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Research to support the Public Transport Users' Committee for Wales' (PTUC) work on integrated transport

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Views expressed in this report are those of the researcher and not necessarily those of the Welsh Government.

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Table of contents

1	Situation, objectives and methodology	11
1.1	The situation	11
1.2	Research objectives	12
1.3	Research methodology.....	13
2	Public transport integration: a review of the evidence.....	16
2.1	Information integration	16
2.2	Service integration through timetabling.....	17
2.3	Integrated fare system	18
2.4	Interchange facilities	20
2.5	Considerations for Wales.....	21
3	Public transport integration in Wales from the perspective of the general public and transport providers	23
3.1	Top of mind associations with public transport in Wales (general public)	23
3.2	Barriers to usage and issues associated with public transport (general public)	26
3.3	Positive aspects associated with public transport (general public)	36
3.4	Types of journey and public transport consideration (general public).....	41
3.5	Current information requirements and provision (general public)	46
3.6	Perceptions of public transport integration (general public)	49
3.7	Perceived benefits of integration (general public).....	56
3.8	Encouraging greater use of public transport (general public)	58
3.9	Views from the five selected transport providers.....	71
4	Learning from examples of good practice in public transport integration	74
4.1	Bus service integration, Oxfordshire County Council.....	74
4.2	SmartZone, Oxford Bus Company.....	76
4.3	Integrated passenger information, Centro	77
4.4	Considerations for Wales.....	80
5	Conclusions and considerations	82

Appendix I: Case studies from among members of the general public..85
Appendix II: References from the literature review95

Executive summary

Introduction

Beaufort Research and Cardiff University were commissioned to undertake Research to support the Public Transport Users' Committee for Wales (PTUC) work on integrated transport.

The research consisted of three stages: a literature review of the international evidence available on public transport integration; qualitative research with members of the public (three extended discussion groups and eight in-depth interviews) and five transport providers; and three case studies highlighting good practice in relation to public transport integration. The fieldwork took place 11 October 2012 – 17 January 2013.

Public transport integration: a review of the evidence

A review of international research on the evidence of various public transport integration initiatives and measures identified a number of examples of interest and outlined key findings with respect to the four rungs of the transport integration ladder: a conceptual model providing a hierarchical structure to various aspects of transport integration (Centre for Cities 2008).

This report focuses on the more tangible aspects of integration, which form the lower rungs of the integration ladder to broadly reflect Wales' current position in relation to public transport integration. These rungs cover: 1) public transport information integration; 2) public transport service integration; 3) public transport fare integration; and 4) interchange facilities. Key findings are:

- The national level initiatives relating to public transport information had generally positive impacts on public transport usage, ranging from modest levels of net modal switch in the case of Traveline (DfT 2003) and

Transport Direct to facilitating transition for people who are already in the process of switching to public transport in the case of Traveline Scotland (Scottish Executive 2006). However, Transport Direct appeared to suffer from the significant overlap with the more heavily promoted AA (The Automobile Association Limited) and Traveline services as well as lower public awareness of the service (DfT 2007). The availability of integrated travel information between modes and between services enhances users' perception of, and experience with, public transport; however, raising awareness of information availability seems to be a common challenge for any schemes relating to integrated information (DfT 2007).

- Integrated ticketing is found to be associated with substantial increases in patronage in the range of six to 20 per cent although it is difficult to isolate the impacts of integrated ticketing from wider factors (PTEG 2009). Integrated ticketing appeals to both users and non-users of public transport and is associated with improved public transport performance. White (2009) attributes the significant patronage growth on London's public transport system between 1999/2000 and 2005/2006 to price and non-price effects of ticket integration, including the ease of interchanges for multi-modal journeys (both time and cost savings in buying a single ticket) as well as the journey and boarding time savings from pre-purchase of tickets.
- Service integration can be successfully sought in a deregulated market as in Oxford. While the fragmented ownership of public transport can be a barrier to integration, some successes in service integration have been achieved in the UK. The relationship between operators and local authorities, as well as the ownership distribution, tend to be key factors affecting success (Centre for Cities 2008). Niche-market based service integration refers to initiatives which focus on improving public transport services for smaller, less dense populations. This type of integration is of particular interest for Wales given the country's rurality. (An example of such a service is Bwcabus.) It attempts to address accessibility for people

living outside the coverage of a more intensive transport network. Its financial viability and operational efficiency may need to be better understood in Wales.

- 'Station travel plans' - travel plans applied to station sites to ensure all train users experience a smooth connection to their onward journeys - are found to have positive impacts on mode shift as well as encouraging the use of sustainable modes for passengers' access / egress to the station. There was good evidence of increased cycling, increased bus patronage and increased walking. However, there was also evidence of increased car use where there were large increases in car parking provision (Rail Safety and Standard Boards 2012).

Views among members of the public and transport providers

Default **general public perceptions** of public transport tended to focus on negative associations with public transport around cost, reliability, frequency, availability, and facilities / environment in which public transport was experienced.

Smooth-running experiences were less likely than negative experiences to stay in the memory. The language and generalisations that participants used indicated that perception did not always reflect reality.

However, users reported various specific instances of issues with public transport, such as infrequency / lack of services, overcrowding, cost and disabled access.

The convenience, flexibility, control, and perceived lower cost of car travel were voiced as widespread barriers to using public transport (more).

The engrained behaviour of car usage, combined with automatic rather than reflective decision-making on travel options, presented a considerable, further barrier.

Participants were able to recognise benefits of public transport when pressed, in terms of the convenience it offered in certain circumstances (e.g. no parking or driving concerns, a cheaper and quicker option).

Public transport integration was not a straightforward concept for participants to grasp; and they did not perceive it was widespread in Wales. Examples of integration they did highlight included online integrated journey planning tools; Holyhead ferry integrating timetables with trains; the proximity of certain bus and train stations (e.g. Cardiff); and park and ride schemes.

Examples where they thought integration was lacking included: no prominent bus timetables at train stations; the perceived cognitive effort in working out journey details; time spent waiting between connections; the inability to use a single ticket across operators / modes; distances and lack of signage between certain bus and train stations (e.g. Newport); and issues which arose when cyclists attempted to use public transport.

The general consensus among participants was that encouraging more use of public transport would require a combination of 'carrot' and 'stick' approaches, provided that participants felt that services were improving.

When discussing ideas and possible improvements which related to integration, participants in the main were keen on, among other things, more journey planning enhancements, real-time information (e.g. for reassurance), better integrated timetables and smartcards for use across modes.

From **transport providers' perspective**, the key challenge is that the commercial business case for closer integration involving service integration and integrated ticketing has not been widely proven outside a few good practice cases such as Oxford city, and that people continue to be encouraged to drive their cars.

The research indicated a noticeable gap between users' and (public transport) providers' perspectives: whereas users naturally compared car and public transport travel, providers tended to focus on the existing users / existing market and not necessarily on non-users' (car drivers') views or enlarging the public transport market beyond the existing one – i.e. what is already captured.

Learning from examples of good practice in public transport integration

In a market where excessive competition results in sub-optimisation of resources, there appears to be a clear economic case for service integration via timetabling and integrated ticketing. It enables operators to save on operating costs while improving the overall performance of public transport by optimising joint service frequency.

A comprehensive and integrated passenger information system can only help grow the attractiveness of public transport as long as there is the financial capacity to deliver and manage it and the general public (both current and prospective users) is aware of it.

Good practice cases clearly highlight two conditions that are conducive to successful transport integration:

- 1) A combination of policy / planning tools that at least mitigate the existing incentives for car driving such as higher car parking charges or bus priority measures;
- 2) A reliable working relationship between operators / providers and local authorities.

Conclusions and considerations

The often negative perceptions of members of the public indicates that there may be an opportunity to raise the profile of existing initiatives / services / facilities and any achieved improvements in relation to public transport generally, as well as integration. The key is to find an effective means of challenging negative perceptions which the research indicates are not always based on (recent) experience.

For example, online journey planning tools and apps could be promoted more widely, highlighting their convenience and ease of use (no different from checking a driving route online, for example); however (subject to further exploration), the challenge appears to be that there is a lack of awareness of a single, salient service associated with door-to-door journey planning. Similarly, some journeys originate or end outside Wales which poses further considerations in this respect.

The research with members of the public also suggests that the theme of cost is important to many, but that there do not appear to be widespread, precise calculations being made when comparing car travel with public transport, other than immediate out-of-pocket costs like fuel and parking.

Prominent case studies, and higher profile, easy-to-use travel cost calculator tools may be a means of beginning to address some of these perceptions (for example how much a car really costs to run a week / per mile), and cost comparisons with public transport.

As far as possible, the convenience associated with car travel would need to be countered with examples of how convenient public transport can be.

Automatic, engrained decision-making associated with car usage is likely to require a partly disruptive approach in order to break the habit chain and encourage active consideration of public transport options.

According to media coverage and at the time of writing this report, the implementation of smartcards in Wales is reportedly facing scepticism among some operators / providers with respect to financial costs (in conjunction with recent funding cuts to operators grant) and timing. Identifying a mechanism through which the initial set-up costs are covered, if not funding sources, remains a crucial issue.

Wales might consider setting out an overall strategy with respect to interchange planning as, in the absence of such a strategy, disjointed implementation of various interchange schemes could mean some adverse effects of losing part of the already thin base of existing public transport users.

The commercial business case for closer integration (service and ticketing) has been proven in Oxford's case. It would be useful to publicise more widely this Oxford model highlighting 1) the (voluntary based) working relationship between operators and local authority as well as 2) the policy and planning tools which helped strengthen the public transport market and thereby contributed to integration success in that area.

While the current study did not specifically address the governance issue, it has emerged that larger conurbations such as West Midlands largely benefit from its PTE status in implementing transport integration. Local authorities in Wales might review transport governance in light of Local Transport Bills and seek ways to include Cardiff city-region, for instance, in the PTE/ITA structure. This would help narrow down the funding related questions the current study identified, with respect to considering integrated ticketing or a comprehensive information system.

More specifically (and based on this qualitative study), the Committee may wish to consider the following suggestions:

- Examining in detail the current relationships between providers / operators and local authorities (and the current state of quality partnerships in Wales) with a view to gauging the potential for further integration;

- Encouraging within the industry greater focus on the passenger's entire journey, rather than a specific mode;
- Continuing to explore the option of smartcard travel given its association with improved public transport performance – but also to consider whether there is a case for pausing to see how emerging mobile phone technology develops;
- Championing station travel plans;
- Providing easily accessible price information for all public transport legs of a journey;
- Providing more (prominent) bus timetables / bus information at train stations;
- Encouraging integrated journey assistance planning for disabled passengers;
- Expanding real-time travel information;
- Exploring opportunities for encouraging greater use of cycling as an access / egress mode;
- Raising the profile further of any integrated ticketing initiatives such as PLUSBUS;
- Continuing to promote park and ride more widely so that it is considered as a regular option for a wide range of journeys (commuting, leisure, shopping, etc.);
- With any rural, demand-driven services, to better understand the views of those aware of such services and the motivations / barriers to usage as well as the extent to which these complement the conventional public transport network.

1 Situation, objectives and methodology

1.1 The situation

The Public Transport Users' Committee for Wales (PTUC) is an advisory committee responsible for providing advice to Welsh Ministers about strategic issues relating to public transport services in Wales. The Committee takes an independent strategic overview of public transport services and facilities across Wales and makes recommendations to Welsh Ministers on a range of issues relating to public transport.

The main focus of the Committee is to advise Welsh Ministers on option-based solutions to: increase the appeal of public transport; promote social inclusion through public transport services; improve accessibility, safety and mobility of public transport services; encourage sustainable travel and support integrated transport; and encourage a shift from using the private car to using public transport.

In 2012/13 the PTUC is focusing on issues related to integrated public transport. More specifically, the Committee is interested in exploring:

1. Whether effective public transport integration (both within individual modes and between different modes) is inhibited by 'physical factors' such as timetabling, location and access;
2. To what extent public perceptions around integration (especially perceptions that put up barriers) are actual problems;
3. What good practice exists in improving integration and addressing perception problems;
4. Whether effective integration can improve take-up of public transport and promote modal shift away from private transport;
5. Behavioural factors that impact on the effectiveness (or otherwise) of interventions to improve integration (e.g. general attitudes towards public transport, safety concerns).

The PTUC is keen to evidence its recommendations as rigorously as possible and therefore commissioned a partnership between Beaufort Research and Cardiff University to provide independent research to feed directly into its work programme.

1.2 Research objectives

The research aims of this project were as follows:

Aim 1: Carry out a review of international evidence around various aspects of public transport integration, and understand its relationship to Wales

Specifically, to investigate effective public transport integration initiatives and consider their applicability to Wales, as well as gathering any evidence on how integration can influence modal shift.

Aim 2: Develop an understanding of public transport integration in Wales from users' perspectives, including the views of transport providers

Specifically to understand users' expectations of public transport as well as perceived barriers and benefits. As part of this, some of the ideas and concepts emerging from the Evidence Review (Aim 1) are to be tested with the general public.

Transport Providers are also to be approached to develop an understanding of their perspective on the barriers and motivators of public transport integration.

Aim 3: Produce case studies of public transport integration initiatives currently in operation (in Wales / elsewhere in the UK) to gain an understanding of challenges and successes

Gather evidence and information on case studies which illustrate what works well and why, in the case of public transport integration.

1.3 Research methodology

The project consisted of a combination of a literature review and qualitative research. A qualitative approach was adopted in order to capture in-depth examples of perceptions and experiences of public transport and integration among members of the general public, as well as in order to explore the views among transport providers and those involved with good practice initiatives.

The research findings are therefore not intended to be ‘representative’ of all views and experiences across Wales but to provide indicative feedback against the research objectives.

Aim 1

The literature review of evidence used as its broad structure the ladder of integration (Centre for Cities 2008), summarised below.

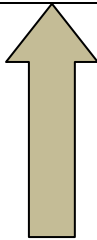
Highest rung	Public service provision and policy making	The Netherlands
	Transport and land use	Portland, USA
	Transport authorities	Transport for London
	Public and private transport	York Park and Ride
	Public transport fares	Oyster Card
	Public transport services	Tyne and Wear
Lowest rung	Public transport information	West Midlands

Figure 1. The ladder of transport integration. Adapted from ‘On the Move’, Centre for Cities, 2008.

The search process consisted of:

- Preliminary online searches to identify published and unpublished documents of high relevance to the wider project aims as well as a more specific aim of constructing a body of evidence on the effects of integration measures/initiatives;
- A focused review of academic and government literature to establish a conceptual framework as well as to compile available evidence with varying degrees rigour;

- A review of publicly available documentary sources of key integration initiatives in the UK or elsewhere. The key findings from the full evidence review are presented in this report.

Aim 2

General public

Three extended focus groups were convened in three separate locations: Newport (Gwent), Haverfordwest and Llandudno. 58 participants attended in total. The aim was to include a broad mix of members of the public. Therefore each group contained a mix of:

- Regular, less frequent / occasional, non / lapsed users of public transport;
- Types of transport used;
- Ages;
- Gender;
- Lifestage;
- Socio-economic grouping.

The Haverfordwest and Llandudno groups also contained participants who lived in rural areas. Participants in Llandudno were given the opportunity of participating in the medium of Welsh. To allow for more detailed discussion, the sessions broke out into smaller groups during the evening.

In order to capture further detail of examples of perceptions and experiences of public transport, eight face-to-face interviews were conducted with participants from the focus groups, as case studies: three in each of Newport and Haverfordwest, and two in Llandudno. The findings from the interviews are incorporated into the report, and the case studies themselves can be found in Appendix I.

The fieldwork with members of the general public took place 11 October – 4 November 2012.

Transport providers

The sample composition was agreed in consultation with the client. Interviews were carried out with representatives of Arriva Wales (rail operator), First Cymru (bus operator), Bwcabus (rural public transport provider), Journey Solutions (PLUSBUS marketer), and Cardiff Council (Sustainable Travel City implementer). Structured interviews were conducted between 19 October 2012 and 6 December 2012 by telephone and interviews lasted one to two hours each.

