



## Business Plan

# Phase 1A of Cape Town's MyCiTi Integrated Rapid Transit system

October 2010

*As approved by Council*



CITY OF CAPE TOWN | ISIXEKO SASEKAPA | STAD KAAPSTAD

THIS CITY WORKS FOR YOU

This Business Plan for Phase 1A of the MyCiTi Integrated Rapid Transit project has been reviewed in light of comments received after the version approved by Council in July 2010. Subsequent to being submitted to the Portfolio Committees for Finance and for Transport, Roads and Major Projects and the Executive Management Team it was subjected to a further language edit – see Annexure J.

15 October 2010

Unanimously approved by Council on 27 October 2010 (Item C79/10/10).

*This Business Plan is intended to inform and guide the City of Cape Town in the development, implementation and operation of the MyCiTi Integrated Rapid Transit Project, for Council approval. The plan and associated development programme are based on current knowledge regarding system requirements and information currently available with regard to funding and other constraints.*

*A professional project management team is about to be appointed to assist the IRT project manager, which will shift the current project management structure from one driven by "function" to a "pure project management" structure. This is intended to increase the probability of successfully delivering the project within "time and cost" constraints.*

*Continuous detailed and in depth assessments will be required to achieve an optimal implementation programme. In response to this and further information on system needs, risk mitigation, reduced uncertainty, funding changes and the like, the Business Plan and associated development programme will be subject to change.*

*While every effort has been made to present accurate and current information, the City of Cape Town will not be held liable for the consequence of any decisions or actions taken by others who may utilise the information contained herein.*

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## Abbreviations and key terms

AFC – Automatic Fare Collection	NDOT – National Department of Transport
APTMS – Advanced Public Transport Management Systems (see also “Control Centre” or CC)	NLTA – National Land Transport Act (5 of 2009)
BRT – Bus rapid transit	NLTTA – National Land Transport Transition Act (22 of 2000, as amended by Act 26 of 2006)
CBD – Central business district	OCC – Operations Control Centre
CC – Control centre	Operations Management Unit – the structure responsible for managing MyCiTi operations: initially the Department: IRT Operations; later the relevant unit within a proposed newly formed ME.
CCC – Control Centre Contractor	POLB – Provincial Operating Licensing Board
CCTV – Closed circuit television	PTISG – Public Transport Infrastructure and Systems Grant
CRC – Continuous reinforced concrete	PTOG – Public Transport Operating Grant
CRR – Capital Replacement Reserve	SARS – South African Revenue Services
DORA - Division of Revenue Act	SDA – Service delivery agreement
EFF – External Financing Fund	SS – Station services
EMV standards – Euro / Master / Visa standards	TIC – Transport Information Centre
FS – Fare system	TMC – Traffic Management Centre
GPS – Geographic positioning system	TR&MP – Transport, Roads and Major Projects directorate of the City of Cape Town
IDP – Integrated Development Plan	VAT – Value Added Taxation
IRT – Integrated Rapid Transit	VO – Vehicle operator
ITP – Integrated Transport Plan	
ITS – Intelligent Transport System	
ME – Municipal entity	
MFMA – Municipal Finance Management Act (56 of 2003)	



# 1. Introduction

## 1.1. Background

The improvement of public transport is one of eight key strategic focus areas identified by the City of Cape Town in its Integrated Development Plan for achieving its long-term vision and developmental goals. Public transport plays a vital role in providing all citizens and visitors with access to opportunities and facilities, whether for economic, education, health, recreation or social purposes.

In February 2007 the City performed a scoping study on an integrated public transport network. The report, *City of Cape Town – Public Transport Implementation Framework*, saw the potential for a city-wide network of bus rapid transit (BRT) routes and related motorised and non-motorised feeder services to complement the existing rail system as part of an integrated public transport system. The concept for this road-based system was modelled on highly successful projects in cities worldwide, including Beijing, Bogotá, Curitiba, Guayaquil, Los Angeles, Ottawa, Paris, Pereira, Quito, and Seoul.

In October 2007, a project office was established to plan an Integrated Rapid Transit (IRT) system in Cape Town. The term 'Integrated Rapid Transit' was used rather than 'Bus Rapid Transit' to emphasise the need for integration with other modes, especially rail, the backbone of public transport in Cape Town. It is also consistent with national government's policy for creating 'Integrated Rapid Public Transport Networks' in cities. The City is receiving substantial financial support from the national Public Transport Infrastructure and Systems Grant (PTISG) fund initially established by National Treasury to improve public transport for the 2010 FIFA World Cup, and now focussed on further transforming public transport in South Africa.

In 2008, the City appointed consultant teams to develop the Operations Plan and Business Plan for the system. On 27 August 2008, the Council approved the implementation of Phase 1A, which includes the inner city and airport services, and certain routes on the corridor between the inner City and Blaauwberg and Atlantis. This was linked to the first version of the Business Plan for this phase.

Phase 1A serves a region of high growth not served by rail, linking it to the Central Business District (CBD) and to the rail network. This initial phase had two clear aims – to meet the requirements for the 2010 Host City Transport Operations Plan and to leverage this investment to achieve a legacy of improved public transport.

During the course of planning, it became apparent that costs would be significantly higher than initially estimated.<sup>1</sup> In October 2009, the Council agreed to continue with the project, limiting initial implementation to that covered by the then allocation of national funding. Council also decided that initial services must be provided to meet the FIFA requirements for the hosting of the World Cup and the conditions set by the Environmental Impact Assessment regarding the Cape Town Stadium. Lastly Council resolved that the Chief Financial Officer and the Executive Director: Service Delivery Integration (now Transport

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<sup>1</sup> See Annexure E for more detail regarding these cost increases.

Roads and Major Projects or TR&MP) should investigate further funding. Since then the National Department of Transport (NDOT) and National Treasury has allocated a total of R3 350 million to the City for public transport infrastructure and systems over the three financial years 2010/11 to 2012/13. This was confirmed with the publication of the Division of Revenue Act (DORA) gazetted in April 2010, and represents an increase of R1 903 million over the amounts previously allocated. The City has already taken transfer of a major portion of this year's allocation of R 850 million.

However, to fully secure the indicative allocations of R1 600 million and R900 million over the next two years, the City was required to submit a detailed business plan by 30 July 2010 for approval by the NDOT and National Treasury on how it plans to spend such funds. Accordingly, a revised Business Plan was approved by Council in July 2010 for submission to NDOT and National Treasury for these purposes.

The City implemented a public consultation process regarding key components of the Business Plan, firstly, in terms of section 33 of the MFMA arising from the intention to enter into contracts spanning more than three municipal financial years; and secondly, in terms of sections 46-50 of the MFMA and the asset transfer regulations in order to implement the City's envisaged approach to structuring the ownership of the MyCiTi vehicles.

Council took the view that apart from the required legal processes, the whole Business Plan should be published for public comment. This has not only enhanced the democratic process but enabled the required processes in terms of the MFMA to be better contextualised.

Thirty-one comments were received regarding matters of general concern, as well as petition-like letters from 83 residents from Flamingo Vlei (ie 114 comments in total). This totalled nearly 1 100 individual points or issues that required consideration by the City (including significant duplication and repetition). Some of these related to relatively small issues, while others questioned the project at a fundamental level. Most comments received were generally strongly welcoming of the initiative but made specific suggestions to enhance the project or object to a particular element.

While raising a number of detailed issues the national Department of Transport (NDOT) stated that *'Overall, the MyCiTi Business Plan is well constructed and detailed'*, and added that *'The plan in many respects can serve as an example for other South African cities'*. It raised a number of issues on fares, the system plan and design, vehicle size, the possibility of a transit mall in Upper Long Street, the phasing of the roll-out and the possibility of advancing links to the South East of the metropolitan area. It expressed some concern at *the planned location of the detailed planning function within City rather than the municipal entity*, and at envisaged timetable for the establishment of the municipal entity.

The response from National Treasury was contained within a letter which also confirmed the City's PTISG allocations as contained in the Division of Revenue Act for the outer years of the Medium Term Expenditure Framework, thus implicitly expressing approval of the overall approach being adopted. It proposed to explore further with the City its envisaged approach to bus ownership. It noted approvingly of the City's proposed fare system and related elements, adding that they *'appear to offer considerable advantages in reducing the risk of fare evasion or collusion'*. Regarding the section 33 process it stated that it *'sees no impediment to the city entering into contractual commitments beyond the three-year MTEF'*



*period*'. A detailed report on the comments and consequent adjustments made to the Business Plan has been submitted to Council.

Key adjustments have included:

- Clarifying what is Phase 1A, Phase 1B and the start of Phase 2;
- Grouping milestones in order to ensure that a larger set of services are implemented at a time, where possible;
- Improving potential MyCiTi business, through better marketing provision and other measures, such as a proposed park-and-ride facility jointly run with ACSA at the Airport;
- Enhancing mechanisms to ensure optimal integration between the four sets of contracts which comprise the key elements of MyCiTi operations, with special attention being paid to integration between the Control Centre and Fare System;
- Clarifying elements of the compensation policy as contained in Annexure F to this Business Plan;
- Updating interim operational costs and income of interim services and earlier Milestones, based on lessons learned to date;
- Recognising the need to review the fare structure, attending in particular to greater differentiation between peak and off-peak fares and providing for options which are more closely in line with current subsidised fare levels;
- Minor corrections to the drafting and improvement to the motivation and explanations in the document, as appropriate to address the comments and questions raised through public comment.

This process followed the process initiated after the October 2009 meeting of Council<sup>2</sup> to thoroughly review all aspects of the project, including undertaking a due diligence audit and a detailed assessment of the operational modelling by independent professional experts.<sup>3</sup>

The current business plan has thus been subjected to a rigorous process of review and reconsideration over a period of twelve months, ultimately receiving endorsement – backed by substantial financial support – from key stakeholders including the national Department of Transport and National Treasury.

In April 2010 the name MyCiTi was chosen to denote a new generation of high-quality public transport. Currently this name refers only to the Bus Rapid Transit (BRT) system and related non-motorised services falling directly under the City or a future municipal entity. However,

<sup>2</sup> Council resolution (c)(i) of item C 71/10/09, adopted in October 2009 (referred to below as 'Council's October 2009 decision on IRT') required that the following be undertaken: *A re-assessment of the IRT Operating / Business Model, including the proposed IRT Operating Entity, the vehicle operating company prospectus, bus ownership options, the handling of depreciation of assets, compensation to the minibus-taxi industry in the Phase 1A area for termination of licences, management of the fare revenue stream, and the capacity within the project team to undertake operating transport modelling and associated cost modelling; that appropriate staff from the Finance and Corporate Services Directorates be assigned to the IRT Project Team to assist with this task; and that this re-assessment be undertaken under the auspices of the Executive Management Team (EMT) IRT Sub-committee and on conclusion a report be submitted to the Mayoral Committee.* (see also recommendation 7.3.1 of the accompanying report to Council.)

Resolution (c)(ii) of the same item required also that *[t]he Chief Financial Officer and the Executive Director: Service Delivery Integration [now TR&MP] be tasked to investigate the most appropriate IRT operations management structure to oversee IRT operations, in the short and medium term.*

<sup>3</sup> Resolution (a)(viii) of Council's October 2009 decision on the IRT.

the brand has been designed to extend to other transport services that meet the required standards of quality and service, are fully integrated with the BRT component and under the full control of MyCiTi or associated management. This is in line with the long-term vision of a city-wide quality integrated public transport system that serves the needs of all citizens in the decades ahead.

The use of MyCiTi buses and trunk stations during the 2010 World Cup period provided locals and visitors the opportunity to experience an early taste of what the IRT service will be. Over this short period, thousands of people used the Stadium Shuttle, Inner City Loop and Airport/CBD services using the 18m articulated and 12m MyCiTi buses. Based on the feedback received directly from the public as well as the many media reports, overwhelming support and appreciation was expressed for the quality of the service experienced on the MyCiTi buses and stations. This positive public response to the introduction of the MyCiTi service over the period of the World Cup is very encouraging and augers well for the planned roll-out of the full MyCiTi services next year – although in many respects the planned MyCiTi service is planned to be better than that.

## **1.2. Purpose and outline of the document**

### **1.2.1. Purpose**

This document sets out the current business plan for MyCiTi as presently constituted with a summary of the main parameters of the project.

It sets out the parameters, extent and estimated budget of Phase 1A of the MyCiTi system, clarifies the system plan and roll-out of operations, outlines institutional and financing arrangements, and indicates the proposed policy on compensation of the directly affected operators in the current public transport industry.

This document will be updated from time to time as the business plan is adjusted to meet the challenges that inevitably arise in a project of this scale and complexity. Updates and developments will be reported in the regular progress reports of the MyCiTi project. Where material changes to the business plan are proposed, this will be reported to Council for approval.

### **1.2.2. Outline of document**

**Chapter 1** sets out the background, purpose and outline of this document.

**Chapter 2** describes the vision of an integrated rapid public transport system and the rationale for the project.

**Chapter 3** demonstrates the project's consistency with key policies, including the Integrated Development Plan and the Integrated Transport Plan, both of which are statutory requirements.

**Chapter 4** is a summary of the system plan and phases. It includes details of the routes, vehicle specifications and passenger demand. It indicates a phased roll out over time, with phases determined by factors, such as operational coherence and financial sustainability.

**Chapter 5** describes key engineering design features, including vehicles, stations and roadway, and the motivation behind them.

**Chapter 6** describes the envisaged business structure and contractual relationships through which the MyCiTi system is managed and operated. These seek to combine public and private sector elements to create incentives for efficiency and effectiveness, in terms of a set of mandates, service delivery agreements and contracts. This chapter describes the contracts for vehicle operators, the fare system, the control centre and the station services.

**Chapter 7** addresses the institutional framework and strategy. In December 2008 Council supported the establishment of a municipal entity for assigned public transport operations (ref C14/12/08). Thus it is envisaged that, in due course, MyCiTi will be managed by a municipal entity established and owned by the City, subject to completing legally required processes and a final Council decision in this regard. Until such time, MyCiTi operations will be managed from within the City administration. In this regard the term 'IRT Operational Management Unit' is used generally to mean the unit or department responsible for the core operational functions of MyCiTi, whether located within the City as the department of IRT Operations, or in the future Municipal Entity.

**Chapter 8** deals with staffing structure and strategy, against the background of the intention to establish a municipal entity.

**Chapter 9** deals with financing, including the full range of costs arising from the project and key sources of finance. It notes that the full operational costs associated with Phase 1A MyCiTi are unlikely to be covered by fare revenues, and discusses ways to address this.

**Chapter 10** describes the mechanism for industry transition from existing to new vehicle operators. An important component of the business plan involves incorporating existing service providers as operators of the new system. The system will largely displace the current road-based minibus-taxi and scheduled bus operators. Incorporating them in the new system is important in order to maintain livelihoods, but is also required because in terms of current legislation existing operators cannot be forced to give up their operating licences. A key issue here is the compensation of existing operators as the new system is introduced.

**Chapter 11** outlines a customer relations strategy distinguishing between issues such as branding, communication and marketing. It emphasises the strong link between these issues and operations and advises that substantial customer relations and communication capacity be located within the IRT Operations Management Unit, which should ultimately be a municipal entity.

## **2. The vision of an integrated rapid public transport system for Cape Town**

### **2.1. Responsibility for public transport**

Public transport is a key mechanism for achieving the City's transport vision of providing a sustainable transport system that moves all its people and goods effectively, efficiently and safely without compromising people, the economy or the environment. Provision of a quality public transport service is essential to create a substantial shift from private to public transportation, thus increasing public transport market share, revenue generation, urban efficiency and improving air quality. Effective and efficient public transport is critical to the social and economic development of urban areas and the country as a whole.

Currently public transport is often unsafe and inconvenient to both citizens and visitors. In Cape Town, as in other cities in South Africa, public transport is widely regarded as inadequate. Subsidised bus and rail systems have relatively low fares, but peak services are uncomfortable and off-peak services are inconvenient, where they exist at all. There is a public perception of a lack of safety and security, which is worse in the off-peak period. Competition for passengers by minibus-taxi operators affects road safety, and the practice of waiting to fill the vehicles before moving is frustrating for users. Inadequate public transport results in greater use of private vehicles and a sharp rise in traffic congestion with higher vehicle emissions and pressures for costly road expansions.

Improving public transport is thus a high strategic priority for national, provincial and City government. At the same time, there is now an understanding that responsibility for public transport is best devolved to metropolitan governments, given that cities are primarily responsible for the servicing and management of the urban 'built environment'. Cities make the key planning decisions influencing urban form, and they are responsible for most of the infrastructure-related services that determine that form. Public transport is integral to the management of the 'built environment' and thus needs to be run in a manner that is fully consistent with related services.

The National Land Transport Act of 2009 and other national government initiatives and statements support the trend towards devolution of public transport responsibilities. Once responsibility for public transport is fully devolved – and particularly if the rail services are included – there will be a major impact on metropolitan government, with the turnover represented by the public transport function possibly becoming the largest of all municipal services, including electricity.

### **2.2. Bus Rapid Transit (BRT)**

Accompanying the need to improve public transport and devolution of authority to metropolitan municipalities is the emergence of BRT as a highly effective urban public transport mode. One of its key strengths is its flexibility, both in serving varying passenger demand levels as well as penetrating the existing urban fabric. By combining different vehicle sizes and frequencies it can meet a wide range of demand levels conveniently and

cost effectively. With its network of trunk and feeder routes it can penetrate the urban fabric at a much finer level than, for example, rail. And, unlike rail which tends to divide urban space, BRT allows greater ease of movement across transport routes, facilitating growth along corridors.

BRT also supports the shift from private to public transport by providing a high quality of service. Typical features include:

- Dedicated busways on trunk routes for fast movement along congested corridors.
- Enclosed trunk stations with pre-boarding fare collection and verification to allow large numbers of passengers to board and alight quickly.
- Level boarding and high-quality fittings give greater access to the disabled while offering a comfortable service to all.
- Short waiting times between buses add to convenience and should encourage more people to use public transport.

Over the years, internationally, the business model for running BRT systems has been refined to maximise efficiencies while accommodating pre-existing operators in the running of new systems. This includes:

- Modern information and communications technology, which allows vehicle movement to be monitored and controlled centrally and services continually tailored to better suit passenger needs.
- Centralised vehicle control and fare management, which enables vehicle operations to be outsourced to more than one company, fostering competition to serve the market while avoiding the 'chasing down' of passengers in current competitive practices.
- Existing minibus-taxi and scheduled bus operators being accommodated competitively within the new system, providing opportunities for the economic empowerment of informal service providers.

Based on these capabilities, BRT is viewed internationally as the most sophisticated and effective form of road-based public transit available and by national government in South Africa as an appropriate and cost-effective approach, \*especially in the context of low-density South African cities. This has led to significant support through the PTISG to cities embarking on such initiatives.

### **2.3. Integrated public transport network**

Cape Town has a substantial rail network. While low urban densities make it costly and inappropriate – other than in a few limited cases – to expand this rail network, new road-based systems need to be fully integrated with the rail services as well as other forms of feeder services.

The City's vision is not mode-based, but rather driven by the need for integration of the various modes into an effective single seamless public transport system. To achieve this, the City has approved the implementation of an Integrated Rapid Transit system, over a provisional timeframe of 15 to 20 years, including the establishment of a full public transport network, with high-quality rail and road services, that will place at least 75% of Cape Town's population within 500 metres of the system.

As described in more detail below, the BRT trunk routes will form the core trunk network, along with rail, while the remaining areas of the city will be served by feeder services.

## 2.4. Design principles

Planning is guided by the following principles:

**Quality** – delivering a car-competitive service that is based around customer needs, including rapid travel times and frequent services, few transfers, safety and security, service integration, universal access, comfort and convenience, clean vehicles, and helpful staff.

**Equity** – ensuring that all segments of society receive an equal, high-quality public transport experience, especially through consideration of the special needs of low-income earners, women, children, the elderly, and those with physical disabilities.

**Security** – a system that gives customers confidence in their personal safety and security.

**Sustainability** – a system that is economically viable, environmentally responsible, and which promotes social equity.

**Integrity** – implementing in an open, transparent, and participatory manner.

These translate into the following design principles:

- Universal access
- Passenger mobility
- Accessibility
- Modal integration
- Customer convenience
- Safety and security
- Transport that is sustainable
- Congestion management
- Optimal use of scarce resources
- Transport that supports economic development.

## 2.5. Phased implementation

The MyCiTi system is designed to be rolled out in four phases, for completion within 15 to 20 years. Phase 1 focuses on the central city and the Blaauwberg corridor towards Table View/Du Noon, as far as Atlantis and Mamre. Phase 2 is currently intended to address the substantial public transport needs of the metro south-east, including Khayelitsha and Mitchells Plain. Phases 3 and 4 include the Durbanville and Delft/Helderberg areas respectively, as shown in Figure 1. The sequencing of the roll-out is subject to discussion and will depend to some degree on the need to serve more lucrative routes first in order to establish a financial base for extending to less lucrative routes.

There is a detailed description of Phase 1 in Chapter 4.

## 2.6. Financial viability of operations

The MyCiTi system will offer a considerably higher level and quality of service than is provided by the current road-based public transport operators at fare levels that are more or less



**Figure 1. Phased implementation of the IRT**

comparable. Key considerations include:

- The degree to which a service is available at certain locations (coverage, service frequency, hours of operation)
- The quality of the service (speed, attractiveness, comfort, convenience, safety, security, and system coherence).

MyCiTi represents a shift from a system aimed at peak period commuter travel to an all-day public transport system. Vehicles will be safer and more comfortable than current vehicles, travel times will be shorter, because of dedicated trunk-route busways and pre-boarding fare collection, and the off-peak service will be more frequent.

During peak demand periods, the MyCiTi service can be provided more cost-effectively than the current service due to the following features:

- Fleet size can be matched with projected demand while maintaining relatively high service frequencies.
- The dedicated roadways allow vehicles to move faster in peak periods, providing scope for more than one trip per vehicle in the peak period. This reduces the required trunk vehicle fleet size and maximises the use of the fleet.
- Rapid boarding and alighting of passengers, including the disabled, minimises dwell times at stations, which positively influences operational costs.
- The control centre tracks all vehicles and monitors compliance with the schedule. This minimises wastage and ensures that demand and supply are optimised.
- Attracting increasing numbers of users from private vehicles reduces operating cost per passenger through economies of scale.

On the other hand, there are features which will increase costs when compared with the current system. These include:

- Dedicated roadways and other fixed infrastructure that must be provided and maintained.
- Higher frequency of service during off-peak periods that increases operational cost.
- Stations and an independent fare collection system need to be operated and extensive security provided on the system.
- Additional costs associated with the control centre, which controls and schedules vehicles in real time, as well as the municipal entity or department required to manage the various contracts and the system as a whole.
- The replacement of current informal business practices with a more formal system with improved employment conditions will increase costs.

A critical contributor to cost effectiveness is the difference between peak and off-peak demand. The overall capacity of the system is driven by the requirements of the peak. But much of this is idle during the off-peak period. By smoothing the peaks and increasing off-peak demand, costs can be reduced and income increased.



The current public transport seeks to deal with low demand in the off-peak period by cutting back severely on services. On many routes the existing bus operators do not provide any off-peak services. Minibus-taxis wait to fill up with passengers before proceeding. It is intended that MyCiTi will provide an acceptable and predictable level of service in the off-peak periods providing the basis over time to smooth the peaks and increase off-peak usage.

Extensive modelling has been done to optimise the Phase 1A operations. This has shown that, while vehicle operations can be covered by fare revenues, other elements, including stations and station services, the control centre, the fare system and the overall management of the system, require funding from other sources to a greater or lesser degree. On its own, Phase 1A has a relatively high operational deficit. However, as the system is rolled out, the operational deficit relative to turnover falls. Preliminary modelling of the entire system indicates that it will be possible to fund operations, including the purchase of vehicles, from a combination of fare revenues and a level of subsidy similar to that currently being provided to the subsidised conventional bus services in the Cape Town area.

The system finances are discussed in more detail in Chapter 9.

## **2.7. Integration with other functions**

### **2.7.1. Urban planning and public transport**

A crucial motivation for devolving public transport to metropolitan governments is the need to integrate public transport with other 'built environment' related functions. Not only is alignment between these functions necessary, but there are opportunities for synergy if integration is well managed. Public transport can unlock a variety of urban planning possibilities, while well-designed urban forms can facilitate the provision of sustainable public transport solutions.

This has a crucial financial dimension. In undertaking the operational and financial planning for this project the impact of urban form has been starkly evident. The operating deficit discussed in Chapter 9 is to a large degree driven by the long travel distances and dispersed urban form evident in the west coast area, including the distant location of Atlantis. By focussing on land use planning and urban designs that facilitate the cost-effective provision of public transport, significant operational savings are possible.

Administrative mechanisms are required so that the results of transport modelling for MyCiTi and other public transport operations are systematically taken into account in planning decisions, such that the financial sustainability of good quality public transport can be enhanced.

This represents a key tool for enhancing urban efficiency in Cape Town and, over the medium to long term, should render significant economic benefits.

Similarly, detailed planning around individual stations and stops, and the ease and safety of moving between station and origin or destination can greatly enhance the attractiveness and success of the system.

The Planning Department has submitted a document entitled 'Draft Spatial Planning Principles Proposed for Consideration in Planning Route Alignments of Cape Town's Integrated Rapid Transit System (IRT)' which is included in the Annexures. This document provides a set of principles to adhere to when planning the system design.

### **2.7.2. Integration with other functions**

MyCiTi requires integration with a variety of other functions, including, in particular, other transport functions, safety and security and economic development.

### **2.7.3. Establishment of a MyCiTi subcommittee in EMT**

At a high level management and coordination within the City is done through the Executive Management Team (EMT).

In order to facilitate the integration for IRT into the functional areas referred to above, and to ensure that the IRT is developed in a manner that aligns with related policies and strategies, a subcommittee on MyCiTi should be established in EMT.

## **Features of the MyCiTi *system***

### **Infrastructure**

- segregated bus ways or bus-lanes mainly in the middle of the roadway
- stations that are convenient, secure, and weather protected
- stations that provide level boarding between the platforms and the vehicle, facilitating wheelchair access.
- special stations that provide integration and convenient transfers between trunk routes, feeder routes and the rail system

### **Operations**

- new fleet of modern vehicles
- frequent and rapid service
- rapid boarding and alighting
- pre-board fare collection, and pre-board fare verification on trunk routes
- integrated fare system using smartcards
- improved pedestrian connections
- integrated pedicab and motorised three-wheeler feeder services at select stations
- integrated bicycle rental at select stations
- secure bicycle parking at select stations
- improved facilities for non-motorised travel

### **Business and institutional structure**

- reformed business model bringing in existing bus and taxi operators with the City to provide services
- transparent process for awarding contracts
- independent fare management system
- minimisation of public sector subsidies for the operations

### **Technology**

- low emission, low noise vehicle technology
- automated fare collection
- Intelligent Transportation System (ITS) management of operations and vehicle location
- signal priority for public transport at intersections

### **Marketing and customer service**

- distinctive identity
- high standard passenger information at stations and vehicles
- good signage and maps
- special provisions for passengers with special needs

### 3. Alignment with corporate plans and policies

The City of Cape Town is mandated by the Constitution, which assigns it responsibility for 'municipal public transport' and the National Land Transport Act (NLTA) to plan and implement public transport within its area of jurisdiction.

The MyCiTi project must be consistent with key policies of the City of Cape Town. These include the Integrated Development Plan (IDP), the overarching strategic plan for the City which is updated annually, and the Integrated Transport Plan (ITP), which is the statutory transport component of the IDP.

The most recent ITP, approved by the City of Cape Town is dated November 2009, and was developed in terms of the National Land Transport Transition Act (NLTTA). Future versions will be developed in terms of the NLTA, which has now taken effect. The NLTA plans for cities to take greater control over 'planning, regulating, implementing, and monitoring' public transport services, and requires the implementation of 'publicly controlled integrated transport systems'.

#### 3.1. MyCiTi and the Integrated Development Plan (IDP)

In the IDP<sup>4</sup>, the City's vision includes:

- a prosperous City in which City Government creates an enabling environment for shared growth and economic development;
- a City known for its effective and equitable service delivery; and
- a City that distinguishes itself as a well governed and effectively run administration.

The IDP recognises the contribution of public transport to attaining this vision and identifies public transport systems as one of the strategic focus areas. Improved public transport also works as an enabler for other focus areas, such as shared economic growth and development, sustainable urban infrastructure and services, integrated human settlements, and safety and security.

There are five objectives for this strategic focus area, which are to:

- Establish a clear locus of responsibility in the City to overcome the highly fragmented responsibilities across the three spheres of government;
- Improve public transport services and secure new investment in transport infrastructure primarily through IRT, a road-based mass transit system that transforms the existing bus and minibus industry into contracted participants in the system.

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<sup>4</sup> The most recent comprehensive IDP is for the period 2007/8 to 2011/12. It is reviewed each year and revised where necessary. The most recent revised IDP was approved by Council in May 2010 and is available on the City of Cape Town website (<http://www.capetown.gov.za>)

- Increase the kilometres of critical routes with dedicated public transport lanes in order to enhance enforcement and increase effectiveness.
- Reduce average peak period travel time by introducing travel demand measures to incentivise more sustainable transport options, such as higher vehicle occupancy, park and ride and ride-share.
- Promote non-motorised transport (NMT) by building bicycle lanes, including bicycle lock up facilities at key transit stations, and improve facilities for pedestrians.

It is thus evident that MyCiTi is consistent with key elements of the IDP and is a fundamental part of the City's overall development strategy.

### **3.2. MyCiTi and the Integrated Transport Plan**

The ITP<sup>5</sup> says that public transport plays a vital and essential role in providing the opportunity for all its citizens and visitors to access the full range of facilities which the City offers, for work, education, recreation, health or social functions. It also emphasises the socio-economic challenges in relation to accessing these facilities by the poorer sections of the community.

Through its mobility strategy, the City is committed to improving access and mobility for all its residents, goods and services, by 'putting public transport, people and quality of life first'. In practice, this must take into account the city's socio-economic diversity and seek to re-balance the development of Cape Town in an environmentally responsible manner.

The vision is for a full public transport network, encompassing high quality rail and road services, which will place at least 75% of Cape Town's population within 500 metres of the system within the foreseeable future. The City's Integrated Transport Plan (2006 – 2011) vision is to '*... provide a world-class sustainable transport system that moves all its people and goods effectively, efficiently, safely and affordably.*'

To achieve this, the City has identified a number of strategic objectives, which overlap partly with the IDP, the most relevant being to:

- Strive towards a complete and balanced sustainable transport system.
- Promote public transport over the private car.
- Promote and encourage non-motorised transport and universal access.
- Promote and incorporate the principles of universal access in design and construction of transport facilities.
- Provide a safe, efficient and well-managed road network that enhances the efficiency of public transport.

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<sup>5</sup> In mid-2008, Council approved the inclusion of the Integrated Rapid Transit initiatives in more detail into the Integrated Transport Plan (2006 to 2011). The latest updated version of the Integrated Transport Plan includes details contained in the report of 22 October 2009 entitled *Integrated Rapid Transit Project: Project Status, financial and strategic assessment*, which served before Council on 28 October 2009.

Public transport is the key to achieving a more balanced, sustainable transport system. The ITP envisages an integrated public transport system that includes:

- The development of rapid mass road-based public transport services on priority high volume corridors which are not served by rail, in support of an integrated network with rail.
- The development of a unified road-based scheduled service bringing the bus and taxi market into a unified service under contract using the appropriate vehicle size for financial and operational efficiencies.
- The introduction of an integrated fare management system.
- The development of the non-motorised transport network to integrate with the rail and bus priority networks.
- A comprehensive passenger information system.
- Uniform branding of all public transport.
- Increased security on public transport.

The ITP notes that since the initial approval of the Integrated Transport Plan (2006 – 2011) the City has embarked on a process of transforming its public transport system into an Integrated Rapid Public Transit Network in line with the NLTA.

## 4. The system plan for MyCiTi

The system plan is a detailed description of the structure, design, coverage and roll out of the system, and associated transport demand modelling, which projects passenger demand and utilisation of the system, once in operation. This is an input to determine fleet and system operational requirements, as well as infrastructure design, system cost modelling, business structure and contracts and industry transition.

In earlier documents regarding the IRT, the system plan was referred to as the operations plan.

The system plan presented here is based on the most up-to-date information available at the end of May 2010. The ability to accurately model travel behaviour is a challenge worldwide, however the accuracy of the modelling results is enhanced through continuous improvement and refinement by calibrating the model with new transport survey and data information.

### 4.1. System structure

#### 4.1.1. Trunk and feeder services

The MyCiTi bus rapid transit system will initially essentially operate as a trunk-feeder service.

The trunk services will operate with larger vehicles along higher-density corridors where vehicles will usually have exclusive rights-of-way. The trunk services will operate as a 'closed system' in mostly segregated busways, mainly in the middle of the road with pre-board fare collection and verification. The trunk is designed for higher carrying capacities and greater travel speeds.

The feeder services will link to the trunk services and also provide distribution within the local area. In areas where geometric design does not allow the use of bigger buses and in relatively lower-density areas, feeder services will use smaller vehicles (eg vehicles between 9 and 10m in length). These feeder services will operate in mixed traffic lanes with kerbside stations. Fare verification will typically be on-board and will operate as an 'open system'.

Closed stations for the feeders may be considered where high boarding and alighting occurs and where there are free transfers between feeder routes. The integration of trunk and feeder routes is facilitated at major transfer stations, with the right-side door permitting feeder vehicles to make use of the closed median trunk and feeder station.

### Trunk characteristics

- High floor (940 mm)
- High-capacity 18m articulated vehicles and 12m solo vehicles
- Three (18m vehicle) and two (12m vehicle) right-sided doorways on vehicle
- Level access between station platform and vehicle
- Dedicated busways for trunk services (mostly)
- Closed median stations with off-board fare collection and fare verification
- Ramped access to station.



### Feeder characteristics

- Smaller, lower capacity vehicles
- 9m and 12m vehicles
- Operation in mixed traffic (mostly)
- One left-sided door and one right-sided door
- Open stations
- Fare collection and verification is onboard the feeder vehicles



### Cycle ways and walkways to MyCiTi stations

Phase 1A includes infrastructure for non-motorised transport, catering both for pedestrians and bicycles. This will assist potential users to reach the system, and in this sense serves as feeder infrastructure.<sup>6</sup>

#### 4.1.2. Types of transfer

Trunk to trunk: Within closed median stations, passengers either transfer from one platform to another or wait at the same platform for the relevant bus.

Trunk to feeder: This is mainly an open transfer where passengers will leave the closed trunk station to catch a feeder bus along the kerbside. However, at selected locations where transfer volumes are high, a closed trunk-feeder station will be provided with transfers within a closed space to improve convenience and reduce customer cost.

Feeder to feeder: This is mainly an open transfer where passengers board and alight at kerbside stations. However, at selected locations where transfer volumes are high, a closed feeder-feeder station will be provided.

Closed trunk-feeder and feeder-feeder stations are physical and elegant attempts to provide free transfers between trunk and feeder and feeder and feeder respectively.

<sup>6</sup> For more regarding walkways and cycle ways, see paragraph 5.6.



### 4.1.3. Fares

Trunk services: Initial fares, per trip, are planned to be distance-based at R5 + R0.30 per km travelled. The fare is currently proposed to be capped at a maximum of R16. In the off-peak, this is proposed to be reduced to R4 + R0.30 per km per trip with a maximum of R15. Passengers transferring from trunk to trunk service will not pay the base fare (R5 for peak and R4 for off-peak) again. Only the rate (R0.30 per km) is applicable, with a maximum of R16 for the total journey.

Feeder services: There is currently a proposed flat fare of R5 per trip in the peak period, proposed to be reduced to R4 in the off-peak period. At closed feeder-feeder stations, transfers to subsequent feeders are free. At closed trunk-feeder stations, the subsequent feeder is free. When transferring from a feeder to trunk, the trunk base fare (R5 for peak and R4 for off-peak) is not charged.

Airport service: This special express service uses the inbound Bus Minibus-taxi (BMT) lane on the N2, returning in mixed traffic. The fare structure is also proposed to be a distance based at R44 + R0.30 per km travelled, so the R16 cap does not apply. In principle, the transfer fare benefits are as discussed, except for transfer to the airport trunk where the higher base fare of R44 will be charged plus the R0.30 per km travelled for the total journey.

To ensure that the proposed IRT fares are comparable with current road based public transport fares, the City is investigating the following additional mechanisms:

- Transport fare products

These products generally provide discounts for regular usage (such as weekly and monthly concessions). One option would be to increase the maximum fare of R16 slightly for single tickets, but to reduce the fare to regular users through such transport products. The City is investigating its fare system design and management capabilities to minimise unacceptable gaming.

- Off-peak travel incentives

The City is investigating further and more significant reduction in off-peak fares. This generally complements and supports customers that travel further distances and are forced to leave early (before the peak hour) to reach their work place accordingly. The challenge (which the City is currently investigating) is the return trip home which normally coincides with the evening peak hour, although the evening peak is usually more spread out.

These incentives will not only benefit the customer but will also attempt to spread the demand across the peak period which will have significant operational and capital cost benefits. Since the system (vehicles and frequency) is designed and sized based on the peak hour, any reduction of demand towards the outer hours will reduce the supply and therefore reduce costs.

The fare system and policy will be reviewed regularly, taking into account lessons learnt from the initial interim MyCiTi services and customer responses.

Where changes are made to the proposed fare structure, this will be submitted to Council through the usual tariff approval processes.

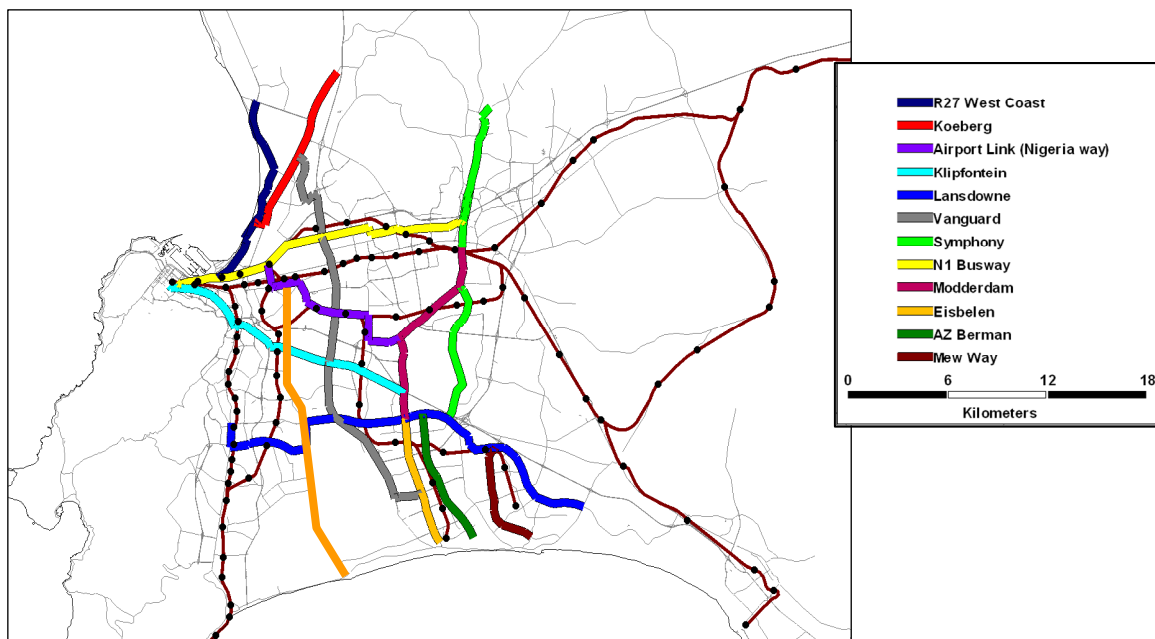
## 4.2. System plan and design

### 4.2.1. Phased implementation

The objective of the system is to transform the entire public transport system in Cape Town, but the full system cannot be implemented at once. An initial pilot service period, which was based on demand estimates provided by 2010 transport world cup event planners, has served the travel demand of the World Cup period, allowing the City to test various characteristics of the system.

