

Understanding the factors that
influence parents' decisions to support
their children with active school travel

Qualitative findings



Prepared for:
Public Health Wales, Health Improvement Division, Physical Activity Programme

Prepared by:
Beaufort Research



Contact details

Agency contacts: Fiona McAllister, Adam Blunt, Catrin Davies

Public Health Wales: John Bradley john.bradley@wales.nhs.uk

Understanding the factors that influence parents' decisions to support their children with active school travel

Qualitative findings

February 2021

Beaufort Research

2 Museum Place

Cardiff

CF10 3BG

(029) 2037 8565

enquiries@beaufortresearch.co.uk

www.beaufortresearch.co.uk

Terms of Contract

Unless otherwise agreed, the findings of this study remain the copyright of Beaufort Research Ltd and may not be quoted, published or reproduced without the company's advance approval.

Approval to quote or publish will only be withheld on the grounds of inaccuracy or misrepresentation.

Any approved publication must detail: Beaufort Research Ltd as provider, sample size and field dates.

© Beaufort Research Ltd 2020

Produced in accordance with ISO20252

Contents

1. Executive summary and conclusions	5
2. The situation, objectives and approach	10
2.1 The situation.....	10
2.2 Objectives.....	11
2.3 Project approach	11
3. Parental beliefs, attitudes and perceptions that facilitated active school travel	14
3.1 Reported practical and physical environment factors that enabled active school travel ..	14
3.2 Reported beliefs, attitudes and perceptions that enabled active travel	15
3.3 The perceived main influence	21
4. Parental beliefs, attitudes and perceptions that acted as barriers to (more) active school travel	22
4.1 Reported practical and physical factors that acted as barriers to (more) active school travel	22
4.2 Reported beliefs, attitudes and perceptions that acted as barriers to (more) active school travel	25
4.3 The perceived main influence	29
5. The age at which parents feel confident to allow their children to actively travel to school and factors influencing this decision	30
5.1 Perceived appropriate ages for active school travel modes.....	30
5.2 Factors determining the ages given	31
5.3 Comparisons with participants' own childhood	33
6. Participants' views on overcoming barriers to active school travel	34
6.1 Routes safe from traffic and the physical environment	34
6.2 Views on improvements schools could make	34
6.3 Suggestions and observations related to beliefs, attitudes and perceptions	34
6.4 Reactions to interventions and initiatives	36
7. Conclusions	39
Annex: sample structure.....	41

List of figures

Figure 1.1: Perceived factors enabling active school travel	6
Figure 1.2: Perceived factors preventing active school travel.....	7

List of tables

Table 5.1: Average age parents feel confident allowing their children to walk or cycle to school by travel method and school phase	31
Table 5.2: Average age parents feel confident allowing their children to walk or cycle to school by SEG and gender	31

1. Executive summary and conclusions

Introduction

Public Health Wales required Beaufort Research to deliver a qualitative insight project to describe the factors that influence parents' decisions and actions in relation to mode of travel to school. The insights will be used to equip Public Health Wales with more a detailed, qualitative understanding of the situation in Wales with active school travel (AST), including how intrapersonal factors influence behaviour alongside the better documented physical environment factors.

Sixty nine participants took part in focus groups and in-depth interviews which were spread across four regions in Wales. The sample was divided between those whose children normally travelled actively to school and those whose children normally did not but lived within a certain distance or travel time of the school where active travel could be possible. The sample also included participants with children at primary school and those with children at secondary school. In addition, there was a mix of socio-economic grouping and urban and rural locations. Some of the research was carried out in Welsh.

Fieldwork took place in March and April 2020. The COVID-19 outbreak was beginning to become more prominent towards the end of the fieldwork period. It should be borne in mind that the main findings are based on views held prior to the outbreak.

The conversations were free-flowing and centred on: eliciting perceived benefits and drawbacks of different methods of travelling to school and influences on decision-making; at what age participants felt confident to allow their children to actively travel to school; and what might encourage them to consider (more) AST.

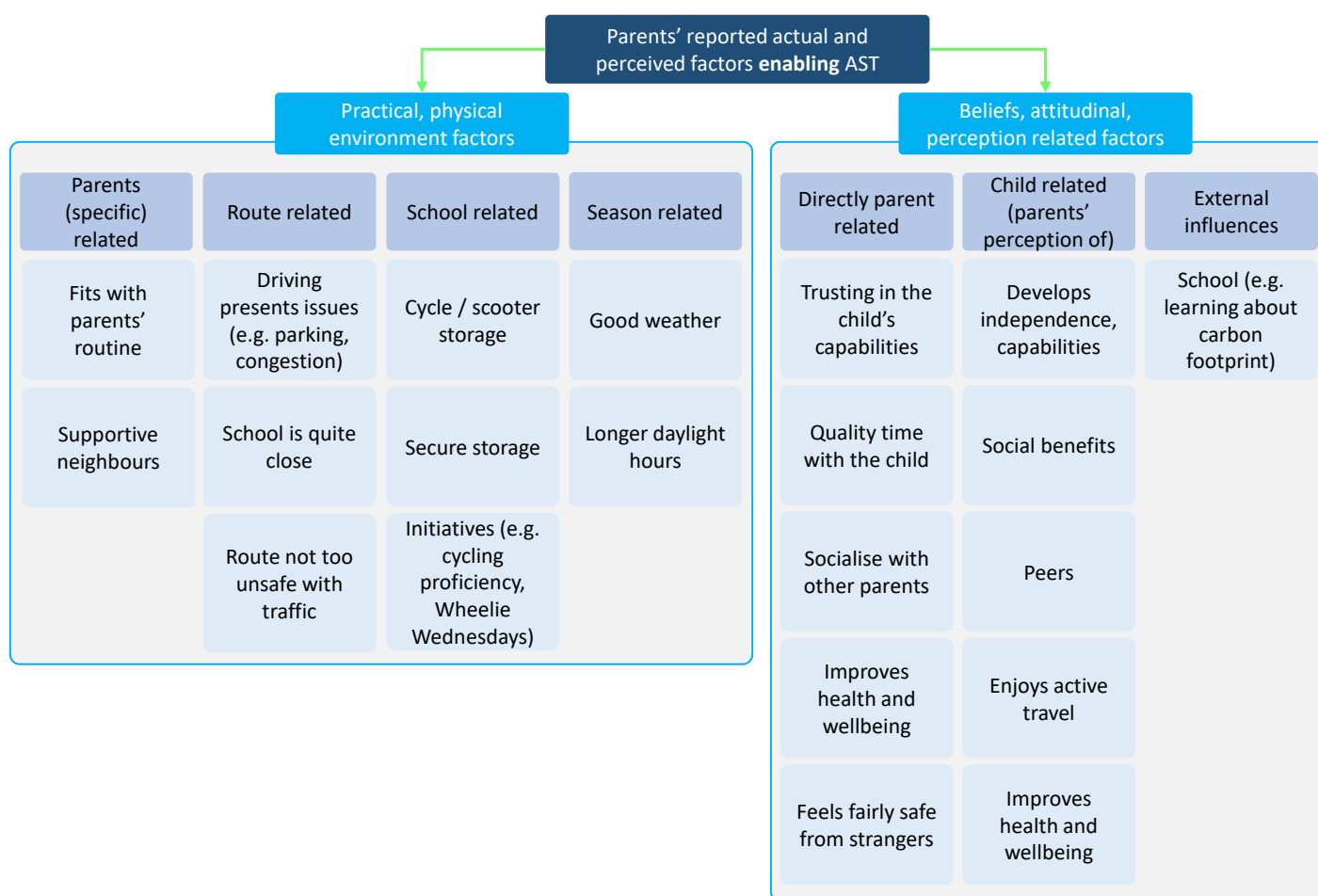
Unlike quantitative surveys, qualitative investigation is not, by its nature, designed to be statistically representative. It is intended to be illustrative and to allow for in-depth exploration of the diversity around the topics of interest.

Key findings

Factors that positively influence AST decisions include a range of beliefs, attitudes and perceptions – as well as the expected physical environment factors

Participants whose children actively travelled to school regularly highlighted influences that can be described as benefits to the child and sometimes to the participant. These types of factor were as prominent as more practical factors like the challenges associated with driving, proximity and fitting the family routine. The same themes often emerged as perceived benefits of AST among those whose children were normally driven to school; but were not voiced to the same extent.

The figure overleaf summarises the main reported actual and perceived enabling factors to emerge. These are divided by those that can be considered more practical and the physical environment, and those based on beliefs, attitudes and perceptions.

Figure 1.1: Parents' reported actual and perceived factors enabling active school travel

Main positive influences on decisions are a mix of factors – from fitting routines, avoiding driving issues and convenience of proximity to developing their child's independence and health benefits

