CONGLOMERATES OF BUS RAPID TRANSIT IN LATIN AMERICAN COUNTRIES

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Abstract.

Public transportation plays an indispensable role in our daily lives, an it also remains as a higher priority for local governments. Within transportation systems, the BRT transport model uses buses on segregated roads, which has been used in different cities across the country. In order to establish structures and associations to suggest statistical models, perform diagnosis and for other purposes of BRT in Latin America, the present research work has been carried out. Once the clusters are formed, an analysis is made about the fuels used in 18 systems in Latin America. Two (2) clusters were formed: Group A with the countries of Argentina, Chile, Ecuador, El Salvador, Guatemala, Peru, Uruguay, and Venezuela which serves 20% of the daily users in Latin America. In addition, cluster B, with 80% of the rest of the users, with three (3) countries: Brazil, Colombia and Mexico. It shows the advantages of the use of natural gas fuel (NGF) with respect to the use of diesel in the BRT units. The use of hybrid systems that integrate electricity and the combination of gasoline with ethanol are not considered in this work due to the variability implied by the energy matrix where BRTs are located and the type and proportion of ethanol used, respectively.

Keywords:

Cluster of latin american countries, BRT fuels, BRT, bus rapid transit, urban transportation.