Strategic Integrated Transport Plan Framework
We are very pleased to present the Strategic Integrated Transport Plan Framework for discussion to you today.

It pulls together much of the work that the Transport Department has been doing over the last ten years as well as setting out what we want to do going forward.

Transport legislation requires municipalities to develop a Comprehensive Integrated Transport Plan every five years.

We did have a CITP from 2003 – 2008 which in fact has served us for 10 years.

Going forward we have developed a new approach along following lines:

- Together will constitute the Comprehensive Integrated Transport Plan.
The purpose of this document is to:

- Give an overview of the status quo of transport and evaluate our progress over the last ten years
- Detail nine strategic thrusts to achieve our transport vision and goals
- Propose a ‘transport footprint’ with the proposed corridors, some of which would become ‘corridors of freedom’ for transit orientated development

We are inviting you to give your comments and inputs before it is presented to Mayoral Committee for approval by mid-year.

It will then guide the development of:

- Long term Integrated Transport Network
- Detailed strategies, operational and business plans
- Detailed corridor or nodal plans
- A ten year fundable transport infrastructure development plan

The final version of this document will include high level standards for infrastructure and services and we would like to hear your views on what these should be.
How the document will unfold

- Status quo and evaluation of last ten years
  - This will not be detailed but a guide to what the document contains
- Vision, mission and goals including the links to the GDS and National Development Plan
- Nine strategic thrusts in terms of the
  - Outcomes and outputs
  - Strategies or deliverables
  - Indicators – how the results of the work we will do can be measured
- For you to consider and give comment on
  - A proposal on the transport footprint /corridors of freedom
  - Standards for transport infrastructure and services
Status quo and evaluation of last ten years
Strategic ITP Framework
What the document covers

- What is the state of:
  - Rail (PRASA rail and Gautrain)
  - Bus (Rea Vaya BRT, Metrobus, other subsidised contracts)
  - Mini bus taxi industry
  - Metered taxis
  - Non motorised transport (cycling and walking)
  - Vehicle population (occupancy, age, fuel type etc)
  - Road and storm water network

- Travel behaviour, characteristics and attitudes (from Gauteng Global City Region Observatory)

Some of info will still be updated when the Transport Information Register and Household Survey is completed.
# Evaluation of the last ten years

<table>
<thead>
<tr>
<th>What</th>
<th>Comment</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strategic Public Transport Network</td>
<td>Not implemented as planned.</td>
<td>😞</td>
</tr>
<tr>
<td>Rea Vaya Phase 1A and 1B</td>
<td>Successful flagship and catalytic project in respect of provision of safe, affordable and reliable public transport and also in respect of the economic empowerment of the affected taxi operators. Initial timeframes needed to be reviewed due to complexity of project</td>
<td>☑️</td>
</tr>
<tr>
<td>Gautrain</td>
<td>Expensive project but significant TOD impacts and high levels of customer satisfaction. High patronage figures on train.</td>
<td>☑️</td>
</tr>
<tr>
<td>Using transport corridors to restructure the City</td>
<td>Influenced growth management strategy. Limited success in changing apartheid spatial form to date</td>
<td>😞</td>
</tr>
<tr>
<td>Upgrade of heavy rail corridors</td>
<td>New planning. Limited implementation. Declining service</td>
<td>😞</td>
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</tbody>
</table>
## Evaluation of the last ten years

<table>
<thead>
<tr>
<th>What</th>
<th>Comment</th>
<th>Evaluation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation of operating license strategy with focus on mini bus taxis</td>
<td>While COJ did lot of preparatory work, this projects was not successfully concluded and to this day many taxis are not properly regulated.</td>
<td>😞</td>
</tr>
<tr>
<td>New public transport facilities</td>
<td>Significant upgrading and new facilities but big backlog and difficult to maintain</td>
<td>😞</td>
</tr>
<tr>
<td>Road network infrastructure</td>
<td>New Road Network Hierarchy in place but little implementation of new roads projects due to funding constraints</td>
<td>😞</td>
</tr>
<tr>
<td>Gauteng Freeway Improvement Project and e-tolling</td>
<td>Freeway system improved but tolling not implemented and City concerns remain</td>
<td>😞</td>
</tr>
</tbody>
</table>

Many new initiatives and projects also emerged over ten years including:
- Transport values
- Compete Streets
- Holistic and partnership focus on road safety

which have been incorporated into this Strategic Framework.
Vision, mission and goals

Strategic ITP Framework
Vision and Mission

VISION

“A people-centred transport system that is transformed.”

MISSION

“Our mission is to implement in a co-responsible and innovative way transport infrastructure and systems to improve the quality of life for present and future generations of residents of Joburg and which will contribute to the City’s goals of:

- Nation building and social cohesion;
- Poverty alleviation, job creation, local manufacture and economic growth; and
- Human development and environmental sustainability.”
Goals

- Building a leading, responsive and activist transportation sector in the City which works in partnership with stakeholders and residents;
- Planning, policies and co-ordination for integrated and sustainable transport;
- Promoting public transport, walking and cycling as modes of choice in Joburg;
- Building co-responsibility and a value-based culture to enable behavioural change towards transport issues;
- Providing high quality, safe, accessible, affordable and environmentally friendly public transport services;
- Building, maintaining and managing our road infrastructure and systems to ensure safety, accessibility and mobility for all road users including pedestrians;
- Transforming the construction, maintenance and management of storm water to respond to climate change and water scarcity and ensure the safety of residents and infrastructure; and
- Building, maintaining and managing public transport and non-motorised transport infrastructure to support walking, cycling and the use of public transport.”
In respect of transport the GDS says:

- “Make public transport, walking and cycling the mode of choice for all Joburg residents. This is to be achieved firstly by reducing congestion and high transport costs through the provision of quality public transport services including Rea Vaya, Metrobus and improving public transport infrastructure and transfer points;

- Improve mobility and accessibility to enhance economic growth and development; and

- Provide quality transport infrastructure including roads which can serve all road users including public transport users, pedestrians, old and young.”
The NDP vision for transport is:

- “By 2030, investments in the transport sector will ensure that it serves as a key driver in empowering South African and its people, enabling:
  - Improved access to economic opportunities, social spaces and services by bridging geographic distances affordably, reliably and safely.
  - Economic development, by supporting the movement of goods from points of production to where they are consumed, facilitating regional and international trade.
  - Greater mobility of people and goods through transport alternatives that support minimised environmental harm.

