

This document discusses the Excel spreadsheet files supplied as part of the Analysis Output Data from the School Travel Health Check, and is divided into the following sections:-

1. Introduction
2. Getting started
3. Sharing files
4. Using the data

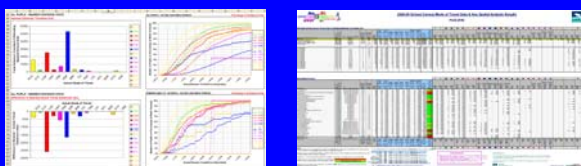
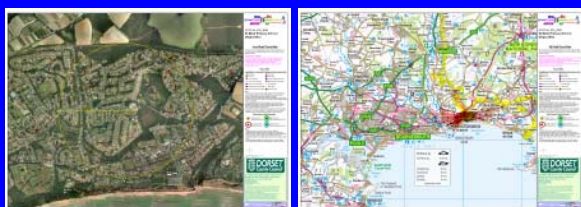
Annex 1 Summary Mindmap

It is one of a series supporting the delivery of the service to existing and potential users. The latest versions, along with sample data, are available to download from our website

www.schooltravelhealthcheck.co.uk

Or if you prefer the short address:

www.sthc.co.uk



“The School Travel Health Check is, in my opinion, an invaluable tool for all those interested in improving the health and wellbeing of children. It provides such crucial information that I don't see how we can do without it.”

Dr Gabriel Scally - Regional Director of Public Health for the South West

1. Introduction to the Spreadsheets (Standard STHC output)

1.1 Don't Panic...

Unless you are a regular Excel user you may feel overwhelmed when you first start to view the Excel files. This is perfectly normal....

The four steps to success:

- Don't Panic
- Put the kettle on...
- Print some of them out on big bits of paper

Remember we want you to get the best out of the data – if you get stuck contact us via the website

www.sthc.co.uk .

1.2 Brief Summary

The suite of Excel spreadsheets statistically summarise the spatial analysis data calculated for **individual pupils**. There are 3 basic statistical sets:-

- Mode of Travel Stats
- Actual (& Nearest) Distance Stats
- Carbon & Calorie Stats

These are presented:-

- At a range of geographic levels:-
 - Pan-Regional (if appropriate)
 - Pan-LEA
 - Individual School
- By national curriculum year:-
 - aggregated into generic school types (primary, secondary, sixth form)
 - by individual year group.
- Showing change over time (STHC School summary spreadsheet only)

There are 3 additional sets of stats calculated at **pan-LEA level** only:-

- Cross-Border Stats
- Distance Profile Stats
- Data Processing Stats

All are presented in standardised tabular form but also as graphs where appropriate.

1.3 What Does The Spreadsheet Output Consist Of?

The standard range of statistics contained in the spreadsheets are briefly described below.

Note

- i. The key with all is to make sure you read the titles of each spreadsheet or chart!
- ii. A full description is available on request

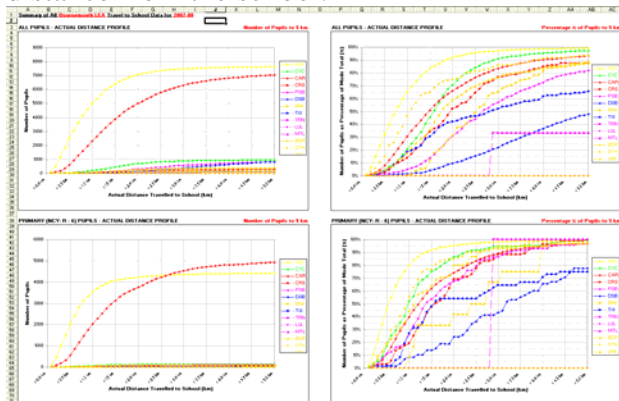
1.3.1 Mode of Travel Stats

The most commonly used output, showing the key output from the spatial processing (blue column headings) and the supporting mode share and school / authority info (grey column headings)

At the school level the data is also rated Red, Amber or Green on car use within walk threshold and Co2 released per pupil per year.

