conceptualised by the NT/ CSP regarding the position and the role of integrated outcome and impact indicators. The framing of this concept is reflected in **Diagram 22**.

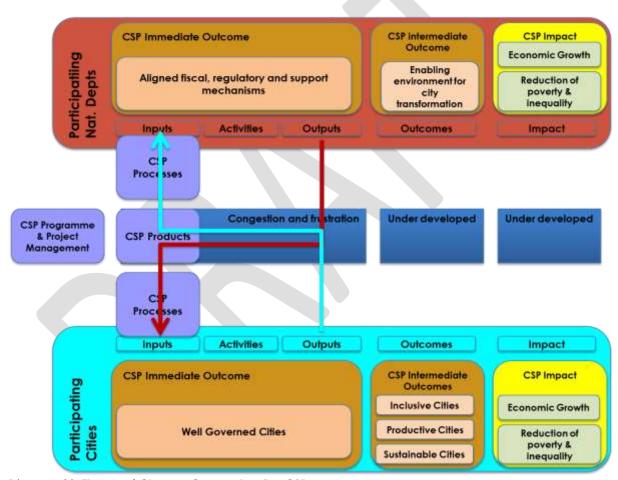


Diagram 22: Theory of Change Concept as Per CSP

Relationship Between Indicator Type, Responsibility and Tools

Based on the progress made at the workshop on 30th October 2015, CCT amended the following draft diagram to structure an understanding of the relationship between the purpose of the indicator (and/ or data element), the institutional monitoring and reporting roles, and the existing regulated tools used for monitoring and reporting.

⁶ CCT suggests these be referred to as Urban Development (and Management?) Indicators

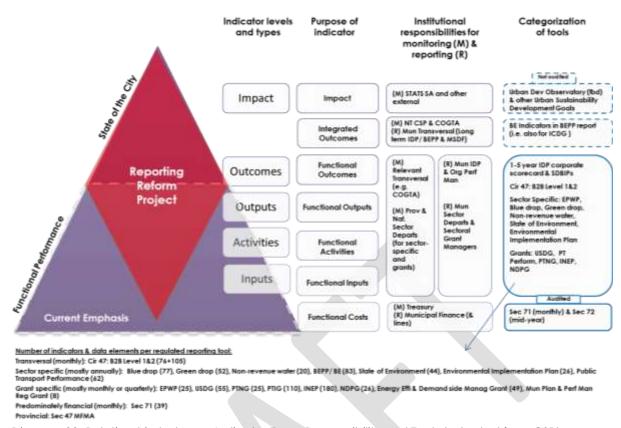


Diagram 23: Relationship between Indicator Type, Responsibility and Tools (adapted from CSP)

Process to Finalise Built Environment (BE) Indicators

With reference to the diagram above and the BEPP Guidelines, the following departure points and expectations from NT / CSP are noted:

- a) Reporting on inputs, activities, and outputs will be through normal SDBIP, Section 71 and 72 (MFMA) processes. It is envisaged that the SDBIP will report on the performance of municipalities input, activities and outputs. The IDP through the Corporate Scorecard will report on the municipal outcomes and BEPP on Cityperspective on nationally comparable outcomes and impacts. Currently only the Corporate Scorecard contained in the IDP is subject to auditing because of the disclosure to the public. It is not clear whether there will be a prescribed set of SDBIP indicators and whether they will be expected to be auditable.
- b) Integrated outcomes (and the ICDG grant) referred to as the BE Indicators, will be reported through the BEPP report and not subject to auditing. The BEPP process and products address and report on longer-term nationally comparable integrated outcomes and impacts. It is not aimed at focusing on the shorter term performance management of the local government as per IDP process and product (annual and 5 year), and measured in terms of the corporate scorecard and directorate and department scorecards (SDBIPs);
- c) NT has acknowledged that negotiations are ongoing with COGTA to consider BEPP as an integral chapter of the IDP. It has yet to be confirmed if the BEPP process will be considered, firstly as the annual internal⁷ strategy process to ensure vision (IDP), investment (budget) and urban development (Metropolitan SDF) alignment; and secondly if the external IDP process could be considered the external public capacitating and information process;
- d) The November version of the BE indicators were distributed and briefly discussed on 30 October 2015; and

⁷ In association with the Provincial Line Departments and the SOEs

e) Cape Town should make progress with the determining of baselines and targets for the BE indicators between November 2015 and February 2016. The aim will be to discuss the baseline and targets at the BEPP Review Process/IGR Session on 18 and 19 February 2016.

During the workshop on 30 October, Cities raised the following points:

- a) It is noted that BEPP Guideline (21 Oct 2015 p.17) indicates that integrated outcome and impact indicators will not be audited.
- b) The City's Corporate Scorecard remains the primary mechanism available to local government to measure the outcomes of strategy and IDP objectives and targets. Clarity is required on the NT initiative to develop a standard set of SDBIP (and Corporate Scorecard IDP) indicators which cities have to / may choose from in preparation of a new term-of-office IDPs. Which indicators form part of the Corporate Scorecard and which are specific to the BEPP may determine the practical implementation of these indicators. Managing and verifying these indicators in line with Auditor General requirements must also be taken into consideration. If municipalities do not have the capacity to provide AG auditable KPI's, an unintended consequence could be more municipalities receiving qualified audits.
- c) Cities stated that NT/ CSP should be clear that BE indicators will not be absorbed in the SDBIPs for 2016/17 and beyond as they are on integrated outcome level, which cannot be measured in the SDBIPs. By implication this means that the indicators will remain part of the annexure to the BEPP report until such time, if at all, the BEPP is incorporated in the IDP. At that time point b) would need to have been clarified recognising that the IDP Corporate Scorecard is audited.
- d) CCT maintains that Section 71 information should not duplicated annually as it is already available monthly. NT should further filter the 54 BE indicators prior to resubmission to the City as per *Diagram* 23 that would potentially reduce the number and eliminate duplication of indicators.
- e) BE indicators cannot be further discussed within the line department of the cities, unless definitions and formulae were available to technical experts. NT/ CSP undertook to provide those.
- f) Even after the important work done by the NT/ CSP's formulation of the Indicator Framework (which included the design principles and criteria for indicators), there is no confirmation from the different role players that there will be a consolidation of regulated/ statutorily required reporting. There is no clear confirmation that:
 - Any of the National Departments will reduce their sector-specific reporting formats for municipalities (such as the ±300 indicators/ data elements in ± 10 annual reports) or their grant-specific reporting formats for municipalities (such as the ±500 indicators/ data elements in ±8 monthly reports); or
 - Any of the Transversal Departments will streamline their integrated reporting requirements (such as the COGTA B2B reporting); and
 - NT will, in partnership with other departments, reconsider the amendment of Sec 71/72 reporting (which contains more than 200 indicators/data elements).

The City undertakes to review the BE Indicators between November 2015 and February 2016 and determine if a baseline and targets can be set for discussion at the IGR Session in February 2016.

Annexure A: Transport Interchanges Facilities Design and **Construction Projects** (reflecting in PTNG application)

	IZ	Public Transport	Description / Nature of Intervention	Implementation Notes:
		Interchange Facility		
18	-	Du Noon	Located adjacent to IRT trunk station on Potsdam Road and will service taxi operations from Du Noon area in addition to the Phase 1A and 1B services. Need for a transfer facility at the Du Noon facility is crucial due to the high demand of commuters transferring to the main IRT trunk station in Potsdam road. Upgrade of current facility will improve current commute experience and connectivity, accessibility and will promote a multimodal public transport facility.	Initial concept design completed during 2013/2014 financial year has been reviewed and public participation/stakeholder engagement (including informal traders) is underway. Detailed design is scheduled for second half of 2015.
1B	-	Bayside	Upgarde of existing facility will enhance (convenience and safety) the pedestrian experience between the shopping centre and IRT services.	Proposal involves land acquisition to improve pedestrian convenience and safety. Design and project programme reviewed during 2014/2015 to ensure alignment with IPTN planning.
N2 Express	MSE	Makhaza	Formalisation of an informal facility at Makhaza at the Cnr of Lansdowne Rd and Fukutha Rd and Cnr of Cekeca and Fukuta Rd	Appropriate land will have to be sourced.
N2 Express	MSE	Vuyani	Provision of an off-street multimodal public transport facility on the south eastern side of Spine Road, to integrate taxi operations with the proposed IRT operations on Spine Road	Project has also been delayed due to the requirement for a full Environmental Impact Assessment (EIA) which is in progress.
N2 Express	MSE	Nonqubela	Located in close proximity to rail line connecting Central Cape Town with Khayelitsha and proposed MyCiTi trunk station along Lansdowne Road (will serve the future East West Lansdowne Wetton Corridor). Upgrade of one of the busiest transport interchanges along the East West Corridor.	Planning programmed for the 2016/2017 financial year
N2 Express	MSE	Nolungile	Located in close proximity to railway line connecting Central Cape Town with Khayelitsha and proposed MyCiTi trunk station along Lansdowne Road a major public transport route for bus operations and future IRT routes.	Conceptual designs were 90% completed during the 2014/2015 financial year. Project rephrased into three phases to integrate with IRT planning, human settlement programme, trading plan and potential land use processes.
N2 Express	MSE / VRC	Inner City	Upgrade of the Cape Town Rail – BRT Station Precinct. Main focus: linking commuters to destinations; create economic opportunities; universal access and dignified public space. NB: Cape Town Station, and Civic Centre IRT Station are priority origins and destinations within the CBD, with the rail forming part of the Rail Priority Corridor.	Conceptual design completed during 2013/2014 is currently being reviewed to ensure alignment with IPTN, updated precinct plan and to Heritage and Visual Impact assessment requirements.

	IZ	Public Transport Interchange Facility	Description / Nature of Intervention	Implementation Notes:
T12	-	Wynberg	Upgrade of Wynberg Public Transport facility: essential node within the MSE corridor providing transfer point between MyCiTi and the Southern Suburbs Rail line.	Conceptual design reviewed during 2014/2015 financial year to ensure alignment with IPTN and due to impacts on PRASA and private land holdings. Challenge is to is the integration of the project's programme with the Lansdowne Wetton Road Corridors IRT roll-out requirements in this area.
T12	MSE	Nyanga	Located in close proximity to the railway line connecting Central Cape Town with Nyanga, Gugulethu, Bellville transport hub and greater metropolitan area.	Design reviewed to integrate with the Nyanga Urban Node Upgrade project and to align with IPTN planning. Appointment of a professional team for the detail design is to follow in the second quarter of 2015/2016 financial year.
T13	-	Durbanville	High passenger demand requires immediate intervention to create a safe, sheltered and dignified environment for public transport users. Upgrade of facility that serves feeder services directly to the Bellville Public Transport Hub, Rail corridor and future North South IRT trunk corridor.	The appointment of a professional team for planning, design and implementation of the Durbanville Public Transport Facility was delayed to ensure alignment with the IPTN planning. The professional team are now planned to be appointed during the second quarter of 2016 (OctDec).
T13	VRC	Bellville	Upgade of existing facility that is 2 nd busiest in Metro area. Existing facility has inadequate capacity to accommodate present volume of minibus taxis and buses. Presently major conflict between pedestrians, taxis, buses and informal traders that will be addressed via upgrade of the facility. Will also improve connectivity and access to nearest Rail corridor and proposed IRT trunk corridor.	Design to be reviewed to ensure alignment with Symphony Way corridor, IRT planning. Project programme also rephased due to essential interaction with the IRT roll-out requirements in this area. Project has been broken up into three phases to allow for the public transport operations still to take place while the upgrade is in progress. Phase 1 and 2 detailed design has been scheduled for completion during January 2016 with the 1st construction to commence during July 2016.
TIO	-	Retreat	Upgrade of existing facility to cater for increase in commuter demand. Main focus on creating economic opportunities and dignified public space for commuters to transfer seamlessly between transport modes (i.e., rail, bus and minibus) to facilitate seamless transfers.	Concept design reviewed as a result of the impacts on large parcels of PRASA land. Improvements together with the envisaged Phase 1A infrastructure will vastly improve the accessibility and urban environment in this area. Conceptual designs completed and public participation/stakeholder engagements are underway. Detailed design is scheduled for completion during November 2015 with construction to commence during May 2016.
T19	VRC	Parow	Upgrade of existing facility located in close proximity to the railway line connecting Central Cape Town with Voortrekker Corridor / Rd and proposed future MyCiTi trunk	Appointment of professional team for planning, design and implementation of the Parow Public Transport Facility planned for the 2015/2016 financial year.

