



## OVERVIEW

# Business Plan for Phase 1A of Cape Town's MyCiTi Integrated Rapid Transit system July 2010



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## Introduction

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.

In February 2007 the City performed a scoping study on an integrated public transport network and identified 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.

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. 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.

During the course of planning, it became apparent that costs would be significantly higher than initially estimated. However in April 2010 a further R1.903 billion was allocated to the City by the National Department of Transport (NDOT) and Treasury resulting in a total allocation of R3.35 billion to the City for public transport infrastructure and systems over the three financial years 2010/11 to 2012/13.

In recent months all aspects of the project have been thoroughly reviewed, including a due diligence audit by independent professional experts. The updated business plan incorporates the insights gained from these processes.

In April 2010 the name *MyCiTi* was chosen to denote a new generation of high-quality public transport and is being used to refer to the BRT system and related non-motorised services, all of which form part of the Integrated Rapid Transit (IRT) system for Cape Town.

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

Currently public transport in Cape Town, as in other cities in South Africa, is widely regarded as inadequate. Improving it is a high strategic priority for national, provincial and City government. At the same time, there is 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'. The City needs to make planning decisions on the location of residential and non-residential areas and design its infrastructure services in conjunction with determining how people will move about in the metropolitan area.

*The successful MyCiTi World Cup service showed that Capetonians are willing to make the switch from private to public transport when the service is fast, safe, convenient and reliable.*



Accompanying the need to improve public transport and devolve 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. And, unlike rail, which tends to divide urban space, BRT allows greater ease of movement across transport routes, facilitating growth along corridors.

Typical features of BRT include:

- Dedicated busways on trunk routes for fast movement along congested corridors.
- Enclosed 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 enhance efficiency 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 as in current competitive practices.
  - Existing minibus-taxi and scheduled bus operators being accommodated competitively as operators of the new system, providing opportunities for the economic empowerment of informal service providers.



*Clean, well-lit stations that are monitored at all times will give MyCiTi users a sense of greater personal freedom and security, even when travelling early in the morning or late at night.*

Based on these capabilities, BRT is viewed internationally as the most sophisticated and effective form of road-based public transit available. National government in South Africa considers it an appropriate and cost-effective approach for South African cities, to operate as complementary services to rail. This has led to significant support through the Public Transport Infrastructure and Systems Grant to cities embarking on such initiatives.

Cape Town has a substantial rail network. While low urban densities generally 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 MyCiTi system is designed to be rolled out in four phases, for completion within 15 to 20 years. This is shown in Figure 1.

