Road Safety Impact Assessments for Projects Training Course

Professional Development Training Course Outline

Category	Traffic Management & Road Safety	**Duration**	10 Days
Base Fee	$3,000 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

Road safety is a critical component of sustainable infrastructure development, and assessing the potential impacts of projects on traffic safety is paramount for saving lives and reducing accident risks. The Road Safety Impact Assessment (RSIA) process integrates advanced methodologies, including risk analysis, traffic modeling, and GIS-based evaluations, to ensure that both new and existing projects align with global road safety standards. Road Safety Impact Assessments for Projects Training Course equips professionals with the knowledge to identify, quantify, and mitigate potential safety hazards, thereby supporting evidence-based decision-making in transportation planning. Participants will explore cutting-edge techniques for accident prediction, safety audits, and multi-modal traffic risk evaluation to enhance project safety outcomes.

This practical, hands-on training program is designed for engineers, planners, and safety practitioners aiming to strengthen their expertise in road safety management and impact assessments. Leveraging case studies from international and local projects, participants will gain exposure to real-world scenarios, enhancing their ability to implement proactive safety measures. Through interactive sessions, group exercises, and data-driven simulations, learners will develop the capacity to integrate sustainable safety solutions into all stages of project design, construction, and operation. By the end of the program, participants will be confident in conducting comprehensive RSIA reports that comply with ISO 39001 standards and other global best practices.

Programme Curriculum

Road Safety Impact Assessments for Projects Training Course

Introduction

Road safety is a critical component of sustainable infrastructure development, and assessing the potential impacts of projects on traffic safety is paramount for saving lives and reducing accident risks. The Road Safety Impact Assessment (RSIA) process integrates advanced methodologies, including risk analysis, traffic modeling, and GIS-based evaluations, to ensure that both new and existing projects align with global road safety standards. Road Safety Impact Assessments for Projects Training Course equips professionals with the knowledge to identify, quantify, and mitigate potential safety hazards, thereby supporting evidence-based decision-making in transportation planning. Participants will explore cutting-edge techniques for accident prediction, safety audits, and multi-modal traffic risk evaluation to enhance project safety outcomes.

This practical, hands-on training program is designed for engineers, planners, and safety practitioners aiming to strengthen their expertise in road safety management and impact assessments. Leveraging case studies from international and local projects, participants will gain exposure to real-world scenarios, enhancing their ability to implement proactive safety measures. Through interactive sessions, group exercises, and data-driven simulations, learners will develop the capacity to integrate sustainable safety solutions into all stages of project design, construction, and operation. By the end of the program, participants will be confident in conducting comprehensive RSIA reports that comply with ISO 39001 standards and other global best practices.

Course Duration

10 days

Course Objectives

1. Understand the principles and frameworks of Road Safety Impact Assessments (RSIA).
2. Identify key road safety risks associated with infrastructure projects.
3. Learn advanced traffic data collection and analysis techniques.
4. Apply accident prediction models for project planning.
5. Conduct safety audits using global best practices.
6. Integrate GIS and digital mapping tools in RSIA studies.
7. Develop risk mitigation strategies for road safety enhancement.
8. Implement sustainable road safety interventions.
9. Evaluate policy, regulatory, and legal requirements for RSIA.
10. Utilize multi-modal transportation safety assessment methods.
11. Design monitoring and evaluation plans for ongoing safety improvements.
12. Apply case study lessons from real-world project scenarios.
13. Prepare comprehensive RSIA reports for decision-makers and stakeholders.

