



# GAUTRAIN - OUR JOURNEY TO A BETTER GAUTENG

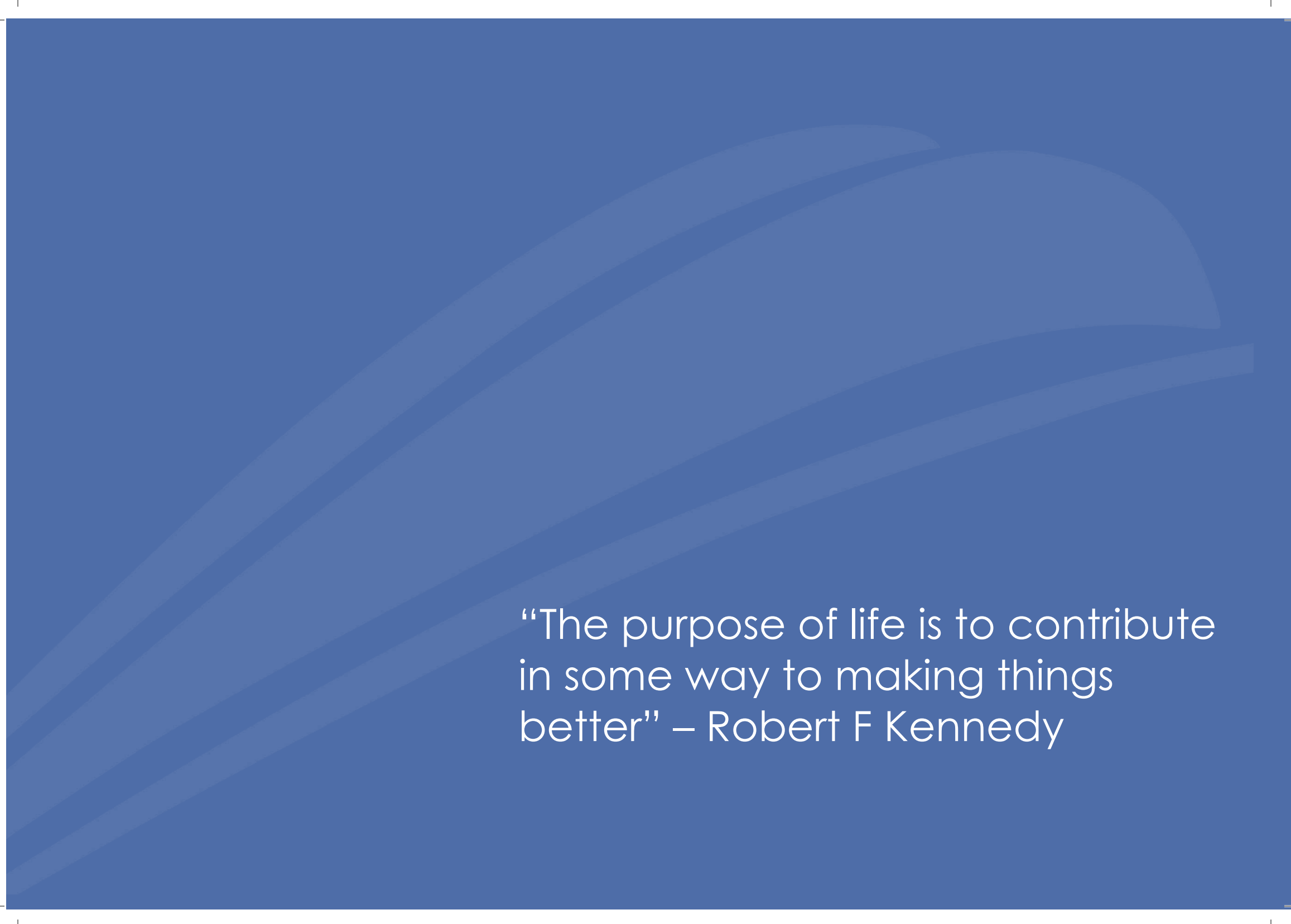
Economic impact of the Gautrain system and  
future expansion on the Province

Executive Summary


November 2014

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The background is a solid blue color with several overlapping, semi-transparent, curved shapes in various shades of blue, creating a layered, abstract effect. The shapes are primarily located in the upper and middle portions of the frame, with some extending towards the bottom.

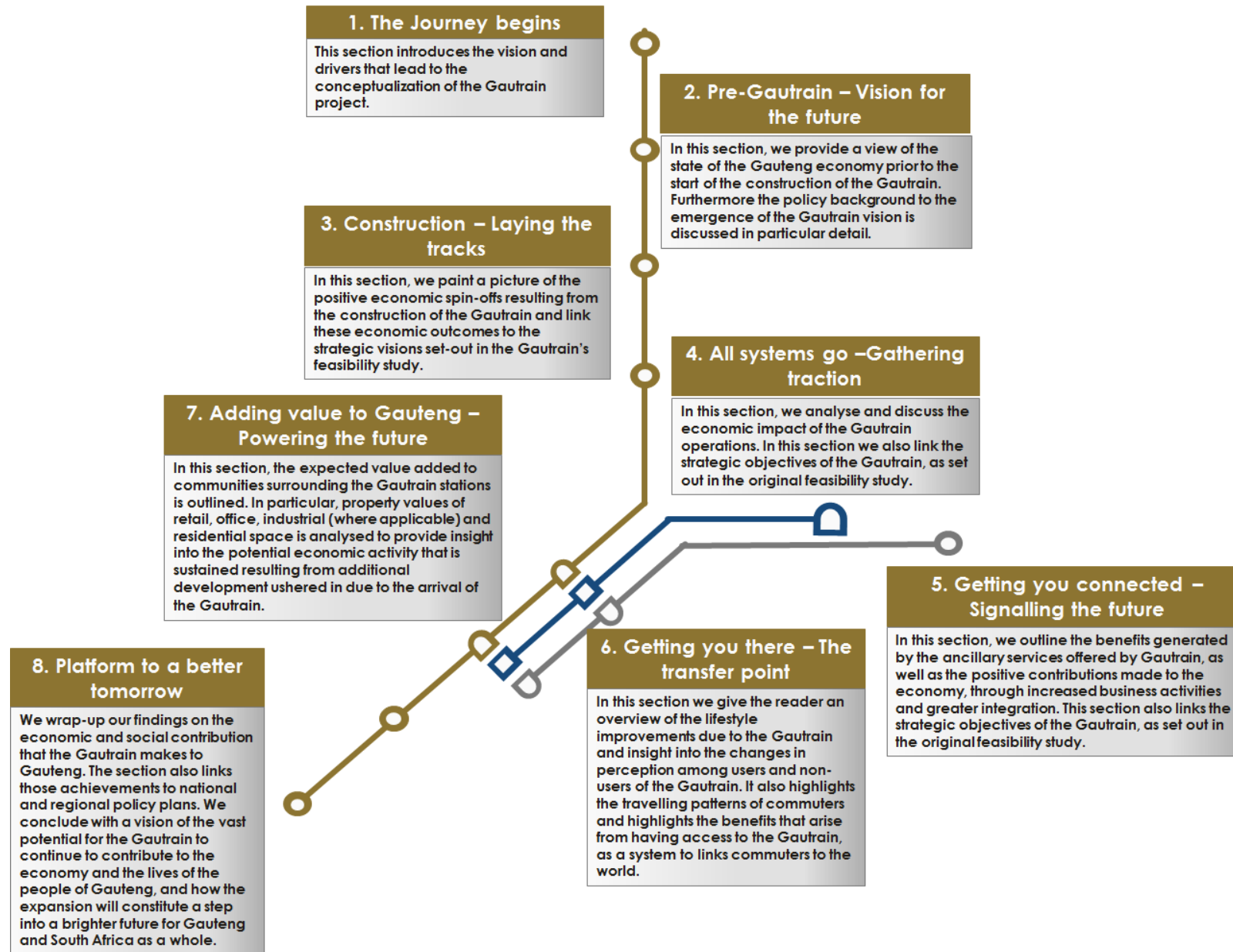
“The purpose of life is to contribute  
in some way to making things  
better” – Robert F Kennedy

A high-speed train, labeled 'GAUTRAIN', is stopped at a station platform. The train is silver with blue and gold accents. The platform has a yellow tactile strip along the edge. The station has a large, modern roof structure with a grid of beams and skylights. The sky is clear and blue.

An advanced city is not a place where the poor move about in car, rather it's where even the rich use public transportation – Enrique Panelosa – Mayor of Bogota

# Network diagram: Journey to a better Gauteng

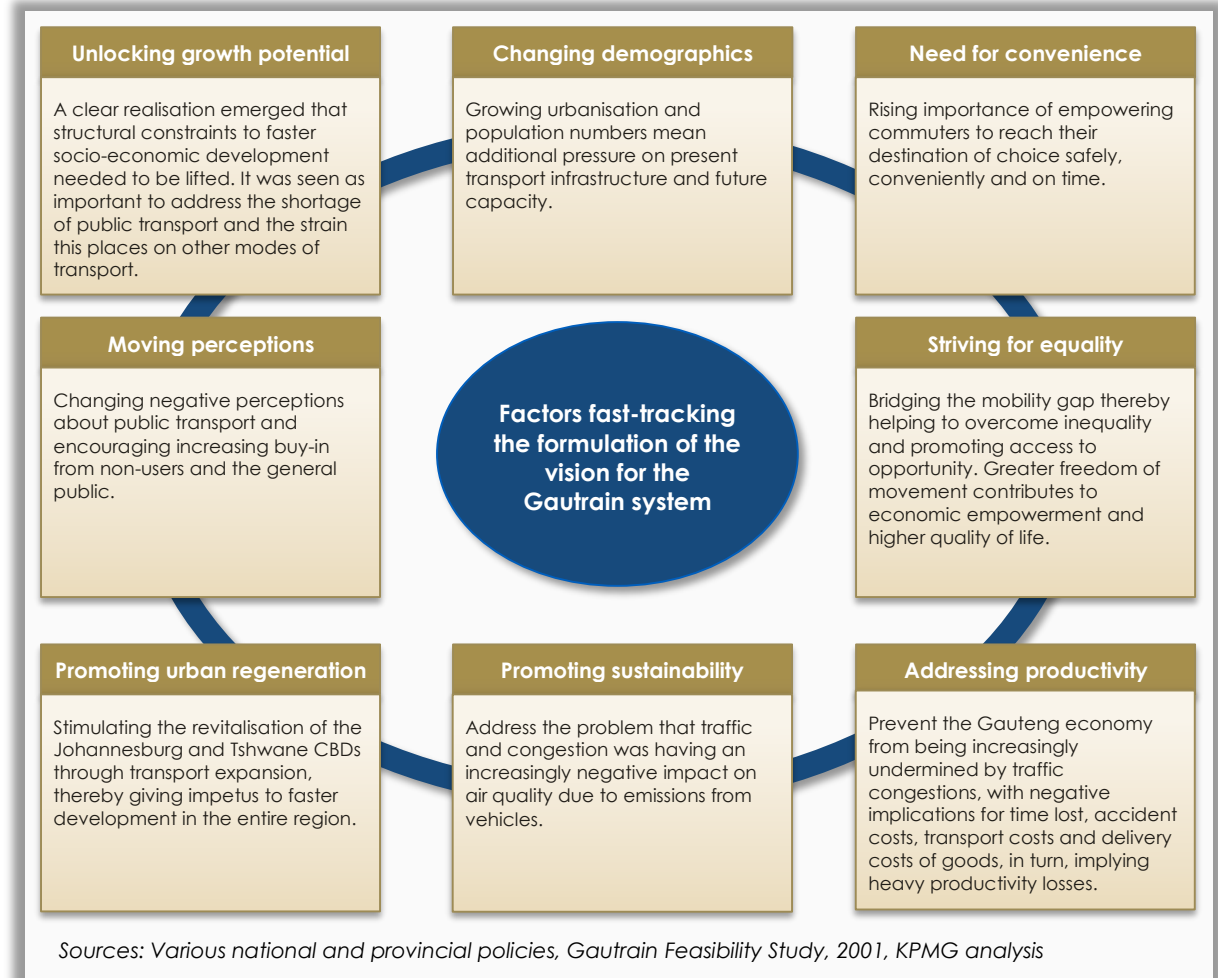




# The Journey Begins...

Over the past decade, the Gauteng Province embarked on a project to implement a state-of-the-art rapid rail network in Gauteng. The project was conceptualised in 1997 and implementation started in 2000. **The goal of the project was not only to radically upgrade public transport in the Province, thereby making a contribution to the goals and objectives of a large range of national and provincial policy plans<sup>1</sup>, but also to improve the economy of the Province and the quality of life of the people of Gauteng.**

In view of the Gautrain's driving forces, the vision of a broader provision of integrated transport emerged, which entailed at its core a rapid rail link system that would connect with various other nodes of transport in Gauteng.



<sup>1</sup> See for example, GEAR, ASGISA and GDS

“Efforts & courage are not enough without purpose and direction” - JFK





# Pre-Gautrain – Vision for the future



## Pre-Gautrain – Vision of the future

### A Challenging Situation

The need to improve public transport in Gauteng

***“The N1 (Johannesburg to Pretoria corridor) north and south-bound freeway is one of the most congested transport corridors in Gauteng, carrying more than 157 000 vehicles single direction on a daily basis. Given this situation, the building of a more efficient public transport system was inevitable. As way of preventing an increase in the rate of private transport entering into city centres, the Gauteng government realized the need for effective alternatives of travel modes to improve this situation.”***

Throughout the early 2000's, the majority of Gauteng's population was still not mobile and/or had **no direct access to reliable and affordable public transport**. An estimated 84.7% of the Province's population used all modes of public transport, i.e. bus, train and taxi.

However, these commuters continued to register **significant levels of dissatisfaction** with each mode of transport, ranging from distance between home and station, travel time, security to, at and on mode, crowding, safety from accidents, frequency, punctuality, fares, facilities and overall service.

During that time, Gauteng's spatial landscape included **rapid urbanisation**, sprawling urban black townships removed from markets and other points of economic activity and demographic changes including urban poverty and unemployment. Population growth registered 21% during 2001 and 2007, impacted by a net migration influx of 494 806 people during the same period.

**Population growth** heavily impacted on Gauteng's road infrastructure network, with close to 450 000 additional vehicles on the road between 2000 and 2005. Additionally, on one of Gauteng's busiest road, i.e. the N1 between Pretoria and Johannesburg, 7 000 additional vehicles were

reported between 2001 and 2003. As a result, the increased congestion led to a larger number of reported accidents and fatalities. The economic burden of such high accident and fatality rates have had a significant impact on the country and the Province's budget each year, with the cost to the latter topping R2 billion in 2005. This represented 4.5% of the size of Gauteng's transport sector in that same year.

***“[C]entral to the development of any economy lies the country's transport infrastructure development”.** MEC for Roads and Transport, Dr Ismail Vadi, 2012*

Prior to the construction of the Gautrain, Gauteng was going from strength to strength as the **economic powerhouse of South Africa**. By 2005, Gauteng was classified as Africa's fourth largest economy (after South Africa, Egypt and Algeria) and served as the economic, corporate and transport hub of the sub-continent. By this stage, Gauteng contributed roughly one third (R539 billion) to the national GDP (R 1 571 billion).

It was apparent that a vibrant Gauteng economy would serve as an engine for driving the achievement of national growth objectives. Strong recognition existed that **the faltering transport network desperately needed substantial upgrading in order to meet the growing needs Gauteng residents**. Only by meeting the Province's transport needs would it be possible to sustain Gauteng's economic significance within South Africa and Africa at large.

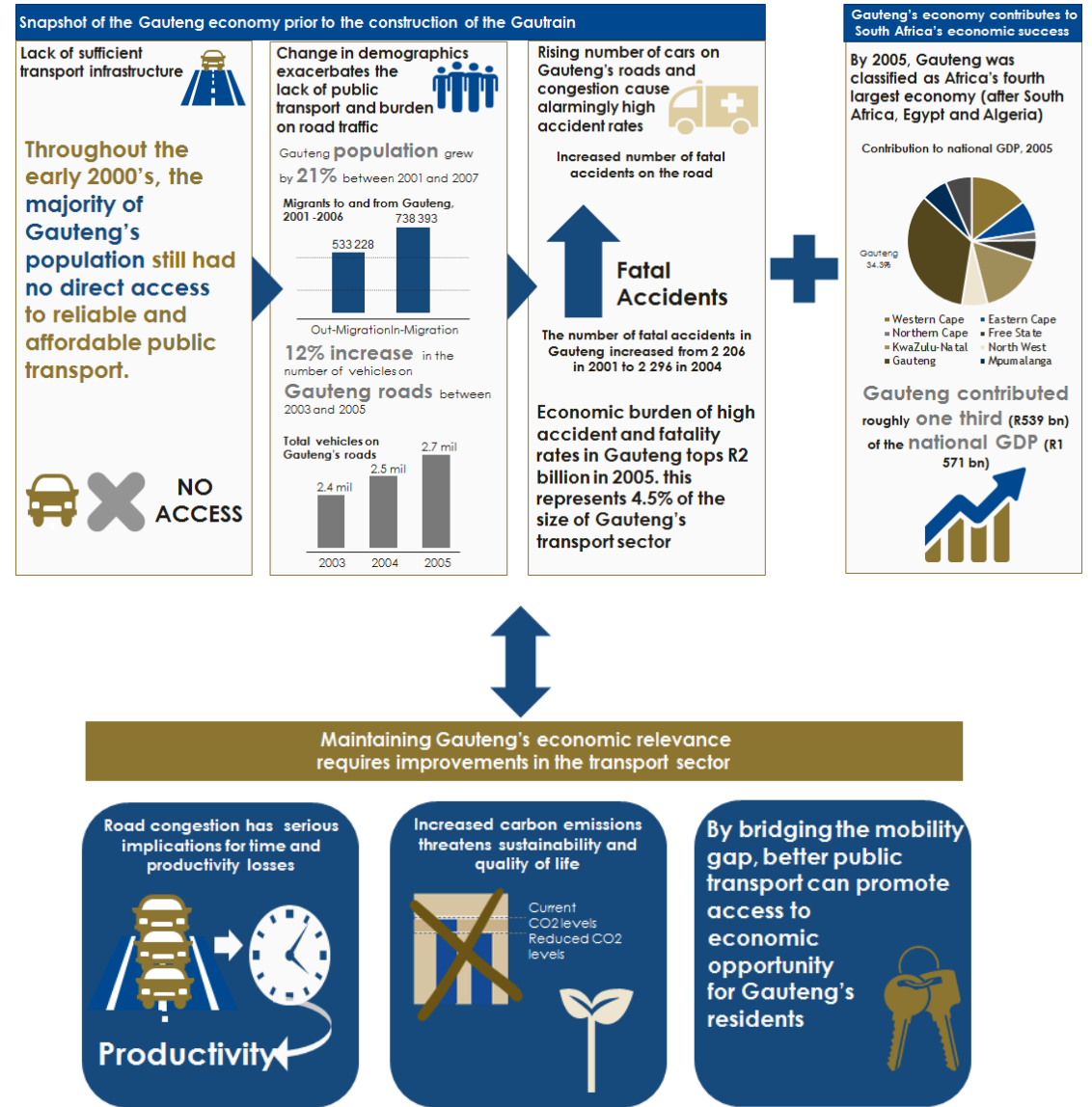
A sub-par transport system in Gauteng was expected to constrain the Province's economic growth in the following ways:

- Road congestion would have serious implications for time and productivity losses. This, in turn, would impact on the cost of labour and diminish productivity levels;
- Increasing number of vehicles on the road would lead to escalating numbers of fatal accidents, with Gauteng already accounting for a quarter of total national fatal accidents in 2001. This would cost the

Gauteng economy R2 billion by 2005, representing 4.5% of Gauteng's transport sector in that year;

- With people being forced to opt for road based transport, carbon emission were on the increase, threatening sustainability and quality of life for Gauteng's residents.

