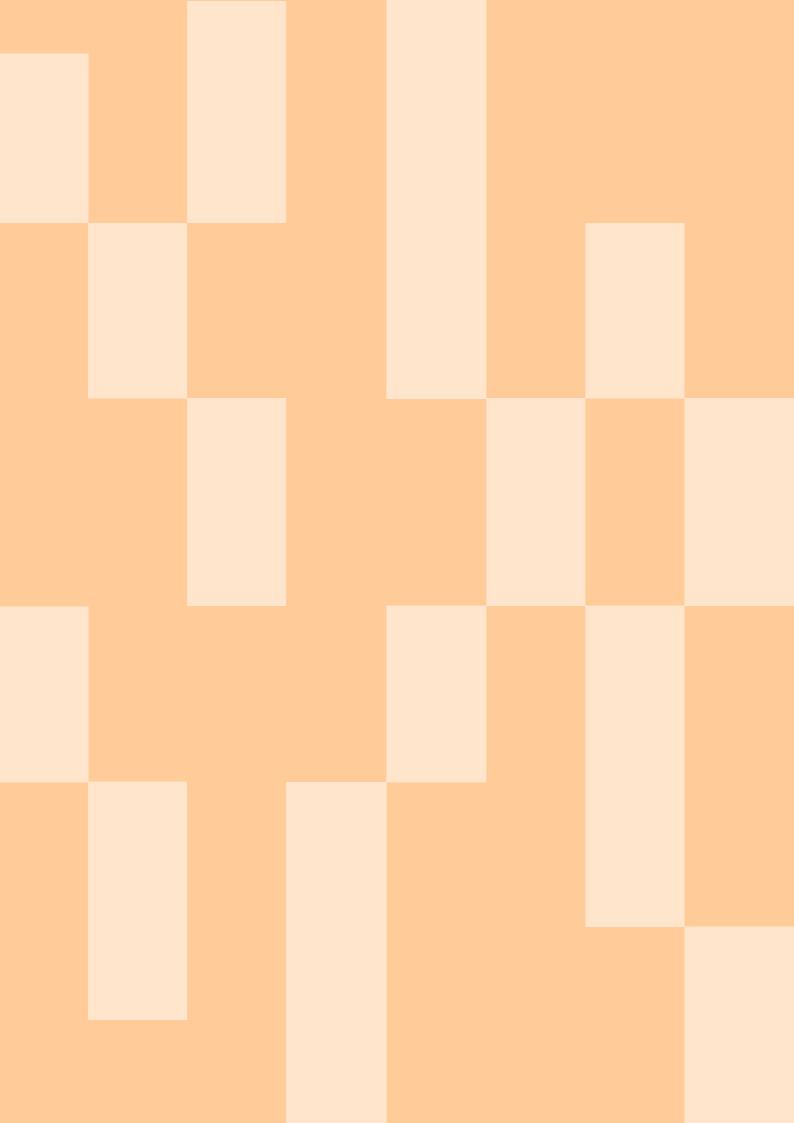# Wales National Travel Survey: Review Report

Authors: Peter Cornick, Eva Aizpurua & Shane Howe
Prepared for: Transport for Wales

JUNE 2023

We believe that social research has the power to make life better.

By really understanding the complexity of people's lives and what they think about the issues that affect them, we give the public a powerful and influential role in shaping decisions and services that can make a difference to everyone. And as an independent, not for profit organisation we're able to put all our time and energy into delivering social research that works for society.

Contents

List of Tables

Background

The Wales National Travel Survey

Transport for Wales (TfW) has commissioned the National Centre for Social Research to work as their delivery partner to design a suitable methodology for the new Wales National Travel Survey (WNTS). The WNTS will collect information on travel attitudes and behaviour in Wales and is expected to launch in 2024.

This report is an integral part of the first phase of a comprehensive review process aimed at identifying the optimal mode(s) to deliver the WNTS. The review is guided by the National Centre for Social Research's REMoDEL approach – a systematic process for designing or transforming social surveys and gathering robust evidence around the trade-offs associated with different design options (Cornick, 2021).

Key Stages of NatCen's REMoDEL Approach:

Review the research and information needs, including any design parameters

Evaluate the feasibility of various methodological designs considering different quality dimensions

Model a prototype design for further development

Design and develop the new methodological approach and questionnaire

Experiment by testing the design in a quantitative context

Launch the new survey

This report summarises the Review stage of the process, with the goal of identifying the specific research needs and the design constraints that the WNTS is required to fulfil.

