COMPREHENSIVE INTEGRATED TRANSPORT PLAN 2013 – 2018

MINI REVIEW 2014

May 2014

Contents

Tables

Figures

Annexures

1 OVERVIEW

In terms of section 36 (1) of the National Land Transport Act (No 5 of 2009) (NLTA), all Metropolitan Planning Authorities must prepare and submit to the Provincial Member of the Executive Council (MEC) a Comprehensive Integrated Transport Plan, (CITP), for their respective areas for a five year period and must update the CITP as frequently as prescribed. The CITP 2013 – 2018 for the City of Cape Town was approved by the Council in December 2013 and by the MEC for Transport and Public Works in January 2014.

This 2014 Mini Review is an addendum to the approved CITP 2013-2018. It does not replace the approved 5-year plan nor is a formal review. Rather, the need for this mini-review stems firstly from the commitment to address the items identified in "Table A5: TCT CITP Mini Review Immediate Term Priorities", which was included in the Executive Summary of the approved CITP 2013-2018, secondly to address the comments made by the MEC in approving the CITP, and lastly to align the approved CITP with the financial management timelines and the City's MTREF. At the time of the approval of the CITP, the TCT budget had not been aligned to the MTREF due to being mid-financial year. Further, the new TCT structure had not been fully rolled out yet.

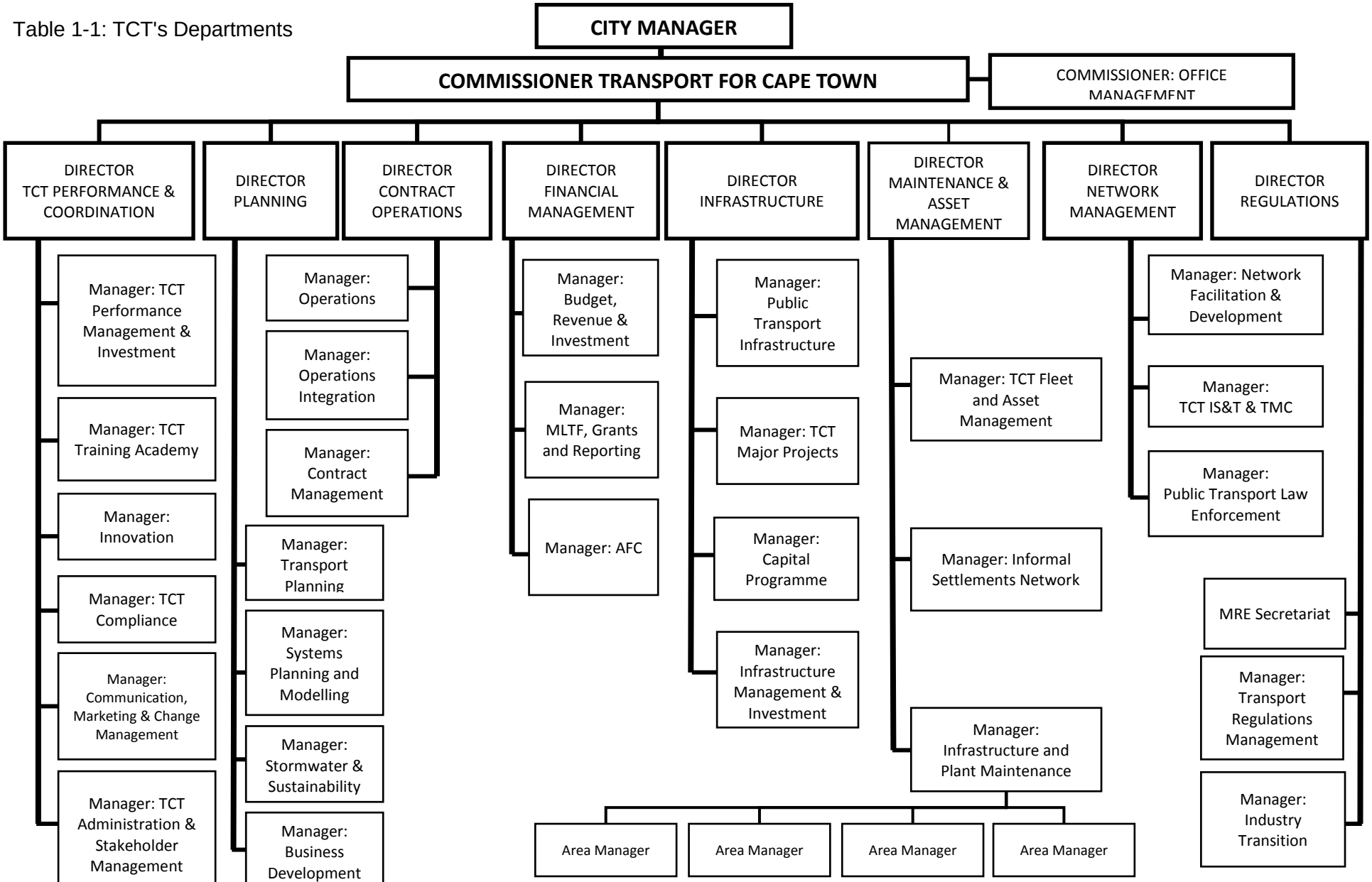
In addition to the progress for various projects described in this document, the mini review brings into the fold of the CITP the following policies and strategies and interventions that have been completed or approved by Council since December 2013, and which provide positive, implementation-oriented service delivery mechanisms

- Approved and gazetted TCT Constitution Bylaws, No 7208 of 2013
- Parking Policy
- Universal Access Policy
- Development Contribution Policy
- Road Safety Strategy
- Memorandum of Understanding between Province, TCT and Golden Arrows Bus Services
- The creation of TCT as the country's first Transport Authority, which has been registered as a "World Design Capital 2014" legacy project.

Table 1-1 shows the current Organogram for TCT, which includes the following minor amendments to the structure shown in the original CITP:

This document was not subjected to a public participation process as it does not introduce any new principles or objectives for the CITP 2013-2018, which underwent a comprehensive public participation process during September 2013. This addendum ensures both alignment and compliance from a budgetary point of view, as well as inclusion of a number of elements, as detailed above, all of which have gone through an extensive public participation process as individual deliverables. Further, the TCT MTREF budget has just gone through public participation.

Table 1-1: TCT's Departments



2 TCT LONG TERM STRATEGY

2.1 OVERVIEW

Transport and the related infrastructure, although not classified as an essential service, is critical to the economics of any city. This relates to the individual's economics or accessibility as well as the economic sustainability, growth or decline of the city concerned.

Local government's financial allocation does not cover the transport need and ever increasing maintenance demands of cities. The need to go beyond these financial bounds resulted in the creation of a transport authority in Cape Town, which has mechanisms at its disposal beyond that of a directorate.

TCT is the first transport authority to be established in the 21st century. The information and technological age that we are in will assist in addressing the enormity of the service delivery need. The overall objective for the establishment of TCT is to work towards breaking even in the long term.

2.2 PROBLEM STATEMENT

TCT is responsible for the planning, design, costing, construction, maintenance, replacement, extension and upgrading of the City's road network, the public transport network and public transport infrastructure, the stormwater network and stormwater infrastructure, and related facilities.

A study was completed to assess the financial cost of addressing critical road network deficiencies. The focus of the analysis was to determine what type of infrastructure investment would be required to be able to release areas in the City for further investment and functionality. The project research for the congestion hotspots has quantified the financial need at approximately R900 million.

Deteriorating road conditions require maintenance mechanisms to prolong the life and efficiencies of the transport system. The current budget shortfall and the lack of prioritisation have meant that the management and maintenance of the road network is on a continuous deterioration curve. TCT determined that its largest asset, the 10 000km of roads, had an estimated value of R78.9 billion in 2013. The project research has quantified the need just for the categories 4 and 5 roads at R12 billion over 15 years, and will still determine the same for other roads.

A substantial increase in the recognition of the roll of public transport demands the need to roll out quality and unified public transport across the City of Cape Town. This is inclusive of an integrated and performance-driven road-based and rail public transport network and an integrated ticket system and a timetable that runs to at least 95% of its schedule. The funding sources for this initiative, which is a requirement in terms of the NLTA, are currently not adequate and are disjointed and include the PTIG, PTNOG, PTOG and up to 4% of Rates. The management and prioritisation of funding sources are being addressed under the Metropolitan land Transport Fund (MLTF).

Across the City of Cape Town there are approximately 352 public transport interchanges, many in disrepair and only 60 of which are currently being actively managed by TCT. There are also over 3 500 bus shelters of varying standards, but many of which are well below socially acceptable standards. There is overcrowding on public transport and the access facilities are in many cases inferior and substandard. The scale of the problem is enormous

and the financial burden on the City, to be able to address these issues, is considered by many insurmountable, reaching into the billions or rand.

Cape Town is, due to a number of historic contributory factors, an inefficient city that is resulting in users (residents, commuters, freight and tourists) costs being exacerbated. This places an added burden on the local authority that can also not adequately provide services and infrastructure due to the costs. The contributory factors to this dilemma include:

1. Historic spatial planning and socio-economic engineering has resulted in:
    - The majority of the poor living in remote areas with no economic base
    - The separation of land uses and long distances to places of work
    - Generally low densities which are on average between 15 – 19 dwellings / ha.
2. Due to an under-investment into public transport, as well as in the road network itself, coupled with the above, this has resulted in:
    - Tidal morning and afternoon peaks and one way flows of people. This results in a very expensive public transport service that is a burden to the City
    - An over reliance on the private car as public transport cannot serve the growing need
    - Different standards in the public transport system

2.3 CITP VISION AND OBJECTIVES

The long term goal of TCT is to achieve the “Transport Vision of 1”, as show in Table 2-1. The Vision will be pursued through targeting the nine long term objectives, which are repeated here in Table 2-2.

Table 2-1: TCT's Vision of 1 - Priority Programmes and Projects

TRANSPORT FOR CAPE TOWN'S VISION OF 1	1	Plan	1 Plan refers to the CITP 2013-2018, which includes the 9 long-term objectives and will include the mini review to get the CITP in line with the budgetary cycle and to allow for the performance-based, target-driven implementation plans for each of TCT's 8 Departments.
	1	Network	An integrated road and rail network, which relates to the infrastructure, facilities, street furniture, systems, etc. that is well maintained and facilitates safe, reliable, efficient and effective access for a multiplicity if users.
	1	Management System	Over the next five years and beyond TCT will establish a unified information management system and a functional management system for all of its departments, which focus on focused, performance-driven service delivery. The management system will further develop unified and sustainable standards for all of its functions so as to drive down the cost of the User Access Priorities.
	1	Contracting Authority	The Contract Authority relates to section 41 and 46 contracts. The assignment for the management of the section 46 contract is eminent. TCT will set up and manage all vehicle operator contracts in a performance-driven, unified manner.
	1	Ticket and Timetable	Critical to driving down the User Access Priorities that relate to social, economic and environmental costs, is the establishment of an integrated timetable and an electronic EMV ticket across all modes. The aim is to have both in place within the next 5 years.
	1	Unified Enforcement System	1 Unified Enforcement System relates to the establishment of the Municipal Regulatory Entity (MRE), strengthening the public transport law enforcement capacity in the City and rolling out an integrated CCTV system across Cape Town, all managed at the TMC.
	1	Unified Structure	TCT, the City of Cape Town's transport authority has been established. It now operates within the bounds of the TCT Constitution Bylaws, 2013 and the newly established Implementation Plan. The foundations of the unified structure have been established, which enables its further growth over the next 5 years and beyond.
	1	Brand	The TCT Brans had now been established and confirmed in a brand strategy, as detailed in Chapter 10 of this CITP. It has also been aligned to the City of Cape Town's Brand. The aim is to roll the TCT Brand out over the next 5 years and beyond so as to enable transportation direction, information management, regulation and control.

Table 2-2: TCT's Long Term Objectives

	OBJECTIVES
1	An efficient and viable relationship between land use, supporting infrastructure and transport for the sustainable development of the City region
2	Integrated, intermodal, interoperable, responsive and car competitive public transport for the benefit of the community
3	An economically viable transport system by balancing service provision with demand and through transparent regulation
4	Services delivered in an accountable, investment orientated and performance driven manner, ensuring quality and unified standards
5	A costed, viable and financially accountable transport management system and network through exploiting all potential sources of funding
6	Consolidated and improved public transport law enforcement functions in the City so as to facilitate safety and security on the public transport network and related facilities for the benefit of all
7	Comprehensive communication and stakeholder management under the banner of TCT so as to ensure responsible service delivery in partnership with all industry role players
8	A fully integrated, responsive and well maintained infrastructure network along with related facilities that are appropriately managed as the largest asset of the City
9	Fully functional and user friendly systems on the intermodal network

2.4 TCT LONG TERM STRATEGY

Now that the TCT Constitution, Bylaw No 7208 of 2013, has been gazetted there is a need to have a long term strategy that gives effect to the Bylaws as well as beginning to address the service delivery issues that stem from the Problem Statement above.

The long term strategy consists of four strategies, which started through the implementation of the TCT Action Plan Matrix. The essence of the TCT Long Terms Strategy is contained in Figure 2-1 and Table 2-3 and is summarised in the sections below.

Figure 2-1: TCT Long Term Strategy Timeline

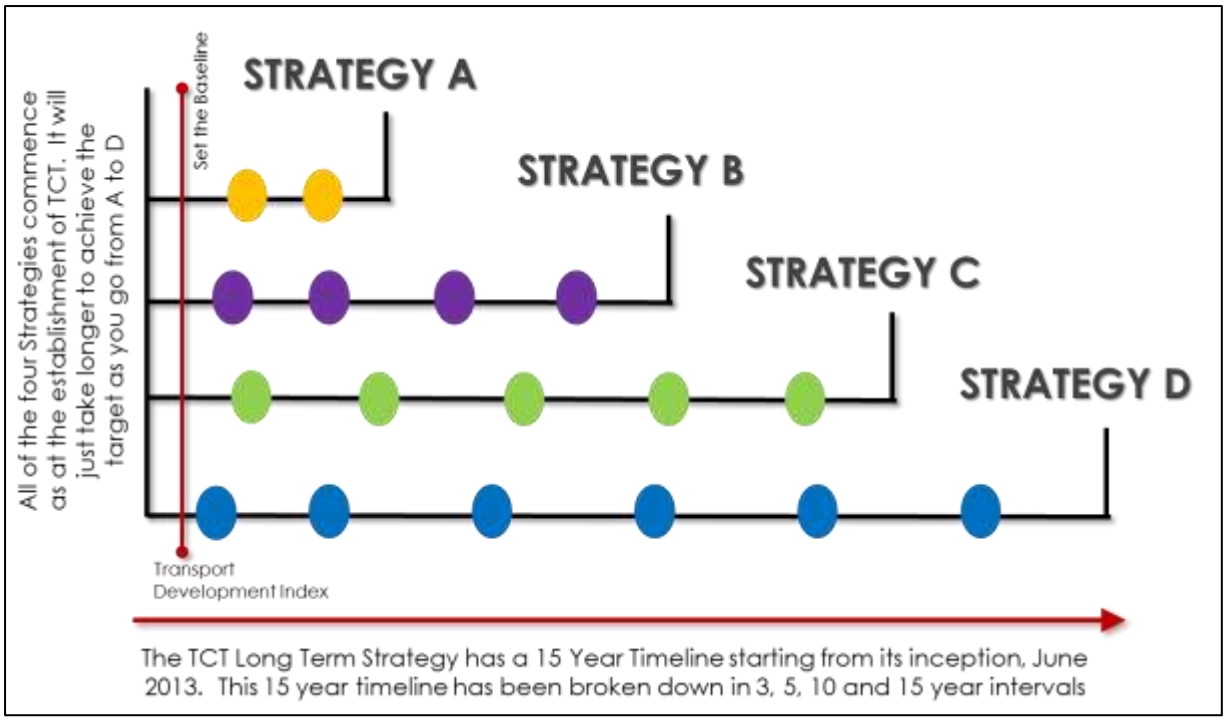


Table 2-3: TCT Long Term Strategy Description

Strategy	Timeline	Description
A	3-year	Consolidation of the TCT transport authority model with the focus on performance-orientated service delivery
B	5-year	Consolidation of the TCT transport authority financial Management strategy and investment logic under the MLTF
C	10-year	Rollout of the integrated road and rail methodology with the focus on one brand and ticket and one integrated timetable
D	15-year	Ensure that costs of the User Access Priority are halved for the benefit of the citizens of and visitors to Cape Town

2.4.1 TCT Long Term Strategy: Strategy A

Consolidate the TCT Transport Authority Model with the focus on Performance-Orientated Service Delivery.

The first step for Cape Town is to consolidate the reason for its existence in that it will draw from the transport authority community and its methodology of performance and investment.

- IS&T System
- TCT App and Website
- Asset Management Register and RISFSA Register
- MRE and CA

If TCT does not fulfil its role as a transport authority, Transport would not only drain the resources of the City but at the same time service delivery would continually fall short of the need and the City would fall into the same trap as many other cities across South Africa where the infrastructure will fail.

2.4.2 TCT Long Term Strategy: Strategy B

Consolidate the TCT transport authority financial management strategy and investment logic under the MLTF.

The overarching principle that TCT has adopted in terms of service delivery is an investment and performance driven approach that is accountable, equitable and costed.

- Release abandoned road schemes
- All projects cost
- MLTF operational
- TCT Investment Plan & Funding packages

Consolidating funding sources and utilising them as strategic leverage tools; Commitment by NDOT and National Treasury on the financial integrated transport model and long term strategy so as to leverage additional funding; Revenue generation; Over 60% of all TCT projects and programmes now have an economic and investment outcome

2.4.3 TCT Long Term Strategy: Strategy C

Rollout of the integrated road and rail methodology with the focus on one brand, one ticket and one integrated timetable.

One of responsibilities for TCT is to achieve integrated, intermodal and interoperable transport across the City of Cape Town in a unified manner and at the same standard. The achievement of this goal within the next ten years is the target. This is for both road and rail, scheduled and on-demand services, and includes:

- Integrated ticket on all modes of transport (road and rail)
- Single brand and way finding across the City of Cape Town
- Public transport for more than 80% of households within 500m
- Required to ensure that service delivery does not continually fall short of the need, and the City do not fall into the same trap as many other cities across SA where transport infrastructure will fail.

Development of Blue Downs; Expedite the trunk BRT network; Rollout the Way finding; Recapitalisation of the entire bus fleet into one brand; Extension of public transport in terms of the IPTN in terms of growth areas; Regulated transport industry

2.4.4 TCT Long Term Strategy: Strategy D

Ensure that costs of the user access priority are halved for the benefit of the citizens of and visitors to Cape Town.

Every person in Cape Town – be they a citizen, business person or visitor – must be able to move from A to B for their own purposes. Behind that simple statement, however, lies a matrix of interlocking factors that vary from one type of user to another. For each type of user, there are four key questions:

- who is the user?
- what does access mean to those users?
- what are the access priorities for those users?
- what is the social, economic and environmental cost of those access priorities to those users?

Transit Orientated Development Assets are used as investment leverage tools

2.5 TCT LONG TERM STRATEGY PRIORITIES

An Action Matrix was created to show where each priority project and programme fits into these four strategies, as shown in Annexure A.

3 FUNCTIONAL REGION PLANNING

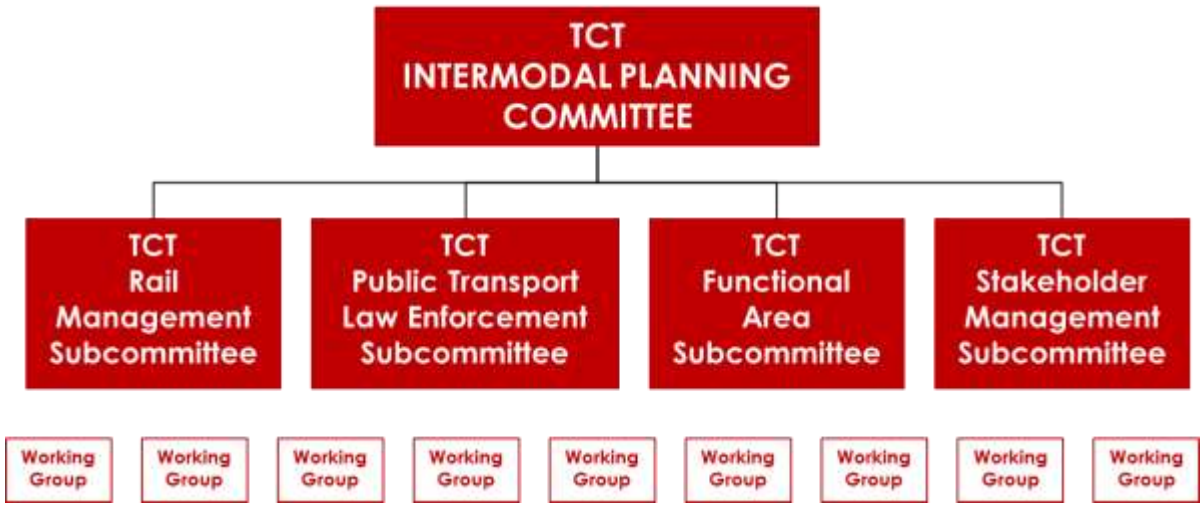
3.1 OVERVIEW

a Functional Region sub-committee has been established under the Intermodal Planning Committee (IPC) with the purpose to align and integrate transport planning objectives and implementation for the Cape Town functional region. This subcommittee will include planning for interaction with towns like Paarl, Stellenbosch, Saldanha, Malmesbury, and others. It is essential for Cape Town to ensure transport investment is co-ordinated throughout the functional region to minimise the user access cost for trips across the city's boundary.

3.2 IPC SUB-COMMITTEE

Figure 3-1 shows the four subcommittees established under the IPC. The subcommittees will be supported by Working Groups to be established as required.