In order to unlock Gauteng's growth potential, it was clear that the transport sector needed to be built, which would **bridge the mobility gap, promoting access to economic opportunity for Gauteng's residents**. In that way it would be possible to address the shortage of public transport in the Province and the strain this places on other modes of transport.



Sources: StatsSA, eNaTIS, Arrive Alive, Road Traffic Management Corporation

# The Vision unfolds











## Towards a better tomorrow

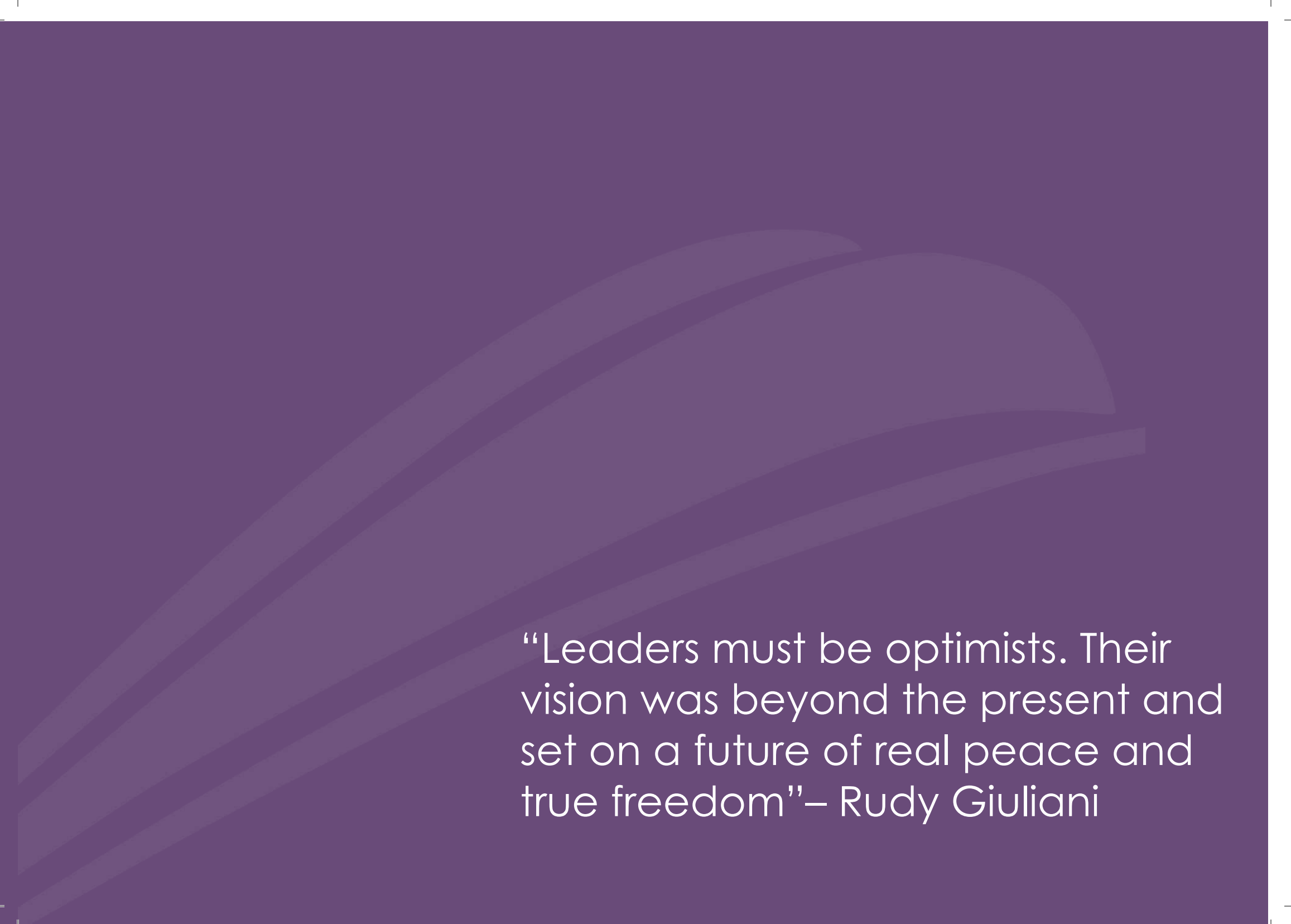
It was apparent that a vibrant Gauteng economy would serve as an engine for driving the achievement of national growth objectives. Indeed, the growing understanding of the importance of building a stronger transport system that would promote the achievement of a variety of socio-economic objectives such as creating more jobs, alleviating power and reducing inequality was also highlighted in important economic policies at the time, including GEAR (1996).

As both GEAR and later, ASGISA, state **at the heart of the development of economies, lies their transport infrastructure**. Therefore, the importance of lifting the structural constraint on growth through a rapid rail link that would connect Gauteng to South Africa and indeed the world via OR Tambo International Airport. This was a central driving force that was the background to the formation of the Gautrain vision for South Africa.

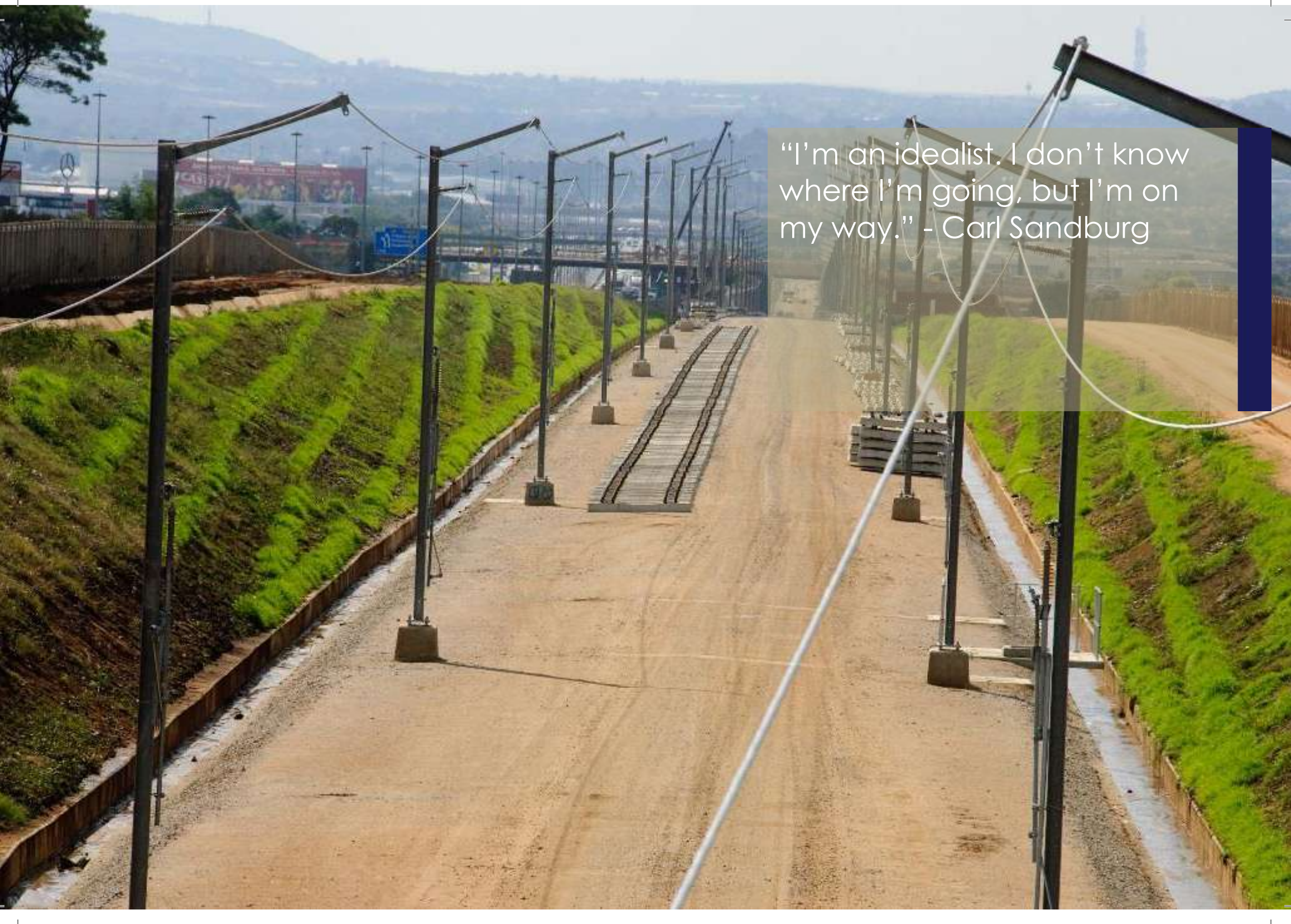
Overall, a sense of urgency emerged that a public transport system needed to be developed that would become a mode of choice and not merely one of necessity, thereby encouraging commuters to switch from road-based transport to public transport.

The process of the formulation of the vision of the Gautrain also led to the creation of a set of objectives, which were highlighted as key success factors against which the performance of the Gautrain could be viewed. Throughout this report, we will refer back to this set of objectives to determine the extent to which the Gautrain in its current form is able to meet these objectives.

| Gautrain's strategic objectives   |  | How the Gautrain contributes to achieving these objectives                            |   |
|---|--|---|---|
|    | The Gautrain Rapid Link (Gautrain) must <b>facilitate development</b> in the Province.   |    | It must develop an <b>integrated public transport system</b> , inter alia through the use of feeder and distribution systems. |
|    | The project must contribute directly and indirectly to <b>job creation</b> and thereby support Socio- Economic Development (SED) goals.  |    | It must <b>integrate land-use</b> and transportation planning in the corridor.  |
|    | It must assist in <b>unlocking the economic development potential</b> of the Gauteng Strategic Development Initiative projects and strengthen existing development nodes in Gauteng. |    | It must utilise the concept of <b>value capture</b> in developing the station precincts.                                      |
|  | It must improve <b>accessibility and mobility</b> in this development corridor.  |  | It must promote <b>tourism</b> .  |
|  | It must promote the <b>use of public transport</b> .   |  | It must assist in <b>improving the image of public transport</b> .  |



“Leaders must be optimists. Their vision was beyond the present and set on a future of real peace and true freedom” – Rudy Giuliani



“I’m an idealist. I don’t know where I’m going, but I’m on my way.” - Carl Sandburg

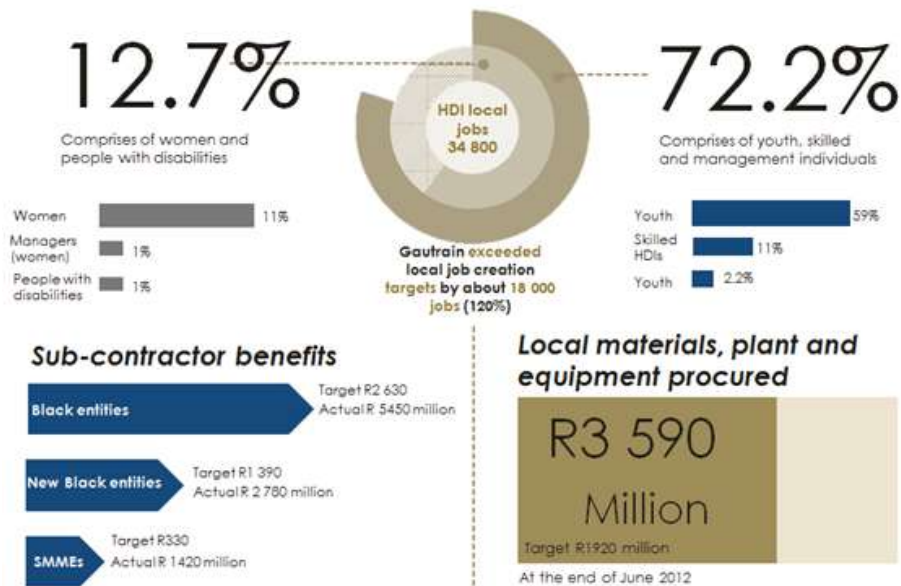


# Construction – Laying the tracks



# Construction – Laying the tracks

Initial works for the Gautrain started in May 2006 and construction commenced after the signing of the Concession Agreement between the Gauteng Provincial Government and the Bombela Concession Company on 28 September 2006. Construction took place in two concurrent phases: the first phase involved the construction of the section between Sandton and OR Tambo International Airport. The second phase included the remaining six stations.



Source: GMA

The construction phase of the Gautrain lasted for about six years, during which a **number of positive economic spin-offs were generated for Gauteng and the national economy as a whole**. Some of the economic benefits to Gauteng included economic growth, the creation of jobs and poverty alleviation.

**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 =**

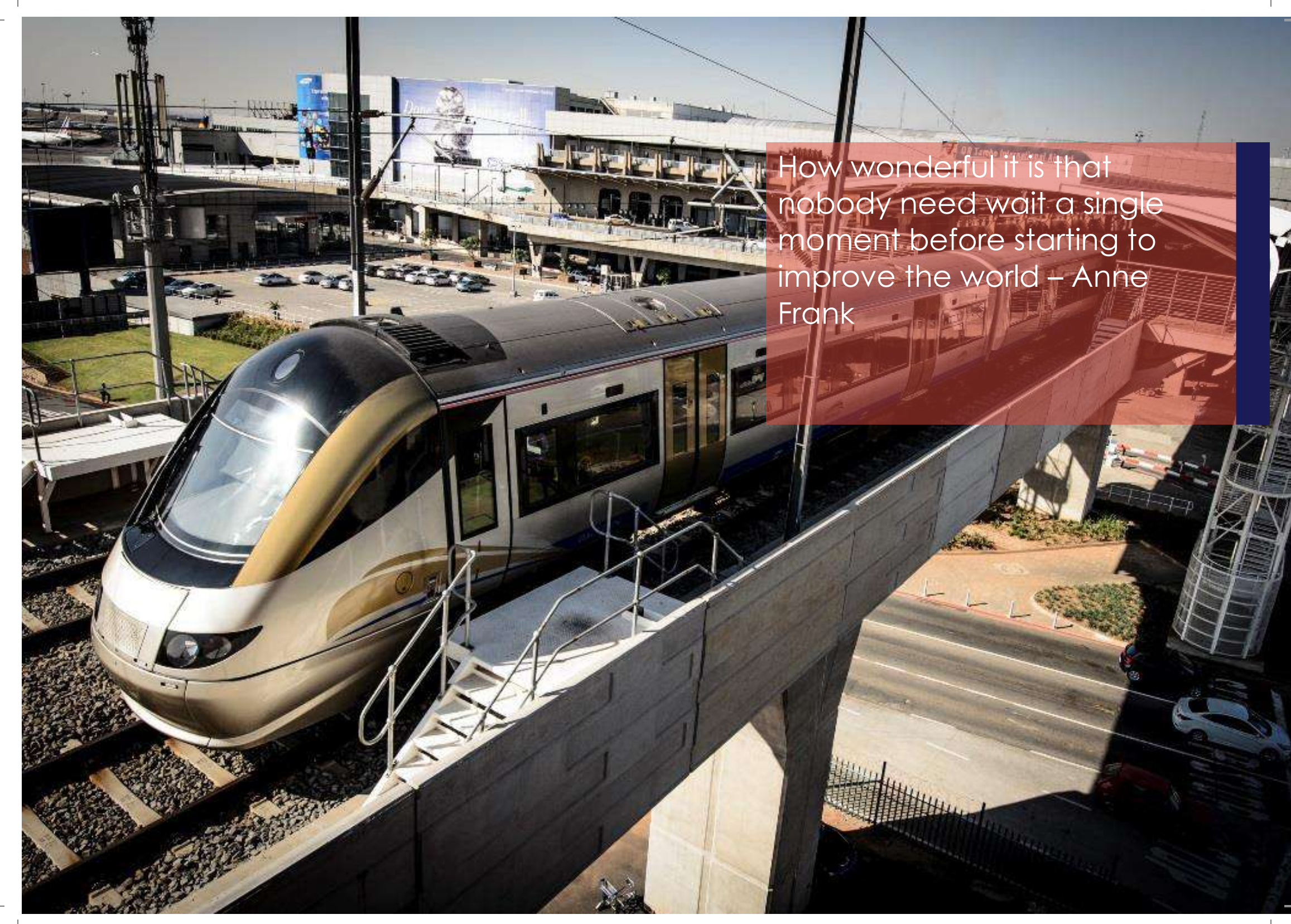
- Approximately **R20 billion** contribution to provincial GDP over the 6 years.
- Sustained **121 800 jobs** in Gauteng between 2006 and 2012.
- Increased government revenue by an estimated **R5 billion**.
- Approximately **R2 billion** income was received by lower income households.

