



Ensuring Public Transport Is Back In BUS-iness

**The pivotal role buses can play in tackling current and future challenges;
A South East Wales Case Study.**

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Appendix A – Online Survey

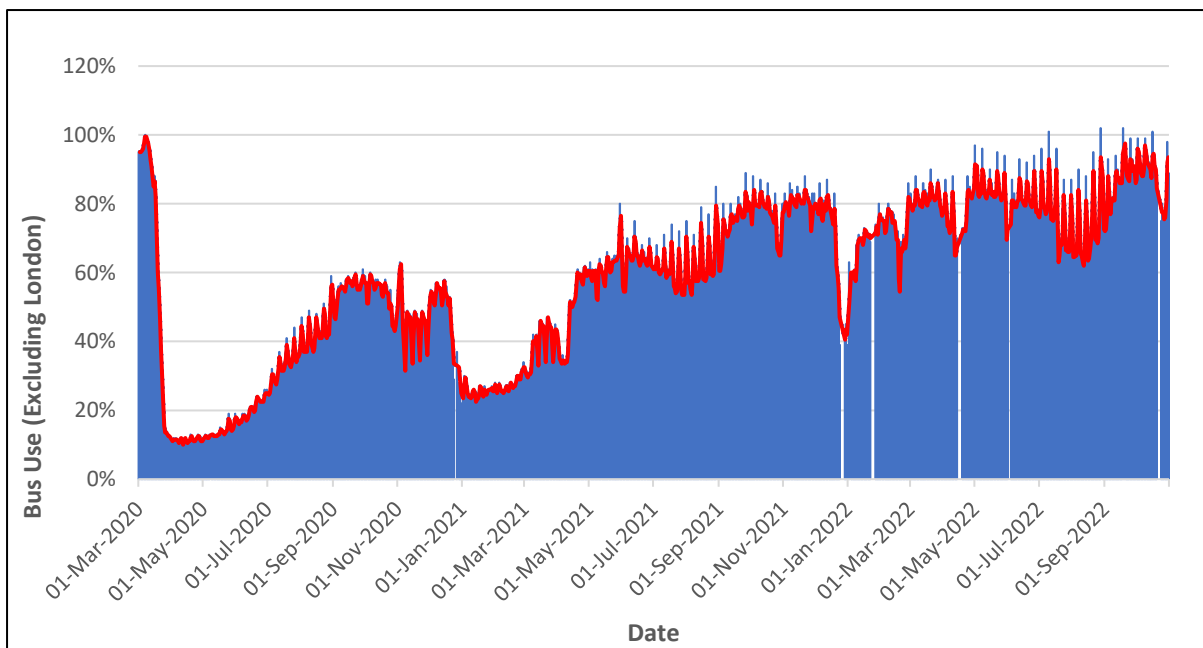
Appendix B – Newspaper Article

Introduction and Study Context

Travel Patterns Post - Covid

Since March 2020, the Covid-19 pandemic has undoubtedly affected travel patterns and public transport ridership. The Department for Transport (DfT) have collected data on transport mode use since the beginning of the pandemic. Buses (excluding London) observed circa 11% fewer passengers during October 2022 than pre-pandemic levels. Whilst patronage levels appear to be nearing their pre-pandemic levels, as observed in Figure 1, the growth in passenger numbers is still lower than optimal, particularly when compared to private car usage, which has returned to approximately 96% of pre-pandemic levels in October 2022.

Figure 1: Transport Use since March 2020 for Buses (excluding London)¹



Several factors could be attributed to this continued reduction in the level of ridership of buses. The increased number of people that continue to work remotely has potentially played a part. ONS data from March 2022 showed that of all working adults in Great Britain, 57% did not work from home and exclusively travelled to work, with 12% working from home exclusively². This is compared to 5% of workers in Great Britain stating they work from home in the 2011 census³.

Another attributing factor to the decline in bus patronage may be a legacy that has carried since the pandemic that public transport is “unclean” and “risky”⁴. The National Travel Attributes Study published by the DfT in 2021⁵ showed that 78% of respondents were concerned for their health if they were to use the bus. This is compared to 11% who were concerned using a private car or 9% using a personal bicycle.

¹ Department for Transport (2022), Transport use during the coronavirus (COVID-19) pandemic.

² Office for National Statistics (2022), Coronavirus and the social impacts on Great Britain: 1 April 2022

³ Office for National Statistics, Census 2011 – QS701EW – Method of Travel to Work

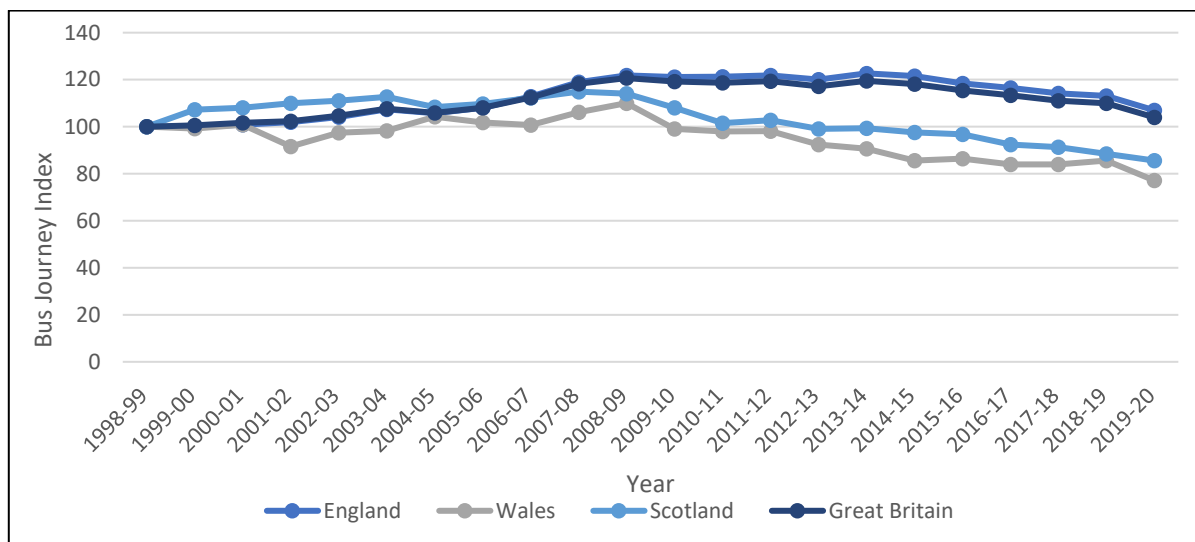
⁴ Department for Transport (2021), Confidence in Public Transport

⁵ Department for Transport (2021), National Travel Attitudes Study: Wave 4

The Pandemic is Not Wholly to Blame

Prior to the Covid-19 pandemic, ridership on buses was steadily declining, particularly in Wales. Figure 2 shows the trend in bus travel in the countries of Great Britain since 1998/99. The trend in Wales has seen a sharper decline than the other countries in Great Britain, with bus journeys less common in Wales than across Great Britain⁶.

Figure 2: Local Bus Journeys Index by UK Country, 1998/99 to 2019/20⁶



The rising cost of travel could deter individuals from using buses and public transport. In the past decade, fuel prices have risen by less than 10%, while rail, coach and bus ticket prices have increased between 33% and 55.7%⁷, with bus fares in Wales increasing by 3.5% from 2019 to 2020 alone⁸.

There are also inequalities regarding access to public transport. Since 2010, bus vehicle numbers have decreased by 17.8%⁹ and, consequently, 12% of people do not have any public transport links within their local area¹⁰. Where services are present, they may not be accessible. In 2020, the Equality and Human Rights Commission undertook research exploring how equality for older and disabled people has been factored into decision-making about public transport in Wales¹¹. The research concurred that older and disabled people felt their opportunities had been restricted because of barriers to travel by bus and perceived bus travel as often being difficult and unpredictable because of these barriers.

Time for Change

Transport produced 27% of the UK's total emissions in 2019 and, of this, the majority (91%) came from road transport vehicles¹². The biggest contributors to this were cars and taxis, which made up 61% of the emissions from road transport¹³.

⁶ Welsh Government (2021): Public Service Vehicles (Buses and Taxis) April 2019 to March 2020

⁷ RAC Foundation, Transport Price Index

⁸ Welsh Government (2021): Public Service Vehicles (Buses and Taxis) April 2019 to March 2020

⁹ Welsh Government (2021): Public Service Vehicles (Buses and Taxis) April 2019 to March 2020

¹⁰ Oxfam Cymru (2020): The Welsh Doughnut 2020: A framework for environmental sustainability and social justice.

