A TRICS SAM SURVEY CASE STUDY: THE FLEXIBILITY OF TRICS

STEVEN SHAW, WEST SUSSEX COUNTY COUNCIL

Today I am going to talk about how TRICS can be flexible in its approach to meeting specific user requirements when it comes to the commissioning of TRICS Standard Assessment Methodology surveys; otherwise known as SAM surveys. We undertake many of these surveys each year, and every site is different in some way. Sometimes we are asked to add additional survey questions or split data in certain ways, and I will show you a case study involving two surveys recently undertaken.

UNIVERSITY OF CHICHESTER SAM RE-SURVEYS 2018

- Re-surveys at Bognor Regis & Chichester (Bishop Otter) campuses in April 2018.
- Previous survey at Bognor Regis campus was in February 2017.
- Previous survey at Bishop Otter campus was in October 2015.
- It was decided that both campuses should be surveyed at the same time in 2018 (1 day apart).

The two surveys in this case study are the University of Chichester campuses at Bognor Regis and Chichester which is known as Bishop Otter. The Bognor site was originally surveyed in February 2017, with the Chichester site surveyed earlier in 2015, both as standard SAM surveys; without any additional requirements. When the next set of surveys were due, it was decided to survey them together (one day apart) in April 2018.

Now let's have a quick look at the locations of the two campuses. Firstly Bognor, which is located to the east of the town centre, within a reasonable walking distance of local facilities. Local bus routes connect the site to Chichester and Bognor Regis rail station is around 800 metres as the crow flies to the west. The campus is bordered by Hotham Park and Butlins Bognor Regis to the south, with a residential area to the north.

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LOCATION OF BISHOP OTTER CAMPUS

- Located to the north of the centre of Chichester, with easy access to central facilities.
- Local bus routes start and end at Chichester bus station in the city centre.
- Chichester rail station just over 1 kilometre away (crow fly distance) to the south.
- Site bordered by St Richard's Hospital to the south-east.

Moving to the Chichester Campus which is just north of the city centre, with easy access to local facilities, so a similar scenario to the Bognor campus in this respect. Local bus routes start and end at Chichester bus station in the city centre, and Chichester rail station is just over 1 kilometre to the south.

CHICHESTER UNIVERSITY SURVEYS: CLIENT REQUIREMENTS

- The client (we were deadline directly with the university) requested a full TRICS SAM survey covering all access points (standard approach).
- In addition, there was a specific requirement to split all inbound trips by staff, student and visitor.
- The previous surveys in 2015 and 2017 did not require this additional split.
- Splits for non-car modes are straightforward (obtained through interviews), but for vehicle occupants this becomes difficult as in normal circumstances we cannot stop vehicles to interview occupants.

For this survey our client was the university itself. They contacted the TRICS team when the next set of surveys were due, and informed us that, in addition to the standard SAM surveys there would be the need for a split of inbound trips by staff, student and visitors. Now splits for non-car modes (and for people parking off site) are quite easy to obtain, as these can be obtained by pedestrian interviews as people walk into a site at its various accesses. However, for vehicle occupants this becomes difficult, as in normal circumstances we cannot stop all vehicles to undertake interviews.

VEHICLE OCCUPANTS SPLITS: TACKLING THE PROBLEM

- We were informed that vehicles visiting the site would display different coloured badges.

- It was suggested that a type of parking beat survey could supplement the standard TRICS multi-modal survey (non-vehicular split obtained through interview).

- Client informed us that they could actually manage the inbound car park accesses so that we could stop vehicles and interview occupants.

- This approach would simplify the survey considerably.

So we looked at how we could address this problem and find a suitable, workable solution. At first we suggested that a type of parking beat survey could be undertaken to supplement the standard TRICS SAM survey (which would record all vehicle occupants but not provide a split). We were informed that vehicles accessing the site would show different coloured parking permits for staff and students, but there would be the potential problem of spotting these, hence the proposed parking beat survey. However, after some discussion a better proposal was put forward. The client informed us that they could themselves manage the inbound vehicle accesses and allow us to stop inbound vehicles, so that interviews of vehicle occupants could actually take place. This approach certainly simplified the surveys.

