University of the West of England
BRISTOL

West of England Sustainable Travel (WEST) Baseline and Years One, Two, and Three (to 2014/15) Annual Outcomes Monitoring Report

Authors (alphabetical): Caroline Bartle, Kiron Chatterjee, Billy Clayton, John Parkin and Miriam Ricci,

(Including revision May 2016)

Centre for Transport & Society

Executive Summary

The Local Sustainable Transport Fund was launched in January 2011 with the four West of England unitary authorities (Bath and North East Somerset, Bristol City, North Somerset and South Gloucestershire Councils) being awarded nearly £30 million by the Department for Transport from the fund on two separate but linked project programmes. The Key Commuter Routes (KCR) project programme was implemented in 2011/12 to 2012/13. The West of England Sustainable Travel (WEST) 'Large Project' programme was implemented in 2012/13 to 2014/15 and involved an integrated package of measures covering the entire West of England travel to work area. The WEST project was awarded extension funding covering the 2015/16 financial year, but the outcomes from this funding are not covered by this report.

The context for the programme is that the West of England area has a high level of road congestion and significant anticipated growth in housing and jobs. The WEST project represents a complex intervention due to the dynamic environment in which it is being implemented, the interaction between different measures within an overall package, the targeting of multiple behaviours, the impacts potentially taking time to build up and the effects varying across the population.

This Annual Outcomes Monitoring Report for 2014/2015 provides results on outcomes from the LSTF programme delivered up to the end of 2014/15. The data presented is divided into five areas: aggregate data; business engagement; local communities; public transport and transitions. There is a final chapter which deals with the process evaluation.

Aggregate data

Area wide data is produced for the following: travel perceptions and satisfaction; travel behaviour; congestion and reliability; carbon emissions; access to employment and commercial centres; air quality and road casualties; physical activity; economic activity.

Satisfaction

The National Highways and Transport Survey (NHTS) shows an increase in satisfaction with cycling which resumes the longer-term positive trend since 2008. Of the four authorities, respondents in South Gloucestershire reported the highest levels of satisfaction across the four cycling categories. The data for bus services demonstrate that levels of satisfaction have risen since the 2010 baseline in two of the three sub-categories: fares and service frequency. While having demonstrated rises in satisfaction for punctuality in earlier years, satisfaction with punctuality is now lower than in 2010. Overall satisfaction in all the unitary authorities is nonetheless greater than at the 2010 baseline. Satisfaction with public transport travel information provision is an area in which there has been an increase in satisfaction and this has increased consistently from year to year since the 2010 baseline. While the NHTS samples households, the Bus Passenger Satisfaction surveys, undertaken by Passenger Focus, samples bus passengers. Passenger Focus data mirror the NHTS data with increases in satisfaction with value for money and reductions in satisfaction with punctuality, with no change in overall satisfaction since 2011.

Mode share

The National Highways and Transport Survey shows around half of respondents walk and use the car daily. A lower proportion of respondents cycle regularly, with 3-10% cycling daily for general or recreational purposes. The bus is also used less often than the car on a daily basis (by 6-10% of respondents), however, it is used by 38-39% of people on a slightly less-frequent basis (either weekly or monthly).

Vehicle flow data

In the four West LSTF unitary authorities, there are 700 million vehicles kilometres more in 2014 than in 2010, an increase of 1.42%. This compares with increases in vehicle kilometres for Great Britain of

2.58%. There was an increase of 300 million car kilometres (0.77%) and this compares with an increase for Great Britain of 1.97%. It should be noted that in the case of motor traffic on non-trunk roads, (i.e. the roads managed by the four unitary authorities) these have seen an increase of 800 million vehicle kilometres, or 2.34%.

Analysis of the cordon, screenline and route traffic count data suggests changes ranging from a reduction of 28% to an increase of 16% in road traffic. A full analysis of the traffic count data will be presented in the final report in December 2016.

Bus patronage and cycle flow data

The bus patronage figures for 2014-2015 demonstrate the continuing increasing trend in bus patronage since 2010. The overall change since 2010 is +17.4%.

Levels of cycling across three of the four UAs have risen to levels above target in 2013/14. In BANES, North Somerset, and South Gloucestershire, there has been an increase of approximately 24.0% since the 2010/11 baseline. A breakdown in the management of Bristol's cycle counter network in 2013/14 continued into 2014/15 and has meant that data for the current reporting period for this authority is not available. The most recent sub-regional figure from 2013 shows that the increase in cycle flows was meeting the target. Bristol City Council suggests, with what data is available, that there has been a 9% increase in cycling in Bristol since 2012/13.

Congestion and reliability

Between 2010/11 and 2014/15, speeds reduced slightly across BANES, Bristol, and South Gloucestershire. However in North Somerset they rose by 3.4%. Bristol had the lowest average vehicle speeds (14.5mph), whilst North Somerset had the highest (30.8mph). This is likely to be a reflection of the different urban and transport network densities of the two areas. The results for bus punctuality demonstrate that generally the WoE sub-region is maintaining positive outcomes in this area, however, there has been a drop in the proportion of buses starting on time in the 2014/15 reporting period when compared to the previous year.

Carbon emissions reductions

The results for carbon emissions shows that after initially exceeding target values, since 2009 the WoE sub-region has reduced carbon emissions year-on-year to well beneath target levels. Reductions in carbon dioxide emissions have been recorded across all four of the UAs, and annual area-wide levels emissions of carbon dioxide from road transport have fallen by 171.8 kilotonnes between 2006 and 2013. This represents an overall reduction of 11.6%. The data for Ultra-low emissions vehicles shows that across the South West region (note: not the four West of England authorities, for which data is not yet available to us), there has been an increase year-on-year in the number of low emissions vehicles licensed. Since the 2010 baseline there has been well over a tenfold increase in the number of new low emissions vehicles licensed – rising from 166 in 2010 to 1,961 in 2014.

Employment rate

The number employed in the WoE region in 2014/15 is 541,200, a 0.88% increase on the 2009/10 period. The employment rate has increased from 74.6% to 77.4%. Numbers unemployed have reduced over the same period by 32% to 24,700, representing an unemployment rate of 4.4%, 1.9% points less than in 2009/10.

Air quality and road casualties

In Bristol, there has been a general improvement in air quality since 2006, although there has been considerable fluctuation in levels of nitrogen dioxide year-on-year. Since the baseline in 2010 there has been a reduction of 10.94µg/m3 in nitrogen dioxide within the AQMA over the period to 2014. In Bath, since the baseline in 2010, there has been a reduction of 3µg/m3 in nitrogen dioxide within the extended AQMA over the period to 2014, but a 2µg/m3 increase since the 2013 AOMR. In South

Gloucestershire, there has been a decrease of 2.5µg/m3 nitrogen dioxide for sites exceeding thresholds in Kingswood from 2010-2014 and a decrease of 2.0µg/m3 nitrogen dioxide over the same period in sites exceeding thresholds in Staple Hill. The road causalities results shows a considerable reduction in the number of people killed or seriously injured on the roads in the WoE sub-region over the period 2005-2014. In total, by 2014 there had been a reduction of 22.6% in the number of road casualties killed or seriously injured compared with the 2005-2009 baseline average of 358. There has been a reduction of 11.2% in KSI incidents in relation to the 2010 baseline.

Business Engagement

Business engagement activity principally comprises of Area Travel Planning and employer grants promoted through roadshows and supporting activities. Other activities as part of business engagement include promotion of low emission vehicles and the consolidation of freight before final delivery.

Area travel plans and employers grants

Employers in the whole of the West of England area are in scope, however there has been a strong focus on three growth areas: Portside; North Fringe; and Bristol Airport. Site-specific packages to enhance access by alternatives to the car may be categorised in three ways: grants to employers for on-site measures; off-site measures; and other support services. On-site measures have been principally cycling facilities (cycle parking, showers, changing facilities and electric bikes). Off-site measures include commuter coach services to the North Fringe and the A2 Airport Link Bus and cycle routes. Other support services include a variety of offers including roadshows and bicycle maintenance and repair visits.

235 employers were engaged with the project in Bristol in 2014/15, an increase on the 104 in 2013/14 and 61 in 2012/13. 47 employers were engaged in North Somerset, 27 in BANES and 67 in South Gloucestershire. A total of 42 grants with value of £222,000 were awarded in 2014/15 compared to 50 in 2013/14.

There were 159 Sustainable Travel Roadshows at employers' sites in 2014/15 which engaged 5,254 individuals with 951 individuals receiving detailed information and/or support.

In 2014/15, travel to work surveys were conducted across employers in Bristol and South Gloucestershire, including North Fringe employers forming part of the Strategic Employment Site evaluation, and at Bristol Airport.

Responses from 5,070 North Fringe employees (response rate 16%) in the Strategic Employment Site area shows a decrease in single occupancy car use from 51.3% in March 2014 to 49.8% in March 2015. It should be noted, however, that the responses in the two years are not drawn from exactly the same sets of employers. Bus use rose from 6.1% in 2014 to 9.3% in 2015 and cycling rose from to 11.7% in 2014 to 13.5 % in 2015.

Promotion of low emission vehicles

The project has delivered further electric vehicle charging points (EVCPs) and enabled to expansion of the car-pool scheme offered by Co-Wheels. 53 electric vehicle charging points, accounting for a total of 74 sockets, were constructed in 2014/15. There are now 68 EVCPs across 56 sites in the West of England, providing a total of 104 sockets. The network of charge points cover car parks with a total of 13,000 parking spaces and businesses with a total in excess of 19,576 staff. The electric charging points were used a total of 3,071 times between 1st April 2012 and 1st January 2015 with total electricity usage being 36,826 kWh. Co-Wheels is an organisation that provides fleet management of very low and zero emission vehicles and administers staff travel and transport. It has been partly funded by LSTF. Co-Wheels has enabled operation of 22 low emission vehicles and 13 bikes (including electric bikes) across the West of England. Currently, the Co-Wheels scheme is available to over 76,000 employees across the sub-region.

Consolidation of freight

DHL operates the Bristol/Bath freight consolidation centre near Junction 18 of the M5, and uses two electric delivery vehicles. LSTF funding is being used to enhance the freight consolidation centre with additional resources to facilitate the expansion of the service to further retailers and organisations across BANES and BCC. Overall in 2014/15, the freight consolidation scheme has served a total of 133 retailers across Bristol and Bath (12 less than in the previous financial year) and as a result of their participation in the scheme the consolidation centre has prevented over 2,074 delivery trips to the two city centres with an estimated reduction in carbon dioxide emissions of 23,657 tonnes.

Local communities

Local community projects comprise of the following: community grants and neighbourhood fund measures; walking and cycling infrastructure measures; and 20mph measures. Active neighbourhood fund grants in Bristol City help local communities to address local barriers to sustainable travel. Priority Neighbourhood Fund capital grants provide a similar mechanism in South Gloucestershire. In addition to grants, Community Active Travel Officers (CATOs) (Bristol) and the Walk to Health Officer (South Gloucestershire) have engaged at community events and with community groups.

The evaluation is being undertaken as follows: bespoke monitoring of grants by Bristol; six community focus groups; and interviews with CATOs. Throughout the period of implementation of the community grants, monitoring agreements were put in place and six focus groups have been undertaken.

Community grants

Analysis of the community grant agreements is on-going and will be provided in the final evaluation report. Three case study examples of the focus groups are presented as well as one monitoring agreement.

Cycling and walking infrastructure

Over a dozen cycling and walking infrastructure improvements have been put in place during 2014/15 and these build on the networks and facilities that have been constructed in previous years. Full analysis will be contained in the 2015/16 AOMR.

20 mph measures

The introduction of 20mph areas across Bristol aims to improve road safety, increase active travel and enhance the local environment. The Central Zone was the first to be introduced in January 2014. The two subsequent areas to be introduced were the Inner South Zone in June 2014 and the Inner North Zone in August 2014. Data collection for the 20mph measures is via before and after Household Interview Surveys. Pre-implementation surveys in the six zones show that majorities (>77%) of residents report that their own streets feel pleasant and relaxed. The number of people who reported feeling that the area was safe for themselves and others as pedestrians varied dependent on age. Generally, support for the 20mph scheme was high (>72%) for their application on local residential streets, but considerably lower (15-35%) for their application on local main roads. Results after implementation are available only for the central area. So far as safety is concerned the proportion of residents who feel safe driving has declined from 89% to 84% and the proportion of residents who feel safe cycling has gone up from 59% to 62%. So far as active travel is concerned the proportion of residents who cycle for ten minutes or more at least once a week in the local area has gone up from 31% to 36%, the proportion of residents who cycle for ten minutes or more most days in their local area has gone down from 16% to 12%, and the proportion of residents who walk for ten minutes or more most days in the local area has gone up from 78% to 88%. So far as the environment is concerned, the proportion of residents disturbed by traffic noise has gone down from 43% to 28%, with perceptions of their own street and streets in the area feeling pleasant and relaxed remaining broadly the same (between 86% and 88%).

Public Transport

Public transport improvements are to services and infrastructure. Service improvements comprise of the following: X18 commuter bus service Kingswood to Aztec West; express commuter coach service Weston-super-Mare to the North Fringe; X2 and X3 Bristol to Portishead (additional to existing X1); 19 and 13 university services (an extension to the 13 was replaced in part by the new X74 service; community transport and demand-responsive commuter services; community transport and demand-responsive commuter services. Bus punctuality improvements include improvements on routes on the A4174, Little Stoke Lane and Emersons Way. Infrastructure improvements have been made on the 24 route and the 6/7 route in Bristol. Financial support, with associated promotion, has included work on the 379 Midsomer Norton to Bristol route.

WEST LSTF and Better Bus Area funding is also improving the on-board environment, travel information, and the promotion of services. These measures include the following: improvements to Real Time Information (RTI) at stops and on buses; next-stop displays and audio announcements; network management measures in BANES; Wi-Fi installation on 300 buses.

Data collection for public transport measures involve satisfaction surveys on corridors served by new or enhanced services, and collecting service-specific patronage figures. Since its introduction, the X18 service has experienced a steady growth in patronage. The Kings Ferry commuter coach service has seen steady patronage growth (after the decline in use at the end of the initial free period). The X18 is popular with a younger demographic and the other express coach services with an older demographic. On the X18, the highest proportions of participants reported having either not made the journey before the introduction of the service (47%), or having switched from using another bus service (40%). This finding represents an interesting shift from the previous year's results, where the majority (53%) had reported switching from car travel. The largest proportion of passengers on The Kings Ferry express coach service had switched from car travel (47%), and the second highest did not make the journey before (20%), demonstrating that this service has been effective in attracting car users.

The University of the West of England service 13 has shown a decline in boardings in 2014/15 but part of its route has been replaced by the X74. The service 19 has seen growth and is now operating commercially. The data for levels of satisfaction on the X1 corridor show a generally increasing trend in levels of satisfaction since 2011, and this is consistent with the longer-term positive trend since 2007. In contrast to the data from the X1 corridor, levels of satisfaction on the X2 and X3 corridor have fallen slightly between 2011 and 2014.

Service enhancements in BANES have rendered 75.3% of passengers satisfied, 15.9% points fewer than in 2012. Satisfaction with punctuality declined to 56.1% a 36.9% point reduction on 2012. 70.7% reported being satisfied with the frequency of buses, 12.6% points less than in 2012. 76.8% were satisfied with value for money, 11.9% points less than in 2012.

Transitions Projects

Four types of project are being carried out to encourage sustainable behaviour change at transition points in the lives of individuals in specific groups as follows: the move to secondary school; transition from compulsory education into jobs or further education and training; transition from College/Sixth Form to first year at university, and transition from first year hall of residence to second year private accommodation; and transition into a new home.

Move to secondary school

Interventions to encourage behaviour change in the move to secondary school have been implemented by Active Travel School Officers (ATSOs) employed by Sustrans and managed by all four UAs. In 2014/15 the ATSOs engaged with over 20 Secondary Schools and over 75 Primary schools. In addition, in south Gloucestershire, 866 level 1, 400 level 2 and 300 level 3 Bikeability training sessions

were run, alongside route planning, pedestrian training, scooter training and led bike rides, and the installation of 20mph zones around schools. 208 scooter spaces and 112 cycle spaces were installed in schools and footways and signing surrounding schools was improved. A schools travel challenge was run with over 1973 participants from 16 schools. In total in 2014/15, 129,020 children participated in sustainable transport activities delivered by the ATSOs. Focus groups in two secondary schools showed that active travel interventions helped pupils to become more aware of sustainability and health issues, to become more confident about travelling on their own, to understand how to cycle safely on the road and repair a bike and to challenge gender stereotypes and help young girls to become confident cyclists.