As with the research component among the general public, qualitative approaches were taken both for data collection and data analysis. This meant that subjective perspectives of the interviewees (who were carefully selected on the basis of their expertise of relevance and their familiarity with the relevant scheme) were actively sought; and which are reflected in the findings.

Aim 3

Case studies of initiatives currently in operation

This sample consisted of three case studies:

- Bus service integration in Oxford city centre;
- The integrated ticketing system Oxford SmartZone;
- Integrated passenger transport information initiative by the Birmingham-based public transport authority Centro.

A mix of face-to-face interviews and telephone interviews – where necessary – were conducted between 6 December 2012 and 17 January 2013 in a semi-structured format to allow for differences in the nature of key issues and contexts of different cases. This was complemented by reviews of relevant online and offline documentary sources.

2 Public transport integration: a review of the evidence

The review took national and international perspectives and looked at both existing assessments of various aspects of transport integration (commissioned by a relatively small number of government organisations) as well as actual cases of integration initiatives for which formal assessments were not available at the time of review. A detailed review of evidence has previously been reported to the PTUC. The review of evidence produced a number of key themes which are summarised below according to the ladder of integration rungs.

2.1 Information integration

There remains a paucity of empirical insight into the behavioural consequences of information use. The current study reviewed various forms – quantitative/qualitative and formal/informal – of assessment which were available at the time of review. These forms of assessment focused on a few notable schemes including the two major nationwide initiatives, Traveline (DfT 2003; Scottish Executive 2006) and Transport Direct (DfT 2007), as well as a local level integrated passenger information initiative in the West Midlands (Centro 2012).

According to the formal research reports reviewed, the national level initiatives had generally positive impacts on public transport usage, ranging from modest levels of net modal switch in the case of Traveline (DfT 2003) and Transport Direct, to facilitating transition for people who are already in the process of switching to public transport in the case of Traveline Scotland (Scottish Executive 2006). However, Transport Direct appeared to suffer from the significant overlap with the more heavily promoted AA and Traveline services as well as lower public awareness of the service (DfT 2007).

The awareness of information availability seems to be a common challenge to any schemes relating to integrated information (DfT 2007). Studies show that

integrated information services are, on the whole, perceived positively by those who have used the product in question (DfT 2003; Scottish Executive 2006; DfT 2007). Focus group based research commissioned by DfT which considered the specific needs of disabled people for public transport information indicated a consistent lack of awareness of the services provided by Traveline and Transport Direct amongst disabled users (DfT/TRIP 2004).

The review found that efforts in providing integrated travel information between modes and between services would enhance users' perception of, and experience with, public transport as long as the availability of integrated information was widely known. Following the review, a local level initiative to integrate transport integration in the West Midlands by Centro was chosen for further investigation.

2.2 Service integration through timetabling

Service integration received little attention in recent UK based policy literature owing mainly to the limited powers of public authorities to influence timetabled bus and rail services. However, the review identified a few domestic cases where this barrier appeared to have been lifted, often with the help of public involvement. These included bus service integration in Oxford city centre; public transport integration in Tyne and Wear prior to deregulation in 1986; Interconnect network in Lincolnshire; and various rural area based schemes in Wales such as Bwcabus.

The lifting of the aforementioned barriers was helped primarily by public subsidy in the latter two cases while institutional arrangements and coordination played a key role in the former two cases. In Oxford, service integration appeared to have resulted in operational efficiency. As an outcome of the review, the Bwcabus initiative was chosen to represent public transport providers' views from the rural perspective, and the case of Oxford was selected as a best practice example of service integration for the case studies in this report.

Bwcabus is a demand-responsive local bus service operating within the Bwcabus zone (largely comprising Carmarthenshire and Ceredigion). It is intended to help people connect to the main line route bus services travelling to places including Aberaeron, Aberystwyth, Cardigan, Carmarthen, Lampeter, Llandysul, Pencader and Newcastle Emlyn via local hubs. It aims to enhance accessibility for people living in less densely built-up areas by providing services that are tailored to the needs of the passengers with limited access to the conventional means of transportation.

The Welsh examples of service integration have tended to focus on rural or leisure travel markets, covering some low density settlement areas. Whereas these initiatives are often deemed innovative and socially desirable (in their potential to contribute to addressing social exclusion by transport), public transport services in low density areas tend to more heavily rely on public subsidy than those operating in high density areas. This implies that, if these initiatives were to be kept and further developed on the basis of their potential role in complementing the existing public transport system, their financial viability would need to be assessed first.

The review noted that Fastrack network in Kent, Crawley Fastway in Sussex, and the Cambridgeshire Busway, all illustrate an institutional environment where additional powers held by the authorities to restrict access to the infrastructure have enabled integrated public transport services to be provided from the outset. Similarly, the highly integrated network in London and the historical case of Tyne and Wear cited above highlight that approaches to integration will need to depend on the significantly varying institutional contexts.

2.3 Integrated fare system

The review identified a small number of clear cut cases of integrated ticketing which have seen positive effects. For instance, it is estimated that the introduction of Travelcards in London in the 1980s – the first comprehensive integrated ticketing product in London prior to the incorporation of smartcard

technology in the form of Oyster Card - led to a ten per cent increase in underground trips and a 16 per cent increase in bus trips (Fairhurst 1993 cited in PTEG 2009). It was also apparent from various versions of time series charts that the increases were closely associated with ticket integration; this step change in public transport usage in the mid 1980s was dubbed 'the Travelcard effect'.

White (2009) attributed the significant patronage growth – by 32 per cent - on London's public transport system between 1999/2000 and 2005/2006 (when significant growth was recorded on all forms of public transport) to both price and non-price effects. These included the ease of interchanges for multi-modal journeys (both time and cost savings in buying a single ticket) as well as the journey and boarding time savings from pre-purchase of tickets.

A review-based investigation into the behavioural impacts of integrated ticketing commissioned by the UK Public Transport Executive Group (PTEG) found substantial increases in patronage in the range of six to 20 per cent while noting the issue of isolating the impacts of integrated ticketing from wider factors (PTEG 2009). The effects of integrated ticketing have been widely evidenced in other parts of the world, such as in Paris ('Orange card') and La Rochelle ('Yelo card') in France; Hong Kong ('Octopus card'); Washington DC ('SmarTrip) and Seoul, Korea ('T-Money'). The review focused on a selected set of cases.

Oxford SmartZone covers the city of Oxford and the village of Kidlington, within which a passenger can travel on any of the three operating companies' buses – Stagecoach, Oxford Bus Company and Thames Travel. The idea is 'whatever bus turns up first you can jump on'. It built on the smartcard systems that operators had previously implemented individually. The integrated ticketing scheme was preceded by the integration of bus services by the three operators involving coordination of timetables.

As a domestic example of integrated ticketing outside London, the review cited Oxford SmartZone, where a significant proportion of bus journeys are made using a smartcard. As an outcome of the evidence review, the commercial based integrated fare system was selected as a further case study for this report. The review also covered the UK based integrated ticketing product PLUSBUS, which is a unique example of combining rail with bus journeys on one ticket at the national scale. The third party (non-public and non-profit) initiative has seen steady growth in terms of both usage level and the number of participating operators.

Purchased as an addition to a conventional rail ticket, **PLUSBUS** allows unlimited bus travel at the origin and/or destination. The nationwide rail-bus ticket integration scheme has steadily expanded its participants since it was launched in 2002 to cover some 400 stations in 293 rail-served towns in the UK. The initiative has won some international attention and awards for its innovative contribution to the advance of public transport integration.

2.4 Interchange facilities

The perceived and actual costs of transfer between modes and services can play a key role in the overall perception of public transport. There has been a reasonable amount of published research into the barriers to interchange (including perceived costs), best practice in interchange design and users' satisfaction with existing facilities. However, there has been little empirical research that systematically attributes changes in perceptions or behaviour to specific improvements in modal integration. Where new interchange facilities are developed, surveys by implementing organisations have typically found overall satisfaction.

One obvious approach to improving public transport integration is to co-locate facilities for buses and taxis adjacent to rail station. However, the current composition of the literature relating to interchange development reflected a growing interest in cycling as an access/egress mode (see Leeds CyclePoint example below). Similarly in practice, station travel plans appear to be

attracting greater attention than the more obvious and conventional approaches such as co-location of public transport stopping points.

Leeds CyclePoint comprises cycle parking, cycle repair facilities and cycle hire in one integrated facility located at the station entrance. Opened in September 2011, the one-stop shop for cyclists is housed in a two-storey structure and offers some additional services and novel features built into each service, such as detailed cycling information designed to meet all passengers' requirements for journey planning to or from the station, including a train departure screen, a large wall map of Leeds cycle routes, and leaflets. Cycle parking is staffed 7am – 7pm and accessed by secure swipe cards at other times.

'Station travel plans' and 'park and ride' aim to support the combination of sustainable travel modes with an individual traveller's main mode of transport. As such, they contribute positively to making a journey involving public transport seamless in general, and are thus an important component of transport integration. Station travel plans refers to travel plans applied to station sites to ensure all train users experience a smooth connection to their onward journeys. There was good evidence of increased cycling at 12 of 24 stations investigated (with at least one indicator of growth at eight others), significantly increased bus patronage at three stations (with at least one indicator of growth at 11 others) and good evidence of increased walking at two stations (with at least one indicator of growth at 11 others). However, there was also evidence of increased car use where there were large increases in car parking provision (Rail Safety and Standard Boards 2012).

The literature also illustrates that park and ride schemes could result in encouraging existing public transport users to become park and ride users; and a dedicated attention to cycling as an onward journey mode at the station site is at times given at the expense of other modes such as bus.

2.5 Considerations for Wales

The review of evidence presented a number of challenges in relation to the specific context in Wales. First, any effort in integrating travel information

between modes and between services would enhance users' perception of, and experience with, public transport only if the availability of integrated information is widely known. Comprehensive integration of public transport information, keeping it up-to-date on a constant basis and effectively promoting the available services together have significant resource implications.

Similarly, evidence that integrated ticketing is closely associated with public transport performance is abundant. A crucial question for Wales, where an overarching transport authority or a specific funding source for ticket integration is currently lacking, would be the source of financing for the initial set-up of a ticketing system at the minimum. As such, identification of an appropriate institutional and financial arrangement that can enable an effective and sustainable programme will need to be considered as a first step to an integrated transport system.

Second, in addressing the role of public transport in the predominantly rural Welsh regions with particular implications for operational efficiency of a mass form of transport, it would be essential to consider what might be a most appropriate form of passenger transport for differing geographic contexts, and the financial viability of any scheme under consideration.

3 Public transport integration in Wales from the perspective of the general public and transport providers

This section contains the findings from both the extended focus groups and in-depth case studies (more detail on each case study is included in Appendix I). It concludes with the results from the perspective of transport providers.

3.1 Top of mind associations with public transport in Wales (general public)

It became apparent from the qualitative discussions that participants' default perceptions in relation to public transport in Wales were mixed at best. In order to gauge the top-of-mind, general views, the discussions opened with a voting exercise on three statements to broadly judge where opinion lay. The table below shows how participants voted.

	Newport		Haverfordwest		Llandudno	
	Agree	Disagree	Agree	Disagree	Agree	Disagree
<i>It's easy to find the information necessary to plan an entire journey on any public transport</i>	9	11	11	9	7	11
<i>Public transport in Wales puts the needs of its users first</i>	1	19	8	12	4	14
<i>Different forms of public transport in Wales work well together</i>	2	18	7	13	4	14

The qualitative nature of these figures should be stressed, but it is interesting to note that participants in the more rural location of Haverfordwest were slightly more positive than the urban based participants of Newport, during the voting. However, the themes that subsequently emerged on perceptions and experiences of public transport were in keeping with those from across other two locations.

Reflecting this overall tendency to have a less positive outlook regarding public transport, top-of-mind terms and phrases associated with public transport in Wales were, on the whole, negative. Themes that arose when participants were asked for words they associated with public transport in Wales included the following, which are discussed in more detail later in this report:

- **Cost related** issues, for example especially if travelling with a family; the perceived cost of peak fares on trains; a perceived lack of value paying for a train ticket but not being able to sit down during the journey; the discontinuation of return bus tickets in the Llandudno area;
- **Reliability and frequency of service** for example services starting too late for a commuting trip, and finishing too early for evening trips such as from a more rural area into a nearby town; infrequent services on a Sunday, mentioned in the Haverfordwest and Llandudno discussions; and delays such as a bus not arriving at the scheduled time;
- The journey **environment** which concerned a lack of comfort for example overcrowding, feeling 'claustrophobic', limited luggage space, vandalised bus-stops and bus-stops open to the elements; a lack of cleanliness especially on buses; 'cold', 'unfriendly' environment / facilities; 'dated' buses and trains –mentioned in Haverfordwest and very occasionally in Newport, and concerns about personal safety;
- **Interactions with bus drivers** for example describing them as 'miserable', 'rude', or as possessing poor spoken English;
- Journeys by public transport **taking longer** than by private car.

On the whole, for occasional and non-users of public transport, these associations were not based on recent, regular or first-hand experiences. It was sometimes the case that a particular one-off experience had made a lasting impact as the first example below illustrates in relation to taking a train to a festival. Similarly, issues with overcrowding on trains on international rugby match days were sometimes voiced, which were infrequent experiences. Positive experiences tended to be less remarkable or

memorable, for example getting a seat and arriving on time / without incident. The language in the second example below from a lapsed user suggests a degree of generalisation but he reported that regularly encountering issues with buses turning up late prompted him to switch to car usage instead.

Claustrophobic on the train, everybody standing and you don't have any personal space if you're standing, you've got somebody's arm sort of hovering over you and it's not particularly pleasant. . . . The last [train journey made] was to Abergavenny [September] and it was a festival and there was, basically the train arrived and wouldn't let any more people on. (F, Newport)

Well, being a non-user you said the first thing that comes to mind, [which] is cost and reliability. From past experience when I used to use public transport they were never reliable enough. . . . They're not reliable to the timetables that they put out. (M, Haverfordwest)

The language used in the examples below also demonstrates that perception rather than reality played a part in shaping public transport top-of-mind associations for some participants.

Buses never stop for you or you're chasing the bus half a mile down the road or they never stop where you want them to stop. (M, Haverfordwest)

I went to Cardiff airport a couple of weeks ago and that was going by car because really nothing else was feasible. [Moderator: Did you look at other options?]. No. (F, Newport)

What I find is that when I get the bus and the train one of them is always late so I miss the connection, so I have to re-plan everything. Sometimes you have to wait an hour for the next train. (F, Llandudno)

However, some regular users supported the negative associations, giving recent examples of dissatisfaction with a journey on public transport. These instances are further highlighted throughout section 3 and in the case studies in Appendix I.

3.2 Barriers to usage and issues associated with public transport (general public)

Recurring themes on barriers to using public transport (more) centred on the convenience of cars and the flexibility they provided to the individual in terms of what they could do and when; and it was an engrained behaviour for many. The car was immediately accessible and considered the easiest option especially if a trip involved children or baggage. The provision of a parking space at work was a further occasional incentive to drive rather than take public transport for a commute.

It's easy isn't it, with your car, you just jump in your car. Don't get wet as well. (M, Newport)

I think if you've got a car then you drive it don't you and you don't really look out for [public transport options]. (F, Haverfordwest)

As one participant pointed out, he could have driven to the train station to reach the discussion in Newport but that once in the car, the convenience overrode any consideration of public transport.

This barrier of the convenience of the car became even greater when combined with a lack of consideration of public transport as a possible option for a journey. It was apparent that some participants were not very aware of the public transport travel options available to them, with travel behaviours driven by habit rather than active decision-making. Participants on occasion acknowledged that they knew very little about the bus services that ran from the bus-stop in their street.