Figure 3-1: IPC Subcommittees



Terms of reference (mandate) for each of the subcommittees are in draft form, and will be finalised by the respective committees and Working Groups. Table 3-1 gives an indication of the intent with the relevant Terms of Reference.

Table 3-1: Terms of Reference and Subcommittees

Subcommittee	Terms of Reference	Working Groups
TCT Rail Management Subcommittee	• To oversee the rail transport initiatives as determined for the functional area of Cape Town • To report on rail related matters as mandated by the IPC (Full TOR to be confirmed)	• Rail Planning and Project Implementation Working Group • Rail operations and Business Management Working Group • Land Use Planning and Development Working Group
TCT Public Transport Law Enforcement Subcommittee	• Involve the respective law enforcement agencies as equal partners in promoting the safe and efficient use of the transport system within the City of Cape Town. • Align and consolidate the prioritised activities of the Law Enforcement Agencies and Transport for Cape Town. • Establish and set agreed upon targets against which the service and efficacy thereof can be measured. • Investigate the role out of additional technology in support of law enforcement requirements in the transport system. • Investigate the appropriate option for funding the expansion of resources in support of the priorities identified. • Investigate: a) the efficacy of the dedicated law enforcement teams. b) to what level must resources be increased to deliver a desired and equitable level of service. c) the establishment of a separate law enforcement agency for transport d) a combination of (a) and (b). • Report to be provided to Mayco members / HOD's	-
TCT Functional Area Subcommittee	(Full TOR to be confirmed)	(Full TOR to be confirmed)
TCT Stakeholder and Communication Subcommittee	(Full TOR to be confirmed)	(Full TOR to be confirmed)

3.3 PRIORITY FOCUS AREAS

The following prevailing matters will be discussed by the Functional Region Sub-committee:

- Freight Rail along Fisantekraal line between Cape Town and Saldanha IDZ
- High order passenger rail or BRT extension from Atlantis to Saldanha Bay
- Interim "scheduled" road-based public transport (PT) to establish PT market with growing economic Development

- Extend passenger rail services from one per day between Malmesbury and Bellville/Cape Town
- PT Links, in terms of IPTN for functional region between:
  - Stellenbosch – Somerset West
  - Stellenbosch – Bellville (via Kuilsriver)
  - Stellenbosch – Bellville/Durbanville (via Kraaifontein)
- Road upgrade of the R44 between Somerset West & Stellenbosch with PT lane/facilities
- Issuing of Operating Licenses for trips between Stellenbosch and Various Cape Town Nodes
- PRASA services in lieu of N1 upgrade for Paarl & Stellenbosch trips
- Separation of functions between PRE and MRE for trips to load in both direction across City boundary
- Freight/Goods movement between agricultural hinterland and processing industry in Cape Town
- Protection of Abnormal Load routes across boundary
- Axel load control consistent throughout Functional Region
- Land densification around PT (TOD) in Functional Region to maximise benefit of PT investment
- Issues that excludes the CCT and which sit between neighbouring municipalities
- Joint Planning funding to benefit from scale-marginal cost to plan from City to Stellenbosch, Paarl, Saldanha Bay

4 PUBLIC TRANSPORT OPERATIONS STRATEGY

4.1 OVERVIEW

This chapter expands on the principles and planning discussed in Chapter 6 of the CITP. It is emphasized that the relatively high operational standards remains necessary to deliver the desired public transport system, and to achieve the 9 Objectives for TCT. This system must offer a dignified service to captive public transport users, while offering a real alternative to current private car users. However, high standards come at a high cost, which requires a carefully designed implementation plan to ensure its sustainability. As shown before, this relies substantially on implementing the TOD strategy over large parts of the Transit Network.

4.2 FINANCIAL ASSESSMENT

The operational requirements to run road-based public transport at the levels of service required by the CITP 2013-2018, in the current urban form of Cape Town, are proving to be financially unsustainable and could lead to significant long-term implications for the future roll-out of road-based public transport. This section outlines the various factors which drive the operational cost of running road-based public transport services in Cape Town and recommends principles and interventions to ensure that public transport is affordable to the City and its residents. It is essential that these interventions are prioritised across all City departments.

4.2.1 Cost Factors

The following factors contribute to the high cost of providing quality public transport in Cape Town.

- Urban sprawl resulting in low population densities. In addition, as is typical for coastal cities, the CBD being on the edge of the metropolitan area leads to longer trip distances. Dispersed urban form leads to passenger numbers being low along many routes resulting in demand best met by small vehicle sizes and longer headways. Smaller vehicles lead to higher driver and other operational costs per passenger carried. Larger vehicles and longer headways increase waiting time, which is a key factor in service levels.
- Homogeneous land use planning resulted in single direction, point-to-point demand. Public transport vehicles travel full in one direction during the peak, but empty on the return trip.
- Peak volumes are very pronounced, which lead to very high capacity requirements that remain unproductive outside of the peaks. By increasing passengers in the return trip, revenue is significantly increased without increasing operational costs. This is inefficient, but will remain a short-to-medium term reality until more mix-use developments are realised.
- Travel along most corridors is generally line haul, where a full train of bus leaves the origin and reaches its destination with very little boarding and alighting along the route. The absence of seat renewal results in a much reduce revenue opportunity. Higher density, mixed use corridors provide the environment for seat renewal along the route.
- Low income levels amongst most public transport users result in an inability to raise fares to overcome some of the inherent inefficiencies, thereby leading to a higher subsidy requirement. Attracting middle to higher income passenger to

public transport can be beneficial if a differential fare can be charged for different service levels, such as in the rail system.

- Apart from the initial infrastructure investment, formalising the road based public transport system has inherently higher operational costs. This stems from higher standards for safety, operating certainty, information management and fare collection.
- The dispersed land use pattern and low density urban resulted in an extensive road network, designed around the needs of car users. The resultant strong private car culture drives more sprawling land development patterns in a vicious circle.
- Parking standards designed to accommodate unconstrained car trips lead to parking in Cape Town being relatively abundant and inexpensive. However, the Parking Policy discussed in Chapter 3 is designed to change this in line with improvements in the public transport system.

The established private car orientation is difficult to shift since the space required by private motorcars makes implementing the higher densities required for successful public transport system difficult to achieve. This shift is the subject of the TOD Strategy section of this CITP.

4.2.2 Principles to Address Affordability

Possible strategies and interventions for managing costs include:

- Smoothing the peak to off-peak demand differential through structuring fares so that there is a significant incentive to ride in the off-peak rather than the peak;
- Embarking on campaigns to encourage more flexible working hours for businesses as well as educational establishments;
- Improving reverse flow demand through promoting mixed land use and more flexible hours;
- Optimising route design through good initial design and continuous improvements based on information feedback from the control centre and fare system;
- Ensuring vehicle and system design allows maximum flexibility and inter-operability between vehicles, including trunk and feeder vehicles;
- Reducing vehicle operator costs through competitive tendering once initial contracts laps;
- Price competition between operators wherever feasible;
- Maximising fare revenue against costs through ensuring fares are as high as is practically and politically reasonable;
- Managing off-peak headways effectively through optimising the balance between off-peak user convenience and increasing headways to cut costs;
- Optimizing coverage by providing the appropriate vehicle size and infrastructure to match the prevailing demand;
- Remove competition for the same passenger trip through optimisation of the IPTN;
- Minimising interchange and station costs through optimal design;

- Maximise the travel speed of Level 1 and 2 services through appropriate infrastructure provision and minimal station spacing, to maximise the attractiveness to choice passengers.
- The City and National government need to agree on mechanisms to ensure financial sustainability, balancing service levels with subsidy levels and managing financial risks. This implies that national government must be urged to:
  - Clarify the long term fiscal envelope
  - Co-determine an acceptable level of operational subsidy and the combination between national grants or city's own revenue sources
  - Assign own revenues to the city for this purpose
  - To the extent operational subsidies are grant funded, guarantee reliable and predictable flows
  - Design surety mechanisms to protect against unexpected events with adverse financial consequences

4.3 IPTN PROPOSED NETWORK

An IPTN is defined in the NLTA as a system in a particular area that integrates public transport services between modes, with through-ticketing and other appropriate mechanisms to provide users of the system with optimal solutions to be able to travel from their origins to destinations in a seamless manner with integrated pedestrian access for all passengers.

The purpose of the IPTN project is to develop an ultimate integrated public transport network and operational plan for the entire Cape Town metropolitan area, with the aim to improve mobility and accessibility for all residents in the area. The IPTN plan encompasses all modes of public transport, including rail and road based technologies, as well as proposals for improving non-motorised transport (bicycle and pedestrian) access and park-and-ride facilities at modal interchange locations, with an emphasis on the trunk (rail and road) network.

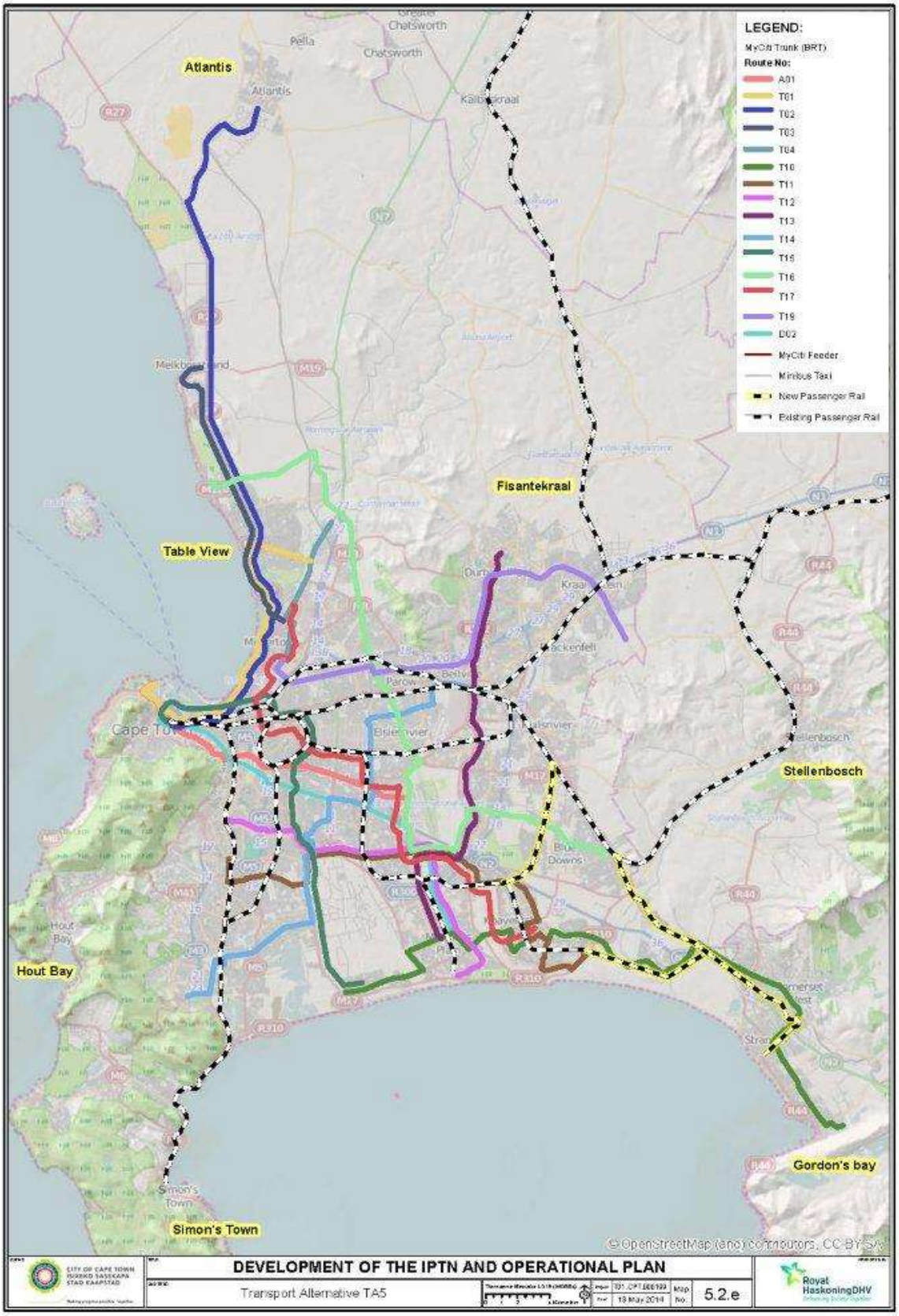
The IPTN plan determines which modes are best suited to cater for the existing and future public transport demand, route descriptions and modal interchanges, station and stop locations, system operational parameters, infrastructure needs and estimates of total system costs.

The proposed integrated public transport network for Cape Town was arrived at through a process of modelling various scenarios and is explained in a separate document entitled *Integrated Public Transport Network Plan 2014: Proposed Network*. This process included modelling scenarios of possible future land use distribution at a future date, namely 2032, collecting data about existing public transport and the travel behaviour of Cape Town residents and using this information in a transport demand model to test five transport network alternatives. These networks were assessed in terms of economic, social, environment, transport, cost and alignment with corporate plans in order to arrive at the preferred network.

The proposed network for public transport is indicated in the figure below. The network provides coverage of 80% of the population within 500m of public transport, and aims to balance meeting the target level of service for the passengers with the affordability of the operating the network to the City.

This proposed IPTN will be submitted for approval at the same time as this ITP, and will be followed by an Operational Plan for this network and an Implementation Plan expanding on the phasing-in of this network. The proposed IPTN will form the basis for subsequent work such as the detailing of the feeder network through corridor plans, and further details of the costs through business plans.

Figure 4-1: Proposed Integrated Public Transport Trunk Network for Cape Town for 2032



4.4 IPTN IMPLEMENTATION

This section describes progress on the priority projects listed in the CITP in terms of the hierarchy of modes, and with operations following infrastructure projects.

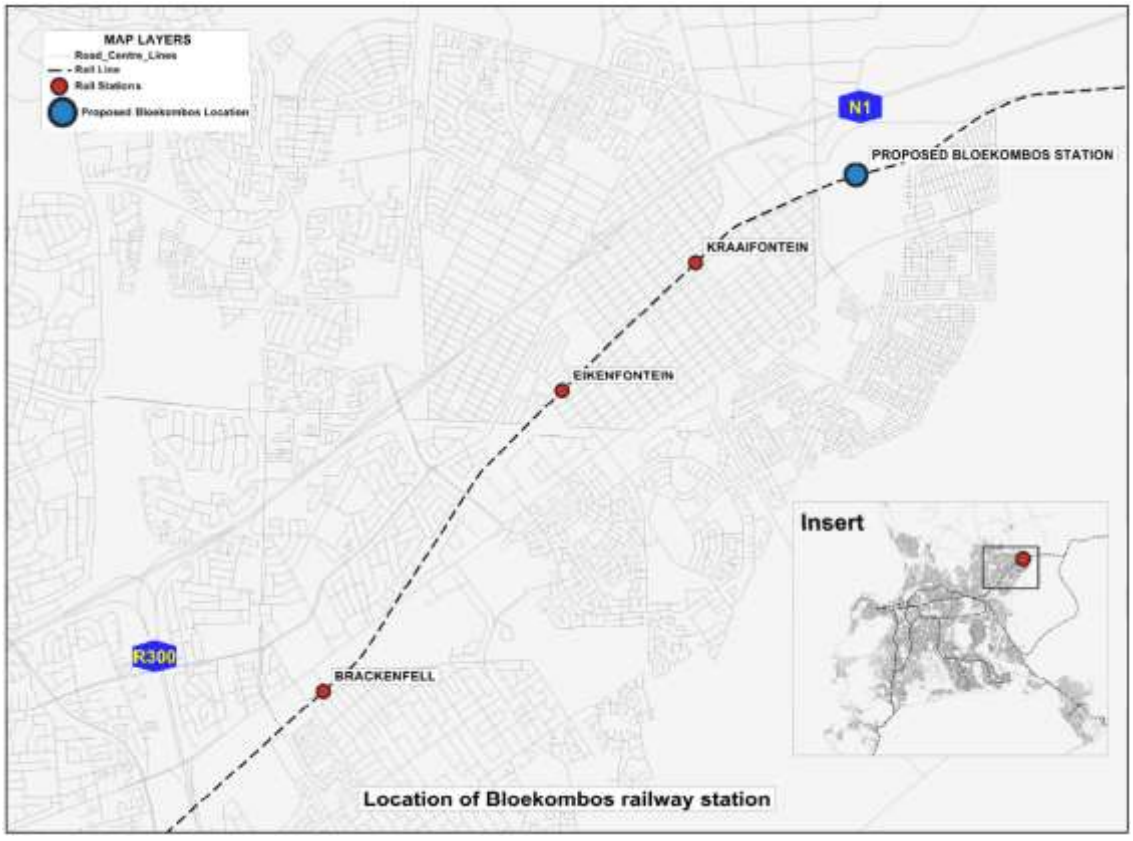
4.4.1 Blue Downs Rail line

PRASA has commenced the review of the design of the railway line in order to confirm, amongst other things, the extent of the rail reserve required and the exact location of station. It will also finalise the procurement of the construction budget in the new financial year.

4.4.2 Bloekombos station

Increasing demand for public transport services from the Bloekombos and Wallacence residential areas as well as neighbouring industrial developments has lead PRASA to approve the development of the Bloekombos Railway Station. This development is fully supported by the City. Figure 4-2 shows the location of the station, adjacent to the Kraaifontein Station.

Figure 4-2: Location of future Bloekombos rail station



In 2006 the erstwhile South African Rail Commuter Company (SARCC), now PRASA, commissioned a study with the City's support into the provision of a railway station in the Kraaifontein East area. The recommendations contained in their planning report titled "Kraaifontein – Muldersvlei Future Commuter Station (Bloekombos): Station Location and Station and Environs Investigation (May 2006)" provided the location, a preliminary station and precinct layout as well as the supporting road side infrastructure requirements.

The development of the station by PRASA is subject to the availability of capital funds. In addition to the station platform and facilities additional supporting infrastructure will be required to be provided by the City. This will include inter alia, road access to the north and south sides of the station, public transport interchange facilities and possibly a street-to-street pedestrian overpass.

Given that the land holdings to the north and south of the station are largely undeveloped it is essential that due cognisance of the station location and its access requirements are taken into account in any adjacent land use development and subdivision approvals.

4.4.3 Phase 1 of MyCiTi

Table 4-1 lists the new MyCiTi services in Phase 1 of the roll-out, that commenced during the drafting of this mini review.

Table 4-1: Implementation of Phase 1 of MyCiTi

Date	Station	Routes
7 September 2013	Grey, Janssens and Wood Station became operational	Extension of T01 from Table View to Wood Station Route 213, West Beach – Table View - Sunningdale Route 214, Big Bay – Table View - Parklands Route 215, Sunningdale – Gie Road - Wood Route 216, Sunningdale – Woodrive - Wood (Routes F14,F15 and F16 were removed)
2 November 2013	Melkbosstrand and Queensbeach Station became operational	Route 102, Salt River – Walmer Estate – Civic Centre (Only Headways were amended on this route) Route 101, Vredehoek - Gardens – Civic Centre Route 103, Oranjezicht – Gardens – Civic Centre Route 104, Sea Point – Waterfront – Civic Centre Route 105, Sea Point – Fresnaye – Civic Centre Route 217, Parklands – Table View – Big Bay - Melkbosstrand Route 230, Duynefontein - Melkbosstrand
30 November 2013	Sandown, Porterfield, Royal Ascot and Omuramba Station became operational	Route T03, Melkbosstrand - Omuramba Route 106, Waterfront Silo – Civic Centre – Camps Bay (Clockwise) Route 107, Waterfront Silo – Civic Centre – Camps Bay (Anti-Clockwise) Route 251, Omuramba – Montague Gardens
14 December 2013		Route 113, Three Anchor Bay – Fresnaye – Sea Point
15 February 2014		Route 108, Hout Bay – Hangberg – Sea Point – Civic Centre Route109, Hout Bay – Imizamo Yethu – Sea Point – Civic Centre
1 March 2014	(Circle East, Potsdam, Killarney, Dunoon and Usasaza Station became operational)	Extension of T01 from Wood Station to Usasaza Station
12 April 2014	(Atlantis Station became operational)	Extension of T03 from Melkbosstrand to Atlantis Station Route 232, Atlantis – Avondale – Protea Park – Atlantis Industria West Route 233, Atlantis - Saxonsea Route 236, Atlantis - Sherwood Route 239, Atlantis – Duynefontein - Melkbosstrand

4.4.4 N2 Express

The MyCiTi N2 Express service from Khayelitsha and Mitchells Plain to Cape Town Central Business District (CBD) represents the first, introductory footprint of the MyCiTi service into the Metropolitan South East (or Metro South East, in short). It is currently being conceived as an initial limited service to alleviate overcrowding on current services, to provide a universally accessible service to and from these areas which connects to the Phase 1 MyCiTi network, and to offer the minibus-taxi industry the opportunity to develop the requisite capacity to manage larger scale bus operations in future.

The MyCiTi N2 Express service is the start of a process and provides an opportunity for the City of Cape to engage all directly affected parties in the short, medium and long term planning and development of improved public transport systems in the Metro South East, which will be rolled out across the Metro South East commencing with the MyCiTi N2 Express service.

It is envisaged that services will be contracted in this area through three distinct contracting phases:

- A pre-interim contract stage of the N2 Express, for the period prior to the commencement of the Interim Contract
- The Interim Contract stage of the N2 Express service, spanning three years from 1 July 2014
- Various Long-term Negotiated Contracts for the Metro South East

The proposed N2 Express service covers, in part, the south-east portion of the City of Cape Town's metropolitan area. It will provide express connections between the Metro South East, i.e. Mitchells Plain/ Khayelitsha and the Cape Town CBD using the N2 freeway (Refer to Figure 4-3.