TRICS SURVEY COUNT SHEETS

- It was agreed that there would be the following series of TRICS survey count sheets supplied. Note that the split by staff/students/visitors would only be required for inbound trips, to avoid having to interview vehicle occupants entering AND exiting the site.
    - Total survey count inbound and outbound by mode (including all trips with no splits between staff, students or visitors).
    - Inbound only staff count (by mode).
    - Inbound only students count (by mode).
    - Inbound only visitors count (by mode).

It was agreed that only inbound trips would be subject to the staff/student/visitor interviews, to ensure that vehicles leaving the site would not need to be stopped with occupants questioned a second time, minimising the inconvenience of people on the day. The TRICS survey count sheets would then be split. There would be a total inbound/outbound sheet for all modes (without the staff/student/visitor split), and then there would be the inbound only sheets separately by staff, students and visitors.

THE TRICS SAM DATA COLLECTION PROCESS

- Sign TRICS survey agreements for both sites.
- Agree in principle with the client about general survey method.
- Undertake site visits (meeting with the client at each campus).
- Production of TRICS survey specifications (incorporating additional client requirements).
- Obtain quotes and gain authorisation from client.
- Undertake the surveys to specification.
- Input data and put it through validation testing.

Here is a quick run-through of the TRICS SAM survey process. Firstly, the client signs the TRICS survey agreement for each survey that is to be undertaken, whilst discussions about the general principle of the nature of the survey take place. This is followed by a site visit (the client also took part in this at both campuses as we felt a mutual agreed understanding of both sites was important). This is followed by the production of detailed survey specifications (incorporating in this instance the additional survey requirements of the client), which then allow us to obtain quotes from our TRICS-approved data collection contractors. The surveys are then authorised by the client, they take place, and the raw data is then supplied to TRICS for input and validation testing.

SURVEY SPECIFICATION: BOGNOR REGIS CAMPUS

- Total of 5 access points (3 vehicular, 2 pedestrian).
- 11 enumerator positions (shown on plan).
- Survey on typical weekday (0700-2200).
- Off-site parking to be included (obtained through pedestrian interviews).
- Head counts used to factor up interview samples at separate access points.
- Special conditions detailed on survey specification (the requirement for inbound splits by staff/student/visitor).

So following the site visits the survey specifications were produced. Here you can see a plan of the Bognor site with the enumerator locations marked out. The site had a total of 5 access points, with 3 being vehicular and 2 pedestrian. There were a total of 11 enumerator positions that had to be manned through the duration of the count, on a typical weekday from 0700 until 2200. Off site parking would be included (obtained through interviews of pedestrians in the usual way), and head counts at access points would be used to factor the interview sample up to 100% (standard at busy sites such as these). Importantly, the special conditions were detailed on the survey specification to ensure that the data collectors would fully understand the need for the additional client requirement of staff/student/visitor inbound splits by mode.

SURVEY SPECIFICATION: BISHOP OTTER CAMPUS

- Total of 9 access points (2 vehicular, 7 pedestrian).
- 17 enumerator positions (shown on plan).
- Survey on typical weekday (0700-2200).
- Off-site parking to be included (obtained through pedestrian interviews).
- Head counts used to factor up interview samples at separate access points.
- Special conditions detailed on survey specification (the requirement for inbound splits by staff/student/visitor).

The same principles were applied to the Chichester site, and here we can also see the plan showing the enumerator positions. This was a more resource-intensive survey, with there being 9 access points (2 vehicular and 7 pedestrian), and a total of 17 enumerator positions.

EXTRACT FROM SPECIFICATION: SPECIAL CONDITIONS SUMMARY

Enumerators should take care to ensure that "internal" trips between the college buildings on either side of College Lane are identified and excluded from the survey count. See individual enumerator instructions for details.

Special provision is being made to allow enumerator staff to stop all inbound vehicles within the site to find out if vehicle occupants are students, staff or visitors. This additional inbound vehicle occupants split is not to be factored up to 100%, with non-responders also recorded as a split type (note that for all other modes factoring using head counts will be required). Also, this split should also apply to other non-vehicular modes. Therefore, the following outputs will be required.

