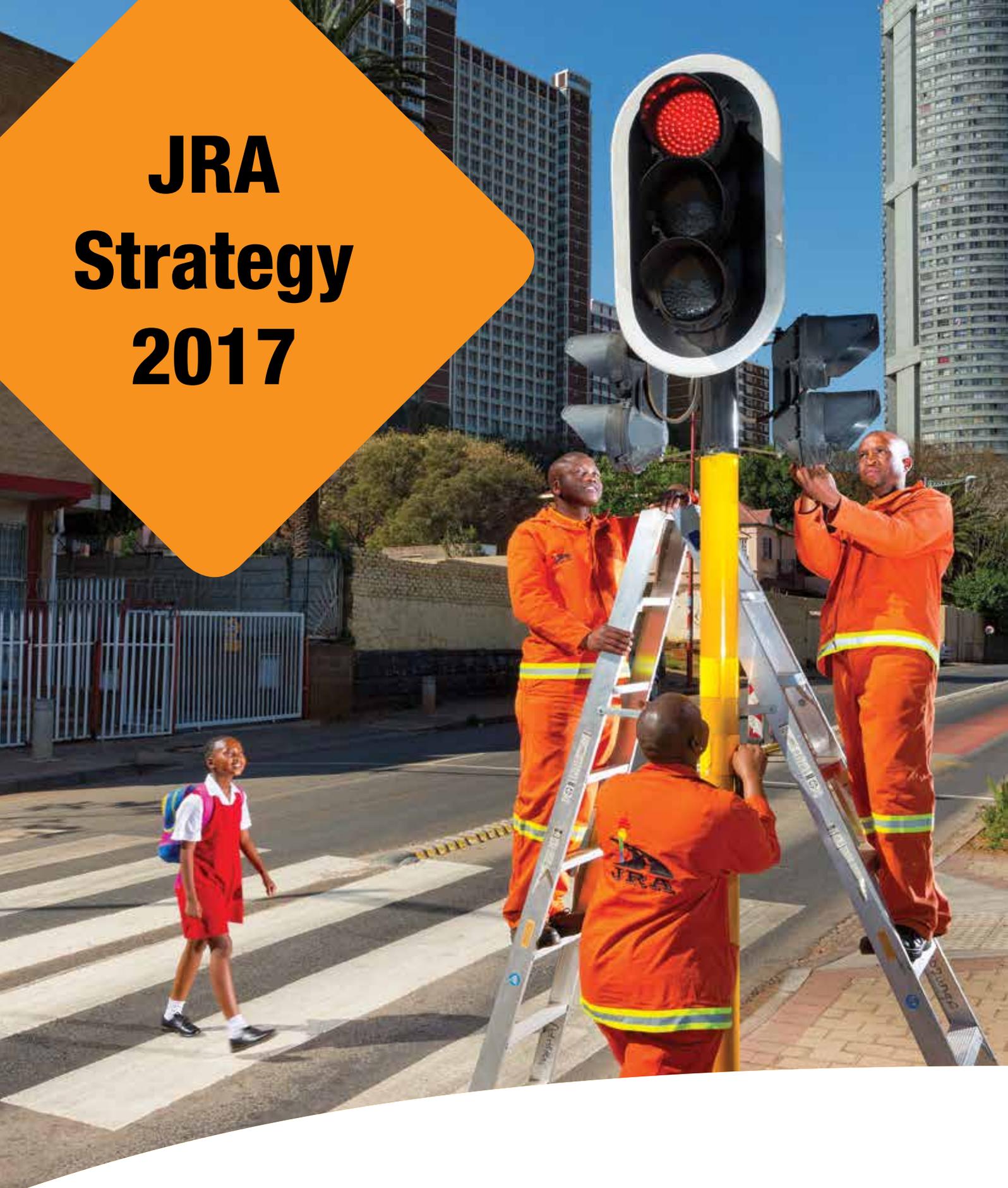


# JRA Strategy 2017



a world class African city



*Mobility made easy*

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# **Our Vision**

**The best city roads  
authority that enables  
economic growth and  
sustainability.**

*Mobility made easy*

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# ABBREVIATIONS

ABET	Adult Basic Education and Training
AMS	Asset Management System
BMS	Bridge Management System
CIMS	Capital Investment Management System
CoJ	City of Johannesburg
CPD	Continuing Professional Development
CRM	Customer Relations Management
DWA	Department of Water Affairs
EAP	Employee Assistance Programme
EMS	Environmental Management System
EMT	Executive Management Team
EPWP	Expanded Public Works Programmes
ERP	Enterprise Resource Planning (Software)
GCR	Gauteng City Region
GDS 2040	Joburg 2040 Growth And Develop Ment Strategy
GIS	Geographical Information System
GRCP	Gravel Roads Reconstruction Plan
GRMS	Gravel Road Management System
ICT	Information and Communication Technology
IDP	Integrated Development Plan
ISWMP	Integrated Storm Water Management Policy
ITS	Intelligent Transport Systems
JRA	Johannesburg Roads Agency
KI	Kerb Inlets
KM	Knowledge Management
LED	Light Emitting Diode
MOE	Municipal Owned Entity
NEMA	National Environmental Management Act, No. 107 of 1998
OHASA	Occupational Health and Safety Act, No. 85 of 1993 as Amended
OHS	Occupational Health and Safety
PEST	Political, Environmental, Social, Technological
PMS	Pavement Management System
RAMS	Road Assets Management System
RCP	Roads Reconstruction Plan
RRM	Routine Roads Maintenance Plan
RRP	Roads Rehabilitation Plan
SARTSM	South African Road Traffic Signs Manual
SCADA	Supervisory Control and Data Acquisition
SCM	Supply Chain Management
SHEQ	Safety and Health Environmental Control Quality Control
SLA	Service Level Agreement
SMME	Small Medium and Micro Enterprise
SOP	Standard Operating Procedures
TMC	Traffic Management Centre
TQMS	Total Quality Management System
UPS	Uninterruptible Power Supply
VCA	Visual Condition Assessments
VCI	Visual Condition Index

## Background and Objectives

In 2004, the Johannesburg Roads Agency (JRA) developed a strategy to guide and focus the service delivery of the organisation. This strategy became known as the 'MOBILITY' strategy.

The JRA's present reality is one of change – with both the entity and its parent municipality, the City of Johannesburg (CoJ) currently in transition. With the CoJ refining its vision and long-term strategy through the Joburg 2040 Growth and Development Strategy (GDS 2040), the JRA has recognised that there is a parallel need to change course and enhance its performance, by ensuring the delivery of a more effective and efficient service to Johannesburg's residents, citizens and visitors.

In support of the change of course initiatives of the City the JRA has reviewed the existing strategy and developed a new five-year strategy for the organisation.

This strategy will help the organisation to:

- Reconfigure its structure to be in a better position to provide services to the City's communities;
- Focus on service, improving coverage and performance;
- Turn around the reputational slump;
- Contribute to the City's stated 2040 objectives of achieving sustainability, resilience and liveability.

The *strategy* of the organisation for the next five years, reviewable every year, will seek to restore balance in the JRA's core focus by implementing programmes in the areas of public transport infrastructure, social infrastructure and economic infrastructure. Public transport infrastructure has been identified as a critical input to achieving a compact City form through enabling transit oriented development locating people, amenities and businesses along major mobility corridors. Social infrastructure enables the transformation of marginalised communities through the provision of basic and linkage infrastructure that connects communities to economic activity areas while improving general living conditions. Lastly economic infrastructure facilitates mobility for trade, tourism and investment purposes, thus stimulating economic growth.

### 1.1 Strategic Elements

The JRA is part of the transportation sector. The sector's vision, mission and goals are aligned to the City's GDS 2040, and Integrated Development Plan (IDP) objectives and envisaged outcomes. The sector's vision, mission and goals are:

#### Vision

A people centred transport system that is transformed

#### Mission

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 Johannesburg 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 and Objectives

These include:

- 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 Johannesburg;
- 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 drainage to respond to climate change and water scarcity and ensure the safety of residents and infrastructure;
- Building, maintaining and managing public transport and non-motorised transport infrastructure to support walking, cycling and the use of public transport.