The N2 Express service is an *express BRT service* that is proposed to start operations in the course of 2014. It is intended that pre-interim services, mainly aimed at capacitating the taxi industry, commence from April or May 2014, with the interim contract commencing in July 2014.

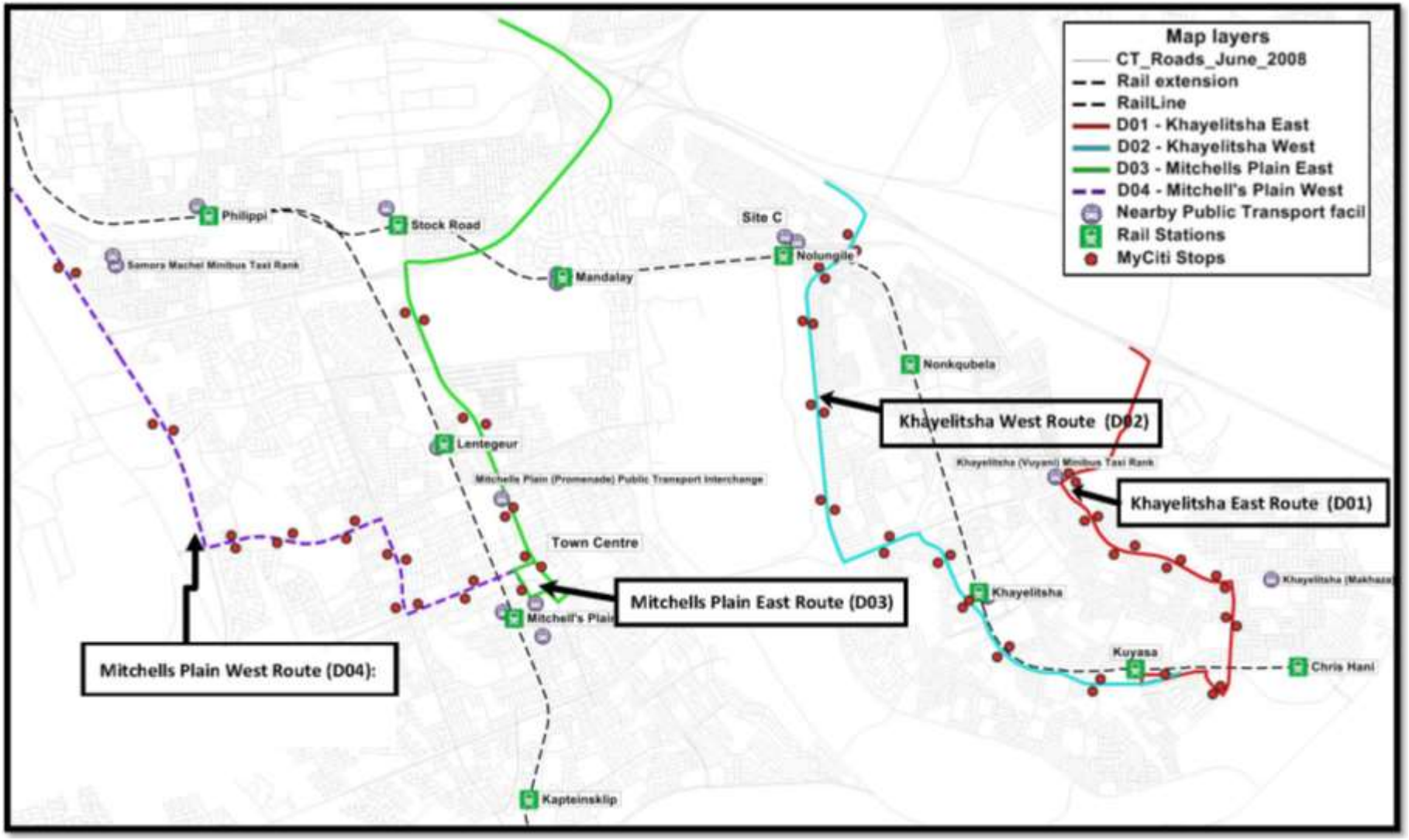
The N2 Express service is a supplementary MyCiTi service that performs a specific function until the Khayelitsha to CBD rail service is adequately upgraded. The long-term role of the N2 Express service will be reviewed subsequent to the update of the Integrated Public Transport Network (IPTN), which is planned for completion during 2014.

The service is designed to pick up (and drop off) passengers along routes within Khayelitsha and Mitchells Plain using universally accessible low floor vehicles before joining the N2 into the CBD. It thus offers the option of a service which will avoid the need for a feeder to trunk transfer for some users travelling between points on this route and the CBD.

On reaching Civic Station in the CBD passengers will be able to transfer seamlessly within the station to the Phase 1 network of MyCiTi. This will offer services to places such as destinations in the City Bowl, Sea Point and Camps Bay, the Waterfront and Hout Bay, as well as all MyCiTi destinations up the West Coast as far as Atlantis – on a single fare.

The proposed direct express services will utilise the existing bus and minibus-taxi (BMT) exclusive use lane along the N2 in the inbound direction. This BMT lane is a dedicated lane on the critical congested section of the N2, which is not physically separated from the adjacent mixed traffic lane.

Figure 4-3: Proposed N2 Express Routes



In the outbound (from the CBD) direction, the services will operate in mixed traffic.

The intention is that passengers should pay fares using Europay / MasterCard / Visa (EMV) compliant contactless smartcards, also referred to as Low Value Payment (LVP) cards, a term indicating that the cards can only be used for low value payments (with a limit currently set at R200 per transaction). The payment of fares will take place at stations or on-board vehicles for open bus-stop operations.

The N2 Express follows a different contracting model from that which the industry has been accustomed to in the past. Previously, public transport operators (including minibus-taxi operators) have made all or most of their money directly from the fares paid by the passengers they carry. In terms of the envisaged model for the N2 Express service the Vehicle Operator Company (VOC) is contracted to run routes and timetables as directed by the City's Transport for Cape Town (TCT) directorate and paid mainly according to an agreed rate for fixed costs, the number of buses and drivers required and the kilometres driven.

The supply of public transport services between Mitchells Plain / Khayelitsha and the Cape Town CBD on the route to be served by the MyCiTi N2 Express is currently less than the estimated passenger demand. The N2 Express service is intended to address the shortage of supply. To the extent that the N2 Express service will provide additional capacity, it will not impact on existing services. However, it is acknowledged that the N2 Express may impact to some degree on existing operators; therefore the interests of these operators need to be taken into account. The actual level of impact will only be known once the new service becomes operational.

4.4.1 Operating Licensing Plans

The implementation of the Lansdowne – Wetton BRT Trunk corridor (LWC), together with its scheduled feeder services will significantly increase capacity from the Metro Southeast to the Claremont and Wynberg area over the next five years. The modernisation of Metrorail's Central Line during the same period will increase capacity from the Metro Southeast towards the CBD and Urban Core corridor. Both these interventions will result in a change in travel patterns for many travellers, and will necessitate a change in the capacity of the minibus taxi fleet on a wide variety of routes in these two corridors.

As indicated through the business and financial modelling for the IPTN, only highly trafficked feeder routes are likely to be contracted to operate according to a timetable. Other feeder routes and local distribution services in local areas within these corridors will continue to operate with operating licenses under the Operating Licensing Strategy (OLS). A complex transition phase will coincide with the infrastructure upgrades, through which the current system of different operating licences for GABS and minibus taxis will culminate in a new system of both commercial contracts and new operating licences for minibus taxis.

Due to the overlap of these corridors with the same origin, a single Operating Licensing Plan (OLP) will be drafted for the Lansdowne-Wetton and Central Line corridors. This plan will demonstrate which new Operating Licenses will be required to both feed the new trunk capacity, and provide local distribution services in the affected local areas. This plan will highlight the new roll of partially affected routes that are not wholly incorporated in the commercial contracts.

4.5 RELATIONSHIP WITH OPERATORS

The City of Cape Town, the Western Cape Government, and Golden Arrow Bus Services have signed two memorandums of understanding (MOUs) on working together to establish a world-class, integrated transport system for the benefit of residents and visitors to the city and the broader metro region.

TCT will lead this transformation process, of which affordability and cost competitiveness form an integral part. As outlined in the first MOU, the City, under the auspices of TCT, will work with the Western Cape Government through the Department of Transport and Public Works (DoTPW), which will provide advice, guidance and support, as well as performing a key oversight role to facilitate the smooth transition.

The second MOU is between the City, the DoTPW and Golden Arrow Bus Services (GABS), and serves as a departure point for the imminent integration of the GABS and MyCiTi bus services to establish one integrated bus service with unified branding, one timetable and scheduling system linked to the integrated public transport network, one performance management system and finally, one integrated ticketing and fare management system. The MOU acknowledges GABS as a significant role player, being the largest scheduled bus operator in the city, and which has been integral to the provision of public transport to the residents of Cape Town since 1861 as a private sector operator and 1997 when it was officially contracted to provide bus transport services for commuters on scheduled routes in the city.

GABS will be contracted as a scheduled bus service operator and, as such, will be a key role player supporting TCT in this transformation process inherent with the CITP. The objectives of the two MOUs are to ensure a smooth and seamless transition process, to lay the foundations of a good working relationship between the different role players, and to establish the basis for an adequately resourced and expanding road-based scheduled public transport service which continually improves and delivers on the growing demand for public transport across Cape Town.

These are the first two of a series of MOUs required in terms of the Western Cape Provincial Land Transport Framework (PLTF) where the Western Cape Government aims to confirm the future of a unified public transport environment, which will serve the broader Cape Town Functional Region.

Discussions with Metrorail and the Minibus Taxi industry about the evolving role of both these public transport operator groups are ongoing. TCT aims to finalise MoU’s with both these groups during 2015.

5 FREIGHT MANAGEMENT

The strategic intent with planning for Freight Management in Cape Town is to manage movement of freight on the City's transport network, which includes road, rail, air, pipelines and maritime freight. Furthermore, a Freight Management Strategy is required as a key mechanism that will facilitate the achievement of TCT's long term transport vision and objectives - not only for passengers, but also for goods and services - to ensure a healthy economy. An analysis of key aspects of freight in Cape Town has been completed, and is described below.

5.1 ROAD FREIGHT

The general growth in private vehicles, with the resultant peak hour spreading, means that roads are capacity strained for many hours of the day. Freight traffic acts as a suppressor to capacity, thereby making the situation worse for commuter traffic. In addition, the economy is based on fast and reliable delivery of goods. High local transport and logistics costs reduce competitiveness of this global flow of commodities. The City is essentially the road based suppliers of freight facilities and as such need to make decisions on the supply side without inadvertently affecting the costs. The cost of provision is high and any new work has long lead times. It is therefore critical to match supply with demand.

High growth in freight traffic is anticipated on the City's major corridors. Similarly high growths are predicted for containerised commodities. Given that the majority of these are intended for the Cape hinterland, a corresponding growth in road freight is expected at the Port and from the industrial areas of the City.

The actual flow of freight along the City's roads from all of these areas is, to a large extent unknown. An effective strategy to address issues resulting from these flows – such as congestion, regulated routes and so on – requires extensive surveys and modelling.

5.2 HAZARDOUS MATERIALS

A City-wide hazardous materials route map identifying major routes used has not been produced. The transportation of large quantities of dangerous goods are however, reported to the City's Fire Services and the City could consider adopting a certain number of routes as routes where dangerous goods are most likely to be transported in order to manage any incidents involving these goods in a better fashion. The City is currently in the process of updating its Disaster Risk Management Plan which covers the handling of dangerous goods.

Freight operators who transport dangerous goods are not specifically vetted nor are inspections carried out at road-worthy checks. There is also the possibility that By-laws and regulations in relation to hazardous material are not aligned with neighbouring municipalities or even the Province. These aspects require attention.

Another issue identified is the inspection and disposal of hazardous waste, particularly medical waste. There are only two sites in the City which are currently allowed to handle this type of waste and only one of these is allowed to accept medical waste. However, there are no formal procedures to check and regulate the type of waste that goes into these facilities and only one facility is under the auspices of the City.

5.3 ABNORMAL LOADS

An updated Abnormal Load Route Map (see Figure 5-1) has been compiled. The designated routes require protection against development. There is a need to develop a procedure to ensure compliance.

Figure 5-1: Abnormal Load Route Map

5.4 PORT OF CAPE TOWN

It is estimated from the number of containers and volumes of other commodities currently being handled at the port, that around 1m trucks movements are generated by these activities. In addition there is stuffing/de-stuffing activities involved with containers as well as empty cleaning/relocation. With the predicted increase in the numbers of containers (which can be estimated to equate approximately to the number of truck movements given the lack of use of rail) and the current mismatch in the delivery/operational procedure of freight forwarding (mainly during office hours) and the Port operation (24 hours/day) freight traffic around the port is set to become a major issue. Operational solutions for these goods and the potential growth in the port's capacity should allow for growth in freight volumes between the peaks rather than an expansion in infrastructural capacity to accommodate peak hour freight traffic growth. TDM measures need to consider this issue specifically for freight traffic, in particular: container movement and stacking issues, the seaward expansion of the port, back-of-port space at Culemborg, Paarden Eiland and Belcon, rail and a stronger link with Port of Saldanha.

5.5 RAIL FREIGHT

Despite the public announcement of planned rail interventions and expenditure on freight rail, it is not clear when this will happen and whether the City will benefit from this expenditure. It is clear from the investigations though, that more freight needs to be shifted to rail or the road network in the City will become extremely congested and, more particularly, the major routes especially the N1 will require major upgrades.

The use of freight rail lines, such as the Monte Vista line, by PRASA for passenger rail needs to be either complimentary or re-thought to allow a larger share of rail freight. New signalling expenditure planned by PRASA needs to be aligned to this goal.

TFR is set to spend R194bn, however much of this is on locomotives which replace the existing fleet and may not release capacity in the form it is needed. This issue needs to be raised at the appropriate forum.

5.6 INTER-MODAL FREIGHT FACILITIES

Inter-modalism, where both road and rail work together in the conveyance of goods is encouraged to avoid exorbitant prices of goods or unprofitable circumstances for the role players.

The status quo and the assessments in this chapter highlight the need for the Bellville Container Depot (Belcon) to operate as a dry port to relieve congestion and capacity constraints at the port through the use of dedicated rail services as well as act as an intermodal hub for rail freight distribution. It is possible that the existing area at Belcon and its location may be problematic in the future. This is recognised by Transnet Freight Rail (TFR) and their long-term plan is to consider additional or alternative facilities.

An indication of hubs and terminals proposed for Cape Town as identified in Transnet's Group Planning is shown in Table 5 – 1.

Table 5-1: Hubs & Terminals – Cape Town

Location	Intervention	Motivation	Date Needed
Belcon Upgrade 1a	Retain existing - Maximise throughput within existing hours	Capacity (126,000 TEU pa)	2010
Belcon Upgrade 1b	Extend terminal hours of operation	Capacity (252,000 TEU pa)	2010
Belcon Upgrade 2	Provide additional lifting equipment and extend terminal hours of operation	Capacity (378,000 TEU pa)	2027
Belcon Upgrade 3	Provide additional lifting equipment, locomotive and train crew resources and extend hours of operation	Capacity (504,000 TEU pa)	2031
Belcon Upgrade 5	Rail infrastructure improvement within existing terminal. Provide additional lifting equipment locomotive and train crew resources and extend hours of operation	Capacity (756,000 TEU pa)	2034
New Super Terminal (Kraaicon)	Rail infrastructure, relocate the site further away from the existing terminal - Super Terminal	Capacity (1,000,000 TEU pa)	2037

5.7 ATHLONE REFUSE TRANSFER STATION (ARTS)

The current volume handled by ARTS is approximately 222,000 tons of waste. Its capacity is estimated to be in the region of 1.2m tons so additional capacity is available and needs to be incorporated in future waste management strategies.

5.8 OVERLOADING

Overloading is not adequately controlled and it is reported that there is inadequate legal support for enforcement (PLTF, 2011). This situation leads to an abuse of loading limits and will only be discouraged if the probability of being caught is high and the related penalties are high. The WCG feels that an amendment to the Road Traffic Act to assign the responsibility of overloading to the consignor, consignee, haulier and drivers may help alleviate the current problems and will pursue this as part of their strategy.

The overloading situation affects the majority of the City's roads as the majority of freight in the Province travels to or from the City. Trucks in the metro are usually 5 axles or less which although they carry a lower payload, cause greater damage if fully or overloaded. Estimates by CSIR show that trucks which are overloaded cause up to 60% of all road damage. The City therefore needs to pursue a comprehensive load management strategy which needs to include trucking to and from the port.

5.9 OVERNIGHT TRUCK HOLDING AREAS

The need for such facilities in addition to the one on the N7 will be addressed in the forthcoming strategy and in the proposed intra and inter-urban freight strategy.

5.10 WAY FORWARD

The analysis described here will be extended into a comprehensive Freight Management Strategy that will extend into the Cape Town functional region. The preparation of the Freight Management Strategy has been divided into three phases, namely,

- Phase I focuses on the development of deliverables for
  - Hazardous materials strategy
  - Abnormal Loads
  - Strategic Road Network Plan
  - Freight Modelling
- Phase II focuses on detailed strategies and studies to be undertaken in partnership with our partners and stakeholders.
- Phase III will focus on creating and aligning the mechanisms to support the TCT investment framework.

6 OTHER TRANSPORT STRATEGIES

6.1 TRANSIT ORIENTATED DEVELOPMENT

6.1.1 Passenger density per line

Table 6-1 expands on Table 10.6 of the CITP, and highlights an estimated population served per line, given the assumed trunk density in various population density areas. The table illustrates how the population served per service drops significantly as the development density reduces. The implication is that the cost of providing quality public transport in low density areas are substantially higher than providing the same service for people living in a high density environment.

Table 6-1: Potential public transport market per population density

Density Distribution	Density (du/ha)	Population	% HH	Trunk spacing (km)	Trunk length (km)	Feeder km	km line	pop/ trunk km	pop/km line
8%	75	1 366 800	24.0%	2	26.8	392	225	51 000	17 000
12%	45	1 230 120	21.6%	3	26.8	721	324	45 900	11 475
18%	25	1 025 100	18.0%	4	30.2	1 324	484	34 000	6 800
24%	20	1 093 440	19.2%	5	32.2	1 631	625	34 000	6 800
Cumulative total		**4 715 460**	**82.8%**						
18%	15	615 060	10.8%	5	24.1	1 324	484	25 500	4 250
12%	10	273 360	4.8%	5	16.1	721	324	17 000	2 833
8%	5	91 120	1.6%	5	10.7	392	225	8 500	1 417
100%	**25**	**5 695 000**			**166.8**	**6 507**	**2 691**	**34 137**	**7 077**

The table indicates that Level 1 and 2 public transport services are not only required in high density environments to meet the potential demand, but it is not warranted to provide the same level of service in low density areas. The type of service that can be provided per density bracket depends on the affordability to the City and Government through fare income and the variety of available grants.

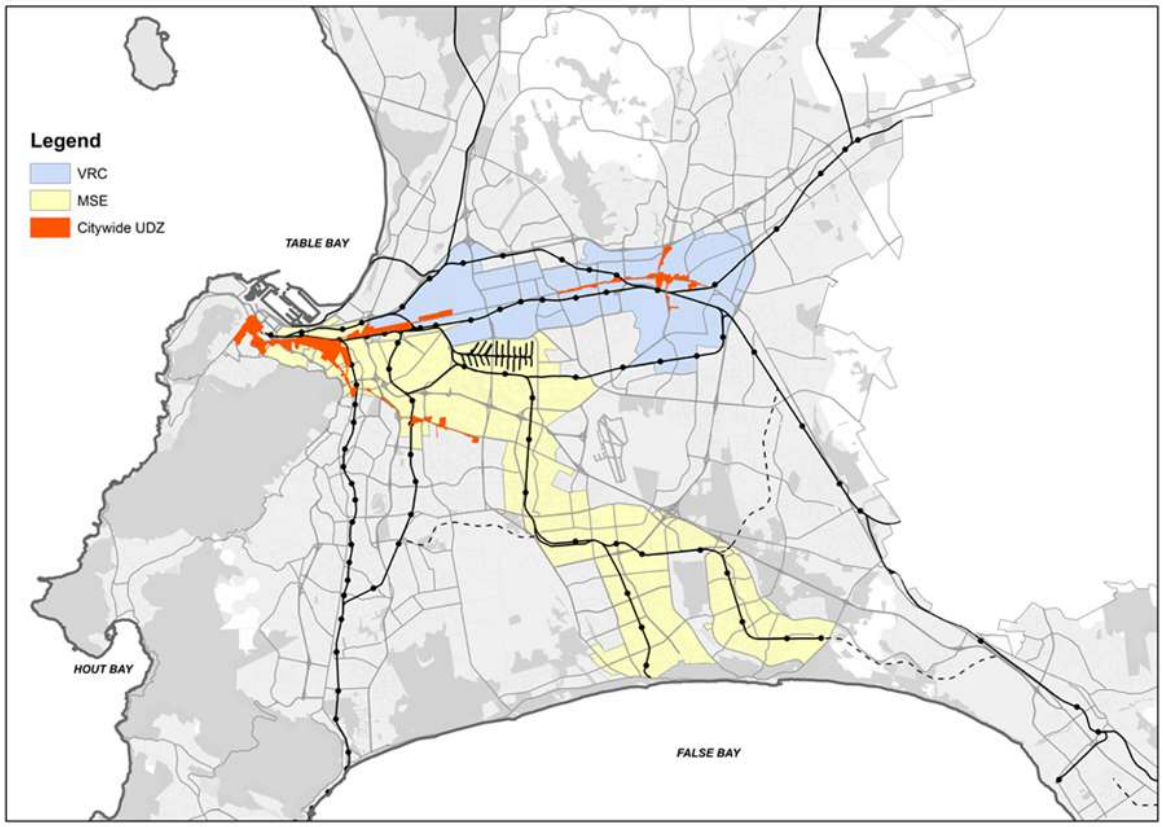
In aiming to ensure that at least 80% of households are within 500m of quality public transport, it would be cost effective to firstly serve areas with densities in excess of a minimum threshold, which is around 15du/ha in this example.