- It also that “Leading up to 2030, transport authorities will be challenged to translate the vision for getting South Africa to work in effective transport. Providing sustainable transport services that are efficient and inclusive is inextricably linked to the need for spatial change in South Africa’s cities and related transport corridors. Users will adjust to pricing that is supported by greater transparency, with full costs associated with each service, including costs linked to environmental impact.”
Strategic thrusts
Proposed strategic thrusts

1: Restructure and integrate the city
2: Improve and expand provision of quality public transport and use of non-motorised transport
3: Maintain, improve, extend and integrate transport infrastructure
4: Support economic growth through improving freight mobility
5: Manage congestion, travel demand and parking
6: Actively engage citizenry in improving the transport system
7: Transform the transport sector and encourage new, efficient and profitable transport enterprises and employment creation
8: Plan and regulate the transport system
9: Resource and finance the transport plan
1. Restructure and Integrate the City outputs, outcomes and indicators

<table>
<thead>
<tr>
<th>OUTPUTS</th>
<th>OUTPUT INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan and implement BRT trunk or complementary routes or public transport priority routes for conventional buses and minibus-taxis in the main TOD corridors</td>
<td>• Number of kms of BRT trunk or complementary routes or public transport priority routes implemented</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OUTCOMES</th>
<th>OUTCOME INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>An efficient, city-wide public transport system located predominantly along high-density mixed land use corridors</td>
<td>• Amount of additional retail, office and residential land value within a 500m strip on both sides of Rea Vaya trunk routes and within 500m radius of Gautrain and PRASA stations</td>
</tr>
</tbody>
</table>
| Lower unit cost of public transport service provision through improved transport efficiencies | • Average daily passenger boardings per bus  
• Average daily passenger boardings per bus kilometre |
1. Restructure and integrate the City: Strategies

The City will:
- Identify and map the whole network of public transport, freight, walking and cycling corridors and nodes and identify the most appropriate mode, routes and services that will be contracted or licensed to operate in each corridor.
- Implement over time identified public transport corridors with the next five year focus on the Rea Vaya 1B and 1C corridors.
- Develop integrated transport hubs and improve the surrounding public environment, in particular the pedestrian and cycling environment.
- Incentivise spatial restructuring including through the way in which public transport fares are structured.

SSHUP proposed corridors
2. Improve and expand provision of quality public transport and use of non-motorised transport
### 2. Improve and expand provision of quality public transport and use of non-motorised transport: Outcomes

<table>
<thead>
<tr>
<th>OUTCOMES</th>
<th>OUTCOME INDICATORS</th>
</tr>
</thead>
</table>
| High-quality, safe, accessible, affordable and environmentally friendly public transport services | • Average public transport travel time for journey to work  
• Rates of public transport crashes, injuries and fatalities  
• Average frequency of contracted services (peak and off-peak)  
• Percentage of HH spending >10% of income on transport  
• Per capita emissions of greenhouse gases from transport  
• Per capita emissions of air pollutants from transport |
| The majority of trips are made using public transport, walking and cycling. | • Percentage share of journeys by modes of walking, cycling, public transport and private car |
| Public transport passengers are satisfied with public transport services and other aspects of the transport system in general | • Public transport system and transport system satisfaction ratings |
## 2. Improve and expand provision of quality public transport and use of non-motorised transport: Outputs

<table>
<thead>
<tr>
<th>OUTPUTS (by 2018)</th>
<th>OUTPUT INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated passenger information at all public transport facilities and cycling and walking route information</td>
<td>• Percentage of public transport ranks, stations and shelters displaying integrated passenger information</td>
</tr>
<tr>
<td>Increase availability of bicycles</td>
<td>• Number of sponsored and donated bicycles provided to learners and low-income users</td>
</tr>
<tr>
<td>Integrate fare medium of Gautrain, Metrobus and Rea Vaya on the basis of EMV-based smartcards</td>
<td>• Number of EMV smartcards in active use</td>
</tr>
<tr>
<td>Increase amount of road-based transport provided in terms of scheduled and performance contracts</td>
<td>• Number of public transport vehicles under contracts managed by the Scheduled Services Management Agency (SSMA)</td>
</tr>
<tr>
<td>Rea Vaya Phase 1B and Phase 1C to be in operation</td>
<td>• Rea Vaya Phase 1B and 1C in operation</td>
</tr>
<tr>
<td>All scheduled conventional bus services are converted to gross cost contracts managed by the Scheduled Services Management Agency (SSMA)</td>
<td>• Percentage and number of all scheduled conventional buses under contractual management of SSMA</td>
</tr>
<tr>
<td>Re-fleet Metrobus with buses using greener fuel sources</td>
<td>• Average age of Metrobus fleet</td>
</tr>
<tr>
<td></td>
<td>• Number of Metrobus vehicles using alternative green fuels</td>
</tr>
<tr>
<td>Assist the minibus-taxi industry to refleet including to greener vehicles</td>
<td>• Average age of minibus-taxi fleet in Johannesburg</td>
</tr>
<tr>
<td></td>
<td>• Number of recapitalised minibus taxis that have switched to greener propulsion systems</td>
</tr>
<tr>
<td>Establish or enable park and ride sites</td>
<td>• Number of park and ride sites in daily operation</td>
</tr>
<tr>
<td></td>
<td>• Number of parking bays at operational park and ride sites</td>
</tr>
<tr>
<td>New public transport vehicles and infrastructure universally designed</td>
<td>• Accessibility audits for new public transport vehicle and infrastructure</td>
</tr>
</tbody>
</table>
The next step in the ITP process is to develop an Integrated Transport Network Plan to determine:

- the best mode for the routes
- the public transport, NMT and freight routes the City will be investing in;
- A 10-year sequenced plan indicating funding requirements.

