

SECTOR PLAN 7: TRANSPORTATION

Introduction

The new Transportation Department will continue to deliver services in terms of the approved 2003/08 Integrated Transport Plan (ITP), which was approved by Council, the Gauteng MEC for Public Transport, Roads & Works, and the Minister of Transport. This was updated in 2004, and the 2007 update is currently in preparation, which will set the foundation for service delivery for 2007 - 2011.

In the institutional refinement undertaken at the start of the new five-year term, Council established the new Transportation Department, and this Department, together with the Johannesburg Roads Agency (JRA) and Metrobus, form the "Transportation Cluster", with the Transportation Department providing a contract management function on behalf of the City over the JRA and Metrobus.

Apart from the normal scale of activities and projects that need to be carried out in the Transportation Department, the following represent unique challenges and opportunities in the Transportation sector during the new five-year term, namely:

Challenges

- Traffic signal outages
- Increasing car ownership and traffic congestion
- The implementation of the Rea Vaya Bus Rapid Transit (BRT) System
- The implementation of Gautrain
- Projects being implemented in preparation for 2010
- Taxi recapitalisation
- Fragmented taxi industry
- Taxi rank management and funding
- Road maintenance funding
- Stormwater infrastructure upgrading
- Ageing Metrobus fleet
- Petroleum energy shortages
- Lack of customer focus
- Regulator and operator (Metrobus).

Opportunities

- First and only approved ITP in South Africa
- The implementation of the Rea Vaya Bus Rapid Transit (BRT) System
- The implementation of Gautrain
- Projects being implemented in preparation for 2010
- Taxi Recapitalisation
- National Commuter Rail Plan
- Gauteng Intergovernmental Transport Charter.

The New Transportation Department

The structure of the new Department is based upon the functions which are required to be undertaken, both legislatively as well as in terms of providing the foundation for the possible move towards a Transport Authority. The portfolio of legislation, from which the Transportation Department draws its mandate, is huge, wide-ranging and extremely complex, and it consists of the following National and Provincial legislation:

A. The Constitution (No 108 of 1996)

B. National Transport Legislation

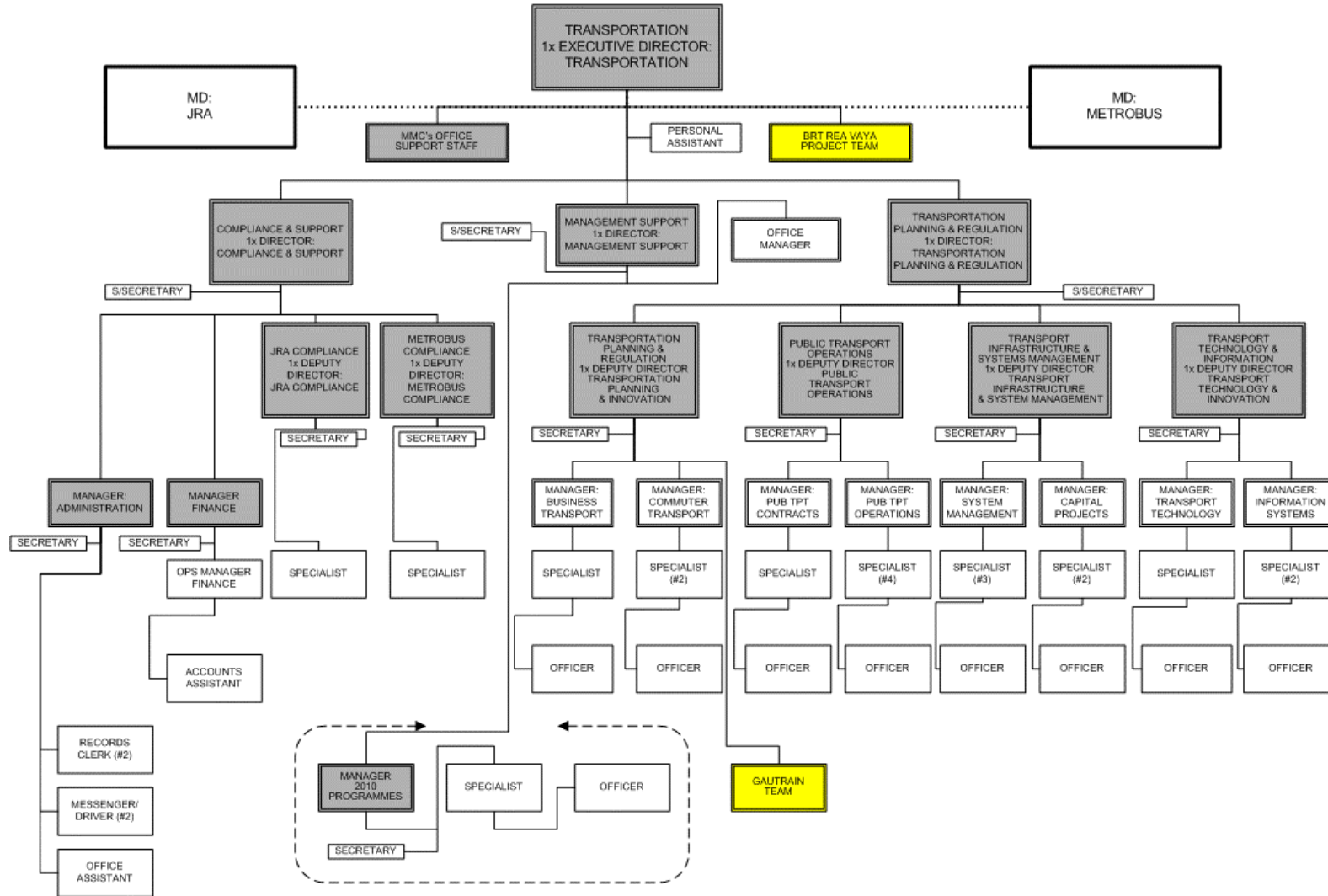
- National Land Transport Transition Act (No 22 of 2000) (NLTTA)
- Urban Transport Act (No 78 of 1977)
- SA National Roads Agency Ltd & National Roads Act (No 7 of 1998)
- National Road Traffic Act (No 93 of 1996)
- Road Traffic Management Corporation Act (No 20 of 1999)
- Administrative Adjudication of Road Traffic Offences Act (No 46 of 1998)
- Transport Appeal Tribunal Act (No 39 of 1998)
- Cross Border Road Transport Act (No 4 of 1998)
- Road Accident Fund Act (No 56 of 1996)
- National Roads Act (No 54 of 1971).

