



PIARC International Seminar on Asset Management for Rural and Low Volume Roads

24-26 May 2017, Santa Cruz de la Sierra - Bolivia

**Gestión de Activos viales para
carreteras rurales y de bajo volumen
Bolivia 2017**



Introduction

The seminar about **Asset Management for Rural and Low Volume Roads** is part of International Seminars program organized by the World Road Association.

In the present period 2016-2019 the World Road Association within the Strategic Plan has the Strategic Theme D, which refers to the road infrastructure in order to improve the quality and efficiency of the road infrastructure through the effective management of road assets in accordance with the expectations of the user, the Government requirements and the sustainable development of peoples. Within this Theme there are the Technical Committee D.1 Asset Management and the Technical Committee D.4 Rural Roads and Earthworks.

Assessing the budget level needed to provide optimal maintenance for road infrastructure and balancing the needs of multiple assets with budgetary constraints is an important part of the work of road administrations. This is reflected in the work of Technical Committee D.1 Asset Management.

In the field of rural roads and earthworks, Technical Committee D.4 Rural Roads and Earthworks investigates road administrations response to adverse conditions as a result of climate change activities while considering the use of local, marginal, and secondary materials in rural and unpaved roads.

Within the program of work of the technical committees of D.1 and D.4 for the period 2016-2019 of PIARC, common lines of policies for our countries will be developed through the following topics:

D.1 Asset Management

- D.1.1 Road Asset Management Manual
- D.1.2 Dissemination and education
- D.1.3 Innovative approaches to Asset Management

D.4 Rural Roads and Earthworks

- D.4.1 Exposure of roads to climate change
- D.4.2 Local materials, practices and techniques
- D.4.3 Management of earthworks

The main objective is to analyze and increase the general awareness of professional and PIARC members about the proper asset management of rural roads with appropriate maintenance and continuing sustainable development of peoples.

The main aim of the seminar is the exchange of experiences, information and technology transfer about the asset management of rural and low volume roads. The Technical Committees will identify areas for research and will address gaps in knowledge for the

topic by presenting case studies and state of the art. The program has been designed to study a wide range of issues, particularly related to the management of road assets, rural roads and low volume roads, use of local materials and others for the stabilization of soils and the problems of particular interest for low and middle income countries.

The seminar is organized by the Technical Committees D.1 and D.4 along with the Plurinational State of Bolivia. The Technical Committees gather members from different countries of the world and their knowledge and experiences are shared and disseminated through publications, participation and organization of international seminars and the comparison of practices in different countries and regions of the world.

The seminar is open to the entire world community interested in rural and low-volume roads. It is also expected to act more specifically on the needs of the countries of the region which have similar geographical, climatic and socio-economic conditions.

Background

The road Asset Management, especially for rural and low volume roads is a key component of rural development, and that is a key development tool for developing regions by providing the basic service generated by the increase in agricultural incomes and better access to jobs. Rural roads are used as a starting point for poverty alleviation since it is agreed that investment in rural access and transport implicates an important improvement of the living conditions of the poorer sectors of our societies. Transport was also identified to have a great importance for the achievement of several of the targets set under the Millennium Development Goals (MDGs), and the 17 Sustainable Development Goals (SDGs) launched by United Nations.

Bolivia implemented the “Pro Vial” (Road Pro) program for the maintenance of the Road Network by the “Bolivian Road Administration” and the “Department of Public Services and Housing”. It is intended to replicate the program in rural networks through prefectures and municipalities. This maintenance program involves the communities along the road network, which mainly perform cleaning work of berms, ditches, drainage and others. Many times, they have performed major works, which have greatly alleviated the trafficability of routes in times of emergency, especially where access is difficult. The program aims at training the next stage groups in more specialized tasks such as signaling, which directly goes towards road safety.

Despite such significant progress in improving accessibility to these rural areas, the management and future maintenance of this rural road network should be expanded in a sustainable manner, with the participation of municipalities and local governments.

Seminar Objective

The main objective of the Seminar is to provide a common platform for experts to share experiences and discuss issues and challenges related to planning, providing maintaining

of rural roads in a sustainable manner. Innovations regarding the participation of local communities in the whole process are also part of the overall objective of the seminar.

Topics

The seminar will broadly cover the following topics.