¹¹ Equality and Human Rights Commission (2020): Accessible Public Transport for Older and Disabled People in Wales

¹² Department for Transport (2021), Transport and Environment Statistics: Autumn 2021

¹³ Department for Transport (2021), Transport and Environment Statistics: Autumn 2021

The UK produced a Net Zero Strategy¹⁴ to reach Net Zero by 2050. A key policy outlined in the strategy is to invest £3 billion to create integrated bus networks, more frequent services and bus lanes. Whilst this is laudable, it is wholly dependent on future demand and patronage, and it is not clear that these interventions will instigate mode shift.

The Welsh Government also produced a Net Zero plan, titled Net Zero Wales Carbon Budget 2 (2021 to 2025)¹⁵. The plan outlines Welsh Government’s ambitions for emission reductions across different sectors, with key ambitions for the transport sector including:

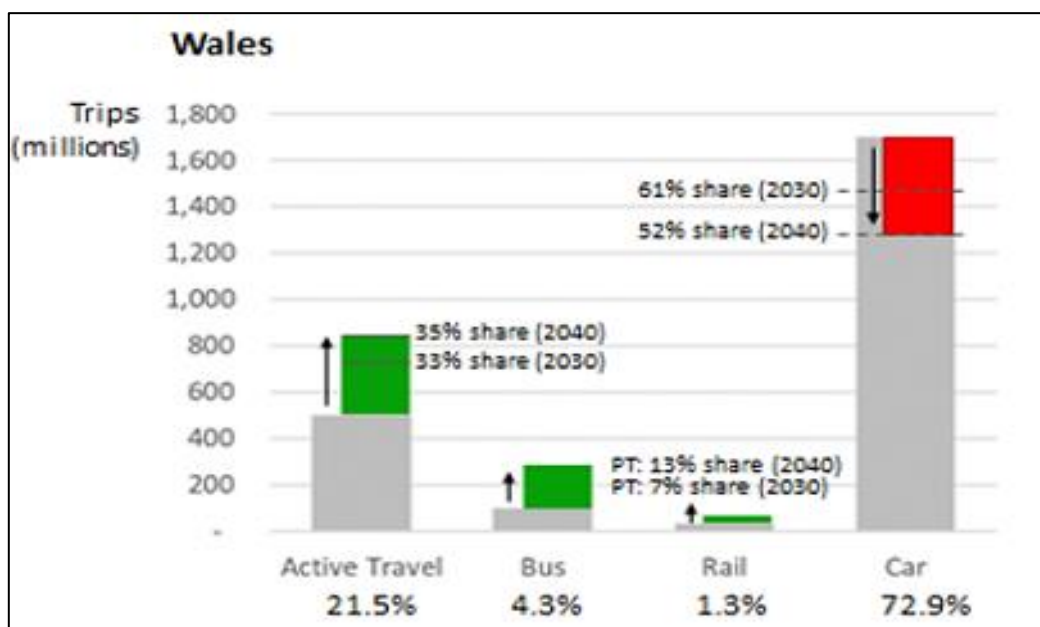
- Reducing emissions from passenger transport by 22% in 2025 (from 2019) and 98% in 2050.
- Reducing emissions from passenger transport by 22% in 2025 (from 2019) and 98% in 2050.
- Increase the proportion of trips by sustainable travel mode (public transport and active travel) to 35% by 2025 and 39% by 2030.

In line with this, Llwybr Newydd – The Wales Transport Strategy, sets the ambitious mode share target of 45% of journeys to be made by sustainable modes by 2040. This represents a 13-percentage point increase on the estimated current mode share of 32%¹⁶.

Figure 3 provides an estimate of the modal shift that will have to occur, based on 2019 baseline mode share estimates¹⁷. The arrows show the mode share targets for 2030 from Net Zero Wales and 2040 from Llwybr Newydd. As can be seen, public transport mode share needs to increase to 13% by 2040; nearly a nine-percentage point increase.

If bus ridership is to be increased to meet these mode share targets, then the barriers to accessing buses must be removed and the perceptions of this mode altered.

Figure 3: Mode Share Targets in Wales: 2030 and 2040



¹⁴ HM Government (2021), Net Zero Strategy: Build Back Greener

¹⁵ Welsh Government (2021), Net Zero Wales Carbon Budget 2 (2021 – 2025)

¹⁶ Welsh Government (2021), Llwybr Newydd – The Wales Transport Strategy 2021

¹⁷ Transport for Quality of Life (2021), Modal Share Targets for Wales

Purpose of the Study

This paper, therefore, aims to ascertain if travel patterns have changed as a result of Covid-19, the defining factors that have contributed to any change and the measures that bus providers and local authorities could implement that would increase an individual's use of bus to travel in the future.

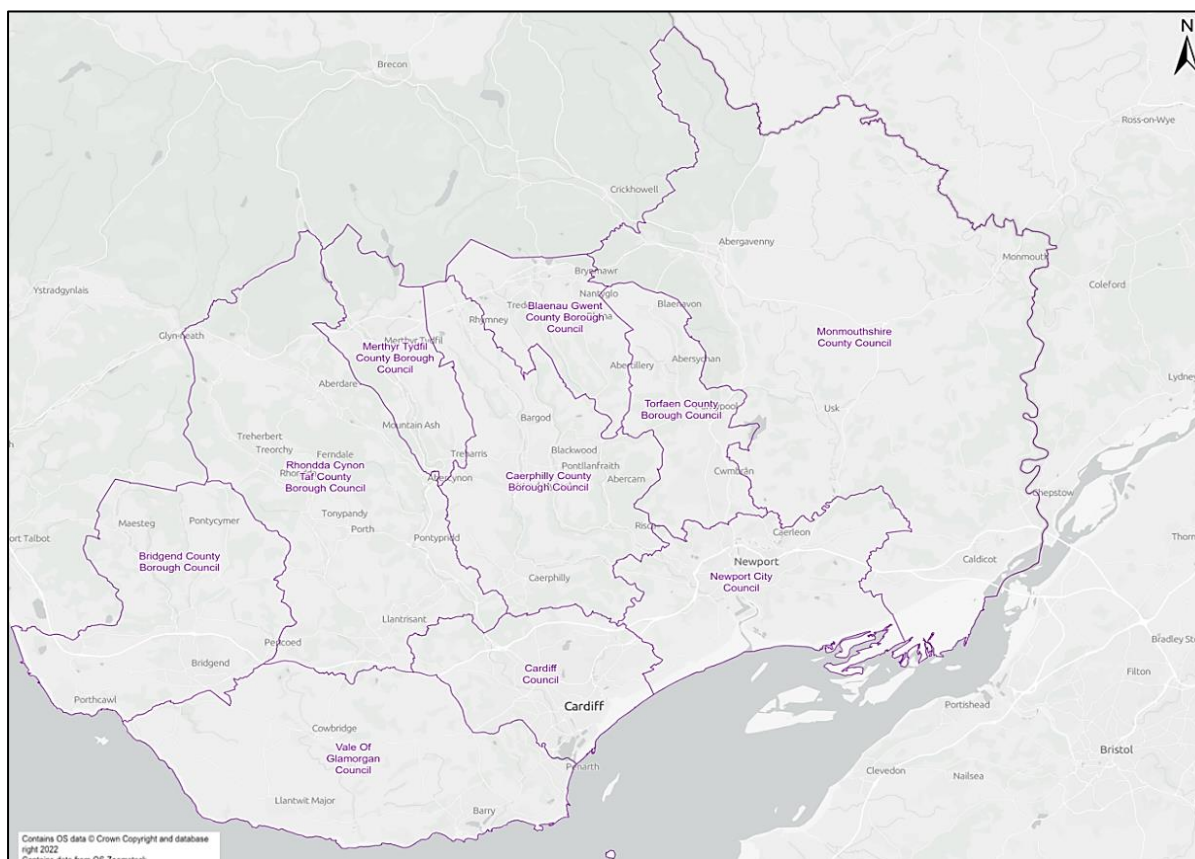
This study will look beyond the effects the pandemic has had on bus ridership and attempts to highlight the other factors that affect patronage, both now and in the future. Based on these factors, this study then suggests measures for decision makers to improve the rider experience and increase patronage in the future, to meet mode share targets.

