

23RD WORLD ROAD CONGRESS
PARIS, FRANCE, 17-21 SEPTEMBER 2007



**INTERNATIONAL CALL
FOR
INDIVIDUAL PAPERS**

KEY DATES

1 September 2006	Deadline for submission of abstracts
November 2006	Acceptance notification of abstracts
31 March 2007	Deadline for full papers
May 2007	Acceptance notification of full papers

TOPICS

**1 - Ex-post Evaluation
of Road Transport Impacts**

Road transport schemes and policies have an impact on road traffic and usage, other transportation modes, economic activities, and the social, human and natural environment. Despite this, few measurements of these impacts are available to the technical community, resulting in evaluation methods often being incomplete and insufficient.

Papers are solicited that focus on the ex-post evaluation of road transport impacts from an **economic perspective**, either in the urban or interurban setting, on the following topics:

- user responses and traffic impacts on all modes;
- economic impacts on transport costs, users' surpluses, land use and land prices, economic activity and accessibility;
- social impacts including effects on equity and spatial segregation of social groups;
- impacts on the health of populations;
- impacts on environmental resources.

Presentation of evaluation methods may be considered, so long as they are applied to a practical case.

**2 - Innovative Financing
for Sustainable
Transportation Infrastructure**

Without stable and reliable financing, it is very difficult to support the sustainable development of roads and road transport. Today, innovative financing mechanisms such as full private financing, public-private partnerships (PPPs), specialized government borrowing, etc., can make significant contributions to funding future sustainable transportation investment. Papers that focus on the following topic areas are solicited:

- How well are these financing techniques meeting the needs and expectations as they were originally defined for the project?
- The long-term value to taxpayers of PPPs, as opposed to conventional financing, especially as governments often have access to "cheaper" capital than the private sector;
- The underlying rationale for use of such innovative financing mechanisms;
- The implications on tendering and contracting; and
- Risk allocation.

The aforementioned topic areas provide an opportunity to assess the costs and the benefits of these innovative financing mechanisms and their real world application today.

3 - Institutional Integrity

Institutional integrity building consists of measures, programs or structures put forth by private and public institutions to assure acceptability of their processes and products, to meet the needs and values of stakeholders, clients and other constituents. Conformity, adherence and compliance to law, codes of conducts, standards of behaviour, ethics and other institutional norms whether inside or outside organizations, can be fostered by governance in road administration, and its partners in the public or private environments.

Papers that focus on the following topic areas are solicited:

- Principles, strategies and measures used to address integrity problems that can confront a road administration in its operations and responsibilities, and
- Methods used to evaluate and monitor the degree of problems, foster awareness, enforce accountability, ensure transparency and social or situational preventions.

The aforementioned topic areas provide an opportunity to improve the understanding of the causes and responses to the problems identified.

4 – Human Resource Management

Having adequate levels of human resource, both in capability and capacity terms, is essential for the effective operation of Road Administrations and enable them to meet the needs and values of stakeholders, clients and other constituents. Against this requirement, Road Administrations are in an environment where many of the following challenges exist:

- Increasing levels of outsourcing and new methods of delivery, including financing;
- Government requirements to reduce staff numbers and corresponding controls over salaries;
- Rapid changes in technology;
- Changes in the societal expectations of Road Administrations;
- An ageing workforce, the impact of which is compounded by inadequate numbers of new staff being trained by educational institutions;
- The impact of generation X and Y, their different values and expectations of an employer.

The above not only put pressure on maintaining core capabilities and capacity, but also on developing new capabilities and competencies to meet these new challenges.

Papers that focus on the Human Resource Management challenges faced by your organization, and the principles, strategies and measures used, or are planning to address them, including the methods used to evaluate their success, are solicited.

5 - Sustainable Development and Road Transport

Implementing sustainable development is now a pressing concern for all administrations. The concept of sustainability can, however, be interpreted in many different ways. Different contexts determine different priorities.

The Committee wants to broaden the scope of the discussion and calls for short illustrative papers, that give practical examples that deal with how stakeholders in developing countries and countries in transition, seek to realise sustainable environmental, economic, social and cultural policies and solutions for roads and road transport.

6 - Opening up and Accessibility

Establishing access between various regions in a territory, and maintaining that access throughout all seasons for passenger and goods transport, is a crucial aspect to improve the living conditions and economic situation in developing countries.

In regard to designing and planning the development of road networks, papers are solicited on two topics:

- The criteria used to evaluate the needs and rank the priorities for development,
- Solutions implemented to facilitate cross border road transport.

7 - Interurban – urban Road Network Interface

When faced with the need to reduce congestion in large cities, it is necessary to ensure good linkage between the various transport modes and encourage the use of public transport.

Within this context, papers are solicited that focus on initiatives taken to provide and improve the interfaces between the interurban road network, and the transport infrastructure in urban areas.

8 - Congestion in Urban Areas

Acute road traffic congestion is a common and aggravating feature of growing and dynamic cities, in both industrialised and developing countries.

Papers are solicited that describe urban congestion, analyse its causes, or present measures and recommendations to mitigate the problems. Presentations of theoretical analysis and case studies are both welcome.