6.1.2 Integration Zones

The National Treasury initiated a Neighbourhood Development Programme which is a Urban Networks Strategy focussing on transformation of the spatial form of south African cities. Under this programme sits the City Support Programme (CSP), which houses a variety of grant funds to support cities to achieve “Inclusive Urban Development”. Through the Integrated City Development Grant (ICDG), Treasury encourages cites to align, sequence and manage public investment, with a specific focus on agglomerating urban activities

around public transport infrastructure and operations. Figure 5-1 illustrates the two Integration Zones identified by the City, within which to focus this grant investment.

Figure 6-1: Cape Town Integration Zones



TCT and the Environmental, Economic and Spatial Planning (EESP) directorates are in the process of planning the investment priorities within these two corridors within the TOD framework of the CITP, which draw on, among others, the City's Densification Policy.

The CSP developed a range of Key Performance Indicators (KPI's) to enable measurement of the efficacy of the grant investments under the Neighbourhood Development Programme. Their indicators for transport, shown in Table 8-1, will be expanded upon in developing a comprehensive set of KPI's for TCT over the next three years.

Table 8-1: CSP Indicators for Transport

B2.9:	Percentage change in the total kilometres of dedicated walkways and cycle paths in relation to the length of roads within integration zones.
B2.1:	Annual percentage change in proportion of dwelling units within 500 metres of access to PT System within integration zones
B2.2:	Percentage decade change in share of household (HH) income spent on transport costs for passengers city-wide
B2.3:	Percentage change in average weekday peak hour commuting time of

	passengers via the scheduled public transport system city-wide
B2.6:	Percentage change of commuters (city-wide) using private motorised transport.
B2.7:	Annual percentage change of all passenger trips that use the same ticketing system
C1.3:	Annual percentage of available passenger spaces in weekday scheduled public transport trips that are occupied

TCT is in the process of designing the data management system, including data collection methodology, to establish the baseline information for these indicators. Thereafter the indicators will be updated periodically to enable measuring the efficacy of the supporting investment programme.

6.1.3 Towards a Comprehensive TOD model

The IPTN network will provide the minimum requirement for public transport in the horizon year of 2032. However, improvements in land use development are likely to significantly increase the level of service that can be achieved on the transport system. A land use scenario is currently being developed to test the benefits to the transport system if development can be focussed largely on the existing rail and BRT trunk system. It is acknowledged that a number of changes would be required within the urban development environment to achieve this scenario. However, it is deemed essential to compare the implications and benefits relative to the current IPTN scenario.

This scenario applies the same number of new dwelling units and non-residential development as in the previous land use scenarios whilst adjusting the following assumptions:

Assumption	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
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
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 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

Assumption	Intention	Modelling mechanism
		the building footprint and by making use of 1 basement parking level).
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
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 public transport infrastructure (BRT trunk and rail).

6.2 DEMARCATION OF PT1 & PT2 AREAS

6.2.1 Introduction

The Cape Town Zoning Scheme (CTZS) stipulates the minimum requirements for conventional off-street parking provision to a variety of land uses. Parking requirements are based on the premise that most visitors to a development would arrive by car. However, the CTZS reflects the recent policy shift that recognises the desirability and positive impact of public transport to reduce the number of car trips to developments served by public transport. In this regard it recommends reduced minimum parking requirements, in demarcated PT1 and PT2 areas.

The CTZS description of what constitutes a PT1 or PT2 area is qualitative and therefore subjective and therefore open to debate. This work represents the process followed to introduce a quantitative assessment tool for the demarcation of PT1 and PT2 areas that would result in more objective and consistent application of the intentions of PT1 and PT2 areas across Cape Town.

The first round maps of PT1 and PT2 areas have been adopted under the CTZS and are in operation since April 2014.

6.2.2 Core Content / Recent Progress

Some of the key assumptions and drivers of this work include:

- The need for parking is reduced where trips conventionally made by car are likely to shift to public transport and NMT (non-motorised transport).
- Public transport must be available, reliable and attractive to target user groups before the PT1 or PT2 is demarcated in that area.
- To determine areas where reduced parking is desired and then to illustrate this on a map.
- Confirm the framework to evaluate what interventions are required to achieve PT1 or PT2 status in future.
- Distinguish between car ownership and car use. While the City policy to encourage the reduced use of the private car does not extend to discouraging car ownership, PT1 and PT2 designations are more suitable for trip attraction than production areas.
- Demarcation of PT1 and PT2 gives additional developments rights to the affected properties. These rights are dependent on the long term commitment to quality public transport that would attract a particular target market. This step further commits the City and National Government (PRASA and BRT subsidies) to a new era of sustained capital and operational investment in public transport systems.
- PT1 and PT2 demarcation results in reduced parking that must be applied in addition to the reductions granted when parking is shared in mixed used developments.
- PT1 and PT2 areas were initially drawn at about a 400m radius from the centre of the public transport facility. This stems from international literature that shows a substantial drop in the likelihood of choice users being attracted to public transport when having to walk longer distances.

- The radius of a PT2 area is extended to at least 800m in areas of very low household income due to the fact that people that people sensitive to transport cost in South Africa are prone to walk much greater distances.
- It should be noted that the demarcation of PT1 and PT2 areas applies only to car parking and not loading or disabled bays.

A numerical model was created to quantify six characteristic elements of the integrated public transport and land use system to determine when public transport is deemed adequate alternative to qualify a PT1 or PT2 area respectively. Table 6-2 lists the maximum and sub-minimum threshold scores to be achieved for either PT1 or PT2 designation for the six elements.

Table 6-2: Public Transport Areas Maximum and Subminimum Score Requirements

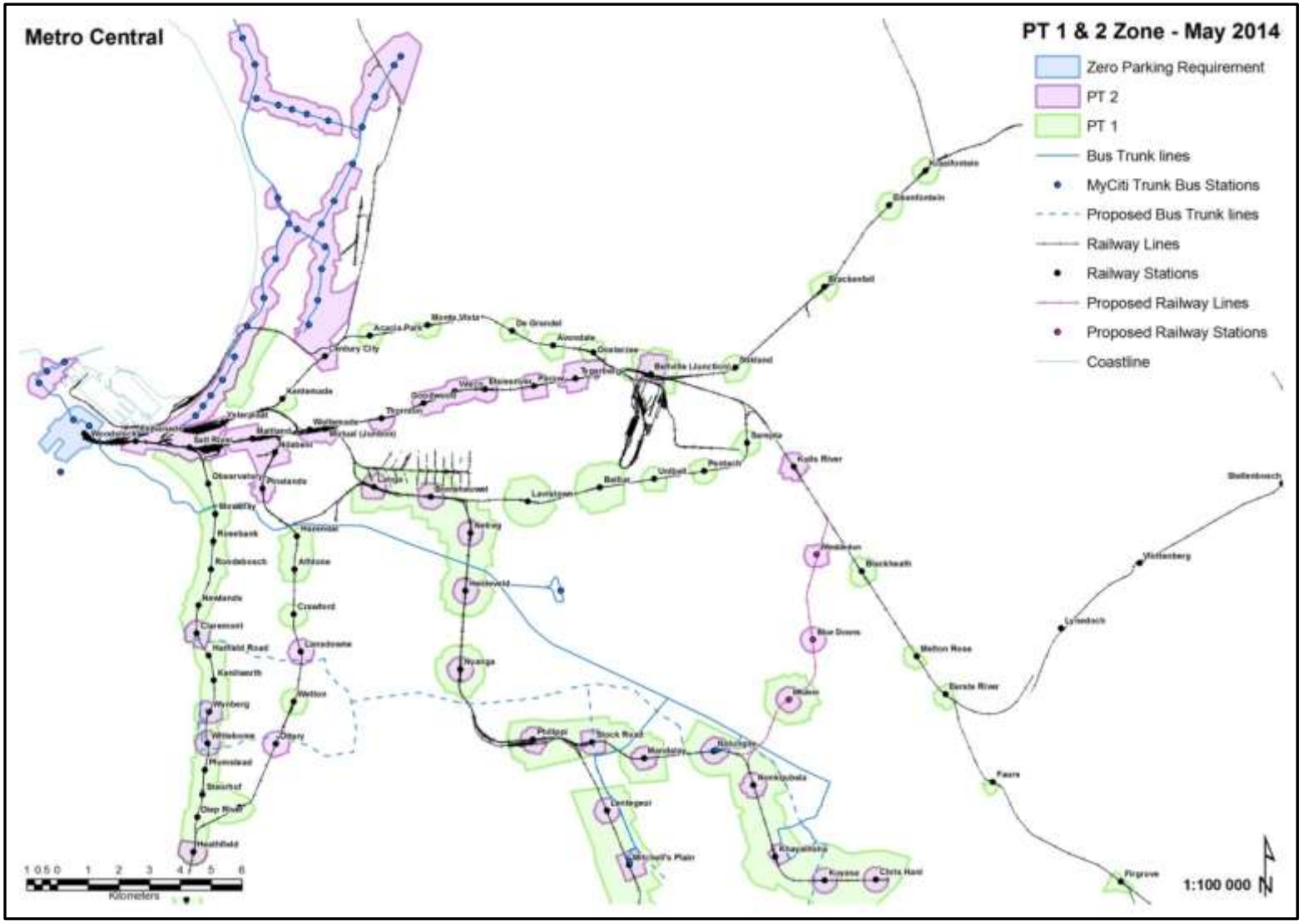
Requirements	Maximum	PT2 Subminimum	PT1 Subminimum
Connectivity	10	6	4
Capacity	6	3	1
Frequency	5	3	1
Level of Service: Station	5	2	1
Level of Service: Precinct*	-	-	-
Volume / Capacity	3	2	1
Subminimum Score	29	16	8

* Data not available to date

In order to qualify for a zonal status, a minimum overall score must be obtained, as well as relevant sub-minimums for key criteria.

Figure 6-2 shows the current PT1 and PT2 areas in Cape Town, which is reflects the output from this model.

Figure 6-2: Typical Category 1 Map: Metro-wide Summary



6.2.3 Way Forward

This version of the model is viewed as the “Beta version”, or the primary basis through which PT areas were demarcated. It is planned that the map be reviewed before the end of 2014, upon consideration of issues raised by the public and the following matters.

- The connectivity criteria will be expanded to fully incorporate all modes of public transport, specifically MyCiti feeders, in the scoring of criteria. This would enable the model to render a more holistic depiction of public transport availability in more areas. This work will draw from the outcome of the IPTN process.
- Further analysis is required to disaggregate the capacity and frequency data with actual, rather than theoretical schedule data. This will allow for scoring of criteria on individual lines rather than only generating the total capacity and frequency of modes to and from all directions, respectively.
- The operational and precinct level of service criteria will be established, and prevailing data would be used as a first measurement for scoring.
- Within the review of the PT area maps, possible extension of the criteria and concept are to be included into the Functional Region of Cape Town. This will be initially rail based, but thereafter it would be done according to the IPTN of neighbouring municipalities, to be informed by their public transport operations, transport and land use planning.
- Furthermore, a literature review is required to solidify and possibly improve the theoretical basis for the criteria and the model.

This project will be finalised by officials from TCT and the Spatial Planning and Urban Design (SPUD) Departments within the next year. This work will also play an important part in the TOD Strategy.

6.2.4 Monitoring and Evaluation

Monitoring and evaluation will initially be through stakeholder involvement with the process. In the longer terms, the impact of these zones should be measured through the rate and quantum of development relative to remaining areas of the City, not demarcated as PT1 or PT 2 areas.

6.3 REVISION OF PARKING STANDARDS

Parking standards currently applied in Cape Town stems largely from those released by the Department of Transport in 1985. However, since then transport policy has changed fundamentally from primarily planning the transport system around the needs of the car, to a "Public Transport First" approach.

A number of significant pieces of work have highlighted the need to revise the required parking standards for Cape Town, some of which are reflected in more detail in this CITP. These include:

- The consolidation of different parking requirements when producing the City's new Development Management Scheme (DMS), which is about to replace the City's Integrated Zoning Scheme (CTZS).
- The adoption of demarcated PT1 and PT2 areas into the DMS during 2014.
- The adoption of a comprehensive Parking Policy for Cape Town in 2014.

Action item 7.5 from the Parking Policy confirms the need for this revision of parking standards, which is recognised as a priority project within TCT. The relevant Policy and Action statement reads as follows:

Policy 7: Implement reduced parking requirements to support new development and address private car dependency proactively.

Action 7.5: Review and update the minimum off-street parking requirements for Standard Areas, PT1 Areas and PT2 Areas as per the DMS.

Particular attention will be given to investigate the implementation minimum off-street parking requirements for subsidy housing, which includes Rental Housing (Social Housing, Institutional Housing and Community Residential Units) and Gap Housing developments. An estimate budget of R1m is required for this review, which will be based on the collection of empirical data for a variety of separate and mixed developments.

6.4 TRANSPORT-RELATED ZONE CATEGORY CHANGES

6.4.1 Background and Description

The TOD Strategy, Parking Policy and Public Transport zones 1 and 2 discussed in this document all lead to a stronger link between transport and land use planning. In addition TCT has moved to expand the Road Hierarchy classification into a Public Right-of-Way classification, supported by the RISFSA classification system. These changes now require an amendment to the two transport zones, to strengthen the ability of TCT as Planning Authority to provide and manage an integrated transport system in Cape Town, alongside related land use. The aim of these proposed amendments to the transport zoning classification is to ensure that the TCT network is seen, and accordingly managed, as an asset. Transport for Cape Town, as determined by the National Land Transport Act, is responsible for what happens on the integrated network (road and rail) in Cape Town and its functional region, which has been defined in the CITP.

The current Cape Town Zoning Scheme (CTZS) reflects how the transport-related zoning was based on the design of urban mobility around the private car. This is no longer suitable for the development, implementation and management of an integrated, multi-modal transport system, hence the proposed amendments.

6.4.2 Resolutions

The following amendments are proposed to the zoning of transport facilities in the Development Management Scheme (DMS), which will soon replace the CTZS:

1) Redefine TR1 to include all facilities related to the right-of-way network, including stations, stops, parking, depots, etc.
2) Redefine TR2 zoning to reflect the Right-of-Way classification system, thereby including rail and BRT reserves, especially as these modes can share the same Right-of Way, rather than only “Road Reserve”. The TR2 zoning will therefore be able to manage the entire integrated transport network.
3) Addition under TR1 the consent use on transport-related facilities for commercial / retail facilities ancillary to the main use.
4) Addition under TR2 for the consent use on the right-of-way network for physical / economic constraints that can impact (positive of negative) on the functionality of the immediate and surrounding network.

6.4.3 Proposed Amendments and Mechanisms

The following changes are recommended to the current definitions in the CTZS.

1) Transport Zoning 1: Transport Use (TR1)

Current zoning definition

The TR1 zoning provides for transportation systems, excluding public roads and public streets, but including all other transport undertakings which serve the public such as airports, harbours, railway lines, bus, railway and other depots associated with public transport uses, public transport terminuses, ranks or holding areas, and cable car stations. Provision is made to approve other uses that can help to support the transport undertaking.

Proposed zoning definition

The TR1 zoning provides for transportation systems, excluding public roads and public streets, railway and bus-rapid transit (BRT) lines, but including all other transport undertakings which serve the public such as premises for the public parking of operable motor vehicles, airports, harbours, bus, railway and other depots associated with public transport uses, public transport terminuses, ranks or holding areas, and cable car stations. Provision is made to approve other uses that can help to support the transport undertaking.

Parking may be provided in buildings or open parking areas, with or without the payment of a fee, in order to address the need for off-site parking. On-site parking for a permitted activity in any zoning is considered to be an associated use and do not represent a separate use category that requires separate zoning or approval.

2) Transport Zoning 2: Public road and public parking (TR2)

Current zoning definition

The TR2 zoning provides for public streets and roads, whether constructed or still to be constructed, as well as premises for the public parking of operable motor vehicles. Such parking may be provided in buildings or open parking areas, with or without the payment of a fee, in order to address the need for off-site parking. On-site parking for a permitted activity in any zoning is considered to be an associated use and do not represent a separate use category that requires separate zoning or approval.

Proposed zoning definition

The TR2 zoning provides for public right-of-way which includes streets and roads, railway and bus-rapid transit (BRT) lines, whether constructed or still to be constructed.

3) TR1 and TR2 Consent Mechanism

It is proposed that the secondary use clause also be amended for TR1 to include retail/commercial user charge activities and for TR2 to include any user charge or constraining activity on the Public Right of Way, so as to enable TCT to evaluate the social, economic and environmental impact and, where appropriate, determine mitigating conditions and/or operational parameters.

These recommendations and parameters are necessary for Transport for Cape Town to be able to appropriately manage the operations of the Integrated Transport Network (road and rail) and related facilities within an investment-oriented perspective. Some of the issues that will be addressed through this new consent-use mechanism are detailed in the table below:

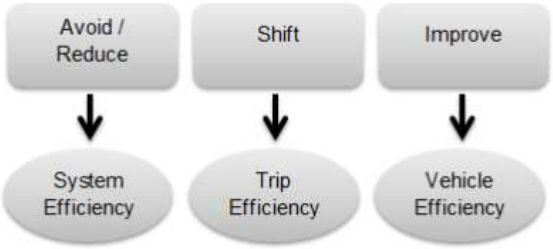
Consent Use Parameters for TR1	Consent Use Parameters for TR2
• Such commercial/retail activity must be ancillary to the main user • Such commercial/retail activity can be permanent or temporary • Permanent activities are to be evaluated in terms of financial viability, transport related benefits and economic spin-offs for the facility and TCT • Further permanent activities will need to be evaluated in terms of operational and maintenance cross-subsidization and TCT can impose related operational costing, all of which will be managed via the MLTF • Temporary activities (economic promotions, etc) shall be evaluated through a similar process as for road closures • TCT can impose on such temporary activities/conditions that can enable a percentage of revenue generated to be accrued to the MLTF and/or related operational conditions	• Such user charge or constraining activity on the right of way shall be managed by TCT through a consent use application that will evaluate, manage and mitigate the impact (positi9ve or negative) on the immediate and surrounding right of way network • Such activities can include, but not limited to, toll roads, congestion charging and weigh bridges • TCT shall evaluate the socio-economic, environmental and financial impact on the immediate and surrounding right-of-way network • Conditions imposed can be once-off capital improvement contributions by the authority that is proposing such activity • Conditions can also include an operational percentage that will be accrued to TCT under the MLTF in order to ensure sustainable management of the network. This operational percentage will have to be sourced from the user charge being imposed should the impact consent be approved
It should be noted that such mechanisms are currently being developed further for incorporation into the new Cape Town Zoning Scheme. Such amendments will then be subject to a public participation process	

6.5 SUSTAINABLE TRANSPORT

6.5.1 Overview

The City of Cape Town has recognised the shift to a more sustainable transport system as an integral part of a broader transition to a sustainable city. This section aims to confirm the central role the drive to sustainability is in the CITP, and leads the way to the development of a comprehensive Sustainable Transport Strategy for TCT. The City's approach to sustainable transport is based on the Avoid-Shift-Improve (A-S-I) concept (See Figure 6-3), which is centred on sustainability principles.

Figure 6-3: A-S-I Approach



“Avoid” refers to the efficiency of the urban system: A compact multi-functional City with an integrated transport system will play a key role in avoiding or reducing the need and desire to travel. Integrated land-use planning: Measures such as the Travel Demand Management (TDM) and Transit Orientated Development (TOD) Strategies can reduce the need to travel as well as the trip length.

“Shift” refers to a modal shift from energy intensive modes such as private vehicles towards more sustainable modes such as NMT and public transport. Again, the TDM strategy plays a key role in achieving this. Although public transport also generates emissions, lower specific energy consumption per passenger km and higher occupancy levels imply that the associated CO_2 emissions per passenger-km are lower compared to vehicles (especially SOV).

“Improve” refers to vehicle and fuel efficiency as well as the optimisation of transport infrastructure. The aim is to improve the energy efficiency of transport modes and related vehicle technology. The potential of alternative energy use is also acknowledged.

6.5.2 Approach

This strategy will coordinate an integrated package of sustainable transport interventions, addressing all three components of the A-S-I approach, in order to achieve a balanced optimal benefit for the Environment, Society and Economy of Cape Town. For example, while technological improvements, such as fuel efficient engines and alternative fuels can reduce emissions, these cannot reduce the travel time or cost to users. Achieving long term benefits therefore requires that interventions are strategically coordinated to positively reinforce each other, and to avoid a skewed emphasis on only some objectives.

The Strategy will analyse longer term scenarios through assessing key issues such as oil depletion, climate change and energy consumption and security, all of which have significant social, environmental and economic implications for Cape Town. This will inform and guide TCT policy and target investment.

Sustainable transport is supported and required by various key City policies and strategies including the Integrated Development Plan (IDP); Integrated Metropolitan Environmental Policy (IMEP); State of Energy and Energy Futures Report and the Air Quality Management Plan. Alignment and integration will be undertaken as part of the strategy development process.

The Sustainable Transport Strategy will consist of specific policies, strategies and plans, such as:

- A Green Strategy
- Travel SMART
- Climate Change Adaptation Plan of Action (CAPA) for TCT

- A Strategy addressing social issues relating to transport
- An Indigent Policy for TCT
- Policies and position papers on fuels and vehicle technology

6.5.3 Green Strategy

The focus of the Green Strategy is to address impacts, such as air and stormwater pollution, that transport has on the natural environment in Cape Town. Various strategy responses, including action plans, will be developed for TCT.