Transition to work

The Wheels to Work West scheme was launched in September 2013 to work with partner organisations to assist job seekers access training and employment opportunities. In excess of 3000 bus tickets have been distributed to help people access work and training. 25 bikes and 10 scooters were loaned over 2014/15. 20 new Wheels to Work West partner organisations have been engaged in 2014/15, taking the total number of engaged partners to 49. An online questionnaire survey has gathered data on bus ticket use at the time of application for tickets at the partner organisation site. A total of 2,090 completed questionnaires were obtained up to September 2015. Almost half of the respondents were 30 years old or younger and most did not have a driving licence. Attending a training course was selected by 41% of the sample as the main purpose of the free bus journey, followed by starting a new job (23%) and attending a job interview (16%). While a quarter of the sample stated they would still make the journey and pay the full bus fare, half (49%) claimed they would not be able to make the journey. Cost was the most cited barrier to making the journey by bus without the free bus ticket. Qualitative comments made by recipients of bus tickets and loan bikes/scooters indicated that they had been enabling factors in finding and maintaining employment.

Move to university

Interventions to encourage behaviour change in the move to university and from year one to year two at university have been implemented in partnership with the University of Bristol and the University of the West of England, Bristol. Based on the previous year's pilots and a commissioned insight report, a travel marketing campaign was designed making use of some existing TravelWest branding. This was delivered from May to November 2014 starting with a pre-arrival summer e-communications campaign which reached prospective students and followed-up with a series of events during the first 6 weeks of term. The pre-arrival email campaign reached about 80,000 people and social media reached about 104,655 people for first 6 weeks of term. There were 1500 engagements from 40 separate events in the first six weeks of term. The annual UWE travel cordon count for all travel to two campuses (Bower Ashton and Frenchay), including students, staff and visitors on a given day in November, showed a reduction in car alone mode share from 34% to 28%, although park and walk increased from 3% to 7%, a reduction in bus mode share from 31% to 28% and small increases in use of other modes.

Move to new home

The project started by piloting sustainable travel initiatives and engagement with residents in two large new residential development sites in South Gloucestershire (Cheswick and Charlton Hayes). In 2014/15 the project involved continued engagement with new movers into these two developments and engagement with new movers into three further new developments. Interventions designed to reduce single occupancy car trips comprise of the following: provision of Travel Information Packs and associated publicity materials; personalised travel planning services and travel offers. Overall,

the project achieved engagement with 1050 households and distributed 883 tailored information packs to new residents. 749 residents had conversation with Travel Advisors and 111 took up one of the key support offers. In-depth interviews have been undertaken with a small number of residents in Cheswick and Charlton Hayes to explore perceived usefulness and impacts of the intervention.

Contents

1. Introduction

1.1 Introduction and purpose of report

The Local Sustainable Transport Fund was launched in January 2011 with the four West of England unitary authorities (Bath and North East Somerset, Bristol City, North Somerset and South Gloucestershire Councils) being awarded nearly £30 million by the Department for Transport from the fund on two separate but linked project programmes. The Key Commuter Routes (KCR) project programme was implemented in 2011/12 to 2012/13. The West of England Sustainable Travel (WEST) 'Large Project' programme was implemented in 2012/13 to 2014/15 and involved an integrated package of measures covering the entire West of England travel to work area. The WEST project was awarded extension funding covering the 2015/16 financial year, but the outcomes from this funding are not covered by this report.

The WEST Outcome Monitoring Plan was produced in July 2013[1] and sets out how the WEST project programme will be monitored and evaluated in accordance with a Framework provided by DfT[2]. The first Annual Outcome Monitoring Report (AOMR) covering the period to March 2013 was published in December 2013[3]. That report also established the baseline position on outcomes, which is generally based on data for 2010/11 (the year prior to any LSTF investment) with results also presented for 2011/12 (the year preceding WEST programme and first year of two years of KCR programme). The second AOMR covered the period to March 2014. This is the third AOMR and covers the period to March 2015. A final overall evaluation report will be produced in December 2016. As well as outcomes, this report (and its predecessors) contain a summary of progress with delivering elements of the programme to 2014/15, as this is necessary context for interpreting outcomes.

After the Introduction section, the evaluation approach and plan is summarised. Results are then presented on area-wide outcomes. This is followed by detailed reporting on progress with delivery of the programme, organised into four sections covering the business engagement, local communities, public transport and transitions project areas. Finally, a summary is provided on process evaluation which is being undertaken alongside monitoring of outcomes.

1.2 Overview of the WEST programme

The WEST project programme involves an integrated package of measures covering the entire West of England travel to work area which is being implemented in the period 2012/13 to 2014/15 and is aligned with the planned development of homes and jobs in priority growth areas up to 2030. The outcomes of the extension funding in 2015/16 will be presented together with an overall evaluation of the project in December 2016.

The project has a main emphasis on influencing travel made at peak times of day with nine projects under the following three themes:

[1] UWE (2013). West of England Sustainable Travel (WEST) Outcome Monitoring Plan (Version 3.0). University of the West of England, Bristol.
[2] DfT (2012). Local Sustainable Transport Fund Monitoring and Evaluation Framework. Department for Transport, London.
[3] UWE (2013). West of England Sustainable Travel (WEST) Annual Outcome Monitoring Report 2012-13. University of the West of England, Bristol.

- Stimulating Growth in Priority Areas ('tackling congestion to get business and our economy moving' with aims to reduce peak-hour congestion, make it easier for employees to gain access to work and reduce carbon emissions)
    - Area Travel Plans
    - Key Commuter Routes (continuing work started with Key Commuter Routes LSTF project)
    - Business travel
- Connected and Thriving Centres ('completing end-to-end journeys' with aims to support the local economy, improve access to employment, training and education, encourage walking and cycling for local journeys and ensure that our town and city centres can continue to prosper)
    - Local economic activity in urban areas
    - Sustainable travel in key centres
- Transitions to a Low-Carbon Lifestyle ('Training, skills and securing long term benefits' which recognises that our interventions to change travel behaviour are more likely to be effective if they occur at times of change in people's lives, and focuses effort on influencing travel choice at these life transitions to taking advantage of life transitions as opportunities for behavioural change)
    - The move to secondary school
    - Access to work and skills
    - Universities
    - New developments

The West of England project area is shown in Map 0 with 11 key commuter routes ('key corridors') and three strategic employment areas (where Area Travel Plans are being developed) indicated.

The project programme is being delivered via dedicated LSTF teams in five delivery areas working with the four unitary authorities (which each have LSTF project managers):

- Business engagement
- Marketing and communications
- Public transport
- Support services
- Transitions

The context for the programme is that the West of England area has a high level of road congestion and significant anticipated growth in housing and jobs. It has the lowest peak period speeds on main routes of any major urban area in England and car-based commuting comprising 63% of journeys to work. Road transport is estimated to account for one third of carbon emissions generated in the area. The programme has a focus on priority growth areas which account for at least 70,000 of the 95,000 new jobs that are aimed to be created by 2030. Business leaders and the Local Enterprise Partnership (LEP) see good access to the labour market and talent pool as a priority for economic growth in the area.

The West of England represents a self-contained journey to work area with 89% of people living in the area also working in the area. 51% of the population of the area (550,000) live on the 11 Key Commuter Routes targeted by the programme. Both of these data highlight the good potential for interventions within the area to have an impact on commuting behaviour and congestion.

The KCR and WEST LSTF project programmes follow from previous major initiatives which have showed positive outcomes: Greater Bristol Bus Network and Cycling City in particular. WEST is being delivered within the framework of the West of England's Joint Local Transport Plan 3 (JLTP3) 2011-

26 and five major transport schemes that are being implemented in the next ten years alongside JLTP3. Three West of England authorities have also been successful in 2013 with a Cycling City Ambition Fund grant application.

The different themes and projects in the WEST project are designed to interconnect spatially and support end-to-end journeys. WEST is aimed at achieving impacts in the short term (building on past successful initiatives) and medium and long term (as new developments and transport infrastructure are completed and more people experience life transitions).

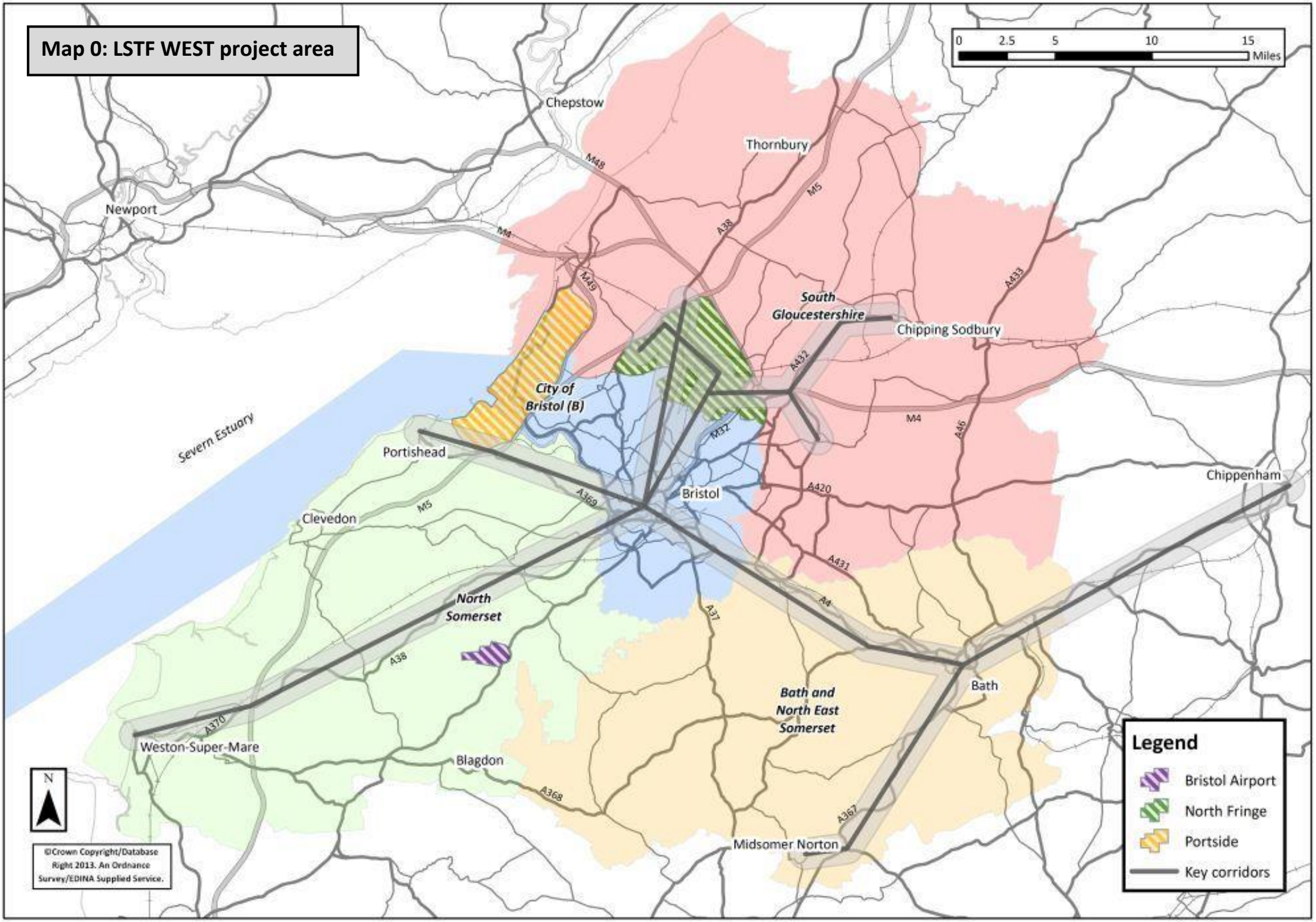
The national LSTF programme has the following two primary objectives:

- support the local economy and facilitate economic development, for example by reducing congestion, improving the reliability and predictability of journey times or enhancing access to employment and other essential services; and
- reduce carbon emissions, for example by bringing about an increase in the volume and proportion of journeys made by low carbon, sustainable modes including walking and cycling.

WEST also aims to address the four secondary objectives of the national LSTF programme:

- helping to deliver wider social and economic benefits (e.g. accessibility and social inclusion) for the community;
- improving safety;
- bringing about improvements to air quality and increased compliance with air quality standards, and wider environmental benefits such as noise reduction; and
- promoting increased levels of physical activity and the health benefits this can be expected to deliver.

A specific set of objectives were identified in the WEST funding bid based around the three programme themes. The objectives are shown in the Indicators Framework included in Section 2. They are consistent with the national LSTF programme objectives but specific to the three themes being pursued in the West of England area. The next section explains how the WEST project programme is being evaluated.


Map 0: LSTF WEST project area
0 2.5 5 10 15 Miles
Chepstow
Thornbury
Newport
M48
M5
M4
A38
A433
M49
South Gloucestershire
Chipping Sodbury
A432
City of Bristol (B)
M4
A46
M32
Severn Estuary
Portishead
A369
Bristol
A420
Chippenham
Clevedon
M5
A431
North Somerset
A4
A37
A38
Bath and North East Somerset
Bath
A370
Weston-Super-Mare
Blagdon
A368
A367
Midsomer Norton
N
©Crown Copyright/Database Right 2013. An Ordnance Survey/EDINA Supplied Service.
Legend
Bristol Airport
North Fringe
Portside
Key corridors

2. Monitoring and Evaluation of WEST Programme

2.1 Evaluation approach

As noted in the WEST Outcome Monitoring Plan (OMP) submitted to DfT in July 2013, the evaluation of LSTF projects is required to meet the following DfT objectives:

- to investigate the contribution of the fund to delivering economic growth and carbon reduction;
- to understand how the fund has delivered against some or all of the secondary objectives;
- to provide accountability to taxpayers and Parliament;
- to fill evidence gaps to inform the case for future local, national or third party funding for sustainable travel and to improve development and appraisal of future proposals; and
- provide an effective method for benchmarking and comparison.

DfT issued some common metrics it wishes LSTF Large Projects (including the WEST programme) to measure in its Monitoring and Evaluation Framework. These have been taken into account in developing the OMP.

The West of England authorities have additional aims from evaluation of the WEST programme:

- to assess the value for money of the programme by considering outcomes/impacts against local objectives;
- to learn about the effectiveness of different interventions in the local context to support improved design of future interventions;
- to test the effectiveness and impact of innovative approaches (e.g. the four projects in transitions theme); and
- to inform the future strategy for local sustainable transport from 2015/16 onwards.

This leads to the following research questions which provide the foundation for the evaluation:

1. What level of engagement was achieved with stakeholders and the public and what factors led to increased engagement?
2. What is the change in acceptance of using low carbon travel alternatives for commuting, education and local non-work journeys?
3. What is the overall change in use of different travel modes for commuting, education and local non-work journeys and how far can this be attributed to LSTF interventions?
4. How do changes in commuting, education and local non-work journeys contribute to wider impacts (carbon, economic growth)?
5. How are outcomes/impacts distributed geographically and by socio-demographic groups?
6. What measures have been particularly successful and why, and what measures have been less successful and why?
7. What indication is there that changes in use of low carbon travel alternatives will be sustained or grow beyond the investment period?
8. How can HEAT be applied to estimate the health benefits of increased walking and cycling?

The WEST project represents a complex intervention due to the dynamic environment in which it is being implemented, the interaction between different measures within an overall package, the targeting of multiple behaviours, the impacts potentially taking time to build up and the effects

varying across the population. It is therefore apparent that the evaluation needs to address the questions of how the intervention causes change, as well as what impacts are achieved.

The evaluation approach has been developed following the steps recommended in the DfT guidance on transport impact evaluation[4]. It has been determined that an *extended intervention logic evaluation* approach is appropriate. This is because the evaluation resources do not allow large-scale collection of primary data. The approach involves bringing in elements of a theory-based approach into a study of outcomes so that the evaluation can answer questions about why change was produced (as well as what change occurred). The main features of this approach are:

- Collection of routine secondary monitoring data relevant to the programme;
- Stakeholders provide views on connections between outputs and outcomes; and
- New data is collected where important gaps are identified and resources permit it.

A programme logic map was included in the OMP which provides a systematic and visual representation of how the interventions carried out are expected to achieve the programme objectives through engagement with target agents and users and modification of travel knowledge, perceptions, capabilities, behaviour and satisfaction. More specific logic maps have been produced for the four project areas of the WEST programme that have been defined for the purposes of monitoring and evaluation (business engagement, local communities, public transport, transitions). Section 2.2 explains how the logic maps enabled the identification of indicators to monitor in the WEST programme evaluation.

In addition to monitoring and evaluating the *outcomes* of the WEST programme, there is value in learning about the *process* of delivering the programme. Hence a *process evaluation* is being conducted. This involves documenting what happens in a programme in order to learn about the effectiveness of its delivery. Quantitative Information on the implementation of the WEST programme will be obtained through project management data on inputs and outputs. This will be complemented by qualitative data in the form of self-completion questionnaires completed by delivery managers every six months. These will seek to help answer:

- What interventions were implemented, by whom, and who were the recipients?
- What resources, including financial, were mobilised in each intervention?
- Which interventions worked well and why?
- Which interventions worked less well and why?
- What lessons have been learnt and how can these lessons help improve the design and delivery of future programme interventions?