Such a plan will be guided by:

- the strategies set out in this document,
- international best practice on what is the correct mode for the level of demand
- the specific routes, travel speed, image for the city, attractiveness to car users, passenger preference, comfort and the convenience of a particular mode.

For public transport:

- 15 or 18-seater minibus: one-way passenger volumes of less than 800 passengers/day.
- Standard bus: Between 800 and 20 000 one way passengers/day.
- Articulated bus: Between 20 000 and 40 000 one-way passengers/day.
- Rail: Above 40 000 one-way passengers/day

For walking and cycling:

- Distances of 500 m to 1 km as representing a fair walking distance
- Reasonable trip times are 30 minutes to jobs/school and 10 to 15 minutes for trips to shops or services
The City will actively support the Metrorail improvement programme and ensure that it is aligned to the Integrated Transport Network Plan, playing the role of a mass mover where high volumes of passengers need to be transported.

Specific strategies will include:
- Working with PRASA for rail stations to become intermodal and TOD nodes;
- Ensuring that road based modes service rail including for so called ‘last mile’;
- Providing pedestrian and cycle paths leading from stations to nearby residential retail areas and public amenities;
- Integrating ticketing and passenger information.

The City will seek to achieve:
- Integration of the fare medium of Gautrain and Rea Vaya – to EMV bank based smart cards;
- Greater fare harmonisation and getting Gautrain to allow non-rail users to use its buses at more affordable fares;
- Greater integration with Rea Vaya, other future city public transport contracts;
- Improved management of providers of transport services from Gautrain stations such as metered taxis and tuk tuks.
Rea Vaya BRT strategy

- Rea Vaya BRT is the city’s choice of mass public transport mode for its busier corridors and where it can play an active role in transit orientated development and urban regeneration.

- The City’s strategy is to:
  - Develop a long term Rea Vaya BRT roll out plan on the basis of the Integrated Transport Network plan
  - Roll out future phases of Rea Vaya BRT at the rate of one phase every two to three years
  - Roll out each phase drawing on the lessons of the previous phase while also recognising the unique circumstances of different corridors
  - Continue to negotiate contracts for the first 12 year contract with affected operators and to provide for transformation or empowerment when previously disadvantaged operators are involved
  - Continue to review and develop ways in which buses are procured to ensure that the operators own the buses and that the fuel source of the buses and the manufacture of the buses maximises job creation and local content
  - Continue to review the contracts between the bus operating companies and the City so that risks are appropriately allocated
  - Continue to integrate BRT with other modes including the mini and metered taxis and non-motorised modes at a strategic and operational level.
Conventional bus strategy

- Conventional bus with some public transport priority measures is an important mode to strengthen public transport corridors and extend existing services to new areas of captive car users in the South, North and North West of the City.
- The most appropriate routes to be serviced by conventional bus will be set out in the Integrated Transport Network.
- The primary operator to service these routes will be Metrobus which will be restructured:
  - In the first instance to have a performance-based management contract with the City through the Transport Department’s Scheduled Services Management Agency (SSMA)
  - In the longer term into several gross cost contracts that could be negotiated or put out to tender.
- PUTCO and other provincial bus contracts can be devolved to the metropolitan level.
- However the starting point would be to evaluate the present routes operated against the Integrated Transport Network to establish whether they should best be converted to minibus-taxi services, Rea Vaya services or new re-packaged tendered bus contracts or continue at a provincial level because they are inter-city services.
Minibus taxis are an integral part of the transport system in the City of Joburg providing a highly convenient although not always safe and reliable service.

The City will as part of its Integrated Transport Network determine the routes where minibus-taxi services are the preferred mode and ensure that they are able to provide a quality safe, reliable and affordable service and that the operators and drivers of mini bus taxis are more prosperous and have greater job security.

Key interventions to achieve this will be:

- Assisting the city’s taxi industry to re-fleet, in particular to switch to greener vehicles
- Piloting and expanding the incorporation of minibus-taxis into the EMV-based integrated fare system
- Incorporating minibus-taxi services into integrated passenger information
- Improving the regulatory environment to ensure that unsafe vehicles do not operate and that there is a match between supply and demand
- Stronger law enforcement to ensure law-abiding road traffic behaviour by minibus-taxis
- Providing safe, secure, attractive and accessible facilities for minibus-taxi users (commuters and drivers) such as shelters, ranks and holding areas (see later) integrated with other modes
- Performance contracting and scheduling minibus-taxis where appropriate
Metered taxis have a diverse role to play for tourists, the young and elderly and as important feeder and distribution service including for those wanting to access mass transit routes

The City will:

- Develop a positive and recognized identity for the metered taxi as a distinct mode of transport in Joburg.
- Bring metered taxis into line with legal requirements including having meters, using properly designated ranks, possessing operating licences and adhering to the area in which they are permitted to operate.
- Formally designating and signing metered taxi ranking points
- Working with the provincial regulatory authority to ensure uniform and consistent fares, that such fares are displayed and that all taxis have functional calibrated meters.
Two and three wheeler transport strategy

- Vehicles such as tuk tuks and pedicabs have a niche role to play especially in certain areas such as tourism attractions or where on street parking is limited and for events.