To investigate this, primary and secondary sources are utilised to provide qualitative and quantitative data. Primary data collection techniques include a large-scale survey of residents of South East Wales, as well as the findings from semi-structured interviews with key transport and equality group representatives; the findings of which will both be presented. Secondary data sources include Transport Focus data, Welsh Government data and research undertaken by University of South Wales regarding the impact of Covid-19 on Welsh Bus Services.

Case Study Area

The case study area for this study is South East Wales; an area which has vast rural areas, as well as the urban centre and capital city of Cardiff. For the purpose of this study, South East Wales is the area defined as the Cardiff Capital Region (CCR), a city region in Wales. This includes the counties of Blaenau Gwent Bridgend, Caerphilly, Cardiff, Merthyr Tydfil, Monmouthshire, Newport, Rhondda Cynon Taf, Torfaen and Vale of Glamorgan, as shown in Figure 4.

Figure 4: Case Study Area of South East Wales



Population

South East Wales has a population of approximately 1,523,900 (Census 2021). Cardiff is the most populous county, with 362,400 residents (Census 2021). Rhondda Cynon Taf is the second most populous, with 237,700 people residing there and Merthyr Tydfil is the least, with a population of 58,800 (Census 2021). Cardiff is also the most densely populated county, with approximately 2,620 persons per square kilometre. Monmouthshire is the least, with a population density of 112.1¹⁸.

Transport

The M4 motorway runs through the region, east to west, connecting South Wales to London. The A470 makes up part of the Strategic Road Network in the area connecting Cardiff to Rhondda Cynon Taf and Merthyr Tydfil and continuing north to Llandudno on the North Wales coast.

The South Wales Mainline provides services towards Bristol and London. Other national rail services run from Cardiff and Newport to Birmingham and Nottingham on the Gloucester to Newport Line and to Manchester on the Welsh Marches Line. Local services within the region are provided by the Core Valley Lines, with services connecting to Aberdare, Coryton, Merthyr Tydfil, Rhymney and Treherbert.

Cardiff Airport is located within the study area at Rhoose in the Vale of Glamorgan and is the only international airport in Wales.

¹⁸ StatsWales (2021), Population density (persons per square kilometre) by local authority and year

Methodology

Online Survey

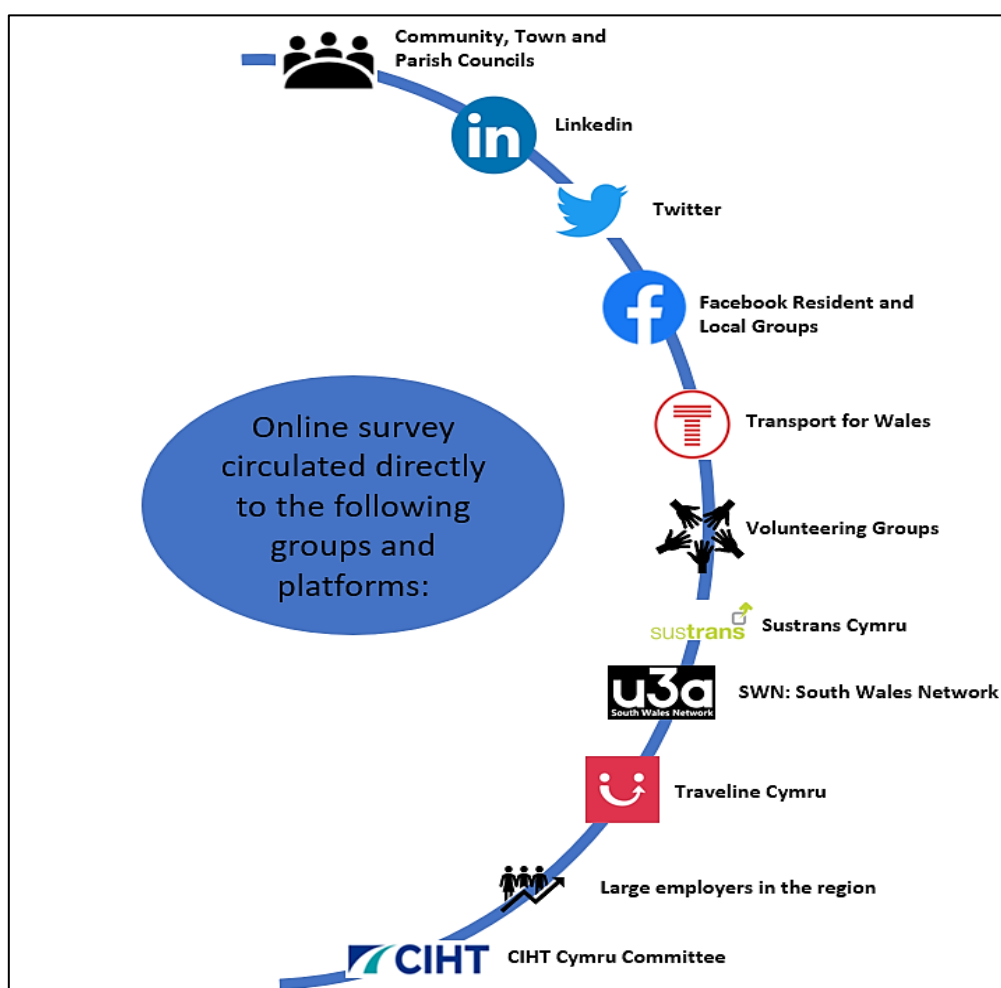
An online survey was undertaken in order to ascertain people's perceptions and travel patterns on buses in the South East Wales area. The survey questionnaire comprised closed and open questions on current travel patterns, the effect Covid-19 has had on mode choice and what factors may impact future mode choice. The combination of open and closed questions proved particularly helpful in the design of the survey, when there was uncertainty regarding how respondents may answer and in developing the response options for the closed questions (Story and Tait, 2019).

Online surveys were chosen as a method of data collection because they are efficient at dealing with specific issues and collect factual information across a large sample (Denscombe, 2014). Online surveys offer immediate access to the data, which is regarded as more accurate and with a decrease in measurement errors, reducing cost and time to the researcher (Evans and Mathur, 2018).

Sampling

The sample population for the study was residents that were over the age of 18 and living in the South East Wales area. In order to attract a high response rate, the survey was shared through a number of channels and platforms, shown in Figure 5.

Figure 5: Groups, Platforms and Organisation the Online Survey was Circulated to



A major factor for consideration when using web-based surveys as a method of data collection is the potential for sampling bias, as not all members of the population will have access to the Internet (Hayslett and Wildemuth, 2004). To mitigate this bias, the survey was offered as a hard copy or to be completed via phone or video call. One hard copy of the survey was requested and completed. A copy of the online questionnaire is contained in **Appendix A**.

Number of Responses

A total of 648 valid responses were received from across the region between October and November 2022. Figures 6 and 7 show the breakdown of responses by county, compared to the composition of the region by population. Whilst not an exact match, with Caerphilly and Rhondda Cynon Taf both five percentage points lower than the proportion of the population that live there, the spread of responses is considered to be representative of the population of South East Wales.

