

City of Johannesburg
South Africa



Towards friendlier mobility

Agenda

- Background and introduction
- Initiatives for friendlier mobility
 - Public transport
 - Cycling
 - Walking
 - New forms
- Lessons and conclusion





Background

Background (City)

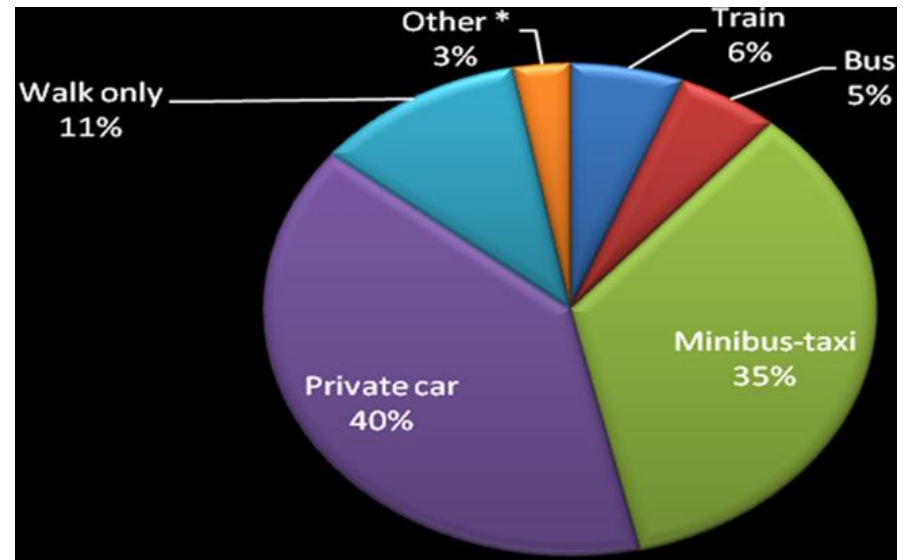
- Joburg has a population of 4.4 million and is growing (3.4% p.a.)
- Spread over a large area so population density is low (2 700 per square km)
- 23% of economically active people are unemployed
- 67.4% of households live on less than R3200 per month with a large percentage of poor household's income going towards transport
- Joburg contributes 56% to national carbon emissions and Transport has the highest demand for energy (67%)



Background (transport)

- The main modes are:
 - Private vehicles
 - Mini bus taxis (not subsidised, privately owned – organised in associations)
 - Rail (Gautrain – high class and Metrorail – for the poorest)
 - Bus (City bus fleet, provincial subsidised, Rea Vaya BRT)

Specific challenges arise out of our apartheid spatial legacy (poor people on the periphery) and decades of car centred, security focused planning



Main mode to work

What is our vision for transport?

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



WE ARE GUIDED BY:

- Joburg Growth and Development Strategy 2040
 - Liveable city: Very pro-public transport, walking and cycling (ecomobility)
 - Radically increase public transport use
 - More compact city with future development around public transport corridors
 - Support economic growth
 - Actively engage the citizenry
 - Support entrepreneurship
 - Job –intensive economy
 - Low-carbon city economy
- National Public Transport Strategy
- National Development Plan

Our policy objectives: To move...