	IZ	Public Transport Interchange Facility	Description / Nature of Intervention	Implementation Notes:
			station. Will serve proposed N1 Express Service and future North - Symphony Way Corridor. Acknowledged as one of the busiest transport interchanges on the Northern rail way line serving both North and South of the rail station with public transport.	
Rail Corridor	-	Macassar	Location has an established range of residential opportunities, growth and a substantial commercial and industrial base. Accordingly, establishes a strong production (origin) and attraction (destination) base for commuter trips as well as a strong feeder service to Firgrove Metro Rail Corridor. Facility will enhance greater access to IRT operations and to all opportunities within the metropolitan region. The facility needs to be designed to adequately serve as a transfer facility for Rail corridors and future MyCiTi services.	Appointment of a professional team for planning, design and implementation of the Macassar Public Transport Facility was delayed to ensure alignment with IPTN planning. Appointment anticipated fourth quarter 2015/2016. Conceptual design is planned to commence during the second quarter of 2016/2017. A challenge for the Macassar Public Transport Facility project is the availability of land for a transfer facility and the future housing developments taking place in the area.
Rail Corridor	-	Somerset West	The high level of passenger demand requires an immediate and crucial intervention to create a safe, sheltered and dignified environment for public transport users. Dominant 'main mode' of transport to the Somerset West CBD is by minibus taxi or walking. Use of buses is most dominant during peak hour, but the service provided is limited in area. Transport needs and operations in and around Somerset West have changed significantly over the past number of years, in terms of both the scale and profile of operations. The number of destinations served from the Somerset West CBD has increased significantly due to the rapid expansion of the surrounding residential areas, and informal and ad hoc loading can no longer be accommodated within the central area of the town. The first phase of the project is to locate the appropriate site for the Public Transport Interchange (PTI) that aligns with future MyCiTi corridors and that is best located to service all modes of public transport. A conceptual plan and design of the PTI facility to cater for commuter demand and capacity constraints, incorporating connectivity and access to nearest IRT trunk or feeder station.	The concept design for the Somerset West Public Transport Facility was review to incorporate Heritage Impact assessment requirements as well as redesign to increase the capacity and operational efficiency. The Conceptual design was completed during the 2014/2015 financial year. Detail design and construction tender process to follow during the 2015/2016 financial year. The detail design approval is subject to the Heritage Impact Assessment and Land acquisition process.
Rail	Ś	Nomzamo	Location has an established range of residential	Project Completed in 2014/2015 (June 2015) financial year

	IZ	Public Transport	Description / Nature of Intervention	Implementation Notes:
		Interchange Facility		
Corridor			opportunities and a substantial commercial and industrial base and forms a strong production (origin) and attraction (destination) base for commuter's trips as well as a strong feeder service to Rail Corridor. The provision of the facility will enhance greater access to the Rail corridor.	and will be handed over to the public transport operators to use in August after all MOA/U's have been signed.
Rail Corridor	-	Vrygrond	Vrygrond community of 10,000 has access to road based public transport in the form of minibus taxis, but these services operate without proper public transport infrastructure in the area. The conditions, in which the commuters are forced to wait for taxi services, are informal, inadequate and potentially unsafe. New facility to be provided to accommodate the growing demand of commuters and the increase in the number of minibus taxis in the area to ensure convenient and safe commuter transfers from one mode to another. The line haul routes from Vrygrond include, Blue Route, Fishhoek, Retreat, and Wynberg.	Appointment of a professional team for planning, design and implementation of the Vrygrond Public Transport Facility is planned for the 2016/2017 financial year.
Rail Corridor	-	Masiphumelele	New public transport facility to be provided to accommodate growing demand of commuters and the increase in the number of minibus taxis in the area to ensure convenient and safe commuter transfers from one mode to another. Opperations at the Masiphumelele taxi facility are feeder services to Sun Valley Mall, Fishhoek and Simonstown and to the Southern Line Rail corridor.	Detailed design is 90% complete. The supply chain management process to follow to appoint a contractor for the implementation of the project which is anticipated to start in March 2016.
Rail Corridor	MSE	Samora Machel	New facility in serving Philippi East area (Samora Machel and Cassava) and three conventional transport modes, i.e. rail, bus and minibus. Need for the provision of the facility is to elevate the current poor operational conditions, accommodate the growing demand of commuters and the increase in the number of minibus-taxis providing a feeder system to rail stations in the area. Facility forms part of the Rail Priority Corridor, the main rail link being the Philippi Rail Station. The facility is also within 1km walking distance of IRT.	Conceptual design will be completed during the 2014/2015. Project programme is being re-phased due to essential interaction with the IRT roll-out requirements in this area. Improvements together with the envisaged infrastructure for the Phase 2A roll-out of the improved road-based public transport in the Lansdowne-Wetton Corridor will vastly improve the accessibility and urban environment in this area.
Rail Corridor		Bloekombos	Transport needs and operations in and around Bloekombos have changed significantly over the past number of years, in terms of both the scale and profile of operations.	Conceptual design will be completed during 2016/2017 financial year. Designs to be reviewed to ensure alignment with IPTN and new Bloekombos rail link proposed by PRASA.

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IZ	·	Description / Nature of Intervention	Implementation Notes:
	Interchange		
	Facility		
		Upgrade of current facility will serve feeder services directly	
		to the Bellville Public Transport Hub, Rail corridor and to	
		future North South IRT trunk corridor. Detailed consideration	
		will be given to pedestrian movement, public transport	
		accessibility and connectivity and the overall integration of	
		the transport system, land-use activities and multi modal	
		facility infrastructure integration.	

Source: City of Cape Town funding application: budget proposal for MTEF 2016/17 to 2018/19 submitted to National Department of Transport

Annexure B: TOD-C Land Use Assumptions

Ass	umption	Intention	Modelling mechanism
	Household income and land value will not impact where residential development is located	To enable development to be located in a way that supports transit	Disregard land value and allow the spatial distribution of residential units to locate where strategically required
b.	Development will be allocated to priority transit areas using existing theoretical maximum permissible/ deliverable rights, and then – if additional development is required –rezoning/ amendment of land use rights will be applied	To focus development in priority transit areas and make use of existing rights, but to allow for further development if the aforementioned is insufficient	Investigate current land use patterns/ mix (zoning). Make use of overlays to increase development potential (e.g. DPZs, PT1/2 zones, Urban Development Zone etc.) or decrease development potential where development is encumbered (e.g. road/ railway reserves, biodiversity areas, etc.). Estimate the available rights using highest and best use assumptions
C.	Parking requirements will be adjusted according to the provisions of Public Transport (PT) zones. If this reduction is not sufficient, further reductions will be modelled	To remove the restrictions placed on bulk ⁸ by reducing parking requirements	Apply reduced parking requirements to properties that fall within the PT1 and PT2 zones It will be assumed that parking will only be provided on site (i.e. around the building footprint and by making use of 1 basement parking level).
d.	Land use intensity and land use mix is allocated according to best location for transit capacity utilisation	To use development type and mix in locations that take up existing, unused public transport capacity to use the public transport network more efficiently	Use existing volume/capacity ratios on transit network to allocate development
e.	Development is geo-fenced to existing and planned higher order public transport infrastructure.	To illustrate the possible implications of concentrating development around the major public transport network in a way that supported the public transport network	Demarcate a TOD study area along existing high-order (BRT trunk and rail) public transport infrastructure.

-

⁸ Bulk is a commonly used term that refers to building magnitude in three dimensions. It is determined by applying all the development rules relating to a particular zoning, namely floor area ratio, coverage and height.

Annexure C: Transit Oriented Development (TOD) Toolkit

Metropolitan Scale					
Category	Tool/mechanism	Purpose	Examples	Regularisation of tool	TOD programme
Institutional and Policy Alignment:	Amendment of existing high level	To institutionalise TOD within all	Integrated Public Transport Network (IPTN)	IPTN	Institutional Alignment
Align existing land use regulations and City-policy directives with TOD principles and objectives.	strategic policy and development frameworks (IDP, SDF, Densification Policy, IHSF etc.).	directorates of the City and ensure that TOD principles are applied to all private sector development approvals and	Incorporate TOD principles and objectives into the IDP	IDP	
	Tolley, It of etc.j.	public sector led development across Cape Town. These may require	Cape Town Spatial Development Framework	CTSDF	
		amendments to specific: Policy directives	Align grant condition through the BEPP	BEPP	
		Spatial designations	Integrated Human Settlement Framework	IHSF	
		Catalytic projects Closer alignment with TOD principles.	Determine the impact of TOD Comp on the Densification Policy	Densification Policy	
	Amend housing policies, including IHSF	Enhance the current delivery of public sector housing. In particular quantify the impact of current human settlement projects on the operational cost of providing public transport cost comparison.	Considering alternative typologies and locations conducive to higher densities and integrated land uses. Placing greater emphasis on spend and resources around brownfield development.	IHSF	Institutional Alignment
	Amend road classification standards/requirements which impede incremental densification and undermine the use of public transport services.	Enable greater densification and prioritization of public transport	Amend road classification standards/requirements which impede incremental densification and undermine the use of public transport services.	Western Cape Road Classification Guidelines (2002)	Institutional Alignment
	Streamline land use application process for development proposals in line with TOD. WCG & CoCT Game Changer Model	Fast-rack development in desirable locations.	DAMS	SPLUMA, LUPA, Cape Town Zoning Scheme	Private Sector Buy-in
		Model to identify a possible pipeline of public sector properties offering key development opportunities to realise spatial transformation – inclusive, transit oriented development and aims to facilitate reflection on what it will take to actually realise these opportunities within acceptable timelines	I.e. NUNU, Philippi Node	City of Cape Town TOD Strategic Framework	Institutional Alignment
Public Incentives to improve behaviour change	Sustainable Public Rewards Programme with monetary Incentives	To influence choices aligned to TAPs.	 Government Housing Subsidies aligned to TAPs Property Rates discounts in TAPs Lower Development Contributions in TAPs 	City of Cape Town PolicyDevelopment Contribution PolicyRates Policy	Civil Society Buy-in
Change Management	TOD Manual	Integrate sound TOD design principles (currently embed within City policy) and engineering standards to inform an appropriate application of policy guidelines to the assessment of private and public development by giving consideration to TOD outcomes at the nodal and precinct scale	 Access requirements Road layouts Parking (trip generation rates) etc. 	City of Cape Town Policy	Institutional Alignment
	Traffic Demand Management (TDM) Strategy	To identify and implement the necessary measures and mechanisms to encourage efficient and sustainable transport, with an emphasis on the efficient movement of people and goods, rather than vehicles (Draft TDM Strategy, 2015). A key priority of this strategy is to induce a modal (and user behavioural) shift from private to public transport.	 Public transport subsidies for companies or developments which actively support public transport usage; network TDM capacity improvements by increasing or decreasing in network capacity to the advantage of public transport specifically; private vehicle restriction zones; taxation policies to discourage private vehicle subsidies and tax rebates where public transport is actively promoted; congestion pricing and travel pricing (e.g. fuel levies) 	City of Cape Town Policy	Civil Society Buy-in