No [I wouldn't have considered coming here by public transport] because being a non-user I don't know when and how, where they run to, what one to get or anything else. (M, Haverfordwest)

Some also assumed that using the car was quicker than public transport, for example in order to reach the focus group they attended or for commuting. The time estimate given in the first comment below was very close to the time provided by online travel information, which ranged from 39 minutes to one hour three minutes depending on the service used.

It would take 40 minutes to an hour by bus or train [to get here] whereas it takes 20 minutes by car. I come from Llanrwst; a bus would take at least more than 40 minutes. (M, Llandudno)

I think for me when I finish work, if I drive on a good day I can be home in about 20 minutes. If I was on public transport I probably wouldn't be home for two hours and it would probably cost a lot as well so, there's just no incentive there really. (M, Newport)

The case study overleaf provides an example of a participant who did not use public transport.

Kate lives in the Valleys and relies on her car for commuting and very rarely even considers public transport for any kind of journey. She has been driving the same route to work for 20 years. When working day shifts she is out of the house by 7.00am and arrives at work around 15 minutes later. The return journey is busier and takes twice as long but Kate still feels calm during the trip.

She has no idea what the options are for travelling to / from work by public transport but assumes it would take a good deal longer than driving and would involve getting a bus either to Pontypool or Cwmbran and changing to another bus. (Online travel information indicates the journey entirely on public transport would involve two changes, take an hour and a quarter and mean arriving slightly late for work.)

She acknowledges that there is a bus-stop 'outside my house' and that it was probably straightforward getting a bus into Newport.

On further reflection, Kate also feels that perhaps one of her rationales for not using public transport (cheaper to travel by car) is not so convincing because of car wear and tear, fuel and having to pay for parking.

Infrequency and lack of services were also regularly voiced as barriers to using public transport, in particular buses in more rural areas. Some faced long walks to bus-stops, long waits between connections or having to arrive at their destination very early due to timetabling issues. This could mean having to try and plan to fit in as much as possible on a single trip to the nearest town to avoid having a long wait for the service back home.

As an example, a Haverfordwest participant looking to travel to the discussion group by public transport found it would have meant arriving at 3.15pm for a 6.00pm start; and then not having an option to travel home in the evening (near Whitland). In another case, one Llandudno participant who travelled to the focus group by train had to arrive 45 minutes early, as the next train would have meant arriving late for the discussion.

I had a long wait when I got into town [for the discussion group] . . . I was here by 5:00pm so I just sat on the beach for 45 minutes. (M, Llandudno)

I came by taxi tonight because there isn't any transport in the village where I live. (F, Llandudno)

The perceived lack of bus services in the evening in some rural locations was felt to impact on the ability to use public transport for leisure related trips such as going to the cinema or out for a meal or drink. From a commuting perspective, the examples below relate to the apparent lack of early morning and early evening services in the Haverfordwest area which resulted in one participant's partner having to drive to work, and another participant on occasion having to catch a taxi home if working after 5.00pm.

That's my biggest problem that there's no bus when I want to use it which would be in the evening to get to Haverfordwest or maybe to Narberth. There's nothing . . . [lives seven miles from Haverfordwest]. (M, Haverfordwest)

My partner lives in Haverfordwest and works at Withybush, she has to get there for 6.30am every morning and she has to have a car because there's nothing at that time. (M, Haverfordwest)

However, rurally located participants sometimes acknowledged that it was not practical to expect to be able to travel everywhere by public transport given Wales' rurality (transport providers also echoed this theme, referring to the challenges posed by Wales' relatively low density form of settlements). Too many diversions to rural stops would also result in even longer journeys which would deter use. Some described how it was inevitable that, if living in a rural location, people would need to purchase a car in order to be able to travel. There were also examples of car-sharing in these areas.

If you live here [Pembrokeshire] any length of time and you've got a family, eventually you just get an old banger or old car because it's just hopeless. I mean unless you live in a town or something perhaps, but if you live in the country, no. (F, Haverfordwest)

I think the geography here makes using a car necessary. (M, Llandudno)

Interestingly in Llandudno, it was felt that travelling across North Wales and into England was more straightforward on public transport than travelling in a north / south direction within North Wales; and this was considered 'unfair'. An instance of perceived inconvenience was described of having to take two buses to travel from Old Colwyn to Llandudno. (Although not based on specific departure and destination addresses, online travel information indicated that there is a direct bus between these two locations.)

If you want to go to Rhyl or to Colwyn Bay you're fine by bus, but if you want to go outside Llandudno or outside the straight line down the coast, north south you can't. (M, Llandudno)

I live in Old Colwyn, and even I would have trouble getting here. . . . To come from Old Colwyn I'd have to get a bus to Colwyn Bay, change, then get another bus; it doesn't work well. (F, Llandudno)

A couple of participants described how a bus service no longer ran from their rural location in North Wales and that a subsidised taxi service had been organised in its place, in consultation with the local council. Even so, the resulting service was infrequent and limiting (see Appendix I, Llandudno case studies). Similarly in Haverfordwest, there was reference to a car-sharing service for villages but there was doubt over to what extent the service could be relied upon for regular, time-sensitive journeys.

A group of us had to work with the Council for them to organise and subsidise a taxi-bus service. That comes in and out three times a day. It's better than how it was, but the times aren't really good because it suits some people, but it isn't good for those who have to go to work because the first one isn't until 9:00am. (F, Llandudno)

They have started the rural scheme in the kind of rural areas now, I think it's Dragon Buses or Dragon Cars (Green Dragon Buses), so if you're out in rural places they're putting like small cars on the road that the community can share – it's like a pool car for villages. (F, Haverfordwest)

Some participants reported that the cost of public transport travel was an issue and a deterrent to usage, although this perception was not always based on evidence or detailed understanding of fares available. This cost issue was slightly more likely to be raised in the Llandudno discussion in relation to bus fares; a number of participants here mentioned that return tickets were no longer available in the region (confirmed by the bus operator in the area) which did not suggest value. A Day Saver ticket in the region was still cheaper than two single tickets. However, the infrequent references among participants to this ticket suggested that they might have been less aware of this option.

Some thought that travelling with the family on public transport was not good value which prompted a few participants to drive instead, for example on a trip to visit family. Specifically, the cost of train travel, for example to London, was considered 'scandalous' by some, and there was criticism of the way in which passengers appeared to be 'punished' with train ticket prices if they tried to book near or on the day or travel, with no improvement in service to reflect the higher cost.

My stepson, he comes up to us, he lives in Milford and he could get the bus from Milford up to us which would cost him about £4... I think he said, £4.50 or £4.70 just from Milford up to Haverfordwest. (Travel helpline information indicates that the cost of a single ticket between these two locations is £4.05, and £6.50 including the return.) (F, Haverfordwest)

That was mean spirited, they stopped [return tickets] earlier this year. I used to get a return from Llandudno, Colwyn Bay for about, I don't know maybe £4.20 but you're paying about £6.60 or something now, maybe more than that even. . . . So that's another reason why I wouldn't bother getting the bus to the Bay and back now. (M, Llandudno)

For instance I went to see my son graduate [in London] and we had to specifically say which train we were going on and which train we were coming back on. And if we missed the second train due to staying a bit longer, we were going to have to pay another £40 or £50 each. . . . We got delayed and we had a hell of a rush to get on the train. (M, Llandudno)

The first comment below highlights an assumption sometimes voiced that it was cheaper to use a car than to use public transport for routine trips. Similarly the second comment refers to the perceived rising cost of public transport but makes no mention of fuel costs for motorists, for example.

But the economics of the car, you can use it 24/7 because you have to pay insurance and tax so the more you use it the cheaper it becomes. So coming here say it's 50p compared to the bus so it's a no-brainer isn't it? (M, Llandudno)

[Public transport] is becoming more expensive, why should I use it rather than driving? (F, Llandudno)

In a couple of examples, lapsed regular users of public transport were able to explain how the cost of public transport had led them to switch to cycling. One participant in Newport had calculated that her commute costed £60 a month and had decided that cycling would not only save money but also be quicker than public transport and improve her sense of wellbeing (see Appendix I,

Newport case studies). Another participant on a low income in Llandudno had reached a similar conclusion and now cycled to work.

According to some participants in Haverfordwest, travelling between towns in the area could work out cheaper by sharing a taxi or driving rather than taking a train or bus.

Even the car, so for me, my partner and my two kids we're looking at about £15 [from Pembroke Dock to Carmarthen]; (online travel information indicates a combined fare of £27.60 by train). If I jump in my car and stick £5 petrol in, it's much cheaper to go in the car. (M, Haverfordwest)

Perceptions of reliability issues and overcrowding especially during commuting periods were further rationales given by some for not considering public transport or at least affecting the experience in a negative way, combined with the consequences of being late for work. One participant explained how she had eventually lost her job because of being late for work with an unreliable bus service from Newport to Cardiff. Sometimes it was stuck in traffic or the bus was full and the participant could not board it.

We commute daily from Rogerstone to Cardiff Central, we buy our weekly pass but there's never, ever any seats going. (F, Newport)

It's on the first train Sunday morning or the second train, from Junction going towards Chester. There's always two carriages and it's always jam-packed . . . and it's always reserved as well. (M, Llandudno)

In another case, a Newport participant described how a specific bus did not turn up at all on occasion, or at times which were different to the timetable, meaning that sometimes the participant had to cancel plans to visit family nearby and head home. The same service also reportedly failed to turn up on a number of occasions when she was attempting to take her child to nursery,

which eventually prompted the participant to complain to the operator. However she stated that she did not receive a satisfactory response from the company, and still experienced an unreliable service.

*My son is going to nursery in [Newport location] and it didn't run four times, I actually had to complain to [the operator] because it wasn't running and my child couldn't get to nursery. . . . They just don't care.
(F, Newport)*

Overcrowding and lack of space was a regular problem for one participant with a disabled partner, as the case study below describes.

As a non-driver, Chris is a regular public transport user and lives in the Pembroke Dock area. On a Saturday, he travels with his partner and young child the short distance by bus to his child's Mum's, to drop the child off for the day. Because his partner is in a wheelchair they are unable to use the bus-stop nearest their home as it is not accessible – the 'pavement is lower than the road'. They therefore walk to the next stop where his partner is able to board a bus in her wheelchair. Sometimes there are buggies or other wheelchair users on the first bus to arrive in which case they have to wait for the next service. The previous weekend to the focus group he attended, this issue 'threw all our travel plans out for the day'.

Arriving in Pembroke Dock there is no issue leaving the bus. Having carried out tasks in town, the return journey leaves from a different bus-stop and relies on the bus operator providing a bus equipped with a ramp because there is no raised curb. Approximately every other week, Chris thinks, they have to wait for the next bus because the first to arrive does not have a ramp.

Complaints to the operator and local Council have not resulted in any changes. Chris feels that, 'in Wales you seem to be expected to make do'.

As the comment below illustrates from a lapsed user, some less positive associations were not always based on recent or regular experience. In addition, one participant who stated that it was too difficult to get a pushchair on the bus subsequently acknowledged that it was the expectation, rather than an experience that meant the bus was not used for a family trip.

I used to get the bus years ago before I had a car and they just keep going, they just drive straight past. (M, Newport)

Both users and non / occasional users of public transport sometimes raised an issue with the environment on public transport vehicles, such as cleanliness on buses and trains (e.g. litter on the floor, dirty windows), occasionally the condition of the fixtures inside a train (e.g. screws coming loose on seating on a train, old-looking stock), and unsavoury passengers, all of which affected the experience of the passengers.

I went to Manchester on the 10:40am. . . . The train was that filthy you couldn't see through the window and I counted about 16 empty cans of beer, packets of crisps and all the rest of it. (M, Llandudno)

In a few cases, participants in Haverfordwest believed that some buses in the area were 'dated' and 'hand-me-downs' from other areas.

A lot of the buses are really, really old as well, we usually get the hand-me-downs from other parts of the country. (F, Haverfordwest)

Further reported barriers to using public transport (more often) mentioned included:

- Not feeling very safe when waiting for a bus or train in the evening; examples included Newport bus station, Swansea train station and Rhyl train station; groups of youths gathering at bus-stops, and being alone at a rural bus-stop; one participant explained that it deterred her from using public transport in the evenings;

You don't feel very safe of a night time sitting in a train station on your own. . . . Llandudno Junction. . . . I don't like getting buses on my own in the evening either. (F, Llandudno)

I've even seen people attacking people at the bus station [in Newport], they've had weapons. I've seen them taking drugs. . . . I just sit there hiding under my hoodie and hope no-one notices me to be fair. (F, Newport)

- Cheap parking being available in Newport which was an incentive to drive into the city rather than take public transport;
- Issues with ticketing: for example, struggling to understand the tickets received for a journey from Wales to London: one couple attempting to travel from Wales to Sussex by train (to avoid the stress of driving) became confused by the number of tickets they received from the self-service ticket machine which led to problems trying to cross London, and missing their connection at Victoria Station. The experience was 'horrendous' and 'stressful'. For another participant, finding it overwhelming with the number of fare options for a trip to London;
- Changes in circumstance resulting in usage lapses, for example finding a neighbour to provide a lift for regular shopping trips where previously a bus had been used; purchasing a car; moving from an urban to a rural home; or finding a new job where there were not the same public transport options for commuting.

3.3 Positive aspects associated with public transport (general public)

Although top-of-mind perceptions of public transport tended to be negative, participants were sometimes able to describe positive aspects, when pressed. In the following example, a very occasional user had been pleasantly surprised by a recent train trip from North Wales to Manchester, and how trouble-free the journey was. He did not want to worry about driving and parking in an unfamiliar city. The positive experience had challenged the individual's less positive associations with public transport.

I went to Manchester by train on Saturday to go to The Enemy, that journey was very smooth, no problems at all. It was much better than I

thought it would be, because I normally drive. . . . It was because I wasn't really sure of the parking in Manchester and what it cost; it was easier by train. (M, Llandudno)

There were infrequent examples where the quality of service provided by particular bus operators (in Newport and in Haverfordwest) were described as 'excellent' with buses which were always 'spot on time', 'really clean' and operated by friendly staff. Also, certain bus services were felt occasionally to effectively link up towns in rural areas like Haverfordwest, and there was appreciation of the presence of a bus service in a small village.

I think [bus operator] are a really good bus company. The buses are really clean and they're nice guys and everything functions. It's just that there aren't many of them and they don't go about late at night, but the ones that are there obviously take great pride in keeping them tidy. (F, Haverfordwest)

The perceived benefits of public transport tended to centre on its convenience advantages over car travel in urban situations, for example not having to worry about finding a parking space. Some participants explained how they would sometimes use the train for leisure trips, for example from Cwmbran to Cardiff at the weekend, Haverfordwest to Cardiff or further afield into England because it was convenient, inexpensive to some, and quicker than driving. From time to time the cost savings on parking, fuel and car wear and tear were a reported benefit as well, for both short journeys such as a daily commute and longer journeys (e.g. travelling to London by coach). One participant commuted to Bristol by public transport even though it took longer than in the car purely to save money, particularly on the Toll Bridge (see Appendix I, Newport case studies).

You don't have to look for parking for starters if you're on a shopping trip to Chester or something. Finding parking in Chester is just almost impossible. (M, Llandudno)

The only plus, which is why I use the bus for work, is because it saves having to park and pay parking fees. (F, Haverfordwest)

The case study below highlights an example where the participant believed it was normally better value to use public transport rather than drive to work.

Joe's usual commute is from Llandudno to Bangor. From home he has a convenient short walk to the bus-stop. He is able to catch a direct bus to Bangor which stops a few minutes' walk to where he works / studies. He tries to catch a slightly earlier bus (before 8.00am) to avoid the later, more congested service with schoolchildren. The fact that the services run every 15 minutes at this time is appreciated. This journey takes around one hour and fifteen minutes and Joe finds its length slightly frustrating because of the number of stops.

By car the journey would take approximately 20 minutes or so, depending on traffic. However, the weekly saver bus ticket of £18 is 'a lot cheaper than driving', he thinks. On balance Joe believes the extra time of the journey is worth bearing in order to save money.