**FROM: URBAN SPRAWL AND
HOUSING FAR FROM JOBS**



**TO: COMPACT CITY – LIVE, WORK, LEARN
AND PLAY IN MIXED USE NODES**

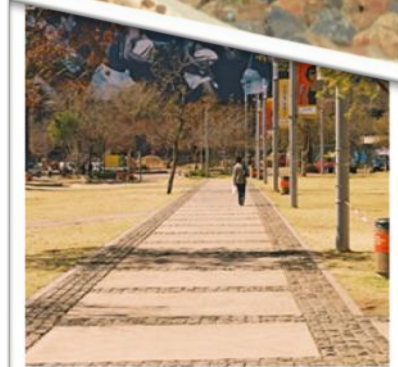
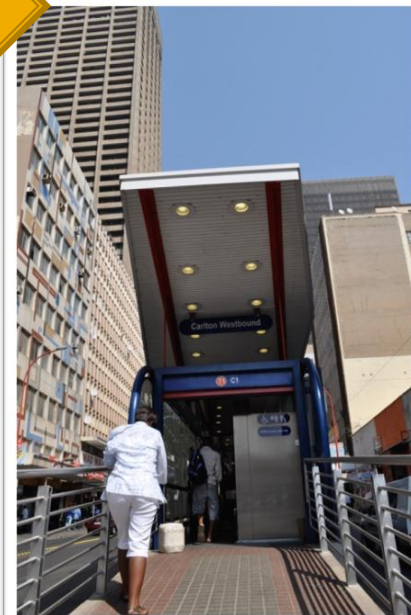


Our policy objectives: To move...

**FROM: A CAR ORIENTATED, CYCLE
AND WALKING UNFRIENDLY CITY**



**TO: A PUBLIC TRANSPORT, WALKING
AND CYCLING ORIENTATED CITY**



Implementing our objective: Making public transport, walking and cycling the mode of choice



Infrastructural changes

- Rea Vaya BRT
- Cycle lanes
- Public transport lanes
- Wider sidewalks
- Public transport facilities: Interchanges, ranks, stations and stops



Operational changes

- Rea Vaya bus services
- Metrobus restructuring and recapitalisation
- Park and rides
- Bike share schemes



Behavioural change

- Eco-mobility Festival
- Freedom Rides
- Ride sharing
- Corporate travel plans
- Open streets

Initiatives for friendly mobility

INITIATIVES

- Public transport
- Cycling
- Walking
- New forms of shared mobility

FOR EACH WE NEED TO CONSIDER:

- Infrastructure
- Services
- Behavioural change

Underpinned by:

- Planning
- Good governance
- Sustainable funding
- Monitoring and evaluation

Public transport



- Introduction of BRT
- Restructuring of existing subsidised or publically owned operators
- Integration and modernisation of mini bus taxis
- Refleeting of Metrorail
- Expansion of Gautrain

Rea Vaya BRT Objectives

- Provide fast, safe, reliable and affordable public transport
- Enable public transport transformation
- Contribute to spatial restructuring and transit orientated development
- Contribute to broad based black economic transformation
- Prevent climate change and reduce air pollution
- Promote social inclusion



Rea Vaya BRT progress

- We have introduced two phases of Rea Vaya BRT:
 - Phase 1A in 2009 (143 buses, 25 kms of trunk route)
 - Phase 1B in 2013 (134 buses, additional 16 km of trunk routes)
- Passenger numbers are approximately 40 000 per weekday and less than projected. Factors impacting on passenger numbers include:
 - Affordability (even through fares generally lower than taxis – people can't afford to travel and competition from poorly regulated taxi industry)
 - Accessibility (taxis still more accessible and have cash fares)
 - Lack of spatial integration (peak hour trips mostly in one way – empty buses on return trips)
- Planning for the third phase had to:
 - Address lessons from previous phases and improve sustainability
 - Respond to corridors of freedom initiative and the growing imperative to integrate with walking and cycling

City owned and provincially subsidised bus systems

- City sees an important role for conventional bus supported by some dedicated bus lanes and speedier boarding on medium-demand public transport routes
- Presently we have two bus services operating in and around Johannesburg which are not integrated and have an aging and unsafe fleet
 - Metrobus (350 buses, 60 000 passengers)
 - PUTCO and other provincial subsidised contracts (about 800 buses)
- We are working to:
 - Refleet Metrobus with new dual fuel (biogas and clean diesel)
 - Change contracting to be similar to BRT – fee per km plus penalties, City takes patronage risk
 - Ensure an integrated network (over time – working on area integrated public transport operational plans including with mini bus taxis)
 - Have a new bus and fare management system with appropriate technology



Mini bus taxi

- Minibus taxis are an integral part of the transport system in the City of Joburg providing a highly convenient although not always safe or comfortable service.
- The City is seeking on one hand to improve the quality and safety of the minibus-taxi routes and incorporate them into an integrated network while also replacing certain of them with more appropriate modes (especially BRT)
- Some of our interventions are:
 - Assisting the city's taxi industry to re-fleet, in particular to switch to greener vehicles.
 - Improving the regulatory environment to ensure that unsafe vehicles do not operate and that there is a match between supply and demand.
 - Stronger law enforcement to ensure law-abiding road traffic behaviour by minibus-taxis.
 - Providing good and integrated public transport facilities (interchanges, ranks, shelters etc.)