Corridor, Nodal and Precinct Scale									
Category	Tool/mechanism	Purpose	Examples	Regularisation of tool	TOD programme				
Strategic Planning Frameworks New (and changes to existing) development frameworks aligned to TOD principles and objectives.	New Development and/or urban design frameworks at applicable scales and changes to existing frameworks (District Spatial Plans, Local Areas SDFs, Local Plans etc.).	To establish specific land use and design guidelines to manage and guide the growth and form of corridor, nodal and precinct development in line with TOD principles and strategies (including NMT Strategy).	 Corridor plans District Spatial Plans Local Area Development Frameworks Urban design frameworks 	SPLUMA/LUPA	Institutional Alignment				
Development Incentives: mechanisms to stimulate	Tax incentives/discounts to property developers	Incentivise development in TOD precincts.	Urban Development Zones	UDZ Income Tax Act 58 of 1962	Private Sector Buy-In				
private sector development and leverage public investment.	Government funding	Subsidise catalytic private sector development. No developer or investor will elect to build in an undesirable location unless it yields a profitable return on investment or in this case receives a subsidy to compensate for its underperformance. Engagement with the private sector is required to determine the appropriate returns warranted and if certain return thresholds can be met.	Private sector subsidies and loans	 MFMA(Municipal Asset Transfer Regulations) DORA 	Private Sector Buy-In				
Public land development programmes: to leverage and expropriate land in support of transit investment	TOD land disposal/release programme	To identify, package, aggregate and condition strategically located city-owned land in support of TOD and release to the market for development.	Targeted land disposal programme including, inter alia, de-proclaimed road widening scheme (Canterbury/Maynard) in key locations	City of Cape Town Policy on the Management of certain of the City of Cape Town's Immovable Property MFMA	Private Sector Buy-In				
	Land Banking and Assembly	Acquire aggregate parcels of land near or within TOD precincts where local development is expected to dramatically increase the plot's value, package the land for appropriate development and sell leasehold rights to private sector to develop.	Property Acquisition Policy	City of Cape Town Policy on the Management of certain of the City of Cape Town's Immovable Property	Private Sector Buy-In				
	Lease and disposal of Air Rights	Leverage development above public infrastructure and facilities such as mass transit stations and other public facilities to achieve a greater density and intensification of appropriate land uses. The clustering of public facilities and convenience facilities in close proximity to transit will allow trip chaining which is key to effective TOD.	TOD land disposal programme	 City of Cape Town Policy on the Management of certain of the City of Cape Town's Immovable Property Municipal Asset Transfer Regulations 	Private Sector Buy-In				
Proactive planning: anticipatory planning mechanisms to fast-track development in TOD precincts	Pre-packaging land	Predetermine the form, type and mix of development in support of TOD linked to the TAPs. Change the applicable development rules of erven to ensure appropriate development-intensification of TOD precincts.	 Proactive/Blanket rezoning (Langa) Overlay zones Amending height restrictions, etc. 	Cape Town Zoning Scheme Regulations	Private Sector Buy-In				

Corridor, Nodal and Precinct Sca				B 1 1 12 6: 1	100
Category	Tool/mechanism	Purpose	Examples	Regularisation of tool	TOD programme
Public Private Partnerships	Establish better forums for engagement	To ensure alignment of proposed development with phasing of transit infrastructure. Open lines of communication. Actively pursue development.	Private Sector engagement forums	• MOU • IDP	Private Sector Buy-In
Value Capture: tools to ensure the City recovers some or all of the value that public infrastructure generates for private landowners, to offset high operational costs	Higher taxation of land (rates)	Retain greater interest on the investment of public infrastructure projects and upgrades.	 The identification of Special Assessment Districts aligned to existing and new public investment/infrastructure projects. Development contributions Land value increment taxes 	 Rates Policy City's Development Contribution Policy 	Integrated Business Model
	Parking levies, congestion tax	To disincentivise private vehicle use, whilst generating additional income to offset operational costs associated with the provision of high quality public transport	Parking leviesCongestion tax	Rates PolicyCity's Development Contribution PolicyTDM Strategy	Integrated Business Model
	Improved management of parking and setting of parking tariffs	To capture the best value of City owned parking (managed, park and rides, and off-street)	Revised Parking Tariff	Parking Management TenderCity of Cape Town Parking Policy	Integrated Business Model
	Improve commercialisation (formal and informal) in and around public transport stations, precincts, nodes and PTIs in the design of IRT Infrastructure and pre-packaging of land	Commercialisation of stations improves ridership, passenger convenience and generates a greater level of seat renewal. Furthermore it provides additional revenue generating opportunities for the City, through leasing or disposal (during the boom phase of the property cycle).		Future City of Cape Town Commercialisation Strategy	Integrated Business Model
Development Controls: regulatory tools to manage urban development processes n support of transit investment	Maximum parking requirements in areas where there is an imbalance between development and parking.	To prevent an additional supply of parking and discourage the use of private vehicles.		Cape Town Zoning Scheme	Integrated Business Model
	Monthly Operational Levy incorporated into the City's Development Contribution calculation	To offset the costs of operating public transport infrastructure in unsustainable locations.		City's Development Contribution Policy	Integrated Business Model
Marketing Tools: Improve political and public palatability of TOD	Media Campaigns	To effectively depict what TOD could potentially look like (high density and mixed use development) and communicate the benefits associated with TOD	3D visual aids across scales of TOD.	CITP	Civil Society Buy-in

⁹ Additional levies assigned to parcels of land/property which have been identified as having received a direct and unique benefit from a public project

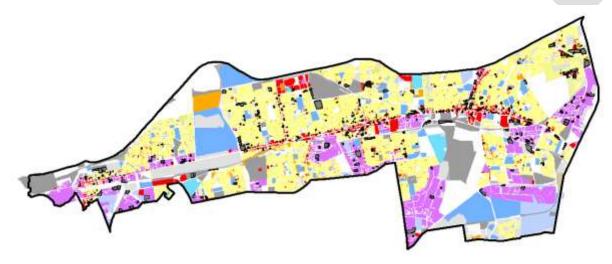
Project and Programme Scale							
<u> </u>		Purpose	Examples	Regularisation of tool	TOD programme		
Projects and Programmes	BEPP Catalytic Projects	Champion projects to: • kick start development interest from private sector in key locations along higher order public transport infrastructure; • facilitate local (formal and informal) economic development. • Improve access to public facilities and social amenities.	Refer to list of projects in the BEPP and the TOD Game Changer Model.	BEPP WCG and CoCT Game Changer Model to promote Urban Integration	ALL		
	NMT Improvement (walkability and cycling)	Improve walkability, to and around IRT stations and PTIs. To improve the assessment private and public sector development applications .	Provide direct pathways	Non-motorised Transport Strategy and design toolkit	ALL		
	Urban Regeneration aligned to the appropriate stage of the property cycle	To improve the quality of the urban environment – improve market responsiveness.	Public space upgrades Safety and security initiatives (i.e., VPUU)		ALL		

Annexure D:

Integration Zone Overview, Strategies and Catalytic Interventions

Voortrekker Road Integration Zone Implementation Plan / Prioritisation Rationale

	Spatial Description	which are situated of etc.); the highest nu (reducing turnaroun regeneration initiative transport capacity of the VRC IZ, with its and services has significant city form are transport networks.	approximately 20km frumber of tertiary instituted times for proposals we aims to facilitate in constraints, inefficient diverse range of land nificant potential for rand function, can be ditransit-oriented development.	Tone (VRCIZ) has bee rom each other. Key spans tutions in relation to the in many instances). In nvestment in the corricand unproductive use uses (including: resident enewal and redevelopativen. By utilising the opment - where commented to the commenter of the correct the commenter of the commenter of the commenter of the correct the cor	catial elements of the rest of the City; a addition, a significant dor by remediating the of public land, anti-sential, commercial, respondent. By taking advantage anunities are in close	e VRCIZ include an e bundant social facili- nt portion of the City' he drivers of disinves ocial behaviour, lack etail, industrial and provantage of these loca ges of existing infrastri	efficient multimodal puties and opportunities of Urban Development thment, including: urbor of public facilities and ublic facilities), excelled ational advantages, spucture networks and less.	blic transport netword for latent land use in Zone (UDZ) extent is an management issurant lineffective land use that location and established attack the exercising the existing the existi	rk (road, rail, taxi, bus ights to be taken up within the VRCIZ. The es, infrastructure and management. Ablished infrastructure at will result in a more g and planned public	
		Popn.	Households	No. households No Income	Age Profile	Land use Profile	Estimated Number of Housing units	Estimated Bulk of Non-Residential	Estimated % take up of land use rights	
Overview	Statistical Overview	The VRC is home to 241 038 people which equates to 6.44% of the Metro's population. The VRC's population racial composition is: Coloured 50.8% vs 42.4% for the entire Metro. White 27.5% vs 15.7% for the entire Metro, and a noticeably smaller Black African representation of 16.6% in comparison to the Metro at 38.6%.	The VRC average household size is 3.60 (Census 2011), up from 3.58 (Census 2001) this is similar to the metro average of 3.60 (Census 2011) and 3.72 (Census 2001) but shows an inverse trend.	The 2011 Census reflects approximately 6000 households with no monthly income for the VRC which translate into 4.29% of the Metro's households with no monthly income.		See Land Use Supplement that follows Assorberation, with a focus on TOD and social housing.				
	Primary Development Outcomes	Directing and coord	dinating a programm	ne of public investment estment to create a cri	t focussing on priori	tised local areas, wh	ich are identified bas			
	Secondary Development Outcomes	Influencing develop government and bu		nd holdings and playin	g a facilitative role b	etween key stakehol	ders such as Parastata	ls, tertiary education	organisations,	



