

Task 1.10 Count Data Processing

Task 1.10.1 Data Acceptance

Inputs

Tube and manual counts from traffic count survey.

Existing count data from Transit and TAs, including historical data and seasonal data.

Historical counts on ART2 screenlines (spreadsheet from ARC).

Internal OD (if undertaken) and External RSI surveys: surveyed trips, classified.

ETM data for buses.

2006 rail and ferry count data.

Processing

- 1) Collation of existing traffic count data from Transit, TAs, etc
- 2) Process traffic count and PT data into a convenient form for data acceptance tasks
- 3) Review data for completeness, reliability, etc, including:
 - Construct historical time series of data where possible, making use of ARC database of historical data on ART2 screenlines; collate other easily available historical data; check trends in data
 - For traffic counts:
 - Compare manual and tube counts at common sites, in total and by light vehicles and MCV/HCV;
 - Compare vehicle type percentages from External Cordon Survey (the surveys and manual counts) and manual counts from TCS manual sites;
 - Any other checks considered worthwhile, such as on directional proportions, upstream/downstream consistency, daily counts versus weekly averages;
 - Hence identify deficiencies and gaps in data and determine appropriate course of action (estimation of data, recounting, etc)

Outputs

Traffic count data files for Preliminary Studies Tasks 2.4 and 2.7

PT data files

Note

Task 1.10.2 Traffic Count Processing – Count Databases

Inputs

Count data

Note on modelled time periods from Preliminary Studies Task 2.4

Light non-commercial vehicle (LNV) to LCV factors from Preliminary Studies Task 2.7

Processing

Seasonal adjustment

- 1) For sites with continuous count data compute monthly adjustment factors based on daily flows. Apply these factors to the other sites to give seasonally-adjusted counts.

Screenlines, Centres and CV Generators

- 2) Set up count database(s) such that data can be extracted separately by modelled time period and vehicle type for:
 - Matrix estimation for the commercial vehicle model and generally,
 - Model validation,
 - Town, commercial and sub-regional centres
- 3) Apply LNV-LCV proportions and to give seasonally-adjusted 15 minute counts by three vehicle types at every site.
- 4) Aggregate data into modelled time periods.
- 5) Create linkage with model network (this could use the link definitions, i-j nodes, or some other identifier) so count data can be imported into model databank and modelled flows extracted and imported into count database.
- 6) For the CV generators, extract into a separate database MCV/HCV counts by time period by generator.

Port

- 7) Process in a separate database collated count data for Ports of Auckland and Metroport into MCV/HCV counts by modelled time period.

Airport

- 8) Process in a separate database collated and surveyed count data each site at the Airport into counts by modelled time period.

Outputs

Separate databases of counts for:

- Validation screenlines
- Estimation screenlines
- Centres,
- CV generators
- Ports
- Airport

Note

Task 1.10.3 Public Transport Count Processing

ETM data is required for expansion of the PT Intercept Survey data.

Inputs

2006 ETM data

2006 rail and ferry counts

Processing

- 1) Process ETM data into counts by surveyed corridors, direction, ticket-type (if available) and surveyed time periods.

Outputs

ETM database for buses

Note