**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.

Source: KPMG analysis



A high-speed train, possibly a Shinkansen, is shown on an elevated track. The train is white with a blue and yellow stripe. The track is supported by a concrete structure. In the background, there is a large building with a blue sign and a parking lot with several cars. The sky is clear and blue. A red semi-transparent box contains a quote in white text. A blue vertical bar is on the right side of the image.

How wonderful it is that  
nobody need wait a single  
moment before starting to  
improve the world – Anne  
Frank

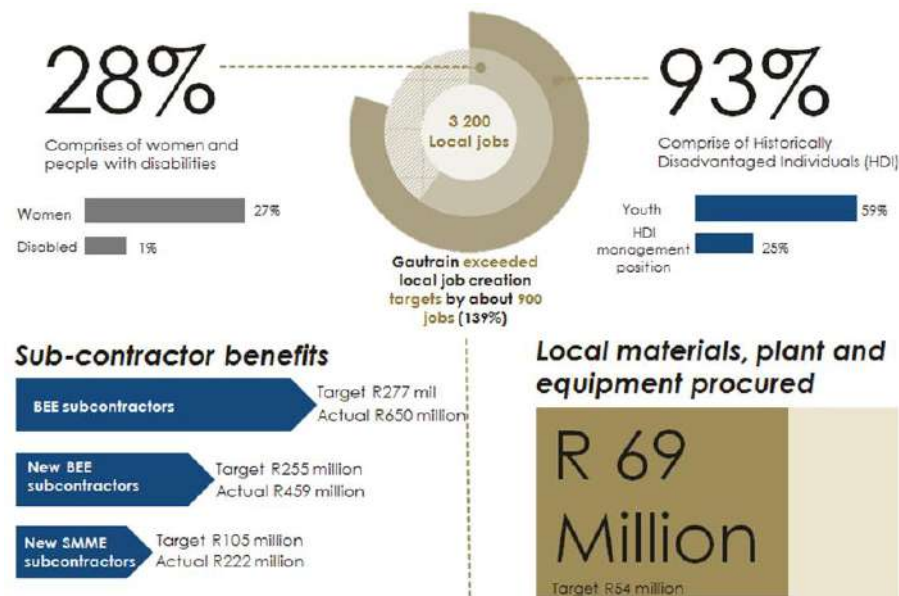
# All systems go - Gathering traction



# All systems go – Gathering traction

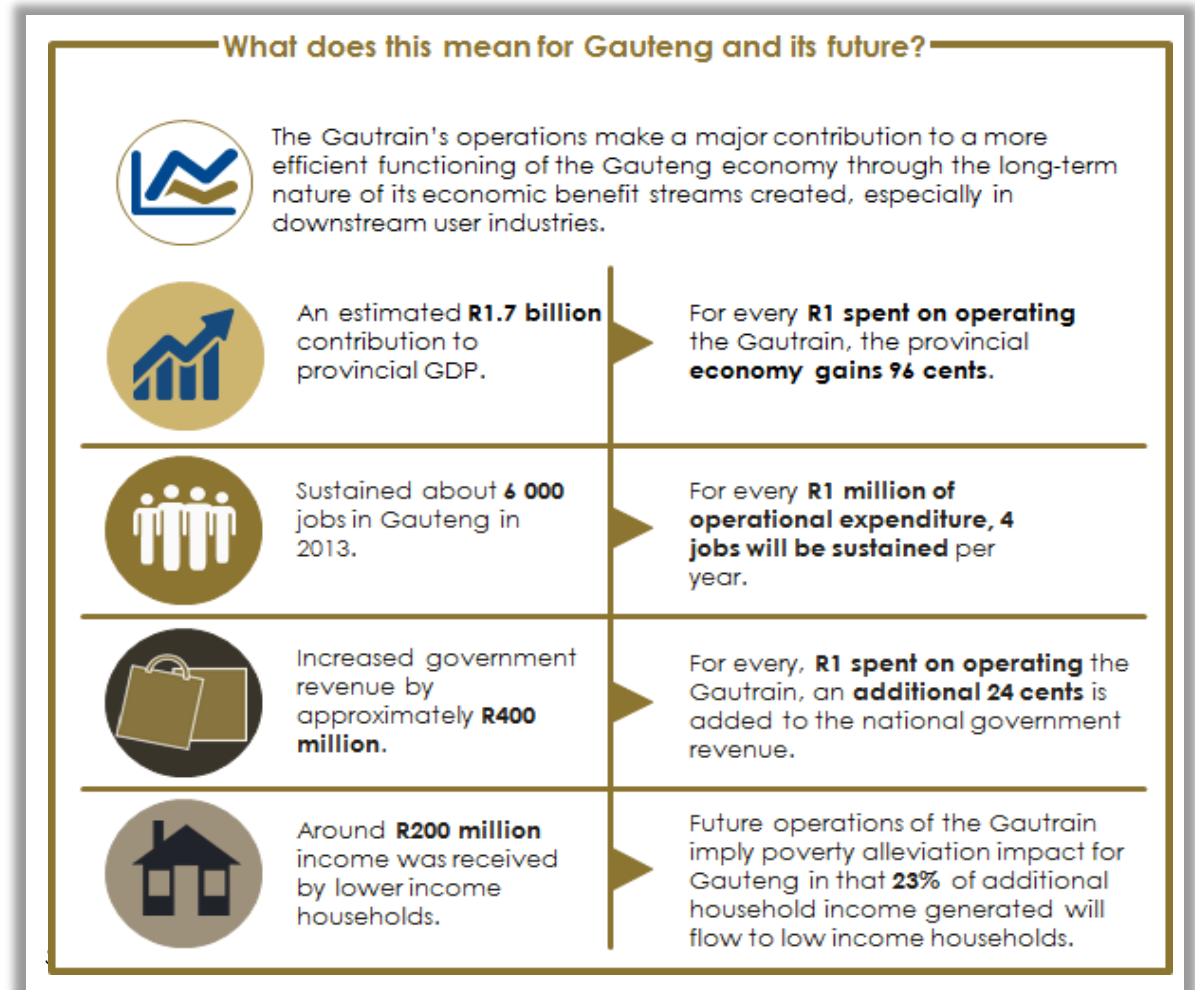
On the 15 May 2004, it was announced that South Africa would host the 2010 Soccer World Cup™. Gautrain's project managers and stakeholders felt an obligation to South Africa to have the link between the OR Tambo International Airport and Sandton commissioned in time for the soccer world cup held in South Africa. In an effort to contribute to make the World Cup a success, the first part of the system, between Sandton and OR Tambo Airport, opened to the public on 8 June 2010, in time for the 2010 FIFA World Cup™.

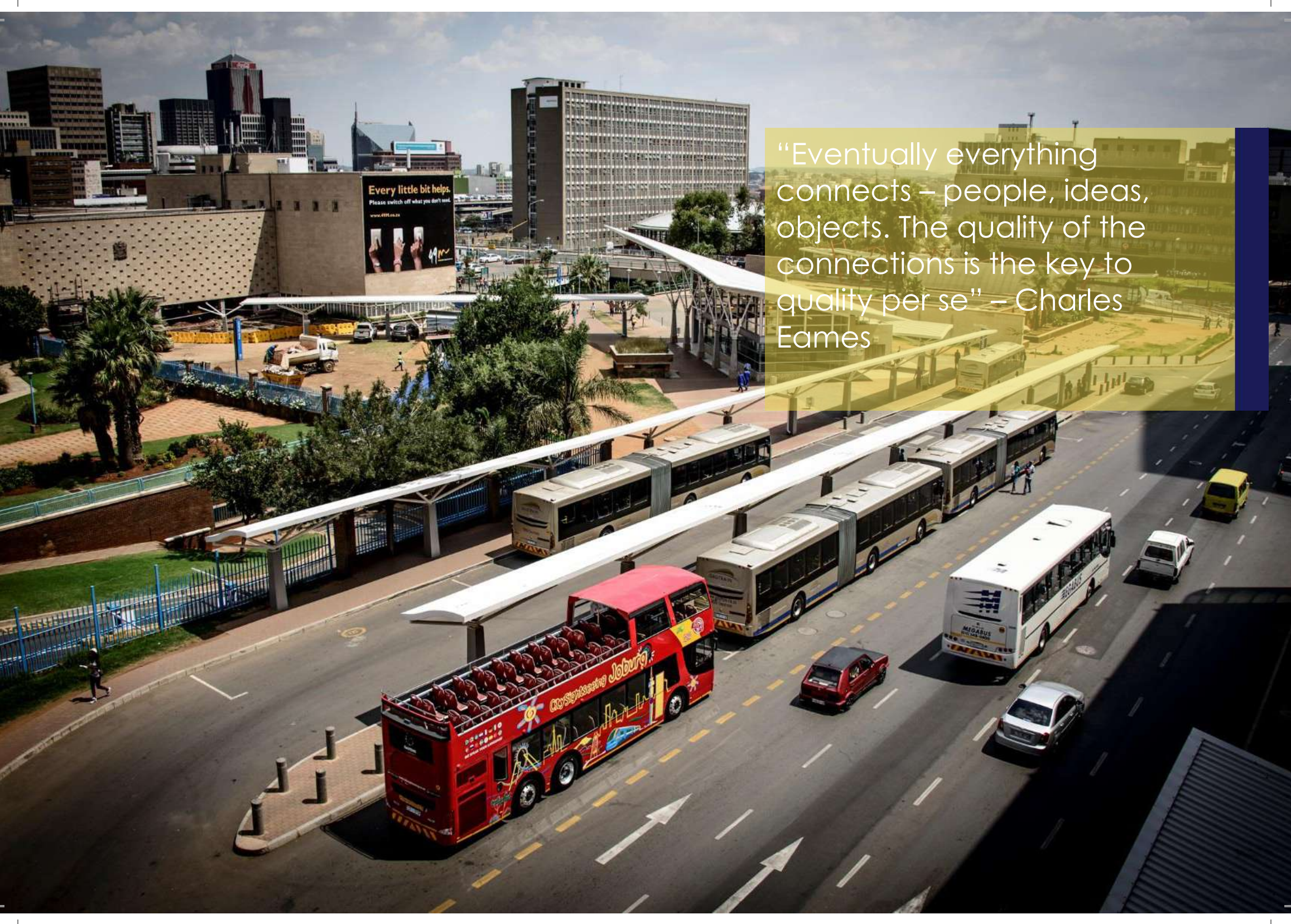
The route from Rosebank to Pretoria and Hatfield commenced operations on 2 August 2011, while the remaining section from Rosebank to Johannesburg Park Station opened on 7 June 2012.



Source: GMA SED reports, 2013/14

The economic benefits for the tax-payer, the economy of Gauteng, as well as the users are apparent and the extent to which the Gautrain contributes to the Gauteng economy is shown below.





“Eventually everything connects – people, ideas, objects. The quality of the connections is the key to quality per se” – Charles Eames

# Getting you connected - Signalling the future



# Getting you connected – Signalling the future Connecting you beyond the rail

The introduction of the Gautrain would not have had the capacity to reduce congestion on this corridor by itself: The support of the Dedicated Feeder and Distribution Services (DFDS, i.e. Gautrain the bus service) would therefore act as a catalyst to change the negative image of public transport, facilitating a switch from private to public transport. In addition, the decision to implement the DFDS was necessary, given the poor state of the available public transport system in the Province at the time and its inability to support the Gautrain.

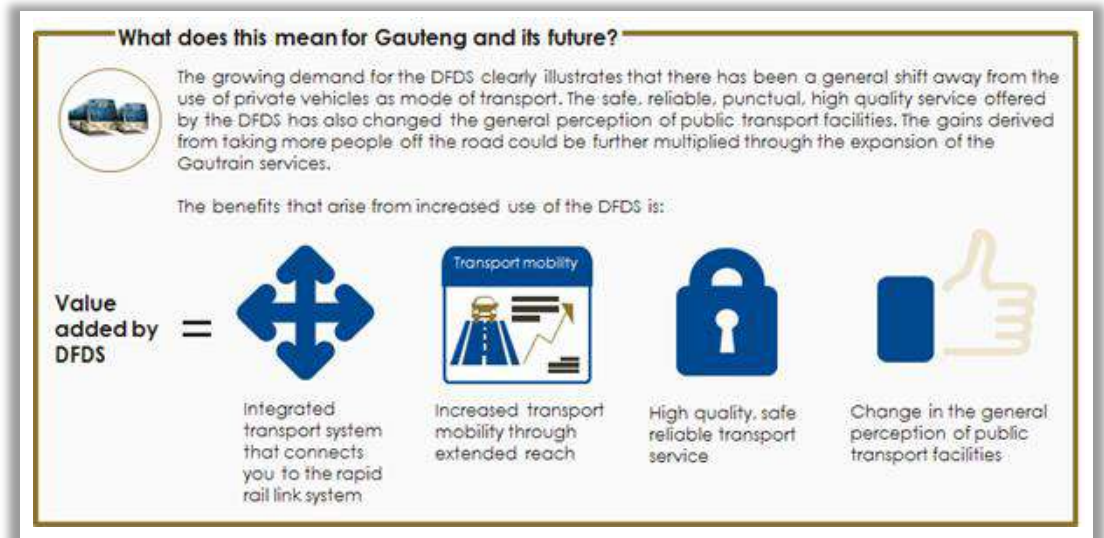
The DFDS currently plays a very important role in attracting Gautrain users. **By providing Gautrain passengers with safe, efficient and reliable transport services to and from the train station, the feeder and distributions service is important contributor to ensuring sufficient levels of ridership rates are achieved on the Gautrain and that maximum conversion is obtained away from private transport.** The shift away from use of private vehicles as a mode of transport, aids in reducing road congestion, air pollution and energy consumption and improves overall transport mobility.

From a commuter survey<sup>[1]</sup> conducted in late 2012, it appears that the majority of Gautrain users rely heavily on the bus service as a main mode of transport to transfer them to their final destination. Depending on the station, the DFDS currently transports between 35%– 40% of Gautrain users to their final destination during weekday peak periods. This clearly illustrates the importance of the DFDS and the value it adds to Gautrain commuters.

In addition to the abovementioned value being added to the Gautrain commuters, the DFDS also contributes positively to the economy. The additional business activity created in the transport sector as a result of the revenue generated from users of the service and the additional employment created, contributes positively to economic activity.

Safety, reliability and punctuality play an important role in public transport service for South Africans. The perception of public transport will only change if there is significant development that offers a safe and reliable mode of transport.

The DFDS currently operates an average of 330 000 trips per month at an average punctuality level of 99% and an average availability level of 99%, above the respective norms of 98.5% and 94%, making it a very safe, reliable and punctual mode of transport. In light of this, the perception of the DFDS that it offers a safe, reliable, and punctual service is central to its increased attractiveness.





The total revenue for the 2013/14 financial year generated by Gautrain DFDS makes up **3.9%** of total APR.



The revenue generated through the DFDS added **R26 million** to the Gauteng economy's GDP during 2013.



The DFDS sustained about **500 jobs** in Gauteng in 2013, **94%** of the jobs created were in the **semi-skilled** and **unskilled category**.



The total government revenue increased by **R7 million** in 2013, due to the operation of the DFDS.



The total income received by households was nearly **R15 million** in 2013, **R4 million** of which was received by lower income households.



Source: KPMG analysis

# Getting you connected – Signalling the future

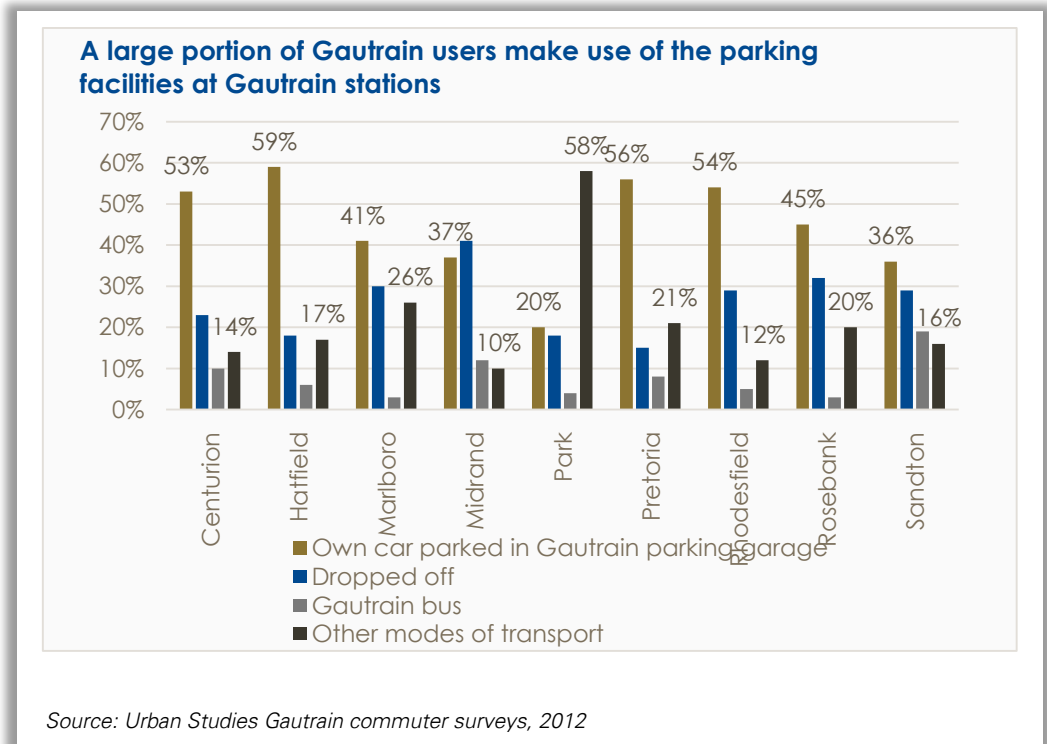
## Safe and sound boarding

The Gautrain parking facilities also plays an important role in the entire Gautrain system supply chain: **With the Gautrain offering adequate, affordable, safe and convenient parking facilities to Gautrain commuters, at all stations (except the OR Tambo station), it contributes to increased ridership rates and, in return, reduced traffic congestion.**

As a result of the safety and convenience of the parking service offered at most Gautrain stations, the demand for the service has far surpassed initial projections, specifically during business days. The stations that are most affected by parking shortages included the Pretoria, Centurion, Midrand, Rhodesfield and, occasionally, Rosebank and Park stations. According to a survey conducted at the end of 2012<sup>2</sup>, the stations noted above are also the stations where the majority of Gautrain commuters make use of their private vehicles as a mode of transport to the station on weekday mornings.