Two forms have been designed to gain an understanding of objectives, activities, issues and thoughts during the reporting period. One form is designed to be completed by managers of specific work packages or measures within the WEST programme, with another form for those who manage wider project areas, tranches or themes.

Summary findings from the process evaluation are included in Chapter 8 of this report.

2.2 Indicators

Data requirements follow from the logic maps which show how interventions are expected to achieve objectives via delivery of projects (outputs), engagement of agents and users (participation), changes in travel perceptions, behaviour and satisfaction (outcomes) and benefits to society

[4] Hills, D. and Junge, K. (2010). Guidance for Transport Impact Evaluations: Choosing an Evaluation Approach to Achieve Attribution. Report to Department for Transport. Available at: http://www.dft.gov.uk/publications/guidance-for-transport-impact-evaluations/

(impacts). The outcome indicators represent the short to medium term changes in thoughts about transport and travel behaviour of people living, working and visiting the West of England. The Impact indicators represent the longer term effects for society. These are dependent on outcomes being achieved.

An Indicators Framework produced for the OMP is shown in Table 2.1. It is similar to the programme logic map but it itemises the set of outcome and impact indicators that we have identified as being priorities to monitor. Impact indicators are categorised according to different objectives and themes of the programme. The Indicators Framework shows which indicators are derived from data being collected centrally by DfT. The indicators in Table 2.1 are area-wide indicators that apply across the entire West of England area and population. There are also outcome and impact indicators which are being monitored for targeted sub-areas or sub-populations within the West of England area. These are considered in this report in the chapters relating to the four project areas (business engagement, local communities, public transport, transitions).

As part of the *extended intervention logic evaluation* approach, data is collected on inputs, outputs and external factors, as well as on outcomes and impacts. This is in order to test whether anticipated mechanisms for change occur. Indicators for inputs, outputs, outcomes and impacts are as follows:

1. Inputs – expenditure and resources are monitored monthly based on quarterly spend information. Information on this is reported to DfT at the end of each financial year with a summary included in the Annual Outputs Report. These data are not presented in this report.

2. Outputs (infrastructure and services) – infrastructure and services delivered are monitored internally based on monthly progress reports from work package managers with the information collated in monthly 'Highlights Reports' which record achievement or slippage of milestones. Summary of progress at the end of each financial year is reported to DfT in the Annual Outputs Report. This report includes more detailed information about outputs than included in the Annual Outputs Report as this is important for interpretation of results on outcomes.

3. Participation – engagement with agents (e.g. employers, communities, schools, and universities) and users (e.g. employees, students) is monitored based on project management data (e.g. number of employers applying for grants, number of residents participating in community events). Summary of progress is reported to DfT in the Annual Outputs Report. This report also includes more detailed information about participation than that included in the Annual Outputs Report, and this is again because this information is important for interpretation of results on outcomes.

4. Quantifiable Outcomes and Impacts – the Indicators Framework (Table 2.1) provides details of the area-wide indicators that are being monitored. As stated, there are also outcome and impact indicators for targeted sub-areas or sub-populations. A summary table of outcome and impact indicators is provided in Tables 2.2 and 2.3 (for area-wide indicators and key indicators for four project areas).

Table 2.1 - WEST Indicators Framework

<table>
<tr><th>Programme broad themes</th><th>Projects</th><th>Outcome indicators</th><th>Impact indicators</th><th>Local objectives (impacts)</th></tr>
<tr><td rowspan="3">Theme 1: Stimulating growth in priority areas</td><td>Area travel plans</td><td rowspan="8">1. Travel perceptions and attitudes
Perceptions of transport alternatives
Attitudes towards different modes

2. Travel behaviour
Mode use frequency for different journey purposes
Vehicle flows
Bus patronage
Cycling flows

3. Travel satisfaction
Satisfaction with transport services, facilities and information
Bus satisfaction</td><td rowspan="8">Economic growth – road congestion
• AM peak journey time per mile
• Variation in journey time
• Bus punctuality
Economic growth – employment
• Access to employment
• Access to commercial centres
• Modal split at workplaces
• Journey to work satisfaction
• Proportion of WEST area in employment
Carbon emissions
• Carbon emissions per capita associated with road transport
• Number of new alternative and conventional fuel vehicles
Quality of life
• Nitrogen dioxide concentration levels in AQMAs
• Road casualties (KSI)
Physical activity and health
• Walking level per person
• Cycling level per person</td><td>1.1
Widened lower carbon access to employment and improved economic growth through reduced congestion</td></tr>
<tr><td>Key commuter routes</td><td>1.2
Reduced carbon emissions per capita for journeys to work</td></tr>
<tr><td>Business travel</td><td>1.3
Improved health, reduced sickness levels and increased workforce productivity</td></tr>
<tr><td rowspan="2">Theme 2: Connected and thriving centres</td><td>Local economic activity in urban areas</td><td>2.1
Strengthened local economies</td></tr>
<tr><td>Sustainable travel in key centres</td><td>2.2
Improved sustainable transport links / access for employment, training, retail, education and leisure</td></tr>
<tr><td rowspan="4">Theme 3: Transitions to a low carbon lifestyle</td><td>The move to secondary schools</td><td>2.3
Increased physical activity and improved health through greater use of walking/cycling for local journeys</td></tr>
<tr><td>Access to work and skills</td><td>3.1
Improved sustainable transport access to work and training for young people</td></tr>
<tr><td>Universities</td><td>3.2
Increased use of sustainable transport among students and reduced congestion in adjacent points in the network</td></tr>
<tr><td>New developments</td><td>3.3
New sustainable travel habits among residents in new developments</td></tr>
</table>

Note: Indicators in *italics* are those that DfT require to be monitored (see DfT's LSTF Monitoring and Evaluation Framework)

Data collection strategies have been produced to collect the information identified above. Separate strategies have been produced for aggregate, area-wide data and for the four project areas:

- Business engagement
- Local communities
- Public transport
- Transitions

The data collection strategies are included in the OMP (Appendices 8-20). The main emphasis in the data collection strategies is in collecting quantitative data on outputs, participation and outcomes, but some qualitative research will be conducted with target groups where this is considered to be particularly valuable in understanding reactions to and experiences of interventions.

Table 2.2 - Area-wide indicators, metrics, and data sources

Outcome	Indicators	Metrics	Sources
"To improve perceptions, attitudes, capabilities with respect to transport alternatives"	Attitudes towards using different travel modes	Attitudes towards using different travel modes for journey to work	YouGov commissioned online survey
"To improve satisfaction with travel alternatives to single occupancy car use"	Satisfaction with transport alternatives	Satisfaction with transport services, facilities and information	National Highways Transport Survey
	Bus satisfaction	Bus passenger satisfaction	Passenger Focus – Bus Passenger Satisfaction Survey
"To change travel behaviours/patterns with greater use of bus, walking, cycling and other alternatives to single occupancy car use"	Mode share	Mode use frequency by journey purpose	National Highways Transport Survey
	Vehicle flows	Annual average number of vehicles/cars over 24 hours/7-10am	Traffic count data (ATCs and MCCs across 4 UAs)
	Bus patronage (JLTP3 primary indicator)	Number of passengers per year	Provided by bus operators
	Cycling flows (JLTP3 primary indicator)	Annual average weekly total of cycling counts	Cycle count data (ATCs and MCCs across 4 UAs)
Objective	**Indicators**	**Metrics**	**Sources**
"To reduce the costs of congestion on the regional economy"	Journey time (JLTP3 secondary indicator)	Average AM peak journey time per mile	Trafficmaster data held in Strategis database

Outcome	Indicators	Metrics	Sources
	Journey time variability	Variation in journey time on key corridors	Trafficmaster data held in Strategis database
	Bus punctuality (JLTP3 secondary indicator)	Proportion of buses starting on time, excess waiting time, and proportion of buses on time at intermediate and non-timing points	Data collected from operators by UAs and reported to DfT
"To tackle transport emissions of carbon dioxide"	Carbon emissions (JLTP3 primary indicator)	Carbon dioxide (CO_2) emissions per-capita associated with road transport	Data supplied by DECC
	Low emission vehicles	Number of new alternative fuel and conventional fuel vehicles	DVLA licensing data supplied by DfT
"To increase accessibility to employment and commercial centres"	Access to employment	Total number of households able to access employment area within 20/40 mins using PT/walking and cycling	Accessibility model
	Access to commercial centres	Total number of households able to access commercial centres within 20/40 mins using PT/walking and cycling	Accessibility model
	Modal split at workplaces	Number of commuting trips by mode per 100 staff	Employee surveys (conducted in selected areas)
	Journey to work satisfaction	Satisfaction with typical journey to work	Employee surveys (conducted in selected areas)
	Proportion of WEST area in employment	Job Seekers Allowance (JSA) claimant numbers	West of England Labour Market Report
"To improve air quality, quality of life, and security"	Public perceptions of air quality	Perceptions of traffic pollution	Bristol Quality of Life survey
	Nitrogen dioxide (NO_2) (JLTP3 secondary indicator)	NO_2 concentration levels	AQMA data
	Road casualties (JLTP3 primary indicator)	Road casualty killed and seriously injured	STATS19 data

Outcome	Indicators	Metrics	Sources
"To promote physical activity through active travel"	Walking level per person	Walk for 30 mins or more, walk at all)	Active People Survey
	Cycling level per person	Cycle for 30 mins or more, cycle at all	Active People Survey
	Cycling level of Bristol residents	Cycle in last week, cycle to work	Bristol Quality of Life Survey

Table 2.3 - Key indicators for four project areas

Project area	Outcomes	Key indicators	Sources
Business Engagement			
Area Travel Plans	Decreased single occupancy car journeys to work Increased satisfaction with journey to work More positive attitude towards using different modes for journey to work	Modal split at workplaces Satisfaction with journey to work Consideration of using different transport modes for journey to work	Employee travel survey
Low Carbon Vehicles	Increased usage of low carbon vehicles	Usage statistics	Project monitoring
Freight Consolidation	Reductions in emissions	CO_2, CO, NOx and PM emissions saved	Freight consolidation centre monthly reports
Local Communities			
Community Grants	Increased walking and cycling	Number of new walkers/cyclists and time spent walking/cycling	Community project grant monitoring forms
20mph	Reduction in vehicle speed	Average and percentile vehicle speeds	Key sites radar speed data
	Reduction in road casualties	Road casualty killed and seriously injured	STATS19 data
	Improved perceptions of traffic speed and road safety Increased walking and cycling	Perceptions of traffic speed and road safety in local neighbourhood Frequency of walking and cycling	Household interview survey (before and after)
Cycling and Walking Infrastructure	Increased number of cyclists	Number of new cyclists and time spent cycling	Cycle counters and user intercept surveys
Public Transport			
New/enhanced services	Increased satisfaction	Satisfaction with service	Bus passenger satisfaction survey
	Patronage sufficient for long-term financial sustainability	Number of passengers per month	Bus patronage aggregated data supplied by operators
Transitions			

The Move to Secondary School	Decreased single occupancy car journeys to school	Modal split at schools	Hands up survey
Wheels to Work WEST	Improved sustainable access to work and skills	Sustainable journeys to work/skills generated by project	Participant survey
Universities	Decreased single occupancy car journeys to university	Modal split at universities	University students survey
New Developments	Decreased single occupancy car journeys	Modal split at new developments	Residents survey

2.3 Annual Outputs Report

The Annual Outputs Report 2014/15 was submitted to the DfT in July 2015. It provides summary details about inputs and outputs delivered in the financial year, and is organised under the following categories:

- Programme management and evaluation
- Business engagement
- Cycling and walking infrastructure
- Bus service improvement measures
- Community engagement
- Transitions
- Marketing and communications

The information provided for each of the above categories included the number of people reached and a summary of achievements.

Reference to the Annual Outputs Report 2014/15 is made in this report where appropriate. In some cases, additional information on inputs and outputs (both in terms of infrastructure/activities and participation delivered in 2014/15) is included in this report.

Each of the following chapters reports progress with delivery and data collection.

3. Area wide data

This section reports area-wide outcomes **for the period 2010/11 to 2014/15 –** with earlier historical results reported where available. The outcomes relate to:

- Travel perceptions and satisfaction
- Travel behaviour
- Congestion and reliability
- Carbon emissions
- Access to employment and commercial centres
- Air quality and road casualties
- Physical activity
- Economic activity

For the most part the results in this section are presented at the sub-regional level (West of England (WoE) area) or unitary authority (UA) level, although disaggregation to a more localised level will be reported where this is appropriate (for example, when investment has been focused on sub-areas).

3.1 Travel perceptions and satisfaction

The WEST programme is intended to increase positive perceptions and satisfaction with alternatives to single occupancy car use. This section reports results on travel perceptions and satisfaction from a number of different data sources.

NHTS – Satisfaction with transport alternatives

The National Highways and Transport Survey (NHTS) conducted by Ipsos MORI via a postal distribution of questionnaires to residential addresses in participating local authorities collects a variety of useful information at local authority level, including perceptions and satisfaction with local transport services, facilities and information (for different modes) and mode use frequency for different journey purposes. The survey has been conducted in the four UAs in WoE since it started in 2008, with response sample sizes in 2015 of 866 in BANES, 1068 in BCC, 882 in NSC and 787 in SGC. Mode use frequency is only available from 2011 onwards.

Presented below are the results from NHTS questions on satisfaction with transport alternatives. The results apply to calendar years with 2010 taken as representing the baseline (indicated with grey shading), but historical results back to 2008 are also shown.

Cycling

Table 1 - Satisfaction with cycle parking

	2008	2009	2010	2011	2012	2013	2014	2015
BANES	43.0	44.4	45.9	55.3	52.5	55.0	54.1	57.0
Bristol	41.9	47.0	49.0	56.0	54.6	53.4	52.8	52.0
North Somerset	43.5	44.0	47.9	51.8	51.0	52.3	51.5	55.0
South Gloucestershire	48.4	49.8	53.0	56.3	56.3	56.8	54.7	60.0
WoE sub-region	44.2	46.3	49.0	54.9	53.6	54.4	53.3	56.0

Table 2 - Satisfaction with location of cycle lanes

	2008	2009	2010	2011	2012	2013	2014	2015
BANES	N/A	N/A	N/A	N/A	52.6	54.3	53.3	57.0
Bristol	N/A	N/A	N/A	N/A	53.8	53.7	51.1	51.0
North Somerset	N/A	N/A	N/A	N/A	56.1	57.0	57.2	60.0
South Gloucestershire	N/A	N/A	N/A	N/A	60.6	63.0	58.0	62.0
WoE sub-region	N/A	N/A	N/A	N/A	55.8	57.0	54.9	57.5

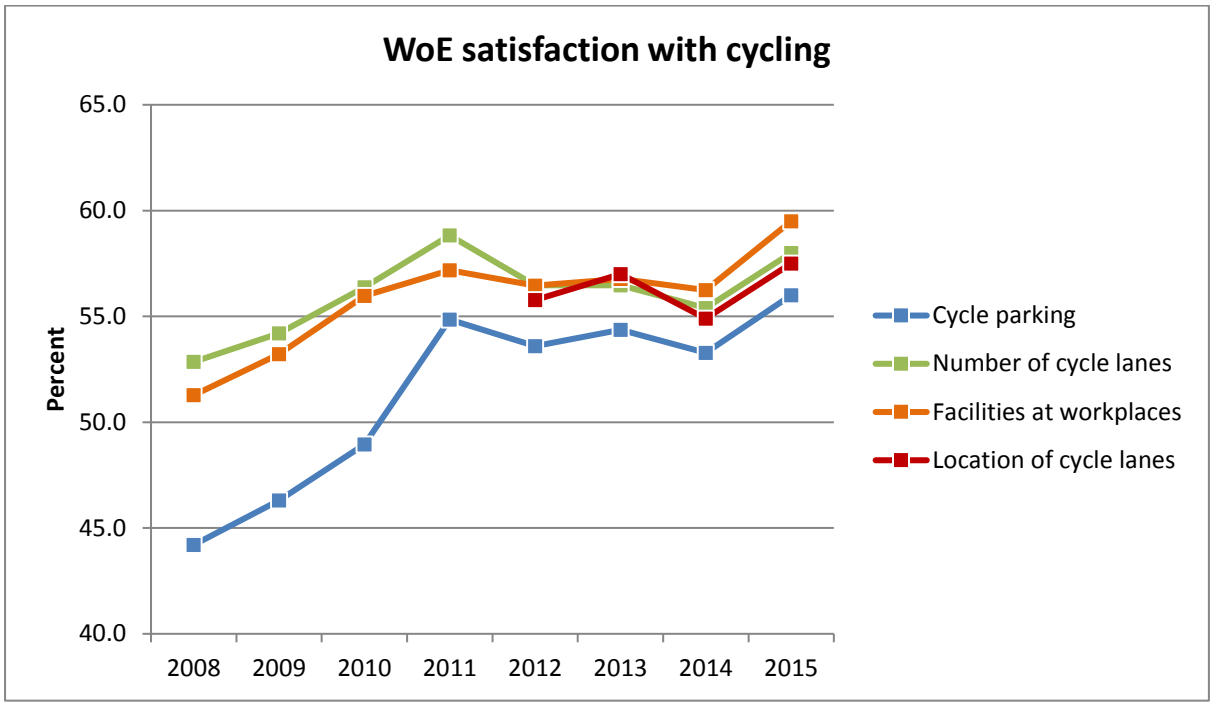
Table 3 - Satisfaction with number of cycle lanes

	2008	2009	2010	2011	2012	2013	2014	2015
BANES	48.2	50.4	50.0	55.5	51.6	53.2	52.4	55.0
Bristol	49.5	51.6	53.8	57.3	56.8	53.6	51.9	53.0
North Somerset	51.3	53.4	57.7	57.7	55.6	56.2	56.6	60.0
South Gloucestershire	62.4	61.4	64.0	64.8	61.9	62.9	60.7	64.0
WoE sub-region	52.9	54.2	56.4	58.8	56.5	56.5	55.4	58.0

Table 4 - Satisfaction with cycle facilities at workplaces

	2008	2009	2010	2011	2012	2013	2014	2015
BANES	48.4	51.0	53.1	54.7	53.5	53.5	54.2	58.0
Bristol	50.8	56.2	58.3	58.6	58.2	58.2	57.1	61.0
North Somerset	50.7	49.6	54.2	55.2	53.9	55.6	54.5	58.0
South Gloucestershire	55.2	56.1	58.3	60.2	60.2	59.8	59.2	61.0
WoE sub-region	51.3	53.2	56.0	57.2	56.5	56.8	56.3	59.5

Chart 1 - WoE sub-region levels of satisfaction with cycle provision



Note: For all analyses in this sub-section a satisfaction figure for the WoE sub-region has been estimated as the mean value of the individual authority figures. We are considering the development of a more precise population-weighted mean.