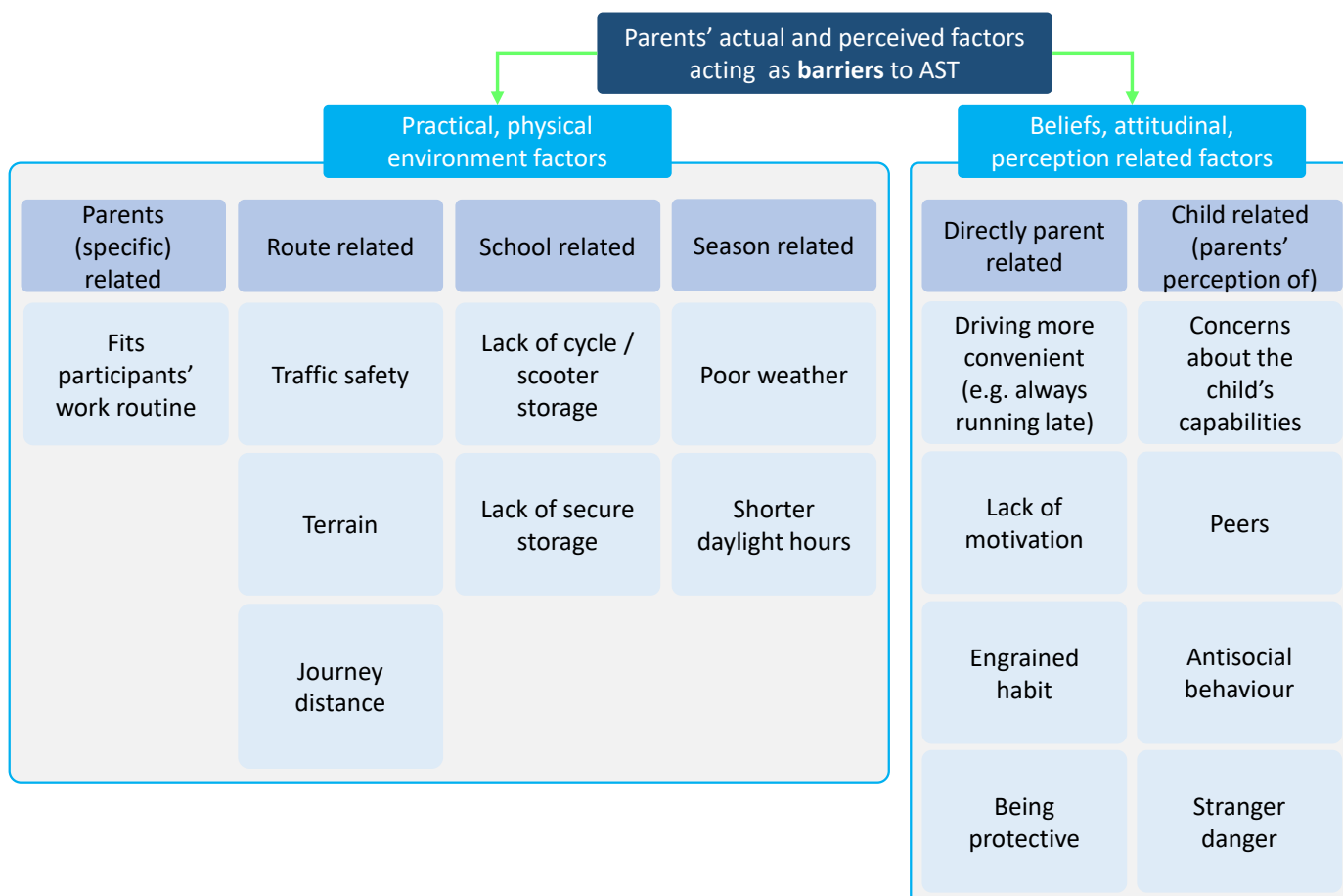
When attempting to identify what they believed was the main influence on decisions to choose AST, participants sometimes gave responses that did not necessarily reflect other factors they had emphasised as influential. They were a mix of practical, physical environment factors and factors related to beliefs, attitudes and perceptions such as fitting parents' routine, proximity, avoiding difficulties associated with driving, helping the child's independence to develop and the social aspect for secondary school children. The research indicates that several factors are often involved and that it may not always be feasible to distil these behaviours down to one key influence.

Factors that are believed to act as barriers to AST centre on convenience and safety – from traffic and strangers

The two broad themes of convenience and safety were identified as perceived barriers to AST. These factors combined practical and physical environment factors (e.g. to fit work routines and concerns about traffic) and beliefs, attitudinal and perception related factors (e.g. concerns about strangers if the child were to travel unaccompanied by an adult, the influence of engrained habits and a lack of parental motivation and organisation).

The figure below summarises the factors raised among participants whose children did not normally actively travel to school.

Figure 1.2: Perceived factors preventing active school travel



Convenience of driving, fitting work routines, and safety concerns are given as the main influences on decisions not to actively travel to school

Participants were likely to reiterate the barriers they emphasised during the discussion as the key factors that acted as barriers to AST. Safety concerns covered worries about traffic as well as strangers. However, some gave the impression when discussing routine and habit that they might no longer be making active decisions on how the child travelled to school.

Ages at which participants feel confident allowing their child to actively travel to school without them are reasonably consistent - but those whose secondary school children do not actively travel give slightly higher ages

Walking with friends was more likely to attract a lower average age: 10 – 12 years old. Slightly higher average ages emerged for walking alone to school and cycling to school with or without friends: 11-13 years old.

The transition from primary to secondary school represented a key point in participants' thinking regarding when a child could walk or cycle to school on their own.

When discussing this topic, participants particularly focused on the child's safety from traffic and strangers (or 'stranger danger' as some described it). Physical improvements to protect

pedestrians and cyclists would lower the age for these activities, according to some participants. Concerns about strangers were based on a mix of general anxiety (e.g. via social media and media coverage) and hearing about specific incidents either locally or more regionally.

The ability to travel to school with other children, some felt, would help to allay concerns about strangers and potentially lead to slightly lower age consideration for AST unaccompanied by an adult.

Some would allow independent active travel if the child seemed mature enough (e.g. aware of their surroundings, traffic-aware and 'streetwise'). Participants also occasionally acknowledged that if they were not so protective towards their children generally, they might consider lowering the age slightly.

Improved safety from traffic, walking school buses¹, travelling with friends, park and stride² and the changes a parent could make were highlighted as ways of overcoming barriers to AST

Safer routes (e.g. designated patrol crossings, dedicated cycle lanes, and wider pavements) were suggested regularly among participants. Walking school buses were sometimes raised spontaneously as well. In addition, some felt that schools could do more such as expanding cycling proficiency sessions and providing better bike and scooter storage facilities.

From time to time, participants concluded that they probably did not need to be as anxious as they were about safety. They could trust their child more and do more to give their child a little more independence. However, there were instances where participants did not think much could be done to allay their fears about traffic safety and strangers.

Some participants with secondary school children believed they would be more willing to allow their child to actively travel to school (unaccompanied by a parent) if they knew that the child would be with friends.

Reflecting on the research discussion, some thought that perhaps they could make more time and effort to walk more often. This was to experience quality time with their child, for health purposes, and because the child enjoyed active travel. Some surmised that travel behaviours had become so routine that the parent had not been prompted in any way to think about changes when perhaps a child was ready to actively travel unaccompanied.

Conclusions

Objective: identify and explore what parental beliefs, attitudes, intentions and perceptions facilitate children to actively travel to school

The research identified a range of factors that influenced parents' decision-making on their child's school travel. Many of these factors related to beliefs, attitudes and perceptions, such as helping to develop the child's independence and capabilities and parental benefits, in addition to the better documented physical environment factors. However, belief, attitudinal and

¹ A walking school bus is a group of children walking to school with one or more adults. It can be as informal as two families taking turns walking their children to school to as structured as a route with meeting points, a timetable and a regularly rotated schedule of trained volunteers.

² A scheme where parents / guardians can park away from the school and walk the rest of the way, reducing congestion and helping pupils enjoy a sociable walk before the start of the school day. An arrangement is usually made with the owner of carpark (e.g. a supermarket) as part of the scheme.

perception based factors were not so strongly expressed among those who normally drove their children to school, when discussing what the benefits of active travel might be.

Objective: identify and explore what parental beliefs, attitudes, intentions and perceptions act as barriers to children travelling actively to school and whether these can be overcome

Some barriers appeared difficult to overcome, for example parents' working hours, the dangers children would face cycling on busy roads, stretches of road in rural areas without a footpath and steep terrain as part of the journey. In addition, there were occasions where participants referred to several different barriers affecting their decisions, making it difficult to address them all.

Leaving aside the frequently requested improvements to the physical environment, there is a case for developing communications and interventions that seek to address beliefs, attitudes, and perceptions that contributed to non-AST. After all, those whose children did actively travel highlighted a range of motivating factors that were not linked to the physical environment and practicalities. They, too, voiced similar fears regarding traffic, strangers and often admitted to being disorganised in the morning. Similarly, some also acknowledged that they were probably overprotective of their children.

The research did not find that participants were regularly exposed to communications or initiatives aimed at encouraging them to review how their children travelled to school. As the discussions concluded, it was noted that some participants were reassessing their routines and travel habits, to the extent that there was occasional acknowledgement of slight laziness. Driving was too convenient, and more deliberative 'System 2'³ decisions were not always necessarily being made about travel.

Objective: identify the age at which parents feel confident to allow their children to actively travel to school and explore the factors that determine this decision

The transition from primary to secondary school is seen as an important stage in the child's life. It was associated with the main point at which a child would begin to travel to school actively without an adult. In some cases, participants had used or expected to use Year 6 as the start of the transition, allowing the child to walk or occasionally cycle to school with friends or unaccompanied.

Travelling alone tended to prompt slightly higher ages, indicating the general concern participants often raised about safety and regarding the child's decision-making.

However, the qualitative nature of these findings on ages means that they can only be considered indicative. Quantitative research would be necessary to provide more robust results on these ages and the differences between these groups in attitude and behaviour. Even so, it would be a challenge to take into account all the variables at play in people's minds such as the child's character, location, routines and attitudes which participants could find hard to put to one side when considering this topic.

³ See Kahneman, D. (2011). *Thinking, Fast and Slow*

2. The situation, objectives and approach

2.1 The situation

The emergence of physical inactivity as a global health concern has heightened the need for strategies to reverse this decline. In Wales, over a quarter of children are overweight or obese. Tackling this issue, as well as adopting a preventative approach to public health challenges, is a key priority for NHS Wales.

Active School Travel (AST) is one strategy that can help with physical inactivity among children. Evidence consistently shows that school children who engage in AST are more physically active than those who travel to school by car. Improvements in cardio-metabolic health profile, wellbeing, way-finding skills and educational attainment are linked to travelling to school in this way.

AST has the added benefits of being an inexpensive source of physical activity that can be integrated into routines. At a broader level, more AST could mean less congestion and lower polluting emissions from vehicles, particularly in the vicinity of schools.

For AST to be effective, it requires more than simply encouraging behaviour change among parents / guardians and school children. Effective interaction is needed between local community culture and values, school culture and practices and the physical environment. These elements need to positively reinforce each other to contribute to improved AST rates.

The Welsh Government recognised the importance of active travel with its Active Travel (Wales) Act 2013⁴. Its vision is for walking and cycling to become the preferred ways of getting around over shorter distances for people in Wales. Active travel also contributes to the wellbeing goals of the Well-being of Future Generations (Wales) Act (2015)⁵. In addition, a Cross Party Group on the Active Travel Act at the National Assembly for Wales has been working on producing an Active Travel to Schools Toolkit⁶. The recent global concentration on climate crisis and the positive impact on air quality of COVID-19 measures globally may be contributing influences as well.

Public Health Wales has made improving understanding and recognition of active travel and AST strategic priorities given the associated range of benefits. As part of Public Health Wales' work, a systematic review of the evidence established that more work is needed to create a more detailed, qualitative understanding of the situation in Wales with AST, particularly regarding how intrapersonal factors influence behaviour alongside the better documented physical environment factors. This insight work is intended to help fill this gap in understanding and level of detail for Wales.