C. Gauteng Provincial Transport Legislation

- Gauteng Public Passenger Road Transport Act (No 7 of 2001)
- Gauteng Transport Infrastructure Act (No 8 of 2001)
- Gauteng Transport Framework Revision Act (No 8 of 2002)
- Gauteng Provincial Road Traffic Act (No 10 of 1997)
- Gauteng Rationalisation of Local Government Affairs Act (No 10 of 1998)
- Urban Transport Act – devolved to Gauteng from National in 1995.

The approved new structure is shown in Figure 1, and progress to date is the appointment of the new Executive Director: Transportation and the new Director: Transportation Planning and Regulation. Currently, the Department is busy filling the rest of the positions, starting with the remaining Directors, Deputy Directors, and Assistant Directors, as indicated on the structure. It is envisaged that the rest of the positions will be filled by the end of the 2006/07 financial year.

FIGURE 1: TRANSPORTATION DEPARTMENT STRUCTURE



In addition, the Department has had two new teams added onto the structure, viz the Gautrain and Rea Vaya BRT Teams. These two teams will mainly be funded from external funding sources, and it is envisaged that they will be capacitated by the end of the 2006/07 financial year.

Five-Year Perspective

Vision

The vision for the Transportation sector for the next five years is:

“A city with a safe and efficient transportation system, with a public transport focus, and a well-developed and well-maintained roads and stormwater infrastructure, able to connect businesses, people and places in a sustainable and cost-effective manner, thereby enhancing the standard of living and quality of life for all inhabitants, as well as the overall competitiveness and growth of the local economy.”

Goals and Interventions

In order to achieve the above, seven long-term goals have been developed, within which a number of long-term interventions have been proposed. These goals are:

- A community of road and public transport users who are aware of, and committed to, a core set of values;
- Improved access for residents to employment, education, recreation and markets, through strategic transport infrastructures and operations well aligned with the City’s Spatial Development Framework;
- Development and maintenance of a world-class road, traffic-signaling and stormwater infrastructure network across the city;
- Improved safety, affordability, convenience and comfort on all transport infrastructure and services;
- Greater user preference for more environmentally sustainable public transport and non-motorised transport choices;
- A restructured transportation industry, enabling customer empowerment, continuous innovation, appropriate competition and greater market access for SMMEs and black-owned enterprises; and
- A world-class freight-transport and logistics infrastructure to position Johannesburg as a ‘gateway city’ in relation to national and international markets.

Programmes

Within each goal and intervention, five-year programmes have been developed, together with a one-year delivery agenda. These are described in detail on the Transportation Sector Plan, attached.

It is also important to note that there has been a significant change of direction in the Transportation sector plan, and this is the move from the Strategic Public Transport Network to the new Rea Vaya Bus Rapid Transit (BRT) system, which was approved by Council in November 2006.

Rea Vaya is a major intervention that will require significant resources from the Transportation Department, the JRA and Metrobus, during the financial year and beyond to 2010.

Key Capital Projects

The following key capital projects are scheduled for implementation in the 2007/08 financial year, providing that the requested funding is awarded:

Rea Vaya BRT system

Rea Vaya infrastructure consists of a total of 94 kilometres of trunk corridors encompassing a total routing length of approximately 148 kilometres. The estimated capital costs are approximately R2bn, and seven routes have been selected in order to give the customer maximum flexibility with a minimum of cumbersome transfers. The seven Rea Vaya routes are:

- NASREC – Newtown – Ellis Park
- Dobsonville – CBD - Troyeville
- Lenasia – Highgate - Sunninghill
- Randburg – CBD
- Alexandra – CBD - Regina Mundi
- Braamfontein – CBD
- CBD circle route.

Phase 1 of the Rea Vaya BRT system is targeted for completion by April 2009.

International Transit & Shopping Centre (ITSC)

Development of an International Transit & Shopping Centre in Joubert Park, with the objective of providing a world-class, long- distance and international public transport terminal and shopping centre, modeled on an international airport terminal. An amount of R50m has been requested for this project in the 2007/08 financial year.