It is envisioned that the system will be rolled out in phases over the next 15 to 20 years, with the initial focus on implementing Phase 1A by September 2013, to match funding availability, and the remainder of Phase 1 by 2015. Figure 2 shows the city's priority transport corridors which provide the framework for potential trunk investment in the long term.

The first phase includes the Inner City and the Blaauwberg-Atlantis Corridor. A key motivation for starting with the Blaauwberg-Du Noon-Atlantis corridor is that no rail service



**Figure 2. Corridors identified for long-term potential trunk investment**

exists in that part of the city. Currently, customers have no alternative to the existing road-based system, which is heavily congested. The Phase 1A route intersects with the rail network at Woodstock station, through which all rail routes pass, providing good connectivity between the Blaauwberg-Atlantis Corridor and the rest of the metropolitan area.

The second phase will be developed in the highest public transport demand areas, including the south east areas such as Mitchells Plain and Khayelitsha. System operational planning

and design of Phase 2 will commence shortly. Future phases are expected to encompass the remaining areas with full implementation by 2025 to 2030.

The various phases are shown in Figure 1 in paragraph 2.5.

#### 4.2.2. Impacts of the October 2009 Council Meeting

In October 2009 a strategic and status report was submitted to Council,<sup>7</sup> which it adopted. At that stage Phase 1A comprised of the following routes (shown in Figure 3):

##### Trunks

- Atlantis to CBD (including Melkbos);
- Du Noon to CBD corridor;
- Airport to CBD.

##### Feeders in

- Atlantis
- Melkbos
- Table View
- Bayside to Montagu Gardens (via Blaauwberg & Koeberg Roads)
- Montagu Gardens to Salt River via Koeberg and Voortrekker roads.
- Inner City (including Hout Bay).

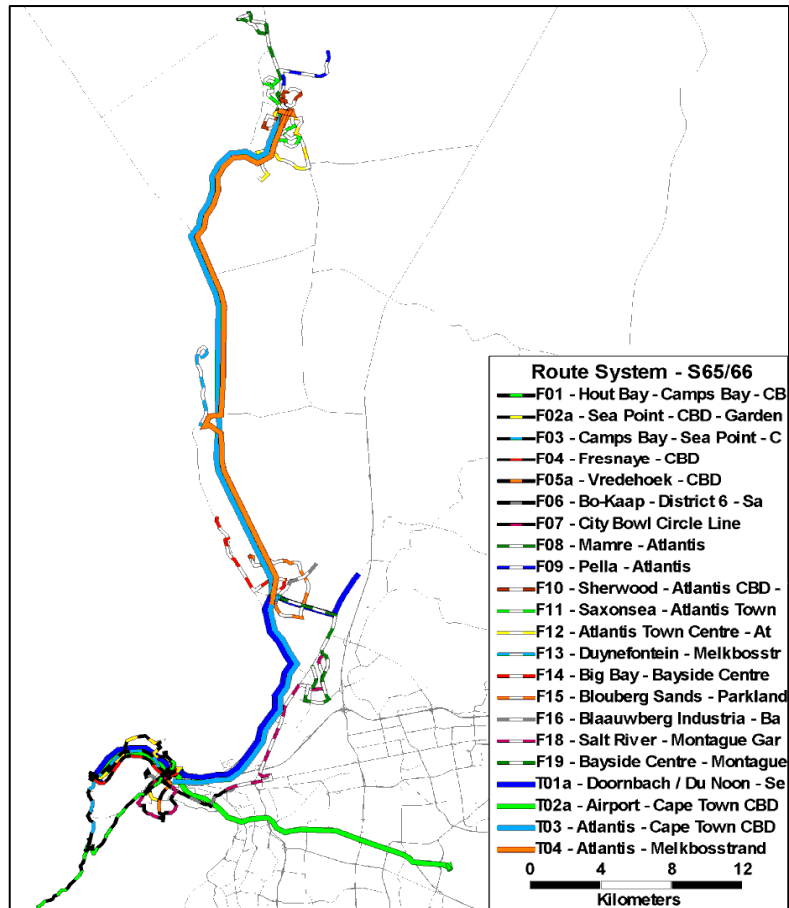


Figure 3. Routes proposed previously

<sup>7</sup> C 71/10/09 Integrated Rapid Transit project (IRT): project status and a financial & strategic assessment.

The annual operational system deficit for this Phase 1A was estimated at a conservative (maximum) amount of R125m per year as per the technical memo dated 14<sup>th</sup> July 2009. This deficit was subsequently refined to R118m based on internal interrogation and refinements which were reflected in a later technical memo dated 22 July 2009.

In its decision of October 2009 Council required a strategic review of Phase 1A, with particular emphasis on benefit, cost and financial affordability.<sup>8</sup>

The following detailed criteria were identified and rigorously used in the review of this Phase 1A plan:

- Maximise use of committed infrastructure
- Maximise use of the fleet as ordered for 2010 World Cup event
- Minimise system operational deficit
- Maximise System coverage within the phase 1 area
- Value Engineering: Extracting maximum benefit with minimum cost without affecting technical integrity.
- Budget constraints
- Minimise negative impact on existing public transport services.
- Maintain IRT ideals and principals
- Maintain high service quality – Passenger convenience.

The review process resulted in the following significant changes:

Proposed amendments	Motivation (Summary)
<p><b>1. Introduce trunk into Montagu Gardens via Racecourse road</b></p> <p><i>In the original Phase 1A, this was served by a feeder connection from Bayside to Montagu Gardens.</i></p>	<ul style="list-style-type: none"> <li>• Montague Gardens is a significant 'trip generator' for customers from the South eastern metro and Atlantis.</li> <li>• Trunk infrastructure will allow quick access to Montagu Gardens via Racecourse Road. Minimal infrastructure is required along Racecourse Rd and therefore generally the benefits of accessing Montagu Gardens exceed the cost of providing this infrastructure along Racecourse Rd.</li> <li>• Woodstock Rail station will provide an excellent gateway for south eastern metro customers destined for Montagu Gardens.</li> </ul>
<p><b>2. Feeder connection between Du Noon &amp; Montagu Gardens</b></p>	<ul style="list-style-type: none"> <li>• Model results showed significant demand from Du Noon to Montagu Gardens. This direct link</li> </ul>

<sup>8</sup> Council resolution (c)(iii) of item C 71/10/09 (recommendation 7.3.3).

Proposed amendments	Motivation (Summary)
<i>In the original Phase 1A, customers had to use two feeders for this trip.</i>	attempts to improve the system coverage.
<b>3. Feeder connection between Century City and R27 trunk.</b>  <i>This link did not exist in the original Phase 1A</i>	<ul style="list-style-type: none"> <li>This link improves system coverage with minimal feeder infrastructure</li> </ul>
<b>4. Minor trunk &amp; feeder improvements in the Inner city</b>	<ul style="list-style-type: none"> <li>Improved inner city coverage</li> <li>Value Engineering</li> </ul>
<b>5. Discard Koeberg Road feeder to Salt River River station</b>	<ul style="list-style-type: none"> <li>This feeder would have negatively affected the operations of the existing services (that would have remained) along Koeberg Road</li> </ul>

#### 4.2.3. Revised Phase 1A

Phase 1 has been divided into two parts: Phase 1A and the remainder of Phase 1.

The revised Phase 1A includes the Inner City (including extension to Hout Bay), Woodstock rail station, Paarden Eiland, Milnerton, Montague Gardens, Century City, Du Noon, Tableview, Melkbos, Atlantis and Mamre. It includes the rapidly growing residential areas in Blaauwberg north of the Diep River, and the low-income communities of Atlantis, Mamre, Du Noon and Doornbach. This corridor faces some of the worst peak period congestion levels, especially to the south and east of the bridges over the Diep River.

Table 1 shows the trunk corridors and feeder areas in Phase 1A. The full Phase 1A route directory is attached as Annexure B. Figure 4 shows a map of the Phase 1A, including the trunks and feeder service routes.

**Table 1. Phase 1A trunks and feeders**

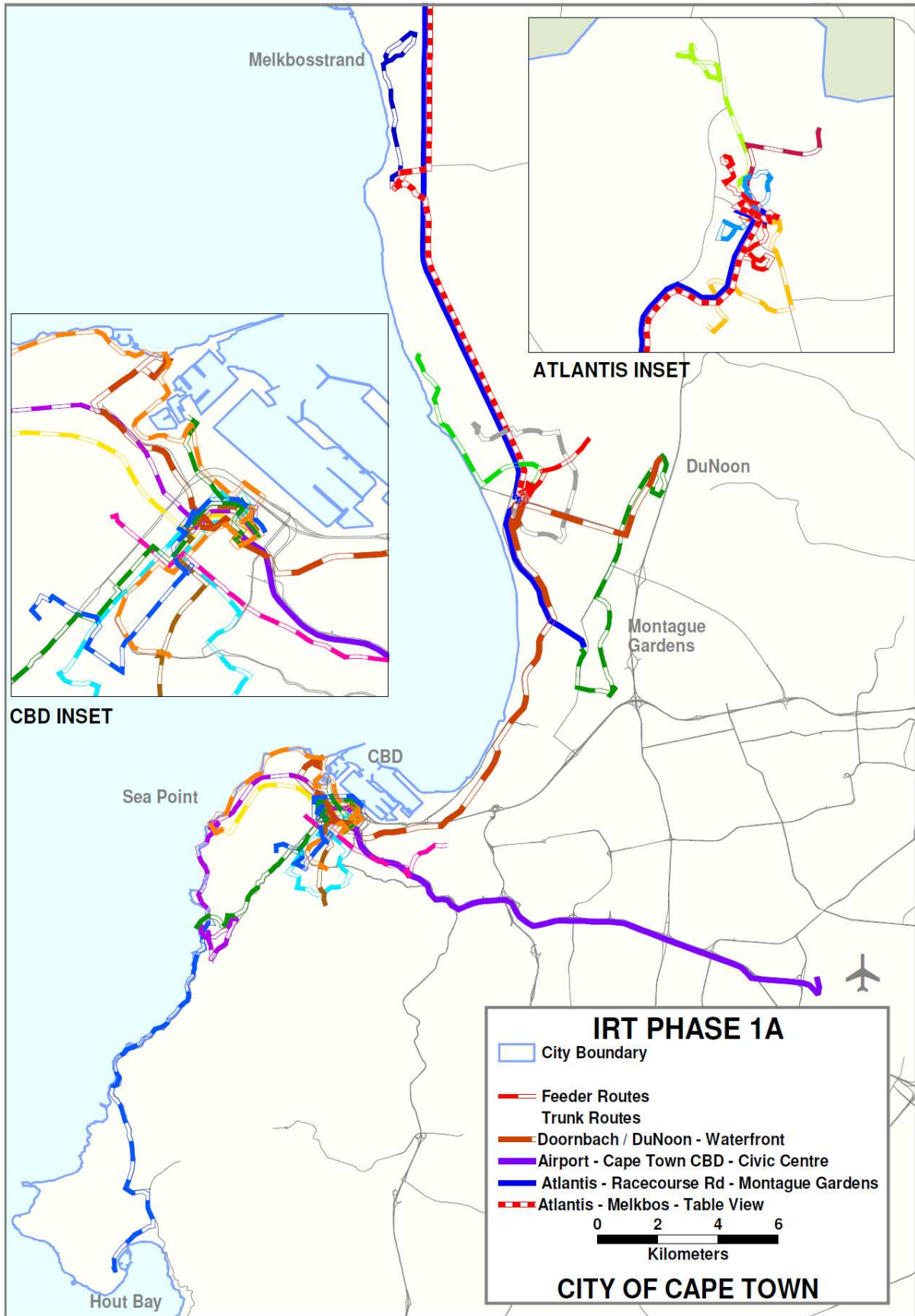
Trunk Number	Trunk Corridor
T1	Doornbach / Du Noon - Cape Town CBD
T2a	Airport - Cape Town CBD
T3 & T4	Atlantis - Melkbosstrand - Bayside Montague Gardens (via Racecourse Rd) The difference between T3 & T4 is described in the Route Directory in Annexure B.
Feeder Number	Feeder Areas

F00 - F07 & F65	Inner City (including Hout Bay)
F08 - F13	Atlantis & Melkbos
F14 - F16	Table View
F66	Du Noon - Montague Gardens
F67	Century City - R27 trunk

#### **4.2.4. Immediate subsequent phases**

The original Phase 1B involved good but expensive linkages (through trunk services) to Montague Gardens, Century City and along Koeberg Road. In the review of Phase 1A, the city assessed elements of Phase 1B that could be accelerated through lower cost infrastructure investments but achieving close to the original benefits. These lower cost solutions are described in section 4.2.2 above.

Whether future routes are classified as Phase 1B or Phase 2 is informed by whether such routes are to be operated by Phase 1A operators or new operators.



**Figure 4. Map of Phase 1A showing trunk and feeder routes**

Services initially considered as part of 1b could include:

#### **Trunk services**

- Further extension of the Airport express services to Durbanville/ Bellville and Claremont / Wynberg areas.

#### **Feeder services**

- Feeder services from Richwood, Edgemoor and Summer Greens areas connecting to both the Phase1a network and the new Century City Rail station.

The original Phase 1B included trunks along Koeberg Road. Koeberg Road catchment will be dealt with in Phase 2 which will align with north-south trunk corridor linking the West Coast area to the South Eastern metro. In Phase 1, this N-S trunk is premature considering all the existing services from the west coast catchment to other areas like Hanover Park, Mitchell's Plain and others.

Phase 1B is under review and investigation. The results thereof will be documented in detail in progress reports and future updates of the IRT Business Plan.

#### **4.2.5. Passenger demand per IRT route**

When projecting passenger demand for each of the MyCiTi routes, the project has followed the well-tested four-step transport modelling process. Travel behaviour is complex, and modelling requires a mathematical model and software tools, such as EMME/3 (previously EMME/2) used by the City for about 18 years. Numerous modelling scenarios with many permutations have been used in an effort to:

- Align with the ITP vision and objectives
- Provide an integrated, multi-modal and seamless transport system
- Maximise customer (both captive and choice) convenience, comfort, reliability and affordability
- Optimise the public transport system operations
- Minimise system operational costs
- Optimise infrastructure provision and operational efficiencies
- Minimise negative impact on existing public transport operators
- Ensure effective roll out in alignment with full phase implementation
- Provide integration with rail and non-motorised transport.

The transport model and cost outputs are documented in numerous technical memoranda, the latest dated May 2010.

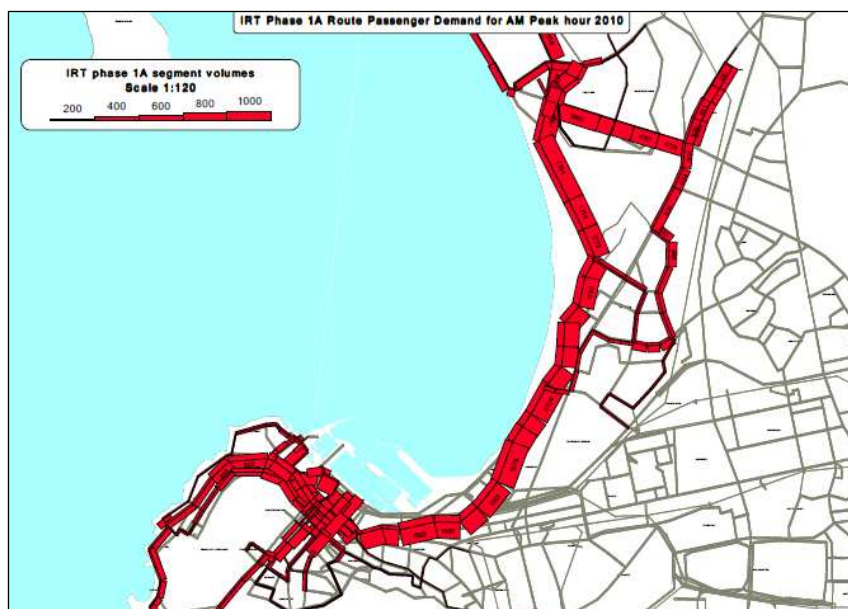
Figure 5 and Figure 6 (see page 28) schematically show the projected passenger demand for Phase 1A area. Table 2 (see from page 29) summarises the operational characteristics for each trunk and feeder route in Phase 1A.



### 4.3. Review of feeder fleet size

In the review of Phase 1A, a critical criterion was to reduce the operational cost in an attempt to minimise the resultant cost deficit. Accordingly the use of 12m feeder fleet vehicles was pursued in an attempt to reduce the frequency of fleet required which has a direct impact on driver and other staff requirements.

However due to lessons learnt from the use of the current 12m fleet during the 2010 WC event within the inner city, inner city infrastructure constraints and better residential 'fit', it is now concluded that the 12m feeder vehicle is inappropriate for the inner city and selected residential feeder services. Although this has a direct impact on the operational cost, mitigating measures will be put in place to avoid increasing the operational deficit. Mitigating measures will include the following: Reduction of off-peak headways and hours of operations and detail analysis of fleet journey times. Journey times have direct impact on fleet size.



**Figure 5. Phase 1A passenger demand from Table View to Inner City for AM peak hour 2010**

### 4.4. 2010 World Cup period and interim services

To meet the requirements for the World Cup, the City entered into a contract with operators to provide services prior to the start of IRT – see Table 3. Some of these services were provided using MyCiTi buses and stations. The World Cup Period was divided into three periods: the period for test events, the 'World Cup peak period' from 29 May to 16 July 2010 and a 'continuation period' from 17 July until 31 October 2010. The airport service, the Civic Centre station to Stadium shuttle and the Inner City service used the new MyCiTi fleet of eight (8) 18m, twenty eight (28) 12m standard and seven (7) specially configured airport vehicles.

#### 4.4.1. Airport and special shuttle service

It was planned that the airport trunk service will continue after the World Cup period, using mainly 12m vehicles, ideally until MyCiTi begins its services proper, and thereafter will operate as part of the Phase 1A contract. Special shuttle services between the city



**Figure 6. Passenger demand for full Phase 1A for morning peak hour 2010**

**Table 2. Summary of operational information per route**

Service	Cycle time (min)	Veh type	Veh capacity**	Fleet excl. reserve fleet (vehicle)	Fleet incl 5% reserve (vehicle)	Frequency (veh/h)	Headway (min)	Year km (1000)	Max vol (AM PH)	Boardings (pax AM PH)	Boardings (kpax year)
F00	117	12m*	91	10	<b>11</b>	5	12	868	466	778	1,585
F01	83	12m*	91	11	<b>12</b>	8	8	755	721	1,752	3,570
F02	83	12m*	91	19	<b>20</b>	13	5	1,073	1,200	1,844	3,758
F03	99	12m*	91	22	<b>23</b>	13	5	1,293	1,208	2,045	4,167
F04	56	12m*	91	9	<b>9</b>	9	7	462	810	1,320	2,690
F05	37	8m	50	5	<b>5</b>	7	8	245	360	504	1,027
F06	52	8m	50	4	<b>4</b>	4	15	352	144	186	379
F07	82	8m	50	9	<b>9</b>	6	10	617	311	959	1,954
F08	57	12m*	91	8	<b>8</b>	7	8	548	681	687	1,384
F09	39	12m*	91	3	<b>3</b>	4	15	281	97	98	197
F10	49	12m*	91	5	<b>6</b>	6	10	306	544	559	1,127
F11	74	12m*	91	14	<b>15</b>	11	6	695	990	1,055	2,126
F12	67	12m*	91	14	<b>14</b>	12	5	708	1,091	1,367	2,755
F13	55	8m	50	4	<b>5</b>	4	14	376	212	294	592
F14	56	12m*	91	9	<b>10</b>	9	6	517	849	1,093	2,203

Service	Cycle time (min)	Veh type	Veh capacity**	Fleet excl. reserve fleet (vehicle)	Fleet incl 5% reserve (vehicle)	Frequency (veh/h)	Headway (min)	Year km (1000)	Max vol (AM PH)	Boardings (pax AM PH)	Boardings (kpax year)
F15	65	12m*	91	5	<b>5</b>	4	15	463	138	233	470
F16	24	12m	91	3	<b>3</b>	6	10	162	541	851	1,715
F65	39	8m	50	4	<b>4</b>	6	11	253	282	532	1,084
F66	110	12m	91	19	<b>20</b>	10	6	871	935	1,378	2,777
F67	72	12m	91	6	<b>6</b>	5	13	436	424	667	1,344
T01	121	18m	146	29	<b>31</b>	14	4	1,910	2,076	5,415	10,913
T02A	85	12m	36	7	<b>10</b>	6	9	1,389	232	387	1,918
T03A/B	103	12m	44 / 91	37	<b>39</b>	21	3	3,778	936	1,897	3,823
T04A	96	12m	44 / 91	36	<b>38</b>	22	3	3,811	976	1,647	3,319
TOTAL:				<b>292</b>			<b>22,168</b>			<b>27,548</b>	<b>56,878</b>

*Scenario 68 - 10% modal shift from private cars (May 2010)*

*For route descriptions, see Annexure B.*

*\* Please refer paragraph titled Review of feeder fleet size on the following page*

*\*\* The 18m (146) and the 12m (91) vehicle capacity have been based on accommodating 5 people per m<sup>2</sup> available for standing. The available legal limit on these buses are: 18m – 142 passengers incl 2 wheelchair positions, 12m standard – 89 passengers incl. 1 wheelchair position and 12 Airport – 92 incl. 1 wheelchair position.*

centre and the stadium will continue for large events at the stadium after the World Cup tournament is over.

Post 2010 World cup event, passenger numbers on the airport shuttle were low. However recent data analysis shows slow but constant increase in patronage. The following measures as have been out in place to improve patronage:

- Established Marketing strategy and resource
- Amended Tariffs that encourages block purchase, regular travelers and reductions for children.



**Figure 7. Passengers at Stadium Station during the World Cup**

Airport Park & Ride initiative with ACSA which will target N2 commuters bound to the CBD.

#### 4.4.2. Inner City interim service

The Inner City Loop service, implemented during the World Cup Peak Period, was designed as an event service around the fan park, fan mile, event road closures and tourist destinations, to augment the existing inner public transport services as required by the Stadium Record of Decision and to support the World Cup.

**Table 3. Limited MyCiTi Services prior to start of IRT**

Period	Services
Test events	Test event services prior to the World Cup
World Cup Peak Period (29/05/10 – 17/07/10)	MyCiTi Civic – Stadium Shuttle (just event days) MyCiTi Airport to CBD trunk service MyCiTi Inner City loop service Services using hired buses: <ul style="list-style-type: none"> <li>○ Hout Bay – CBD (just event days)</li> <li>○ Queens Beach to CBD</li> <li>○ UCT Park &amp; Ride (just event days)</li> </ul>
Continuation Period (18/07/10 – 30/10/10)	MyCiTi Airport to CBD trunk service
Possible continuation Period 2 (1/11/10 until MyCiTi Starter Service – see Milestone 0 below)	MyCiTi Airport to CBD trunk service Interim MyCiti Inner City feeder route Operations are subject to adequate funds being available to cover all capital and operational cost, to the necessary procurement steps to be followed and to operating licensing as required by law.



Figure 8. Proposed inner city interim service

existing services which charges lower fares (R5) in order to avoid unnecessary conflict and legal difficulties. This service was not designed for and does not adequately meet normal (post-World Cup period) commuter or other trip purposes which explains the current low patronage.

When the MyCiTi inner-city feeder services are implemented (see Milestone 0 below), the City will be serviced through appropriate routes one tailored to meet customer demands.

For the reasons stated above it was in the City's best interest to discontinue the existing loop service at the end of the World Cup Peak period (ie by 16 July).

The City is investigating the possibility of running a limited but more suitable service along routes covering the necessary destinations, aligns with future IRT inner city routings, minimally impacts on existing services and at a more affordable fare. The proposed route for this interim service is shown in Figure 8.

It is proposed that this route commence in November 2010 to supplement the existing Airport shuttle service and the R27 trunk (commencing end February 2011). This interim route will be replaced by the inner city feeder system as per Milestone 1

#### **4.4.3. Amended interim tariffs**

In August 2010 Council approved amended tariffs. The key tariffs are summarised below.

##### *Airport service*

Tickets for children aged four to 11 will cost R25 each – half the standard R50 adult fare. In an option aimed at frequent travellers (especially airport workers), an unlimited number of trips per month will cost R400 (these tickets will not be transferable).

##### *Revised inner city interim service*

A standard ticket will be R5 – cheaper than the R8 service on the World Cup inner-city loop. A ticket for one week of unlimited travel on this service will cost R40, while a two-week clip card costing R40 will be valid for 10 trips. In an option aimed at visitors to the city, a ticket giving one day of unlimited travel will cost R15.

##### *Bulk sales and vendors*

In an option aimed at hotels, event organisers and other larger users (including interested retail outlets) tickets for the airport and inner city services will be discounted by 20%, when bought in bulk. The tickets bought in bulk will be valid for three months, as are single tickets.

Vendors may now be appointed to sell any of the above tickets, subject to conditions the City may determine. The City will provide tickets to them at a 20% discount.

#### **4.5. Sequencing the roll out of Phase 1A**

The implementation of Phase 1A must be matched to available funding. This means that services will be implemented as the funding for infrastructure, vehicles, vehicle operator,

fare management contract, station services contract, control centre contract and other items necessary to operate the system becomes available in tranches over a number of years.

The cost of items required for Phase 1A to be operational has been estimated and grouped in a number of packages that make up the building blocks for implementing the MyCiTi system. These packages have been combined in a number of different sequences to create operational milestones for Phase 1A. The implications of each sequence for the duration of roll out, implications on existing services and company formation, system legibility and costs, among other matters, have been assessed and discussed in detail. Technically, the system operates optimally as a network of routes, which ideally should be implemented together. Unfortunately, due to funding constraints, this is not possible.

The overriding factor in the proposed roll out sequence was how quickly the main components of the Phase 1A network could be implemented. This sequence permits the greatest coverage in the shortest time, based on a preliminary exercise of matching the costs with the funding timeframes.

The proposed sequence of roll out is as follows:

### **Milestone 0: Starter Service**

This is the first stage of MyCiTi 'proper' and will consist of two trunk routes:

- Bayside to CBD (T01): This new service will make use of the predominantly dedicated route along the R27 to the Waterfront via Granger Bay Boulevard. The Waterfront end has not been finalised but interim measures will be put in place until a trunk station is built there.
- Airport to CBD (T02a): This is a continuation of the existing Airport service. The route could be extended from the Civic Centre Station, where it currently ends, to the Waterfront via Granger Bay Boulevard. If this is not feasible then this movement can be accommodated by a convenient transfer to T01 at the Civic Station.



These services will operate as planned and designed, using the correct designated fleet, stations and routes and, as soon as possible, with the support of the Automatic Fare System, Control Centre and Station Services. The existing services that will be affected by this service have been identified and an estimate has been generated for the annual operating costs of this service.

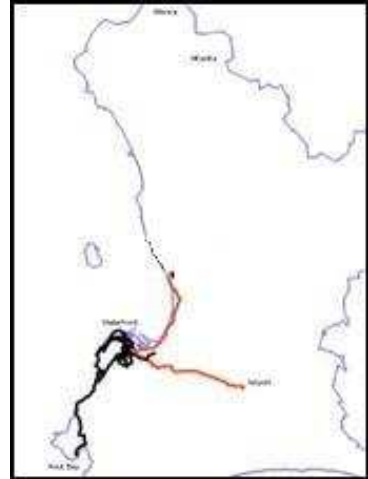
This target date for this milestone is end February 2011.

### **Milestone 1: The addition of Inner City feeder services**

This milestone sees the addition of all the feeder routes in the Inner City from the foreshore to Hout Bay (F00-F07 & F65). These feeder routes will be supported by the Inner City depot and feeder stops, including five closed feeder-to-feeder stations. These routes will make use 8,8m vehicles.



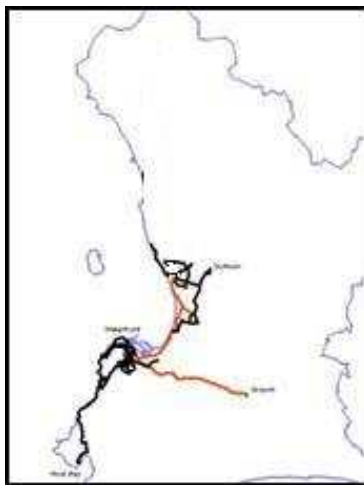
The Inner City feeder services, excluding the closed feeder stations, can be ready for operation by December 2011. The Inner City closed feeder stations are planned for completion by April 2012. The closed feeder stations provide additional convenience, safety and customer fare benefits, but the services can be operated ahead of completion.



### **Milestone 2: The addition of the Table View, Du Noon, Montague Gardens and Century City feeder services + trunk into Montague Gardens**

(The original milestone 2 and 3 as per the Business Plan dated July 2010 has now been combined into one milestone, namely milestone 2.)

This milestone introduces following feeder and trunk services:



- Table View feeders to serve the R27 trunk and provide a distribution service within the Table View area. The original plan involves three feeder routes (F14 – F16). These services are currently being reviewed to improve system coverage.
- Du Noon – Montague Gardens - Century City (F66) feeder
- Century City to R27 feeder (F67): This route intersects with F66 in Century City with a free transfer. This feeder connects with the R27 trunk route (T01) via Loxton Road..
- CBD to Montague Gardens trunk (T03 interim): This trunk service is an interim service providing a link from Woodstock rail station to Montague Gardens, serving the significant demand from the metropolitan south-east area to Montague Gardens and making use of the 12m trunk vehicles already purchased for the Atlantis to Montague Gardens service, which will be redeployed for the Atlantis services.

Woodstock rail station to Montague Gardens, serving the significant demand from the metropolitan south-east area to Montague Gardens and making use of the 12m trunk vehicles already purchased for the Atlantis to Montague Gardens service, which will be redeployed for the Atlantis services.

The target date for this milestone is February 2012.

### Milestone 3: The addition of Atlantis and Melkbosstrand trunk and feeder services

In this milestone, the following are added:



- Atlantis to Montague Gardens trunk (T03): This service will replace the interim service from the CBD to Montague Gardens, while still permitting travellers from the metro south-east to reach Montague Gardens via T01 and transferring to T03. The service has slight differences between peak and off-peak services.
  - Atlantis to Table View (T04): This service will provide an all-day service between Atlantis, Melkbosstrand and Bayside centre.
  - Feeders in Atlantis and Melkbosstrand (F08 – F13)
  - This milestone can be operational without all the components completed, and it is proposed that the Atlantis feeders be phased in.
- The target date for the start of operations of the trunk services is July 2012, with the full service (including feeders) to start by December 2012. Securing the existing subsidy is critical for the financial viability of this milestone.

### Milestone 4: The extension of the Bayside trunk to Du Noon



- In the final milestone of Phase 1A, the trunk from Bayside to the CBD is extended from Bayside to Du Noon. This trunk route (T01) will require the construction of dedicated bus lanes on Blaauwberg Road and Potsdam Road. Once this milestone is implemented Phase 1A will be complete.
- The existing public transport services that will be affected by this service have been identified and an estimate has been generated for the annual operating costs of this service.

The target date for this milestone is September 2013.

### Review of Milestone 3 & 4

During the public participation process the following matters of importance were raised and warrant further investigation:

### *Review of the current Atlantis feeder model*

Existing minibus-taxi services comprehensively cover the Atlantis residential areas. The size of the proposed IRT feeder fleet and the resulting operational cost makes it difficult to provide similar coverage as the existing taxi operators are providing. By reducing the coverage you affect current customer convenience, in the sense that customer may have to walk further to get to the new feeder services. The City plans to review the Atlantis feeder model to ensure optimum balance between affordability and quality of service.

### *Accelerating the Du Noon trunk*

Operationally it is advantageous to accelerate this trunk for the following reasons:

- To minimise dead mileage: The proposed depot is located in Potsdam Road north of Du Noon and Doornbach. Without the Du Noon trunk in place, fleet will travel (in mixed traffic) along Potsdam and Blaauwberg Roads to commence services at Bayside. This would be dead mileage as this fleet will not be able to pick up passengers along Blaauwberg Road. By accelerating this trunk, this service can now commence in Du Noon and improve system efficiency.
- Ensure continuity in the roll out process, due to the advanced stage of design of the Blaauwberg/ Potsdam road system, and minimise delays to the overall Phase 1A programme

The earlier implementation of the Du Noon trunk will be assessed in relation to the extent of additional grant funding secured, the securing of the existing bus subsidy and possible review of the Atlantis feeder network.

## **4.6. Stations and stops**

Phase 1A as proposed includes:

- 43 trunk stations (made up of 71 platforms) on four trunk services.
- 590 feeder stations/stops, including closed feeder stations where free feeder-to-feeder transfers will occur (this represents approximately 295 locations, since each location has a feeder station/stop on either side of the road).

Trunk stations are closed and located in the median, with raised platforms to facilitate ease of access with level boarding onto high-floor vehicles. The station includes a ramp for wheelchair access. A ticket booth and fare collection section at the station entrance ensures easy access to ticket sales and pre-board fare collection.

See Annexure H on page 141 for a list of the names of the Phase 1A stations.

Feeder services will operate in mixed traffic. Feeder stops are located on the kerbside to provide access to the left-sided doors on the low-floor feeder vehicles. Feeder vehicles will also have a right-sided door to enable docking at closed-feeder median stations. Figure 7 shows a feeder stop.



**Figure 10. Trunk station on the R27 (almost complete – June 2010)**



**Figure 11. Speedy level boarding onto trunk vehicles.**



**Figure 9. At trunk stations fares are collected prior to boarding using 'contact-less' smartcards readers and gates, and cards can be "topped up" at kiosks.**



Figure 12 **Open feeder stop at the kerbside**

#### 4.7. Depots and staging areas

Depots are located to reduce wasted kilometres. They are purchased and owned by the City for use by different operators over the lifetime of the system. Three depots have been identified for Phase 1A operations:

- Inner City area: This depot is located on the foreshore area and will be supplemented by a staging area below the Foreshore Freeway.
- Table View area: The Stables Depot is located off Potsdam Road.
- Atlantis area: Depot located in the Atlantis Industrial area.

Two staging areas may also be required:

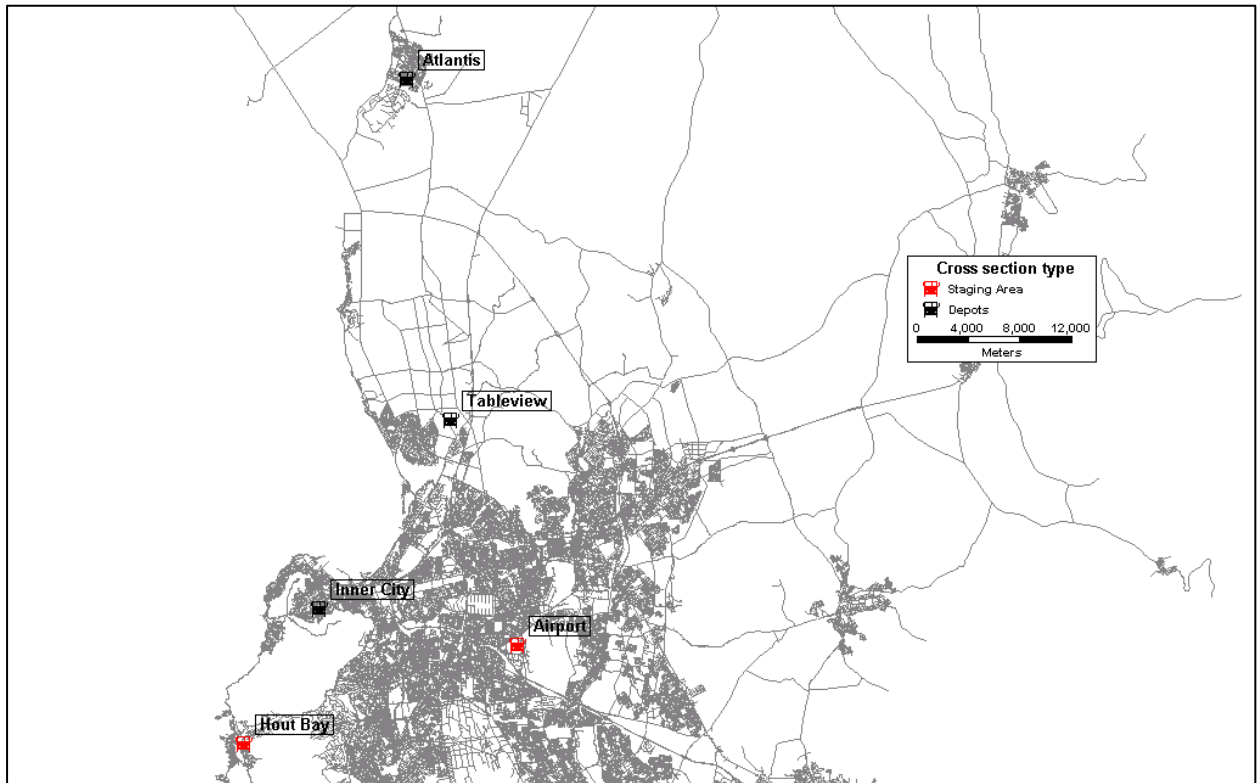
- Airport area: This will be used for staging vehicles for the airport service, with vehicles to be held at the Inner City depot
- Hout Bay area: This will be used for staging vehicles for the Hout Bay feeder service, with vehicles to be held at the Inner City depot.

The depot areas have been designed to include facilities for fueling, cleaning, tyre repair, parking (vehicle circulation), access control and security, heavy and light maintenance, and administration. The staging areas require parking (vehicle circulation), access control and security.

#### 4.8. Vehicles

##### 4.8.1. Number of vehicles

The number of vehicles projected for Phase 1A is as set out in Table 4. These figures are based on the latest modelling scenario 68 (dated 25 May 2010) and include a 5% reserve fleet.



**Figure 8. Location of bus depots**

The vehicle sizes are being reviewed on certain routes in order to match the most appropriate vehicle size to the road network. This applies particularly to the Inner City feeder routes where the road layout deems that 9 metre vehicle to be much more suitable than the 12 metre vehicle originally proposed. The 9 metre vehicles have better operational characteristics in the more tightly defined inner city road networks. The argument for the larger vehicle was to reduce costs but reducing fleet sizes and consequently the driver requirement

**Table 4. Preliminary numbers of vehicle based on Scenario 68 with reserve fleet**

Service	Vehicle size	Total
Feeder	9m	27*
	12m	165*
Trunk	12m	87
	18m	31
	<b>Total</b>	<b>310</b>

\* Note: These numbers may be revised as indicated in the text.

Whilst they have lower operating costs, a shift to the 9 metre vehicles requires additional vehicles, and consequently additional drivers, to provide the same peak hour capacity. However more detailed passenger demand analysis will be done to match the frequencies required with the smaller vehicles to contain costs.

#### 4.8.2. Trunk vehicles



**Figure 13. An 18m articulated high-floor vehicle**

Vehicles for trunk services will be high-floor articulated 18m vehicles or solo 12m vehicles with right-sided doors to service the median stations. They will also have a left-sided door for emergency use at the left-hand kerb where access will be via stairs. Table 5 refers to the specifications of the two trunk vehicle types.