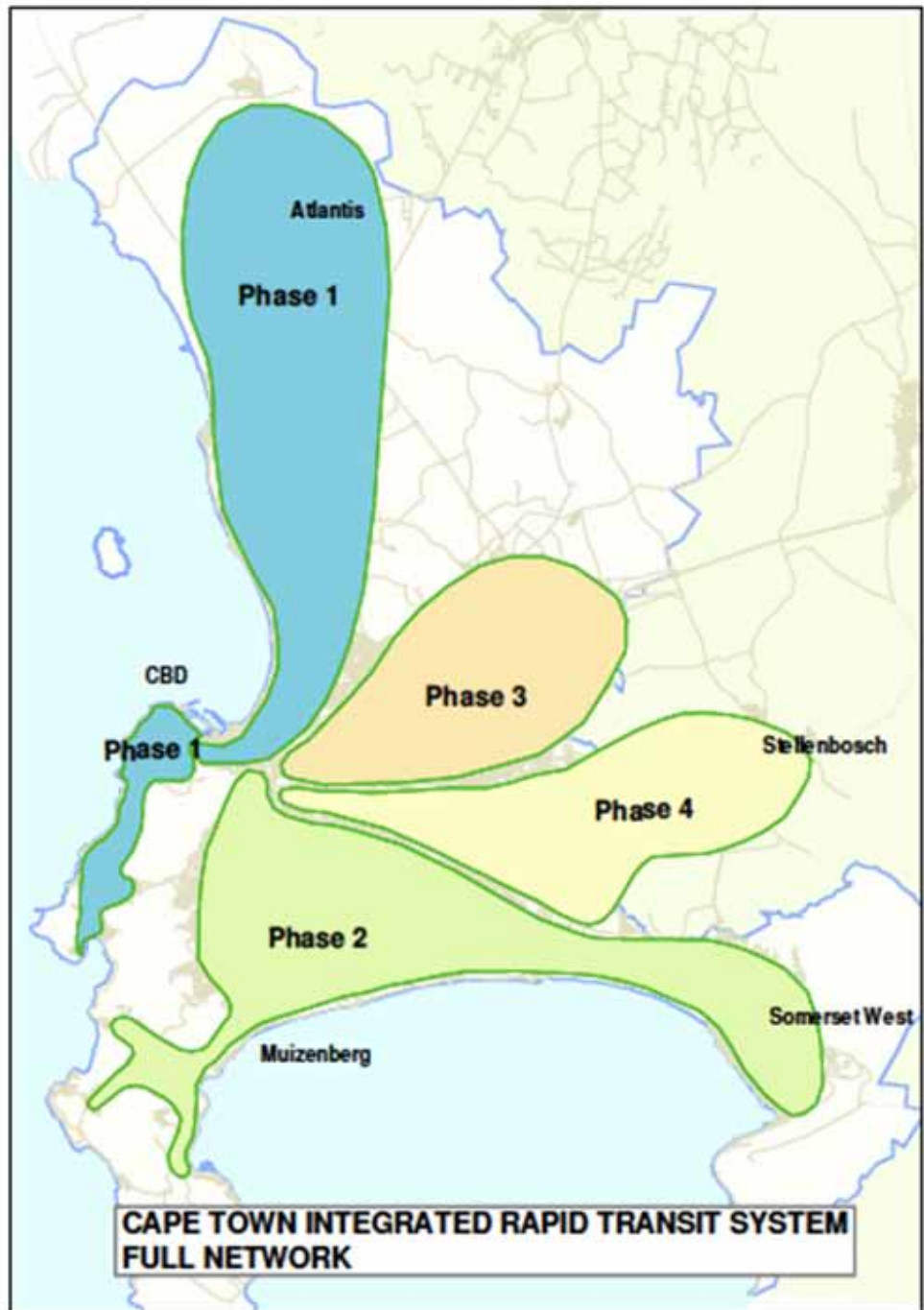


Figure 1. Phased implementation of the IRT

## Alignment with corporate plans and policies

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

The IDP recognises the contribution of public transport to attaining the vision it spells out for the City. It identifies the significant improvement of public transport systems as one of the strategic focus areas.

MyCiTi is implemented in terms of the ITP, which envisages an integrated public transport system that includes:

- The development of rapid mass road-based public transport services on priority high volume corridors that 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 long-term benefits of MyCiTi are reflected in the City of Cape Town's vision for the future – giving all residents access to opportunities for employment, education and training, health, leisure and recreational facilities; providing cleaner air by reducing congestion and a more efficient and productive local economy.*

## The system plan for MyCiTi

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

The trunk services will operate with larger vehicles along higher-density corridors where vehicles will have exclusive rights-of-way. The trunk services will operate 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 along higher-density corridors.

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 lower-density areas, the feeder services will use smaller vehicles in most cases in mixed traffic lanes with kerbside stations. Fare verification will typically occur on entering the vehicle.

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

A number of priority corridors have been identified for potential trunk investment in the long term. This is shown in Figure 2.