Methodology

To identify the information needs and design requirements that the WNTS needs to fulfil, NatCen first reviewed the substantial preparatory work already conducted by TfW. This consisted of a detailed summary of the key outcome and success indicators of the WNTS, alongside a list of essential and desirable requirements. Key information needs were outlined, including 11 measures that the Wales Transport Strategy monitoring framework needs the WNTS to deliver (see Appendix A. Four targets and Eleven key measures within the monitoring framework reliant on WNTS).

NatCen and TfW then organised a workshop with key stakeholders from TfW and the Welsh Government. The workshop, facilitated by researchers at NatCen, took place over two sessions in May 2023. It aimed to provide a deeper understanding of TfW's information needs to allow NatCen to map them against a range of quality 'dimensions' concerned with the quality and usability of the data which would be generated. The discussion was aided by an interview guide that explored the information needs and design parameters for the survey. Additional details about the workshop are available in Table 1. The discussion guide can be found in Appendix B. Wales National Travel Survey: Review 2023. Topic guide.

Table 1. Details of the workshop conducted to inform this report

Dates	May 5 and May 12, 2023
Duration	5 hours
Attendees	NatCen Social Research (moderators and note takers) Transport for Wales Welsh Government
Location	Virtual – MS Teams meeting
Workshop content	Introduction Definition of research questions and information needs of the survey Requirements of the survey design Conclusions and next steps
Output	Review report

This report summarises this initial information gathering stage and will guide the next phases of the REMoDEL approach. Alongside this report and based on the discussions held as part of the workshop, NatCen has produced a separate report focusing specifically on the delivery approach for the "travel diary" component of the WNTS, assessing the feasibility of incorporating the Department for Transport's (DfT) Digital Travel Diary (Cornick, Aizpurua & Howe, 2023).

Stakeholder feedback

Research and information needs

The initial segment of the Review Workshop was devoted to identifying the research questions that the WNTS aims to address. This involved establishing its primary objectives, anticipated uses, and corresponding analytical requirements.

The discussion led to the identification of the following as the primary objectives of the WNTS:

Substantive objectives:

1) To monitor changes in travel behaviour and evaluate the degree to which specified targets are being met. These targets are outlined in the Welsh Government's second carbon budget plan, Net Zero Wales, underpinned by the Wales Transport Strategy and focus on carbon reduction, mode shift towards the use of sustainable travel, car use reduction, and changes in remote working patterns to better understand the impact of remote working policies on transportation behaviour (Welsh Government, 2021). In particular, the WNTS needs to provide the information to inform four targets set out in Net Zero Wales and 11 measures outlined in the Wales Transport Strategy monitoring framework (see Appendix A).

2) To provide data that will improve the transport evidence base and regional transport models in Wales.

Methodological objectives:

3) To develop a robust, repeatable data collection strategy that provides more agency and control over the data generation process. A major goal of the WNTS is to provide robust evidence that allows decision-makers to better understand travel behaviour and trends over time and the ability to interrogate them by different demographic stratifications. Currently, data comes from different years and sources, requiring caveats and proxy information which reduces the confidence in, and comparability of, the estimates. WNTS aims to fill this gap by becoming the main source of information on travel behaviour and attitudes in Wales. The robustness of the study is also required to ensure that the WNTS achieves the status of a National Statistic.

In terms of outputs, the goal is to produce information that is accessible and can be easily used by interested parties (e.g., journalists, charities, academics, transport organisations, etc.).

Design requirements

The second objective of the Review stage is to define the key design parameters for the survey. For this report, we organise the information based on key topics discussed during the workshop (for further details, refer to the guide in Appendix B. Wales National Travel Survey: Review 2023. Topic guide).

1.1 Accuracy, key populations of interest and credibility

A key objective of the WNTS is to provide data that is representative of Wales and allows analysis of key subgroups. In practical terms, the WNTS will cover trips within Wales, while also capturing trips originating from or destined to England (i.e., cross-border trips) and understanding their purpose. International trips are considered outside the scope of the WNTS.