1) Total inbound and outbound count by mode (as per a normal TRICS survey)
2) Students only inbound count by mode
3) Staff only inbound count by mode
4) Visitors only inbound count by mode
5) Non-Responders vehicle occupants inbound count

Please see individual enumerator instructions for full details.

I can provide you with some extracts from the survey specifications. Here is what was contained in the "special conditions" summary at the beginning of the survey specification for the Bognor site (the same applied to the Chichester site). Specific instructions are given that the inbound counts are to be split (by mode) by staff/students/visitors, with all non-responders recorded as their own split type (which will be used along with head counts to factor up the interview sample to 100% of trips). The various count outputs types are then listed as explained earlier.

EXTRACTS FROM SPECIFICATION: ALL MODE INTERVIEWS

All Mode Interviews (Inbound)	All people that walk into the site at this access should be asked the following question: "For this particular journey, has your main method of transport been vehicle, walking, bus or train?" If the answer is "vehicle" then the type of vehicle needs to be determined by interview (one of the 7 standard classifications of car, motorcycle, taxi, light goods vehicle, public service vehicle, OGV1, OGV2). The following question will then need to be asked: "Have you parked, or were you dropped off?" If the answer is "parked" then record the vehicle as a vehicle arrival, and also record the appropriate number of vehicle occupant arrivals. If the answer is "dropped off" then record the vehicle as both an arrival and a departure, and record the appropriate number of vehicle occupant arrivals. If the answer is "walking" then record as a pedestrian arrival. If the answer is "bus" then record as a bus passenger arrival. If the answer is "train" then record as a train passenger arrival. The following question should then be asked: "Are you a student, a member of staff or a visitor?" If the answer is "student" then record as a student arrival. If the answer is "member of staff" then record as a member of staff arrival. If the answer is "visitor" then record as a visitor arrival.

Here is an extract from one of the access points which gives instructions on all mode interviews (i.e. all people walking into the access are to be interviewed as to the main method of transport and then they are asked if they are staff, a student or a visitor). Note the second sub-section which asks the split question has been added to the first larger part above (which is the standard wording for all mode interviews). Our survey specifications are designed to allow all sorts of additional tailoring to deal with a wide range of client's additional survey requirements.

EXTRACTS FROM SPECIFICATION: VEHICLE OCCUPANT INTERVIEWS

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Vehicle Occupants Split Interviews (Inbound)	All people that arrive at the site in a vehicle at this access should be asked the following question: *"Are you a student, a member of staff or a visitor?"* If the answer is "student" then record as a student vehicle occupant arrival. If the answer is "member of staff" then record as a member of staff vehicle occupant arrival. If the answer is "visitor" then record as a visitor vehicle occupant arrival. If the question is refused then record as a non-response vehicle occupant arrival. *NOTE: This enumerator should take care to ensure that the correct modes and numbers are recorded when groups of people arrive at the site together.*
Special Conditions	This enumerator should ensure the total vehicle occupants count is recorded both inbound and outbound in the normal way in addition to the inbound vehicle occupants split.

And here we have an extract which again interviews people about whether they are staff, a student or a visitor, only this time the interview is of vehicle occupants.

EXAMPLE OF SITE PHOTOS WITHIN SPECIFICATIONS

The survey specifications also include photos of each of the access points. In this example we are looking at one of the vehicle accesses at the Chichester site, identified at the top of the site plan next to it (highlighted in orange).

And here is what the survey count data will look like as it is supplied to us. We will of course have a number of different count sheets like this providing us with the total count as well as the inbound staff, student and visitor splits.

THE DATA: NEXT STEPS

- Surveys went well and followed the agreed specifications.
- Data has been received and is currently being put through validation testing.
- Once validated the finalised TRICS outputs will be forwarded to the client along with the inbound raw data splits (staff/student/visitor).
- Data should be included in TRICS 7.5.2 update (July 2018).

So, to end this presentation we can summarise what the next steps are. The surveys were reported as having went well, and the raw data has been received by TRICS and is in the process of being put through validation testing. Once validated, the finalised TRICS outputs plus the raw data for the additional splits will be forwarded to the client to inform their Travel Plan, and the total count should be made available in time for the next TRICS update, which is version 7.5.2 being released in July 2018.