Phase 5 of the Baragwanath Taxi Rank

Phase 5 is the final phase of the Baragwanath Taxi Rank, comprising upgrades to the pedestrian bridge to and from the Chris Hani Baragwanath Hospital, CCTV cameras, lighting and finishes. An amount of R10m has been requested for this project in the 2007/08 financial year.

Phase 2 of COSMO City Taxi Rank

This phase is the final of the COSMO City Taxi Rank, and an amount of R10m has been requested for this project in the 2007/08 financial year.

N17 Road Link

The implementation of the N17 road link is being taken over by the SA National Roads Agency (SANRAL), and provision has been made to work with SANRAL on the implementation of the sections intersecting with city roads i.e. NASREC road, Canada Road and the Soweto Highway. An amount of R14m has been requested for this project in the 2007/08 financial year.

One-Year Perspective (2007/08)

Below is a list of the individual programmes that will be undertaken in the 2007/08 financial year, depending on the funding that is be awarded. The details are contained in the Transportation Sector Plan, attached.

- Travel Values

- Transportation Information & Awareness
- Brt Rea Vaya Infrastructure
- Brt Rea Vaya Operations
- Metrobus-Specific Programme
- Intergovernmental Transport Affairs
- Gautrain Support
- 2010 Soccer World Cup
- Gravel Roads Surfacing Programme
- Roads Infrastructure Development Programme
- Roads Infrastructure Maintenance & Upgrading Programme
- Traffic Signal Upgrade & Maintenance Programme
- Road Signage Upgrading Programme
- Road Network Conditions Detection, Information Programme & Intelligent Traffic System (ITS)
- Storm Water Development & Management Programme
- Transportation Safety Programme
- Transportation Access Improvement Programme
- Travel Demand Management Programme
- Sustainable Transport Programme
- Infrastructure Resource Conservation Programme
- Industry Normalisation & Restructuring
- Freight & Logistics Programme

Sector Plan 7: Transportation

FIVE-YEAR STRATEGIC OBJECTIVES	FIVE-YEAR IDP PROGRAMMES AND KEY PROGRAMME ACHIEVEMENTS	2007/08 DELIVERY AGENDA
<p>Reduced incidents of violent behaviour on roads.</p> <p>Reduced incidents of vandalism in facilities on busses, etc.</p>	<ul style="list-style-type: none"> - Travel-values Programme: - Initiate a major outreach programme to elicit community views on transportation priorities in the city; - Run an ongoing community education and communication campaign to encourage pride in, and care of, the transport system and facilities; - To counter a lack of compliance, speeding, road-rage and general aggressive behaviour on the road, run an ongoing road-user education and communication campaign; - Through vigorous enforcement, supported by information and education provision, discourage behaviour that creates safety risks and/or affects the quality of daily travel experiences (illegal advertising along roads, illegal trading at intersections), etc. 	<ul style="list-style-type: none"> - Travel-values Programme: - Continue with an outreach programme to elicit community views on transportation priorities in the city to update ITP; - Continue with a programme to inculcate travel values into Transportation cluster, the community and operators; - Initiate an ongoing road-user education and communication campaign to counter poor and aggressive behaviour on the road; and - Initiate vigorous enforcement, supported by information and education.

FIVE-YEAR STRATEGIC OBJECTIVES	FIVE-YEAR IDP PROGRAMMES AND KEY PROGRAMME ACHIEVEMENTS	2007/08 DELIVERY AGENDA
<p>Improved awareness in communities of Johannesburg's transport history, evolving transport system, and how best to use facilities and infrastructure.</p>	<p>Transport Information and Awareness Programme:</p> <ul style="list-style-type: none"> - Through various modes of communication (radio, sms, etc.), offer daily 'traffic tips' to public transport commuters and road-users; - In conjunction with Province and National, hold an annual public 'Transport Month', with educational displays at libraries, recreation centres, schools, etc.; - Introduce a mobile education unit and mascot to roll-out a 'rules of the road' education programme targeting children and youth at schools, libraries, etc. - Commission a study of the role of transport in the struggle and reclaim this history through displays at community centres, an oral history project, community murals, etc.; and - Through partners, introduce 'entertainment measures' that improve awareness and adherence to values, such as a sci-bono-type transport museum. 	<ul style="list-style-type: none"> - Transport Information and Awareness Programme: - Continue with daily 'traffic tips' (radio, sms, etc.). - Continue with October "Transport Month" programme, together with Province & National. - Implement a mobile education unit and mascot to roll-out a "rules of the road". - Initiate a study of the role of transport in the struggle.