Figure 6: Percentage of Total Responses from Each County

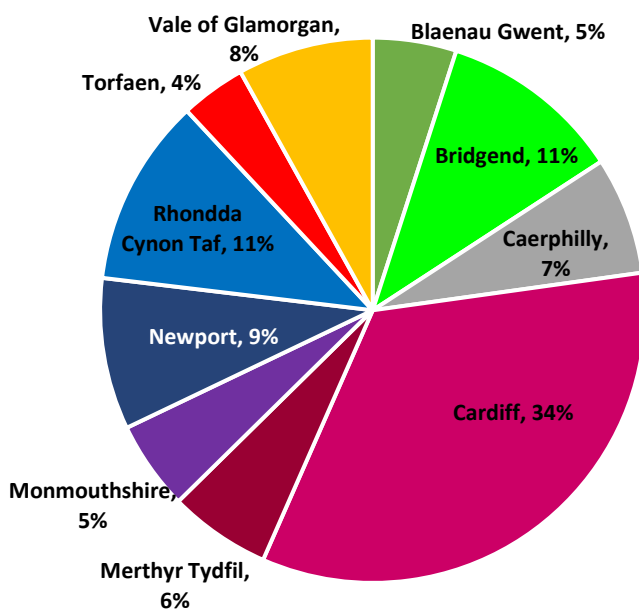
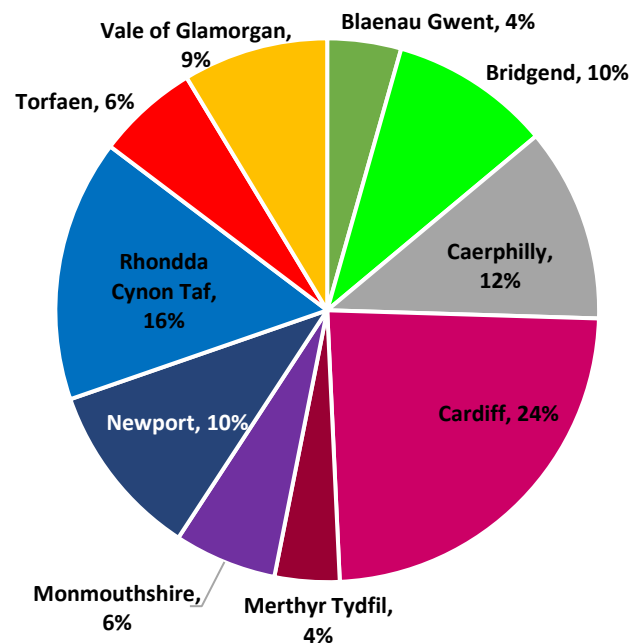


Figure 7: Composition of the Study Area based on Percentage of the Total Population



Semi – Structured Interviews

Two semi – structured interviews were conducted to supplement the surveys; one with a representative of Transport for Wales and the other with a group of adults with learning difficulties based in Rhondda Cynon Taf. The use of semi structured interviews allowed for probing of views and allowed respondents to expand on their answers (Gray, 2018). Such probing allowed for diversion of the interview questions; this was particularly useful during the latter interview to fully gather evidence on the group’s experience of public transport in the region. Both interviews were conducted virtually using video call technology.

Secondary Research

It was considered appropriate to use secondary data sources to supplement the primary data collection methods as part of this study. A benefit of utilising secondary data is that specific variables

that are needed can be acquired from existing data that can make the data collection process more efficient (Sylvia, 2018). In the case of this research study, data from Transport Focus on Fflecsi in Wales gave insight into the experience of one of the possible public transport solutions to overcome challenges in the future. Work undertaken by University of South Wales also proved valuable as part of this study in monitoring the impact that Covid-19 has had on bus services in Wales.

Limitations

One limitation to the study was that the survey was not available in Welsh in line with Welsh Language Standards (Welsh Government, 2022). Due to time and monetary constraints, translation and consideration for the Welsh language was not feasible in this study.

A second limitation of this study regards the availability of secondary data. Cardiff Council were approached regarding data collected as part of the Bus Strategy Consultation in October/November 2021. The request for information was refused as the information will be published in March 2023, which is outside of the timescale of this study.

Data Privacy and Informed Consent

All survey data was anonymised and cannot be traced to individuals. As part of the survey, respondents were given the option to provide their email address to be entered into a prize draw. This was voluntary and all email addresses were stored securely and deleted immediately following the completion of prize draw.

Informed consent was ensured prior to data collection; participants were provided with sufficient information about the research project, so that they could make an informed decision about whether to be involved in the study or not (Crow et al, 2006). The nature of the study ensured no individuals under the age of 18 were included.

Data Analysis and Research Findings

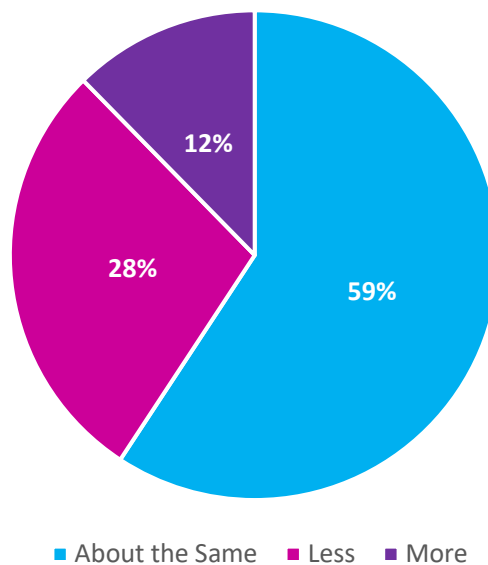
Travel Patterns Post - Covid

There is still uncertainty regarding demand forecasting following the unprecedented crisis of the Covid-19 pandemic (Gkiotsalitis and Cats, 2021). Whilst concerns about using public transport that were present at the height of the pandemic have partially been alleviated, there are still higher levels of concern about public transport compared to pre-Covid (Beck and Hensher, 2020).

This research project aimed to ascertain the impact the pandemic has had on bus ridership in South East Wales. As can be seen in Figure 8, the majority of respondents (59%) stated they use the bus about the same now as they did prior to March 2020. Of the 28% of respondents that use the bus less, reasons for this mode shift included “no longer need to commute due to working from home”, “don’t think the bus is as safe as before Covid-19”, “service frequency in my area has decreased”, and “the number of buses has been reduced”.

A smaller proportion of respondents (12%) stated that they use the bus more now, with 15% of those respondents’ citing reasons associated with the rising costs of fuel and owning a car.

Figure 8: Travel Patterns of Respondents on Buses Compared to Before the Pandemic



Provision of Services

According to the survey responses, a reduction in services is one of the defining reasons individuals now use the bus less. Of those that stated they now use the bus less, 28% gave reasons referring to a reduction in the number of bus services or the frequency of bus services since the pandemic.

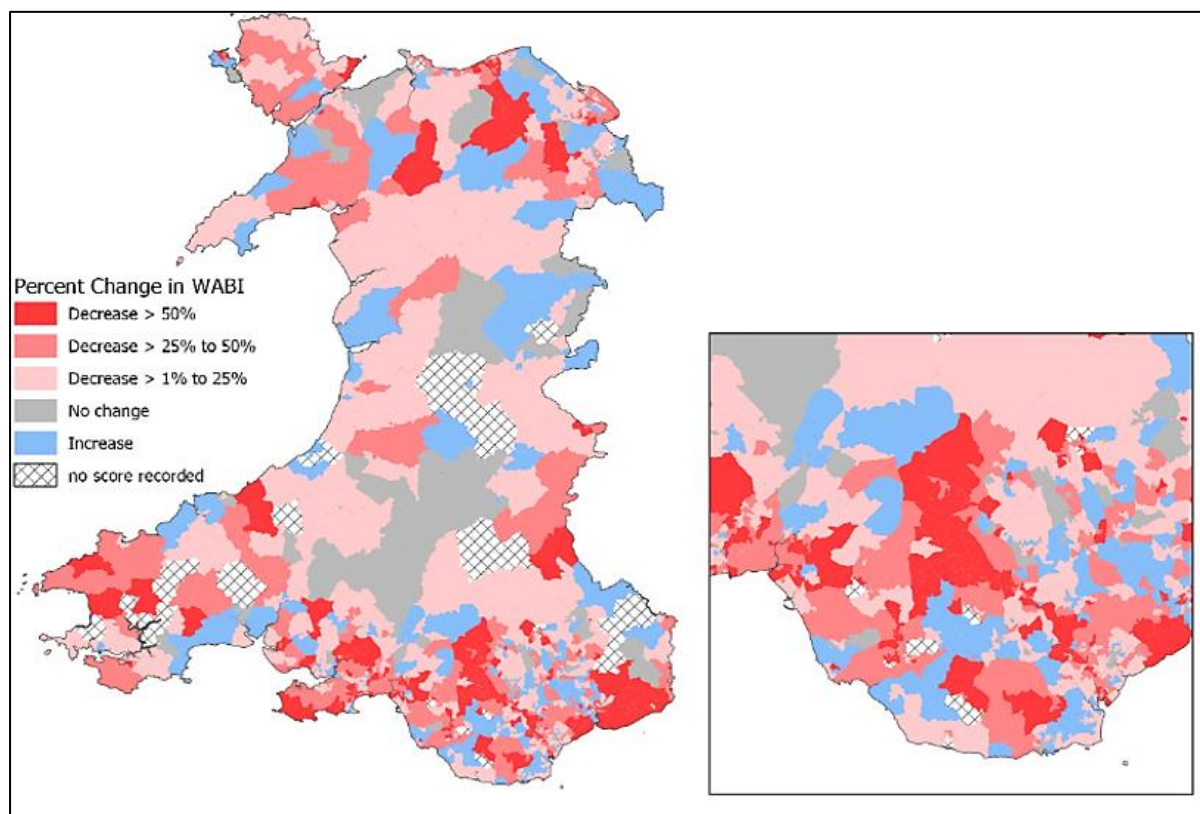
Wales Institute of Social and Economic Research and Data (WISERD) and the University of South Wales investigated how the pandemic has affected bus service levels across Wales¹⁹. Data on Welsh bus services and on public transport infrastructure was compared from August 2019 to August 2021. The analysis suggested a loss of 690 bus stops across Wales (circa 3%), with 150 fewer bus routes and

¹⁹ Langford et al (2022), Access all areas or missing the bus? Monitoring the impact of Covid-19 on Welsh bus services

service frequencies on the remaining routes declining by 22%. The overall opportunity to catch a bus fell from 1.875 million to 1.446 million per week²⁰.