##### 1.1.1 Alignment to the GDS 2040

The GDS 2040 envisions a city that in the next three decades will be resilient, sustainable and liveable while being the front line of a developmental state within the Gauteng City Region (GCR). The GDS 2040 outreach process required the City to 'change its course'. This means that the City needs to redirect and reorient its collective energy to a new course by setting short-to-medium-term goals in order to pave the way for the long-term realisation of the Joburg 2040 vision.

To support the City in changing its course, the GDS 2040 implementation roadmap was approved to facilitate:

- Reprioritising the City's expenditure (budget) to address revenue challenges;
- Developing infrastructure and systems and addressing the basics;
- Improving stakeholder relations and enhancing the quality of interaction,
- Interacting with residents and clients in the spirit of Batho Pele.

The City's GDS 2040 is implemented through five master programmes by identified organisational clusters in the City. The links between the master programmes, cluster programmes and the Transport Department's strategic objective are set out below.

The JRA has defined its role in supporting the City's priorities and its programmes and priorities are geared to ensuring that the City's objectives listed below are achieved:

### **Financial Sustainability and Resilience**

The key objective of this priority is to ensure that the City's financial capacity is secured and preserved in both the short and long term so that the City is able to fund the investments required to achieve the GDS 2040 vision, while being able to withstand unforeseen external and internal occurrences.

Since financial sustainability and resilience is a precondition for achieving the City's other priorities it is imperative that it is achieved in the first decade of the period to 2040. For this reason a call has been made across the City to give urgent attention to this priority. It is also for this reason that the majority of work plans identified for this priority need to be completed within the current term of office.

The JRA will contribute to achieving financial sustainability and resilience through ensuring:

- Disciplined expenditure management;
- Effective management oversight and monitoring of people and processes;
- Obtaining value for money through smart and efficient supply chain management (SCM) of procurement processes;
- Ensuring a financially stable entity with healthy financial reserves.

### **Agriculture and Food Security**

The key objective for this programme is to address poverty and income inequality. The City recognises the immediate need for poverty alleviation measures (focusing on the poor and vulnerable) and poverty eradication in the long term to ensure self-reliant communities.

Food security exists when all people, at all times, have physical and economic access to sufficient safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.

The JRA will contribute to this priority by providing a freight-logistics-supportive road network system that enables the rapid movement of goods, enables intermodal transfers and provides access to facilities such as food markets and other agricultural facilities. Through the use of urban storm water systems, the JRA will also contribute to the conservation and diversion of surface runoff water into irrigation schemes in support of food production.

### **Sustainable Human Settlements**

The key objective for this programme is to address spatial inequality and create the material conditions for economic growth with an emphasis on strengthening the inclusive nature of entrepreneurial, middle, working class and marginalised economic activities. It seeks to transform the human settlement patterns of the past, ensuring inclusive and mixed housing solutions while also promoting economic activities within communities.

The JRA will contribute to sustainable human settlements by providing the core road networks that are necessary for mobility and connectivity in communities. This will also serve to attract investment to local economic nodes and thus grow the City's economic base. Some of the interventions will include the improvement of arterial roads and main roads going into communities, the development of complete streets to manage road space demand while ensuring safety and the updating of storm water master plans to manage the impacts of development.

### **SMME and Entrepreneurial Support**

The key objective for this programme is to address poverty and, in particular, income inequality and create the material conditions for economic growth with an emphasis on strengthening the inclusive nature of the City's economy. The focus will be on promoting entrepreneurial activity, supporting the middle and working class and recognising marginalised economic activities through the following:

- Identifying the key enablers and success factors for entrepreneurial growth in particular, small medium and micro enterprise (SMME) development, and implementing targeted programmes to achieve this.
- Identifying both governance frameworks and interventions which will improve and accelerate the development of entrepreneurs. Specific measures will be implemented to address the supply of services and commodities through SMME's and to formalise and support informal economy activities that contribute to the City's economy.

The JRA will continue to develop SMMEs and entrepreneurs through:

- The utilisation and support of emerging contractors in the capital works programme;
- The implementation of Expanded Public Works Programmes (EPWPs) and the application of EPWP principles in normal JRA projects.

### **Engaged Active Citizenry**

The strategic intent of the programme is to ensure that citizens of Johannesburg take an active role in their communities and that they participate in the planning and implementation of Government programmes and in service delivery. The key elements include the following:

- Rolling out community based planning;
- Promoting active community participation in the execution of key service delivery areas (such as crime prevention, traffic management, by-law development and enforcement), infrastructure protection and community safety programmes;
- Community education and awareness programmes;
- Human development and social cohesion

The JRA will contribute to this priority through the rollout of programmes such as ‘adopt a street’ and ‘adopt a pavement’. Communities will also be mobilised to participate in infrastructure protection and road safety programmes. This will also enable the JRA to promote the values of responsible citizenship and solidarity thus enhancing the City’s vision of a caring municipality.

### Resource Resilience

Water is central to economic production and the well-being of the City’s residents, yet thousands of litres of water are lost every year through water leaks. Most of the city’s water is imported from elsewhere and thus the challenge for Johannesburg is to make the most efficient use of water.

- With regard to the safe supply of water, Johannesburg has the dual challenge of water scarcity and the increasing cost of water provision and network maintenance.
- With regard to the protection of essential water resources such as the management of water catchments and ground water, Johannesburg faces the challenges of increasing flood risks and the pollution of water courses and underground water, which limit the potential use of these resources to supplement current water supply.

The City is exploring opportunities for complementing current water supply with alternative sources in order to guarantee future supply. In addition the City wants to ensure that the downstream quality of rivers is not affected by poor quality effluent from wastewater treatment works, polluted storm water runoff and overflowing sewage systems.

The large volumes of waste generated and disposed by landfill are causing a serious threat to local communities living adjacent to landfills; to underground water systems through the seepage of chemicals; and to air quality through the discharge of gas by-products. Most of the existing landfills will soon reach the end of their design lives. The City is embarking on an ambitious programme that seeks to reduce the amount of recyclable waste that goes to landfill sites to zero and to promote the principle of reducing, reusing and recycling waste before landfill disposal.

The JRA will contribute to resource resilience by:

- Supporting an ecosystem of complete street-linked storm water systems;
- Minimising flood events to improve the safety of our

residents;

- Ensuring a healthy and clean underground water system;
- Reducing the amount of road related waste that is sent to landfill sites;
- Preventing illegal dumping.

### Smart City

The success of the Joburg Smart City initiative is largely dependent on the success of two key elements, namely the:

- Broadband network and connectivity
- Information and communication technology (ICT) upgrade

The key outcomes of the smart city initiative include:

- The City using technology as a base for innovation and service delivery efficiency;
- The City becoming a smart institution with high levels of productivity;
- Smart service delivery as the norm;
- Access to quality CoJ information and ICT services;
- Municipal services provided to households utilising the broadband infrastructure.

The JRA will support this priority through the rollout of:

- Intelligent transport systems (ITS) that include traffic flow management systems; infrastructure security systems; road asset management systems such as the pavement management system and bridge management system; and the geographical information system (GIS).
- Remote monitoring systems for traffic signals

### Investment Attraction, Retention and Expansion

The City realises the importance of investing in logistics infrastructure to facilitate trade and tourism. Seamless mobility on the City’s road and rail network will ensure quick turnaround times for goods and passengers between points of origin and destinations, and thus will attract business and tourists. The City Deep and Lanseria precincts will play a critical role in unlocking trade investment potential in the City and will result in large quantities of freight transportation to and from Johannesburg.

The JRA will improve mobility for freight moving into and out of the City Deep precinct by providing an efficient road network system. Attention will also be given to the improvement of the freeway system in the City in order to unblock known bottlenecks and improve riding quality.

### Green Economy

The green economy concept is relatively new. It refers to the way in which natural resources are used to produce goods

for the population. Even though this concept is still being developed and has not been applied to its full potential, it reflects significant concerns such as sustainable growth, production, use of natural resources, and protection of the environment. Ultimately, it involves a new form of production and a new way of relating to our environment.

The green economy refers to a low-carbon economy that seeks to ensure efficient use of natural resources, as well as traditional inputs such as labour, capital and fossil fuels. A green economy values natural capital and invests in it, offering better conditions to ensure sustainable growth and seeking to conserve and preserve the environment, with the understanding that it is essential to guarantee the sustainability of production for future generations.