⁴ See http://www.legislation.gov.uk/anaw/2013/7/pdfs/anaw_20130007_en.pdf

⁵ See <https://seneddresearch.blog/2016/03/22/the-well-being-of-future-generations-wales-act-2015-what-is-it-and-what-does-it-mean-for-wales/>

⁶ See <http://www.huwiranca-davies.org.uk/active-travel-to-schools-toolkit-event/>

2.2 Objectives

The aim of this project was to carry out insight work to describe the factors that influence parents' decisions and actions in relation to mode of travel to school. The key objectives were:

- Identify and explore what parental beliefs, attitudes, intentions and perceptions facilitate children to actively travel to school;
- Identify and explore what parental beliefs, attitudes, intentions and perceptions act as barriers to children travelling actively to school and whether these can be overcome;
- Identify the age at which parents feel confident to allow their children to actively travel to school and explore the factors that determine this decision.

2.3 Project approach

A qualitative approach

The project used a qualitative method with a combination focus groups, in-depth face-to-face interviews, and in-depth phone interviews. A qualitative approach was appropriate because it allowed for exploring the diversity around the topics of interest and in more depth than would be possible via a quantitative approach. This approach also enabled us to identify themes across diverse groups.

The COVID-19 outbreak was beginning to become more prominent towards the end of the fieldwork period. This resulted in talking with some parents by phone to ensure we reached enough participants. It should be borne in mind that the main findings are based on views held prior to the outbreak.

The potential drawback of this qualitative approach centres on the limited ability to draw decisive inferences from the feedback obtained that can be applied to a population, as the sample was not representative. Qualitative investigation is not designed to be statistically representative. It is intended to provide in-depth understanding which was required for exploring the objectives. Its strengths lie in the ability to identify themes and insight across diverse groups and experiences, and indicate the prevalence of certain issues.

Project sample

The total sample consisted of eight focus groups and eight in-depth interviews, plus a further seven in-depth interviews where attendance in two groups had not been sufficient. The sample design covered the following criteria:

- Four locations – Aberystwyth, Caernarfon, Cardiff and Mold. Parents living in urban and rural areas were included and a mix was ensured of parents from socio-economic groupings ABC1 and C2DE⁷;

⁷ Socio-economic grouping (SEG) given for the disengaged adults sample summary is based on the occupation of the head of the household, with each group defined as follows:

AB: Higher and intermediate managerial, administrative and professional occupations

C1: Supervisory, clerical and junior managerial, administrative and professional occupations

C2: Skilled manual workers

DE: Semi-skilled and unskilled manual workers, state pensioners, casual and lowest grade workers, unemployed with state benefits only

- Half of the sample structure consisted of participants whose children normally actively travel to schools and half whose children normally did not. AST was defined as the child walking, scooting or cycling to school for a minimum of 10 minutes for all or part of the journey;
- Half of the sample consisted of parents whose oldest child was at primary school and half had a child at secondary school;
- Parents taking part in discussions that focused on primary school were to live up to approximately 1.5 miles from the school; and those with children at secondary school were to live up to approximately three miles from the school.

Participants on occasion were uncertain what the distance was or precisely how long the journey took. In addition, a small number of participants in more rural locations lived further than these distances from the schools (e.g. a secondary school pupil who travelled actively by walking 15 minutes to the bus, then another 15-20 minutes from the bus-stop to school). In a few cases, participants' weekly routines varied, for example where a parent worked shifts, where different children travelled to school in different ways or where there was shared custody of a child.

In total, 69 participants took part and a proportion of the fieldwork was carried out in Welsh. The sample structure is provided in the annex.

Recruiting participants

Beaufort first agreed a screening questionnaire with Public Health Wales. Using the questionnaire, our network of qualitative recruiters found participants by knocking on doors, stopping people in the street, and using local networks. The focus groups took place in local hotels or community centres and participants were given a financial incentive. Individual interviews took place in-home and by phone. There was no discernible impact on the quality or type of feedback obtained using these different methods, although we were able to explore perceptions in more depth during individual interviews. In-home visits also allowed us to understand the context for some of the participant's responses because the researcher had seen, for example, the busy main road at the end of the estate where a participant lived.

The discussions and analysis

Beaufort drafted a topic guide to use in the discussions which was revised based on feedback from Public Health Wales. The conversations were free-flowing and centred on: eliciting perceived benefits and drawbacks of different methods of travelling to school; perceived main influences on their decision-making regarding school travel; exploring practical and more intrapersonal enablers and barriers; at what age parents felt confident to allow their children to actively travel to school; and what might encourage them to consider (more) AST.

The focus groups and interviews were audio-recorded with participants' permission. An inductive approach to the analysis was used whereby Beaufort, through descriptive analysis, categorised the data to develop themes that emerged from the content of the focus groups and interviews. The categories and themes were broadly framed within the key project objectives.

Anonymous verbatim comments from participants are included throughout this report. These comments should not be interpreted as defining the views of all. Instead they give insight into individual views on the points identified. Each comment has an attribution which identifies

gender, whether or not the child / children actively travel to school, school phase, socio-economic grouping and location (e.g. *female, AST, secondary, ABC1, Mold*). Comments and attributions have been anonymised where necessary. Where the report refers to 'both types of participant', this means those whose children normally travelled actively to school and those who did not. Differences by other criteria like primary versus secondary school are highlighted where they occur.

Where bulleted lists of points made by participants are provided in the report, they are organised in alphabetical order unless otherwise stated, indicating that the points were not dominant themes. Bold text is used in the report to identify themes and change of topic.

3. Parental beliefs, attitudes and perceptions that facilitated active school travel

This chapter explores the enabling factors that participants believed influenced their decision to allow their children to travel actively to school. It is broadly divided between practical and physical environment factors; and enablers based more on beliefs, attitudinal and perception related factors. The chapter also includes the views from participants whose children did not normally actively travel to school on what they perceived to be the benefits of active travel and how their children not actively travelling could make them feel.

3.1 Reported practical and physical environment factors that enabled active school travel

Parents-specific related factors

3.1.1 Fit with routine and supportive neighbours

AST, according to some participants, fitted conveniently into their day-to-day routine. An older child walking alone to secondary school allowed the parent to walk a younger sibling to primary school, for example. In addition, participants who worked full days or shifts were unable to take a child to secondary school even if they wanted to, because it did not fit into their work routine.

Having **supportive neighbours** helped to sustain the AST routine for a few participants. They worked together to help each other out (e.g. taking it in turns to walk the children to primary school to fit with work commitments). In one example, parents had discussed with their neighbours how the children would travel to secondary school in their first year. Discussions with other parents had also reassured one parent about safety.

Route related factors

3.1.2 Issues with driving to school

Some participants whose children actively travelled to school highlighted issues with using the car. Driving was not necessarily quicker because of **congestion**, and it was difficult to park near the school to drop the child off. Getting younger children into and out of the car could be a 'hassle' as well. Walking, cycling or scooting were convenient because the journey did not take very long with the school reasonably **close**. A foldable scooter could easily be carried home, for example, and a younger child could ride on a board attached to a pram.

For him to go to school it's actually quicker for him to walk, I know it's crazy but actually quicker to walk. (Female, AST, secondary, ABC1, Mold)

I just find it's always a worry when there's kids running around everywhere and you're trying to look to see if there is a car coming, trying to check you're not going to knock any child over. I just feel a bit safer about leaving the car at home really. (Female, AST, primary, C2DE, Cardiff)

Mae'n fwy o hassle cael nhw mewn i car ac wedyn cael nhw allan ochr arall. (It's more hassle to get them in and out of the car.) (Male, AST, primary, ABC1, Caernarfon)

Participants whose children did not normally actively travel sometimes highlighted these issues as well but parking and route congestion did not deter them from driving their children to

school. In one instance, the participant arrived half an hour early to secure a parking space when collecting the child from primary school. Other issues occasionally associated with driving among those who normally drove were the cost of fuel and running a car, the stress of sitting in traffic and public buses being unreliable. Only in a couple of isolated cases, however, did these participants volunteer that they were contributing to congestion and parking problems.

But sometimes you turn up, like the other day, half-past-two, oh, I'll be nice and early. I'll get a spot. And you can't. (Female, non-AST, primary, C2DE, Mold)

Other than when the weather was bad or when running late in the morning, some participants whose children actively travelled could not identify any further benefits with this mode of travel. In a few cases, participants did not have a car so active travel was the only option.

3.1.3 Safety from traffic

Additional practical or physical enabling factors that arose slightly less frequently included safety from traffic on the route to the school (for accompanied and unaccompanied children). A participant gave the example of there only being one main road to cross and the child knew to stop on their bike there and wait for the parent to catch up.

School related factors

3.1.4 Storage facilities and initiatives

The school providing secure cycle storage was occasionally raised as a factor contributing to AST, giving parents peace of mind. Also, participants sometimes referred to the role school initiatives had played in encouraging AST among parents and children, for example cycling proficiency sessions at school. Initiatives are covered in more depth in section 6.4.

Season related factors

3.1.5 The weather and daylight hours

Good weather was believed to encourage AST. This point was more emphatically made among those whose children did not normally actively travel. In addition, these participants (not normally actively travelling) sometimes qualified these active travel occasions with further conditions like needing to get up in time in the morning or being in the 'mood' to do so. Some comments indicated, therefore, that the weather alone was not always a decisive factor in choosing to actively travel. Some drew attention to shorter **daylight hours** as a barrier to AST, indicating that longer daylight hours could contribute to encouraging AST as well.

We do walk sometimes in the summer; . . . but [driving] is just the easiest and more convenient way. (Male, non-AST, primary, C2DE, Mold)

3.2 Reported beliefs, attitudes and perceptions that enabled active travel

Directly parent related factors

3.2.1 Trusting in the child's capabilities

From time to time, participants whose secondary school children normally travelled actively to school explained how they **trusted** the child to be sensible and 'streetwise' on the journey and

not to be distracted on the way, thereby arriving at school on time. Having confidence in their child's cycling ability was also an influence.

She's very sensible [12 years old]. She's got her head screwed on. She's got a phone on her all the time. That's pretty much it really. Just got to go with the flow and just trust that it's going to be okay. (Male, AST, secondary, ABC1, Mold)

3.2.2 Benefit to the parent

Some participants whose children travelled actively to school highlighted the benefits to the parent as influencing factors. Among those with primary school aged children, walking with them created precious **quality time** with the child to chat. The opportunity to **get to know other parents** during this period was considered an advantage as well. In some cases, parents who normally drove children to school also thought they missed out on quality time in a busy day to have a chat with the child or to socialise with others rather than being confined to a car. It might also make them feel more relaxed and **help with wellbeing**, according to a couple of participants. In addition, it could help with their own physical health, such as losing weight.

