



Transport Modelling for Non-Modellers

2 Day Programme

Overview

The modelling of junctions, road networks and public transport systems provides fundamental information to support decisions taken on future land uses, investment in the transport system and other policy interventions. With modelling tools ranging from "simple" equations through to highly complex mathematical, algorithm based systems, many people responsible for commissioning modelling activities find modelling a daunting area of responsibility. This course provides an introduction to the modelling tools commonly used, providing delegates with an understanding of the applicability of different models to various situations, and equips practitioners with simple techniques for checking model outputs

Who should attend

The course is designed for people with limited or no experience of transport modelling activities who are responsible for requesting or commissioning models....

Day One

Overview of Modelling

- Reasons for using a model
- Applications, main components, available software

Commissioning Models

- Time and cost implications of model development
- Contractual considerations, guidance and best practice
- Auditing models and what can go wrong

Future Growth

- Overview of forecasting and growth
- Reference case study and options testing

Local Models - Junctions:

- Overview of common packages, limitations and mistakes

Local Models - Microsimulation

- Overview of types of models and when to use microsimulation

Local Models - Case Study Work

... such as those working in the fields of strategic transport planning, strategic land use planning, development management and economic growth/regeneration. It is also suitable for those with managerial responsibility for modelling teams, who are looking for a broad overview of techniques and issues.

- ✓ Reasons for using models
- ✓ Forecasting
- ✓ Main components
- ✓ Guidance data requirements
- ✓ Option testing and scheme appraisal
- ✓ Model types: advantages, disadvantages and limitations
- ✓ Illustrated by case studies and group work

Day Two

Strategic Models - Demand

- Overview of strategic and multi-modal models
- Four stage modelling, demand and network building

Strategic Models - Highway

- Overview of strategic highway assignment models
- Demand and network building

Strategic Models - Public Transport

- Overview of types of models and when to use
- Building network and demand

Scheme Appraisal

- Major scheme business case
- Economic evaluation and wider economic benefits
- Guidance, tools, and common issues

Larger Models - Case Study Work

Pedestrian Modelling

- Overview of types of models and when to use them
- Building network and demand; and 2D/3D graphics

Future of Modelling

- Emerging data sources, changes in behaviour, home working and activity-based modelling

Emerging Technologies

- Modelling cycling
- Modelling the near future for traffic management