VOORTREKKER ROAD LAND USE PROFILE

METROPOLITAN AREA*

LU Cat1		MBF		
Code**	LU Cat1 Description**	Count	m² GLA	DU Count
AGRIC	Agricultural	1 700	208 066	0
BUS-GENRC	Business: Generic	1 284	206 686	0
BUS-OFFICE	Business: Office	14 179	6 175 285	0
BUS-RETAIL	Business: Retail	17 543	7 506 833	0
CIV-GENRC	Civic: Generic	1 962	1 148 782	0
CIV-HOSP	Civic: Hospital	835	1 182 435	0
IND-GEN	Industrial: General	20 086	12 023 620	0
IND-SRVC	Industrial: Service Industry	5 009	1 741 592	0
IND-WHS	Industrial: WH/Storage	7 376	4 640 281	0
INST-GENRC	Institutional: Generic	1 702	1 225 808	0
INST-POI	Institutional: Place of Instruction	6 505	3 964 027	1
MINING	Mining	79	20 617	0
MIXED-USE	Mixed Use	981	431 065	0
OS	Open Space	153	22 468	0
OTHER	Unallocated/ Other	2 832	53 668	0
POW	Place of Worship	3 546	1 239 344	0
SPECIAL	Special Purposes	1 928	807 873	0
UTILITY	Utility	196	65 544	0
RES-MULTI	Residential: General Residential	148 044	15 418 023	140 360
res-sngl	Residential: Single Residential	887 830	64 359 604	613 558

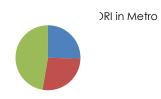
VOORTREKKER ROAD CORRIDOR INTEGRATION ZONE*

LU Cat1		MBF		
Code**	LU Cat1 Description**	Count	m² GLA	DU Count
	I			
BUS-GENRC	Business: Generic	151	24 170	0
BUS-OFFICE	Business: Office	1 884	867 928	0
BUS-RETAIL	Business: Retail	2 455	1 130 374	0
CIV-GENRC	Civic: Generic	242	93 063	0
CIV-HOSP	Civic: Hospital	117	162 125	0
IND-GEN	Industrial: General	4 893	3 176 317	0
IND-SRVC	Industrial: Service Industry	1 343	596 273	0
IND-WHS	Industrial: WH/Storage	1 680	1 037 195	0
INST-GENRC	Institutional: Generic	481	403 171	0
INST-POI	Institutional: Place of Instruction	662	465 600	1
MIXED-USE	Mixed Use	48	11 036	0
OS	Open Space	4	214	0
OTHER	Unallocated/ Other	199	8 946	0
POW	Place of Worship	412	153 439	0
SPECIAL	Special Purposes	349	90 829	0
UTILITY	Utility	26	8 852	0
RES-MULTI	Residential: General Residential	16 711	1 551 541	15 629
RES-SNGL	Residential: Single Residential	60 110	5 201 330	42 094

COMPARISON

BROAD LAND USE CATEGORY	% OF METRO
Agricultural	0.00%
Business: Generic	11.69%
Business: Office	14.05%
Business: Retail	15.06%
Civic: Generic	8.10%
Civic: Hospital	13.71%
Industrial: General	26.42%
Industrial: Service Industry	34.24%
Industrial: WH/Storage	22.35%
Institutional: Generic	32.89%
Institutional: Place of Instruction	11.75%
Mining	0.00%
Mixed Use	2.56%
Open Space	0.95%
Unallocated/ Other	16.67%
Place of Worship	12.38%
Special Purposes	11.24%
Utility	13.51%
Residential: General Residential	10.06%
Residential: Single Residential	8.08%

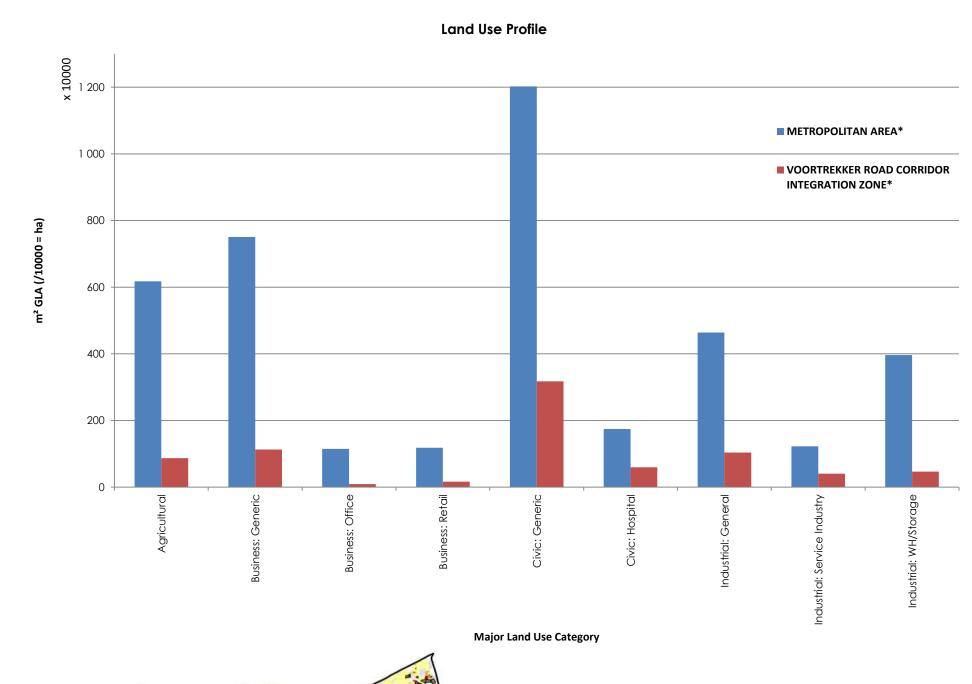
	# of Dus m² GLA (formal)	# of Dus <u>m² GLA</u> (formal)
RES	753 918	6 752 871 57 723 7.66%
NRES	42 663 994	8 229 532 19.29%
	ORI % split in Metro	ORI % split in VRC
Office	6 175 285 19.25%	867 928 12.75% 14.05%
Retail	7 506 833 23.39%	1 130 374 16.60% 15.06%
Industrial	18 405 493 57.36%	4 809 785 70.65% 26.13% 26.13%



^{*} Source: General Valuation Roll, 2015

^{**} Land Use Categorisation by SPUD

Voortrekker Road Corridor Land Use Profile



of Housing Units

Formal dwellings 57 723
Informal dwellings to be calculated
Backyard & Second Dwellings to be estimated

Non-Residential: m² GLA

m² GLA	
867 928	
1 130 374	
4 809 785	
	867 928 1 130 374

■ RES* ■ Non-RES*

RES* ■ Non-RES*

LAND USED FOR RES vs Non-RES

Land Use
type m² %

RES* 20 408 964 27.54%

Non-RES* 61 555 354

N-RES
(swtch) 53 685 272

* Formal, registered only

BUILDINGS USED FOR RES vs Non-RES

 Land Use type
 m²
 %

 RES*
 6 752 871
 45.07%

 Non-RES*
 8 229 532
 54.93%



^{*} Formal, registered only

		PLA 1	PLA 2	PLA 3	PLA 4	PLA 5	PLA 6	Potential PLA 7	Potential PLA 8
	Name	Bellville	Salt River/Maitland	Elsies River	Parow	UWC/CPUT	N1 City	Transnet/Wingfield /Conradie	Stikland Hospital
Prioritised Precincts / Local Areas		BELLVILE CED		OLF COURSE P ET SIES RIVER 10	Passav Bo		MY CULVA A DOWN GPLF COURSE	TRANSMETT WINGFIELD CONRADE 12	STILLE OF DE MOSPITAL
	Theme	Enhancing existing Infrastructure and addressing Urban Management challenges	Bolstering Private- Public Partnerships and supporting social housing initiatives	Promoting subsidized housing initiatives and enhancing the public environment	Upgrading existing public transport facilities and enhancing the urban environment as part of the Mayoral Urban Regeneration Programme (MURP)	Private investment at Belhar CBD and housing interventions in the form of student accommodation and social housing.	Implementation of BRT routes and prefeasibility studies for potential redevelopment initiatives	Unlocking action: Land release/assembly	Unlocking action: Land release/assembly
Targets	Private Sector	Short term: Participation of development community in targeted discussions to inform the investment framework and ensure that public investment addresses factors currently inhibiting private sector investment. Medium term: Frontier developers going into the area, ongoing engagement to ensure positive feedback loop of value of public interventions. Long term: Private sector undertaking development in line with corridor vision, making use of incentives, perpetuating feedback cycle to ensure that public interventions and incentives support demand.							
	Public Sector	Short term: Create investment framework to direct and coordinate a programme of public investment focusing on spatially targeted areas (prioritised local areas) and accessing further grant funding based on short term performance. Medium term: Creating business and residential development friendly environment that encourages development through infrastructure development, urban management and public amenity upgrades. Long term: Ensure continued vibrancy of the area, mitigating urban decay and displacement through a focus on social housing, investment, continuous updating of the public investment framework and adjusting spatial focus as needed, ensuring that growth and renewal of the urban core will have positive benefits to adjacent areas.							

		Central Business District	Cape Town	Cape Town								
		Urban Hubs	Bellville									
		Secondary Nodes (smaller township centers)	N/A									
		Other Municipal Nodes	Century City (Commercial), Maitland (Mix use), Riverton (Mix use), Parow East (Mix use), N1 City (Commercial)									
	Components	Transport Attributes	obtainable from the N1 and R300 along of the northern and m	etwork permits ease f access and novement within the RCIZ.	stations in total, with 4 ranked amongst the top ten busiest in the municipal area. The 4 station daily boarding	interchanges. A	are operational along the complete higher order road network for the VRC – i.e.	fully services by the BRT system; however, areas such as Salt River and Woodstock are currently serviced by BRT. Longer term	upgrades are planned in key areas. I.e. Upper Halt Road, Elsie River.			
		Transit Accessible Precincts (TAPS)		ne draft TAPS's within the VRCIZ indicates the ability to accommodate higher density developments in order to unlock latent bulk rights and to also promote TOD litiatives. The TAP's are emphasized mainly along the railway network and where future BRT stops are envisioned. Ongoing work on the TAP's will provide a clearer								
		Informal Settlements	There are 7 informal settler Koekoe Town (98) Maitland cemeter Royal Plakkers Kan 6 th Avenue, Kensin Wingfield Camp (2 Appelboord (359) Gaza (378)	ments located within th ry (113) mp (172) ngton (189) 235)		lates approximately 1544	residents. These informa	al settlements are:				
		Infrastructure Upgrades	Area based interventions will consider the informal settlements. The VRC has an extensive services infrastructure network. Some capacity constraints exist within this network. As one of the oldest parts of the City, infrastructure is aging and requires upgrading in some instances to prevent failure and to augment capacity. Core infrastructure deficiencies and current work include key electricity upgrades, waste water treatment works and critical road infrastructure upgrades.									
			Urban Development	Infrastructure			rvention	Programmes Programmes	Property			
Inte	Interventions	1. Belhar CBD Redevelopmen		Public Transport 1. Bellville PTI 2. Parow PTI 3. Bellville Integrated Transport Lo Use Plan 4. Kruskal Ave Solid Waste 5. Bellville was transfer stat 6. Bellville land expansion Water & Sanitation 7. Bellville WW MURP Electricity 8. Koeberg Ro switching st	Voortrekke Integration Housing 1. Belhar 2. Glenha 3. Belhar te ion dfill	1. Be Social 2. Ma		MURP	1. Parow Golf Course			

		9. Plattekloof N1 Main substation upgrade 10. Oakdale Main substation upgrade Sewerage 11. Northern Areas sewer line upgrade						
	Stakeholders: State	National Treasury (via ICDG)						
	Stakeholders: Province	PGWC- GTP – City liaison forum						
	Stakeholders: Parastatal	PRASA						
Institutional Arrangements	Stakeholders: Private	Cape Town Property Developers Forum Greater Tygerberg Partnership Education: UWC, CPUT Social Housing Institutions Business Chambers / Organisations						
(Should we include a "Stakeholders:	Consultation and participation/ co- ordination mechanism	Targeted discussions, further participation on project-based interventions						
Internal"	Precinct / urban management	CID, PLA intervention frameworks						
	Regulatory Reforms	New Bylaw, potential utilization of overlay zones						
	Incentives (current, potential)	Current: Bolstering infrastructure to allow take up of existing rights, parking reductions in PT zones in Bylaw, promotion of exciting incentives such as UDZ, promotion of underutilized rights and urban management interventions. Potential: Making use of Densification Overlay Zones, streamline statutory process.						