The main groups of interest for the project include:
- **Adults:** The WNTS's main target population are adults aged 16 years and above. There is also a secondary interest in including children, given the interest in gathering school trip data. The survey will cover private households. However, widening coverage to non-private household population groups would also be desirable if possible. Within this, there are some key areas of interest:
    - o **Personal characteristics**: Information related to age, gender, physical ability, impairments, and employment status is of particular interest for the WNTS. The feasibility of collecting data on other protected characteristics, such as race/ethnicity, religion, sexual orientation, and pregnancy status will be considered in the next stage of the process, taking into account potential survey modes, expectations on proxy reporting, and other relevant considerations.
    - o **Remote workers**: Given the importance of comparing trip patterns between remote and non-remote workers, ensuring a sizable sample is essential to obtain reliable estimates for these groups and to better understand the impact of remote working policies on travel behaviour.
    - o **Welsh speakers**: A key group of interest are Welsh speakers. Ideally, the use of Welsh language would be measured in a more nuanced way than a binary measure. Factors such as frequency of use and the use of Welsh in public transport (both written and spoken) should be considered.
- **Geographical distribution**: There is an interest in obtaining information and analysing the data at the regional level (i.e., North Wales, Mid Wales, South-East Wales, and South West Wales. See **Table 6** in the Appendix), which would require oversampling in the mid-Wales region. In addition to the regional information, there is a need to explore differences between rural and urban areas. Information at the local authority level would be an added advantage, but it is not expected to be feasible due to the higher costs involved in larger sample sizes.

As previously mentioned (see Research and information needs), the study's design needs to be sufficiently robust and credible to receive National Statistics status. This requirement was deemed relevant to boost confidence both in data users and the estimates produced.

1.2 Comparability

The current data sources which are used to approximate the information needs of TfW and the Welsh Government are multifarious, and all have limitations. There was no overarching desire for the new survey to provide comparability with any existing source. However, if resources permit, some testing and comparability may be desirable with the National Survey for Wales (NSW).

A primary reason for launching the WNTS is for TfW and the Welsh Government to have full control over how data concerning travel and transport within Wales is produced and monitored so they can create a robust time-series to compare with in future years. As such, comparability over time is more of a priority than comparability with any other data sources.

There are some concerns regarding the possibility of both the National Travel Survey (NTS) operated by the UK Government's Department for Transport and the Wales National Travel Survey (WNTS) collecting data concurrently in Wales. These concerns included:
- Inconsistencies in the estimates produced by the two surveys due to methodological differences and sampling error.
- Households being selected to participate in both data collection efforts.
- Estimates being 'cherry-picked' across studies for reporting purposes or for either study's authenticity to be questioned.
- Reputational damage (use of public funds, assumed lack of co-ordination/communication between the UK and the Welsh Government).
- Call to action and ability to use data to drive positive change (collecting data for a positive purpose versus collecting data for data sake).

TfW and the Welsh Government confirmed that there is no requirement for the WNTS data to be comparable to the NTS data. Should both the NTS and WNTS collect travel data in Wales, there is an interest in understanding how methodological differences between the two projects would impact the resulting estimates and to enable TfW and the Welsh government to answer queries confidently concerning data inconsistencies.

1.3 Completeness and coherence

Based on the information from the tender and the workshop discussion, it is anticipated that the WNTS will consist of two primary components, both of which will need to be made available in both Welsh and English:
1) a survey, and
2) a travel diary.

The survey will be used to gather data on household composition and socio-demographic characteristics, attitudes towards travel and some travel behaviours. The travel diary will be used to collect detailed information on travel behaviour over a specific timeframe. This level of understanding provided by paired information is not currently available without notable adjustments or caveats.

A key requirement of the WNTS is to collect paired information (i.e., both survey and diary data), as both sources are needed, in combination, to answer many research questions. The travel and trip rate information were viewed as a necessary and vital extension of the WNTS, as opposed to an insightful addition. There might be an advantage to receiving unpaired data earlier to provide some quicker, albeit limited, analysis and it was also noted that the Net Zero Wales targets and most of the key measures for the WTS monitoring framework will be gathered by the diary component.

Providing there was a benefit to completion rates, TfW and the Welsh Government were open to either ordering of data collection activities: 1) survey first, followed by a travel diary or 2) a travel diary followed by the survey. The consensus among those present was that the survey should be offered first as this is a more salient and transparent activity.

The length of the travel diary (that is, the number of days that it covers) was deemed flexible, providing the data collected achieved a sufficient sample size to meet the study goals and to conduct subgroup analyses. The possibility of conducting follow-up activities to collect additional travel data from participants was also discussed as a potential option if a shorter diary were to be used.

