

# TOWARDS 2020: PUBLIC TRANSPORT STRATEGY AND ACTION PLAN

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## ABSTRACT

During the course of 2006, the Department of Transport prepared a public transport strategy and action plan for submission to the Cabinet. Cabinet approved the release of the Draft Public Transport Strategy for public consultation in October 2006. The Draft Public Transport Strategy was circulated among a wide range of stakeholders and was also the subject of two days of deliberation at the Transport Indaba - hosted by the Minister of Transport in October 2006.

The strategy was followed by the development of an Action Plan, a process which involved the DoT in an engagement with 6 metropolitan cities and 6 other cities as well as the SA Rail Commuter Corporation (SARCC) - with regard to developing a Phase 1 (2007-2010) package of catalytic integrated rapid rail and road corridors. An estimated costing of these Phase 1 integrated rapid public transport networks was undertaken and was incorporated into a funding and institutional framework within the Action Plan.

Cabinet approved the Action Plan in April 2007 and the Department is currently interacting with the cities and districts to kick-start the detailed network operational planning and costing between April and September 2007 in order to create the basis for the Phase 1 implementation from 2007-2010.

The Action Plan engagement with the 12 cities to date has also aimed to integrate the 2010 Legacy components of the Public Transport Infrastructure and Systems Fund (PTIF). The cities' PTIF proposals were used as a basis for developing the Phase 1 catalytic package for the Public Transport Action Plan. However, cities were encouraged to go beyond their initial 2010 Legacy proposals – if required – in order to fully align with the Public Transport Strategy's thrust of moving to the initial stage of integrated rapid public transport networks that can retain existing users as well as serve as an alternative for car users.

The Action Plan is also integrated with the implementation aspects of the draft Rural Transport Strategy. In this regard, the current work in 3 district municipalities will be scaled up to form a strategic Phase 1 Rural public transport package and it is intended that the Action Plan will aim for strategic full-scale implementation in at least 6 rural districts over the Phase 1 and 2 period (2007-2014).

## 1. BACKGROUND

Despite the recent rapid growth in car use, public transport and walking are still the predominant “lifeline” forms of mobility for the vast majority of South Africans in order to access work, schools and services. According to the National Household Travel Survey (NHTS 2003):

- 38 million citizens live in households with NO access to a car;
- 80 per cent of adults do not have a driver’s licence;
- 14 million children walk to school, 7 million workers and learners use public transport;
- 13.7 million people used public transport at least once a week while only 7 million used a car – (see Table 1).

**Table 1: Weekly use of travel modes**

Days used	% of people that used mode in past 7 days			
	Train	Bus	Minibus-taxi	Car
Number of users	1 083 000	2 566 000	10 080 000	7 088 000

Current users are very unhappy with public transport service quality. For example, the National Household Travel Survey (2003) shows that: 71% of train users, 55% of taxi users and 54% of bus users are dissatisfied with the level of crowding on vehicles. In addition, 74% of bus users, 64% of taxi users and 53% of train users are unhappy with facilities at stops, ranks and stations.

In addition, the service offering for land-based long distance public transport is typically poor quality, informal and expensive. There is a large existing market of migrant workers, students, tourists and occasional travellers that warrants a far more formalised and improved quality of service. Table 2 (based on the National Household Travel Survey of 2003) illustrates one dimension of the demand for long distance transport.

**Table 2: Long distance holiday travel in the RSA**

Province	No. of people	No of trips per year	% using mode on last holiday trip				
			Car	Taxi	Bus	Train	Aircraft
Western Cape	562 000	1 202 000	78.7	7.3	5	2.8	5.2
Eastern Cape	496 000	817 000	28.5	40.7	23	3.6	1.7
Northern Cape	104 000	164 000	59.1	17.8	2.6	16.9	0.2
Free State	323 000	718 000	43.3	37.7	9.4	5.5	1.7
KwaZulu-Natal	424 000	827 000	43.3	40.4	8.8	2.2	5.1
North West	331 000	646 000	40.2	38.5	13.5	4.5	1.8
Gauteng	887 000	1 657 000	55.9	22.5	13.1	3.1	5.3
Mpumalanga	396 000	886 000	39.8	47.6	10.5	1.6	0.4
Limpopo	554 000	1 012 000	22.6	44.4	30.1	0.4	0.1
<b>RSA</b>	<b>4 077 000</b>	<b>7 929 000</b>	<b>46.1</b>	<b>32.3</b>	<b>14.3</b>	<b>3.2</b>	<b>3.0</b>

50% of the holiday travellers or over 2 million people used public transport on their last holiday trip and over 500 000 migrant workers used long distance public transport to travel home once a month. 95% of migrant workers use public transport, mostly taxis.

