OUR JOURNEY TO A BETTER GAUTENG

South African Reward Association
Employee Benefits Workshop
16 May 2018
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1. The Past – Africa’s Largest PPP
2. The Present – Managing Complexity
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The Past: Africa’s Largest PPP
Public Private Partnership

• Gautrain is a PPP Project
• Leading to a Concession Agreement
• PPP Projects on National and Provincial levels are regulated by South African Public Finance Management Act Regulations (TR 16)
PPP Contracts

• Characteristics of PPP contracts
  – Output specification
  – Client (authority) only defines the problem (essential minimum requirements)
  – Concessionaire bids to design, build, operate the project for the concession period a fixed price, fixed specification and fixed time frame (turnkey) contract
  – Concessionaire takes all completion and integration risks
  – Concessionaire is fully involved in the operation and maintenance of the system for the full concession period
  – Concessionaire must hand over the system to the client at the end of the concession period in a prescribed condition
Existing Routes
Pre Gautrain - a challenging future

Snapshot of the Gauteng economy prior to the construction of the Gautrain

Lack of sufficient transport infrastructure

Throughout the early 2000's, the majority of Gauteng's population still had no direct access to reliable and affordable public transport.

NO ACCESS

Change in demographics exacerbates the lack of public transport and burden on road traffic

Gauteng population grew by 21% between 2001 and 2007

Migrants to and from Gauteng, 2001-2006

533,228

738,383

Out-Migration

In-Migration

12% increase in the number of vehicles on Gauteng roads between 2003 and 2005

Total vehicles on Gauteng's roads

2.4 mil

2.5 mil

2.7 mil

2003

2004

2005

Rising number of cars on Gauteng's roads and congestion cause alarmingly high accident rates

Increased number of fatal accidents on the road

Fatal Accidents

The number of fatal accidents in Gauteng increased from 2,206 in 2001 to 2,296 in 2004

Economic burden of high accident and fatality rates in Gauteng tops R2 billion in 2005. This represents 4.5% of the size of Gauteng's transport sector

Gauteng's economy contributes to South Africa's economic success

By 2005, Gauteng was classified as Africa's fourth largest economy (after South Africa, Egypt and Algeria)

Contribution to national GDP, 2005

Gauteng 34.36%

Western Cape
Northern Cape
Free State
KwaZulu-Natal
North West
Gauteng
Mpumalanga

Gauteng contributed roughly one third (R539 bn) of the national GDP (R1 571 bn)
Gautrain: More than Just Another Transport Project

**Stimulate**
- Economic growth
- Investment
- New development
- Job creation

**Design to**
- Reduce travel distances, time and cost
- Restructure urban areas
- Improve city sustainability

**Promote**
- Public Transport
- SMME & BBBEE Development
- Tourism
- Business development
# Major Phases of Project

<table>
<thead>
<tr>
<th>PHASE</th>
<th>PHASE NAME AND PERIOD</th>
<th>PROVINCE SUPPORT</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>PROCUREMENT</td>
<td>Transaction Advisors</td>
</tr>
<tr>
<td></td>
<td>Apr 2000 – Sep 2006</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Financial Close only in February 2007</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>CONCESSION DEVELOPMENT</td>
<td>GMA staff and Provincial Support Team</td>
</tr>
<tr>
<td></td>
<td>28 Sep 2006 – 7 June 2012</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plus defects/liability/retention period</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>OPERATION &amp; MAINTENANCE</td>
<td>GMA</td>
</tr>
<tr>
<td></td>
<td>7 June 2012 – 27 March 2026</td>
<td></td>
</tr>
</tbody>
</table>
Project Cost

• Gautrain is a fixed price turn key project
  – Price had been fixed at the signing of the Concession Agreement on 28 September 2006
• Provincial contribution R21,9 bn
• Private sector contribution R 3,2 bn
• R25,1 bn is expressed in nominal terms over the 54 months of construction
• Only the following increases in cost were allowed:
  – Extra work through a Variation Order (only 4.6% of Project Value)
  – Escalation higher than the escalation prediction of the Reserve Bank
Gautrain Socio economic development (Construction)

What does this mean for Gauteng and its future?

The Gautrain’s construction made a major contribution over the 6 year period to help Gauteng become a more efficient economy through the long-term nature of its economic benefit streams created, especially in downstream user industries.

Economic contribution through the following impacts

- Approximately R20 billion contribution to provincial GDP over the 6 years.
- Sustained 121,800 jobs in Gauteng between 2006 and 2012.
- Increased government revenue by an estimated R5 billion.
- Approximately R2 billion income was received by lower income households.

