



Can cities afford the public transport function?

The National Land Transport Act, passed in 2009, laid the basis for city government to take responsibility for managing and regulating public transport at the local level. But, says IAN PALMER, the financial implications of this are not yet well understood, and there are also risks involved.

When it comes to capital investment, public transport infrastructure has the greatest capacity to promote higher densities and improve cost efficiencies in cities.

And while there are public transport interventions that do not rely on capital spending on infrastructure, these will bring about only relatively modest gains. What is really needed in the larger South African cities is more road and rail 'space', and this requires high levels of capital spending.

With a wide range of geographic circumstances among South Africa's cities, and differing mixes of modes, it is not possible to 'model' the required capital investment in public transport infrastructure and associated systems. But some guideline figures can be applied.

Larger metros are developing road-based mass transit systems, based on bus rapid transit (BRT), which require about R1 billion a year in investments continuing for at least 10 years. In a city of 3.3 million people, this adds up to about R300 per capita per year.

For cities with populations of less than one million, the requirement is less for capital investment on infrastructure, as there is less congestion and trip lengths are shorter - dedicated road or rail space is therefore not as appropriate. Thus the level of investment per capita in secondary cities may be about half that of the larger metros.

At this level of spending - about R1 billion per large metro per year - the state seems to be willing to contribute a large proportion through the Public

Transport Infrastructure and Systems Grant (PTISG). The grant encompasses a policy intention requiring cities to contribute 20% of this amount. Initial indications suggest, though, that this contribution has not been forthcoming and that, in fact, the PTISG is being used for purposes other than infrastructure and systems - in particular for financing vehicles and possibly other 'operating' costs.

For the purposes of financial modelling, it is important to differentiate between infrastructure (including related systems) and vehicle finance and the assumption made here is that the R1 billion a year goes to infrastructure with 80% funded through PTISG.

PRASA is currently allocated R5.6 billion a year from the national fiscus for capital spending, including infrastructure, systems and train sets. It is notable that the state is currently allocating more capital finance to rail-based systems than road-based ones, even though the indications are that rail will have a lower impact in the long term.

Shifting cost and risk

From the point of view of the metropolitan municipalities, one of the most important issues in public transport is the planned shift of operator risk from the parastatal and private sectors onto the metros.

Leaving rail aside in the meantime, or assuming it remains in the parastatal realm, the focus of current BRT planning is on using gross-cost contracting models.

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With the inclusion of integrated ticketing systems, the city as the 'authority' will take on the responsibility for collecting revenue from ticketing and substantial risk.

The financial implications can be analysed by looking at four sets of costs. There are costs associated with the regulation of operators not currently included in city-managed services, namely taxis and conventional buses. Planning costs are associated with planning of infrastructure and operations. Operating system costs are incurred in running those activities not associated with bus operations directly, such as ticketing systems, signalling systems, station management and marketing. Vehicle operating costs include the cost of operating and maintaining vehicles, including vehicle finance and profit, where applicable.

The build-up of cost structure is estimated to be 2.5:2.5:15:80 for regulation, planning, operating system and vehicle operations respectively.

For the six largest metros, the total operating cost of a public transport system is estimated to be R23.9 billion, rising to R42.2 billion in ten years' time.

Long-term trends

The next step is to assess the long-term trends on the operating account of metro public transport undertakings, with the assumption of urgent roll out of BRT or similar systems. This is based on the following assumptions:

- Current risk is only taken on municipal bus services, with BRT systems not yet properly on municipal accounts.
- Good numbers on operating costs of municipal bus services are not easily available, but figures for Johannesburg's Metrobus and eThekweni's Durban Transport Services of R563 million and R451 million respectively are dominant, with other metros thought to have much smaller numbers, estimated at R270 million.
- In year 10, the metros are assumed to be fully responsible for BRT systems on 'gross cost' contracting arrangements.
- In year 10, the metros will be responsible for planning and regulating all road-based public transport systems, including minibus taxis and conventional buses, which are not part of 'gross cost' contracts.

The table (right) gives an indication of operating expenditures that could find their way onto the budgets of all six metros. They are based on an ambitious roll out of BRT systems.

Converting this figure of R17.9 billion to one for a large metro with 3.5 million people gives an expenditure of R3.8 billion per year.

Levels of revenue

The key question with respect to this analysis, on the operating account, is: with rapidly increasing public transport costs on city budgets what proportion of these costs will be covered by revenue, taking operating subsidies and fares into consideration?

The starting point for the current year does not

inspire optimism with municipal bus services typically covering well below 50% of their costs through fares and getting little or no subsidy, with the exception of Durban Transport.

Looking forward, it is evident that costs will rise rapidly as BRT or equivalent systems are rolled out and only some of these will be covered by subsidies. If a subsidy level of 30% is assumed, will it be possible to cover the remaining 70% through fares, taking the typical length of routes and relatively low passenger volumes in some areas into account? The existing privately run bus services have, in general, not been able to do this.

Conclusions

There are a number of conclusions that can be drawn from this analysis, the first being that cities are taking on considerable risk as they expand municipally managed public transport systems.

The current subsidy arrangements are obviously a major concern to cities, as they drive the viability of public transport operations, affect the livelihoods of poor people and impact on the spatial structure of cities. It is clear that these arrangements are inequitable both in terms of access to subsidies by particular cities and in terms of modal neutrality. Further, it is easy to demonstrate that subsidies are not well targeted, with the poorest people living in the most marginal positions in cities often not benefiting at all.

The viability of public transport undertakings in the future is dependent on having a much improved subsidy environment. Currently, the level of operating subsidy to the public transport sector as a whole is about 25% and applies primarily to bus and rail. There are key questions about the extent to which the state will continue to make subsidies available. Specifically, will operating subsidies be made available to BRT systems? It is arguable that, with the diversity of BRT routes and the volumes on these routes, subsidies will be necessary if poorer people are to benefit.

With a level of subsidy continuing at about 25% and assuming BRT systems are eligible for subsidy at a level of about 30%, the amount of subsidy will have to double, in real terms, from the current level of R5.3 billion.

If the six metros are to take on expenditure at a level of R17.9 billion (about R3.8 billion for each of the three largest metros), there is a considerable risk that they will not be able to raise sufficient revenue from fares to cover this expenditure, even assuming levels of subsidy are 30%. Other forms of revenue will become important to cover the potential shortfall after subsidies and fares are applied, with uncertainly over the scale of such revenues.

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Indicative figures for projected increase in public transport operating costs on city budgets

COSTS IN R BN	CURRENT YEAR	YEAR 10
Regulation	0.03	0.7
Planning	0.03	0.7
Operating systems	0.06	2.5
Vehicle operations	1.16	14.1
Total	1.28	17.9