The information below illustrates the extent of public transport use by migrants:

- 2.1 million RSA workers regard 'home' as another place to the one where they live & work more than 4 nights/week;
- 865 000 of them used public transport to visit 'home' in the previous month (i.e. do so monthly);
- 501 000 of these travelled to another district to go 'home' (long-distance migrant travellers);
- thus there are over 6 million annual long distance trips made by migrants

Long distance public transport has been relatively neglected in the past decade. In order to address this important transport sector and to establish some of the service capacity required for the 2010 World Cup - will require a dedicated commitment and prioritisation focus from all Departments of Transport including National, provincial and municipal levels.

The Public Transport Action Plan aims to address the problems in local and long distance public transport through implementing a Phase 1 (2007-2010) Catalytic Integrated Rapid Public Transport Network Project in up to 12 cities and 6 districts that addresses the need for high quality services that can retain current users and attract new users.

## **2. VISION OF THE PUBLIC TRANSPORT ACTION PLAN (2007-2020)**

### 2.1 Integrated Rapid Public Transport Service Networks

Integrated rapid public transport service networks are the mobility wave of the future and are the only viable option that can ensure sustainable, equitable and uncongested mobility in liveable cities and districts.

The expected peaking of global oil production within the next decade will mark the end of the cheap fossil fuel era. This, together with the increasing pressures for drastic cuts in climate change emissions – means that the mass motorisation of the South African population will not be possible, and neither is it desirable, nor equitable.

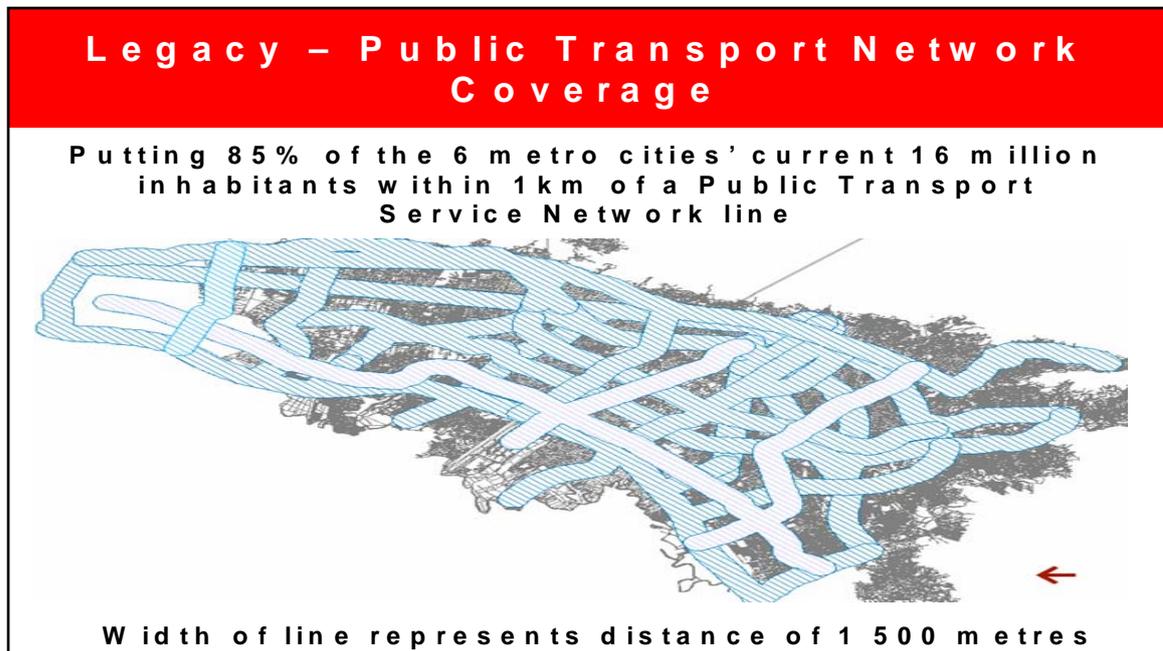
This does not mean, however, that the 70% of households without access to a car today are relegated to third class travel options. Integrated Rapid Public Transport Service Networks in the larger cities, as well as adapted versions for smaller cities and rural districts will be able to provide a mobility solution that is attractive to all – both current public transport users, as well as current car users.