Rail

METRORAIL

- A national refueling and modernisation programme is underway including with a strong focus on local content on new rolling stock
- Creates the possibility of rail being a mode for all (not only the captured very poor) and City may need to start looking more seriously at “last mile services”

GAUTRAIN

- Built as a PPP aimed at attracting private car users doing inter-City travel (and airport)
- Makes public transport ‘friendly’ to car captured commuters and has been relatively successful at doing this
- Has also enabled significant TOD at stations

Public transport interchanges

- We are constructing /creating a number of high profile interchanges which will serve to:
 - Create a focus for Transit Orientated Development (social amenities, social housing, retail)
 - Enable easy and safe transfer/integration with walking, cycling, mini bus taxi, BRT, conventional bus and rail
 - Provide for Park and Ride facilities bearing in mind low density nature of many areas and the need to attract previous car users to public transport
 - Contribute to changing the face of 'previously disadvantaged areas' with high quality infrastructure



Cycling



Why is the City promoting cycling

- Cycling can be a meaningful mode of transport for workers and learners who live between 2.5 and 6 km from their places of work or learning or further if integrated with public transport
- Reduces congestion
- Reduces CO₂ emissions, improves air quality and reduced noise in our neighbourhoods;
- Improves fitness and health of our communities. Cycling is excellent for mental health – regular cycling makes people feel great; and
- More people on our streets walking and cycling breaks down barriers and improves active citizenry.

In line with international cycling revival



Pillars to promote cycling



Construction of cycle friendly infrastructure

Dedicated cycle lanes

Bike storage and bike parking points

Bikes on public transport



Making cycles more accessible

Donation of bikes to learners

Enabling the private sector to produce bicycles that are more robust

Ensuring that bike repair is affordable



Cycle promotion

h promotional events such as Freedom Ride

Training learners to ride bikes



Cycle safety

Education of all stakeholders in cycle road safety

Changes to legislation in respect of road speeds and signage

Cycling infrastructure

- We have built or are constructing different kinds of cycle lanes:
 - Completely dedicated
 - Dedicated on the sidewalk
 - Dedicated lanes on the road
 - Way finding and some safety features on ordinary road
- Cycling is being integrated with walking and public transport as follows:
 - Bike storage at Rea Vaya stations
 - Cycle routes end at stations, with possible bike sharing at stations/interchanges
 - Cycle routes on complementary alignments to public transport
 - Bikes on public transport where possible...



Accessibility

- The City wants to promote access to bikes through:
 - Donation of bikes to learners in partnership with NGOs and the private sector
 - Enabling bike share/bike rental schemes – although difficult due to spatial lay out
 - Engaging retailers to reduce the price of bikes
 - Supporting the establishment of bike empowerment centres (BEN) to service bikes and teach, especially young people to ride bikes



Cycle promotion

- The City is promoting cycling through bi-annual “Freedom Rides” and other cycle activations, open street activities



Walking



Walking networks

We are investing significantly to improve sidewalks and build dedicated walking and cycling routes in both CBDs and residential areas to:

- Enable people who can't afford to use public transport to walk within a 5 km radius
- Promote behavioural change amongst car users to switch to more environmentally friendly forms of transport
- Provide increased accessibility to public transport



