

# Road Asset Management

## INTRODUCTION

- This Road Asset Management training course will further improve the understanding of the applicable methods, tools and techniques for road data gathering and analysis in order to improve the system of road construction and maintenance, as the developments in technology have enabled the road agencies to determine the adequate decay forecasting methods and also reuse the materials from one part of the road network to another parts of road network.
- This will emphasize the needs to create a sustainable road asset management system, where the investment and revenues can enable the road network expansion, cost reduction and even increased revenues, therefore transforming the roads from capital investment projects into capital revenue projects.

This training course will highlight:

- Purpose and Benefits of Asset Management
- Processes, Tools, and Data to Support Asset Management
- Preparing and Implementing an Asset Management
- Transportation Asset Management Information Systems
- Critical Assets Identification
- Material and Resources Re – use
- Cost Effective Maintenance the Roads
- Transformation of Road Network from Cost Centers into revenue centers

## OBJECTIVES

At the end of this training course, participants will learn to:

- Understand the importance of Road Asset Management
- Use modern tools and technologies for road decay prediction
- Create a road asset management plan based on the decay forecasting
- Evaluate available road asset management plans
- Plan and prioritize the road maintenance based on the multiple criteria decision making
- Identify and use the materials from one part of road network onto another parts
- Define success factors for Road Asset Management System in their environment

## TRAINING METHODOLOGY

- The participants to this course will receive a detailed training on the subjects covered by the course outline with the tutor utilizing a variety of adult learning techniques, with the focus on case studies and solving of actual problems through the guided examples, which will be relevant to the particular stage of the country development. Instructor will use theoretical basis, extended onto the practical examples of success and mistake stories, backed up with the videos and tabletop exercises.

## ORGANISATIONAL IMPACT

- The organization will acquire structured and effective method to implement Road Asset Management solutions, manage to cut costs and improve their organization workflow through the proper application of Road Asset Management systems.

The participants on this training course, will:

- Benefiting from clarifying and summarizing the complex information from the roads
- Adopt organized and planned way of Road Maintenance
- Improve the comprehension of the complex document for Road Maintenance
- Improve its operational processes, polices and workflows
- Reduce operational risks, reduce costs and improve Road Asset Management efficiency
- Create a fertile ground for a culture of shared responsibility for road asset management
- Reduce costs of road construction and maintenance
- Improve their public image

## PERSONAL IMPACT

Upon attending this training course, all participants are to gain a deep & solid understanding and practical experience in application and operation of Road Asset Management through the following:

- Learn how to organize the Road Asset and Road Maintenance
- Develop a clear creation process
- Learn the steps of planning and implementing Road Asset Management
- Use the modern and/or better solutions
- Planning and budgeting for road asset maintenance and road asset management
- Recognize the usability of new trends in Road Asset and Road Maintenance
- The road asset management data acquisition and analysis

## WHO SHOULD ATTEND?

- This Road Asset Management training course is suitable to a wide range of professionals but will greatly benefit, those who are involved and responsibility for the maintenance, construction and upgrade and of the road infrastructure.

This training course is suitable to a wide range of professionals but will greatly benefit:

- Project Managers
- Highway and Road Engineers
- Traffic and Transportation Planners
- Traffic and Transportation Engineers
- Incident Response Team Members
- Application Designers
- Law Enforcement Professionals
- IT Professionals

## Course Outline

### Introduction of Road Asset Management

- What is Asset Management?
- Why Asset Management?
- Purpose of Asset Management
- Benefits of Asset Management
- Review of Current Practice
- Defining Desired Practice
- Transport Modes



### Asset Management Plan

- Road Classification
- Data Collection-modern Tools and Techniques
- Preparing an Asset Management Plan
- Processes, Tools, and Data to Support Asset Management
- Risk Assessment and Management
- Transportation Asset Management Information Systems
- Implementation Plan
- Exercise: Make your Plan On

## Implementing Road Asset Management

- Starting Point
- Levels of Service
- Option Identification
- Decay Forecasting
- Material Reuse
- Road Construction as maintenance option
- Decision Making
- Decision Making
- Service Delivery
- Reporting and Monitoring

## Paved and Unpaved Roads

- Highway Asset Management Strategy
- Other Paved Roads
- Organizational Structure
- Network Management Group
- Budget Allocation Process
- Summary of Highway Infrastructure Assets
- Asset Groups, Components and Activities
- Strategic Level – Needs Based Budgeting Criteria
- Other Paved Roads
- Unpaved Roads Upgrade



## Road Maintenance

- Preventive Road Maintenance
- Road Emergency Repairs
- Road Rehabilitation
- Road Reconstruction
- Future Gap Analysis Tool