Just chat to each other for a time. Wellbeing, mental health. . . . Make time. (Male, non-AST, primary, ABC1, Aberystwyth)

Dw i'n licio cael sgwrs efo'r plant, yn enwedig ar y ffordd adref. Dwi'n cael gwybod lot yn y deg munud, chwarter awr yna. Dwi'n cael gwybod bob dim, be sydd 'di digwydd yn yr ysgol. (I like having a chat with the children, especially on the way home. I get to know a lot in that ten minutes, quarter of an hour, I get to know everything that's happened at school). (Female, AST, primary, ABC1, Caernarfon)

AST freed up time for some secondary school parents resulting in a less stressful morning routine. As an example, one participant explained that, with the older children walking to secondary school on their own, she had time to walk the younger children to school and enjoy a calmer routine rather than rushing to drive all of them to school. In a final example of a benefit to the parent, a participant revealed how she felt very 'chuffed' that her son walked to secondary school as part of their efforts to help him become healthier.

Occasionally, parents who normally drove their child to school also imagined that AST could free up their time in the mornings. An example was given of envisioning primary school aged children joining a walking bus so that the parent could pop into town instead or not having to rush to get themselves up and ready so early in the mornings.

3.2.3 Safety from strangers

Feeling that the child was safe on the route to school regularly influenced participants with secondary school aged children. Safety could therefore mean safety from being approached by other people as well as from traffic. They were reassured that the route to school was used by many children and some adults which helped to allay concerns about anyone undesirable approaching the child. Travelling with a friend to secondary school also helped with any anxiety about a child's security, for some. Furthermore, some occasionally explained that they insisted their children text them on arrival. Similarly, one participant revealed that they used a tracker app that informed them when the child had arrived.

That gives each of them that little bit of security because there is two of them. . . . If she didn't have a friend with her, I would be a bit concerned. (Female, AST, secondary, ABC1, Mold)

Mae genna fi tracker ar Cari ar ei Fitbit hi. Mae o'n dod i ffôn fi, so dwi'n gwybod yn union lle mae hi. So dwi'n checio hwnna bob 30 seconds! (I have a tracker on Ffion's Fitbit. I can see it on my phone, so I know exactly where she is. I check that every 30 seconds!) (Female, AST, primary, ABC1, Caernarfon)

Building on this theme, participants from time to time acknowledged they could be slightly overprotective, so such steps regarding the child's safety put them more at ease (being protective is discussed further in chapter 4). Another example was given of following a son at a distance when he first cycled to secondary school, not only to see how safe the route was from traffic but also to see who else was in the vicinity at that time.

3.2.4 The environment

A further, infrequently voiced factor that was positively influencing AST related to environmental issues. Concern was sometimes expressed about increasing congestion around schools and how active travel contributed to reducing the resulting pollution. 'We've got to think of other ways of getting about', observed one participant. Another commented that their child was aware that walking to school helped to save money for the family which was thought to help with motivating the child.

The environment was not, however, a front-of-mind factor overall. Those whose children did not actively travel to school tended not to raise environmental issues when discussing the advantages and disadvantages of different school travel modes.

Parents' perceptions of child related factors

3.2.5 Developing the child's independence and capabilities

Among mainly those with secondary school aged children, a key enabling factor was how children making their own way to school (with or without friends) helped to develop their child's independence, self-sufficiency, confidence and decision-making skills, for example around traffic. This could include walking, cycling or catching a bus as part of the journey. Some thought of it as an unconscious benefit the child was experiencing while some believed that the prospect of greater independence actively motivated their child to want to travel without parents. 'He's not having to obey my rules', as one participant explained. The point was also made among those with children at primary school but not to the same extent.

It's teaching them skills. It's preparing them, because when they do leave school you've not pampered them and dropped them here, there and everywhere. They've learnt from that age then. Senior school is a good age, eleven, to be doing it. (Female, AST, secondary, C2DE, Aberystwyth)

She is getting onto a public bus [after a fifteen minute walk]; therefore she is expanding her horizons if you know what I mean. She is meeting other people and becoming self-

sufficient rather than having to rely on parents. . . . I think it's just she likes her independence really. (Male, AST, secondary, ABC1, Mold)

Dw i'n meddwl bod o'n magu hyder yn y plant i wneud pethau eu hunain. Maen nhw'n gorfod feddwl am eu hunain dydi o. (I think it nurtures the children's confidence to be able to do things for themselves. They have to think for themselves.) (Female, AST, primary, ABC1, Caernarfon)

The perceived importance of opportunities for greater independence for the child helped some parents to counter feeling overprotective towards them. Seeing a child become more confident because of this increased independence also helped with 'letting those strings go', according to one participant.

3.2.6 Social benefits

Participants with children at secondary school stated that the social aspect of children going to school with friends helped to encourage AST. They described how their children were able to catch up with friendship groups, develop social skills and bonds. One participant commented that she liked how her son would sometimes stop with friends in a coffee shop or bakery on his way home. It was also pointed out that children would not want to be seen with their parents travelling actively to secondary school because of the embarrassment. This social benefit was noted from time to time among participants whose children did not actively travel to school.

She'll amble down the hill with friends and talk and chat and I mean, she admitted that she can get down in twenty-five minutes. . . . They can do it in forty minutes, because they just take their time, they chat and they stroll, they're not in a hurry to get anywhere. (Female, AST, secondary, C2DE, Aberystwyth)

Linked to the social aspect was **peer influence**, according to some participants. Choosing to walk or cycle was often believed to depend on what the friendship group wanted to do. Participants with children at primary school were less likely to make this point although there were occasions cited of a child scooting to school because friends did; and asking to walk to primary school because friends did who lived closer to school.

Mae o jyst isio mynd achos mae'r hogia eraill 'di deu'tha fo bod nhw isio 'neud yr un peth, so mae o jyst 'di cael o yn ei ben fod o isio seiclo i'r ysgol. (He just wants to go because the other boys have told him they want to do the same thing, so he's got it in his head that he wants to cycle to school.) (Male, non-AST, secondary, C2DE, Caernarfon)

3.2.7 Enjoyment

Knowing that children enjoyed AST influenced some parents' decisions. For some with primary school aged children, scooting and cycling were seen as fun activities. It was something for children to look forward to after school, for example. For older children, parents noted that they enjoyed going to school with friends, as described above.

F: [Scooters] would be their first go-to as long as it's not raining. M: It's more social. They can team up with their mates. (AST, primary, C2DE, Cardiff)

They absolutely love adventure. They love the bikes; love the scooters. . . . As soon as she gets in from school [six year old], she wants to be outside if it's nice on a scooter, on the bike. As you can see, it's a dead-end, just ride up and down, around these bits here. So, for her to ride a scooter it's like bliss. (Male, AST, secondary, ABC1, Mold)

Some participants with younger children explained how they made the journey to school into a game or challenge. Examples included competitive elements like a race, a parent and child competing over who recorded the most steps each day, jumping puddles or a 'foraging' expedition, as the comment below illustrates. It was felt by one participant that the primary school had contributed to the fun by adopting an initiative with a competitive component: the children had enjoyed earning points for active travel.

Sometimes you turn into like a forager so you say like, give them a list, complete your list all the way to school you get a pound. So like I say if they find a packet of crisps on the floor put it in the bin, tick. Conker, got a conker you know? (Male, AST, primary, C2DE, Cardiff)

According to a participant whose child did not normally actively travel to school because of the parent's work routine, they would walk in together whenever the participant had a day off work as both enjoyed the activity. In addition, there were occasions where other participants who normally drove their children to school felt the child was probably missing out on this type of benefit. It was suggested that a child who walked or cycled to school would see and learn more about what was around them in their community, including through conversations with the parent if accompanied.

3.2.8 Health and wellbeing

Parents of primary and secondary school children often referred to perceived health and wellbeing factors that contributed to their decision to encourage AST. There were references to the benefits of exercise and fresh air that helped to wake the child up and prepare them to be focused on learning by tiring them out slightly. It also supported mental wellbeing because it created an appropriate environment for the child to talk with their parent about anything that might be on their mind. This appeared to be more of a parental view than a motivating factor for the child. There were infrequent cases where participants felt that the child did not get enough exercise at school, so active travel helped in this respect. In a couple of cases, participants reported that their children had wanted to lose weight and felt walking to school would help.

It's healthy for them. By the time they get to school then, ten, fifteen minute walk they've already released all the endorphins in their brain so when they get to school and they're switched on. That's what I think wakes you up. (Male, AST, primary, C2DE, Cardiff)

It helps a lot for the boys; it gives them more focus because once you've expended that energy in the morning you then are capable of sitting down and concentrating. (Female, AST, secondary, C2DE, Aberystwyth)

Mae'r 'fenga hefo lot o anxiety issues a pethau fel 'na. . . . Os ti'n mynd yn y car, 'dyn nhw ddim 'di cael chans i ddeud, 'Dwi'n nerfus am hyn heddiw, Mam. Nei di siarad efo', whatever. Dwi'n meddwl mae o'n iechyd corfforol a meddylol. (The youngest has a lot of

anxiety issues. . . . If you go in the car, they don't get a chance to say 'I'm nervous about this today, Mam. Will you speak to . . .' whatever. I think it's about physical and mental health.) (Female, AST, primary, ABC1, Caernarfon)

Those whose children did not normally actively travel to school also sometimes noted the health benefits of active travel. In a small number of cases among these participants, there was reference to their child becoming lazy with car use and in one case overweight. Thus, there was an awareness of some of the benefits of AST. However, it was not a concern where children were active outside school, including among those who drove their children to school.

It means they're refreshed by the time they get to school as well. . . . They loved it, they really enjoyed it [the one time the parent was able to walk them in]. . . . One, it was something different, two, it was getting them going in the morning rather than half asleep, falling in the car and, half asleep, shoved out the car. (Male, non-AST, primary, ABC1, Aberystwyth)

I probably would like my daughter to walk sometimes, because it's good for the mind and exercise, isn't it? Always jumping in the car and jumping out, but it's not . . . I'd like her to walk to school, so no exercise [is an issue]. (Female, non-AST, secondary, ABC1, Cardiff)

External influences

3.2.9 School influence

On occasion, primary schools' efforts were believed to have motivated pupils to want to travel more actively. Examples were given of a child being keen to walk or cycle: because they had been learning about carbon footprints in class; because of initiatives like Wheelie Wednesday⁸, points based competitions and sticker charts; and because of cycling proficiency training at school.