The research developed a Welsh Access to Bus Indicator (WABI). Most LSOAs, both rural and urban, saw a net decline in bus services between August 2019 and 2021. Figure 9 shows the percentage change in access to bus services in all of Wales and part of the study area from 2019 to 2021. Declines were highest (greater than 50%) and most concentrated within Rhondda Cynon Taf, east Newport and South Monmouthshire. There are also clusters in and around inner-city Cardiff and rural Vale of Glamorgan.

Figure 9: Percentage Change in Access to Welsh Bus Services 2019 to 2021²¹

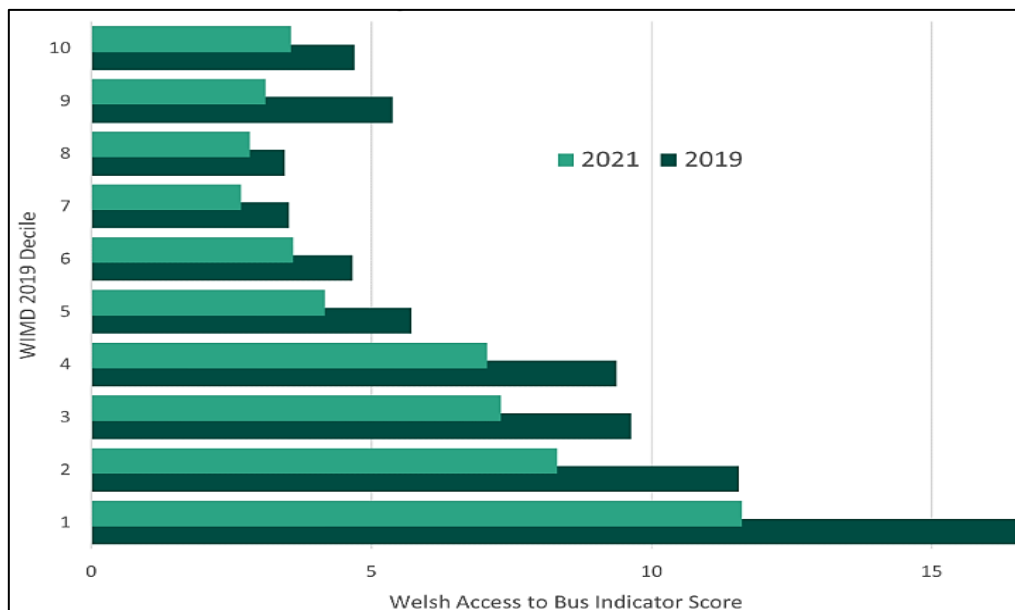


The level of service provision and access to buses measured by WABI was examined against the Welsh Index of Multiple Deprivation. Figure 10 shows the medium WABI score by WIMD decile, with 1 being the most deprived and 10 being the least deprived. The graph shows that the decline in access was largest among the most deprived areas of Wales, which suggest these areas experienced the greatest loss of bus services over the period.

²⁰ Langford et al (2022), Access all areas or missing the bus? Monitoring the impact of Covid-19 on Welsh bus services

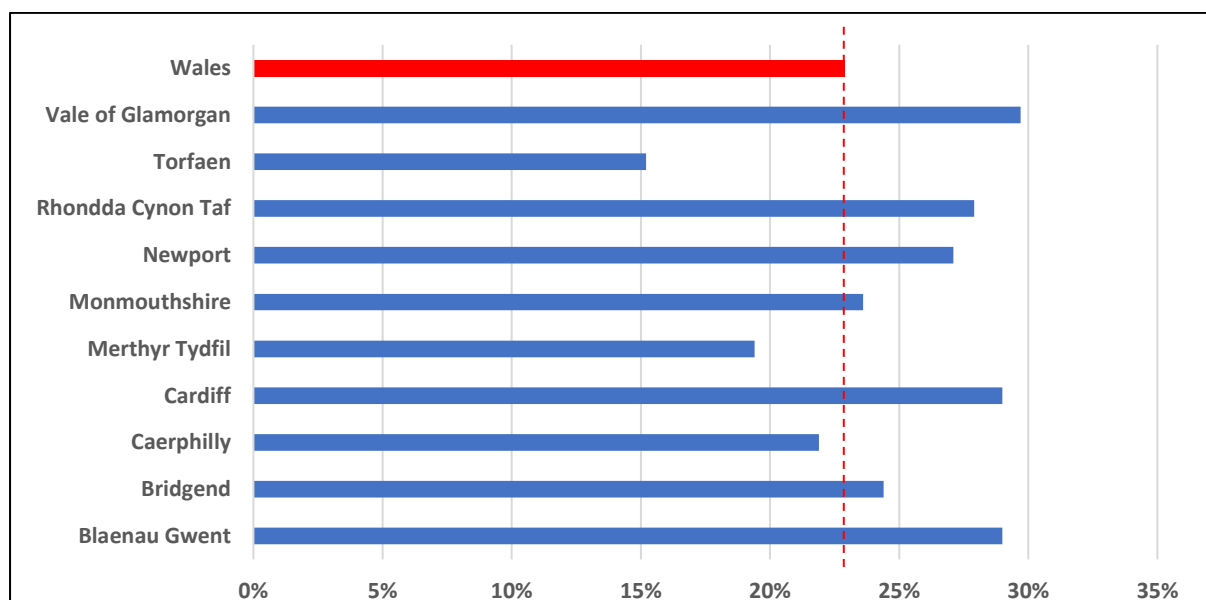
²¹ Langford et al (2022), Access all areas or missing the bus? Monitoring the impact of Covid-19 on Welsh bus services

Figure 10: Medium Welsh Access to Bus Indicator Score for Weekday Services 2019 to 2021 by WIMD decile



It can therefore be seen that Covid-19 and the declining impact this has had on the provision of bus services has disproportionately impacted the most deprived areas of Wales. The most damaging impacts from a decline in public transport services will also be on those who rely on public transport due to the lack of availability of cars in their household. Figure 11 presents the percentage of households in the study area that have no cars or vans, compared to the national average. Seven of the 10 counties have a larger proportion of households with no cars or vans than the national average. The average for the study area is 24.7% of households with no car or van availability, compared to 22.9% nationally.

Figure 11: Percentage of Households with No Cars or Vans in the Study Area and Wales

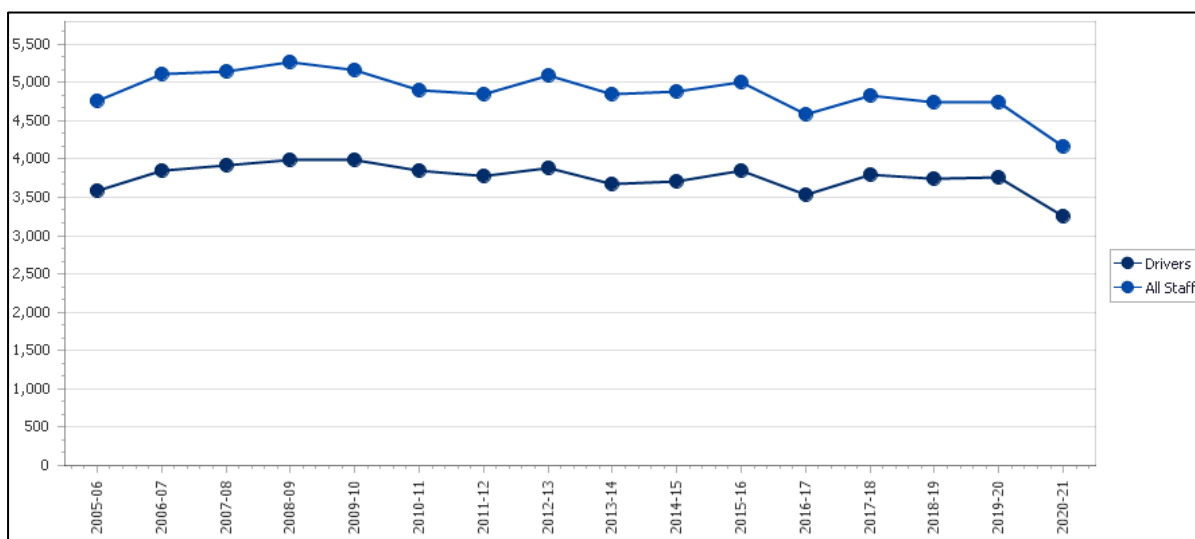


First and foremost, to achieve the mode share targets outlined in Llwybr Newydd and Net Zero Wales, sufficient levels of service must be made available to those who need them most and bus services should be reinstated to at least pre-covid levels of provision and beyond.