- The City will work with the provincial regulatory authorities and law enforcement to ensure that:
  - Normal regulatory conditions and road traffic laws apply such as drivers having a Professional Public Driving Permit.
  - There is consultation with other affected operators before a new service is introduced.
  - Conditions such as maximum number of kilometres that these vehicles they may travel from their base ranking point will be enforced.
  - There are proper safe and secure arrangements for ranking and holding.
  - Vehicles display information for passengers to know their fares, routes and numbers of people they can carry.
Cycling strategy

The City will:

- Create a dedicated network of high quality pedestrian and cycling routes – NMT framework identified 10 routes, these may be revised and extended as part of the Integrated Transport Network.
- Integrate cycling at public transport nodes.
- Focus cycling programmes on university and school learners – to help foster a new cycling generation.
- Increase the availability of bicycles including through donating bikes and engaging with manufacturers to provide more durable bikes and also bikes that can be used for deliveries and transporting waste – freight bikes.
- Make cycling cool through awareness and mindset change programmes.
- Amending relevant technical roads standards and planning requirements.
3. Maintain, improve, extend and integrate transport infrastructure
## 3. Maintain, improve, extend and integrate transport infrastructure: Outcomes

<table>
<thead>
<tr>
<th>OUTCOMES</th>
<th>OUTCOME INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public transport and non-motorised transport infrastructure that is built, maintained and managed in such a way that it supports walking, cycling and the use of public transport</td>
<td>Increased percentage of residents satisfied with public transport and non-motorised transport facilities in the City</td>
</tr>
<tr>
<td>Road network infrastructure that is built, maintained and managed in such a way that it supports good mobility for goods and people</td>
<td>Increased percentage of residents satisfied with roads in the City</td>
</tr>
<tr>
<td>Storm water infrastructure is constructed, maintained and managed in such a way that it responds to climate change and water scarcity and that residents’ safety is ensured</td>
<td>Increased percentage of residents satisfied with storm water in the City</td>
</tr>
</tbody>
</table>
3. Maintain, improve, extend and integrate transport infrastructure: Outputs

<table>
<thead>
<tr>
<th>OUTPUTS (by 2018)</th>
<th>OUTPUT INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Build new roads and retrofit existing roads to Complete Streets standards</td>
<td>Kms of complete streets implemented</td>
</tr>
<tr>
<td>Introduce managed lanes (HOV, kerbside exclusive lanes for public transport, and contraflow lanes for public transport)</td>
<td>Km of managed lanes, by category, in operation</td>
</tr>
<tr>
<td>Create a designated network of quality pedestrian routes and cycle routes</td>
<td>Kms of the continuous designated pedestrian and cycle network implemented</td>
</tr>
<tr>
<td>Maintain the road network with reference to the PMS and BMS and restore to acceptable condition</td>
<td>Percentage of roads categorised as “good” in terms of the Visual Condition Index and/or International Roughness Index</td>
</tr>
<tr>
<td>Equip all public transport routes with kerbside commuter shelters at regular intervals</td>
<td>Percentage of required total commuter shelters erected</td>
</tr>
<tr>
<td>Public transport facilities managed so that they are safe, clean and accessible to all commuters</td>
<td>Number of public transport facilities formally managed</td>
</tr>
<tr>
<td>Replace all old traffic signals and cabling with new equipment and cable and install remote monitoring systems and UPS, giving priority to the City’s 200 main intersections initially</td>
<td>Average number of traffic signal outages per day Number of traffic signal outages per day lasting longer than 24 hours</td>
</tr>
</tbody>
</table>
3. Maintain, improve, extend and integrate transport infrastructure: Strategies

- This section will look at strategies in respect of:
  - Complete streets
  - BRT infrastructure
  - Managed lanes
  - Public transport facilities
  - Road and storm water network
Complete Streets are streets which are safe, comfortable and convenient for travel for everyone, regardless of age or ability, and mode of movement.

Complete streets are designed for:

- **Safety**: Move people and goods safely
- **Access and Mobility**: Accommodate all street users, giving priority to the most energy- and space-efficient modes
- **Context**: Respond to neighborhood character and there will be different features depending on the nature of the street and the function it performs (e.g. near a school, along high streets etc.)
- **Livability**: Create a vibrant public realm with high-quality public spaces
- **Sustainability**: Contribute to a healthier and more sustainable environment
- **Visual Excellence**: Create coherent and harmonious streetscapes
- **Cost-Effectiveness**: Provide the greatest possible value to the public

Complete streets will be built in labour-intensive ways

We aim for all our streets to be “complete” in the long term – either through retrofitting or when new streets are built - standards and guidelines are being developed which will need to apply to public and private sector developments
The initial key infrastructure components for BRT were:
- median-aligned trunk bus ways,
- median stations with passing lanes
- and depots.

Going forward the following improvements will be made:
- Increased integration with other modes (rail, bus, minibus-taxi and other Rea Vaya routes) at stations
- Public transport priority and/or traffic calming measures on the complementary and feeder routes where warranted
- Improved sidewalks and footways leading to BRT routes and stations and a minimum of 3 metre wide sidewalks alongside bus ways and stations
- Bike storage at each station
- Dedicated cycling lanes connecting the Rea Vaya stations to the surrounding area
- Park and rides strategically positioned to increase switch from private car use
- Improved universal access
- More aggressive traffic interventions to improve speed such as elimination of more right turns across bus way and on-street parking
- One-way paired bus ways and traffic circles will be avoided.
Managed lanes are to lanes whose use by general traffic is restricted in some way so as to reduce travel demand, manage the flow of traffic, exploit spare capacity in some lanes, or extract more person-carrying capacity from the lanes.