The results on satisfaction with cycling provision show a positive picture in the past year. In all categories, satisfaction with cycling has risen over the period 2014-2015 (Chart 1). This increase resumes the longer-term positive trend in satisfaction in these categories since 2008, which had plateaued in the previous year. Satisfaction in all categories is above that of the 2010 baseline, albeit by a relatively small amount.

Of the four authorities, respondents in South Gloucestershire reported the highest levels of satisfaction across the four categories. At the aggregate level, the greatest positive change in satisfaction since 2010 has been with the number of cycle parking facilities available (+7.0 percentage points), whilst the smallest change in satisfaction has been recorded with the number of cycle lanes available (+1.6 percentage points).

Buses

Table 5 - Satisfaction with bus fares

	2008	2009	2010	2011	2012	2013	2014	2015
BANES	29.5	31.9	29.9	32.1	29.1	29.2	33.2	38.0
Bristol	19.8	23.8	23.7	22.8	22.0	20.6	40.3	37.0
North Somerset	36.9	39.9	41.2	40.5	40.0	40.5	44.2	46.0
South Gloucestershire	23.9	29.4	32.5	31.0	32.6	32.9	41.3	40.0
WoE sub-region	27.5	31.3	31.8	31.6	30.9	30.8	39.8	40.3

Table 6 - Satisfaction with bus service frequency

	2008	2009	2010	2011	2012	2013	2014	2015
BANES	57.2	57.1	56.2	58.2	59.3	62.1	61.6	64.0
Bristol	47.3	56.0	57.9	57.1	57.1	57.9	59.3	56.0
North Somerset	55.4	61.2	59.4	58.6	59.0	62.6	61.3	61.0
South Gloucestershire	46.9	52.5	56.3	55.8	56.6	59.1	59.0	57.0
WoE sub-region	51.7	56.7	57.5	57.4	58.0	60.4	60.3	59.5

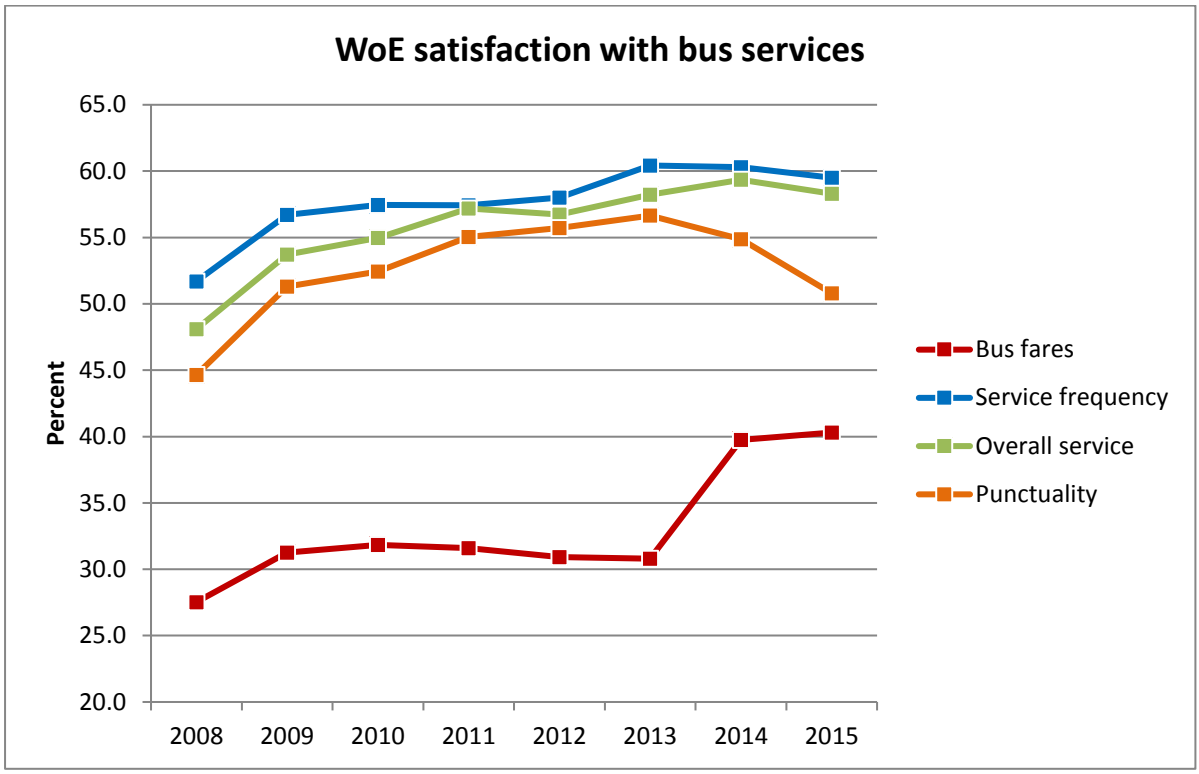
Table 7 - Satisfaction with bus service overall

	2008	2009	2010	2011	2012	2013	2014	2015
BANES	54.0	54.7	54.5	57.3	57.5	60.1	61.2	64.0
Bristol	40.5	48.2	49.6	51.7	52.0	51.7	56.0	52.0
North Somerset	53.6	60.2	60.5	61.2	59.6	61.8	61.7	61.0
South Gloucestershire	44.3	51.8	55.3	58.6	57.8	59.3	58.5	56.0
WoE sub-region	48.1	53.7	55.0	57.2	56.7	58.2	59.4	58.3

Table 8 - Satisfaction with bus punctuality

	2008	2009	2010	2011	2012	2013	2014	2015
BANES	52.0	53.9	50.6	55.8	57.2	59.1	57.4	56.0
Bristol	33.9	43.9	47.5	49.0	49.7	50.4	49.9	43.0
North Somerset	51.0	57.8	57.4	58.5	58.6	60.0	57.8	56.0
South Gloucestershire	41.7	49.6	54.2	56.9	57.4	57.1	54.4	48.0
WoE sub-region	44.7	51.3	52.4	55.1	55.7	56.7	54.9	50.8

Chart 2 - WoE sub-region satisfaction with bus service provision



The data for bus services demonstrate that levels of satisfaction have risen since the 2010 baseline in two of the three sub-categories: fares and service frequency (Chart 2). The most significant change to passenger satisfaction in this AOMR is the continued decline in satisfaction with punctuality, which had peaked in 2013 at 56.7%, but which over the past two reporting periods has declined to its current level of 50.8% (-5.9 percentage points since 2003). The 2015 result takes satisfaction with punctuality below the level of the 2010 baseline of 52.4%. Whilst it is still above the 2010 baseline level, there has also been a slight decline in satisfaction with bus service frequency over the past two reporting periods, in 2015, satisfaction in this category was 2.1 percentage points lower than its peak of 56.7% in 2013.

A further headline statistic is the continued (albeit slowed) positive trend in satisfaction with fares. This is suggested to be a reflection of the recent changes to the fare structure on First services in Bath, which mirrored those in Bristol the year before. It is evident that these changes have had a positive impact of this on passenger satisfaction, with BANES reporting a +4.8 percentage point rise in satisfaction with fares over the period 2014-2015. In the previous AOMR the headline statistic was Bristol's drastic increase in satisfaction – possibly attributed to the fare changes – however in 2015 there has been a slight reduction in satisfaction on the 2014 figure (-3.3 percentage points), which may indicate a levelling out with satisfaction as passengers become used to the new fares. In the 2013 AOMR, satisfaction with bus fares was highlighted as a category in which the public were considerably less satisfied than in other areas. Whilst still lagging behind other factors in terms of satisfaction, it is fares that have made the most substantial positive increase across the sub-region since the 2010 baseline.

More generally, there have been gains in overall satisfaction with bus services in only one of the four UA areas over the past year: BANES (+1.8 percentage points). There have been decreases in overall satisfaction in Bristol, (-4.0 percentage points) North Somerset (-0.7 percentage points), and South Gloucestershire (-2.5 percentage points). At the aggregate level, overall satisfaction in 2015 fell slightly

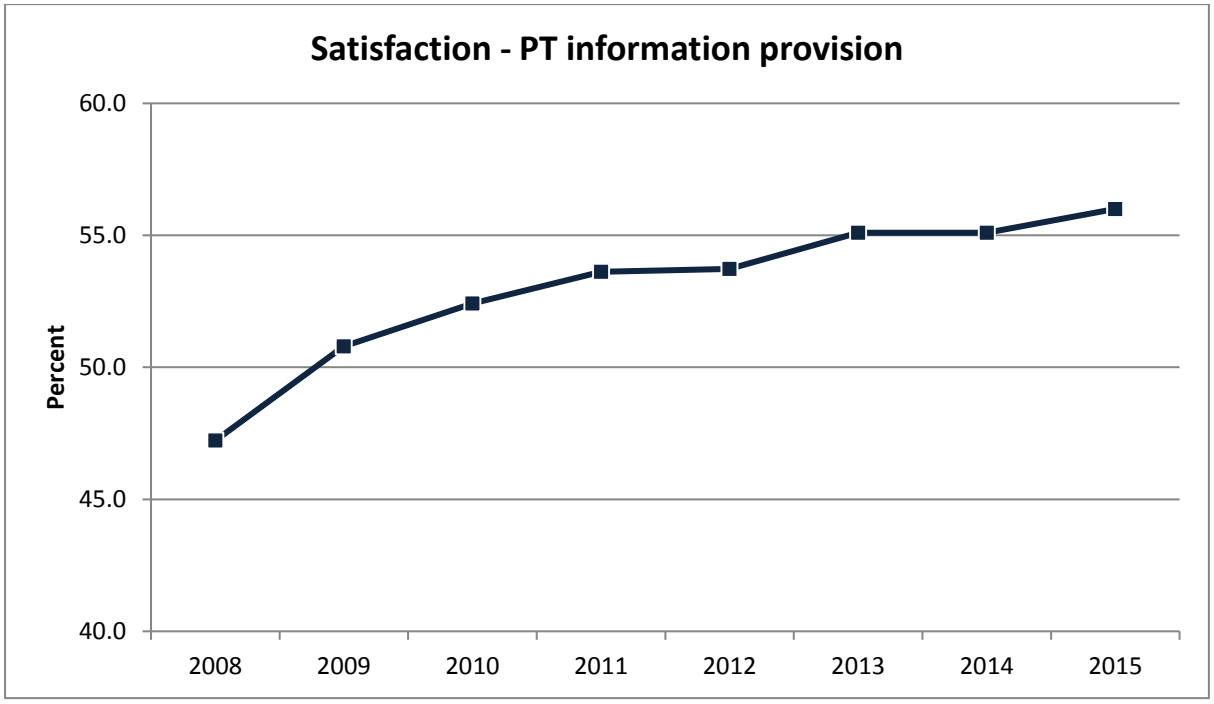
from its peak in 2014, declining by 1.1 percentage points across the sub-region. Satisfaction in all UAs is nonetheless greater than at the 2010 baseline. There has been a sub-regional positive change in satisfaction of +3.3 percentage points since 2010. This is in line with an increase of +10.2 percentage points since 2008.

Public transport travel information

Table 9 - Satisfaction with public transport information provision

	2008	2009	2010	2011	2012	2013	2014	2015
BANES	48.2	50.3	50.0	52.2	53.2	54.4	54.5	59.0
Bristol	45.5	50.7	51.3	52.4	50.8	51.8	53.9	52.0
North Somerset	49.6	52.1	53.1	56.3	55.8	57.6	57.2	57.0
South Gloucestershire	45.6	50.1	55.3	53.6	55.1	56.6	54.8	56.0
WoE sub-region	47.2	50.8	52.4	53.6	53.7	55.1	55.1	56.0

Chart 3 - WoE sub-region satisfaction with PT travel information provision



Satisfaction with public transport travel information provision has increased consistently from year to year since the 2010 baseline. Across the WoE sub-region, in 2015 there has been a change of +3.6 percentage points since 2010, and an increase of 0.9 percentage points on the 2014 figure. Since the last reporting period, Bristol and North Somerset have seen slight reductions in satisfaction, of -1.9 and -0.2 percentage points respectively, whilst BANES and South Gloucestershire both recorded increases in satisfaction of +4.5 and +1.2 percentage points respectively.

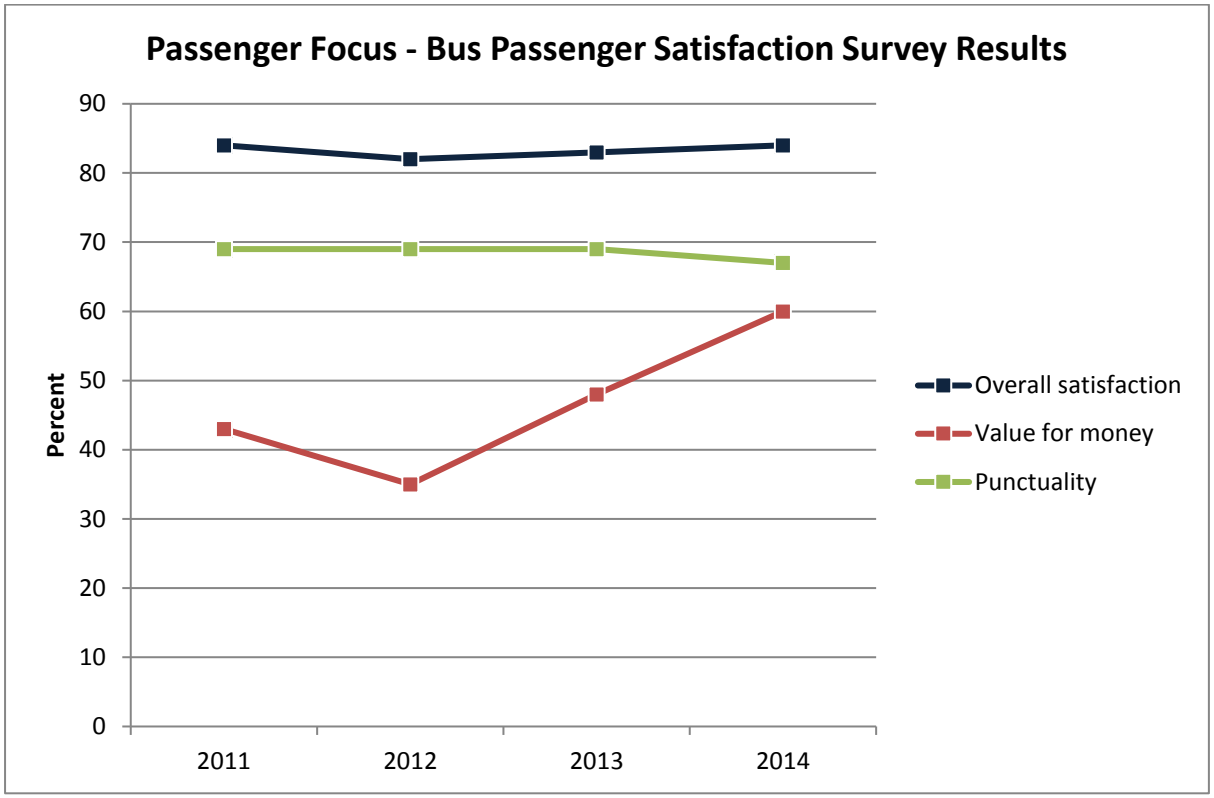
Passenger Focus Bus Passenger Satisfaction Survey – Bus satisfaction

Passenger Focus conducts a national annual survey of levels of satisfaction with bus services in the UK. These survey results are a valuable additional source of satisfaction data which can be used alongside the NHTS to create a fuller understanding of levels of public satisfaction with bus services. It needs to be noted that NHTS is conducted with residents while the Bus Passenger Satisfaction Survey (BPSS) is conducted with bus users. Data for 2014 will be available in the 2014/15 AOMR.

