

Lagos sets standard for urban transport in Africa

The Nigerian capital has launched a new bus system which is carrying three times its forecasted passengers at fares which have been slashed by a third. **Jake Blosse** explains how Lagos BRT could be a blueprint for other developing cities.



In less than two years, Lagos has demonstrated how a well-planned bus system can transform urban transport. Africa's first bus rapid transit (BRT) system, which became operational on 17 March 2008, was finished within a record 15-month timeframe at a delivery cost of just USD 1.7 million per kilometre. After 100 days it had already carried 9.7 million people and within its first six months of operation buses had carried a total of 29 million.

"Patronage has exceeded expectations," says Dayo Mobereola, CEO of Lagos Metropolitan Area Transport Authority in the Nigerian capital. "Passengers pay 30 percent less in fares, and enjoy a greater degree of fare stability, despite the fact that fuel costs have risen by over 100 percent in the past few years." Journey times have also been reduced by 40 percent and average weekly passenger numbers far exceed what had been forecasted. Lagos BRT was projected to carry 60,000 people per day but now carries over 200,000 people. "The scheme has attracted increased patronage from sectors that had previously shied away from public transport, namely children, car-owning middle classes, the elderly and disabled," says Mobereola.

An additional benefit is that Lagos' bus network has created direct employment for more than 1,500 people, mostly graduates, and indirect employment for over 500,000 people. Says Mobereola: "Lagos BRT has demonstrated the ability of local operators to run successful public transport operations which has subsequently generated intense interest from banks, financiers and vehicle suppliers for other BRT networks." The biggest initial challenge was getting a financial institution to fund the project. Mobereola comments: "At the concept stage it was very difficult to attract banks that would support us." Eventually, a local bank offered a guarantee but it imposed tough conditions in order to mitigate risk. The agreement gives the bank a lien (a security interest) on revenues collected from bus services with only the balance, after deduction of the financing cost, being passed through to the operator. The bank has also been given the right to act as ticket distributor and security monitor. All participating operators have to accept collective liability for all the agreements they have entered into. Any individual default, whether by embezzlement of revenues or through

Bus Rapid Transit: the beginning

First pioneered in Curitiba, Brazil, bus rapid transit (BRT) was born in the early 1970s, not to tackle traffic congestion, but rather because of the high number of individual bus operators. "Imagine thousands of people driving around and competing for every fare," says Bill Vincent, director of the Bus Rapid Transit Policy Centre in Washington D.C., which was set up in 2002 to show how enhanced bus services can sustain mobility while helping fight climate change. "In Latin America, before the advent of BRT, any bus could pick up any passenger, anywhere. There were no designated bus stops, so you could just flag a bus down like a taxi." The reason Curitiba introduced its bus rapid transit system in 1974 was to organize this chaos. By 2002, Curitiba transit services were worked by 1,902 buses, operating 14,000 daily trips totalling 320,000 kilometres and supporting more than 1.9 million passenger trips each day. These results caught the eye of many cities around the world, and BRT started to spread.

There is concern that BRT can bring about more traffic congestion, due to segregated roadways taking up the limited land space available. But Curitiba's traffic speed compares favourably. In 2003, the average speed of Curitiba's bus services was 22.4 km/h. This compared with Rio de Janeiro at 14.3 km/h, São Paulo at 15.4 km/h and Mexico City at 16.9 km/h. Traffic in Curitiba now flows at 40 km/h with a considerable advantage over Rio de Janeiro (30 km/h), São Paulo (24.1 km/h) and Mexico City (22.5 km/h).

vehicle unavailability, for example because of an accident or mechanical failure, will be made good by an additional charge on all the remaining members. "Where the default is fraudulent, the individual operator will lose his deposit or collateral," says Mobereola.

Lagos' publicity campaign for its new transport system was crucial to its success. The television programmes BRT Half Hour and Lagos on the Move were geared towards educating and informing the population about the bus rapid transit system. "It was difficult at first getting people to understand what the new bus system was all about because of low confidence and lack of trust in the government," comments Mobereola. "Lagos' previous governments had put a lot of measures in place to address the transportation problems but none proved sustainable."

After becoming operational in 2008 with 100 high-capacity buses, 120 more buses were added when it became apparent that 100 simply would not be enough. After one year of operation, the system has carried a total of 56.2 million passengers.

Of the world's most populated cities, 15 of the top 20 are from emerging economies. It is here where bus rapid transit systems can shine. Lagos, with a projected population

What is BRT?

Bus Rapid Transit (BRT) is a cheap, cost-effective public transportation strategy that can help tackle urban transport issues such as poor air quality and congestion, and assist in reducing greenhouse gas emissions at a fraction of the cost of light rail. It is a high-quality intelligent transport system telling passengers when buses will arrive, informing drivers to slow down or speed up, giving prioritization at traffic lights and offering off-bus ticket purchase, all aimed at making buses faster, travel times shorter and congestion lower. However, globally, BRT is implemented in a number of ways, from expensive computer-controlled networks, to simpler bus systems similar to the one in Lagos.

increase of over 10 million people by 2020, is a good example of a city where BRT offers a cheap, flexible and effective transport solution for the future. ♦