FIVE-YEAR STRATEGIC OBJECTIVES	FIVE-YEAR IDP PROGRAMMES AND KEY PROGRAMME ACHIEVEMENTS	2007/08 DELIVERY AGENDA
<p>Phase 1 of Rea Vaya BRT implemented.</p> <p>Reduced average public transport travel times on selected BRT routes as measured by a five-yearly survey, or improvement on a mobility index to be finalised.</p>	<p>Bus Rapid Transit – Rea Vaya Infrastructure Programme*</p> <ul style="list-style-type: none"> – In line with the approved plans, upgrade public transport infrastructure along the Phase 1 BRT-Rea Vaya routes; – Upgrade traffic signal infrastructure along the Phase 1 BRT network; develop and implement a telecommunication backbone along the BRT routes; and implement signal priority for public transport vehicles at signalised intersections along the BRT network; – Implement a sustainable development application process; – Implement a sustainable transport funding strategy; – Implement a sustainable Security Access Restrictions (SARS) policy; – Develop and upgrade public transport lay-bys and shelters throughout the city on SPTN routes other than on the BRT network; and – Work with the DPTR&W to develop and agree on a future primary road network (classes 1, 2 and 3 including PWV roads). 	<ul style="list-style-type: none"> – Bus Rapid Transit – Rea Vaya Infrastructure Programme: – Continue with implementation of Rea Vaya public transport infrastructure priorities. – Continue to improve development applications turnaround rate; and – Commence implementation of CI 29 of NLTTA into additional development contributions. – Continue to re-process Security Access Restrictions (SARS) applications and participate in policy review.

FIVE-YEAR STRATEGIC OBJECTIVES	FIVE-YEAR IDP PROGRAMMES AND KEY PROGRAMME ACHIEVEMENTS	2007/08 DELIVERY AGENDA
<p>Reduced average public transport travel times on selected BRT routes as measured by a five-yearly survey, or improvement on a mobility index,</p> <p>Improved satisfaction on the CoJ annual customer satisfaction survey, from x% to y%.</p>	<p>Bus Rapid Transit – Rea Vaya Operations Programme:</p> <ul style="list-style-type: none"> – Implement the Phase 1 BRT public transport operations to ensure all-day, frequent and cost-effective transport services; – Develop and implement an integrated centralised control facility that monitors and controls network operations along the BRT network; – Stimulate appropriate competition for services on BRT routes to drive innovation and improved services; – Support the implementation of the National Commuter Rail Plan; – Provide public transport maps, timetables and usage information; – Implement an integrated fares and ticketing system; – Inter alia through a binding MOU with the City’s Metropolitan Trading Company, ensure effective management of the City’s public transport facilities; and – Together with JMPD, develop a public transport law enforcement strategy to ensure the success of BRT. 	<p>Bus Rapid Transit – Rea Vaya Operations Programme:</p> <ul style="list-style-type: none"> – Develop a public transport operational plan for Rea Vaya. – Engage with operators with respect to the Rea Vaya business model. – Develop integrated fares and ticketing for Rea Vaya; – Together with MTC, ensure effective management of the City’s public transport facilities; and – Together with JMPD, implement a public transport enforcement strategy.

FIVE-YEAR STRATEGIC OBJECTIVES	FIVE-YEAR IDP PROGRAMMES AND KEY PROGRAMME ACHIEVEMENTS	2007/08 DELIVERY AGENDA
<p>Improved level of service to Metrobus users from “X” to “Y”.</p>	<p>Metrobus-Specific Programme:</p> <ul style="list-style-type: none"> - Partner with the City in the implementation of Phase 1 BRT; - Implement improved route scheduling, fleet management, cost management and fare collection systems; - Implement improved research on passenger needs and communications; - Refurbish premises to improve safety and security; - Introduce improved HR practices such as staff training, employee wellness programmes and driver incentives; and - Reduce the average age of the fleet to < seven years by 2010; and - Ensure full regulatory compliance. 	<p>Metrobus-Specific Programme:</p> <ul style="list-style-type: none"> - Metrobus will explore its role in BRT and partner with the City to be ready for the implementation of Phase 1 BRT; - The implementation of improved route scheduling, fleet management and cost management and fare collection systems are all programmes which Metrobus has already committed itself to; - Continue with the Customer Services Index (CSI) annually. The CSI index was completed in December 2006, with positive feedback being received; and - Metrobus to relocate its Head Office premises to the JRA Building in July 2007; - Improved HR practices have been introduced and are on-going. - Reduction of average age of fleet is ongoing – deadline 2010; and - Ensuring full regulatory compliance is ongoing.

FIVE-YEAR STRATEGIC OBJECTIVES	FIVE-YEAR IDP PROGRAMMES AND KEY PROGRAMME ACHIEVEMENTS	2007/08 DELIVERY AGENDA
<p>Agreement and implementation of approved option for a Transport Authority.</p>	<p>Intergovernmental Transport Planning and Management Programme:</p> <ul style="list-style-type: none"> - Implement the Gauteng Intergovernmental Transport Charter, together with the DPTR&W and other Gauteng municipalities; and - Finalise investigations and negotiations around Transport Authority options, and work with partners to implement key components. 	<p>Intergovernmental Transport Planning and Management Programme:</p> <ul style="list-style-type: none"> - Implement Gauteng Intergovernmental Transport Charter, together with the DPTR&W and other Gauteng municipalities; and - Finalise investigations and negotiations around Transport Authority options, and work with partners to implement key components.

