Transport Planning for Transformation in the City of Joburg

Our Cities Our Selves
25th February 2011

Transport planning in the City of Joburg

- National legislation requires that City develops a five year Integrated Transport Plan (ITP)
- ITP must include data on origins and destinations, traffic flows, ‘register’ of all public transport services and facilities
- ITP then should develop detailed strategies and plans for public transport routes, NMT, freight, etc
- Last ITP was done 2003 – 2008.
Background: Integrated Transport Plan

- Key features of 2003 – 2008 ITP
  - A Strategic Public Transport Network (SPTN), consisting of 325 kms of public transport priorities on existing roads with 30 interchange nodes;
  - A proposed Inner City Distribution System linking strategic modal integration facilities and nodes in the city, including Park Station; and
  - Rationalisation of bus and minibus-taxi services to operate predominantly on the SPTN. Bus services to operate at frequencies of 5 - 15 minutes in the peak, and 30 to 60 minutes in the off-peak.
- After 2006 elections, new Council agreed to introduce Rea Vaya BRT as a flagship project and SPTN priority was replaced with 122 km of dedicated lanes for bus rapid transit.

Background: New ITP

- Now City is embarking on new ITP, first step being information gathering especially in light of significant changes over last 5 years including:
  - Introduction of new modes, projects (Rea Vaya, Gautrain, Freeway tolling)
  - Introduction of Gautrain, Rea Vaya BRT, GFIS
  - Increased urbanisation and changing residential patterns (e.g. increased numbers in the inner city).
  - Increased need for ‘green transport’ and to reduce air pollution and carbon emissions
Key principles for integrated transport planning going forward

- The new ITP is likely to focus on the implementation of the following key principles:
  - Maximisation of integration (strategic, spatial, physical and operational);
  - Determine the best mode for the route based on matching density and land use type to most appropriate transport mode
  - Identifying priority public transport routes of different types (BRT, dedicated lanes)
  - Promotion of non motorised transport and an integration with other forms of public transport
  - Sustainability (environmental, financial, institutional)

And does it not sound similar too…

“Ten principles for transportation in urban life”

- Walk the walk: Create great pedestrian environments
- **Powered by people:** Create a great environment for bicycles and other non-motorized vehicles
- **Get on the bus:** Provide great, cost-effective public transport
- **Cruise control:** Provide access for clean passenger vehicles at safe speeds and in significantly reduced numbers
- **Deliver the goods:** Service the city in the cleanest and safest manner.
- **Mix it up:** Mix people and activities, buildings and spaces.
- **Fill it in:** Build dense, people and transit oriented urban districts that are desirable.
- **Get real:** Preserve and enhance the local, natural, cultural, social and historical assets.
- **Connect the blocks:** Make walking trips more direct, interesting and productive with small-size, permeable buildings and blocks.
- **Make it last:** Build for the long term. Sustainable cities bridge generations. They are memorable, malleable, built from quality materials, and well maintained.
Let's discuss these principles in the context of Joburg and after hearing about the vision for Orlando for 2050.

**Walk the walk**
**Connect the blocks**

- We used to be good at building roads...
- Now we want to embrace the ‘complete streets’ idea especially in inner city and ‘marginalised areas’
- JDA has done some great sidewalks in Inner City, Orange Farm, Orlando
- Sidewalks are great for:
  - Job creation
  - Promotion of walking and support to public transport
  - Urban management and safety
  - Greening
  - Trolley pushers, pram pushers and wheel barrows
  - Accessibility for people with disability
Walk the Walk
Connect the blocks

- But you need to be smart to ensure you incorporate:
  - The correct width
  - Storm water
  - Sustainability (to last and to absorb water)
  - Incorporate public transport stops, shelters, lay byes and bulbs
- And there are debates:
  - Do you segregate cyclists and pedestrians?
  - Private sector responsibility

Powered by the people

- City has an NMT framework and attempted a number of flagship projects
- Yet the reality is that there is little provision and promotion
- Arguments against NMT include:
  - Terrain is not favourable
  - Road space does not exist in built up areas
  - Distances are long especially as a result of apartheid legacy
  - Even for learners, parents send children to good schools vs. close schools
- Arguments for NMT is:
  - NMT is not only for cyclists for recreation but for trolley pushers and scholars
  - If you don’t provide the facilities, then you will never be able to promote cyclists
- Projects that exist or are imminent
  - 4 m sidewalks for Zandspruit (segregated between cyclists and walkers)
  - Provision for cyclists on Rea Vaya Station precincts
  - Ongoing partnership with NDOT on Shova Kalula cycle provision for learners
Get on the bus: Rea Vaya BRT

- Flagship City project
  - Objectives include:
    - Fast, safe, reliable and affordable public transport
    - Enabling public transport transformation
    - Enable spatial restructuring
    - Broad based black economic transformation
    - Enable climate change (cleanest buses in Africa)
    - Promote livable and competitive city.

Get on the bus: Put the foot on the accelerator!

- In face of climate change imperatives, more has to be done sooner to bring people closer to work, school etc and move people to public transport
- Critical is pro-active land use planning and spatial integration and ensuring best transport mode for the route
- Transport projects need to include:
  - Integration including with Gautrain
  - Revitalisation of rail
  - Reflecting and restructuring of Metrobus to build green fleet and expand services
  - Restructuring of bus provincial subsidised contracts.
Cruise control/Deliver the goods

- Need to put the breaks on private car use
  - Take away road space (BRT, dedicated lanes)
  - Parking restrictions and parking levy
  - Toll roads!

- Need to have cleaner vehicles
  - Some government pilots on greener fuel sources for government owned vehicles
  - No big initiatives on electricity vehicles – also an issue since our electricity comes from dirty sources (coal)
  - Metrobus want to pilot on bioethanol and Euro 4

- Lots of debates on appropriate alternative fuel looking at issues of:
  - Food security
  - Local job creation
  - Reliability of supply
  - Fuel logistics

Mix it up
Fit it in and Get real

- Challenge for City is how to make interchanges ant heaps and not sink holes!
  - Metro Malls are a limited success story
  - Piloting Sandton Station
  - Looking a Randburg/Kazeme public as possible public private partnerships

(For next set of speakers)
Make it last

- Sustainability is about materials and maintenance but it is also about non-material things
  - Political commitment and leadership
  - Values: community ownership of infrastructure
- Also about balancing:
  - Community needs, political interests and technological soundness.
  - Short vs long term (making it last for our children).

Conclusion

- Our cities are becoming more and more crowded. A city needs cars like a fish needs a bicycle primarily because you can’t use all that speed because of the many obstacles. (…) in 20-30 years people will not primarily use cars to get around in the cities”. Dean Kamen