### 2.2 Phasing in a lasting legacy

The legacy the Public Transport Strategy and Action Plan aim to achieve is the phased but accelerated implementation of Integrated Rapid Public Transport Service Networks (IRPTSN) in metropolitan cities, smaller cities and rural districts. This phased implementation of IPRTNs will aim to have operating systems in place in 12 cities and at least 6 rural districts by 2014.

The longer-term vision until 2020 is to develop a system that places over **85 percent of a metropolitan city's population within 1km of an Integrated Rapid Public Transport Network trunk (road and rail) or feeder (road) corridor.**

A further goal for the metropolitan cities by 2020 is to achieve a mode shift of 20 per cent of car work trips to public transport networks. In 2003 there were 1.85m workers in metropolitan cities who used a car to work. Assuming a doubling of this to 3.7m in 2020 would mean attracting 750 000 (20%) of these workers to public transport networks.



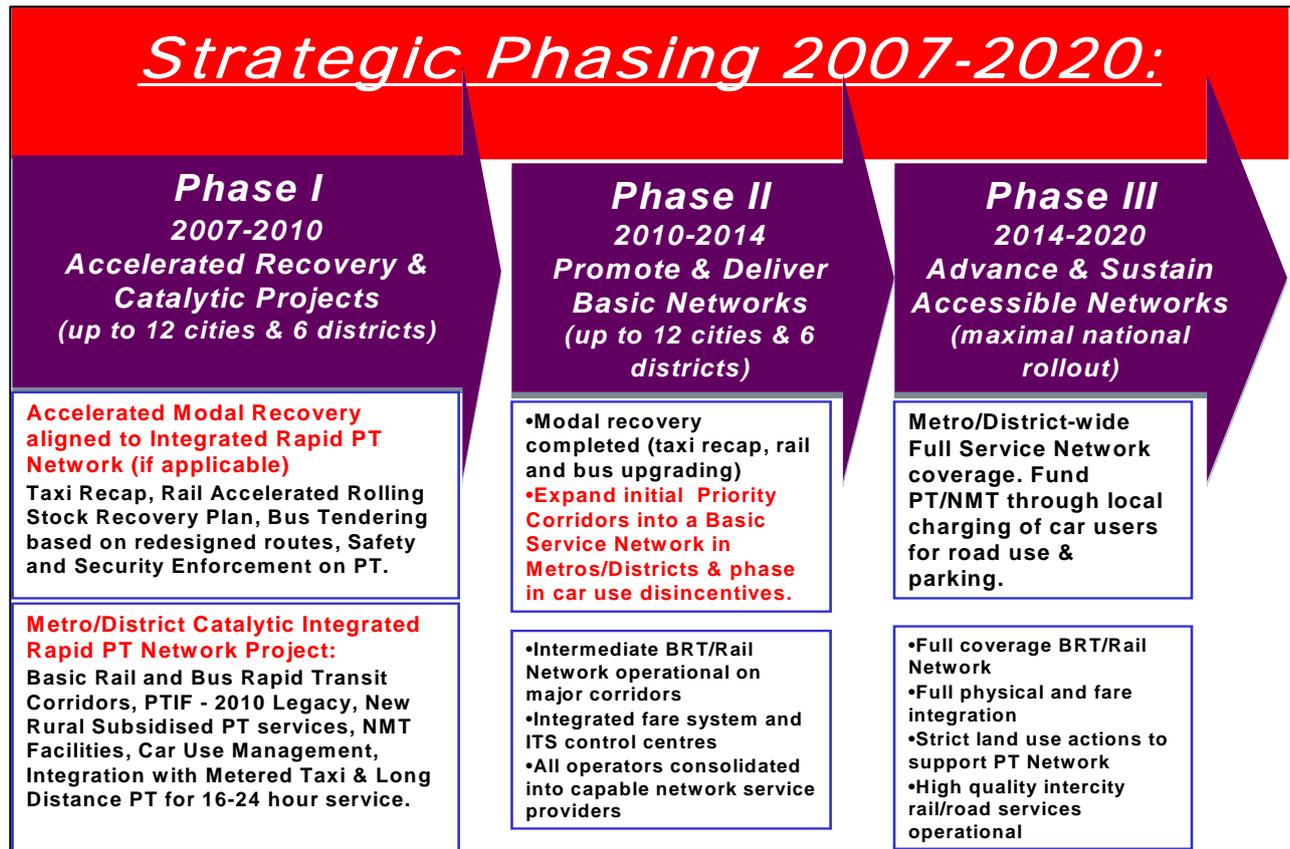
By 2014 Phase 1 and 2 network implementation needs to be in place in the 6 metropolitan cities and at least Phase 1 implementation completed in the 6 smaller cities and 6 rural districts. This will cover 18 of the 53 metropolitan cities and districts in South Africa and will provide a rich implementation experience before embarking on a larger, nation-wide rollout from 2014 onwards.