The JRA will maintain the focus on green economy opportunities by:

- Contributing towards energy saving through implementation of solar power, light emitting diode (LED) and uninterruptible power supply (UPS) traffic signals;
- Waste minimisation.

## 1.5 Our Core Values

**Table 1: Core values of the JRA**

<b>Respect</b>	Gathering the customer, prioritising communities, ensuring equity
<b>Accountability</b>	The man in the mirror, responsible actions
<b>Ubuntu</b>	Compassion for communities and road users, empathy, humility
<b>Cooperation</b>	Working together, integration, collaboration and pooling resources
<b>Honesty</b>	Ethics, transparency, doing the right thing.

## 1.2 The JRA's Mandate

The Johannesburg Roads Agency is a private company established by the City of Johannesburg in 2000. The JRA derives its mandate from the service delivery agreement signed in 2001 between the two parties and recently reviewed and changed to a service level agreement (SLA) in 2012. The mandate can be summarised as 'the design, construction and maintenance of roads and road infrastructure'. From this mandate, the JRA's priority goals vary from year to year, as informed by:

- The IDP,
- The Mayoral priorities;
- The GDS, among other instruments.

## 1.3 Vision

The best city roads authority that enables economic growth and sustainability

## 1.4 Mission

We commit to provide quality roads that are accessible, safe and liveable for our communities

# Core Business

Figure 1 is a schematic representation of the three pillars and the enablers that govern the JRA's business. Customer service is the overarching benchmark that determines the level of success in the business operations. The JRA seeks to ultimately achieve the outcomes of safety, mobility and access for users of the road network

Figure 1: Pillars and enablers

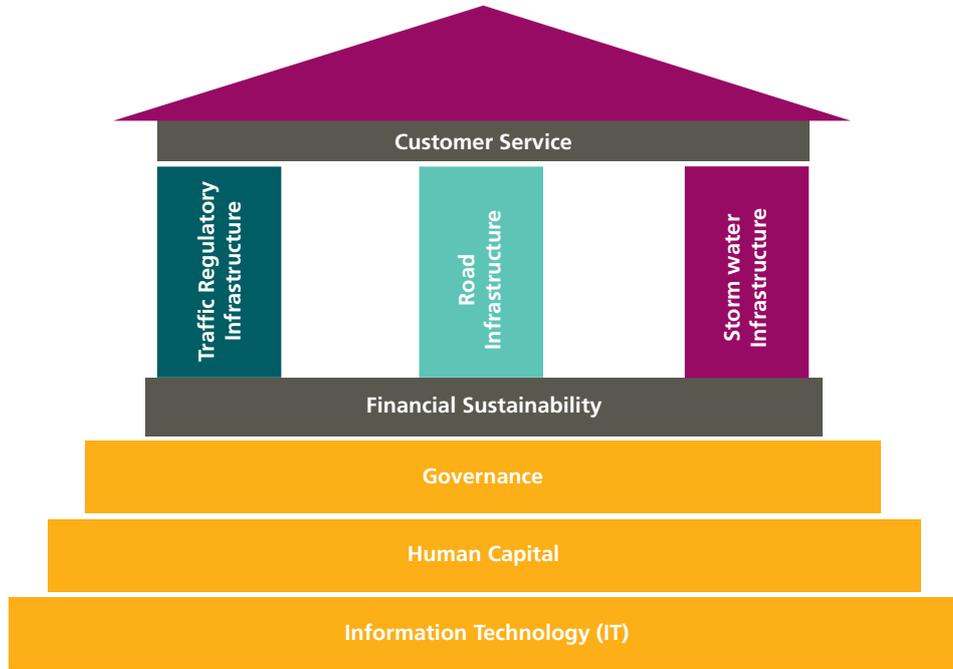


Figure 2: Key Focus Areas

<p><b>Traffic Regulatory Infrastructure</b></p>	<ul style="list-style-type: none"> <li><b>FOCUS AREA</b></li> <li>Traffic signals management</li> <li>Road sign and markings management</li> <li>Road safety (infrastructure)</li> <li>Network monitoring</li> <li>Intelligent transport system</li> <li>Traffic engineering (geometric improvements)</li> <li>GIS and accident management systems</li> <li>Traffic signal operations</li> <li>Overload control</li> </ul>
<p><b>Road Infrastructure</b></p>	<ul style="list-style-type: none"> <li><b>FOCUS AREA</b></li> <li>Road assets management systems (RAMS)</li> <li>Planning</li> <li>Design</li> <li>Maintenance</li> <li>Construction</li> <li>Strategic assets</li> <li>Development control</li> </ul>
<p><b>Storm water Infrastructure</b></p>	<ul style="list-style-type: none"> <li><b>FOCUS AREA</b></li> <li>Flood line and master planning</li> <li>Stormwater maintenance</li> <li>Stormwater network development planning</li> <li>Development control</li> <li>Dam safety management</li> <li>In house designs (capacity building)</li> </ul>

# Strategic Analysis

## 3.1 Strategic Context

Any large city in the world faces the challenge of how to enable its population to move quickly, easily and cheaply around the built-up area. Typically today, the larger the city becomes the greater the challenge. Given that so much of the City's transportation for both people and goods uses the road network, a very important issue is the development and maintenance of a quality road network.

Johannesburg has the highest overall average trip distance by car and public transport when compared to other cities of similar characteristics. This is an indication that people in Johannesburg spend more time on the road due to distance between work and home and/ or network inefficiency. It also implies that the infrastructure needs to be maintained to regulate the flow of traffic. Taking into consideration that the operational infrastructure conditions and road network efficiency of Johannesburg is far less effective than world-class standards; a substantial effort should be made to counter operational inefficiencies through higher annual road investments per kilometre of road network.

Figure 3: Strategic role of transport

### Strategic role of transport

- Efficient transport systems provide economic and social opportunities and positive multiplier effects
- Poverty alleviation and job creation
- Spatial prioritisation of transport investment
- Targeted economic development facilitation - economic zones, hubs, nodes etc.
- SMME development and income generating opportunities e.g. emerging contractor development
- Job Creation - Preferential procurement targets, community based local employment focus, labour intensive construction
- Green economy opportunities
- Transit orientated and local economic development
- Focus investment along nodes and corridors
- Economic investment in deprived areas
- Local income circulation
- Skills development
- Community based asset management models
- Transformation
- Inter-nodal connectivity
- Inter-modal transport services and restructuring to more efficient and sustainable models
- Transformation of marginalised operators
- Broad based black economic empowerment

**Internationally:**

- At macro economic level:  
Transport accounts for between 6 - 12% of GDP
- At micro economic level:  
Transport accounts for between 10 to 15% of household expenditure

According to the World Bank an estimate of 2.5% of the total asset base is required as a guideline to effectively maintain assets. To achieve world-class standards, Johannesburg should invest according to world-class standards and trends. Currently, Johannesburg under-spends by a factor of five in comparison to other comparable world cities. Figure 3 emphasises the strategic role that transport plays in society.

Roads provide mobility and accessibility. Mobility is the ease with which people can travel without interruptions, whilst accessibility is the ability of people to get to various facilities and services such as shops, schools, economic centres and residential areas. Road transport plays a meaningful role in the movement of goods and people. The importance

of roads for our society and economy can never be over emphasised.

A sound road network is an essential ingredient of a country's economic and social wellbeing. However, for optimum results, the network needs to be an efficient one, with no duplication of roads, but at the same time without gaps or deficiencies. A sound functional classification of the separate elements of the total network is needed to promote this endeavour. For efficient delivery there should be a synergy between the functional and the administrative components of the network. However, irrespective of how efficient the network is, unless it is properly operated, its full potential will not be realised.

The City has realised the important role that the road network system can play in reshaping the landscape and in transforming its spatial patterns. The Transit Oriented Development focus will be rolled out behind key public

transport corridors to encourage densification and mixed use of City spaces. Freight logistics will be promoted through the provision of adequate road space and associated facilities.