Potential follow-up research activities were not anchored to a specific design, but TfW and the Welsh Government would like the flexibility to conduct either one-off studies or more structured follow-up activities such as a panel project. Similarly, the discussants were receptive to the idea of potentially using modularisation (i.e., splitting the questionnaire content over time or across respondents) to reduce respondent burden if needed. Respondent burden as a concept was focused on limiting undesirable interactions which hinder data quality brought on by cognitive demand: non-differentiation, item-nonresponse, drop-offs, etc.

1.4 Timeliness

Timeliness of data is a crucial factor for the success of WNTS and is considered a priority. As mentioned throughout this report, and the workshop, items of interest and performance indicators are being monitored with known limitations, and concerns remain that this could be creating a skewed representation of travel and transport behaviour within Wales. As such, any early insights afforded by piloting or experimentation would be very welcomed despite known caveats, as existing data is potentially more problematic in some areas of monitoring.

It was fully accepted that experimentation is needed to ensure the WNTS meets the design and research requirements. However, to adhere to the agreed timescales, the latest a full survey could launch would be December 2024.

The attendees were interested in both a 'staggered' data delivery approach (two data deliveries per year) and pairing several survey years together to provide a richer data set which permits analysis of smaller sub-groups. It was noted that a six-month data delivery would be limited for reasons of seasonality and/or sample size, but this could provide internal insight into specific areas of interest to TfW or the Welsh Government. There remains a concern about the impact of seasonality on data due to the seasonal nature of travel behaviour. While a full twelve-months encompassing all seasons was needed, there was no preference for this to be a calendar year (January- December) or a fiscal year (April-March). The overriding concern was to make data available as soon as possible, rather than conforming to a specific twelve-month time frame.

1.5 Cost-effectiveness

A key indicator of success for the WNTS is that it needs to be cost-effective. This specifically means providing accurate, representative data which maximises the usefulness of the WNTS as a means to understand travel and transport within Wales.

Discussions surrounding cost-effectiveness also focused on the need to justify more expensive data collection activities and the innate benefits they bring, compared with cheaper methods of data collection. It was requested that unit cost per interview, even if using vague quantifiers, be used in comparison to data quality dimensions (accuracy, representation, external validity, etc.) so the trade-offs between cost and quality are transparent.

1.6 Impact

The impact aspect of this study focused on the environmental aspects of delivering the survey. Similar to cost-effectiveness, it was agreed that environmental efficiency cannot be pursued to the detriment of accuracy or data quality generated, but this is an area of concern and growing interest within both TfW and the Welsh Government. The WNTS cannot be wasteful or cause unnecessary omissions and an assessment of environmental impact should be provided so this is a known and accountable factor. There is not an existing modelling framework for designs to be assessed against. Instead, a qualitative judgement using indicative quantifiers would be suitable in providing a comparative assessment of this element.

Conclusions and next steps

This report outlines the information needs and design requirements of the WNTS, based on the details provided by Transport for Wales and feedback gathered during a virtual workshop facilitated by NatCen, with participation from TfW and the Welsh Government.

The primary information needs and design requirements for the WNTS have been identified as follows:

- To provide a representative sample of the population in Wales, that is large enough to facilitate subgroup analysis based on relevant characteristics (e.g., region, urban/rural, Welsh language usage, age, gender, physical ability, employment status, etc). The research design should be sufficiently robust to achieve National Statistics status. (For a more detailed breakdown, see Tables 2 and 3.)

- To collect paired survey and travel diary data, gathering information on sociodemographic characteristics, attitudes towards travel, and detailed travel behaviour. This information will be collected on a rolling basis, enabling the monitoring of trends over time, and assessing the degree to which transportation goals are being fulfilled (the outcomes and success indicators for the WNTS as reported in the Invitation for Tender are available in **Table 7**).

Table 2. WNTS information needs

Mode share for journey stages
Average distance travelled per person by mode
Zero emission car miles travelled per person
Travel behaviour of remote workers
Journey satisfaction by mode
Transport accessibility by mode
Use of Welsh language in transport
Public transport user costs and perceived affordability

Perceived safety and welcome by mode
Transport noise
Attitudes to mode choice
Journey purpose
Children's travel needs and behaviours, if possible

Table 3. WNTS design requirements (not in any priority order)

Random, representative sample of the population in Wales
Facilitate regional level analysis (see Appendix C for Region breakdown) as well as urban/rural breakdown
Data collected robustly to achieve National Statistics status
Survey information paired with travel diary data
Account for seasonality in travel and variability in travel by day of week and time of day
Provide sufficient levels of respondent consent to participate in follow up studies
Survey launched by no later than December 2024
Maximise usefulness of WNTS to ensure cost-effectiveness
Provide accurate and representative data as environmentally sustainable as possible
Undertaken of adults and possibly children living in Wales
Make use of the most appropriate technology to maximise participation
Minimise burden on respondents
Be repeatable