Table 10 - Passenger Focus - Bus Passenger Satisfaction Survey

	2011	2012	2013	2014
Overall satisfaction	84	82	83	84
Value for money	43	35	48	60
Punctuality	69	69	69	67

Chart 4 - Bus passenger satisfaction survey results



Data from the BPSS is only available since 2011. The 2014 survey results suggest a slight increase in overall satisfaction (+2 percentage points) from 2012, but it now lies at 84%, the same as the 2001 baseline data.

Satisfaction with punctuality has declined slightly on the stable figure recorded in the previous three years, and now stands at 67% (-2.0 percentage points). This corresponds with a similar trend seen in the results of the NHTS.

The BPSS findings show a strong increase in satisfaction with fares: an increase in satisfaction of 25 percentage points in the period 2012-2014 to 60%. This result may be linked to a significant change to the fare structure for First buses travelling in Bristol, which came into effect in autumn of 2013, and the subsequent fare changes in Bath, which came into effect the following year.

YouGov Attitudes Survey – Attitudes towards using different modes

This section contains results from the 2012 YouGov attitudes survey which was commissioned by the WEST project to explore public attitudes in the West of England towards different transport modes for journeys to work. The survey sample is members of the YouGov panel who live in West of England area and are in employment and who accepted the invitation to complete an on-line questionnaire. The intention is for there to be a follow-up survey conducted in 2015 to assess how attitudes have changed over the course of the LSTF project. While these baseline data have been reported in the previous reports, we repeat them here for reference. For the evaluation, responses to a number of relevant questions have been selected, with the focus on differences in attitudes to car travel and public transport use for work trips. Map 1 supplements this, and shows the postcode data collected in the survey. Over the course of the evaluation a spatial analysis of survey responses will be developed to explore how attitudes are distributed across the sub-region.

Table 11 - Consideration of public transport for work trips

Thinking about your journey to work, which of the following statements best describes your current thoughts about using public transport? (n = 554)

I haven't really thought about using public transport	31.9%
I have thought about using public transport but decided not to	39.7%
I am considering using public transport but haven't thought about when I will start	0.9%
I am considering using public transport more often sometime soon	0.7%
I tried to use public transport previously, but decided not to continue	16.4%
I do sometimes use public transport	10.3%

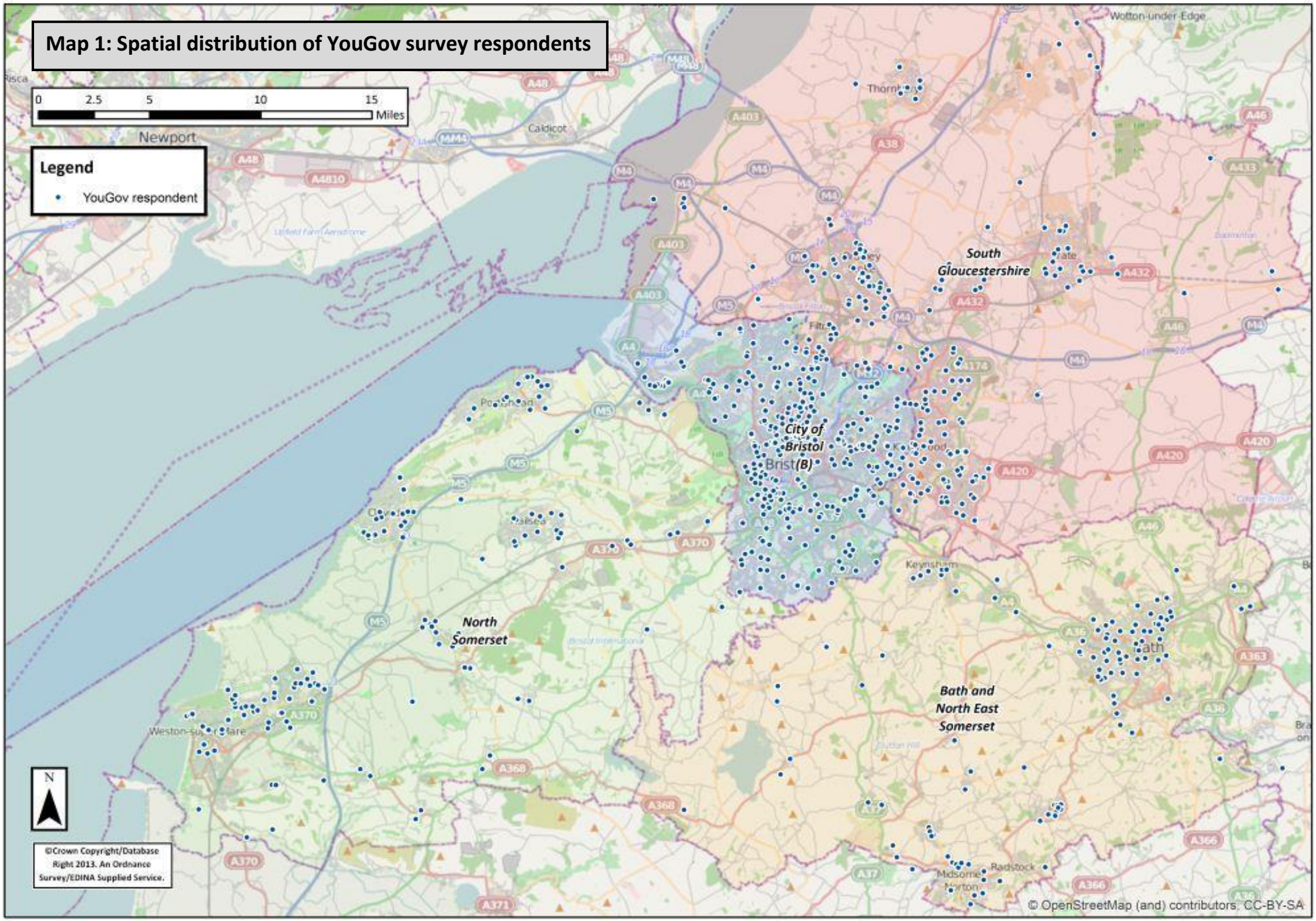

Map 1: Spatial distribution of YouGov survey respondents
0 2.5 5 10 15
Miles
Legend
YouGov respondent
Newport
Caldicot
Wotton-under-Edge
South Gloucestershire
City of Bristol (B)
North Somerset
Bath and North East Somerset
Keynsham
Radstock
Midsomer Norton
Weston-super-Mare
N
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Table 12 - Views and attitudes on car use (percent)

	Definitely agree	Tend to agree	Neither agree or disagree	Tend to disagree	Definitely disagree	N/A	n
I enjoy driving	26.4	36.8	21.0	10.0	4.8	1.0	900
I find driving stressful	5.8	20.0	24.8	29.8	18.7	1.0	900
With rising costs, owning a car has become less appealing	15.8	47.6	19.8	12.2	3.9	.7	1000
If I could, I would gladly go without a car	11.5	22.9	16.0	24.5	24.5	.6	827
If I could, I would prefer to drive less than I do	12.0	31.2	28.2	18.6	8.7	1.3	827
There are no practical alternatives to travelling by car	33.0	32.2	13.3	13.5	7.7	.2	827
I would only travel by bus if I had no other choice	27.3	29.6	18.7	15.5	8.0	.9	1000
I think it is cheaper for me to go by car rather than use public transport	35.7	36.0	15.5	6.7	4.1	2.1	827
People should be able to use their cars as much as they like	24.3	33.9	19.6	15.8	6.0	.4	1000
Restrictions and charges should be implemented to discourage driving	7.8	16.7	18.8	20.9	34.9	.9	1000

Table 13 - Views and attitudes on public transport use (percent)

	Definitely agree	Tend to agree	Neither agree or disagree	Tend to disagree	Definitely disagree	N/A	n
I like travelling by bus	3.2	17.1	25.0	25.8	27.5	1.4	1000
I find travelling by bus stressful	18.3	32.3	22.0	18.6	6.6	2.2	1000
I find travelling by bus is expensive	48.2	32.6	10.5	4.6	1.4	2.7	1000
In general, when I have the choice I would rather walk or cycle than go by bus	32.3	34.6	16.9	11.4	3.9	.9	1000

Table 14 - Perceptions and experiences of consequences of not owning a car (percent)

	Definitely agree	Tend to agree	Neither agree or disagree	Tend to disagree	Definitely disagree	N/A	n
Not having a car *would* seriously damage my career prospects	29.5	24.5	17.9	16.0	10.9	1.2	827
Not having a car *has* seriously damaged my career prospects	9.8	14.5	22.5	20.2	28.9	4.0	173

People who don’t own a car are at a disadvantage	17.5	44.7	20.3	11.4	5.8	.3	1000

The results reflect the levels of car use and public transport use reported in the following section. Interestingly, in terms of members of the public considering public transport use, the highest proportions of respondents have considered using public transport for their journey to work but have decided not to do so (39.7%).

Some light is shed on this by looking at views and attitudes about car use. The majority of respondents enjoyed driving (63.2%) and did not find it stressful (48.5%). About half of respondents would prefer to keep their cars (49%), but 43.2% would like to drive less if possible. The majority of respondents nonetheless felt that there is no practical alternative to the car for them (65.2%); despite a majority also feeling that the car is becoming less appealing as costs rise (63.8%). There remains a perception amongst people who drive to work that public transport is more expensive than car travel (71.7%). Amongst all respondents the majority are in favour of people being able to use their cars as often as they wish (58.2%), and there is disagreement that restrictions and increased charges should be imposed on drivers to encourage less car use (55.8%). These results suggest a situation in which there is some opportunity to encourage drivers to use their cars less for work trips – mainly due to the rising costs of car use – however this opportunity will be difficult to realise as public transport is not seen by the majority as a practical alternative.

Looking at views and attitudes towards bus use, the majority of respondents did not like travelling by bus (53.3%) and found the bus to be stressful (50.6%). An even stronger majority of respondents found the bus to be expensive (80.8%), and this mirrors the fears of car drivers in relation to the relative costs of bus travel and car travel. The majority of respondents would prefer to travel by bicycle or foot instead of the bus when given the choice (66.9%). However it should be noted that this is not an indicator of levels of cycling and walking, rather a stated preference about hypothetical alternatives to bus travel.

When looking at the disparity between perceptions of bus travel and the actual experience of bus travel, the majority of those who have a car imagined that it would negatively affect their career prospects if they did not have it (54%). However for those without a car, one half of respondents found that in their experience it had not negatively affected their career prospects (49.1%). In general, the majority of participants perceived those without a car to be at a disadvantage (62.2%).

As a whole, the data shows that there remains a strong affinity for car travel, and that the car is perceived positively in relation to public transport. There is a suggestion however that the rising costs of car travel are creating a potential challenge to these perceptions and attitudes, and that if, through LSTF measures, negative perceptions of bus travel can be countered there may be an opportunity to encourage greater use of public transport.

3.2 Travel behaviour

Modal shift from car to other modes is the main mechanism by which the WEST programme is intended to generate positive impacts relating to the economy and carbon. This section presents results on travel behaviour outcomes.

NHTS – mode share statistics

Presented below are the results of questions relevant to mode share. Note the data below are currently restricted to 2013 onwards and we will seek historical data for 2011 and 2012 from Ipsos Mori.

In addition to the complete data presented by local authority in Tables 3.15 to 3.18, Charts 5-9 to show more clearly the changes in levels of use of key modes across the sub-region from the 2013 NHTS survey to the 2015 NHTS survey.

It should be noted that between the 2013 and 2014 NHTS rounds, the cycling category was split into two different categories – one for cycling more generally, and one specifically for recreational cycling. This should be taken into consideration when evaluating the results for general levels of cycling in the 2014 and 2015 data.

Table 15 - BANES: Frequency of mode use (percent)

	Daily				2-3 times p/w				Weekly				Monthly				Less/Never			
	2013	2014	2015	% +/- (13-15)	2013	2014	2015	% +/- (13-15)	2013	2014	2015	% +/- (13-15)	2013	2014	2015	% +/- (13-15)	2013	2014	2015	% +/- (13-15)
Walking	58	57	55	-3.0	22	19	21	-1.0	9	9	9	0.0	3	7	3	0.0	6	7	7	1.0
Cycle	*5*	*4*	*3*	-2.0	*6*	*4*	*4*	-2.0	*8*	*4*	*3*	-5.0	*9*	*2*	*2*	-7.0	*67*	*80*	*79*	12.0
Cycle (rec.)	N/A	1	1	N/A	N/A	5	6	N/A	N/A	9	7	N/A	N/A	12	10	N/A	N/A	66	67	N/A
Bus	7	7	6	-1.0	17	16	16	-1.0	15	16	15	0.0	25	25	23	-2.0	32	32	34	2.0
Car (or Van)	47	47	48	1.0	30	28	27	-3.0	8	9	8	0.0	2	9	2	0.0	11	10	10	-1.0
Motorcycle	1	1	1	0.0	1	1	0	-1.0	1	1	1	0.0	1	1	1	0.0	91	91	89	-2.0
Taxi/Minicab	1	0	0	-1.0	2	1	1	-1.0	5	4	4	-1.0	24	24	21	-3.0	64	66	67	3.0
Train	2	2	2	0.0	2	2	3	1.0	4	5	4	0.0	23	18	22	-1.0	65	69	63	-2.0
CT	0	0	0	0.0	0	0	0	0.0	1	1	0	-1.0	1	1	1	0.0	94	93	92	-2.0
DRT	0	0	0	0.0	0	0	0	0.0	0	0	0	0.0	1	2	1	0.0	90	91	91	1.0
P&R	2	1	2	0.0	2	2	3	1.0	6	7	6	0.0	21	19	20	-1.0	65	66	62	-3.0
Mobility aid	1	N/A	1	0.0	1	N\A	0	-1.0	1	N/A	0	-1.0	0	N/A	0	0.0	93	N/A	90	-3.0

Table 16 - Bristol: Frequency of mode use (percent)

	Daily				2-3 times p/w				Weekly				Monthly				Less/Never			
	2013	2014	2015	% +/- (13-15)	2013	2014	2015	% +/- (13-15)	2013	2014	2015	% +/- (13-15)	2013	2014	2015	% +/- (13-15)	2013	2014	2015	% +/- (13-15)
Walking	59	58	58	-1.0	21	21	19	-2.0	9	8	8	-1.0	2	3	2	0.0	6	7	7	1.0
Cycle	*8*	*9*	*7*	-1.0	*9*	*7*	*6*	-3.0	*7*	*2*	*2*	-5.0	*7*	*3*	*3*	-4.0	*64*	*73*	*74*	10.0
Cycle (rec.)	N/A	3	3	N/A	N/A	3	6	N/A	N/A	8	8	N/A	N/A	10	11	N/A	N/A	66	65	N/A
Bus	9	8	10	1.0	17	17	18	1.0	14	16	17	3.0	27	26	22	-5.0	30	28	26	-4.0
Car (or Van)	41	39	37	-4.0	27	25	26	-1.0	12	12	11	-1.0	4	4	5	1.0	13	15	15	2.0
Motorcycle	1	1	1	0.0	1	1	0	-1.0	2	1	0	-2.0	2	2	1	-1.0	90	90	89	-1.0
Taxi/Minicab	1	0	0	-1.0	1	1	1	0.0	5	5	1	-4.0	31	28	28	-3.0	57	61	59	2.0
Train	1	1	1	0.0	1	2	1	0.0	5	4	4	-1.0	24	20	20	-4.0	65	68	67	2.0
CT	0	0	0	0.0	1	0	1	0.0	1	0	0	-1.0	2	1	1	-1.0	92	92	90	-2.0
DRT	0	0	0	0.0	1	1	0	-1.0	1	0	0	-1.0	1	1	1	0.0	92	92	89	-3.0
P&R	1	0	0	-1.0	0	1	0	0.0	1	2	1	0.0	6	7	6	0.0	87	84	83	-4.0
Mobility aid	1	N/A	2	1.0	1	N/A	1	0.0	1	N/A	0	-1.0	1	N/A	0	-1.0	91	N/A	89	-2.0

