

Task 2.16 Inputs to Model Calibration

This short paper notes the data that we will need prior to starting model calibration.

All sub-models:

- ❑ matrix sectorisations (ie zonal aggregations) for diagnostic analyses, including the zones comprising the CBD¹ ;
- ❑ time period, purpose and segment (person type, household type, vehicle type, car availability) definitions.

Trip productions, from the

- ❑ household survey (processed, unexpanded)

Trip attractions, from the

- ❑ household survey (processed, expanded and bias corrected);
- ❑ external survey (processed and expanded), to identify the internal attractions of non-residents;
- ❑ planning data: zonal population and employment by category, land area and other zonal activity indicators (shopping centres by type, key recreational attractors etc);
- ❑ ports and airports generation data, as available.

Car ownership, from the:

- ❑ household survey (processed, unexpanded);
- ❑ census car ownership by zone (for each of the 5 household types: no. of 0 car, 1 car, 2 car, 3+ car households and total cars – note confirm the definition of ‘cars’ from the census);
- ❑ processed networks: if we are to examine accessibility (further we need to generate some aggregate time period accessibility values);
- ❑ expanded household data for sample enumeration?

Car ownership trend model:

- ❑ specify the required historic data (by year: cars, GDP, fuel prices etc)

Distribution/Mode Choice:

- ❑ household survey: processed, expanded and bias corrected;
- ❑ non-residents trip matrix from external road surveys;
- ❑ processed networks.

Family structure:

- ❑ household survey (processed, expanded and bias corrected).

Time period factors:

- ❑ household survey (processed, expanded and bias corrected).

¹ Central Business District

Processed networks:

- ❑ completed networks;
- ❑ base road network calibration to estimate current journey times; requiring validation counts and speeds;
- ❑ specification of generalised costs, in turn covering such issues as parking, fares etc.

This is summarised in the table, with the nomenclature I hope being obvious.

Data Source	Sub-Model					
	P	A	CO	DMS	FS	TPF
Household survey, unexpanded	X		X	X		
Household survey expanded		X	X?	X	X	X
External surveys		X		X		
Planning data		X				
Processed networks			X?	X		
Census data			X			