Task 5.3 Upgrade Base Year Public Transport Networks

This particular model uses EMME/2, where bus services use the road network and there is a separate rail network.

Inputs

- Timetables
- Existing model networks

Processing

- network structure:
  - compare coded rail link distances with crow-fly calculation
  - extend network to connect with the revised zoning system
  - check coded rail times against the timetable, update as necessary
  - review bus speeds/times and the interface with road assignment (a relationship between bus journey times and car times was developed: see Outcomes)
  - review mode and vehicle type definitions against current and potential segmentation (e.g. express, all-stops, flyer buses, ferry, rail ...)
  - update centroid connectors as necessary and for new zoning system (see Outcomes, for how centroid connectors to railway stations were addressed)
- services: check bus and rail services against timetables or, in the case of bus, observation
- set up fares tables or specify process for extracting fares from the networks
- network parameters:
  - implement interchange penalties
  - specify intended routeing criterion (with without fares) and use sensitivity tests to determine the optimum routeing criteria, and the appropriate weightings for bus and rail journey times and boarding penalties
- review approach to park & ride assignment (recognising that the approach may be developed further in later model versions)
- test/validate the networks using test paths, independent data on rail and bus loads etc.

Outputs

2001 Network.
Technical Note.