FIVE-YEAR STRATEGIC OBJECTIVES	FIVE-YEAR IDP PROGRAMMES AND KEY PROGRAMME ACHIEVEMENTS	2007/08 DELIVERY AGENDA
<p>Gautrain infrastructure and services well-integrated with other transport modes and services.</p>	<p>Gautrain Support Programme:</p> <ul style="list-style-type: none"> - Assist with the implementation of Gautrain as it relates to the City's competencies; - Facilitate the effective working of the temporary road closures at stations, including monitoring the impact on network mobility as a result of the Gautrain construction. At all five relevant stations, work with the DPTR&W to achieve optimum modal integration; integration of 'feeder & distribution systems'; and road and intersection upgrading; and - Manage the pavement condition of all maintenance and rehabilitation deviations, mass-haul routes and detours. 	<p>Gautrain Support Programme:</p> <ul style="list-style-type: none"> - Continue to assist with the implementation of Gautrain in the City. - Continue to assist with the effective working of the temporary road closures at stations and with modal integration, and integration of 'feeder & distribution systems'. - Manage pavement conditions of all deviations and mass haulage routes.

FIVE-YEAR STRATEGIC OBJECTIVES	FIVE-YEAR IDP PROGRAMMES AND KEY PROGRAMME ACHIEVEMENTS	2007/08 DELIVERY AGENDA
<p>All bid-book commitments in respect of transport services and times delivered in terms of the approved high-level 2010 Transport Plan.</p> <p>World Cup 2010 transport infrastructure and services designed so as to ensure lasting value for the city.</p>	<p>World Cup 2010 Transportation Programme:</p> <ul style="list-style-type: none"> - Implement the ITSC in conjunction with the DPTR&W, Gautrain, SARCC, NDoT and CBRTA; - Implement the N17 as it relates to 2010 access to Nasrec; - Implement the 2010 Transport Plans for Ellis Park, Nasrec and the eight identified training venues; and - Implement a new, innovative model for metered taxi services in time for the World Cup. 	<p>World Cup 2010 Transportation Programme:</p> <ul style="list-style-type: none"> - Begin implementation of International Transit & Shopping Centre (ITSC); - Continue implementation of N17 road link in conjunction with SANRAL; - Finalise and begin testing 2010 Transport Plans for Ellis Park, Soccer City and the eight identified training venues; and - Begin implementation of a new, innovative model for metered taxi services.

FIVE-YEAR STRATEGIC OBJECTIVES	FIVE-YEAR IDP PROGRAMMES AND KEY PROGRAMME ACHIEVEMENTS	2007/08 DELIVERY AGENDA
<p>x kilometres of remaining gravel roads surfaced.</p> <p>% of roads in the city's residential areas remaining un-surfaced reduced to x%.</p>	<p>Citywide Gravel Roads Surfacing Programme:</p> <ul style="list-style-type: none"> - Update and verify database of service backlogs and prioritise the backlogs to be eradicated over the five years. - Implement gravel roads surfacing, systematically area by area, focusing on areas such as Bram Fisherville, Diepsloot, Rabie Ridge, Kaalfontein, Doornkop, Drieziek, Ivory Park, Orange Farm, and Vlakfontein. - Working with the City's Housing Department, institute procedures and guidelines to streamline the co-ordination and rollout of new housing developments and associated infrastructure, to ensure that all new housing developments are constructed with surfaced roads, so that no new housing development adds to the backlog. 	<p>Citywide Gravel Roads Surfacing Programme:</p> <ul style="list-style-type: none"> - Focus will be on: - Ivory Park - Orange Farm - Diepsloot - Doornkoop. - Implement gravel roads surfacing, systematically area by area, focusing on Diepsloot, Doornkop, Ivory Park and Orange Farm, four old TPA townships totalling +/-60km at R120m; - Continue to implement Soweto footways, kerbs and cycling paths, including June 16 trail; and - Youth and other developments, including EPWP learnerships at R15m. - Working with the City's Housing Department, institute procedures and guidelines to streamline the co-ordination and rollout of new housing developments.

FIVE-YEAR STRATEGIC OBJECTIVES	FIVE-YEAR IDP PROGRAMMES AND KEY PROGRAMME ACHIEVEMENTS	2007/08 DELIVERY AGENDA
x kilometres of lane constructed	<ul style="list-style-type: none"> - Roads Infrastructure Development Programme: - Develop and implement the Capital Asset Strategy; and - As required, implement the planned construction and upgrade of new roads. 	<p>Roads Infrastructure Development Programme:</p> <ul style="list-style-type: none"> - Develop and implement the Capital Asset Strategy; - Koma Road Phase 4 to be completed at R15m; - K43 at R40m, 153 families to be relocated by the Housing Department; and - Crownwood Road and bridge completion at R60m.

FIVE-YEAR STRATEGIC OBJECTIVES	FIVE-YEAR IDP PROGRAMMES AND KEY PROGRAMME ACHIEVEMENTS	2007/08 DELIVERY AGENDA
<p>Improvement in the visual condition index from “x” to “y”.</p>	<p>Road Infrastructure Maintenance and Upgrading programme:</p> <ul style="list-style-type: none"> – Implement a rapid preventative maintenance programme; – Allocate sufficient funding to resurface / rehabilitate road networks on an ongoing basis to improve the visual condition index from “x” to “y”; – Undertake targeted upgrading of roads and intersections within the ring road to relieve congestion; – Undertake geometric upgrade of intersections to reduce the backlog in intersections currently operating at capacity; – Rehabilitate / refurbish bridges, culverts, guardrails and motorway joints on an ongoing basis; – Undertake proactive, routine and reactive maintenance on footways, medians and verges; and – Continue to improve road maintenance systems and processes to ensure maximum cost-efficiency and responsiveness. 	<p>Road Infrastructure Maintenance and Upgrading Programme:</p> <ul style="list-style-type: none"> – Implement a rapid preventative maintenance programme; – Allocate sufficient funding to resurface / rehabilitate road networks on an ongoing basis to improve the visual condition index from 71 to 75; – Undertake targeted upgrading of roads and intersections within the ring road to relieve congestion; – Undertake geometric upgrade of intersections to reduce the backlog in intersections currently operating at capacity; – Rehabilitate / refurbish bridges, culverts, guardrails and motorway joints on an ongoing basis; – Undertake proactive, routine and reactive maintenance on footways, medians and verges; and – Continue to improve road maintenance systems and processes to ensure maximum cost-efficiency and responsiveness.

