Annex C

Guide to the Sydney walking audit (spreadsheet)

General

The Excel spreadsheet (Annex B) includes a range of walking audits, each fulfilling a different purpose. These were devised by Pharoah and Stüssi. The table below describes the purpose of each tab (worksheet) in the spreadsheet.

Tab (worksheet) name	Purpose	Comments
Context	Provides information about the function and character of streets in the area	This could be useful when drawing up proposals, but consulting the relevant GIS layers may be equally effective
Crossings	To audit the quality of crossings	For greater simplicity, a number of parameters found in PERS are not included: Crossing provision; Performance; Legibility; Gradient; Obstructions; Maintenance.
Links	To audit the quality of links (between crossings)	Footways either side of the street can be audited together or, if they are different in quality or character, separately.
Combined link parameters	To show the combined score of all link quality parameters	This is included to enable combined or separate category scores to be compared.
Links Traffic Data	To record pedestrian and vehicle traffic data	Specific traffic data related to the street being audited will be helpful for comparison with post-intervention data. For example, the number of pedestrians using the street can be shown to have increased by a specific percentage. Also, any change in vehicle traffic will show in terms of the amenity rating.
Area audit - 5Cs	For judging general walkability. This can help to pinpoint areas of the city where action is needed.	Optional, but can be rolled out across the city rapidly, in advance of detailed walking audits.
Other comments on sample areas	This tab provides space for other comments by the auditor on the areas being surveyed	Optional
Links with reference to street code	Provides specific measurement of footway widths in comparison with the Street Design Code standards (2013). This could be used to monitor progress towards Target 4.	Optional. Footway width is a parameter in the audit tool, with the adequacy of the width being judged by the auditor on the ground. Alternatively, this parameter could be filled using the GIS width data, and comparison with the standards set according to street classification. We have included this in the spreadsheet as a separate tab for convenience.
Route audit - speed	Relates to the Walking Strategy target (Target 3) to reduce walking times by 10%. Sample journeys have been surveyed to test the method.	This is separate from the links and crossings audits, because it relates to sample walking journeys. For progress towards the target to be measured, it is suggested that this type of survey is undertaken for a specified sample of routes across the City of Sydney. The sample journeys included in the test spreadsheet show that meeting the target will require wait times at signalised junctions and crossings to be reduced.
Route audit - amenity	Relates to the Walking Strategy target (Target 5) to improve walking amenity by 10% on main activity streets	An alternative set of parameters to the "Environment" category included in the Links tab. The option of merging these two sets into a single set could be considered.

Issues with the walking audit

Some issues with using the audit tools

1. The main task is to **select assessment criteria** that are appropriate to the objective of the audit, and relevant to the environment being assessed. Not all criteria are relevant in all circumstances. It is suggested that a comprehensive set of criteria are included in the audit tool, and then if necessary, particular criteria can be dropped from the survey and/or the analysis to cater for varying purposes and places.

2. A particular issue is that of scoring quality **features that are not part of a design standard** in Sydney can skew the overall result. For example, there is no comprehensive policy to provide tactile paving to assist people who are visually impaired, so the inclusion of this indicator will result in a lower score across the board.

3. There are issues with **scoring the criteria**. For example, surveyors may have differing perceptions of quality. The consultants, for example, gave a low rating to almost all the kerb ramps encountered in the sample areas because they do not meet good practice standards of design encountered in other countries. Local assessors may regard these ramps as "normal" and acceptable.

4. **Wayfinding** is not included in the audit tool. This is because without a clear picture of what wayfinding is required or useful, assessing its absence is not helpful. However, comments have been made on this aspect for the sample areas. We understand that a wayfinding strategy is being devised for Sydney.

5. Trees and soft **landscaping** are included as an element of the "shade" category in the Environmental tool. However, it should be noted that the PERS tool assesses it the other way round, with shade being a sub-category of soft landscaping. We consider that shade is a critical aspect of walking quality in the Sydney climate, and should receive its own category. A separate trees and soft landscaping category could be inserted in the Environment tool if desired, but it is not always the case that this is a positive aspect of the urban environment, and inconsistent results could occur (for example, trees and soft landscaping may not suit the character of some streets, and can obscure views and the appreciation of fine buildings).

6. The "**user conflict**" category that is found in PERS has been omitted from the Footway audit because it was perceived as being fairly rare, and can be noted in the survey comments. "User conflict" can also lead to double counting with the "obstructions" category. For example, café tables and chairs are "obstructions" to pedestrians, but are also an example of a conflict between café users and pedestrians passing

along the footway. However, we feel that a mix of activity can be a positive aspect of footways, and the issue is more about adequate widths. We would not want to see negative scoring in circumstances where the public realm supports mixed and lively activity.

A particular issue that could be well-served by the user conflict category is the mixing of cycling and pedestrians on footways. This was noticed in some parts of Sydney, although not in the sample areas. City officers may wish to give further consideration to how this issue is handled in the audit tool.

7. CCTV is included as a sub category in the "**personal security**" parameter in PERS. However, we have not included this in the sample audit because it is not clear whether its presence is a positive or negative feature. Cameras can indicate to people that the area is dangerous, rather than making them feel secure.

8. **Maintenance** is not regarded as necessary in a tool that will be used to monitor improvements over time, because improvements could be due to the maintenance cycle rather than infrastructure improvement projects. Also, auditing maintenance issues such as street cleanliness and foliage clipping, while important, are more to do with day-to-day management rather than infrastructure planning.

9. In the Crossings worksheet, example scores are given for where **particular parameters are excluded** from the total. Such exclusion might be appropriate when the parameter being assessed is not catered for in current policy. The examples used in the spreadsheet are "legibility for people with sensory impairment" (which is not generally provided for in Sydney), and the dropped kerb/ramp parameter, because the existing standard provision in Sydney does not meet inclusive mobility requirements. Thus in both cases crossings in Sydney will consistently attract a low score on these parameters, which could be regarded as producing an unwanted skew in the overall total. The issues raised on inclusive mobility first require to be dealt with in policy terms. If, for example, it were to be decided that tactile information should be provided at all crossings (as in the UK), then it would be appropriate to assess crossings on this parameter.

Modification of the audit tool

The indicators used in arriving at a score within a particular parameter can easily be changed. All that is needed is for the assessment form (see PERS example forms in Annex E) to be altered and/or for the auditors to be told how to score each parameter.

It is also easy for parameters to be omitted, either at the survey stage (e.g. to simplify the survey form and reduce the auditor's burden), or at the

analysis stage (e.g. if a particular parameter is considered irrelevant, or is leading to an inappropriate skewing of the overall score).

Adding parameters to the spreadsheet tool can also be done easily with the bespoke audit tool provided in this project, but the following consequences must be understood. Increasing the number of parameters:
- Reduces the differentiation within the overall scores, thus potentially making the audit less useful;
- Increases the burden on auditors, which can lead to poorer survey results through auditor fatigue.

It should be noted, however, that parameters cannot be added to the PERS off-the-shelf software. If PERS were to be used, modifications would have to be undertaken by the software developers (TRL), which would have a cost attached. An alternative to adding parameters would be to change the description of one or more parameters on the auditor's survey form, and to ignore this change for data entry. For example, if it was felt that a parameter for "shade" was important, but the existing "maintenance" parameter was not important, then the "maintenance" parameter could be achieved by re-assigning that row on the survey form to "shade". The auditor would not need to be aware of this change, but of course the data analyst would.