## 3.2 PEST (political, environmental, social and technological)

**Table 2: PEST analysis**

Political	Economic
<ul style="list-style-type: none"> <li>Change of government and policies</li> <li>Funding, grants and budget</li> <li>Changes in the political environment</li> <li>Levels of corruption, nepotism and fraud</li> <li>Instability of neighbouring provinces/countries and conflicts/wars.</li> <li>Environmental/ecological legislation</li> <li>Regulation, de-regulation and legislations</li> </ul>	<ul style="list-style-type: none"> <li>Rail infrastructure and freight haulage</li> <li>Labour costs and stability</li> <li>Costs of oil by-products used in asphalt</li> <li>Transportation costs and oil prices</li> <li>Engineering and related industry factors</li> <li>Climate change and unpredictable weather patterns</li> <li>Impact of globalisation on local economies</li> <li>Economy growth and levels of unemployment</li> <li>Economic road infrastructure</li> <li>Customer/road-user outlook and car ownership</li> <li>Economic migration.</li> </ul>
Social	Technological
<ul style="list-style-type: none"> <li>Population growth and migration levels</li> <li>Lifestyle choices, trends and attitudes on car usage</li> <li>Demographics and distances between home and work</li> <li>Behavioural, attitudes and opinions towards public transport</li> <li>Public transport reliability and availability</li> <li>Legislations affecting social factors</li> <li>Role models and influences</li> <li>Finances, buying trends and access to credit</li> <li>Ethical and religious issues</li> <li>Socio-cultural changes and attitude</li> </ul>	<ul style="list-style-type: none"> <li>New products and innovations</li> <li>Research and development</li> <li>Impact of emerging technologies and technology transfer locally and internationally</li> <li>Replacement and maintenance technology solutions</li> <li>Manufacturing capacity and related technology</li> <li>Engineering standards, accreditation and approvals</li> <li>Intellectual property, patents and licensing issues</li> </ul>

## 3.3 Market Dynamics

The road sector is of interest because of both the significant benefits road provision is associated with and the strong potential for issues of political economy to have an impact on the form and outcomes of the sector. The benefits of road provision are both direct and indirect. Roads create connectivity, which allows for easier access to external goods and labour markets as well as greater social contact with other settlements, both of which contribute to national integration. This can have very powerful long-term implications and is accompanied by secondary effects on the provision of other basic goods and services.

There are studies that demonstrate the difficulties of excluding those who are not contributing to their upkeep

from roads, but they also illustrate that there is unexploited potential for making exclusion viable in the roads sector, at least within South Africa and this may become more viable in the future, if and when traffic volumes increase.

The roads are widely recognised as creating externalities, both positive and negative. The main debate surrounds their magnitude, whether they have a net positive effect and whether they are distributed equitably between different socio-economic groups. Externalities may take economic forms, such as a decrease in price volatility and increased opportunities to take advantage of business and work opportunities outside the community; social forms, such as an increased ability to make links with people in different settlements; and governance or public service forms, such as an increased ability to access, or be accessed by, health services, schools, security forces and the justice system.

## Market failure characteristics

There is a tendency towards monopoly, where monopolies are defined as markets where there is only a single seller of a good or service, with an absence of entrants who can provide competition. The roads industry has been considered a strong example of a monopoly. The economic logic behind this holds in both rural and urban areas, in that road construction requires a high level of sunken costs in terms of land, materials and labour, which presents a formidable barrier to entry.

In some circumstances competition may be physically impossible, in that there may not be multiple viable routes for roads to follow; this is particularly the case in mountainous or remote regions. Level of traffic flow is also likely to be a crucial determinant of whether competition is possible, as this will determine whether there is sufficient demand to make the presence of two roads economically viable. Traffic flows are generally higher along interurban routes and in urban areas than in rural ones (World Bank, 2010)<sup>1</sup>, and the geography of urban areas makes multiple routes between locations more likely. Hence, roads have strong monopoly characteristics, particularly in rural areas.

In a paper recently presented by the AA, it is stated that "Vast portions of South Africa's road network are in danger of becoming so badly damaged that they will no longer be able to be repaired, and the government will be forced to reconstruct them."

The JRA's approach to service delivery is to combine:

- Internal (mainly maintenance activities);
- External (mainly capital works)

This has had both positives and negatives to it. Where the private sector is relied on for the construction of roads, it is the bidding and contracting documents which are the foundation of the construction process. In recent years, as the process of contracting has quickly evolved, and contractors have experimented with new ways of acquiring new business and enhancing profit, it has become apparent that there is a need to refine these basic documents, particularly in the areas of risks and incentives.

The JRA and the industry as a whole has historically not dealt well with risk, leading to many failed contractors through poor planning, poor budgeting, and poor resource management.

On the contractor's side, the push to minimise costs is often

an absolute goal, regardless of market realities, resulting in impossibly low prices being accepted as part of bids and contracts which give owners all the rights and contractors all of the obligations. To overcome these problems during road construction, risks must be properly defined and the remedies associated with these risks spelled out in a way that eliminates the incentive of the contractor to bid other than at their best price.

The JRA must also be protected against irresponsibly low bids that later result in excess claims and controversy. Apart from insisting on clarity of contract terms, the JRA should also carry out close scrutiny of the bidder's credentials and the responsiveness of their bid, and this should also be linked to awarding contracts to the lowest responsive, responsible bidder. New approaches, including management contracts should be considered as valid options, together with the more traditional methods of bidding on the basis of existing designs and specifications.

There are options for creating an enabling environment for the construction industry, thus leading to more involvement of private contractors and consultants in improved management of road assets. The process, which is of particular importance for economies in transition, begins with separating the functions of planning and management from the implementation of road works. Different forms of contracts have several implications for the risk allocation between client and contractor; the risks to the highway agency tend to decrease as the agency shifts from force account (or direct labour) to short- and long-term forms of contract with the private sector, including concessions.

Added to the above are the risks associated with uncontrolled and unregulated suppliers and manufacturers of materials. This relates to materials that are used for both construction and maintenance of roads.

The JRA is also faced with a problem of lack of ownership of key plant and equipment thus resulting in above inflation cost increases. The high level SWOT analysis presented below in Table 3 looks at the strengths, weaknesses, opportunities and threats that the JRA works with in addressing this situation.

<sup>1</sup> World Bank (2010) 'Roads: Broadening the Agenda', in V. Foster and C. Briceño-Garmendia (eds), Africa's Infrastructure: A Time for Transformation. Washington DC: World Bank.

## 3.4 High Level SWOT Analysis

Table 3: SWOT analysis

STRENGTHS		WEAKNESSES	
<ul style="list-style-type: none"> <li>Core municipal service, recognised by politicians (decision makers) as key to growth and development</li> </ul>	<ul style="list-style-type: none"> <li>In-house plant repair and service (own equipment, experienced technicians )</li> </ul>	<ul style="list-style-type: none"> <li>Inadequate research and development (new products/markets)</li> </ul>	<ul style="list-style-type: none"> <li>Financial management skills and reporting</li> </ul>
<ul style="list-style-type: none"> <li>Knowledgeable, skilled personnel with experience</li> </ul>	<ul style="list-style-type: none"> <li>Own strategic assets, i.e. asphalt plant, laboratory</li> </ul>	<ul style="list-style-type: none"> <li>Poor organisational culture and ethics</li> </ul>	<ul style="list-style-type: none"> <li>Poor ICT infrastructure and skills</li> </ul>
<ul style="list-style-type: none"> <li>Experienced management with local government and corporate skills training</li> </ul>	<ul style="list-style-type: none"> <li>Ability to be self-sufficient and self-sustaining through the production of asphalt</li> </ul>	<ul style="list-style-type: none"> <li>Negative customer perceptions</li> </ul>	<ul style="list-style-type: none"> <li>High staff turnover, IT, Finance and Audit</li> </ul>
<ul style="list-style-type: none"> <li>No direct competitors</li> </ul>		<ul style="list-style-type: none"> <li>Poor stakeholder relations management/ communications</li> </ul>	
<ul style="list-style-type: none"> <li>Enabling legislative environment (by-laws)</li> </ul>		<ul style="list-style-type: none"> <li>Limited corporate/ commercial management expertise</li> </ul>	
		<ul style="list-style-type: none"> <li>Unfunded mandate and backlogs</li> </ul>	
OPPORTUNITIES		THREATS	
<ul style="list-style-type: none"> <li>Positive public image of the JRA</li> </ul>	<ul style="list-style-type: none"> <li>Dissemination of information</li> </ul>	<ul style="list-style-type: none"> <li>Changing political priorities</li> </ul>	<ul style="list-style-type: none"> <li>Budgetary constraints because of low revenue collections</li> </ul>
<ul style="list-style-type: none"> <li>Economic infrastructure management</li> </ul>	<ul style="list-style-type: none"> <li>Information and communication technology (ICT)</li> </ul>	<ul style="list-style-type: none"> <li>Shortage of critical skills (engineering, financial)</li> </ul>	<ul style="list-style-type: none"> <li>Poor socio-economic conditions negatively affecting the City's revenue</li> </ul>
<ul style="list-style-type: none"> <li>Better management of demand for services and response</li> </ul>	<ul style="list-style-type: none"> <li>Improved stakeholder network</li> </ul>	<ul style="list-style-type: none"> <li>High levels of criminality (theft, vandalism) and damages to road infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Climate change – unpredictable weather patterns, i.e. increased incidence of flooding</li> </ul>
<ul style="list-style-type: none"> <li>Protection and safe-guarding of road infrastructure</li> </ul>	<ul style="list-style-type: none"> <li>Alternative sources of funds and partnerships opportunities</li> </ul>	<ul style="list-style-type: none"> <li>Ever-increasing customer demands not matched with related budget</li> </ul>	
	<ul style="list-style-type: none"> <li>Provision of road infrastructure for non-motorised transport</li> </ul>		