I Experience in the management of road asset management in the region and future challenges

II Best Practices for planners and professionals in the development and sustainability of rural access

III Framework, project requirements and maintenance.

- Planning and other pre- requisites including the involvement of local communities.
- Financing, organization and management.
- Maintenance practices.
- Enforcement of maintenance contracts and alternatives.

IV Community participation in rural roads

Maximizing the participation of local communities:

1. in the overall planning / prioritization of phase;
2. in the initial phase of construction;
3. In the routine maintenance and repair phase.

V Sustainable Rural Roads - The Path

Seminar Venue

The seminar will take place in the city of Santa Cruz de la Sierra from May 24th to May 26th, 2017 in Santa Cruz de la Sierra - BOLIVIA

Santa Cruz has an area of 370.621 km². One third of this area is mountainous region and the rest is spread over the Amazon floodplain which covers the eastern part of the Country. In the north Santa Cruz joins the department of Beni, in the east borders on the Republic of Brazil. In the south of the department Chuquisaca and Paraguay join Santa Cruz de la Sierra.

The approximate population of Santa Cruz is 2,000,000 inhabitants. The departmental capital is the city of Santa Cruz de la Sierra.

Methodology

The methodology for the International Seminar will consist of (a) plenary sessions with presentations by leading experts, b) round of questions to the speakers, and (c) the conclusions and resolutions.

In each of the precedent parts there will be enough **time allocated for discussion with the audience.**

The plenary sessions will include presentations from experts of PIARC Technical Committees D.1 and D.4, as well as local, regional and international leading experts.

Languages

The official language of the seminar will be Spanish with simultaneous translation into English.

Participation

The topic of the seminar and methodology interest a wide variety of stakeholders, so the following sectors are expected to attend:

- Members of PIARC Technical Committee D.1 and D.4.
- Ministries, organizations and administrations dealing with rural connectivity.
- Research organizations with particular expertise in rural roads and low volume roads asset management and their maintenance.
- Representatives of multilateral funding agencies.
- Several Organizations of United Nations related to accessibility and mobility for the rural communities.
- Practicing engineers, construction companies and consultants who possess expertise in the development and management of rural and low volume roads.
- Community development specialists, groups or associations that have a special interest in the subject.

Seminar Program

Wednesday, May 24, 2017				
Time	Title	Institution	Name	Nationality
8:30 to 9:30	Registration			
Opening session				
9:30 to 10:30	Presentation of authorities			
	Speech delivered by PIARC's Vice President	PIARC	Lic. Miguel Ángel Salvia	Argentina
	Speech delivered by PIARC's Technical Director	PIARC	Ing. Miguel Caso Flórez	Spain
	Speech delivered by PIARC's TC D.1 President	PIARC	Dr. Ing. Thomas Linder	Germany
	Speech delivered by PIARC's TC D.4 President	PIARC	Ing. Roberto Sandóval Farfán	Bolivia
	Speech delivered by the ABC's Executive President	ABC - Administradora Boliviana de Carreteras	Ing. Noemí Eliana Villegas Tufiño	Bolivia
	Speech delivered by the Minister of Public Works and Housing	Ministerio de Obras Públicas y Vivienda	Ing. Milton Claros Hinojosa	Bolivia
	Speech delivered by the President of the Plurinational State of Bolivia	Estado Plurinacional de Bolivia	President Evo Morales Ayma	Bolivia
10:30 to 11:00	Tea / Coffee Break			
Technical Session I: Experience in the management of road asset management in the region and future challenges				
11:00 to 11:20	Basic Roads in Chile	TC D4 - Dirección de Vialidad - Min. Obras Públicas	Ing. Osvaldo Aguayo	Chile
11:20 to 11:40	Inclusive Roads: CAF Vision to include communities adjacent to road corridors.	CAF - Corporación Andina de Fomento	Ing. Andrés Oneto	Peru
11:40 to 12:00	Asset Management Needs for Low Volume Roadways	TC D1 – Applied Research Associates	Ing. David Hein	Canada
12:00 to 12:20	ABC Level of investment in Bolivia for Construction and Maintenance in Primary Road Network.	ABC - Administradora Boliviana de Carreteras	Ing. Erick De Las Heras Ing. Manuel Guzmán	Bolivia
12:20 to 12:40	Round of questions to the speakers			
12:40 to 14:30	Lunch Break			
Technical Session II: Best Practices for planners and professionals in the development and sustainability of rural access				
14:30 to 14:50	PIARC efforts to educate the asset management workforce of tomorrow	TC D1 – Virginia Tech Transportation Institute	Prof. Gerardo Flintsch	USA
14:50 to 15:10	Adaptation of transport infrastructures and networks to climate change.	TC D4 - CEREMA	Ing. Veronique Berche	France
15:10 to 15:30	Applications of HDM-4 to low volume roads.	TC D1 – Mexican Institute of Transport	Ing. Ricardo Solorio	Mexico
15:30 to 15:50	Environmental and social responsibility ex post of construction and conservation phase of road assets.	ABC - Administradora Boliviana de Carreteras	Ing. Jonatan Lazarte	Bolivia
15:50 to 16:10	Round of questions to the speakers			
16:10 to 16:40	Tea / Coffee Break			
16:40 to 17:00	Management of earthworks	TC D4 – GRInfra & Egis	Ing. Guy Raoul Isabelle Lappe	France
17:00 to 17:20	Peru's low-volume rural road asset management – Advancing the support to the Subnational Transport Program (PATS)	WB - World Bank	Ing. Ramón Muñoz Raskin Ing. Sofía Guerrero	
17:20 to 17:30	Round of questions to the speakers			
17:30 to 17:40	Conclusions of the Day			