Potential long-term economic benefits

- For every R1 new investment into the economy by the Gautrain, an additional 73 cents is added to the Gauteng economy.
- Investment into the expansion of the Gautrain implies an additional 5 jobs per R1 million spent will be sustained during the construction.
- For every R1 new investment into the economy by the Gautrain, an additional 18 cents is added to the national government revenue.
- Future expansion would imply poverty alleviation impact for Gauteng in that 17% of additional household income generated will flow to low income households.
The Present – Managing Complexity
Key Lessons

1. Have a customer focus
2. Support private sector efficiency
3. Contract management drives Value for Money
4. Empowered public sector essential
5. Public sector drives change in a PPP
Snap -Shot

1. 99% Availability and 98% Punctuality
2. Less than 0,4% fare evasion
3. Less than 1 security incidents / 1 million trips
4. Strong ridership growth
5. Operating cost recovery ratio 1,1
6. Overcrowding and capacity constraints currently using entire fleet of trains
Gautrain – Revenue (Nominal)

Gautrain Annual Fare Income
With year on year growth rate indicated

FY 12/13 FY 13/14 FY 14/15 FY 15/16

GPS

25.3%

15.0%

7.9%

APS

R 0
R 100 000 000
R 200 000 000
R 300 000 000
R 400 000 000
R 500 000 000
R 600 000 000
R 700 000 000
R 800 000 000
R 900 000 000
Fare Comparison

Comparison of Orange Single Train Fares: 2011 to 2016
Managing Capacity

As the following slides show, Gautrain has addressed capacity issues by:

- Introducing 8-car trains
- Structuring the fares to encourage travel outside of peaks
- Introducing a 10 minute timetable
Additional Rolling Stock

- Province has identified a latent demand and capacity constraint in relation to the Gautrain Rapid Rail Link system.
- The actual passenger demand on the Gautrain system has exceeded realistic expectations and predictions.
- To manage the provision of capacity, Province will require a total of 48 coaches, expanded depot and upgrade signalling.
- Being done as a Variation spanning over the end of the concession.
- DBSA is GMA financing partner.
- R4,5 billion project.
- Currently in procurement.
Gautrain’s operations
Socio-economic development success

Source: GMA SED report 2013/14 financial year

What does this mean for Gauteng and its future?

- An estimated R1.7 billion contribution to provincial GDP.
- Sustained about 6,000 jobs in Gauteng in 2013.
- Increased government revenue by approximately R400 million.
- Around R200 million income was received by lower income households.

For every R1 spent on operating the Gautrain, the provincial economy gains 96 cents.
For every R1 million of operational expenditure, 4 jobs will be sustained per year.
For every R1 spent on operating the Gautrain, an additional 24 cents is added to the national government revenue.
Future operations of the Gautrain imply poverty alleviation impact for Gauteng in that 23% of additional household income generated will flow to low income households.
Gautrain’s operations
Socio-economic development success

Source: GMA SED report 2013/14 financial year

<table>
<thead>
<tr>
<th>Economic impact of increased business activity</th>
<th>R10 billion invested in new developments and upgrades to retail centres between 2009 and 2014</th>
<th>An increase in GLA has led to additional investment of R986 million in office space.</th>
</tr>
</thead>
</table>

- The additional investment in the retail industry added **R28 billion** to the Gauteng economy’s GDP during 2013, representation of **3%** of the provincial GDP, emphasizing the importance of the multiplier effect which the retail industry has on the Gauteng economy.

- The retail industry’s operations sustained about **143 800 jobs** in Gauteng in 2013, representing about **4%** of the total employment in the Province during 2013.

- The increased investment in office rentals had a total impact on the provincial GDP of **R920 million**. Even though its impact was not as significant as the retail industry, it still made a contribution of about **0.1%** to the provincial GDP in 2013.

- **4 000 jobs** were sustained in Gauteng due to the additional office space available in 2013.

The Vision for the Future
A new modern Gauteng is in the making

• Gauteng premier’s first State of the Province Address on 27 June 2014 in Thokoza, Ekurhuleni
  – Radically modernise the way Gauteng residents live and work
  – Ten pillars of radical transformation
• Gauteng has a 25 year Integrated Transport Master Plan with Rail as its Public Transport backbone
• Use public transport as an economic growth stimulant
GRRIN Land Use population

- Gauteng’s population is estimated to increase by 48% by 2037

![Population Chart]

- 2014: 12,952,631
- 2025: 16,797,806
- 2037: 19,143,438

Total Population
Formal work opportunities and jobs

- Work force is estimated to increase by 44% by 2037
- Formal jobs in Gauteng is estimated to increase by 83% by 2037
Demographic - Job opportunities

Gauteng 25-Year Integrated Transport Master Plan
Gauteng SDF Approach (2037)

Formal Workers:
- Retail / Office
- Industrial / Commercial
- Other Formal Workers