**Table 5. Trunk vehicle specifications**

Vehicle Type	12-metre vehicle (standard and airport seating configuration)	18-metre articulated vehicle
Dimensions	Length: 12.75 m Width: 2.6 m	Length: 18.4 m Width: 2.6 m
Floor height	940mm (+/- 30mm tolerance)	940mm (+/- 30mm tolerance)
Number of Doors	2 right sided doors, 1 left-sided standard door	3 right sided doors, 1 left sided emergency door
Wheelchair positions	1	2
Loads (laden)	Front Axle: 6.5 tons Rear Axle: 11.5 tons	Front Axle: 7.5 tons Intermediate Axle: 10.0 tons Rear Axle: 9.5 tons
Capacity	89 - 92 (41-33 seated, 47-58 standing, 1 wheelchair)	142 (53 seated, 87 standing, 2 wheelchair)



**A 12m solo trunk vehicle**

#### 4.8.3. Feeder vehicles

Two types of vehicles have been identified for feeder services. These include a 12m solo vehicle and an 8m vehicle. These will be low-entry vehicles and will have two sets of left-sided doorways and a right-sided door for those services that will make use of closed median stations on low-floor platforms. Table 6 refers to the specifications of the two feeder vehicle types.



**Figure 14. An 8m feeder vehicle for low-demand areas**

**Table 6. Overview of feeder vehicles specification**

Vehicle Type	12m Solo Feeder Vehicle	8m Feeder Vehicle
Dimensions	Length: 11.5m – 12.5m Width: 2.6m	6.6m – 9.0m
Floor height	350mm (+/- 30mm tolerance)	350mm
Number of Doors	1 left sided + right sided door	1 left sided + right sided door
Wheelchair positions	1	1
Loads	Front Axle: 7.7 tons Intermediate/Rear Axle: 12.5 tons Driver Axle: 11.5 tons	To be determined
Capacity	89 – 92 passengers	50 passengers



#### **4.9. Impact on existing minibus-taxi and bus routes**

Where Phase 1A of the MyCiTi system will upgrade existing services, permits for the minibus-taxi operations will be withdrawn, cancelled or not reissued after they have run their term. This is discussed in Chapter 10. Where existing minibus-taxi and bus routes come into the Phase 1A area from elsewhere, with a major portion of the route located outside area, the permits will usually be unaffected. In a few cases shortening of routes is proposed. In this regarding see par 1.2(b) in Annexure F.

## 5. Decisions relating to infrastructure and costs

### 5.1. High-floor trunk vehicles

The system makes use of trunk and feeder vehicles, with a key design principle that there should be level boarding. The City had to make an early choice between low-floor or high-floor technology, because this determines the floor height of the trunk stations.

The advantages of high floor technology include the following:

- Wheel wells, fuel tanks and other mechanical and electrical equipment minimally protrude into the bus floor maximising the available floor area and the number of seats. Low-floor bus designs typically lose between four and eight seats to wheel well intrusion, even where relatively small wheel and tyre sizes are used.
- Since the wheels, engine and other mechanical equipment are housed below the 940mm high floor, a constant level surface, free of steps, is maintained between the doors, improving access for the physically disabled.
- High-floor buses cost less, weigh less and have less complex maintenance regimes when compared to low-floor buses, where space is limited for packaging mechanical and electrical equipment. A disadvantage of low-floor bus designs is that mechanical and electrical equipment and fuel tanks must either be stored inside the vehicle, where they take up space, or put on the roof, where they are difficult to service. Hence reduced acquisition cost, maintenance costs and reduced axle load on the road pavement all contribute to limiting the overall operating cost of the system.
- High-floor technology creates a more definable presence for the trunk routes.

The advantages of low-floor technology include:

- Stations are visually less intrusive.
- It is easier to operate 'complementary services', where vehicles run partly on trunk and partly on feeder routes, because feeder and trunk stations are the same height

It was decided that the arguments for high-floor trunk vehicles were stronger. While the high-floor doors are on the right side of the bus, it is possible in addition to have a low-entry door with steps on the left hand side of the trunk vehicle, enabling it to be used at feeder stops if necessary.

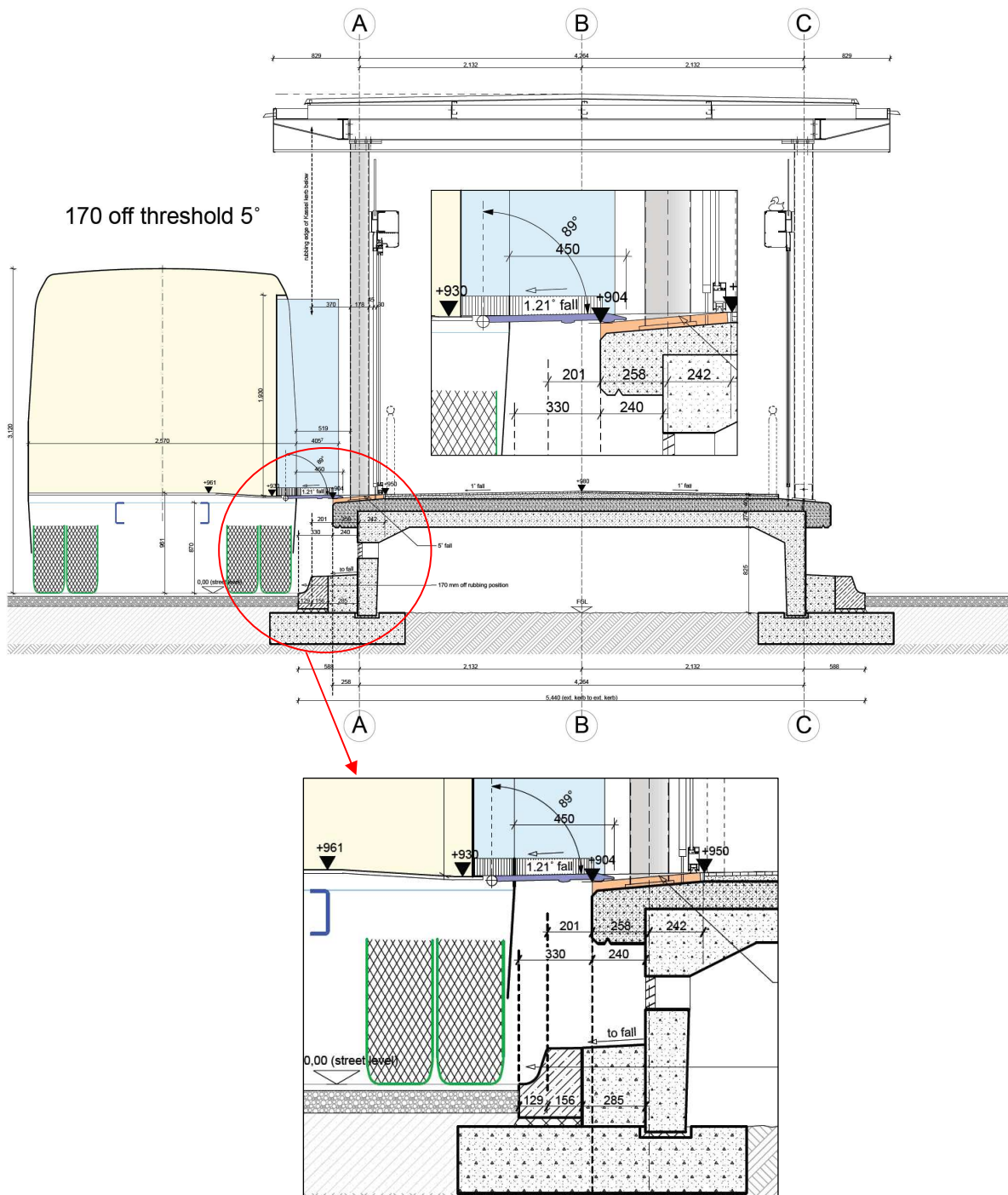
### 5.2. Kassel kerb and bridge

Ease of boarding requires a minimal gap between the edge of the bus and the platform, requiring the driver to bring the vehicle as close to the platform as possible. According to operators in other BRT systems, the most expensive operating cost after fuel is the cost of replacing tyres. This is because, in many systems, tyre sidewalls are damaged by contact with the kerb or station when attempting to dock.

To ensure optimal alignment of the bus and the platform a specially shaped Kassel kerb is used at stations and stops. The smooth surface and profile of this kerb reduces tyre sidewall wear. Operators have reported a reduction in sidewall damage of up to 40% when compared with conventional concrete kerbs. The City intends using Kassel kerbs not only at stations but at all feeder stops. 17000 Kassel kerbs have been manufactured so far and stored for this purpose.

MyCiTi buses have boarding bridges that are automatically lowered just before the bus doors open at the trunk stations. This closes the gap between the station edge and the bus, allowing for rapid boarding of passengers and reducing the risk of injury.

**Figure 15:** High-floor trunk vehicles and stations, Kassel kerb and bridge



### 5.3. Pavement design: continuous reinforced concrete and red pigmentation

MyCiTi had the option of using a continuous reinforced concrete (CRC) surface or a conventional flexible asphalt alternative. The design decisions for the trunk route surfaces were based on the full development of the system, taking into account future bus traffic loading of the system and the following information on articulated bus axle loads supplied by vehicle operators:

- Front axle maximum load 7.5 tons
- Middle axle maximum load 11.5 tons
- Rear axle maximum load 12.3 tons.

A key issue was ongoing maintenance costs. While capital infrastructure cost comparisons revealed that the CRC rigid road pavement costs 10% more than that of a conventional flexible road pavement, this is more than compensated for by reduced maintenance costs. The CRC option requires little or no maintenance over its 40-year design life. Benefits are two-fold: savings on direct maintenance costs and reduced bus lane operational downtime.

The decision to provide a red pigment surface that clearly demarcates bus lanes exclusively reserved for MyCiTi also influenced costing and maintenance regimes for the pavement options. The red pigment used with the CRC is mixed into the concrete, while on asphalt a special coloured surface treatment is needed to achieve a red surface. The most viable option for this was an epoxy-based resin incorporating red pigmented granite aggregate, both of which are imported. When the asphalt is resurfaced, as would be required during its 20-year design life, this surface treatment would also have to be renewed at significant cost.

This reinforced the decision in favour of concrete. The due diligence report, referred to earlier, also concluded that CRC was the most feasible option, with best returns over the lifetime of the MyCiTi system.

The decision to construct CRC pavement also presents challenges:

- Access to services covered over by the CRC bus lanes is almost impossible.
- Future service crossings are complicated since trenching across the dedicated bus lane would involve breaking and reinstating the CRC pavement. However, this can be overcome using a directional thrust boring construction technique.
- Reinstatement of the CRC pavement would result in unacceptable disruption to the service.
- The construction of a CRC pavement requires concrete to cure for a minimum of 21 days before use by traffic, causing lengthy road closures and unacceptable traffic delays.

A decision was made to revert to a conventional flexible road pavement construction at intersections, for the following reasons:

- Constructability and operational impacts: A flexible road pavement, made up of a combination of both gravel and asphalt, is much quicker to repair than CRC pavement and would minimise operational downtime.
- Impact on traffic: flexible road pavements can be repaired quickly without the need for lengthy road closures or diversions.

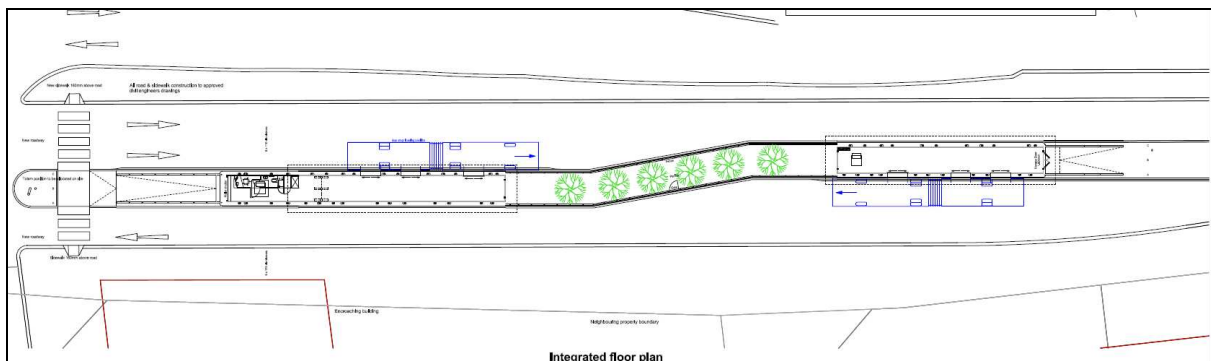
- Repairs and maintenance: flexible pavements are easier to trench and repair, and can be used by traffic almost immediately after construction.
- Access to services: the majority of service crossings, to which utility companies would require access to undertake repairs, are located at intersections.

#### 5.4. Station configuration in narrow roadways

The acquisition of the Paarden Eiland Rail Spur and land through Culemborg for use as a public transport corridor will significantly cut travelling times on the congested roads of the Blaauwberg / Paarden Eiland areas during peak periods. This section of the busway will ultimately carry multiple routes at high frequencies and a need for passing lanes was identified to allow full buses to pass stationary buses at the station locations.

The narrow rail reserve (approximately 19m) coupled with the need to provide a 3.5m wide station, a 3m shared pedestrian/cycle facility, a 3.5m bus lane in either direction and a 3.5m passing lane in either direction posed a challenge. Designers developed a staggered station where buses travelling in opposing directions would not stop opposite one another. These stations separate the inbound and outbound stops by providing two independent closed bus stations, each with its own passing lane, separated by a staggered link section.

The extended development length of these special stations comes at a premium, but the additional investment is far outweighed by the operational benefits over the life of the asset.



**Figure 16. Staggered station to allow passing lanes**

#### 5.5. Access for the disabled

The system is fully accessible for passengers in wheelchairs and those with other disabilities, such as sight impairment. All trunk stations have level surfaces at entrances and exits, and a level surface between the platform and the vehicle. All feeder vehicles will have ramps that can be pulled out to allow wheelchair access into the vehicles. Inside both trunk and feeder vehicles there will be designated open spaces for securing wheelchairs. These features benefit a large number of customers, not just those with long-term physical disabilities. People with temporary disabilities or injuries, parents with prams, the elderly and the young will benefit from the ease of access.

Other facilities to address disabilities include dropped kerbs at all intersections, textured (tactile) paving to guide the blind and partially sighted and wide, even pavement surfaces. All new traffic signal road intersections will be fitted with a vibrating button which emits an audio signal when it is safe to cross. The device provides both audio and tactile signals indicating that the pedestrian green man symbol is lit and that it is safe to cross the road. Turnstiles have been designed taking into account wheelchair access.

## **5.6. Non-motorised transport (NMT) infrastructure**

A key feature of the MyCiTi system is the network of dedicated bicycle and pedestrian pathways around the main bus trunk routes. The Blaauwberg starter service features a smooth three-metre wide shared pedestrian/cycle facility along its entire 16km length from the city centre to the middle of Blaauwberg. The shared pedestrian/cycle facility along MyCiTi trunk routes is separate from the roadway, and therefore much safer.

To help people reach the main route, a secondary network of cycleways has also been designed for 500m along all its intersecting roads. Due to lower usage, these will generally consist of painted cycle lanes on the existing roads. As far as possible, such networks will be extended along all MyCiTi trunk routes as the system is expanded.

An exceptional feature of the MyCiTi cycle system is that on the main routes cyclists can opt to switch to a bus to finish the journey. Bicycles will be allowed onto the buses, which have been designed together with the stations to make it as easy as possible to board. Some of the features include wide doors and entrance gates, level boarding into the middle of the buses, and ramps leading up to the station platforms. Stations are typically at all intersections with the route, about 600m apart. Commuters will also have the option of leaving a bicycle at lockup facilities placed within view of stations.

The bicycle lane surface changes as it approaches intersections from about 20m, then changes again in the area immediately surrounding the intersection. These subtle variations, together with warning and yield signs, provide a clear signal that pedestrians or vehicles may be present in the area, particularly as cyclists could be travelling up to 25km an hour along some stretches. At intersections where high pedestrian movement is expected it is intended that cyclists will reduce their speed appropriately.

## **5.7. Intelligent Transport Systems**

The Intelligent Transport Systems (ITS) implemented as part of the MyCiTi system can be divided into two main streams – fare management, also known as the management of Automated Fare Collection (AFC), and Advanced Public Transport Management Systems (APTMS). Two separate ITS projects, each resulting in its own tenders and contracts, were commissioned to reflect these two streams. See Chapter 6 for a discussion of the business structure and contractual relationships.

Two services contractors, the Fare System contractor, and the Control Centre contractor, will be appointed. The contractors will be responsible for installing and maintaining the systems, with the option of operating the systems should the City choose not to do so itself.

The Fare Management System contract consists of the fare media (a contact-less smart card issued through a bank) and all systems (including a card issuing distribution network) and operations required to enable transactions with the fare media. This includes gates and validators (card readers) at trunk stations and on the feeder vehicles, where the fare media can be 'tapped-in and out' to register a transaction. The feeder vehicles are also equipped with cash boxes to enable payment via cash, where a receipt will be issued, serving as a ticket. Cashiers will be provided at the trunk stations through the Station Services contract, which will also deal with all cash management processes, including collection, transit and deposit.

The City of Cape Town will comply fully with the national fare management vision and regulations issued by NDOT. This requires the use of an NDOT approved data structure on a multi-modal inter-operable contactless smart card complying with the EMV (Euro/MasterCard/Visa) standards, as required by the Payment Association of South Africa (PASA). All banks operating in South Africa are members of PASA, which is under the control of the Reserve Bank. The fare media solution specified in the tender fully meets the NDOT requirements.

The APTMS includes all systems on buses, at trunk and feeder stations and in the Transport Management Centre and depots necessary for the system control function, including:

- Tracking, monitoring and efficient scheduling of MyCiTi services
- Providing passengers with real-time information on and off the vehicles
- Surveillance systems to ensuring the safety of the passengers
- Collecting, processing and disseminating data and information between the bus, station and TMC.
- On-bus systems including, amongst others, Automated Vehicle Locations systems, (AVL), onboard CCTV, vehicle logic unit, a system for announcing the next stop, information displays, driver/TMC voice communications and vehicle performance monitoring.
- Systems in stations, including information displays (typically LCD/LED screens), public announcement systems, telephony, emergency and information phones, and CCTV. The feeder stops could also be equipped with CCTV, emergency/information phone service and passenger information displays to the extent finances permit.

The Control Centre contractors will be based at the Transport Management Centre (TMC) from where MyCiTi vehicles will be monitored and information collected, processed and disseminated. Their function includes an operational call centre (as opposed to a call centre for customer queries, which is addressed separately) to deal with fare and APTMS related queries, including maintenance and operations. The calls will be responded to and managed via a task-tracking system to ensure that service providers adhere to service level agreements.

The ITS component includes all wired and wireless data and voice communication requirements for Fare Management and APTMS operations. The installation of CCTV systems on buses, in stations and on MyCiTi routes between stations is required to meet security and bus operation requirements. The installation of CCTV in and between stations falls into infrastructure contracts, while CCTV on buses is installed under the APTMS contract. All

CCTV installations must be consistent with the specifications of the Cape Town Metropolitan Police, which will be responsible for monitoring all CCTV on the MyCiTi system.



## 6. Business structure and contractual relationships

### 6.1. Introduction and overview

MyCiTi operations can be run optimally if responsibilities are divided appropriately amongst the City of Cape Town; a municipal entity (ME) established as a company and owned by the City, which will oversee operations and some aspects of system development; and private sector companies which perform most of the actual operational tasks under contract to the municipal company.

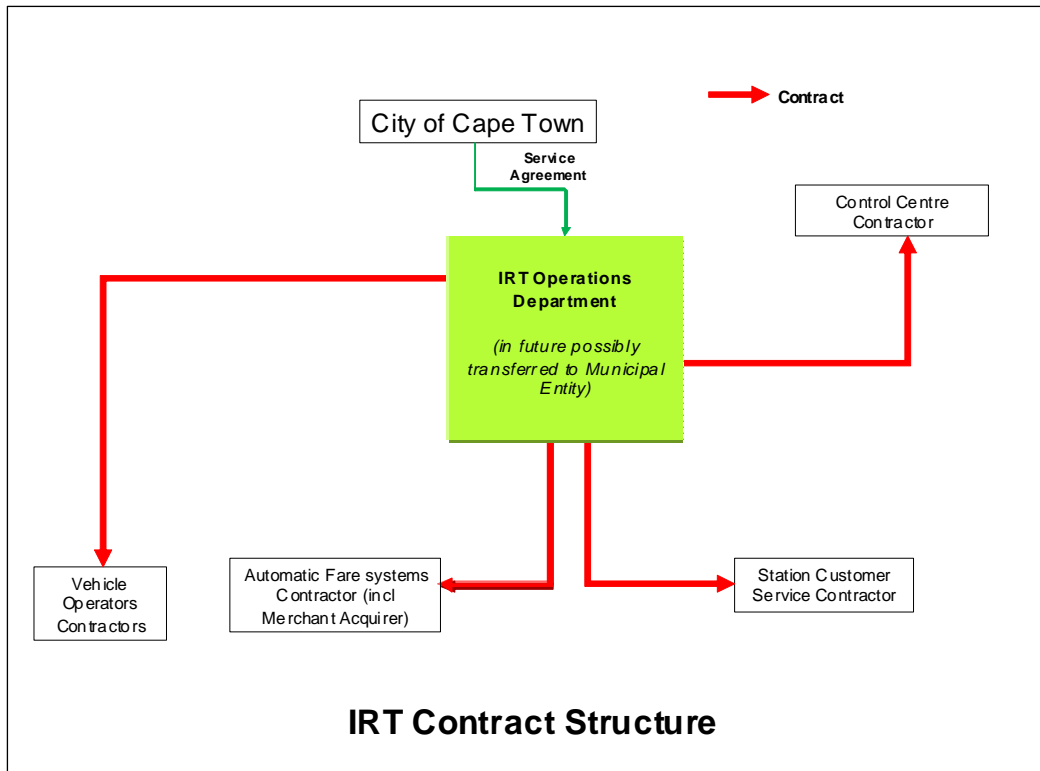
The business structure and contracts are described here based on present plans. It may be necessary to change elements of these during the processes of tender and negotiations for the various services.

In the initial phase, the proposed tasks of the City and the ME will be combined in a MyCiTi Project Office within the City administration, reporting to the Executive Director: Transport, Roads and Major Projects, and consisting of two departments, namely the Department: IRT Development and the Department: IRT Operations. As the detail of contractual relationships between the various parties is clarified and stabilised and a new ME for public transport services is established, it is anticipated that the Department: IRT Operations will move into the ME, while the Department: IRT Development will remain in the City administration.

The generic term 'MyCiTi Operations Management Unit' is used to refer to the structure which is responsible for managing MyCiTi operations. As indicated, this will initially be the Department: IRT Operations. Subsequently the MyCiTi Operations Management Unit will become a unit within a newly formed ME.

It is envisaged that six distinct role players will be involved in MyCiTi including:

- A MyCiTi Operations Management Unit, which will initially be the Department: IRT Operations forming part of a MyCiTi Project Office within the administration of the City of Cape Town. Pending decisions to be taken in terms of compulsory legislative processes, it is envisaged that this MyCiTi Operations Management Unit will be shifted into a ME for public transport services;
- The administration of the City of Cape Town, including, in particular, the MyCiTi Project Office, which will consist of the Department: IRT Development and, until it is shifted to the envisaged ME, the Department: IRT Operations. The Department: IRT Development, in conjunction with other City departments, will perform the City's overall regulatory function and remain responsible for the roll out and maintenance of the route infrastructure and related City assets. The Department: IRT Development will plan and implement the roll out of the system in conjunction with, in particular, the MyCiTi Operations Management Unit, whether the latter is situated within the City's Project Office as the Department: IRT Operations, or within a new ME;
- Vehicle operating companies (referred to as VOs);
- A fare system contractor (FS contractor);
- A control centre contractor (CC contractor); and



**Figure 17. MyCiTi contract structure**

- A station services contractor (SS contractor).

The City of Cape Town has overall responsibility for MyCiTi. It determines where the system is to be rolled out, builds and maintains the MyCiTi infrastructure, and sets the terms under which the system operates. This includes setting the framework for establishing fare levels and establishing through negotiations with the MyCiTi Operations Management Unit the level of additional finance contributed by the City to run the transport operations. The ME will be governed by a service delivery agreement with the City. The MyCiTi Operations Management Unit manages the design and implementation of operations and controls the contracts in terms of which various private sector companies deliver different elements of the service.

VOs will transport passengers and be paid largely on the basis of the number of kilometres travelled. On trunk routes they will have no responsibility for fare collection, but will have a limited role to play on feeder routes. Responsibility for the fare system (including access control infrastructure and fare software) will rest with the independent fare system (FS) contractor. The actual on-station ticket sales and access control at trunk stations will be undertaken by the SS contractor. The SS contractor will pay the collected fares over to the bank account of the ME (or the bank account of the City until the MyCiTi Operations Management Unit is transferred to the ME), which will be responsible for paying VOs and the other service providers out of the fare revenues and – to the extent necessary – other revenues paid to it by the City. The stations and its precincts will be managed by the SS contractor.

The MyCiTi Operations Management Unit will be responsible for directing the scheduling and control of vehicles. However, the MyCiTi Operations Management Unit will contract the CC contractor to set up the scheduling and controlling systems and operate them for an initial period. The overall structure of contracts is shown in Figure 17.

While establishing four separate sets of contracts conforms with international best practice, this approach does present challenges to ensure effective integration between the contracts. Special attention is being paid in designing the contracts to ensuring seamless integration. The FS contractor is being made responsible for integration between the fare system and control centre. The services of an independent specialist firm will be procured to thoroughly test the integration of these two systems.

These roles, relationships and contracts are now summarised in more detail.

## **6.2. Vehicle operating contractors**

### **6.2.1. Overall description**

At the heart of the MyCiTi system will be the vehicle operating companies (VOs) responsible for operating the vehicles necessary to service both the trunk routes and the feeder routes.

For Phase 1A, the City will award contracts to two VOs, both of which will be consortia established as private companies. The division of the required services between these two companies and the process of allocating the current industry actors to one or other of these companies is discussed in Chapter 10 on industry transition.<sup>9</sup>

Both VOs are planned to be appointed through a negotiation process to be run by the City. This negotiation is clearly subject to achieving a reasonable negotiated agreement within a reasonable period. If no agreement is reached through negotiation by a time to be specified by the City, it may procure the urgent or immediate services through other means of procurement.

Each company will be contracted to provide both trunk and feeder services and the contract will be paid mainly by way of a fee per kilometre of service provided. *The kilometre rate will take into account the total operational costs, plus a reasonable profit, although an element of payment per passenger on feeder routes may be included\**. This is the key element to be negotiated between the City and these companies, and eventually of the companies' bids.

Vehicle purchase and ownership are dealt with differently in the initial phase of MyCiTi. The City considered a range of options, which are described and discussed in Annexure C.

The option for Phase 1A, chosen as the most tax efficient and cost effective while also enabling the City to be protected from the risk of the loss of the vehicles should the VO's be liquidated, is as follows: In Phase 1A the City will purchase the initial fleet of vehicles, funded by the Public Transport Infrastructure and Systems Grant (PTISG). The vehicles purchased by the City out of the grant will be sold to a financial institution and the proceeds invested with that financial institution as guarantee. The vehicles will then be leased to the VOs. The City will draw on the investment to make a separate monthly payment to the VOs in order for them to pay for the lease of the vehicles. By involving a bank in this manner it also helps prepare role players for the mechanisms envisaged for subsequent phases. It is

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<sup>9</sup> Added clarification: This relates to directly affected operators, who are those whose services are proposed to be replaced by a particular phase of MyCiTi, whose legal rights are affected and who have agreed to surrender their operating licence and operating vehicle.

envisaged that the mechanism will be implemented through a tripartite agreement between the City, a financial institution and the VOs.

In subsequent phases, it is likely that the VOs will purchase their own vehicles and the interest and principal will be paid for out of a tendered fee per kilometre. If the cost of the vehicles is to be paid for out of the fee per kilometre this fee will need to be higher to include the cost of financing and repayment of the loan taken to purchase the vehicles. As the system is rolled out it is envisaged that improved ridership in Phase 1A and the revenue from more lucrative additional routes will enable the ME to pay a fee per kilometre on all routes that will cover the vehicle repayment costs, including for next round of contracts for Phase 1A, which will be implemented 12 years from the start of initial operations.

A different arrangement is being adopted in the first phase because the expected fare revenue will be insufficient in this phase to cover the cost of vehicles and because the City has been able to secure grant funding for these vehicles.

Vehicles purchased in addition to the fleet initially identified as required for Phase 1A will also be paid for out of fare revenues, and not from the PTISG. Such vehicles would only be required in the event of significantly higher demand than anticipated, and thus should be able to be covered out of the fare revenue. This issue is further discussed in Annexure D

The VOs will use the vehicles solely to fulfil their obligations to the MyCiTi Operations Management Unit, or for additional services (for example, contract services) authorised by the City or the ME. At the end of the life of the contract it is envisaged (\*subject to the process being run in terms of the MFMA and its regulations regarding bus ownership) that the majority of vehicles will be transferred to the VOs for their own benefit. Where the vehicles still have a substantial useful life, the terms of the tripartite agreement will be drafted in a manner that retains the vehicles within the MyCiTi system.

The VOs must be ready to test and train the drivers in advance of the system start and will need to work with the City through the MyCiTi Project Office on coordination of vehicle procurement, infrastructure construction, and system start.

In terms of these obligations, each VO will be responsible for operating specified feeder vehicles on feeder routes and trunk vehicles on trunk routes. The routes and the expected phasing of these routes are described in Chapter 4. The detailed programming of services to be provided on the routes and frequency of services will ultimately be determined by the MyCiTi Operations Management Unit in consultation with the VOs, subject to their contract terms.

### **6.2.2. Quality of service mechanisms**

The final payment of kilometres will be subject to deductions for fines for non-compliance with quality of service standards. The draft operating contract includes a number of 'quality of service' indicators. If these 'quality of service' indicators are not met, the company will be fined by reducing the number of kilometres that that VO is paid for (even if they have been run). The fines will be deducted from the normal payment. Incentives will also be developed as positive encouragement for better levels of service.

Penalties will be imposed against a VO after a preliminary trial period of operation for infringements such as:

- Failure to comply with the bus schedule
- Failure to follow the timetable and route programming
- Vehicle breakdowns as a result of non-compliance with the maintenance schedule
- Failing to display correct destination information
- Failing to pick up or set down passengers at authorised stops and stations
- Vehicles in an unsatisfactory condition, for example, a dirty exterior or interior
- Speeding and violation of other transit regulations.

On the other hand, the City will guarantee that the MyCiTi segregated lanes and corridors will not have illegal competitors, subject at all times to the provision of the NLTA.

### **6.2.3. Assignment of routes and control of driver**

Feeder routes falling within the contract area of a given VO will be assigned to that VO. The contract will give non-exclusive rights to the companies on the trunk routes and they may be required to operate on any trunk route within the MyCiTi system as determined by the MyCiTi Operations Management Unit. Therefore, more than one BRT company can be required to operate vehicles on any trunk route.

On leaving the depot the vehicle will be under the control of the MyCiTi Operations Management Unit, which will have direct contact with the driver. Generally, on MyCiTi routes no other scheduled bus or metered-taxis services will be allowed to run, subject to the provisions of the NLTA in terms of which existing operators can refuse to accept the compensation payments offered and continue to operate in competition with the MyCiTi system until their licences expire; and subject to the continuation of most of the services which only partially overlap with MyCiTi routes. Some services, which do not run in competition to the MyCiTi service but merely intersect with MyCiTi routes (eg metered taxis and contracted bus services), will also continue to run.

The depots will be owned by the City and provided at no cost to the VOs; if the City charged rental for such facilities it would merely have to pay this back to the VOs through a higher kilometre rate. The depots will be provided with the major fixed infrastructure such as buildings, parking areas, maintenance pits, wash bays, fuel tanks, fencing and service connections. The VOs will be responsible for the day-to-day and other light maintenance of the depot and for the supply of all the required staff and equipment, such as tooling and office equipment, as well as payment for all services such as water, electricity and security. Heavy maintenance will be the responsibility of the City, which will continue to own the depots.

The space and buildings for the administrative offices of the companies and the maintenance yards will be provided at the depots and owned by the City. All of the equipment, furniture, maintenance tools and other costs associated with outfitting the depots will be borne by the VOs.

The City remains responsible for the insurance of the infrastructure it provides, and the operator for all its equipment. Insurance of the vehicles may be managed in terms of the tripartite agreement between the City, financial institution and VOs.

The VOs will be responsible for the maintenance of the vehicles. They will either provide it in-house or subcontract it out to the manufacturer or manufacturer-authorized company. For the initial period, while the system is being established, maintenance is addressed through initial maintenance plan linked to the purchase of the vehicles.

Each of the vehicles will be fitted with the necessary equipment, such as such as GPS transponders and on-board computers, to enable the MyCiTi Operations Management Unit to schedule departure and arrival times at particular points and to monitor and control their movements. The scheduling and monitoring equipment will also be utilised to ensure compliance with the requirements stipulated by the MyCiTi Operations Management Unit. Most of this equipment will be provided initially through the Control Centre contract (see paragraph 6.4).

The VOs will be fully responsible for driver management. The MyCiTi Operations Management Unit will specify the training requirements and carry out regular checks and examinations.

The VOs will not be responsible for fare collection on the trunk service, but they will be responsible for taking steps with regard to fare evasion on feeder vehicles and allowing security staff to board the vehicles and carry out their functions.

For trunk vehicles, fare collection will occur only at the stations, and not in the vehicles, and through the use of smartcards (apart from services at the start of operations, where some fare measures may be included on trunk vehicles). For feeder services, the vehicles will have smartcard readers on board, provided by the Fare System contractor. Feeder vehicles may have electronic cash boxes where passengers without smartcards can pay the fare; however, the driver will not manage cash.

The VOs will not manage the process of advertising on vehicles, since such advertising will be used generally to provide income to the system as a whole, and will be managed by the MyCiTi Operations Management Unit or a company contracted for this purpose. The VOs must allow the MyCiTi Operations Management Unit and advertising service providers access to vehicles to facilitate installation of facilities for infotainment, within the limited and specified spaces in the vehicle set aside for this. It is possible that a small proportion of advertising income can be reserved for the VO to facilitate easy access of advertisers to vehicles.

The vehicle operating contracts will be for a specified duration. The maximum average number of kilometres for the fleet has not been finalised, but will be around 1.6 million kilometres per trunk vehicle, and a set number of kilometres for feeder vehicles. The life of the contract will correspond with the expected commercial life of the 18m articulated trunk vehicles, up to a maximum of 12 years.

### **6.3. The Fare System contractor**

Passengers will travel using smartcards, which they can purchase and subsequently top-up at stations or at retail outlets.

A Fare System (FS) contractor will be contracted by the City and will be responsible for creating and operating a simple, effective, efficient and transparent automated fare collection (AFC) system. This contractor will need to supply all access hardware at stations

and on relevant buses, including turnstiles and contact-less card readers for deducting fares from smartcards.<sup>10</sup> It may be required to supply automated cash boxes for feeder buses (and other categories of buses, where appropriate). If installed, these boxes will not give change, so as to avoid delays in entering buses and to encourage passengers to use a smart card. The plan is that, over the longer term, access will be allowed only through the use of smart cards.

The ownership of all FS and CC equipment will pass to the City at a time to be defined in the final contract with these contractors.

Tenders for the fare system contract have closed and the tender validity has been extended although the tender has not yet been awarded. Pending the resolution of key issues, the City's Bid Adjudication Committee is expected to make a decision shortly. Key issues to be resolved prior to award include aspects of the banking services agreement for the processing of fares collected via contactless payment transactions which will be required between the City and the bank involved in the fare system contract, and the completion of the process required in terms of section 33 of the MFMA.

This smart card will be accepted by the City for AFC only and there is no obligation to accept any other payment card for any of the other City services. It appears that the City will not, as a result of the introduction of this system, have to accept payment by credit card for City services, only to load funds onto the "Smart" cards and for transport related products.

The fare system tender has been tailored to capitalise on emerging developments in the industry. From April 2010 South African banks have started issuing contact-less cards with an "e-purse" that can be loaded with up to R1 500 at any time, with a maximum monthly turn-over of R3 000 in cash. They allow transactions of up to R200 without needing to connect online to the banking system or be verified by signature or PIN, as is currently required with all debit and credit card transactions. Such transactions qualify for the exemption from the Financial Intelligence Centre Act, granted by the Minister of Finance.<sup>11</sup> These restrictions do not apply to bank cards issued by banks to their clients, where there are no balance or loading limits.

Additional anonymous store value debit cards with e-purses, which can be used by people who do not have a bank account, will be widely available from public transport operators and outlets in the retail sector. These payment cards are intended for making low value transaction payments of up to R200 in value through the e-purse facility, subject to the same financial limits as set out above.

The use of such cards to replace cash is expected to become widespread, with a wide range of retailers set to introduce systems to accept contactless payment cards issued by the banking industry. There is significant benefit to retailers, since it reduces the notes and coins, which pose significant security risks.

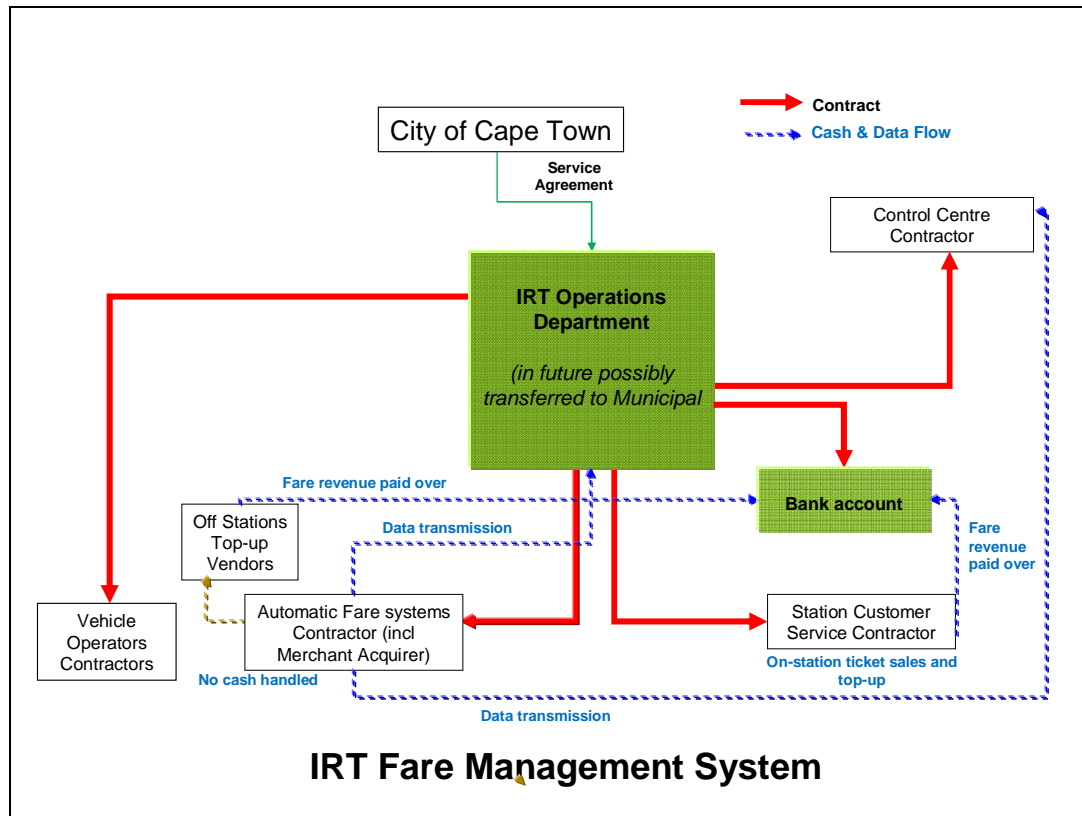
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<sup>10</sup> Hardware to be supplied includes EMV compliant Fare Media Readers, EMV certified Wi-Fi and GPRS enabled contact and contact-less handheld Fare Media Readers/writers, smartcard readers, Mobile Fare Media Validators, electronic cash boxes for feeder buses and EMV compliant card vending machines, electronic value and transit product loading terminals, as well as the electronic and communication hardware and software to run the fare system.

<sup>11</sup> Exemption In Terms Of Financial Intelligence Centre Act, 2001 (Act No. 38 OF 2001) - Government Notice 454 of 28 May 2010.