Focus areas include:

- Green roads (shift to sustainable practices in the design and construction of roads)
- Sustainable management of Stormwater
- Fleet greening (alternative fuel and vehicle technology; fuel specifications; SMART driver training; monitoring of driver behaviour & fuel consumption)

In addition to local scale benefits, the implementation of the Strategy will also contribute towards reduced vulnerability to the impacts of global climate change, oil depletion and energy security.

6.5.4 Travel SMART

Travel SMART started as a transport focussed behavioural change programme for large employers in the Cape Town CBD. Large employers are an important target group as they represent a high percentage of commuters travelling to the CBD on a daily basis. Travel SMART aims to develop partnerships with large organisations and assist them with supporting their employees in choosing more sustainable ways of travelling, both for commuting and for travel during the working day.

The potential benefits of the Travel SMART Programme include: more flexible travel options for employees; less time in traffic & less stressful commutes; saving in parking costs (employers and employees); commuter savings; emission reductions; increased productivity from employees; and enhanced organisation image.

It should be noted that the Travel Smart Programme is in the process of being revamped and aligned to the TCT Master Brand. The project, over the next year, will be extended to deal with implementation-oriented initiatives that will level the peaks and visibly implement Travel Demand Managemtn (TDM) principles and practices.

The City's involvement in Travel SMART is two-fold:

1) The City is responsible for managing and implementing the broader Travel SMART Programme in Cape Town; and
2) As one of the participating Travel SMART organisations, the City is responsible for implementing its own organisation-specific programme.

The following City organisation-specific pilot projects are currently underway:

- SMART Driver Training:

A SMART driver training programme has been introduced in order to train City fleet drivers to drive more efficiently. SMART driving is a way of driving a vehicle that reduces fuel consumption and costs (fuel and running costs); reduces vehicle emissions; and increases safety.

The City is the largest fleet owner in Cape Town (approximately 7 000 fleet vehicles) and has 10 000 fleet drivers. The programme is being roll-out in a phased approach and to date 50 fleet drivers have been trained.

- Travel SMART Forum

The City is broadening the scope of Travel SMART and has identified the establishment of a Travel SMART Forum as the ideal platform to actively engage with organisations on key sustainable transport issues; provide a platform for information flow and system changes required to address concerns and barriers to more sustainable travel behaviour; and to guide joint action with regards to the implementation of appropriate interventions within their own organisations.

6.5.5 Travel Demand Management

The TDM Strategy in the CITP will be developed into a stand-alone, comprehensive Strategy during the next three years. The current focus of this strategy is on improving the understanding of transport user behaviour in order to prioritise targeted interventions to reduce the cost of specific user access. Current initiatives are as follows:

- Development of a Travel Behavioural Change Framework:

A Travel Behavioural Change Framework is in the process of being developed for Cape Town that will guide interventions with predictable and measurable changes in travel behaviour. The Framework will highlight the relative importance and potential contributions of the different behavioural change interventions and enable the selection of appropriate interventions and targeted awareness campaigns and that will result in more meaningful impact.

- Analysis of transport users and their access priorities:

In order to ensure that appropriate behaviour change interventions are selected, it is important to understand how user characteristics impact and influence travel choice. An analysis and disaggregation of the main elements in TDM that influence travel choices; namely the user; trip purpose(s); and mode(s) is currently underway in a manner that can be used to influence travel behaviour choices by individuals, as well as their broader community groupings.

- Introduction of a Flexible Working Programme

Peak period capacity constraints in the public transport system can lead to long waiting times and overcrowding in vehicles. The introduction of a Flexible Working Programme can assist with ‘flattening the peak’, as it spreads arrival and departure times, thereby spreading peak period traffic over a longer time period.

Depending on the type of option implemented, employees are encouraged to consider using public transport and lift clubs. Compressed work weeks can reduce the number of vehicle - km travelled by reducing the number of trips.

Various flexible working options are available depending on the needs of specific organisation as well as individuals doing the work such as:

- Flexi-time
- Staggered work hours
- Compressed work weeks
- Regular or irregular working at home
- Remote/ off-site working at an approved location

An integrated 'package' of interventions is necessary in order to achieve any significant behaviour change. The outcomes of the Transport User Analysis and Behavioural Change Framework projects inform and guide the selection of appropriate interventions for implementation.

6.5.6 Monitoring and Evaluation

As sustainability is the result of a wide variety of interventions on both the supply and demand side of the transport system, it is not measured against any specific intervention, but rather as the outcome of all the interventions over a certain time period. It is therefore necessary to define appropriate lagging Key Performance Indicators (KPI) for which relevant data can be collected and assessed periodically. The production of these indicators will be informed by those proposed through the City Support Programme (CSP), and will also draw on work done to develop KPI's before.

6.6 MARKETING & COMMUNICATIONS

6.6.1 PROJECT DEFINITION AND DESCRIPTION

The National Land Transport Act, 2009 (section 11(c)) states that local government is responsible for:

- marketing and promoting public transport and promoting publicity associated with the public transport system
- providing information to users or potential users of public transport
- promoting safety and security in public transport

The City operates a 24/7 Transport Information Centre (TIC) which gives effect to the requirements of the NLTA. The operations of the TIC are to be revisited over the next few years so as to give effect to the integrated transport vision of TCT. There will be more services that will need to be managed and communicated. Further, there is a need to develop a value-add process for the information that is coming in to the TIC.

6.6.2 PROJECT STATUS

TCT Brand was approved by Council in 2014.

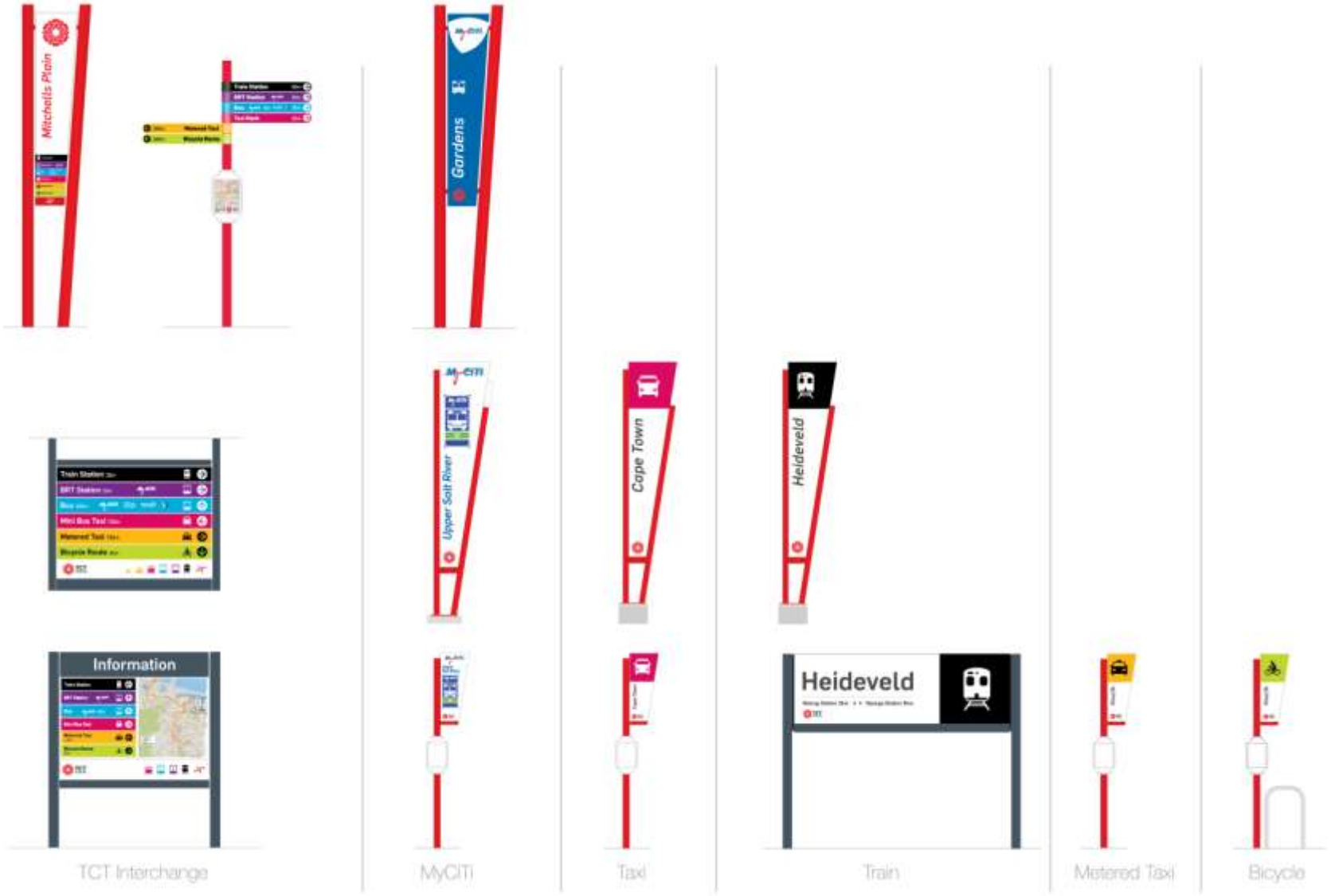
6.6.3 TCT BRAND DEVELOPMENT

The TCT Brand Plan has been developed, however, the roll-out could not commence due to the change in the City of Cape Town's brand which impacted on the TCT brand. This process started in November 2013 and concluded on 26 February 2014 when the new master brand for TCT was approved by Council. TCT is a master brand with MyCiTi as a sub-brand of TCT. The new TCT Brand Plan has been developed to reflect the master brand status while also reflecting the alignment and relationship with the City of Cape Town brand. The TCT Brand is reflected below.

- Transport is the dominant colour: Red
- Each major mode has a distinguishing colour as shown in the graphics below. The distinguishing colours reflects the alignment and relationship between the City of Cape Town brand and the TCT Brand while the TCT marketing material represents the movement associated with transport.
- Wayfinding across the City of Cape Town: The rollout of the TCT Brand in terms of Wayfinding which started at the Mitchells Plain PTI. After this, the rollout will be scheduled in accordance with available funding. The aim is to standardise all wayfinding across Cape Town within the next 5-7 years.
- Regulations and Enforcement: One of the most important components in rolling out the TCT Brand is in relation to regulations and enforcement. Once the assignment of the MRE has been effected the regulations of operating licences will be distinguished through the same colouring, enabling enforcement.

TCT is in the process of establishing a website and a TCT App that will become active during 2014. The TCT cellphone App will be launched on 1 June that will enhance the Cape Town transport experience for private and public commuters by providing access to: journey planning, timetables traffic incidents and places of interest. Both mediums are critical to the overall communication strategy for TCT internally, externally to commuters, stakeholders and to the International Investment community.

Train		
BRT		
Bus		
Metered Taxi		
Minibus Taxi		
Non-Motorised Transport		


Mitchells Plain
Gardens
Train Station
BRT Station
Bus
Mini Bus Taxi
Metered Taxi
Bicycle Route
Upper Salt River
Cape Town
Heideveld
Information
Heideveld
TCT Interchange
MyCiTi
Taxi
Train
Metered Taxi
Bicycle

7 FUNDING

7.1 FUNDING STRATEGY

The City's contribution to the overall transport budget is spent through the eight directorates. However, the funding strategy must ensure that the overall transport system is developed in a sustainable manner, in accordance with developmental objectives, and therefore the budget needs to be determined on technical grounds. The functional elements to which the budget is allocated are categorised as:

- IPTN BRT: infrastructure, maintenance and operations
- IPTN Facilities: infrastructure, maintenance and operations
- Road Network: infrastructure and maintenance
- Non-motorised transport network: infrastructure and maintenance
- Information and Communications: operations
- Transport Planning: operations
- Monitoring and evaluation: operations
- Law Enforcement: operations
- Administration and technical support: operations

The funding strategy will be expanded to include the assets and budget spent by other authorities within the jurisdictional area of TCT as planning authority. This primarily includes:

- IPTN Rail: infrastructure, maintenance and operations
- Road Network elements of SANRAL and Provincial Government

Transforming and developing the desired transport system requires a complex budgetary strategy. The approach, which will be further developed during the validity period of this CITP, is explained using Rail and BRT and the Private car system as examples.

Rail: The Rail network in Cape Town is extensive, but has suffered from poor maintenance over recent decades, and currently does not operate at the desired level of service. It therefore requires relatively little capital budget (in comparison to the current asset value); above average maintenance budget in the short term to address the backlog (which would moderate over time); and sustained higher operational funding to increase the level of service at which the system operates.

BRT: The ambition for BRT, according to the IPTN, is to significantly extend the BRT network in Cape Town over the next 20 years. The requirement for capital budget is therefore very high relative to the current asset value. Maintenance budget requirements will gradually increase over time as the network is extended and ages. Similar to rail though, is the requirement to sustain the operational budget necessary to maintain and improve service levels over time.

Car: Cape Town has a road network of about 10 000km for the population of nearly 4 million inhabitants, on a development footprint of about 70 000 ha. The road network density is therefore about 14.3km/km^2, or about 2.5m/person. Private car infrastructure and facilities

consume between 12 and 15% of the total developed footprint of Cape Town of about 70 000 ha. The extensive road network poses both an opportunity cost by sterilising land for more productive activities, while also resulting in a substantial maintenance expense.

The transport system will only be sustainable when the annual maintenance and operational cost can be recovered through sustainable income sources, including Fare Revenue and the contribution from rates.

This strategy will be developed to determine the Annualised Net Present Value of the desired transport system for Cape Town in the planned horizon year of 2032. This will be done by discounting the capital expansion programme, as well as the annual maintenance and operating budgets, in order to determine the shortfall between the required and current revenue and funding sources.

7.1.1 Capital Funding Strategy

The capital programme must ensure that all network elements are delivered at the required rate, in terms of the priorities from the IPTN Implementation Plan, and must be funded from the appropriate sources. Availability of capital could, in itself, impact the roll-out process.

The short to medium term infrastructure priorities for public transport are to:

- continue expansion of the BRT network in Cape Town,
- construct the Blue Downs Rail line and upgrading of other sections of the rail network, and
- to upgrade interchange facilities and stations to ensure quick transfers for all passengers between services on the mobility network

The full infrastructure cost of the IPTN will be determined, and the capital spending programme will be developed in line with the available funding sources, whether through grants, loans, etc. One of the aims of the strategy will be to normalise the rate of spending in support of sustaining the capacity of the construction industry.

7.1.2 Maintenance and Operations Funding Strategy

Approximately 2 to 3% of the value of transport assets should be spent annually to sustain that asset. A detailed analysis is required for all elements of the transport asset, to determine the percentage spend required, as this varies based on many factors. Since timely maintenance of the existing asset has a much higher benefit cost ratio than a reactive maintenance regime, this should have an overriding priority over the provision of new infrastructure in the capital programme.

For instance, if the current value of all transport assets is estimated at R100bn, an annual maintenance budget of between R2 and R3bn is required across all modes. The current maintenance budget of about R0.5bn falls far short of the requirement. New infrastructure should not be added to expand the system if the full maintenance budget cannot be secured first.

A maintenance strategy will be developed to address both prioritising within a deficient budget, and to minimise future exposure to a growing asset. The short to medium term priority for maintenance is to remove the backlog of maintenance in both the rail and road networks. It is also necessary to increase maintenance of public transport facilities, especially those that will not

be incorporated into the formal IPTN within the short term, in order to ensure minimum service standards are attained.

7.1.3 Public Transport Operations Funding Strategy

Table 7-1 indicates the split between private and public sector for funding infrastructure and operations components of different passenger modes.

Table 7-1: Ownership and operation of mode types in Cape Town

Mode		Interchange & Depot	Way	Operations
Rail	Type	Stations & Marshalling yards	Rail track	Rolling Stock
	Ownership	PRASA & TFR: Public	TFR / PRASA: Public	Public
Road: BRT	Type	Stations & Depots	Trunk bus lanes	Buses
	Ownership	TCT: Public	TCT: Public	Public
Road: Private	Type	Parking Garage	Roads	Cars, Taxis & Buses
	Ownership	Private	DoT / SANRAL: Public	Private

The table illustrates the different cost bases between the private car and public transport services. In a car oriented system the Public sector provides only the road network and regulates the provision of parking, while the Private sector carries the full cost of providing and operating cars and the majority of parking space. In the public transport environment, the Public Sector provides the infrastructure (Rail and Road), the stations, depots and other facilities, as well as the fleet of vehicles. In addition, the Public Sector also retains full responsibility for the standard at which services are operated. This shift from a car-based system to a public transport system that operates at a high standard requires a substantial shift in the budgetary process, which goes far beyond inflation based budget adjustments. It is this difference that drives the need for the TCT long term strategy to reduce the user access cost in the medium to long term.

Because of this substantial change in the cost structure of the transport system, it has become essential to understand where the benefits of the budgets will accrue so that income can be derived from beneficiaries in an equitable and sustainable manner. In addition to direct revenue from public transport services, value accrues through enhanced development rights, social gains and environmental sustainability. It is imperative that the bulk of the operational funding sources be institutionally embedded in the transport system, so as to remove the vulnerability of reliance on external funding sources and grants. The mechanisms required for such a funding strategy will be incorporated in the Transit Orientated Development (TOD) Strategy.

The full benefit of an integrated public transport system will only be realised when an acceptable standard of operations is reached over a critical mass proportion of the network, so that fare revenue, land development, as well as social and environmental benefits will exceed the on-going operational cost. The public transport operational deficit, or subsidy, should therefore be viewed and determined in terms of the future benefits that will accrue to the broader society. The funding strategy will illustrate how the cash flow will be negative in the short term, stabilise in the medium term and only become positive in the long term, if and when TOD capitalises on the transport system benefits.

7.1.4 Planning and Institutional Management

The devolution of the Contracting Authority and Regulating Entity into the City not only increases the institutional capacity to deal with these functions, but places additional responsibilities on the City in terms of other functions, including Planning, Financial Management as well as Performance Monitoring and Evaluation. The funding strategy will evolve to determine the optimum budgetary contribution to each of these functions to sustain the Capital, Maintenance and Operating functions of Transport for Cape Town.

7.2 MLTF

The MLTF has been established in terms of sections 27 and 28 of the NLTA. Amounts paid into the MLTF include:

- Monies allocated by the Minister and MEC – grants e.g. currently PTIG, PTNOG
- User charges
  - vehicles entering specific areas e.g. congestion charges, toll fees or freight charges
  - L&B that generate the movement of people e.g. PTI's
  - Parking
  - Taxi ranks, stops and terminals
- Interest on invested cash balances
- Donations and contributions to the Fund from any other sources including foreign aid agencies

The Fund can be used by TCT to defray the cost of functions in terms of the Act or its CITP and cover any other expenditure that will promote the objectives of the Act.

The MLTF also facilitates the creation of the strategic business models for the individual investment packages and projects (including their linkages to TOD). These models are to include (as appropriate) the use of partnership models with the private sector (these may draw on international models such as local asset backed vehicles, tax incremental financing and PPP) as well as the use of appropriate public sector grants and guarantees. Such packages and projects need to be costed in determining which the most appropriate investment markets are for them (with a particular focus on international markets).

These packages and projects will include:

- Appropriate user charging projects (such as congestion charging and freight charging mechanisms) on a value for money basis;
- Rail and related infrastructure projects (which may include signalling, development opportunities relating to stations, rolling stock procurement and an airport link PPP project); and
- Bike share and public transport street furniture projects; and
- The creation of a model form vehicle operator contract that fits within the TCT/National Contracting Authority assignment agreement and further:

- elaborates on the performance management and investment management procedures of the Contracting Authority linked to the Constitution of TCT By-law;
- gives effect to the parameters of the assignment agreement; and
- sets out the linkages to and working of the MLTF in relation to the Contracting Authority.

The establishment of the Municipal Land Transport Fund (MLTF) is critical to the financial management methodology and success of TCT as a Transport Authority. The immediate next step in the formalisation of the MLTF is to develop and cost investment packages as recommended in the CITP. Some of the deliverables under this process include:

- Defining the functionality of the MLTF in practice, both in terms of sections 27 and 28 of the NLTA and in order to give effect to the Constitution of the TCT By-law ("the By-law");
- The development of the accountability and reporting mechanisms as to how the funding received by the MLTF is allocated for the purposes of transport and related activities, including as to the linkages with TCT's annual reporting requirements referred to in the By-law for the financial years 2014/15 onwards;
- The development of the philosophy and principles underpinning the investment activities of TCT, including how such activities relate to the prevailing CITP;
- The creation of the strategic business models for the individual investment packages and projects (including their linkages to TOD). These models are to include (as appropriate) the use of partnership models with the private sector (these may draw on international models such as local asset backed vehicles, tax incremental financing and PPP) as well as the use of appropriate public sector grants and guarantees. This will include supporting the costing of such packages and projects and determining which are the most appropriate investment markets for them (with a particular focus on international markets). These packages and projects will include:
    a. appropriate user charging projects (such as congestion charging and freight charging mechanisms) on a value for money basis;
    b. rail and related infrastructure projects (which may include signalling, development opportunities relating to stations, rolling stock procurement and an airport link PPP project); and
    c. bike share and public transport street furniture projects; and

One of the key focus areas is developing the investment methodology of the above and further, under the parameters of Transit Orientated Development. After setting broad objectives, these will be converted into specifics and to develop a TOD manual with the focus being on identified transport driven projects. The investment deliverables will be in relation to performance driven investment, profiling and business plans as well as details packaging and leverage tools. At least three investments projects will have to be developed and linked to the Integrated City Development Grant.

It is also important at this stage to set out the linkages to and working of the MLTF in relation to the Contracting Authority.

Lastly, the MLTF will continue to be managed in accordance with the MFMA, as updated through its regular circulars.