Due to the increased demand for parking facilities, short-term measures to enhance parking availability have been implemented. Additional parking bays were added to the Rhodesfield station in December 2012, while additional processes were put in place to expand parking facilities at the Midrand, Centurion and Pretoria stations.

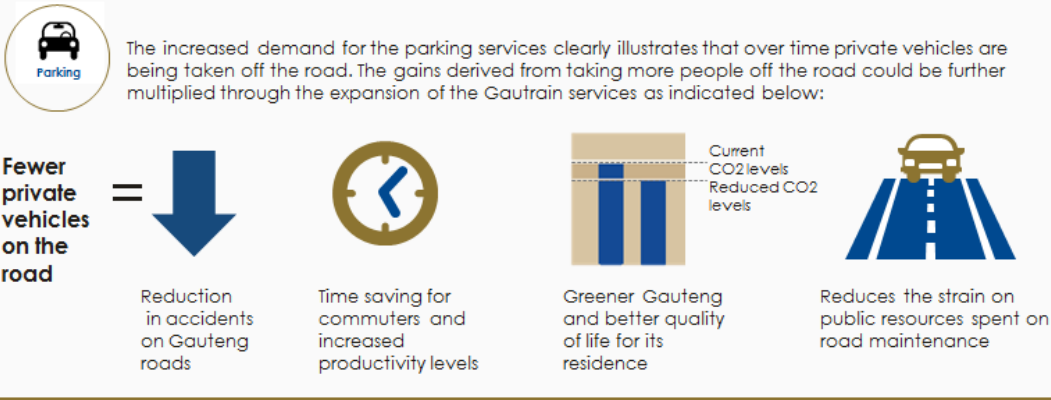
Mode of transport of Gautrain commuters travelling from home to Gautrain stations on weekday mornings



<sup>2</sup> Urban Studies, Gautrain commuter survey, November 2012



**What does this mean for Gauteng and its future?**



The introduction of the parking facilities results in additional business activity, resulting from the direct job creation required to provide these services, this increase in business activity in the economy creates additional employment opportunities in the transport sector. The economic benefits resulting from the increased revenue generated from are as follows:



The total revenue for the 2013/14 financial year generated by Gautrain parking bays makes up **5.1%** of total APR.



The revenue generated through the parking bays added **R47 million** to the Gauteng economy's GDP during 2013.



The parking bays sustained about **618 jobs** in Gauteng in 2013, **83%** of the jobs created was in the **semi-skilled** and **unskilled category**.



The total government revenue increased by **R10 million** in 2013, due to the parking bays.



The total income received by households was nearly **R26 million** in 2013, **R7 million** of which was received by lower income households.

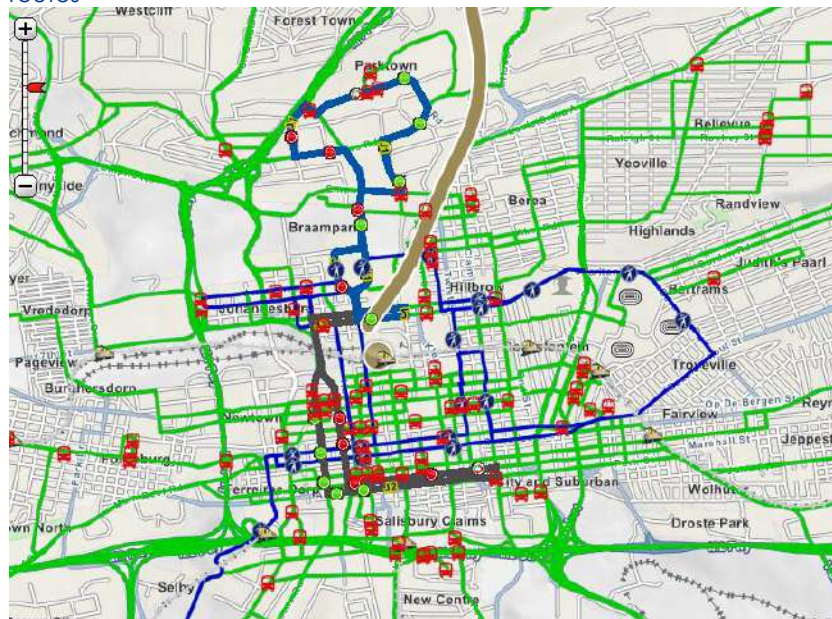
Source: KPMG analysis

# Getting you connected Signalling the future

## Province-wide mobility

On the basis of the example of Park station and surrounding areas within roughly a 3km radius (shown on the AfriGIS and NASA maps below), it is possible to gain an impression of the way in which different modes of transport currently service the areas surrounding Park station.

Gautrain Rapid Rail Link, DFDS routes (Gautrain buses), Metrorail, Metro Bus and BRT routes




Source: AfriGIS, 2014

Viewing a number of different public transport modes in conjunction, as shown in the map on the left, it emerges that the Gautrain station and DFDS (Gautrain bus services) are already integrated to some extent with other public modes of transport, although potential for integration exists, which could be harnessed. This could be achieved through implementing the ITMP25 suggestions for integration in terms of **placement of bus stations, coordination of schedules, fare structures and ticketing systems**. Through the inception of the **Gauteng Transport Commission (GTC), the implementation of such integration initiatives in the public transport system in Gauteng is likely to gain momentum through better co-ordination and collaboration of different stakeholders.**

While the case of Gautrain's Park station was used here as an example of the degree of integration of public transport modes around Gautrain stations and DFDS routes, a similar picture is likely to emerge from a number of other Gautrain stations and their surrounding areas. Total integration is not yet the norm, due to the independent manner in which the different public transport modes have been developed in the past. Nonetheless, there is **a notable improvement in integration due the connectivity, which the Gautrain system adds**. It is also important to note the Gautrain's large contribution to integration, which is achieved through the effortless and fast connection of Johannesburg, Pretoria and Ekurhuleni, in turn, **empowering the Gauteng's city region**. Moreover, we anticipate that transport integration will continue to be propelled forward through the concerted drive to implement the initiatives of the ITMP25, as well as potentially through the expansion of Gautrain routes that could allow for the **development of further strategic nodes to enable commuters to transition conveniently** from one mode of public transport to the next.



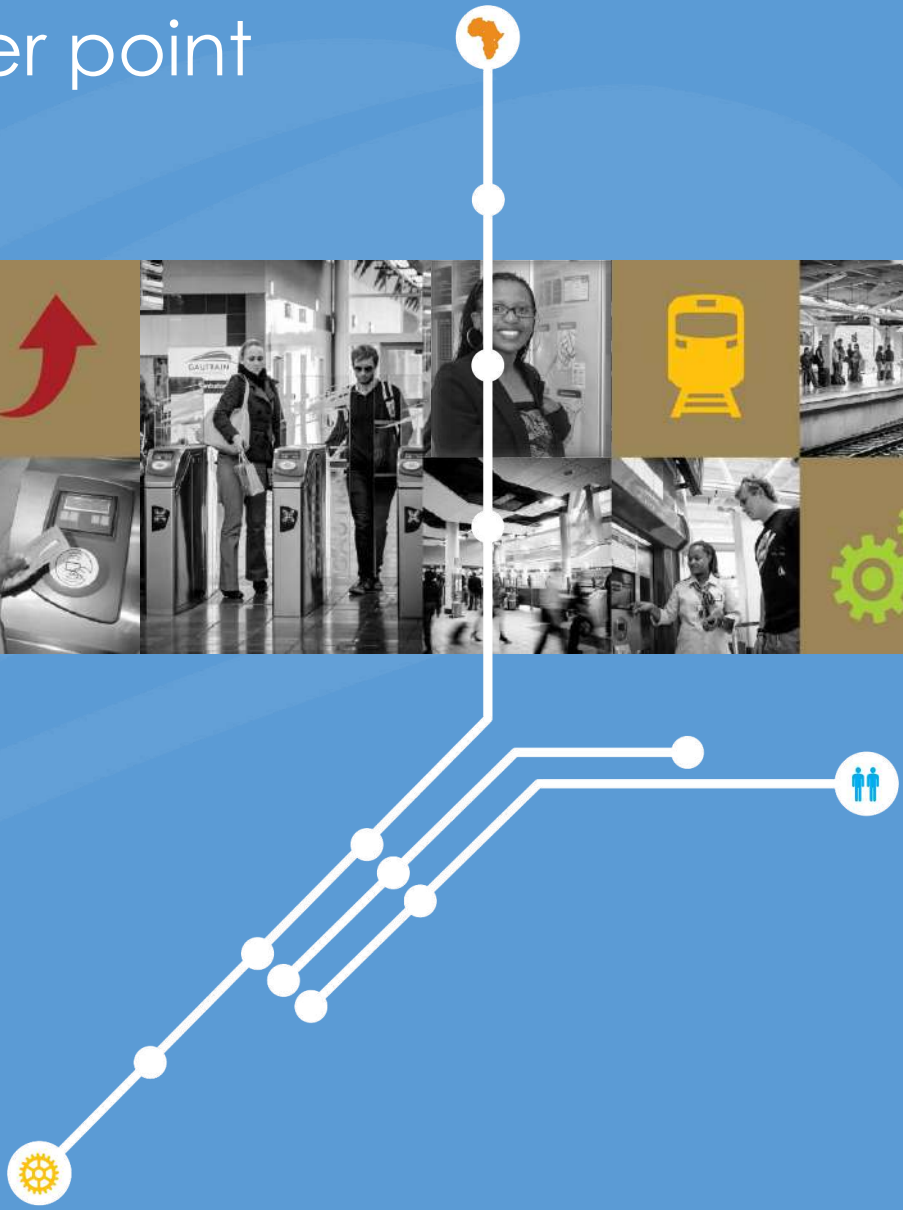


It's easy to make a buck. It's  
a lot tougher to make a  
difference – Tom Brokaw

“The more complex the network is, the more complex its pattern of interconnections, the more resilient it will be” – Fritjof Capra



# Getting you there – The transfer point



# Getting you there – The transfer point

## People on the move

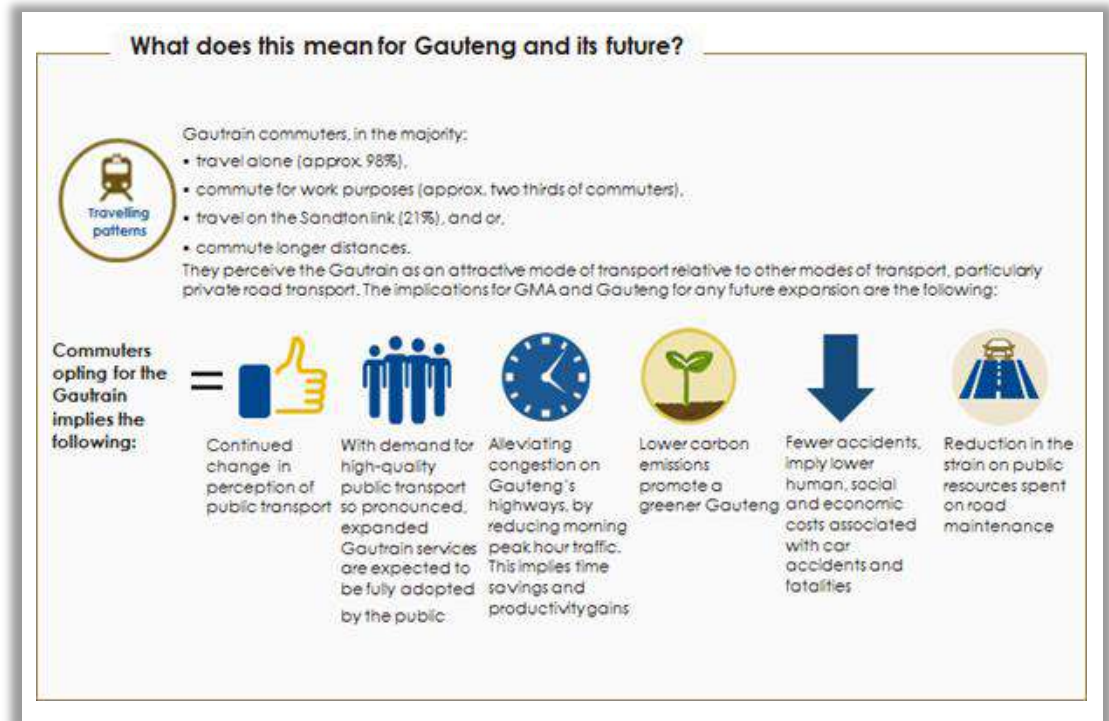
An analysis of a collection of ridership data, survey results and reputation audits<sup>3</sup> allowed us to generate a picture of the profiles of Gautrain commuters and their behaviour patterns. In addition, this information will provide an indication of the potential demand for the expansion of Gautrain's services.

### Who uses the Gautrain and why?

The majority of commuters use the Gautrain to commute to and from work and education institutions. Additionally, over the past two years (2012-14), the proportion of commuters using the Gautrain for work purposes has increased by nearly ten percentage points. These travel patterns have significant implications for the degree of congestion on Gauteng's roads, mitigating the growing pressures on the Province's road network.

Another implication is that the Gautrain is, in particular, meeting the demand of commuters seeking to reach their place of employment and return home after work. This also explains why surveys found that Gautrain commuters tend to travel alone (95% of commuters<sup>4</sup>) and are likely to return to the station they entered initially, when they return home. We anticipate that **the Gautrain therefore plays an important role in bringing commuters closer to economic opportunities, serving as an enabler of socio-economic development in Gauteng.** Thus, a potential expansion of the Gautrain services could multiply these gains and provide more people with high-quality public transport that affords them greater access to opportunity. This

would make a large contribution to bridging the mobility gap that puts a cap on faster growth and development in the region.



<sup>3</sup> Ridership data supplied by GMA and Bombela; Gautrain AM Commuter survey, Urban studies, 2012; Service Audit Track, Catalyst, June 2013; Gautrain Brand Valuation Audit, Letsema

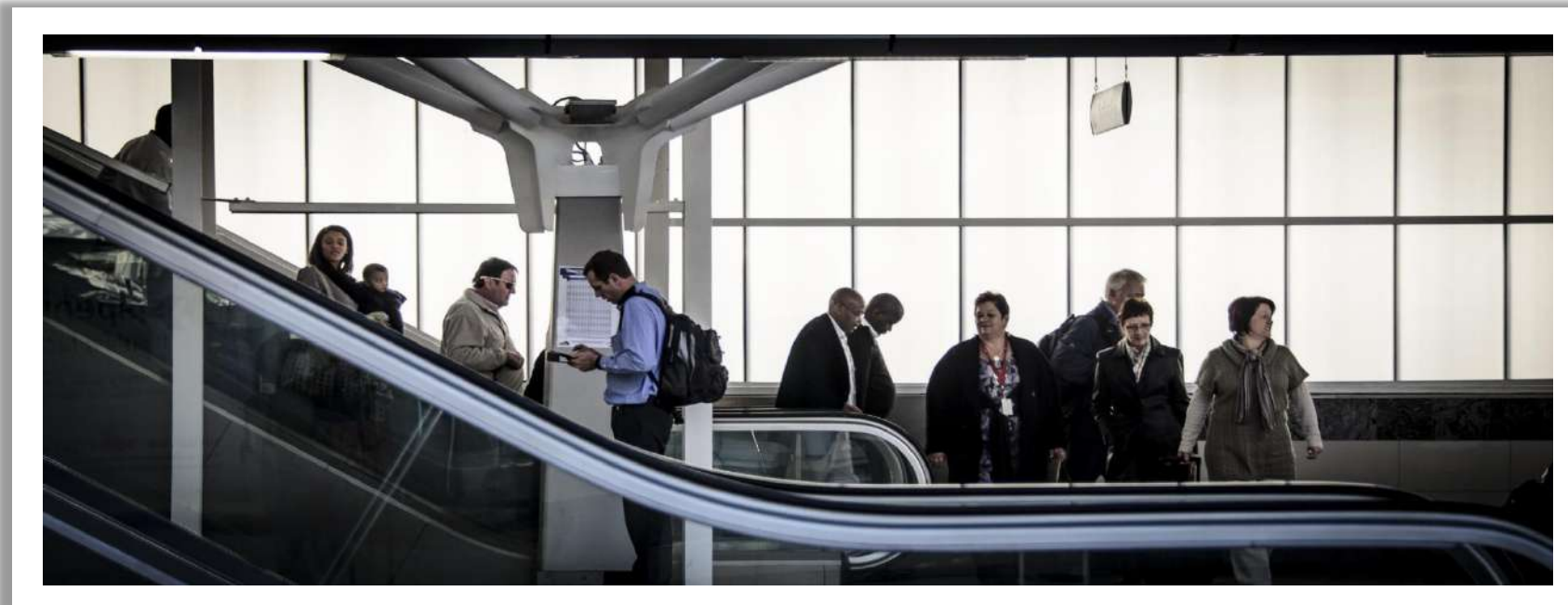
Consulting and Mazars, July 2014; Service Audit Track, Catalyst, June 2014; Gautrain Reputation Audit, Catalyst, June 2014, amongst others.