In another example, a parent recounted how the primary school 'made a fuss' of children who walked to school in bad weather, providing a snack or hot drink on arrival for them. A further perceived motivating factor for children in one school was how a teacher placed a 'golden lock' on a different bike each day and the owner received a bag of treats. Elsewhere, a primary school had created a character to help children learn about road safety (Carys Ofalus / Careful Carys the Cat). It was sometimes felt that these efforts early in the child's school experience helped to create a foundation on which AST habits were formed. Schools had occasionally communicated directly with parents, for example encouraging them to use the car less for school travel and reminders about parking outside the school.

In my kids' school they encourage them now. They're trying to lower the carbon footprint and all that palaver. (Male, AST, primary, C2DE, Cardiff)

Ond maen nhw'n cael clo aur ar ei beics [yn yr ysgol]. So bob dydd mae'r athrawes yn rhoi o ar random beic, ac wedyn ti'n cael llond bag o goodies, pwy bynnag sy'n cael y clo aur. (They get a golden lock on their bikes [at school]. So every day the teacher will put it on a

⁸ An initiative in some primary schools where, every Wednesday, children are encouraged to bring their scooters and sometimes bikes to school to enjoy during break time.

random bike and then they get a bog of goodies, whoever gets the gold lock.) (Female, AST, primary, ABC1, Caernarfon)

3.3 The perceived main influence

When attempting to identify what they believed was the main influence on decisions to choose AST, participants sometimes gave responses that did not necessarily reflect other factors they had highlighted as influential. The research indicates that several factors are at work and that it may not always be feasible to distil these behaviours down to one key influence. Summing up, participants highlighted the following as key factors which were a mix of practical factors and factors related to attitudes and beliefs:

- Convenience: it was not too far to travel, fitted with routines and avoided the difficulties associated with driving and parking near the school;
- Developing their child's independence;
- Fun, enjoyment for the child;
- Health and fresh air;
- Not having any other transport option;
- Quality time with the child;
- Safe way to travel;
- Social aspect for secondary school children.

Overlapping factors were highlighted by some participants whose children did not normally actively travel to school when they considered what concerned them most about not travelling actively. However, no prevalent theme emerged. These included:

- Developing lazy habits and conditioning the children to want to travel by car, and therefore missing out on an opportunity to be a little healthier;
- Having to deal with traffic congestion and difficulty parking near the school;
- The child and parent missing out on the opportunity to socialise, for example if friends walked to school as well;

It was occasionally reiterated among these participants that they were not too concerned about AST because the children were active outside school. In addition, it was impractical to consider it, given the parents' work routine.

4. Parental beliefs, attitudes and perceptions that acted as barriers to (more) active school travel

As with factors that were thought to facilitate AST, participants often referred to more practical and physical environment barriers that prevented (more) AST. These factors are discussed first, followed by beliefs, attitudes and perceptions.

4.1 Reported practical and physical factors that acted as barriers to (more) active school travel

Parents-specific related factors

4.1.1 Work routine

The parents' work routine was a regularly voiced barrier to AST. This could be because the work commuting route was on the way to school and there was not enough time in the morning to build in any kind of active travel. Some also commented how it was convenient to be able to drop a child off on the way to work. A small number of single parents in the study with primary school aged children commented how it was difficult for them to consider active travel when constrained by work deadlines. In a few instances, participants whose children normally actively travelled acknowledged that on certain days their routine made it very difficult to be able to walk a child to school. It was more convenient to drop a child off by car.

I think with the car it's a convenience thing isn't it because of work, and you have to drop off and then get to work, and walking would just mean getting up earlier and nobody wants to do that. (Male, non-AST, primary, ABC1, Aberystwyth)

I'm going to Caerphilly already [for work] so it's only a small diversion really for us. (Male, non-AST, secondary, ABC1, Cardiff)

Route related factors

4.1.2 Traffic safety

Issues with traffic safety were often given by parents as obstacles to AST, normally regarding unaccompanied travel. Comments included traffic travelling too fast on busy roads, a lack of cycle lanes or believing them to be inadequate, narrow pavements and occasionally hearing or knowing of cyclists involved in traffic accidents. Some participants in rural areas highlighted roads that did not have a suitable footpath, which would have left them feeling vulnerable to traffic for certain parts of the journey to school, had a child walked or cycled in. Words such as 'horrified', 'petrified' and 'nervous' were used by some participants at the idea of their children cycling to school in one more rural area. From time to time, participants mentioned that they did not cycle either, because of traffic safety concerns.

Ceir a bysys yn uffernol, mae'n gul yndi. So hwnna bysa'r poen mwya i mi os 'sa hi'n cerddad i ysgol, ti'n gwybod. (Cars and buses are awful, it's narrow there. So that would be my biggest worry if she was walking to school, you know?) (Male, non-AST, secondary, C2DE, Caernarfon)

The road is too dangerous to do anything other than drive. . . . Really rural, like one lane. F: Just in the last year two people have died on that road. (Female, non-AST, primary, ABC1, Aberystwyth)

The country lanes as well where we are, they're too dangerous because cars come down too fast. The other road is a main road that people are meant to do 40 at, but they normally do 60. There's just no way. So even though it's so close and it's so lovely, it's dangerous. (Female, non-AST, secondary, ABC1, Cardiff)

My eldest [nine years old] has asked if she can walk to school and I have said absolutely not, until high school. I mean, I think even at Year 6 because of the roads she would have to cross, and she has to go through a park. She is only tiny, and you know it's just, no. I wouldn't allow it really. (Female, non-AST, primary, C2DE, Mold)

The secondary schoolchildren of some participants in a more rural location travelled to school by bus (approximately three mile trip) for several reasons, one of which was to ensure that the child arrived at the school safely.

Participants whose children did actively travel also sometimes raised concerns about traffic. This affected decisions on the type of active travel and whether they accompanied the child (at primary school) rather than whether the child travelled actively. The motivations to actively travel outweighed these concerns, even when the worries were quite strong. Examples included a steep hill with fast traffic, crossing busy roads and cars reversing out of drives across pavements.

I feel safer [accompanying my son], I couldn't leave him to cross on his own. Especially after witnessing that again today, it's the fourth time. Shocking. [Cars not stopping at a zebra crossing.] (Male, AST, primary, C2DE, Cardiff)

'Dan ni wedi bod yn mynd efo beic, ond mae o jyst rhy beryg. Mae hi jyst hectic, a mae rhai'n gyrru. Jyst y traffig, y volume o traffig yn anaddas i'r lôn a mae o'n nerve-wracking bod nhw'n mynd ar y sgwters dipyn bach mwy in control pan mae nhw yn cerdded 'de. (We have been going on the bike, but it's just too dangerous, it's just hectic, some are speeding, and the volume of traffic is inappropriate for the road and it's nerve-wracking when they go on scooters; they're a bit more in control when they're walking.) (Female, AST, primary, ABC1, Caernarfon)

You've seen how busy that road is at the very end [of our street], haven't you? it's a thirty-mile-an-hour road. It's never really policed. Now and again you'll see the police with speed guns and things because they absolutely fly up that road. There's a lot of lorries that come through. . . . Three or four girls who walk, crammed on that little island [in the middle of the road]. (Male, AST, secondary, ABC1, Mold)

4.1.3 Terrain and journey distance

In a couple of locations, participants pointed to the terrain as a reason for not travelling actively, with a hill either on the way to or from school. This could also make the journey longer because of the perceived effort required. Participants sometimes added that the journey felt too far

generally, for example for a one to one and half mile journey for a primary school aged child or three miles for secondary school. Some reasoned that the child would be too tired for school after such a long journey.

I have to drive up every morning, because there's a big hill, I hate walking up that hill. . . . We're in the next village, but to get to [x], it's at the top of this hill, it's a good half hour walk, at least. (Male, non-AST, primary, C2DE, Mold)

Er bod fi 'di deud wrtho fo i gerdded un tro, mae tair milltir yn lot i gerdded, so chwe milltir i gyd, 'swn i'm yn 'neud o fy hun de. So 'swn i'm yn disgwyl iddo fo wneud o, chwarae teg. (Even though I did tell him to walk once, three miles is a long way to walk, so six miles in total I wouldn't do that myself. I wouldn't expect him to do it either, fair play.) (Female, non-AST, secondary, C2DE, Caernarfon)

As a compromise, a small number of participants whose children normally actively travelled would sometimes drive their child to the top of the hill and then the child would walk the rest of the way; and then walk the entire route home as it was downhill.

School related factors

4.1.4 Storage facilities

In a few cases, participants stated that the school did not have anywhere to leave a bike or scooter (primary school) or else the storage was not deemed secure. These aspects also deterred some participants whose children did actively travel from allowing their children to cycle or scoot to school.

Season related factors

4.1.5 The weather and daylight hours

As described in chapter 3, some participants whose children did not actively travel to school rationalised that the weather was a regular deterrent to walking or cycling. They felt that driving or the bus was therefore the only option. Similarly, some participants whose children normally travelled actively to school commented that they drove the children to school if the weather was bad. They might, however, walk or cycle home because the children could easily change out of wet clothes on arrival. Shorter daylight hours were considered a deterrent on occasion as well.

4.1.6 Additional, less prominent barriers

Further perceived practical barriers to AST raised less often among participants included:

- Being put off by large amounts of dog mess and sometimes used needles on the route to school;
- Difficulties managing young children when walking to school and being worried they might run out in front of traffic, or having to deal with a younger sibling for whom the journey would be too long. Driving was therefore seen to provide more control;
- Having a child with a physical disability;
- Having to negotiate an often muddy section on the route;

- Secondary school children being reluctant to walk or cycle because they would arrive at school feeling sweaty and uncomfortable;
- The amount of kit to carry in with three young children – this participant had invested in a cycle trailer to carry all the children’s school bags so they could cycle but admitted that it was a hassle to organise and it was easier to drive.

4.2 Reported beliefs, attitudes and perceptions that acted as barriers to (more) active school travel

Directly parent related factors

4.2.1 Convenience

A key factor to emerge among participants whose children did not normally actively travel to school was that driving or, for some, the bus were more convenient. In addition to fitting with work routines described earlier in this chapter, driving and the bus were convenient when the family was **running late** in the morning, which happened frequently. Feeling disorganised, parents feeling tired and knowing that the children might not walk in very quickly added to the convenience factor. Those whose children normally travelled actively admitted on occasion that they drove their child to school because they were late in the morning.