## Strategic Challenges

- Description:** Lack of integration of planning.

The lack of integrated planning between the public and private sector in Johannesburg has seen different priority areas developed by the City, the province and the private sector. While the City is pushing for a compact city that is based on transit oriented development, transformation of marginalised communities and a revitalised inner city, the private sector has at times gone for estate developments, office parks and retail malls that are located in traditionally high income areas or greenfields sites.

- **Description:** Delivery capacity.

The City is embarking on a R100bn infrastructure investment drive over the next decade in pursuit of the future defined in the GDS 2040. This will require adequate service delivery capacity not only within the city's administration but also in the construction industry. There is already a known shortage of students with mathematics and matric exemptions at high school level, there is a shortage of engineering graduates at tertiary institutions and there is a low number of engineers per 100 000 people in South Africa. Progress with emerging contractor development has been slow and many have not grown for various reasons within the industry. Other disciplines such as artisans, environmentalists, project managers etc. are also required. Access to skills is thus a serious determinant of the level of success that will be achieved in the city's investment programme over the next decade.

- **Description:** Asset preservation.

The City is under tremendous pressure to preserve the value of its infrastructure assets for various reasons that include very old infrastructure (the City is more than a 100 years old); competing demands that have led to insufficient investment in infrastructure maintenance; vandalism and organised theft of infrastructure assets and changing weather patterns causing flash floods that wash away infrastructure.

- **Description:** Rapid urbanisation and migration.

The census of 2011 indicates that the population of Johannesburg has grown from some 3.2 million people in 2001 to 4.4 million in 2011. This is a 38% increase in population in a decade. This reality means that the basic services in the city such as housing, water supply, sanitation, roads and storm water drainage are under tremendous pressure from a capacity perspective as demand has increased. For example the developments that have taken place in areas like Soweto have resulted in more surface water runoff and the storm water drainage system is no longer coping.

## Strategic Opportunities

Based on the JRA Strategy 2017, the ultimate goal is to develop and build a sustainable company, capacitated with a competent team motivated to meet the shareholder's objectives, provide services to communities, satisfy road user and community expectations and contribute to the city's growth and development objectives towards 2040.

- **Description:** Integrated development

Integrated development through the Transit Oriented Development approach will ensure public transport driven corridor development that enables the pooling of the City's resources to use strategic land to develop compact, mixed use areas that promote economic and social activities in well serviced areas.

- **Description:** Gauteng GCR

Harnessing the potential and opportunities of the Gauteng Global City Region in order to integrate the economic development plans of Tshwane, Johannesburg and Ekurhuleni involves moving towards creating a mega-city within the Gauteng province. The integration of the road and rail network systems, improvement of major freight logistics hubs, and the prioritisation of public transport based mobility in the region will promote trade and investment and attract tourists.

- **Description:** Transformation

Economic transformation through job creation and the targeted development and use of emerging contractors in the rollout of the City's R100bn infrastructure investment programme. The roads, housing, water and electricity sectors contribute significantly to the construction economy and the City can provide a significant stimulus to the market through its investment programme. Such a big investment programme must be used to achieve economic transformation

## Strategic Interventions

Strategic Assets What we want to achieve in 2017	Traffic Regulation What we want to achieve in 2017	Road Network Development What we want to achieve in 2017
<ul style="list-style-type: none"> <li>An upgraded, efficient and financially viable asphalt plant that supplies adequate amounts of asphalt to JRA depots and generates revenue from external sales to the market.</li> </ul>	<ul style="list-style-type: none"> <li>Functional traffic signals that improve the road user experience.</li> </ul>	<ul style="list-style-type: none"> <li>Rollout of a major capital reinvestment in the City's road network system.</li> </ul>
<ul style="list-style-type: none"> <li>An adequately resourced Resurfacing Depot that carries out a significant portion of the JRA's resurfacing spend delivering quality resurfacing of the City's roads.</li> </ul>	<ul style="list-style-type: none"> <li>A traffic signals maintenance regime that incorporates prevention, remote monitoring, regular inspections and rapid response in compliance with City standards.</li> </ul>	<ul style="list-style-type: none"> <li>A funded routine and periodic road maintenance regime that preserves the city's roads.</li> </ul>
<ul style="list-style-type: none"> <li>Functional soils and asphalt materials laboratories that conduct most of the JRA's materials testing.</li> </ul>	<ul style="list-style-type: none"> <li>Compliance with the SA Road Traffic Signs Manual (SARTSM) standards for both traffic signs and signals.</li> </ul>	<ul style="list-style-type: none"> <li>Improved visual condition index (VCI) against the 2008 baseline VCI.</li> </ul>
<ul style="list-style-type: none"> <li>Adequate provision of fleet and plant to support the regional service delivery operations.</li> </ul>	<ul style="list-style-type: none"> <li>Modern traffic signals with state of the art technology.</li> </ul>	<ul style="list-style-type: none"> <li>Adequate protection of road infrastructure assets to ensure road user safety and preserve asset value.</li> </ul>
<ul style="list-style-type: none"> <li>An efficient Traffic Signals Maintenance Depot that prioritises preventative maintenance and uses the remote management system to anticipate and rapidly respond to traffic signal malfunctioning.</li> </ul>	<ul style="list-style-type: none"> <li>Deployment of alternative power sources where appropriate to ensure resource sustainability.</li> </ul>	<ul style="list-style-type: none"> <li>Programmatic road network management based on a 10 year roads development plan for the City.</li> </ul>
	<ul style="list-style-type: none"> <li>Visible street names and clear road markings in communities.</li> </ul>	
	<ul style="list-style-type: none"> <li>Safety improvements based on accident statistics, traffic studies and hot spot identification.</li> </ul>	
<ul style="list-style-type: none"> <li>Proper floodline data, masterplans and water impoundment information for decision support and implementation.</li> </ul>	<ul style="list-style-type: none"> <li>Adequate funding levels for the JRA.</li> </ul>	<ul style="list-style-type: none"> <li>Public-public, public- private and public-public- private partnerships that respond directly to the City's priorities, the GCR and the National Development Plan.</li> </ul>
<ul style="list-style-type: none"> <li>Safer communities through the provision of safe and adequate sub-surface storm water drainage systems.</li> </ul>	<ul style="list-style-type: none"> <li>Funding flexibility to ensure adequate funding models are applied to specific funding areas.</li> </ul>	<ul style="list-style-type: none"> <li>Strong links with communities, NGOs and other civil society structures to promote active citizenry and empower the unemployed, the youth and women.</li> </ul>
<ul style="list-style-type: none"> <li>Application of urban water drainage principles where possible to preserve and use surface runoff.</li> </ul>	<ul style="list-style-type: none"> <li>Maximise the JRA's contribution to the city's financial resilience and sustainability priority focus.</li> </ul>	<ul style="list-style-type: none"> <li>Proper SLAs and contract management to ensure delivery against the objectives of partnerships.</li> </ul>
<ul style="list-style-type: none"> <li>An adequate storm water infrastructure maintenance regime that ensures a structurally sound, safe and blockage free drainage network.</li> </ul>	<ul style="list-style-type: none"> <li>Savings from internal efficiency and improved productivity.</li> </ul>	<ul style="list-style-type: none"> <li>Improved collaboration with other CoJ departments and municipal entities (MEs) in the rollout of service delivery to communities.</li> </ul>
	<ul style="list-style-type: none"> <li>Savings from reduced vandalism and infrastructure theft.</li> </ul>	

