



## **EMME Users' Group Meeting**

# **NSW Modelling Guidelines - Highway Assignment**

27 May 2011

# PROJECT SCOPE

- Highway Modelling Techniques
- Not Prescriptive or Detailed
- Summary of Relevant Standards and Guidelines
- Meso and Macro Level Models only

	Macro Focus	Micro Focus
Analytical technique	Macro-scopic models	Micro-analytical models
Simulation Technique	Meso-scopic models	Micro-simulation model

- Topics were set at a workshop with RTA and BTS reps

# Key References

- Traffic Modelling Guidelines, TfL Traffic Manager and Network Performance Best Practice, Transport for London.
- Guidelines for Selecting Techniques for Modelling Network Operations, Austroads Research
- Design Manual For Roads and Bridges, DOT (UK)
- Economic Evaluation Manual. NZ Transport Agency.
- A Primer for Dynamic Traffic Assignment. TRB

# Draft guideline contents

- Model type selection using a suitability scoring method suggested by Austroads
  - Review the project context
  - A preliminary analysis to establish the need for modelling and to refine the functional specifications for the model solution.
  - Review the elements of the traffic system relevant to the functional specifications using a worksheet of suitability scores.
  - Assess the various model types by adding up the suitability scores.

## Draft guideline contents (cont)

- Model scope and specifications
- Model software
- Broad model development procedure
- Network familiarisation
- Data acquisition
  - Typical traffic conditions
  - Traffic surveys
  - Passenger Car Units
  - Signal phasing and timing data
  - Bus vehicle and bus lane usage

## Draft guideline contents (cont)

- Scale of study area and network
- Zones, nodes, connectors and links
- Intersection coding
- Representation of tolls
- Demand matrices
- Assignment
- Blocking back
- Convergence
- Base model calibration and validation
- Scenario modelling and reporting

# Timing

- Preliminary draft is currently with RTA
- Workshop with RTA & BTS (within 2 weeks)
- Final draft to RTA (mid June)
- Full guideline draft for initial use and comment