Metro-South-East Road Integration Zone Implementation Plan / Prioritisation Rationale

OVERVIEW Spatial description	dwellings, 51% of its bac Crossroads, Site B, C, an (specifically the area fro Crossroads, Site B, C, an formal industrial and co Southern and Cape Flat	ckyard units, and 70% of the day of the day of the day of the rest of the day of the day of the day of the rest of the day of the da	e city's informal dwellings of Khayelitsha. The area i s towards Khayelitsha), ar of Khayelitsha). The south the Cape Flats is very stril	s home to the largest con nd the largest concentrati n-east, where most of the king considering the sized Guguletu, Bishop Lavis, H	nighest unit densities in the icentration of people in the ion of people in the city re city's poor live, is not ach ible resident population. Feideveld, Nyanga, Mitches	e city (above 100 units/hone city rated worst off in the ated worst off in terms of the city the same growth of all provides the backbor	the location of 31% of Ca a) occur in the MSEIZ, spec erms of the Socio-econom the Household Services Inc as the high-income suburba ne of transportation service areas (central and eastern	ifically in Langa, Philippi/ lic Status Index dex (specifically Philippi/ s to the west. The lack of es within the MSEIZ. The
Statistical overview	Population	Households	Income	Age	Land use	Housing units	Non residential	Building activity
(MSEIZ wide)	 1.46m, more than 39% of city (on 12.3% of land area). In part the primary focus of residents who have recently migrated to Cape Town (specifically Philippi/ Crossroads, Site B, C, and TR Section, and the rest of Khayelitsha). The spatial pattern of the overall Socioeconomic Status Index (SES) has largely remained the same between 2001 and 2011, exhibiting two broad clusters, a better off area stretching from the CBD towards Langa and a worse off area from Langa southeastwards towards Khayelitsha. 	Household size in the western, wealthier parts and Black African areas (specifically Crossroads, Philippi, and Khayelitsha) are generally smaller than the city average.	Incomes vary, with the western MSEIZ on or above the city average and the central and eastern parts generally below the City average. More than 55% of the households in the MSEIZ suburbs stretching from Langa southeastwards towards Khayelitsha earns a monthly income of R3 200 or less.	Population in the western, wealthier parts and predominantly Coloured (central) areas are less youthful than the city average while in Black African areas (specifically the east) the proportion of youthful population is higher than the city average.	 Predominantly residential. Different parts of the MSEIZ exhibit a different relationship between residential use and other uses (within and outside the area). Lower residential population densities are generally located in the western side of the MSEIZ while high densities are located in the east. In the west, high densities are mostly located around amenities, transportation interchanges, and along activity streets. In the east, high densities are located in pockets (e.g. informal settlers making the most of available land), not necessarily located optimally in relation to public transport services or amenities. 	 37% of the city's total number of housing opportunities. 31% of the city's formal dwellings. 51% of the city's backyard units. 70% of the city's informal dwellings (not in back yards). 	 The CBD and environs remains a significant metropolitan commercial centre. Few higher order commercial facilities towards the east. No area south of the N2 features as one of the more significant commercial nodes of Cape Town, but the inner city area from Maitland to Woodstock is an opportunity zone. Open space in the west – whether publicly accessible or not – is generally large, developed, and "readable" as open space. Towards the east, open space often appears as "lost space", undeveloped, not maintained, and fragmented. 	Varies across the MSEIZ. Larger commercial development focuses on the west (in the vicinity of the old CBD). Numerous smaller building activities – predominantly residential – occur in the eastern parts. The overall value of small activity, however, matches or surpasses building value elsewhere.

METRO SOUTH EAST INTEGRATION ZONE LAND USE PROFILE

METROPOLITAN AREA*

LU Cat1	III C 11 D **	MBF		DII Carrat
Code**	LU Cat1 Description**	Count	m² GLA	DU Count
AGRIC	Agricultural	1 700	208 066	0
BUS-GENRC	Business: Generic	1 284	206 686	0
BUS-OFFICE	Business: Office	14 179	6 175 285	0
BUS-RETAIL	Business: Retail	17 543	7 506 833	0
CIV-GENRC	Civic: Generic	1 962	1 148 782	0
CIV-HOSP	Civic: Hospital	835	1 182 435	0
IND-GEN	Industrial: General	20 086	12 023 620	0
IND-SRVC	Industrial: Service Industry	5 009	1 741 592	0
IND-WHS	Industrial: WH/Storage	7 376	4 640 281	0
INST-GENRC	Institutional: Generic	1 702	1 225 808	0
INST-POI	Institutional: Place of Instruction	6 505	3 964 027	1
MINING	Mining	79	20 617	0
MIXED-USE	Mixed Use	981	431 065	0
OS	Open Space	153	22 468	0
OTHER	Unallocated/ Other	2 832	53 668	0
POW	Place of Worship	3 546	1 239 344	0
SPECIAL	Special Purposes	1 928	807 873	0
UTILITY	Utility	196	65 544	0
RES-MULTI	Residential: General Residential	148 044	15 418 023	140 360
res-sngl	Residential: Single Residential	887 830	64 359 604	613 558

METRO SOUTH-EAST INTEGRATION ZONE*

LU Cat1	III Catl Description	MBF	ma ² Cl A	DUCarrat
Code	LU Cat1 Description	Count	m² GLA	DU Count
AGRIC	Agricultural	I	0	0
BUS-GENRC	Business: Generic	194	31 516	0
BUS-OFFICE	Business: Office	1 700	694 394	0
BUS-RETAIL	Business: Retail	2 348	1 383 340	0
CIV-GENRC	Civic: Generic	361	142 080	0
CIV-HOSP	Civic: Hospital	299	306 891	0
IND-GEN	Industrial: General	2 479	1 880 892	0
IND-SRVC	Industrial: Service Industry	440	165 440	0
IND-WHS	Industrial: WH/Storage	1 093	938 542	0
INST-GENRC	Institutional: Generic	232	121 618	0
INST-POI	Institutional: Place of Instruction	1 655	1 016 734	0
MIXED-USE	Mixed Use	103	189 525	0
OS	Open Space	4	111	0
OTHER	Unallocated/ Other	163	150	0
POW	Place of Worship	797	277 249	0
SPECIAL	Special Purposes	337	102 125	0
UTILITY	Utility	33	10 088	0
RES-MULTI	Residential: General Residential	10 497	1 287 098	9 587
RES-SNGL	Residential: Single Residential	208 126	9 825 288	145 645

COMPARISON

BROAD LAND USE CATEGORY	% OF METRO
Agricultural	0.00%
Business: Generic	15.25%
Business: Office	11.24%
Business: Retail	18.43%
Civic: Generic	12.37%
Civic: Hospital	25.95%
Industrial: General	15.64%
Industrial: Service Industry	9.50%
Industrial: WH/Storage	20.23%
Institutional: Generic	9.92%
Institutional: Place of Instruction	25.65%
Mining	0.00%
Mixed Use	43.97%
Open Space	0.49%
Unallocated/ Other	0.28%
Place of Worship	22.37%
Special Purposes	12.64%
Utility	15.39%
Residential: General Residential	8.35%
Residential: Single Residential	15.27%

	_m² GLA	# of Dus (formal)	
RES		753 918	
NRES	42 663 994		
Office	6 175 285	19.25%	
Retail	7 506 833	23.39%	
Industrial	18 405 493	57.36%	

RI % split in Metro	

m² GLA	# of Dus (formal)		
11 112 386	155 232		
7 260 695			
			ORI % split in MSE
694 394	13.72%	11.24%	
1 383 340	27.32%	18.43%	
2 984 874	58.96%	16.22%	