<sup>4</sup> Urban Studies, Gautrain Morning Commuter Survey, 2012

### Implications for the future of the Gautrain

It is apparent that pronounced demand for high-quality public transport exists, particularly for people using the services regularly and for work purposes. Given that the majority of Gautrain commuters (55% in 2014) otherwise most commonly use private transport, the impact of taking business travellers off the road and thereby mitigating congestion on Gauteng's main roads, will be substantial. This effect will likely have the largest positive influence on traffic flows on Gauteng's roads during the morning peak hours, when congestions tends to be most problematic. With economic growth in Gauteng on the rise, it is central for the sustainability of development in the region that public transport continues to gain popularity, becoming increasingly recognised as a mode of choice. With commuters opting for modes of transport like the Gautrain, instead of road based transport, Gauteng will be empowered to achieve faster rates of socio-economic development than before.

**Overall, there are strong indications that an expansion of the Gautrain to reach additional catchment areas and thereby increase the reach of attractive public transport options (for example surrounding the proposed stations Menlyn and Modderfontein), would be met by substantial demand from potential commuters.** In turn, we expect that an expansion of the Gautrain will multiply the current positive impacts garnered from diverting road users to train-based public transport.



# Getting you there – The transfer point

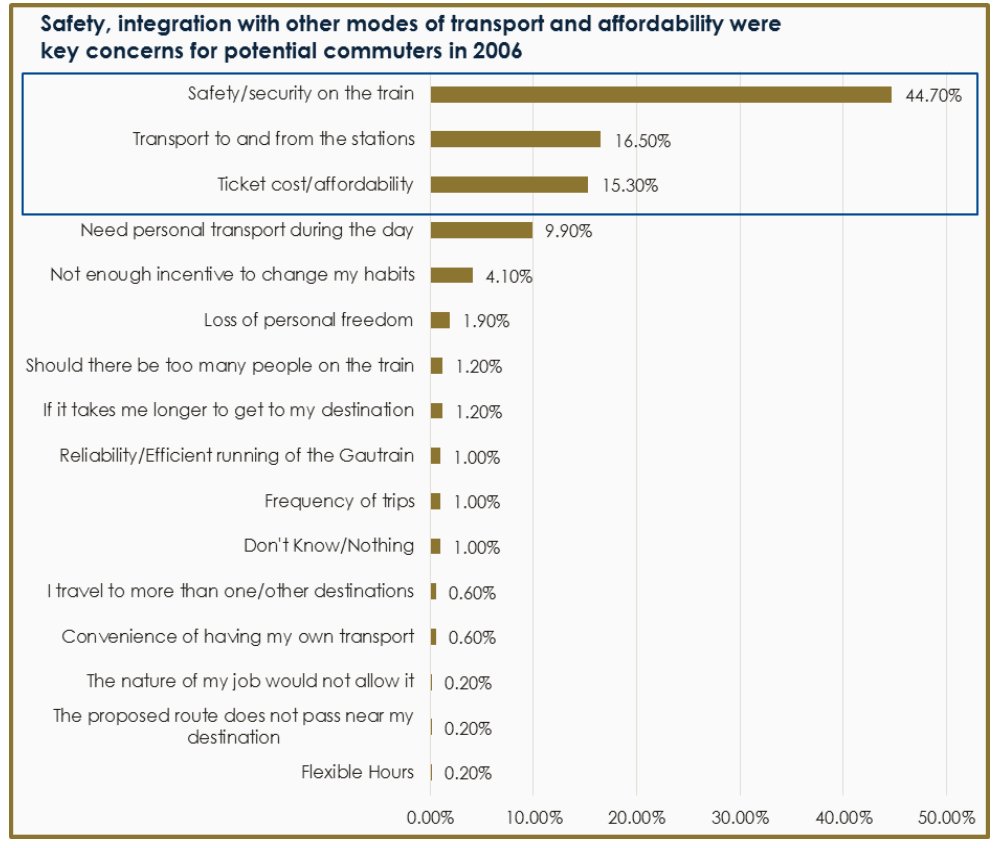
## Moving public opinion

Overall, in working to overcome the challenges associated with the realisation of such an ambitious infrastructure project, the public increasingly bought into the Gautrain project, and as recent opinion surveys and reputation audits indicate, **users as well as non-users of the Gautrain system view it in a highly favourable light.** In conjunction with growing Gautrain ridership numbers (94% annual growth in 2011/12 and 27% annual growth in 2012/135) and indications of pronounced demand for high-quality public transport in Gauteng, it is clear that an expansion of the Gautrain system would be met by both broad approval from the public, as well as substantial utilisation of its services.

But, it has not all been smooth sailing. Prior to construction and even during construction, segments of the public have not always been in favour of the Gautrain. With possible benefits of economic savings in terms of time and accident costs, the Gautrain was expected to ease the pressure on motorists. In 2006, however, not all motorists agreed. At the time, only 57% believed that their journey would be faster on the Gautrain. Additionally, only 50% of car drivers believed that the Gautrain would be a safer option than travelling in their cars. 70% of taxi users, on the other hand, indicated that the Gautrain would offer a safer trip in their opinion.

The top three factors preventing likelihood of use were: Safety and security on the train; transport to and from the stations and ticket cost and affordability.

Most common answers to the question: "What would be the one thing that you believe would stop you from using the Gautrain?"



<sup>5</sup> GMA, 2014



The As time went by, through the successful and timely roll-out of the Gautrain and its consistent performance, the public was quick not only to accept the Gautrain, but also to associate it with a sense of achievement and pride. It would eventually be seen as an aspirational project that would uplift the standing and reputation of public transport in South Africa to its residents and the world.

The trend of rising public approval ratings continued: Gautrain commuters were asked recently to describe the Gautrain's reputation in their own words, the three most common responses were:

**The public perceived the following five statements to be most applicable to the Gautrain brand**



The Gautrain brand represents freedom 87.2/100



The Gautrain logo and brand are recognisable and distinctive 82.8/100



The Gautrain brand represents pride 81.5/100



The Gautrain's slogan ("For people on the move") is relevant 81.1/100



The Gautrain brand reflects the objectives of the project 80/100



Good reputation, highly respected



Safe



Top/first/world class/best/quality service.

This is particularly noteworthy in relation to the 2006 survey results, where potential commuters were most concerned with the safety of and security on the train. Clearly, in view of current perception results, the **Gautrain has been able to convey high levels of safety, which now serve as a central aspect of the Gautrain's positive reputation with commuters.** Commuters' sense of safety is justified, with Gautrain, particularly since June 2013, consistently meeting its benchmark security targets of one or fewer incidents per one million commuters.

## What does this mean for Gauteng and South Africa?



Gautrain commuters perceive the Gautrain as convenient and time saving, with these qualities representing the top two responses in a recent commuter survey (58%).

The general public, both commuters and non-users, hold the Gautrain in high regard, recognising its unique, world class, and aspirational contribution to public transport in South Africa. The public gives the Gautrain a rating of over 80% for brand recognition and distinctiveness, as well as its ability to achieve the targeted objectives.

The implications of this are as follows:

**Public perception of the Gautrain is decidedly favourable, which implies the following:**



The Gautrain is successfully transforming perceptions of public transport in South Africa. This promotes a shift from private to public transport.



Ridership is trending upwards as members of the public increasingly utilise the Gautrain and discover the value it brings to their lives. This contributes to a shift to the use of public transport.



The success of the Gautrain project inspires confidence in South Africa's ability to realise ambitious major infrastructure projects



Possible expansion plans are likely to be met by approval from the public. We also expect this to meet substantial demand for expanded transport services

# Getting you there – The transfer point

## Providing a better quality of life

In addition to generating concrete economic benefits, the Gautrain also delivers on social dimensions, bring about a greener, more sustainable Gauteng and improved quality of life for Gauteng's residence.

### Lower carbon emissions

Each potential motorist commuting with the Gautrain instead **reduces his/her carbon footprint by roughly 52% per trip.**

### Reduced cars on the road

Between 1 April 2013 and 31 March 2014, an average of **42 456 passengers utilised the General Passenger Service route** between Pretoria and Johannesburg on business days (excluding the airport link).<sup>6</sup> As a result, the Gautrain effectively **removed 24 200** would-be motorists from the Pretoria Johannesburg corridor every business day over this period.<sup>7</sup> Therefore, based on the assumption that approximately **300 000 cars use the Pretoria Johannesburg corridor** every business day<sup>8</sup>, the Gautrain **reduced the traffic congestion** on this stretch of highway by **7.5%** during the week over this period.<sup>9</sup>

<sup>6</sup> Gautrain management Agency Patronage data 2013/14

<sup>7</sup> Average number of Gautrain commuters per business day multiplied by the percentage of respondents who use private transport when not using the Gautrain = The number of cars effectively removed from the Pretoria Johannesburg corridor per business day by the Gautrain

### Reduced fatal accidents and resultant fatalities

Between 1 April 2013 and 31 March 2014, **a daily average of 42 456 passengers utilised the General Passenger Service route** between Pretoria and Johannesburg on business days. This means that **approximately 24 200 would-be motorists were effectively removed from** the Pretoria Johannesburg corridor every business day throughout this 12 month period.

Assuming the most recent fatal accidents and fatalities per day statistics listed hold true for the period 1 April 2013 to 31 March 2014, it stands to reason that the **Gautrain has avoided 13 fatal accidents and 14 resultant fatalities** during this period. However with the Pretoria Johannesburg corridor being one of the busiest corridors in Gauteng, it is safe to say that we cannot expect that only 8% of total accidents would occur on the stretch of road. For that reason a scenario analysis was conducted to estimate the number of fatal accidents that could have potentially been avoided. **Based on the scenario analysis we expect that the Gautrain averts between 13 and 81 fatal accidents and 14 and 91 fatalities per year.**

<sup>8</sup> City of Johannesburg. (2014). Engineeringnews.com. (2003). Newton Heritage Trail. (2010). IOL Property. (2010). All of these listed webpages and web-based articles have indicated this figure, without stating its direct source.

<sup>9</sup> The number of cars effectively removed from the Pretoria Johannesburg corridor per day by the Gautrain, divided by the number of vehicles using the Pretoria Johannesburg corridor per business day = the proportion of vehicles removed from the Pretoria Johannesburg corridor.

This in turn reduced the direct cost of the actual accident and also the indirect cost of the resultant traffic delays. In fact, the average human casualty cost resulting from a road accident was estimated to be R1 133 766 in 2013, while the average unit vehicle damage and incident cost was R59 070 in 2013.<sup>10</sup> Therefore, the **Gautrain reduced the total cost<sup>11</sup> resulting from fatal accidents by at least R17 million** over the period 1 April 2013 to 31 March 2014. When including the number of non-fatal accidents avoided, this number will of course be much higher.

### Reduced travel time

The Gautrain's ability to move a large number of people through the busiest metropolis in Africa at a rapid speed is unequivocally its greatest advantage. While the minimum travelling times between Hatfield and Park station are relatively closely aligned for the two transport modes, road congestion occurs very often and inhibit one's ability to travel the distance in under an hour. With heavy traffic, the time spent between these two stations can increase three fold. The Gautrain utilises a direct route between OR Tambo and Sandton station, thereby reducing the total road distance travelled by almost 40%. The reduction in distance travelled allows this trip to be completed in less than half the time a motorist would require with no traffic and up to 8 times faster with heavy road congestion.



<sup>10</sup> The National Department of Transport. (2002). *The estimation of unit costs of road traffic accidents in South Africa*. These numbers were increased with annual inflation to reflect 2013 values.

<sup>11</sup> The costs to society as a whole is measured as costs to the individual and its family, the community, government departments, the private sector, and the economy through loss of potential production plus average damage to vehicle

## What does this mean for Gauteng and its future?



The Gautrain is clearly attracting commuters who were previously forced to use road transport. This shift has several implications for the environment and the quality of life for the Gauteng Community. The gains derived from taking more people off the road could be further multiplied through the expansion of the Gautrain services as indicated below:

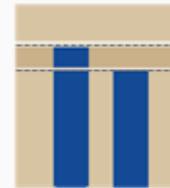
Better quality of life through the following impacts



Reduced road congestion, **21 300 less cars on the road per day**, resulting a reduction in accidents.



Time saving for commuters and increased productivity levels of **10 to 12 working days per year**



Current CO2 levels  
Reduced CO2 levels

The Gautrain brings a greener transport alternative to especially car transport in the province, **reducing** his/her **carbon footprint** by between **52% per trip**

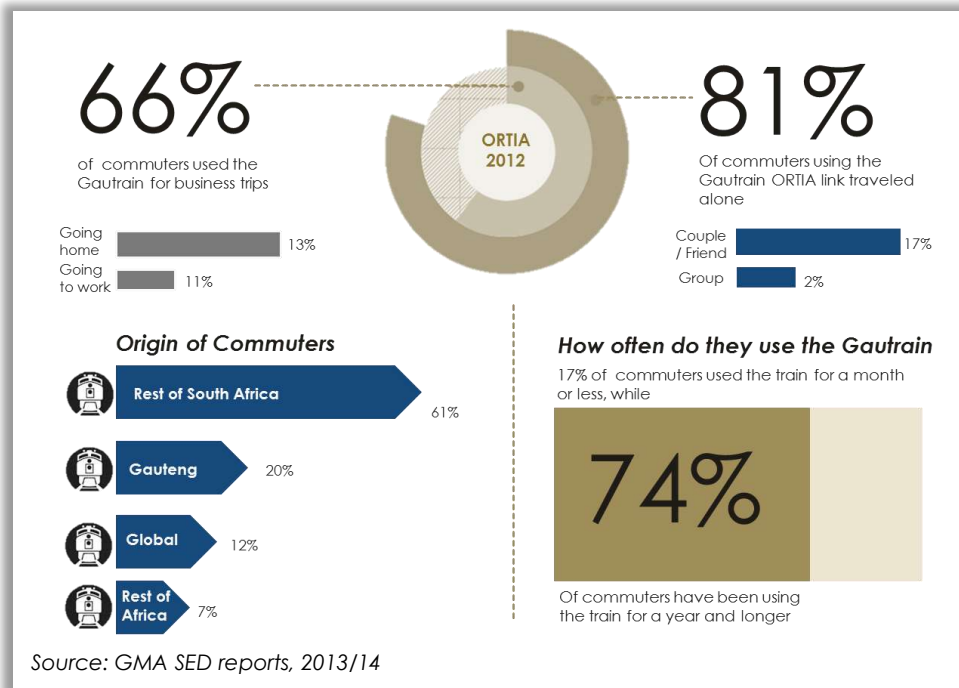


Move towards a more reliable transport mode. The Gautrain producing a highly impressive **99.67% service availability**, consistently **outperforming its benchmark**.

# Getting you there – The transfer point

## Connecting you to the world

The Gautrain airport service has been operational for four years and within the first six months of the airport service's operation, it carried just over 1 million passengers. By the 2012 / 2013 financial year, the demand for the service grew twofold, carrying just under two million people. **The increase in demand for the service can be attributed to excellent customer service provided to commuters in the form of convenience, efficiency, reliability and safety of the service.**



Considering the general profile of a commuter using this service (see figure above), it is safe to say that the Gautrain airport services play an important role in the economy in the following ways:

**Connects local business travellers to Gauteng, the hub of the country**

This is shown by the fact that more than 60% of commuters both originate from the rest of South Africa and use the service for business trips.

**Supports Gauteng's access to international markets, by providing a safe and convenient mode of transport for international visitor**

This is shown by the fact that 12% of commuters travelling from abroad use the Gautrain airport service.

**Connects employees of the ORTIA precinct to their place of work**

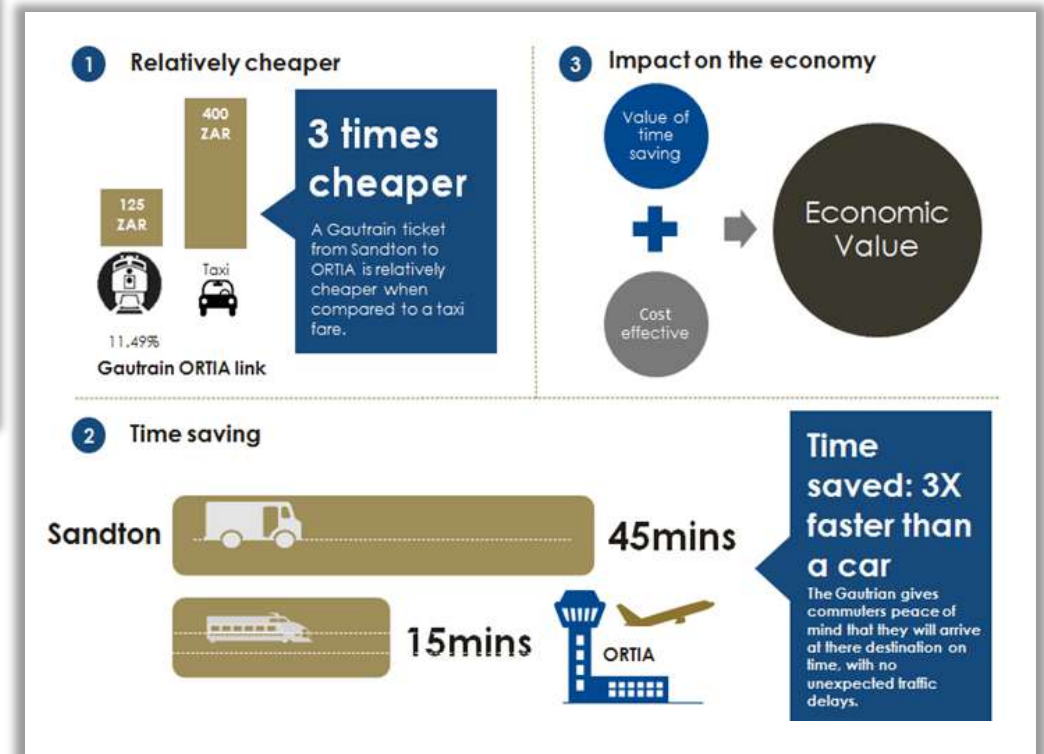
This is shown by the fact that 11% of commuters use the Gautrain as a means to get to work.