Rhedeg yn hwyr. Convenience, bod o yn haws neu bod o ar y route i gwaith neu be bynnag. (Running late. Convenience, that it’s easier or that it’s on the way to work or whatever.) (Male, non-AST, secondary, C2DE, Caernarfon)

Some participants whose children did not normally actively travel assumed that those who did were more organised than they were and perhaps calmer and more laid back. However, there was a great deal of similarity between the ways in which both types of participant summed up their morning routines with words like ‘hectic’, ‘nightmare’ and ‘late’.

Driving the children to school was believed to offer further convenience benefits:

- A convenient means of dealing with a child who was being stubborn or playing up (‘having a strop’);
- It felt safer than a child cycling or walking unaccompanied and provided the parent with peace of mind that the child had arrived safely;
- It felt safer than attempting to manage more than one child on a walk to school next to a busy road;
- It was quicker than walking to school;
- It was a regular opportunity to have a conversation with their teenage child;
- Not having to worry about what the child would do with any cycling equipment or clothes on arrival at school;
- The parent could take the dog, leave it in the car rather than having to tie it up outside the school, and then drive to a location to walk the pet.

4.2.2 A lack of motivation

Some participants whose children did not normally actively travel to school indicated that their own lack of motivation to do so was an influencing factor or being 'diog' / 'lazy', as a small number admitted. There were references to not being organised enough in the mornings, and therefore not leaving enough time for AST, and having settled into a convenient routine, or **habit**, as described above. In a further example, a participant stated that it was 'too much of a chore' for their children to scoot to school because it was difficult to control them.

Routine, you just get in your comfort zone, don't you, just like get up half seven, get breakfast done by eight, that's your routine isn't it? (Male, non-AST, primary, ABC1, Aberystwyth)

These participants saw themselves as lazy and on other occasions labelled the child as being lazy or stubborn. A participant commented how it was easier to give in to what the child wanted – a lift to secondary school – rather than attempt to persuade the child to make their own way in. Even when the car had needed a repair, a secondary school pupil had phoned around friends to secure a lift, rather than walk in as her brother did. In a few cases, participants also commented that their children were not interested in cycling generally, or as an option for travelling to school.

They've always had a car. They grew up with a car so, . . . they're lazy. They are lazy. (Male, non-AST, primary, C2DE, Mold)

There's some days where I say, 'do you want to walk to school?', and she says, 'no'. She is lovely, but she's spoilt. . . . She wouldn't go if I didn't take her, which is a terrible thing to say, since she's only twelve, but it's just an easier life to just get it in the car and go. . . . It would be about a fifteen-minute walk. But she won't. (Female, non-AST, secondary, ABC1, Cardiff)

Parents' perceptions of child related factors

4.2.3 Concerns about the child's capabilities

Some participants did not think that their children were ready to travel to school actively because it would mean travelling unaccompanied (see chapter 5 for further discussion). Having to negotiate busy roads was a concern for some who did not think that their children had the confidence to cycle, or the safety awareness to cross busy roads safely. This factor linked in with parents being protective.

She does cycle [twelve years old] but she hasn't really gone anywhere without either of us with her really. Just when she finished her last year in primary school they did a course which was to build them up in confidence of using public roads on a bike. But I don't think she has the confidence to do it because of the main roads. (Male, non-AST, secondary, ABC1, Cardiff)

Bod o'n mynd yn wirion ar y lôn a pethau. Neu dangos ei hun a wedyn fysa fo yn gallu bod mewn damwain massive. (That he would be silly on the road and stuff. Or that he would show off and then he could be in a massive accident.) (Female, Non-AST, secondary, C2DE, Caernarfon)

4.2.4 Peer influence

Infrequently, both types of participant believed that their children's school travel preferences were sometimes influenced by peer behaviour. There were references to secondary school girls not wanting to cycle, wearing a helmet being considered uncool, being bullied for wearing a helmet so no longer riding to school and not wanting to walk to school if no-one locally was walking. Some added that their secondary school children were keen to catch the bus for an approximate three mile trip because they were able to socialise on the bus and arrive at school together.

4.2.5 Concerns about strangers and antisocial behaviour

Participants whose children did not normally actively travel described worries about strangers and antisocial behaviour. This fear tended not to result from specific incidents but from a **general concern** about how vulnerable children were. Some broadened the topic to explain their concerns about children being vulnerable online. Media coverage, social media and rumour were identified as sources for this anxiety. A further example was a parent who lived in a coastal location with a seasonal population increase. The number of strangers in the area reinforced this barrier.

My child could cycle because there's a cycle path. . . . The only thing is, one, riding through the park, you'd have to be with a group to make it safe. Two, in the winter months, mornings and afternoons, it's not safe I wouldn't want my child to be on a push bike at all. . . . I know that park, and I know what happens. It's about safety. (Female, non-AST, secondary, ABC1, Cardiff)

M: Rumours yn mynd rownd yn deud bod 'na predators o gwmpas. F: Maen nhw ym mhob man, dydyn, disgusting. (M: Rumours go around saying there are predators around. F: They are everywhere aren't they, disgusting.) (Non-AST, secondary, C2DE, Caernarfon)

While stranger concerns were regularly given as a barrier to AST, there was occasional acknowledgement that the parent could still walk with the child to primary school. This suggested that the barrier, in some cases, was a rationalisation for driving a child to school rather than a specific obstacle to active travel, as the first comment below illustrates. Furthermore, the same general concerns were voiced among participants whose children did normally actively travel to school. It was often given as a factor when discussing reasons for accompanying a primary school child on the journey. Travelling to school with friends or on a route that was busy with other children, for secondary school pupils, helped to allay this fear. The concern some participants expressed, therefore, was not sufficient to prevent AST as the second comment below indicates.

F: Kidnappers. F: Some weirdo, yeah. F: And I think if you've taken them [to school by car] you know they're safe; but then I could walk with him. (Female, non-AST, primary, ABC1, Aberystwyth)

It's general fear because that's the way of the world at the minute. But as you walk over the road there's a lot of flats over that side and there's a lot of drug users over there. . . . She has to walk that way to come home, past there. (Male, AST, secondary, ABC1, Mold)

I think it's easier for paedophiles to get hold of any information they want. . . . You didn't hear so much [in the past] about children being snatched and all sorts of things. Whereas now, I don't trust it, I don't put photos of my kids on the computer, not on any sites like Facebook or anything like that. (Female, AST, primary, C2DE, Cardiff)

In some cases, active travel and non-active travel participants referred to **specific incidents or situations** that they felt made them more concerned about this issue. These included: having experienced an attempted abduction as a child; receiving a letter from the school about a potential risk to children from an individual in the community; a local mugging; believing that child abusers lived within the community (based on social media content); hearing a rumour of someone 'lingering around' recently and acting strangely; a relative experiencing an unpleasant encounter in another part of Wales; the lasting impact of April Jones' death in the region; seeing the effects of vandalism on the route to school; seeing evidence of drug use; and a child having been bullied when cycling in.

There's all paedophiles and everything around, aren't there? . . . There's one on the street down there. There's one up there and you know where they all live now. . . . Facebook finder or whatever. They're all like, that nonce catcher and all that. They're everywhere. And they're all coming to North Wales from the Midlands and all that. (Male, non-AST, primary, C2DE, Mold)

A further point made by a couple of participants whose children normally travelled actively was that, during winter months, they would not allow their child to walk back from school because it was beginning to get dark. They were concerned that 'if anything was to happen' it would not be so visible to others.

4.2.6 Being protective

Both types of participant often acknowledged that they were very protective towards their children and it could significantly influence travel choices. Although traffic issues are described above as practical barriers, participants sometimes gave the impression that these concerns were, to a degree, influenced by their need for reassurance that the child was safe, rather than necessarily the child not being able to make the journey. Knowing that the child had reached school was mentioned from time to time as a factor that motivated participants to drive their child to school. As the discussions progressed, some participants (but not all) remarked that they might be too overprotective of their children. Some, on further reflection, began to think along similar lines regarding concerns about strangers and being exposed to undesirable behaviours.

I would never let him walk to school [at primary school] because I needed the reassurance that he'd got to school kind of thing. (Female, non-AST, primary, C2DE, Mold)

I know it sounds ridiculous, but [I worry about] strangers. I know it's probably something that we need to be less concerned about than what we actually are. (Female, AST, secondary, ABC1, Mold)

Exploring how participants talked about being protective, some referred to not wanting to see their children grow up and to 'losing them', 'wrapping them in cotton wool' or 'bubble wrap', 'mollycoddling' and 'babying' the child. For some participants, a belief that children were more

vulnerable now than in the past fuelled this perception further. It was sometimes considered quicker to do things for the child than let them learn for themselves. Examples included getting clothes, bags and kit ready for school and doing chores. Summing up, participants on occasion likened allowing a child to travel to school without a parent as losing control, as their child began to do things on their own. These perceptions were, in a few cases, accompanied by the view that the children would ultimately need to be allowed more independence.

You can't keep them as four year olds forever, can you? I wish I could but you've got to let them go. (Male, non-AST, primary, ABC1, Aberystwyth)

Dwi'n meddwl bod fi'n overprotective hefo bob peth pan mae'n dod i Hannah achos dwi'n meddwl na mond un s'genna fi. A 'swn i'n medru jyst cadw hi adra a rhoi bubble wrap drosti, 'swn i yn. Ond tydi o'm yn fywyd i hi wedyn, nac'di. Mae hi angen dysgu, dydi. (I think I'm overprotective with everything when it comes to Hannah because I only have one. I could just keep her at home and put bubble wrap around her. But then that's no life for her. She needs to learn.) (Female, AST, primary, ABC1, Caernarfon)

4.3 The perceived main influence

Participants identified three broad themes as the main reason for their children not travelling actively to school: the overall **convenience** of driving, fitting into parents' **work routines**, and **safety** concerns which covered traffic and stranger worries. Participants sometimes referred to a combination of main factors. However, some gave the impression when discussing routine and habit that they might no longer be making active decisions on how their children travelled to school.

F: I've considered it, but it's safety, that road is lethal. M: Safety and convenience for work. (Non-AST, primary, ABC1, Aberystwyth)

Os rhywbeth, dwi'n meddwl bod paedophiles, rapists, smackheads, whatever, yn dod cyn, ceir [fel prif bryder]. (If anything, I think that paedophiles, rapists, smackheads, whatever, comes before cars [as a main concern] (Female, non-AST, secondary, C2DE, Caernarfon)

It's just safety. To make sure she gets there okay. And the convenience of it. (Male, non-AST, secondary, ABC1, Cardiff)

If the bikes was secure and safe, [and] if we weren't as lazy as we are. (Male, non-AST, primary, C2DE, Mold)

5. The age at which parents feel confident to allow their children to actively travel to school and factors influencing this decision

This chapter explores participants' perceptions of the age at which they would or did feel comfortable allowing their children to actively travel to school. It should be noted that the average ages provided in this section are based on a qualitative research method and a relatively small, unrepresentative sample. The results need to be treated with caution.