	20.59%
	17.02%
ORI % split in MSE	
	11.24%
	18.43%
	16.22%

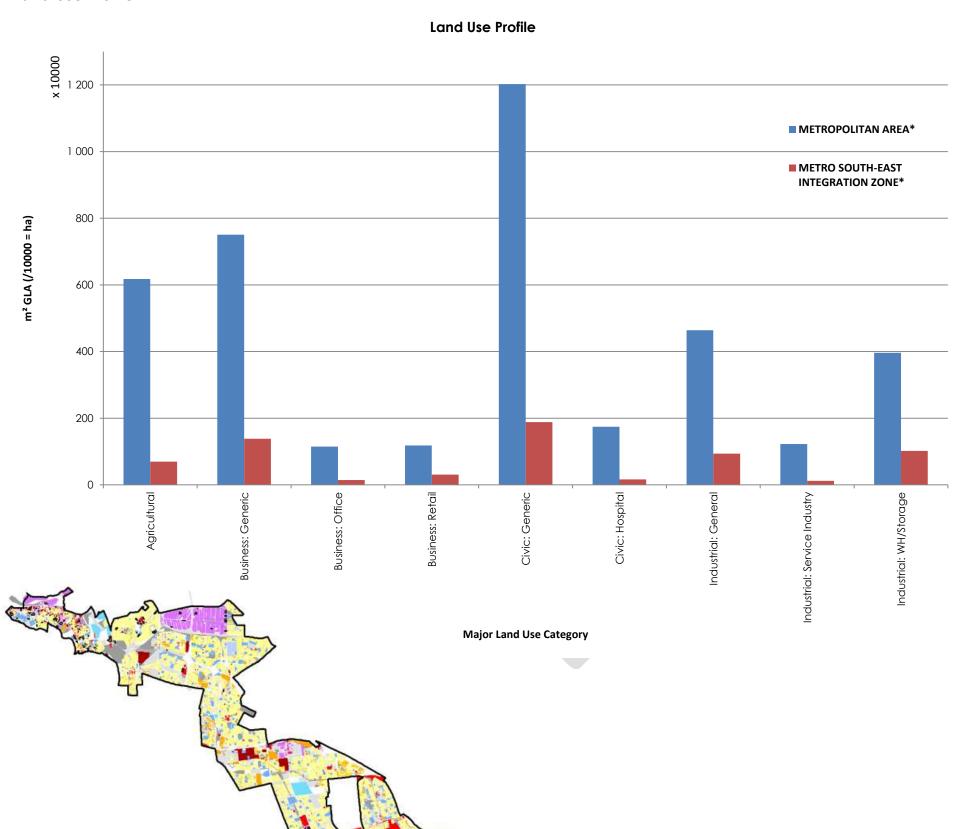
ORI in MSE as % of ORI in Metro



^{*} **Source**: General Valuation Roll, 2015

^{**} Land Use Categorisation by SPUD

Metro South East Land Use Profile



# of Housing Un	nits	
Formal dwelling	gs	155 232
Informal dwellir	ngs	to be calculated,
Backyard & Sec	cond Dwellings	but it is significant
Non-Residentia	ıl: m² GLA	
Non-RES	m² GLA	
Office	694 394	
Retail	1 383 340	
Industrial	2 984 874	
iiidosiiidi	2 704 074	
LAND USED FOR	RES vs Non-RES	RES* ■ Non-RES*
Land Use		
type	m²	%
RES*	38 081 188	33.22%
Non-RES*	75 918 049	66.78%
N-RES (swtch)	76 552 194	
* Formal, registered	only	
BUILDINGS USE	O FOR RES vs Non-RES	
		RES* ■ Non-RE
Land Use	_	~ 1
type	m²	%
RES*	11 112 386	60.48%
Non-RES*	7 260 695	39.52%

^{*} Formal, registered only

	Area specific Overview	West	Central	East		
	Population	 1.5% of the city population. 3.8% of the MSEIZ population. A relatively balanced mix of population groups. 	 12.8% of the city population. 32.7% of the MSEIZ population. Overwhelmingly coloured (except Langa, Gugulethu, and Nyanga, which is overwhelmingly Black African). Less than 40% of communities east of Langa have matric qualifications and less than 25% has higher qualifications. 	 24.8% of the city population. 63.5% of the MSEIZ population. Crossroads, Philippi, and Khayelitsha is overwhelmingly Black African. Mitchells Plain is overwhelmingly coloured. Less than 40% of communities east of Langa have matric qualifications and less than 25% has higher qualifications. 		
	Income	 Proportion of people earning less than R3 200 per month considerably less than the city average. Proportion of labour force employed considerable higher than city average. 	 Proportion of people earning less than R3 200 per month compares well to the city average (accept for Black African areas). Proportion of labour force employed compares well with city average except for Black African areas. 	 Black African areas show very high proportion of people earning less than R3 200 per month compared to the city average. In Black African areas, the proportion of the labour force employed is lower than the city average. 		
	Health	Lower incidence of health issues than city as a whole.	Relatively high Infant Mortality Rates.High incidence of TB in some parts.	Highest Infant Mortality Rates in the city.Highest incidence of TB in the city.		
OVERVIEW	Land use	Balanced use of land between residential and commercial/ public facility uses. Routes of metropolitan significance have attracted commercial uses and public facilities of high order, serving both local and regional needs.	 Predominantly residential. Non-residential uses "embedded" in residential areas (as opposed to being located on major metropolitan routes). Pressure of informal settlement on the edges of major remaining land holdings. 	 Predominantly residential. Non-residential uses "embedded" in residential areas (as opposed to being located on major metropolitan routes). Residential use is interspersed with commercial uses and public facilities, but these are largely limited to what is needed to serve local communities (and often under-provided). Pressure of informal settlement on the edges of major remaining land holdings (including Philippi horticulture, the airport "buffer" strips, coastal strip, Denel, and Driftsand nature area). An extreme protectionist approach to the False Bay coastal strip (as opposed to selective, sensitive development in a manner which grows opportunity and a more varied land market). 		
	Housing	 1.6% of the city's total housing opportunities. 2% of the city's total formal housing opportunities. 	 11.4% of the city's total housing opportunities. 8.5% of the city's total formal housing opportunities. 14.7% of the city's total back yard units. 14.2% of the city's total informal settlement units. 	 24.3% of the city's total housing opportunities. 9.6% of the city's total formal housing opportunities. 36% of the city's total back yard units. 56% of the city's total informal settlement units. 		
	Economic activity	 In the broader Table Bay district (western MSEIZ), commercial and industrial property together account for 23.4% of all properties and 34% of value. Part of the main area of economic opportunity in the city with the largest concentration of economic activities, including most of the higher order services. In 2005, the City Centre accounted for close to 25% of all City turnover (a further 43% was generated in the area roughly stretching from Salt River to Bellville and the West Coast and Southern 	Lacking in overall economic activity. In the broader Cape Flats district (central MSEIZ), commercial and industrial property together account for 10.2% of all properties and 4.0% of value.	 The area has the lowest proportions of commercial and industrial activity of all city areas. In Khayelitsha and Mitchells Plain, commercial and industrial property together account for 2.6% of all properties and 2.3% of value. There are no significant decentralized mixed-use nodes in the MSEIZ (although Liberty Promenade is the 3rd largest mall in the city it lacks offices). 		
		Suburbs each accounted for a further 10%). • The CBD and Salt River is classified as a "Growth" area in terms of the City's ECAMP.	in the metro north, with opportunity for regeneration along the • Apart from Airport Industrial, industrial areas in the central/east	traposes the presence of the forces of agglomeration and growth VRCIZ. perform comparatively poor. Airport Industrial has vacant land, noderately high. While Philippi also has vacant land, demand is ow and vacancies are high.		
	Transport	The broader CBD area (together with Voortrekker Road and the Wynberg area) is a major trip destination for people from the central and eastern MSEIZ.	 The Langa, Guguletu, Bishop Lavis, Heideveld, Nyanga, Mitchells Plain and Khayelitsha areas have the highest trip origins in the city. The largest desire lines (demand 10 000 to 20 000 person trips) in the City are from the residential areas around Philippi, towards the CBD and the Epping area, and from the MSEIZ towards the Bellville area. 			

			The second largest desire lines (demand 6 000 to 10 000) in the City	are also largely concentrated within the MSEIZ.			
	Services	Services (water, sanitation, refuse, electricity) generally above city average.	 On average, about 50% of dwellings in the Black African areas of Langa, Gugulethu, and Nyanga have piped water inside the dwelling, well below the City average of 75%. Other services (sanitation, refuse, electricity) generally below City average (except for N2 informal settlements). 	 At 26%, Philippi has the lowest proportion of dwellings provided with piped water inside the dwelling in the City. Khayelitsha is the second lowest at 34.6%. Other services (sanitation, refuse, electricity) generally below City average. The largest concentration of people in the city rated worst off in terms of the Household Services Index (specifically Philippi/ Crossroads, Site B, C, and TR Section, and the rest of Khayelitsha). 			
	Social facilities	Some facilities (especially schools) have capacity and serves learners from the central and eastern areas.	 The whole of the MSEIZ east of Langa contains the highest numbers of unserved secondary school learners in the City. Nyanga/ Gugulethu/ and Heideveld is poorly served by community parks. 	 South-east Khayelitsha is the most underprovided with community centres area in city. More than a third of the 2016 city-wide unserved local library demand arises from the Mitchells Plain/ Khayelitsha District (with a specific concentration in the north of Mitchells Plain sub-district, Philippi, and Site B, C, and TR Section sub-districts, and the northern part of Greater Khayelitsha sub-district). Crossroads (Philippi sub-district) and the north-west of Khayelitsha are the most significant concentrations unserved with primary schools, with more than 50% of the city's unserved primary school learners. Philippi, and Site B, C, and TR Section, and Greater Khayelitsha is poorly served by community parks. The Mitchell's Plain/ Khayelitsha district only have 29.7% of its total population served by sports fields, the lowest in Cape Town. 			
	Building activity	 Together with Blaauwberg, Table Bay district received the lowest proportion of BDM applications submitted in 2009-2012 (6.6%) The value of BDM for the Table Bay district is also the lowest during 2009-2012 (9.9%, compared to the 15.5% of Blaauwberg). 	•	Khayelitsha district received 23.8% of the city's BDM applications submitted in 2009-2012 and the 3rd highest proportion of building value (14.8%).			
	Socio-economic Index status		Together with the east, the largest concentration of people in the city rated worst off in terms of the Socio-economic Status.	Together with the central area, the largest concentration of people in the city rated worst off in terms of the Socio- economic Status.			
DEVELOPMENT OUTCOMES PURSUED	Primary development outcome	 Enhance the MSEIZ's contribution to a more compact and integrated city, with associated efficiency, productive, and resource sustainability gains. Use the TOD Strategy as a lever to growth and development through the enhancement of public transport infrastructure (including its institutional arrangements and processes) and the support of appropriate development at appropriate locations. 					
	Secondary development outcome	 Maximise the investment by various spheres of government and related agencies in the provision and maintenance of infrastructure and public facilities; and encourage private sector and individual entrepreneurship and investment through appropriate infrastructure and facility provision, regulations, and urban management instruments. Enhance infrastructure provisions in the MSEIZ by: Strengthening institutional arrangements and support systems that enable cross-sectoral, integrated work on urbanization, infrastructure and facility provision and management. Improving existing infrastructure and public facility services in the MSEIZ and improving efficiencies across infrastructure and facility networks. Integrating informal settlements with existing infrastructure and social facility assets offered by the MSEIZ and the city broadly. 					
TARGETS	Public sector	To be determined.					
	Private sector	To be determined.					