**Changes the overall perception of the public transport system by providing a safe and convenient service that delivers an enjoyable and stress free transition between air and rail travel**

This is shown by the fact that 74% of commuters have been using the Gautrain for a year or more, therefore we can conclude that it has become a preferred mode of transport for this group.

The economic value-add derived from the Gautrain airport service stems from the cost savings and value for money of the service, as well as the average time saving and reliability of the service. This has aided in the popularity of the service.

|  | Gautrain | Car – No traffic | Car – Heavy traffic |
|--|----------|------------------|---------------------|
| <b>Hatfield stations and Park station</b><br>Average travel time | 42mins   | 49mins           | 2hrs 35min          |
| <b>OR Tambo and Sandton station</b><br>Average travel time       | 15mins   | 32mins           | 2hrs 5mins          |



## Story of Gautrain

The golden train that connects Gauteng to the globe

### The Aerotropolis effect

In modern cities, airports have become major drivers of urban form, economic activity and city competitiveness. The Aerotropolis aims to take advantage of these changes and optimises the positive effects the airport can have on the economy and on communities. To achieve these positive changes, the Aerotropolis seeks to serve as an economic development strategy designed to increase competitiveness in global markets, leveraging the degree of access to air travel and air freight.

### Ekurhuleni's aim to create an Aerotropolis- centred development

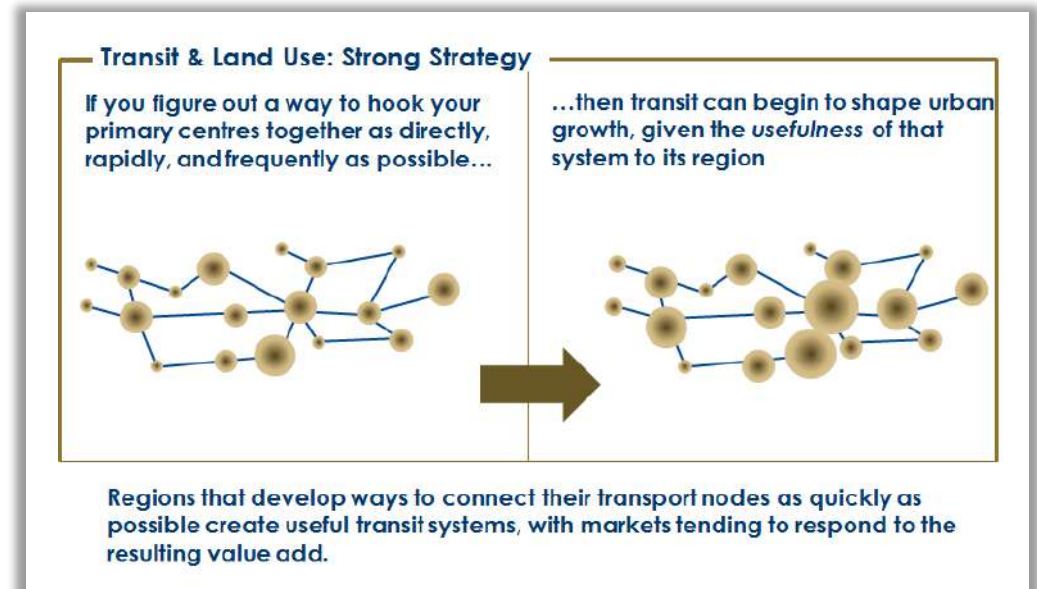
The Aerotropolis concept is now becoming more central in Ekurhuleni's economic policy planning, potentially bringing substantial economic and social benefits to airport owners, as well as local businesses and communities. Through a seamless connection to other transportation modes, for example the link to the Gautrain, Ekurhuleni and Gauteng can leverage their comparative advantage in the transport sector. The envisioned outcome is a dramatic increase in the scale of ORTIA centred developments in the Province, with their growth serving as sources of employment for its people.

### Current Aerotropolis-related interventions in Ekurhuleni and Gauteng

Overall, the potential Gautrain expansion, the Aerotropolis, and the IRPTN (Integrated Rapid Public Transport Network) projects are all supportive of the provincial imperatives outlined in the Gauteng Industrial Policy Framework (GIPF), which emphasizes expansion of work opportunities, development and expansion of medium technology and labour intensive

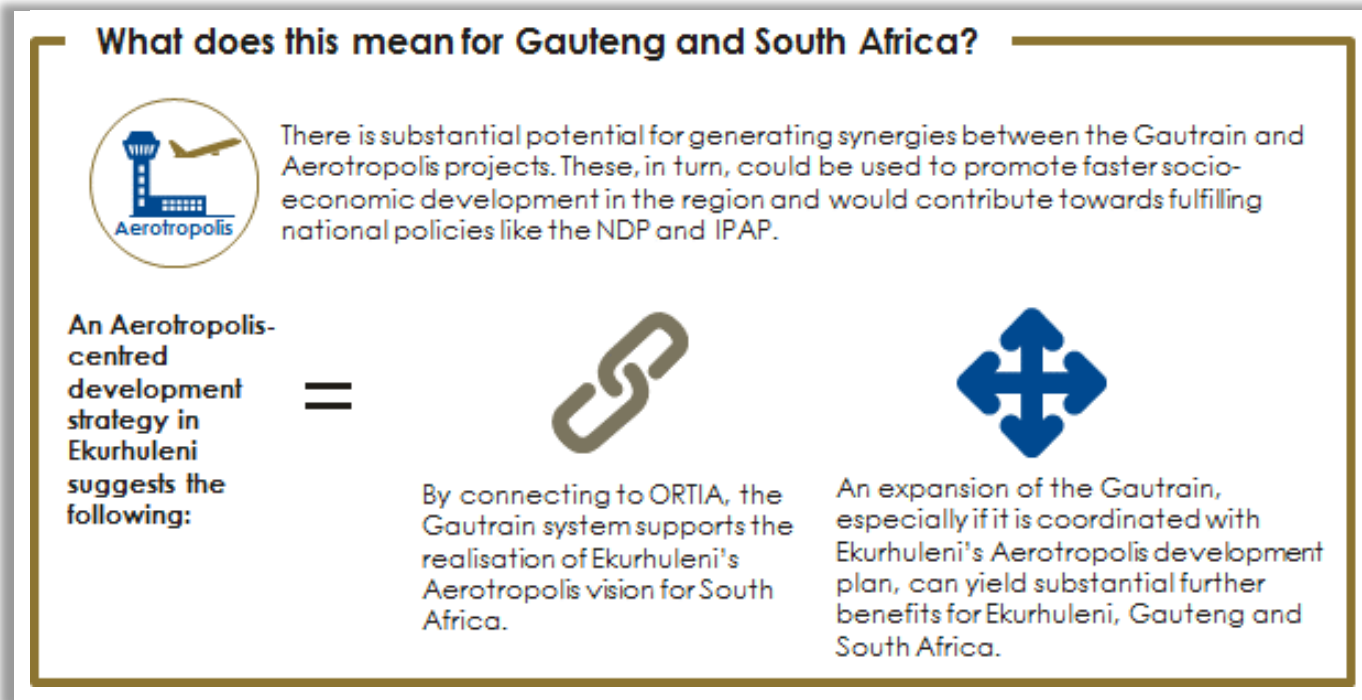
manufacturing, strengthened sectoral linkages with supply chain development and clustering, and the creation of an integrated and diversified industrial base. Gauteng is an important manufacturing base in the country, and as such support for the transport, manufacturing, engineering, and related services sector is considered to be a comparative advantage.


Additionally, **the potential expansion of the partnership between the Aerotropolis and the Gautrain would help promote continued socio-economic growth in Gauteng around transit-oriented development.** This entails encouraging transport nodes to serve as enablers of economic activity in emerging hubs. Improving access to economic opportunities via transit is also very important to households with lower incomes, who spend a greater proportion of their income on housing and transportation and often have to travel long distances to find good-paying jobs and the training needed to get them.





With the Aerotropolis development gaining momentum and receiving support from a wide range of national, provincial and municipal policy documents and strategic objectives, it is important to emphasise the enormous potential for synergy between the Gautrain and the OR Tambo International Airport. The implications are as follows:



An aerial night view of a city skyline, likely Toronto, featuring numerous illuminated skyscrapers and a prominent street with light trails from traffic. The CN Tower is visible on the left side of the frame. The sky is a deep twilight blue.

“There is no power for  
change greater than a  
community discovering  
what it cares about” –  
Margaret J. Wheatley



# Adding value to Gauteng – Powering the future

## Developing our communities

Due to increased connectivity provided by the Gautrain in combination with high rates of economic growth in Gauteng in the past few years, **the areas surrounding the Gautrain stations have developed and are continuing to develop into high density mixed-use areas, changing the urban landscape notably.** Property values continue to rise in areas surrounding Gautrain stations and several new developments have been rolled out in their vicinity, including, high rise office towers, hotel developments, residential apartment blocks and various other forms of retail and commercial properties.

The Gautrain route passes through the heart of Gauteng, where communities take part in all social and economic activity. Since 2005, increased activity along the Gautrain route has changed the landscape considerably.

| Letter | Description   |
|--------|---|
| A      | Hatfield Station  |
| B      | Jean Avenue Shopping Centre                                 |
| C      | Office Park   |
| D      | Eris Office Park  |
| E      | Office Block Echo Park                                      |
| F      | N1 Business Park  |
| G      | Investec Development opposite Midrand Station               |
| H      | Midrand Station   |
| I      | New Warehouse for Dis-Chem Pharmaceuticals                  |
| J      | Warehouse Development for Companies like Builders Warehouse |
| K      | Waterfall City Mall   |
| L      | Waterfall City Residential Area                             |
| M      | Gautrain Depot  |
| N      | OR Tambo  |
| O      | Modderfontein City Planned Future Development               |
| P      | Light Industrial Development on Scarce Property             |
| Q      | Marlboro Station  |
| R      | Renault, HILTI and SUPA Quick Commercial site               |
| S      | Area Upgrade Around Sandton Station                         |
| T      | Discovery Health new Head Office                            |
| U      | Park Station  |

Some of these development were certainly ushered in with the construction of the Gautrain, others would have certainly gained from the additional connectivity which links them to industrial and economic hubs.

To illustrate this changing landscape, the areal map from 2014 (below) indicates 21 major developments since 2005 within a 5km band along the Gautrain route. Some examples of these developments are:

### Examples of developments along Gautrain route



# Adding value to Gauteng – Powering the future

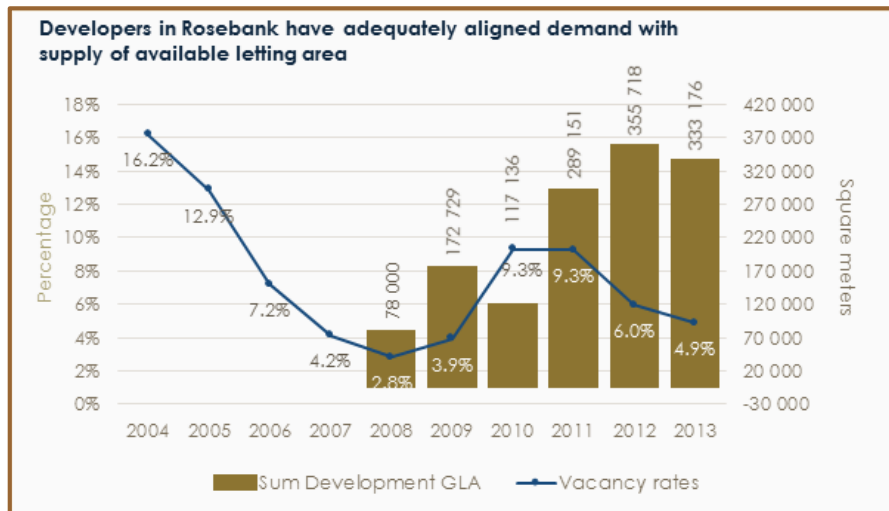
## Empowering business activity

The construction of the Gautrain **ushered in a new period for business activity in the surrounding areas**. It is important to note that a number of exogenous driving forces would have had a bearing on the dynamics of the property market in Gauteng, including for example, international developments like the global financial crisis of 2008/9, or domestic drivers like the implementation of local development plans. Keeping this caveat in mind, it is nonetheless possible to connect new developments to the emergence of better connectivity in the area by assessing their geographical proximity to Gautrain stations and routes. Indeed, a number of businesses moved their premises closer to Gautrain stations to take advantage of better connectivity, decreased travel time and the subsequent higher productivity. For example, Ernst & Young and Alexander Forbes moved closer to the Sandton station and Standard Bank moved closer to the Rosebank station. A number of new developments are following, like Discovery Health's new headquarters to be constructed close to Sandton station and Fluxmans Attorneys near Rosebank station.



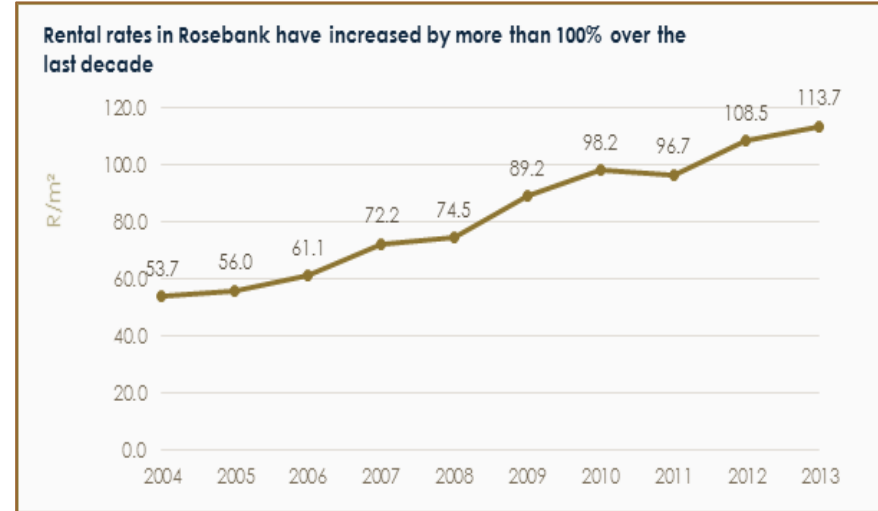
Areas such as Rosebank and Midrand have managed to adequately meet the increased demand for letting space. **Each Gautrain station has witnessed an increase in the gross lettable area (GLA) in its immediate surrounds in terms of office or industrial developments.** Despite the increases in GLA, due to escalating demand for rental space, there has been an over 100% rise in rental rates in Rosebank over the last decade, as shown below.

Rosebank GLA and vacancy rates



Source: IPD





Rosebank rental rates (deflated)



Source: Rode

However, with the global financial crisis inhibiting business and industrial/manufacturing expansion, a number of these developments have been struggling to maintain full occupation. The increased vacancy rates within office blocks and industrial parks have affected areas such as Sandton, Johannesburg CBD, Centurion CBD and Hatfield/Hillcrest.

New developments and upgrades to retail centres started in order to utilise the improved connectivity that the Gautrain brought to consumers. Therefore it is clear that the Gautrain's arrival led to increased investment and development translating to improved connectivity and production, which in turn led to positive economic spin-offs.

|  |  |   |   |   |
|--|--|---|---|---|
|  |   | <p><b>R10 billion</b> invested in new developments and upgrades to <b>retail centres</b> between 2009 and 2014</p>  |  | <p>An increase in GLA has led to additional investment of <b>R986 million</b> in <b>office space</b>.</p> |
|   | <p>The additional investment in the retail industry added <b>R28 billion</b> to the Gauteng economy's GDP during 2013, representation of <b>3%</b> of the provincial GDP<sup>12</sup>, emphasizing the importance of the multiplier effect which the retail industry has on the Gauteng economy.</p> | <p>The increased investment in office rentals had a total impact on the provincial GDP of <b>R920 million</b>. Even though its impact was not as significant as the retail industry, it still made a contribution of about <b>0.1%</b> to the provincial GDP in 2013.</p> |   |   |
|  | <p>The retail industry's operations sustained about <b>143 800 jobs</b> in Gauteng in 2013, representing about <b>4%</b> of the total employment<sup>13</sup> in the Province during 2013.</p>   | <p><b>4 000 jobs</b> were sustained in Gauteng due to the additional office space available in 2013.</p>  |   |   |

Source: IPD, Rode, IOL, Property 24, SA Commercial Prop News, Engineering News, Business Day, KPMG analysis

<sup>12</sup> Total GDP of Gauteng for 2013 = R1 174 723 million (Source: StatsSA Statistical release P0441, Gross Domestic Product, Quarter 3, 2013)

<sup>13</sup> Total number of jobs in Gauteng for 2013 was 4 823 000 (Source: StatsSA Statistical release P0211, Quarterly Labour Force Survey (QLFS), Quarter 4, 2013)

# Adding value to Gauteng – Powering the future

## Home is where the Gautrain is

The analysis of the residential property value surrounding the Gautrain station allows us to gain a better understanding of the impact the Gautrain development has on the attractiveness of surrounding areas, relative to further outlying property. By showing the impact of additional demand on property prices surrounding the Gautrain, it is possible to see **the value that residents attach to being close to high quality public transport that connects them to industrial and economic business hubs**. Specifically, the analysis takes account of the effect of Gautrain stations on residential properties within a 0km - 2km radius of all the stations in terms of their value inflation since 2008.

