CODATU 25 October 2010

Theme: Sustainable Transport and the quality of life in the City
Sub theme: Sustainable Transportation – (the nature of) the service offer

Topic

The introduction of Bus Rapid Transit Systems in South African Cities – participation of the minibus taxi industry – a model for sustainability or a recipe for failure?

Nico McLachlan
Origin, growth and evolution of the minibus taxi industry in South Africa

- 1986 government deregulates minibus taxi
- 1994 democracy comes to SA
- 2000 National Land Transport Transition Act
- 2007 R 7.7 bn for taxi recapitalization
- 2009 National Land Transport Act- (City Authorities & Rapid Transit as central to urban transport reform)
- Taxi Industry today more than 100 000 registered owners
- Organized in two main national, 9 provincial and numerous local associations
- Well regulated
- Covers 65% of daily public passenger transport demand
Historical approach to public passenger transport funding in SA

- Historic and current public funding (subsidy regime) in numbers
- R 2.5 bn rand on rail subsidies (15% users)
- R 2.2 bn rand on bus subsidies (20% users)
- No subsidy (other than R 55 000 scrapping allowance) on taxi

- Yet the minibus taxi provides 65% of “public transport”

- 2005 Public Transport Infrastructure Fund established (R 3.7 bn)
- 2010 This fund stands at more than R 10 bn

- Aim by 2014 to have Integrated Rapid Public Transport Networks in place in 12 cities and 6 rural districts
BRT and the basics of subsidy reform

- Integrated Rapid Transit Systems (including BRT) now stands at the center of South Africa’s urban transport reform model

- In addition to a significant shift in infrastructure funding to IRT / BRT systems the national treasury and national department of transport will be using IRT to redirect operating grant funding to support IRT/BRT operations (ie thus alleviating the pressure on the Cities to subsidize public transport from local revenue)
Different approaches to BRT introduction (Cape Town & Johannesburg)

- The two leading SA cities (Cape Town and Johannesburg) initially started out taking what appears to be diverging approaches.

- Now two years down the line and with the FIFA Soccer World Cup pressures behind us the two cities seems to be converging on the same path.

- What were (and in some instances still are) the differences?
Slow – Fast

THE CAPE TOWN APPROACH
Public Transport Strategy and Action Plan

Integrated Rapid Public Transport Networks (IRPTN)
Scoping study to consider implementing such a IRPTN. Report identified the potential for a network of BRT routes.
Project Office formed to undertake planning for the development of an Integrated Rapid Transit system
 Council approves the implementation of Phase 1a
Origins of IRT Phase 1A Project

Formal engagement and consultation with taxi industry begins

October 2008
IRT PHASE 1A: BUSINESS MODEL & INDUSTRY TRANSITION

PROCESS TO DATE

- Workshopped, discussed, debated
- Developed a Compensation Model
- Determined market share
- Appointed facilitators, business consultants and legal advisors
DEVELOPMENT OF IRT PHASE 1A PROJECT

Figure. Phased implementation of the IRT
IRT PHASE 1A PROJECT

**Trunk Characteristics**

- High floor (940 mm)
- High-capacity 18 metre articulated vehicles and 12 meter solo vehicles
- Three (18m vehicle) and two (12m vehicle) right-sided doorways on vehicle
- Level access between station platform and vehicle
- Dedicated busways for trunk services
- Closed median stations with off board fare collection and fare verification
- Ramped access to station
IRT PHASE 1A PROJECT

Feeder Characteristics

- Smaller lower capacity vehicles
- 9-metre and 12-metre vehicles
- Operation in mixed traffic
- Two left-sided doors and one right-sided door
- Open stations
- Fare collection and verification is onboard the feeder vehicles
IRT PHASE 1A: BUSINESS MODEL & INDUSTRY TRANSITION

IRT PHASE 1A PROJECT
IRT PHASE 1A : BUSINESS MODEL & INDUSTRY TRANSITION

IRT PHASE 1A ROLL-OUT SEQUENCE

Milestone 0
Starter Service
End January 2011
IRT PHASE 1A : BUSINESS MODEL & INDUSTRY TRANSITION

IRT PHASE 1A ROLL-OUT SEQUENCE

Milestone 1

Inner City Feeder Services

October 2011
Milestone 2
Tableview Feeder Services
November 2011
Milestone 3

Du Noon, Montague Gardens and Century City Feeders and interim Montague Gardens trunk