### 2.3 Phased Strategy 2007-2010-2014-2020

To translate the vision into an Action Plan the strategy proposes 3 Phases:

- Accelerated Recovery and Catalytic Projects (2007-2010)
- Promote and Deliver Basic Networks (2010-2014)
- Advance and Sustain Accessible Networks (2014-2020)

The figure below summarises the 3 phases.



## 2.4 Overarching Strategic Approach:

The 3 phases are guided by a firm commitment to the following principles:

- A phased implementation of a SINGLE, user-responsive, publicly planned and controlled system, that integrates routes into a multi-modal mass rapid public transport network, and provides maximum accessibility and coverage in a city or district for ALL citizens, both in the townships and suburbs as well as rural districts.
- This integrated network will provide extended hours of operation (16-24 hours a day) and will strive for maximum accessibility for users with special needs – especially on the high volume rail and road corridors and related stop/station infrastructure. The economic development opportunities that will be created by extended hours of operation must be fully recognised and taken advantage of by other sectors such as business and specifically the retail sector. More importantly meeting the needs of all shift workers in the retail, entertainment, health, education, construction, security and hospitality sectors through the provision of 16-24 hours service, public transport will have unprecedented improvements on workers conditions and unlock economic growth potential including job creation.
- This action plan makes an explicit commitment to further the empowerment of workers, women, users, people with special needs, historically disadvantaged people and small business. In line with the Economic Cluster priorities, this will ensure much required intervention in the second economy and reduce transport cost for the majority of workers. More importantly this action plan will ensure maximum empowerment of public transport workers and operators through the massive network expansion and economic development opportunities this will present. This will be done through: improving working conditions and providing ongoing training as well as maximising the

opportunities for entities that are women-owned, black-owned, special needs-owned and also small business.

### **3. PHASE 1 (2007-2010) IRPTN INTERVENTIONS IN UP TO 12 CITIES (INCLUDING THE NINE 2010 HOST CITIES) AND 6 DISTRICTS**

The Public Transport Action Plan is a high-level plan that supplements the Public Transport Strategy. It maps out the Phase 1 (2007-2010) fast track implementation programme over the next four years that targets the initial development of high quality, Integrated Rapid Public Transport Networks (IRPTNs) in 12 cities. In addition, it also proposes a Public Transport Network Package for 6 rural Districts.

The essential feature of the Public Transport Strategy (2007-2020) is the phased extension of mode-based vehicle recapitalisation into IRPTNs. These networks comprise an integrated package of Rapid Rail and Bus Rapid Transit (BRT) priority corridors – especially in major cities.

The key focus of the Action Plan is on initiating implementation in a speedy and highly visible manner with maximum impact. Successful implementation over the Phase 1 and 2 periods (2007-2014) in 18 of South Africa's total of 53 Metropolitan and District Municipalities will see the improvement in public transport services for potentially over half the country's population. This is an ambitious programme for the overhaul of public transport and will require a concerted effort by the three spheres of Government and all other stakeholders

The goal of the "Catalytic Projects" is to initiate implementation of IRPTNs in targeted municipalities, simultaneously with, the current nationwide rollout of "Accelerated Modal Recovery" interventions. The latter involves the 3-7 year modal transformation plans such as the Taxi Recapitalisation Plan, Passenger Rail Plan and the Commuter Bus Transformation Plan.