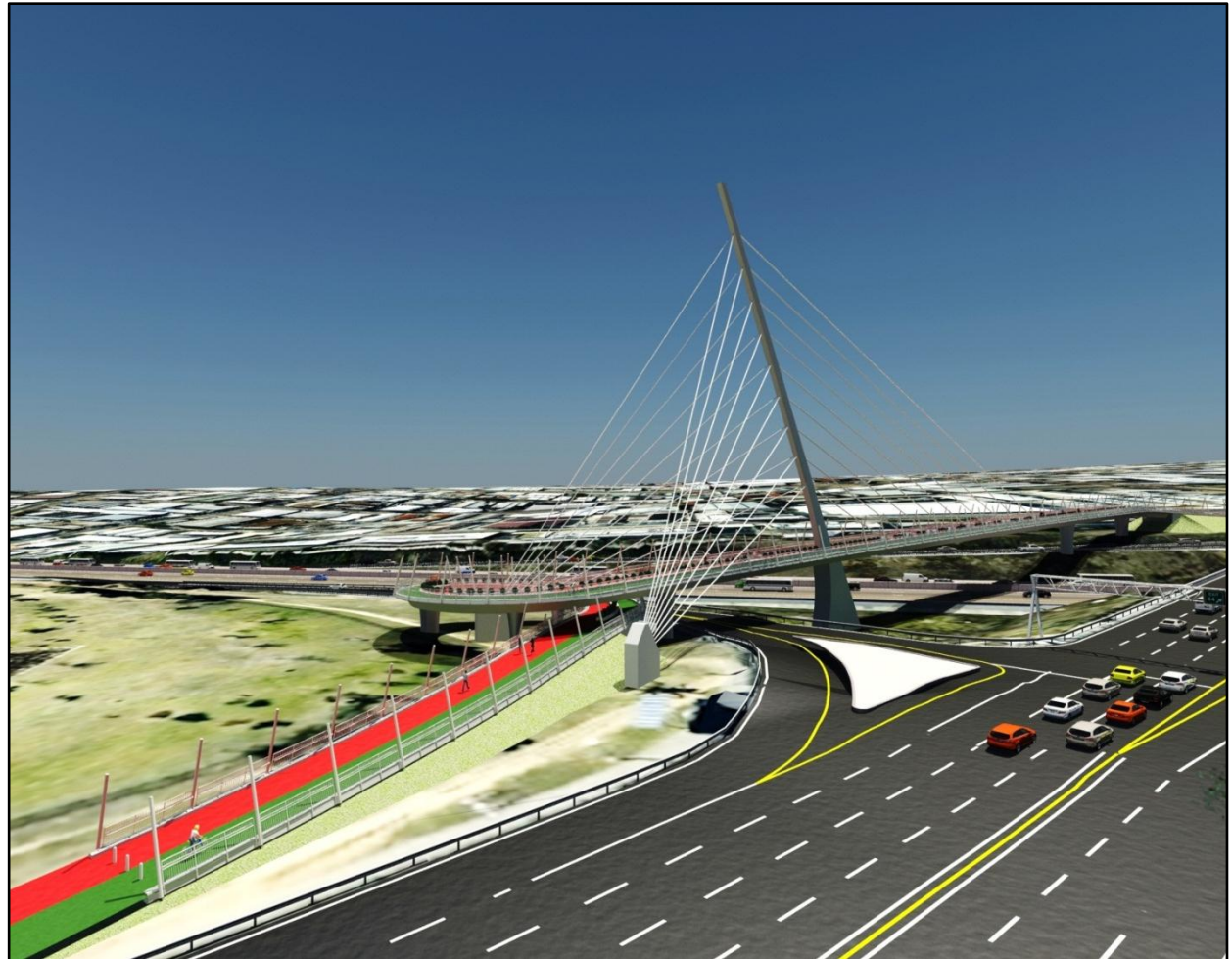
Complete streets

- Since 2011 we have been promoting the construction of Complete Streets which we regard as safe, comfortable and convenient for travel for everyone, regardless of age or ability, and mode of movement.
- Design standards and guidelines were developed this year for each class of road, and these will need to be adhered to in all public and private sector developments
- Our Complete Streets are built in labour-intensive ways as well as promoting "Jozi@Work" – entrepreneurship
- We aim for all our streets to be "complete" in the long term – either through retrofitting or when new streets are built