In addition to these informational needs, the NZW targets and eleven specific WTS monitoring measures already outlined by TfW and Welsh Government (See Appendix A), will inform the next stage of the process: Evaluation. During this phase, we will assess the feasibility of competing survey designs on their ability to meet the goals of the WNTS. This assessment will include a comparison of multiple mode(s) of data collection for the survey and the travel diary, as well as a discussion of the advantages and disadvantages of using a person-level design versus a household-level design in the context of the WNTS. The assessment will be based on an expert review of the design parameters listed in Table 3 with the goal of identifying the most suitable design to develop in more detail. The output of this stage will be a report assessing each design against various indicators of data quality and the specific needs of WNTS.

References

Cornick, P. (2021). *The NatCen Remodel Approach. A systematic approach to transforming social surveys*. Briefing Paper. Centre for Social Survey transformation.

Cornick, P., Aizpurua, E., & Howe, S. (2023). *Wales National Travel Survey: Digital Diary*. Report prepared by NatCen Social Research for Transport of Wales.

Transport for Wales (2023). *Wales National Travel Survey – Delivery partner. Invitation to Tender*. Volume 1, Instructions and Response Requirements.

Welsh Government. (2021) Llwybr Newydd: the Wales transport strategy 2021. Retrieved from https://www.gov.wales/llwybr-newydd-wales-transport-strategy-2021-html

Appendices

Appendix A. Four targets and Eleven key measures within the monitoring framework reliant on WNTS

Table 4. Relevant targets from Net Zero Wales to be captured in the WNTS

Policy (page)	Measure	Key target (date)	Interim target (date)	Assumed baseline
31 (86)	Increase % trip mode share undertaken by active travel	35% (2040)	33% (2030)	27%
32 (88)	Increase % trip mode share undertaken by public transport (rail and bus)	13% (2040)	7% (2030)	5%
(82)	Reduce the number of car miles travelled per person	By 10% (2030)	NA	NA
(82)	Increase the level of passenger car travel by zero emission car	10% (2025)	NA	NA

Source: Invitation to tender, volume 1 – Instructions and Response Requirements

Table 5. Relevant measures from the Wales Transport Strategy Monitoring Framework to be captured in the WNTS

Measure	Description
M1	Percentage of journeys made by walking, cycling, and public transport
M4	Average distance travelled per person
M5	Percentage of workforce working remotely on a regular basis
S5	Percentage of journeys to a rail station by walking, cycling, or bus
S11	Percentage of people satisfied with their journey
S12	Percentage of people satisfied with their ability to access public transport independently
S15	Percentage of Welsh speakers using Welsh language services in the transport sector
S17	Average cost per kilometre travelled by public transport
S18	Percentage of people who feel they can't afford to travel by public transport
S20	Percentage of people who feel safe and welcome when travelling
S24	Percentage of people regularly bothered by noise from outside the home caused by transport

Appendix B. Wales National Travel Survey: Review 2023. Topic guide

Background

Transport for Wales (TfW) has commissioned the National Centre for Social Research to work as their delivery partner to design a suitable methodology for the new Wales National Travel Survey (WNTS) The WNTS will collect information about travel behaviour and attitudes in Wales.

This is the first stage in a formal review to determine the optimal mode to deliver the WNTS. The review will follow the National Centre for Social Research's REMoDEL approach – a clear, systematic process for transforming social surveys and generating robust evidence around the trade-offs involved. The REMoDEL approach follows six stages:

Review | **E**valuate | **Mo**del | **D**esign | **E**xperiment and analyse | **L**aunch

- **R**eview the research and information needs, and any design parameters.
- **E**valuate the feasibility of differing methodological designs by considering a range of quality dimensions.
- **Mo**del a prototype design to be further developed.
- **D**esign and develop the methodological approach and questionnaire.
- **E**xperiment by testing the design in a quantitative setting.
- **L**aunch the new survey.

Aims and objectives

The Welsh Government and Transport for Wales have clearly already done significant thinking around their information needs, the requirements of the survey and associated success indicators. The aim of this workshop is to fully understand and explore these requirements which will allow us to summarise the information needs (the research questions) and any associated requirements of the design (the design parameters) against which we can assess the most suitable survey design.