Both the "Catalytic Projects" and the "Accelerated Modal Recovery" processes from 2007-2014 are intended to create the platform for a nationwide rollout of fully accessible Networks in cities and districts from 2014 onwards. The 6 metropolitan cities and the 6 secondary cities that are targeted for Catalytic Integrated Rapid Public Transport Network projects include all 9 of the 2010 World Cup venue cities. In this regard, the venue cities have based their Phase 1 Network concepts on maximising alignment with 2010 Legacy proposals that have been submitted to the DoT's Public Transport Infrastructure and Systems Fund (PTIF).

The Action Plan proposes that Network implementation comprise a standard basic package that can be adapted for local city and district conditions. In general, especially for the larger cities, this will require city-wide controlled network of rapid public transport corridors together with a fine grained feeder system of smaller buses, taxis, bicycles, pedestrian access as well as metered taxis and park and ride facilities.

This Network will prioritise public transport, walking and cycling over private car travel and will dedicate road space to these priority modes. The figure below highlights the core components of the Network package as well as the critical implementation building blocks viz. a Network Implementation Plan, Transport Authority control over the Network and Maximum inclusion of existing operators in the Network.

## Strategic Approach 2007-2020:

**Vision: From Basic Commuter operations... To Accelerated Modal Upgrading & Integrated Rapid Public Transport Networks!**

- 85% of all residents within 1km of Rapid PT Network by 2020
  - Upgraded modal fleet, facilities, stops & stations
    - Extended hours of operation (16-24hrs)
- Peak frequencies (5-10min) - Off peak frequencies (10-30min)
  - Full special needs and wheelchair access
- Safe and secure operations monitored by Control Centre
  - Electronic fare integration when making transfers
- Integrated feeder services including walking/cycling and taxi networks
- Integration with metered taxi services and long distance intercity services
- Car competitive PT option - enables strict peak period car use management

### Critical Implementation Building Blocks

• *Integrated Rapid Public Transport Network Implementation Plan*

• *Municipal control over Integrated Network*

• *Maximum stake for existing bus/minibus sector in Rapid PT Network operations*

The overarching service vision of the 2007 to 2020 Strategy is to implement a continuous upgrading from the current basic commuter service to an upgraded modal service and then an integrated rapid public transport network. This network will strive for maximum accessibility with a target of 85 per cent of a city's residents within 1km of the network (either a road or rail trunk corridor or a road or non-motorised transport feeder service to a trunk corridor).

In addition, this service will have high frequencies of  $\pm 5$  minutes in the peak along trunk corridors and, as mentioned previously, 16-24 hour operations. Full special needs and wheelchair access for ALL trunk corridor rail and road vehicles will be implemented. This will allow for specialised feeder services to the trunk corridors for special needs users in "on-demand" services.

The network will integrate with metered taxis and long distance public transport to provide maximum coverage and interconnection. Integrated fare structures will be implemented through a common electronic fare system on all modes on the network – including payment for park and ride facilities, bicycle parking etc.

#### **4. INSTITUTIONAL FRAMEWORK TO ENSURE SUSTAINABLE IMPLEMENTATION**

Achieving the ambitious goal of Integrated Networks is going to require an institutional framework that facilitates implementation. In this regard the Action Plan proposes the phased establishment of transport authorities that are able to plan, manage and regulate a Network in which the transport authority is responsible for the fare revenue and operators are contracted to provide particular services in terms of the Network Plan. The Provinces will play a coordinating role in regard to planning and to ensure core capacity is available for transport authorities. There should be a programme for capacity building and phased devolution of funding to ensure that transport authorities have the capability and the resources to implement IRPTNs as envisaged in this Action Plan. In the implementation the need to establish multidisciplinary Intergovernmental Task Teams will be crucial in order to fast track and minimise bureaucratic bottlenecks and facilitate speedy decision making.