The fare system has been specified so as to integrate with these systems. As users 'tap on' and 'tap off' the system the fare will be calculated and debited from the e-purse on the card.

For the system to function, a network of points for loading value into the e-purse as well as prepaid transit products will be required. These will be located at various strategic locations, including kiosks at the MyCiTi stations and at participating retail outlets. It is expected that in time automatic teller machines (ATMs) will become the favoured point for loading cards directly from bank accounts, usually involving no handling of cash.



**Figure 18. Fare management**

Any payment card issued by the banking industry that has a contactless smart card interface (which will shortly become standard with all new cards issued in South Africa) will be able to use these cards on the MyCiTi system.

All EMV compliant contactless card issuers have agreed that, in addition to e-purse functionality, they will incorporate an electronic data structure, which is defined by the National Department of Transport as a national standard, on all contactless cards. Besides the capability of loading electronic money on the card, all cards will also have the capability of holding certain 'transit products' or electronic tickets, as defined and sold by public transport operators (such as MyCiTi). A 'transit product' could, for example, be a set of tickets for the week comprising a specified number of journeys of particular distance, or a ticket allowing multiple journeys within a fixed period of time – per day, week, month. The card readers will only subtract electronic monetary value from the e-purse if there is not a valid transit product stored on the card for the journey to be undertaken by the commuter. If a valid 'transit product' has been loaded on the card the terminal will deduct the journey from the 'transit product' memory chip on the card or in the case of a multi journey period pass, allow access if the pass has not yet expired.



For the purposes of fare payments if there is insufficient float in the e-purse when the user taps off the card will have to be reloaded before it can be used again, and the amount owed is debited at that point.

The fare payments will be delivered directly to the MyCiTi bank account (either an account of the City or, once in place, an account of the ME). Where payment for a fare is made out of the cash float carried in the e-purse, the value deducted will be paid to the MyCiTi account the day after the deduction was made. Where a 'transit product' sold by the City is an electronic prepaid ticket, the payment will be made to the MyCiTi account within a day of this sale, in which case the City will receive the cash in advance of most of the journeys being made.

A full audit trail with extremely high levels of security will apply to all transactions.

The integration of the fare system with the new banking system cash cards places the MyCiTi fare system at the forefront of modern fare system technology. It has only been possible as a result of agreement between all South Africa's participating banks, working in conjunction with the Department of Transport. It is not only more convenient, but also has a substantial cost advantage in that the MyCiTi system is not required to maintain back-office IT payment systems, which is a costly feature of most electronic fare systems worldwide.

Apart from managing the payment process, the fare system will separately deliver substantial amounts of data to the control centre, which will be used for managing the MyCiTi system. This data will include information on every trip taken, including timing, location and length, and becomes the basis for reconfiguring vehicle operations in order to match supply more appropriately with demand.

The fare system contractor will be responsible for the day-to-day management of the fare collection function and will have to adhere to the system's goals for good customer service and experience. The contract includes the provision and maintenance of the turnstiles and gates at stations. However it does not include the running of the cash offices or the security on the stations. This is a responsibility of the Station Services contractor.

The FS contractor will be responsible to roll out the system during the three-year roll-out period as described in paragraph 4.5, during which the hardware and software systems will be installed, tested, commissioned and handed over\* to the City or ME. Once equipment is operational, the FS contractor is intended to have a continuing role up to the end of the contract period, which is planned to be up to seven years from the awarding of the contract, during which it will be responsible for issuing smartcards to the City or ME, for tracking sales and tracking payments to the City or ME, and for maintaining the hardware and software systems. This proposed longer term contract is still subject to the conclusion of a process in terms of section 33 of the MFMA.

The hardware on the stations, including, in particular the gates, represent a substantial element of the total costs of the fare system contract. The costs are driven, in turn, by considerations such as prevention of fare evasion, wheelchair accessibility, durability, and the capability of being fitted into the confined space of the stations.

The FS contractor will also be responsible to ensure that there is full integration between its technology and systems and that of the CC system.

## 6.4. The Control Centre contractor

The following two functions should be distinguished:

- (i) The Control Centre contractor (CCC) is the contractor responsible for installing IT equipment on buses and in stations and for building a facility in the TMC from which the system is monitored. This contractor will also be responsible for maintenance and fault correction for the full CC contract period, which will be up to seven years.
- (ii) The Operations Control Centre (OCC) is the facility initially installed by the CCC but once installed is operated by the IRT Operations Department (or the CCC for an initial period of up to 2 years).

The technology provided by the CCC forms a key part of the strategic management of the system. Through Geographic Positioning Systems (GPSs) it monitors all vehicles in real time and the information can be used by operators to direct and control the bus operations. It will enable the collection of data on passenger demand which will enable reconfiguring of services on a regular basis to better suit needs and maximise revenue in relation to kilometres driven, while maintaining set minimum standards. This functionality will require an interface with the fare management operations.

The City will enter into a contract with a CC contractor, which will be responsible for the supply of the fleet management system (both equipment and the software).

This contract will include the supply of CCTV systems in the buses and at some of the feeder

### **Role of the Transport Management Centre**

The operations nucleus of the MyCiTi service will be housed in the Transport Management Centre (TMC) in Goodwood. The TMC facility was designed and constructed to accommodate 24/7 operations in an easily accessible user-friendly but secure environment. Twenty-two operator workstations for the management of MyCiTi bus operations have been allocated in the TMC's Core Operations Area (COA) where MyCiTi operations will function adjacent to other essential Cape Town Transport and Traffic operations, including Freeway Management, Urban Traffic Control and Traffic Services.

The Metropolitan Police Department is housed one level up but will monitor MyCiTi CCTV cameras in a dedicated surveillance area next to the COA on the first floor. This accommodation arrangement ensures direct and immediate contact between critical stakeholders in Public Transport, Traffic and Safety-and-Security operations. Back office space for fare collection and other MyCiTi operations has been provided in an area directly adjacent to the COA. Office space for MyCiTi planning functions – 11 closed offices and a boardroom – has been allocated on the second floor.

The Transport Information Centre (TIC), currently responsible for the collection and dissemination of public transport information in Cape Town, is situated on the first floor behind the COA. The current two-storey TMC building was constructed to accommodate a third storey if/when required by expanded MyCiTi operations in future.

The COA has a large video wall display shared between the different operational entities in the area, but this wall will be extended as part of the Control Centre Contract to make a dedicated area available for MyCiTi operations. Bus schedules, tracking information and CCTV footage will typically be displayed in this video wall. The MyCiTi operators in the TMC's COA will have direct communications links with buses and stations and will collect, process and disseminate MyCiTi management and operational information. Operators in the TMC will monitor bus progress per pre-planned and approved schedules and can intervene where/when necessary and will contribute to incident management processes where MyCiTi services are affected. A call centre will be in operation that will deal with the maintenance issues and queries for the (infrastructure) equipment on stations and on buses related to the Control Centre and Automatic Fare Collection (AFC) contracts.

A specialised server room – the hub of the citywide MyCiTi communications backbone – will house all the centralised MyCiTi hardware and software.

stops (the bulk of the CCTV system in the stations and along the route will be installed under the infrastructure contracts), the supply of a passenger information system (control terminal, software and displays in vehicles and at trunk and some feeder stations), the provision of communication (telephone and radio) between the stations, passenger information points and the control centre, provision of computer-aided dispatching, bus scheduling, and maintenance software, and the provision of various services such as training, maintenance, software upgrades, etc. The contractor will also have to install other equipment on the vehicles, such as the GPS transponders and on-board computers. It will be required to set up and equip an operations control centre in the Traffic Management Centre and make sure there is smooth communication between all. The CC contractor will be responsible for maintaining the above system for a contracted period, including replacement of any faulty or damaged equipment and upgrading of software.

As indicated above, the OCC will be run by the MyCiTi Operations Management Unit. The OCC will be doing the actual controlling, monitoring and scheduling of the bus services. The CC contractor could operate the OCC during the first 12 to 24 months of operation, depending on the readiness of the MyCiTi Operations Management Unit. A testing-training period will take place prior to the hand-over to MyCiTi officials.

The CC contractor will also be responsible to ensure that there is full integration between its technology and systems and that of the fare system.

As in the case of the FS contractor, the control centre contract will be for an initial period not exceeding 24 months during which the hardware and software systems will be installed, tested, commissioned and handed over to the MyCiTi Operations Management Unit. Once all the hardware and software systems are operational, the CC contractor will have a continuing role for a further six years in maintaining the hardware and software systems and possibly operating the control centre system on behalf of the MyCiTi Operations Management Unit.

There will be some integration required between the CCC and FS contractor's contracts, for example the CCC may have to provide information on bus location (re certain buses) to the AFC's on-board validators to facilitate distance-based fares. The CCC must ensure that it can supply information according to protocols as will be determined by the FS contractor. The FS contractor will be ultimately responsible to ensure integration, and the CCC must comply with the FS contractor's directives in this regard.

## **6.5. Station Services contractor**

A single contract will be entered into with the station services contractor, which will be responsible for general management services on the stations and for upholding the MyCiTi system's quality goal of good customer service.

The principle responsibilities of the Station Services contractor (some elaborated further below) will be:

- security and access control at stations and on trunk vehicles;
- the supply and management of ticket sales at trunk station kiosks, including supply and management of cashiers and cash collection;
- provision of passenger information at kiosks and through station staff;

- making available brochures and maps and maintaining notices and displays provided by the MyCiTi Operations Management Unit on stations and at stops;
- monitoring the use of advertising displays;
- minor maintenance at stations;
- the cleaning of stations and the exclusive busways between trunk stations;
- maintenance of landscaping at stations and along exclusive busways;
- cleaning and minor maintenance of feeder stops; and
- may include: management of parking in the areas surrounding the stations, both as a source of revenue as well as a way to enhance security in the area around stations.

It will make use of a communication system linking security personnel and the Operations Control Centre installed by the CC contractor.

The City's Metro Police will undertake security outside the station precincts and between stations, while Traffic Services will ensure against infringements of bus lanes and station embayments. The Specialised Services Unit (SSU) will be responsible for management of the CCTV camera system in stations and along busways, while the station services contractor will maintain communication with surveillance personnel in the control centre where CCTV monitoring will take place.

The SS contractor will be responsible for hiring and training cashiers and customer service agents at the stations and providing a level of service that exceeds customer expectations.

While the fare system contractor is responsible for procuring, installing, and maintaining the equipment in the stations for fare collection, the SS contractor will need to coordinate with the fare system contractor for maintenance and upkeep of the fare collection equipment within the station.

It will be responsible for security in the station, for passengers and the money collected from ticket sales. This includes controlling fraud and fare evasion. The company is liable for any money lost or stolen and will ensure cash taken at station kiosks is deposited into the appropriate bank account prescribed by the City or the ME. The SS contractor will be responsible for the collection of cash from stations and (if cash boxes are installed on board) from feeder buses.

Major station maintenance will be the responsibility of the City, while the SS contractor will be responsible for all minor maintenance of the stations.

Under consideration is whether the station services contract should include management of parking in the areas surrounding the stations, both as a source of revenue as well as a way to enhance security in the area around stations. It is expected that MyCiTi passengers will be able to pay for parking using smartcards.

The SS contract will run for up to seven years, with a period in which recruitment and training of personnel will take place to allow the SS contractor to develop its management responsibilities efficiently.

## **6.6. Non-motorised transport (NMT) and other feeder system operators**

The MyCiTi stations are designed to encourage people to reach the stations by walking, cycling, and small motorised cabs or non-motorised pedicabs. The City will provide the

necessary parking and infrastructure for the operation of cabs, pedicabs, rental bicycles and secure bicycle parking.

The small cabs and pedicabs will operate differently to the MyCiTi buses, serving passengers on a door-to-door or door-to-station basis. In that respect, they will serve as feeders to the MyCiTi system and support its operations. They will complement the service provided by the feeder buses, increasing the coverage and improving the whole system's service and operations. Pedicab feeders, as experienced in Bogotá, can reduce the cost of vehicle operations by serving areas with very low demand at a much lower cost of operations than a bus, which will also be reflected in a better service for the customer. The non-motorised pedicabs are emission-free and their lower speed reduces risk of accident.

Since the pedicabs will be integrated with the MyCiTi system, they will have exclusive rights to access the stations and park in the designated areas. It is possible that the pedicab services at MyCiTi stations could be contracted to the VOs. Therefore, in addition to the formal feeder vehicles, VOs could introduce these pedicabs (or small motorised versions of these where pedicabs are not practical) where viable, to attract more passengers to the system. However, the introduction of pedicabs will require the permission of the City or the ME and the vehicle acquisition will be for the VO's account.

Bicycle rentals will be an integrated part of the system but will not be part of the vehicle operations contract.

## **6.7. Various municipal services**

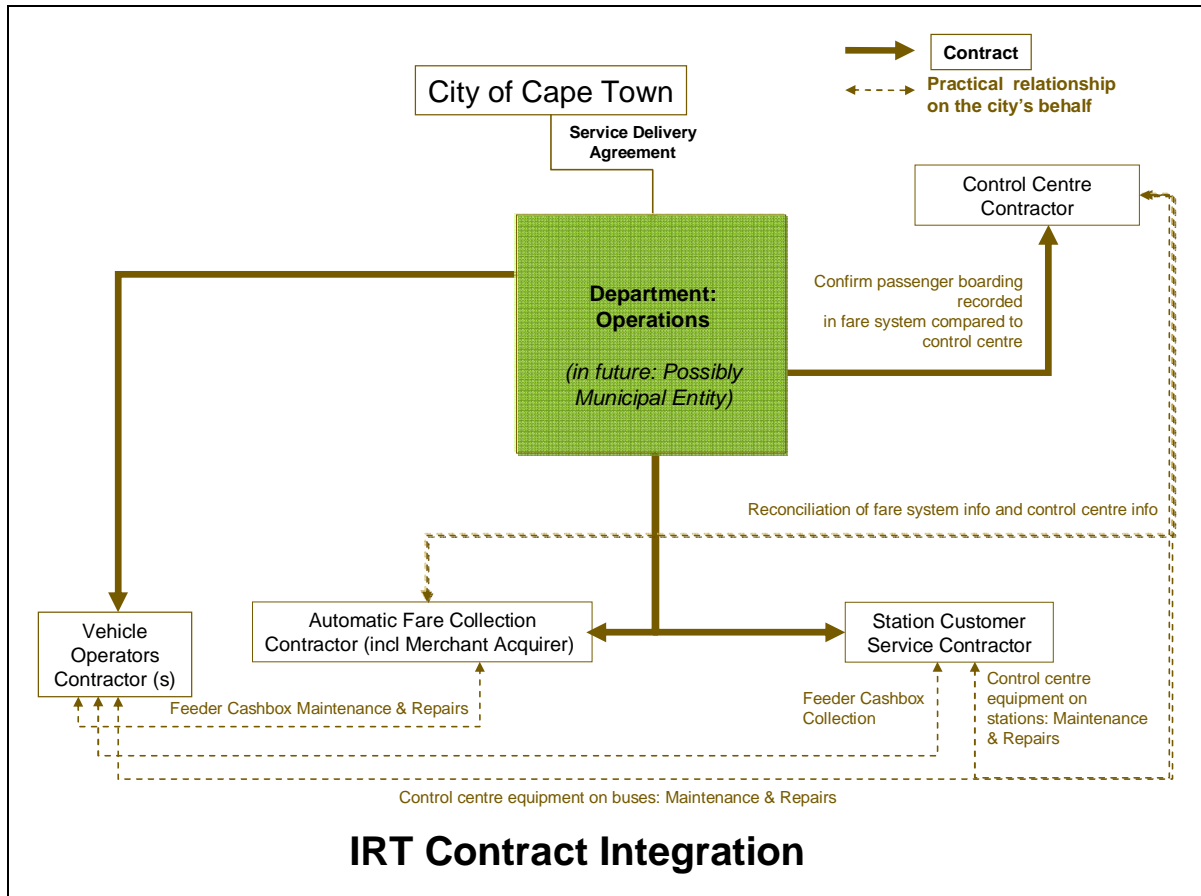
The provision of public transport is a municipal competence in terms of the Constitution and the NLTA. As part of the suite of services to be provided by municipalities, the implementation will affect all services. It is envisaged that the various municipal services will respond as required. Service Level Agreements may be entered into in respect of some of these services. Examples where Service Level Agreements may be required include:

- The Security Surveillance Unit, in order to monitor the additional CCTV cameras in busways and on stations;
- Solid Waste Department for the removal of refuse;
- Stormwater Department for the cleaning of streets and stormwater drains;
- Metro Police for the provision of policing and traffic management services required to maintain dedicated busways.

It is not envisaged that these services will impose major new obligations on other departments outside of normal growth parameters. Thus, no additional financial provisions have been made in this Business Plan to deal with any potential additional resources or service delivery operational changes that may be required in these departments.

## **6.8. Integration of contracts and municipal services**

It is clear that there is significant interaction between the various organisations making up the business structure of the MyCiTi system. The diagram in Figure 19 shows the key relationships between the different components.



**Figure 19. Contract integration**

Each contracted company forming part of the MyCiTi contract structure will have specific responsibilities defined in its contract with the City, through the MyCiTi Operations Management Unit. This Management Unit will also have its own set of responsibilities to administer the system, monitor operations, review and amend operating schedules and many other functions that will similarly be defined in an operational management protocol – and must be allocated significant and skilled human resources to facilitate effective integration.

As indicated above, the fare system contractor will be responsible to ensure that there is full integration between its technology and systems and that of the control centre. The services of an independent specialist firm will be procured to thoroughly test the integration of these two systems.

Furthermore, many of the responsibilities of role players will require the participation or response of another role player, resulting in a complex integration of responsibilities that must be properly defined and documented in the operational management protocol.

These defined responsibilities will form the basis of organised and disciplined management of the system as a whole and allow the MyCiTi contract structure to function as an integrated system.

## 7. Institutional plan

### 7.1. Institutional framework

The City is constitutionally responsible for the provision of 'municipal public transport' in its area. The National Land Transport Act says the City is responsible for:

the planning, implementation and management of modally integrated public transport networks and travel corridors for transport within the municipal area and liaising in that regard with neighbouring municipalities [s 11 (1)(c) (xviii)].

The City's strategic objective is to establish a single point of authority for transport, and is pursuing a strategy in terms of which the City's administration, duly guided by the ITP, will manage the following:

- strategic planning of the IRT system, including MyCiTi;
- network planning, inter alia determining where and when MyCiTi is to be rolled out, and
- building and maintaining MyCiTi infrastructure.

The City will ensure effective control of the management of MyCiTi operations through an appropriate mechanism, considered in terms of section 78 of the Municipal Systems Act and, where applicable, to be considered in terms of section 84 of the Municipal Finance Management Act. It will set the terms under which the system operates.

### 7.2. Determining an appropriate mechanism for the provision of BRT services

In December 2008 Council supported a Municipal Entity as the appropriate mechanism for the provision of municipal public transport services, including MyCiTi, subject to the process required in terms of section 84 of the MFMA before the establishment of an Municipal Entity can be approved. This Council decision underpins the implementation strategy for the services in this Business Plan.

The section 84 process has not yet been concluded. The administration is of the view that the City should first achieve higher levels of confidence in the projected implications of the roll out of MyCiTi to identify and minimise the risks of the system to the City before creating a Municipal Entity. The level and extent of operations required to justify the establishment of the Municipal Entity is not expected to be achieved before September 2011. Thus, there is a need for internal capacity to oversee MyCiTi operations. In May 2010, Council gave the City Manager approval to establish such an internal structure.

As mentioned in paragraph 6.1 and elaborated in Chapter 8, in the initial phase the proposed tasks of the City and the Municipal Entity will be combined in a MyCiTi Project Office within the City administration, reporting to the Executive Director: Transport, Roads and Major Projects, and consisting of two departments, namely the Department: IRT Development and the Department: IRT Operations. As the detail of contractual relationships

between the various parties is clarified and stabilised and, should a Municipal Entity for public transport services be established, it is anticipated that the Department: IRT Operations would move into the Municipal Entity, while the Department: IRT Development would remain in the City administration.

In this Business Plan, the structure responsible for managing MyCiTi operations is generically called the MyCiTi Operations Management Unit. Initially, this is the Department: IRT Operations, but in due course this is planned to become a unit within a newly formed Municipal Entity, if the City decides to establish such entity.

The creation of internal capacity does not imply an internal mechanism, as envisaged in the MFMA and therefore does not negate the legislative processes already undertaken to determine the best model of service delivery. It simply means that the internal staff resources will manage the provision of services by the contracting of service operators, a mechanism which is still external to the City. The contracts will provide for the cession thereof to a ME, if and when established. The development of the internal capacity is guided by the need for the unit to be transferred to a future Municipal Entity as seamlessly as possible. For more about the staffing structure and organigram, see Chapter 8.

It is also a preferred strategy of entering into negotiated vehicle operator contracts with the directly affected operators in Phase 1A (see paragraph 6.2). However, in view of the risk in the course of this process of not being able to negotiate and conclude reasonable terms in time to meet the planned implementation of the starter services, it is appropriate for the City also to have the option of providing limited vehicle services by way of an internal mechanism, such as by operating the services through the appointment of their own temporary staff (such as drivers). This option may in future also be necessary where the contracted vehicle operators default on services delivery. Such staff will only be appointed on a temporary basis under relevant employment conditions.

In August 2010 the Council resolved in terms of section 78(4) of the Municipal Systems Act that, until the ME is established,

- the City should itself provide MyCiTi-related municipal public transport services through an external mechanism in the form stipulated in s76(b)(v) of MSA i.e. "any other institution, entity or person legally competent to operate a business activity," during the period prior to the possible establishment of the ME; and
- where an external mechanism cannot be utilised within the required timeline, the City may as an interim measure provide MyCiTi-related services through an internal mechanism as provided for in s76 (a) of the MSA, until it is able to provide them through an external mechanism.

### **7.3. Internal MyCiTi Operations Management Unit**

Thus, the institutional strategy is to establish the Municipal Entity only once there is a more substantial business and the City obtains practical expertise in the monitoring of BRT Operations.

There are some serious risks in managing MyCiTi operations through an internal department. These include:



- The decision-making process regarding key issues of relevance to the MyCiTi may be slower than necessary to avoid exposure to risk by staff members having a bureaucratic approach.
- The City's response time in corporate related services as well as City protocol requirements may pose further risks. It is therefore essential that the internal MyCiTi operations function be supported by a team that are hands-on, dedicated, and specialised in the specific areas relevant to the service.
- Within the City the MyCiTi Operations Management Unit may be subject to many conflicting service delivery views and pressures as well as corporate process issues. This may reduce efficiency and its ability to focus on the core business at hand. Thus the benefit of a having a focused semi-independent body, such as an entity, could be lost.
- Once this function is assigned to a Municipal Entity, there will be creative tension between the Board (acting as autonomously as possible, focusing on its core service) and the broader views of the City (focused on the full package of service delivery and social responsibilities). This tension could be lost while the MyCiTi Operations Management Unit is located within the City.

Currently, these risks are mitigated by incorporating various role-players in the overall development of operations as well as calling in expertise from consultants. The City also provides strategic support and guidance through a special political sub-committee established to oversee the 2010 developments. It is recommended that this high-level structure remains post-2010 to decide upon cross-cutting issues regarding the IRT (ie issues beyond those falling within the direct management authority of the Executive Director: TR&MP).

These risks should be managed and reduced by setting up and running the MyCiTi Operations Management Unit on business lines. Thus this department should:

- Focus on balancing the pressures of running a high-quality public transport system, while at the same time reducing cost and working towards a sustainable service.
- Run on principles of optimising customer service within available budget;
- Be advised by an advisory board, established in a manner similar to that required for a Municipal Entity, with an emphasis on ensuring appropriate customer services and running of the service on business principles;
- Be able to make informed decisions quickly and efficiently, which requires substantial decision-making authority, taking into consideration the input of an advisory board and the high-level structure, recommended above, under the direction of the Executive Director: TR&MP.

The exact roles and responsibilities, as well as the authority and service requirements of the internal MyCiTi Operations Management Unit (for example, vis-à-vis the Department: IRT Development) should be set out in a service delivery agreement, in much the way an SDA with a ME would be formulated.

#### **7.4. Functioning of the interim advisory board**

As indicated above, in the interim period prior to the establishment of a ME, an advisory board should be established as a precursor to the board that must be established regarding the ME. Unlike the ME board, the advisory board will not have decision-making functions. Its role would be that of provision of advice to the Department: IRT Operations as well as the Executive Director: Transport, Roads and Major Projects. Such advice will focus on how the MyCiTi services would be run as a business on customer service principles.

Members of the public with relevant expertise and backgrounds will be invited by the City to serve on the advisory board for a one-year term. In this period the City will be in a position to evaluate individual advisory board member's suitability to serve on the future Municipal Entity board when it is established. The advisory board will function in the same way as the Municipal Entity by electing a chairperson and having regular meetings to consider and discuss progress reports. It is envisaged that the advisory board would meet quarterly.

#### **7.5. Pertinent issues regarding the eventual role of the Municipal Entity**

At the time of the planned establishment of the Municipal Entity, more information should be available to determine the precise content of the relationship between the City and the Municipal Entity, and the legislated Service Delivery Agreement (SDA) will be developed accordingly. The current view as to pertinent elements of such an agreement is summarised below. The final terms of such an agreement will, of course, be reviewed prior to the establishment of the Municipal Entity.

*ME's advisory role.* In addition to the broad description of the roles of the City and the ME (as indicated previously), the ME will have an advisory role in the strategic aspects of the network roll-out, the conceptual design of new corridors and routes, the design of facilities, and determining the routes and services to be provided by the VO companies.

*Procurement of services.* The ME's activities will include the bidding and tendering process as well as management of the contracts with private operators, in accordance with directives from the City (as stipulated in the SDA) and in terms of legislation directing the operations of such entities. However, the initial contracts, and possibly the monitoring thereof, will be handled by the City, given the timeframe for the establishment of the ME. After the establishment of the ME, the initial contracts and monitoring thereof, as entered into by the City, will be assigned to the ME.

*Scheduling and controlling of services.* The ME will be in charge of scheduling and controlling the vehicle operations and developing quarterly, monthly, and weekly daily schedules.

*Branding.* The ME will manage the branding and image of the system, as directed by the City.

*ME Board and CEO.* Subject to the completion of the required legal processes, the ME will be governed by a board of directors appointed by the City. In accordance with current legislation, no councillors or city officials will serve on the board. The board will be made up of persons appointed in terms of their specific expertise and experience. The ME will be run

by a chief executive officer appointed by the Board who will have a team of employees to fulfil all the functions assigned to the ME.

*Fares.* The Council will determine the bus fares and tariff policy each year, probably approving a range of fares to take into consideration any changes in variable inputs into the fares (such as the fuel price). The SDA will provide that the ME can adjust the public fare, within a framework set by the City. This adjustment will occur if changes in the variable factors in running the operations exceed pre-set parameters, in terms of the escalation formulas in the contracts. If, after consultation with the City, it is determined that it is not feasible to increase the fare and that the City cannot allocate additional revenue for the system, the ME will reduce the provision of public transport services in order to reduce the costs to the system and the pressure on fare revenue to cover those costs.

The fare ought to be set so as to maximise revenues while taking into account a range of other considerations such as affordability to users and incentivising usage of the system and available subsidies, if any. To the extent that the ME is required to deliver services beyond what is affordable through the collection of fares, the City will have to provide the ME with additional resources derived from own taxes or grants from other spheres of government.

*Role of the City.* The City will remain responsible for the fulfilment of a number of functions in relation to MyCiTi, including the construction of infrastructure, setting the framework for the determination of fares and the related tariff policy, roadway maintenance and cleaning, traffic signal control maintenance, property and land acquisition, ownership of MyCiTi infrastructure and broader transport planning functions.

*Ownership of the ME.* The City will be the sole shareholder of the ME and will ensure that everything it does is in accordance with the City's ITP, as it may be amended over time.

*Other spheres of government.* City is prepared to enter into agreements with other spheres of government as regards the role of the ME in relation to their interests, including PGWC and adjacent municipalities.

*City's modelling capability.* Since the City has ultimate responsibility for setting fare levels, and allocating finances to the ME to address the gap between fare income and costs, as well as to determine how the system is to be rolled out, and also finances and maintenance of the fixed infrastructure, it requires system planning capabilities and the ability to model operating costs and revenues. Though the ME should have capacity to plan and model in detail, subject to the City's overall parameters, the respective responsibilities will be defined to avoid duplication of resources.

*ME business approach.* The ME will need to constantly tailor services through its scheduling and controlling functions so as to maximise revenues and minimise costs. A key issue, for example, will be how it manages to lower the peaks and increase the off-peak ridership. The ME should have the scope and incentives to encourage it to find creative ways of increasing income and reducing costs.

## **7.6. Conclusion**

Action items on the institutional arrangements are summarised as follows:

- In August 2010 Council has taken an expanded section 78 (4) decision which,

- in addition to the support for a ME as per the previous decision, will approve that Council, in a preceding phase and prior to the establishment of the ME, enter into the initial contracting of service providers to meet the services indicated in this Business Plan;
- also include that City may provide limited services (not for prolonged periods) by internal mechanism to reduce the risk associated with the negotiation process with current operators for the initial services as well as to provide for possible defaulting on service delivery by future appointed operators.
- The establishment of the internal Department: IRT operations will be pursued in such a manner as to enable the relocation of capacity to a ME (if approved).
- An SDA between the rest of the City and the internal MyCiTi Operations Management Unit should be formulated. In due course, the precise content of the SDA with the ME will be formulated prior to the establishment of the ME, but the provisional intentions are indicated above.

## 8. Staffing structure and strategy

### 8.1. Framework

The staffing strategy is developed with the understanding that it is a constitutional responsibility of the City of Cape Town to provide for public transport within the metropolitan area.

Overall strategic planning of transport, as done by the Transport Department of the City, will set the framework of the MyCiTi Integrated Rapid Transit (IRT) system. The City will also build and maintain the infrastructure required for the MyCiTi system.

As indicated in Chapter 7, the Council supports in principle that MyCiTi services should be provided in due course through a Municipal Entity (ME) still to be established – subject to further legal steps. Thus in due course the ME may well be responsible for the management of operations. The performance of the ME will in turn be monitored and managed by the City. The ME will also undertake an advisory role to the City in respect of the management of operations.

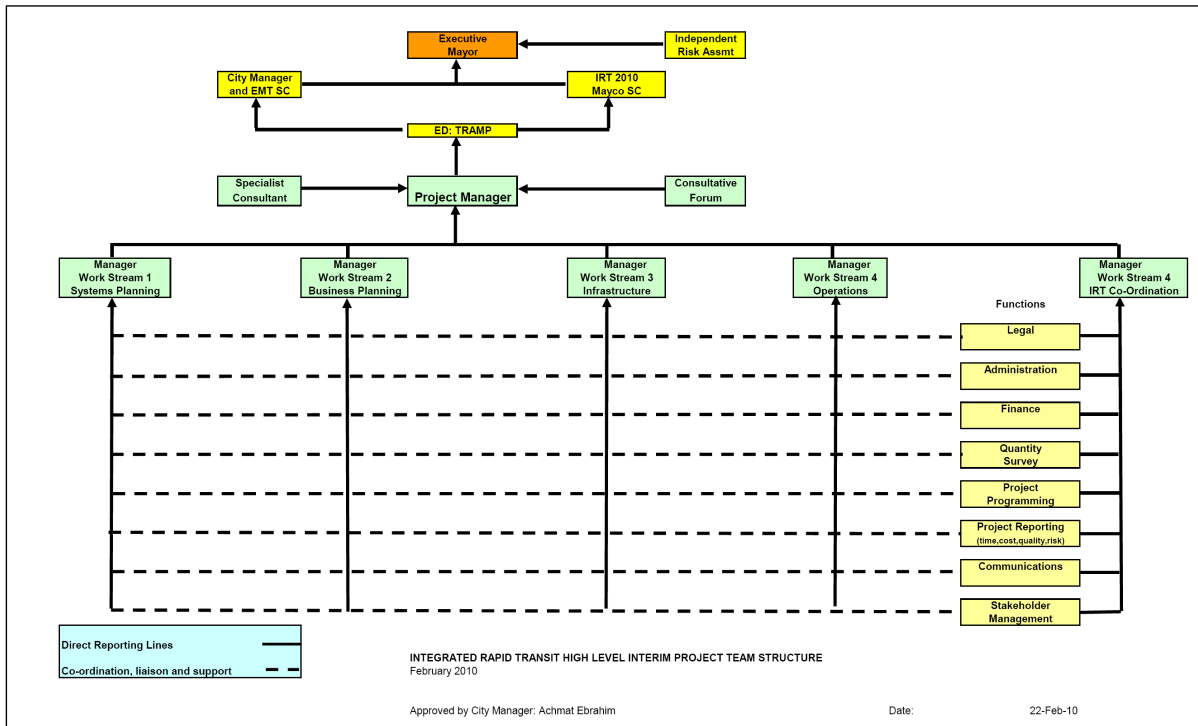
### 8.2. Legal requirements

The Constitution determines that it is the responsibility of a municipality to provide for public transport within its area of jurisdiction.

Section 78 of the Local Government: Municipal Systems Act requires of the City to follow a specific process for the establishment of an IRT System. In terms of this legal requirement the Council resolved on 27 March 2008 to explore, in terms of section 78(2)(b), the provision for an IRT System through an external mechanism. The Council further resolved at its meeting of 3 December 2008 to support the establishment of a ME to manage the operations of the BRT System.

Section 84 of the Municipal Finance Management Act requires the City to undertake a formal assessment of the viability of the establishment of a ME to be responsible for the management of the operations of the BRT system.

The Council also resolved on 26 August 2009 to transfer the IRT Project from the then Transport, Roads and Stormwater directorate to the then Service Delivery Integration directorate (SDI). It was further resolved at a meeting held on 26 November 2009 to devolve all the functions of the then SDI directorate to other directorates except for 2010 World Cup and Strategic Support, in order to be able to take responsibility for the IRT Project. A framework for the development of the IRT Project internally was also adopted at this meeting. This framework was further amended on 24 February 2010 by the City Manager in terms of the authority granted to him by section 66 of the Municipal Systems Act (32 of 2000), the latest version which is shown in Figure 20. He exercised this authority within the policy framework for organisational structure and design as amended by the Executive Mayor in consultation with the members of the Mayoral Committee on 17 March 2009.



**Figure 20. Organisational Framework for the development of the IRT Project.**

On 27 January 2010 the City resolved to amalgamate the directorates of Transport, Roads and Stormwater and SDI to form the new directorate Transport, Roads and Major Projects (TR&MP). The new directorate consists of the following departments:

- Transport
- Roads and Stormwater
- 2010 Technical
- 2010 Operations
- IRT Implementation (now proposed to be called IRT Development)
- IRT Operations.

Whilst all the departments involved moved to the new directorate as a going concern, two new posts of Director: IRT Implementation (now proposed to be called Director: IRT Development, the name used in the remainder of this Business Plan) and Director: IRT Operations were created to manage the IRT Project.

In the light of the section 78 process followed, the City further resolved on 25 May 2010 to create an interim organisational structure for the IRT Project to meet the immediate operational requirements. In the light of the section 84 process not yet being finalised for the establishment of the ME, the creation of an interim organisational structure became an operational requirement, as was adopted by Council on 25 May 2010 (Item C 118/05/10). A further report, on the utilisation of contractors to render certain operational functions during the interim period until the ME is established, is also required for consideration by the City.

### 8.3. Operational requirements

As indicated above, the IRT Project requires the establishment of at least two departments to be operationally affective, namely IRT Development and IRT Operations. Elsewhere in this report the term 'IRT Operational Management Unit' is used generally to mean the unit / department responsible for the core operational functions, whether located in the City as the department of IRT Operations, or in the future Municipal Entity.

The proposed structure for the two IRT departments is set out in Figure 21.

IRT Development will be responsible for the development and maintenance of the IRT infrastructure and will mainly consist of the following functions:

- System Planning and Modelling
  - Strategic System Planning
  - Transit Modelling
  - Transportation Engineering
  - Transit Operational Planning
- Infrastructure and Development
  - Busway and NMT Design
  - Station and Depot Design
  - IRT Fixed Infrastructure Contract Management
  - IRT Transport Engineering and Urban Design
- Coordination and Project Support
- Financial Management
- Support Services.

IRT Operations on the other hand will be responsible for the provision of the service, ie. the management of operations. It is envisaged that this function could be done through a ME to be established and approved by the City on the basis of the section 84 assessment report.

IRT Operations will consist of mainly the following functions:

- Business Development
  - Contract development
  - Integration
  - Technology
- Operations Management
  - Scheduling and Controlling
  - Service Management
  - Facility Operations
  - Emergency and Risk Management

- Industry Transition
  - Strategy Development and Negotiations
  - Industry Liaison and Capacitation
  - Data Management
- Financial Management
- Customer Relations
- Support Services.

#### **8.4. Organisational development**

The organisational structure for the IRT Project should be developed to give affect to both development and operations functions as listed above. Furthermore, provision is made for support services to give affect to at least the following functions:

- Day to day Financial Management
- Day to day Human Resources Management
- Day to day Information Systems and Technology

These three functions should be fulfilled by the Support Manager. The Support Manager would be responsible for all transactional processes flowing from the above three functions.

More specialised strategic advice and support could be provided by the following staff in the office of the Executive Director: TR&MP:

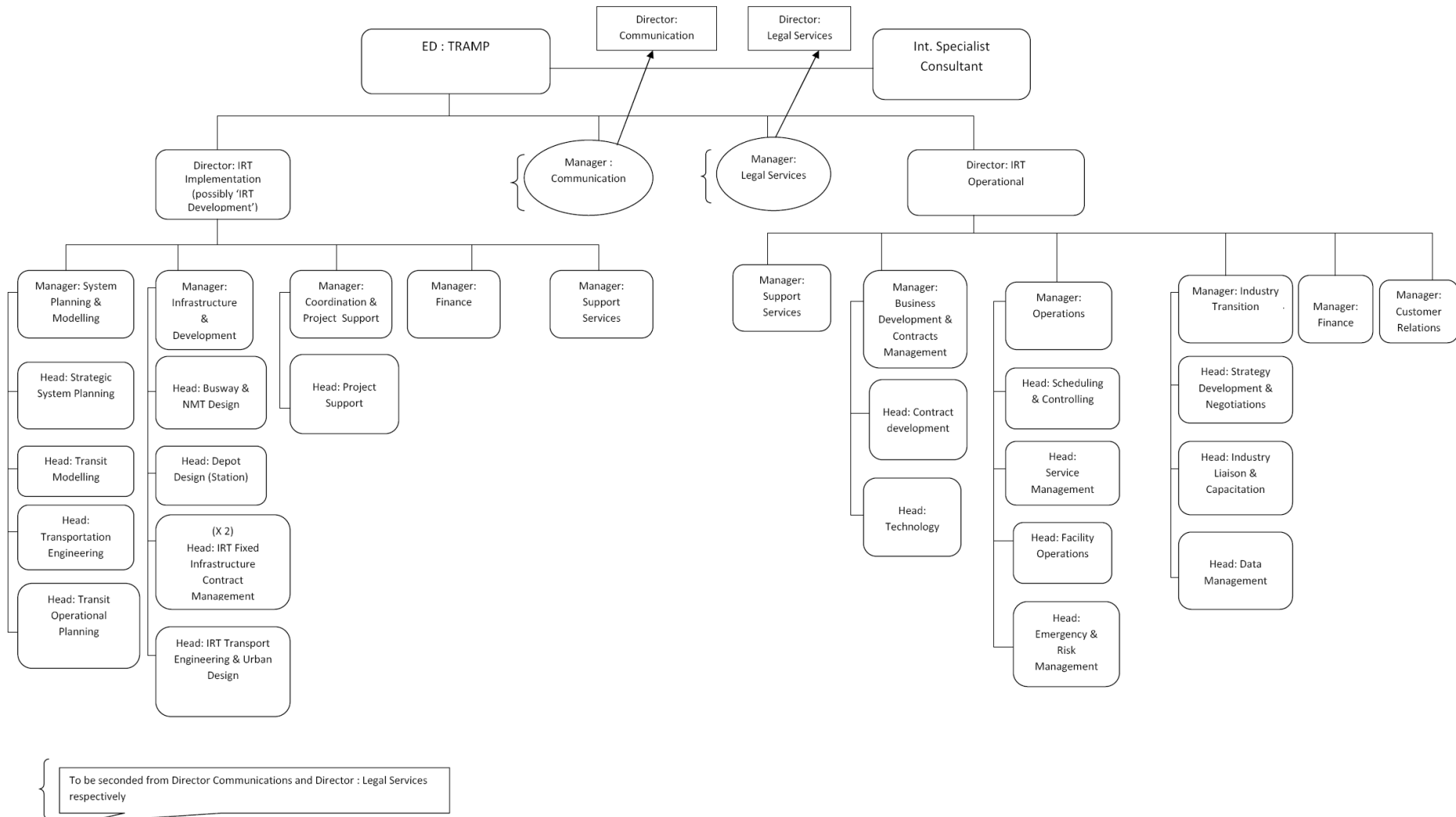
- Financial Manager
- Human Resources Business Partner
- Strategic Support Manager.