Depending on what time he leaves college, the return journey can be busy with schoolchildren but overall finds the entire journey 'not too bad'.

On some occasions Joe drives this journey. In these circumstances it is because he is only at work / studying for a couple of days during the week so it is not worth his while buying the weekly ticket; and individual tickets he thinks would be more expensive than driving.

Some participants appreciated the speed and reliability of public transport over cars in certain situations, especially commuting by train. Car travel faced issues with congestion and having to leave very early to be sure of arriving at work on time.

And [on the train] you haven't got the city driving then to worry about either, because traffic jams and that, you can't really trust driving in unless you leave way before the rush-hour starts. (F, Newport)

Public transport also helped a couple of parents with the school run, for example an older child was able to catch a train to Tenby while the parent drove the younger child to another school.

Free bus passes were highlighted as an obvious cost benefit for older people and disabled people, with one participant making extensive use of his free bus pass for days out. A Rover ticket (mentioned in Newport, Haverfordwest and Llandudno – the latter referred to as a Day Saver ticket), where used, was deemed good value.

You also have a Rover bus ticket as well, which covers you for the week. One level will cover you for the whole day, then you've got one ticket and it'll cover you for the whole week. . . . I think it's a good thing. . . . It's cheaper, it's a lot cheaper because it's one payment. (M, Haverfordwest)

The affective effort could also be less 'stressful', 'hectic' and 'frustrating' with public transport: a longer train journey could be 'stress-free', 'relaxing' and give the passenger the opportunity to take in the views; trains avoided congestion, and even if a bus was caught in a traffic jam, there was less stress not having to drive, or not having to map-read and negotiate the roads in an unfamiliar city as a driver. Journey time could also be used more productively (mainly on trains).

It just felt relaxing [by train]. It's just nice to sit and read a book. . . . Except standing for the whole of the journey from Shrewsbury to Manchester. (Train from Aberystwyth to Manchester) (F, Haverfordwest)

You get to see things whilst travelling on a train because you have to concentrate when driving, especially with children. (F, Llandudno)

In the case study below, a Haverfordwest participant who uses public transport infrequently explains why the family sometimes chooses public transport for leisure trips.

On the odd occasions Carl uses public transport it tends to be for leisure trips with the family. An example involves a short walk to the train station, and then a direct service to Tenby which is convenient and straightforward, with enough space for the children and buggy.

Carl will check the train times online at thetrainline.com for these trips because they do not make them very often and to make sure that the timetable has not changed. He welcomes the availability of journey planning websites rather than having to source and read printed copies of timetables.

He doubts the trip is any cheaper by public transport but admits that it is difficult to work out how much it would cost to do the same journey by car. The main reasons for taking the train are: when it is a family trip; to avoid the hassle of finding somewhere to park; and because the train provides an opportunity to relax and spend time with the children.

As a further benefit, several participants explained that public transport gave them the freedom to drink alcohol at the destination, for example a trip to a rugby match, to see relatives, or for a night out.

Those who did not drive sometimes acknowledged that public transport gave them 'a bit more independence to do my own thing' and, more generally, helped some people to be more mobile, for example older people when combined with the free bus pass.

The place I go mostly on the bus is, my husband died and he's buried in Neyland so to get there it's easy for me, although it's only one an hour it's a lot easier for me than asking my son [for a lift]. (F, Haverfordwest, non-driver)

Environmental benefits were raised infrequently but were important to those who mentioned them. It was assumed that if more people used public

transport there would be fewer car journeys made and therefore fewer emissions entering the atmosphere.

3.4 Types of journey and public transport consideration (general public)

During the discussions, participants were asked for their views on considering public transport for different types of journey, covering shopping, part of a journey to / from a ferry / airport terminal, visiting family and friends, while on holiday, commuting, and for a day out. Similar benefits and barriers / issues were voiced to those covered earlier in this section.

On the whole, participants were more likely to consider public transport for commuting and potentially for a day out / longer trips, although views were very mixed across the different scenarios tested.

Commuting: For some (especially those living in urban / suburban areas), the speed and cost compared with driving and parking ('perfect for me') meant that it was worth enduring standing-room only on the commute to work. On occasion, participants who worked and did not drive relied on public transport for their commute.

I used to [commute] by car and it costs me a fortune by petrol. . . . £21 a week [the train costs]. . . . But I was spending £50 a week petrol and £4.50 a day parking. (F, Newport)

I'd have to go [on public transport] definitely because it's the only option of getting to work for me. (F, Llandudno)

However, perceptions of reliability, or stressful experiences of being (nearly) late for work, meant that some did not think that public transport could be trusted to get them to work on time, or that the journey would be very quick.

I had to get a train from Llandudno to Rhyl, the bus that I needed left at 7.00am and the train arrived at 7.02am so I had to wait until 7.15am to get the bus to [work in] Glan Clwyd. . . . It is a bit stressful trying to get there on time and I had to explain to work that I wouldn't be there in good time. (M, Llandudno)

Some of those in more rural areas viewed public transport for non-work related trips which were not so time dependent or 'serious', because of infrequent services or services that did not run early or late enough in the day.

Shopping: the more items purchased, the less likely participants were to consider public transport for a shopping trip. A trip into town for one or two tasks such as getting a haircut or going to the cinema was, for some, quite convenient by bus because there was no need to worry about parking. A bus-stop or train station near to home as well as the local shopping destination was enough to prompt some participants to use public transport in this way, whereas a slightly longer walk to / from the bus-stop could make public transport less appealing for this use. If the shopping trip was more of an occasion, for example travelling from Pembrokeshire to Cardiff, the train was an option for some because of perceived savings on cost over driving.

You're limited then as to what you can buy because the bus-stop is a good five to ten minute walk from my house. . . . When you've got the car you've got the option of going to put some stuff back into the car, go back into the town. (F, Newport)

Less positively, the idea of taking a trip by bus which might take longer than by car was unappealing to many in more rural locations, especially if it involved a walk from the bus-stop with bags and / or if the trip was likely to take much longer.

A couple of participants relied on buses for shopping trips but did not find it a very convenient method because of having to carry bags, limited space on the

bus, and sometimes with a young child to look after: 'If I had an alternative, I wouldn't take the bus'.

For a day out: If travelling with a group of friends, the train was sometimes considered to be a sociable and fun way to start the trip, with the opportunity to 'have a drink'. Public transport was also considered by some for longer trips because it was thought to save on fuel (e.g. Haverfordwest to Swansea or Cardiff) and be quicker than driving (e.g. Newport to Salisbury).

And also if you're going out for the day with your friends and you want to have a drink, you don't have to worry about it. (F, Haverfordwest)

One family in Haverfordwest occasionally used public transport in this way so that they could enjoy a cycle ride home or a stretch of the Coastal Path; and felt more could be done to promote public transport in this way with families (see Appendix I, Haverfordwest case studies). These trips were also an adventure for younger children.

It's a part of a day out sometimes as well isn't it, part of the day out is the journey there. I mean my little boy loves the train. (M, Haverfordwest)

Some participants, however, dismissed the idea of using public transport in this way, citing the lack of flexibility and spontaneity of stopping wherever and whenever convenient (e.g. stopping off at toilets for the children, last-minute change of plans, and travelling with a disabled member of the family). A view was also expressed that some rural places to visit on a day out such as the Gower had limited public transport options.

Just that I prefer going by car. . . . I would go by car just for the convenience of going out when I want to go out and coming back when I want to come back, you know? (M, Llandudno)

Part of a journey to / from a ferry / airport terminal: most issues with this type of trip related to accommodating luggage, and a reluctance to walk with the items as part of the journey. There were also concerns about reliability and arriving in time which would be more stressful knowing they had a ferry or plane to catch, and not being in control in this respect. In addition, leaving plenty of time to account for these perceived issues would mean time spent 'hanging around' at the destination.

I've done it on the train and people have been really funny, they've asked you to move your case and things. (F, Llandudno)

Some participants felt they would consider public transport as part of a journey involving a ferry or airport terminal if these types of concern were allayed, because it would mean they could avoid parking costs. One participant had a positive experience taking two trains to reach Rhoose and was met by a 'small minibus' which took her to her hotel the evening before the flight – 'it all worked really well'.

I definitely would consider it. Saves on trying to find somewhere to park your car. (F, Haverfordwest)

A number of participants in Llandudno had used the train to get to Holyhead ferry terminal and praised the service for its value and the proximity between modes.

That is pretty well integrated I think, that service. (M, Llandudno)

Visiting family and friends: Some participants could not begin to think why they might use public transport in this way having always used the car for this type of trip; and what the benefit might be of using public transport. The inconvenience and inflexibility of having to plan around public transport timetables was also raised. The idea of taking young children on such a journey was also unappealing to some in terms of keeping them occupied and

carrying baggage such as pushchairs. It was also expected to be cheaper to travel by car with the family than by public transport.

The reason I always use the car for that is that you go straight there, it's quicker and if you haven't seen family and friends for a long time you can have a lot longer there, spend more time with them and you can leave when it suits you and if you decide to have an overnight stay you can change your arrangements quickly. (M, Llandudno)

Sometimes trains were used for longer journeys, for example visiting family in Lancashire, Oxford, Kent or London to avoid the stress of driving in large, unfamiliar cities and because there was the convenience of public transport from the train station. The participant in the comment below believed that these benefits outweighed a perceived slight cost-saving if driving.

I do sometimes, to go to London because it's easier than driving around. . . . It is slightly cheaper to go in the car than on the train, but going to London it's much less stress on the train. You go from Llandudno Junction straight down to London, and there's a Tube every two minutes and a bus every 10 minutes. (F, Llandudno)

In the following case study, the participant travelled from Newport to Swindon for the weekend, with mixed experiences.

Marianne recently travelled by public transport to visit a friend in Swindon on a Saturday. Leaving from work in Newport and with luggage, she took a bus from outside work to the train station. There was enough space for her luggage on the bus. She did not feel that the bus fare of £1.60 was very good value for a journey of 'five minutes' and had to 'scramble about' for the correct change. The bus stopped about a seven-minute walk from the train station which seemed 'a long way when you're carrying a lot of stuff and not that convenient because you have to cross a big main road'. She did not enjoy the walk.

The train was busy and she found it 'uncomfortable, claustrophobic, [and] dirty' with 'people leaving rubbish around'. However the train did arrive on time and she did have a seat.

The return train journey was less busy. As it was a Sunday, Marianne doubted that the bus service was running very frequently from the nearest stop to the train station that she would need to get home, and did not think that it was possible to find out these times at the train station. Rather than potentially face a long wait for the bus, and not relishing the walk with luggage, she decided to take a taxi home from the train station because taxis were waiting outside, and not a bus.

While on holiday: A handful of participants would and did use public transport in this way when there were no real time deadlines for the journey, because it was an effective way of seeing more of an area, a good way of entertaining younger children, and removed any concerns about directions and where to park in busy, unfamiliar towns.

[Public transport on holiday] shows you an awful lot more. You're not in that hurry to be somewhere at a particular time so you don't mind and it takes the stress out. (F, Newport)

3.5 Current information requirements and provision (general public)

Few participants appeared to consciously plan the more regular journeys they made since they had been developed around habit. It therefore transpired that some were unfamiliar with the schedules and routes available from nearby bus-stops.

The **internet** was often suggested as their likely starting point for finding out information on a journey although knowledge of specific sites varied. Some participants found online journey planning a 'fantastic' service, far easier to use than timetables, but were not always sure which site they had used. Some described how they would use Google, for example entering '412 bus timetable' or 'train times'. It became apparent that sites like Traveline Cymru were not widely recalled among these participants. Some explained how they would search for information based on station locations, service numbers or by specific operator.

There did not appear to be one site more prominent than others for planning travel on public transport, although there were some references to 'The Trainline'. Also mentioned were 'Traveline', apps ('Orange Travel app', 'Catch That Bus', 'National Rail', 'Arriva', one relating to ferries), and operators' websites, especially among participants in Haverfordwest. If a trip was to involve more than one form of transport, it appeared that participants were more likely to use an aggregated site.

I've got an app on my phone, like Traveline Wales or something it's called, and that's quite good because it's got all the trains and all the buses and things. And every time I've used that the information has been right. (F, Haverfordwest)

I felt much safer having [the 'National Rail' app]. I went out for the day to Legoland and I missed a bus, so I thought I'd miss the train, but I looked at the app and saw there was another one in 20 minutes so there was no need to worry. (F, Llandudno)

Some preferred to **phone** for information to ensure that they had not misunderstood online information. Those who had used the Traveline Cymru helpline were complementary of the service, describing the phone option as 'really handy, helpful'. This was especially the case with planning longer journeys, for a few, and seeking reassurance that they had the correct

information. Others still preferred to visit the bus or train station to find out and pick up information. A small number in Haverfordwest reported that when they had tried to phone specific bus operators, if it was not engaged they were informed that they should look online. Even so, there was an occasional perception among some that timetables from the operator direct were more likely to be accurate.

I'd rather that because I get all the information and trying to kind of work it out on the computer can sometimes be quite confusing. If you're doing quite a big cross-country journey with lots of connections I phone Traveline. (F, Newport)

An SMS service had been used by one participant in Llandudno to find out when the next bus was due at a bus-stop; and was deemed effective.

On occasion, participants complained about difficulties reading timetables. Issues mentioned included struggling with PDFs online, younger family members finding it hard to use a printed timetable, having to 'really work harder' to understand printed timetables versus online options, and not knowing how to read the 24-hour clock. For a few participants, this difficulty in understanding public transport timetables was considered a further barrier to usage.

I can't cope with those timetables, like bus timetables. I just can't get my head round them. . . . You know, the actual ones you pick up at the coach station. . . . I can't make head nor tail out of them. (F, Newport)

They're either the wrong ones, as in out of date, or you've got to go online, download a PDF file, look at it, try and figure out which bus you want to go on from where, then you've got to try and follow the times. No, I'd rather take my car. (F, Haverfordwest)

In contrast, a small number of participants felt that timetables had become easier to read.

M: Some of them have been changed recently and the format seems a lot easier than it used to. F: The timetables at the bus-stop with all the times – that's very easy, that one. M: You can just see what time it is and look for the next one. (Llandudno)

Some preferred **printed** format timetables because they were not so comfortable on the internet, did not own smartphones and liked to carry the timetable with them. On-site printed timetables were also important to some when turning up at a bus-stop and wanting to know when the next service was due.

Picking up timetables from stations was the preferred option for a small number of participants, for example for help with planning a long journey.

Some occasional / non-users in Haverfordwest referred to how services changed from summer to winter but they were never sure when this took place, whereas more regular users pointed out that it was well advertised, for example on timetables.

3.6 Perceptions of public transport integration (general public)

Even with accompanying explanations, the concept of *public transport integration* was a challenge for participants to grasp and envisage because it was not one they appeared to consciously consider very often (the research with members of the public sought to avoid using this specific phrase where possible). This observation was also noted among transport providers. Participants therefore sometimes struggled to identify examples which pointed to public transport integration, and consequently did not think that there was much integration taking place with public transport in the areas in which they

lived. As with some previous perceptions voiced, some participants based these views on assumption rather than experience.

In this section of the report, participants' views and experiences in relation to public transport integration are grouped broadly according to the integration themes of information requirements, linking bus and rail timetables, fares, and facilities / environment. Within each theme, the positive examples of public transport integration given by participants are followed by examples which did not indicate integration to them.

3.6.1 Information requirements

Positive examples relating to integration

- Digital displays of bus times at bus-stops were welcomed; one participant explained how their introduction in Fishguard had been beneficial to the young people she worked with; the digital displays meant that these young people did not have to try and use the printed timetable with which they struggled;

There are some electronic ones now with us in Fishguard. It makes timetables more accessible. I work with teenagers who have had problems; interpreting bus timetables for those sorts of kids, it's a complete no-no. If you walk along a bus station now you can see that the one over there is going to Pembroke and is leaving in 10 minutes' time which makes it more accessible and easy to know which bus to get. (F, Haverfordwest)

- The availability of information online and via apps across modes for a single journey was appreciated where used;
- In the example below, the participant provided a more detailed instance where he believed that certain bus operators in Pembrokeshire did work well together but that it was not reflected in the timetables provided at bus-stops for a particular journey using two different operators.