Some of the questions presented may feel self-evident but it is helpful to have as little assumption as possible. The primary objectives of this discussion are:

1) To understand what information TfW require from the survey
2) To identify key design parameters for the survey

Workshop section	Notes
1. WNTS information needs	Discussion on what information WNTS needs to deliver
2. Design parameters	Considers various quality dimensions, based on a modified version of the Total Survey Quality Framework and essential requirements from the Tender, to consider key design parameters

1. WNTS Research and information needs

- Firstly, why have you decided to commission a Wales National Travel Survey?

- If you had to sum up the purpose of the new survey in one sentence, what would it be?

- In 2021 the Welsh Government published a new Wales Transport Strategy, Llwybr Newydd. What are the most important aspects of this new strategy in regard to the WNT?
  - PROBE FOR: Mode shift away from private cars; achieve net zero by 2050

- What are the key targets of the strategy?

- As well as the WNTS, what other sources will feed into these targets?

- Your brief outlined the 11 key measures that the survey will need to provide information on. In addition to these measures, are there any other key metrics that the survey will feed into?

- If you had to choose just one topic, what is the most important information WNTS will provide you with?

- What supplementary information is needed to effectively analyse any key requirements? (i.e. geography/region; educational attainment; household size; protected characteristics; tenure; levels of deprivation) Probe for requirements around occupation coding.

- Is there a need to gather any specific data on inclusivity of existing transport?

- Is there any requirement to understand changes within individuals behaviour or simply monitor change between individuals? Longitudinal/Cross-sectional analysis.

- Is any of the information you need available from another source, or have you been using any other data as an approximation for this?

2. Design parameters

The next stage is to consider the survey's design parameters: any design features that are essential to any design or data collection.

Accuracy - The population and groups of interest to you

A key indicator of success is that the results are representative of the Welsh population. What does this mean to you?

What are the main populations of interest for the WNTS?

- Overall inferential population (e.g., Private households in Wales)

- Some sub-groups may need particular focus in the sampling design or in the survey design (such as through accessibility requirements). Which sub-groups is it essential that are covered: PROBE FOR: Welsh speakers, protected characteristics, rural/urban, tenure?

  o Which of these are a priority for inclusion?

- A key consideration will be household level vs individual level data collection. There are different options here. Don't need to make a decision now, but would be good to think about how the data may be used:
  o Do you envisage the survey being adult-only, or would you like to consider travel among children too?

  o Are you interested in travel behaviour at the overall level, or is there interest in household-level travel patterns? That is, do you have an interest in shared trips? Are you interested in household-level variables (such as income), which might influence travel behaviour? Will you be looking to analyse the impact of policies at the household level?

- Are there any specific geographic requirements when it comes to representation? PROBE FOR: LA/Regional level; Urban/Rural level etc.

Credibility - Your survey outputs and intended audience.

How will WNTS data be used?

- What output will you generate from the data, reports, data tables?

- Who is the key audience for these outputs? – ministers, journalists, academics, charities etc.

What are the key analytical requirements of the WNTS? PROBE FOR:
- Geographic analysis: Is analysis required at the regional level? Is analysis required at the LA level? Is there a priority? Rural vs Urban
- Demographic analysis: What population sub-groups, if any, will you need to break the data down for? (Protected characteristics; Welsh speakers; socio-economic indicators)

- Are there any other key demographics or geographies required for analysis purposes?

- The brief states that a desired requirement is a 7-day travel diary. 7-day diaries give comprehensive coverage of travel behaviour (allow for variation in daily travel patterns); are more likely to capture rare events such as long-distance journeys and allow for more detailed analysis, but they are high burden (can lead to non-response), are prone to errors such as recall bias, can be difficult to analyse, and require costly data processing. Many national travel surveys use one- or two-day travel recall instead.
  o What level of travel behaviour detail do you require? That is, do you require overall volumes of trips per mode, or do you want to understand how that varies over a given period?

Do you anticipate the outputs being assessed for National Statistic status?

Comparability - Key comparisons you need to make

What data comparisons, if any, does the WNTS need to provide?
- How important, if at all, is it for WNTS data to be comparable with NTS or any other surveys such as National Survey for Wales?

Does the diary data need to compare with NTS diary data?
- Will the travel diary element only include trips within Wales?
- Is it likely the travel diary will need to record international travel, those by plane or boat?