One reason for the reduction in services is the availability of drivers. The issue of driver shortages since the pandemic has been widely publicised in the media, with headlines such as those shown in Figure 12. This is also shown in Figure 13, with the number of drivers and all staff employed on buses and coaches falling approximately 15% from over the last 10 years. The steepest decline was observed from 2019/20 to 2020/21, coinciding with the Covid-19 outbreak about pandemic. Large-scale driver recruitment is important to reinstate services to pre pandemic levels.

Figure 12: Newspaper Headlines Regarding Bus Driver Shortages²²

Figure 13: Number of Staff employed on Buses and Coaches from 2005/06 to 2020/21²³

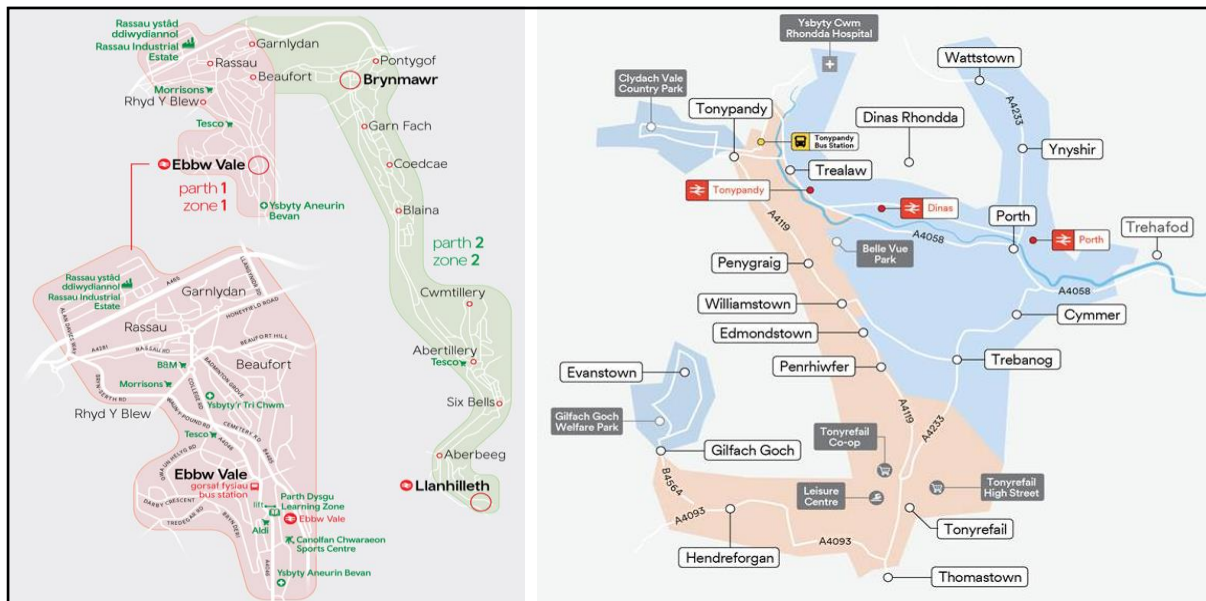


Is Demand Responsive Transport the solution?

Demand Responsive Transport is often seen as the optimal solution, particularly in rural areas, to address a decline in fixed bus services whilst serving the population in an efficient manner (Sorensen et al, 2021). Fflecsi – the DRT system in Wales, was first introduced in 2020 as a response to the pandemic. Users download an app or call a phone number to book their trip and receive live updates on their bus. Figure 14 shows the areas within the study area where Fflecsi is currently active, in Blaenau Gwent and Rhondda Cynon Taf.

²² Wales Online and BBC News (Various Dates).

²³ StatsWales (2022), Number of Staff employed on buses and coaches by year

Figure 14: Fflecsi Coverage within the Study Area - Blaenau Gwent and Rhondda Cynon Taf²⁴

As part of this study, Fflecsi was mentioned twice by respondents of the online survey as a reason they now use the bus less, due to having to book in advance deterring one user and the feeling that the service was not accessible to the disabled expressed by another individual. This is reiterated in an Interim Report produced by Transport for Wales and Transport Focus²⁵ on the experience of DRT with the “need to plan ahead” cited as a barrier to some passengers using the service.

As part of the Fflecsi interim report, concern was raised that if Fflecsi is successful in attracting passengers back to public transport, then scheduled services may have to be reintroduced to cope with demand. A study in Amsterdam demonstrated that the change to DRT impacted ridership, by as much as a 28% reduction on the previous level (Coutinho et al, 2020). The study did however conclude that reduced mileage and operating timeframe of the DRT system improved overall efficiency compared to fixed line bus services.

The overall conclusion of the interim report was that DRT can play a valuable role as part of the overall transport offer and the successful introduction of Fflecsi has been dependent on a good working relationship between operator and local authorities, as well as Transport for Wales. The report also concluded that once the concept of DRT was understood, it is viewed as an attractive public transport option and is well-suited to serve rural communities.

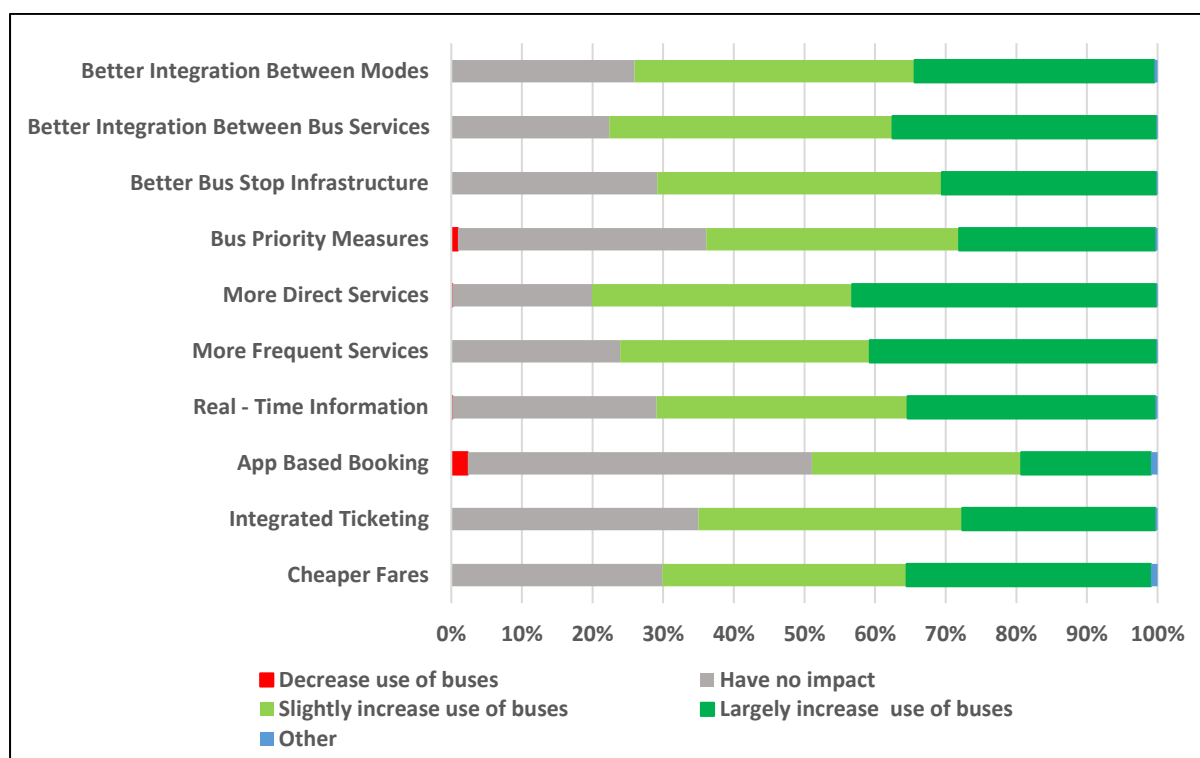
Factors Affecting Future Bus Travel

Respondents of the online survey were asked to complete a stated preference question to ascertain the factors that may influence mode shift to bus in the future. Respondents were asked to state to what extent each measure would influence how often they use the bus to travel. The responses are presented in Figure 15.