5.1 Perceived appropriate ages for active school travel modes

Table 5.1 overleaf shows the average ages parent would feel confident allowing their children to walk or cycle to school, with and without friends. Some participants with young primary school aged children were thinking ahead whereas some with children at secondary school were thinking back to when they had allowed children to travel to school unaccompanied.

The averages were **reasonably consistent** across different types of participant (rounded to the nearest whole year). Walking alone and cycling tended to prompt slightly higher average ages, reflecting participants' safety concerns. Participants whose secondary school children did not normally actively travel tended to choose slightly higher ages than the rest of the sample.

Participants reverted to perceived barriers already voiced, mainly regarding **traffic safety** and **stranger** concerns. Some also commented that it very much varied depending on the child's **character and development**. They were asked to try to imagine what age they would choose if these factors were not present. Even so, some found it difficult to put these influences to one side.

Two further activities, visiting the local park with friends and sleeping over at a friend's house, were also included. The aim was to see if there were broad factors influencing decisions about the children across activities or whether there were more specific factors at play for active travel. Similar factors contributed to the age given for visiting the local park with friends. A lower age was chosen overall for staying at a friend's for a sleepover: the traffic concerns were removed but participants stressed the importance of being able to trust the parents of the child visited.

Table 5.1: Average age parents feel confident allowing their children to walk or cycle to school by travel method and school phase

Whether children actively travel	Walk with friends	Walk alone	Cycle with friends	Cycle alone	Visit local park with friends	Sleepover at a friends'
Normally actively travel - primary	10	11	11	11	10	9
Normally actively travel - secondary	10	11	11	11	10	8
Do not normally actively travel - primary	10	11	11	11	10	8
Do not normally actively travel - secondary	12	13	12	13	11	10

Table 5.2 shows that participants from lower socio-economic groupings and male participants were slightly more likely to choose older ages for most activities. It is important to reiterate, however, that these figures cannot be described as representative and would need further investigation with a quantitative sample.

Table 5.2: Average age parents feel confident allowing their children to walk or cycle to school by SEG and gender

	Walk with friends	Walk alone	Cycle with friends	Cycle alone	Visit local park with friends	Sleepover at a friends'
ABC1 participants	10	11	11	11	10	9
C2DE participants	11	12	12	13	11	9
Female participants	11	11	11	12	10	8
Male participants	12	13	12	13	11	9

5.2 Factors determining the ages given

5.2.1 Safety

Safety from traffic and **safety from other people** were two key factors. As with the previous chapters in this report, factors that were identified sometimes interlinked. In this case, the safety theme was, for some participants, governed by their perception of how sensible, mature, traffic-aware and 'streetwise' their child was (see 5.2.2).

Concerns around **road safety** included:

- For walking - crossing busy roads, children not being aware of cars pulling out of drives across pavements and having to walk on roads in rural locations because of a lack of footpaths;
- For cycling - a lack of safe paths or lanes for cyclists to use, having to cycle on roads especially in rural locations where traffic might build up behind the cyclist, and colliding with

pedestrians if attempting to cycle on pavements. In a few cases, participants reported road traffic accidents in the area involving cyclists which added to their concern over their child cycling and the age they would choose.

Physical improvements to protect pedestrians and cyclists would lower the age for these activities, according to some participants (discussed in more detail in chapter 6). Some also acknowledged that if they were not so protective, they might consider lowering the age slightly.

A concern regarding **other people** children might encounter if travelling to and from school unaccompanied was also a prevalent factor across all types of participant. Fears included abduction, assault, bullying and being exposed to undesirable behaviours or situations (discussed in chapter 4). Knowing that groups of friends or others in the community also walked in the same way helped some parents decide that their child could walk in at a particular age. A general sense that the area was safe helped as well, according to a couple of participants in rural areas.

She's always looked older than she is, so she's always been slightly taller so I think, just maybe who she may be approached by, just, I don't know it just didn't feel right with her going on her own until I knew that she was confident. . . . It was me, really. (Female, AST, secondary, C2DE, Aberystwyth)

5.2.2 the child's capabilities and character

A third factor that participants often considered when deciding at what age they would feel confident allowing their child to walk without a parent or cycle to school related to the child's capabilities and character. Some described how they would allow this type of active travel if the child seemed mature enough to them to be aware of their surroundings, behave sensibly and to be able to concentrate during the journey. They needed to be able to trust the child's behaviour. There were also references to the child needing to be a confident cyclist and 'streetwise' (e.g. not talking to strangers and being aware of traffic). As a result, some participants felt that they might choose a different age for their different children, depending on their development in these areas and character. Occasions were described where a participant had checked, or would check, on a child's decision-making by following them at a short distance on the first few journeys to school walking or cycling unaccompanied. Parents' protectiveness was playing a part as well.

F: I don't trust their riding capabilities. M: I don't trust them. F: It's just if they have a little wobble or a fall. (AST, primary, C2DE, Cardiff)

Mae hi'n mynd ar beic pan dwi'n cerddad hefo'r ci, ac os oes 'na gar 'di parcio ochr lôn, 'neith hi jyst fynd rownd y car heb sbio be sy'n dod tu ôl. (She goes on her bike while I walk the dog and if there is a car parked on the side of the road she will just go around the car without looking behind her.) (Female, AST, primary, ABC1, Caernarfon)

This factor, according to some, could help to develop trust between parent and child and give the child a greater degree of **independence** - a perceived important aspect of growing up. Some participants commented how they had, or would, allow their child to walk to school with friends or, less often, alone in their final year of primary school as part of the transition process from

primary to secondary school , even though the parent might not always feel very comfortable with this step.

Because you do have to give children a little bit more freedom to get that being street smart. They don't get that when they're around their parents do they? It's quite a daunting time really, when they first start high school. (Female, AST, secondary, ABC1, Mold)

Some also felt that during this transition period, it was important for the children to develop **social bonds** by travelling with friends, so that they had strong relationships in place during the early years in secondary school.

5.2.3 Proximity and terrain

Proximity to school played a part in some participants' reasoning: the shorter the journey to school, the more willing some were to consider lowering the age for when a child could walk or cycle to school unaccompanied. In addition, terrain was a factor in some participants' thinking and it was hard for them to imagine the journey without, for example, the hill some had to negotiate to the school, in a couple of locations.

5.3 Comparisons with participants' own childhood

Participants tended to feel that **society and times had changed** since their childhoods. They often recalled having had greater freedom to roam. Reference was made to staying out until the street lights came on which was the signal for returning home. Echoing the prevalent themes across the research topics, some believed that children were more vulnerable now to adults who wanted to harm them and that more congested roads meant greater risks from traffic. Perceived increases in more transient populations were also mentioned.

In addition, some felt that a **sense of community** they had experienced growing up was not so strong nowadays. They referred to perceived increases in reported crime and greater drug use as well. Perhaps there were also more people working or seeming to be in more of a rush generally, it was surmised. On further reflection, participants (those whose children normally travelled actively to school and those who did not) sometimes acknowledged that they were probably **overprotective** about child safety, especially when looking back on their own childhood, and that part of the issue might also be more (and more accessible) **media coverage** of such issues. Chapter 4 provides more discussion on the extent to which concerns about safety from strangers was thought to be based on a general perception versus specific incidents.

6. Participants' views on overcoming barriers to active school travel

This chapter covers participants' spontaneous views on what could be done to encourage more AST as well as reactions to examples of interventions and initiatives.

6.1 Routes safe from traffic and the physical environment

A widespread suggestion was for safer routes to school for children walking and cycling. Participants regularly flagged this barrier as a key factor that would have to change for their children to actively travel to school or travel this way more often. This was the case for unaccompanied travel and, in some instances, travel with a parent. Spontaneous examples put forward included: more designated patrol crossings on busy roads; dedicated cycle lanes separated from traffic and from pedestrians; wider pavements; more street signage aimed at helping children; traffic-calming measures near schools and on busy roads; more traffic lights that gave cyclists priority; clamping down on pavement parking; and building or improving footpaths on rural roads. Some participants also spontaneously suggested a walking bus. (Perceptions of this initiative are described in 6.4.)

Other aspects raised concerning the physical environment included tackling dog fouling and better street lighting.

6.2 Views on improvements schools could make

Participants sometimes pointed to aspects where schools could make a difference by encouraging more AST. Suggestions included: continuing with or developing further the cycling proficiency training at primary school including safety awareness; providing or improving cycle and scooter storage facilities and ensuring they were secure; providing storage for coats, helmets and school kit that children might otherwise have to carry with them; access to cycle purchase discounts; and generally making more of an effort to motivate children, for example via assemblies, incentives and highlighting the environmental benefits of active travel. A further idea was to involve in some way older secondary school children with primary school children on the subject, as the younger children might be more likely to listen to them.

Additional ideas included a system to inform parents that their child had arrived at school (e.g. by text), a scheme that helped parents access bikes so they could ride with their children if they could not afford one, and organising a school bus so parents did not have to drive their children to school.

6.3 Suggestions and observations related to beliefs, attitudes and perceptions

Some participants with secondary school children believed they would be more willing to allow their child to actively travel to school if they knew that the child would be **with friends** for the journey. This would help to allay concerns about the child's safety. In addition, the spontaneously suggested **supervised walking school bus**⁹ was thought by some to provide

⁹ A walking school bus is a group of children walking to school with one or more adults. It can be as informal as two families taking turns walking their children to school to as structured as a route with meeting points, a timetable and a regularly rotated schedule of trained volunteers.

reassurances about safety from strangers, as well as traffic, particularly among participants with primary school aged children.

From time to time, participants concluded that they probably did not need to be as **anxious** as they were about safety. They could trust the child more and do more to give their child more independence. However, there were instances where participants did not think much could be done to allay their fears about traffic safety and strangers. They would therefore be unlikely to change their stance on unaccompanied AST.

I do realise that I think a lot of the restrictions, all the delays and giving them that independence has been more me than them. (Female, AST, secondary, C2DE, Aberystwyth)

Just makes you think a bit more about maybe you should just trust her to do things more on her own. I think the fear of it is a lot greater with her mum than with me. . . . She's not going to get the confidence to go and do the things unless you let them start doing it. (Male, non-AST, secondary, ABC1, Cardiff)

Reflecting on the research discussion, some thought that perhaps they could **make more time** and **effort** to walk more often. This was to experience more quality time with the child because the child enjoyed walking and for more exercise. There was occasional acknowledgement of becoming slightly lazy with routines and that active travel would be possible with more organisation.