Coherence - The importance of multiple data sources

How valuable or informative is unpaired WNTS data? I.e. Interview survey without diary data or diary data without the Interviewer survey. (NOTE FOR MODERATOR: NTS produces data at two levels: interview level – based on all completed CAPI interviews (regardless of whether the diary is complete; and diary level – based on all fully productive households: complete interviews and diaries for all household members)

Facilitating the potential to recontact respondents to ask about more
targeted travel issues is outlined as an essential requirement in the brief.
Do you, at this stage, have any thoughts or requirements around this
recontact? PROBE FOR:
- Frequency of data
- Questionnaire content: Repeated measures or one-off areas of interest, attitudinal and/or behavioural
- Type of analysis: Longitudinal or cross-sectional
- Regional representation or country wide
- Sample size or achieved interviews required.
- How long would individuals/households remain active for contact?
- Is there an interest in their travel behaviour (completing a diary element) or is the focus on attitudinal questions?

Completeness – levels of completed data

Minimising respondent input/effort or burden is a key indicator of success.
What does this mean to you? PROBE FOR
- Length of survey
- Concepts measured.
- Days required for a full completion of the diary
- Selecting a mode to complete the survey in

There is a trade-off between respondent burden and the volume of data
collected to consider, particularly in relation to the diary. At this stage, does
one of these have any more weight than the other?

How critical is it that all questions are asked of the whole sample?
- Modularisation or rotating modules across years

Are there any items which would be critical if they were missing?

Is there a single feature (item or day) that is most important when collecting
travel behaviour from the diary?

Timeliness - When you need the data?

In an ideal world, how frequently/when would you like WNTS data to be delivered?

Does annual data delivery meet your requirements?
* The 'shortest feasible timescale' was mentioned, what are your needs and expectations on data delivery?
* Are there any planned publication or policy requirements scheduled?

Are there concerns with the survey not following a calendar year for data collection i.e. April-March?

Travel behaviour is often impacted by seasonality, is this something which should be addressed in a design?

Cost-effectiveness The available survey budget

Delivering the survey in a cost-effective manner and giving value for money is a key indicator of success. What does value for money mean to you in this context?

Is cost-per interview a useful metric to consider?

Impact - The wider impact of delivering the survey

A key indicator of success is that the survey is delivered in an environmentally sound and efficient manner. What does this mean to you in this context?
PROBE FOR:
* Limiting the amount of travel required to deliver the survey
* Limiting the amount of printing and postage required to deliver the survey

Do you have any existing metrics/ways of measuring impact that you would like us to factor into our assessment?

Conclusion and next steps

Are there anything other requirements for the WNTS we have not discussed today that you would like to detail?

Next steps: A report will be written as a short summary of the key information provided.

We will also be moving to the evaluate stage based on the information gained from this workshop.

This stage looks at the feasibility of different methodological designs assessed against a range of quality dimensions (adapted total survey quality framework (Biemer, 2010)): accuracy, credibility, comparability, coherence, completeness, relevance, timeliness and cost-effectiveness.

For each dimension we devise a series of indicators based on the specific requirements.

We will work closely with you to consider the options around the diary, the sampling approach and the selection approach, outlining the advantages and disadvantages of each and any associated trade-offs to consider.