²⁴ Stagecoach (n.d), Stagecoach Services and Fflecsi: [fflecsi the flexible way to travel | Stagecoach \(stagecoachbus.com\)](https://www.stagecoachbus.com/fflecsi)

²⁵ Transport for Wales and Transport Focus (2022), Fflecsi – the experience of Demand Responsive Transport in Wales interim Report

Figure 15: The Extent to Which Measures Affect Bus Travel in Future



App Based Booking

Of the responses, 2.3% of individuals stated that app-based booking would decrease the amount they used the bus in future. App Based Booking also observed the largest proportion of “Have no Impact” responses, with 48.8% of respondents stating this measure would not influence their bus travel patterns in future. This reflects comments made in the semi-structured interview conducted with a representative of Transport for Wales. They stated that there is a reasonable proportion of cash paying customers and acknowledge the importance of cash, particularly in the most deprived areas of the region, who should not be alienated from using the bus by app based or cashless systems.

Bus Priority Measures and Bus Stop Infrastructure

Bus priority measures were highlighted by nearly 1% of respondents as decreasing the amount they use the bus, due to “a waste of public funds” and “increased traffic for other road users”. A further 35% of respondents stated that bus priority measures would have no impact in their personal ridership of buses.

Whilst bus priority measures were less likely to encourage individuals to use the bus more, better bus stop infrastructure would slightly or largely increase 70% of respondents use of bus. One Councillor in the study area shared a newspaper article from 2018, but stated it was still relevant presently. The newspaper article is included as **Appendix B** and states that the poor quality of bus stops in Wales are deterring passengers and are responsible for the decline in passenger numbers. The research undertaken by the Equality Human Rights Commission also concurs with these finding. The Research Report²⁶ found that older and disabled people thought there was too much variability in the design and quality of bus shelters across local areas, including the provision of a shelter, suitable seating and delivery of real time information. This is reflected in the current research study. Of the respondents

²⁶ Equality and Human Rights Commission (2020): Accessible Public Transport for Older and Disabled People in Wales

who were elderly (over the age of 70) and those that answered yes to having any long-term health condition or disability, 80.8% stated that better bus stop infrastructure would slightly or largely increase their use of buses in the future.

Other Factors Influencing Bus Use

Respondents of the online survey were also given an “other” option to provide additional feedback on the factors that would influence their use of bus in the future. Of these “other” comments, 3% of respondents identified there were issues with “driver attitudes” or “customer service of drivers”. This issue was also raised during the semi – structured interview conducted with a group of adults with learning disabilities from Rhondda Cynon Taf. The group stated that bus drivers need additional training on how to be inclusive to people with both physical and hidden disabilities. They acknowledged it was not all drivers, but the ones that came across as “rude” or “unwelcoming” deterred them from getting the bus in the future.

Measures To Increase Bus Use

According to the survey respondents, the factors which would have the largest impact on increasing their use of buses were more direct services, more frequent services, better integration between bus services and better integration between modes. More direct services would see the largest increase in bus ridership, with 80% of respondents stating the implementation of such a measure would slightly or largely increase their use of bus. Similarly, 76% indicated that more frequent services would encourage them to use the bus more. 77% of respondents stated that better integration between bus services would increase their use of bus and 74% stated better integration between modes would positively influence their use of buses in the future.

Of the respondents that completed the open-ended question giving expanded answers on the factors affecting future bus travel, 10% mentioned that bus services are poor or do not exist in the evening and that this then has a detrimental effect for local employment and the late-night economy. Figure 16 summarises some of the responses given regarding the limited availability of evening buses.

Figure 16: Survey Responses Regarding the Availability of Evening / Late Night Services



Bus White Paper

A public consultation took place between March and June 2022 on proposals for new bus legislation in Wales, as part of a Bus White Paper. “One network, one timetable, one ticket: planning buses as a

public service for Wales”²⁷ aims to improve buses and implement each of the measures above that would increase bus use the most. The consultation paper outlines legislative proposals to achieve three objectives for bus travel in Wales:

- a comprehensive network of bus routes to serve the widest feasible range of destinations, both at busy times and less busy times in the evenings and Sundays.
- coordinated timetables for bus-bus connections and bus connections with all other modes of public transport.
- simple area-wide fares, valid across all bus routes and on all modes of public transport.

If the White Paper is implemented, it would transform the bus service offering in Wales and would go a large way to achieving the mode shift targets outlined in Net Zero Wales and Llwybr Newydd. It should be noted, that a previous consultation was undertaken in 2019 and a Bus Services (Wales) Bill was submitted to the Senedd (Welsh Parliament) in March 2020. In July 2020, the Bill was withdrawn, although the reason cited for the withdrawal was the impact of Covid-19 on the legislative timetable.

This withdrawal cannot happen with One network, one timetable, one ticket and it is the recommendation of this study that the Senedd should pass the legislation and implement it as soon as possible. The White Paper proposes measures that tackle the majority of issues raised as part of this research study in order to improve bus services and overcome the challenges of inequality, climate change and post Covid recovery.

²⁷ Welsh Government (2022), One Network, One Timetable, One Ticket: Planning Buses as a Public Service for Wales: [One network, one timetable, one ticket: planning buses as a public service for Wales \[HTML\] | GOV.WALES](#)

Conclusion and Recommendations

Summary

The overarching aim of this study has been to determine whether and how travel patterns have changed as a result of Covid-19, to ascertain the defining factors that have contributed to any change and to explore the measures that bus providers and local authorities could implement that would increase an individual's use of bus to travel in the future. This research project presents a large-scale study into the factors that influence bus ridership, with 648 responses received from across the South East Wales region.

The majority of participants in this research study (59%) stated that they use the bus about the same now as they did prior to Covid-19. Whilst this is encouraging, 28% of respondents use the bus less, for reasons including a reduction in the number of services or service frequencies, working from home meaning individuals no longer need to commute and the perception that the bus is not as safe anymore.

The factors that had the largest impact in increasing the use of buses were more direct services, more frequent services, better integration between bus services and better integration between modes. The "One network, one timetable, one ticket" Bus Legislation proposes measures that tackle most issues raised as part of this research study in order to improve bus services and overcome the challenges of inequality, climate change and post Covid recovery.

Recommendations

Whilst this project focussed on the South East Wales region, the results are indicative of wider trends across the UK. This research study therefore makes the following recommendations for national policy makers, both in Wales and the UK, local decision makers and service providers:

- In order to achieve mode share and net zero targets, sufficient bus services must be made available to those who need them most. This means bus services should be reinstated to at least pre-covid levels of provision and beyond. This includes the introduction of evening, late night, early morning and weekend services to a sufficient service frequency.
- Large-scale driver recruitment is important in order to reinstate services; however, driver training and education is equally as important to provide an equal and fair service to all and to create an inclusive environment on buses.
- DRT, including Fflecsi, can play a valuable role as part of the overall transport offer, however, DRT should not negatively impact communities by replacing fixed line bus services for a less accessible service.
- App based booking should not wholly replace cash payments on buses but should be a part of the overall ticketing offer.
- Bus stop infrastructure needs to be improved, standardised, yet applicable to the location and surroundings. There should be Bus Stop Infrastructure Standards in order to achieve this, similar to the Station Design Guidance²⁸ produced by Network Rail.
- The Bus Legislation - One network, one timetable, one ticket: planning buses as a public service for Wales should be passed through the Senedd and implemented.

