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RECOMMENDATIONS FOR USERS IN THE APPLICATION OF MULTI-MODAL APPRAISAL SYSTEMS

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Multi-modal appraisal can be defined as a method to assess the optimal balance of investment between transport modes by considering all alternative modal solutions within a consistent appraisal framework. The focus is on assessing modal shift between road and other modes and the impacts of road investment on the economic performance of other modes. Assessing transport schemes against a standard appraisal framework allows decision makers both to compare options for a scheme and to prioritise different schemes in a clear and unambiguous manner.

This report prepared by the World Road Association (PIARC) Technical Committee 1.1 -Road System Economics, presents recommendations for the application of multi-modal appraisal systems. The recommendations reflect the different needs of developed countries, countries in transition and less developed countries.

The report is structured around analysis and assessment of case studies, starting with a review of the current status of multi-modal assessment and then addresses:

- Common themes;
- Strengths and weaknesses of various approaches;
- Transferability of themes;
- Generic framework for multi-modal assessment;
- Recommendations for areas for further research and development.

The published report is a culmination of a series of investigatory activities commencing with a review of current systems through the screening of over one hundred PIARC Member Countries and non-governmental organisations to determine those countries most likely to have a multi-modal planning system. Following this initial screening, forty countries and organisations were selected for investigation through a questionnaire, the result of which identified seven countries with comprehensive systems, of which five (UK, USA, France, Norway and Sweden) were analysed in further depth.

The case study review was undertaken for the five selected countries. The findings demonstrated an emerging consensus on the approach to multi-modal appraisal for the countries with the most advanced planning systems. The systems examined in the case study reviews included the following common themes or elements:

- A definition of the objectives and problems a project is to address;
- A method for defining and screening multiple alternatives to address project needs;
- A process for public consultation in scheme developments.

The research identified that many of the systems developed to date are based on complex transport modelling and cost benefit analysis techniques, typically using computer models. Although some countries were found to have developed approaches, the majority of countries in the world have rudimentary systems, particularly in developing countries.

A general framework for multi-modal assessment based on the common themes was developed. The framework guides the user to the best practice used in the advanced systems and it paves the way for future work in the area with the ultimate aim to transition this preliminary framework into a manual for practitioner's use. This will assist developing and transition countries, for which early multi-modal planning can minimise the need for future and more costly measures.

This report can be accessed through PIARC's Virtual Library at: http://publications.piarc.org/ressources/publications_files/5/3519,2009R04WEP.odf