1.3.2 Distance Profile Stats

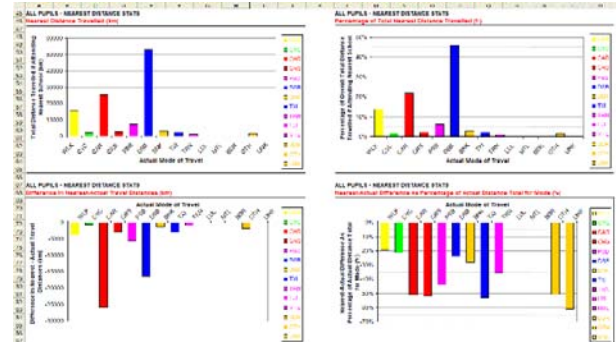
Provide an immediate feel for how the different travel modes are distributed according to distance from the school.



1.3.3 Actual (& Nearest) Distance Stats

Translate the Mode of Travel stats into distances

on the ground, both the distance to the school the pupil actually attends (“Actual Distance”) and to the nearest eligible school (“Nearest Distance”).



1.3.4 Carbon & Calorie Stats

Translates the distances of the Actual & Nearest Distance Stats, into total journey distances (home – school – home), and thence into either the calories burned by pupils during the walk or cycle or the CO₂ emitted if travelling by vehicle.

1.3.5 Cross-Border Stats

The purpose of the Cross-Border Stats is to list all the LEAs in which the pupils’ home postcodes are situated along with the actual numbers of pupils coming from each, for all the authorities that are part of the analysis dataset.

Note

- i. Read flows in on the horizontal, flows out on the vertical axis.
- ii) If the analysis dataset is comprised of only a single authority then it will only be possible to see flows in and not flows out to the surrounding LEAs, unless neighbouring authorities provide their census data for analysis.

2. Getting started

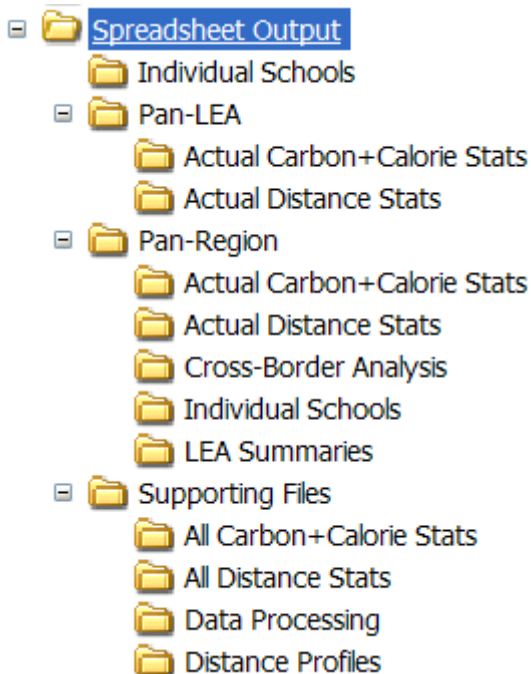
2.1 Print some spreadsheets on to big bits of paper...

We have found that for some of the output, big bits of paper and a long ruler work best! Print them out (or pull them out from your final data pack), put the kettle on and take some time to work through them. Once you have got the hang of them make sure you share them with your colleagues.

Note

- i. You will receive a set of these spreadsheets as part of your final data output pack
- ii. As with much of life presentation is key – we have tried to make the most commonly used spreadsheets as friendly as possible in terms of layout and use of colour / icons, be it on screen or paper. Please contact us if any of it can be improved or if it simply does not work for people with visual issues such as colour blindness.

2.1.1 How do I find the files?



We encourage authorities to retain the same structure as we send the data out. The titles of the following sections relate to the file structure shown above.

Note:

It may help to print off a copy of this structure and add your own notes to help you find your way around the various folders and their content.

2.1.2 Individual Schools Folder – STHC sub folder - Schools Summaries spreadsheet(s)

This is the familiar spreadsheet that goes out to all schools as part of the School Travel Health Check packs. Schools love it, Members and Officers also love it - all find it very accessible.

Better still, it now shows change over time and RAG rates car use within walk threshold!

It has become the default ‘calling card’ for many SMOTS and STP Officers – it clearly shows the wealth of information available, it flags the key issues in a way that all can understand and it stimulates links between various local authority directorates.

Make sure you have your contact details on it somewhere and use it as your calling card. Print them off on a big bit of paper (A1) a dozen at a time:

- Portrait if you have a lot of schools – the text is small but still readable
- Landscape if you have fewer schools or need a ‘large print’ version.

Note:

- i. Given the size of some of the STHC authorities the paper version of the summary spreadsheet sent to schools is now broken down by district (some spreadsheets were over 2 metres long!)
- ii. Before you send all 12 to the plotter double check to see that what you see on screen is coming out on paper – Excel has a nasty habit of not wanting to print the pale grey lines that separate the individual cells.