²⁸ Network Rail (2021), Station Design Guidance

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Appendix A – Online Survey

Your Opinion and Travel Patterns on Buses in the South East Wales Area

This survey is open to individuals over the age of 18 who live in the South East Wales Area.

Thank you for taking the time to fill in this survey. It should not take more than 5 to 10 minutes to complete and will provide valuable information on the public perception of buses for those who live and work in the South Wales Area.

To thank you for taking the time to complete this survey, you have the opportunity to be entered into a prize draw to win a £25 Amazon Voucher.

The survey will ask about your current travel patterns by bus, how these compare to Pre Covid - 19 patterns and why there may be a change in your travel behaviour. The survey will then ask questions looking to the future and how bus service and infrastructure improvements may affect ridership in the future.

If you have any concerns or queries, including requesting the survey in alternative formats, please email orla_95@hotmail.co.uk

Thank you.

Current Travel Patterns

1. Do you currently travel by bus? *

This means any frequency, even if just once in the last year

Yes

No

Other

2. If yes, how often do you use the bus? *

Daily

2 - 3 times a week

Once a week

Once a fortnight

Monthly

Seasonally

Rarely (Once or twice a year)

Never

3. And what are your primary reasons for using the bus? *

- Travel to Work
- Travel to Education (School, College, University etc)
- Travel to Retail (Shopping in Town Centres, Retail Parks, Out of Town Shopping Centres)
- Travel to Hospitality (Restaurants, Bars, Hotels)
- Travel to Leisure facilities (Parks, Leisure Centres, Libraries)
- Travel to visit family / friends
- Travel to services (Doctors, Pharmacies)
- All of the above
- Other

4. Thinking back to before the Covid-19 pandemic (Pre March 2020), do you believe you use the bus more or less now compared to before? *

- More
- Less
- About the same

Question Contains Branching – Q5 to Q8 appear depending on answer to Q4.

5. Why do you use the bus more now compared to before Covid-19?

Enter your answer

6. Why do you use the bus less now compared to before Covid -19?

Enter your answer

7. What mode of transport did you previously use instead of the bus?

- Walk
- Bicycle
- Car
- Train
- Taxi
- Motorcycle
- Other

8. What mode of transport do you now currently use instead of the bus?

- Walk
- Bicycle
- Car
- Train
- Taxi
- Motorcycle
- Other

Future Travel Patterns

	Largely increase my use of buses	Slightly increase my use of buses	Have no impact	Decrease my use of buses	Other
Cheaper Fares	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Integrated Ticketing across different modes (rail/coach/bus)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
App Based Booking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Real Time Information	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More frequent Services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
More direct services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Bus priority, including bus lanes and bus gates	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Better bus stop infrastructure, including shelter and seats	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Better integration between bus services	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Better integration with other modes (rail, active travel)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other (Please explain in the next question)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

About You

11. What county in South Wales do you live in?

Select your answer



12. What is the first part of your postcode? (e.g. CF11)

Enter your answer

13. What is your age?

- 18 - 25
- 26 - 30
- 31 - 39
- 40-49
- 50-59
- 60-69
- 70-79
- 80-89
- 90+

14. Do you have any long - term health condition or disability? (i.e. physical, mental or cognitive)

- Yes
- No

15. Do any of your illnesses or conditions reduce your ability to carry out day to day activities?

- Yes a lot
- Yes a little
- Not at all

Amazon Voucher Prize Draw

16. If you would like to be entered into the prize draw to receive a £25 Amazon Voucher, please enter your email below

Enter your answer

Appendix B – Newspaper Article

'Poor quality bus stops are deterring passengers'

As the Welsh railway network prepares for billions of pounds worth of improvements in the coming years, the road ahead appears less prosperous for our buses. As Rhodri Clark reports, the bus stop is actually the starting point for its troubles



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BUS managers say the poor quality of many bus stops is contributing to Welsh bus passenger numbers falling at twice the rate of Great Britain overall.

One industry leader says 80% of Welsh bus stops are inadequate, but the Welsh Government is focusing its major investment – nearly £200m – on further improvements to railway stations.

Now a survey of stops in Rusbun and Chirk – in the constituency of transport secretary Ken Skates – reveals passengers have to contend with timetable posters at least three years out of date, while government-funded electronic “next bus” displays are blank.

Rusbun’s bus-rail interchange, funded by the government about 10 years ago, has weeds inside the bus shelter – with official information directing passengers to stops further away. Rusbun is the railhead for passengers heading to Llangollen, Bala, Dolgellau and Barmouth.

Arriva operates the station and most of the buses but has a policy of not displaying timetables.

New figures confirm that bus usage in Wales continues to plummet. In 2017-18 there was a 3.3% fall, double the 1.6% decline across Great Britain.

The quality of bus stops in many areas “inevitably” drives bus usage down, according to Bev Fowles, chair of bus industry body CPT Cymru. He said buses were cleaned every day, but continued: “If the bus stop is dingy and smelling of something, you probably would look for an alternative, like a taxi.”

He said there was something wrong with about eight out of 10 bus stops. In his company’s operating area, facilities were particularly inadequate in Pontardawe, where key bus routes intersect.

He said Welsh councils are too small and fragmented to provide consistently good bus stops, including digital information displays, and the task should be taken over by the government’s Transport for Wales company and Traveline Cymru.

The Welsh Government continues to focus on improving the quality of railway stations, which are not devolved. About four times as many people use Welsh bus stops, which are devolved.

All rail stations will be improved

under the £5bn Wales and Borders rail contract. Each one already has a working digital information screen, thanks to a £6.5m programme completed in 2016 with government funding. Similar screens at many bus stops are now disused.

Mr Fowles said that in the Swansea region, First Cymru and South Wales Transport put up their timetables at stops with display cases.

Arriva does not display information at most bus stops in Mr Skates’ constituency. A spokeswoman said Arriva informed councils every time a service was changed.

“Arriva has no involvement in the distribution and updating of the bus stop displays as these are owned by the council,” she said.

We asked Mr Skates’ office whether he ever uses buses in his constituency and what he had done to prevent his constituents being misled by out-of-date timetables.

‘If the bus stop is dingy and smelling of something, you probably would look for an alternative, like a taxi’

BEV FOWLES, CPT CYMRU

A spokesman replied: “The provision, location and information at bus stops is the responsibility of local authorities.”

“Since 2013, the Welsh Government has protected the £25m a year we allocate to local authorities under the Bus Services Support Grant scheme, so that they can deliver bus services that best serve their communities.”

However, this funding replaced the fuel-duty rebate previously paid to operators by the UK Government to offset their running costs, rather than for bus stop maintenance.

The spokesman continued: “This is in addition to the annual local government settlement. We also recently announced a further £3.5m investment in bus services, and for local authorities to improve audio-visual equipment on board buses and technology at bus stops.”

“We expect local authorities to invest this funding for the benefit of

communities, supplementing expenditure from their own budgets, not replacing it. It is vital that each local authority protects its funding for the bus network.”

Wrexham council said it is reviewing its bus shelters in response to the government’s additional funding last spring. “This funding will be used to improve on-street bus-related infrastructure along key strategic bus routes,” said a spokeswoman.

She said the council has an £18,000 a year budget for maintaining and installing bus stop facilities. Stops are cleaned “as required”.

Wrexham’s digital information screens were supported by the councils’ regional transport consortium TAITH, which the government scrapped in 2014. The councils later decided collectively to “switch the system off due to the technology becoming outdated” and prohibitive cost.

Asked why old timetables had not been removed, she said: “In recent years there have, and continue to be, a large number of changes to services in Wrexham. The council do not have the resources to maintain and update all timetables.”

Correct timetables were available on the council’s website and printed copies were available at Wrexham bus station information office, she added.

In Rusbun and Chirk, two of the main towns in Ken Skates’ Chirk South constituency, we surveyed 10 bus stops on the main road in both centres.

Most shelters appear not to have been cleaned this year and have opaque glazing, moss on roofs and glazing seals, and remnants of old fly-posters.

Where a phone number for Traveline is provided, it’s always the business-rate (0870 and 0871) numbers, not the freephone (0800) number introduced in 2016. Traveline Cymru says every stop displays a seven-letter code which you can text for times of next buses. The code was missing from most of the 11 stops and readable at only one.

Many stops have empty timetable cases. Where Wrexham council displays timetable posters, most date from May 2014 and one from April 2015. All are incorrect, and the date isn’t easy to spot.