The following kinds managed lanes will be implemented to meet the City’s objectives of prioritising public transport, walking and cycling and reducing congestion:

- Exclusive lanes for public transport (e.g. BRT), pedestrian, cyclists or freight.
- High-occupancy vehicle lanes for vehicles that carry two or three more passengers
- Counter flow lanes where there are high volumes in one direction and additional road space in the counter direction
- By-pass lanes for the exclusive use of public transport vehicles at major intersections so they can by-pass traffic jams and reduce delay to their passengers
Public transport facilities strategy: Construction

TYPES OF PUBLIC TRANSPORT FACILITIES

- Holding facilities
- Interchanges for nodes especially in CBDs/“A” points
- Terminus at route origins
- Smaller facilities or super stops at origins/B points or along routes for ranking by all modes (bus, mini bus, metered, 2/3 wheeler)
- BRT stations
- Commuter shelters at stops with lay byes or public transport priority

FOR ALL FACILITIES

- Pedestrian and cycle facilities
- Safe, secure and attractive
- Universally accessible
- Passenger information and way finding
- Trading facilities where appropriate
Public transport strategy: Maintenance and management

- All public transport facilities will be well maintained and managed
- Well managed facilities is a form of support to unsubsidised public transport operations and for this reason the City will review the policy that taxi industry operators should pay user fees for use of City owned public transport facilities.
- Our strategy is as follows:
  - City will retain ownership of all public transport facilities and also retains ultimate responsibility for their management.
  - Rea Vaya BRT stations will be maintained in terms of a tendered maintenance contract.
  - All public transport facilities will be formally designated and if not designated will be regarded as illegal and illegal parking should be dealt with by law enforcement.
  - Fixed-period user agreements will be entered into between the City and representatives of operators making use of formal facilities
    - Third parties such as community representatives may also be party to these agreements
    - A standard agreement will be drawn up to allocate roles and responsibilities and standards.
The City will introduce a comprehensive approach to the maintenance, development and expansion of the City’s road network.

JRA new vision is to be the best city roads authority that enables economic growth and sustainability and provide quality roads that are accessible, safe and liveable for our communities.

The JRA will:

- develop and implement a number of long term development plans which on the basis of data gathered in systems such as the Pavement Management System, Bridge Management System and Storm water management system be able to prioritise interventions for the sustainable redevelopment and maintenance of the road and storm water network.
- Capacitate and resource its depots for effective service delivery.
- Look at new labour intensive ways of constructing and maintaining roads at a local level.
- Introduce performance contracts and improve quality assurance with contractors who work on the road reserve.
- Work with the JMPD in respect of overloading and Joburg Water in respect of water leaks to prevent the unnecessary deterioration of the road network.
- Be more pro-active and impose higher penalties when reinstatements after work is done in the road reserve.
- Introduce a new approach to Developer Contributions to ensure that more revenue is available for the road upgrading as a result of new developments.
Freight Congestion

Thrusts 4 and 5
4. Support economic growth through improving freight mobility: Outputs and outcomes

<table>
<thead>
<tr>
<th>OUTPUTS (by 2018)</th>
<th>OUTPUT INDICATORS</th>
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</thead>
<tbody>
<tr>
<td>Improve the mobility of freight</td>
<td>• Freight routes designated in CITP and signposted accordingly</td>
</tr>
<tr>
<td></td>
<td>• Satisfaction rating by Johannesburg Freight Operators Forum</td>
</tr>
<tr>
<td>Establish a database on urban freight transport in CoJ</td>
<td>• Urban freight database established and operational</td>
</tr>
<tr>
<td>Investigate introduction of access time regulations for urban goods transport especially in Inner City and introduce where necessary</td>
<td>• Ratio of off-peak to total freight travel</td>
</tr>
<tr>
<td>Reduction in overloading by freight vehicles</td>
<td>• Percentage Increase in prosecution of overloaded vehicles</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OUTCOMES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Freight movement in the CoJ will be safe, reliable, and efficient to support the city’s economy and be in balance with the needs of other transport users, the environment and quality of life</td>
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4. Support economic growth through improving freight mobility: Strategies

SHORT TERM

- Increasing capacity for freight planning
- Co-operation with other spheres on strategic Gauteng/Ethekwini corridor to ensure that sufficient capacity exists on roads and at City Deep for the efficient movement of goods
- Improved enforcement of overloading
- Improved management of freight in CBDs and small nodes

LONG TERM

- Low Emission Zones (LEZs);
- Environmental-friendly vehicles (EFVs);
- Real-time freight information and maps
- Night deliveries
- Urban traffic management and control systems
## 5. Manage congestion, travel demand and parking: Outputs and outcomes

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<thead>
<tr>
<th>OUTPUTS (by 2018)</th>
<th>OUTPUT INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Promote ridesharing (lift clubs)</td>
<td>• Increased modal share of liftclubs in trips to work</td>
</tr>
<tr>
<td>Work with employers to assist them to introduce Employee Trip Reduction Programmes including at Precinct level</td>
<td>• Number of major employers to have introduced trip reduction programmes</td>
</tr>
<tr>
<td>Introduce paid on-street parking in major commercial nodes and nodes which will benefit from managed parking</td>
<td>• Number of on-street parking spaces under management</td>
</tr>
<tr>
<td>Introduce parking solutions in small nodes to increase their accessibility to all users</td>
<td>• Number of nodes which have become more accessible due to parking solutions</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OUTCOMES</th>
<th>OUTCOME INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Congestion has been reduced through greater use of public transport, cycling and walking, introducing travel demand management and through improving the operation of the road network</td>
<td>• Personal mobility (annual person-kilometres) by mode (non-motorised, private and public transport)</td>
</tr>
<tr>
<td></td>
<td>• Reduction in CBD &amp; Sandton cordon peak period traffic volumes</td>
</tr>
<tr>
<td></td>
<td>• Reduction in per capita congestion costs</td>
</tr>
<tr>
<td></td>
<td>• Reduction in per capita transport energy consumption</td>
</tr>
</tbody>
</table>
The City’s approach to reducing and controlling traffic growth is to focus on mobility for people and goods, not vehicles per se. Thus the solution to congestion is not to build more roads but to:

- Use the strategy of transit-oriented development (TOD) to reduce travel demand.
- Improve public transport to the extent that car users regard it as a realistic, quality alternative, and increasingly use it, especially for peak period regular trips to work and school.
- Encourage more trips by walking and cycling.
- Increase the cost of private car use (through measures such as tolls and higher licence fees, along with ever-rising fuel prices).
- Manage travel demand thus reducing the need to travel in the peak, and reducing car use, especially single-occupancy vehicle use.
- Get more out of the existing capacity in the road system (e.g. through Intelligent Transport Systems, managed lanes and better traffic management systems).
## TRAVEL DEMAND MANAGEMENT

- Promoting ridesharing to increase the number of individuals per private car
- Promotion of flexi time, variable working hours and other employer policies to reduce private car use in work to home trips
- Restricting entry of certain vehicles into certain areas and/or at certain times
- Various forms of parking management
- Managed lanes (see earlier)
- Traffic management and intelligent transport systems

## RESTRICTING ENTRY OF VEHICLES

Forms of such restrictions can include:

- Restricting freight vehicles from entering the CBD during the day time which would reduce congestion and prevent conflict between car users, pedestrians, public transport users and freight vehicles.
- Restricting vehicles that weigh a lot and are high polluters from entering identified areas such as conservancies, heritage, arts, culture and educational areas.
- Restricting vehicles from entering certain parts of the CBD and converting road use for limited car use and increased pedestrian use. This can be permanent or can be only on weekdays. Public parking can be provided on the outskirts of the node and people can be transported from such places with public transport or non-motorised transport such as Pedi cabs.
**Parking management: Strategies**

**Parking Strategies**

- Encourage employers to increase the cost of parking provided to employees.
- Develop comprehensive plans to address on-street parking in the CBD and all major (and minor) nodes which may include:
  - Restoring paid parking where it can improve mobility.
  - Restricting or reducing on-street parking to allow more space for walking, cycling, trading etc. (see earlier).
- Amendments to land use and zoning policies in respect of what is required by developers in terms of parking.

**Proposals to be included in the City’s new consolidated zoning scheme**

- Maximum parking provision limits should be introduced in public transport priority areas in terms of the City’s Growth Management Strategy (GMS).
- Lower maximum parking requirements should be introduced around upgraded public transport corridors and in the marginalised areas in terms of the GMS.
- Lower off-street parking requirements in the inner City and regional nodes.
- A shared parking concept - where the same parking spaces can be used for different land uses at different times - should be introduced for mixed land use developments.
- Retail centres and office parks should be required to make provision for public transport vehicles, metered taxis and decent pedestrian access, as well as shared parking.
Traffic management and intelligent transport systems

JRA MOBILITY PLAN

- Remote monitoring of signalised intersections from a Traffic Management Centre
- Monitoring of the city motorways using CCTV cameras so that traffic conditions can be observed on screens at the TMC
- Incident detection (and related incident management) on the motorways
- Provision of real-time information about traffic conditions to drivers through variable message signs and web-based information so that dynamic decisions can be made, thereby taking the pressure off congestion hotspots.

SHORT TERM ACTIONS

- Extending remote monitoring of signalized intersections using the Urban Traffic Control system,
- Recabling at signalized traffic intersections and introduction of UPS to ensure uninterrupted power supply
- Installation of new traffic signals
- Upgrading the traffic signal controllers with new traffic signal adaptive controllers
- Revision of signal phasing at major intersections to reduce delay
- Implementation of signage upgrading to comply with the SA Road Traffic Signs Manual (route markers, tourism signs, directional signs, regulatory/warning signs)
- Improved co-operation with JMPD, City Power and Eskom
6. Actively engage citizenry in improving the transport system: Outputs and outcomes

<table>
<thead>
<tr>
<th>OUTPUTS (by 2018)</th>
<th>OUTPUT INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Update and maintain the Traffic Safety Management Information System and, inter alia, identify the top hazardous locations</td>
<td>• Traffic Safety MIS updated and maintained</td>
</tr>
<tr>
<td>Implement Streets Alive</td>
<td>• Number of public events</td>
</tr>
<tr>
<td>• Ongoing educational and behavioural change programmes,</td>
<td>• Number of ward-based road safety plans developed</td>
</tr>
<tr>
<td>• Ward-based action plans on road safety;</td>
<td>• Number of Open Street events</td>
</tr>
<tr>
<td>• Open Streets events</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>OUTCOMES (c 2018-2040)</th>
<th>OUTCOME INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction in road crashes and fatalities</td>
<td>• Total transport crash and fatality rates</td>
</tr>
</tbody>
</table>
6. Actively engage citizenry in improving the transport system: Strategies

- Data driven interventions: Improving information on causes of road accidents and transport security

- Ongoing implementation of Streets Alive including:
  - Promotion of transport values of accountability, co-operation, honesty, respect and ubuntu through education and awareness campaigns
  - Implementing holistic and data driven ward based road safety solutions (engineering – completing streets with comprehensive traffic calming measures coupled with education, enforcement and community action) in partnership with communities
  - Ongoing training and capacitation of ward based activists and relevant stakeholders in addressing road safety and related issues
  - Partnering with communities and the Go Jozi, Be Active, Feel Good campaign on fun walks, cycle rides and other activities where streets are closed for vehicles and open to people
  - Championship of road safety partnership through the Johannesburg Road Safety Council
7: Transform the transport sector and encourage new, efficient and profitable transport enterprises and employment creation: Outputs and outcomes

<table>
<thead>
<tr>
<th>OUTPUTS (by 2018)</th>
<th>OUTPUT INDICATORS</th>
</tr>
</thead>
</table>
| Transport Department to enable new enterprise formation in the transport sector and pursue maximum job creation through projects under its control | • Number of new enterprises formed through projects under City of Joburg Transport Sector control  
• Number of new jobs created (permanent and 55-day definition, direct and indirect) through projects and contracts under City of Joburg Transport Sector control and breakdown by category (youth, women, people with disabilities) |

<table>
<thead>
<tr>
<th>OUTCOMES (c 2018-2040)</th>
<th>OUTCOME INDICATORS</th>
</tr>
</thead>
</table>
| A transformed, expanded and prosperous private sector in transport generating new jobs and income generating opportunities | • Number of new enterprises formed through projects under City of Joburg Transport Sector control  
• Number of new jobs created (permanent and 55-day definition, direct and indirect) through projects and contracts under City of Joburg Transport Sector control and breakdown by category (youth, women, people with disabilities)  
• Contribution of transport sector to city economy  
• Estimated number of indirect jobs generated by City Transport Sector through green fleet initiatives |
Labour intensive construction and the implementation of the Expanded Public Works Programme (EPWP) where jobs and skills training will be maximised in the construction of road infrastructure including complete streets, sidewalks and bicycle lanes and rail upgrading.