2.1.3 Pan-Region Folder – LEA Summaries sub folder – LEA Summaries spreadsheet

Same headings as the school summary spreadsheet but carries summary info for the participating authorities in your region (A national summary spreadsheet is in development).

The main point of this spreadsheet (and the census processing) is being able to see across borders and compare with your neighbours and country / city cousins.

This piece of paper is most likely to be of interest to your LAA and LTP monitoring teams as the STHC offers a far more refined tool than the blunt NI 198 ‘mode share by car’.

“But it makes our authority look bad so I don’t want to show / share it with others...”

1. Get over it – positive change does not come without a degree of discomfort.
2. Use it as a tool to stimulate discussion about how to improve.

Example:

Dorset, one of the original STHC authorities, sits 18 out of 18 when it comes to CO2 released per pupil per year. This is being used to highlight the need for positive change and has given an excellent route in to the discussion over the future location of schools in order to maximise the potential for sustainable travel and consequent reduction in CO2.

2.1.4 Pan Region Folder – Cross-border Analysis – Cross-border spreadsheet

Keep repeating: “Flows in horizontal, flows out vertical” It will soon make sense.

Your Schools Admissions and 14 to 19 teams should be interested in this as it informs Travel to Learn Areas and the 14 to 19 agenda.

Note

It is worth remembering that local authorities can see who comes in but until the STHC have

struggled to see who goes out and where to – this work shows these flows out – essential in today’s boundary free education agenda!

2.1.5 Supporting Files – Distance profiles – Distance Profiles spreadsheet – Mode Summary Tables page.

This shows the outer distance that 85 and 95% of your pupils travel by a particular mode. It is from this rather dull looking table that the realistic walk thresholds come from.

The next time colleagues or external agencies, tell you that primary school children should be walking 2 miles (3.2km) to school hand them this table – with the majority (85%) of primary pupils walking from within a radius of a shade over 1000m. Excessive optimism over walk distances is a common problem and tends to undermine credibility.

Note

The distribution graphs on the first tab provide a strong support to this table – showing how trips by mode build over distance from the school – they do look good on paper but cannot be used to show detailed figures in their paper form (when in Excel place your cursor over the curves to see the detail).

2.2 Into the spreadsheets on the screen

One thing to remember with these spreadsheets is that many have more than one page (tab). We have tried to order the tabs in terms of frequency of use / ease of access. Equally some tabs have to be in there to make the charts work. So work through the tabs from left to right and don’t panic if you struggle to comprehend the right hand tabs!

Remember – if stuck – contact us via the website. www.sthc.co.uk

Note

As with section 2.1 the titles below relate to the file structure shown in section 2.1.1.

2.2.1 Individual Schools Folder - Summary spreadsheets - individual schools summaries

This spreadsheet will help you answer the majority of questions that will come back from schools and Members.

Note

The carbon and distance tabs allow you to filter the results by school & mode.

Schools mode of travel tab:

Same as the one you printed off in the previous section but lacking the RAG rating for car within walk threshold and change over time.

School carbon and calorie stats tab

Nice easy one this – all reads horizontally and the column heads should make sense. Equally it shows how the CO2 and calorie figures were calculated – allows this work to inform / be compared with other calorie and carbon work being undertaken elsewhere The only thing to watch for is some of the numbers get too big for the cells in the spreadsheet to show. So where you see cells full of #####, they are not broken – just hover over them or click on them to get the figure.

School actual distance stats tab:

This fits the ‘Right hand tabs are more difficult’ rule! We suggest you start with the easily usable bits:

- **Min and Max KM** (Cols J&K) are handy for checking for poor recording of modes – we are looking to bring this figure in to the STHC report
- **Actual distance summary** (Cols U to AA) Shows how trips build over distance from the school

Note

What are the figures in italics? These only kick in if you have lots of unknown modes in your

data – these columns are best tackled through telephone support!

As ever the best option is for you to have a play with the data– For example why not have a go at looking at cycle journeys to a school (filter by school and then by mode):

From the Carbon and Calorie tab:

- How many cycle trips per day?
- The combined kilometres cycled?
- The calories burned per pupil per year?

From the actual distance tab:

- The threshold distance at which point cycling begins to tail off?
- What is the maximum distance children are currently cycling and does it look reliable? – Hint - if in doubt look at the schools data on a map.