# Activities and Deliverable

**Table 4: Activities and deliverables for 2017**

## 7.1 Roads infrastructure: Core activities and ‘burning deliverables’

Focus Area: Traffic Signal Management	
Activities	Burning deliverables
1. Traffic signals maintenance: Continue with routine and reactive maintenance (with 24 hour emergency teams)	1. All minor faults repaired within 24 hours of fault logging; all major faults within 72 hours of fault logging
2. Traffic signals SA Road Traffic Signs Manual (SARTSM) upgrades: Meet legal compliance/ standard	2. Weekly monitoring of every signalised intersection undertaken; routine maintenance at every signalised intersection undertaken once a month
3. Install new signalised intersections to SARTSM standard	3. All signalised intersections to comply to minimum legal requirements
4. Alternative power - UPS/ solar systems: Install at arterial routes and other identified critical intersections	4. Re-cable, replace controllers and install LEDs at remaining signalised intersections
5. Upgrade existing traffic signal equipment: Re-cabling, controller replacement, LED conversions, phase changes	

Focus Area: Road Signs and Marking Management	
Activities	Burning deliverables
1. Routine signs and marking maintenance: Minor repairs, straightening of devices, cleaning, and removing vegetation and debris, as well as many other necessary daily requirements	1. All major arterials repainted every 2 years (can extend to 6 depending on paint). Local roads (suburbs) repainted every 3 years.
2. Proactive maintenance: Upgrading of existing signs and markings	2. All regulatory signs/markings replaced within 24 hours from fault logging.
3. Implementation of new signs and markings	3. Visible street names and house numbers evident at all intersections
4. Implementation of renamed and new street names	
5. Installation of temporary signage	

Focus Area: Network Monitoring	
Activities	Burning deliverables
1. Manage remote traffic signals	1. Remote monitoring systems installed at 75% of the network by 2015
2. Manage incidents – Traffic Management Centre (TMC): Operate the TMC as a 24 hour centre	2. Real time information provided to road users and stakeholders on network conditions
3. Protect infrastructure: Design and implementation of mechanisms/ technologies to protect infrastructure	3. Vandalism on traffic signal infrastructure reduced by 30%
4. Implementation of renamed and new street names	4. Road network monitored on a 24 hour basis in terms of vandalism, incidents, traffic flow, defects
5. Survey and monitor the road network	
6. Disseminate real-time traffic information	

Focus Area: Traffic Engineering	
Activities	Burning deliverables
1. Collect and survey traffic data	1. Annual traffic counting report produced in terms of SLA.
2. Conduct and evaluate traffic impact studies/ models associated with development applications, changes to the road environment, road closures, special events	2. Routine traffic signal timings revised every 3 years
3. Design and modify local intersection: Identification, planning/ design of minor geometric road network upgrades; development of designs for recommended upgrades, improvements and modifications of access points, roads and intersections; junction analysis and design including roundabout and traffic signals	3. Accident hot spots analysed on a monthly basis and improvements recommended
4. Design traffic signal timings: Warrants for new signals; design of new traffic signals; revision of signal phases; warrants and design for additional signal phases; progression/ synchronisation; pedestrian warrants; service requests related to signal timings; process documentation in place for routine retiming; signal timing database management, implementation and fine-tuning	4. Traffic impact studies evaluated within 6 weeks from date of submission and comments made
5. Undertake road safety investigations and design improvements; hot spot analysis, asset management system (AMS) development	
6. Manage parking requirements	

Focus Area: Freight Management	
Activities	Burning deliverables
1. Develop and implement an overload control strategy	1. Overload control strategy developed
2. Install weigh-in-motion systems	2. Key freight areas improved by upgrading road infrastructure
3. Plan weighbridges: Protection of road network	3. Weighbridge implemented in conjunction with JMPD
4. Design and implement infrastructure to support freight movement	4. Data collected on overloading through the implementation of weigh-in-motion for improved road management and enforcement

## 7.2 Roads infrastructure: Core activities and ‘burning deliverables’

Focus Area: Road Asset Management Systems	
Activities	Burning deliverables
1. Annual visual condition assessments (VCA) and updating of visual condition index (VCI)	1. Annual VCA and bridge inspections programme completed
2. Updating of the Roads Asset Management System (AMS): including PMS (Pavement Management System), BMS (Bridge Management System) and GRMS (Gravel Road Management System)	2. PMS, BMS and GRMS updated utilising the data collected from the annual VCA, bridge inspections and gravel roads assessment
3. Upgrading and updating of GIS	3. Prioritised road maintenance and rehabilitation plans, bridge management programme and the gravel road maintenance and rehabilitation plans finalised
4. Record of Construction Systems	

Focus Area: Road Asset Management Systems	
Activities	Burning deliverables
1. Annual visual condition assessments (VCA) and updating of visual condition index (VCI)	1. Annual VCA and bridge inspections programme completed
2. Updating of the Roads Asset Management System (AMS): including PMS (Pavement Management System), BMS (Bridge Management System) and GRMS (Gravel Road Management System)	2. PMS, BMS and GRMS updated utilising the data collected from the annual VCA, bridge inspections and gravel roads assessment
3. Upgrading and updating of GIS	3. Prioritised road maintenance and rehabilitation plans, bridge management programme and the gravel road maintenance and rehabilitation plans finalised
4. Record of Construction Systems	

Focus Area: Planning	
Activities	Burning deliverables
1. Strategic framework for roads	1. Completed strategic framework for roads aligned to the CoJ GDS 2040, IDP and mandate
2. Development of the Ten Year Roads Development Plan (including Capital Investment Management System (CIMS) requirements)	2. Development and annual review of the 10 year roads development plan completed
3. Development of the Marginalised Townships plan	3. Freight logistics planning
4. Development of the Roads Hierarchy Plan	
5. Freight logistics planning	

Focus Area: Design	
Activities	Burning deliverables
1. Create In-house design capacity	1. A functional and equipped in-house design office established
2. Develop and review design standards	2. Development and annual review of the JRA Standards Manual (standard for roads and storm water design drawings)
	3. Compliance of the relevant stakeholders with the roads and storm water design standards ensured

Focus Area: Maintenance	
Activities	Burning deliverables
1. Develop and implement the Routine Roads	1. Undertake the review and update of the Routine Roads Maintenance Plan (RRM)
2. Develop and implement a Gravel Roads	2. 100% implementation of the approved Routine Roads Maintenance Plan within the agreed standards and budget available
3. Improve way-leave management and reinstatements	3. Undertake the review and update of the Gravel Roads Maintenance Plan
	4. 100% implementation of the approved Gravel Roads Maintenance Plan within the agreed standards and budget available
	5. 100% of way-leave reinstatements completed within 3 days
	6. SLAs concluded with all municipal owned entities (MOEs) and telecommunication service providers (Way-leaves and manhole covers)

Focus Area: Construction	
Activities	Burning deliverables
1. Develop and implement a Roads Rehabilitation Plan (RRP)	1. 100% Implementation of the Roads Rehabilitation Multiyear Plan (RRP) according to standard and within budget
2. Develop and implement a Roads Reconstruction Plan (RCP)	2. 100% Implementation of the Roads Reconstruction Multiyear Plan (RCP) according to standard and within budget
3. Develop and implement a Gravel Roads Reconstruction Plan (GRCP)	3. 100% Implementation of the Gravel Roads Reconstruction Multiyear Plan (GRCP) according to standard and within budgets
4. Implement New Roads Construction Plan (public transport, social and economic roads)	4. 100% Implementation of the New Roads Construction Multiyear Plan (public transport, social and economic roads) according to standard and within budgets
5. Implement complete streets retrofit programme	5. 100% Implementation of the streets retrofit programme
6. Implement Gravel Roads Upgrade Programme	6. 100% Implementation of the Gravel Roads Upgrade Programme