9 - Human Powered Mobility in Urban Areas

Non-motorised traffic is an important mode not only in developing countries, but also in cities of developed countries. Papers are solicited that:

- analyse social, economical and safety issues of human powered mobility in urban areas;
- present measures to make human powered mobility more attractive.

Contributions from developing countries and countries in transition are especially encouraged.

10 - Development of Rural Roads

In developing countries, for both social and local economic reasons, increasing attention is being paid, to the appropriate development of rural road networks.

Papers are solicited on the following topics:

- How are the needs for rural roads assessed? What indicators are used? How are priorities determined for planning decisions?
- How States envisage the sustainability of these networks when considering their financial resources?
- Examples of partnerships between the State and various stakeholders i.e.: local authorities, communities, public and private companies, NGOs; in order to secure finance for the provision of rural road programmes, and then to ensure their on-going management and sustainable maintenance.

11 - Road Safety

Papers are solicited on the following issues:

- Reports on the successful implementation of large scale road safety audits and road safety inspections. Papers presenting how difficulties were overcome and data showing the positive effect of these measures on road safety, are particularly encouraged;
- Innovations in road safety (from ITS to "low tech" solutions). Papers should be supported by data. Commercial presentations will be rejected.

12 - Risk Management

Papers are solicited that present case studies showing the application of risk management in either of the following situations:

- road infrastructure threatened by natural or manmade hazards;
- development of road infrastructure mega-projects.

13 - Management of Road Infrastructure Assets

Road asset management that provides, at the lowest cost, a road network operation that meets the needs of the various users, is a complex problem involving many stakeholders such as decision makers, road network managers, users and residents. No optimal or proven solution has been found yet.

This call for papers aims at gathering more knowledge on two particular points:

- in management systems, how to consider infrastructure performance measured in terms of functionality (expected service vs. service provided, users' and residents' point of view, etc.);
- how the concept of road corridors can be reflected in the design and use of road asset management systems.

14 - Innovation in Minimizing Impacts at Road Works

Roadway construction and maintenance has a direct impact on the users and the adjacent land use, for example homeowners, businesses, and recreational land use. Typically, impacts may include construction noise, a reduction in safety, air, water and ground pollution, vibration, and reduced roadway availability, etc.

Papers are solicited that focus on innovation in design, construction or maintenance that help to mitigate the impact of construction on the travelling public or surrounding land use. This may include contractual requirements, management of innovation (partnering, design/build approach, etc.), innovative construction techniques, and advanced traffic information. Of particular interest are project case studies that outline new steps to help mitigate the impact of construction.

15 - Management of Historical Bridges

Historical bridges are structures requiring special treatment in aspects such as inspection, evaluation, repair, rehabilitation and, in general, management. Many countries have a wide patrimony of historical bridges, some of which are bearing intensive traffic loads and are cared for as monumental constructions. Other bridges, usually on secondary roads, suffer a lack of maintenance and every year beautiful, historical or monumental bridges are lost.

Papers are solicited that focus on the special considerations given to the analysis of structural behaviour, aesthetic preservation, materials used for repair, etc., of historical bridges. Of interest are both considerations for specific bridges and systematic programmes and actions applicable to a bridge stock.

16 - Indicators representative of the Condition of the Geotechnical Structures

Geotechnical structures (embankments, retaining walls, drainage systems, etc.) represent important items with regard to the performance of the road. The condition of these elements can deteriorate over time and alter the functionality of the infrastructure. However, little attention has been paid up until now to have indicators representative of the condition of the geotechnical structures, as inputs into road asset management systems.

Papers are solicited that focus on the approach taken to manage the geotechnical asset, within a network or along a route, and the indicators used for that purpose. Of particular interest is elaboration of the acquisition, storage and interrogation of data used in these approaches, and links with broader asset management objectives, such as work prioritisation, emergency works and strategic studies.

17 - Environmental Assessment of Waste and Industrial By-products used in Road Construction

The necessity to spare natural resources, legal limits to dumping and more generally, the implementation of a policy for sustainable development, are incentives for the use of waste and industrial by-products as road construction materials.

Papers are called for on the characterization of these materials with respect to the risk of impact on the environment in the case of reuse, on methodologies and test methods selected in order to characterize before and after laying, and the noxiousness of reused waste and by-products.

18 - Freight transport and intermodality

Papers are solicited on the following topics:

- Evolution of freight logistics: the response of road administrations to the development of freight logistics over time and the increase in road transport within countries and across countries.
- Alternatives and terminals: effective terminal structure, road accessibility to intermodal facilities, and governmental / administrative supports for the improvement of terminals and related activities, etc.
- Guidance for the developing countries to build a sustainable freight transport system.

Historical Symposium "Road Civilisations of the XXth century"

The historical symposium entitled ***Road Civilisations of the XXth century*** will be an opportunity to retrace and put into perspective the profound evolutions that have marked the road and its universe during the past century which saw the development of automobile transport.

Expected contributions will analyse how policies and techniques for the road (more precisely roads), in various scopes since the end of the XIXth century to the contemporary period, have provided answers to the social demands for mobility and what the social acceptance of these implemented solutions has been.

Further details at http://www.piarc.org/en/paris2007/historical_symposium/