ELEMENTS		West			Central			East				
CBD		Cape Town.										
Urban Hub	bs				Athlone CBD.				East itsha CBD. Ils Plain Town Centre.			
Secondary	ry Nodes	To be reviewed.			To be reviewed. To be reviewed. To be reviewed.				To be reviewed.			
Local Node	des	To be reviewed.							riewed.			
Transit Acc Precincts		To be reviewed.							To be reviewed.			
Transport a	attributes	Freeway	Mobility	Rail		Bus	Taxi	•	Interchange	NMT		
		 N2: passing from Somerset West through the MSEIZ to the CBD. R300: an east/ west link from the Philippi area towards the N2 and northwards towards the northern and eastern areas of the metropolitan area. M5: a major freeway link between the N1 and N2 freeways. 	 Klipfontein Road: a major secondary link (Class 2 route) between the western (Mowbray area) and eastern side (Crossroads/ Philippi) of the MSEIZ. Lansdowne Road: a major secondary link (Class 2 route) between the western (Wynberg) and eastern side (Khayelitsha) of the MSEIZ. Baden Powell Drive: the major secondary link on the southern boundary of the MSE IZ, providing linkages to the west (Muizenberg) and to the east (Stellenbosch). Raapenberg/ Forest Drive: a major secondary link between the Mowbray area and Pinelands. Jan Smuts Drive: a major secondary link between the Mowbray area and Pinelands. Jan Smuts Drive: a major secondary link between the Athlone area and Pinelands/ Epping. N7/ Vanguard Drive: the major secondary north/south link in the central area of the MSE IZ, linking the central portions to all central and northern suburbs of the city. Duinefontein/ Modderdam Road: a major secondary link between the Guguletu area and the central and northern suburbs of the city. Borcherds Quarry/ New Eisleben: serves as an important linkage for Mitchells Plain to the north. It is not quite continuous at present (in 	backb transpor within to Southe Lines por the MS Kaptei Hani bir Centro MSEIZ, the Sar Centro MSEIZ. 13 pass of vary functio The 20 do not issues of Plain a lines. A major the op service signal of equipm huge of service	ortation services the MSEIZ. The ern and Cape Flats artially pass through EIZ. The entire insklip and Chris ranches of the all Line fall within the and a section of repta branch of the all Line falls within the senger rail stations ring size and ons. 12 Rail Census data indicate capacity on the Mitchells and Khayelitsha rail or problem affecting eration of the a is the theft of cabling and ment which causes delays on the	Of the ten busiest current bus routes in the City, seven originate or pass through the MSEIZ. CTIA MyCity service (from/ to the CBD).	Major taxi ranks of Mitchells Plain Tox Centre and Nolur (Khayelitsha).	wn		Provided across the area (often associated with new projects).		

		the vicinity of the N2), but improvement of the continuity has been planned and could be implemented soon. • Stock/AZ Berman: a major secondary link between Mitchells Plain and the Philippi Industrial area, serving a similar purpose to Borcherds Quarry/ New Eisleben through its interchange with the R300. • Swartklip Road, Mew Way and Spine Road: the major arterials servicing the eastern portion of Mitchells Plain, as well as Khayelitsha, and heavily used by public transport vehicles.		
INTERVENTIONS	Strategy	See attached Strategic Framework Summary.		
	Thematic interventions	Under investigation.		
	Area based interventions	West	Central	East
	Mayoral Urban Regeneration	-	 Bonteheuwel. Athlone. Gatesville. Valhalla Park (on MSIEZ edge). Bishop Lavis (on MSEIZ edge). Nyanga. Gugulethu. Manenberg. Hanover Park (on MSEIZ edge). 	 Philippi East Node. Mitchells Plain Town Centre. Khayelitsha CBD. Harare Precinct. Kuyasa Project.
	MSEIZ Priority Local Areas (proposed)	 District 6. Salt River/ Woodstock. TRUP/ Mowbray Golf Course. 	 Athlone CBD/ Athlone Power Station. Gugulethu/ Nyanga. Manenberg/ Hanover Park. 	 CTIA/ Philippi. Lentegeur/ Promenade/ Mitchells Plain Town Centre. Denel/ Swartklip. Khayelitsha CBD/ Khayelitsha Industrial area. False Bay Coastal nodes.
	Existing area- based planning initiatives	TRUP Development Framework. Athlone Power Station Pre-feasibility and Concept Development Framework.	 CTIA aerotropolis feasibility study. Hanover Park Development Framework. 	 Momwabisi Coastal Node. Denel Development Framework. Kapteinsklip Development Framework.
	Human Settlements	West	Central	East
	Pipeline	Salt River Market social housing.	 Gugulethu Hostels. Nyanga Hostels. Hanover Park infill. 	 Khayelitsha Backstage, Erf 36638. Khayelitsha Harare infill. Khayelitsha Ilitha Park infill. Khayelitsha Erf 28019/29155. Khayelitsha Erf 28804. Khayelitsha Mahama infill. Mitchells Plain Highlands Drive infill.

	Planning	Woodstock Pine road social hou Salt River Foundry Road.		 Bonteheuwel infill. Valhalla Park infill. Athlone Vygieskraal. Athlone Kewtown. Gugulethu Phola Park. Nyanga Lotus Park. 		 Philippi Braaf/ Sheffield. Philippi BRT relocation. Philippi Monwood. Khayelitsha Barney Molokwana. Khayelitsha Enkanini. Khayelitsha False Bay IDA. Khayelitsha Green Point Phase 3. Khayelitsha Momwabisi Park. Mitchells Plain Beaconvalley infill. Mitchells Plain Kapteinsklip. 			
	Implementation			 Langa CRU. Langa Joe Slovo (N2 Gateway). Valhalla Park 8ste Laan. Bonteheuwel backyarder upgrade Athlone Hazendal infill (Bokmakierie Gugulethu backyarder upgrade. Nyanga upgrading. Nyanga Thambo Square. Heideveld backyarder upgrade. Heideveld Duinefontein Road. Manenberg backyarder upgrade. Manenberg The Downs infill. Hanover Park backyarder upgrade Gugulethu MauMau infill. 	e).	Khayelitsha CBD. Mitchells Plain backyarder upgrade.			
	Infrastructure	Transport	Electricity	Water	Waste water	Storm water	Other infrastructure		
	(MSEIZ wide)	 BRT Phase 2B Wynberg to Mitchells Plain/ Khayelitsha (planning). Integrated Rapid Transit Control Centre. Integrated Rapid Transit Fare Collection system. Metro South-east Public Transport Facility (planning). PRASA Rail Modernisation (implementation). Blue Downs Rail Link (planning). Various metro road upgrading projects. Various road projects (for housing). Various traffic calming projects. Various NMT projects. 	(planning and implementation).	projects (for housing). • Water provision for informal settlements (various projects).	Cape Flats Waste Water Treatment Works. Increase in treatment cap of Zandvliet Wastewater Treatment Works Regional resources development. Various waste water augmentation/ refurbishm projects.	ent	 Dark Fibre Broadband infrastructure. WCG Broadband Connectivity. Digital Inclusion ProjectProposed. 2nd runway at CTIA. Various park improvements. Various cemetery improvements. 		
	Infrastructure (area specific)	West		Central		East			
		Inner-city public transport hub.		Gugulethu concrete roads.		 Stock Road upgrading. Lentegeur/ Mandalay Station Public Transport Interchanges (implementation). Mitchells Plain Transport Interchange (implementation). Nolungile Public Transport Interchange (planning). Khayelitsha CBD Public Transport Interchange. 			
		Observatory Main Sub-station up	ograde (planning).	 Bofors (Epping) Main Sub-station up Erica Electricity Intake Point at Mitc growth in the southern peninsula, G where the load already exceeds the (planning). Backyarder connections (Heidevella a priority). 	hells Plain to meet load Gugulethu and Mitchells Plain the capacity of infrastructure	(planning).			

				 Electrification of formal and inf priority). Integrated National Electrificat connections in undersupplied of Langa, Gugulethu). 	ion Programme Grant (INEPG)			
	Water					Water supply	at Baden Powell to Khayelitsha.	
	Solid waste	Athlone Transfer Station (± R125m).				Swartklip Tran	nsfer Station.	
	Waste water			Cape Flats Waste Water TreatrBorchards Quarry Waste WaterMitchells Plain Waste Water Tre	Treatment Works (implementation atment Works (implementation). atment Works Phase 2 (implement	ո).		
	Storm water							
	Other infrastructure							
	Social facilities	West		Central		East		
				 Gugulethu clinic upgrade and services. Heideveld ECD. Nyanga/ Gugulethu prioritised development over the short te 	for large/intermediate parks	 Replacement/ extension/ upgrade of various clinics (replacement of Zakhele and Tafelsig clinics the top prior New Mandalay clinic (Mitchells Plain). Lentegeur ECD. Philippi/ Khayelitsha prioritised for large/ intermediate padevelopment over the short term. Kuyasa Regional Library. Khayelitsha Wetlands Park upgrade. 		
	Catalytic	Urban Development	Infrastructure		Human Settlement		Other	
	 (current proposed/ under discussion) Projects not in the BEPP shown in italics Athlone CBD planning and construction (2015-2018: R5.1m). Athlone Power Station technical/ financial feasibility (2015-2017: R8.3m). Khayelitsha CBD expansion. ERT Phase 2 V Khayelitsha (2 PRASA Rail M Northern Area through Thorn 2018: R122m) Cape Flats 3 between Ath WWTW (2015-4thlone to Phunderground) Mitchells Plair integration (2 Stock Road under the proposed of the projects not in the BEPP shown in italics 			es sewer line replacement ton to Athlone WWTW (2015-ewer; additional sewer line one WWTW and Cape Flats 2018: R179m). ilippi OH electricity line ng (2015-2018: R7.6m). a electricity Erica intake 015-2018: R5m). pagrading (2015-2018: R45.52m).	 District 6 Social Housing (2015-2) Salt River Market social housing Southern Corridor. Lentegeur social housing (no b Kapteinsklip social housing (no 	y (no budget).	Khayelitsha Industrial Area. Maitland Abbatoir. Two Rivers Urban Park.	
INSTITUTIONAL ARRANGEMENTS/	Government							
REGULATORY REFORM	Budget prioritisation	Establishment of Grant Projects Review Commit	tee (Section 80) c	and reviewed budget priorities (an	d associated screening questionn	aire).		
	Special programmes	See MURP above. Establishment of TCT.						
	Important initiatives	 BRT Phase 2 Wynberg to Mitchells Plain/ Khayeli Finalisation of the Integrated Human Settlement Proposed CTIA aerotropolis governance arrang 	f Framework/ Plar	า.				
	NGO support	Various grants to NGOs.						
	Regulatory reform	Review of Social Housing and Restructuring Zone Application of Zoning Scheme Overlay Zones to		cation and private household con	tribution to meeting housing need	I and City densifi	cation objectives.	

Private sector	
Incentives	



Voortrekker l	Road Integration Zo	ne Implementation Plan / Prio	ritisation Rational	е			
		Key Project(s)	2014/15	2015/16	2016/17	2017/18	2018/19
	Capex spend						
	ICDG						
Fiscal	PTNG						
aspects	INEPG						
	USDG / HSDG						
	NDPG						
	Opex Spend						

MSE Integrat	on Zone Implement	tation Plan / Prioritisation Ratio	nale				
		Key Project(s)	2014/15	2015/16	2016/17	2017/18	2018/19
	Capex spend						
	ICDG						
Fiscal	PTNG						
aspects	INEPG						
	USDG / HSDG						
	NDPG						
	Opex Spend						

Annexure E: Land Value Capture Approaches

City Objectives	Development Challenge	Illustrative Example	Potentially Appropriate LVC Tool	Contextual Preconditions	When is this tool appropriate?	*	**	***
Support appropriate city growth; support economic growth	Market demand exists but is constrained by infrastructure availability Bulk Infrastructure: Capital outlay is too large for the municipality or a single developer to	Bellville – Tygervalley IRT link (as part of IPTN)	Special Assessment District	 There is existing demand There is private sector buy-in for establishing a SAD 	 When no other source of funds is available within a certain timeframe Large-scale public improvements that provide a district-wide benefit Municipality must have legislative authority to create a SAD Best utilised where local support is likely 	✓	1	
	finance upfront Bulk infrastructure: Required infrastructure to respond to demand is not a short-term budgetary priority for the City Connecting infrastructure		Tax Increment Financing	There is existing demand There is a likelihood that land value will increase as a result of investment	 Large-scale projects that would be unfeasible to develop otherwise Where construction of improvements is expected to result in significant increase in the value of surrounding properties Strong demand for greater density than what is currently permitted Where private sector is committed to construct as soon as infrastructure has been built Municipality has authority to establish a taxing district 	V		1
			Development charges (ie. impact fees)		 For private development which requires new infrastructure or services In cities where there is a strong demand for private development Requires dedicated municipal staff to administer effectively 	V		

