

ENVIRONMENTAL ANALYSIS OF EFFICIENCY IN THE BUS RAPID TRANSIT IN MEXICO, BRAZIL AND COLOMBIA

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Summary

In the present investigation we studied the cases of rapid transit systems articulated bus (BRT, for its acronym in English of Bus Rapid Transit) from Mexico, Brazil and Colombia, with the aim of identifying their efficiency from the point of environmentally and operationally, according to fuel use, technology and infrastructure of its buses to determine their advantages and disadvantages.

The method used in this study is the comparison that included analysis of the variables: technology, fuels and engines, infrastructure and environmental considerations, to thereby know what transportation system is contributing to air quality and the environment.

With the information obtained, presents a model that relates these variables, which aims to identify the advantages and disadvantages of each system, from the standpoint of environmental and operational and thereby contribute to environmental improvement.

The analysis refers to four transportation systems in Mexico: Metrobus in Mexico City; Macrobús in City of Guadalajara; Optibús of the City of Leon, Guanajuato, and Mexico State Mexibús, and the Integrated Network of Transportation of the City of Curitiba , Brazil, and the TransMilenio in Bogotá, Colombia.

Keyword: BRT, mass transit, rapid transit, transport efficiency