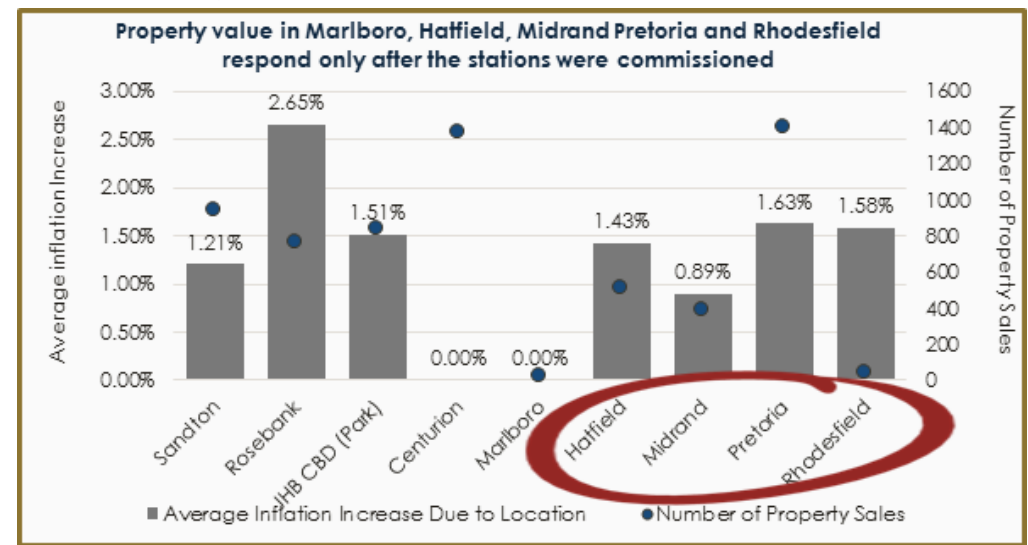
Prior to the completion of the first Gautrain link in 2010, there was already a strong indication that in residential areas surrounding Park, Rosebank and Rhodesfield stations, the demand for freehold property was on the rise at a rate higher than that of further outlying properties. Specifically, property values were inflated by an additional 1% - 3% for areas surrounding these stations.

The stations that have most positively affected freehold residential growth over the period 2011 to 2013 were Park, Rosebank, Marlboro and Midrand stations. During that period, the properties very close to these stations increased in value by 0.7% to 2.6% more than further outlying properties. Furthermore the changing dynamics are reflected in sales volumes that virtually doubled for the post construction period under consideration.

Sectional title properties close to the Gautrain stations show the most significant growth increases owing to their convenient location close to the stations compared with freehold residential properties. The sectional title properties close to the Rosebank station show an increase of their inflation figures of just over 2.5% compared with properties further away. This makes the Rosebank station the most influential station on property price growth figures, followed by Rhodesfield and Johannesburg Park stations.

In the case of residential property surrounding the Hatfield, Rhodesfield, Pretoria and Midrand stations, property values rose relatively faster in comparison to residential areas further from the station. The increase ranged from an additional 0% to about 1.63%, respectively, between 2008-09 and 2011-13.

Sectional title residential property inflation and property sales by Gautrain station within a 0km - 2km radius, 2011/13



Source: Lightstone, 2014



It is clear that the Gautrain's arrival led to increased property prices and development, translating into increased property values, which in turn led to positive economic spin-offs.

**What does this mean for Gauteng and its future?**

The Gautrain provides clear value add, which is reflected by increased sales volumes and residential property values in the vicinity of Gautrain Stations. This essentially implies that commuters attach value to having easy access to high quality public transport like the Gautrain.

**Value created from having a Gautrain station nearby** =

- Property demand** Increased demand for residential property surrounding the Gautrain stations due to high quality public transport
- Development** Increased development in and around station areas
- Property value** Increased property value in the vicinity of Gautrain stations
- Land use and densification** Each Gautrain stations serves as a development node that promotes improved land use and densification

Increase in property value of **R12.9 billion**

The increased property values added an additional **R18 billion** to the provincial GDP, representation of **1.5%** of the provincial GDP, emphasizing the importance of the multiplier effect which the property has on the Gauteng economy.

The increased development of residential properties sustained about **98 000 jobs** in Gauteng in 2013, representing about **2%** of the total employment in the Province during 2013.

Source: KPMG analysis

Welcome



GAUTRAIN

Your Partner for the Future

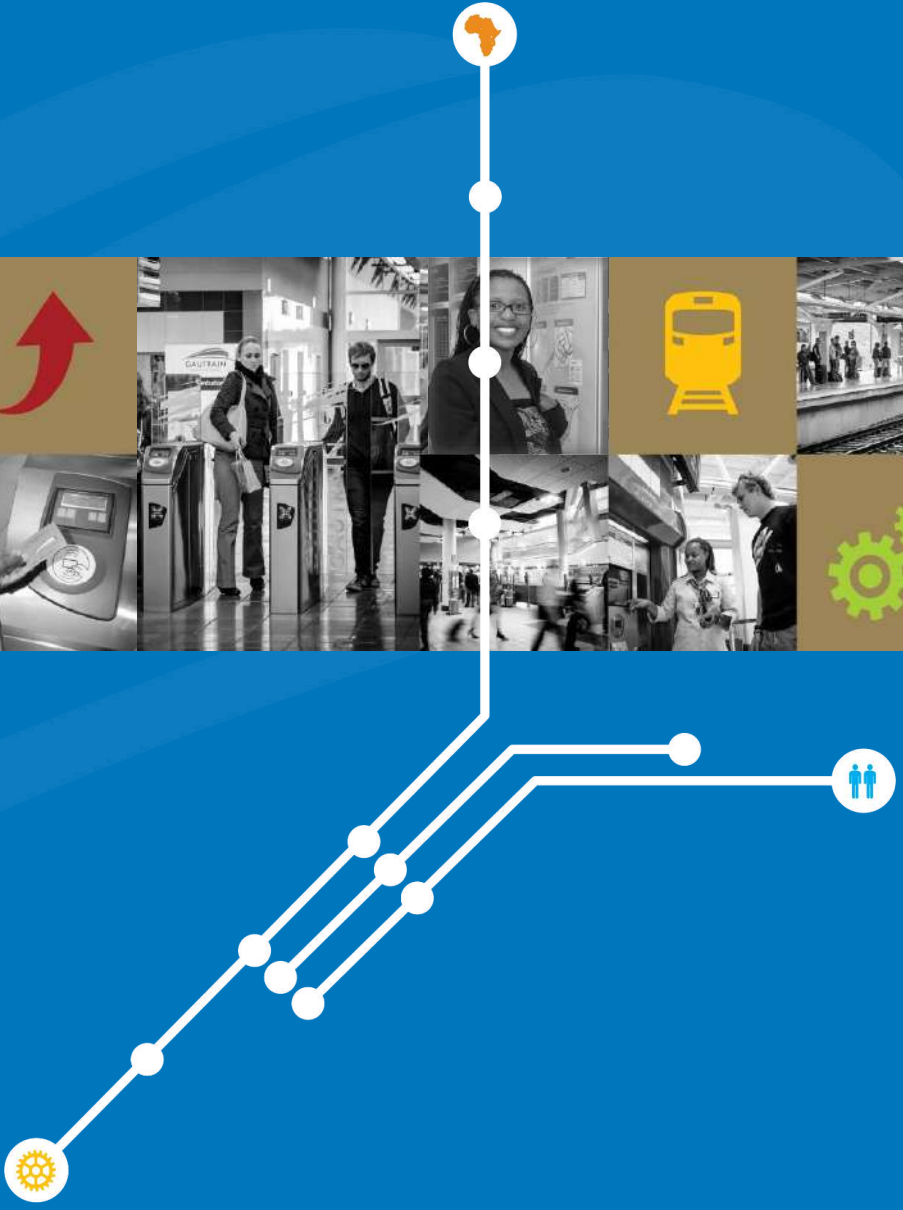
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CONTINENTAL - SPG JV

“The secret of change is to focus all of your energy, not on fighting the old, but on building the new” – Socrates

# Platform to a better tomorrow










## Platform to a better tomorrow

### Gautrain on the move to a better tomorrow

Our journey thus far has taken us through the structure and challenges in the Gauteng province before the introduction of the Gautrain, the construction of the Gautrain and the inception of the operations of the Gautrain and its ancillary services and the positive impacts that the project has had on the economy and the lives of the people of Gauteng.







However, the journey of the Gautrain and the good news associated with the Gautrain, do not stop here. **The project will continue to contribute to the future of the country and the province and through the role it can play to give impetus to national policy initiatives such as the National Development plan and the Integrated Transport Master Plan.**

The Gautrain has already contributed to some of the NDP milestones and will continue to be a major player in shaping the economy of Gauteng, more so if its network expands beyond the current capacity.





| NDP milestones to achieve South Africa's visions for 2030  | How the Gautrain can contribute to achieving these milestones  |
|--|--|
|  <p>Increasing employment</p>   | <p>With operations of the Gautrain already supporting in excess of 6 000 jobs, future growth in passenger numbers and the extension of the Gautrain, as well localisation of rolling stock maintenance and building of rolling stock, can increase this number dramatically. For every R1m invested in future expansion, approximately an extra 5 jobs can be created.</p>   |
|  <p>Increase per capita income, specifically for lower income households</p>                                | <p>Over and above the 22% of income flowing to lower income households, expanding the public transport network will create further opportunities for the unemployed to be able to access work opportunities.</p>   |
|  <p>Competitive base of infrastructure and human resources</p>  | <p>Improving the quality of infrastructure, in particular the quality of public transport, could only improve South Africa's competitiveness position. Currently, the country is ranked in 66<sup>th</sup> position</p>  |
|  <p>Ensure that the job market better reflects the racial, gender and disability make-up of the country</p> | <p>A comprehensive monitoring and evaluation process of the Gautrain's socio-economic development contribution has been in place since the inception of the project and is still continuing. This monitoring process has certain targets in place for the employment of Historically Disadvantaged individuals and the procurement processes to benefit Small and Medium Enterprises. Reports tracking progress is published on a monthly basis.</p> |
|  <p>Establish safe, affordable public transport</p>   | <p>Before construction of the Gautrain, potential users had concerns about the safety of the system and 44% stated that it would keep them from using the Gautrain. However, in 2014, safety is one of the central elements highlighted by commuters as being a reason that attracts them to using the Gautrain.</p>   |
|  <p>Access to quality education and healthcare</p>  | <p>If the current usage by Gautrain users are considered, it is clear that the system already is an important way for students and scholars to reach educational institutions, 11% of users at Park station are on their way to an educational institution.</p>  |
|  <p>Reduction in carbon emissions</p>   | <p>Commuters opting to use the Gautrain instead of their motor vehicles, reduce their carbon footprint by 52% per trip.</p>  |









Following the implementation of the NDP, the Gauteng province published the 25-Year Integrated Transport Master Plan (ITMP25). The key differentiation of the ITMP25 is the approach towards integrated spatial and transport planning, further giving effect to the NDP milestones of safe and affordable public transport, economic development and economic integration. The ITMP25 provides insight into the 10 key integrated transport interventions identified for the Province related to:

- Land use development
- A strategic public transport network
- Freight transport
- Road transport.

| ITMP25 interventions   | How the Gautrain can contribute to achieving these milestones  |
|--|--|
|  <p>Facilitating local economic development outside the urban core</p>            | <p>By connecting industrial areas to its workers and the city, the value proposition for functioning industrial zones outside of the urban core has increased significantly. This can be seen in the Rhodesfield, Marlboro South and Modderfontein areas surrounding the respective stations.</p>  |
|  <p>Land use densification in support of public transport</p>                     | <p>The Gautrain and its feeder systems have increased connectivity which has led to residential, business and industrial densification, thereby integrating the metropolis. New residential and retail developments closer to the Gautrain are following and attest to this.</p>   |
|  <p>Reinforcing the passenger rail network as the backbone of the system</p>      | <p>More than 30% of commuters travel the entire distance of the link between Pretoria CBD and Part station (Johannesburg CBD). A further 22% travels between Pretoria CBD and Sandton. From there commuters would make use of other means to get to their final destinations. This supports the view that a rail network is well suited to cover longer distance connections and integrates easily with other modes of transport.</p>  |
|  <p>Extending the integrated rapid and road-based public transport networks</p> | <p>The integrated nature of the Gautrain system in other transport systems is supported by the large portion (30% - 40%) of commuters that make use of the bus system to get to their point of final destination. The Gautrain provides the link to major points and from there, the distribution and feeder system relies on other types of transport. This trend will become more pronounced in future</p>   |
|  <p>Capacity building in the transport industry</p>                             | <p>First project of this nature in the country and largest PPP project in Africa.</p>  |
|  <p>Travel demand management</p>  | <p>The N1 corridor between Johannesburg and Pretoria is one of the most congested roads in South Africa. The large majority of commuters who make use of the Gautrain, use it to get to and from the office. As more than 50% of Gautrain users make use of private vehicles to get to and from the station, it is a good indication that these vehicles would have been on the road, probably during peak times. The Gautrain therefor makes an important contribution to reduce congestion during peak hours</p> |

The Gauteng Premier, David Makura and his administration team have adopted a ten-pillar programme of radical transformation, modernisation and reindustrialisation for the province over the next five to fifteen years. This programme is set to make Gauteng an integrated city-region characterised by social cohesion and economic inclusion; the leading economy in the continent underpinned by smart and green industrial and socioeconomic development.

| Ten pillar programme  |   | How the Gautrain can contribute to achieving these milestones |
|---|---|---|
|  <p><b>Decisive spatial transformation</b> through public transport infrastructure development and the creation of integrated and sustainable human settlements that are connected to hubs of economic opportunity</p> | <p>If the current usage by Gautrain users is considered, it is clear that the system is already an important way for employees to reach their place of work: more than 50% of commuters use the Gautrain to get to work.</p>  |   |
|  <p><b>Accelerated social transformation</b> by raising the living standard of and quality of life of all people of Gauteng</p>  | <p>Over and above the 23% of income flowing to lower income households, expanding the public transport network will create further opportunities for the unemployed to be able to access work opportunities and thus aid in raising the quality of life of public transport commuters.</p>  |   |
|  <p><b>Modernisation of public transport infrastructure</b></p>  | <p>The Gautrain promotes the emergence of hubs of economic activity and increased spatial development surrounding the stations and bus routes. We expect that in areas where Gautrain stations will be located the surrounding areas will benefit through increased connectivity and economic activity.</p>   |   |
|  <p><b>Re –Industrialisation of the Gauteng economy</b></p>  | <p>With the construction of the Gautrain already supporting in excess of 34 800 direct jobs and contributing R20bn to provincial GDP, future expansion to the Gautrain link, as well as localisation of rolling stock maintenance and building of rolling stock, can increase this number dramatically: For every R1m invested in future, at least R730 000 is estimated be added to GDP and 5 additional jobs are expected to be created.</p> <p>Improving the quality of infrastructure, in particular the quality of public transport, could also improve South Africa's competitiveness position. Currently, the country is ranked in 66<sup>th</sup> position.</p> |   |

| <b>GCR Game Changers: Economic Cluster</b>  |   |  |  |
|---|---|--|--|
| <b>Pillar #1: Radical economic transformation</b><br><b>Pillar #2: Decisive spatial transformation</b><br><b>Pillar #5: Modernisation of the economy</b><br><b>Pillar #8: Modernisation of public transport infrastructure</b><br><b>Pillar #9: Re-industrialise Gauteng</b><br><b>Pillar #10: Lead in Africa's new industrial revolution</b> |   |  |  |
| <b>Game Changer</b>   | <b>Description</b>  | <b>Role of the Gautrain and future extension in supporting these Game Changer projects</b>   |  |
|  <b>Gautrain extensions</b>  | To increase accessibility and improve mobility by extending the current footprint across the Province.  |  |  |
|  <b>Revitalisation of township economies</b>   | Transform townships into vibrant economic centres of opportunity and job creation   | Depending on where future Gautrain stations and routes will be located, surrounding areas are expected to experience transit-oriented development, driven by improved connectivity and access.   |  |
|  <b>Green Economy</b>  | To skill up for & manufacture sustainable green energy solutions in support of the Gauteng Energy Strategy  | With more commuters opting to use the Gautrain instead of their motor vehicles, there will be a substantial reduction in their carbon footprint, promoting a greener Gauteng economy.  |  |
|  <b>Metropolitan BRT Systems</b>   | To increase accessibility by completing BRT systems in 3 metros with potential extension  | The Gautrain extension, particularly if it is coordinated with other transport modes and future transport system expansions, will substantially support efforts to create a more integrated transport system in Gauteng, as described in the ITMP25. |  |
|  <b>Metrorail upgrade</b>  | Implementation of the 25 year ITMP with regards to moving passenger transport from road to rail   |  |  |
|  <b>Aerotropolis</b>   | Leveraging the potential of ORTIA as an economic engine for sustainable economic growth and job creation  | Through a seamless connection to other transportation modes, for example from ORTIA to the Gautrain and vice versa, Ekurhuleni and Gauteng can leverage their comparative advantage in the transport sector.   |  |
|  <b>Gauteng as Africa's financial and services hub</b>   | Implement and build on National Treasury Strategy in this regard<br><br>Cement GCR as the primary provider of goods, services, and skills to a growing Africa | An extension of the Gautrain can make a major further contribution to facilitating growth in the financial and services hubs of Gauteng, thereby helping to cement the GCR as the primary provider of goods, services, and skills to the continent.  |  |
|  <b>Gauteng Energy Strategy</b>  | To ensure energy security<br><br>To reduce the reliance on carbon-based fuels   | With commuters being increasingly diverted from road-based traffic, the Gautrain and its extension can make a substantial contribution to reducing the Province's reliance on carbon-based fuels.  |  |



## Platform to a better tomorrow

### Building on our track record

Along with the excitement of the 2010 FIFA Soccer World Cup, South Africans experienced the opening of the first high-speed rail link in South Africa: The Gautrain. The Gautrain has exceeded the expectations in terms of the ridership, its contribution to the Gauteng economy, how it has transformed the way in which people live, work, get to school, to places of business, to the airport and conduct their leisure activities.