Target Audience

1. Civil and transportation engineers
2. Urban and regional planners
3. Road safety auditors and consultants
4. Project managers in infrastructure development
5. Policy makers in transport and urban safety
6. Traffic and highway safety researchers
7. Road construction contractors
8. Government regulators and safety inspectors

Course Modules

Module 1: Introduction to Road Safety Impact Assessment

- Overview of RSIA principles and objectives
- Importance of road safety in project planning
- Key international guidelines
- Benefits of proactive safety assessments
- Case study: RSIA integration in a highway expansion project

Module 2: Road Safety Legislation and Policy Framework

- National and international road safety laws
- Regulatory compliance in project planning
- Role of government and agencies
- Policy instruments for accident reduction
- Case study: Legislative impact on urban road safety projects

Module 3: Road Safety Risk Identification

- Types of road hazards and risk factors
- Crash data analysis techniques
- Human, vehicle, and environmental factors
- Prioritizing risks for intervention
- Case study: Risk identification in a multi-modal corridor

Module 4: Traffic Data Collection Methods

- Vehicle counts and speed surveys
- Pedestrian and cyclist data collection
- Automated traffic monitoring technologies
- Data quality control and validation
- Case study: Using smart sensors for data-driven RSIA

Module 5: Crash Analysis and Prediction Models

- Accident severity and frequency analysis
- Predictive crash modeling techniques
- Statistical and GIS-based approaches
- Identifying high-risk locations
- Case study: Predictive modeling for a highway redesign

Module 6: Safety Audits and Inspections

- Principles of road safety audits
- Pre-construction and post-construction audits
- Checklists and reporting formats
- Hazard identification techniques
- Case study: Safety audit in a complex urban intersection

Module 7: Road Design and Safety

- Safe geometric design principles
- Traffic calming measures
- Intersection and pedestrian design
- Roadside safety and barrier assessment

- Case study: Safety-focused redesign of an arterial road

Module 8: Road User Behavior Analysis

- Driver, pedestrian, and cyclist behavior studies
- Human factors and accident causation
- Behavioral interventions and awareness campaigns
- Enforcement strategies for safer roads
- Case study: Behavioral assessment in school zones

Module 9: Multi-Modal Transport Safety Assessment

- Assessing buses, bicycles, pedestrians, and e-mobility
- Integrated safety planning for diverse users
- Conflict points and risk mitigation
- Urban mobility safety strategies
- Case study: Multi-modal RSIA for a city center corridor

Module 10: GIS and Digital Tools in RSIA

- Mapping accident hotspots
- Route analysis using GIS software
- Integrating spatial data into RSIA reports
- Visualization for decision-making
- Case study: GIS-driven safety improvement in rural highways

Module 11: Risk Mitigation Strategies

- Engineering countermeasures
- Education and enforcement interventions
- Policy and planning solutions
- Cost-benefit analysis of safety measures
- Case study: Comprehensive mitigation in a highway project

Module 12: Sustainable Road Safety Interventions

- Green infrastructure and road safety
- Low-emission and safe mobility solutions
- Long-term safety and environmental planning
- Community involvement in safety projects
- Case study: Sustainable safety design in urban redevelopment

Module 13: Monitoring and Evaluation

- Key performance indicators for road safety
- Post-implementation monitoring techniques
- Continuous improvement processes
- Reporting and feedback mechanisms
- Case study: Longitudinal safety evaluation of a freeway project

Module 14: Report Preparation and Communication

- Structure of RSIA reports

- Effective visualization and presentation techniques
- Tailoring reports for stakeholders
- Executive summary and recommendations
- Case study: High-impact RSIA report presentation

Module 15: Hands-on Workshops and Simulations

- Real-world RSIA simulation exercises
- Group projects with risk assessment
- Data interpretation and recommendation drafting
- Interactive case studies and role play
- Scenario: Safety planning for a new expressway

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call +254769199797

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	04 Dec 2026	Online	$2,000
23 Nov 2026	04 Dec 2026	Physical	$3,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$6,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$9,000
23 Nov 2026	04 Dec 2026	Physical	$12,000
23 Nov 2026	04 Dec 2026	Physical	$12,000

Ready to enroll or request a customized program? Book online or contact us:

Register Online Now

Email: info@fineskilltrainingcenter.com | Website: www.fineskilltrainingcenter.com