FIVE-YEAR STRATEGIC OBJECTIVES	FIVE-YEAR IDP PROGRAMMES AND KEY PROGRAMME ACHIEVEMENTS	2007/08 DELIVERY AGENDA
<p>Reduction in traffic signal outages to less than 1% of all signals out on any given day.</p>	<p>Traffic Signal Upgrade and Maintenance Programme:</p> <ul style="list-style-type: none"> - Install new traffic signals at intersections that warrant signal control; - Implement a traffic signal upgrade programme to replace old infrastructure, including controllers, lamps, cables, signal heads, etc., in order to ensure that all signalised intersections comply with the legal requirements as set out in the SARTSM; - Improve the existing systematic traffic signal maintenance programme in order to ensure best practice in preventive maintenance; - Together with JMPD, introduce a system to speedily man faulty signalised intersections during peak traffic; - To improve reaction times to faulty traffic signals, expand and upgrade the existing remote-controlled UTC system throughout the city, improve the communication network to controllers, and implement an automatic fault logging system; - Revise signal phasings at major intersections to ensure optimum control at intersections and to reduce delays; - Introduce adaptive control at warranted intersections; and - Implement emergency 	<p>Traffic Signal Upgrade and Maintenance Programme:</p> <ul style="list-style-type: none"> - Total number of intersections is 1887; - Implement a traffic signal upgrade programme to replace old infrastructure, including controllers, lamps, cables, and signal heads; - 600 intersections were upgraded in the last financial year; - 150 more to be completed in current financial year; - 400 upgrades will be completed in 07/08 @ R28m; - Improve the existing systematic traffic signal maintenance programme (visit each intersection twice monthly); - Points-men training ongoing; - Together with JMPD, introduce a system to speedily man faulty signalised intersections during peak traffic; - To improve reaction times to faulty traffic signals, and expand and upgrade the existing remote-monitoring UTC system throughout the city; - Revise signal phasing at major intersections; - Introduce adaptive control at warranted intersections; - Implement emergency backup power supply at key intersection; and - Implement LED signal heads to improve safety and energy consumption.

FIVE-YEAR STRATEGIC OBJECTIVES	FIVE-YEAR IDP PROGRAMMES AND KEY PROGRAMME ACHIEVEMENTS	2007/08 DELIVERY AGENDA
<p>% major intersections provided with adequate road signs.</p> <p>x kilometres of thermoplastic lane markings provided.</p>	<p>Road Signage Upgrade Programme:</p> <ul style="list-style-type: none"> - Upgrade / maintain route markers, tourism signs, directional signs and regulatory/warning signs to ensure compliance with SARTSM; and - Upgrade / maintain street name signs at intersections. - Provide and maintain all road markings. 	<p>Road Signage Upgrade Programme:</p> <ul style="list-style-type: none"> - Upgrade / maintain route markers, tourism signs, directional signs and regulatory/warning signs to ensure compliance with SARTSM; - Implement street name signs on all CoJ roads by 2010. For 07/08, the priority will be in Doornkop, Braamfischerville, Ivory Park, Orange Farm, Lehae and Diepsloot; and - Provide and maintain all road markings in all Regions.
<p>% reduced delay to all general road users as a result of incidents on the road.</p>	<p>Road Network Conditions Detection and Information Programme:</p> <ul style="list-style-type: none"> - Develop and implement a real-time service disruption detection programme that will provide road users with pre-trip and in-trip information; and - Introduce variable message signs on major freeways and BRT routes, including public transport stops to inform motorists of expected travel conditions. 	<p>Road Network Conditions Detection and Information Programme:</p> <ul style="list-style-type: none"> - Develop and implement a real-time service disruption detection programme that will provide road users with pre-trip and in-trip information; - Introduce variable message signs on major freeways and BRT routes, including public transport stops to inform motorists of expected travel conditions; and - Implement a traffic incident response control room at JMPD head quarters (Martindale) with a back up system at JRA.