17:40	End of Sessions			
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Thursday, May 25, 2017

Time	Title	Institution	Name	Nationality
Technical Session III: Framework, project requirements and maintenance				
09:00 to 09:20	Neighbouring Roads in Santa Cruz – Bolivia	SEDCAM - Servicio Departamental de Caminos	Ing. Jhonny Soria	Bolivia
09:20 to 09:40	The use of local materials around the world	TC D4 - CEDEX	Ing. Aurea Perucho	Spain
09:40 to 10:00	Solutions and technological innovations for the improvement of low traffic routes	CAF - Corporación Andina de Fomento	Ing. Otoniel Fernandez	Colombia
10:00 to 10:20	Road environment and accidents in Bolivia's Primary Road Network	ABC - Administradora Boliviana de Carreteras	Ing. Gustavo Espinoza	Bolivia
10:20 to 10:40	Asset management in Chile	TC D1 – Ministry of Public Works	Ing. Miguel Valdes	Chile
10:40 to 11:00	Round of questions to the speakers			
11:00 to 11:20	Tea / Coffee Break			
Technical Session IV: Community participation in rural roads				
11:20 to 11:40	Asset management models for growing economies	TC D1 – National Roads and Motorways	Ing. Marcin Nowacki	Poland
11:40 to 12:00	Multimodal transport in Comunidad Andina	Comunidad Andina	Ing. Alan Octavio Vera Velasco	Bolivia
12:00 to 12:20	The Role of capability development in road asset	TC D1 – UPM & Transport Agency	Prof. Fernando Varela Soto Ing. David Darwin	Spain New Zealand
12:20 to 12:40	Round of questions to the speakers			
12:40 to 14:30	Lunch Break			
Technical Session V: Sustainable Rural Roads - The Path				
14:30 to 14:50	Economical and Social Profits in Rural Roads	TC D4 - AAC	Ing. Haydeé Lordi	Argentina
14:50 to 15:10	Affordable data collection (Tim Massart, Belgium)	TC D1 - Belgian Road Research Centre	Ing. Tim Massart	Belgium
15:10 to 15:30	Geometric Design Standards for Rural Roads with IMD <200veh / day - Case PERU.	TC D4 - FNTRD	MDI Ing. Victor Arévalo Lay	Peru
15:30 to 15:50	General Requirements for Road Asset Management Education Courses	TC D1 - Heller Ingenieurgesellschaft	Ing. Slawomir Heller	Germany
15:50 to 16:10	Round of questions to the speakers			
16:10 to 16:30	Tea / Coffee Break			
Closing Session - Round Table				
16:30 to 17:00	Closing Session - Round Table			
17:00 to 17:20	Conclusions of the Seminar			
17:20 to 17:40	Honors and Closing Ceremony			
18:30 to 21:30	Gala Dinner			

Friday May 26, 2017

The Technical Visit will be made to the La Angostura - Samaipata Route.
 We will see the difficulties of a mountain road with low volume traffic, according to the geographic, geotechnical and geometric characteristics.
 We will visit the Archaeological Ruins of El Fuerte - Samaipata, UNESCO World Heritage Site

Call for Papers

The abstract of the papers should not exceed 150-200 words and in general, and it may be submitted in English or Spanish.