7.3 DEVELOPMENT CONTRIBUTIONS FOR ENGINEERING SERVICES

7.3.1 Project Definition and Description

Local government is empowered to provide municipal services in terms of Section 156(1) of the Constitution, and Section 8 of the Systems Act, 2000. This obligation is discharged through, among others, the provision and operation of infrastructure, including external infrastructure. Section 73(2)(c) of the Municipal Systems Act also requires that these services must be provided in a financially sustainable manner and Section 75A of the same Act empowers a municipality to impose, inter alia, charges to pay for services.

The strategic intent of this policy is to ensure the financial sustainability of the City through the definition and confirmation of a Development Charge on any new development or land use rights application that increases the load on municipal external infrastructure.

7.3.2 Project Status

The Development Charges for Engineering Services Policy, as approved by Council will come into effect on 1 July 2014, which is the start of the 2014/15 Financial Year.

Development applications approved prior to the approval of the new Development Charges Policy will be subject to the current Interim Policy, approved by Council in 20014, and all new developments approved after the date of approval of the new Development Charges Policy will be subject to the new policy. The new Development Charges Policy will replace that Interim Policy on Development Contributions (MC45/09/04), as amended and supplemented in 2011 and 2012.

7.3.3 Project Policy and Strategy

Development Charges are an integral part of the broader legal framework for urban land development and municipal finance. This legal framework is undergoing change at national, provincial and municipal levels.

This policy is consistent with the Draft Policy Framework for Municipal Development Charges (Version 7) issued by the National Treasury in 2011 and which reflects a broadly shared understanding of the role, purpose and legal nature of Development Charges across the country. An amendment to the national Municipal Fiscal Powers and Functions Act, 12 of 2007, to give legal force to the current final Draft National Policy Framework for Municipal Development Charges (2011) is anticipated.

Development Charges are currently provided for in terms of Section 42 of the Land Use Planning Ordinance (LUPO), 15 of 1985. When an approval is granted for a land use change in terms of LUPO, then the City is empowered to impose conditions in terms of section 42(2).

Changes in land use or zoning give rise to a Development Charge where there is intensified utilisation of the land and resultant increase in loading on the infrastructure. Development Charges will be imposed on all these applications where the City is requested to approve a development application in terms of the applicable land use or planning legislation.

Although public transport infrastructure is not typically included as one of the engineering services covered by Development Charges the National Land Transport Act, (Act 5 of 2009), allows a municipality to raise a user charge from 'land, buildings or other developments that generate the movement of passengers, including land or buildings of which the State is the owner, in its area', provided that this money goes into the municipality's 'land transport fund'.

Development Charges may only be used for capital works, i.e. the full and actual costs of construction of new municipal infrastructure or the upgrading of the capacity of existing municipal infrastructure, taking into account the components of actual cost as set out in the policy. Development Charges may not be used to reduce or eliminate existing infrastructure backlogs, for operations or maintenance costs, or as a general revenue source for the City.

7.3.4 Future Strategies and Plans

The modelling of the City to determine the cost of public transport will be done on the following basis.

- The Pragmatic Densification (PD), and not the Pragmatic TOD land use scenario was used to calculate Development Charges (DC's).
- The IPTN development programme evaluated several public transport network alternatives. The TA2 and TA4 networks were applied to the PD land use scenario.
- The TA2 network focusses on an improved rail network, additional BRT trunk lines, limited minibus-taxi (MBT) services and no remaining subsidised bus services. For the purpose of this modelling, the Atlantis rail service was added to this scenario. This network was used to determine the future road network infrastructure to accommodate the PD land use scenario.
- The TA4 network focusses on BRT services (Trunks and feeders), some MBT services, and no subsidised buses. This network was used to determine public transport infrastructure.
- The following public transport components were included in the DC calculations:
  (1) PTI,
  (2) Park & rides,
  (3) Stops and
  (4) NMT linkages.

  This will only be for public transport services where the City does not receive any funding (e.g. roadside MBT stops). A percentage of the total public transport costs were added to allow for linkages over the whole network. The DC Policy made specific reference to public transport incentives so as to facilitate investment into the relevant infrastructure upgrading. [1]
- It is assessed that no public transport costs are backlogged.

[1] It should be noted that all development charges related to road, stormwater or public transport will be accumulated in the Municipal Land Transport Fund(MLTF) for use in specific TCT-related projects and programmes

7.3.5 Project Programme and Budget

All funds collected are to be retained in dedicated Asset-financing Funds, per service and per municipal district, to be applied in the Areas concerned, and toward the services against which payment was made, provided that:

- Funds must be spent according to the project priorities of the City for that municipal district and service, as illustrated in the infrastructure master plans (in the case of TVCT, the CITP) and detailed in the capital budget or integrated development plan.

7.3.6 Monitoring and Evaluation

The Finance Directorate: Treasury Department will be responsible for monitoring the collection and use of the Development Charges. The use of Development Charges shall be reported on in the City's Annual Report, and be subject to the City's standard auditing procedures.

The following information, broken down by service and by applicable region, must be published annually by the City and used for evaluation and review of the policy:

- Value of Development Charges levied;
- Value of Development Charges received;
- Value of the external infrastructure provided by developers as payment in kind;
- Expenditure from all Development Charges funds; and
- Value of rebates/exemptions awarded and sources of alternative funding.

8 SUMMARY OF PROPOSALS AND PROGRAMMES

The core of this chapter is to highlight the progress made with linking the TCT objectives with strategic actions for the various departments of TCT, while also updating the budget allocation for the next three years. The next step, that will be address during the 2014/15 review of the CITP, will be to align the budget with strategic actions – first for the outer years of the budget, but then increasingly for the actual detailed budget.

8.1 ACTION MATRIX

Annexure A shows the Action Matrix of projects, programmes and interventions to be completed during the 5-year timeframe of this CITP 2013 – 2018. Interventions range from institutional projects, through development mechanisms to investment projects, with 60% falling in the investment category.

The Action Matrix primarily shows the priority programmes and projects pertaining to the TCT Objective it best addresses. It then highlights the lead department within TCT who is accountable for each deliverable, with linkage to critical supporting departments. Items highlighted in yellow have either commenced or will start in 2014/15 financial year.

8.2 BUDGETS AND PROJECTS

8.2.1 Capital Budget

The approved TCT capital budget for 2014/15 to 2016/17 for TCT was approved by Council in May 2014, and is shown in Annexure B. A summary of the budget spend per financial year is shown in Table 8-1. The sources of funding for the TCT 2014/15 to 2016/17 budget are shown in Table 8-2.

Table 8-1: TCT Proposed Capital Budget 2014/15 to 2016/17

Department	Approved Budget 2014/15	Approved Budget 2015/16	Approved Budget 2016/17	Total
Commissioner TCT	43 121	0	0	43 121
Contract Operations	474 609 938	206 259 679	72 852 840	753 722 457
Financial Management	700 000	700 000	700 000	2 100 000
Infrastructure	423 731 510	521 840 321	672 888 160	1 618 459 991
Maintenance	712 149 985	636 239 965	641 523 092	1 989 913 042
Network Management	46 700 000	39 600 000	9 700 000	96 000 000
TCT Performance & Coordination	2 250 000	1 750 000	1 750 000	5 750 000
Total	R1 660 184 554	R1 406 389 965	R1 399 414 092	R4 465 988 611

Table 8-2: Funding Sources for TCT Approved Capital Budget 2014/15 to 2016/17

Fund	Approved Budget 2014/15	Approved Budget 2015/16	Approved Budget 2016/17	Total
EFF	105 489 492	165 673 092	179 273 092	450 435 676
REVENUE: INSURANCE	200 000	200 000	200 000	600 000
ASSETS SALE	1 000 000	440 000	0	1 440 000
BICL	44 000 000	20 430 000	3 100 000	67 530 000
CRR	33 762 652	0	0	33 762 652
CMTF OTHER	2 100 000	0	0	2 100 000
NT NDPG	31 150 000	10 000 000	0	41 150 000
NT PTIG	1 159 140 000	900 000 000	912 841 000	2 971 981 000
NT PTNOG	50 000	4 000 000	4 000 000	8 050 000
NT USDG	268 292 410	250 646 873	245 000 000	763 939 283
PM&R - TS&I	5 000 000	5 000 000	5 000 000	15 000 000
PRIVATE SECTOR	10 000 000	50 000 000	50 000 000	110 000 000
TOTAL	**R 1 660 184 554**	**R 1 406 389 965**	**R 1 399 414 092**	**4 465 988 611**

8.2.1 Repairs and maintenance budget

The budget shown in Table 8-4reflects the proposed 2014/2015 Repairs and Maintenance budget for Transport for Cape Town, as well as the projected budget for 2015/16 and 2016/17. The budget as a whole reflects both Primary Costs (costs of external service providers) and Secondary costs (cost relating to internal service providers such as Depot staff and plant).

Furthermore the budget reflects the allocation per Area in terms of the City's decentralised services delivery model as well as Service Menu elements such as Metro Roads Reseal/ Resurfacing, Local Roads Reseal/ Resurfacing and Lines & Signs. Stormwater expenditure is also reflected, but is not included in the Transport Related Total.

The Area Model consists of the following sub-units, consisting of Districts and Depots, and is arranged as shown in Table 8-3.

Table 8-3: Department: Asset Management and Maintenance: Area-based Composition

Area: Central	District: Cape Town	Depot: Ebenezer
		Depot: Ndabeni
	District: Blaauwberg	Depot: Killarney
		Depot: Atlantis
Area: South	District: Athlone	Depot: Heideveld/Nyanga
		Depot: Hillstar
	District: Plumstead	Depot: Southfield
		Depot: Fish Hoek
		Depot: Houtbay

Area: North	District: Kraaifontein	Depot: Kraaifontein
		Depot: Langeberg
	District: Bellville	Depot: Arnold Wilhelm/Socony
		Depot: Sacks Circle
Area: East	District: Somerset West	Depot: Strand/Macasser
		Depot: Delft/Kuilsriver
	District: Khayelitsha	Depot: Mitchells Plain
		Depot: Khayelitsha

Table 8-4: MTREF TCT Repairs and Maintenance Budget 2014/15 to 2016/17

ELEMENT	TOTAL	Projected Annual Increase 8.8%	
	14/15	15/16	16/17
STORMWATER			
GULLEY CLEANING (28%)	23 800 000	25 894 400	28 173 107
S/W CLEAN (28%)	23 800 000	25 894 400	28 173 107
RIVER, STREAMS & CANALS CLEANING (28%)	23 800 000	25 894 400	28 173 107
S/W REPAIR & REHAB (8%)	6 800 000	7 398 400	8 049 459
SEA WALLS & COASTAL STRUCTURES (2%)	1 700 000	1 849 600	2 012 365
HYDROLOGICAL MONITORING SYSTEM (2%)	1 700 000	1 849 600	2 012 365
CONSULTANCY SERVICES (4%)	3 400 000	3 699 200	4 024 730
STORMWATER PRIMARY	**85 000 000**	**92 480 000**	**100 618 240**
STORMWATER SECONDARY (WORK BY DEPOTS)	**59 470 208**	**64 703 586**	**70 397 502**
STORMWATER TOTAL	**144 470 208**	**157 183 586**	**171 015 742**
		-	-
PUBLIC TRANSPORT INTERCHANGES PRIMARY	**10 129 704**	**11 021 118**	**11 990 976**
PUBLIC TRANSPORT INTERCHANGES SECONDARY	**956 359**	**1 040 518**	**1 132 084**
PUBLIC TRANSPORT INTERCHANGES TOTAL	**11 086 062**	**12 061 636**	**13 123 060**
		-	**-**
RAIL SERVICES PRIMARY TOTAL	**3 201 087**	**3 482 782**	**3 789 267**
		-	-
NETWORK MANAGEMENT (Incl Signals) PRIMARY	**15 376 206**	**16 729 312**	**18 201 491**

NETWORK MANAGEMENT (Incl Signals) SECONDARY	**336 650**	**366 275**	**398 507**
NETWORK MANAGEMENT (Incl Signals) TOTAL	**15 712 856**	**17 095 587**	**18 599 999**
		-	-
PLANT & BUILDING MAINTENANCE PRIMARY	**6 063 081**	**6 596 632**	**7 177 135**
PLANT & BUILDING MAINTENANCE SECONDARY	**3 159 181**	**3 437 189**	**3 739 661**
PLANT & BUILDING MAINTENANCE TOTAL	**9 222 262**	**10 033 821**	**10 916 797**
	-	-	-
ROADS	-	-	-
INFORMAL SETTLEMENTS	10 500 000	11 424 000	12 429 312
METRO RESEAL (3)	149 832 670	163 017 945	177 363 524
LOCAL RESEAL (4)	95 000 000	103 360 000	112 455 680
STRUCTURES	12 000 000	13 056 000	14 204 928
GUARDRAILS	8 000 000	8 704 000	9 469 952
PLANNED ROUTINE - METRO	12 000 000	13 056 000	14 204 928
REACTIVE ROUTINE - DISTRICTS	40 000 000	43 520 000	47 349 760
RAILINGS (5)	1 000 000	1 088 000	1 183 744
LANE MARKING AND SIGNS	20 000 000	21 760 000	23 674 880
FOOTWAYS, VERGES & CYCLEWAYS	8 000 000	8 704 000	9 469 952
K + CH	4 000 000	4 352 000	4 734 976
FENCING (5)	1 000 000	1 088 000	1 183 744
GRAVEL ROAD MAINTENANCE	14 000 000	15 232 000	16 572 416
PERIODIC BIDS	1 000 000	1 088 000	1 183 744
WEEDSPRAYING (8)	5 500 000	5 984 000	6 510 592
ROADS PRIMARY	**381 832 670**	**415 433 945**	**451 992 132**
ROADS SECONDARY (WORK BY DEPOTS)	**270 919 849**	**294 760 796**	**320 699 746**
ROADS TOTAL	**652 752 519**	**710 194 740**	**772 691 877**
TRANSPORT RELATED TOTAL	**691 974 785**	**752 868 566**	**819 121 000**
TCT R&M GRAND TOTAL	**836 444 993**	**910 052 152**	**990 136 742**

ANNEXURES

Annexure A: TCT Action Plan

Objective 1: An efficient and viable relationship between land use, supporting infrastructure and transport for the sustainable development of the City region

				Interdependency							
ID	**S**	**Priority Programme or Project**	**Lead**	**PC**	**P**	**CO**	**FM**	**I**	**M**	**NM**	**R**
1.1	A	Continually review and update the CITP for the furtherance of City's Transport Vision of 1 and TCT's nine Objectives, as well as ensuring that the CITP is within the National and Provincial strategic directives (National Development Plan, PLTF, etc)	**P**	✓		✓	✓	✓	✓	✓	✓
1.1.1	A	Develop a freight management strategy	**P**					✓		✓	
1.1.2	B	Finalise the parking management strategy and develop a parking management tender	**NM**		✓		✓				
1.1.3	A	Review and update the stormwater management by-law	**P**					✓	✓		
1.1.4	B	Research and develop a green strategy for TCT	**P**	✓		✓	✓	✓	✓	✓	
1.1.5	A	Develop a mechanism to incorporate the Expanded Public Works Programme (EPWP) into the line functions	**I**	✓			✓		✓		
1.1.6	A	Research and develop a non motorised transport / active mobility by-law for TCT	**P**					✓		✓	
1.2	C	Finalise the Integrated Public Transport Network (IPTN) and develop IPTN implementation mechanisms	**P**								
1.3	C	Develop a Transit Orientated Development (TOD) Strategy and key related investment programmes and projects	**P**	✓			✓				

Objective 1: An efficient and viable relationship between land use, supporting infrastructure and transport for the sustainable development of the City region												
				Interdependency								
ID	**S**	**Priority Programme or Project**	**Lead**	**PC**	**P**	**CO**	**FM**	**I**	**M**	**NM**	**R**
1.4.1	A	Finalise the Development Charges Policy and Mechanism	**I**		✓		✓		✓		
1.4.2	B	Give effect to the investment potential of the Development Charges Policy and Mechanism for the component related to TCT	**FM**						✓		
1.4.3	A	Make operational the Development Charges Policy and Mechanism	**M**				✓				
1.5	B	Expedite process of releasing abandoned road schemes and invest the proceeds into the maintenance and management needs of TCT	**I**				✓				
1.6	A	Finalise the business model and funding mechanism for the Sir Lowry's Pass River upgrade project and its implementation so as to release the adjoining land	**I**				✓				
1.7	A	Develop a business model and funding parameters for flood management related to the Lourens River project	**I**		✓		✓				

PC: Performance and Coordination; P: Planning; CO: Contract Operations; FM: Financial Mgt; I: Infrastructure; M: Maintenance; NM: Network Ops Mgt; R: Regulations

Objective 2: Integrated, intermodal, interoperable, responsive and car competitive public transport for the benefit of the community											
				Interdependency							
ID	**S**	**Priority Programme or Project**	**Lead**	**PC**	**P**	**CO**	**FM**	**I**	**M**	**NM**	**R**
2.1	C	Roll out of Contracting Authority Function assignment and integration with all other vehicle operator contracts across the City	**CO**	✓							
2.2	A	Fully functional and mandated Contracting Authority	**CO**								
2.2.1	A	Development of operational contracts	**CO**	✓			✓				
2.2.2	A	Regulatory unified mechanisms in respect of Contract Operations	**R**	✓		✓	✓				
2.2.3	A	Consolidated penalty system	**CO**	✓			✓				
2.2.4	A	Financial management of operational contracts	**FM**			✓					
2.3	C	Development and implementation of an integrated, responsive single timetable across all scheduled modes of transport	**CO**	✓	✓						
2.4	C	Roll out of MyConnect across all modes and expansion of its capabilities for other secondary uses (such as events, parking etc)	**FM**	✓						✓	
2.5	C	Approval and roll out of the City's Comprehensive Universal Access Policy	**P**								
2.5.1	A	Development of the Universal Access Policy operational by-law	**CO**		✓						
2.5.2	A	Review and development of new Universal Access Infrastructure Standards	**I**		✓	✓				✓	

Objective 2: Integrated, intermodal, interoperable, responsive and car competitive public transport for the benefit of the community											
				Interdependency							
ID	**S**	**Priority Programme or Project**	**Lead**	**PC**	**P**	**CO**	**FM**	**I**	**M**	**NM**	**R**
2.5.3	A	Rollout various Universal Assess Contracts (e.g. DAR X2 etc)	**CO**	✓			✓	✓		✓	✓
2.5.4	A	Ensure all contracts include Universal Access parameters	**CO**	✓							✓
2.6	C	Continue with the MIT / Sensible City Lab project and roll out of the preferred project	**PC**								✓

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Objective 3: An economically viable transport system by balancing service provision with demand and through transparent regulation												
				Interdependency								
ID	**S**	**Priority Programme or Project**	**Lead**	**PC**	**P**	**CO**	**FM**	**I**	**M**	**NM**	**R**
3.1	A	Roll out of the Municipal Regulatory Entity (MRE) Function, the related Operating Licence Administrative System (OLAS) and registration of all taxi associations	**R**	✓	✓					✓	
3.2	A	Fully functional Municipal Regulatory Entity Committee and Secretariat	**R**								
3.3	C	Develop local operational demand plans related to growth areas across the City as well as an operational/growth model that is based on economic parameters	**R**		✓						
3.4	B	Establish and work up the costing model for integrated public transport along with service delivery scenarios	**P**			✓	✓	✓	✓	✓	
3.5	D	Continue the process for the roll out of the ORIO funding initiative, with a focus on developing a workable model for revenue generation at and maintenance of public transport interchanges	**I**		✓	✓	✓		✓		
3.6	D	Develop, consult and implement a socio-economic solution for all taxi operations (e.g. direct, partial, indirect, etc)	**R**	✓		✓					
3.7	C	Roll out of projects that will focus on the alleviation of congestion and development of related investment funding mechanisms	**I**	✓	✓		✓			✓	
3.8	B	Research and develop socio economic investment driven model for public transport	**P**				✓				

Objective 3: An economically viable transport system by balancing service provision with demand and through transparent regulation												
				Interdependency								
ID	**S**	**Priority Programme or Project**	**Lead**	**PC**	**P**	**CO**	**FM**	**I**	**M**	**NM**	**R**
3.8.1	C	Interrelationship between typologies within modes	**P**	✓							
3.8.2	A	Public Transport Interchanges	**I**	✓	✓			✓	✓	✓	
3.8.3	C	Public transport interface with land use	**P**	✓			✓				
3.8.4	C	Public transport interface with utilities	**I**		✓		✓		✓		
3.8.5	C	Public transport interface with human services settlements	**M**		✓		✓				
3.9	C	Continued roll out of the IRT system in an integrated manner	**I**								
3.9.1	A	Roll out of the Phase 1 milestones	**I**	✓	✓	✓	✓				✓
3.9.2	A	Complete the construction of Phase 1B and N2 Express	**I**	✓					✓		
3.9.3	C	Project management, coordination and reporting of IRT – all Phases	**I**	✓	✓	✓	✓		✓	✓	✓
3.9.4	A	Continued roll out of industry transition and compensation	**R**	✓		✓					
3.9.5	A	Conceptual design and tender initiation for Phase 2	**I**		✓	✓					
3.9.6	A	Stakeholder consultation, communication and marketing	**PC**		✓	✓	✓	✓	✓	✓	✓

PC: Performance and Coordination; P: Planning; CO: Contract Operations; FM: Financial Mgt; I: Infrastructure; M: Maintenance; NM: Network Ops Mgt; R: Regulations

