

Task 1.4.4 Household Survey Trip Linking

Inputs

Household survey data base.

Processing

Specify the trip linking process. In drawing up the specification, it is wise to look carefully at the data to ensure that the trip-linking specification covers most issues.

The task is likely to involve:

- identifying sequences of trip stages that form a single trip;
- converting the trip stage records into a trip record; typically, this will include resetting:
 - the end time to that of the last stage,
 - the destination purpose to that of the last stage,
 - the mode of travel where more than one mode is used for the stages of a trip, based typically on the combination of a modal hierarchy and the mode used for the greater part of the trip (see below),
 - parking cost, from the appropriate final car stage,
 - for car trips, the number of passengers (using some appropriate logic where the number of passengers varies between the stages).

Specify the main mode of transport, as follows:

- specify a modal hierarchy (eg ferry, rail, bus, car driver, car passenger, cycle, walk);
- also calculate the crow-fly distance travelled by each transport mode on each trip stage;
- compute main mode based on both the hierarchy and the distance travelled;
- cross-tabulate and identify proportion of data where the main mode is different for the two tests;
- check a sample of trips where these tests are inconsistent and develop a preferred approach to trip-linking in these circumstances;
- specify final mechanism for identifying main mode.

Outputs

A trip file in the survey data base.

Note.