Table 17 - North Somerset: Frequency of mode use (percent)

	Daily				2-3 times p/w				Weekly				Monthly				Less/Never			
	2013	2014	2015	% +/- (13-15)	2013	2014	2015	% +/- (13-15)	2013	2014	2015	% +/- (13-15)	2013	2014	2015	% +/- (13-15)	2013	2014	2015	% +/- (13-15)
Walking	53	51	52	-1.0	26	23	22	-4.0	10	12	11	1.0	4	4	3	-1.0	6	6	7	1.0
Cycle	*5*	*2*	*2*	-3.0	*6*	*3*	*3*	-3.0	*7*	*2*	*3*	-4.0	*10*	*3*	*2*	-8.0	*68*	*82*	*80*	12.0
Cycle (rec.)	N/A	2	1	N/A	N/A	6	5	N/A	N/A	7	9	N/A	N/A	11	11	N/A	N/A	67	66	N/A
Bus	7	5	6	-1.0	11	12	9	-2.0	14	13	15	1.0	23	25	24	1.0	43	41	41	-2.0
Car (or Van)	59	55	54	-5.0	24	23	24	0.0	5	6	5	0.0	1	1	2	1.0	8	10	9	1.0
Motorcycle	1	1	1	0.0	1	1	2	1.0	1	1	1	0.0	1	1	1	0.0	92	89	88	-4.0
Taxi/Minicab	0	0	0	0.0	2	2	1	-1.0	5	3	4	-1.0	20	19	17	-3.0	71	70	72	1.0
Train	2	1	1	-1.0	1	1	1	0.0	2	2	1	-1.0	16	15	16	0.0	77	75	74	-3.0
CT	0	0	0	0.0	0	1	0	0.0	1	1	0	-1.0	2	1	1	-1.0	94	92	91	-3.0
DRT	1	1	0	-1.0	1	0	1	0.0	0	0	0	0.0	1	1	0	-1.0	93	91	92	-1.0
P&R	1	1	1	0.0	1	1	0	-1.0	3	3	3	0.0	18	15	17	-1.0	72	74	72	0.0
Mobility aid	1	N/A	1	0.0	1	N/A	1	0.0	0	N/A	0	0.0	0	N/A	1	1.0	92	N/A	89	-3.0

Table 18 - South Gloucestershire: Frequency of mode use (percent)

	Daily				2-3 times p/w				Weekly				Monthly				Less/Never			
	2013	2014	2015	% +/- (13-15)	2013	2014	2015	% +/- (13-15)	2013	2014	2015	% +/- (13-15)	2013	2014	2015	% +/- (13-15)	2013	2014	2015	% +/- (13-15)
Walking	53	47	46	-7.0	22	26	25	3.0	12	13	14	2.0	4	3	2	-2.0	6	7	8	2.0
Cycle	*6*	*3*	*4*	-2.0	*7*	*5*	*2*	-5.0	*7*	*5*	*2*	-5.0	*9*	*4*	*2*	-7.0	*66*	*79*	*82*	16.0
Cycle (rec.)	N/A	2	2	N/A	N/A	5	4	N/A	N/A	9	8	N/A	N/A	13	10	N/A	N/A	65	69	N/A
Bus	6	6	6	0.0	10	10	12	2.0	14	12	13	-1.0	26	26	25	-1.0	39	41	39	0.0
Car (or Van)	59	58	55	-4.0	25	21	23	-2.0	5	6	8	3.0	1	1	1	0.0	7	10	8	1.0
Motorcycle	2	1	1	-1.0	2	1	1	-1.0	1	2	1	0.0	1	1	1	0.0	89	91	89	0.0
Taxi/Minicab	0	0	0	0.0	0	1	0	0.0	2	2	2	0.0	17	17	16	-1.0	76	75	76	0.0
Train	1	1	1	0.0	0	1	0	0.0	2	2	2	0.0	14	16	17	3.0	79	75	74	-5.0
CT	0	0	0	0.0	0	1	1	1.0	1	1	1	0.0	1	1	3	2.0	93	92	89	-4.0
DRT	1	0	1	0.0	0	0	0	0.0	1	1	0	-1.0	2	1	1	-1.0	92	93	91	-1.0
P&R	0	1	1	1.0	1	1	1	0.0	2	1	2	0.0	12	12	13	1.0	80	79	76	-4.0
Mobility aid	2	N/A	2	0.0	1	N/A	1	0.0	1	N/A	0	-1.0	0	N/A	1	1.0	91	N/A	89	-2.0