Furthermore, the following functions could be provided to the IRT Project on the basis of full time secondment from other Directorates and Line Departments of staff to the office of the Executive Director: TR&MP:

- Manager Marketing and Communication
- Manager Legal Support.

In the light of this it should be noted that once a ME has been established by the City it might be necessary to create the above support functions in the ME before the IRT Operations function is transferred to the ME.





**Figure 21. Draft Organisational Structure for the IRT Project (still subject to further changes due to operational requirements)**

## 9. Financing MyCiTi

### 9.1. Introduction

This chapter summarises the financing of the MyCiTi system.

From a financial perspective there are three broad cost components to the MyCiTi system.

- The capital and operating costs arising from infrastructure and system implementation, including compensation of existing operators;
- The cost of managing MyCiTi development and operations within the City of Cape Town administration and any Municipal Entity which is created;
- The cost of the contracted service providers for running public transport operations, including vehicle operating companies, the Station Services contractor, the control centre and the fare collector.

The main source of funding for the project is national government's Public Transport Infrastructure and Systems Grant (PTISG). This funding is supplemented by the City's own capital and operating contributions.

The intention of national government is that existing bus subsidies paid by provinces to contracted service providers out of the Public Transport Operations Grant (PTOG) be shifted to cities where the provincially subsidised services are replaced by the city systems. This is according to Regulation 877 of the National Land Transport Act (5 of 2009).

Initial modelling indicates that the amount currently provided through the PTOG for the whole metropolitan area, which is in excess of R600 million per annum, will be sufficient to cover the deficit once the system is fully rolled out. However, this is not projected to be the case for Phase 1A on its own. To the extent the available PTOG amount is insufficient this deficit will have to be provided for out of rates and general income and by drawing on the PTISG on an interim basis.

### 9.2. Infrastructure and implementation costs

#### 9.2.1. Capital and implementation costs

Table 7 and Table 8 show the past, present and future estimated capital and implementation costs of Phase 1A. While some of these costs are classified as operating costs they are all once-off costs and are funded by a combination of the city's own capital funding and national government's PTISG.

**Table 7. Infrastructure and Vehicle Costs (including VAT)**

R million	07/08	08/09	09/10	10/11	11/12	12/13	13/14	Total
Busways	9.5	229.6	391.2	200.2	138.9	271.2	9.0	1249.6
Depots	0.0	6.0	25.8	72.1	144.0	0.0	0.0	247.8
Stations and stops	0.0	23.1	96.1	158.9	188.6	70.2	14.9	551.7
Control centre	0.0	0.0	0.0	79.3	73.6	9.3	11.8	174.0
Transport Mgt Centre	0.0	22.1	37.9	0.0	0.0	0.0	0.0	60.0
Land procurement and EIA approval	0.0	78.1	53.4	80.5	0.0	0.0	6.0	218.0
Fare system and related infrastructure	0.0	0.0	0.0	148.0	153.2	13.3	15.6	330.2
Vehicles	0.0	0.0	89.6	11.0	403.6	0.0	68.2	572.5
Non-motorised transport infrastructure	0.0	0.0	0.4	32.1	20.8	14.0	9.0	76.2
Contingency	0.0	0.0	0.0	0.0	0.0	174.0	0.0	174.0
Escalation	0.0	0.0	0.0	0.0	95.4	97.4	47.3	240.0
<b>TOTAL</b>	<b>9.5</b>	<b>359.0</b>	<b>694.3</b>	<b>782.0</b>	<b>1218.0</b>	<b>649.3</b>	<b>181.9</b>	<b>3893.9</b>

**Table 8. Transitional, design and implementation costs**

R million	07/08	08/09	09/10	10/11	11/12	12/13	13/14	Total
Compensation and scrapping allowance				34.5	316.3	0.0	24.5	375.3
Planning, system design and implementation	2.6	24.5	39.0	101.6	49.6	27.8	21.6	266.6
Property related charges			2.2	9.0	1.2	1.3	1.3	15.0
Contingency							45.5	45.5
<b>TOTAL</b>	<b>2.6</b>	<b>24.5</b>	<b>41.2</b>	<b>145.1</b>	<b>367.0</b>	<b>29.1</b>	<b>92.9</b>	<b>702.4</b>

### 9.3. Tax and the impact on costs

#### 9.3.1. Value added tax (VAT)

The costs shown in the above tables assume that infrastructure provided by municipalities is defined as 'VAT exempt' rather than 'zero-rated'.

In the MyCiTi system there are potentially three levels of role-players: the City, a Municipal Entity established to manage public transport, and the contractors. As indicated in Chapter 6, such contractors will include two Vehicle Operators; a Fare System contractor; a Station Management contractor; and a Control Centre contractor. Each of these role-players will be impacted by VAT and other forms of tax in different ways, some of which are unclear, and the subject of discussion between National Treasury and the South African Revenue Services.

There are three types of VAT status – the normal VAT status, 'VAT exempt' status, and 'zero-rated' status. Under VAT exempt status a supplier may not charge VAT on outputs, but has to pay VAT on all inputs and may not reclaim these from SARS. Under zero-rated status the supplier does not charge VAT on outputs, but may reclaim all VAT paid on inputs to the activity. It is thus most advantageous for the supplier if the service is 'zero-rated'.

In 2006, when Regional Services Council levies were abolished part of the compensation to municipalities was to introduce zero-rated status for rates funded services. However, there is a specific section in the VAT Act dealing with public transport. This provision, section 12, stipulates that

*"the supply of any of the following goods or services shall be exempt from the tax imposed under section 7(1)(a):*

...

*(g) the supply by any person in the course of a transport business of any service comprising the transport by that person in a vehicle (...) operated by him of fare-paying passengers and their personal effects by road or railway (...), ..."*

While it is clear that transport operations are VAT exempt it is not clear how public transport fixed infrastructure is to be treated. This depends on the extent to which the infrastructure is regarded as part of the 'service'. If the provision of infrastructure in this project is to be treated as part of the service and is therefore VAT exempt then the city will not be able to reclaim VAT on the inputs to the provision of infrastructure, despite the fact that it has developed all infrastructure out of zero-rated public grants or through zero-rated rates income and the infrastructure has been developed within the Transport, Roads and Stormwater Directorate which renders zero-rated supplies for VAT purposes.

This would lead to the anomalous result that where the city provides infrastructure for private motorists it can reclaim the input VAT, but where it provides infrastructure for public transport it cannot.

Initially the view taken by cities implementing BRT systems (including Johannesburg and Cape Town) was that the BRT operations were VAT exempt, but the infrastructure zero-rated. However, this has been brought into doubt. The matter has not yet been resolved, but after discussions with SARS officials and on their advice, it was deemed prudent to

consider the infrastructure development as VAT exempt until confirmation to the contrary, and pay input VAT to avoid any potential penalties. The VAT due was thus calculated and paid over to SARS, and all future payments to contractors on infrastructure required exclusively for the MyCiTi System will be deemed exempt for VAT return purposes until further clarity on the matter is obtained from SARS.

The project has been costed on this basis, and the costs included in the tables above. The cost of the additional VAT previously not provided for is R309 million.

The matter is now the subject of discussion between National Treasury and SARS, and both acknowledge that there are anomalies that have to be addressed, and are exploring ways that this can best be done. The problem is exacerbated by the fact that for technical reasons the public transport infrastructure provided in the eThekweni service is being provisionally treated as zero-rated. While it may be that the MyCiTi system could be framed institutionally in a manner that leads to a more tax efficient treatment, it is not considered appropriate to drive institutional approaches on this basis, particularly give the possibility of imminent changes.

### **9.3.2. Other tax issues**

Other issues that must be considered are the potential income tax implications for any operating unit or the contracting companies; and capital gains taxes or donations taxes related to the transfer of any assets required for the operation of a public transport system.

While some tax advice has already been received from the internal VAT unit in the City as well as external tax experts, there are still some issues that remain unresolved and the City is seeking a binding tax ruling from SARS.

### **9.4. City's maintenance, project management and other recurrent costs**

The following table shows costs incurred on a recurrent basis by the City, itself, excluding the system operational costs (vehicles, fare collection, station services and control centre), which are described in the following section. However, they include the costs of the two directorates which are being set up to implement the system and manage operations. This is shown under MyCiTi Project Office. The Department: IRT Operations will, in essence, become the management unit for MyCiTi operations within the proposed Municipal Entity for public transport services. These departments are funded by rates and will continue as long as the service is provided, although the scale of project office costs will vary dependent upon whether the system is still being developed and expanded. To the extent that the costs of these departments could be regarded as the cost of implementing the project rather than ongoing recurrent costs associated with MyCiTi they could be funded from PTIS grants.

The system's operational costs (and revenues) are discussed separately since they represent the core of the business which will be undertaken by the entity once it is established.

The stations and roadways will remain assets of the city and will need to be maintained and insured. These have been designed so as to minimise ongoing maintenance costs, hence the relatively low figure for these items. Vehicles will need to be insured while they remain owned by the city. The budget shown in Table 9 includes the insurance of the vehicles purchased for the World Cup service and currently owned by the city.

Note that the figures in this table are in real 2010 rands. Thus they will increase with inflation.

**Table 9. City's maintenance, management and other recurrent costs (2010 rands)**

	Projected 2009/10	Revised 2010/11	Revised 2011/12	Revised 2012/13	Revised 2013/14
Stations Maintenance	0.0	1.5	1.5	1.5	1.5
Roadways, Signals etc	0.0	2.0	2.0	2.0	2.0
MyCiTi project Office	30.0	30.0	30.0	30.0	30.0
IRT Internet\Intranet	0.1	0.1	0.1	0.1	0.1
Insurance of city assets (incl excess provision)	0.6	6.0	6.0	6.0	6.0
<b>TOTAL</b>	<b>30.7</b>	<b>39.6</b>	<b>39.6</b>	<b>39.6</b>	<b>39.6</b>

## 9.5. System operational costs

System operational costs have been modelled for the starter service and the full Phase 1A. Apart from a limited service which will continue after the World Cup, the City will initially implement the starter service and then add to it incrementally over the following three years until Phase 1A has been implemented.

The following sections discuss the expected costs on an annualised basis for Phase 1A. The figures are based on actual costs and tendered prices where possible and modelling of expected ridership. However, actual costs and revenue depend on variables which cannot be fixed. Thus this section presents a range of likely costs and revenues, and estimates a range of likely operational deficits that will have to be addressed.

### 9.5.1. Phase 1A system operational revenue and costs

#### *System revenue*

The revenue generated by the system comprises two components: the fare revenue from passenger fares, and revenue from advertising at stations, on vehicles, and through concessions around the stations.

The fare revenue has been estimated from detailed operational modelling of the system. The routes, frequencies, vehicle type, and fare structure and fare level have been modelled and optimised to increase levels of patronage and maximise fare revenue, while providing a high standard of service to the passenger. Options of differential fares for off-peak travel have also been tested. A modest level of fare evasion of 2% has also been used as a realistic estimate. The figures assume that a fully operational automated fare collection system is in place as specified in a tender that has been prepared and issued.

Table 10 gives the range of estimated system revenues for the full Phase 1A. The upper (optimistic) level of the range assumes that all passengers that are modelled to use the

service do so. This includes all captive public transport users and 10% of those currently using private transport. The lower (pessimistic) level of the range assumes fare revenue is 25% lower. This would be mainly attributable to a drop in captive user revenue, since choice users represent only a small portion of total users once Phase 1A is rolled out. The lower estimate assumes advertising revenue is only 50% of the modelled figure.

**Table 10. Phase 1A System Revenue**

<b>Revenue source (R mill/year)</b>	<b>Optimistic</b>	<b>Pessimistic</b>
Fare revenue	297.6	223.2
Advertising and concessions	20.0	10.0
<b>TOTAL</b>	<b>317.6</b>	<b>233.2</b>

The system revenue, including fare revenue and revenue from advertising and concessions, is thus estimated at between R317.6 million and R233.2 million.

### *System costs*

The system costs comprise two broad categories: the costs of the system operators, namely the vehicle operator, the fare collection company, the control centre, and the station services; and the institutional costs comprising the costs of the MyCiTi Operations Management Unit (which may function from within the city or from a Municipal Entity) and costs of marketing and promoting the system.

- **Vehicle operator contracts**

A full operator financial model was developed to estimate the vehicle operator contract cost. The model takes into account the full costs of operations including:

- Personnel costs including market related salaries with benefits and statutory levies. These were developed using a likely organisational personnel structure and salary levels for the vehicle operating company based on services provided for the World Cup service and in Johannesburg's Rea Vaya system;
- Direct vehicle operating costs such as fuel, tyres, parts, spares and maintenance;
- Fixed costs associated with the buses (such as insurance and licensing);
- Fixed costs and overheads, and
- An allowance for profit based on sound commercial principles for this type of enterprise.

Consistent with proposals and the negotiations with the existing affected bus and taxi operators, the cost structure in the financial model is based on the premise that two bus operating companies will be formed to render the Phase 1A services. The aim of this is to create the basis for competition between the operators.

For Phase 1A the City is adopting a vehicle ownership model where the City sells the vehicles it has purchased with the PTISG to a financial institution and the bus operator will then lease the vehicles from the financial institution. The lease costs to the operator will be reduced in the first four years as a result of the tax benefits the bank receives from the

depreciation allowance of the vehicles. The City will pay the required amount for the lease to the vehicle operator out of the proceeds of the initial vehicle sale. The full details of this proposed ownership scheme are described in the Annexure 3.

The implications of this ownership model are that the City will pay the operator for providing the service in two payments:

The first payment will be based on a fixed fee per kilometre per vehicle type for the scheduled kilometres operated.

The fee per km will be adjusted monthly based on changes in certain input costs, such as fuel, CPI, and labour costs. It will be based on the cost structure of the operation, plus a margin for profit. To estimate the fee per km and hence the likely contract costs, a margin of profit was used based on commercial principles for this type of business.

Since the City is committed to a negotiated contract, all the components that factor into the fee per km will be subject to negotiation with the future bus operating companies.

The second payment will cover the lease costs after the allowance for depreciation provided by the bank.

This will not have any direct affect on the financial statement of the bus operating company or tax liability as the lease costs will be exactly offset by this second payment by the City. In the financial statements it will reflect as a zero sum. From the City's perspective the payments it makes to the vehicle operators for the purposes of its lease payments will be fully covered from the investment it makes out of the proceeds of the sale of the vehicles.

- **Fare Collector**

The details of the fare collections system are described in paragraph 6.3. A tender has been issued for automated fare collection. The estimated operational costs have been based on a selection of tendered prices received. A negotiation is still required with the successful tenderer. The operational costs reflected in this model relate to costs of managing the system, including operations, maintenance and provision of spares and replacement of parts. The capital costs have been separately indicated above.

- **Control Centre**

The details of the control centre operation are described in paragraph 6.4. As with the fare collections a tender has been issued. The estimated operational costs have been based on the tender prices received, although this will also be subject to negotiation to finalise costs. The operational costs relate to the management of the system, personnel costs, and system software and hardware maintenance.

- **Station Services**

The details of the station services are described in paragraph 6.5. In summary the station services will include the security at the stations, the cleaning of stations, passenger management, cashiers for fare collection and the management of on-street parking in the area of operations, especially around stations.



A draft contract is being prepared, but this has not yet been issued for tender. The estimated costs for station services have been developed based on the number and sizing of stations, and the required personnel and costs to perform the services.

- **MyCiTi Operations - Municipal Entity**

As discussed, it is envisaged that the Department: IRT Operations will be transferred into a Municipal Entity for public transport services which is to be created to run all the City's public transport operations, with MyCiTi representing most such operations initially. Overall management of the MyCiTi system is thus referred to in the modelled Phase 1A as the MyCiTi Operations Management Unit. An organisational design for this has been prepared and the costs structure determined. Note that this is in addition to the costs shown in the above section on the City's recurrent costs. This has been necessary to ensure budget provision for both the Department: IRT Development and the Department: IRT Operations from before the system becomes into operation and to convey the full costs of operations once the system is fully phased in and operational. However, some rationalisation between the two provisions will be possible.

- **Marketing**

Marketing the system is seen as a key ingredient for success, and is thus shown separately. A figure of 2% of fare revenue has been assumed as the promotion and marketing costs. Note that in addition to this a further R24 million has been provided in the first three years for initial marketing of the system. This is included in the planning and implementation costs under 'Planning, system design and implementation' costs within the tables above.

- **Vehicle operators**

A high and low figure has been estimated for the vehicle operator costs. The expected figure based on modelled costs has been used as the low figure, while the high figure is assumed to be 15% higher than the modelled figure for the same level of service provision.

However, were both the low revenue and high cost scenario to coincide measures would be taken to reduce costs. Fewer vehicles would be required to transport the lower peak hour passenger volumes, while hours of operation and off-peak frequencies would also be cut. It is estimated that this could bring vehicle operator costs down by 20%.

The following tables shows the Phase 1A system costs on an annualised basis for both the optimistic and pessimistic scenarios assuming cost saving measures are implemented in response to low revenues arising from low ridership. This is the annualised cost once Phase 1A is fully in place.

**Table 11. System operational and maintenance costs**

<b>System Costs (R mill/year)</b>	<b>Optimistic</b>	<b>Pessimistic</b>
<i>Total payment to system operators</i>	372.6	349.0
MyCiTi Operations Management Unit	25.0	25.0
Marketing and communication	5.9	4.5

The capital cost of vehicles is not included in these modelled prices since they are being paid for through the PTISG. As indicated, a structure has been devised which will have no net impact on the vehicle operators finances. This structure entails the following steps:

- the City purchases the vehicles using the PTISG
- the City sells the vehicles to a bank/financial institution
- the City invests the proceeds of the sale with the financial institution and derives interest from the deposit
- the vehicle operator leases the vehicles from the bank for the 12 year contract on a 12 year lease.
- the bank will be paid a fee for its services but claims the depreciation as an allowance against tax on the buses over 4 years and concomitantly reduces the vehicle lease costs
- the City pays the balance of the lease costs to the operator out of the deposit and interest derived from the sale of the vehicles to the financial institution

As indicated, the initial capital cost of the buses is R572.5 million, including the initial maintenance provision which is included with the vehicle purchase price. At the end of 12 years, there will be a balance remaining in the bank under this financing scheme which would be approximately R 150 million.

### **9.5.2. Phasing in Phase 1A**

As discussed, the system is being phased in, with both estimated costs and revenues increasing from the 2010/11 year during which the starter service is implemented to the 2013/14 financial year by which time Phase 1A will be fully phased in.

Table 12 indicates the estimated costs and revenues for the financial years assuming time frame described in Chapter 4.

**Table 12. Estimated system costs and revenues**

	2010/11		2011/12		2012/13		2013/14	
<b>System Revenue and Costs (R mill/year)</b>	optimistic case	pessimistic case	optimistic case	pessimistic case	optimistic case	pessimistic case	optimistic case	pessimistic case
<b>Revenue</b>								
Fare revenue	19.2	6.9	134.7	101.1	268.6	201.4	297.6	223.2
Advertising, concessions	0.5	0.4	8.9	4.5	17.7	8.8	20.0	10.0
<b>Costs</b>								
<i>Total payment to system operators</i>	71.2	69.6	199.9	189.2	337.9	316.7	372.6	349.0
MyCiTi Operations management unit	5.0	5.0	12.5	12.5	25.0	25.0	25.0	25.0
Marketing	2.0	2.0	4.0	3.5	5.4	4.0	6.0	4.5

The costs of the starter service are disproportionately high as the service is very small with a total of only 17 buses and therefore does not benefit from economies of scale. It has been assumed that two vehicle operator companies will be established as a forerunner to the full Phase 1A service, which requires two companies, in terms of the model. This is in order to avoid a monopoly developing, which will be more costly in the long term. However, in the short term it requires a doubling of personnel and other costs.

Similarly with the control centre and fare collection system, there is a minimum level of resources that need to be deployed irrespective of the size of the operation.

The provision for the MyCiTi Operations Management Unit is low in the initial years but climbs to R25 million a year once Phase 1A is fully implemented. As indicated above, there is also a provision for the MyCiTi Project Office, which includes the Department: IRT Development and the Department IRT: Operations. As the Operations Management Unit is shifted across to the proposed Municipal Entity the budget requirement for the Project Office should fall away. Thus there should be scope for rationalisation of these provisions in the above tables.

The possible deficit range for the system that could be expected is shown in Table 13.

**Table 13. Possible system deficit range**

(R mill/year)	2010/11		2011/12		2012/13		2013/14	
	optimistic case	pessimistic case	optimistic case	pessimistic case	optimistic case	pessimistic case	optimistic case	pessimistic case
Possible deficit range	58.5	69.3	72.8	99.6	82.0	135.5	86.0	145.3
Midpoint	63.9		86.2		108.7		115.7	

## 9.6. Funding mechanisms

Apart from fares there are five key sources of funding. These are:

- Public Transport Infrastructure and Systems Grant
- Loan funding from the CRR and EFF
- Public Transport Operating Grant
- Local tax income such as property rates, a share of the fuel levy and other general income
- Other sources such as advertising and parking revenue.

### 9.6.1. Public Transport Infrastructure and Systems Grant

The Public Transport Infrastructure and Systems Grant (PTISG) is a national grant with the strategic goal of 'promoting the provision of accessible, reliable and affordable Integrated Rapid Public Transport Network (IRPTN) services in the major cities of South Africa' (DORA 2010).

Table 14 shows the total amounts the City has received or is due to receive from the PTISG between the 2008/09 financial year and the end of the current Medium Term Expenditure Framework of national government covered by the Division of Revenue Act. It also shows the amounts of the grant allocated to other transport projects and the remaining amounts that are available for MyCiTi.

**Table 14. PTISG allocations per financial year for MyCiTi (R million)**

R million	2008/09 Actual	2009/10 Actual	2010/11	2011/12	2012/13	Total
Total PTISG allocated to the City	424.84	332.50	850.00	1 600.00	900.00	4 107.34
Total of this allocated to MyCiTi	225.64	282.70	736.55	1 358.07	804.17	3 407.13
Amounts to other projects, incl 2010 WC Transport	199.20	49.80	113.45	241.94	95.83	700.22

The grant framework is contained in the Division of Revenue Act. Key wording to be noted in the framework includes the 'Grant purpose' which is as follows:

To provide for accelerated planning, construction and implementation of public and non-motorised transport networks in major cities in South Africa. This includes network related infrastructure and information systems as well as transitional measures such as the inclusion of directly affected public transport operators and workers and also once-off measures to ensure the availability of network vehicle fleets for the 2010 FIFA World Cup and for network Phase 1A services

The inclusion of the reference to 'transitional measures' in the framework is significant in defining the scope of the grant usage.

A significant condition of the grant is that the 'total city wide IRPTN system must cover direct vehicle operator costs from fare revenue, any other local sources of revenue and Public Transport Operations Grant if applicable'. However, it adds that 'This applies to the city-wide network as a whole and not necessarily to initial phases.'

The conditions demand that the City 'establish dedicated project teams with sufficient capacity to design and implement IRPTN projects.'

Responsibilities of the national Department of Transport include that it 'allocate the funds based on stated priorities through a Joint PTISG Committee comprising the Department of Transport and National Treasury'.

The responsibilities of municipalities include the compilation of a business plan for IRPTN services 'based on sound operational plans', the provision of certain data, and the establishment of 'a dedicated IRPTN project team to implement the system in the development phase and subsequently', and 'specialist capacity to manage and monitor operations and plan expansions'.

The document is reproduced in the annexures.

While the three year national budget gives a good indication of future PTISG and other grant funding it is not legally binding on national government. It has been recognised that MyCiTi and other BRT projects need greater funding certainty because of the long lead times in projects of this nature. Section 8(4) of the Division of Revenue Act 2010 sought to address this with the following inclusion:

8(4) Notwithstanding anything to the contrary contained in subsection (2), in respect of the Public Transport Infrastructure and Systems Grant, funding which is specifically approved by the National Treasury in relation to transport contracts for capital projects must be regarded as being firm allocations for the next financial year and the 2012/13 financial year that will not be altered downwards in the Division of Revenue Acts in respect of those financial years.

This is the only grant for which a specific provision of this nature has been made in the Division of Revenue Act.

This makes it possible to advertise and award tenders before funds are actually received by the City, although the implementation will be managed in such a way that payment will not be required prior to funds being received by the City.

As indicated in the table above, some of the PTISG has been spent on projects other than the MyCiTi project, and it is intended that this will occur to a limited degree in future. The key motivation for national government to direct such significant additional resources through the PTISG to Cape Town is in order to implement the MyCiTi project. It is important

that any spending not directly on MyCiTi can be shown to be consistent with it and meet the criteria of the grant framework.

### 9.6.2. Loan funding from the Capital Replacement Reserve (CRR) and External Financing Fund (EFF)

Table 15 indicates the amounts that the City has made available through CRR and EFF funding.

**Table 15. City capital funding per financial year for MyCiTi (R million)**

Rmillion	2008/09 Actual	Projected 2009/10	Revised 2010/11	Revised 2011/12	Revised 2012/13	Revised 2013/14	Total
CRR	43.9	331.1	0.0	0.0	0.0	0.0	375.0
EFF	0.2	4.0	0.0	0.0	0.0	0.0	4.2
TOTAL	44.1	335.1	0.0	0.0	0.0	0.0	379.3

### 9.6.3. Project costs against funding

The total cost of implementing the project is shown in Table 7 and Table 8. Other costs relate to the ongoing management and operation of the system and will recur even after the project is implemented. They are thus shown separately. Some elements of the City's recurrent costs, shown in Table 9, which relate to the costs of managing project implementation, could feasibly be charged against the PTISG.

Table 16 shows that in relation to estimated project costs there remains a deficit of R809.9 million still to be funded. To the extent that the VAT issue is resolved satisfactorily the deficit could be reduced by R309 million. On the other hand, to the extent that PTIS grant is used on the City's internal project related costs, or as a transition measure to cover a larger than expected system deficit, this deficit will be higher.

**Table 16. Deficit in relation to estimated project costs**

<b>Item</b>	<b>Amount (R million)</b>
Infrastructure and Vehicle Costs	3 893.9
Transitional, design and implementation costs (including compensation)	702.4
Total project costs	4 596.3
PTISG already contained in DORA and available for project	3 407.1
City's own capital contribution	379.3
Total available towards project costs	3 786.4
Amount still required	809.9

#### **9.6.4. Future PTISG requirements**

The City is requesting additional funding from PTISG both to cover the shortfall on Phase 1A and provide funding for Phase 1B and Phase 2. This funding could be a combination of increased funding in the 2011/12 and 2012/13 financial years and additional funding in the 2013/14 financial year.

The amount of funding is dictated by the cost of capital investment requirements, while the timing is dependent upon the capacity of the City to spend.

While the capacity of the City to spend is dictated to some degree by the volume of work required at any one time, a more significant factor relates to the predictability of the funding stream and clarity around what it should be spent on.

The inclusion of clause 8(4) in the 2010 Division of Revenue Act in combination with the three year indicative budget adds significantly to the predictability of funding, in that it allows the City to plan and make commitments with the certainty that when amounts become payable funding will be available. In the absence of this mechanism the City can only enter into commitments in relation to funding that has already been appropriated in respect of national government's current financial year – with actual spending occurring well after this. The program set out in this Business Plan assumes the use of the mechanism provided for in clause 8(4), ie that the allocation of funds to the City is to be made firm.

The amount of R1 600 million provided for in the 2011/12 financial year probably represents the maximum the City would envisage spending per year under current conditions. However the City's planned implementation is slower in the 2010/11 financial year than would have been possible had more funding been available. The capacity to spend efficiently and

effectively on this project is also greater in the 2012/13 financial year than the R900 million that has been provided in terms of DORA.

Clearly, the additional costs imposed by the change in assumed VAT treatment of infrastructure will not require additional planning, but will be spent in line with the current envisaged roll-out.

While this Business Plan concerns Phase 1A, it is reasonable to assume that it will be followed by further system roll-out. This is likely to entail either the implementation of Phase 1B, or a route connecting the infrastructure already implemented in Phase 1A with the demand in the City's south east region, including Mitchell's Plain and Khayelitsha – ie the start of Phase 2. The latter route would serve significant demand which cuts across the existing lines of the rail network. A key consideration will be the ongoing operating costs associated with the roll-out choice. Indeed, while further modelling is required, it is likely that were the connection between the south east and Phase 1A be made the system operating deficit could be significantly reduced.

Given the project implementation capability being established currently, and assuming continuation of rollout, it would be appropriate to provide for further implementation in the 2013/14 financial year, including further planning during prior years; in the absence of this project capacity would lie idle and may be lost. A reasonable amount to be spent in that year would be in the region of one billion, with 10% of the amount spent on planning and design cost in prior years.

The balance required for Phase 1A of R809 million indicated in the previous section could all be spent within the period up to the end of the 2012/13 financial year. In addition, spending of R100 million would be required during this period for planning of the further rollout to be implemented in the ensuing 2013/14 financial year.

The City is therefore requesting that for the MyCiTi program an additional R1 909 million be provided over the three year period to be covered by the 2011 Division of Revenue Act and national government's medium term expenditure framework of 2011/12 to 2013/14. Ideally, R909 million should be received in the period up until end 2012/13 and a further R1 000 million in the following year – as set out in Table 17.

Engagement with the National Department of Transport is required on this matter in the context of engagement around this Business Plan.

Clearly the amounts to be made available are contingent upon successful implementation of the current program, the envelope of resources available to national government and its choices on prioritisation, as well as the approach that is adopted towards how these programmes are to be funded going forward. The latter issue is dealt with briefly later in this chapter and relates to the extent to which national government wishes to continue to fund public transport largely through grant mechanisms, or address the issue by establishing additional own revenue sources for cities.



**Table 17. Additional PTISG request re MyCiTi**

Item	2011/12	2012/13	2013/14
Amount requested in respect of VAT and balance of other costs for completion of Phase 1A	R 567 million	R242 million	
Amount requested for planning for further system extension	R50 million	R50 million	
Amount requested for further system extension			R1 000 million
Total additional request for 2011/12 to 2013/14 period	R 617 million	R292 million	
Existing DORA allocation plus the above additional request	R1 975 million	R1 096 million	R1 000 million

### 9.6.5. Public transport operating grant (PTOG)

The key funding mechanism for existing operating bus subsidies is the provincially managed Public Transport Operating Grant. National government has indicated that, as municipally run transport services displace provincially managed transport services currently funded through this grant, the grant must be transferred to the municipality for the purpose of funding the municipally managed services. This is contained in Regulation 877 (Government Gazette 32535 dated 31 August 2009) of the National Land Transport Act (5 of 2009). Clause 2(2)b of the regulation reads as follows:

“Where there is a subsidised service contract, interim contract, current tendered contract or negotiated contract as contemplated in the Transition Act, or a contract contemplated in section 46(1) of the Act involving services on BRT routes as part of an Integrated Public Transport Network, and such contract has more than three months still to run...(b) the funds previously allocated for the routes or areas forming part of the services provided in terms of that contract that will be covered by the BRT services must be allocated to the municipality for funding the network contract, subject to the relevant Division of Revenue Act; ...”

The total bus subsidy for the provincially managed services for the 2010/11 financial year within the City of Cape Town is just over of R600 million. The subsidy paid in respect of the services covered by Phase 1A was, until 2009/10, approximately R55m. The City should therefore expect approximately this amount would be paid towards Phase1A MyCiTi costs. The details of implementing this transfer are being pursued with the Provincial Government of the Western Cape. Two obstacles have been raised, namely that the City should take over the whole of the provincially subsidised bus service at once, and not portions of it; and that the formula for working out the subsidy per area has been changed, thus lowering the amount payable to the City. It is expected that both these matters can be resolved.

It has also been suggested that for this to become enforceable it will have to be more clearly expressed as a condition within the framework of the Public Transport Operating Grant as contained in the Division of Revenue Act.

### 9.6.6. Rates and other municipal tax sources

The two main sources of tax revenue are property rates and a share of the nationally collected fuel levy. In the 2010/11 financial year the following revenue is budgeted from these revenue sources:

Property rates	R4 156 million
Share of nationally collected fuel levy	R1 517 million

Thus R41.6 million represents 1% of property rates income and R56.7 million represents 1% of these sources combined.

Table 18 shows the amounts that the City's budget has provided from rates and related income sources for MyCiTi.

**Table 18. Rates funding per year for MyCiTi (in real 2010 rands)**

R million	Projected 2009/10	Revised 2010/11	Revised 2011/12	Revised 2012/13	Revised 2013/14
Rates and related	30.0	30.0	30.0	30.0	30.0
Provision for operating deficit		65.0	65.0	65.0	65.0
TOTAL	30.0	95.0	95.0	95.0	95.0

#### 9.6.7. Advertising and concessions

There is scope for earning revenue from advertising on the MyCiTi system. Advertising revenue includes, primarily, advertising in stations, in vehicles and, to the extent desirable, advertising on the outside of vehicles.

During the World Cup period many of the vehicles have been fully wrapped with advertising. However, the vehicle branding for Phase 1A has been designed to allow advertising only at the rear of the bus.

A report commissioned to estimate potential advertising revenue from Phase 1A found that revenue of approximately R20 million could be expected. However, subsequent experience on procuring advertising for the World Cup period suggests that this is an overestimate. Amounts of both R10 million and R20 million per year have been modelled.

Concessions are also possible to allow trading on some of the bigger stations, such as the Civic Centre station. Revenue of approximately R1 million a year has been estimated from this source.

#### 9.6.8. Parking revenues

It is recommended that the station services contract includes the right to manage and charge for roadside parking in the areas where MyCiTi operates. This has two aims. Firstly, it will enhance security around the stations and stops. Secondly, it will offer a further source of revenue. This revenue will be incorporated into the station service contract, so will not be shown separately as a revenue source, but will serve to lower the price of the station services contract.

## 9.7. Timing of use of funding against expenses

The roll out discussed in Chapter 4 has been designed to be operationally practical as well to avoid the need for bridging finance. Costs will thus not be incurred prior to the receipt of funding from PTISG.

However, the timing of the roll out assumes utilising Section 8(4) of the Division of Revenue Act 2010 as quoted above so that commitments can be entered into in advance of what would usually be feasible with grant funding of this nature.

## 9.8. Covering the operational deficit

### 9.8.1. Short to medium term

The modelled figures have shown that the City faces a projected annual deficit from operations of between R58.5 million and R69.3 million in the 2010/11 financial year. In this period MyCiTi services will continue post the World Cup and the Phase 1A starter service will be implemented. The deficit will rise to between R86.0 million and R145.3 million once Phase 1A is fully implemented. The mid-point of the deficit range is R63.9 million and R115.7 million.<sup>12</sup>

Assuming the deficit remains around or below the midpoint of the projected range it can be covered by a combination of the Public Transport Operating Grant and the City's existing provision from rates and general sources. In the unlikely event that the PTOG funding cannot be accessed, or if the total deficit is higher than R120 million per annum, the national Department of Transport has confirmed that PTISG can be drawn on to assist in covering the operating deficit as a transitional measure during the initial three years as the system is phased in. However, this would then limit the amount available for capital requirements.

The funding of the operating deficit is summarised in Table 19.

**Table 19: Summary of funding of operational deficit once Phase 1A fully implemented**

<i>Source</i>	<i>Amount</i>
Rates	Up to R65 million
Public Transport Operating Grant (PTOG)	R55 million
Total	Up to R120 million
Public Transport Infrastructure and Systems Grant (PTISG)	To be used on a three year interim basis to extent deficit cannot be covered by rates and PTOG

<sup>12</sup> Text has been amended to align with the correct figures in Table 13. The incorrect text as was submitted to Mayco on 19 Oct 2010 read: (a) "projected annual deficit from operations of between R23.4 million and R26.0 million in the 2010/11 financial year" and (b) "The mid-point of the deficit range is R24.7 million and R115.7 million."

### 9.8.2. Long term

In the report entitled "Project Status and Financial Strategic Assessment" adopted by Council in October 2009, it was reported that initial modelling results for the complete MyCiTi system, including all four proposed phases, would result in an annual deficit of R 440 million, as shown in Table 20.

**Table 20. Estimates of full system cost**

<b>System appraisal of full IRT bus system (modelling scenario 57)</b>	<b>Modelled annual operating costs of full IRT bus system (2010 Rands)</b>
Estimated income	R 5 700 million
Estimated total expenses	R 6 140 million
Deficit	- R 440 million

As the existing GABS/Sibanye scheduled bus services are phased out and replaced by the new MyCiTi system, the subsidies paid for these services which, as noted above, presently exceed R 600 million are anticipated to be shifted across to the new system. Thus, initial modelled figures indicate that once fully implemented the system operations would not require additional revenue sources over and above existing bus subsidies. These figures include the financing costs of the vehicles.

The reason for a lower proportional subsidy requirement once the whole system is in place arises from economies of scale, as well as higher passenger usage resulting from the convenience of a more comprehensive network. Furthermore, the Phase 1A route was chosen because of an absence of any rail network in that part of the City, combined with the fact that it is the City's fastest growing area and is experiencing significant escalating traffic congestion. However, the long distance Atlantis routes and generally low current densities tend to make this a more costly area to serve. As development in the area proceeds and densities increase it could be anticipated that unit costs will be lowered.

More modelling will need to be undertaken to refine and further verify these estimates.

### 9.9. Financing MyCiTi in the longer term

The PTISG framework implicitly recognises that fare revenue will be insufficient to cover all costs. There thus needs to be engagement with national government on financing in the long term. This has been recognised by the Financial and Fiscal Commission, which has recommended in its submission to Parliament for the 2011/12 Division of Revenue Act, inter alia, that

The government should make a decision without further delays on the funding streams that will contribute to the Municipal Land Transport Fund as delays could negatively affect the financial position of affected municipalities. (Recommendation 2 on public transport)

The current mechanisms and basis for distributing transport subsidies should be reviewed by the Department of Transport, National Treasury and other key stakeholders in order to promote the efficiency of urban transport and land use systems, taking into account equity and distributional effects on households. (Recommendation 5 on public transport)

The potential financial implications resulting from the promulgation of the National Land Transport Act on municipalities should be examined by the Department of Transport and the National Treasury and dedicated funding streams for public transport identified. (Recommendation 6 on public transport)

The Minister of Finance is obliged to respond to these recommendations when tabling the next national budget. It is understood that national government will seek to engage on these issues over the coming months and will be working on a policy response to table in Cabinet for agreement prior to implementation.

### **9.9.1. Long term options**

Two broad approaches can be identified to funding MyCiTi into the future, although the solution could be a combination of the two.

- Grants and subsidies from national government
- Own revenues.

