**1. Curitiba (1972)**

The Curitiba BRT system has been referred to as the first BRT system (or *full* BRT) on the continent. It was initially launched in 1972 as part of a more general urban planning policy. The mayor at the time, Jaime Lerner, is credited with the system’s successful launch, along with transited-oriented development (TOD) planning along the system’s corridors.

The system has 64.6 kms of lines and has a demand of 560,000 trips per day. This translates to 20,000 passengers/hour/direction, which is double the maximum normal ridership that was expected for a bus-based system. Even though the system uses several types of buses, the most well-known are the biarticulated vehicles, which in fact were built at a Volvo plant that was developed in that city with the idea of a BRT system in mind. The construction cost per kilometer of this system was approximately $1.1–$6 million U.S. dollars.

This system is the first real example of a bus-based public transit system that has succeeded at transporting passengers at similar capacities to a rail system. Exclusive bus lanes were implemented in this system, as were station fare collections and larger capacity vehicles, in addition to a near-restructuring of its operation. Subsequently, improvements would be made to other systems that were configured to what we now call BRT. Nevertheless, Curitiba remains a global example of the success of BRT.

Some experts claim that the city of Curitiba is in the process of constructing a rail-based system. Even though the information is not entirely clear at the moment, the most up-to-date information that the author could find was the recent decision by the government to improve the current system’s operation instead of planning a new system that uses a different type of technology.

**2. Quito (1995, 2001, 2004)**

 Based on Curitiba’s experience, the city of Quito developed a similar system but on a lesser scale. The city mainly sought to construct a low-cost but high-performance system. Beginning in 1995, the city began building a network of lines for its BRT systems, which currently include three lines. In total, the system comprises 37 kilometers of lines and moves 400,000 passengers per day. The system is controlled by a public-private operator. However, a negative aspect of the system is its lack of physical and fare integration between the three systems. Unfortunately, this factor has very negatively impacted efforts to increase the ridership and the number of trips provided by public transport in Quito. The costs of the system have varied between $0.5 and $5 million U.S. dollars per kilometer. This large variation is due to the differences in the scale and size of the three “sub” systems that exist in the city.

The most interesting characteristic of the Quito system is its low cost and the fact that the city was successful at constructing a system with stations and exclusive bus lanes despite the very little available road space. The system crosses the city’s downtown and, in some cases, does this with streets that are completely dedicated to buses. This demonstrates the priority that public transport has been given over private transport.

However, in recent years, problems have arisen with respecting the exclusive bus lanes. Transit officers have been allowing automobile access in the exclusive bus lanes under the false impression that this would reduce traffic congestion. The actual result of this measure has been as much congestion with public transport as with private. Nevertheless, efforts by local entities are underway to improve this situation.

Quito has also planned to construct a light rail train system. To date, however, the system’s plans have not yet been finalized, primarily due to a lack of funding and the project’s technical requirements.

**3. Bogotá (2000)**

The Bogotá system has been referred to as the only actual complete BRT (or *full* BRT) in existence due to its high coverage and its service elements. To date, TransMilenio has 84 km in operation and transports around 1.4 million passengers per day. Its capacity has reached as much as 40,000 passengers/hour/direction, which is higher than a large number of the world’s rail systems. Similarly with rail systems, this system has achieved vehicle occupancy rates of 6 people per square meter. The system’s success has been strongly linked to the mayor who was in charge of its design and initial construction, Enrique Peñalosa. In addition, he also complemented the system with other developments, such as with the construction parks, bicycle and pedestrian infrastructure, and other public works of great importance to the city.

 An additional aspect of this system is its recent integration with non-motorized transport (bicycle parking at station entrances), which has considerably increased the system’s catchment area and has reduced the burden on food service, which in turn is subsidized by the fare. This system is currently planning phase 3, and the system’s costs of capital (including the expropriation of land) have been between $5.3 and $13.3 million U.S. dollars per kilometer. This amount is similar to that of some medium capacity rail systems like light rail, although a deeper analysis should be made to verify these comparisons.

 Significant innovations have been made in the Bogotá system’s planning that have led it to be the most robust BRT system in the world. Among the characteristics that have made this distinction possible are the passing lane and the express services (where the busses do not stop at all the stations). Both of these features have reduced journey times as much as they have increased the capacity per hour per direction. Both this and bus frequency planning based on a standard of 6 people per square meter have generated some agglomeration issues at stations, which has reduced the quality of service and has increased riders’ dissatisfaction.

 In Bogotá, there have also been talks of constructing a metro, but this has been an issue in all mayoral elections since 1950. Nevertheless, this time, the metro initiative has remained in the current mayor’s action plan who intends to secure the system’s financing through a multilateral bank. To date, there are no concrete plans yet to construct a system of this type in the future.