City Objectives	Development Challenge	Illustrative Example	Potentially Appropriate LVC Tool	Contextual Preconditions	When is this tool appropriate?	*	**	***
Encourage land use intensificatio n in appropriate locations in support of TOD	Market demand exists but is constrained by land availability (or lack of appropriately packaged land) Site fragmented ie. erven too small and/or in separate ownership Land use rights are limiting relative to demand	TOD precinct where precondition s exist Fisantekraal Bellville Rail Corridor (land may be required as part of construction	Sale of development rights	There is strong demand for additional developme nt rights There is strong demand for additional developme nt rights	 For private or city-owned properties in an area where the municipality supports additional density Where there is strong demand for high-density development Most beneficial if the municipality wishes to attract commercial development Dedicated municipal staff and legal counsel would be required to administer the approval process for the sale of development rights and to complete the real estate transaction 	√	1	
		of second line) TOD precinct, where land opportunity. Eg Bellville PTI and	TOD land redevelopmen t or readjustment scheme	There is demand for developme nt and private sector interest	In urbanized area: In a targeted redevelopment district where the municipality has modified zoning codes to increase the maximum floor area ratio Where the market demand for high-density development is strong but where developable land is scarce	√		√
		surrounds			On the urban fringe: For new infrastructure projects that require land assemblage to build the infrastructure In a market where the construction of the infrastructure is expected to result in a significant increase in the value of surrounding properties Where local property owners are willing to contribute their land to invest in improvements, in exchange for future personal gains	√		✓
			City-owned land disposal	Ideally, property market in an upswing	 City-owned property no longer needed for public use Municipality must have authority to dispose of public property for private 	√		1

City Objectives	Development Challenge	Illustrative Example	Potentially Appropriate LVC Tool	Contextual Preconditions	When is this tool appropriate?	*	**	***
					 development Ideally dispose of land when market conditions are positive and where the site does not have major development constraints Land may be disposed as an in-kind payment for infrastructure when the property has sufficient market value to enable a financially viable transaction Land may be disposed as equity for development: When there are challenges to redevelop the site making it unattractive to a private developer, the municipality may contribute the value of the land When land is adjacent to privately owned sites and can be combined into one regeneration project 			
			Density bonuses	There is strong demand for additional developme nt rights	 In strong markets where the municipality would like to encourage development of a public/social benefit not available through the private market When market rents and/or home prices are high, land values are high, and land is scarce Where the municipality supports additional density beyond what is currently permitted Where there is sufficient capacity in the municipality to assign a dedicated team to administer the program 			V

City Objectives	Development Challenge	Illustrative Example	Potentially Appropriate LVC Tool	Contextual Preconditions	When is this tool appropriate?	*	**	***
Encourage land use intensification in appropriate locations in support of TOD	Location supports City's TOD objectives but private sector interest is low		Tax Abatements		 In a distressed market where property owners are not prepared to make improvements to their properties or where there is no demand to rent or purchase property In a stabilized market if there is a lack of a social good eg. affordable housing To incentivise development without providing a direct cash subsidy or debt upfront Municipality must have administrative resources 			✓
			City-owned land disposal		May be used to catalyse regeneration of a larger area where the market has lacked investment	1		1

Annexure F: Alignment Screening Questionnaire and Provisional Scoring Criteria

			estimated score		SCORING CRITERIA		Information Sources and key contacts
Ques tion #	Priorities: Alignment of Capital Budgets (as per report approved by Joint Cluster)	Strategic theme	Score: low/ medium/ high	Low	Medium	High	Information Sources <u>or</u> Spatial Reference Layers
1	Support the strategic objectives of the City – as articulated in the Integrated Development Plan, the Economic Growth Strategy, and the Social Development Strategy	Strategy alignment		Indirectly supports an IDP programme or a strategic intervention identified in the EGS or SDS	Directly an IDP programme or a strategic intervention identified in the EGS or SDS	Project makes a direct and tangible contribution to more than three IDP programmes or strategic interventions identified in the EGS or SDS	(i) Integrated Development Plan (2012-2017) and Annual Reviews; (ii) Economic Growth Strategy; (iii) Social Development Strategy. Source: http://www.capetown.gov. za/en/IDP/Pages/default.as
2	Support the consolidation of the City footprint - in recognition of the fact that the consolidation of the City footprint can (i) enhance the efficiency of the public transport network, (ii) ensure that people are located closer to economic opportunities and social amenities, and (iii) promote efficiencies in basic service provision.	Spatial consolidation		Project (or its influence area) located in greenfield within the urban edge	Project (or its influence area) located within the urban edge <u>and</u> within the built footprint	Project (or its influence area) is located in an integration zone OR Project supports densities of >80 du per ha within the urban edge and the built footprint	px (i) Urban Edge Map (ii) Built Footprint Map (iii) Integration Zones Map
3	Prioritise projects that support the City's objectives with regard to Transit Oriented Development and enhancing the efficiency of the public transport network	Transit- Oriented Development		Project is not located in a Transit Accessible Precinct (TAP)	Project located inside a TAP OR Project's influence area corresponds >50% with a TAP areas OR Project supports initiatives/ projects in a TAP area.	Project constitutes an enhancement/ redevelopment/ support investment of the trunk BRT or rail station, Public Transport Interchange or other node in a TAP OR Project's influence area corresponds >75% with a TAP area OR Project supports initiative(s)/ project(s) located on a BRT/ rail trunk station or PTI or other node in a TAP area.	(i) Transport Accessible Precincts map

			ESTIMATED SCORE	SCORING CRITERIA			Information Sources and key contacts
Ques tion #	Priorities: Alignment of Capital Budgets (as per report approved by Joint Cluster)	Strategic theme	Score: low/ medium/ high	Low	Medium	High	Information Sources <u>or</u> Spatial Reference Layers
4	Maximise opportunities to leverage existing basic service infrastructure (and recognising the need to maintain the City's existing infrastructure)	Basic service infrastructure		Project requires significant investment in new bulk infrastructure - not currently provided for in sector plans (roads/ stormwater, electricity, water, sanitation)	Project requires additional investment in bulk infrastructure, but such investment is already provided for in sector plans (roads/ stormwater, electricity, water, sanitation)	Project requires no additional investment in bulk infrastructure (can be accommodated within current bulk)	(i) Consider utility sector plans: Source: http://www.capetown.gov. za/en/IDP/Pages/StatutoryP lans2012.aspx
				Project constitutes new bulk, link or distribution infrastructure currently prioritised on the 10 year capital programme (roads/ stormwater, electricity, water, sanitation) based on the long term risk assessment.	Project constitutes new bulk, link or distribution infrastructure currently prioritised on the 5 year capital programme (roads/stormwater, electricity, water, sanitation) based on the medium term risk assessment.	Project constitutes new bulk, link or distribution infrastructure currently prioritised on the 3 year capital programme (roads/ stormwater, electricity, water, sanitation), based on the short term risk assessment.	(i) Risk maps per infrastructure type
5	Prioritise projects that are planned as part of a programme of interventions to improve City infrastructure and services in a particular area (and recognising the need for social facilities as part of an integrated approach to human settlements)	Integrated investment programme		Project (or its influence area) has no linkages to planned or committed Human Settlements and/ or MURP capital projects	Project (or its influence area) is an enabler for another committed human settlements and/ or MURP capital project OR has directly linkages to another capital project	Project (or its influence area) is an enabler of more than 1 committed HS and/ or MURP capital projects OR Project contributes directly to the City's objectives with regard to facilities optimisation	(i) Human Settlement Project Pipeline map; (ii) MURP areas map;
6	Prioritise projects in areas where citizens are in greatest need (as determined by socio-economic indicators derived from the Census and by City-level analyses of access to services and amenities)	Socio- economic need		Project to serve community in a "very good" or "good" area OR Project's influence area predominately (>75% of clients) serves a community in a "very good" or "good" area.	Project to serve community in the "average" area. OR Mixed-Income project (project services range of income groups) OR Projec's influence area predominately (>75%) serves a community in the "average" area.	Project (or >90% of its influence area) serves a community in "very needy" or "needy" areas. OR Project addresses identified need for social infrastructure in a particular area (as per CSIR research output).	(i) Socio-economic index map; (ii) CSIR Investment map; The Cape Town Census 2011 Socio-Economic Index Source: http://cityapps.capetown.g ov.za/sites/ikrc/Document/ Cape_Town_Census_2011_S ocio-Economic_Index.pdf
7	Facilitate economic growth by focusing investment in growth-enabling infrastructure in areas of high economic potential, but lagging levels growth and investment	Enabling economic growth		Project (or >75% of its influence area) is situated in an area classified as having a 0-0.4 factor of network constraint on long-term growth prospects (red and orange).	Project (or >75% of its influence area) is situated in an area classified as having a 0.5-0.6 factor of network constraint on long-term growth prospects (yellow).	Project (or >75% of its influence area) is situated in an area classified as having a 0.7-1.0 factor of network constraint on long-term growth prospects (light and dark	Map showing areas where network upgrades are most likely to trigger a commensurate market response in the forseaable future. Values are based on the extent to which future

			estimated score	SCORING CRITERIA			Information Sources and key contacts
Ques tion #	Priorities: Alignment of Capital Budgets (as per report approved by Joint Cluster)	Strategic theme	Score: low/ medium/ high	Low	Medium	High	Information Sources <u>or</u> Spatial Reference Layers
						green).	commercial and industrial growth prospects are being hampered by bulk and road network constraints.
				Project (or >75% of influence area) is situated in an area classified as having a 0-0.4 factor of business environment constraint on long-term growth prospects (red and orange).	Project (or >75% of its influence area) is situated in an area classified as having a 0.5-0.6 factor of business environment constraint on long-term growth prospects (yellow)	Project (or >75% of its influence area) is situated in an area classified as having a 0.7-1.0 factor of business environment constraint on long-term growth prospects (light and dark green).	Map showing areas where improvements to the business environment (e.g. public space enhancements, safety measures and other amenities) is likely to trigger a commensurate market response in the forseeable future, if complemented by appropriate urban management measures. Values are based on the extent to which local business areas are underperforming relative to their long-term location potential.
8	Prioritise catalytic projects with the potential to unlock opportunities for crowding in investment in priority areas - as articulated in the Built Environment Performance Plan (BEPP)	Impact		Project (or >50% of its influence) could unlock potential in the area and has a low to medium likelihood of triggering further investment from the private sector or national/provincial government.	Project (or >75% of its influence) will unlock significant potential in the area, with a high likelihood of triggering further investment from the private sector or national/provincial government.	Project (or >90% of its influence) is Identified and acknowledged as a Catalytic Project in the CoCT Built Environment Performance Plan (BEPP)	BEPP catalytic projects

Annexure G: Treasury Specified Format for Catalytic Projects Follow this link