Sustainable urban city development from a public transport perspective
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Some contextualization

• Africa is facing three urgent transport challenges:
  • The continent has the highest rate of road fatalities in the world;
  • It has an unprecedented growth rate of urbanization; and
  • It has the highest transport costs in the world.

• The World Bank estimates that another 500 million people will move to cities on the African Continent over the next 25 years (i.e. by 2043)

• Many of these cities are ill-equipped to provide safe, reliable and sustainable public transport
Some contextualization

• Gauteng will by 2037 have an estimated 16 million population (11m in 2010)

• What are we doing to improve access to work, commercial centres, schools, leisure facilities, hospitals etc?

• The proposed new White Paper on National Transport policy is, amongst other, silent on a “visionary” vision that deals with:
  • the potential impacts of the 4th Industrial revolution on transport (think Uber/Lyft, car/ride sharing, car pooling, new technology, big data etc.),
  • major urbanization challenges and the need for improved public transport,
  • how government intends optimizing and prioritizing the future provision of public transport;
  • public transport funding issues and how to handle this,
  • compact cities,
  • measures to discourage car use etc.
The Gauteng City Region (GCR) context

- GCR is the economic heartland of SA
- 33% of SA's GDP generated in Gauteng
- Gauteng consists of 2% of land mass of SA
Movement into and within the City of Johannesburg, Tshwane and Ekurhuleni
Public housing programmes (2008) and distance to major economic centres

Source: Public housing programme (Gauteng Department of Human Settlements, 2008)
Planned housing developments (housing units)
Look for work trips made by survey respondents (red dots represent trip destinations)
Trips made by respondents going to work categorized by race
Imperatives for sustainable transportation in the GCR

• **Support for integrated transport policy and planning approach** taking into account those whose mobility is constrained because of disability, age, poverty etc.

• **Coordination of land-use and transport planning** to encourage spatial settlement patterns that facilitate access to basic necessities such as workplaces, schools, health care, places of worship, goods and services and others, and leisure, thereby reducing the need to travel

• **Encourage the optimal combination of modes of transport, including walking, cycling and private and public means of transport**, through appropriate pricing, spatial settlement policies and regulatory measures

• **Promote and implement measures that discourage the increase in private car use and reduce congestion** which is damaging environmentally, economically and socially and to human health and safety, through pricing, traffic regulation, parking and land-use planning and traffic abatement methods, and by providing or encouraging effective alternative transport methods, particularly to the most congested areas

• **Provide or promote an effective, affordable, physically accessible and environmentally sound public transport and communication system**

• **Promote, regulate and enforce quiet, user-efficient and low-polluting technologies**

Imperatives for sustainable transportation in the GCR

- The establishment of a Transport Authority for the GCR is critical to achieve sustainable transportation development in the City Region

- Benefits include:
  - Functional flow planning of public transport systems across metro boundaries and within the region
  - Harnessing existing expertise in one authority – transport planning, engineering, contracting, land use and development, network designs, marketing etc
  - Pooling of public transport funds and avoiding the ineffective and inefficient application of existing funding sources
  - Avoiding the current silo approach to managing and funding modes of transport – rail, school bus transport, commuter bus transport, metro bus transport, BRTs and Gautrain in the GCR
Thank you