FIVE-YEAR STRATEGIC OBJECTIVES	FIVE-YEAR IDP PROGRAMMES AND KEY PROGRAMME ACHIEVEMENTS	2007/08 DELIVERY AGENDA
<p>Improved stormwater infrastructure and management systems across Johannesburg.</p>	<p>Stormwater Development and Management Programme:</p> <ul style="list-style-type: none"> - Assess the status of all of the city's major and minor stormwater catchment areas; by the end of 2006/07. - Develop a comprehensive Stormwater Development and Management System / Plan linked to a clear catchment management policy developed jointly with the City's Environment and Infrastructure Departments; - In line with the System / Plan, implement a citywide stormwater capital programme covering catchment infrastructure, emergency projects and network upgrading; - Rehabilitate all Level 4 and Level 5 stormwater channels by 2007/08; - Undertake ongoing systematic monitoring and evaluation of the impact of stormwater discharge on water courses; - Address pollution of storm water channels; and - Implement required safety improvement measures on all open stormwater channels. 	<p>Stormwater Development and Management Programme:</p> <ul style="list-style-type: none"> - Assess the status of all of the city's major and minor stormwater catchment areas by the end of 2006/07; - Develop a comprehensive Stormwater Development and Management System / Plan linked to a clear catchment management policy developed jointly with the City's Environment and Infrastructure Departments; - In line with the System / Plan, implement a citywide stormwater capital programme covering catchment infrastructure, emergency projects and network upgrading. This covers ten projects, including culvert rehabilitations, erosion projection, and emergency stormwater repairs following their safety inspections. An Integrated Stormwater Management Plan (ISWMP) has been developed and is being implemented in accordance with it's required outputs; - Rehabilitate all Level 4 and Level 5 stormwater channels by 2007/08, covering fifteen projects which include structural repairs to culverts and erosion protection crowded areas; - Undertake ongoing systematic monitoring and evaluation of the impact of stormwater discharge on water courses; - Address pollution of storm water channels; and - Implement required safety improvement measures on all open stormwater channels.

FIVE-YEAR STRATEGIC OBJECTIVES	FIVE-YEAR IDP PROGRAMMES AND KEY PROGRAMME ACHIEVEMENTS	2007/08 DELIVERY AGENDA
<p>Reduced incidents of crime on public transport and in facilities.</p> <p>Reduced number of traffic accidents.</p> <p>Improved roadworthiness of public and private vehicles.</p> <p>Reduced number of public safety incidents arising from poor quality transport infrastructure maintained by the City.</p> <p>Reduced safety incidents at river crossings.</p>	<p>Transportation Safety Programme:</p> <ul style="list-style-type: none"> - Assemble and analyse annual transportation safety statistics and undertake an annual traffic safety audit. - Implement engineering, education and enforcement interventions in the Inner City and Soweto. - Update and refine the Transportation Safety plan on an annual basis. 	<p>Transportation Safety Programme:</p> <ul style="list-style-type: none"> - Continue to assemble and analyse transportation safety statistics, undertake a traffic safety audit, and engage with councillors to identify interventions; - Continue to develop and refine a comprehensive Transportation Safety Plan in the Inner City and Soweto covering engineering, enforcement and education (as part of the City Safety Strategy); and - Continue to implement the Transportation Safety Plan.
<p>% of households spending more than 10% of their monthly income on travel reduced to x.</p>	<p>Affordability Improvement Programme:</p> <ul style="list-style-type: none"> - Together with the GDPTR&W, review the transport subsidy system in general and implement revisions (covering both Metrobus and Provincially-subsidised services). 	<p>Affordability Improvement Programme:</p> <ul style="list-style-type: none"> - Guided by BRT implementation and the Province Roadmap on bus contracts restructure subsidies.

FIVE-YEAR STRATEGIC OBJECTIVES	FIVE-YEAR IDP PROGRAMMES AND KEY PROGRAMME ACHIEVEMENTS	2007/08 DELIVERY AGENDA
<p>Increased use by PWDs of the public transport system.</p> <p>Improved accessibility to private and public transport in marginalised areas.</p>	<p>Transportation Access Improvement Programme:</p> <ul style="list-style-type: none"> - Prioritise implementation of PWD features and operations on Soweto to CBD BRT corridor, and extend to other areas as appropriate; and - Targeted provision of access infrastructure in areas of extreme poverty (e.g. pedestrian bridges, walkways or fencing over or alongside freeways and railway lines). 	<p>Transportation Access Improvement Programme:</p> <ul style="list-style-type: none"> - Continue to implement accessible features and operations on Soweto to CBD SPTN corridor, and extend to other areas as appropriate; and - Continue to implement pedestrian bridges, walkways or fencing over or alongside freeways and railway lines (as appropriate) in areas of extreme poverty, in consultation with councillors.

FIVE-YEAR STRATEGIC OBJECTIVES	FIVE-YEAR IDP PROGRAMMES AND KEY PROGRAMME ACHIEVEMENTS	2007/08 DELIVERY AGENDA
<p>Improved modal split between commuter public vs private transport (47/53 to x?).</p> <p>Increased % of commuters participating in Travel Demand Management (TDM) programmes from x to y</p> <p>Improved off-street and on-street parking provision, pricing and management</p>	<p>Travel Demand Management Programme:</p> <ul style="list-style-type: none"> - Introduce sustainable Travel Demand Management – including VWH, ride sharing, Telecommuting and a Ride-smart desk, as well as HOV lanes; - Introduce ITS as and where appropriate, including CCTV on the BRT network, and a network monitoring system whereby network utilisation and performance (such as journey times) are recorded on a regular basis; - Implement a revised parking policy; - Implement a sustainable traffic calming policy; and - Together with SANRAL and the GDPTR&W, investigate congestion pricing and tolling options to reduce private transport travel demand. 	<p>Travel Demand Management Programme:</p> <ul style="list-style-type: none"> - Continue to implement Travel Demand Management, including Variable Working Hours and a Ride-sharing and Ride-smart desk; - Begin implementation of the new parking policy; - Implement a sustainable traffic calming policy; and - Work with SANRAL and Province to investigate and implement congestion pricing options to reduce private transport travel demand.