I think [bus operator A] and [bus operator B] work well together [from the Pembroke Dock area to Milford Haven], but it's not that well displayed on the timetable; . . . I do it online and it tells you exactly who it's with, what bus company, but if I went to a bus-stop to look at the timetables I wouldn't be able to see clearly . . . because you have to go on the [operator A] bus to Johnston and then on [operator B] bus from Johnston to Milford. (M, Haverfordwest)

Examples which did not indicate integration (information requirements)

- Not being aware of a convenient and quick method of working out bus times and train times to plan a shopping trip, and therefore getting a lift to the train station rather than catching a bus from a local stop;

It is [possible to get a bus to the train station] but I waste my time working out the bus times and train times; it's just easy to get a lift . . . (F, Newport)

- Struggling to plan a route from Cardiff to Battersea; this participant had hoped to purchase her Tube ticket from the conductor on the train but was unable to; she then found that it took a good deal of time queuing at an information desk at Paddington Tube station to find out how to reach Battersea, having assumed incorrectly that there was a Tube stop at that location. This last leg of the journey took over two hours.

3.6.2 Linking bus and rail timetables

Positive examples relating to integration

- Particular bus operators in Pembrokeshire tying their timetables in with train timetables;

The good thing with [bus operator name] is they set their timetable around the trains in Haverfordwest or for a lot of the journeys anyway to Cardiff. . . . When the train timetable changes [the operator] change their bus timetables because they go to the train station. (F, Haverfordwest)

- The convenience and simplicity travelling from home to family in Bournemouth using bus and train;
- Using public transport (train and bus) to travel from Haverfordwest to Cardiff airport, which was uneventful and ‘worked really well’.

Examples which did not indicate integration (Linking bus and rail timetables)

- The perceived lack of evidence of how train and bus operators were working together to integrate timetables or between bus operators in more rural locations (including across county boundaries), or between connecting train services;
- The perceived amount of time the passenger had to wait between connections, which was deemed to support this view, for example on a trip from Conwy to Wrexham via Chester; having a 35-minute wait for a bus near Bristol having alighted from a Newport train; 20 minutes between connecting buses on a trip from Maesglas to Caerleon; two different bus operators in North Wales providing services which ran within a few minutes of each other every hour, rather than spacing them out; or missing a train connection and having a two-hour wait at a ‘really unpleasant’ station late in the evening.

Where I live in Glan Conwy, we’ve got a problem with, there’s like two buses every hour and they’re within five minutes of each other because they’re different companies. So one comes at twenty past, the other one comes at twenty five past and then you’ve got to wait another hour before the next one. (M, Llandudno)

At the moment [in Newport] we’ve got sort of a taxi rank outside the train station and the bus-stop isn’t too far away, it’s walking distance. But are they actually linked? Do they actually communicate with each other? I personally don’t think they do. (M, Newport)

3.6.3 Fares

Positive example relating to integration

- Rover tickets which were recognised as better value (although did not appear to be widely used); examples given were of a trip to Rhyl; a journey from Rhyl to St Asaph which included a train and a bus; and across Newport and Cardiff. These participants recalled thinking that it was good value for the distance travelled.

The Day Rover I bought one last week going to Rhyl. I got a Day Rover and it was £6.50 and you can jump on any bus, they're quite flexible. In that respect they're good. (M, Llandudno)

Examples which did not indicate integration (fares)

- A couple of examples were given of how day or family tickets on buses were not valid with other bus operators in the area; and having to use one bus operator for the outward journey and a different operator for the return journey;

F: The problem I can see in this area is that you have so many different bus operators. F: But they should be able to figure that one out. F: Not even some of the family and day tickets on the buses – other operators won't accept tickets from another company which seems to be ridiculous. (Haverfordwest)

- Using public transport to travel from Cwmbran to Cardiff Airport on a Sunday: the participant took a train to Bridgend then had a change but it was not clear what to change to (the ticket reportedly said 'bus or train'); he was advised to catch the bus which was late (one hour wait); and the bus driver explained that he did not stop at the airport but would try and drop him nearby to help out;
- A point was also raised as to why it was not apparently possible to have one fare that covered both bus and train travel.

3.6.4 Facilities, environment

Positive examples relating to integration

- The positioning in Cardiff of the bus station next to the train station which encouraged one participant to use a bus service after using the train; and the close proximity of bus-stops and train stations at Milford Haven;

On a long journey it can be convenient [on public transport] because you don't have to worry about traffic. When I went to Cardiff, two minutes from the station you can get a bus. (M, Llandudno)

- Travelling to Holyhead ferry terminal by train, and appreciating how the station was close to the ferry terminal. It was also stated that the ferry was known to wait for the train to arrive, and that it was convenient to have an 'all-in-one' ticket. One or two participants reported that this example of integration had encouraged them to leave the car at home for this trip. In isolated cases, participants in Haverfordwest thought that the 'ferry holds up until the train gets in';

The easiness of it. The all-in-one ticket, the times, you knew once you got on your train at Junction that the boat would wait for you, the train would wait the other side. (F, Llandudno)

- Park and ride schemes, removing the 'hassle' of find a space to park; providing a much cheaper option compared with town / city parking; being seen as a cheaper option to other public transport and therefore acting as a reason not to use other public transport. One participant in Newport was thinking of changing her commute from a train into Cardiff to using the park and ride as several friends had already done; the aim was to avoid overcrowding on the train.

Examples which did not indicate integration (facilities, environment)

- The way in which different modes physically connected, for example: the distance between Newport bus and train station, and between Haverfordwest bus and train station; a perception that not many buses

stopped outside Newport train station; a lack of signposting from Newport train station to the bus station for those less familiar with the city; and a perception that there was no bus-stop right outside Llandudno station;

It is difficult to describe how to get there to someone who doesn't live here because I've been stopped so many times outside the train station and they've said 'where's the bus station'? (F, Newport)

- The lack of prominent bus related information at Newport train station, for example one participant knew that the appropriate bus-stop was a seven minute walk away, but did not know how frequently the buses were running, and was not willing to take a chance because of having to carry bags; she therefore took a taxi instead which she would have preferred not to do;
- Struggling to board a train with a bicycle from Newport to Bristol, as the case study below illustrates;

Assuming he does not have any work equipment with him, Neil will cycle to his local station near Newport and catch a train to Bristol. He needs to catch a 6.00am service as the next train isn't for another one hour 20 minutes which would make him late for work. There's usually plenty of space between carriages to stand with his bike.

Issues arise when Neil changes trains at Newport for a very busy service. He is sometimes told by the train staff to wait until passengers have boarded, to see if there is room for him and his bike. There are therefore times when he is late because he has had to wait for a later, less busy train, leaving him 'frustrated, disappointed and angry'.

It can be awkward on the train if the bike is wet or muddy and he worries about other passengers getting dirty from his bike. He tends not to be able to reach the bike rack or else he is not aware of one on the train. He then cycles a couple of miles to work near Bristol, arriving about an hour and a half after he left home. Driving would be quicker and he would have more of a lie-in, but he has estimated that it is cheaper to cycle and take the train than if he is driving the larger of the family's cars (fuel and toll bridge).

- A lack of secure storage for bicycles at train stations;
- As a cyclist, seeing little in Newport to suggest enhancements to encourage more cycling in the city;

- The inability to take a bicycle on the bus or accommodate bicycles at bus-stops;
- As discussed elsewhere in the report, feeling unsafe at a train or bus station at night;
- The lack of a ticket office or toilets at a train station (e.g. Tenby);
- A perceived lack of integrated assistance service for disabled users: having to contact separate companies, as part of the same journey, to book assistance.

3.7 Perceived benefits of integration (general public)

Before any prompting with specific integration initiatives, participants were asked what they would envisage as the possible benefits of improved integration of public transport. In the main, they assumed that the benefits would be an enhancement of certain advantages that some participants already associated with public transport, as outlined below. These benefits can be divided into more functional benefits and more affective benefits:

More functional benefits

- Saving money (e.g. park and ride, not having to rely on a taxi for part of a journey);
- Arriving safely, for example not rushing in the car, taking risks;
- Arriving on time or earlier than before because of improved reliability;
- Less time spent waiting between connections because of better linked timetables between modes and operators;
- More service availability: being able to use the same ticket with different bus operators;

If you've got like a return ticket for like [operator A] but you could use it on a [operator B] bus to go back. . . . Because some buses run at different times so you'd get home about half an hour earlier than half an hour late. (M, Haverfordwest)

- Greater environmental benefits as better integration would encourage more usage of public transport.

More affective benefits

- Arriving less stressed;
- Feeling reassured that there would be a connecting bus or train;
- With cycling encouraged as part of the journey, improved fitness, less stress, and feeling upbeat;
- Potentially a social benefit in communities in terms of helping residents to be more mobile, save money on travel / car usage, and helping ‘give a bit more life to rural communities’;

Economic viability of communities. If you can get around without a car then you’re saving yourself a lot of money. . . . Adding like to the communities and I think it’s a nice social thing as well, easier to see friends or to see family and things. . . . It would mean that villages in rural communities could thrive instead of like everything shutting. (F, Haverfordwest)

- Greater opportunity to use public transport for different types of journey, for example removing the stress of driving on a family trip, trying to map-read and control the children etc., and allowing for family time to interact positively during the journey; and potentially greater opportunity to find work in more rural areas.

As a result, some thought that improved integration would encourage people to use public transport (more) because of the improved experience.

I’ve been a non-user for years and I enjoy driving, I can go when I want, I can stop where I want. I’ve never had, touch wood, any problem with parking. . . . I would start using [public transport again] if it all linked together and everything was reliable, which would keep the cost down. (M, Haverfordwest)

3.8 Encouraging greater use of public transport (general public)

This section of the report covers participants' views on what might encourage more members of the public to make (more) use of public transport and includes feedback on possible improvements which relate to the four broad themes of integration discussed in section 3.7: information requirements; linking bus and rail timetables; fares; and facilities / the environment in relation to public transport. Before the report examines potential improvements to these four areas, it will outline participants' overall views on incentives versus penalties (e.g. for car users) as a means of prompting greater use of public transport.

Participants tended to feel that efforts to encourage more use of public transport would need a mix of incentives and service improvements, and changes to make driving less appealing.

They'd have to increase public transport, if they were going to try and stop people using their cars; they'd have to put more transport on because it's overcrowded as it is. (F, Newport)

Incentive ideas included:

- A smartcard (see *Fares*, 3.8.3 below);
- Cheaper fares (some in rural locations thought there might be scope for cheaper fares given that some buses appeared to have very few passengers), and more 'family orientated' fares;

I would think about it [for commuting] if it was cheaper to go that way. (M, Llandudno)

- 'Five free bus tickets in with a tax disc';
- Free WiFi;
- More direct routes, or 'express' buses with fewer stops between towns (e.g. Pembroke to Tenby; Llandudno to Rhyl);

I would definitely use [public] transport if I can get on at Llandudno and pay to go to Rhyl and I didn't have to stop on the way. (M, Llandudno)

- Timetables delivered to homes as a reminder of the public transport options available in that area;
- A bus service more tailored to the local community's needs (e.g. in more rural locations, a bus service the user could phone up and which would pick them up).

If car travel was to be made less appealing, participants believed it would need to be balanced with clear improvements to the public transport alternatives, for example around overcrowding, frequency and reliability.

Providing that alongside [penalties for car users] they actually put in the facility for you to be able to use the [public] transport as almost as easily as you could your own car, which I don't think is ever quite going to happen. (M, Newport)

As a couple of participants pointed out, they did not 'need' to take public transport and it would take a good deal of convincing simply with benefits or perks to challenge the convenience of the car. There was a suggestion for some kind of effort to encourage people to think differently about journeys, which were currently felt to be car-centric, with 'everything adapted to the car': it would take 'a devolution if you like for public transport, it would be a big change' as one participant put it.

I don't see the Government trying to get people onto public transport. They don't do anything to motivate people to leave their cars at home. (F, Llandudno)

Possible ways suggested by participants of making car travel less appealing included:

- If parking became prohibitively expensive, for example at airports or at the carpark at the train station (to encourage adding a bus journey to the trip); a couple of participants in Newport used Cardiff's park and ride because parking in the city was thought to have become so expensive;
- Fuel prices increasing further;
- Fewer parking options available (as long as it did not mean residential spaces were used instead);
- Congestion charging: London was seen as a positive example although some participants in Pembrokeshire believed such a move would be inappropriate because of perceived current issues attracting people into town centres like Haverfordwest;
- More bus lanes;
- Not allowing cars into towns.

Participants often gave the impression that they were less concerned with integration related improvements and, along with cheaper fares, more interested in fundamental enhancements such as a more pleasant environment on buses (for example in relation to litter, other passengers' behaviour, unfriendly drivers), less overcrowding on trains (e.g. when commuting), and services running more frequently, particularly in rural areas (for example on Sundays and Bank Holidays) and at peak times, such as every half hour rather than every hour.

*I would definitely use [public transport] more if it ran for longer at night time and my partner would use it more if it ran earlier in the morning.
(M, Haverfordwest)*

They need to sort out all the other issues with the transport before they think of something like [smartcards]. I think to get a bit more of a reliable service and to run more often. (F, Haverfordwest)

Additional isolated suggestions made to reduce car journeys and encourage more use of public transport included more effort from employers to encourage car-sharing; and politicians being seen to lead by example.

3.8.1 Information requirements and improvements

In terms of the overall kind of information participants wanted in relation to a journey using public transport, they tended to focus on timetables, overall journey time, real-time travel status (for example using digital displays, GPS for accuracy and to highlight any delays), the location of station stops, and how much the journey will cost. There were also references to the option of guaranteeing a seat, and to receiving a text alert updating the traveller on the status of an expected bus or train. The latter was considered potentially useful particularly where there was a requirement to arrive by a given time: at work or a hospital appointment. One participant with the responsibility of opening up a shop in Cardiff every morning explained how stressful it could be to turn up for the commute at the train station to find the train had been delayed. The idea of a text alert prior to leaving home would mean that she could drive if the delay was likely to make her late for work.

There is no way of knowing if a bus isn't coming unless there is those digital what's-its, so you don't know, you could be waiting, you know, for a bus that doesn't arrive. (M, Newport)

Door-to-door information provision on a journey was of interest to some, including the distance between a station and the final destination, and was expected to remove the inconvenience of visiting separate operator sites and 'playing with three or four different timetables'. However, as one participant remarked, it would only be effective if the public transport services (particularly buses) were punctual and not full, so that the given journey worked in its entirety.

That would be brilliant wouldn't it (door-to-door information)? It would take all the work out of it. (F, Llandudno)

You would like to know from your own house every option of public transport from the house that is train whatever and directions, price, best price. . . . It would have to allow for bookings as well. (F, Haverfordwest)

Focusing on buses and information requirements, some wanted to know if a bus that was due shortly to arrive was full or not, or had space for a wheelchair, to help manage expectations and reduce the frustration felt when the bus drove past without stopping. If this was the case, one participant explained that a smaller bus could be added to the service to follow soon after if the main service ran infrequently. More digital displays were also requested on occasion in rural areas, and where buses ran infrequently, to manage expectations.

Where all the displays on the bus shelters and the buses all coming are linked to them, so the driver can say 'this bus is full', you know, at all the stops that he's going to, says his bus is full or 'I'm running five minutes late', or something like that. (M, Newport)

The internet regularly featured as a preferred option for acquiring journey information. Many participants suggested that smartphone / tablet apps would be an easily accessible, portable information channel for public transport offering door-to-door information. Those who made these suggestions tended not to be aware of existing apps or online services available. As described earlier in the report, those participants who did use mobile apps found them very useful.