**4. 7 Colombian cities**

Based on the success of TransMilenio in Bogotá, a plan has been developed in Colombia to construct BRT systems in seven Colombian cities. Pereira was the first city to date to have its system commence operations in 2006. During its first year of operation, it served 15 kms of lines with a demand of 100,000 trips per day. It is important to note that Pereira is a medium-sized Colombian city, and therefore, its BRT system is on a much smaller scale as compared with Bogotá’s. The cost per kilometer of this system has been $1.7 million U.S. dollars.

 The other Colombian cities where BRT systems will be constructed (or are being constructed) are in different stages of development, and it is expected that some of them will commence operations in 2008 (in the cities of Cali, Barranquilla, Cartagena, Medellín, Bucaramanga, and Soacha).

 Notably, Colombia has succeeded at adapting the large-scale and high cost Bogotá system to smaller scale and lower cost replicas in other Colombian cities. Even so, the smaller-scale systems have been able to maintain both the service quality and the main elements of a BRT system.

**5. Sao Paulo (2003)**

In Brazil, there have been various developments simulated after Curitiba. The case of Sao Paulo is the most representative of these developments. This city developed a system of exclusive bus lanes that mostly resembles an improved bus operation and covers an extensive network of 129.5 km. It is important to note that this city has been one of the only in Latin America (if not the only) to have an integrated fare system with the metro (referred to as an “interlinked” system). This interlinked system has generated greater benefits for the city’s citizens due to its better connectedness. The bus system has a demand of 140,000 trips per day.

 This system was developed in Sao Paulo as a complement to the metro, and its operation is adequate for this function. The system is quite extensive, which increases the effectiveness of the interlinked system and its benefits for the entire population. This example is possibly one of most comprehensive of a system that is considered to be truly integrated, as well as the fact that its different features actually complement both its service and operation.

**6. Mexico DF (2005)**

The Mexican capital has also developed a system (referred to as Metrobus), which has been built as a complement to the city’s extensive metro network. In the Federal District, more than 20 km of lines have been built, and the system has a demand of 260,000 trips per day. This system also has a public-private operator and it is the only BRT system to date that has a government subsidized fare, but not because of a need to cover the system’s operating costs. The system has a higher PKM index than close to 10 other BRT systems. The average cost to build the lines was $1.5 million U.S. dollars per kilometer.

 An interesting aspect of this system is that the value of the ticket is double that of the city’s metro, in part due to the current subsidy in both systems. The Federal District’s metro has been viewed as “a system for low-income people.” The BRT system, however, does not have this negative image, possibly in part due to the ticket cost and the novelty effect.

**7. Guayaquil (2006)**

Guayaquil had the opportunity to develop a BRT system modeled after Quito’s. In this case, 15.5 km of lines were built, and the “Metrovía” system provides 100,000 trips per day. The system is controlled by a foundation that subcontracts the system’s services, which has allowed for a reduced personnel structure consisting of 12 people. This small administrative structure has allowed the system to cover its operating expenses from its advertising revenue. The system has cost $1.4 million U.S. dollars per kilometer.

**8. Santiago de Chile (2007)**

The case of TranSantiago is known by many people around the world, especially due to the system’s difficulties since its launch in February of 2007. It is important to note that this new public transit system involved the complete reorganization of the city’s public transit overnight, which led to difficulties with coordinating the system’s transformation. More importantly, however, the system’s riders did not have the opportunity to familiarize themselves with the complex system before it was launched. This, added to other problems with the estimation of the ridership and other technological issues caused the system’s launch to experience difficulties that were far beyond any typical difficulties with launching a reorganized public transit system. In fact, the city’s public transit in general has deteriorated, especially the underground Santiago Metro, which before had provided impeccable service. However, it, too, has been affected by the excess demand generated by the un-usability of the TransSantiago system. To date, it is difficult to present conclusive data on the system’s ridership or its implementation costs. It could even be said that the system is still in its launch or “re-launch” phase, where it has had to be redefined in various aspects based on the initial work completed.

The Santiago de Chile system has faced extensive criticism and a thorough review surpassing a hundred documents. Some documents point to similar reasons that explain the system’s “problems.” The analyses all seem to agree that the lack of system planning means that any improvement made will cost much more than the initial investment. However, it might be a good idea to wait to learn the results until after several years of the system’s operation as it might be too soon to draw conclusions that would give an objective overview of what happened.

**9. Guatemala City (2007)**

The most recent BRT system to be implemented in Latin America is that of Guatemala City at the end of 2007. This system comprises 11 kilometers of lines and forms part of a comprehensive city improvement plan (Plan Guatemala 2020). This system has succeeded in providing up to 143,000 trips per day in its small initial network. To date, this information is all that is available on the system. Guatemala City received an honorable mention for the 2008 Sustainable Transport Award given by the Institute for Transportation and Development Policy.