

Course No. 1678

Strategic Maintenance Management for Public Assets

**PUBLIC ASSET & FACILITIES MANAGEMENT
GOVERNMENT & PUBLIC SECTOR**

DURATION

5 Days

DELIVERY

Classroom



Course Overview

The Strategic Maintenance Management for Public Assets Training Course provides a comprehensive framework for managing the maintenance of public assets as a strategic organizational function rather than a purely operational activity. The course focuses on how government entities and public-sector organizations can improve asset reliability, service continuity, cost efficiency, risk control, and long-term asset value through structured and performance-driven maintenance strategies.

Public assets such as buildings, roads, utilities, transportation infrastructure, public facilities, mechanical and electrical systems, and critical infrastructure require systematic maintenance throughout their operating life. Poorly planned maintenance can increase lifecycle costs, reduce service availability, accelerate asset deterioration, and create operational and safety risks. This course equips participants with practical approaches for developing maintenance strategies that reflect asset criticality, condition, service requirements, available resources, and organizational priorities.

The program covers strategic maintenance planning, asset criticality, preventive and predictive maintenance, condition-based maintenance, reliability-centered approaches, maintenance prioritization, work management, resource planning, maintenance budgeting, contractor management, and performance measurement. Participants will learn how to connect maintenance activities with asset management objectives and public service requirements while improving the efficiency and effectiveness of maintenance resources.

A key focus of the course is the development of risk-based and lifecycle-oriented maintenance strategies. Participants will examine how to prioritize maintenance interventions according to asset criticality, failure consequences, condition, service impact, and available budgets. The course also addresses maintenance backlogs, deferred maintenance, renewal planning, spare parts, workforce requirements, contractor performance, and the use of digital systems and asset data to strengthen maintenance decision-making.

Through practical exercises, case studies, maintenance strategy workshops, asset prioritization activities, and performance analysis, participants will develop the ability to create actionable maintenance plans for public assets. The course supports ministries, municipalities, public authorities, government-owned organizations, infrastructure operators, utilities, transportation

organizations, and other public-sector entities seeking to improve the reliability, sustainability, and value of their asset portfolios.

Objectives

- Analyze the strategic role of maintenance management in protecting public assets and sustaining service delivery.
- Assess the condition, criticality, operational importance, and maintenance requirements of public assets.
- Develop maintenance strategies aligned with asset lifecycle requirements, service levels, risks, and organizational priorities.
- Evaluate preventive, predictive, condition-based, and corrective maintenance approaches and determine their appropriate application.
- Apply risk-based methods to prioritize maintenance activities according to asset criticality and failure consequences.
- Develop structured maintenance plans that define activities, frequencies, resources, responsibilities, and priorities.
- Evaluate maintenance backlogs and deferred maintenance requirements and establish practical intervention priorities.
- Improve maintenance resource planning across workforce, equipment, materials, spare parts, and external contractors.
- Analyze maintenance costs and lifecycle considerations to support effective budgeting and resource allocation.
- Develop performance indicators for measuring maintenance effectiveness, asset reliability, service availability, and work management.
- Strengthen contractor and service-provider performance management through clear maintenance requirements and measurable service levels.
- Design a strategic maintenance management framework for public assets by the end of the course.

Who Should Attend

This training course is designed for Public Asset Managers, Facilities Managers, Maintenance Managers, Infrastructure Managers, Engineering Managers, Operations Managers, Property Managers, Reliability Professionals, Maintenance Planners, Asset Management Specialists, and professionals responsible for maintaining government-owned buildings, infrastructure, equipment, and public facilities.

The course is particularly relevant to professionals working in ministries, municipalities, government authorities, public utilities, transportation organizations, airports, ports, public housing organizations, healthcare facilities, educational institutions, energy organizations, and other public-sector entities with significant asset portfolios. It is also suitable for professionals involved in asset management, engineering, procurement, contracts, budgeting, operations, and infrastructure planning.

The program will benefit executives, department heads, senior managers, budget holders, project managers, contract managers, and decision makers responsible for maintenance strategy, asset performance, service continuity, operational risk, and long-term investment planning. It provides practical approaches for connecting maintenance decisions with public service outcomes, financial priorities, and organizational performance.

Learning Outcomes

- Explain the strategic principles of maintenance management for public assets.
- Assess public asset criticality, condition, service importance, and maintenance requirements.
- Develop lifecycle-based maintenance strategies for different categories of public assets.
- Select appropriate preventive, predictive, condition-based, and corrective maintenance approaches.
- Prioritize maintenance activities using asset criticality, risk, condition, and service impact.
- Develop structured maintenance plans with defined activities, frequencies, responsibilities, resources, and priorities.
- Analyze maintenance backlogs and deferred work to establish realistic intervention priorities.
- Develop maintenance resource plans covering workforce, materials, equipment, spare parts, and contractors.
- Evaluate maintenance costs and lifecycle implications to support budgeting and investment

decisions.

- Develop maintenance performance indicators for reliability, availability, cost, productivity, and service quality.
- Evaluate contractor maintenance performance against defined requirements and service levels.
- Develop a practical strategic maintenance framework for improving the performance and sustainability of public assets.

Course Outline

DAY 01

Strategic Maintenance Management & Public Asset Performance

- Strategic role of maintenance in public asset management and service delivery
- Public asset portfolios, asset criticality, service levels, and operational priorities
- Relationship between maintenance, asset lifecycle, reliability, risk, and cost
- Maintenance governance, policies, responsibilities, and decision-making

PRACTICAL APPLICATION

Assess a public asset portfolio and identify critical assets, service requirements, and strategic maintenance priorities

DAY 02

Maintenance Strategies, Reliability & Risk-Based Prioritization

- Preventive, predictive, condition-based, corrective, and proactive maintenance
- Asset criticality assessment and maintenance prioritization
- Failure consequences, operational risks, and service continuity
- Reliability-focused maintenance strategy development

PRACTICAL APPLICATION

Develop a risk-based maintenance strategy for a selected group of public assets

DAY 03

Maintenance Planning, Work Management & Resource Optimization

- Maintenance planning and scheduling principles
- Work identification, work orders, backlog management, and maintenance priorities
- Workforce, equipment, materials, and spare parts planning
- Maintenance budgeting and resource allocation

PRACTICAL APPLICATION

Develop a maintenance plan and resource schedule for a public facility or infrastructure asset portfolio

DAY 04

Lifecycle Maintenance, Contractors & Performance Management

- Lifecycle maintenance planning and deferred maintenance management
- Maintenance cost analysis and lifecycle value considerations
- Contractor management, service requirements, and service-level agreements
- Maintenance performance measurement and Key Performance Indicators

PRACTICAL APPLICATION

Evaluate maintenance performance and develop improvement actions for internal teams and external service providers

DAY 05

Strategic Maintenance Framework & Continuous Improvement

- Developing a public asset maintenance policy and strategic framework
- Integrating maintenance planning with asset management, capital planning, and service objectives
- Maintenance risk management, performance reviews, and continuous improvement

DAY 05 — CONTINUED

- Digital maintenance systems, asset data, and decision-support practices

FINAL WORKSHOP

Develop a Strategic Maintenance Management plan for public assets covering asset priorities, maintenance strategies, risk assessment, resource requirements, budgets, performance indicators, contractor management, and implementation priorities

Register or Request More Information

Course page: <https://quest-training.com/courses/strategic-maintenance-management-for-public-assets>

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