Other suggestions for information requirements included:

- Keeping printed versions of timetables which participants occasionally explained that they liked to carry with them; and which were assumed to

be more straightforward than trying to find the information online; and posting these to members of the public to encourage them to consider local public transport;

- More readily available information on route and timetable changes e.g. via the local paper, in local shops, on local radio, and at the bus-stops (Haverfordwest);
- More help with identifying the name of a bus-stop: not all participants knew the name given to their nearest bus-stop, and there was therefore a request to 'do something about the naming of things', for example including such information as part of a travel app.

With a bus, you don't necessarily know what the actual bus-stop's called because I've recently moved from Malpas to Maesglas and I didn't know that my bus-stop was called Maesglas Shops, I thought it was Cardiff Road. (F, Newport)

3.8.2 Linking bus and rail timetables

Participants agreed that operators could do a good deal more to link their timetables more effectively. This issue was more keenly felt in rural areas where services were less frequent and where a number of different operators provided services on similar routes. There was also a suggestion made for being able to access integrated bus and rail timetable information from a central point at a train / bus station. Some believed that this integration of timetables should have the flexibility to accommodate delays from either mode so that, for example, a bus leaving a train station would wait for a delayed train service.

If one [bus from one of the operators] came at five to the hour and the other at 25 past that would be a lot, lot easier for everybody. Like today I would have had to have left at 4:25pm to get me here for 5:45pm and it's a 20-minute journey. (M, Llandudno)

During this part of the focus group discussions, participants were briefly asked for their awareness and views on the Bwcabus and TrawsCymru services. They were given a short description of each service.

Bwcabus: no participant reported using Bwcabus and awareness of the service was low across the research locations. The few participants who thought they were aware of the service (but had not used it) were very positive, describing it as a 'good idea', and 'brilliant'.

Rurally based participants could see how the service would save them time when waiting for infrequent services from town back home, and give them more opportunity to travel especially if the service ran for longer hours than 7.00am to 7.00pm.

Well then yeah for me then, yes because, like I said, I'd have to walk two to two and a half miles to catch the bus [currently]. (F, Haverfordwest)

Some wondered how economically viable Bwcabus was, especially if the service was to cater for all rural areas, and how long it would last, even with subsidies. There was a further query over how it would work if the passenger had to arrive at a destination by a specific time. On occasion, participants felt that such a service should be a priority for older, 'vulnerable' and less mobile passengers than themselves, and did not think that they would feel comfortable using it as a result.

TrawsCymru: Awareness of this service was also very low, with no participant reporting any usage. On hearing the description of the service, participants in the main did not think that the idea of longer distance bus journeys was very appealing. This was in contrast to longer train journeys where it was easier to occupy the children, talk to other passengers, use the facilities and so on. The point was made that the buses would need to offer

high levels of comfort and be 'cheap' to persuade travellers to consider the service.

It would have to be really cheap and really easy and really comfortable and lots of it which I don't think is financially viable to do. (F, Haverfordwest)

Some thought the service could be useful if it did not stop at smaller locations, offered a similar journey time to using a car, and if there was no realistic train alternative. The concept also reflected the spontaneous suggestion made by a number of participants for 'express' bus services between towns which did not stop on the way. Leisure trips were considered a possible use for this service.

The service could be of interest, it just depends on the cost and when it goes. If you know it's only going to take three hours instead of two and a half in a car and you save some money then that's good. (M, Llandudno)

3.8.3 Fares

This subject generally provoked the most interest. Participants often suggested spontaneously that a smartcard-type approach to fares similar to an Oyster Card would offer greater convenience and ease of use. They referred to the inconvenience of having to pay bus fares with the exact amount of money, or experiencing 'rudeness' from a driver when attempting to pay with a bank note. The smartcard approach would also save time by not having to purchase tickets or divert to a cashpoint in order to have cash available for the journey.

Get like a card and top it up with money whenever you need it. Sort of like how the Oyster Card works. (F, Haverfordwest)

*It saves getting thrown off [the bus] if you haven't got any change. . . .
And if you're rushing and you haven't got time to go to the cash point.
(F, Llandudno)*

Participants believed it would be more convenient if such a smartcard covered both trains and buses, including coaches for longer trips, and even into England for a few in Llandudno and Newport. Preferences were mixed in terms of prepay (which some participants believed should be cheaper because of paying in advance); and 'pay as you go' options with a smartcard. They wanted the option of putting credit on a smartcard online, by phone, in local shops, at the Post Office – like a PayPoint, or perhaps via a machine at the bus-stop.

None expected to have to pay more in order to be able to use a smartcard. As one person pointed out, 'you're paying in advance anyway'. Cheaper journeys, it was felt, would be a greater incentive to make more use of the smartcard, versus more expensive fares if paying by cash. According to some participants, it would still need to be clear how much each journey was going to cost, to avoid 'getting stung'. Some stated that the likely greater convenience and anticipated cheaper fares using a smartcard might encourage them to use public transport (more), as might the realisation that they had already paid for it. There were also requests for the smartcard not to be time-dependent, but to be based on the number of journeys made.

*If you paid for it already you would want to use it more, go out more. (F,
Llandudno)*

A couple of parents saw an added benefit of their children using a smartcard which would ensure they could always get home, giving the parent peace of mind.

Among the generally positive perceptions of smartcards, a small number wondered how it would all be financed, and how worthwhile it would be. A

handful in Haverfordwest wondered how realistic it would be for a smartcard to be used across the different bus companies. There was also occasional concern over how those on low incomes would be able to benefit from a smartcard scheme if it involved adding credit to the card in a lump sum; and an occasional preference for using cash 'so that I know where I am' with money.

Prior to discussing PLUSBUS, there was a further idea suggested of being able to pay for a train ticket when purchasing a bus ticket and vice versa, for added convenience and to minimise any rushing and uncertainty over making the connecting leg.

Some participants spontaneously suggested an incentivisation scheme to encourage greater use of public transport with a smartcard. Possible 'rewards' included high street vouchers, free journeys ('like air miles' or Tesco points) having used the card a certain number of times, and priority seating for smartcard users.

They should have some like reward scheme, like if you're travelling all the time on public transport. You know if I buy the next one half price or something like that or even free. (M, Newport)

Participants were asked for their views on the idea of a smartcard which could be used by more than one person, for example other family members. The idea was positively received and some could envisage their family (e.g. with older children) making more use of public transport if such a card existed; or sharing the price of the amount of money on the card.

The idea of a **flat fare** for all travel in an area stimulated some interest provided that the fare did not seem too expensive for shorter journeys. The point was also made that with a flat fare, the cost of the journey would be known in advance.

As with other possible integration initiatives, some in rural areas believed that more fundamental issues needed to be improved before looking at an idea like flat fares, such as buses running for longer and more frequently. They also were unsure how a flat fare would apply to small rural towns.

PLUSBUS was outlined to participants during the discussion on fares: low awareness of the service resulted in some participants assuming that the service was not well publicised, and wondering why this was the case. It was not clear how it would therefore attract new customers. The point was made that the service could be mentioned where appropriate to passengers as they bought their tickets. Some thought the service sounded ‘quite handy’: useful for ‘away-days’, such as a day trip to another city.

I go to Leeds quite often to see relatives and if I could get from the bus station to their house it would save them coming to pick me up. (F, Haverfordwest)

3.8.4 Facilities, environment

When discussing public transport and the ideal facilities and environment, the theme of personal safety and security dominated across the locations. Participants wanted to feel ‘welcomed’ at these places, and for the sites to be ‘warm and friendly’ where possible, ‘well lit’ and staffed. Some female participants referred to having felt insecure at bus / train stations later at night. There was acknowledgement of CCTV but some did not think that this made them feel especially safe, and that having staff on hand was more reassuring.

It was really late at night and there was no one around [at Swansea train station] and it was dark and horrible – it was just a bad feeling and I didn’t feel very safe. (F, Haverfordwest)

Bus-stops would have more comfortable seating, and greater protection from the elements.

In terms of information provision, there were requests for clear information boards, real-time information, whether buses were full or not and, in larger or connecting stations, integrated digital timetables across bus and train journeys, for example provided via touch-screen.

I was thinking maybe in bigger bus stations and bigger train stations if you had a touch-screen where you could pick your route and it would come up straight away and tell you what time that train is running and what platform and whatever. . . . Have them on trains and buses as well, if it's possible, that interaction. (M, Llandudno)

Other suggestions in relation to improving facilities / the environment included; reasonably priced options in cafés rather than feeling overcharged as a captive audience; luggage trolleys for use between bus and train stations; prominent luggage storage lockers; more luggage space on buses and trains; protecting wheelchair spaces on buses for wheelchairs only or having the option to fold down more chairs to accommodate wheelchairs / pushchairs; guarantee of a seat; free / cheaper parking at train stations; and bilingual signage (Llandudno).

Estimates of the time participants stated they would be prepared to walk between a train and bus station were typically five to 15 minutes, but would depend on whether or not they were carrying luggage, and time of day because of safety fears. Clear signage between the two would be important, especially for anyone less familiar with the area, and with indications of walking times. Newport was singled out as a case in point. Even then, however, some stated that they would be reluctant to walk that distance in Newport later in the evening.

If you're visiting Newport heaven forbid how the hell would you know [where the bus station was from the train station]? (M, Newport)

A suggestion was made that cycle routes should run right up to the bus / train stations to improve accessibility, and that there should be secure, covered storage with CCTV available for bicycles, and properly protected from the elements. Dedicated cycle storage on trains was also requested, as was exploring how to accommodate cycling as part of a journey which involved taking a bus. There were also occasional suggestions for rental bicycles similar to those available in London.

The **Leeds CyclePoint** initiative was described to participants, and they welcomed the idea. There was a query over what this would mean if the passenger needed to use their bicycle at the destination station; a rental service was therefore considered an option for this service, especially if the train was likely to be crowded. Those in rural areas, however, sometimes believed that there would be insufficient demand, and that the concept was more for cities.

They have a system on the Merseyrail (<http://bit.ly/WvpYWV>) where they have lockers in the station for you to stick [bicycles] in; maybe introduce something like that. (M, Llandudno)

F: It's okay as long as you don't need your bike when you get to the other end really. . . . M: Unless they add a CyclePoint at the other end as well, so you can borrow a bike. (Newport)

Participants attending the Haverfordwest discussion were asked if they were aware of Haverfordwest's Sustainable Travel Centre Scheme; but virtually all were unaware. One participant thought it might have been 'information guides' from Pembrokeshire County Council aimed at 'leisure' and trying to 'get people walking, [using] buses and trains, and cycling'.

3.9 Views from the five selected transport providers

The research with the general public was complemented by interviews with five transport providers: Arriva, First Cymru, Bwcabus, Journey Solutions (Organiser / marketer of PLUSBUS) and Cardiff Council (Sustainable Travel City) on their views concerning the barriers to and motivators of public transport integration. This highlighted a number of viewpoints on the issue of transport integration which are distinct from what has been captured from research with the users reported in preceding sections (3.2 to 3.8).

Funding availability in general and uncertainty with respect to funding and other policies affecting public transport operation/provision were identified as the key challenges – both current and future – by all interviewees. The recent cuts to the Bus Service Operators Grant (BSOG) were mentioned by all service providers as an example of barriers, causing not just immediate material impacts but also the general sense of uncertainty which hinders any proactive approach to integration. Unsurprisingly, the issues of uncertainty were particularly underlined by the providers of schemes inherently relying on public funds.

Not unrelated to the funding issues above, integrated ticketing (essentially ‘smartcard’) requires some capital investments upfront. Some participants raised the question of who would pick up the initial set-up costs. Provided its financial means were met, providers concurred that such a ticketing system would help improve users’ experience with public transport. However, some providers were weary of the (excessive) popularity of smartcard - as if it promised integrated transport on its own. It was also noted that advanced transit cities around the world are moving beyond ‘smartcard’ and towards mobile phone based payment schemes.

Another key issue raised was that the relatively low density form of Welsh settlements renders it difficult to have a commercially viable, high performance public transport system outside Cardiff and its vicinity. Some

suggested that for rural areas, rail may not be a logical choice owing to the high costs involved in comparison with bus, and indeed any mass form of transport may not be appropriate in certain parts of the rural regions. In the most remote areas, a smaller and more flexible form of transport (e.g. vans, taxis or shared cars) might suit better, suggested some providers.

For further integration of public transport services and modes to be achieved, some providers believed that a consistent strategy was required; and which was currently thought to be lacking. It emerged that these providers had in mind a strategy in a stricter sense with appropriate commitment in the form of funding priority, for instance. In relation to this, the current structure of funding priority (such as that given to concessionary fares, for example) coupled with the present economic conditions in general, means there is relatively small resource capacity for developing other types of policy or programmes such as those relating to transport integration.

Some providers stated that it was important to consider transport issues including those of integration beyond Wales even when the objective is to plan for Wales. Due to the very nature of transportation which connects a place to another place and a city to another city, it is necessary to consider transport contexts beyond Wales (e.g. rail services may start in Wales but many of them end in cities outside Wales).

In addition, a privatised market was not considered a barrier to integration. However, competition regulation or, more precisely, the fear of being blamed for engaging in unfair competition, was often cited as a barrier.

A significant comment made by private operators highlights one of the key issues in relation to public transport integration: the challenge is that the commercial business case for closer integration involving service integration and integrated ticketing has not been widely proven outside a small number of good practice cases such as Oxford city; and that people continue to be encouraged to drive their cars.

The research indicated a noticeable gap between users' and (public transport) providers' perspectives: whereas users naturally compared car and public transport travel, providers tended to focus on the existing users / existing market and not necessarily on non-users' (car drivers') views or enlarging the public transport market beyond the existing one – i.e. what is already captured.

4 Learning from examples of good practice in public transport integration

Good practice case studies were aimed at gaining a first-hand understanding of successful integration schemes and, where possible, developing a balanced assessment of what works well and why; what works less well; and what lessons should be learned for any future intervention.

4.1 Bus service integration, Oxfordshire County Council

As an expected effect of the 1985 Transport Act, Oxford saw significant competition *in* the bus market within its city centre - which was, interestingly, not observed in practice in most parts of the rest of the country. As excessive bus traffic and associated vehicular emissions in an essentially medieval town became a prime concern for Oxfordshire County Council, the latter came to a decision in July 2011 to proactively push the commercial operators, Oxford Bus Company, Stagecoach and Thames Travel, to develop a collective plan to reduce the number of buses operating in the city centre primarily through coordinating service timetables.

Although the Council did not have direct control over the commercial services that operators chose to run, they worked closely with the commercial operators to influence services. To avoid any potential issues concerning competition law, the Council referred to the 2008 Local Transport Act which allowed bus operators, under block grant, to coordinate with each other. The County Council worked in partnership with the two operators to develop an agreement for the specification and operation of city centre bus services, focusing on the four main radial routes into the city. The Bus Qualifying Agreement, finalised in 2011, is the outcome of this effort.

As a result, a new service pattern involving substantial reductions in the total number of buses operating in the city centre was secured. More importantly, the alleviation of bus traffic was achieved without compromising service capacity. That is, the number of passenger seats increased despite the slight

decrease in service frequency (this was made possible by using double deckers). This case well illustrates what can be achieved through coordination and service integration between different operators serving the same area. In the process, integrated ticketing ('smart ticketing') across Oxford SmartZone became a key part of service integration.

Our interviewees repeatedly emphasised the 'pro-bus' policy which has long been in place in Oxford. This is manifest in the form of a well-established park and ride network (since the 1970s), pedestrianisation, bus lanes and other bus priority measures (traffic signalling etc.) as well as traffic restraint measures such as significantly high parking charges (£24 for a day's parking). An emphasis is equally given, by both the representatives of the Council and bus operators, to the working relationship between commercial operators and the Council which has grown over an extended time period and is based on mutual trust and shared experience. These two aspects were labelled as 'Oxford factors' by our interviewees.