Focus Area: Strategic Assets	
Activities	Burning deliverables
1. Upgrade and optimise Asphalt Plant capacity improvement	1. Increased Asphalt Plant production to 120 000 tons per annum in 2 years
2. Resurfacing depot (RSD) capacity improvement	2. RSD output increased to 120 lane kms per annum with effect from 2013/2014
3. Materials testing laboratories capacity improvement	3. Review and upgrade of capacity of the materials testing laboratory to ensure it meets requirements for increased output at the Asphalt Plant and Resurfacing Depot (RSD)
4. Capacitate and improve fleet and plant services	4. 90% availability of plant and equipment
	5. Fleet optimised to 80% of utilisation

Focus Area: Development Control	
Activities	Burning deliverables
1. Enhanced co-operation between CoJ and JRA Development Control	1. Enhanced co-operation between CoJ Transport Department and the JRA's Development Control to effectively regulate development proposals.
2. Improved co-operation between JRA and CoJ Housing, Provincial Housing, Johannesburg Property Company (JPC) and private developers	2. Improved co-operation between JRA and CoJ Housing, Provincial Housing, JPC and private developers (improved consultation and compliance)

### 7.3 Storm water infrastructure: Core activities and 'burning deliverables'

Focus Area: Centralised Storm Water Planning	
Activities	Burning deliverables
1. Flood line determination	1. Storm water competence in design office established.
2. Flood management in conjunction with Environmental Management System (EMS) and depots	2. Flood line determination completed – ensuring compliance with minimum legal requirements
3. Weather intelligence, especially better storm predictions	3. Dam safety inspections completed on all dams ensuring compliance with minimum legal requirements (as per changes to the Water Act)

Focus Area: Centralised Storm Water Planning	
Activities	Burning deliverables
4. Required storm water policies finalised and enforced: Integrated Storm Water Management Policy (ISWMP), by-laws, catchment policy and National Water Act, No. 36 of 1998 NEMA compliance	
5. Storm water audits conducted and linked to CIMS (integrated storm water management)	

Focus Area: Regionalised Storm water Planning	
Activities	Burning deliverables
1. Localised storm water master planning: In support of depot level activities	1. Local storm water master planning completed for hot spots
2. Catchment management: Local hotspots addressed	2. Emergency storm water project implemented
3. Increase conversion of open drains/ channels to prevent loss of life	3. Storm water conversion of open drains accelerated
4. Emergency storm water projects	4. Education / awareness programme of all stakeholders conducted
5. Dam management in line with new Water Act – special focus on embankment protection, and maintenance (e.g. dam walls)	5. Compliance to Occupational Health and Safety Act (OHASA) training and Safety and Health Environmental Control Quality Control (SHEQ) programmes
6. 6. Ground water intelligence	

Focus Area: Maintenance	
Activities	Burning deliverables
1. Embankment protection	1. Depots adequately resourced to effectively execute maintenance operations.
2. Pollution trap system	2. Achieve updated GIS information with servitudes lines and depot level reports, linked to an updated JRA website.
3. Silt management	3. OHASA training and SHEQ programmes conducted as required
4. Kerb inlets (KI) and pipe cleaning and unblocking programme and open channels	
5. Raising of kerb lines	
6. Dam maintenance, especially embankment protection to the approval of the Department of Water Affairs (DWA)	

Focus Area: Construction	
Activities	Burning deliverables
1. New storm water systems construction	1. Adequate funding levels for storm water projects and streamlined procurement processes.
2. Storm water capacity expansion	2. Accelerated and streamlined for river rehabilitation
3. Storm water system upgrades	3. Streamlined storm water planning and construction processes and the use of capable contractors in storm water projects.
4. Conversion programme	4. Enhanced project management capacity and expertise.
5. Dam rehabilitation	
6. Review standard for building kerb inlets	

Focus Area: Human Capital Management	
Activities	Burning deliverables
1. Training of storm-water water engineers and hydrologists	1. Enhanced technical engineering skills and professional competence achieved in organisation
2. Civil design course (training)	2. SHEQ training programmes conducted to comply with legislation
3. Immediate establishment of design office	3. On-going technical training implemented in line with Continuing Professional Development (CPD) requirements

## 7.4 Customer service: Core activities and 'burning deliverables'

Focus Area: Customer service standards	
Activities	Burning deliverables
1. Improve turnaround times	1. Total Quality Management System (TQMS) implemented
2. Quality performance against standards	2. SLAs and charter monitored and evaluated
3. Communication of the requirements of the charter	
4. Develop and review SLAs with other municipal owned entities (MOEs)/ interdepartmental/ inter-governmental role- players	
5. Continued compliance to the charter	

Focus Area: Access to Quality and Real-time Information	
Activities	Burning deliverables
1. Ability to report and act on information gathered in real time	1. Customer Relations Management System developed.
	2. Refurbished website with improved functionality and content

Focus Area: Stakeholder management	
Activities	Burning deliverables
1. Proactive management of media relations	<p>Overarching across all focus areas.</p> <p>1. Communication strategy reviewed to cover, but not limited to:</p> <ul style="list-style-type: none"> <li>• Quarterly bulletin of activities</li> <li>• Communication of programmes in the community as well as ward based communication</li> <li>• Building relationships with community newspapers and radio stations</li> <li>• Safety messages</li> <li>• Participation in regional forums</li> <li>• Relevant media information</li> </ul>

Focus Area: Community Engagement	
Activities	Burning deliverables
1. Ward based planning and implementation monitoring	1. Development of SMMEs and job creation through EPWP programmes in communities.
2. Implement EPWP	2. Educational and awareness programmes in communities to promote community activism and responsibility.

Focus Area: Community Engagement	
Activities	Burning deliverables
3. Active citizenry campaign, which includes: <ul style="list-style-type: none"> <li>• Adopt a road/footway</li> <li>• Adopt a signal</li> <li>• Community based asset protection</li> <li>• Road ambassador programme</li> </ul>	

Focus Area: Customer Satisfaction	
Activities	Burning deliverables
1. Measure customer satisfaction	1. Delivered customer satisfaction survey results including: <ul style="list-style-type: none"> <li>• Internal customer surveys</li> <li>• Brand and perception surveys</li> <li>• Supplier satisfaction surveys</li> </ul>
2. Introduce one stop customer services point	2. Survey findings addressed through structured management interventions/response plans
3. Conduct community research	3. Regionalised service delivery focus

Focus Area: Communication	
Activities	Burning deliverables
1. Customer education, including road user empowerment which allows for better public relations.	Overarching across all focus areas. 1. Communication strategy reviewed to cover, but not limited to: <ul style="list-style-type: none"> <li>• Quarterly bulletin of activities developed</li> <li>• Communication of programs in the community as well as ward base communication</li> <li>• Building relationships with community newspapers and radio stations</li> <li>• Safety messages</li> <li>• Participation in regional forums</li> <li>• Relevant media information</li> </ul>
2. By law communication and enforcement	2. Developed and approved brand management strategy
3. Analysis and management of media sentiment	
4. Brand awareness and perception management, including events and promotions	
5. Participate in public hearings and announcements	

Focus Area: Partnerships	
Activities	Burning deliverables
1. Public partnerships	1. Developed and approved policy on partnerships
2. Private partnerships	2. Signed, enforceable agreements with partners.
3. Social partnerships	
4. International partnerships	
5. Educational partnerships	

Focus Area: Safety	
Activities	Burning deliverables
1. Create awareness and educate	2. Complete street concept implemented
2. Conducting training	4. Upgraded traffic management centre
3. Managing incidents and accidents	6. Collaboration with law enforcement
4. Undertake designs (example, geometric)- in order to be safe	
5. Traffic management centre	
6. Identification of hazards and assessment of risks	