December 2011
IRT PHASE 1A ROLL-OUT SEQUENCE

Milestone 4

Atlantis and Melkbosstrand trunk services
May-Oct 2012
Milestone 5

Extension of Bayside truck to Du Noon

September 2013
IRT PHASE 1A: BUSINESS MODEL & INDUSTRY TRANSITION

BUSINESS & CONTRACT STRUCTURE

Existing Model

CURRENT BUS OPERATOR

- Operating the buses
- Ticketing
- Fare collection
- System Information
- Marketing the service
- Bus stop maintenance
- Termini management
- Depot management
- Depot owner
- Contract Monitoring

CITY OF CAPE TOWN

PGWC
IRT PHASE 1A: BUSINESS MODEL & INDUSTRY TRANSITION

BUSINESS & CONTRACT STRUCTURE

IRT Model

**IRT VEHICLE OPERATOR COMPANY**
- Operating the buses
- Ticketing
- Fare collection
- System Information
- Marketing the service
- Bus stop maintenance
- Station management
- Depot management
- Depot owner
- Contract Monitoring

**CITY OF CAPE TOWN**
IRT PHASE 1A: BUSINESS MODEL & INDUSTRY TRANSITION

BUSINESS & CONTRACT STRUCTURE

SERVICE DELIVERY AGREEMENT WITH

MUNICIPAL IRT ENTITY

TENDER   TENDER   TENDER   NEGOTIATE

Control Centre Contractor
Fare collection monitoring
System Information
Contract Monitoring

Fare System Contractor
Ticketing system & equipment
Fare collection

Station Services Contractor
Ticket sales
Access control
System Information
Station management
Cleaning
Security

Vehicle Operator Contractor
Operating the buses
Depot management
## SUMMARY OF SYSTEM REVENUE & COSTS

<table>
<thead>
<tr>
<th>Cost item</th>
<th>Cost (R million)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>System income</strong></td>
<td></td>
</tr>
<tr>
<td>1. Fare revenue</td>
<td></td>
</tr>
<tr>
<td>2. Advertising income</td>
<td></td>
</tr>
<tr>
<td><strong>System costs</strong></td>
<td></td>
</tr>
<tr>
<td>1. Vehicle Operators</td>
<td></td>
</tr>
<tr>
<td>2. Fare Systems Company</td>
<td></td>
</tr>
<tr>
<td>3. Control Centre Company</td>
<td></td>
</tr>
<tr>
<td>4. IRT Entity / System marketing</td>
<td></td>
</tr>
<tr>
<td>5. Security Company</td>
<td></td>
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<tr>
<td><strong>Net profit / loss</strong></td>
<td></td>
</tr>
</tbody>
</table>
IRT PHASE 1A: BUSINESS MODEL & INDUSTRY TRANSITION

Phase 1a Corridor Vehicle Operator Contracts

2 Contracts

2 Companies

NORTHERN West Coast

SOUTHERN Inner City
IRT PHASE 1A: BUSINESS MODEL & INDUSTRY TRANSITION

MAIN OBJECTIVE

8 TAXI ASSOCIATIONS
Approx 700 taxis

+ 2 BUS COMPANIES
Approx 200 buses

2 IRT VEHICLE OPERATOR COMPANIES
Approx 270 buses
IRT PHASE 1A: BUSINESS MODEL & INDUSTRY TRANSITION

CHALLENGE

- Existing (taxi) operators should not be worse off (bus?)
- No significant loss of legitimate jobs
IRT PHASE 1A: BUSINESS MODEL & INDUSTRY TRANSITION

TRANSITION PROCESS

MEETINGS / DISCUSSIONS / VISITS
BRT SYSTEMS

MEETINGS / DISCUSSIONS
IRT PROPOSALS (Phase 1a)
VEHICLE OPERATOR PROSPECTUS

CONTRACT 1
COMPANY A

CONTRACT 2
COMPANY B

NEGOTIATIONS
- km tariff
- Contract document

CONTRACT AGREEMENT

SIGNING OF CONTRACT

2010
SHAREHOLDING : STEP 1 > Determining bus/taxi market share

Market Share

BASED ON:
- Passenger trips
- Passenger km
- Fare Revenue
- Profit

ADJUSTMENT FOR SUBSIDY
**SHAREHOLDING : STEP 1 > Determining bus/taxi market share**