### **9.9.2. Grants and subsidy approach**

If the long-term approach is to be based on grants and subsidies this will require refinement of the PTISG and PTOG mechanisms. The advantage of a grant and subsidy based approach is that the City of Cape Town would not have to raise money from its own tax base. However receipt of funds can be unpredictable and a public transport system requires long term commitments. Grants and subsidies are usually only predictable over the period of the medium term expenditure horizon, and even then, are only legally binding through mechanisms such as that contained in clause 8 of the 2010 Division of Revenue Act.

### **9.9.3. Own revenues**

If national government is to pursue giving cities their own sources of revenue to finance public transport the most obvious option would be to increase the share of the fuel levy currently distributed amongst metropolitan councils.

The existing share of the fuel levy was introduced from 2008/09 in order to compensate for the abolition of Regional Services Council (RSC) levies. Initially the RSC levies, which were a form of local business tax, were replaced by an interim grant which is currently being phased out as the fuel levy share is phased in. Table 21 shows the levies currently imposed on each litre of petrol and diesel. The metropolitan councils receive a portion of the total national fuel levy, distributed on the basis of fuel sales.

**Table 21. Cents per litre of various levies for petrol and diesel (from April 2008 and 2009)**

<i>Levy</i>	<i>1 Apr 2009 to 31 Mar 2010</i>		<i>1 Apr 2010 to 31 Mar 2011</i>	
	<i>93 Octane petrol</i>	<i>Diesel</i>	<i>93 Octane petrol</i>	<i>Diesel</i>
General fuel levy	150.00	135.00	167.50	152.50
Road Accident Fund levy	64.00	64.00	72.00	72.00
Customs and excise levy	4.00	4.00	4.00	4.00
Equalisation Fund levy	-	-	-	-
Illuminating paraffin marker		0.01		0.01
Total	218.00	203.01	243.50	228.51

The total amount raised by national government from the Cape Town metropolitan area for the General Fuel levy component of the combined levies is approximately R3.2 billion per annum, of which the share returned to the city is, as stated above, estimated at R1.517 billion in the 2010/11 financial year.

It is not feasible for cities to impose their own levies since this would lead to price difference across municipal boundaries, which in turn is likely to lead to fraudulent selling of fuel purchased in a low tax jurisdiction into higher taxed jurisdiction and illegally appropriating the difference. This is the reason why the current mechanism is based on a share of a nationwide levy. Any mechanism would therefore need to be based on an increased amount from nationally imposed fuel taxes.

## **10. The transition from existing to new vehicle operators**

### **10.1. Introduction**

A key element of MyCiTi is the intention to incorporate existing directly affected road-based public transport operators into the new project. Directly affected operators are those whose services are proposed to be replaced by a particular phase of MyCiTi, whose legal rights are affected and who have agreed to surrender their operating licence and operating vehicle in return for compensation and / or participation as shareholders in the two vehicle operating companies, or VOs.

This section explains the division of contracts between the two VOs in Phase 1A and the process for transitioning the current industry into the new system.

### **10.2. Division of Vehicle Operator Contracts**

As indicated, vehicle operations have been split into two vehicle operator contracts. The City plans to award these two contracts to two different companies. International best practice suggests that having a system with a single VO company should be avoided. First, it is appropriate to build in competition for at least some components of the services on offer in the system, linked to the quality and price of their respective offers. Secondly, having more than one vehicle operator company would encourage competition between them and provide an incentive for the companies to operate efficiently; and ensure the City has a fallback when one company, for whatever reason, is unable to render the service.

#### **10.2.1. Basis for the division**

The initial basis for dividing the service into two contracts was geographic considerations, providing for a northern and a southern contract. However, the extent of the actual services contracted to each of the two companies will be based on the market share of the existing taxi associations and bus companies who will constitute the two companies. The determination of market share is explained later in this chapter and is set out in Annexure F. Accordingly, the contracts will be divided as set out in Table 22.

**Table 22. Division of services between two VO contracts**

<b>Contract 1 Inner City</b>	<b>Contract 2 Blaauwberg</b>
<ul style="list-style-type: none"> <li>• All inner city feeder services (including City-Hout Bay)</li> <li>• Airport-City trunk service</li> <li>• Portion of the trunk services based on the City's calculation of current market share between constituent parties allocated to the two contract areas</li> </ul>	<ul style="list-style-type: none"> <li>• All Blaauwberg feeder services (between Salt River and Atlantis)</li> <li>• Portion of the trunk services based on the City's calculation of current market share between constituent parties allocated to the two contract areas</li> </ul>

**10.2.2. Assignment of operators to company groups**

The assignment of taxi associations and bus companies to company groups is based on whether the taxi association or bus company operate their main services (that will become MyCiTi feeder services), in either the Inner City area (Contract A) or the Blaauwberg area (Contract B) of Phase 1A.

Based on these criteria, the assignment of existing taxi associations and bus companies are set out in Table 23.

**Table 23. Assignment of operators to company groups (for VOs)**

<b>Company A (Inner City)</b>	<b>Company B (Blaauwberg)</b>
<ol style="list-style-type: none"> <li>1. Peninsula Taxi Association</li> <li>2. Central Unity Taxi Association</li> <li>3. Devils Peak Vredehoek Taxi Association</li> <li>4. Golden Arrow (scheduled bud service provider)</li> </ol>	<ol style="list-style-type: none"> <li>1. Blaauwberg Taxi Association</li> <li>2. Maitland Taxi Association</li> <li>3. United Taxi Association</li> <li>4. Ysterplaat Taxi Association</li> <li>5. Du Noon Taxi Association</li> <li>6. Sibanye (scheduled bud service provider)</li> </ol>

Company A will therefore be awarded the Inner City Contract, and Company B the Blaauwberg contract. However, the value of the two contracts will be determined based on, inter alia, the relative share of the existing market.



### **10.3. Approach to industry transition**

The viability of Phase 1A is based largely on sufficient numbers of people using the service. The operating and financial modelling assumes that all existing bus and taxi users on routes that will be fully replaced by Phase 1A routes and services will use the new MyCiTi services. For this to be achieved, existing bus and taxi operations on these routes would need to cease operating, failing which the viability of the MyCiTi system is compromised.

National policy and guidelines on implementing integrated public transport networks indicate that:

- Existing operators, especially minibus-taxi operators, must form the nucleus of the vehicle operator companies;
- Minibus-taxi operators should not be worse off in terms of their current legitimate earnings compared to what they would earn when forming part of the service; and
- The new system should offer the same number of legitimate jobs as the current industry that it replaces.

An assessment of the financial viability of the existing taxi and bus industry versus the proposed MyCiTi system, viewed from a vehicle operator perspective, indicates that the existing industry will generate significantly more profits than what the corresponding MyCiTi vehicle operator company is projected to generate. Had the profits in the vehicle operator company been equal or better, it would be less of a challenge to convince taxi and bus operators to voluntarily surrender their existing permits and vehicles in exchange for a share in a new vehicle company.

In terms of the National Land Transport Act and regulations the City cannot terminate or withdraw an operating licence without the agreement of the licence holder, unless the licence period has run out. If the affected operator refuses to be part of the vehicle operator company, the City may have no alternative but to allow such an operator to continue to operate alongside the MyCiTi service until the validity period of the licence runs out (a maximum of seven years). If many operators elect to go this route and compete with the MyCiTi service, it will seriously undermine the viability of the system.

It is therefore essential that the deal offered to existing operators, especially the affected minibus-taxi industry, is a lucrative one.

To facilitate this transition, the City has in parallel recommended since late 2009 that all operating licences renewed or awarded in the Phase 1A corridor should be awarded subject to the condition that the licence period comes to an end upon the date where that service is replaced by comparable IRT services.

#### **10.3.1. Challenges**

The issue of difference in current versus future profits discussed above is one of three challenges that the proposed Compensation Model aims to address in implementing Phase 1A.

The second challenge is that of dealing fairly with shareholding in the new vehicle operator contracts. In Phase 1A (as is probably the case in all corridors) there are great differences in profits generated on the various routes and amongst existing minibus-taxi operators on the same route. Equal shareholding per operator in the new businesses would therefore not be fair or acceptable.

The third challenge is that of capitalising the new vehicle operator contractors. Capital is required to establish the companies including set-up costs, securing a performance guarantee as will be demanded by the City, and providing for a scheme where taxi shareholders are able to receive a regular monthly income, especially in the first few years of the contract when the dividend is likely to be low.

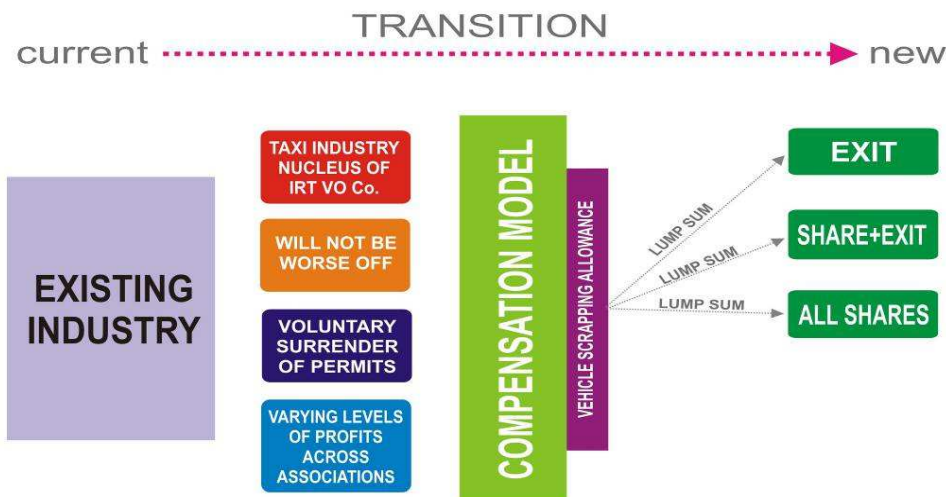
### **10.3.2. The compensation model**

Having explored various options to determine a fair and equitable approach to transition existing operators into the new vehicle operator companies, the most practical, easy-to-understand and implement option is what has been referred to as the City's *minibus-taxi compensation model*.

The link between the compensation model and the remainder of the industry transition strategy is set out in Figure 22.

In this section the term 'operator' refers to a minibus-taxi operator.

The difference between current legitimate profit in the Phase 1A minibus-taxi industry and likely dividend from the vehicle operator contractor can be addressed in one of two ways. The first way offers the existing operators a share in a new vehicle operator company with a relatively low dividend yield (if every Phase 1A-affected taxi operator becomes a shareholder) and makes up the difference with a monthly operating subsidy. The second way offers the operators a once-off lump sum payment and let them decide either to leave the industry or invest as shareholders in the new vehicle operator company.



**Figure 22. Compensation as part of industry transition**

The difference between current legitimate profit and likely dividend from the vehicle operator contractor can be addressed in one of two ways. The first way offers the existing operators a share in a new vehicle operator company with a low dividend yield and makes up the difference with a monthly operating subsidy. The second way offers the operators a once-off lump sum payment and let them decide either to leave the industry or invest as shareholders in the new vehicle operator company.

To avoid an on-going operating subsidy, the latter option is preferred. Detailed surveys undertaken of existing services have enabled the City to calculate the existing profitability (actual and legitimate) of the existing taxi services and hence to develop a method to calculate a proposed lump sum payment for every affected taxi operator.

A four-step process is used to calculate the compensation. The steps are:

**1. Determine the market share between bus and minibus-taxi operators based on fare revenue information collected through extensive surveys.**

Fare revenue is the current number of passenger trips multiplied by the fare paid by the customer for each trip undertaken by the taxi or scheduled bus operator. The fare revenue calculation is based on actual surveys undertaken by the City and verified by the operators. Based on initial surveys undertaken the impact of this information on market share division between the taxi and bus industry is shown in Table 24.

As indicated, regarding the scheduled bus operators the subsidy income is not taken into consideration in determining fare revenue. This represents an adjustment to the bus market share to account for the benefit enjoyed by the bus companies vis-à-vis the taxi industry as buses benefit from state subsidies and while taxis do not.

**Table 24. Market share division between bus and taxi industry**

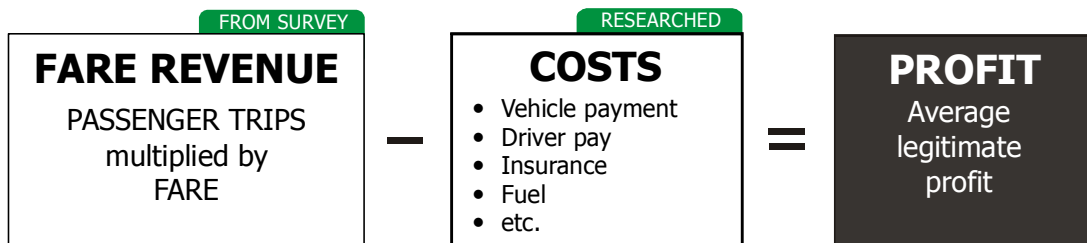
Mode	Passenger trips	%	Fare revenue	%
Taxis	100620	77.3%	R 578 142.50	60.6%
Gabs	12358	9.5%	R 92 644.93	9.7%
Sibanye	17224	13.2%	R 283 866.18	29.7%
<b>Total</b>	<b>130202</b>	<b>100.0%</b>	<b>R 954 653.60</b>	<b>100.0%</b>

The recommended factor to determine market share between minibus-taxi sector and the scheduled bus sector is fare revenue and not passenger trips, since it is a more

accurate reflection of the size of the business that the relevant mode will contribute to the MyCiTi system.

**2. For the minibus-taxi component within a company grouping, determine the relative market share per association using average legitimate profit as a basis.**

Average legitimate profit on a particular route is determined taking the fare revenue and deducting the average operating cost on that particular route. Legitimate profit is determined using the same average and appropriate costs across the area for the value of the vehicle, payment of drivers, level of maintenance, insurance and tax. This means that these costs are assumed, whether a given operator incurs them or not – eg. what is the appropriate maximum distance a tyre should be used for, or what is the legally required tax to be paid.



**3. Using the validity period of the operating licences within an association (maximum seven years), calculate the total profit over the period of the licences and convert that total to nett present value using a market-related discount rate.**

**4. The nett present value lump sum figures per association are then presented to the relevant association for decision on distribution of the lump sum to its members.**

If no agreement is reached within an association on how to distribute the lump sum, the City will apply the distribution formula of 30% of the lump sum to be divided equally amongst the members, and the remaining 70% on a pro-rata basis linked to the number of trips undertaken by each member (as per the survey). Additional measures will be used to determine the usual business of an active taxi that is not found in the survey on a given day (eg because it is in for repairs).

Linked to the compensation is the vehicle scrapping allowance. Every minibus-taxi operator wishing to participate in MyCiTi or to take up a compensation offer will also be required to surrender their vehicles for scrapping. The amount budgeted for scrapping of vehicles is R55 000 per vehicle (as set in the parallel Taxi Recapitalisation Programme or TRP). Note however that whilst the vehicle scrapping process proposed in IRT is aiming to achieve some of the same objectives as the TRP, the IRT process will not be administered as, or subject to the same conditions as the TRP. The intention is not to scrap recently licenced vehicles, but the older fleet that pose more of a safety risk to passengers and other road users. When operators have newer vehicles they are encouraged to sell their vehicles and buy an older licensed vehicle for the purpose of scrapping.

After the compensation has been determined and the scrapping allowance settled, each operator

- Option 1: Invest the total compensation in shares in the VO (subject to the maximum shares available);
- Option 2: Exit the industry with the lump sum payment; or
- Option 3: Use a portion of the compensation to buy shares in the vehicle operating company and retain the balance.

The cost of shares should be based on the cost of capitalising the new company (set-up, guarantee, and dividend equalisation) divided by the lowest compensation value (or lower) to allow every operator the opportunity to buy at least one share. The shares allocated to those who decide to exit the industry should be made available to the remaining operators within the association first, and then to the remaining minibus-taxi operators in other participating associations.

This model allows for all or a few operators to invest as shareholders in the new vehicle operator companies. For Phase 1A where the profits in the new VOs are relatively small, if more of the existing operators decide to exit the industry, the greater the shareholding and dividends available to the remaining operators who take up shares in the companies will be. The model shows that if the average operator invests their entire lump sum into shares, and if the company is run at an average level of efficiency and profitability, the dividend yield would be about the same as their current profits. If, however, the company runs a better than- average operation, the dividend yield per shareholder will obviously increase.

Operators who decline to choose Option 1, 2 or 3 will be allowed to continue to operate alongside the MyCiTi system until the validity period of their operating licenses runs out, at which point the City will not support the renewal of their operating licenses. In such cases the operator will not qualify for any compensation.

#### *Impact of slower IRT roll-out on compensation*

When the compensation model was first proposed and discussed with the various roleplayers, it was envisaged that the implementation of all the Phase 1A services would occur at more or less the same time. However, as the Business Plan now indicates, the Phase 1A infrastructure and services are planned to be rolled-out over a three year period. This means that operators will be required to come into the IRT system (by surrendering their license and vehicles) at different times during the roll-out period. Given that compensation to minibus-taxi operators is only payable at the time the operator surrenders his or her license and vehicle, compensation will therefore also now become payable at every milestone over the three year period.

Compensation will therefore be dealt with as follows:

1. The compensation calculated at the beginning of the process (prior the negotiations for 12 year contract have been concluded), and set at a date to be determined by the City, will hold firm irrespective of when during the roll-out period the compensation becomes payable.
2. In calculating the compensation, the following categories of operating licenses will be considered – as set out in Annexure F: Previously Indefinite operating licenses; Current Definite operating license; Semi-legal (application in the system prior to August 2008).

### 10.3.3. Shareholding

Market share between minibus-taxi and scheduled bus modes of public transport is explained in paragraph 10.3.2, step 1.

In terms of the most recent City survey data Golden Arrow Bus Service (GABS) has a 9.7% market share in the current Phase 1A area. This would equate to a 22.8% share in Company A. Equally, Sibanye's share of 29.7% in the Phase 1A system would amount to a 51.7% share in Company B. It is proposed that the two bus companies have the right to shares equivalent to this market share, provided they contribute to company capitalisation (excluding the component relevant to the taxi dividend equalisation fund) in proportion to their market share.

The City intends to issue requirements and limitations regarding cross-shareholding between the companies, to enhance competition between them.

#### *Determining shareholding by taxi operators*

The following process is proposed for division of shareholding within taxi associations. The City has estimated the cash after-tax dividend flows likely to be generated by the new vehicle operator companies, and is of the view that the total dividend to be generated by each of the companies will be insufficient to allow all current minibus-taxi operators to buy shares in sufficient quantities to generate future dividends equal to their current after-tax profits earned from operating within the taxi industry.

Where some operators within a taxi association do not take up the allocated minimum proportion of shares, the other operators in the association would be able to take up such shares against the relevant payment for the shares. Only if the available shares are not taken up within an association, can any other affected taxi operator within such vehicle operator company grouping be given the option to buy these shares. If any taxi shares remain unclaimed by affected taxi operators, the bus company shareholders can offer to take them up. The companies themselves will determine the cost per share (subject to City requirements) and the projected dividend (which will be a function of how profitably a company is run).

The vehicle operator company will be required to submit a proposal on the proposed base kilometre rates for each type of vehicle, for consideration by and negotiation with the City, as well as proposals regarding other methods of payment (if any) as determined by the City. The company will have to project the profit it is likely to yield, and determine its proposal on the kilometre rates and other payments based on this.

After calculating the kilometre rates and other methods of payment (if any) the relevant company plans to offer the City and after deciding on the number of shares to be made available, the company would also be in a position to calculate the projected average annual and monthly dividend per share.

#### *Other shareholders*

As each company may be required to identify personnel with experience deemed acceptable by the City for all management positions required to operate a modern public transport company, securing these management positions may require the distribution of some shares to certain key personnel in lieu of payment.

The partners of the company may invite an international company to join the consortium. Minibus-taxi associations may form strategic partnerships with an international company that can bring expertise in maintenance and labour management, access to spare parts suppliers, insurance, financing, and other inputs at lower cost than would otherwise be available to them. Securing the participation of such international partnerships may require a final reallocation of shares among the consortium's partners.

At the end of this process, the allocation of shares among the various partners of the new consortium should be complete. Whether the shares held by members of specific minibustaxi associations are distributed to the individual owners of the minibus-taxi association, or whether the minibus-taxi associations in turn choose to create a corporate entity that holds their shares of the consortium collectively is up to the relevant groupings.

#### *Limitation of selling of shares*

For the first five years of the operating contract, shares cannot be sold outside the shareholders of the company, except if an increase in capital is required, in which case the reduction may not be more than 50% of the total participation. However, shares may be traded between shareholders of the company, up to a maximum shareholding of 33% of shares in the hands of a single legal entity (including subsidiaries or parent company of that entity) or of a natural person. Any taxi shares made available for sale should first be made available to other taxi shareholders, before it is made available to sale to the bus shareholders.

After five years this limitation will be removed, subject to the terms of the relevant company's shareholders agreement.

### **10.4. Other categories of operators for compensation**

There are two other categories of existing operators who may require compensation.

- Services that MyCiTi is not replacing but where these services are likely to be negatively impacted upon, to a significant degree. Examples include metered taxi services operating from the airport or in the CBD. If it is proven that IRT will have a significant negative impact on these services, the City should consider compensating these operators, if they are prepared to surrender their operating licences. These operators would then not be allowed, whether in their own name or through others, to apply for a similar operating licence within a period equal to the period used to calculate compensation.
- Existing minibus-taxi services that run from outside the Phase 1A MyCiTi area into the Phase 1A area and therefore will be operating a shortened service. This will require an amendment to the operating licence conditions and necessitate consultation and some form of compensation.

### **10.5. Other transition costs**

The compensation model gives rise other considerations with cost implications.

### **10.5.1. Entrepreneurship guidance**

There is a concern that if large numbers of existing taxi operators elect to take the lump sum compensation offered and leave the industry and these operators are not well advised of how best to utilize the lump sum, many operators and their families may be worse off, over time. The City should make available entrepreneurship guidance and training to these operators. Provision has therefore been made on the budget for this and can take the form of appointing a consultant, NGO or other agency to put in place such a programme.

### **10.5.2. Agency costs**

The scrapping allowance scheme assumes that minibus-taxi operators with newer vehicles will be able to get a fair price for their vehicles when sold in the open market. However, operators with newer vehicles who have recently bought these vehicles and have paid instalments regularly may owe more on the vehicle than can be realised in sales on the open market, due to finance charges linked to vehicle loans. However, the new finance regulation requires that the instalment on vehicles financed through financial institutions include the capital cost of the vehicle. It is therefore unlikely that the settlement figure on vehicles is significantly more than the market value of the vehicle. Notwithstanding this, it is recommended that some provision be made to allow a top-up funded by the City, to cover the difference between the justified outstanding balance (i.e. excluding penalties and interest for late payments) and the vehicle's market value – where this is fair. Specific policy in this regard will be submitted to Council for approval.

It is proposed that the City contracts a second-hand dealership, through a tender process, to buy up newer vehicles and sell them.

Secondly, financial institutions are presently not willing to finance taxi vehicles that are more than one year old. To help facilitate the sale of these vehicles, the City may consider appointing, through a tender process, an agency to buy and sell these vehicles, and may also need to engage with banks to change their view.

### **10.5.3. Re-skilling of taxi industry employees**

One of the undertakings the national government has given to the taxi industry is that with the implementation of BRT there will not be significant job losses. This is interpreted to mean that the number of jobs available in a particular phase of MyCiTi should be the same as that currently available in the taxi and bus industry affected in that phase of the system.

The type of jobs in the new system will however be different with different skills requirements. To ensure that current taxi industry employees have a good chance of being successful in getting jobs in the new system, significant re-skilling will be required. Provision has therefore been made in the budget to allow for training and re-skilling of existing taxi industry employees, which is likely to be channelled through the contracts for specific operations (eg stations services), since these operators are best charged with such a training responsibility.



# 11. Customer relations, marketing and communication

## 11.1. Introduction

Central to the success of a public transport service, such as MyCiTi, is the need to have professional customer relations, communication, marketing and stakeholder engagement capacity.

A comprehensive customer relations, marketing and communication strategy for the MyCiTi system should be directed toward multiple objectives including:

- Achieving a high level of insight into the needs and characteristics of users and potential users;
- Providing information to users and potential users about the system, including effective and clear signage, maps, website, call centre and other channels;
- Maximising ridership and interest in the system, which in turn will maximise related revenue streams, such as advertising in and around the system;
- Overcoming doubts and concerns related to the system;
- Responding to customer feedback and dealing with complaints in a responsive, service-orientated manner, that promotes transparency and a commitment to excellence;
- Targeting different messages to specialised customer groups; and
- Engaging with the media in a proactive and transparent way;
- Informing business planning to continuously improve the service offering of MyCiTi.

Given that this system is a major City project and that the key objective is to meet the needs and expectations of the users, it is recommended that strategic, high-level communication capacity is located within the most senior management level responsible for implementation, operations and system development; and that marketing and communication is integrated into the overall management of the system, so that both the back-end of the service and the front-of-house work together to achieve customer satisfaction.

The importance of strategic communication and marketing input into the decision-making process is critical from the point of initial planning of services. Conversely the operational decisions that shape the service need to inform public communication and marketing.

Working in an integrated or cross-cutting way will ensure that a sustainable market for a service is identified and forms part of the operational planning from the start. Clearly, putting a service in place and then seeking a market that will use it is not an appropriate approach.

A careful balance needs to be maintained between raising expectations about the nature and scope of the service prematurely, and launching a service that has not been adequately communicated about and marketed prior to its launch. This balance can only be struck if communicators are directly involved in the planning and management to advise the team

responsible for infrastructure and operations and to gain an understanding of the inevitable challenges along the way. For example, changes to the way the feeder services will or will not be provided may impact on the overall communication about the accessibility of the service to various user groups.

Given the high levels of investment and the sophisticated nature of a quality public transport service such as MyCiTi, once launched, appropriate resourcing of the customer relations, communication and marketing component should be a given, as this is not only the face and voice of the service, but also the key channel for understanding user needs and tailoring services accordingly in an ongoing manner.

In the case of the new MyCiTi system, there are additional factors underlining the need for significant and high-level communication and customer relations capacity. These include the fact that the city as a whole has not had experience of a customer-focussed integrated public transport network, as envisaged by national legislation and the City's Integrated Transport Plan.

Once the first phase of the MyCiTi service is successfully launched, there will be a need for ongoing communication, implemented within the context of a clearly understood and articulated customer relations, communication and marketing strategy that has the buy-in and support of the entire management team and governance structures.

## **11.2. Areas of communication activity**

### **11.2.1. Market research**

An important element of customer management is independent market research and comparative studies with similar services in the market. This activity will inform business planning and the MyCiTi services. It is envisaged that the market research will be done through existing customer surveys done by the City of Cape Town and additional surveys as and when required.

### **11.2.2. Customer service**

Central to good customer management and communication is establishing the idea of MyCiTi as a public transport service that responds to the needs of its users. This centres on conveying the message that this is a system in which user-friendliness and convenience is overriding and where the customer comes first. These principles should determine the marketing strategy and should be integrated into the overall operations of the system. Mechanisms to collect and process customer feedback should form part of this approach.

### **11.2.3. Branding**

An important component of the marketing and communication strategy was achieved with the launch of the MyCiTi brand including a logo, colour palette and multi-lingual slogan: *Siyajikeleza. Laat Wiel. Going Places.*

The brand development, which included a comprehensive stakeholder engagement and two market research interventions to test the brand concepts, resulted in the public launch of the identity of the system on 6 May 2010. This coincided with the delivery of the first MyCiTi buses in their branded livery.

The brand provides an opportunity to extend 'ownership' of the city to those who were denied it in the past as well as vulnerable groups that South African public transport has to date not served very well. In particular, MyCiTi aims to provide a service that is universally accessible and which meets the needs of wheelchair users, customers with sight and hearing impairments and the elderly.

The ongoing development of the brand depends on the quality of the service offering and the extent to which it stands apart from existing bus services and the notion that 'public transport is something that is not clean and not particularly nice, and should only be endured when truly necessary' (BRT Planning Guide 2007:665). Instead, the marketing strategy for the system should aim to place public transport in a new light, appealing to both existing users of public transport and private car users who will be encouraged to make a modal shift.



#### **11.2.4. Stakeholder engagement**

Ongoing stakeholder engagement is a critical component in the success of large infrastructure projects and the development of new service offerings, especially given the challenge of achieving progressively higher levels of modal integration.

The MyCiTi system requires ongoing stakeholder engagement as part of a high-level communication and marketing strategy, guided by the top management team as a whole.

This interaction should be regular and frequent, providing an opportunity to build relationships with future champions and users of the system and to take into account stakeholder perspectives that might contribute to and enrich operational decisions.

In addition, stakeholder forums, which might be localised in nature as operational planning gets underway for different parts of the city, and other forms of engagement provide an opportunity to reach out to the partners that will make the system a success or be impacted by it. Examples include schools, local businesses, ratepayer and resident organisations, corporate institutions located on an identified route and motorists likely to be affected by construction. While this kind of localised engagement may be viewed as time consuming and unnecessary, successful infrastructure projects such as Gautrain, and best practice internationally points to the benefits of stakeholder engagement as a means to build support and harness local knowledge and perspectives that may assist operational planning. Ward and other councillors will also play an important role in local engagement.

### **11.2.5. Communicating with the media**

As operations get underway so the need for direct communication with the media will increase. The focus of media coverage of the system will develop from reporting on the processes behind the development of the system, to stories about the actual operations.

These may range from fares, ridership, convenience, customer service, quality of staff performance, cost of operations, operational safety, integration with other modes, funding models and impact on the market.

A single point of contact for the media is required – a spokesperson with the authority to provide rapid responses to media queries. This requires an ongoing high-level of involvement at top-level with the overall strategic management and planning of the system as a whole. Having this kind of communication resource would enable both proactive and reactive engagement with the media and contribute to building a world-class brand that garners respect.

### **11.2.6. Customer feedback**

Responding appropriately to both solicited and unsolicited customer feedback will be important in establishing the credibility of the system and its relationship with customers.

Issuing public responses to customer feedback and updating public information in response to questions and queries posed by the public is a communication function that depends on a high level of access to information and ability to respond appropriately and quickly. Acting on customer feedback requires an integrated management response, however, aimed at progressive and sustained improvement of the service and how it meets customer needs and expectations.

### **11.2.7. Using new media**

The Internet and other new media will be central to providing customers with real-time information about the range of services provided and changes that might occur. Increasingly this is a mode that South Africans (and international visitors) are making use of, often through a cell phone.

The system website should be a one-stop shop of information for customers both new and regular, and should also provide up to date information that media can access.

The MyCiTi website should be easy to use, written in plain language and should contribute to the professional image of the system. Information on the website should be updated on a real time basis, and should be responsive to unforeseen operational changes. The MyCiTi website should be complimented by a mobi site as well.

As with all new media, quick and easy access to relevant information, via the Internet and increasingly mobile phone applications is critical.

A new media strategy and instant communication capacity should be an essential feature of the MyCiTi service going forward.

### **11.2.8. Transport Information Call Centre**

A multi-lingual call centre is required to provide an important back office service for general information while also being able to provide users with accurate information in the event of unplanned scheduling changes.

Call centre facilities provided by the Transport Information Centre have become an important component of the provision of public transport information in Cape Town, as has been seen during the World Cup against the backdrop of public service offerings that lack a high degree of integration.

It is not envisaged that MyCiTi run its own call centre at this stage. It will, however, be responsible for ensuring that call centre facilities are available. As a first step an investigation will be required as to whether these services can be outsourced to the existing Transport Information Centre.

This activity needs to be distinguished from the call centre which is part of the control centre and will be established to receive calls from service providers on operational matters to enable faults to be corrected. Under certain circumstances it may be appropriate to redirect calls received by the Transport Information Centre to the control centre's call centre.

### **11.2.9. Civic and public education**

The MyCiTi system breaks with current public transport offerings and traditions and requires changes in user behaviour and civic education about different elements of the system, which differ from current public transport systems. Some examples include:

- The location of trunk stations in the road median, which calls for safe pedestrian crossings.
- The dedicated bus lanes which may not be used by pedestrians and other vehicles.
- The preferential signalling system which gives buses right of way and which may appear confusing to car users.
- The need for bus users to dispose of refuse outside of the stations and the buses.
- The need for bus users to respect designated seating and facilities for special needs users.
- The need for users not to eat or drink on MyCiTi buses; and
- The need for a culture of respect for public infrastructure to be inculcated among all users and stakeholders.

### **11.2.10. Associated revenue opportunities**

A source of revenue for public transport systems around the world is the advertising opportunities associated with the system, in and around stations and on and inside the vehicles. This needs professional management from within the MyCiTi management team to ensure that the maximum revenue is extracted, without negatively impacting on the brand. This process should be a responsibility of the customer relations, communications and marketing function.

### **11.3. Resources required**

#### **11.3.1. Personnel**

The key locus of responsibility for customer relations, marketing and communication for MyCiTi should be situated at the senior management level within the team responsible for MyCiTi operations. Some capacity for communications should also be established within the City's Corporate Communications function.

Within MyCiTi operations the senior strategic executive, probably to be referred to as the Manager: Customer Relations, should report directly to the head of MyCiTi operations.

Within the City's Corporate Communications function a senior manager should be assigned responsibility for MyCiTi as part of their broader functions to deal with issues relating to MyCiTi that are relevant to the city's overall responsibilities.

There will need to be close liaison between the MyCiTi executive responsible for Customer Relations and the person responsible for communications relating to MyCiTi issues within Corporate Communications. Protocols will need to be developed in order to assign tasks and responsibilities between the two managers.

#### **11.3.2. Finances**

The finances required for this function will be dependent on a range of factors, some of which are yet to be resolved. The marketing budget will also need to be higher in the initial years when significant public education is required and the brand is being established.

A budget of 2% of system revenue has been provided within system operations. A budget of R2.5m a year has been provided for in the initial year of operations, climbing to between R4.5m and R5.9m per year once Phase 1A is established. For the initial implementation period to the end of June 2013 an additional amount of R24 million has been provided.

This should provide an acceptable envelope within which to design these activities.

## Annexures

### Annexure A. Reports to Council and the Mayoral Committee

Item Number	Subject	Date
C 46/03/08	Development of an Integrated Rapid Transit system for the City of Cape Town	27-03-2008
C 75/08/08	Implementation of the Integrated Rapid Transit system for the City of Cape Town	27-08-2008
C 47/08/09	Implementation of the Integrated Rapid Transit system for the City of Cape Town: Phase 1A: funding allocation and progress report	26-08-2009
C 71/10/09	Integrated Rapid Transit project (IRT): project status and a financial & strategic assessment.	28-10-2009
C 80/11/09	Transfer of Integrated Rapid Transport project from Transport Roads and Stormwater (TRS) to Service Delivery Integration (SDI) and the transferring of certain functions of Service Delivery Integration (SDI) to other directorates	26-11-2009
C 100/11/09	Funding and budgetary provisions for basic transport requirements for the 2010 World Cup in accordance with Council recommendation c71/10/09 of 28 October 2009	26-11-2009
TRS 04/02/10 (Item 16)	Integrated Rapid Transit Project Status and Progress Report No 1, December 2009	4-02-2010
TRS 04/03/10 (Item 08)	Integrated Rapid Transit Project Status and Progress Report No 2, January 2010	4-03-2010
C 06/03/10	Tariffs for integrated rapid transit services rendered during the 2010/2011 financial year and public transport services for the 2010 FIFA World Cup and other events planned at the Cape Town Stadium during 2010/2011 financial year	31-03-2010
MC 16/03/10(Item32)	Update on negotiations and contracts related to Council decisions of 28 October 2009	16-03-2010
MC 16/3/10 (Item 59)	Tariffs for services rendered by the Transport Department for the 2010-2011 financial year	16-03-10
C 31/03/10 (Item 53)	Recommendation - Integrated Rapid Transit project: Update on negotiations and contracts related to Council decisions of	31-03-2010

Item Number	Subject	Date
	28 October 2009	
MC 29/4/10 (Item 22)	Integrated Rapid Transit Project Status and Progress Report No 3, February 2010	29-04-2010
MC 18/5/10 (Item 14)	Integrated Rapid Transit Progress Report No. 4, March 2010	18-05-10
MC 24/05/10	To obtain approval to incur additional expenditure on the Rapid Transit System (IRT) projects as a result of the latest VAT implications in the current financial year	18-05-10
C 98/05/10	To obtain approval to incur additional expenditure on the Rapid Transit System (IRT) Projects as a result of the latest VAT implications in the current financial year	25-05-2010
MC 79/05/10 C 25/05/10(Item 118)	Provision of municipal public transport services: establishment of interim operational capacity for IRT	18-05-10 25-05-2010
FIN 30/05/10 TRS 24/05/10 MC 38/07/10 C 28/07/10 (Item 64)	Report on the due diligence completed on the Integrated Rapid Transit System	3-05-2010 28-07-2010
TRS 03/06/10(Item 9) MC 08/07/10	Integrated Rapid Transit Progress Report No. 5, April 2010	3-06-2010
MC 22/07/10	Transfer of funds from EFF to State Funding – 2009/10 IRT repayment of bridging finance	07-07-2010
MC 39/07/10 C28/07/10 (Item 65)	Business Plan for Phase 1A of Cape Town's MyCiTi Integrated Rapid Transit System	15-07-2010 28-07-10
F2/08/10 (Item 13)	Authorisation for public participation process: Disposal of MyCiTi vehicles to a Financial Institution	2/08/10
Finance, Transport, Mayco, Council	Provision of municipal public transport services: expansion of existing Municipal Systems Act section 78(4) decision, regarding MyCiTi services	
TRS 5/08/10 (Item 13) MC 17/08/10(Item15)	Integrated Rapid Transit Project: Progress Report 6 – May/June 2010	5/08/10 17/08/10
M17/08/10(Item 16)	MyCiTi proposed re-introduction of interim inner city bus service	17/08/10
M17/08/10(Item 60) C26/08/10 (Item 55)	Tariffs for MyCiTi services rendered during the 2010/2011 financial year – concessions and new services	17/08/10 26/08/10



## Annexure B. Route descriptions: Phase 1A

MyCiTi Routes		
PHASE 1A TRUNK DIRECTORY (as on 7 July 2010)		
ID	Route identification	Route details
<b>Trunk</b>		
T01	Doornbach / Du Noon - Waterfront	<b>(Forward)</b> - Potsdam Rd & Usasaza Rd - Potsdam Road - Blaauwberg Rd - R27 - Milner St - Paarden Eiland disused rail siding - New N1 busway - Hertzog Blvd - Heerengracht - Hans Strijdom Ave - Western Blvd - Granger Bay Blvd - Breakwater Lane - V&A Waterfront
T02a	Airport - Cape Town CBD - Civic Centre	<b>(Forward)</b> - Airport Terminal - Airport Approach Rd - N2 - Hertzog Blvd - Heerengracht - Hans Strijdom Ave - Civic Centre Station
T03a	Atlantis - Racecourse Rd - Montagu Gardens (Peak Period)	<b>(Forward)</b> - Atlantis Town Centre terminus - Westfleur Clr. - Sampson Rd - Charel Uys Dr - Dassenberg Rd (R307) - West Coast Road (R27) - Blaauwberg Rd east - Blaauwberg/ Raats rd intersection - Blaauwberg Rd west - R 27 - Racecourse Rd - Racecourse Rd/ Omuramba Rd intersection (Closed station)
T03b	Atlantis -Melkbos - Montagu Gardens (Off - peak period only)	<b>(Forward)</b> - Atlantis Town Centre terminus - Westfleur Clr. - Sampson Rd - Charel Uys Dr - Dassenberg Rd (R307) - West Coast Road (R27) - Melkbosstrand Rd - Otto du Plessis Dr (M14) - Birkenhead Dr - R27 - Blaauwberg Rd east - Blaauwberg/ Raats rd intersection - Blaauwberg Rd west - R 27 - Racecourse Rd - Racecourse Rd/ Omuramba Rd intersection (Closed station)
T04a	Atlantis - Melkbos - Table View (Peak Period only)	<b>(Forward)</b> - Atlantis Town Centre terminus - Westfleur Clr. - Sampson Rd - Charel Uys Dr - Dassenberg Rd (R307) - West Coast Road (R27) - Melkbosstrand Rd - Otto du Plessis Dr (M14) - Birkenhead Dr - R27 - Blaauwberg Rd east - Blaauwberg/ Raats rd intersection - Blaauwberg Rd west