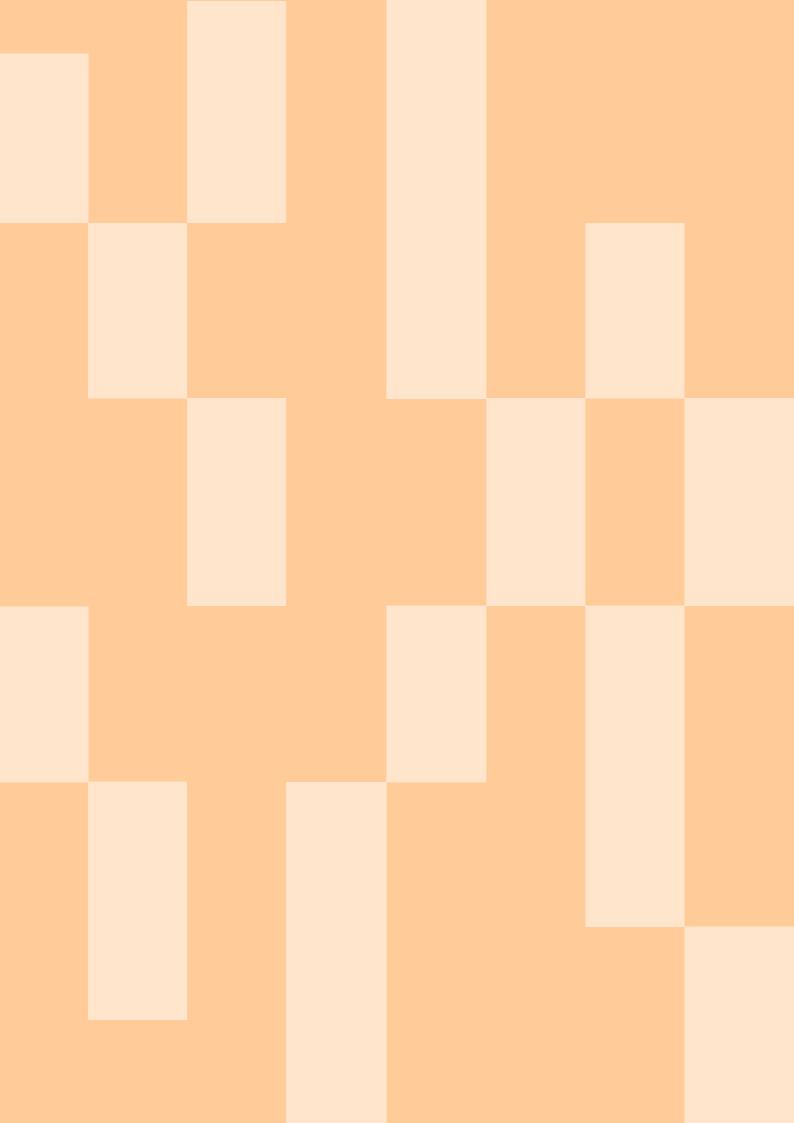**Appendix C. Regional Breakdown**

Table 6. Regional breakdown

Region	Local authorities
South East Wales	Blaenau Gwent, Bridgend, Caerphilly, Cardiff, Merthyr Tydfil, Monmouthshire, Newport, Rhondda Cynon Taf, Torfaen, Vale of Glamorgan
South West Wales	Carmarthenshire, Neath Port Talbot, Pembrokeshire, Swansea
Mid Wales	Ceredigion, Powys
North Wales	Anglesey, Conwy, Denbighshire, Flintshire, Gwynedd, Wrexham

Appendix D

Table 7. Outcomes and success indicators for the WNTS

Indicator of success	Further explanation
Outcome 1: The survey provides representative, meaningful and useful insight into travel in Wales.	
1.1. Provides relevant and detailed outputs on the travel patterns, habits, experiences and perceptions of people living in Wales.	Outputs should help the Welsh Government and TfW to: understand transport's contribution to overarching policy objectives; assess transport system performance; and evaluate interventions.
1.2. Provides robust outputs in a usable and understandable format.	Outputs are to the standard required to be badged as national statistics in line with the UK Code of Practice for Statistics and in a format which allows for analysis across TfW and Welsh Government policy areas.
1.3. Provides results that are representative of the Welsh population.	A sufficiently large randomly selected sample, across age, gender, physical ability, other protected characteristics, socio-economic factors, urban/rural home location and Welsh speakers.
Outcome 2: The survey has a robust, future-proof design and methodology that enables effective data collection and analysis.	
2.1. Is repeatable so that the same method can be used on an annual basis in the future.	Minimal technical complexity, allowing the same approach to be used in future years without concerns over technological redundancy, while also allowing for flexibility in the questions asked.
2.2. Minimises respondent input effort and avoids confusion through user-centred question design.	Questions are relatively quick, straightforward, clear to complete, and offered bilingually, leading to higher quality data outputs.
Outcome 3: The Welsh population is engaged and supportive of the Wales National Travel Survey as an example of an innovative and sustainable survey	
3.1. Is demonstrably delivered in a cost-effective manner.	The survey is of high quality while at the same time clearly provides value for money.
3.2. Minimises respondent input effort through appropriate use of technology targeted to user needs.	The survey is easy for respondents to understand and complete, and focused on the varied needs of respondents, encouraging a good response rate.
3.3. Is delivered in an environmentally sound and efficient manner.	Reduces the need to travel to implement the survey and minimises paper use / waste.
3.4. The approach and communication comply with GDPR as well as minimising any public concern.	Go beyond GDPR compliance, ensuring that the survey is undertaken and communicated in a way which assuages any public concern over data security and use.

Source: Invitation to tender, volume 1 – Instructions and Response Requirements,