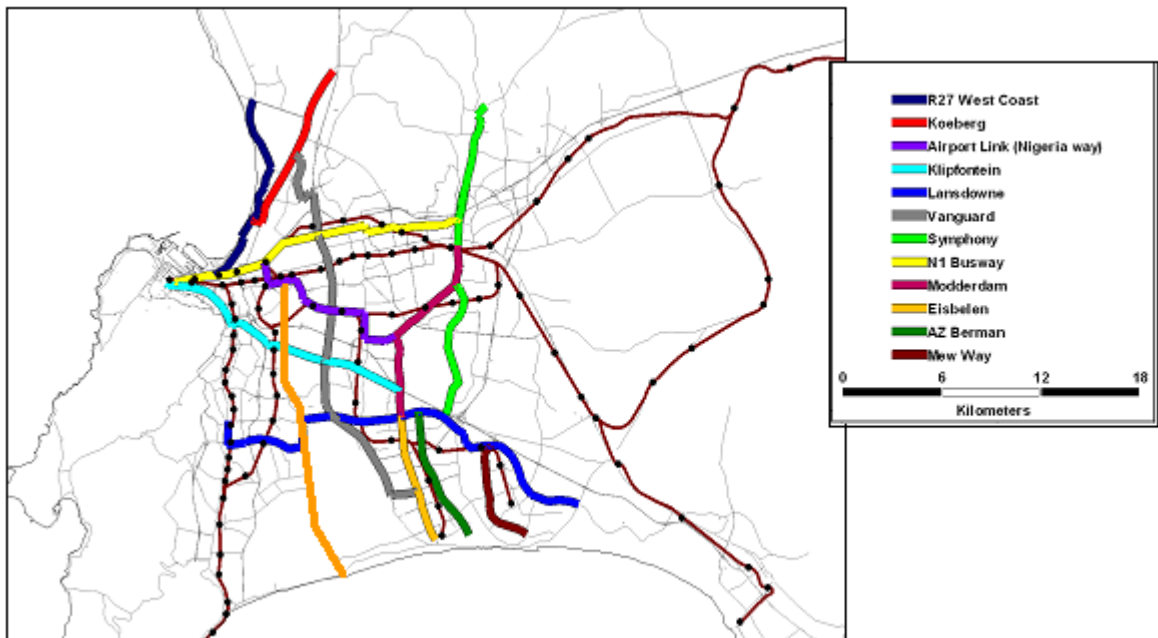


Figure 2. Corridors identified for long-term potential trunk investment

*Where MyCiTi will be a real time saver is on high-demand routes where dedicated lanes, closed stations with level boarding and pre-payment will make the service much faster than is possible using a private car, especially in peak-hour congestion.*



## Fares

Trunk services: Initial fares are planned to be distance-based at R5 + R0.30 per km travelled. The fare is capped at a maximum of R16. In the off-peak, this will be reduced to R4 + R0.30 per km 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 an initial planned flat fare of R5 in the peak period, 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 distance based at R44 + R0.30 per km travelled, so the R16 cap does not apply.

The fare system and policy will be reviewed regularly, taking into account initial MyCiTi services and customer responses. During this process transport products (such as weekly or monthly concessions) will be investigated. Further measures to encourage off-peak travel will also be designed.

## Phase 1A routes

Table 1 gives the trunk and feeder routes for Phase 1A and these are also shown in the accompanying map in Figure 3.

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

Table 1. Phase 1A trunks and feeders

*Giving public transport services priority over private traffic, as this preferential signalling does, is an important part of the MyCiTi philosophy and has proved to be effective around the world.*