New enterprise development and the formalisation and growth of existing enterprises in the public transport sector including in respect of Bus Operating Companies (BOCs) with Rea Vaya contracts, other scheduled services contracts, operation of park and ride sites, etc.

Creation of new enterprises in the promotion of a green economy including through introducing new fuel sources such as bio gas and bioethanol and cycle promotion including in the manufacture, assembly, sale, repair, rental and maintenance of bicycles.

Introducing new modes of transport such as tuk tuks and pedicabs.

Associated job creation in the transport value chain such as bitumen for roads, and components for buses. For example for each direct construction job created in Rea Vaya construction, two further jobs are indirectly created in the construction sector in South Africa.

Job creation in the public sector especially for young professionals as we continue to innovate in the public sector and expand the public sector’s role in transport regulation and contracting.
# 8. Plan and regulate the transport system: Outputs

<table>
<thead>
<tr>
<th>OUTPUTS (by 2018)</th>
<th>OUTPUT INDICATORS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain and update all information systems and create information systems to properly store all data collected, including GIS, TSMIS, TIR, Capital Investment Management System in respect of road network, JRA databases (PMS, BMS etc), cordon and screenline counts, automatic vehicle counts, and household travel survey</td>
<td>• Maintained and up-to-date databases</td>
</tr>
<tr>
<td>Monitoring plan for Rea Vaya Verified Carbon Standard and prepare validation reports every two years</td>
<td>• Successful validation of carbon savings by independent VCS auditors and sale of carbon credits</td>
</tr>
<tr>
<td>Update, improve and maintain the Emme model</td>
<td>• A licensed, updated and maintained Emme model</td>
</tr>
<tr>
<td>Develop procedures and a database and management system to support the decision making process in respect of operating licence applications referred by the PRE</td>
<td>• A new procedure and database in place</td>
</tr>
<tr>
<td></td>
<td>• Percentage of legally-compliant public transport vehicles</td>
</tr>
</tbody>
</table>

Planning and regulation leads to outcomes in other thrusts
8. Planning and regulation of the transport system: Strategies

**STRATEGIES**

- High levels of quality data collection
- Integrated transport planning (as explained at beginning)
- Administration of operating license applications in line with the Integrated Transport Network and according to the principles of administrative justice

**DATA COLLECTION**

- Manual and automatic traffic counting programme (roads, cordons and screenlines)
- Transport Safety Management Information System
- Transport Information Register (TIR)
- Household Travel Survey (every ten years)
- Annual customer surveys of scheduled services
- Emme strategic transportation model
- Monitoring of Rea Vaya Phase 1A and 1B to comply with mandatory requirements of registration on Verified Carbon System so carbon credits can be sold.

**Potential role of Gauteng Transport Authority will impact on these strategies**
9. Resource and finance the transport plan: Outputs

<table>
<thead>
<tr>
<th>OUTPUTS (by 2018)</th>
<th>OUTPUT INDICATORS</th>
</tr>
</thead>
</table>
| Capacitation, training and knowledge management in order to build a centre of excellence in transport | • Number of bursaries awarded to Transport Department staff or awarded by Transport Department to members of the public  
• Percentage of staff who received training each year  
• Number of young professionals employed in transport sector in City of Joburg |
A quality staff training and development programme which will include in addition to statutory requirements the hiring of interns, mentoring of young professionals, financial support to post-graduate study and local and international partnerships with institutes and institutions of higher education.

- Pro-active knowledge management and knowledge sharing
- A specific staff retention and attraction policy aimed at scarce skills in transport
- Capacitation of ward transport representatives and other local level stakeholders to be able to address transport issues at a ward or sector level such as road safety, prevention of vandalism, mediation, negotiation, commuter activism etc
Improving transport efficiencies: The cost of transport service provision can be significantly reduce through TOD especially over the long term. For example if on Rea Vaya Phase 1A, if each seat was occupied twice on each trunk peak period bus trip, instead of the current estimated 1.1 times, revenue would increase by 50%

Improved cost recovery: In particular the JRA provides services such as way leaves, reinstatements, security access restrictions where services are charged for but further income could be generated with improved cost recovery

Land value capture: The City can recoup the additional value that accrues to property owners as a result of the creation of a new public facility, to contribute towards payment of that facility. So the investment in public transport along a corridor can be recouped from increased property taxes

Higher priority in budgeting: Since the economic benefits for the city of investment in transport are significant, going forward transport expenditure in respect of quality of the road network and public transport services should be increased. One source of this could be the portion of the fuel levy that comes to the City, especially in the City can also introduce a new business tax that has been proposed by SALGA
Transport footprint
Towards corridors of freedom
Strategic ITP Framework
In the Executive Mayor’s State of the Nation speech he promised residents five rights including “he right to a spatially integrated and united city”

He said: “We have already pioneered the first Bus Rapid Transit system when we launched the Rea Vaya...Today we are taking transit oriented development another step forward, with the introduction of a project that will forever change the urban structure of Johannesburg and eradicate the legacy of Apartheid spatial planning.”

