

fieldworkers new to the survey. The initial training session should cover the following objectives:

- Introduction to ticket queuing surveys;
  - Use of hand held recording devices;
  - Review of assessor documentation;
  - Dummy assessments conducted in field; and
  - Health and safety requirements.
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- Monitoring of fieldworkers – agencies should recommend what level of monitoring and actions taken to introduce new fieldworkers to the surveys. For long serving fieldworkers agencies must state how they will ensure no "bad habits" have developed
  - Limits on the number of shifts fieldworkers can undertake each period and how to control this. Although there are benefits to a small, highly skilled panel of fieldworkers TfL wishes to limit high levels of fieldworker effect influencing the data.
  - Supervision of fieldworkers and spot-checking is of prime importance to ensure interviewer variance is kept to a minimum
  - Variety of shifts distributed to individual fieldworkers – how to control over familiarity/fatigue (e.g. rotation of shifts)
  - Procedures for dealing with poor quality fieldwork and fieldworker performance – rescheduling of shifts (at no cost to TfL)
  - Ensuring that proper scheduling has been carried out, i.e. no back to back scheduling

## 6.2 DATA CHECKING AND VALIDATION PROCEDURES

Agencies should state how they intend to deal with each of the following issues:

- How to monitor that data has been collected at the correct times and locations (correct stations, ticket halls and routes). Any missed or incorrect shifts will need to be investigated with the surveyors and will need to be rescheduled if due to fieldworker error
- Procedures for data entry, what/when checks take place

- Procedures for validating data
  - An automated system to check the NLC code, the ticket hall code, the date entered (including shifts that have been re-scheduled) and start time is valid
  - Checks to ensure queue timing is consistent with queue length and vice versa
  - Checks of high queue lengths to ensure that they are not data collection / processing areas
- Correct formatting of data sets
- Responsibility for signing off data at different stages (and at what level)

It is expected that all data checks mentioned above are achieved through an applied processes that is clearly documented, using both a data validation and a clear process flow chart to show the complete cycle of the data from start to finish

In addition to the above quality control procedures, basic "common sense" checks should be undertaken on 100% of the data by the agency. TfL will reject any data that fails these checks and the agency will be responsible for re-submitting correct data at their expense until TfL is fully satisfied with the accuracy and validity of results.

The minimum POMs "common sense" checks are:

- Valid NLC code and ticket hall code
- Valid date entered (including shifts that have been re-scheduled)
- Number of queue data columns equals number of machines surveyed
- Number of columns equals maximum of 12 (10 containing queue data)

The minimum TOMs "common sense" checks are:

- Valid NLC code and ticket hall code
- Valid date entered (including shifts that have been re-scheduled)
- Queue time vs. queue lengths checks need to be undertaken to ensure that the following do not occur:
  - That a timing is recorded, yet no queue length
  - A queue length is recorded, yet the timing is zero
- High queue lengths/times - check that high queue lengths/times are not data processing errors (for all queue lengths > 10 people)
- Number of columns equals 22