Abstract should address to the following mail: seminarbolivia2017@gmail.com

Call for Papers is as follows:

Submission of abstracts	January	31, 2016
Review of abstracts and notification to authors	February	28, 2016
Presentation of the full article	March	31, 2017

Full articles must be submitted with the presentations of the Seminar for publication

PIARC Special Fund

The PIARC Special Fund can cover up to 100% of travel expenses or up to 100% of the accommodation costs of participants from developing countries (lower middle income and low income countries). It can cover the cost of one participant per PIARC member subject to the agreement of the First Delegate. Requests for Special Fund assistance should be made by the First Delegate to the PIARC General Secretariat e-mail: info@piarc.org.

The precepts for the use of the Special Fund are available on the PIARC website: www.piarc.org.in the Blue Guide.

Record

a. Share

Delegates from high income countries:	250 \$US
PIARC members from high income countries:	220 \$US
Delegates from low and middle income countries:	150 \$US
PIARC members from low and middle income countries:	120 \$US

Delegates from Bolivia (Local Government):	500 Bolivianos
Students	200 Bolivianos

b. Registration Deadline: May 10, 2017

The registration form will be published in the website separately.

Accommodation

There are a few hotels located near the event and the participants may choose where they want to stay upon their necessities. The Bolivian Road Administration made some arrangements and discounts with a few hotels.

Coming up the alternatives of hotels with the code GMB2224:

1. Buganvillas Hotel Suites & Spa
Hotel de 5 estrellas, Zona Rio Piraí
Dirección: Av.Roca y Coronado 901, Santa Cruz de la Sierra, Bolivia
Teléfono: +591 3 3551212
Web: <http://www.buganvillashotelsuites.com/ventas@hotelbuganvillas.com> contact person-Marcela Perez
2. Hotel Casa Blanca
Zona Rio Piraí
Dirección: Av. Marcelo Terceros Bánzer, Santa Cruz de la Sierra, Bolivia
Teléfono: +591 3 3434444
Web: <http://www.hotelcasablanca.com.bo/>
3. Hotel Camino Real Santa Cruz
Hotel de 5 estrellas
Dirección: Avenida San Martin & Calle k , Cuarto Anillo, Santa Cruz, Bolivia
Teléfono: +591 3 3423535
Web: <http://www.caminoreal.com.bo/ventas4@caminoreal.com.bo;ventas5@caminoreal.com.bo>
contact person - Luis Mojica
4. Hotel Radisson
Hotel de 5 estrellas
Dirección: Avenida Segunda #4, Colinas Del Urubo, Santa Cruz, Bolivia
Teléfono: +591 3 3718000
Web: <https://www.radisson.com/mariacaudia.valdivieso@ghlhoteles.com> contact person - Claudia Baldivieso



Travel and Transportation

Santa Cruz is well connected to the rest of the country and the world through railways, roads and its international airport Viru Viru. Transportation to and from the venue of the hotels will be the responsibility of the organizers.

Climate

The climate in may is nice in Santa Cruz. The daytime temperatures range is between 25-35 °C. Practice you need only light clothing, even at night.

Visa Requirements

In general, the following documents are required for obtaining visa for Bolivia:

- Original passport valid for at last six months
- Visa fees
- The supporting documents, if necessary
- Completed application

However, the procedures, requirements and deadlines may vary from country to country. Please check with your embassy or consulate to obtain complete and accurate information.

Details of contact with the local organizers

For scientific issues

Ing. Roberto Sandóval Farfán
Chair of PIARC TC D4
Tel-Fax: +591 33446249 Mob. +591 72100022
E-Mail rsandoval@cigeco.com.bo

Dr. Ing. Thomas Linder
Chair of PIARC TC D1
Tel/Fax: +49 89/2192-3539
E-Mail chairtc41@stmi.bayern.de

For general issues

seminarbolivia2017@gmail.com

The website for registration and information

www.seminariobolivia2017.com