Objective 4: Services delivered in an accountable, investment orientated and performance driven manner, ensuring quality and unified standards												
				Interdependency								
ID	**S**	**Priority Programme or Project**	**Lead**	**PC**	**P**	**CO**	**FM**	**I**	**M**	**NM**	**R**
4.1	A	Specify, establish and make operational TCT's IS&T system	**NM**								
4.1.1	A	Make operational TCT's Information Management System	**NM**	✓	✓	✓	✓	✓	✓		✓
4.1.2	A	Develop and implement TCT's centralised databank	**NM**								
4.1.3	D	Create and roll out TCT's Transport Development Index	**PC**							✓	
4.1.4	A	Design TCT's Performance Management mechanism	**PC**							✓	
4.1.5	A	Create and populate TCT's website and app	**PC**		✓	✓	✓	✓	✓	✓	✓
4.2	B	Develop detailed norms and standards of the infrastructure network eg road, stormwater, non motorised transport and how they relate to and interface with rail	**I**						✓	✓	
4.3	A	Establish and roll out a system by which all vehicle operators are managed through a performance driven accountability mechanism which is available to the public and published on TCT's website	**CO**	✓							
4.4	D	Establishment of a new investment driven infrastructure system	**I**							✓	

Objective 4: Services delivered in an accountable, investment orientated and performance driven manner, ensuring quality and unified standards												
				Interdependency								
ID	**S**	**Priority Programme or Project**	**Lead**	**PC**	**P**	**CO**	**FM**	**I**	**M**	**NM**	**R**
4.4.1	A	Develop a new Pavement Management System (PMS), Bridge Management System (BMS) and Load Management System (LMS)	**I**						✓		
4.4.2	A	Manage the new PMS, BMS and LMS	**M**					✓			
4.4.3	A	Create and manage a comprehensive new asset management register for all road, stormwater and public transport infrastructure	**M**				✓	✓		✓	
4.4.4	A	Create and maintain a comprehensive register of moveable assets, plant and equipment	**M**				✓			✓	
4.5	A	Investigate and cost the establishment of a training academy to cater for all the Functions of TCT	**PC**								

PC: Performance and Coordination; P: Planning; CO: Contract Operations; FM: Financial Mgt; I: Infrastructure; M: Maintenance; NM: Network Ops Mgt; R: Regulations

Objective 5: A costed, viable and financially accountable transport management system and network through exploiting all potential sources of funding												
				Interdependency								
ID	**S**	**Priority Programme or Project**	**Lead**	**PC**	**P**	**CO**	**FM**	**I**	**M**	**NM**	**R**
5.1	B	Establish a fully functional Municipal Land Transport Fund that maximises its funding opportunities so as to enhance service delivery by TCT	**FM**								
5.1.1	A	Review the potential of the funding sources, both collectively and individually	**FM**								
5.1.2	B	Determine a mechanism to maximise interest and its use	**FM**								
5.1.3	B	Determine investment packages for key programmes and projects	**FM**	Note *	Note *	Note *		Note *	Note *	Note *	Note *
5.1.4	B	Develop a strategy to maximise revenue for TCT	**FM**	✓	✓	✓		✓	✓	✓	✓
5.1.5	B	Determine and consolidate the linkages between the MLTF and AFC	**FM**			✓				✓	
5.2	D	Continue with and expand on the funding maximisation model to expedite roll out of BRT and ultimately the fully integrated public transport system across Cape Town	**I**		✓	✓	✓				✓
5.3	B	Investigate and cost for the potential establishment of the Premix Plant that will service all infrastructure and maintenance projects across the City	**M**				✓				

Objective 5: A costed, viable and financially accountable transport management system and network through exploiting all potential sources of funding											
				Interdependency							
ID	**S**	**Priority Programme or Project**	**Lead**	**PC**	**P**	**CO**	**FM**	**I**	**M**	**NM**	**R**
5.4	D	Develop an investment methodology that takes into account the relationship between capital investment and the operating cost of infrastructure and facilities, as well as long term repairs and maintenance	**FM**			✓		✓	✓	✓	

Note * - in 5.1.3, Departments are not assigned by default to support, but on a case by case basis according to the content of the investment

PC: Performance and Coordination; P: Planning; CO: Contract Operations; FM: Financial Mgt; I: Infrastructure; M: Maintenance; NM: Network Ops Mgt; R: Regulations

Objective 6: Consolidated and improved PT law enforcement functions in the City so as to facilitate safety and security on the network and related facilities for the benefit of all												
				Interdependency								
ID	**S**	**Priority Programme or Project**	**Lead**	**PC**	**P**	**CO**	**FM**	**I**	**M**	**NM**	**R**
6.1	A	Consolidate the parameters of public transport law enforcement required in the City, delivery roles and responsibilities, financial sources and establish the mechanisms for such enforcement	**NM**				✓				✓
6.2	A	Extension of the TMC (including comprehensive CCTV roll out) to cover all TCT functional activities, including rail	**NM**	✓							
6.3	A	Improve public perception of safety on and of the transport network and facilities	**PC**			✓				✓	✓
6.4	A	Roll out the approved Road Safety Strategy for the City of Cape Town	**NM**	✓				✓	✓		
6.5	A	Cost and implement the enforcement component of the MRE	**R**							✓	
6.5.1	A	Develop the specifications for the enforcement component of the MRE	**R**							✓	
6.5.2	A	Determine the operational system for MRE enforcement	**R**							✓	
6.5.3	A	Implement the specifications and system and its linkages to public transport law enforcement	**NM**		✓	✓	✓				
6.6	C	Continue with the roll out of the rail/informal settlement project that is in partnership with PRASA so as to improve community safety	**P**	✓		✓		✓			

PC: Performance and Coordination; P: Planning; CO: Contract Operations; FM: Financial Mgt; I: Infrastructure; M: Maintenance; NM: Network Ops Mgt; R: Regulations

Objective 7: Comprehensive communication and stakeholder management under the banner of TCT so as to ensure responsible service delivery in partnership with all industry role players											
				Interdependency							
ID	**S**	**Priority Programme or Project**	**Lead**	**PC**	**P**	**CO**	**FM**	**I**	**M**	**NM**	**R**
7.1	A	Establish and operate the Land Transport Advisory Board and the Intermodal Planning Committee	**PC**								
7.2	A	Roll out the TCT brand and appropriate wayfinding methodology (eg app, signage, website)	**PC**					✓	✓	✓	
7.3	A	Develop and roll out a comprehensive marketing and communication strategy for TCT that covers its operational, corporate, functional, national and international mandate	**PC**		✓	✓	✓	✓	✓	✓	✓
7.4	A	Develop and implement a memorandum of action with the following role players in Cape Town that is focused on responsive service delivery and building capacity within that sector:									
7.4.1	A	PRASA	**CO**	✓	✓						
7.4.2	A	Minibus Taxi Industry	**R**	✓			✓				
7.4.3	A	Scheduled Bus Operators	**CO**	✓							✓
7.4.4	A	Meter Taxi Industry	**R**	✓							
7.4.5	A	Small Bus Operator Industry	**CO**	✓							✓
7.4.6	A	Non motorised transport stakeholders	**P**	✓							

Objective 7: Comprehensive communication and stakeholder management under the banner of TCT so as to ensure responsible service delivery in partnership with all industry role players											
				Interdependency							
ID	**S**	**Priority Programme or Project**	**Lead**	**PC**	**P**	**CO**	**FM**	**I**	**M**	**NM**	**R**
7.4.7	A	Universal Access Stakeholders	**P**	✓		✓					
7.4.8	A	Educational Institutions	**CO**	✓	✓						✓
7.4.9	A	Construction Industry	**I/M**	✓					✓		
7.4.10	A	Freight	**P**	✓				✓	✓		
7.4.11	A	Business	**PC**			✓	✓				
7.4.12	A	Adjoining local municipalities	**PC**								
7.4.13	A	Other relevant State Owned Enterprises (SOEs)	**PC**		✓	✓	✓	✓	✓	✓	
7.4.14	A	Tuk Tuks	**R**	✓							
7.5	A	Establish TCT as a World Design Capital 2014 legacy project	**PC**		✓	✓	✓	✓	✓	✓	✓

PC: Performance and Coordination; P: Planning; CO: Contract Operations; FM: Financial Mgt; I: Infrastructure; M: Maintenance; NM: Network Ops Mgt; R: Regulations

Objective 8: A fully integrated, responsive and well maintained infrastructure network along with related facilities that are appropriately managed as the largest asset of the City

				Interdependency							
ID	**S**	**Priority Programme or Project**	**Lead**	**PC**	**P**	**CO**	**FM**	**I**	**M**	**NM**	**R**
8.1	D	Register the network in terms of the Road Infrastructure Strategic Framework for South Africa (RIFSA)	**I**						✓	✓	
8.2	D	Using the asset register, develop a lifecycle costing methodology for infrastructure investment and maintenance decisions, and move towards a more appropriate planned versus reactive maintenance ratio	**I**				✓		✓		
8.2.1	D	Develop a lifecycle costing methodology for infrastructure investment	**I**				✓		✓		
8.2.2		Develop a strategy and action plan to move towards a more efficient planned versus reactive maintenance ratio	**M**				✓	✓			
8.3	C	Develop a stormwater and access track strategy and intervention priorities for identified informal settlements	**M**		✓					✓	
8.4	A	Continue and expand the project for the upgrading of concrete roads, addressing the pavement, stormwater and sidewalk needs in identified areas	**I**								
8.5	C	Continue with the UCT/TCT partnership related to the Foreshore Freeways with the aim of progressing the preferred research outcomes into a detailed project brief	**PC**				✓	✓			
8.6	A	Deliver on the Traffic Signals Upgrade Project	**NM**								

Objective 8: A fully integrated, responsive and well maintained infrastructure network along with related facilities that are appropriately managed as the largest asset of the City												
				Interdependency								
ID	**S**	**Priority Programme or Project**	**Lead**	**PC**	**P**	**CO**	**FM**	**I**	**M**	**NM**	**R**
8.7	A	Construction of the Seapoint and Strand seawalls	**I**								

PC: Performance and Coordination; P: Planning; CO: Contract Operations; FM: Financial Mgt; I: Infrastructure; M: Maintenance; NM: Network Ops Mgt; R: Regulations

Objective 9: Fully functional and user friendly systems on the intermodal network												
				Interdependency								
ID	**S**	**Priority Programme or Project**	**Lead**	**PC**	**P**	**CO**	**FM**	**I**	**M**	**NM**	**R**
9.1	D	Develop a cost effective and responsive public transport network and related facilities	**I**								
9.1.1	B	Develop a cost effective, investment orientated model for unified public transport facilities across Cape Town.. Bus Shelters. Illuminated Signs	**I**	✓	✓		✓		✓	✓	
9.1.2	A	Develop a comprehensive tender for a TCT wayfinding system	**I**	✓			✓				
9.1.3	A	Develop and roll out a bike share system	**P**	✓			✓				
9.1.4	A	Design and manage construction of public transport facilities and interchanges	**I**								
9.1.5	A	Maintain all TCT wayfinding, facilities and PTIs	**M**							✓	
9.2	D	Establish and roll out a transport model for events that addresses movement, safety, convenience, interrelated costs and promotion	**NM**	✓		✓	✓		✓		
9.3	C	Work in partnership with PRASA to expedite the roll out of the new Blue Downs rail connection and ensure that the linkage and working relationships are established with sister departments	**CO**	✓	✓						
9.4	A	Manage the expansion of Arterial Management System (AMS) and Freeway Management System (FMS)	**NM**	✓							

PC: Performance and Coordination; P: Planning; CO: Contract Operations; FM: Financial Mgt; I: Infrastructure; M: Maintenance; NM: Network Ops Mgt; R: Regulations

Annexure B: TCT's Budgets for TCT's Projects for 2014/15 to 2016/17

No.	Project Description	Approved Budget 2014/15 (R)	Approved Budget 2015/16 (R)	Approved Budget 2016/17 (R)	Fund	Ward
1	Furniture & Computers: Additional	43 121	0	0	1 EFF	Corp Inf
2	Mitchell's Plain Station TI	14 500 000	8 000 000	0	4 NT NDPG	79
3	IRT: Control Centre	27 606 444	11 455 735	0	4 NT PTIG	Multi-ward
4	IRT: Fare Collection	122 614 644	133 411 360	58 352 840	4 NT PTIG	Multi-ward
5	Khayelitsha CBD PTI	500 000	4 000 000	5 500 000	4 NT PTIG	94
6	IRT: Acquisition of Rights	50 000	4 000 000	4 000 000	4 NT PTNOG	Multi-ward
7	MyConnect Ticketing in PT Facilities	2 500 000	0	0	4 NT PTIG	Multi-ward
8	PT information & branding	4 500 000	0	0	4 NT PTIG	Multi-ward
9	IRT: Vehicle Acquisition	302 338 850	0	0	4 NT PTIG	Multi-ward
10	MyConnect Ticketing in PT Facilities	0	0	5 000 000	4 NT PTIG	Multi-ward
11	IRT: Vehicle Acquisition	0	42 892 584	0	4 NT PTIG	Multi-ward
12	MyConnect Ticketing in PT Facilities	0	2 500 000	0	4 NT PTIG	Multi-ward
13	Furniture, Tools & Equipment: Additional	500 000	0	0	1 EFF	Corp Inf
14	TRS Contingency Provision - Insurance	200 000	0	0	2 REVENUE: INSURANCE	Corp Inf
15	TRS Contingency Provision - Insurance	0	200 000	0	2 REVENUE: INSURANCE	Corp Inf
16	TRS Contingency Provision - Insurance	0	0	200 000	2 REVENUE: INSURANCE	Corp Inf
17	Furniture, Tools & Equipment: Additional	0	500 000	0	1 EFF	Corp Inf
18	Furniture, Tools & Equipment: Additional	0	0	500 000	1 EFF	Corp Inf
19	Lentegeur & Mandalay Station PTI's:Dsg	12 650 000	2 000 000	0	4 NT NDPG	76
20	Intergrated Bus Rapid Transit System	32 000 000	0	0	4 NT PTIG	Corp Inf
21	IRT:Depot Infrastructure:Inner City	10 000 000	0	0	4 NT PTIG	Multi-ward
22	IRT: West Coast Corridor	5 000 000	0	0	4 NT PTIG	Multi-ward
23	IRT: Inner City Feeder Stops	40 000 000	0	0	4 NT PTIG	Multi-ward
24	IRT: Trunk Stations	3 813 300	0	0	4 NT PTIG	Multi-ward
25	Inner City:Public Transport Hub	10 400 000	30 000 000	45 000 000	4 NT PTIG	Multi-ward
26	Bayside Public Transport Interch: PTIG	4 500 000	7 000 000	2 500 000	4 NT PTIG	Multi-ward

No.	Project Description	Approved Budget 2014/15 (R)	Approved Budget 2015/16 (R)	Approved Budget 2016/17 (R)	Fund	Ward
27	Bellville:Public Transport Hub	6 300 000	2 000 000	2 000 000	4 NT PTIG	Multi-ward
28	IRT: Ph 2A Wetton-Lansdowne Corr	149 599 970	416 540 321	566 388 160	4 NT PTIG	Multi-ward
29	IRT: Phase 2 Express City to Mitch Plain	25 183 200	0	0	4 NT PTIG	Multi-ward
30	IRT: Ph 1B Koeberg-Century City	110 785 040	5 000 000	0	4 NT PTIG	Multi-ward
31	Rail related projects for central line	1 000 000	0	0	4 NT PTIG	Corp Inf
32	Public Transport Facilities	0	4 000 000	2 000 000	4 NT USDG	Multi-ward
33	Rail related projects for central line	0	500 000	0	4 NT PTIG	Corp Inf
34	Rail related projects for central line	0	0	3 000 000	4 NT PTIG	Corp Inf
35	Bloekombos PTI: Upgrade	200 000	2 800 000	0	4 NT PTIG	101
36	Bloekombos PTI: Upgrade	300 000	0	0	3 CRR:WardAllocation	101
37	Metro South East Public Transport Facili	2 000 000	2 000 000	2 000 000	4 NT PTIG	Multi-ward
38	Metro South East Public Transport Facili	10 000 000	50 000 000	50 000 000	4 PRIVATE SECTOR FIN	Multi-ward
39	Construct Rds:De Villiers Rd	10 000 000	0	0	1 EFF	103
40	Construct Rds:Bottelary/R300	1 000 000	1 000 000	1 000 000	3 BICL T&Roads:Oos	6
41	Flood Alleviation - Lourens River	1 600 000	6 000 000	6 000 000	1 EFF	83
42	Bulk Stormwater Table View North	2 000 000	0	0	1 EFF	Multi-ward
43	Atlantis: Development of Corridor - M12	1 000 000	0	0	3 BICL T&Roads:Blg	104
44	Atlantis: Development of Corridor - M12	0	3 000 000	0	4 NT PTIG	104
45	Buttskop Rd upgrading	0	500 000	2 500 000	1 EFF	14
46	Construct of Roads: Dualling Plattekloof	3 000 000	4 430 000	0	3 BICL T&Roads:Blg	4
47	Construct of Roads: Dualling Plattekloof	3 000 000	0	0	1 EFF	4
48	Vlakteplaas Bulk Roads & S/water	0	2 000 000	10 000 000	4 NT USDG	100
49	Upgr: Gravel St's: Mission Grounds, SLP	1 200 000	1 200 000	1 200 000	1 EFF	100
50	Dualling: Broadway Blvd:Beach Rd:MR27	0	600 000	7 500 000	1 EFF	83
51	Widening: Lourensford Rd: MR9 Parel Vall	0	300 000	1 500 000	1 EFF	84
52	Pelican Park: Strandfontein Road Upgr	25 000 000	50 000 000	0	4 NT USDG	66
53	Extension of Broadway Blvd : Broadlands	1 300 000	0	0	1 EFF	100
54	Croydon - Roads & Stormwater	6 100 000	0	0	1 EFF	109

No.	Project Description	Approved Budget 2014/15 (R)	Approved Budget 2015/16 (R)	Approved Budget 2016/17 (R)	Fund	Ward
55	South Fork, Strand - roads & storm water	0	150 000	1 350 000	1 EFF	100
56	Green Point Promenade Upgrade	2 000 000	2 000 000	2 000 000	1 EFF	54
57	Dunoon Taxi Terminus	11 998 552	11 000 000	0	4 NT PTIG	104
58	Retreat PTI	15 000 000	13 000 000	8 000 000	4 NT PTIG	Multi-ward
59	Samora Machel Taxi Rank Philippi	2 500 000	4 000 000	0	4 NT PTIG	33
60	Masiphumelele (Site 5) Taxi Rank	3 000 000	5 000 000	0	4 NT PTIG	69
61	Nyanga Main Taxi Rank	2 500 000	2 000 000	15 000 000	4 NT PTIG	37
62	Wynberg: Public Transport Hub	4 000 000	5 000 000	5 000 000	4 NT PTIG	62
63	Nomzamo Public Transport Facility	10 000 000	3 000 000	0	4 NT PTIG	85
64	Somerset West PTI	1 100 000	2 000 000	10 000 000	4 NT PTIG	84
65	Macasssar Housing: Roads & SW	200 000	5 000 000	0	4 NT USDG	109
66	Rail based Park & Ride Facilities	40 000 000	0	0	4 NT PTIG	Multi-ward
67	Makhaza Bus Terminal	10 000 000	10 000 000	2 500 000	4 NT PTIG	Multi-ward
68	Nolungile (Site C) PTI	15 000 000	15 000 000	15 000 000	4 NT PTIG	87
69	USDG: Scottsdene Regional Taxi Rank	15 000 000	2 000 000	0	4 NT USDG	6
70	Main Roads: Northern Corridor	17 500 000	6 500 000	1 000 000	3 BICL T&Roads:Oos	Multi-ward
71	Main Roads: Northern Corridor	9 000 000	9 000 000	1 000 000	1 EFF	Multi-ward
72	Durban Road Corridor Modderdam Road ext	500 000	1 000 000	0	3 BICL SWater: Tyg N	9
73	Construct:Broadway Blvd, Nomzamo/Lwandle	6 000 000	0	0	4 NT USDG	100
74	Kuyasa Libry Precinct:Walter Sisulu Road	4 000 000	0	0	4 NT NDPG	97
75	Saxdown Road - S West Construction	1 000 000	0	0	1 EFF	100
76	Saxdown Road - S West Construction	1 000 000	0	0	3 BICL SWater: Hel	100
77	Durbanville CBD PTI	200 000	1 000 000	1 000 000	4 NT PTIG	21
78	Macassar PTI	2 000 000	2 500 000	5 000 000	4 NT PTIG	109
79	Public Transport Systems management proj	43 000 000	15 000 000	15 000 000	4 NT PTIG	Multi-ward
80	NMT Network & Universal Access:PTIS	80 000 000	0	0	4 NT PTIG	Multi-ward
81	Sir Lowry's Pass River Upgrade	0	77 000 000	87 000 000	1 EFF	100
82	Sir Lowry's Pass River Upgrade	0	0	100 000	3 BICL T&Roads:Hel	100
83	Sir Lowry's Pass River Upgrade	2 092 410	10 000 000	15 000 000	4 NT USDG	100