## 7.5 Reflecting on the enablers: Core activities and ‘burning deliverables’

Focus Area: Human Resources	
Activities	Burning deliverables
1. Training and development	1. Short term: Microsoft office, adult basic education and training (ABET), team leaders, project management, development of specific training for engineers 2. Medium term: Mentorship programme, coaching, a female youth development programme 3. Long term: Engineering internship programme, partnerships with universities established, established career path plan, development of a skills matrix
2. Performance management and individual development plans	4. Well managed individual performance contracts, scorecards and individual development plans.
3. Employee relations	5. Harmonised relationships with labour 6. Continued compliance with the employment equity legislation 7. Well implemented employee assistance programme (EAP)
4. HR policies and procedures	8. Designed and implemented a complete HR policy which clearly defines procedures which are in line with current legislation, JRA approved policies and CoJ policies. Continued review of policies and processes. 9. Having a well-trained and informed team
5. Payroll and administration	10. Continued updating and implementation of HR payroll and information systems
6. Safety and Health Environmental Control Quality Control (SHEQ)	11. Well implemented SHEQ policies and procedures to ensure compliance with legislation

Focus Area: Information and Communication Technology	
Activities	Burning deliverables
1. CT governance <ul style="list-style-type: none"> <li>• ICT governance framework</li> <li>• ICT strategy</li> <li>• ICT policies</li> <li>• ICT steering committee</li> </ul>	1. Stabilised IT environment (access, reliability, security, connectivity). (June 2013): <ul style="list-style-type: none"> <li>• Disaster recovery and business continuity</li> <li>• Voice and data communication</li> <li>• Application and infrastructure security</li> </ul>
2. Disaster recovery and business continuity <ul style="list-style-type: none"> <li>• Storage and backup</li> </ul>	2. Approved and implemented ICT governance framework: <ul style="list-style-type: none"> <li>• Strategy</li> <li>• Policies</li> <li>• ICT steering committee established</li> </ul>

Focus Area: Information and Communication Technology	
Activities	Burning deliverables
3. Voice and data communication: Connectivity between depots and HO and rollout <ul style="list-style-type: none"> <li>• Telephones</li> <li>• 3G</li> </ul>	3. Deployed and maintained integrated enterprise resource planning (ERP) systems aligned to CoJ ERP system: <ul style="list-style-type: none"> <li>• Knowledge management (KM) and information system</li> <li>• HR system</li> <li>• Financial system</li> <li>• Business intelligence/ reporting system</li> </ul>
4. Integrated ERP System: <ul style="list-style-type: none"> <li>• JDE, Hansen and SAP</li> <li>• Knowledge management ( user manual) (document management system)</li> <li>• Migration from JDE to SAP</li> </ul>	4. Updated, optimised and maintained industrial IT systems (Feb 2013 onwards): GIS, transportation management system (TMS), traffic management centre (TMC). total quality management system (TQMS), pavement management system (PMS), bridge management system (BMS), accident management system AMS
5. Application and infrastructure security: <ul style="list-style-type: none"> <li>• Access to folders/ servers/ firewall</li> <li>• Security around applications (JDE etc.)</li> </ul>	5. Improved IT system support provided to end users: <ul style="list-style-type: none"> <li>• Provision of relevant and up to date software and hardware (new technologies)</li> <li>• Training of staff</li> <li>• User manual updated and provided</li> <li>• Improved turnaround times on technical queries</li> </ul>
6. Industrial IT system relevant to business (e.g. TMS, TMC, TQMS, customer relations management (CRM), BMS, PMS, GIS, supervisory control and data acquisition (SCADA))	
7. IT Support: <ul style="list-style-type: none"> <li>• Training of staff</li> <li>• Provision of relevant/up to date software and hardware (new technology)</li> <li>• User manual</li> </ul>	

Focus Area: Governance	
Activities	Burning deliverables
1. The TQMS policy management guideline finalised, including: <ul style="list-style-type: none"> <li>• Quality policy statement</li> <li>• Company performance management</li> <li>• Quality assurance/ control</li> <li>• Risk management</li> <li>• Policy database</li> </ul>	1. Contract administration and supply chain management (SCM): <ul style="list-style-type: none"> <li>• A forum of user experts to develop specifications established</li> </ul>
2. JRA policies gathered; checked for gaps and database shared with JRA employees upon Executive Management Team (EMT) approval	2. Review and update of policies <ul style="list-style-type: none"> <li>• SOPs, policies (including separation of functions) reviewed, developed and updated</li> </ul>
3. Standard operating procedures (SOPs) and policies including the separation of functions are developed, reviewed and updated in order of priority.	3. Delegation of authority <ul style="list-style-type: none"> <li>• Updated and approved delegations applied</li> </ul>

Focus Area: Governance	
Activities	Burning deliverables
4. Delegation of authority <ul style="list-style-type: none"> <li>Ensure that the existing delegation policy and schedule are reviewed, communicated, aligned and benchmarked</li> </ul>	
5. Auditing: <ul style="list-style-type: none"> <li>Promote the exercise of internal audit as an ongoing process proactively leading to the external audit of the Auditor-General</li> <li>Ensure action plans and corrective recommendations for audit are implemented and that oversight is provided</li> <li>Performance management measured</li> <li>Ensure compliance to supply chain management (SCM), auditing and reporting requirements is achieved</li> </ul>	
6. Contract administration and SCM: <ul style="list-style-type: none"> <li>Ensure that a forum of user experts to develop specifications is established to support specifications development and SCM optimisation learning</li> </ul>	

Focus Area: Financial Sustainability	
Activities	Burning deliverables
1. Manage cash flow	1. Financially solvent JRA with positive bank balance
2. Improve expenditure efficiency: Undertake benchmarking/ accurate costing of JRA resources/ activities; increase internal productivity; internal vs. external; 3 year capital budgets	2. Clean financial administration achieved (clean audit) through the implementation of proactive and benchmarked continuous quality reviews, increased controls and audit investigations
3. Develop and implement an alternative funding strategy for income generation	3. Quality, value for money services delivered, on time, within budget through the practice of a financially disciplined
4. Review overall funding/ costing/ pricing model for service delivery	4. Compliant procurement plan developed with agreed turnaround times, standards, implemented by all role players in alignment with business plan
5. Manage budget: Improve ability to spend, control mechanisms; improve depot alignment between operation, budget and expenditure; real time budget information on the ground; realign budgets	5. SAP financial accounting model implemented by 1 July 2013
6. Manage SCM	

## Risks and Dependencies

### 8.1 Risks

The following risks have been identified as threats to the delivery of this strategy.

- Lack of buy-in and implementation of the strategy
- Data availability and integrity
- Unknown medium-term economic outlook and its likely impact on funding levels
- Inadequate skills and lack of delivery capacity
- Lack of cooperation and support from various City structures

The standard risk management process of risk identification, assessment, management, and monitoring will be used to manage and mitigate the identified risks. Through the support of both the Risk Management and the Performance Management and Quality Assurance Units, a process will be put to track progress with the implementation of the JRA Strategy 2017.

## 8.2 Dependencies

The successful implementation of this strategy will rely on the management of the dependencies listed in table 5 below.

**Table 5: Dependencies for strategy implementation**

Dependency	Description	Responsibility
Strategic approach, long term perspective, financial sustainability, integrated approach, partnerships	JRA vision and strategy, JRA 10 year plan, financial turnaround plan, integration at city cluster level, partnerships with private companies, NGOs, province, national government and communities depends on the leadership and foresight by the managing director, planning and finance departments	MD's Office CFO's Office Planning Department
Information systems, data, connectivity and document management	VCAs; GIS; bridge inspections; connectivity to depots depend on the improvement of the JRA's IT infrastructure and network and the rollout of the City's be wired broadband service	IT Department CoJ IT Department
Human capital, adequate skills, transformation, delivery capacity	Planning, design, maintenance, quality assurance, performance management, depend on the JRA's human resources processes of recruitment, skills development, professional development and a balanced skills matrix	HR Department HRD Department
Service delivery, staff morale, visibility, performance	Depot facilities, depot supplies including equipment, plant and materials, strategic asset facilities and supplies, OHS depends on the JRA's facilities management services, procurement and finance	Management Support Services Department Supply Chain Management Finance Department
Infrastructure rollout, service delivery and job creation	Capex programme rollout, visible service delivery, SMME development, labour recruitment depend on the project design and project management, targeted procurement and development of emerging contractors, targeted recruitment of youth and women and strong depot teams	Infrastructure Department Implementation Department Supply Chain Management

# **Our Mission**

**We commit to provide  
quality roads that  
are accessible, safe  
and liveable for our  
communities.**

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