Chart 5 - Change in frequency of walking by UA

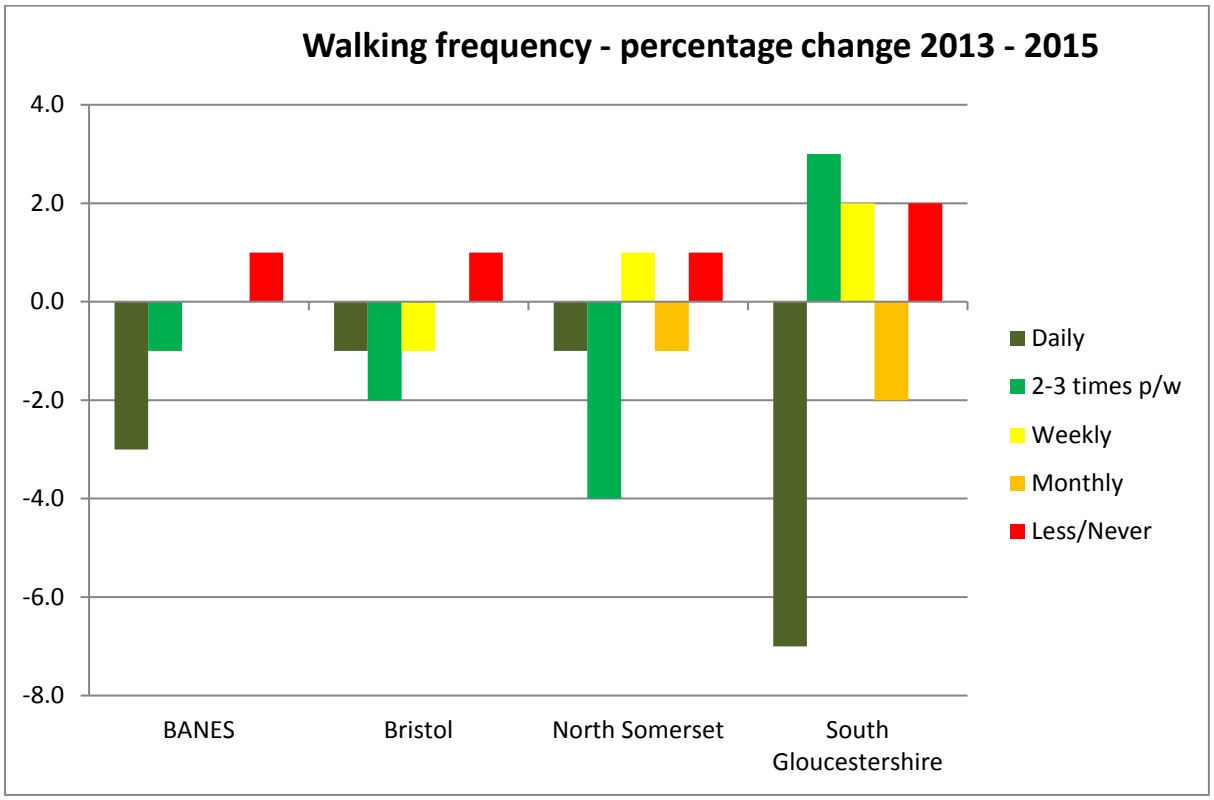


Chart 6 - Change in frequency of cycling by UA

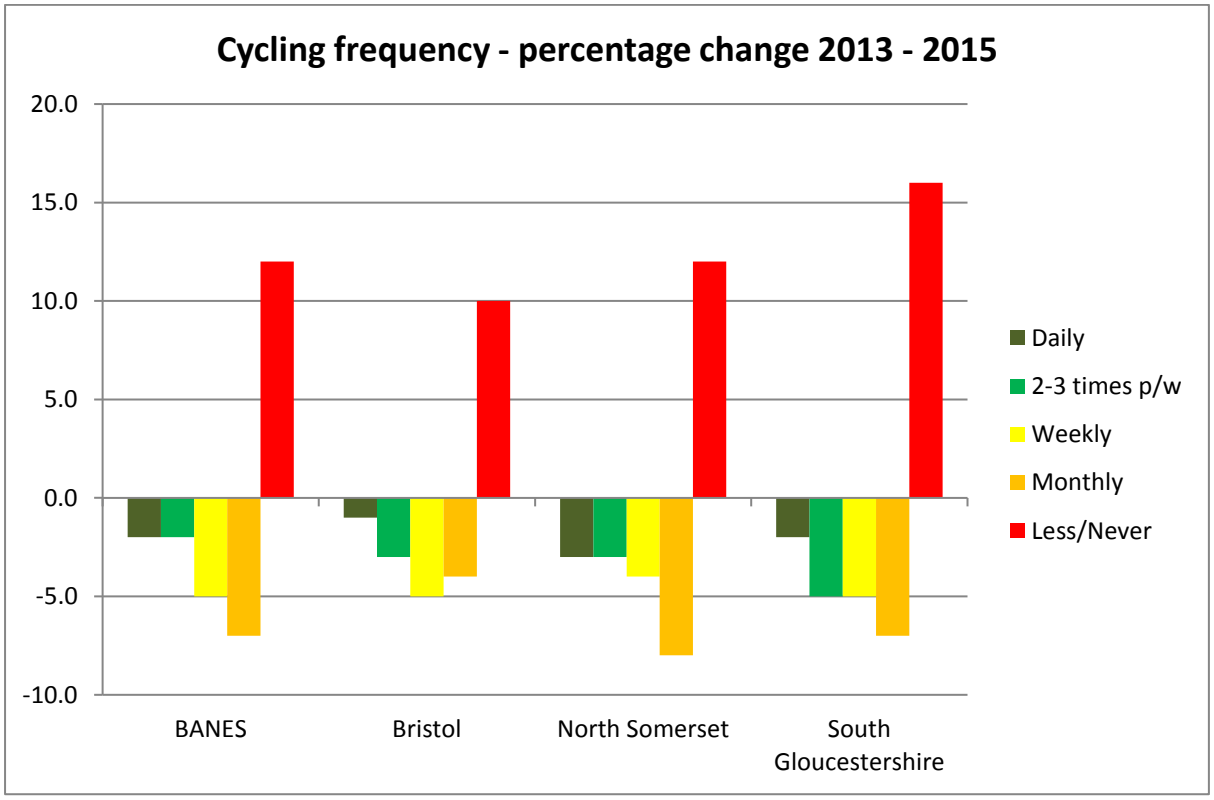


Chart 7 - Change in frequency of bus use by UA

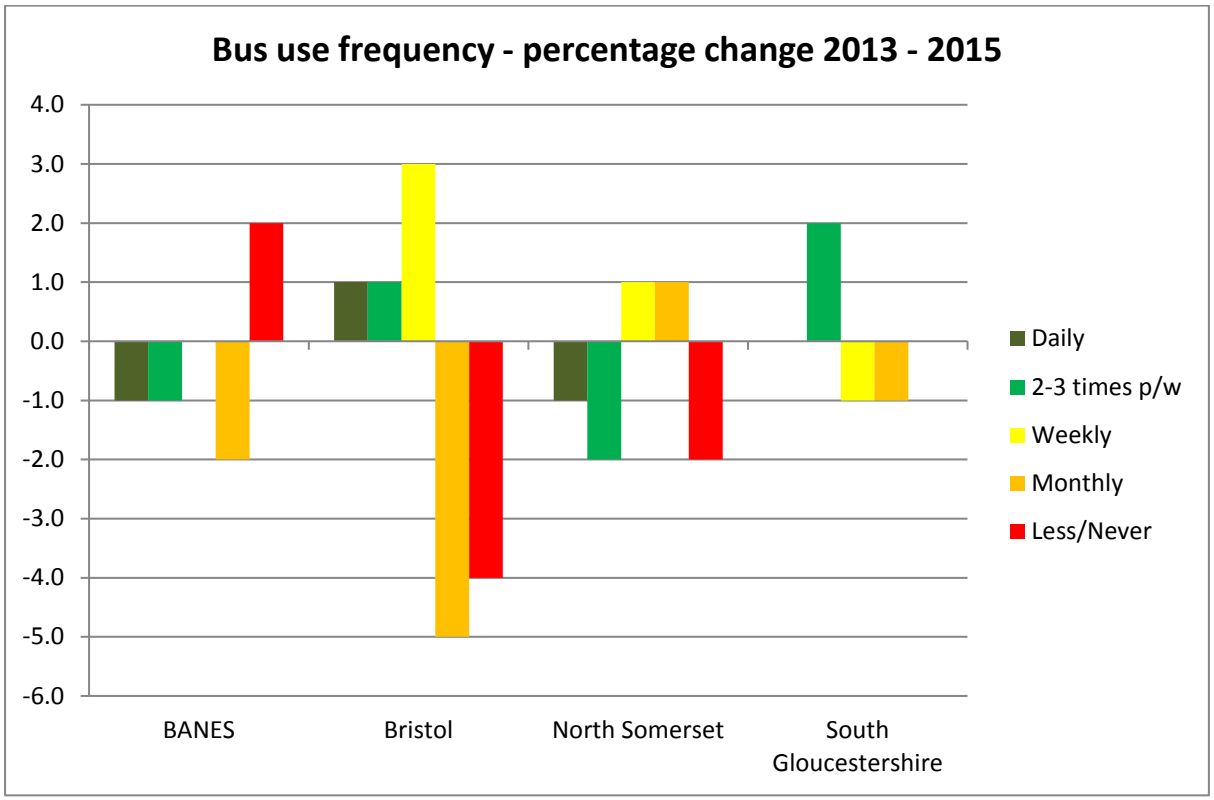


Chart 8 - Change in frequency of car use by UA

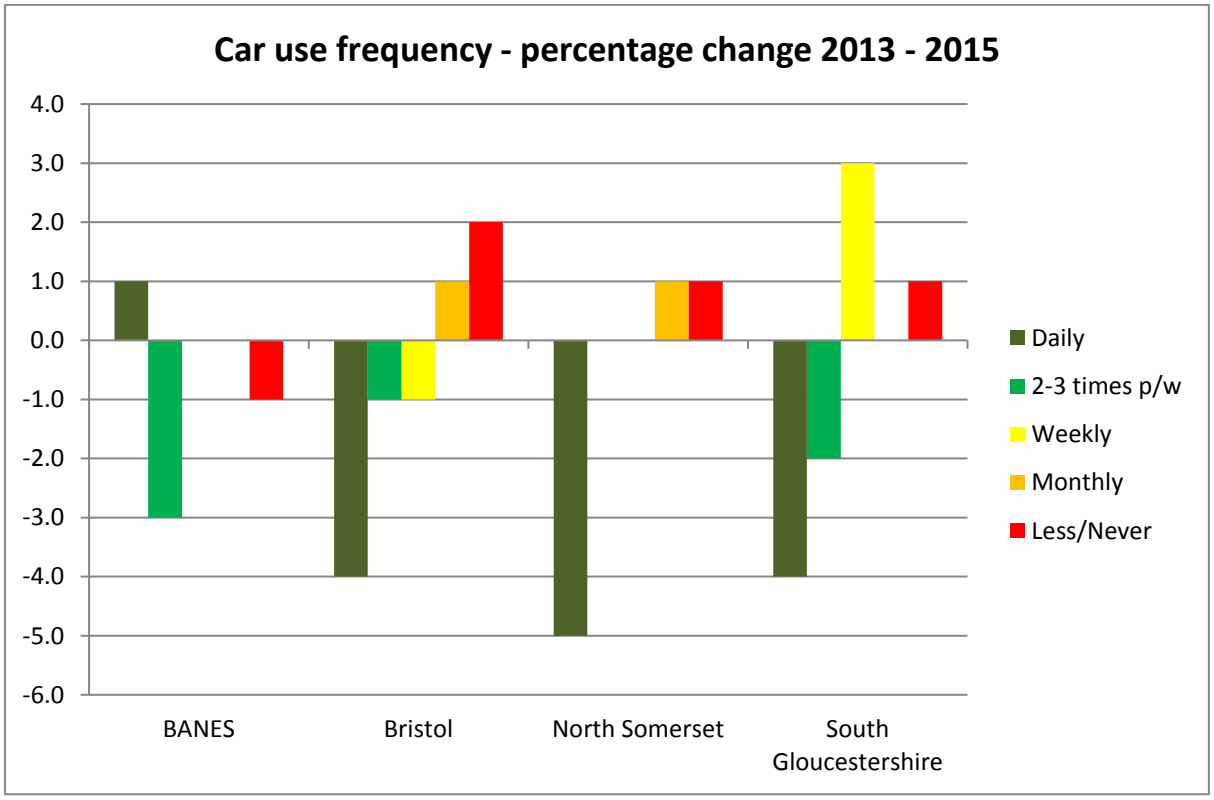
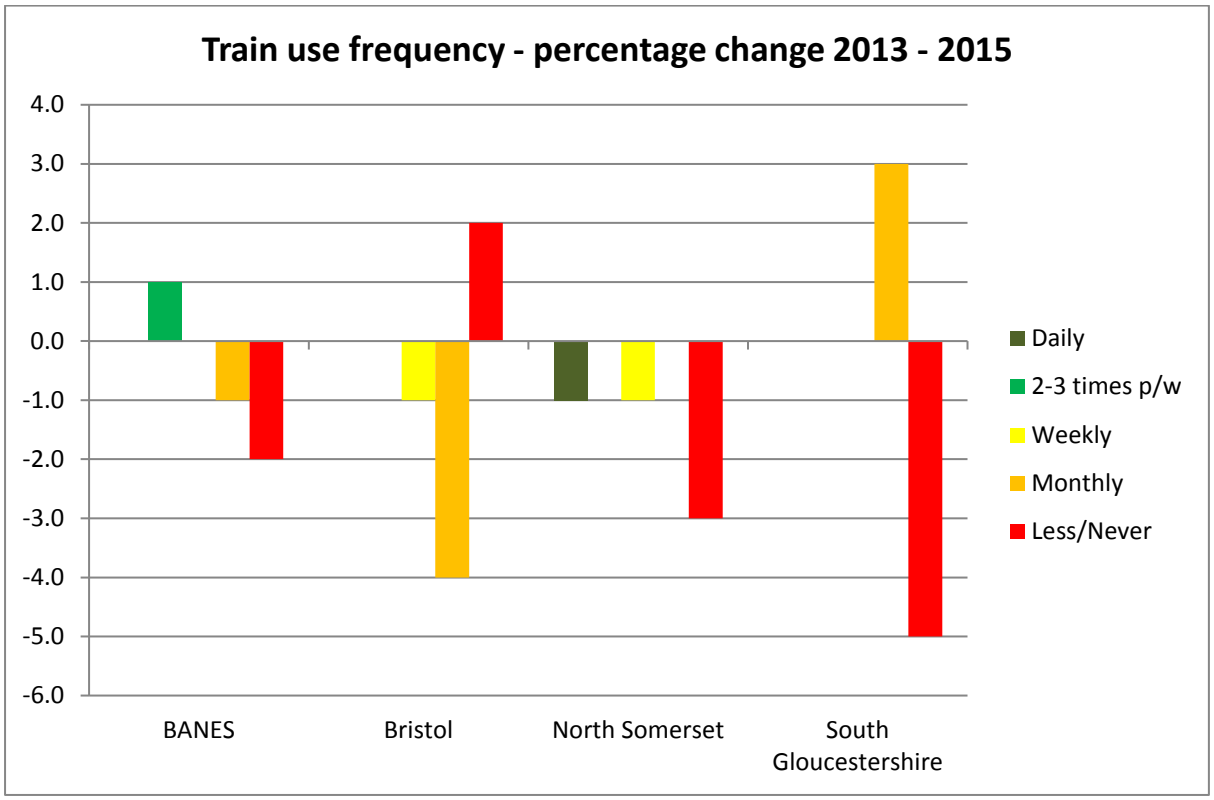


Chart 9 - Change in frequency of train use by UA



In general, there has been relatively little change in mode share since the 2014 AOMR. In terms of mode use in 2015, the data show that in this reporting period again walking and car travel are the modes used most frequently, with approximately 40-60% of people using these every day.

The bus is used every day by 5-10% of people; however it is used by relatively high proportions of people on a less-frequent basis – either weekly or monthly. Daily bus use is most frequent in Bristol (10% of respondents).

Trends in cycling are difficult to determine because of the changed basis of questioning. Taking the sum of the two percentages of daily use (general and recreational), cycling may have declined in BANES and North Somerset, remained static in South Gloucestershire, and increased in Bristol.. As previously, however, the majority of people (approximately 60-80%) use a bicycle either 'rarely' or 'never'.

Low proportions of people use the train on a daily or weekly basis (less than 3%), however approximately 15-25% of people use the train on a monthly basis. The majority of respondents either rarely or never use the train (approximately 65-75%).

There is some variation in mode use frequency between the UAs. Daily walking is highest in Bristol and BANES, and daily cycling and bus use is highest in Bristol. Daily car use is highest in North Somerset and South Gloucestershire. This is likely to reflect the urban densities and transport networks of the different areas.

The headline figure for changes in mode use frequency between 2013 and 2015 is perhaps the reduction in regular use of the car. In Bristol, North Somerset, and South Gloucestershire, daily use has fallen by between 4-5 percentage points over this two year period. In BANES, daily use has increased by 1 percentage point, however use 2-3 times a week has fallen by 3 percentage points.

In Bristol there has been a shift towards more frequent bus use, with fewer people using the bus monthly (-5 percentage points) or less often (-4 percentage points, and more people using it weekly (+3 percentage points), 2-3 times a week (+1 percentage point), or daily (+1 percentage point).

South Gloucestershire has witnessed a big decline in the proportions of people walking daily, with a 7 percentage point decline between 2013 and 2015.

Vehicle flow data

Data from traffic counts form a significant part of the set of data used to analyse change in travel in the WoE sub-region. There are three main sources of data that will be used, as follows:

- National Road Traffic Estimates for each of the four UAs;
- Count data collected by the Department for Transport; and
- Count data collected by the four unitary authorities.

National Road Traffic Estimates

National Road Traffic Estimates are produced nationally from around 10,000 manual classified counts (MCC). The manual counts are undertaken on a neutral day between March and October over a twelve hour period. Each section of the major road network is assigned to a link and given a Count Point (CP) number and may be counted either every year, or every 2, 4 or 8 years. A representative sample of minor roads has counts undertaken every year. Expansion to 24 hour Annual Average Daily Traffic (AADF) is undertaken using expansion factors derived from Automatic Traffic Counters (ATC), and every ATC is assigned to one of 22 routes types. The median expansion factor for each of eleven vehicle types for all ATCs in each of the 22 categories is used. When a manual count has not had a count undertaken for the year in question (the reference year), a growth factor based on the ATC data is applied to a previous year's count. For major roads, each count point has a link length associated with it, and the total number of vehicle kilometres is estimated as the sum over all the count points of the link length multiplied by the AADF multiplied by 365 days. For minor roads, AADFs from the sample of links counted are applied to all other minor roads not counted, based on their category.

The following data are available for each of the four unitary authorities in the West of England LSTF area:

- Number of motor vehicle kilometres (Table 8904[5]);
- Number of car vehicle kilometres (Table 8905); and
- Number of motor vehicle kilometres excluding trunk roads (Table 8906).

We report these data for a period including five years before the baseline year of 2010/11. Our final analysis of the whole data set will extend this period back to 2001 and identify trends in these data and also, as a comparator, use the equivalent three series of data for all of Great Britain and for urban authorities in Great Britain. We plan to do this for the following urban areas: unitary authorities in the West Midlands, West Yorkshire, South Yorkshire, Merseyside, Greater Manchester, and Nottingham and Leicester. For simplicity and clarity, we do not include these data at this stage.

Table 19 - Motor vehicle traffic (vehicle km) by local authority in Great Britain, annual from 1993

Million vehicle kilometres

Local Authority	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
BANES	1,142	1,173	1,189	1,189	1,153	1,120	1,134	1,129	1,130	1,163
Bristol	2,242	2,261	2,325	2,312	2,292	2,228	2,257	2,253	2,248	2,309
North Somerset	2,238	2,232	2,326	2,369	2,309	2,252	2,237	2,269	2,283	2,325
South Glos	3,702	3,790	3,853	3,837	3,786	3,739	3,747	3,668	3,727	3,856
South West Region*	*48.7*	*49.7*	*50.2*	*50.6*	*49.9*	*49.2*	*49.1*	*48.6*	*48.9*	*49.9*
Great Britain*	*493.8*	*501.0*	*505.4*	*500.6*	*495.8*	*487.9*	*488.9*	*487.1*	*488.8*	*500.5*

(*Billion vehicle kilometres)

[5] This table and the others referred to are available at: https://www.gov.uk/government/collections/road-traffic-statistics

Table 20 - Index of motor vehicle traffic (vehicle km) by local authority in Great Britain, annual from 1993

Local Authority	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
BANES	100	103	104	104	101	98	99	99	99	102
Bristol	100	101	104	103	102	99	101	100	100	103
North Somerset	100	100	104	106	103	101	100	101	102	104
South Glos	100	102	104	104	102	101	101	99	101	104
South West Region	*100*	*102*	*103*	*104*	*103*	*101*	*101*	*100*	*101*	*102*
Great Britain*	*100*	*101*	*102*	*101*	*100*	*99*	*99*	*99*	*99*	*101*

Table 21 - Car traffic (vehicle km) by local authority in Great Britain, annual from 1993

Million vehicle kilometres

Local Authority	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
BANES	932	959	965	970	942	911	922	921	916	937
Bristol	1,822	1,839	1,879	1,875	1,869	1,807	1,834	1,832	1,820	1,859
North Somerset	1,827	1,818	1,882	1,921	1,871	1,826	1,813	1,833	1,832	1,857
South Glos	2,949	3,028	3,048	3,038	3,018	2,984	2,998	2,927	2,955	3,046
South West Region*	*39.0*	*39.8*	*39.8*	*40.2*	*39.9*	*39.2*	*39.1*	*38.8*	*38.9*	*39.5*
Great Britain*	*392.7*	*397.4*	*397.9*	*395.0*	*394.0*	*385.9*	*387.4*	*386.7*	*386.2*	*393.5*

(*Billion vehicle kilometres)

Table 22 - Index of car traffic (vehicle km) by local authority in Great Britain, annual from 1993

Local Authority	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
BANES	100	103	104	104	101	98	99	99	98	101
Bristol	100	101	103	103	103	99	101	101	100	102
North Somerset	100	100	103	105	102	100	99	100	100	102
South Glos	100	103	103	103	102	101	102	99	100	103
South West Region	*100*	*102*	*102*	*103*	*102*	*101*	*100*	*99*	*100*	*101*
Great Britain*	*100*	*101*	*101*	*101*	*100*	*98*	*99*	*98*	*98*	*100*

Table 23 - Motor vehicle traffic (vehicle km) excluding trunk roads by local authority in Great Britain, annual from 1993

Million vehicle kilometres

Local Authority	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
BANES	1,044	1,073	1,084	1,085	1,050	1,024	1,039	1,031	1,031	1,061
Bristol	1,929	1,947	1,997	1,975	1,955	1,899	1,925	1,937	1,925	1,972
North Somerset	1,313	1,349	1,371	1,369	1,358	1,312	1,313	1,304	1,304	1,342
South Glos	1,849	1,876	1,832	1,833	1,791	1,750	1,737	1,727	1,746	1,808
South West Region*	*34.3*	*35.0*	*35.3*	*35.3*	*34.8*	*34.2*	*34.0*	*33.7*	*33.9*	*35.0*
England*	*290.3*	*292.8*	*295.9*	*291.8*	*288.8*	*284.0*	*282.9*	*280.7*	*280.7*	*288.3*

(*Billion vehicle kilometres)

Table 24 - Index of motor vehicle traffic (vehicle km) excluding trunk roads by local authority in Great Britain, annual from 1993

Local Authority	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
BANES	100	103	104	104	101	98	100	99	99	102
Bristol	100	101	104	102	101	98	100	100	100	102
North Somerset	100	103	104	104	103	100	100	99	99	102
South Glos	100	101	99	99	97	95	94	93	94	98
South West Region	*100*	*102*	*103*	*103*	*102*	*100*	*99*	*98*	*99*	*102*
England	*100*	*101*	*102*	*101*	*99*	*98*	*97*	*97*	*97*	*99*

In the four West LSTF unitary authorities, there are 700 million vehicles kilometres more in 2014 than in 2010, an increase of 1.42%. This compares with increases in vehicle kilometres for Great Britain of 2.58%. There was an increase of 300 million car kilometres (0.77%) and this compares with an increase for Great Britain of 1.97%. It should be noted that in the case of motor traffic on non-trunk roads, (i.e. the roads managed by the four unitary authorities) these have seen an increase of 800 million vehicle kilometres, or 2.34%.

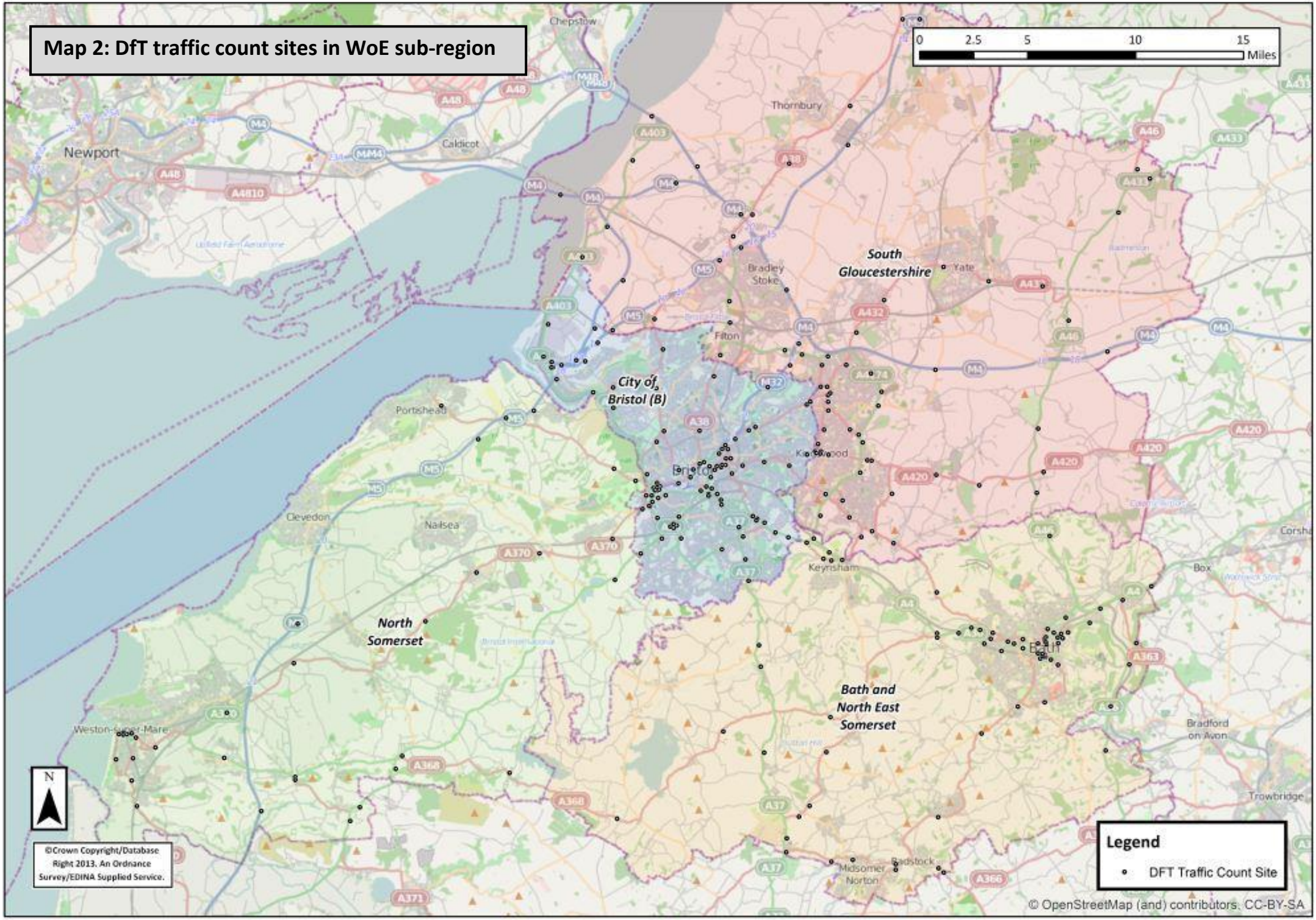
Count data collected by the DfT

Annual Average Daily Flows for the count point sites used by the Department for Transport in the production of the National Road Traffic Estimates are available. Map 2 shows the location of these counters. There are a total of 289 sites (figure correct for 2013). Table 3.25 shows the breakdown of the sites and indicates whether they are on the trunk road or principal road network.