Table 2.4: Summary of market share division between bus and taxi industry

<table>
<thead>
<tr>
<th>Mode</th>
<th>Passenger trips</th>
<th>Fare revenue</th>
<th>Proposed market share</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxis</td>
<td>100,620</td>
<td>R 578,142.50</td>
<td>60.6%</td>
</tr>
<tr>
<td>Gabs</td>
<td>12,358</td>
<td>R 92,644.93</td>
<td>9.7%</td>
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<tr>
<td>Sibanye</td>
<td>17,224</td>
<td>R 283,866.18</td>
<td>29.7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>130,202</strong></td>
<td><strong>R 954,653.60</strong></td>
<td><strong>100.0%</strong></td>
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</tbody>
</table>
SHAREHOLDING : STEP 2 > Determining taxi association market share

Market Share
BETWEEN 8 TAXI ASSOCIATIONS

BASED ON :
Average Legitimate Profit
SHAREHOLDING: STEP 2 > Determining taxi association market share

Average Legitimate Profit

\[
\text{FARE REVENUE} - \text{COSTS} = \text{PROFIT}
\]

- **FARE REVENUE**
  - PASSENGER TRIPS multiplied by FARE

- **COSTS**
  - Vehicle payment
  - Driver pay
  - Insurance
  - Fuel
  - etc.

- **PROFIT**
  - Average legitimate profit
Vehicle Scrapping Allowance

R55,000

Buy/sell agency?
SHAREHOLDING: ALLOCATION OF SHARES

% Market Share = % Shareholding

in current market

in new Veh Operator Company

BUS TAXI

BUS TAXI
SHAREHOLDING : ACQUISITION OF SHARES

Cost of shares >> Capitalisation costs

Capitalisation costs include:

1. Set-up capital (equipment & furniture)
2. Performance guarantee
3. Taxi industry dividend equalisation fund
IRT PHASE 1A: BUSINESS MODEL & INDUSTRY TRANSITION

TIMELINES

IRT Phase 1a Timeline
15 June 2010

Station Construction
Fare System & Control Centre
Vehicle Operator Contract
Earliest Start of Starter Service

3 Year roll-out to full Phase 1a

<table>
<thead>
<tr>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
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<tr>
<td>Dec</td>
<td>Jan</td>
<td>Feb</td>
<td>Mar</td>
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Review of Business Plan and Operations Plan

Award Contract

Negotiate
Set-up / Install

Event Service Continuation Service

Holiday Holiday
IRT PHASE 1A: BUSINESS MODEL & INDUSTRY TRANSITION

TIMELINES

Earliest Start of Starter Service
3 Year roll-out to full Phase 1a

2010

2011

Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Jan Feb Mar

Council Report Business Plan
August-November 2010

Negotiate a 12 year contract with Company A and Company B

*If Company A & B is to operate the Starter Service at the end of January 2010*
IRT PHASE 1A: BUSINESS MODEL & INDUSTRY TRANSITION

Let's get going !!! ...
Fast - Slow?

THE JOHANNESBURG APPROACH
Key differences in approach

- City links BRT phase 1 A to hosting Fifa World Cup 2010
- So phase 1 A infrastructure addresses both area of high demand (Soweto into the City) as well as rapid links to the two main stadiums (Orlando and Ellis Park)
- Unlike Cape Town phase 1 A is conceptualized to be served by one operator (ie no competition in first phase)
- To pull this off in time …the City acquires the first set of vehicles, and …
- In absence of an agreement with the affected minibus taxi operators contracts its own bus company to run the world cup services
- So …the World Cup arrangement now has to be undone and is proving to be a challenge
- Interim arrangements have a tendency to become “permanent”
Key differences in approach …

- Initially Joburg does not consider compensation for loss of business
- It follows a logic that says compensation will be built into the earnings model over the 12 year negotiated contract period
The similarities

- Both Cities are following a phased and staged approach
- Both Cities have used an “engineering led” plan – design – construct” approach to create pressure on the affected industry role players
- Both Cities have used the pressure of hosting FIFA World Cup 2010 to good effect and both Cities have used the World Cup as a learning and demonstration process
- Both Cities are setting up business models that allows for separation of vehicle operations from control center services, station services and fare management services
- Both Cities appear to be limiting the vehicle operators to pure operations and maintenance contracts
- Legally both Cities are negotiating fixed term contracts for an initial 12 year period
Preliminary conclusions

- “Putting the infrastructure down” assists in creating pressure for industry transition, but its logic will inevitably be questioned and rework must be accepted as part of the deal.

- The “quick out of the starting blocks” approach may leave the City Authority with a couple of fixes that may prove to be costly to undo.

- Never underestimate the “business savvy” of the informal sector – treat their businesses just like you would treat any other business (valuation, compensation, market share calculation, etc).

- Allow formal and informal industry role players timely opportunity to influence the decisions we normally leave to “experts”