While this study highlights the two particular aspects of integration showcased in the Oxford area, namely service integration and ticket integration, the county also has real-time information signs installed in 200 bus-stops in Oxford and the surrounding towns and villages as well as real-time bus information accessible through a website or via text messages. Further, all buses operating in Oxford city centre will be certified with Euro V emission standards while Low Emission Zone will be effective from January 2014. Oxford is now looking to expand its current bus operating framework in place in the city centre to the entire county.

The need for service integration within a sub-market (e.g. local bus market) varies depending on the nature of the market. In a market where excessive competition results in sub-optimisation of resources, there appears to be a clear economic case for service integration via timetabling and integrated ticketing. It enables operators to save on operating costs while improving the overall performance of public transport by optimising joint service frequency.

4.2 SmartZone, Oxford Bus Company

The 'Oxford SmartZone' covers Oxford city and the village of Kidlington. Passengers can make their outward journeys using one company and their return journey using a different company operating bus routes which are part of SmartZone. They are also able to use a single smartcard on any bus operated by Oxford Bus Company, Stagecoach and Thames Travel within the SmartZone area.

While there has not been any formal assessment of the effect of SmartZone in terms of travel mode choice, the users of Oxford Bus Company's smartcard (which preceded SmartZone) rose from 20,000 to 104,000. At the same time, there has been a great reduction in cash-paying passengers and large increases in the number of passengers purchasing long-term bus passes. Discounts are substantial with an annual pass priced at the equivalent of 26 weekly passes. Despite the short-term risk of reduced revenue as a consequence of the significant discounts on seasonal tickets, the company accepted the new fare system as they saw the potential for longer term benefits.

The integrated ticketing system was almost entirely paid for by the operators although part of BSOG (Bus Service Operators Grant) money was used for ticket machine installation. At the same time, the overall scheme brought about considerable resource savings as the number of vehicles nearly halved through service integration (which turned five minute intervals by each company into five minutes joint).

Strong underlying local markets (e.g. high parking charges, matured public transport markets supported by Oxford's traditional pro-bus policies) were again stressed as one of the key factors contributing to success by our interviewee at Oxford Bus Company, who referred to the case as the

culmination of 40 years' work and a very close working relationship between the operators and the local authority.

The simplicity of the scheme (helped by geographic configuration and the small number of operators involved) was also highlighted as a contributing factor, which makes redistribution of fares that much simpler. The ticketing integration does not involve rail, but this did not appear to be perceived as a significant issue in Oxford - a predominantly bus-based urban area with a fairly sparse rail network – from an operator's perspective, whereas the county has a plan to eventually integrate the two modes in future. In addition, integration with rail would involve significant technical challenges (e.g. linking existing smartcard with PLUSBUS).

4.3 Integrated passenger information, Centro

The Centre for Cities (2008) report identified the West Midlands as an area of good practice in the delivery of integrated public transport information. This work has been led by Centro – the Integrated Transport Authority for the West Midlands area. The authority has recently published an Integrated Passenger Information Strategy which sets out a vision for public transport information, ten passenger information principles based on customer surveys, progress so far and what to expect in the future based on current or planned initiatives.

The first principle is to include the whole trip not just the public transport journey in providing comprehensive passenger information. This is a move beyond the traditional responsibility of the authority to provide public transport users with details of access and egress modes. The ten principles are:

1. Providing integrated, comprehensive and accurate information;
2. Delivering information in person;
3. Information for all;
4. Improving signage and way finding (how to get around);
5. Offering personalised travel information;

6. Delivering 'help yourself' services;
7. Delivering digital information 'pre-trip';
8. Enhancing information at interchanges, visitor attractions and businesses;
9. Providing 'on vehicle' information;
10. Delivering digital information 'on the move'.

Separate from these principles, Centro has identified *emerging* customer expectations in addition to a set of more conventional customer expectations. It is worth noting that these include, among other things: more pre-journey information; up-to-date information for reassurance; multiple information channels and formats; prospective passengers wanting service improvement/changes to be better advertised. From their information strategy, it is clear that emphasis is given to the need to adjust to the evolving nature of customer expectation as well as to the importance of understanding the needs and wishes of potential customers.

Centro's case with integrated passenger transport information illustrates an institutional context manifestly different from that of Oxfordshire County Council discussed earlier, in that it is one of the five PTEs (Passenger Transport Executives) in the country (while it has recently changed its name to Integrated Transport Authority). PTEs were set up in the major conurbations in England in the late 1960s and early 1970s. The West Midlands was given this effectively metropolitan status after combining Coventry with its pre-existing four counties. Our interviewees consider the PTE status as significantly advantageous in developing integrated transport not least in light of the benefits of the lobbying and promotion via PTEG (Passenger Transport Executive Groups).

In addition, 'branding' themselves as Network West Midlands appears to have considerably raised the public awareness of the unitary authority within the city-region covering all transport modes. Our interviewees concurred that a unified logo placed on all public transport stops and stations as well as

vehicles makes it far easier for passengers to consider the entire system as an integrated one. The following quote summarises the role of a unified entity people can associate with without difficulty, faced with any public transport issues they need to address:

In a deregulated environment, there is a need for public transport customers to have someone they can turn to for comprehensive travel information and assistance when things go wrong. (centro.org.uk)

For Centro the following four channels comprise a complete set of information services:

- Travel Information Centre;
- Traveline;
- Printed information;
- Customer Relations Office.

Travel Information Centre is used by about 1 million customers a year whereas Customer Relations Office deals with some 6,500 suggestions and complaints annually. Part of the latter are fed back to public transport operators and part dealt with by Centro, depending on the nature of the suggestion / complaint. Whereas there is no formal mechanism for monitoring operators' response, Centro is confident that they have a good sense of what is being done and that 'things are not simply ignored'.

For Centro, a key integration issue it faces on a continual basis is the challenge to create a 'win-win' situation that enables not just the public but also the operators to benefit from any integration effort. Similar to the case of Oxfordshire, however, it was evident that the voluntary partnership between public transport operators and public authority (Centro) has been a reliable foundation for collaboration which was required for any major integration initiative they have undertaken so far to work.

As in Oxfordshire, Centro's work has covered other aspects of integration than is highlighted here as well, such as interchanges and integrated ticketing. Most small operators are currently participating in the Network West Midlands' integrated ticketing system Swiftcard. The major operator National Express, with an 80 per cent market share, is yet to come on board at the time of writing this report, however, which Centro envisages will take place over the next one to two years.

4.4 Considerations for Wales

In the context of Wales, the Oxford model may be more applicable to the interurban market, for example, where competition *in* the market, as opposed to competition *for* the market, is observed to some extent unlike the monopolised intra-urban markets. Another practical lesson learned from the Oxford case is that the small number of operators involved was one of the crucial factors influencing the successful implementation of integration schemes.

The Oxford SmartZone case reinforces the importance of the underlying market as a source of confidence on the part of commercial public transport operators which might be necessary for them to engage in any form of reform such as coordinating timetabling or service integration. Two conditions seemed essential for successful transport integration:

- 1) A combination of policy / planning tools that at least mitigate the existing incentives for car driving such as higher car parking charges or bus priority measures;
- 2) A reliable working relationship between operators and public authorities. A more practical issue facing Wales would be again the source of financing for the initial set-up in the absence of an obvious responsibility structure in this respect.

With regard to the Centro example, a comprehensive and integrated passenger information system can only help grow the attractiveness of public

transport. However, this particular case also demonstrated the vast scale of efforts in terms of resources – human and financial – and the strong institutional structure required for the overall public transport integration programme of which integrated information is one dimension. While the current study did not specifically address the governance issue, it has emerged that larger conurbations such as the West Midlands largely benefit from their PTE status in implementing transport integration. In Wales it may be a worthwhile step to review the current institutional structure governing or influencing issues relating to transport integration in the country, and to explore ways to make better use of what is currently available in terms of funding and institutional infrastructure.

5 Conclusions and considerations

The often negative perceptions of members of the public indicates that there may be an opportunity to raise the profile of existing initiatives / services / facilities and any achieved improvements in relation to public transport generally, as well as integration. The key is to find an effective means of challenging negative perceptions which the research indicates are not always based on (recent) experience.

For example, online journey planning tools and apps could be promoted more widely, highlighting their convenience and ease of use (no different from checking a driving route online, for example); however (subject to further exploration), the challenge appears to be that there is a lack of awareness of a single, salient service associated with door-to-door journey planning. Similarly, some journeys originate or end outside Wales which poses further considerations in this respect.

The research with members of the public also suggests that the theme of cost is important to many, but that there do not appear to be widespread, precise calculations being made when comparing car travel with public transport, other than immediate out-of-pocket costs like fuel and parking.

Prominent case studies, and higher profile, easy-to-use travel cost calculator tools may be a means of beginning to address some of these perceptions (for example how much a car really costs to run a week / per mile), and cost comparisons with public transport.

As far as possible, the convenience associated with car travel would need to be countered with examples of how convenient public transport can be.

Automatic, engrained decision-making associated with car usage is likely to require a partly disruptive approach in order to break the habit chain and encourage active consideration of public transport options.

According to media coverage and at the time of writing this report, the implementation of smartcards in Wales is reportedly facing scepticism among some operators / providers with respect to financial costs (in conjunction with recent funding cuts to operators grant) and timing. Identifying a mechanism through which the initial set-up costs are covered, if not funding sources, remains a crucial issue.

Wales might consider setting out an overall strategy with respect to interchange planning as, in the absence of such a strategy, disjointed implementation of various interchange schemes could mean some adverse effects of losing part of the already thin base of existing public transport users.

The commercial business case for closer integration (service and ticketing) has been proven in Oxford's case. It would be useful to publicise more widely this Oxford model highlighting 1) the (voluntary based) working relationship between operators and local authority as well as 2) the policy and planning tools which helped strengthen the public transport market and thereby contributed to integration success in that area.

While the current study did not specifically address the governance issue, it has emerged that larger conurbations such as West Midlands largely benefit from its PTE status in implementing transport integration. Local authorities in Wales might review transport governance in light of Local Transport Bills and seek ways to include Cardiff city-region, for instance, in the PTE/ITA structure. This would help narrow down the funding related questions the current study identified, with respect to considering integrated ticketing or a comprehensive information system.

More specifically (and based on this qualitative study), the Committee may wish to consider the following suggestions:

- Examining in detail the current relationships between providers / operators and local authorities (and the current state of quality partnerships in Wales) with a view to gauging the potential for further integration;

- Encouraging within the industry greater focus on the passenger's entire journey, rather than a specific mode;
- Continuing to explore the option of smartcard travel given its association with improved public transport performance – but also to consider whether there is a case for pausing to see how emerging mobile phone technology develops;
- Championing station travel plans;
- Providing easily accessible price information for all public transport legs of a journey;
- Providing more (prominent) bus timetables / bus information at train stations;
- Encouraging integrated journey assistance planning for disabled passengers;
- Expanding real-time travel information;
- Exploring opportunities for encouraging greater use of cycling as an access / egress mode;
- Raising the profile further of any integrated ticketing initiatives such as PLUSBUS;
- Continuing to promote park and ride more widely so that it is considered as a regular option for a wide range of journeys (commuting, leisure, shopping, etc.);
- With any rural, demand-driven services, to better understand the views of those aware of such services and the motivations / barriers to usage as well as the extent to which these complement the conventional public transport network.

Appendix I: Case studies from among members of the general public

Neil – regular use of public transport, and cyclist, Newport

Neil works full-time and lives about five miles outside Newport. Four days a week he works in Newport, and one day a week in Bristol. He tries to avoid using the car wherever possible in order to try and keep costs down and also from an environmental point of view.

Despite his mixed experiences with public transport, Neil appreciates the 'reflective time' he can enjoy on public transport ('I can get my own thinking time back') without the distraction of driving. He also speaks highly of the social aspect of commuting by train, making new friends on the same service.

Routine travel habits

When commuting to Bristol, Neil will cycle to his local station and catch a train to Bristol. He needs to catch a 6.00am service as the next train isn't for another one hour 20 minutes which would make him late for work. There's usually plenty of space between carriages to stand with his bike.

Issues arise when Neil changes trains at Newport for a very busy service. He is sometimes told by the train staff to wait until passengers have boarded, to see if there is room for him and his bike. There are therefore times when he is late because he has had to wait for a later, less busy train.

When he does board the train, it can be awkward if the bike is wet or muddy and he worries about other passengers getting dirty from his bike. He tends not to be able to reach the bike rack or else he is not aware of one on the train. He then cycles a couple of miles to work near Bristol, arriving about an hour and a half after he left home. Driving would be quicker and he would have more of a lie-in, but he has estimated that it is cheaper to cycle and take the train if he is driving the larger of the family's cars (fuel and toll bridge).

A leisure trip: having arranged to visit family in Cardiff on a Saturday, Neil decided to take the children by train to avoid using two cars as his wife was making her own way there. The trip consisted of a change at Cardiff to the final destination. From his local station to Cardiff was a modern train but they had to stand most of the way because it was busy which was frustrating; it was slightly stressful with three children. There was also a good deal of luggage in the train and a number of bikes which added to the lack of comfort.

On arriving at Cardiff, he had no idea where to look for information on the connecting train. He described this stage as a 'lot of hard work and a

headache' with the children. There was also stress waiting to find out if he would be able to get seats for the children on the next train.

In the event, the 'Valleys' train was almost empty but was 'horrible' in terms of its condition (e.g. 'ripped seats', 'cider bottles' and 'screws falling out'). The children had been reluctant to board the train as a result. The family was relieved not to have to make the return journey by train.

Suggested improvements

Having checked that his train was on time via an app, and purchased a ticket similar to a TAG system, Neil would like to be able to load his bike into a dedicated carriage for bikes, separate from other passengers, with a locking mechanism for each bike. He would then have a seat available and room under the seat to place his bag. Before changing between trains at Newport he would be told in advance which platform the connecting train would depart from, for example by putting his ticket into a machine on the first train which gave him this information.

Neil also suggested that he would be more than happy to use 'Boris bikes' instead for this journey. He would want to be able to use his TAG type card for the bike hire as well.

Kate – non user of public transport, Newport

Kate lives in the Valleys with her partner and is in her early 50s. She has lived in the area all her life and works several miles from home. She is a car owner.

Routine travel habits

Given Kate's lack of consideration for public transport travel, she relies on her car for commuting. She has travelled the same journey to work for 20 years, so her travel habits to work by car are very much an engrained, automatic behaviour. When working day shifts she is out of the house by 7.00am and arrives at work around 15 minutes later. The return journey is busier and can take twice as long but Kate still feels calm during the trip.

She has no idea what the options are for travelling to / from work by public transport but assumes it would take a good deal longer than driving and would involve getting a bus either to Pontypool or Cwmbran and changing to another bus. (Online travel information indicates the journey entirely on public transport would involve two changes, take an hour and a quarter and mean arriving slightly late for work.)

She acknowledges that there is a bus-stop 'outside my house' and that it was probably straightforward getting a bus into Newport. On further reflection, Kate also feels that perhaps one of her rationales for not using public transport (cheaper to travel by car) is not so convincing because of car wear and tear, fuel and having to pay for parking.

Interestingly, from a non-work perspective, Kate then reveals that she does occasionally use the train for short leisure trips to watch rugby internationals in Cardiff. Her motivation is so that she and her partner can 'have a drink' and not worry about driving into the city. Furthermore, she is willing to walk for 25 minutes to the train station (having driven to a friend's house first near Cwmbran) for the first part of the journey and catch a 'pretty full' train; and then return on a much more crowded service back. The excitement and infrequency of the occasion means that Kate is 'not too stressed' about the overcrowding but could not face such a situation on a day-to-day commute.

Kate does envisage using public transport regularly once she retires because she does not think she will be able to afford to run a car so would therefore make use of the free bus pass. She also thinks receiving information through the post on local bus times and prices might prompt her to at least consider public transport as a travel option.

