



Building Climate Resilience into Roads & Transport Infrastructure

Online Training
May 19 – June 11, 2020



Online Training



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Online Workshop

Background

This on-line training course is designed to provide a methodical overview of climate change mitigation strategies and emergency response management. Participants will be guided through various processes aimed at conducting thorough risk preparedness assessments and the associated remedial measures. Throughout the course, the issue of successful engagement with impacted residents will be addressed. Rural roads, frequently a vulnerable link in the transport chain, will also be addressed through dedicated modules presenting design and maintenance features for weather-resilient low volume / rural roads. The lectures will be taught during a four-week period with live two hour on-line sessions held on Tuesday and Thursday of each week.

Upon completion of the training program, the IRF will administer an on-line knowledge test. Participants with a score of 80% of the exam will be awarded with a certificate verifying their successful completion of the course.

Why Online?

- Earn 16 Professional Development Hours
- Expert training by professionals for Professionals: access IRF's unique curriculum and lectures developed by world-class specialists
- Accelerated learning processes: get up to speed and gain new insights in less time and with no travel constraints
- Full access to learning materials and session recordings
- Small classrooms & scheduled One-on-One sessions with instructors
- Self-paced options available
- Interactive group projects and case studies
- Receive IRF Certification

Learning Objectives

- ✓ Understand the impact of Climate Change on Transportation
- ✓ Learn methods to assess risks and set priorities for Infrastructure
- ✓ Learn methods to communicate an effective message
- ✓ Develop a plan to address Climate Change in your country
- ✓ Understand how to plan, prepare and respond to Emergencies in your country
- ✓ Learn Low Cost Solutions for Rural Roads and how to apply in your country

Schedule

Tuesdays & Thursdays (1:00 PM– 3:00 PM US EST / 5:00 – 7:00 PM GMT)

Tuesday May 19, 2020

Extent of Climate Change & its Impacts
Risk Assessments & Challenges
Methodologies to determine projects

Thursday May 21, 2020

Communications and Messaging
Solutions to address impacts of Climate Change
Low Cost mitigation measures

Tuesday May 26, 2020

Financing the Solutions
Presentation of your Plans and Feedback
Emergency Planning & Preparation

Thursday May 28, 2020

Emergency Response
Emergency Recovery
Developing your Emergency Plan

Tuesday June 2, 2020

Introduction to Climate Resilient Rural Roads
Climate Change Impacts and Transportation Sector Efforts
Infrastructure Vulnerability Assessment

Thursday June 4, 2020

Considering Climate Variability in Road Planning, Location, Design and Maintenance
Hydrology Design in the Time of Climate Change
Hydraulic Issues-Bank Stabilization, Manning's Formula, Filters

Tuesday June 9, 2020

Roadway Surface Drainage Issues, Subsurface Drainage
Culvert Design and Installation
Climate Resilient Structures-Culverts, Fords, Bridges

Thursday June 11, 2020

Soil Bioengineering for Slope Stabilization & Erosion Control, Other Slope Stabilization Methods
Roadway Materials, Use of Marginal Materials; Quarry Development and Reclamation Plans
Use of Geosynthetics in Low-Volume Roads
Exam

Speakers



Gordon Keller
US Forest Service (Retired)

Gordon's recent professional experience has included conducting over 100 Low-Volume Roads Engineering Best Practices lectures and training courses (one to five days long) worldwide over the past 25 years. His training and project experiences have included storm damage repair work in Central America after Hurricane Mitch and in the Dominican Republic after Hurricane Georges. He also conducted roads natural hazard vulnerability reduction training across Central America for OAS.

Additionally, Gordon has prepared rural roads design and environmental analysis training courses throughout Central America, Mexico, South America, Haiti, Africa, Australia, China, India, Nepal, and the Western Pacific, working for World Bank, IADB, International Road Federation, US Agency for International Development, Pan-American Highway Institute, Rainforest Alliance, TNC, Brazilian Forest Service, Mexican Transportation Institute, VicForests, India National Institute of Technology, Universities, and other groups or partners of the USDA, Forest Service Office of International Programs.



Michael Avery
International Transport Expert

Michael Avery is recognized as an international expert in improving Transportation Organizations and Systems. He has first hand experiences from over 25 years of service in Africa, Asia, Australia, Europe, North America and South America. He has improved Transportation Organizations/Systems to focus on performance, results and service. Mr Avery has first hand experience with Emergencies and impacts of Climate Change caused by rising sea levels, Hurricanes, Earthquakes and devastating fires. Mr

Avery served in senior positions in both private companies and government agencies. He currently works in the US Department of Transportation. He also serves as Vice-Chairman of the International "Committee of Ethical Practice" of the American Society of Civil Engineers (ASCE).

Registration

- **1,700 USD IRF Members**
- **2,000 USD Non IRF Members**
- **1,000 USD IFIs, US State DOTs & City Officials**
- **1,400 USD Group Rate (Groups of 3 or more)**

For any support, please contact melabyad@irf.global

Registration: <https://www.irf.global/event/crr20-ws-online-training>

System Requirements

Computer Requirements

Operating System

Windows 7 - Windows 10, Mac OS X 10.9 (Mavericks), macOS Catalina (10.15), Linux, Google Chrome OS, Android OS 5 (Lollipop) - Android 9 (Pie), iOS 10 - iOS 12, Windows Phone 8+, Windows 8RT+

Web browser

Google Chrome (most recent 2 versions)

Mozilla Firefox (most recent 2 versions)

Internet Explorer v11 (with Adobe Flash if running Windows 7)

Apple Safari (most recent 2 versions)

Microsoft Edge (most recent 2 versions)

Internet connection

1 Mbps or better (broadband recommended)

Hardware

2GB of RAM (minimum), 4GB or more of RAM (recommended)

Microphone and speakers (USB headset recommended)

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International Road Federation

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