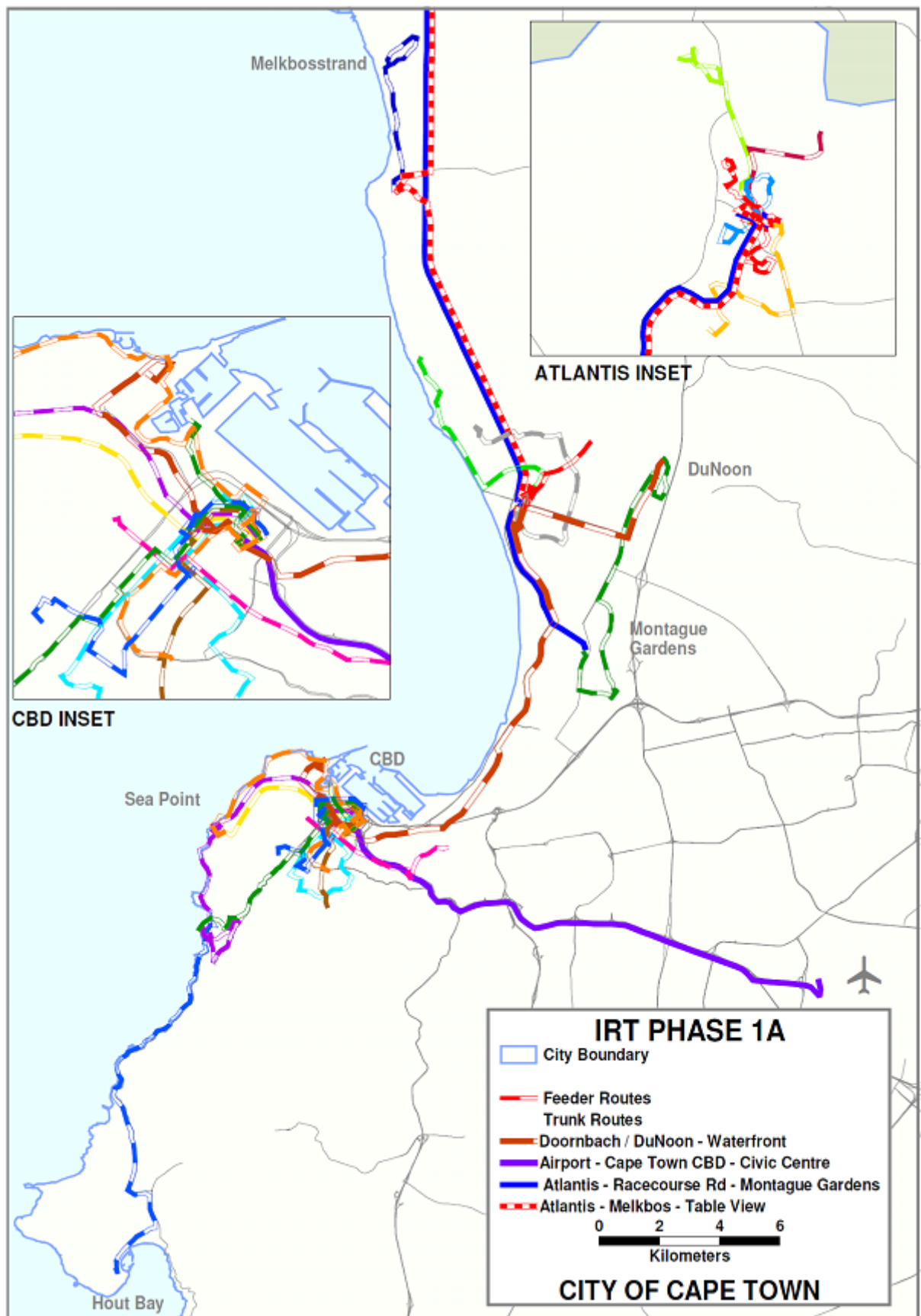


Figure 3. Map of Phase 1A, showing trunk and feeder routes

## Interim services

The system implementation was planned so that some elements would be in place in time to be used for the 2010 FIFA World Cup event. The starter service, due to begin in early 2011, represents the beginning of the roll out of the regular service. The services in the interim are shown in the following Table.

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 (only event days) MyCiTi Airport – CBD trunk service MyCiTi Inner-city loop service Some additional services were provided using hired buses
Continuation Period 1 (until Sept 2010)	MyCiTi Airport to CBD trunk service
Continuation Period 2 (Proposed from Sept to Oct 2010)	To be determined, but probably the following services: <ul style="list-style-type: none"> <li>• MyCiTi Airport to CBD trunk service</li> <li>• MyCiTi amended inner-city loop service</li> </ul>
Possible continuation Period 3 (From 1 Nov 2010 until MyCiTi Starter Service – see Milestone 0 below)	To be determined, but possibly the same as during Continuation Period 2, subject to appropriate steps in terms of the City's procurement rules.

