

South Africa needs to revamp its new public transport system

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Over the past eight years, the South African government has spent more than R130bn on public transport [projects](#) in the country's main cities. The projects included the refurbishment of rail services and the establishment of a new rapid rail and bus rapid transit (BRT) systems.



KIM Ludbrook/EAP

This is a lot of money by any standards. As a percentage of gross geographic product, South African cities devote about [twice](#) as much money to transport as other developing countries and as much as four times more than some regions of the world.

The country should by now be celebrating the success of this investment. But sustaining the systems, especially the BRT systems, is proving to be difficult.

Even high-ranking government officials have expressed doubts about the way things are going. The MEC for transport in Gauteng province, Ismail Vadi, recently [asked](#) whether government was getting value for money from the BRT systems. His concerns have been [echoed](#) by Joe Maswanganyi, the national minister of transport.



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Maswanganyi suggested that it was time to rethink and redesign the systems to “stop draining money from the fiscus”. The BRT has been called a “[mammoth flop](#)” and “[a white elephant](#)” in some media.

Those are exaggerations. But there are serious problems with the [BRT](#).

Fixing them must focus on reducing costs and growing income. Running costs should automatically decline as the system matures. But to raise revenue levels, BRT must become better integrated with housing and other transport services so that

more people use them and help pay for them. In particular, the BRT should work with minibus-taxis to help widen the net of BRT usage. The country needs better planning and funding to make this happen.

Benefits and costs of BRT

BRT systems represent a significant improvement compared to traditional metro transport systems. They use dedicated lanes and stations, modern buses, and smartcard payment systems to speed up public transport and give passengers a better quality service.

This comes at a price. BRT ticket prices are typically higher than [Metrorail](#) but are set to be competitive with the minibus-taxi offering.

South Africa's BRT systems are currently transporting more than 120,000 passengers (one-way trips) every day. [Surveys](#) show that passengers generally prefer the comfort and speed of BRT to other modes like minibus-taxis. So, based on passenger numbers alone, BRT is not a failure.



Passengers walk from the Johannesburg Bus Rapid Transit system in Johannesburg. The system is proving to be unsustainably expensive for the South African government. KIM Ludbrook/EAP

But the BRT systems in the country's main cities, Johannesburg, Cape Town, and Tshwane, are performing worse financially than was expected.

Between 2005 and 2016, a total of about R35.7bn was [allocated](#) for the planning, design, and construction of integrated public transport networks countrywide. Costs are pushed up by national government's [commitment](#) to bring minibus-taxi operators into the system in such a way that they are no worse off than before.

This was partly driven by political pressure from taxi organisations, and partly to help bring an upgraded taxi industry into the formal transport network.

Despite these extra costs, South Africa's spending on BRT systems is, per kilometre of busway, [on par](#) with many systems in Latin America and Asia. This suggests that the country has not overspent on infrastructure.



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The problem is that [fewer people](#) than forecast are using the systems. Fare revenues are lower than expected.

Take Rea Vaya, the BRT in the main economic hub of Johannesburg, as an example. Demand grew by about [6% a year](#) on average in the five years to 2016.

In 2016 Rea Vaya catered for about 50,000 passenger trips a day. This equates to about 1,100 daily boardings per kilometre of busway, [but it's far less](#) than the average of 8,000 for comparable systems in Africa, Asia, and Latin America.

The productivity of each bus is low. Travel distances are long because of apartheid spatial planning and low densities. Seat turnover along the route is low and most passengers use the buses at peak times. The result is that Johannesburg and Cape Town have had to subsidise their BRT systems much [more than planned](#).

Subsidy expectations came from using some Latin American cities, which operate with zero subsidy, as a benchmark. Planners expected fare revenues to cover direct operating costs. For Rea Vaya, the direct [cost recovery ratio](#) is only about 30% and for Cape Town's MyCiTi just over 40%.

Subsidies in itself are not the problem. Subsidies for public transport are widely accepted as a way of making cities work better and protecting the environment.

The issue is that South Africa's BRT subsidies are too high and haven't produced the desired results. One senses from the minister's comments that government's appetite for subsidising what are seen as underperforming systems is waning. Unless the entire public transport system makes a better impact, the programme is likely to stall.

What can be done

Cities have relatively little room for growing revenues by raising fares. Recent [research](#) has shown that BRT demand in the Gauteng cities of Johannesburg, Ekurhuleni and Tshwane is very sensitive to fares. Higher fares would also exclude the poorest passengers, which would not help to make the transport system more equitable.

The solution is to improve passenger numbers by bringing BRT closer to where people live, work and play. South African cities have lower population densities than [cities in Latin America](#). The demand for transport in South Africa is lower per square kilometre.



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One way to bring people and BRT closer together is to develop housing along transport routes. This is already happening to a limited extent in Johannesburg's [Corridors of Freedom](#) initiative. Mixed land use should also improve the productivity of buses and infrastructure.

Precincts served by BRT should also be made easier for pedestrians to use and more attractive to investors.

Bringing quality public transport within reach of more people requires more than just BRT. Recent studies [show](#) that existing and potential BRT users in Johannesburg value frequent, easily accessible transport and low fares more than short travel times. They want short walks to public transport. In other words, they want what minibus-taxis are already providing.

Bringing upgraded minibus-taxis into the formal network could greatly expand the number of people benefiting from investment in public transport.

South Africa should be putting more energy into integrating BRTs better with other public transport systems, including municipal buses, minibus-taxis and e-hail services like Uber. It should be working towards common cashless fare systems and easy transfers. Extending the special BRT corridors could follow at a slower pace.

Lastly, cities will have to find ways to raise additional revenues for public transport. These might include charging for the use and parking of cars in congested areas, or partnering with property developers to help build transport interchanges as commercial ventures. Pulling this off will require a wider conversation around whether South Africa wants the benefits of better public transport, and how it will pay for that.

The expansion and operation of bus rapid transit systems in South African municipalities can't continue as it is. Government may withdraw its financial support unless cities can do three things: reduce costs, increase revenues and make the system work for more people.

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