Demographic - Job opportunities
2037 Socio-economic Density
Low Income with Existing Rail
2037 Socio-economic Density
Middle Income with Existing Rail

Middle Income
Population Density

Job Density
2037 Socio-economic Density
High Income with Existing Rail

High Income Population Density
Job Density
Gauteng Rail Network (Gautrain/ PRASA)

Two Key Rail Operators in Gauteng

- Metrorail/PRASA
- Gautrain
- Routes complementary
Gauteng future

1. Population Growth and land use changes
2. Car/vehicle growth and Road Congestion
3. The cost of doing nothing
4. Needs to have investment in
   - Rapid Rail
   - Commuter rail
   - Road Network
   - Needs to have investment in
5. GRRIN Model takes all future network growth into account
Car growth and Congestion in Gauteng

- 3.9 million in 2014 to 6.6 million in 2037
- 300/1000 population to 450/1000
- Significant car growth
- Congested road network
“The Cost of Doing Nothing”

Analysis of the transport situation in 25 years' time, shows that the consequences or “cost of doing nothing” will be severe, i.e.

- Vehicle population predicted to grow from 3.65 mil. to 6.57 mil.
- Peak hour person trips to grow from 2.2 mil. to 3.9 mil.
- Weighted average peak hour road network speed will reduce from 48 km/h to below 10 km/h
- Weighted public transport travel speed decline from 38 km/h to below 14 km/h
- Congestion nightmare, with the transport network, the economy and the natural environment eventually choking
- Major interventions and management of travel choices and demand will be required to avoid this scenario

<table>
<thead>
<tr>
<th>Demand on Base Year Network</th>
<th>0 - 20 km/h</th>
<th>20 - 40 km/h</th>
<th>40 - 60 km/h</th>
<th>&gt; 60 km/h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Base Year</td>
<td>7%</td>
<td>9%</td>
<td>30%</td>
<td>53%</td>
</tr>
<tr>
<td>2025</td>
<td>9%</td>
<td>11%</td>
<td>31%</td>
<td>48%</td>
</tr>
<tr>
<td>2037</td>
<td>39%</td>
<td>22%</td>
<td>17%</td>
<td>23%</td>
</tr>
</tbody>
</table>
“The Cost of Doing Nothing”

Private / Public Transport

Tokyo: 89% Private, 11% Public
Hong Kong: 89% Private, 11% Public
Seoul: 79% Private, 21% Public
Mumbai: 78% Private, 22% Public
Bogota: 77% Private, 23% Public
Delhi: 72% Private, 28% Public
Guangzhou: 66% Private, 34% Public
Paris: 65% Private, 35% Public
Bangalore: 63% Private, 37% Public
Shanghai: 62% Private, 38% Public
Singapore: 57% Private, 43% Public
London: 57% Private, 43% Public
Beijing: 55% Private, 45% Public
Gauteng (GTS 2000): 51% Private, 49% Public
Gauteng (Base - 2011): 59% Private, 41% Public
Ahmedabad: 44% Private, 56% Public
New York: 34% Private, 66% Public
Sydney: 25% Private, 75% Public
Melbourne: 15% Private, 85% Public

Private ▶ Public
## Comparison: Rail Transport Types

<table>
<thead>
<tr>
<th>Characteristic (typical)</th>
<th>Rapid Rail</th>
<th>Commuter Rail</th>
<th>Light Rail</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Top Speed (km/h)</strong></td>
<td>160 – 180</td>
<td>120</td>
<td>80</td>
</tr>
<tr>
<td>**Operating Speed (km/h) *</td>
<td>100</td>
<td>45 -60</td>
<td>35</td>
</tr>
<tr>
<td><strong>Capacity (pax / train)</strong></td>
<td>400/800/1200 / 4-8-12-car</td>
<td>1600 / 12-car</td>
<td>240 / 3-car</td>
</tr>
<tr>
<td><strong>Standing</strong></td>
<td>25%</td>
<td>65%</td>
<td>50%</td>
</tr>
<tr>
<td><strong>Station Spacing</strong></td>
<td>6-10 km</td>
<td>3 km</td>
<td>500m – 1km</td>
</tr>
</tbody>
</table>

* Including Stops
Rapid Rail GRRIN interaction with other modes

![Diagram showing the interaction between Rapid Rail and other modes of transportation. The diagram compares passenger capacity per hour against travel distance (km). Rapid Rail is highlighted in green, Commuter Metro Rail in red, Long Distance in purple, Monorail in brown, BRT in dark blue, and Minibus in yellow. The diagram illustrates that Rapid Rail is most effective in the 20-30 km range, while Commuter Metro Rail is optimal for shorter distances. The Long Distance category extends to 900 km.]
Gautrain Public transport system

Rapid Rail / Gautrain Speed profile:
• 160 km/h
Optimal distance
• 62 – 75 km
Passenger per hour
• 7,500 – 20,000 pph

Gautrain Feeder System

GRRIN Integration with BRT in CoT, EMM and CoJ as part of feeder and distribution bus network.