**Table 2. Limited MyCiTi Services prior to start of IRT**



*After the successful service during the World Cup period, there will be a progressive roll out along the West Coast, around the inner city areas and then in the next 15 to 20 years in a phased manner right across Cape Town, as funding becomes available.*

## Sequencing the roll out of Phase 1A

The implementation of Phase 1A must be matched to available funding. 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:

- Airport to CBD (T02a): This is a continuation of the World Cup period service. The route will be extended from the Civic Centre Station, where it currently ends, 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.
- Bayside to CBD (T01): This new service will make use of the predominantly dedicated route along the R27.

The target date for this milestone is the end of January 2011.

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

The Inner City feeder services, excluding the closed feeder stations, can be ready for operation by October 2011. The Inner City closed feeder stations are planned for completion by April 2012.

### Milestone 2: The addition of the Table View feeder services

This milestone completes the system network between Table View and Cape Town. It provides three feeder routes (F14 – F16) in Table View to serve the R27 trunk and provide a distribution service within Table View. The target date for this milestone is November 2011.

### Milestone 3: The addition of the Du Noon, Montague Gardens and Century City feeder services and interim Montague Gardens trunk service

This milestone introduces the following feeder and trunk services:

- Du Noon via Century City to Montague Gardens feeder (F66)
- Century City to R27 feeder (F67)
- CBD to Montague Gardens trunk (T03 interim).

The target date for this milestone is December 2011.



*MyCiTi is set to transform the commuting experience for people living in suburbs along the West Coast, linking this fast-growing area to the rail system at Woodstock Station and to the city centre.*

#### Milestone 4: The addition of Atlantis and Melkbosstrand trunk and feeder services

In this milestone, the following are added:

- Atlantis to Montague Gardens trunk (T03)
- Atlantis to Table View (T04)
- Feeders in Atlantis and Melkbosstrand (F08-F13)

The target date is May 2012, with the full plan as designed implemented by October 2012.

#### Milestone 5: 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.

The target date for this milestone is September 2013.

### Number of vehicles

The number of vehicles projected for Phase 1A is as set out in Table 3. These figures are based on the latest modelling (dated 25 May 2010) and include a 5% reserve fleet.

Service	Vehicle size	Total
Feeder	8m or 12m	192
Trunk	12m	87
	18m	31
TOTAL		310

Table 3. Vehicle fleet based on Scenario 68 with reserve fleet

### Business structure and contractual relationships

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. It is envisaged that this MyCiTi Operations Management Unit will at some

*Structuring the service for different contracts will provide a wide range of economic empowerment opportunities for local companies, including the current operators of minibus taxi and bus services in the affected areas. Many jobs will be created in the process, because of the planned high level of service.*



point be shifted into an independent municipally owned company – a Municipal Entity (ME) for public transport services;

- The administration of the City of Cape Town, including, in particular, the MyCiTi Project Office. Within this office, 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;
- Vehicle operating companies (referred to as VOs);
- A fare system contractor (FS contractor);
- A control centre contractor (CC contractor); and
- 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 proposed Municipal Entity, which should in due course include the MyCiTi Operations Management Unit, 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.

Vehicle operating companies will transport passengers and be paid largely on the basis of the number of kilometres travelled, rather than on the number of passengers they carry. On trunk routes they will have no responsibility for fare collection, but will have a limited role to play on feeder routes. Responsibility for fare collection will rest with an independent fare system contractor. It will pay the collected fares over to the bank account of the Municipal Entity (or the bank account of the City until the MyCiTi Operations Management Unit is transferred), which will be responsible for paying the vehicle operators 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 will be managed by a separate station services contractor.