He promised: “Over the decade we will introduce transport corridors connecting strategic nodes through an affordable and accessible mass public transit that includes both bus and passenger rail. Along these corridors we will locate mixed income housing, schools, offices, community facilities, cultural centres, parks, public squares, clinics and libraries.

He called these corridors: “Corridors of Freedom”

What should be these corridors of freedom?
In the next slide we make some proposals for discussion
PROPOSED TRANSIT ORIENTATED DEVELOPMENT CORRIDORS
<table>
<thead>
<tr>
<th>Name of corridor</th>
<th>Public Transport</th>
<th>Nodes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soweto to CBD via Soweto Highway</td>
<td>Rea Vaya Phase 1A (T)</td>
<td>Moroka, Kliptown, Orlando, Diepkloof, Nasrec, Booyens, Westgate, Newtown, CBD (also Dube and New Canada if include rail corridor)</td>
</tr>
<tr>
<td>Soweto to CBD via Perth</td>
<td>Rea Vaya Phase 1B (T)</td>
<td>New Canada, Rahima Moosa, Helen Joseph, University of Joburg, Wits University, Parktown, Metro Centre, CBD</td>
</tr>
<tr>
<td>Soweto (Baragwanath) via Koma Street to Roodepoort</td>
<td>Partial Rea Vaya 1A (C), partial taxi</td>
<td>Baragwanath, UJ Soweto, Mabopane Mall, Jabulani, Dobsonville, Roodepoort</td>
</tr>
<tr>
<td>CBD-Bruma/Eastgate</td>
<td>Metrobus</td>
<td>CBD, Berea, Yeoville, Cyrlidene, Bruma, Eastgate</td>
</tr>
<tr>
<td>CBD-Alexandra via Louis Botha</td>
<td>Rea Vaya Phase 1C (T)</td>
<td>Norwood, Highlands North, Orange Grove, Balfour Park, Bellevue, Hillbrow, CBD</td>
</tr>
<tr>
<td>Alexandra-Wynberg-Sandton</td>
<td>Rea Vaya Phase 1C (T)</td>
<td>Alexandra, Wynberg, Sandton</td>
</tr>
<tr>
<td>Sandton-Randburg-Fourways-Diepsloot</td>
<td>Taxi, Phase 1C (T)</td>
<td>Sandton, Randburg, Fourways, Diepsloot</td>
</tr>
<tr>
<td>Roodepoort-Randburg-Northgate</td>
<td>Unserved (SPTN Flagship)</td>
<td>Randburg, Cresta, Constantia Basin, Roodepoort</td>
</tr>
<tr>
<td>Alexandra-Greenstone-Ivory Park</td>
<td>Rea Vaya Phase 1C (C+F)</td>
<td>Alexandra, Greenstone, Ivory Park</td>
</tr>
<tr>
<td>Alexandra/Wynberg - Marlboro - Linbro Park</td>
<td>Rea Vaya Phase 1C (C+F)</td>
<td>Alexandra, Wynberg, Marlboro, Linbro Park</td>
</tr>
<tr>
<td>Midrand-Ivory Park-Wynberg-Alexandra</td>
<td>Taxi</td>
<td>Midrand, Ivory Park, Wynberg, Alexandra</td>
</tr>
<tr>
<td>Lanseria-Cosmo City-Woodmead</td>
<td>Taxi, little bit Phase 1C (T)</td>
<td>Lanseria, Cosmo-city, Kya Sand, Northgate, Fourways, Sunninghill, Woodmead</td>
</tr>
<tr>
<td>CBD-Sandton-Sunninghill via Oxford</td>
<td>Gautrain (CBD to Sandton), Rea Vaya Phase 1C (T)</td>
<td>CBD, Rosebank, Sandton, Rivonia, Sunninghill</td>
</tr>
<tr>
<td>CBD-Turffontein-Southgate-Baragwanath</td>
<td>Partial Metrobus, partial taxi</td>
<td>Baragwanth, Southgate, Turffontein</td>
</tr>
<tr>
<td>Zandspruit-Cresta-Melville</td>
<td>Partial Phase 1B (C), taxi</td>
<td>Zandspruit, Cresta, UJ</td>
</tr>
</tbody>
</table>
For discussion and inputs

Strategic ITP Framework
We want to hear from you

WHAT IS IN DOCUMENT

- What do you think of the strategic thrusts?
  - What we want to achieve in the long term (outcomes)
  - What we want to deliver (outputs)
  - How we want to achieve the outcomes (strategies)
- What do you think of the proposed corridors?

STANDARDS

In the final version of the document we want to propose standards for which the City can be held accountable and that users can expect as a minimum:

- Transport infrastructure e.g.
  - Amenities at public transport facilities
  - Minimum width of sidewalks and cycle lanes
  - Traffic signals reliability
  - Street names, signs and road markings
  - Levels of maintenance and road quality

- Public transport services e.g.
  - Availability
  - Quality of vehicle
  - Punctuality
  - Passenger information
  - Peak and off-peak frequency
  - Cleanliness of buses and facilities
Conclusion

- We have come this far through farsighted political leadership on the one hand and partnership and participation from so many hundreds of stakeholders and residents.
- In the coming years we want to consolidate and strengthen our partnerships to deliver on the transport agenda.
- This document when finalised will be both the road map to guide all of us and the benchmark for citizens to hold the City of Joburg accountable.
- We look forward to your comments.
Copies and Comments

- Copies of the full document and this presentation available from:
  - Website: [www.joburg.org.za](http://www.joburg.org.za)
  - Regions Customer Service Centres (at 60 cents per page)

- Comments should be
  - Addressed to:
    The Executive Director: Transport: Ms Lisa Seftel, P O Box 31923, Braamfontein, 2000
    - Emailed to: [itpframework@joburg.org.za](mailto:itpframework@joburg.org.za)
  - Until: 18 June 2013