2.2.2 Individual Schools Folder - Summary spreadsheets - LEA summaries

You have already printed off a paper copy. Being a summary it does not contain the school level actual distance and carbon / calorie calculations.

2.2.3 Pan LEA Folder - Actual Carbon + Calorie stats

Simple: Data for the whole authority - Total distance for each mode turned in to CO2 output (for the vehicular modes) and calories burned (for walking and cycling).

Note

i. These spreadsheets contain a lot of tabs that look similar. The key to working with these spreadsheets is to take care when reading the title of the spreadsheet and the graphs.

ii. You also need to take care when reading the vertical axis – the scales differ. Hint - In later versions of Excel if you hover over a bar it will tell you the value.

2.2.4 Pan LEA folder - Actual Distance stats

Probably not as interesting as the carbon and calorie stats above.

2.2.5 Pan Region folder

As for the pan Lea folder but with the addition of:

- Cross border analysis – ref section 2.1
- Lea summaries - ref section 2.1.
- Individual schools – all the region's schools in a single spreadsheet!

If you want to get an idea of the scale of things take a look at the pan region individual schools spreadsheet – every school in the consortium is there!

2.2.6 Supporting Files Folder

This contains some important spreadsheets. They can however be easily misread so you do need to take care in using them and in sharing the data with others – you don't want to get the figures for the present and the future mixed up....

2.2.7 Supporting Files Folder - All Carbon + Calorie stats spreadsheets

- We know the current straight line distance and mode between home and school
- We know if they are attending their nearest school
- We can therefore work out how far they would travel and Co2 / calories burned if they attended their nearest school
- We therefore know what success looks like!

Start from the top of the charts and scroll down (making sure you read the titles!).

Note

These calculations currently do not change the person's mode of travel - if a car based trip shifted from a school 5km away to one 100metres away, we have left it as a 'car' – in reality it would change to 'walk'. So if all attend their nearest school savings are likely to be higher than those shown in the spreadsheet.

2.2.8 Supporting Files Folder - All distance stats

Probably not as interesting as the carbon and calorie stats above, but necessary for their generation!

2.2.9 Supporting Files Folder - Data processing

A simple file that shows how many records were supplied, how many failed to plot and how many were removed.

It is handy to compare with the other authorities listed to get an idea of what an acceptable result looks like.

Quick guide 2 explains all this at length.

2.2.10 Supporting Files Folder -Distance Profiles

Definitely a case of last but not least!

The first two tabs of the spreadsheet: '**distribution graphs**' and the '**mode summary tables**' are very important. As mentioned in the 'print it on a piece of paper' section, this spreadsheet ('**Mode summary tables in particular**') is the one that buries, once and for all the "When I were a kid I walked 12 miles" nonsense that tends to persist - Pupils will only walk so far no matter what rhetoric people choose to use.

Distribution graphs tab

Are the easiest to use and show cumulative numbers of pupils by mode as a count and as a percentage.

We recommend you stick to the two left hand columns of charts – journeys within 5km. The other two columns (journeys within 40km) are in there for the sake of completeness.

These graphs provide you with the best way if identifying how far pupils travel by each mode. They also do a good job of highlighting how miscoding of Census data can skew distance data! You only need a few pupils walking 39km to school to affect averages! You do therefore

need to use the curves to inform setting of realistic actual walk thresholds rather than simply picking the 85 percentile figure and stating that it is the actual walk distance - unless your data is 100% accurate this will not be the case!

Mode summary tab

Very important! See the 'print on a piece of paper' section

Summary tab

A by product of the processing – of no real interest for day to day use.

Percentiles by mode tab

These drive the graphs in the first tab of the spreadsheet.

3.0 A note on sharing files with colleagues

You do need to take care in distributing these spreadsheets (and the 'spider' plots), failure to consider what supporting information is needed to ensure understanding of the data presented could well turn people off to the very important data these spreadsheets contain. Put simply do not present it in a large bundle without supporting explanation!

When passing this data on to others consider two things:

- Can it be better shown on a map?
- Would your Mother understand it?

If in any doubt extract the relevant bit of data and present it in a more approachable format such as a School travel Health Check.

Data protection

Spreadsheet output only contains analysis data, not any of the pupil level census data. There is no reason to refuse internal sharing of this data on data protection grounds.

4.0 Using the data within LTP3, School travel, carbon and Health contexts:

As we operate in an ever changing policy environment notes on suggested uses of the data are contained within a separate document 'Quick Guide 4'. Contact us via the website for the latest version. www.sthc.co.uk