Feeder Bus

Feeder Taxi
• Marlboro
• Rosebank

Gautrain

Feeder Bus

Feeder Taxi
• Marlboro
• Rosebank

Gautrain

GRRIN Integration with BRT in CoT, EMM and CoJ as part of feeder and distribution bus network.

REA VAYA

Harambee BRT

A RE YENG
GRRIN Extensions    Phase 1
Western Core Network

LEGEND
- North – South Commuter
- East – West Commuter
- Airport
- Phase 1
- Metrorail

Gautrain
GAUTRAIN MANAGEMENT AGENCY
Implementing Agency

Gauteng
ON THE MOVE
GRRIN Extensions: Phase 2-5

LEGEND
- Red: North – South Commuter
- Blue: East – West Commuter
- Orange: Airport
- Green: Phase 3-5
- Grey: Metrorail

Stations:
- Sandton
- Centurion
- Midrand
- Hatfield
- Pretoria
- Irene
- Samrand
- O.R. Tambo
- Rhodesfield
- Hazeldean
- Tshwane East
- Hazeldean
- Rhodesfield
- Hazeldean
- Midrand
- Sandton
- Sandton 2
- Sandton 2
- Sunninghill
- Olievenhoutsbosch
- Lanseria
- Cradle
- Little Falls
- Roodepoort
- Jabulani
- Park
- Rosebank
- Randburg
- Marlbora
- Modderfontein
- East Rand Mall
- Boksburg
- Johannesburg
SED and BBBEE

- Investigation done
- Gautrain lessons learnt taken into account

**SED NEEDS ANALYSIS REPORT**

Identified SED Goals:
- Increase in Black Ownership in Sector by Black People and Black Women.
- Increase in Black Management and employment equity in sector.
- Increase in procurement to Black owned entities operating in sector, and creation of Black Industrialists.
- Increase in support to Black Enterprises operating in sector.
- Focus of Localisation and Local Content of entities in the supply chain of sector.
- Increase in the creation of jobs.
- Focus on Decent work.
- Increase in capacity in the sector through Skills Development

**SED SOLUTIONS OPTIONS REPORT**

Summary of the estimated SED Solutions Options Results:

<table>
<thead>
<tr>
<th></th>
<th>Approx. 211 000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Jobs</td>
<td></td>
</tr>
<tr>
<td>Procurement spend on black owned entities</td>
<td>R19 billion</td>
</tr>
<tr>
<td>Local Content</td>
<td>R79 billion</td>
</tr>
<tr>
<td>Socio-economic value (Skills, ED, SD)</td>
<td>R1, 6 billion</td>
</tr>
</tbody>
</table>

**SED DUE DILIGENCE REPORT**

SED Due Diligence Focus Areas:
- Due diligence on whether the following SED elements are credible:
  - Black Equity Ownership
  - Management Control and Employment Equity
  - Preferential Procurement
  - Skills Development
  - Enterprise and Supplier Development
  - Job Creation
  - Local Content
  - Socio-Economic Development
  - Recommendations
# SED targets for Phase 1

<table>
<thead>
<tr>
<th>Economic Development Achievements</th>
<th>Development Period</th>
<th>Operational Period</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Target</td>
<td>Value</td>
</tr>
<tr>
<td>Local Content</td>
<td>65%</td>
<td>R 16,800 million</td>
</tr>
<tr>
<td>Job Creation</td>
<td></td>
<td>28,997</td>
</tr>
<tr>
<td>Skills Development</td>
<td>1,5%</td>
<td>R 388 million</td>
</tr>
<tr>
<td>Preferential Procurement: Black Owned Spend</td>
<td>15%</td>
<td>R 2,525 million</td>
</tr>
<tr>
<td>Enterprise Development</td>
<td>0,1%</td>
<td>R 26 million</td>
</tr>
<tr>
<td>Supplier Development</td>
<td>0,2%</td>
<td>R 52 million</td>
</tr>
</tbody>
</table>
Job Creation

**SOURCE BASIC SKILLS**
- Vulindlele' eJozi
- Harambee Youth Accelerator

**PROVIDE WORK OPPORTUNITY**
- Jozi@Work

**Programme sequencing**

- EPWP / CWP
- JOZI@WORK
- ACCELERATED SMME CONTRACTING
- CSDP

- Locally sourced semi-skilled/unskilled labour workers can be pooled into small enterprises & co-ops
- Locally sourced co-ops/ micro enterprises with CSA oversight
- Locally sourced manufacturing linked to larger industry

Value chain participation / capture of rand value (livelihood impact)
Thank You

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