Suggested improvements

If Kate was to use public transport for a trip to the airport (which she had recently driven), she would want to use a pre-booked direct service that involved only a short walk to the main road from home to a pick-up point, because of her luggage. She would receive a text message to say that the bus was '10 minutes' away' from the pick-up point so that she did not have to wait around too long. Passengers would pay for the ticket as they boarded.

Kate would not mind further stops on the journey as long as the overall journey time was known in advance, and that she could be reassured in some way that the bus would arrive on schedule. During the trip the driver would keep the passengers up to date on their arrival time to reassure them that they would not be late.

Marianne – lapsed / occasional user of public transport, Newport

In her 50s, Marianne lives alone in the suburbs of Newport and has lived in the area for most of her adult life. She prefers to cycle when she can and is hard pressed to think of any advantages currently associated with public transport; and is not aware of any 'government' efforts to encourage more public transport or improve the system itself.

Routine travel habits

Marianne's commute to work by bike takes approximately 15 minutes and she does not think that public transport would offer the same convenience with time. Despite the nearest bus-stop being a five-minute walk, she no longer catches the bus: cycling is a cheaper option (she calculated that she saves £60 a month by not catching the bus), and an effective source of regular exercise. There is also the added psychological benefit of feeling more 'invigorated' from cycling and not having to worry about buses turning up on time which used to make her feel stressed'.

The 'low environmental impact' is also an important factor for Marianne and she believes more could be done in Newport to encourage cycling with safe cycle routes and secure storage. She has had three locked bicycles stolen to date.

Occasional trip further afield

Marianne recently travelled by public transport to visit a friend in Swindon on a Saturday. Leaving from work in Newport and with luggage, she took a bus from outside work to the train station. There was enough space for her luggage on the bus. She did not feel that the bus fare of £1.60 was very good value for a journey of 'five minutes' and had to 'scramble about' for the correct change. The bus stopped about a seven-minute walk from the train station which seemed 'a long way when you're carrying a lot of stuff and not that convenient because you have to cross a big main road'. She did not enjoy the walk.

The train was busy and she found it 'uncomfortable, claustrophobic, [and] dirty' with 'people leaving rubbish around'. However the train did arrive on time and she did have a seat.

The return train journey was less busy. As it was a Sunday, Marianne doubted that the bus service was running very frequently from the nearest stop to the train station that she would need to get home, and did not think that it was possible to find out these times at the train station. Rather than potentially face a long wait for the bus, and not relishing the walk with luggage, she decided to take a taxi home from the train station because taxis were waiting outside, and not a bus.

Suggested improvements

If Marianne had to make the journey with luggage again, she would like to phone a door-to-door information service and be told 'how much, where from and how often' for each mode. A digital display at the bus-stop would keep her up to date on the bus's status. Marianne would like to be able to use a smartcard for this journey across two modes. The bus stops immediately outside Newport station.

The bus-stops would be bright and free of graffiti and contain an up to date timetable. Marianne reported that she did not think her local bus-stop had a timetable on display. The bus home would leave from Newport station and there would be little 'personal effort' to find out from which stand it left. As a result of these improvements, Marianne would 'look forward' to the trip rather than 'finding it daunting'.

Chris – regular user of public transport, Haverfordwest

As a non-driver, Chris is a regular public transport user and lives in the Pembroke Dock area. On a Saturday, he travels with his partner and young child the short distance by bus to his child's Mum's, to drop the child off for the day. Because his partner is in a wheelchair they are unable to use the bus-stop nearest their home as it is not accessible – the 'pavement is lower than

the road'. They therefore walk to the next stop where his partner is able to board a bus in her wheelchair. Sometimes there are buggies or other wheelchair users on the first bus to arrive in which case they have to wait for the next service which, the previous weekend, 'threw all our travel plans out for the day' because there was an hour's wait.

The return journey leaves from a different bus-stop and relies on the bus operator providing a bus equipped with a ramp because there is no raised curb. Approximately every other week, Chris thinks, they have to wait for the next bus because the first to arrive does not have a ramp.

Longer trips

His partner's disability means that they need to book assistance 24 hours in advance for train journeys, and is frustrated that they cannot simply turn up and travel without prior arrangements. Even with bookings, Chris finds that they sometimes face issues with the journey such as not being able to reserve a seat for his child, wheelchair spaces full of luggage, and trying to find a member of staff to help with boarding. He feels these situations impact on his partner's independence.

However, Chris acknowledged that once they are on the train, then transfers 'go quite smoothly' and appreciated an occasion when a connecting train was held for them and the ramp was ready and waiting on the second train: 'absolutely fantastic'.

Suggested improvements

More generally, Chris feels that the train operators could provide a more integrated assistance service for disabled users rather than having to contact separate companies, as part of the same journey, to book assistance. When taking a bus to the train station with his partner, Chris would like staff at the station to be aware of what bus they were arriving on and be ready to help with boarding.

In addition to accessibility improvements, Chris would like to see buses run more regularly in the area, for example every 30 minutes rather than every hour, adding smaller buses to the services at busier times of day. It would mean that he could drop his son off earlier at his son's Mum's and get on with other tasks. He also requests that 'bus timetables are posted next to every train timetable in a train station'.

Carl – occasional user of public transport, Haverfordwest

Carl has lived in the Pembroke Dock area for two years. He works locally while his wife works in Haverfordwest. The family has one car. He used public transport a good deal in the past before he passed his driving test.

Routine travel habits

Carl describes a recent trip he has made to Carmarthen to see a film with friends on a Saturday afternoon. They decided to drive because it would be

quicker and because they could park immediately next to the cinema. Driving took about 40 minutes whereas he guessed more or less correctly that the train would take nearer an hour and a half. Using public transport would also have taken more planning in terms of journey times.

On the odd occasions Carl uses public transport it tends to be for leisure trips with the family. An example involves a short walk to the train station, and then a direct service to Tenby which is convenient and straightforward, with enough space for the children and buggy.

Carl will check the train times online at thetrainline.com for these trips because they do not make them very often and to make sure that the timetable has not changed. He welcomes the availability of journey planning websites rather than having to source and read printed copies of timetables.

He doubts the trip is any cheaper by public transport but admits that it is difficult to work out how much it would cost to do the same journey by car. The main reasons for taking the train are: when it is a family trip; to avoid the hassle of finding somewhere to park; and because the train provides an opportunity to relax and spend time with the children.

Although Haverfordwest (12 miles away) has 'all the shops' and is useful for banking, it is less appealing as an option by train because it involves changing at Whitland station; and, according to Carl, most likely a sufficiently long wait between connections to deter usage. As a result, they drive to Haverfordwest because it is quicker and probably cheaper than by public transport. He guesses that it might cost the family £30 to travel by train to Haverfordwest, return journey. (Initial information online indicates that there are no direct routes, and that by train only it would cost £23.40 for the family but could take two or three hours or more with more than a 90 minute wait at Whitland. A journey involving a direct bus would take 44 minutes or around one hour 30 minutes depending on what time they left.)

Suggested improvements

Carl recalls how impressed he was on a visit to London with the Oyster Card. He would therefore like to see the introduction of a similar option as long as it was based on how much money was on the card rather than any time limitations. Payment via an app would be handy for him as a regular smartphone user.

However, he thinks it unlikely that he would be interested in bus travel as part of the card's coverage. He puts this down partly to wanting to avoid the aggravation of trying to board buses with a buggy and partly a general dislike of local bus travel based on an experience three months ago when he had to pay with a £20 note (the driver looked at him in 'disgust') and then found the legroom cramped.

If the buses were comfortable and friendly, Carl would consider using a service that ran directly and quickly between the main towns in the region. He would also like these services to start earlier in the day and finish later in the

evening. This would mean his wife could use the bus for her commute, they could also use it for evenings out, and benefit from slower depreciation of the car. The environment would benefit as well.

Nadine: lapsed / occasional user of public transport, Haverfordwest

Nadine lives with her family outside a village on the Pembrokeshire / Carmarthenshire border, just in Pembrokeshire. Both she and her husband work. She has previously lived in London and was a regular public transport user. They have two cars.

Routine travel habits

There is a bus-stop 20 yards from Nadine's rurally located home which goes direct to Carmarthen but she has never used it because the car seems more convenient (involves no planning and likely to be quicker).

Although Nadine classes herself as an occasional user, her eldest son uses public transport on a daily basis to travel to and from school. On the rare occasions that Nadine uses public transport, it is for leisure purposes. She gives the example of a trip to watch an Iron Man competition in Tenby where they had to use public transport because of road closures in the area for the competition. The family found the trip very easy, having walked to the local train station and caught a direct train to Tenby which took around 20 minutes. She was relieved that they arrived early for the train because it left five minutes early with the next service not due until the afternoon.

Even so, had there not been road closures in place she admits that they would have driven because of the convenience and perceived cost-saving. Similarly, with a recent evening out to Carmarthen she expected it to be more convenient to travel by taxi and for the taxi fare to be similar to the cost of two adults travelling by train. In addition, she did not want to be tied to specific train times for the return journey and have to use a bus to travel from the train station into Carmarthen.

Nadine has never actually done this journey by train and then bus into Carmarthen. She has, though, in the past caught the train to Narberth for an evening out but disliked the inconvenience of the station itself being outside the town – 'a mile walk'. She finds this station an 'eerie place'.

In terms of public transport provision in the area, Nadine feels that it would not be very practical to try and increase train or bus services in the area, doubting that there would be the demand (her son sometimes seems to be the only passenger on the early morning train). She thinks the perceived lengthy journey times on public transport are probably unavoidable because the modes have to cater for those living in rural areas.

Nadine is unaware of any door-to-door journey planning websites including Traveline Cymru. However, she is interested in the idea and would like to see

what the options are for her younger son's trip to school which, as far as she knows, does not have a convenient public transport route.

She explains that she would use public transport for her elder son to travel to a sports club after school from Tenby to Haverfordwest but does not think that there is a service that would get him there in time. (Online travel information indicates that there is a bus service that might get him there on time.)

The family occasionally uses the train for cycling trips at weekends. They will cycle to the local train station, travel with the bicycles to somewhere like Tenby and then cycle back home. Nadine thinks that more could be done to encourage people in the area to use public transport for leisure purposes.

Suggested improvements

Nadine believes that she might be prompted to consider bus travel if she had an app which provided real-time information on journey times, timetables and any delays, as she uses apps daily. Such information at 'the press of a button' would suggest convenience and tempt her to at least look at it.

If using the bus, the price would also need to be appealing. Nadine suggests £5.00 return for a family ticket to travel to its destination would be an incentive and sounds similar to how much they might spend on fuel during an equivalent trip.

June – occasional user of public transport, Llandudno

June lives in a village not far from Conwy in North West Wales. Each week, June works across two food outlets in Llandudno and Conwy.

Routine travel habits

As she doesn't drive, she tends to rely on family members for travel. Wherever possible she will use lifts rather than public transport but will use the bus if necessary for part of her commute. June believes that you need a car living in her area.

Because of her rural location, there is a shared taxi service which runs three times a day which is pre-arranged in terms of numbers travelling. The nearest bus-stop is a 'long walk' up hill and feels isolated – she wouldn't feel safe there after dark or feel very comfortable walking up the lane to reach it. If a lift isn't available, she will catch the first shared taxi service at 9.00am which costs 50 pence to Conwy. June then has to 'hope it's not late' in order to catch a bus from Conwy into Llandudno.

There are, she points out, three bus services from Conwy to Llandudno that she could use if working in the latter, but is frustrated that they all seem to leave within ten to fifteen minutes of each other.

The taxi journey back is a request service at 5.15pm from Conwy. Often she finishes work and shopping after this time. There is the option of a bus but it

involves a fair amount of walking and when the evenings are darker she does not feel very safe waiting at the bus-stop in town on her own or walking alone back home from the bus-stop. She therefore waits until a member of the family is able to give her a lift.

June thinks bus ticket prices have 'shot up' and isn't happy with how ticketing works on buses. She reports that a return ticket is no longer available and that there is now a 'flat fee' in the area of £3.60. There is the option of a weekly ticket which she recalls is around £18 (a Saver ticket; contact with the operator indicates that the single fare in question may be either £3.60 or £2.50 and that there are different single fare prices rather than a flat fare, starting at £1.60 and rising to £3.60; a Day Saver is also available at £6.50). But as she does not use the bus a great deal, this option would not make sense for her. She would prefer to buy a ticket that covered a number of journeys rather than being time-sensitive.

Suggested improvements

Ideally June's commute would begin in the village with a bus-stop nearby. She is comfortable with reading paper format bus timetables although she thinks that the timetable at her nearest bus-stop hasn't been updated since 2006. She would be reluctant to use mobile based information because of poor network coverage in the area; and she has never found it easy to locate the right bus times online. She would be happy if the bus ran every hour.

A 'top-up card' would be a convenient way of paying for her ticket, so all she had to do was swipe it when entering the bus. This method would also remove awkward situations when paying the driver with a note.

Countdown signs at the bus-stops would be helpful so she would know if she had missed a bus, and when the next one was due. The bus-stop would be more 'enclosed' to provide protection from the elements and would be brightly lit.

In terms of coming home, June's main improvement would be buses running later into the evening (and stopping in the village). This would mean she could make more use of leisure facilities beforehand.

Joe – regular user of public transport, Llandudno

Joe has lived in Llandudno for several years and is married. In his late twenties, he is a mature student and studies / works in Bangor. He uses public transport more than his car because he believes it's cheaper. He regularly uses the bus although he has bought a car fairly recently so uses it for some journeys where previously he would have used public transport.

Routine travel habits

Joe's usual commute is from Llandudno to Bangor. From home he has a convenient short walk to the bus-stop. He is able to catch a direct bus to Bangor which stops a few minutes' walk to where he works / studies. He tries

to catch a slightly earlier bus (before 8.00am) to avoid the later, more congested service with schoolchildren. The fact that the services run every 15 minutes at this time is appreciated. This journey takes around one hour and fifteen minutes and Joe finds its length slightly frustrating because of the number of stops.

By car the journey would take approximately 20 minutes or so, depending on traffic. However, the weekly Saver bus ticket of £18 is 'a lot cheaper than driving', he thinks. On balance Joe believes the extra time of the journey is worth bearing in order to save money.

Joe appears to slightly contradict himself when talking about the cost of public transport. He referred to how using the bus for this routine journey was cheaper than driving but still believed that the local transport operator was increasing prices in the face of apparently little competition.

On some occasions Joe drives this journey. In these circumstances it is because he is only at work / studying for a couple of days during the week so it is not worth his while buying the weekly ticket; and individual tickets he thinks would be more expensive than driving (£3.60 for a single journey or £6.50 for a Day Saver ticket). Even so, he has to leave 'really early' to make sure he can find a place to park.

Part of his study involves placements in different locations in North Wales including near Rhyl. Joe found this journey by public transport from Llandudno less convenient because it involved catching both a train and a bus and also buying separate tickets. The bus he wanted to catch for the second leg of the journey left a couple of minutes before the train arrived which meant having to catch a bus around 15 minutes later which impacted on his punctuality at work which could at times be 'stressful'. The return journey took Joe longer: he finished later in the evening and had some waiting to do between connections.

Suggested improvements

Joe already uses a mobile version of the bus timetable provided by the operator as well as the printed copy, both of which meet his needs. He is broadly happy with the reliability of the buses, stating that they arrive on time '99 per cent of the time'. He also welcomes improvements he has noticed to the layout of timetables at bus-stops, which makes them 'easier to read'. He would, however, like to see public transport running earlier in the morning to help with his commuting options. His ideal would be for a direct bus early enough in the morning for him not to have to change modes when travelling to Glan Clwyd.

According to Joe, the same company operates both the buses and trains and he feels that perhaps something could be done for his connection on the journey to Glan Clwyd so that the bus which leaves two minutes before the train arrives is able to wait a couple of minutes so that it can connect with the train, and he can arrive at work on time.

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