

## TRAFFIC DATA COLLECTION AND ANALYSIS TRAINING

*“Gather, Analyze, and Interpret Traffic Data to Make Informed Transportation Decisions”*

### Schedule

Venue (InHouse)	Fees
At Your Organization Premises	Ask For The Quotation

► **Available delivery methods:** In-House Training

### Introduction

Effective traffic management and transportation planning require accurate and comprehensive traffic data. Understanding traffic volumes, patterns, and road user behavior is crucial for designing safe, efficient, and sustainable transportation systems. This course on Traffic Data Collection and Analysis provides participants with practical skills to collect, process, and analyze traffic data using modern tools and techniques.

Participants will learn methodologies for traffic counting, vehicle classification, speed studies, origin-destination surveys, and data interpretation. The training emphasizes hands-on exercises and real-world case studies to enable participants to make data-driven decisions for road safety, traffic flow optimization, and infrastructure planning.

### Objectives

By the end of this course, participants will be able to:

- Understand the principles and importance of traffic data collection.
- Learn different traffic data collection methods: manual, automatic, and video-based.
- Conduct traffic volume, vehicle classification, and speed studies.
- Perform origin-destination surveys and pedestrian/cycle counts.
- Analyze traffic data using statistical and software tools.
- Interpret data for traffic management, road design, and policy planning.
- Prepare professional traffic analysis reports and visualizations.
- Apply best practices for data accuracy, reliability, and consistency.

## Why Attend

Accurate traffic data is the foundation of successful transportation planning, road safety programs, and infrastructure development. This course equips traffic engineers, planners, and professionals with the practical skills to gather reliable data and derive actionable insights. Participants gain hands-on experience, enhancing their ability to make informed decisions that improve traffic flow, reduce congestion, and support sustainable urban mobility.

## Target Audience

This course is suitable for:

- Traffic and Transportation Engineers
- Urban Planners and Road Safety Professionals
- Traffic Surveyors and Data Analysts
- Civil Engineers involved in transportation projects
- GIS and Planning Professionals
- Students and Graduates interested in transportation engineering

## Individual Benefits

- Gain practical experience in traffic data collection and analysis techniques.
- Improve analytical skills for interpreting traffic patterns and behavior.
- Learn to use software tools for traffic data analysis.
- Enhance problem-solving capabilities in traffic and transportation planning.
- Increase professional value and employability in traffic and transportation projects.
- Develop confidence in conducting surveys, interpreting results, and making recommendations.

## Organizational Benefits

- Improve project planning and decision-making with reliable traffic data.
- Optimize road design, traffic flow, and infrastructure utilization.
- Enhance safety measures and reduce traffic congestion.
- Standardize traffic data collection and reporting procedures across teams.
- Support evidence-based planning and policy-making.
- Build in-house expertise for traffic management and transportation analysis.

## Instructional Methodology

The training employs a practical, project-based approach through:

- Interactive demonstrations of traffic data collection methods
- Hands-on exercises with manual counts, sensors, and video tools
- Case studies from real-world traffic surveys
- Step-by-step data analysis tutorials using statistical and traffic software
- Group discussions and collaborative exercises for interpretation
- Assignments focusing on actual traffic scenarios
- Continuous feedback and Q&A sessions for individual improvement

### Course Outline

- Module 1: Introduction to Traffic Data Collection and Its Importance
- Module 2: Traffic Volume Studies – Manual and Automatic Methods
- Module 3: Vehicle Classification and Speed Studies
- Module 4: Origin-Destination Surveys and Pedestrian/Cycle Counts
- Module 5: Traffic Data Processing and Statistical Analysis
- Module 6: Software Tools for Traffic Data Analysis (Excel, SPSS, or specialized software)
- Module 7: Interpretation of Traffic Data and Identifying Patterns
- Module 8: Traffic Flow and Congestion Analysis
- Module 9: Reporting and Visualization of Traffic Data
- Module 10: Capstone Project – Comprehensive Traffic Data Collection and Analysis

### Certification

Upon successful completion, participants will receive a Certificate in Traffic Data Collection and Analysis Training, recognizing their skills in gathering, analyzing, and interpreting traffic data for informed transportation planning and management.

### Why Choose MAWA Events

- **Global Expertise:** More than 17 years of experience in professional training and consulting.
- **Industry-Leading Faculty:** Courses delivered by seasoned professionals with hands-on experience.
- **Practical Insights:** Learn to turn theory into actionable strategies for real-world business impact.
- **Client-Focused Solutions:** Customized programs designed to achieve your organisation’s unique goals.

#### In-House / Customized Training

Interested in running this course for your team?  
Please contact us:

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