While the vehicle operator companies will be responsible for transporting passengers, the fare system contractor for collecting fares, and the station services contractor for running the stations, MyCiTi Operations Management Unit will be responsible for directing the scheduling and control of vehicles. However, the MyCiTi Operations Management Unit will contract a control centre contractor to set up the scheduling and controlling systems and operate them for an initial period. The overall structure of contracts is shown in the diagram, with the MyCiTi Operations Management Unit's tasks initially performed by the MyCiTi Operations Management Unit within the Project Office of the City of Cape Town.

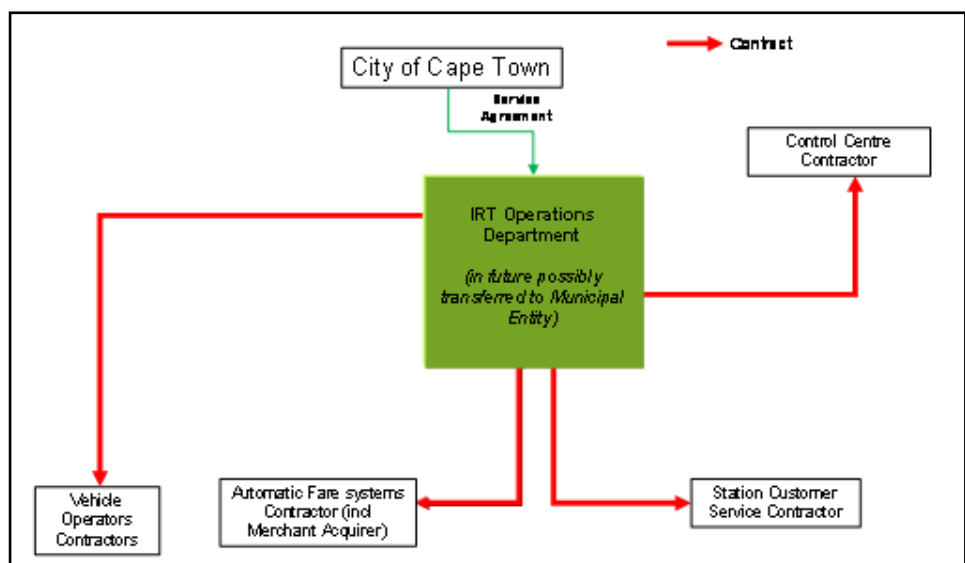


Figure 4. MyCiTi contract structure

## Financing MyCiTi

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 minibus-taxi operators for giving up their existing rights;
- 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 implementation of 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 key funding mechanism for existing operating bus subsidies is the provincially managed Public Transport Operating Grant (PTOG). 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 to cover the cost of the contracted service providers.

Initial modelling indicates that the amount currently provided through the PTOG for the whole metropolitan area 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 be provided for out of an existing provision on the rates and general income budget and by drawing on the PTISG on an interim basis.



*While the costs of implementing the MyCiTi system are high, this kind of bus-based integrated transit system is more practical to implement and more cost-effective than rail along corridors with appropriate levels of passenger demand and delivers real returns in passenger benefits on the public investment by national, provincial and local government.*

## The transition from existing to new vehicle operators

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.

Vehicle operations have been split into two vehicle operator contracts, each with a different company. Given the size and scale of the Phase 1A operations, the vehicle operations could have been provided by a single company. However, international best practice suggests that having a system with a single VO company should be avoided. Having more than one vehicle operator company would encourage competition and provide an incentive for the companies to operate more efficiently; and ensure the City has a fall-back when one company, for whatever reason, is unable to render the service.

The extent of the services contracted to each of the two companies will be based on the market share of the existing minibus-taxi associations and bus companies who will constitute the two companies. The contracts will be divided as set out in Table 4.

Contract 1: Inner City	Contract 2: Blaauwberg corridor
<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>

**Table 4. Division of services between two VO contracts**

The assignment of taxi associations and bus companies to company groups is based on whether the minibus-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 / Atlantis area (Contract B) of Phase 1A.

*Iconic public transport services like MyCiTi are an essential component of an efficient urban space that works for residents, visitors and the local economy.*