## 5. SUMMARY OF ACTION PLAN

### 5.1 Accelerated Recovery and Catalytic Projects actions below need to be completed by 2010:

#### 5.1.1 Planning Actions

- Detailed design of Phase 1 integrated rapid public transport corridors. Includes BRT, Rapid Rail and Non-Motorised network, infrastructure, facilities and service rollout, by September 2007
- Plan fully accessible corridors for users with special needs, guidelines and specifications for accessible taxis, buses and trains by June 2007
- Completion of network design to include current bus and taxi services in an area and commence implementation of gross cost contracts with municipal control of fare income by January 2008
- Development of criteria for transport node designation and finalisation of standards and guidelines for Public Transport facilities including taxi and intermodal facilities by September 2007
- Include requirement for public transport facilities in Airports Company (ACSA) capital programme for airport development to cater for user on low cost airlines by September 2008
- Plan and implement high occupancy car lanes and ride-sharing promotion in metro cities to commence September 2007
- Plan and pilot Public Transport Intelligent Transport Systems (ITS) including electronic fare collection system that is controlled by public sector in partnership with operators by June 2008
- Plan periodic contracted public transport service in rural districts by March 2008
- Plan and implement Non motorised and public space network by December 2008 and expand the rollout of the Shova Kalula bicycle initiative and the campaign for safer cycling and walking conditions
- Improve interdepartmental coordination with regard to housing, land use and transport and fast track the identification of priority local transport corridors and the related location of medium density land use in support of transport corridors by March 2008
- Finalise policy for Learner Transport in conjunction with the Department of Education, provinces and municipalities to ensure maximum accessibility of learners through the public transport network by July 2007.

#### 5.1.2 Operational Improvement Actions

Commence implementation of BRT systems - procurement of infrastructure design of operating contracts and ITS and electronic fare system by January 2008

- Commencement of implementation of Public Transport ITS and fare collection system by March 2008 and control centre by June 2008
- Acquisition of articulated buses to operate on BRT systems by April 2009
- Implementation of infrastructure - including median bus lanes, median stations, depots and terminals by March 2008
- Completion of construction, delivery of vehicles, ITS and fare equipment and set up of control centre by March 2009. Commencement of operations (including full accessibility for special needs users) by May 2009
- IRPTN service information, maps, timetables and marketing improvements to commence in October 2007
- Accelerated rollout of fleet upgrading on all modes – Taxi Recapitalisation – 75000 vehicles scrapped by 2009/10. Rail rolling stock upgrading – 2000 coaches refurbished by 2009/10. Bus contracting 30 % of current of 7500 fleet to be fully compliant with

contracting specifications for average fleet age (including contracted taxis) by 2010. Also, Phase 1 BRT systems in cities to include new specification for all bus vehicles on trunk corridors;

- All new minibus taxis, buses as well as upgraded rail coaches to be fully accessible for special needs users from January 2008 for buses and January 2008 for minibus taxis.
  - Local engagement with operators and labour on their maximum participation in the Phase 1 Network projects - includes incentives and support as well as negotiations with taxi operators and bus operators to participate in gross based contracts - to be finalised March 2008
  - Extended measures to improve service, hours of operations to 16 - 24 hours and improved working conditions from May 2008
  - Award negotiated gross based operating contracts to taxi industry and bus operators by June 2008, this will incorporate learner transport contracts
  - Criteria for nodes and guidelines for Public Transport facilities to be adopted as minimum standard by all spheres of government
  - Roll-out rural contracted public transport services by July 2008;
  - Fast track roll out of the Shova Kalula initiative: 1 million bicycles in partnership with stakeholders by 2010
  - Implement safer cycling and walking routes, particularly around schools and residential areas - to commence in September 2007 six months after the International Non-motorised Transport Conference
  - Limit car use in the peak period in major urban congested corridors from September 2007 in line with the high occupancy vehicle lanes implementation Ensure initial 10% of total public transport fleet to be fully accessible for users with special needs through all newly implemented BRT and Rapid Rail to be fully wheelchair accessible from April 2009.
- #### 5.1.3 Capacity Enhancement Actions
- Build local transport capacity for planning, monitoring, regulation and network management - support municipalities to develop strategic integrated network plans (including 2010 operational plans, travel demand management plans, and electronic fare collection plans) in conjunction with the TETA, Transport Centres of Development and other Institutions of Higher Learning - to commence in July 2007 Enhance capacity for Operating Licence processing (both commuter, scholar, tourist, metered taxi and charter services) and Cross Border permit processing and the related alignment with transport planning - to commence in July 2007
  - Support and training for existing minibus/small bus operators and drivers in order to enhance their participation in the Phase 1 network - to commence in July 2007
  - Enhance law enforcement, inspection, investigation and prosecution capacity and campaigns across all road-based modes (detailed action plan tied to the R2.2bn allocated for minibus recapitalisation regulation and enforcement) to commence in July 2007.

