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## **Sustainable urban mobility: a comparative study and the basis for a management system in Brazil and Portugal**

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### **Abstract**

There is a clear need for the implementation of sustainability principles and guidelines in urban areas, as well as for strategies for controlling the elements that shape the urban environment. As a consequence, indicators become essential tools in providing the knowledge and information required for understanding particular aspects and problems of the cities. Therefore, the main objective of this work was to identify indicators that are suitable for monitoring the urban mobility conditions of selected cities in Brazil and Portugal. The first step taken in order to reach that objective was the selection and analysis of mobility indicators extracted from several national and international experiences of sustainability indicators. Those indicators were organized under a framework of Categories and Themes and also submitted to the evaluation of groups of experts in both countries, in order to determine their relative importance for monitoring urban mobility conditions. The final outcome of the analysis was a common set of mobility indicators for Brazilian and Portuguese cities, in addition to a more complete list of indicators that could better serve each country in particular.

*Keywords: urban sustainable mobility, mobility indicators, multicriteria analysis, Brazilian cities, Portuguese cities.*

### **1 Introduction**

The increasing number of people living in cities, the continuous overload of infrastructure and urban facilities, and different kinds of environmental impacts