MyCiTi Routes		
PHASE 1A FEEDER DIRECTORY (as on 7 July 2010)		
ID	Route identification	Route details
F00	Hout Bay - Camps Bay	<i>Forward Direction:</i> Marlin Cr - Karbonkel Rd - Atlantic Skipper Rd - Harbour Rd - Princess St - Main Rd - Imizamo Yethu - Victoria Rd - Llandudno - Victoria Rd - The Meadway - Park Rd - Argyle St - Victoria Rd
		<i>Reverse Direction:</i> The Meadway - Park Rd - Argyle St - Victoria Rd - Llandudno - Victoria Rd - Imizamo Yethu - Main Rd - Princess St - Harbour Rd - Atlantic Skipper Rd - Karbonkel Rd - Marlin Cr.
F01	Camps Bay - CBD - Waterfront	<i>Forward Direction:</i> Victoria Rd northbound - Argyle St - Tree Rd - Geneva Dr - Camps Bay Dr - Kloof Nek Rd - Kloof St - Loop St - Wale St - Adderley St - Heerenracht - Hertzog Blvd eastbound - Hertzog Blvd westbound - D F Malan St - Table Bay Blvd - Hereenracht - Coen Steytler Ave - Dock Rd - South Arm Rd - V & A Waterfront Clock Tower
		<i>Reverse Direction:</i> V&A Waterfront Clock Tower - South Arm Rd - Dock Rd - Coen Steytler Ave - Hereenracht - Table Bay Blvd - D F Malan St - Hertzog Blvd eastbound - Hertzog Blvd westbound - Heerenracht - Adderley St - Wale St - Long St - Kloof St - Kloof Nek Rd - Camps Bay Dr - Prima Ave - Platteklip Plein - Ravensteyn Ave - Camps Bay Dr - Fiskaal Rd - Chas Booth Ave - Rontree Ave - Camps Bay Dr - Victoria Rd northbound - Argyle St - Tree Rd - Geneva Dr - Camps Bay Dr - Victoria Rd northbound.
F02	Sea Point (via Beach Rd) - CBD - Garden Centre	<i>Forward Direction:</i> Beach Rd (At Queens Rd Circle) - Breakwater Lane - Port Rd - Dock Rd circle - Dock Rd - Coen Steytler Ave - Heerenracht - Table Bay Blvd - D F Malan St - Hertzog Blvd Eastbound - Hertzog Boulevard Westbound - Heerenracht - Adderley St - Wale St - Long St - Orange St - Annandale Rd - Mill St - Mill St off ramp eastbound - Maynard Southbound - Mill St on ramp Westbound
		<i>Reverse Direction:</i> Mill St on ramp Westbound - Mill St - Annandale Rd - Orange St - Buitensingel St - Loop St - Wale St - Adderley St - Heerenracht - Hertzog Blvd Eastbound - Hertzog Blvd Westbound - D F Malan St - Table Bay Blvd - Heerenracht - Coen Steyter Ave - Dock Rd - Dock Rd circle - Port Rd - Breakwater Lane - Beach Rd - Turn around at Queens Rd circle.
F03	Camps Bay - Sea Point - CBD	<i>Forward Direction:</i> Victoria Rd southbound - Camps Bay Dr - Geneva Dr - Camps Bay Dr westbound - Victoria Rd northbound - Queens Rd - Regent Rd - St Andrews Rd - Beach Rd - Queens Rd - Regent Rd - Main Rd - Somerset Rd - Riebeek St - Long St - Strand St - Adderley St - Heerenracht - Hertzog Blvd eastbound
		<i>Reverse Direction:</i> Hertzog Blvd westbound - Heerenracht - Adderley St - Strand St - Loop St - Riebeek St - Somerset Rd - Main Rd - Regent Rd - St Andrews Rd - Beach Rd - Queens Rd - Victoria Rd - Camps Bay Dr - Geneva Dr - Camps Bay Dr westbound - Victoria Rd northbound

F04	Fresnaye - CBD	<i>Forward Direction:</i> Beach Rd - Queens Rd - Kloof Rd - Ave Fresnaye - High Level Rd - Strand St - Adderley St - Heerengracht - Hertzog Blvd Eastbound
		<i>Reverse Direction:</i> Hertzog Blvd Westbound - Heerengracht - Adderley St - Strand St - High level Rd - Ave Fresnaye - Kloof Rd - Queens Rd - Regent Rd - St Andrews Rd - Beach Rd.
F05	Vredehoek - CBD	<i>Forward Direction:</i> Deer Park Dr West - Highlands Ave - Upper Buitenkant St - Mill St eastbound - Maynard St - Mill St westbound - Buitenkant St - Darling St - Adderley St - Heerengracht - Hertzog Blvd.
		<i>Reverse Direction:</i> Hertzog Blvd westbound - Heerengracht - Adderley St - Darling St - Buitenkant St - Mill St eastbound - Maynard St - Mill St westbound - Upper Buitenkant St - Highlands Ave - Deer Park Dr East - Frank Ave - Deer Park Dr West.
F06	Bo-Kaap - CBD - District 6 - Salt River	<i>Forward Direction:</i> Bantam St - Yusuf Dr - Wale St - Adderley St - Darling St - Keizersgracht - Chester Rd - Coronation Rd - Upper Mountain Rd - Rhodes Ave - Upper Roodebloem Rd - Roodebloem Rd - Victoria Rd - Salt River Rd - Salt River Rd Circle - Albert Rd eastbound - Spencer Rd northbound - Foundry Rd westbound
		<i>Reverse Direction:</i> Foundry Rd westbound - Alfred Rd northbound - Voortrekker Rd westbound - Salt River Circle - Salt River Rd - Victoria Rd - Roodebloem Rd - Upper Roodebloem Rd - Rhodes Ave - Upper Mountain Rd - Chester Rd - Keizersgracht - Darling St - Adderley St - Wale St - Yusuf Dr - Bantam St.
F07	City Bowl Circle Line	<i>Forward Direction:</i> Kloof St - Hof St - Rayden St - Molteno Rd - Montrose Ave - Upper Orange St - Lincoln Rd - Sidmouth Ave - Homeleigh Ave - Fitzherbert Rd - Deer Park Dr - Highlands Ave - Florida Rd - Davenport Rd - St James St - Derry St - Noordelik Ave - Barnham Ave - Windburg Ave - Crassula Ave - Roeland St - de Villiers Rd - Tennant St - Keizergracht - Darling St - Adderley St - Heerengracht - Hertzog Blvd Eastbound - Hertzog Boulevard Westbound - D F Malan St - Table Bay Blvd - Heerengracht - Coen Steytler Ave - Lower Long St - Long St - Kloof St.
		<i>Reverse Direction:</i> Kloof St - Buitensingel Rd - Loop St - Lower Long St - Coen Steytler Ave - Heerengracht - Table Bay Blvd - D F Malan St - Hertzog Blvd Westbound - Hertzog Blvd Eastbound - Heerengracht - Adderley St - Darling St - Keizergracht - Tennant St - de Villiers Rd - Roeland St - Crassula Ave - Windburg Ave - Barnham Ave - Noordelik Ave - Derry St - St James St - Davenport Rd - Florida Rd - Highlands Ave - Deer Park Dr - Fitzherbert Ave - Homeleigh Ave - Sidmouth Ave - Upper Orange St - Montrose Ave - Molteno Rd - Raydon St - Hof St - Kloof St.
F65	Tamboerskloof - CBD	<i>Forward Direction:</i> Warren St - Albert Rd - Woodside Rd - Brownlow Rd - Burnside Rd - Kloof Nek Rd - Kloof St (southbound) - Camp St - Upper Orange St - Hatfield St - St Johns Rd - Plein St - Darling St - Adderley St - Heerengracht - Hertzog Blvd.
		<i>Reverse Direction:</i> Hertzog Blvd (westbound) - Heerengracht - Adderley St - Darling St - Plein St - St Johns Rd - Hatfield St - Upper Orange St - Camp St - Kloof St (northbound) - Kloof Nek Rd - Warren St.

F08	Mamre - Atlantis	Silverstream/ Dassenberg Rd intersection - Dassenberg Rd northbound only - Main Rd westbound only - Turnaround at Frans St Circle - Main Rd southbound - Lang Ave - Seemeeu st southbound only - Enon St eastbound only - Moravia St southbound only - Poiet St southbound only - Silverstream Rd eastbound only - Dassenberg Rd - Charel Uys Dr - Grosvenor Ave - Athens Ave - Anna Ave - Wesfleur Cir - Current Taxi Facility
F09	Pella - Atlantis	Current bus turnaround in Pella - Pella Rd - R304 (Charel Uys Dr ) - Arion Dr. - Wesfleur Cir - Current Taxi Facility
F10	Sherwood - Atlantis Town Centre - Avondale	Sherwood Rd and Nottingham Rd - Deerlodge Rd (one-way loop clockwise) - Knysna Rd - Jonkershoek Rd - Malvern - Nottingham Rd - Sherwood Rd - Brutus Ave - Anna Ave - Wesfleur Cir - Current Taxi Facility - Meermin Rd - Palmer Ave westbound only - Grosvenor Ave southbound only - Meermin Rd northbound only (till Palmer Ave)
F11	Saxonsea - Atlantis Town Centre - Protea Park	Kent Cr & Hermes Ave - Kent Cr anticlockwise only - Hermes Ave - Grosvenor Ave - Hoop Cr - Figilante St - Hoop Cr - Grosvenor Ave - Anna Ave - Wesfleur Cir - Current Taxi Facility - Sampson Rd - Curlew St - Magnolia St - Gardenia St - Disa St - Dahlia St - Kerria Ave - Acacia Cir - Kerria Ave - Gardenia St - Magnolia St
F12	Atlantis Town Centre - Atlantis Industrial	Current Taxi Facility - Wesfleur Cir - Sampson Rd - Curlew St - Fiskaal St - Starling Rd - Reygersdal Dr - Bloembosch Rd (John Dreyer St) - Neil Hare Rd (anticlockwise) - John van Niekerk St (down towards Neil Hare) - Niel Hare (southbound) - William Gourlay - Turn around at Bus terminus
F13	Duynefontein - Melkbosstrand	Atlantic Ave/ M14 - Atlantic Ave - Napoleon Ave - Narcissus Ave - M14 - Dunker St - Charles Hoff Ave - M14 - Birkenhead Dr - Waratah Ave - Turnaround on grass 'verge' on the SW Quadrant of Birkenhead/ Waratah Ave intersection
F14	Big Bay - Bayside Centre	La Paloma & Otto du Plessis - Otto Du Plessis - M14 - Sir David Baird Dr - M14 - Blaauwberg Rd - Marine Cir - Porterfield Rd - Link Rd - Parklands Main Rd - Raats Dr - Blaauwberg Rd (turn around at Bayside)
F15	Blouberg Sands - Parklands - Bayside Centre	Sandown Rd and Rochester Rd - Sandown Rd northbound only - Windlass Way westbound only - Port Place southbound only - Rochester Rd eastbound only - Sandown Rd - Sunningdale Dr - Humewood Dr - Ringwood Dr - Wood Dr - Study St - Pentz Dr - Raats Dr - Blaauwberg Rd (turn around at Bayside)
F16	Blaauwberg Industria - Bayside Centre	Gie Rd Circle - Parklands Main Rd - Raats Dr - Blaauwberg Rd (turn around at Bayside)
F66	Du Noon - Montagu Gardens	Dumani/ Waxbury intersection - Dumani Str - Mnandi Str - Ingwe Str - Ngena Str - Usasaza Str - Potsdam Rd -Killarney Rd - Killarney Ave - Potsdam Rd - Koeberg Rd - Montague Dr - Century City Bus Rank (Century Ave) - Century Ave - Bosmansdam Rd - Omuramba Rd - Omuramba/ Racecourse Rd (Closed Trunk - Feeder transfer)
F67	Century City - Koeberg Rd - Boundary Road	Century City Rail Station - Sable Rd - Ratanga Rd - Century Boulevard - Century Avenue -Century City Bus Rank - Century Ave - Bosmansdam Rd - Koeberg Rd - Boundary Rd - Turn around in Lagoon Beach west of R27/ Boundary Rd intersection

## **Annexure C. Recommendations on purchase of buses**

### **Objectives**

Four options relating to ownership of the vehicles in Phase 1A of MyCiTi were considered, with the objective of optimizing across three key objectives namely:

- To minimize costs to the system;
- To ensure that the City is not exposed to the risk of losing buses which it has supplied at below cost to the vehicle operating companies; and
- To incentivise the vehicle operating companies to maintain and run the vehicles as well as possible.

### **The exceptional nature of Phase 1A**

In the standard BRT model the system generates sufficient revenue from fares that vehicle operators can be paid a fee per kilometre which covers the vehicle operating costs and the capital charges on the vehicle while also offering a profit assuming normal efficiency levels. Under this system the vehicle operators purchase the vehicles from the vehicle manufacturers and pay for them on terms they negotiate.

But in Phase 1A the system does not generate sufficient revenue to do this. Modelling shows that fare revenues can cover the operating costs of the vehicles as well as a normal level of profit. But subsidies will be required from sources other than ticket sales to cover the remaining costs.

National government has agreed that the vehicles can be paid out of the Public Transport Infrastructure and Systems Grant (PTISG), and this has already been done in respect of the buses purchased so far.

## **Important considerations relating to financial and tax impacts**

### **Direct and indirect benefits of the respective approaches**

Different approaches to the financing of buses impose different costs on different stakeholders. The objective should be to minimize the overall costs of buses to the system. If a particular approach enables the vehicle operators to benefit from a tax advantage this enables the city to pay them less for the provision of the service. Thus while the direct benefit is to the vehicle operator the city benefits indirectly – depending on the extent to which the city is able to capture these benefits through the negotiation process.

Similarly, where a bank is involved in a manner where it is able to benefit from a tax advantage this could be used to reduce the costs of the system as a whole – again, depending on the extent to which city is able to capture these benefits through a tendering or negotiation process.

### **Depreciation benefits for tax purposes**

A key element in designing an optimum approach to ownership arises from the way depreciation is treated in the tax system.

Taxpayers can deduct the value of the depreciation of assets from their taxable income and so reduce the amount of tax they are liable for. The depreciation is based on the value by which the asset depreciated whilst used for business purposes. The value by which the asset depreciated is usually determined by reference to the cost of the acquisition of the asset; however where the asset was acquired by way of a donation the value of the asset used to determine the depreciation is the market value of the asset at the time the asset was acquired for business purposes. The period over which an asset can be depreciated is based on guidelines drawn up by SARS for different classes of assets.

Even if the MyCiTi vehicle operating companies are given the vehicles free they can deduct the full value of the vehicles from their income over four years, subject to agreement from SARS that a four year period is reasonable in these circumstances. Thus they can deduct 25% of the value of vehicles per year from their taxable income for four years. Since company tax is payable at 28% of taxable income this translates into a benefit worth 28% of the value of the vehicles.

If the vehicle operator companies are sold the vehicles at market price they will have to charge the City more for the service they are providing since they will have to cover the interest and capital redemption costs of the vehicles. The additional amount payable to them by the City will be taxable. The interest component of this additional amount can be deducted from their taxable income as an expense; however they cannot claim the capital component as an expense and also claim the depreciation benefit.

Thus under the scheme whereby the vehicles are donated to the vehicle operating companies less tax is payable overall than when they are sold to the companies and the payment to the companies for their services is concomitantly higher.

The tax depreciation benefit is not available if the buses are owned by the City since the City does not have taxable income against which to make the deduction. However, if they are

owned by a profit making financial institution which leases the vehicles to a vehicle operator the tax depreciation benefit is available to the financial institution.

Note that were the City to create a municipal entity to run the IRT service, as originally envisaged, the vehicles could be donated to such an entity, which, because it is a tax paying entity, would be able to benefit from depreciation allowances. This would have led to more options than those considered below; however, since such an entity does not exist at this stage these options are not presented or discussed.

## The four options

The four options that have been considered are:

<b>Option A</b>	<b>The City of Cape Town pays for the vehicles out of the PTISG in Phase 1A and transfers ownership of the vehicles at the start of the contract at no charge to the vehicle operators (VO), but with a call option whereby ownership reverts to the City under specified circumstances</b>
Option B	The City of Cape Town pays for the vehicles out of the PTISG in Phase 1A and sells the vehicles to the vehicle operators on an instalment sale (hire purchase) basis so that ownership transfers to the VO at the end of the 12 year contract. The City pays the VO an additional monthly amount (compared to Option A) and the VO pays this back to the City in order to pay the interest and redemption on the buses
Option C	The City of Cape Town, having purchased the vehicles with the PTISG, retains ownership of the vehicles and leases them to the operators
Option D	The City of Cape Town, having purchased the vehicles with the PTISG, sells the vehicles to a secure financial institution at market price. The proceeds of the sale are invested with the financial institution as collateral for the vehicles which are then leased by the financial institution to the vehicle operator. The City pays the vehicle operators on a monthly basis out of the collateral investment it has placed with the financial institution. The bank, as owner of the vehicles, is able to benefit from the allowance arising from the vehicle depreciation. To the extent that it can be ensured that this benefit is passed on to the VO, the City needs to pay only a reduced amount to the VOs to enable them to pay for the vehicle lease.

### Option A

Initially Option A was preferred. Under Option A the vehicle operators own the vehicles and thus have an incentive to maintain and run them optimally. There is also a significant tax advantage in that even though the operators have not had to pay for the vehicles they can claim an allowance for depreciation based on the real value of the vehicles. This depreciation advantage accrues over the first four years of the contract and is equivalent to 28% of the value of the vehicles.

For every R100 million worth of vehicles donated in Phase 1A the VOs overall tax liability would be reduced by R7 million per year for four years – a total of R28 million.

This allows the City to pay a lower rate per km to the VOs than would otherwise be the case – a benefit which results in less operating subsidy requirement.

However, the concern with Option A is that if the VOs go bankrupt the vehicles will be lost to the City – unless the City buys them again from the liquidator.

Option A was thus rejected.

### **Option B**

Option B was considered because an instalment sale (hire purchase) arrangement allows the City to register a bond over the vehicles. If the VOs go bankrupt the City can call in the bond and claim the vehicles.

Under this option the VO has to make an additional payment each month which was not required under Option A. That is the VO must pay the interest and capital on the loan for the buses. This means the City in turn has to pay an additional amount each month to the VO (which the VO pays back to the city). This amount which the City pays to the VO is taxable.

The tax payable on this amount can be reduced. Firstly, the interest component of the amount the VO now pays the city in terms of the instalment sale agreement can be claimed as a business expense. Thus, effectively, there is no net tax payable as a result of the interest component of the grant the city makes to the VO for vehicle purchase.

Secondly, under an instalment sale agreement a depreciation benefit can still be claimed by the purchaser even though ownership only passes to the purchaser at the end of the hire purchase period (in this case 12 years).

This depreciation benefit offsets the tax liability on the capital component of the grant the City makes to the VO for vehicle purchase.

However in Option A this depreciation benefit was available to offset tax liability on other income. Under Option B it has been used up in offsetting an element of the grant the City makes to the VO for bus purchase – a grant not required under Option A.

The overall amount of tax payable by the VO is thus significantly more under Option B than under Option A. The difference is, in effect, equivalent to the tax payable on the capital component of the grant the city makes to the VO for bus purchase.

It is also possible that this option falls foul of the MFMA, which does not allow the City to make loans to the public. The City may have to be registered as a financial services provider in terms of the National Credit Act.

### **Option C**

Under Option C the City retains ownership of the buses and leases them to the VOs. This lease can be at a low rate. And there is no danger that the vehicles are lost.

The VOs will not be able to claim a depreciation allowance, but will be able to claim a tax deduction for the full amount of the lease payments made to the City. As a non-taxpaying



entity the city is not subject to tax on the lease income but is also not able to claim the depreciation allowance as an expense for tax purposes (since it has no tax liability that could be reduced).

Under this arrangement the City could (in terms of its standard depreciation procedures) choose to use the additional amounts payable by the VOs to build up a cash backed reserve to provide for the replacement of vehicles. However, it then has to find the money elsewhere to pay the VO to enable the VO to pay for the lease.

The VOs do not have the same incentive as in the previous two options to maintain and run the vehicles optimally - although this might be mitigated if the vehicles are transferred free of charge to the VOs at the end of the 12 year period. If this is done the VOs will, however, then be subject to income tax in the tax year during which ownership of the vehicles passes to them. The amount to be taxed will be equal to the original cash cost of the vehicles less a depreciation allowance which is determined according to the diminishing balance method at a rate of 20% per annum of the cost of the vehicles for the full duration of the leases.

To implement this scheme the City of Cape Town may have to be registered as a financial services provider in terms of the National Credit Act.

#### **Option D**

Under Option D a financial institution such as a bank, as a tax paying entity – and owner of the vehicles – is able to reduce its own tax liability by the amount the vehicles depreciate. It should thus be able to pass the benefit of this on to the VO by charging a lower interest rate to the VO. This means that the amount the City needs to pay to the VOs to pay for the lease would be reduced.

Under this option the vehicles could be given to the VOs at the end of the 12-year period thus giving them an incentive to run and maintain them well. However, if so, the VOs will be subject to income tax in the tax year during which ownership of the vehicles passes to them.

As explained under Option C the amount to be taxed will be equal to the original cash cost of the vehicles less a depreciation allowance which is determined according to the diminishing balance method at a rate of 20% per annum of the cost of the vehicles for the full duration of the leases. Based on current tax law, the VOs will then be able to claim a depreciation allowance based on the real value of the vehicles at that time (which value may be negligible).

The bank is highly unlikely to go bankrupt – thus the potential loss of vehicles by this mechanism is minimized.

A drawback for the City under this option is that the bank will charge a fee for the service and the bank may be required to verify the credit worthiness of each VO before it enters into any agreement with the VOs. However, investigation has shown that this fee will be limited assuming, as indicated, the City stands behind the lease payments and uses the capital proceeds from the sale of the vehicles as collateral in respect of the vehicles.

## **Results from financial modelling of the options**

Option A has been excluded because of the risk of loss of the vehicles in case of the vehicle operator going bankrupt. Were this to occur a substantial investment made out of the PTISG would be lost.

Of the remaining options Option D is the most advantageous financially. This is based on the full tax benefit from depreciation that accrues to the bank being passed on to the system in the form of reduced lease charges, while the bank is paid a market related fee for the service. It is estimated that, based on reasonable assumptions in respect of fees and interest rates, and assuming all payments to the vehicle operators for the purpose of paying the lease are made out of the collateral account established with the proceeds of the sale of the vehicles to the bank, at the end of the 12 year period an amount of approximately R32 million will remain in the account.

## **Conclusion**

Taking into account all three objectives mentioned above Option D is the preferred option. While Option A is potentially the most advantageous financially, it carries intolerable risk in that the vehicles, which will have been paid for out of the PTISG, might be lost to the system in the event the vehicle operating company goes bankrupt.

Based on modelling undertaken, Option D is the next most advantageous financially. Other advantages include the fact that the leasing of assets, such as vehicles, is a core business of many financial institutions, while the City does not customarily lease or sell vehicles on an instalment sales basis. Indeed, it is possible that the sale of vehicles on an instalment sale basis would not be permitted in terms of the MFMA.

Introducing a financial institution in this manner enables such institutions to become familiar with the system while also allowing the vehicle operators to build up a track record for future transactions. This is likely to be beneficial in future phases when the preferred model is implemented, whereby the vehicle operators buy the vehicles out of the per kilometre fee.

## **Consultation process**

Option D involves the sale of assets to a financial institution. Such transactions are governed by R878: Municipal Asset Transfer Regulations, issued in terms of the Local Government: Municipal Finance Management Act (56/2003). These provisions require that the City follow public consultation processes before making final decisions regarding matter prescribed in such provisions.

### *Asset transfer*

The Municipal Asset Transfer Regulations require that where high value municipal assets are sold a public participation process is required. High value assets are defined as those worth in excess of R50 million. Section 5(3)(b) of the Asset Regulations requires that an information statement must accompany the request to Council for authorisation of a public participation process, and sets out the required contents of the information statement. Section 6 of the Municipal Asset Transfer Regulations requires that the proposed transfer and required information be made public in accordance with section 21A of the Municipal

Systems Act at least 60 days prior to a final determination by Council in terms of section 5(1)(b). Council's final agreement to the proposed transfer of ownership must be based upon section 14(2) of the MFMA which requires that it be satisfied that the capital asset is not required for the provision of minimum levels of basic services, and a consideration of the overall benefit to Council of the transaction.

(i) Applicability to this transaction

There are conflicting legal views as to how these Regulations apply to the envisaged transaction. Regulation 5(4) states that the value of assets to be transferred is determined 'in accordance with the accounting standards that the municipality is required by legislation to apply in preparing its annual reports'. These accounting standards require that each vehicle be accounted for individually. On this basis it is argued that because each bus is valued at less than R5 million the City Manager may authorise the sale of the vehicles and a public participation process is not required.

However, there is an alternative legal opinion that, because the vehicles are to be transferred as a fleet, the total value of all the vehicles together must be taken into account, and that the regulations therefore require the public participation process to be followed.

In the absence of a conclusive determination by a court or legal advice as to the effect that the former view is correct, it is considered prudent to assume that the latter is, and thus follow the public participation process.

(ii) Council authorisation of public consultation

In August 2010 Council authorised the City manager to conduct a public participation process in terms of Regulation 5(1) of the Municipal Asset Transfer Regulations for the proposed disposal of MyCiTi vehicles and approved an information statement to be used in such process.

*MFMA provisions on long term debt (and related)*

The MFMA also regulates the circumstances in which municipalities may incur long-term debt (that is, debt repayable over a period longer than one year), including the provision of long-term security for contractual obligations. The MFMA defines debt as including contingent liabilities.

The MFMA prescribes a process to be followed, which includes a public participation process, which municipalities must follow before they decide to incur long-term debt or to provide long-term security for contractual obligations.

It is possible (but not definite) that one of the features of the bus transaction will be (i) an undertaking by the City to the bank to make good financial losses suffered by the bank as a result of non-payment of lease payments by the vehicle operators and (ii) the provision of security for that undertaking. Since the proposed commercial details of the bus transaction have not been finalized, there was a possibility that the City may give security as meant in the MFMA, and therefore the City invited comment from the public, as well as from the National Treasury and the Western Cape Provincial Treasury, on the proposed security, as required by section 46(3)(a) of the MFMA.

It should be noted that the City was not proposing to borrow money for the purposes of the bus transaction – in other words, the City will not be incurring debt in the narrow sense of the word. However, because of the wording of relevant legislation it is necessary to follow a process akin to that required when incurring debt in the sense conventionally understood.

*Public consultation*

Thus, in August 2010 the City issued information statements regarding the proposed asset transfer and related elements of the proposed transaction, and invited public comment as prescribed in the provisions in the MFMA and its regulations regarding asset transfer, long-term debt (including provision for contingent liabilities and the provision of security). In parallel the City invited comment from National Treasury, the national Department of Transport, and the Provincial Treasury and Provincial department responsible for transport.

In October 2010 the comments received will be reported to Council.

In due course the Council will be requested to make a formal decision in this regard, taking into consideration the comments received.

## **Annexure D. Purchasing of vehicles beyond the initial fleet**

As explained, the business model and the business proposition to the vehicle operator (VO) contractors is for the initial fleet of vehicles to be purchased by the City out of the PTISG, which will then be sold to a financial institution and the proceeds invested with that financial institution as a guarantee. The vehicles will then be leased to the VOs. The City will draw on the investment to make a separate monthly payment to the VOs in order for them to pay for the lease of the vehicles. By involving a bank in this manner it also helps to prepare the role players for the mechanisms envisaged for subsequent phases.

The VOs will be fully responsible for maintenance of the vehicles, and subject to some conditions, the ownership of the vehicles will be transferred to the VOs at the end of the contract period for their own benefit. This should provide an incentive for the VOs to maintain the vehicles to an acceptable level towards the end of the contract, to retain their market value.

The cost structure of the VO under this business model is largely weighted towards variable costs, with the fixed costs portion being relatively low in the absence of capital costs and interest payments. The fixed costs component is limited to aspects such as licences, installation costs and non-operational staff. In this context, drivers can be classified as short to medium term variable costs. The rate per kilometre will be set to cover all the costs plus allowance for profit, but will exclude any allowance for capital costs of vehicles.

There could be two reasons for the need to acquire vehicles in addition to the initial fleet: firstly if vehicles reach the end of their useful life, and secondly if passenger demand increases.

### *Useful life of vehicles*

The Phase 1A operational plan indicates that the average number of kilometres over the 12 year contract for the 18 metre vehicles would be in the order of 900 000. For the 12 metre vehicle, this is in the order of 1.65 million kilometres, and 600 000 for the 8.8 metre vehicles.

The vehicle manufacturers have indicated a useful life of the 18 m and 12 m vehicles conservatively at one million kilometres, but this can be extended to 1.6 million with good levels of maintenance and programmed parts replacement and overhauls.

Whilst the City may programme additional kilometres when passenger demand warrants, the indications from the vehicle manufacturers are that the trunk vehicles will probably not need to be replaced during the currency of the envisioned 12-year VO contract.

### *Additional fleet due to passenger demand*

The City may need to programme additional kilometres due to an increase in passenger demand. If the increase is in the off peak, this will have no impact on the fleet requirement. This would be highly desirable as it would indicate the success of the system in attracting passengers with no adverse costs implications for the City. The additional fare revenue would offset the additional payment to the VOs for the additional off peak kilometres. The VOs would also benefit with greater profitability as they would only have to cover variable

costs, whilst the rate per kilometre includes a component of fixed costs which are not incurred with off peak operations. This provides a good incentive for the VOs to increase demand in the off peak periods through good service and customer care.

If the increase in passenger demand is in the peak, additional fleet would be required. In terms of the proposed contract, the VOs would be required to acquire the additional vehicles to the City's specifications.

The capital costs of the vehicle acquisition would have to be covered by the City through an increase in the rate per kilometre over the remaining number of guaranteed kilometres.

The full impact of the increase in costs can be mitigated in two ways: from the additional fare revenue from the additional passengers, especially if the increase in peak passengers also translates into increases in off peak patronage as well or from increases in fares.

In terms of the contract, the rate per kilometre will be adjusted through a formula which will include the price of diesel, CPI, driver wages and salary costs. Over the course of the contract, fares will need to be increased at least in line with the escalation in the rate per kilometre to maintain the same margin of cost recovery. It can be accepted that the escalation will be broadly in line with inflation, but the outlier which could affect this is the price of diesel. If fares can be increased at a higher rate, always subject to political acceptability and customer response, so much the better as this would improve the bottom line and cost recovery. Any increase in the rate per kilometre due to the acquisition of new vehicles would need to be covered through fare increases. These increases would need to be higher than the escalation formula if the same margin of cost recovery is to be maintained. This presents some risk to the City and the policy towards fare increases need to be carefully weighed.

## **Annexure E. Changes in project implementation costs**

The IRT team produced and presented to Council its original conceptual plans for the IRT, and the accompanying budget in August 2008. However, this costing was based on initial estimates, in turn generated from international experience and a range of assumptions informed by the Rea Vaya project which was, itself, at an early stage of development. No project of this nature has previously been undertaken by the City of Cape Town. Furthermore, initial planning was truncated by a desire to implement key elements of the system in time for the 2010 FIFA World Cup.

The design parameters of the initial costing required reconsideration during the detailed design process that followed. Furthermore, during this process the team recommended design changes that, although increasing costs significantly in the short term, will save costs in the long term. A better understanding of the complexity of the Integrated Rapid Transit (IRT) project, further detailed planning and design, as well as the receipt of actual tenders allowed for a more detailed and confident estimate of the overall project costs than that possible at the time the project was initiated. This resulted in the adoption by Council in November 2009 of an IRT implementation budget of R4.309 billion.

Since November 2009 the estimated project costs themselves have remained largely the same. However, an additional R309 million is being budgeted to cover additional VAT regarding a range of costs previously classified as 'zero-rated' for VAT purposes are reclassified as 'VAT exempt'. This issue is addressed in paragraph 9.3.1. There remains uncertainty as to the VAT treatment of elements of the project and these are the subject of discussion between National Treasury and SARS. However, a worst case outcome is being assumed in this Business Plan until certainty is established, and VAT is in the mean time being paid to avoid possible penalties.

The costs are largely in line with experience in Johannesburg, which also faces similar upward revisions arising from a different VAT treatment than was initially envisaged.

Since the report to Council in November indicating a budget of R4.309 billion significant additional amounts have been allocated to the project by national government through the PTIS grant.

The revised project implementation costs, in order to complete the Phase 1A plan as reflected in the report to Council on 27 August 2008 (C75/08/08), including an allowance for contingencies, escalation and VAT (where applicable), are presented in the following table.

**Table 25. System implementation estimates - comparison between provisional estimates (Aug 08), approved budget (Nov -09) and further revised estimates (July 10).**

Description <i>All amounts in R (Millions)</i>	Original Estimate (Aug 08) (R m)	Budget report of Nov 2009 (R m)	Revised estimate, Business Plan, July 2010 (R m)
Construction Costs	1 021.6	2 869.6	3 219.7
Design and Professional Fees		270.0	260.2
General contingency allowance	102.2	173.3	174.0
Escalation		327.3	240.0
<b>Sub Total: Estimated Infrastructure costs</b>	<b>1 123.8</b>	<b>3 640.2</b>	<b>3 893.9</b>
Operating Costs for planning, design & transition.	198.3	668.5	702.4
<b>Total capital and implementation operating cost estimate</b>	<b>1 322.0</b>	<b>4 308.7</b>	<b>4 596.30</b>

**Note:** The latest estimate was prepared on information available as at July 2010, and assuming the required funds in outlying years will be secured from national funding. The last column includes the possible additional VAT payable as discussed above.

### **Increases from August 2008 to November 2009**

The reasons for the changes between the estimates between August 2008 to July 2009 for Phase 1A included additional costs estimated regarding planning and infrastructure, industry transition, vehicles and VAT – as discussed in the introductory paragraphs of this annexure. This increase in costs was subject to a separate forensic investigation between September and November 2009.

As the IRT team did detailed design, it became clear that certain steps – which required more upfront-expenditure in many cases – would save money in the long term and increase the quality of the customer's experience of the system. The improvements in the extent and standards applicable to Phase 1A, which required a major increases to the budget, also was the result of careful planning by the IRT to ensure that the system is viable in the long term and most importantly will provide customers with a quality public transport system that is accessible, frequent, user-friendly and affordable.

#### *Extent of the system*

The size of the system network has been expanded compared to the original proposal in 2008. Based upon input from bus and minibus industry, the feeder service networks in the Atlantis and Table View areas have been significantly expanded. Now, communities such as Pella will have a high-quality service directly to their community. The additional feeder routes, though, have cost implications in terms of stations and vehicles. The additional feeder routes also meant that an additional depot facility would be required in the Atlantis area. Only minor changes were made regarding trunk routes.



### *Infrastructure*

The implementation costs revisions include, inter alia, civil engineering, building works and equipment, such as that for the control centre and fare management system. These revisions revealed that the original estimates were underestimated, primarily due to the preliminary information available at time of estimating as a result of the short time frames to achieve a service by World Cup 2010. Further, the following items have contributed to the projected increased capital cost:

- The need to reconstruct certain bridge structures, strengthening the road pavement for bus ways using continuously reinforced concrete (CRC), additional busway elements for passing at IRT stations, the need for more costly offset stations in the narrow disused goods rail siding in Paarden Eiland, etc. Taking as an example the decision to use CRC, although the initial capital costs are more costly in the short-term, the longer-term benefit is significant. The CRC caters for the heavier than normal axle-loads of the 18m IRT Trunk vehicles. It reduces long term maintenance costs since it will not require maintenance for more than 30 years, which not only reduces maintenance costs, but will also reduce the inconvenience to customers and other additional operational costs due to interruption in service caused by maintenance activities.
- The use of a special type of kerbing (Kassel kerbs) will now reduce tyre wear by an estimated 40%. Tyre wear is a significant component of on-going vehicle operating costs. Thus, while this kerbing has added costs to the initial infrastructure costs, it will reduce the long-term cost impact on operations and permit close docking of IRT vehicles at station platforms to provide universal access.
- The IRT plan provided for the widening of roadway within the existing road reserve, to the extent possible, rather than reducing the lanes available for private cars (which would have had a massive negative impact on private vehicles and freight traffic in this rapidly growing corridor as well as on rapidly increasing freight and business traffic). Thus, along the R27 route, two lanes of general vehicle traffic are retained in each travel direction. A dedicated lane for public transport is only provided where there is space to widen the roadway. Adding a roadway lane by converting the original shoulders to general traffic lanes is obviously more costly than using an existing roadway lane for public transport. Initial costing largely assumed using existing roadway.
- It was decided to construct infrastructure for level boarding and tactile paving at all trunk stations and most feeder stops to ensure universal accessibility, which is in line with national policy (adopted after the initial estimates). Subsequent further design changes
- The City originally projected that City-owned land in the Table View area could be utilised for a depot facility there. Due to zoning and title deed restrictions, however, the City-owned land could not be used for this purpose in the time available for this project implementation. Instead, the City has had to acquire suitably-zoned private land for a depot facility in the Potsdam/Du Noon area.
- Pigment was used in the concrete for the IRT's trunk lanes at nominal additional cost. This makes the lanes more visible as IRT-exclusive lanes and identifies the City's new IRT system more clearly to customers and other road users.

- Compliance with the new National Standards for electronic fare management (EMV) systems further resulted in substantial additional costs.
- More expensive automatic commuter control access gates were chosen for use in the IRT stations, rather than the turnstiles originally budgeted for, which added significant costs. These gates last far longer than the turnstiles, will ensure much lower levels of fare evasion, and allow faster passenger through-flow exiting and entering the stations, which will save money in the long run. As part of the team's work to enhance the quality of the system the gates also allow universal access for people using wheelchairs, prams or bicycles. The gates chosen comply with the latest international disability requirements and standards for wheelchair access. One of the major focuses of the system is to allow easy and universal access to the disabled.
- A contribution was made to the costs of the Traffic Management Centre, where the IRT operational management staff and control centre staff and equipment will be housed.
- Procurement of property for vehicle maintenance depots for Phase 1A services was added (these will also function as staging facilities and will serve subsequent phases of the IRT system.)
- The addition of an IRT route and depot to reduce the annual operational running costs for the Phase 1A starter services and provide transport services to an important constituency of commuters of the Atlantis / Blaauwberg / Du Noon corridor.

### *Industry transition*

- The issue of compensation had not been finalized at the time of the original cost estimate, since it was being discussed at the time with the National Public Transport Committee.
- The estimated costs of the transition of the current minibus-taxi industries to the IRT were found to be higher than initially estimated. On the one hand the new National Land Transport Act made it more difficult and costly to rationalise the taxi industry. On the other, the City had engaged in a detailed process of surveys and of modelling to calculate the value of taxi businesses affected by Phase 1A of the IRT, i.e. which it would replace. The result was that it was clear that more funds were required for industry transition. This would include payment of compensation to those affected taxi operators who agree to give up their taxi licences in the area but who do not want to be part of the IRT (see paragraph 10.3.2).
- The industry transition costs initially did not include amounts payable for the surrender of vehicles as it was assumed that should this be required it would be funded by National Government separately. At the existing scrapping allowance of R55 000 per vehicle, a total amount of R47m is projected to be required.

### *Vehicles*

- In the August 2008 report the cost of the IRT vehicles was reported separately and not included in the reported total project costs. This was done because the initial plan was that the IRT Vehicle Operating contractors, which was planned to be contracted by the City to run the system, would purchase the buses as is the case in many international cities implementing a BRT system. However, this would significantly have increased the fare-price to the customer, since the vehicle operating contractors will

then increase their prices to the City to cover the cost of purchasing the buses and finance charges. Therefore the later estimates include these costs upfront to reduce the costs for the customer and to reduce the initial operational deficit.