Dedicated walking and cycling infrastructure

- We have an iconic project to create a dedicated walking and cycling bridge over the premier motorway in the City
- It will cater for 10 000 people who walk from the one of the poorest areas in our City to the richest (Alexandra to Sandton)
- It is also signals our long term policy objectives and priorities



Street furniture

- We have also put a lot of attention in recent years to street furniture:
 - Hawker stalls
 - Shelters
 - Public art
- This serves to make our streets more attractive, safe and functional public spaces

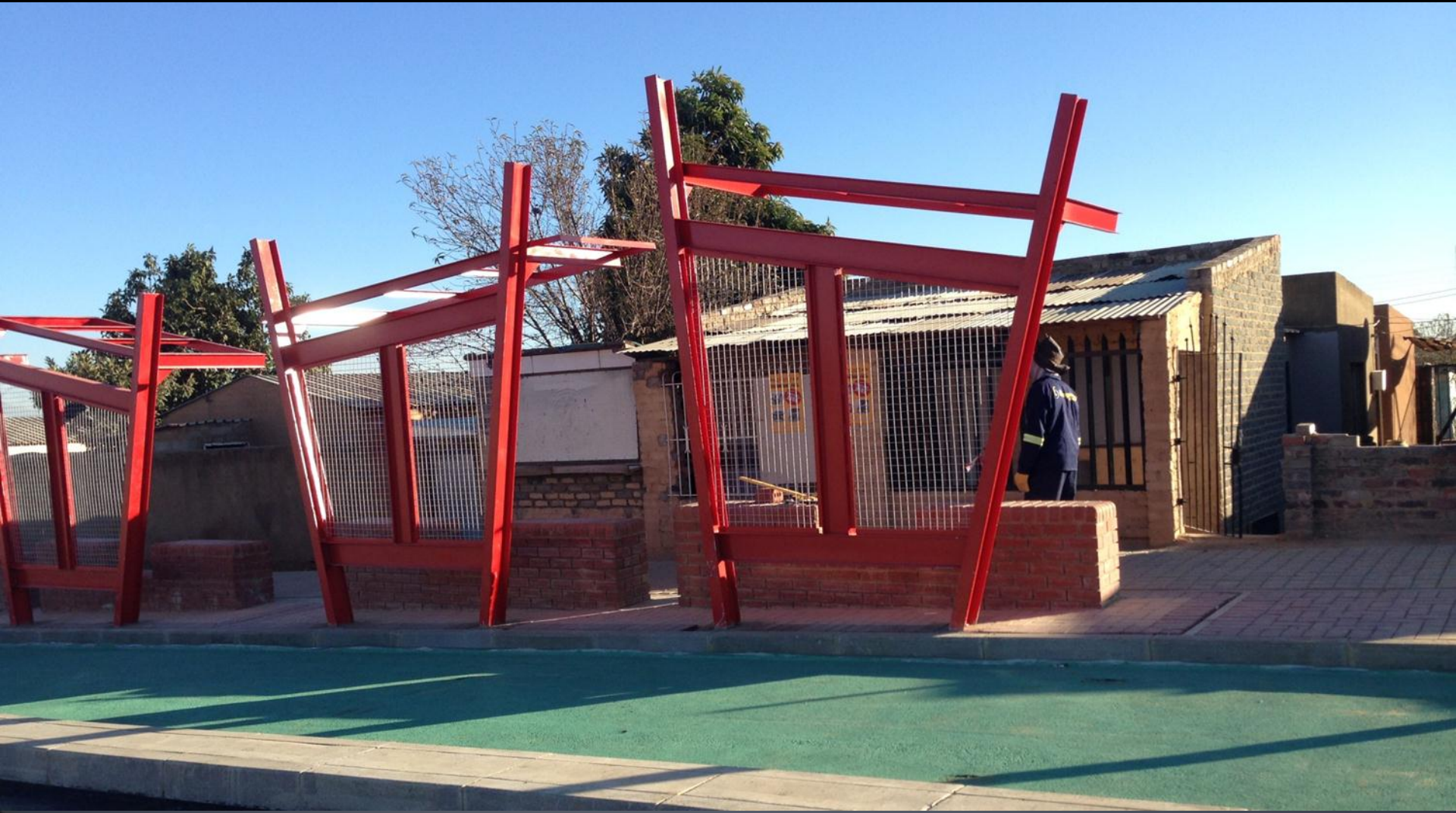


New forms of Mobility

New forms of mobility

- Over the last five years the following have emerged on our streets:
 - Tuk tuks (mostly with petrol or diesel engines – not clean)
 - Uber (registered as corporate travel not metered taxis)
 - Segways (? Is this public transport or even transport)
- What has not emerged have been:
 - Pedicabs (regulatory issues)
 - Zipcars and similar (security considerations?)
 - Motor bikes (carry one which are popular in East Asia and Africa and very dangerous)

Lessons and conclusions



Lessons: Planning and policy for friendlier mobility

- Linking transport and land use planning (TOD): Do Cities have the funding (and time) to invest in corridors that may only yield 'public transport patronage' in the long term?
- Need a mixture of "tactical urbanism" and long term master plans especially for walking and cycling
- People centred means involving people
 - Observations
 - Participation in planning (cyclists believe nothing about us without us)
- Friendlier mobility has the potential to support a number of City objectives (greening, climate change, TOD, healthy lifestyles, social cohesion but be careful of overloading objectives)

Lessons: Implementation

- Public transport, walking and cycling infrastructure needs lots of maintenance so sustainable materials and technology matters