FIVE-YEAR STRATEGIC OBJECTIVES	FIVE-YEAR IDP PROGRAMMES AND KEY PROGRAMME ACHIEVEMENTS	2007/08 DELIVERY AGENDA
<p>Improved % of residents who could otherwise access motorised transport, walking or cycling to work, shops and schools.</p> <p>Exhaust emission levels reduced from “x” to “y”.</p>	<p>Sustainable Transport Programme (Transportation component):</p> <ul style="list-style-type: none"> – Promote non-motorised transport by supporting targeted cycle lanes, as well as sidewalks, street lights and safe pedestrian crossings throughout the city; – Together with Environment and JMPD, implement a targeted vehicle emission control and enforcement system. 	<p>Sustainable Transport Programme (Transportation component):</p> <ul style="list-style-type: none"> – Implement targeted cycle lanes, as well as sidewalks, street lights and safe pedestrian crossings in Diepsloot and Orange Farm; – Investigate cycling integration with Rea Vaya, including bicycle taxis.
<p>A record of proactive adoption of appropriate cleaner production technologies and/or initiatives.</p>	<p>Transport Infrastructure Resource Conservation Programme:</p> <ul style="list-style-type: none"> – Reduce waste products and air emission levels at the City’s asphalt plant. – Continue the roll-out of energy efficient lighting at all city depots, and at signalised intersections; and – Continue the roll-out of long- lasting thermoplastic paint on all major arterials on an ongoing basis. 	<p>Transport Infrastructure Resource Conservation Programme:</p> <ul style="list-style-type: none"> – Reduce waste products and air emission levels at the City’s asphalt plant; – Continue the roll-out of energy- efficient lighting at all city depots, and at signalised intersections; and – Continue the roll-out of long- lasting thermoplastic paint on all major arterials on an ongoing basis.
<p>Diversification in ownership of transport operations to BEE players.</p> <p>Significant progress in implementation of taxi</p>	<p>Industry Normalisation and Restructuring Programme:</p> <ul style="list-style-type: none"> – Work with Gauteng Provincial Government to restructure the Provincially-subsidised bus contracts (RATPLAN); 	<p>Industry normalisation and restructuring programme</p> <ul style="list-style-type: none"> – Facilitate taxi industry training in support of Rea Vaya; – Complete the development of a sustainable taxi industry business model in support

FIVE-YEAR STRATEGIC OBJECTIVES	FIVE-YEAR IDP PROGRAMMES AND KEY PROGRAMME ACHIEVEMENTS	2007/08 DELIVERY AGENDA
<p>recapitalisation.</p> <p>Improved satisfaction of public transport commuters as measured either through the City's customer satisfaction survey or a dedicated five-yearly survey.</p>	<ul style="list-style-type: none"> - As part of the industry-restructuring programme, pilot negotiated and tendered contract models as part of BRT; - Normalise the taxi industry in Johannesburg by, inter alia, getting the entire industry to agree to work together with the City; - Develop a sustainable taxi industry business model as part of BRT; - Support taxi recapitalisation via rank upgrading and permit to operating licence conversions; - Implement the Operating Licence Strategy (OLS), including a sustainable Operating Licence application process; - Implement the Cab Licence strategy. - Legalise all ranks/holding areas/stops via the newly established designation process; and - Empower customers through provision of information and establishment of feedback mechanisms, as well as consumer protection initiatives. 	<p>of Rea Vaya;</p> <ul style="list-style-type: none"> - Assist Province and National with the rollout of taxi recapitalisation and conversions; - Continue to implement the Cab Licence strategy; and - Continue with the legalisation of all ranks/holding areas/stops.
<p>Shift in freight transport modal split from road to rail to x ratio.</p>	<p>Freight and Logistics Infrastructure Programme:</p> <ul style="list-style-type: none"> - Introduce a transport 	<p>Freight and Logistics Infrastructure Programme:</p> <ul style="list-style-type: none"> - Work with Province and

FIVE-YEAR STRATEGIC OBJECTIVES	FIVE-YEAR IDP PROGRAMMES AND KEY PROGRAMME ACHIEVEMENTS	2007/08 DELIVERY AGENDA
	<p>and logistics support office;</p> <ul style="list-style-type: none"> - With other stakeholders, begin the upgrade of City Deep to become a world-class freight and logistics hub; - Introduce prioritised freight routes/corridors and regulatory frameworks to manage routing of HAZMAT and abnormal loads; and - Work with JMPD and JRA to proactively manage overloading. 	<p>National to facilitate the upgrading of City Deep to become a world-class freight and logistics hub;</p> <ul style="list-style-type: none"> - Together with EMS, implement prioritised freight routes/corridors and regulatory frameworks to manage routing of HAZMAT and abnormal loads; and - Together with JMPD and JRA, implement an overloading control strategy.