- Initially it was anticipated that the City would only fund a portion of the acquisition. Detailed operation cost modelling revealed that for this initial start-up phase it would be more effective if the full costs of the vehicles for the initial implementation phase were carried by the City, again to reduce the operational deficit.

#### *Increased system design and implementation costs*

- As the operating cost implications of the system became more apparent additional resources have been provided for improved demand modelling including building enhanced local capacity.

#### *Cost escalations*

Contingencies and cost escalation due to delays to the project based on the current proposed roll out was factored in. The roll out is linked to when funds become available.

These revised estimates have been compiled on a conservative basis, i.e. where there was a possibility of increased cost regarding components, this cost was now included to give a complete financial picture.

### **Increases from November 2009 to July 2010**

#### *Value Added Tax*

While there have been some changes within the composition of estimated costs the overall envelope for this remains approximately the same while the key escalation between November 2009 and July 2010 arises from an increase of R309 million in the provision for VAT. This matter is discussed in paragraph 9.3.1.

## **Annexure F. City policy on compensation of minibus-taxi and other operators**

This document sets out the City's policy on compensation to the minibus-taxi operators who are directly affected, and those who are indirectly or partially affected. This policy must be read together with Chapter 10 on industry transition. Directly affected operators are those whose services are proposed to be replaced by a particular phase of MyCiTi, whose legal rights are affected and who have agreed to surrender their operating licence and operating vehicle in return for compensation and / or participation as shareholders in the two vehicle operating companies, or VOs.

### **1. Categories of Operators Qualifying for Compensation**

- 1.1 Minibus-taxi operators who are directly affected by a particular phase of MyCiTi implementation and who have agreed to surrender their operating licence and operating vehicle would qualify for full compensation (as described in this document). These operators will also have rights to shareholding in the new Vehicle Operator company.
- 1.2 Operators who are indirectly or partially affected are:
  - o Services that MyCiTi is not replacing but where these services are likely to be negatively impacted upon, to a significant degree. Examples include the following:
    - (a) Metered taxi services operating from the airport or in the CBD. If it is proven that IRT will have a significant negative impact on these services, the City should consider compensating these operators, if they are prepared to surrender their operating licences. These operators would then not be allowed, whether in their own name or through others, to apply for a similar operating licence within a period equal to the period used to calculate compensation.
    - (b) Existing minibus-taxi services that run from outside the Phase 1A MyCiTi area into the Phase 1A area, and agree to run a shortened service by delivering passengers for transfer onto the MyCiTi services. This will require an amendment to the operating licence conditions and necessitate consultation and some form of compensation.

### **2. Basis for determining compensation**

Compensation is aimed at determining the value of the actual business of an operator that is being replaced by the new system. It is not aimed at replacing the rights on the operating licence. This means if an operator has an operating licence with authority to operate on a network of routes, but is exercising the rights on only one or two routes to generate an income, then compensation is aimed at replacing the value of the income and not the potential income that could be generated from the other authorities on the operating licence.

### 3. Methodology for calculating compensation

The following steps should be used to determine the compensation value in a particular phase or corridor where MyCiTi is to be implemented:

- 3.1 Identify all the directly affected and partially affected operators.
- 3.2 Market share per mode
  - a) Through detailed surveys of passengers trips on all directly and partially affected modes, determine the market share of each mode using fare revenue as a criterion.
  - b) In the case where the fare to the passenger on a particular mode is subsidised through government funding, the fare revenue directly linked to the subsidy for that mode should be adjusted to take account of the influence of the subsidy on passenger modal choice.
- 3.3 Market share per taxi association
  - a) Once the market share of the minibus-taxi mode has been determined, the market share of each route or association then needs to be determined using average legitimate profit as a criterion.
  - b) Average legitimate profit is defined as the fare revenue less the average and appropriate operating costs (\*taking into account the costs a prudent operator of a transport business would incur, or would have to incur as required by law), including the repayment on the vehicle.
  - c) Average operating costs per vehicle on a particular route must include:
    - Driver salary
    - Insurance
    - Vehicle payment
    - Fuel
    - Oil
    - Brakes
    - General repairs
  - d) To calculate the repayment costs on a vehicle, a standard vehicle cost needs to be applied. This is determined by considering the type and cost of a vehicle that would be required to render a service for a period equivalent to the average validity period of the operating licences on a particular route.
  - e) To determine the average fare revenue per vehicle, the total fare revenue per route must be divided by the number of vehicles required on a particular route (N<sup>s</sup>), as determined by the City's Transport Department division when comment is given to the POLB on operating licence applications. In cases where the actual number of vehicles is less than required, the actual number of vehicles should be used to determine the average fare revenue per vehicle.
  - f) Total average cost and profit per route is calculated in the same way by multiplying the average cost/profit per vehicle by the number of vehicles required on the route (N<sup>s</sup>).

- g) Market share per route/taxi association is determined using the total average profit as described above.

### 3.3 Lump sum determination

- a) The lump sum is the actual value of compensation to be offered by the City and is intended to reflect the value of the business to be replaced by the MyCiTi system.
- b) The lump sum is determined by calculating the average profit over the validity period of the operating licence and then converting it to nett present value.
- c) The validity period of the operating licence is the licence period reflected on the licence at the time the compensation is calculated and finalised.
- d) For the purpose of calculating the lump sum value, the following periods shall be used :

<b>Category of Operating Licence</b>	<b>Period</b>
Former Indefinite licence	7 years
Definite period licence	5 years
Semi-legal operator *	1 year

\* A semi-legal operator is defined by the National Department of Transport as those operators without an operating licence but whose application for an operating licence has been in the system for a number of years (at least prior to August 2008 when the IRT consultation process started with the industry).

- e) The lump sum value thus calculated at the beginning of the process (prior the negotiations for 12 year contract being concluded), will hold firm irrespective of when during the roll-out period it becomes payable.
- f) The total lump sum for each of the three categories of operating licences is calculated separately to determine an `indefinite licence pot`, a `definite licence pot`, and a `semi-legal pot`.

### 3.4 Lump Sum Distribution

- a) The lump sum value is first calculated per association.
- b) Associations are then required to indicate to the City how they want the lump sum to be distributed to their membership in the most appropriate way.
- c) The membership of the association must be grouped into the abovementioned three categories, although the association may indicate a different treatment of the different categories.\*

- d) Within each category, agreement must be reached by at least 70% of the all the members *\*who are directly affected* on the basis for distributing the lump sum pot.
- e) If no such agreement is reached, the City will apply the following distribution formula: 30% of the pot to be divided equally amongst the members and the remaining 70% allocated on a pro-rata basis based on the number of passenger trips undertaken by each member.
- f) *\*Where an operator was not surveyed as having provided transport services on the day/s of the survey the City may take further measures to establish the average / likely passenger load of that operator, and adjust the passengers moved by other operators who are members of the same association accordingly.*

#### **4. Application of compensation model**

##### 4.1 Market share and shareholding

The compensation model provides for a direct link between the market share, lump sum, and rights to shareholding in the Vehicle Operator company for both the individual operator as well as for the association as a collective. Market share and the associate right to shareholding must therefore be determined and agreed to upfront, i.e. prior to company formation.

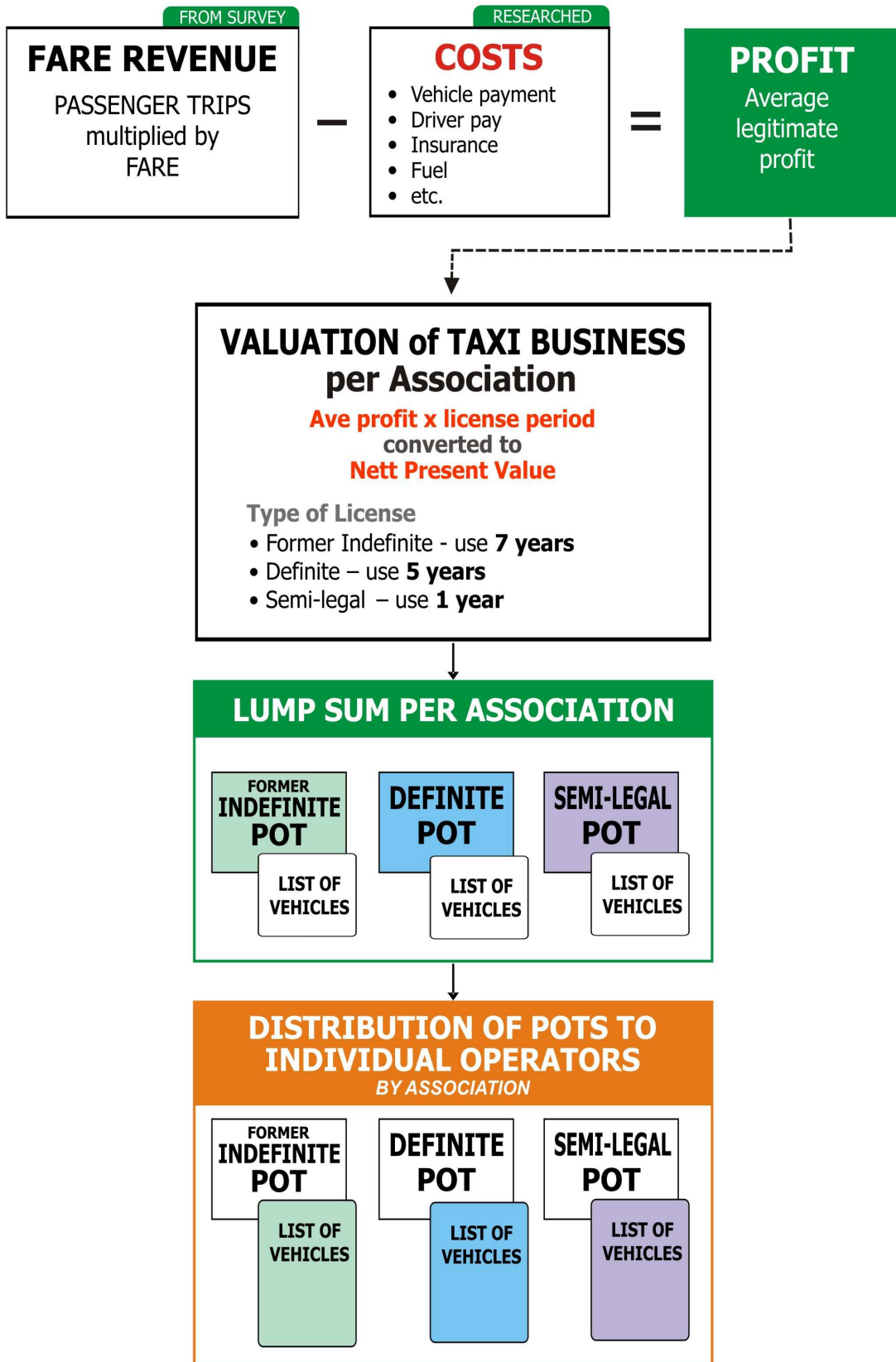
Where roll-out of a particular phase of the MyCiTi project is planned to occur over a number of years, the market share and associated right to shareholding in the Vehicle Operator company agreed to prior to company formation, cannot be changed notwithstanding the fact that passenger demand may change during the course of the roll-out period.

##### 4.2 Dormant operating licenses

Dormant operating licenses on any affected route should be identified and the POLB requested to follow a process of taking these operating licences off the system. Affected associations should then be given the opportunity to replace these dormant operating licences with applications for new operating licences.

##### 4.3 Additional Operating Licences

The City should therefore not support, except in the case of replacement of dormant operating licences, the granting of any additional operating licences on the affected routes once the market share has been finalised. If some additional operating licences are granted by the POLB during this period, such licences will not have any impact on the agreed market share. In such cases the lump sum allocated to an association must then be shared amongst all the members holding valid operating licences.





## Annexure G. Public Transport Infrastructure and Systems Grant Framework

<b>Transferring department</b>	<ul style="list-style-type: none"> <li>Transport (Vote 36)</li> </ul>
<b>Strategic goal</b>	<ul style="list-style-type: none"> <li>To support the Public Transport Strategy and Action Plan in promoting the provision of accessible, reliable and affordable Integrated Rapid Public Transport Network (IRPTN) services in the major cities of South Africa</li> </ul>
<b>Grant purpose</b>	<ul style="list-style-type: none"> <li>To provide for accelerated planning, construction and implementation of public and non-motorised transport networks in major cities of South Africa. This includes network-related infrastructure and information systems as well as transitional measures such as the inclusion of directly affected public transport operators and workers and also once-off measures to ensure the availability of network vehicle fleets for the 2010 FIFA World Cup and for network Phase 1A services</li> </ul>
<b>Outcomes statements</b>	<ul style="list-style-type: none"> <li>Improved public transport network services that are formal, scheduled, well managed with supporting non-motorised networks and which are accessible to an increasing percentage of the population of the major cities of South Africa</li> </ul>
<b>Outputs</b>	<ul style="list-style-type: none"> <li>Number of weekday passenger trips carried on IRPTN systems</li> <li>The number of households within 1 km of IRPTN access points (stations and feeder service stops)</li> <li>Number of kilometres of bi-directional, exclusive lanes in operation in IRPTN systems</li> <li>Number of route kilometres of IRPTN services by trunk, complementary and feeder operating categories</li> <li>Number of IRPTN network stations and feeder service stops in operation</li> <li>Size of the formal IRPTN vehicle fleet in operation (per contracted trunk, complementary and feeder vehicle type) as well as average passenger trips per trunk/complementary vehicle per weekday as well as total passenger kilometres supplied per vehicle type in a typical peak week</li> </ul>
<b>Details contained in business plan</b>	<ul style="list-style-type: none"> <li>Outcomes Indicators</li> <li>Output indicators</li> <li>Inputs</li> <li>Key Activities</li> </ul>
<b>Conditions</b>	<ul style="list-style-type: none"> <li>The current Public Transport Infrastructure and Systems (PTIS) grant funds municipal public transport infrastructure and systems and related transitional measures in support of integrated networks as defined in the Public Transport Strategy and provided for in the National Land Transport Act</li> <li>The allocation of PTIS funds must be aligned with the Integrated Transport Plan and its IRPTN components as approved by the relevant municipal council</li> <li>Total city-wide IRPTN system must cover direct vehicle operator costs from fare revenue, any other local sources of revenue and Public Transport Operations Grant if applicable. This applies to the city-wide network as a whole and not necessarily to initial phases</li> <li>Cities are required to establish dedicated project teams with sufficient capacity to design and implement IRPTN projects</li> <li>Cities are required to establish specialist capacity to manage and monitor IRPTN system contracts and operations as well as to plan future expansions of the network and this must be in place in advance of the first IRPTN operator commencing with service provision to the public</li> </ul>
<b>Allocation criteria</b>	<ul style="list-style-type: none"> <li>The grant is focused on IRPTN implementation in up to 12 cities in accordance with Phase 1 and 2 of the Public Transport Strategy and Action Plan</li> <li>Budget proposals will be evaluated in accordance with the outputs of a municipal IRPTN operational plan which specifies the infrastructure, systems and transitional costs of serving a defined number of passenger trips per day by a given fleet of IRPTN vehicles running on a defined amount of exclusive IRPTN infrastructure (including IRPTN stations, feeder stops, depots and exclusive lanes)</li> </ul>
<b>Reason not incorporated in equitable share</b>	<ul style="list-style-type: none"> <li>This is a specific purpose grant with objectives and distribution criteria which differ from those of the Equitable Share allocations</li> </ul>
<b>Past performance</b>	<p><b>2008/09 audited financial outcomes</b></p> <ul style="list-style-type: none"> <li>The Auditor-General's report contained no matters on the grant</li> </ul>

	<p><b>2008/09 service delivery performance</b></p> <ul style="list-style-type: none"> <li>• Funds allocated: R3 169 million</li> <li>• Funds transferred: R2 919 million</li> <li>• Funds spent: R1 450 million</li> <li>• R250 million was not transferred to the City of Tshwane in this period due to project delays and a lack of capacity to spend these funds which were redirected to the National Revenue Fund</li> <li>• Construction of Phase 1A infrastructure of the Rea Vaya BRT was 80 per cent complete in the City of Johannesburg and 143 BRT vehicles were delivered to the city</li> <li>• Cape Town commenced construction of BRT infrastructure worth R600 million</li> <li>• IRPTN operational planning commenced in Buffalo City, Rustenburg and Polokwane</li> </ul>
	<ul style="list-style-type: none"> <li>• The grant is expected to continue up to at least 2020 in support of the Public Transport Strategy of 2007</li> </ul>
<b>2011 MTEF allocations</b>	<ul style="list-style-type: none"> <li>• 2010/11: R3 699 million</li> <li>• 2011/12: R4 425 million</li> <li>• 2012/13: R4 125 million</li> </ul>
<b>Payment schedule</b>	<ul style="list-style-type: none"> <li>• Transfers are made in terms of the approved payment schedule by National Treasury</li> </ul>
<b>Responsibilities of the national department</b>	<p><b>Responsibilities of the national department</b></p> <ul style="list-style-type: none"> <li>• Monitor IRPTN implementation progress in line with the conditions above</li> <li>• Verify reports from municipalities by conducting at least one site visit per annum</li> <li>• Allocate the funds based on stated priorities through a Joint PTIS Committee comprising the Department of Transport and National Treasury</li> </ul>
	<p><b>Responsibilities of municipalities</b></p> <ul style="list-style-type: none"> <li>• Provide business plans for the PTIS IRPTN expenditure that are based on sound operational plans</li> <li>• Compile and submit data that indicates the efficiency and effectiveness of the IRPTN services where operations have commenced - in line with measurable outputs above</li> <li>• Provide detailed information on the actual costs of procuring IRPTN inputs including those for infrastructure, systems and transitional and regulatory items</li> <li>• Establish a dedicated IRPTN project team to implement the system in the development phase and subsequently once IRPTN services to the public have commenced</li> <li>• Establish a specialist capacity to manage and monitor operations and to plan expansions</li> </ul>
<b>Process for approval of 2011 MTEF allocations</b>	<ul style="list-style-type: none"> <li>• Municipalities will be requested to submit budget proposals that are based on business plans by 30 July 2010</li> <li>• These requests will be evaluated by a Joint PTIS Committee comprising the Department of Transport and National Treasury</li> <li>• Cities may be required to make presentations to the Joint PTIS Committee in August and September 2010</li> <li>• Municipal provisional allocations will be finalised by 29 October 2010</li> </ul>

*Source: Division of Revenue Act – Government Gazette 33100 13 April 2010*

## **Annexure H. Naming policy for MyCiTi stations and stops**

### **Policy**

The names of all trunk stations and feeder stops of the MyCiTi Integrated Rapid Transit project should be set taking into account the following principles:

- Names of IRT trunk stations and feeder stops must be kept relatively short given that the space available for the names to be displayed on facilities is limited.
- Generally speaking, the name of an IRT station needs to be based on local geography or landmarks that are easily recognized and that will tend to orientate users, residents as well as visitors. Alternatively it should reflect a place of cultural or heritage significance. Names that reflect commercial undertakings must be avoided.
- If possible and appropriate, the name of the nearest cross street that serves as the primary access route to the station should be used in the names of stations and stops.
- Offensive or insensitive names should also be avoided.

### **Station names**

A set of names for the first seventeen trunk stations was compiled by the IRT project team, taking into account the abovementioned criteria, and are set out in Table 26. In some cases the name reflects the place, area or neighbourhood served by the station. In other cases, the name of the nearest cross street that serves as the primary access route to the station is used in the station name.

The names have been subjected to a process of internal scrutiny and consultation with other officials in the Directorate of Strategy & Planning, particularly those dealing with heritage issues. Local ward councilors have also been informed and invited to make comments.

An initial list was published as part of the Business Plan of July 2010, for public comment.

There were some public responses to the previously proposed station names in the City's general IRT public communication process that has been taken into account in the latest list of names. In particular, the names previously proposed for Vrystaat and Table View stations (earlier proposed to be named Brooklyn and Bayside) were criticized by interested parties and these have been changed to the first mentioned names, which aligns with the above policy.

**Table 26. Proposed MyCiTi station names**

<i>Proposed trunk station name and location</i>
<b>Woodstock</b> (on new busway, just west of Church St)
<b>Paarden Eiland</b> (on new busway, just north of Paarden Eiland Rd)
<b>Neptune</b> (on new busway, just south of intersection with Neptune St)
<b>Section</b> (on new busway, just north of intersection with Section St)
<b>Vrystaat</b> (on new busway, just north of intersection with Vrystaat Rd)
<b>Zoarvlei</b> (on new busway, near Milner St intersection with R27)
<b>Lagoon Beach</b> (on R27, about 70 metres south of Boundary Rd)
<b>Woodbridge</b> (on R27, about 70 metres south of Loxton Rd)
<b>Milnerton</b> (on R27, about 40 metres north of Broad Rd)
<b>Racecourse</b> (on R27, just north of Racecourse Rd)
<b>Sunset Beach</b> (on R27, just north of Ocean Way)
<b>Table View</b> (on Blaauwberg Rd, between intersections of R27 and Raats / Nico Pentz Drives)
<b>Granger Bay</b> (Granger Bay Blvd, near access to Fort Wynyard and Somerset Hospital)
<b>Stadium</b> (Western Blvd, between new traffic circle and Portswood Rd intersection)
<b>Thibault Square</b> (Hans Strijdom Ave between Heerengracht & Long Street)
<b>Civic Centre</b> (Hertzog Blvd, between DF Malan Rd & Civic Ave)
<b>Airport</b> (Cape Town International Airport Transport Plaza)

## **Annexure I. Draft spatial planning principles for consideration in planning route alignments of the IRT**

*Submission from City Planning Department*

It is contended that land use integration with the IRT service has the potential to contribute towards the realization of a more efficient urban structure through increasing operational efficiency by concentrating urban development at a high level of intensity along public transportation routes and at identified station precincts. This position paper argues that successful land use and transportation integration can be facilitated by taking into consideration spatial planning principles at the design stage (route alignment) of the IRT service to enable development intensities and a greater mix of land uses to capitalise on the high accessibility provided by the IRT service.

*A set of spatial planning principles / criteria are provided hereunder as a proposal to inform future route planning of Cape Town's IRT service.*

### **Section 1: Rationale for IRT spatial planning principles**

Given the nature, extent and significance of the infrastructural investment that the IRT project represents, our department would like to highlight spatial informants which should have an influence on the decision making process to enable the IRT project to maximum its inherent potential to 'restructure' Cape Town and facilitate the catalytic development of a more sustainable, efficient, equitable and mutually inclusive urban form.

#### **STARTING POINT: INTEGRATED IRT TRANSPORT / LAND USE PLANNING PHILOSOPHY**

- How will future travel demand be affected by land use?
- How will new transport investments modify existing land use patterns?
- How can we optimize IRT route alignments to ensure an optimum land use response which further supports patronage and ridership of the IRT system

### **Section 2: Spatial planning principles for consideration in planning route alignments of the Bus Rapid Transit component of the IRT**

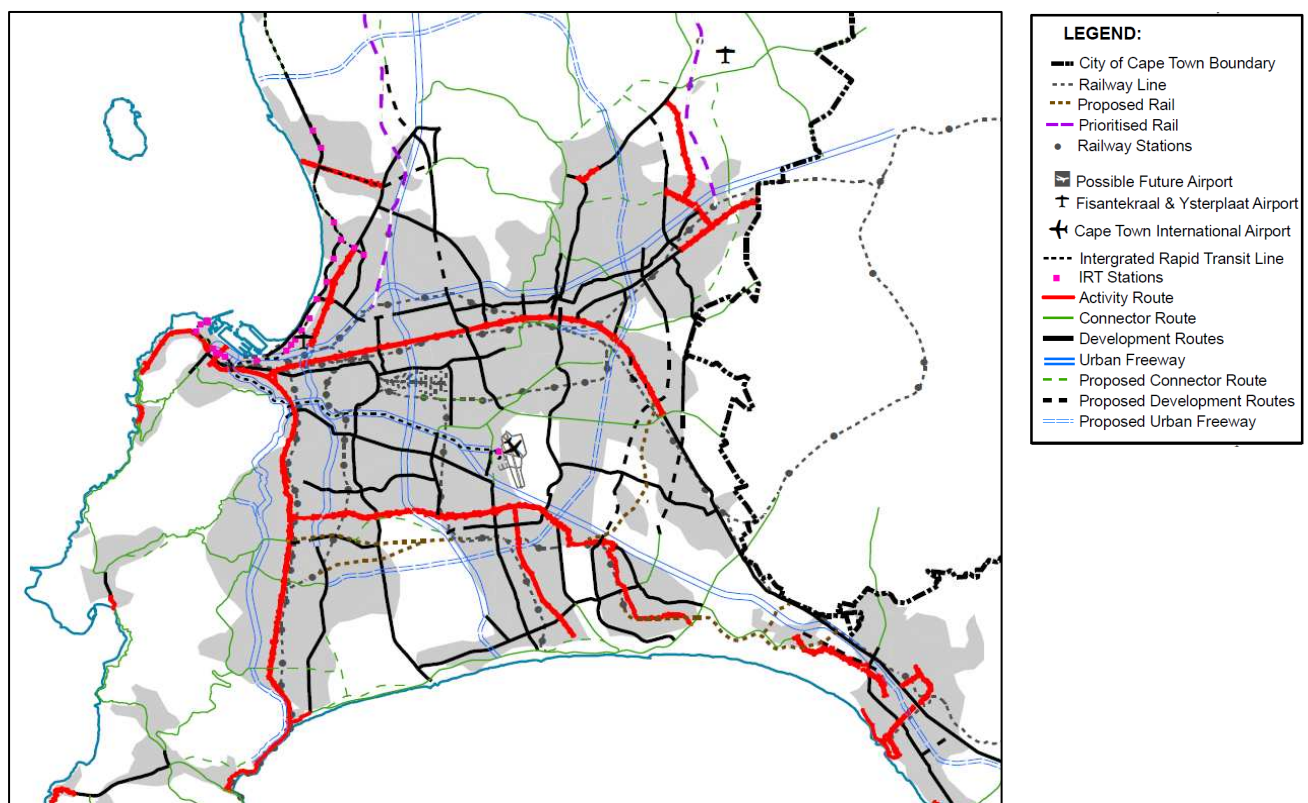
#### **Principle 1: Ensure consistency with the draft Spatial Development Framework (SDF) and District Spatial Development Plans (DSDP's)**

In line with Cape Town's Integrated Transport Plan (ITP), the City's draft SDF proposes to improve city-wide access to the city's opportunities and amenities by putting a multidirectional, grid-based movement system in place – moving away from the historical radial pattern of movement, where movement systems were primarily aimed at giving access to and from the historical city centre, at the expense of east-west and north-south linkages. The City's draft SDF proposes to increase the performance and efficiency of the grid based movement system by consolidating and intensifying higher densities and

intensive forms of mixed use development on the grid to improve accessibility and increase the thresholds required to support public transport services. In so doing, the draft SDF recognizes that land use and public transport have a mutual and reciprocal relationship. In order to determine the consistency of the proposed routing with the City's Spatial Planning policies, the following checklist has been compiled:

- How does the proposed routing reinforce the city's envisioned long term spatial structure?
- How does the phasing / alignment of the IRT contribute towards establishing a multidirectional, grid based movement system?
- Does the proposed routing allow for intensive land uses to respond and consolidate activity on the development routes and activity routes and streets that underlie the accessibility grid?
- Does the proposed routing support the identified development corridors and activity and development routes? The city's existing land use pattern has evolved incrementally over a medium – long term timescale. The investment and implementation of the IRT network is relatively rapid and will surpass existing investment – potentially competing with existing corridors, therefore, it is important to consider the potential of the IRT system to reinforce corridor type development along developed or emerging corridors. Does the proposed routing reinforce or compete with existing corridor development and other public investments made within this established structure?

Figure 2: Cape Town's Land Use Transport Network



Source: Cape Town Spatial Development Framework (draft 2010)

## **Principle 2: Ensure that the land use potential along IRT routes can be maximised**

The IRT service will relieve traffic congestion and increasing accessibility from residential areas to employment opportunities - allowing increased efficiency in the transfer of goods, services and workforce commuting, and increasing accessibility to shops, community facilities, civic amenities and recreational areas. Accessibility is recognised as a key informant to property values. Through enhancing accessibility, the market values of properties adjacent to the IRT system are anticipated to rise, representing a capitalization of 'accessibility cost savings' and decreased travel times. Rising land values are anticipated to encourage greater land use intensity and a more diverse land use mix, which, provided appropriate support mechanisms are in place, are likely to increase specialization, productivity and profitability.

The infrastructural investment symbolized by the IRT service will contribute towards establishing a new hierarchy of accessibility which is likely to have a long term impact on the city's spatial structure, increasing access to certain land parcels, some of which may currently be vacant and /or underutilized. Planning investigations should therefore be undertaken at the routing alignment stage in the planning process to identify areas which have the most potential to maximise these benefits, and facilitate an optimum land use response to support the IRT service. In order to measure the ability of land uses to respond to the IRT service, the following checklist has been compiled:

- Evaluate the ability of land uses to respond along the route and at identified station precincts. Are there any environmental or other development constraints?
- Undertake a land use compatibility assessment of surrounding land uses to determine suitability for higher intensity land uses, considering the existing and potential character of the identified route alignment.
- Evaluate the existing property development trends along the identified route. Will the IRT service compete or conflict with existing property development trends along adjacent routes?
- Is the IRT route intended to fulfill an accessibility or a mobility function? What is the most appropriate and context specific need / requirement - Consider the impact of increasing accessibility / mobility and measure the ability of land uses to respond.

Land use potential can be measured through a land audit to measure potential 'land value' add in terms of:

- Ownership: State Owned Enterprises (SOE), National, Provincial, Municipal (with the added potential for long term cross subsidisation) + Private ownership;
- Existing rights and potential for upgrading of rights (Zoning);
- Vacant / underutilized sites;

Figure 3: International examples of land development benefits of existing BRT systems

<b>EXHIBIT 6-2 Reported Land Development Benefits of BRT</b>	
<b>BRT System</b>	<b>Land Development Benefits</b>
Adelaide Guided Busway	Tea Tree Gully area is becoming urban village.
Bogotá TransMilenio	For every 5 minutes of additional walking time to a BRT station, the rental price of a property decreases between 6.8% and 9.3% after controlling for structural characteristics and neighborhood attributes
Boston Silver Line (rebuilt Washington Street)	\$700+ million in new investment within two to three blocks of BRT line
Brisbane South East Busway	Up to 20% gain in property values near busway. Property values in areas within 6 miles of station grew two to three times faster than those at greater distances. Higher increase in median home values around busway than other suburban areas.
Ottawa Transitway System	\$1 billion (Canadian) in new construction at Transitway Stations.
Pittsburgh East Busway	59 new developments within 1,500 feet of stations. \$302 million in land development benefits of which \$275 million was new construction. 80% clustered at stations.
Pittsburgh West Busway	Land development focused on six park-and-ride lots.

SOURCE: The Value of Accessibility to Bogotá's Bus Rapid Transit System (4) and TCRP Report 90 (5)

Source: Transportation Research Board Washington DC (2007): *Bus Rapid Transit Practitioner's Guide*

### **Principle 3: Take long term growth potential into account when determining the short term IRT routing**

The growth of identified new development areas must be considered together with existing growth scenarios (refer Figure 4).

- Take a long term perspective in traffic modeling scenarios and consider growth projections and new development areas in the City's growth corridors;
- Does the proposed route align with future city growth corridors? This is important to ensure that public transport is the preferred transport mode at the outset in new developments – taking advantage of the opportunity to capture new markets.
- Incorporate future land use patterns in demand modeling exercises;
- Proactively determine the alignment of the routes so the necessary road reserves can be negotiated when assessing land use applications.



#### Principle 4: Assess IRT potential for city restructuring

- Does the proposed alignment 'connect' previously disadvantaged areas of the City to areas of economic opportunity? (Possible phasing determinant rather than routing) - For example:
  - The Bellville – Khayelitsha link
  - The Wynberg / Claremont – Philippi and Metro South East link (Lansdowne – Wetton Road)

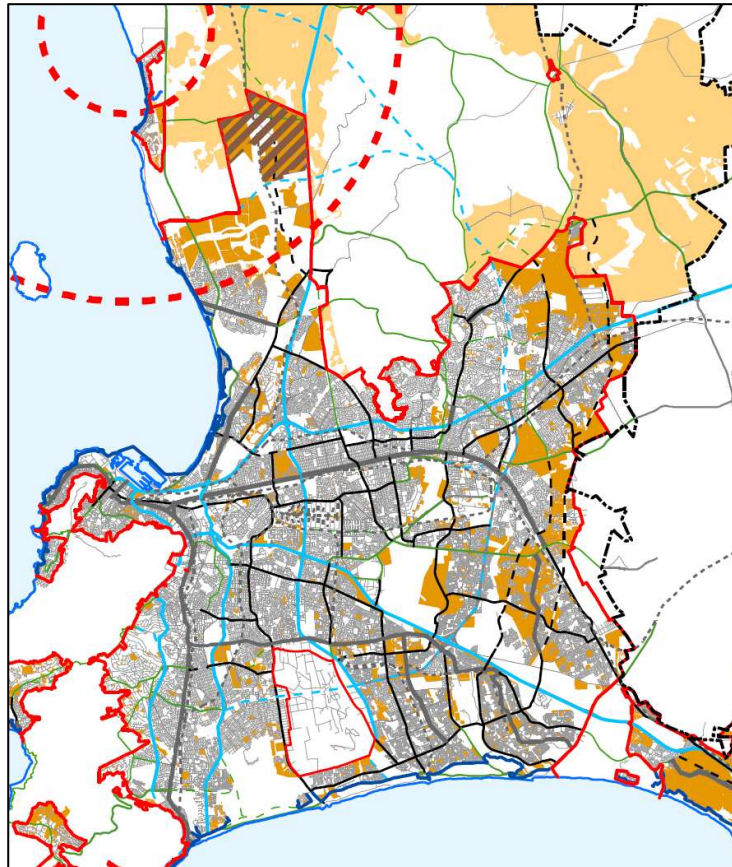
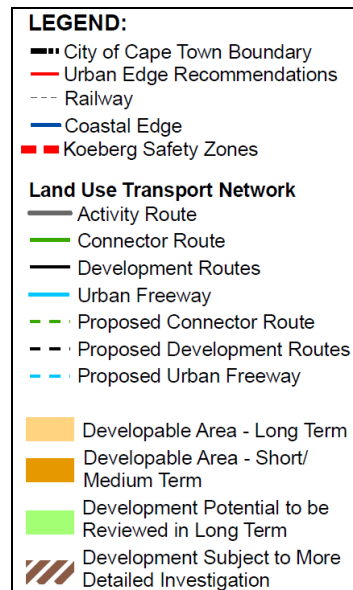


Figure 4: Areas identified for future development in Cape Town



Source: Cape Town Spatial Development Framework (draft 2010)

### Section 3: Process forward

It is intended that these spatial planning principles be circulated for internal comment within the Strategy and Planning Directorate. Thereafter, a formal engagement should be coordinated with the Transport and IRT departments.

## Proposed Summary spatial planning principles

### DRAFT SPATIAL PLANNING PRINCIPLES FOR CONSIDERATION IN PLANNING ROUTING ALIGNMENTS OF THE BUS RAPID TRANSIT (BRT) COMPONENT OF THE IRT

Spatial planning considerations must inform the IRT trunk and feeder routing alignment to ensure that maximum development intensity can be achieved along identified routes and at station precincts. The following spatial planning principles are relevant:

1. *Ensure consistency with Spatial Planning Policy*
2. *Ensure that the land use potential along IRT routes can be maximised*
3. *Take long term growth potential into account when determining the short-medium term IRT routing*
4. *Assess IRT route potential for City restructuring*

Based on these spatial planning principles, the IRT system should:

- Reinforce the city's envisioned long term spatial structure and contribute towards establishing a multidirectional, grid based movement system;
- Reinforce existing corridor development along development routes, activity routes and activity streets where the IRT system is fulfilling an accessibility function;
- Consider the ability of land uses to respond to IRT flows / opportunities created along the IRT routes and at identified station locations;
- Take a long term perspective in traffic modelling scenarios and consider growth projections and new development areas in the City's growth corridors; and
- Be used as a tool to restructure the City and integrate previously disadvantaged areas of the City to areas of economic opportunity.

## References

- Johannesburg Metropolitan Municipality (2007): Parktown - Sunninghill Development Framework (Development contributions towards public transport)
- SACN (2008): Transit Led planning in the City of Joburg
- Johannesburg Metropolitan Municipality (2007), Parktown - Sunninghill BRT Development Framework
- Transportation Research Board Washington DC (2007): Bus Rapid Transit Practitioner's Guide
- Federal Transit Administration (2009), Bus Rapid Transit and Development: Policies and Practices that Affect Development Around Transit,
- Urban Econ (2010), IRT Business / Industrial Hub Pre-Feasibility Study Report 2010

## Annexure J. Notes on final edit of the Business Plan

Version 6.04 of the Business Plan was submitted to the Portfolio Committees for Finance and for Transport, Roads and Major Projects and the Executive Management Team (version 6.04). Comment was received that it required a further language edit, with attention to layout and to consistency of content. This version (6.042) is the Business Plan as amended through this final edit.

Corrections (eg to achieve consistency) that have been addressed are as follows:

- Par 1.1: The last sentence of the 11th paragraph was amended by the insertion of the words in italics: "It expressed some concern at *the planned location of the detailed planning function within City rather than the municipal entity*, and at envisaged timetable for the establishment of the municipal entity."
- In par 6.2.1:
  - The 4<sup>th</sup> paragraph was amended by replacing the 2<sup>nd</sup> sentence with the following sentence (shown in italics in the text): "The kilometre rate will take into account the total operational costs, plus a reasonable profit, although an element of payment per passenger on feeder routes may be included."
  - in the 9<sup>th</sup> paragraph, amended the 2<sup>nd</sup> sentence to read as follows (words in italics added): "At the end of the life of the contract it is envisaged (subject to the process being run in terms of the MFMA and its regulations regarding bus ownership) that the majority of vehicles will be transferred to the VOs for their own benefit."
- In par 6.2.2 the following sentence was added to the end of the first paragraph: "Incentives will also be developed as positive encouragement for better levels of service."
- In par 6.2.3, the 2<sup>nd</sup> last paragraph, the following was added at the end: "It is possible that a small proportion of advertising income can be reserved for the VO to facilitate easy access of advertisers to vehicles."
- Ticket sales in the system are handled on trunk stations by the Station Services contractor; and off-station through vendors procured by the Fare System Contractor. Previously wording of paragraph 6.3 created the impression that all the ticket sale services are procured by the Fare System contractor. This is not the case.
- At the end of par 7.2 the full wording of the relevant Council resolution was summarised.
- In par 7.6, the second last bullet was deleted, since the matter was concluded in a Council decision of August 2010.
- Table 17 on page 91: Updated table to reflect the actual City proposals for PTISG allocations regarding MyCiTi implementation.
- [See footnote 12 on page 93 for a correction made regarding paragraph 9.8.1.]
- In the compensation policy in Annexure F:
  - In par 3(b): added in the following clarification regarding appropriate expences: "taking into account the costs a prudent operator of a transport business would incur, or would have to incur as required by law".

- In par 3(c), added the wording in italics: "The membership of the association must be grouped into the abovementioned three categories, *although the association may indicate a different treatment of the different categories.*"
- In par 3.4(d), added the wording in italics: "Within each category, agreement must be reached by at least 70% of the all the members *who are directly affected* on the basis for distributing the lump sum pot."
- Added an additional par 3.4(f): "Where an operator was not surveyed as having provided transport services on the day/s of the survey the City may take further measures to establish the average / likely passenger load of that operator, and adjust the passengers moved by other operators who are members of the same association accordingly."