No.	Project Description	Approved Budget 2014/15 (R)	Approved Budget 2015/16 (R)	Approved Budget 2016/17 (R)	Fund	Ward
84	Sir Lowry's Pass Village Road Upgrade	4 000 000	0	0	1 EFF	100
85	Sir Lowry's Pass Village Road Upgrade	9 000 000	0	0	3 BICL T&Roads:Hel	100
86	Plant, tools and equipment: Replacement	1 000 000	0	0	3 ASSETS SALE	Corp Inf
87	Nomzamo Bridge, Publc Transprt interchng	1 000 000	1 646 873	0	4 NT USDG	85
88	Transport facilities upgrades	50 000	0	0	1 EFF	Corp Inf
89	Transport: PTI Upgrades	150 000	0	0	1 EFF	Multi-ward
90	Prov of PT shelters,embayments & signage	10 000 000	0	0	4 NT PTIG	Multi-ward
91	PT Electr Access Control & Technology	5 000 000	0	0	4 NT PTIG	Corp Inf
92	Bulk Roads & Stormwater Housing Project	50 000 000	0	0	4 NT USDG	Multi-ward
93	Roads & Stormwater Rehabilitation	139 000 000	0	0	4 NT USDG	Multi-ward
94	Pedestrianisation - Low Income Areas	30 000 000	0	0	4 NT USDG	Multi-ward
95	Upgrading: HO, Depot & District Bldgs	900 000	0	0	1 EFF	Multi-ward
96	Property Acquisition	1 000 000	0	0	1 EFF	Multi-ward
97	Plant, Tools and Equipment: Additional	700 000	0	0	1 EFF	Corp Inf
98	IM:Rehab of Proclaimed Main Roads	5 000 000	0	0	4 PM&R - TS&I	Multi-ward
99	Rehabilitation - Minor Roads	1 000 000	0	0	1 EFF	Multi-ward
100	IM: Reconstruct Roads Metro	27 996 371	0	0	1 EFF	Multi-ward
101	Unmade Roads: Residential	3 000 000	0	0	1 EFF	Multi-ward
102	IM: Construct Road Structures	3 000 000	0	0	1 EFF	Multi-ward
103	Traffic Calming City Wide	1 600 000	0	0	1 EFF	Multi-ward
104	IM:Rehabilitation Coastal Structures	8 500 000	0	0	1 EFF	Multi-ward
105	SW: Coastal Water Quality Control Struct	1 000 000	0	0	1 EFF	Multi-ward
106	CSRM General Stormwater projects	0	6 000 000	0	1 EFF	Multi-ward
107	Construct Roads Signs City wide	500 000	0	0	1 EFF	Multi-ward
108	CSRM General Stormwater projects	6 000 000	0	0	1 EFF	Multi-ward
109	Transport facilities upgrades	0	50 000	0	1 EFF	Corp Inf
110	Prov of PT shelters,embayments & signage	0	5 000 000	0	4 NT PTIG	Multi-ward

No.	Project Description	Approved Budget 2014/15 (R)	Approved Budget 2015/16 (R)	Approved Budget 2016/17 (R)	Fund	Ward
111	PT information & branding	0	2 000 000	0	4 NT PTIG	Multi-ward
112	Transport: PTI Upgrades	0	150 000	0	1 EFF	Multi-ward
113	SW: Coastal Water Quality Control Struct	0	1 000 000	0	1 EFF	Multi-ward
114	Traffic Calming City Wide	0	1 600 000	0	1 EFF	Multi-ward
115	IM:Rehabilitation Coastal Structures	0	14 000 000	0	1 EFF	Multi-ward
116	NMT Network & Universal Access	0	80 000 000	0	4 NT PTIG	Multi-ward
117	Upgrading: HO, Depot & District Bldgs	0	700 000	0	1 EFF	Multi-ward
118	Plant, Tools and Equipment: Additional	0	600 000	0	1 EFF	Corp Inf
119	Pedestrianisation - Low Income Areas	0	30 000 000	0	4 NT USDG	Multi-ward
120	Property Acquisition	0	2 000 000	0	1 EFF	Multi-ward
121	Roads & Stormwater Rehabilitation	0	96 000 000	0	4 NT USDG	Multi-ward
122	Bulk Roads & Stormwater Housing Project	0	50 000 000	0	4 NT USDG	Multi-ward
123	IM:Rehab of Proclaimed Main Roads	0	5 000 000	0	4 PM&R - TS&I	Multi-ward
124	Rehabilitation - Minor Roads	0	1 000 000	0	1 EFF	Multi-ward
125	IM: Reconstruct Roads Metro	0	24 973 092	0	1 EFF	Multi-ward
126	Unmade Roads: Residential	0	4 000 000	0	1 EFF	Multi-ward
127	IM: Construct Road Structures	0	3 000 000	0	1 EFF	Multi-ward
128	Construct Roads Signs City wide	0	500 000	0	1 EFF	Multi-ward
129	Traffic Calming Ward 1	90 000	0	0	3 CRR:WardAllocation	1
130	Building sidewalks, ward 83	200 000	0	0	3 CRR:WardAllocation	83
131	Traffic Calming in Ward 2	140 000	0	0	3 CRR:WardAllocation	2
132	Fencing of Jacqueline/Tierberg Road	60 000	0	0	3 CRR:WardAllocation	2
133	Upgrade of road infrastructure ward 68	150 000	0	0	3 CRR:WardAllocation	68
134	Construct embayment in ward 68	150 000	0	0	3 CRR:WardAllocation	68

No.	Project Description	Approved Budget 2014/15 (R)	Approved Budget 2015/16 (R)	Approved Budget 2016/17 (R)	Fund	Ward
135	Upgrade of roads in Ward 62	190 000	0	0	3 CRR:WardAllocation	62
136	Upgrade of roads in Ward 58	200 000	0	0	3 CRR:WardAllocation	58
137	Upgrade of roads in Ward 72	140 000	0	0	3 CRR:WardAllocation	72
138	Upgrade of roads in Ward 59	245 000	0	0	3 CRR:WardAllocation	59
139	Mount Road carriage way crossing	10 000	0	0	3 CRR:WardAllocation	59
140	Upgrade of steps and sidewalks Ward 54	160 000	0	0	3 CRR:WardAllocation	54
141	Tarring of sidewalk 0pp Athlone Stadium	25 000	0	0	3 CRR:WardAllocation	48
142	Tarring of Sidewalks in Greenlands	80 000	0	0	3 CRR:WardAllocation	9
143	Hardening of Lanes in Ward 10	100 000	0	0	3 CRR:WardAllocation	10
144	Traffic Calming in Ward 10	75 000	0	0	3 CRR:WardAllocation	10
145	Upgrading of Sidewalks in Ward 22	130 000	0	0	3 CRR:WardAllocation	22
146	Tarring of Sidewalks in Ward 12	100 000	0	0	3 CRR:WardAllocation	12
147	Kerb inlays in Ward 73	100 000	0	0	3 CRR:WardAllocation	73
148	2 Speedhumps Crawford Rd	40 000	0	0	3 CRR:WardAllocation	60
149	Upgrade of roads in Ward 73	80 000	0	0	3 CRR:WardAllocation	73
150	2 Speedhumps Albert Rd Lansdowne	40 000	0	0	3 CRR:WardAllocation	60
151	1 Speedhump Sunnyside Rd Crawford	20 000	0	0	3 CRR:WardAllocation	60
152	Upgrade Sidewalks Ward 17	60 000	0	0	3 CRR:WardAllocation	17
153	2 Speedhumps Voorspoed & Welby Inter	40 000	0	0	3 CRR:WardAllocation	46

No.	Project Description	Approved Budget 2014/15 (R)	Approved Budget 2015/16 (R)	Approved Budget 2016/17 (R)	Fund	Ward
154	R/Intersection Trematon & Station Rd	160 000	0	0	3 CRR:WardAllocation	60
155	6 Speed humps in Lynburg Rd H/Park	120 000	0	0	3 CRR:WardAllocation	46
156	4 Speed Humps in Turflyn Walk H/Park	80 000	0	0	3 CRR:WardAllocation	46
157	Upgrade Sidewalks - Bishop Lavis	50 000	0	0	3 CRR:WardAllocation	24
158	Traffic Calming - John Ramsey Avenue	100 000	0	0	3 CRR:WardAllocation	24
159	Upgrade of Sidewalks Nooitgedacht Flats	20 000	0	0	3 CRR:WardAllocation	31
160	Upgrade of Sidewalks Ward 31	280 000	0	0	3 CRR:WardAllocation	31
161	Traffic Calming: Dissel Road Bonteheuwel	35 000	0	0	3 CRR:WardAllocation	50
162	Tarring of Sidewalks within Ward 19	100 000	0	0	3 CRR:WardAllocation	19
163	Traffic Calming: Baronetcy Boulevard	50 000	0	0	3 CRR:WardAllocation	105
164	Curb stone pavement Dummer Street	40 000	0	0	3 CRR:WardAllocation	84
165	Implement Traffic Calming Ward 17	105 000	0	0	3 CRR:WardAllocation	17
166	Upgrade of Sidewalks within Ward 11	140 000	0	0	3 CRR:WardAllocation	11
167	Implement Traffic Calming Ward 11	100 000	0	0	3 CRR:WardAllocation	11
168	Upgrade of Sidewalks within Ward 14	100 000	0	0	3 CRR:WardAllocation	14
169	Albert Road Hout Bay-3 speed humps	60 000	0	0	3 CRR:WardAllocation	74
170	New pavement: Kommissaris St. Welgemoed	100 000	0	0	3 CRR:WardAllocation	70
171	New footpaths in Van Riebeeckshof Road	100 000	0	0	3 CRR:WardAllocation	70
172	Ward 101: Traffic Calming	100 000	0	0	3 CRR:WardAllocation	101

No.	Project Description	Approved Budget 2014/15 (R)	Approved Budget 2015/16 (R)	Approved Budget 2016/17 (R)	Fund	Ward
173	Traffic Calming: Hout Street, Kftn	40 000	0	0	3 CRR:WardAllocation	102
174	Ward 103: Sidewalk Construction	126 000	0	0	3 CRR:WardAllocation	103
175	Ward 103: Traffic Calming	90 000	0	0	3 CRR:WardAllocation	103
176	Ward 105: Traffic Calming	40 000	0	0	3 CRR:WardAllocation	6
177	Traffic Calming: Ward 6	100 000	0	0	3 CRR:WardAllocation	6
178	Fencing along Frans Conradie Road	150 000	0	0	3 CRR:WardAllocation	8
179	Kerbs, Andries Pretorius and Caledon St	40 000	0	0	3 CRR:WardAllocation	84
180	Roads in Garden Village	74 000	0	0	3 CRR:WardAllocation	84
181	Speed calming, ward 84	100 000	0	0	3 CRR:WardAllocation	84
182	Canalisation of Solly's Town canal	200 000	0	0	3 CRR:WardAllocation	85
183	Sidewalk, Simon Street, Nomzamo	100 000	0	0	3 CRR:WardAllocation	85
184	Speed calming, Lonja Street	30 000	0	0	3 CRR:WardAllocation	85
185	Tarred walkway, Lonja and Tyawe St	70 000	0	0	3 CRR:WardAllocation	85
186	Sidewalk in Michael Street, Nomzamo	60 000	0	0	3 CRR:WardAllocation	86
187	Raised intersection in Rusthof Street	100 000	0	0	3 CRR:WardAllocation	86
188	Construction of Sidewalks in Ward 100	150 000	0	0	3 CRR:WardAllocation	100
189	Speed calming, ward 100	50 000	0	0	3 CRR:WardAllocation	100
190	Traffic calming Measures- Ward 28	120 000	0	0	3 CRR:WardAllocation	28
191	Traffic Calming Measures Ward 30	100 000	0	0	3 CRR:WardAllocation	30

No.	Project Description	Approved Budget 2014/15 (R)	Approved Budget 2015/16 (R)	Approved Budget 2016/17 (R)	Fund	Ward
192	Tarring of pavements	30 000	0	0	3 CRR:WardAllocation	30
193	Placing Street Name Kerbs	600 000	0	0	3 CRR:WardAllocation	39
194	Traffic calming in ward 65	75 000	0	0	3 CRR:WardAllocation	65
195	T/C Bay Beach Av/Ocean Way	120 000	0	0	3 CRR:WardAllocation	4
196	Upgrading entrace S/Stroomstrand Beach	150 000	0	0	3 CRR:WardAllocation	29
197	Traffic calming in ward 66	60 000	0	0	3 CRR:WardAllocation	66
198	Construction: kerb & channell/sidewalks	200 000	0	0	3 CRR:WardAllocation	66
199	Upgrade of road infrastructure ward 110	270 000	0	0	3 CRR:WardAllocation	110
200	Upgrade of Sidewalks ward 42	200 000	0	0	3 CRR:WardAllocation	42
201	Traffic Calming in Ward 44	100 000	0	0	3 CRR:WardAllocation	44
202	Traffic Calming in Ward 49	200 000	0	0	3 CRR:WardAllocation	49
203	Upgrade Rds & S/Water Infrastructure	650 000	0	0	3 CRR:WardAllocation	64
204	Traffic Calming Measures in Ward 80	40 000	0	0	3 CRR:WardAllocation	80
205	Traffic Calming - Ward 75	150 000	0	0	3 CRR:WardAllocation	75
206	Sidewalks - Ward 75	200 000	0	0	3 CRR:WardAllocation	75
207	Traffic Calming Ward 76	100 000	0	0	3 CRR:WardAllocation	76
208	Traffic Calming within Ward 88	150 000	0	0	3 CRR:WardAllocation	88
209	Traffic Calming in Ward 93	60 000	0	0	3 CRR:WardAllocation	93
210	Side Walks in Ward 94	500 000	0	0	3 CRR:WardAllocation	94

No.	Project Description	Approved Budget 2014/15 (R)	Approved Budget 2015/16 (R)	Approved Budget 2016/17 (R)	Fund	Ward
211	Construction of Speedhumps in Ward 94	220 000	0	0	3 CRR:WardAllocation	94
212	Traffic Calming Measures in Ward 99	60 000	0	0	3 CRR:WardAllocation	99
213	Side Walks in Ward 99	100 000	0	0	3 CRR:WardAllocation	99
214	Traffic Calming Measures:Ward 78	170 000	0	0	3 CRR:WardAllocation	78
215	Traffic Calming Measures:Ward 81	180 000	0	0	3 CRR:WardAllocation	81
216	Traffic Calming Measures Ward 82	80 000	0	0	3 CRR:WardAllocation	82
217	Traffic calming measures in Ward 97	55 000	0	0	3 CRR:WardAllocation	97
218	Sidewalks in Zwelitsha in Ward 95	250 000	0	0	3 CRR:WardAllocation	95
219	Upgrade of Sidewalk: Petunia Street	250 000	0	0	3 CRR:WardAllocation	111
220	Installation of Traffic Calming:Ward 111	100 000	0	0	3 CRR:WardAllocation	111
221	Planning/Implementation of Pathways	80 000	0	0	3 CRR:WardAllocation	8
222	Speedhumps in Ward 18	100 000	0	0	3 CRR:WardAllocation	18
223	Speedhumps in Ward 87	70 000	0	0	3 CRR:WardAllocation	87
224	T/C Measures Hoop Crescent, Atlantis	60 000	0	0	3 CRR:WardAllocation	29
225	Resurfacing roads in Coral Place Flats	120 000	0	0	3 CRR:WardAllocation	29
226	Sidewalks in Ward 15	75 000	0	0	3 CRR:WardAllocation	15
227	Sidewalks in Firgrove	20 000	0	0	3 CRR:WardAllocation	15
228	Speed calming in Ward 15	90 000	0	0	3 CRR:WardAllocation	15
229	Sidewalks in Ward 16	150 000	0	0	3 CRR:WardAllocation	16

No.	Project Description	Approved Budget 2014/15 (R)	Approved Budget 2015/16 (R)	Approved Budget 2016/17 (R)	Fund	Ward
230	Sidewalks in Makhaza	50 000	0	0	3 CRR:WardAllocation	109
231	Construct Sidewalks	185 000	0	0	3 CRR:WardAllocation	51
232	Traffic Calming: W57	60 000	0	0	3 CRR:WardAllocation	57
233	Upgrade Entrance to TRUP	70 000	0	0	3 CRR:WardAllocation	77
234	Erect Fencing: Albatross	35 000	0	0	3 CRR:WardAllocation	53
235	Traffic Calming: W53	61 652	0	0	3 CRR:WardAllocation	53
236	Install Embayments: Valentyn Rd Tijerhof	50 000	0	0	3 CRR:WardAllocation	55
237	IM:Rehabilitation Coastal Structures:EFF	0	0	10 000 000	1 EFF	Multi-ward
238	CSRM General Stormwater projects	1 000 000	0	0	3 BICL SWater: Hel	Multi-ward
239	NMT Network & Universal Access:PTIS	0	0	80 000 000	4 NT PTIG	Multi-ward
240	IM: Reconstruct Roads Metro	0	0	24 573 092	1 EFF	Multi-ward
241	IM: Construct Road Structures	0	0	3 000 000	1 EFF	Multi-ward
242	IM:Rehab of Proclaimed Main Roads	0	0	5 000 000	4 PM&R - TS&I	Multi-ward
243	Bulk Roads & Stormwater Housing Project	0	0	50 000 000	4 NT USDG	Multi-ward
244	Construct Roads Signs City wide	0	0	500 000	1 EFF	Multi-ward
245	CSRM General Stormwater projects	0	0	5 000 000	1 EFF	Multi-ward
246	Upgrading: HO, Depot & District Bldgs	0	0	700 000	1 EFF	Multi-ward
247	Unmade Roads: Residential	0	0	4 000 000	1 EFF	Multi-ward
248	Traffic Calming City Wide	0	0	1 600 000	1 EFF	Multi-ward
249	SW: Coastal Water Quality Control Struct	0	0	1 000 000	1 EFF	Multi-ward
250	Property Acquisition	0	0	2 000 000	1 EFF	Multi-ward
251	Rehabilitation - Minor Roads	0	0	1 000 000	1 EFF	Multi-ward
252	Plant, Tools and Equipment: Additional	0	0	600 000	1 EFF	Corp Inf
253	Roads & Stormwater Rehabilitation	0	0	138 000 000	4 NT USDG	Multi-ward

No.	Project Description	Approved Budget 2014/15 (R)	Approved Budget 2015/16 (R)	Approved Budget 2016/17 (R)	Fund	Ward
254	Transport facilities upgrades	0	0	50 000	1 EFF	Multi-ward
255	PT Information & Branding	0	0	5 000 000	4 NT PTIG	Multi-ward
256	Kommetjie Road Upgrade	1 000 000	4 000 000	1 000 000	3 BICL T&Roads:SPM	69
257	Plant, Tools and Equipment	0	440 000	0	3 ASSETS SALE	Corp Inf
258	Pedestrianisation - Low Income Areas	0	0	30 000 000	4 NT USDG	Multi-ward
259	Transport: PTI Upgrades	0	0	150 000	1 EFF	Multi-ward
260	Prov of PT shelters,embayments & signage	0	0	10 000 000	4 NT PTIG	Multi-ward
261	Glencairn Rail & Road Stabilisation	3 000 000	5 000 000	2 000 000	4 NT PTIG	Multi-ward
262	Vrygrond PTF	0	200 000	4 800 000	4 NT PTIG	67
263	Parow PTI	0	200 000	4 800 000	4 NT PTIG	26
264	Nonqubela PTI	0	1 000 000	5 000 000	4 NT PTIG	87
265	Rail based Park & Ride Facilities	0	20 000 000	0	4 NT PTIG	Multi-ward
266	Rail based Park & Ride Facilities	0	0	30 000 000	4 NT PTIG	Multi-ward
267	District Six: Bulk Roads & Stormwater	0	0	5 600 000	1 EFF	Multi-ward
268	Traffic Calming in Ward 48	80 000	0	0	3 CRR:WardAllocation	48
269	Traffic Calming: Beach Rd Melkbosstrand	40 000	0	0	3 CRR:WardAllocation	23
270	Sidewalks: Lwandle, Ward 86	141 000	0	0	3 CRR:WardAllocation	86
271	Construction of sidewalks in ward 96	400 000	0	0	3 CRR:WardAllocation	96
272	Bottelary Area Main Roads	9 000 000	3 500 000	0	3 BICL T&Roads:Hel	11
273	Transport Infrastruct - poverty hotspots	20 000 000	0	0	3 CRR:Mayoral Redress	Multi-ward
274	Acquisition Vehicles & Plant Add	1 500 000	0	0	1 EFF	Corp Inf
275	Acquisition Vehicles & Plant Additional	0	2 500 000	0	1 EFF	Corp Inf
276	Acquisition Vehicles & Plant Additiona	0	0	2 500 000	1 EFF	Corp Inf
277	Transport Active Network Systems	1 500 000	0	0	1 EFF	Multi-ward
278	Traffic Signal and system upgrade	1 200 000	0	0	1 EFF	Multi-ward
279	Transport Systems Management Projects	1 900 000	0	0	1 EFF	Multi-ward

No.	Project Description	Approved Budget 2014/15 (R)	Approved Budget 2015/16 (R)	Approved Budget 2016/17 (R)	Fund	Ward
280	Freeway Management System	1 000 000	0	0	4 CMTF OTHER	Multi-ward
281	Traffic Safety Bureau - Projects	1 100 000	0	0	4 CMTF OTHER	Multi-ward
282	Transport Active Network Systems	0	1 500 000	0	1 EFF	Multi-ward
283	Traffic Signal and system upgrade	0	1 200 000	0	1 EFF	Multi-ward
284	Transport Systems Management Projects	0	1 900 000	0	1 EFF	Multi-ward
285	Transport Systems Management Projects	0	0	2 000 000	1 EFF	Multi-ward
286	Transport Active Network Systems	0	0	1 500 000	1 EFF	Multi-ward
287	Traffic Signal and system upgrade	0	0	1 200 000	1 EFF	Multi-ward
288	Transport Management Centre Extension	40 000 000	35 000 000	5 000 000	4 NT PTIG	Multi-ward
289	Transport: Computer Equipment & software	500 000	0	0	1 EFF	Corp Inf
290	Transport:Furn, Fittings, Tools & Equip	750 000	0	0	1 EFF	Corp Inf
291	Transport Registry system	1 000 000	0	0	1 EFF	Multi-ward
292	Transport: Computer Equipment & software	0	1 000 000	0	1 EFF	Corp Inf
293	Transport:Furn, Fittings, Tools & Equip	0	750 000	0	1 EFF	Corp Inf
294	Transport:Furn, Fittings, Tools & Equip	0	0	750 000	1 EFF	Corp Inf
295	Transport: Computer Equipment & software	0	0	1 000 000	1 EFF	Corp Inf
Annual Total		1 660 184 554	1 406 389 965	1 399 414 092		