## 5.2 Promote & Deliver Basic Networks (2010-2014)

The strategic thrust of this action agenda is to incrementally enhance and expand the passenger transport system. It is the action plan for the medium term:

### 5.2.1 Planning Actions

- Finalise full network planning and roll out Phase 2 gross cost contracts which include small bus and taxi operators.

- 5.2.2 Capacity Enhancement Actions
- Consolidate operators (including minibus) into capable entities and provide business planning support to ensure they are able to provide high quality services under contract
- Full establishment of municipal network planning and management entity that has the necessary operational expertise to monitor operators in terms of performance contracts.
- 5.2.3 *Operational Improvement Actions*
- Fully upgrade Phase 2 integrated rapid public transport corridors – in all six metropolitan cities as well as in other cities and districts. To cover at least the top 50 mass corridors (Rapid Rail/BRT) in the country
- Roll out Public Transport Intelligent Transport Systems nationally
- Implement Travel Demand Management and car use reduction measures in all metropolitan areas – including roadspace reallocation measures to prioritise public transport
- Implement an IRPTN-supportive land use system in the 12 cities
- All 12 cities and 6 districts to mainstream high quality pedestrian and cycling facilities, infrastructure, public space and bicycle transport promotion – including at least 100km of high quality cycle and pedestrian paths in each area
- Completion of taxi recapitalisation and rail rolling stock refurbishment programme. BRT Phase 2 rollout in the metropolitan cities to ensure full replacement of bus fleet
- Roll out targeted public transport subsidies - that are linked to integrated rapid public transport networks
- Full implementation of periodic public transport service networks in 6 districts
- Phase 2 IRTPN corridors to be fully accessible for users with special needs.

### 5.3 Advance & Sustain Accessible Networks (2014-2020)

The strategic thrust is to significantly expand and transform public transport through large scale implementation. It is an agenda for action for the long-term.

#### 5.3.1 *Planning Actions*

- Promote and coordinate employer-based car trip reduction programmes, park and ride facilities, ride sharing, public sector employee ridesharing, etc.

#### 5.3.2 *Capacity Enhancement Actions*

- Ensure ongoing investment in innovative local public sector capabilities to plan, manage, promote, regulate, enforce, and monitor contracts, etc.

#### 5.3.3 *Operational Improvement Actions*

- Implement fully interconnected integrated mass rapid public transport networks in all major urban centres
- Phase 3 non motorised networks to cover majority of city/district neighbourhoods
- All cities to implement aggressive car use and parking restriction measures to promote switching to public transport and non motorised transport – includes pricing measures
- All public transport facilities, vehicles and infrastructure to comprise Rapid Rail and BRT quality and include scheduled maintenance
- Medium density, mixed income land use developments at major IRPTN nodes
- Promote free minimum basic mobility for all citizens regardless of ability to pay – a lifeline IRPTN mobility allowance using smartcard technology
- Phase 3 Rural Public Transport Services to expand to all 13 ISRDP districts and to include combined rural passenger and freight transport services; and
- All IRPTNS to be offer universal access for special needs users in Phase 3.

## 6. CONCLUSION

The Action Plan aims to create a bridge to enable the movement from Strategy to rapid Implementation. It does so in a manner that focuses on the implementation of IRPTNs in up to 12 cities as well as 6 districts. An initial assessment shows that 7 of the 12 cities have commenced with concept planning that is roughly aligned with the objective of Phase 1 IRPTNs. In addition, useful pre-implementation planning has commenced in at least the 3 districts that have been targeted as part of the Rural Transport Strategy piloting initiative.

The key challenge in 2007 is to ensure detailed implementation planning is finalised in all 18 areas – and is aligned with the Action Plan goals. This is going to require a serious effort and investment in capacity and resources among the three spheres of Government. Nevertheless, whilst ambitious this is achievable.

## 7. REFERENCES

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- [3] Matete M. Long distance travel in the RSA. Seminar on the National Household Travel Survey; TRC Africa Consortium, Pretoria, 2006