All of these positive spin-offs already tell the story of how potential extensions to the Gautrain system could connect more people, more businesses, more parts of the Gauteng province not currently being serviced. Feasibility studies for network expansions are currently being undertaken. Usage trends and uptake, as well as the broader impacts of the current network only continue to support the view that network expansions will multiply the current benefits.

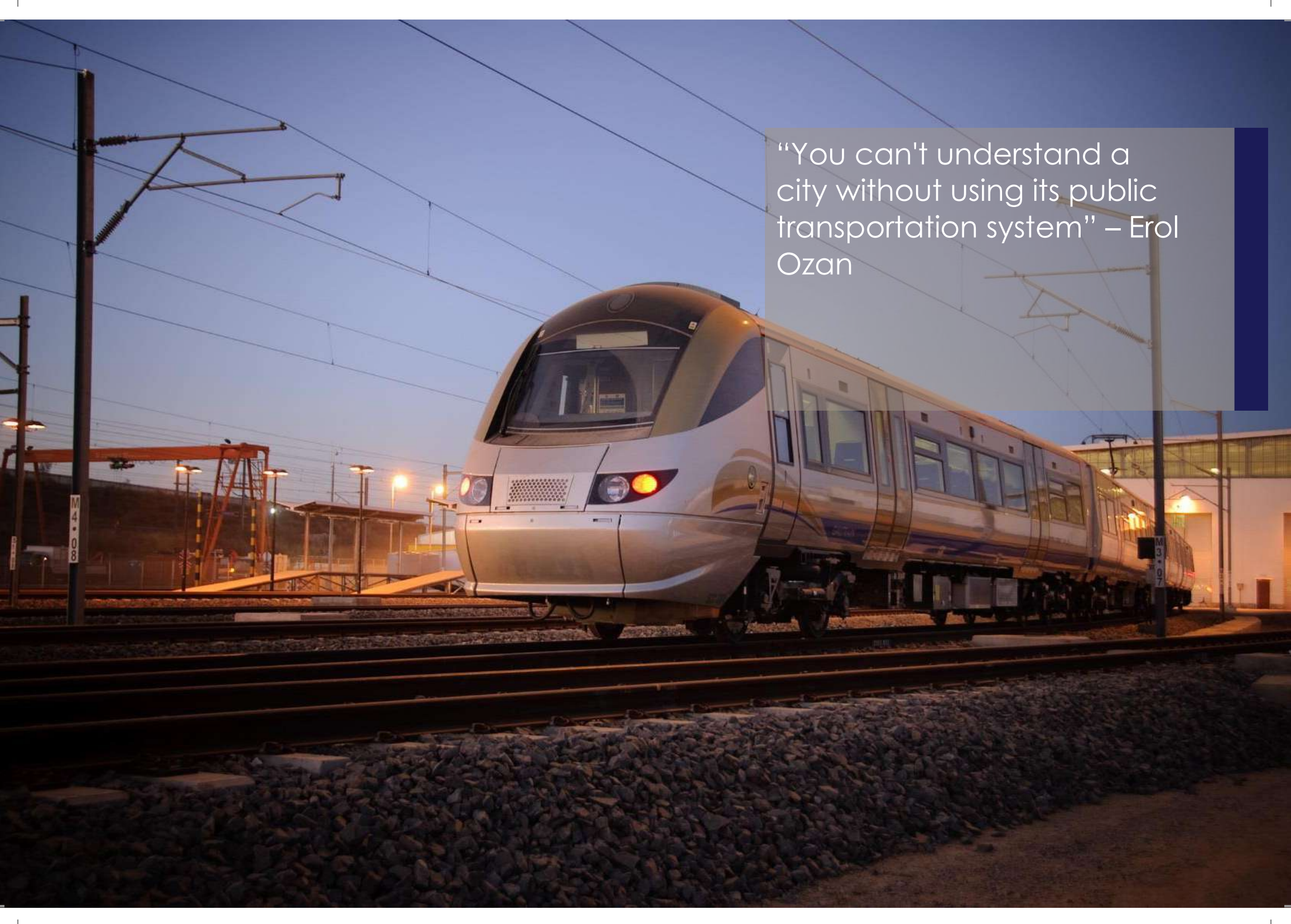
### Arriving home: the future of the Gautrain

Over and above capacity interventions such as the above, the coverage of the current network and appetite for further expansion is also in the spotlight: The Gautrain is viewed as an inter-city transport system, linking the three main metropolitan areas of the Gauteng province. The current system serves only part of the key developmental nodes that have been identified in the Province and areas such as the eastern part of Ekurhuleni and areas further to the south, such as Soweto, as well as the western parts of the Province towards Honeydew and Ruimsig, as well as the further eastern parts of Tshwane are not currently being serviced. The potential new developments are therefore considered within these areas and take into account what the Gautrain user of the future will require.

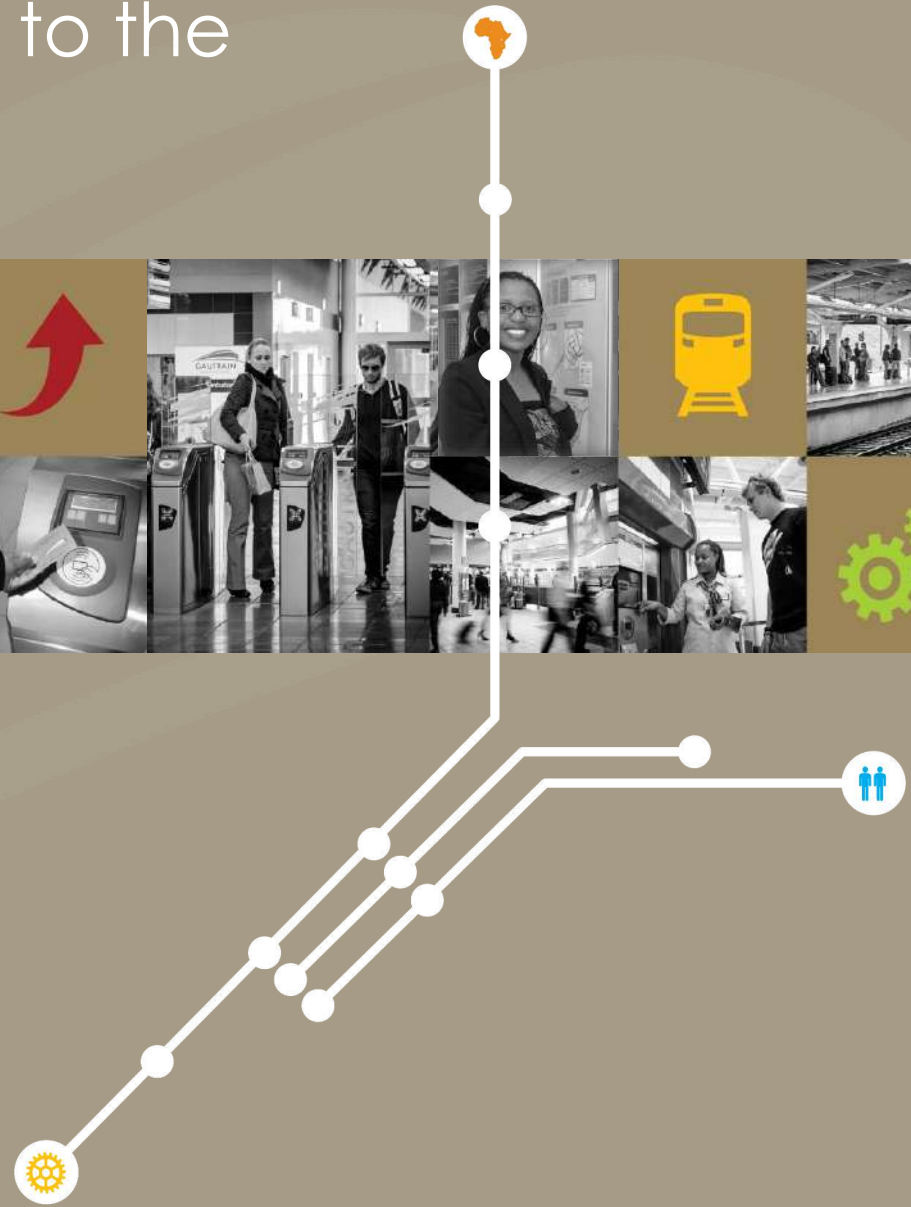
The Gautrain users of 2030 will require a transport system that is safe, secure, reliable flexible and easy to use. They would like to plan their journeys in the morning before they leave home, taking into account information about delays, connections with other forms of transport and alternatives available to them. They would require their journey to work to be integrated with the places where they would want to shop and the places of education that they sent their children to, be it day care or university. They would be sensitive and cognisant of the impact that their travel decisions would have on the environment. They would require a transport system that allow them to connect with the technology they are using in their daily lives.

The Gautrain users of the future will undertake the majority of their long distance travel in the Province via rail, but they would require a hub where it would be easy and quick for them to transfer to other modes of public transport.

“You can't understand a city without using its public transportation system” – Erol Ozan



# Current impact pave the way to the future



# Current impacts pave the way to the future

## GAUTRAIN'S CONTRIBUTION TO GAUTENG'S LONG-TERM ECONOMIC DEVELOPMENT

THE GAUTRAIN IS A MAJOR FACILITATOR OF INCOME AND JOB CREATION IN GAUTENG AND THE REST OF SOUTH AFRICA. THE GAUTRAIN'S BENEFITS INCLUDE A NUMBER OF DIRECT AND INDIRECT GAINS THAT THROUGH AN EXPANSION OF THE GAUTRAIN SERVICES COULD BE MULTIPLIED FOR THE BENEFIT OF GAUTENG AND ITS RESIDENTS

### Current impact

**R20 BILLION** TOTAL GDP IMPACT ADDED TO THE PROVINCIAL ECONOMY DURING THE CONSTRUCTION PHASE

**34 800** DIRECT JOBS WERE CREATED DURING CONSTRUCTION AND ABOUT **87 000** INDIRECT AND INDUCED JOBS OPPORTUNITIES WERE CREATED  
78% OF ALL JOBS CREATED WERE SKILLED AND SEMI SKILLED AND 22% WERE UNSKILLED WORKERS

FOR EACH YEAR OF GAUTRAIN OPERATIONS, **R1.7 BILLION** ARE ADDED TO THE PROVINCIAL ECONOMY

**922** DIRECT JOBS WERE CREATED BY THE GAUTRAIN'S OPERATION AND 5 200 INDIRECT AND INDUCED JOB OPPORTUNITIES WERE CREATED  
83% OF ALL JOBS CREATED WERE SKILLED AND SEMI SKILLED AND 17% WERE UNSKILLED WORKERS

**R617 Million** OF THE R3.2 BILLION HOUSEHOLD INCOME GENERATED FROM GAUTRAIN'S CAPEX AND OPEX CONTRIBUTES TO POVERTY ALLEVIATION IN GAUTENG

**R74 MILLION** TOTAL GDP IMPACT ADDED TO THE PROVINCIAL ECONOMY AND **947** DIRECT JOBS AND **171** INDIRECT JOBS WERE CREATED FROM THE ANXILLARY SERVICES OFFERED BY THE GAUTRAIN

### Future impact

**0.73** TOTAL GDP MULTIPLIER FOR THE CONSTRUCTION PHASE OF THE GAUTRAIN  
FOR EVERY R1 OF 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 CREATED

EQUAL TO A GDP MULTIPLIER OF **0.96** FOR ONE YEAR OF OPERATIONS IMPLYING THAT 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 CREATED PER YEAR

FUTURE EXPANSION WOULD IMPLY A SUBSTANTIAL POVERTY ALLEVIATION IMPACT FOR GAUTENG RESIDENTS IN THAT **19%** OF ADDITIONAL HOUSEHOLD INCOME GENERATED WILL FLOW TO LOW INCOME HOUSEHOLDS.

**72 CENTS** FOR EVERY R1 SPENT AND **11 JOBS** PER MILLION RAND SPENT WILL BE ADDED TO THE GAUTENG ECONOMY

The stated current and anticipated impacts of the Gautrain system are centred around the GMA's Key Performance Indicators (KPIs) namely, *inter alia*, economic development, public transport as a mode of choice and spatial development.

## GAUTRAIN'S CONTRIBUTION TO PUBLIC TRANSPORT BECOMING A MODE OF CHOICE

THE VALUE THE GAUTRAIN CONTRIBUTES TO PEOPLE'S LIVES HAS LED TO A SHIFT IN THE WAY THE PUBLIC PERCEIVES PUBLIC TRANSPORT IN SOUTH AFRICA. THE SHIFT AWAY FROM ROAD TRANSPORT HAS ALSO BENEFITED THE GAUTENG COMMUNITY IN THE FOLLOWING WAYS:

THERE HAS CLEARLY BEEN A **MOVE TO HIGH QUALITY PUBLIC TRANSPORT** GIVEN THAT GAUTRAIN'S RIDERSHIP NUMBERS HAVE INCREASED BY **94% AND 27%** IN 2011/12 AND 2012/13, RESPECTIVELY

**24 200** FEWER CARS ON THE ROAD PER DAY

At least **13** FEWER FATAL CRASHES PER YEAR  
At least **14** FEWER FATALITIES PER YEAR

**TIME SAVING** OF BETWEEN **10 AND 12** WORKING DAYS PER YEAR

GAUTRAIN IS **8x** FASTER THAN ROAD TRANSPORT IN HEAVY ROAD CONGESTION

**REDUCED CARBON FOOTPRINT** OF **52%** PER GAUTRAIN COMMUTER

IN 2006 NEARLY **50%** OF POTENTIAL COMMUTERS SAID **SAFETY** WOULD BE THE ONE THINGS STOPPING THEM FROM USING THE GAUTRAIN

IN 2014, SAFETY IS THE **SECOND MOST** COMMON ASSOCIATION WITH THE GAUTRAIN

THE GROWTH IN RIDERSHIP NUMBERS SUGGESTS A **CHANGE IN PERCEPTION** REGARDING THE **ATTRACTIVENESS OF PUBLIC TRANSPORT**

THE PUBLIC INCREASINGLY ADOPTING PUBLIC TRANSPORT AS A **MODE OF CHOICE** MEANS, AMONG OTHERS, **CONTINUED ALLEVIATION OF ROAD CONGESTION** LIFTING THE CAP ON ECONOMIC GROWTH

**TIME IS VALUABLE**

WITH **GROWING DEMAND** FOR GAUTRAIN'S SERVICES, AN EXPANSION IMPLIES **LARGE TIME WINS**, SUBSTANTIALLY SUPPORTING **PRODUCTIVITY AND LIFESTYLE GAINS**

EXPANSIONS OF THE GAUTRAIN SYSTEM WILL YIELD FURTHER CONTRIBUTIONS TOWARDS A **GREENER GAUTENG**, ENSURING ITS **SUSTAINABILITY** GOING FORWARD

**PUBLIC SUPPORT** FOR AN **EXPANSION** OF THE GAUTRAIN SERVICES IS GUARANTEED

GAUTENG RESIDENTS **VALUE** HAVING A GAUTRAIN STATION OR BUS ROUTE CLOSEBY

## GAUTRAIN'S CONTRIBUTION TO GAUTENG'S IMPROVED SPATIAL DEVELOPMENT

GAUTRAIN SUPPORTS TRANSIT ORIENTED DEVELOPMENT BY ENCOURAGING THE GROWTH OF TRANSPORT NODES THAT SERVE AS ENABLERS OF ECONOMIC ACTIVITY IN EMERGING HUBS OF GAUTENG

### Current impact

**R46 BILLION** TOTAL GDP IMPACT ADDED TO THE PROVINCIAL ECONOMY THROUGH PROPERTY DEVELOPMENT INDUCED BY THE GAUTRAIN

**245 000 TOTAL JOBS** WERE CREATED AS A RESULT OF THE PROPERTY DEVELOPMENT THAT TOOK PLACE 85% OF ALL JOBS CREATED WERE SKILLED AND SEMI SKILLED AND 15% WERE UNSKILLED WORKERS

**R4.9 Billion** OF THE R28 BILLION HOUSEHOLD INCOME GENERATED FROM PROPERTY DEVELOPMENT AROUND GAUTRAIN STATIONS CONTRIBUTES TO POVERTY ALLEVIATION IN GAUTENG

**1% - 3%** FASTER GROWTH IN RESIDENTIAL PROPERTY VALUE IN CLOSE PROXIMITY TO GAUTRAIN STATIONS RELATIVE TO SURROUNDING AREAS 100% HIGHER OFFICE RENTAL RATES IN SOME CASES

**R10 BILLION** RETAIL PROPERTY DEVELOPMENT IN CLOSE PROXIMITY TO GAUTRAIN STATIONS

### Future impact

**1.91** TOTAL GDP MULTIPLIER FOR PROPERTY DEVELOPMENT AROUND GAUTRAIN STATIONS FOR EVERY R1 OF NEW INVESTMENT INTO THE ECONOMY BY THE GAUTRAIN, AN ADDITIONAL R1.91 IS ADDED TO THE GAUTENG ECONOMY

ADDITIONAL INVESTMENT INTO PROPERTY DEVELOPMENT AROUND GAUTRAIN STATIONS IS EXPECTED TO CREATE **10 JOBS PER R1 MILLION SPENT**

FUTURE EXPANSION WOULD IMPLY A SUBSTANTIAL **POVERTY ALLEVIATION** IMPACT FOR GAUTENG RESIDENTS IN THAT **17%** OF ADDITIONAL HOUSEHOLD INCOME GENERATED WILL FLOW TO LOW INCOME HOUSEHOLDS

FUTURE EXPANSION OF THE GAUTRAIN WOULD **PROMOTE DEVELOPMENT** AROUND NEW GAUTRAIN STATIONS

FUTURE EXPANSION WOULD USHER IN **ADDITIONAL BUSINESS ACTIVITY** THAT WOULD GENERATE **POSITIVE ECONOMIC SPIN-OFFS** FOR THE AREA