[After this conversation] I'm going to try and get on the bike more than the car. The fact that I'm lazy and I've just realised it. Yeah, I mean, in the back of my mind I can do it because I did it in the summer so saying that it's raining is not really a, yeah so, I should do it more. (Female, non-AST, primary, C2DE, Mold)

Make the time, wake up earlier, there's enough hours in the day, isn't there? . . . I'm like oh we haven't got time, so yeah probably I should be a bit less selfish and get up earlier [so my daughter can cycle to school]. (Male, non-AST, primary, ABC1, Aberystwyth)

Some surmised that **travel behaviours had become so routine** that the parent had not been prompted in any way to think about changes when perhaps a child was ready to actively travel unaccompanied. Summing up, one participant observed that 'it just hasn't clicked into my head to even think about it. It's just habit. . . . We're too set in a routine'. Even so, a small number of participants anticipated that the novelty for their child of AST versus the convenience of being driven to school would soon wear off and that their child would likely not want to continue.

Additional suggestions that arose occasionally were that parents might be motivated by **messages** concerning health, fitness and wellbeing for the child and parent and that it could help with the child's performance at school. Realising through the discussion what their child might be missing out on through being driven to school was also mentioned. Examples included meeting up with other children along the way, beginning to have a little independence, seeing more of the community and developing road safety awareness. This prompted one participant to

think about parking further from the school so her child could then scoot the rest of the way with her.

Some, however, did not anticipate the discussion having any impact because of the types of barrier described earlier in the report like work routines, the convenience of driving and safety concerns.

6.4 Reactions to interventions and initiatives

6.4.1 Walking school bus

This idea, sometimes spontaneously suggested, was often very favourably received by both types of participant. Some parents with primary school aged children voiced strong interest. Its perceived benefits included reassurance that the child would be supervised, the potential to form new friendships, learning about road safety, starting to become more independent, exercise, and allowing the child to actively travel while the parent has more time to get to work. It was suggested that the idea could be developed to include a small incentive for the children, like a free snack on arrival at school or stickers. There were also suggestions that older children could help supervise the walking bus. A bus that covered breakfast club would help those parents who normally drove the child to the club on the way to work.

If that was available, and Seren [seven years old] was comfortable, I would let her do it, if there were lots of other children there, then I would definitely, I'd definitely let her do it. Like I'd even go walk with them, just until she felt comfortable. I'd even book a day off work to walk with her. (Female, AST, secondary, ABC1, Mold)

Oh, God, yeah. Definitely [I'd be interested]. . . . If there was an adult with her [Year 6], walking up with their child [from the village], then I would let her go. . . . I would feel more comfortable with her, I'd obviously have to know the adult, but I would feel more comfortable with her walking to school, give her a bit of freedom, and let her talk to her friends, and I could get into work a bit earlier. (Male, non-AST, primary, C2DE, Mold)

According to a small number of participants, something similar could be effective for younger children at secondary school, for example organised meeting points so that several children could walk in together. It would also need to work for the return journey as well.

Uncertainties about this initiative tended to centre on practical issues: children were too spread out in one rural area for it to work; and what would happen with inclement weather and parents who work having to rely on the service. The point was also made that it tended to be the same small group of parents who volunteered for everything. It might therefore be difficult to spread the responsibility for supervising the walking bus. This had already happened, according to a couple of participants: the local council had attempted to facilitate a walking bus but parents were reluctant to take responsibility for other people's children.

6.4.2 More school crossing patrols at designated points

Some participants had suggested this idea spontaneously. It was welcomed where busy roads were deemed a barrier, and where participants sometimes did not trust their child to take care crossing busy roads.

A lollipop man or lady would be the best thing, I'd definitely feel happiest about that. But anything would be a help whether it was a zebra crossing or a pedestrian crossing. (Female, primary, C2DE, Cardiff)

6.4.3 Park and stride¹⁰

Regardless of its relevance to their situation, participants generally liked this idea. Some who travelled from slightly further away felt it was a great initiative (for example described as 'fantastic', 'perfect', 'brilliant' and 'a really good idea'). It would mean the child got some exercise, began to experience some independence and congestion would be reduced around the school. Some with children at primary school wanted to know if adults or perhaps a teacher would supervise the last part of the journey for parents who had to travel on to work.

M: That would be wonderful if the space was available. . . . Definitely, definitely [would use it]. F: I definitely would, . . . because parking's crazy by the actual school. (Non-AST, primary, ABC1, Aberystwyth)

Less positively, a small number of participants admitted that they doubted they would bother, having made the effort to take the child in and drop them off near the school gates. Also, if they wanted the child to walk more, the parent could simply drop the child off further from the school.

6.4.4 Journey planning

Participants were more likely to identify reservations about this idea. There were references to already knowing what the best route was, doubting that there was a particularly safe route regarding traffic, and older children disregarding any guidance and preferring the fastest or flattest route.

Less often, some thought it would be useful to know things like the safest places to cross busy roads and which were the quieter roads, given the many ways to reach the school. An increased flow of people along the same route could also help allay safety fears about strangers if a child was walking to school unaccompanied by a parent.

Promoting safe routes and promoting, 'If you live in this area . . .'. A map of a mile or two-mile radius and show all designated, trusted routes in for everybody so then you have more of a flow of people because everybody would be doing the same thing. . . . Just a bit more relaxed [as a parent]. (Male, non-AST, secondary, ABC1, Cardiff)

6.4.5 Freewheel Fridays, Wheelie Wednesdays, Big Pedal¹¹

These types of initiative generally drew positive reactions from participants, particularly when considering younger primary school aged children. Anything that involved incentives and a sense

¹⁰ A scheme where parents / guardians can park away from the school and walk the rest of the way, reducing congestion and helping pupils enjoy a sociable walk before the start of the school day. An arrangement is usually made with the owner of carpark (e.g. a supermarket) as part of the scheme.

¹¹ Freewheel Fridays, Wheelie Wednesdays are when the school encourages pupils to cycle / scoot in that day. Big Pedal is the UK's largest inter-school cycling, walking and scooting challenge. Taking part in the competition is free. There are prizes to be won for the school, teachers and pupils.

of competition was thought to be motivating. A school, class or group approach was expected to be motivating as well and perhaps prompt a child to influence a parent.

Most kids are competitive anyway. So anything that sort of takes the focus away from the effort of doing it and more on the competition side of it is good. We do something similar at work. A competition on steps you take per day, average per month. You get credits to spend in an online store. (Male, non-AST, secondary, ABC1, Cardiff)

Thinking about secondary school children, some participants thought it could work for younger pupils and with incentives like vouchers to trampolining centres and popular shops in the area and school mentions on popular commercial radio stations the children liked to listen to.

A number of doubts were raised as well: if a one-off or annual event, it might only have limited longer term impact on behaviour; it seemed slightly unfair on those who were unable to participate for practical reasons; and the route in could be hilly, congested, feel unsafe and unappealing to ride.

7. Conclusions

Objective: identify and explore what parental beliefs, attitudes, intentions and perceptions facilitate children to actively travel to school

The research identified a range of factors that influenced parents' decision-making on their child's school travel. Many of these factors related to beliefs, attitudes and perceptions, such as helping to develop the child's independence and capabilities and parental benefits, in addition to the better documented physical environment factors. However, belief, attitudinal and perception based factors were not so strongly expressed among those who normally drove their children to school, when discussing what the benefits of active travel might be.

Objective: identify and explore what parental beliefs, attitudes, intentions and perceptions act as barriers to children travelling actively to school and whether these can be overcome

Some barriers appeared difficult to overcome, for example parents' working hours, the dangers children would face cycling on busy roads, stretches of road in rural areas without a footpath and steep terrain as part of the journey. In addition, there were occasions where participants referred to several different barriers affecting their decisions, making it difficult to address them all.

Leaving aside the frequently requested improvements to the physical environment, there is a case for developing communications and interventions that seek to address beliefs, attitudes, and perceptions that contributed to non-AST. After all, those whose children did actively travel highlighted a range of motivating factors that were not linked to the physical environment and practicalities. They, too, voiced similar fears regarding traffic, strangers and often admitted to being disorganised in the morning. Similarly, some also acknowledged that they were probably overprotective of their children.

The research did not find that participants were regularly exposed to communications or initiatives aimed at encouraging them to review how their children travelled to school. As the discussions concluded, it was noted that some participants were reassessing their routines and travel habits, to the extent that there was occasional acknowledgement of slight laziness. Driving was too convenient, and more deliberative 'System 2'¹² decisions were not always necessarily being made about travel.

Objective: identify the age at which parents feel confident to allow their children to actively travel to school and explore the factors that determine this decision

The transition from primary to secondary school is seen as an important stage in the child's life. It was associated with the main point at which a child would begin to travel to school actively without an adult. In some cases, participants had used or expected to use Year 6 as the start of the transition, allowing the child to walk or occasionally cycle to school with friends or unaccompanied.

Travelling alone tended to prompt slightly higher ages, indicating the general concern participants often raised about safety and regarding the child's decision-making.

¹² See Kahneman, D. (2011). *Thinking, Fast and Slow*

However, the qualitative nature of these findings on ages means that they can only be considered indicative. Quantitative research would be necessary to provide more robust results on these ages and the differences between these groups in attitude and behaviour. Even so, it would be a challenge to take into account all the variables at play in people's minds such as the child's character, location, routines and attitudes which participants could find hard to put to one side when considering this topic.

Annex: sample structure

Focus group	Children's age	Region, geography	Current school travel routine	Socio-economic grouping
1	Oldest child at home is at primary school	Cardiff, mix of urban and rural	Normally AST	C2DE
2	Oldest child at home is at primary school	Caernarfon, mix of urban and rural	Normally AST	ABC1
3	Oldest child at home is at primary school	Mold, mix of urban and rural	Normally not AST	C2DE
4	Oldest child at home is at primary school	Aberystwyth, mix of urban and rural	Normally not AST	ABC1
5	Secondary school children at home	Cardiff, mix of urban and rural	Normally not AST	ABC1
6	Secondary school children at home	Caernarfon, mix of urban and rural	Normally not AST	C2DE
7	Secondary school children at home	Mold, mix of urban and rural	Normally AST	ABC1
8	Secondary school children at home	Aberystwyth, mix of urban and rural	Normally AST	C2DE

One in-depth interview was carried out to correspond with each focus group criteria. Additional in-depth interviews were carried out to ensure sufficient numbers of parents took part.