- Technology has created opportunities (e.g. Uber, ITS) but can be costly and even more so when it is imported
- Despite fancy technology, the human element (customer service, driver discipline and training) remains key

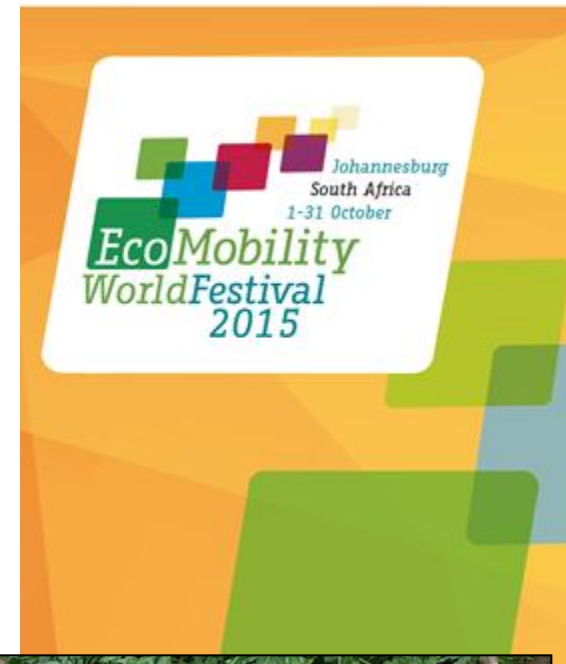
Lessons: Leadership and governance

- Leadership support and setting the example is important
- There are lots of interests to manage
- Institutional arrangements matter less than good relationship management between spheres of government, public and private players



EcoMobility World Festival

- The City of Joburg in partnership with ICLEI and others are hosting a monthly long EcoMobility World Festival in October 2015
- The Festival will take place in the streets of our second CBD in Sandton and will include:
 - An International EcoMobility Exhibition show casing different forms of 'passenging'
 - A week of dialogues including looking at how to make EcoMobility cool, new forms of mobility and is a care free future possible – seeking to attract local and international participants
 - Number of cycle rides and street activities
 - Closing certain streets and enabling Sandton residents and workers to use other public transport, walking and cycling options.
- Visit www.ecomobilityfestival.org for more information or follow #joburgecomobility



Conclusion

- While public transport and walking is the mode most used by Johannesburg residents, it (and cycling) is not a mode of choice
- This is mostly because of safety and security considerations as well as the fact that while congestions is bad, it is not impossible
- The City's strategies of friendlier mobility hopes to improve travel time, quality and affordability to the poor while at the same time attracting all users to it with the offer of reduced congestion, need for healthier lifestyles and a more sustainable future.