Nowadays public transport in big cities is a very important theme. There are a lot of examples about cities totally collapsed by the excessive use of private vehicles. To try to solve this situation, some cities invert an important part of their money to improve their public transport.

However, this transport must be efficient in order to compete with possibilities against private transport. This is the main reason why new transport systems have been created in the last times.

In seventies, a new type of urban transport appeared in Curitiba (Brazil) for first time, it was called Bus Rapid Transit (BRT). The principal idea of this new transport was to obtain, with a moderate investment, the best public transport possible in surface. The economical restrictions were the principal argument to choose buses like vehicles, rather than other options as railways systems. Moreover, they permit to operate with satisfactory enough results in capacity. In the meanwhile other transport innovation ideas where created. Some examples are: giving an exclusive lane to buses, separated to private transport, building bus-stops which seem subway-stops or giving priority to buses in intersections.

Nowadays this system is having success everywhere where it’s been used and keeps expanding al over the world. Eventhough it still exists a commune sense of unknowledge about it in our country. It also can be provoked for the chaotic growing what BRT have had in the last years, because it contains some characteristics that you can use or not.

The objective of this document is to explain these main characteristics of BRT in the meantime that tries to find out the reengineered process that was used in its creation. Moreover, an informatical model it’s been created on the propose of being a help instrument for taking decisions, and choosing applications to run a future BRT line with minimum costs tor both owner an users. This model is composed by 24 different possibilities of kinds of BRT’s lines. Between all of them it takes the best option to obtain the most economical line.

This model offers the opportunity of study the whole system in different situations and places. The place that is been chosen in order to run it’s a quarter with same characteristics as the “Eixample” in Barcelona. Once analyzed model results in the placement chosen, deferential parameters have been modified as for example the demand, the quantity of semaphores in green wave, the length of the corridor and the speed allowed in the segregated rail. These parameters have been modified in all its possibilities, to be able to observe the behaviour of every option to extract conclusions. Finally, we could have found the best options to implant a general BRT line.