Table 25 - DfT traffic count sites in the WoE sub-region

Area	Trunk Road	Principal Road	Total
BANES	6	72	78
Bristol	13	88	101
North Somerset	4	30	34
South Gloucestershire	18	58	76
Total	41	248	289

While the DfT has already used these counts to produce the National Road Traffic Estimates for each of the UAs, we will also use a sub-set of these counters to identify whether there are differences in trends for different parts of the WoE area.


Map 2: DfT traffic count sites in WoE sub-region
0 2.5 5 10 15
Miles
Newport
Chepstow
Caldicot
Thornbury
Bradley Stoke
South Gloucestershire
Yate
Filton
City of Bristol (B)
Portishead
Clevedon
Nailsea
North Somerset
Keynsham
Bath and North East Somerset
Weston-super-Mare
Midsomer Norton
Bradford on Avon
Trowbridge
Box
N
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Legend
DFT Traffic Count Site
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Count data collected by the four Unitary Authorities

We are assessing the availability of counter data to identify a more comprehensive approach to monitoring vehicle traffic activity in the WoE sub-region. The full analysis will be included in the final evaluation report. Map 3 shows the location of UA ATC sites and Map 4 presents the screenlines, cordons and routes which we have identified as being appropriate for assessing changes in vehicular traffic. Map 4 also shows the key corridors which were identified in the WEST programme bid.

We are liaising with the individual UAs on this issue, and below have provided a summary of the current state of data gathering in the four authorities:

BANES	We have confirmed what is available. Cordon count sites have been finalised and the process of collecting the data from these sites has been completed. BANES is not able to provide data to us in a patched format and so we have developed algorithms ourselves for patching these data.
BCC	We understand that the cordon count data has not been collected in the same way as it had been prior to 2010. We have been advised that the relevant cordon count data for BCC is not available, and as-such we are defaulting to the use of DfT count sites to compensate for this.
NSC	Cordon count sites have been finalised and the process of data transfer from the UA to UWE has been completed. These data have been provided in a patched format.
SGC	Cordon count sites have been finalised and the process of data transfer from the UA to UWE has been completed. These data have been provided in a patched format.

We recognise that the volume of data that we are requesting from the local authorities is substantial. We also recognise that this has been placing a significant additional burden on the individual staff involved in managing traffic counts. We have been working as closely as we can with them in order to ensure that the data is collected and transmitted to us in as efficient a manner as possible. We would like to thank the UAs for their considerable help in interpreting their data and commenting on matters such as the screenlines. In some cases, this has resulted in slightly revised approaches.

We have identified six screenlines, to which we have given appropriate reference names as follows:

- **Patchway Screenline**, cutting across routes which emerge from the motorway network into the Cribbs Causeway, Aztec West, Bradley Stoke and Stoke Gifford areas of North Bristol.
- **North Bristol Screenline**, which cuts across routes from north of Bristol into the city centre
- **Bristol-Bath Screenline**, which cuts routes between Bristol and Bath
- **Chipping Sodbury Screenline**, which cuts routes south and west from Chipping Sodbury
- **Clevedon Screenline**, which cuts routes emerging from Clevedon; and
- **Weston-super-Mare Screenline**, which cuts routes emerging from Weston-super-Mare in the direction of Bristol and Bath.

We have identified two cordons as follows:

- **Bristol Central Cordon**; and
- **Bath Central Cordon**

We have identified two routes of interest:

- **Portishead route**; and
- **A370 route**

Taken together, these three amalgamations of counts will provide a useful basis for the analysis of count data. For the screenlines and cordons we will amalgamate counts to produce totals crossing the boundary. For the routes, we will compare counts along the route to identify whether there are different trends in traffic volumes at different points along the route. Such an analysis may, for

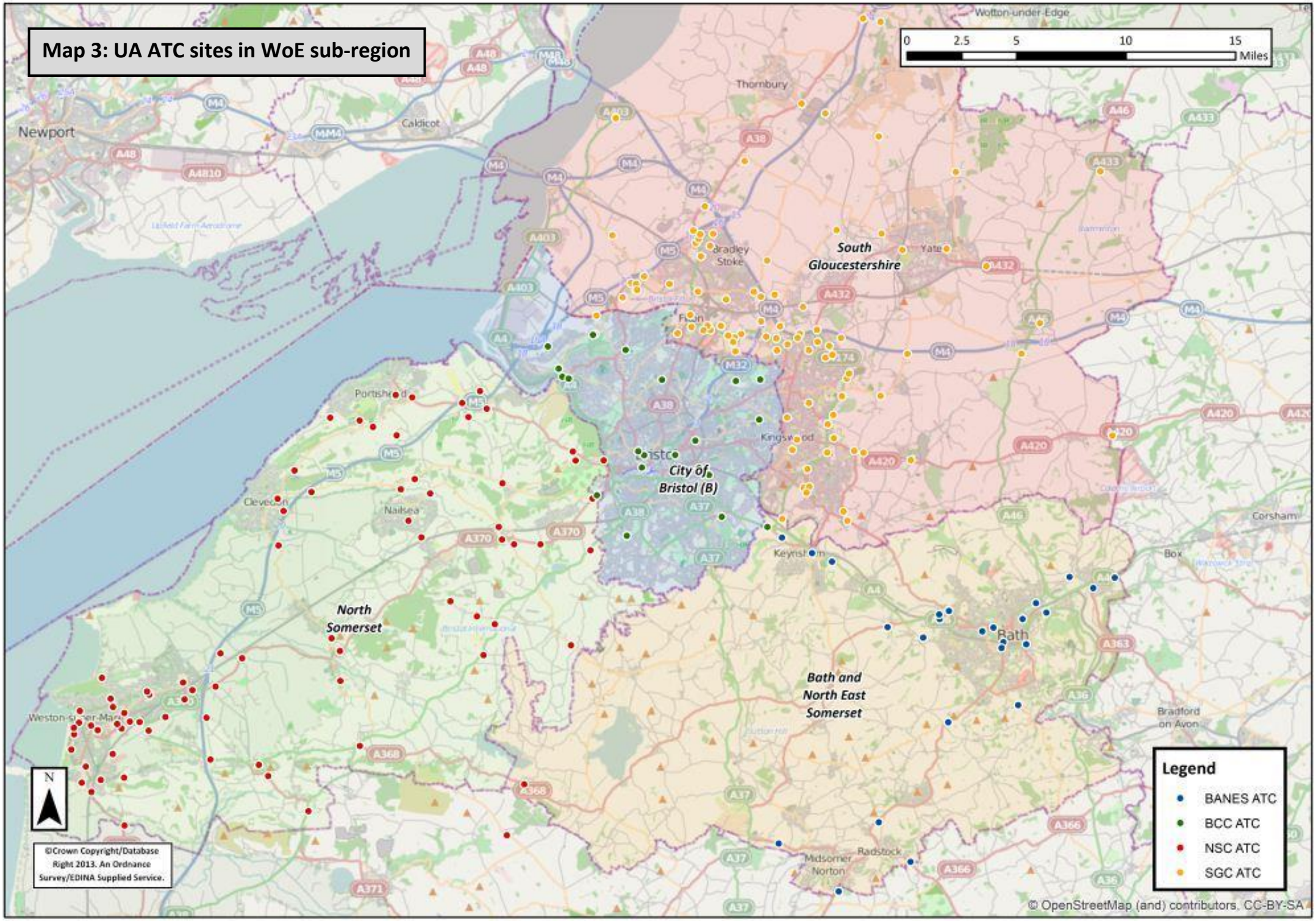
example, reveal a distance effect linked with the interventions, such that perhaps there is either a greater or lesser change in traffic volumes either nearer or further away from population centres.

We intend to make estimates of traffic volumes passing these screenlines, cordons and count sites on the routes of interest in the following three dimensions:

- Annual Average Daily Traffic (AADT);
- Annual Average Weekly Traffic (AAWT); and
- Annual Average Peak Traffic (AAPT) for the morning peak period of 7am to 10am.

The AADT will provide a baseline against which we can compare trends in AAWT and AAPT, and, coupled with other data, we may be able to associate changes with the impact of the LSTF measures on commuting travel and total travel.

Manual Classified Counts will need to be factored to AADT, AAWT and AAPT as appropriate and we will adopt the same methodologies for making these adjustments as have been used by the respective UAs in the past.


Map 3: UA ATC sites in WoE sub-region
0 2.5 5 10 15
Miles
Wotton-under-Edge
Thornbury
Newport
Caldicot
Bradley Stoke
South Gloucestershire
Yate
Filton
Kingswood
City of Bristol (B)
Portishead
Clevedon
Nailsea
North Somerset
Keynsham
Bath
Box
Corsham
Bath and North East Somerset
Bradford on Avon
Weston-super-Mare
Midsomer Norton
Radstock
N
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Legend
BANES ATC
BCC ATC
NSC ATC
SGC ATC
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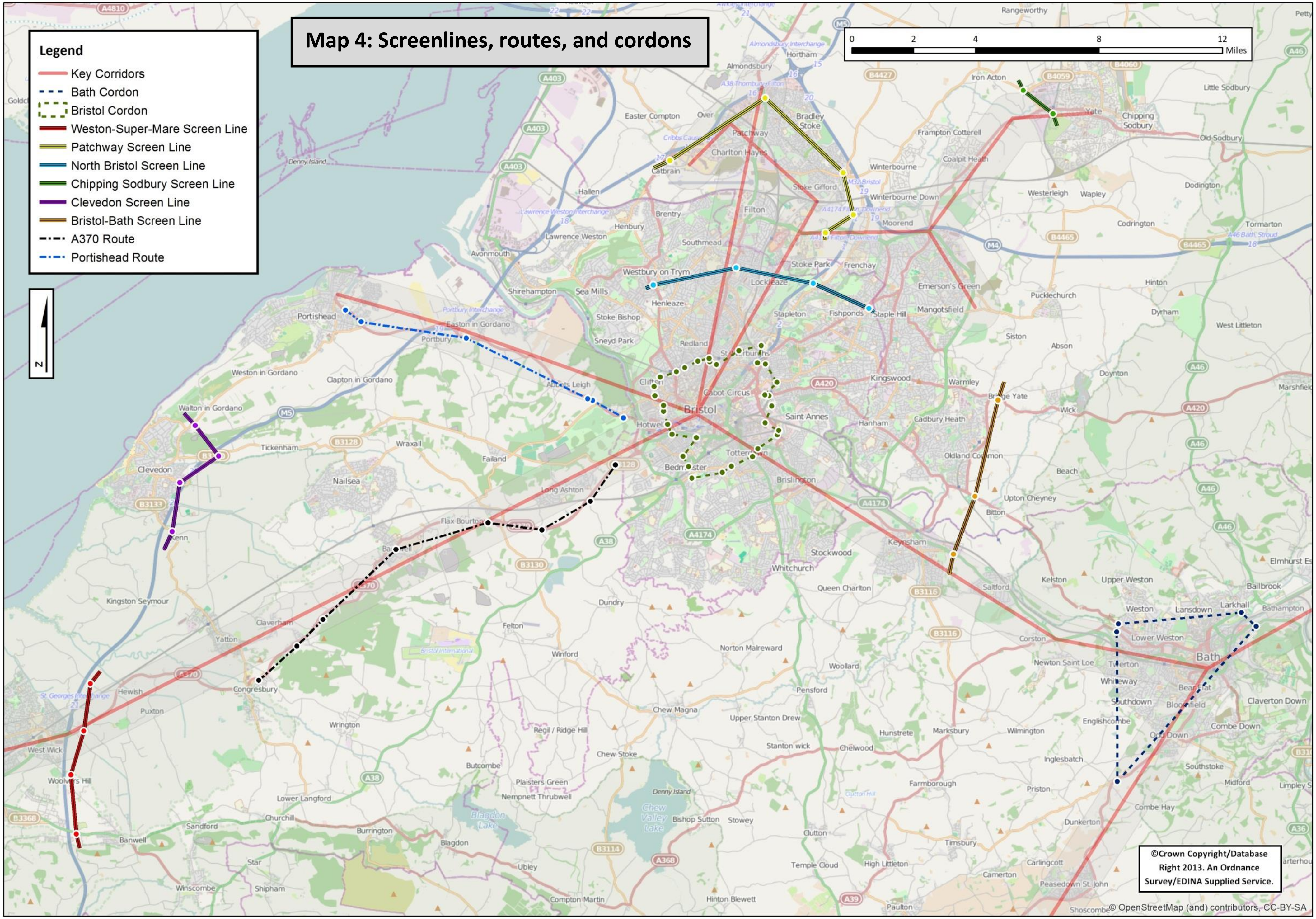

Map 4: Screenlines, routes, and cordons
Legend
Key Corridors
Bath Cordon
Bristol Cordon
Weston-Super-Mare Screen Line
Patchway Screen Line
North Bristol Screen Line
Chipping Sodbury Screen Line
Clevedon Screen Line
Bristol-Bath Screen Line
A370 Route
Portishead Route
0 2 4 8 12 Miles
N
Bristol
Bath
Portishead
Clevedon
Nailsea
Keynsham
Yate
Chipping Sodbury
Congresbury
Kingswood
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Count data from LSTF-specific analysis areas

Table 26 - AADT - all sites

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	*2010-2014*
North Bristol screenline	124490	122143	120462	116506	124722	123627	114849	121658	122334	122640	123959	123815	119102	120583	0.98
Bath cordon										29032	28541	28425	29180	27657	0.95
Bristol - Bath screenline	48102	49884	50766	50945	50364	51205	51457	47919	42227	48610	48177	48410	48531	44474	0.91
Clevedon screenline			53224	52056	54959	56571	59047	55557	55178	53701	54897	49862	53538	55071	1.03
W-s-M screenline									36152	36100	36516	36372	28738	41767	1.16
Portishead route				57032	55270	55649	56627	55782	57330	55904	56512	54162	58645	63884	1.14
A370 route									48196	45152	42795	45220	42705	42675	0.95

Chart 10 - AADT at all sites

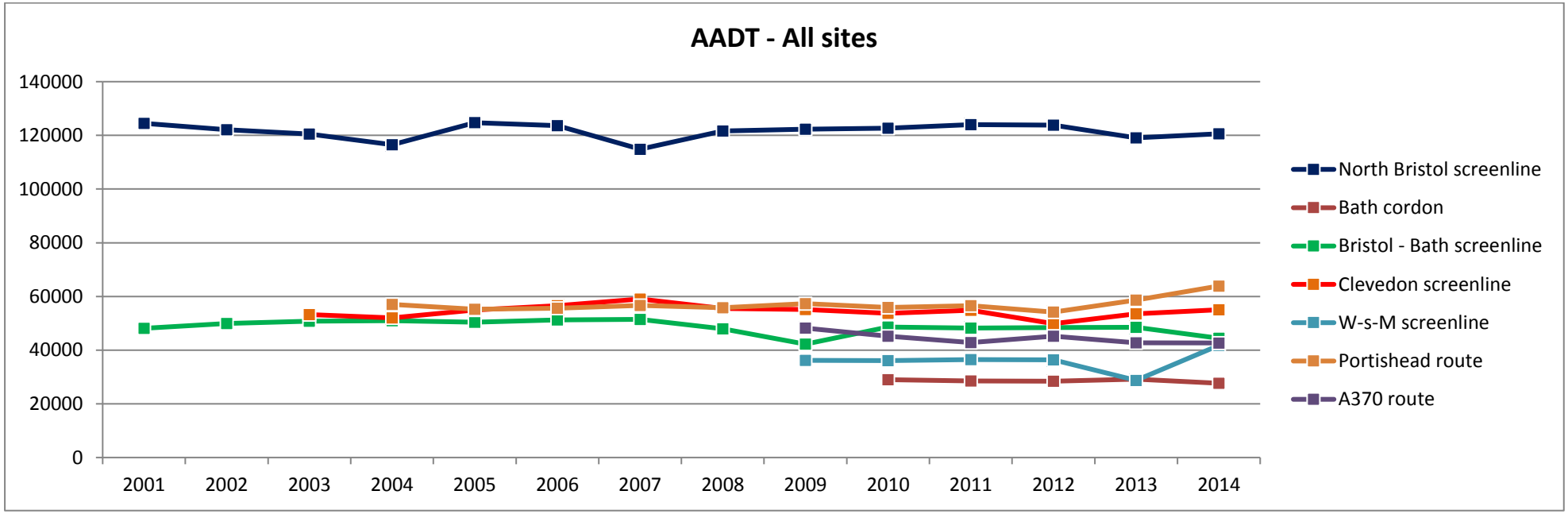
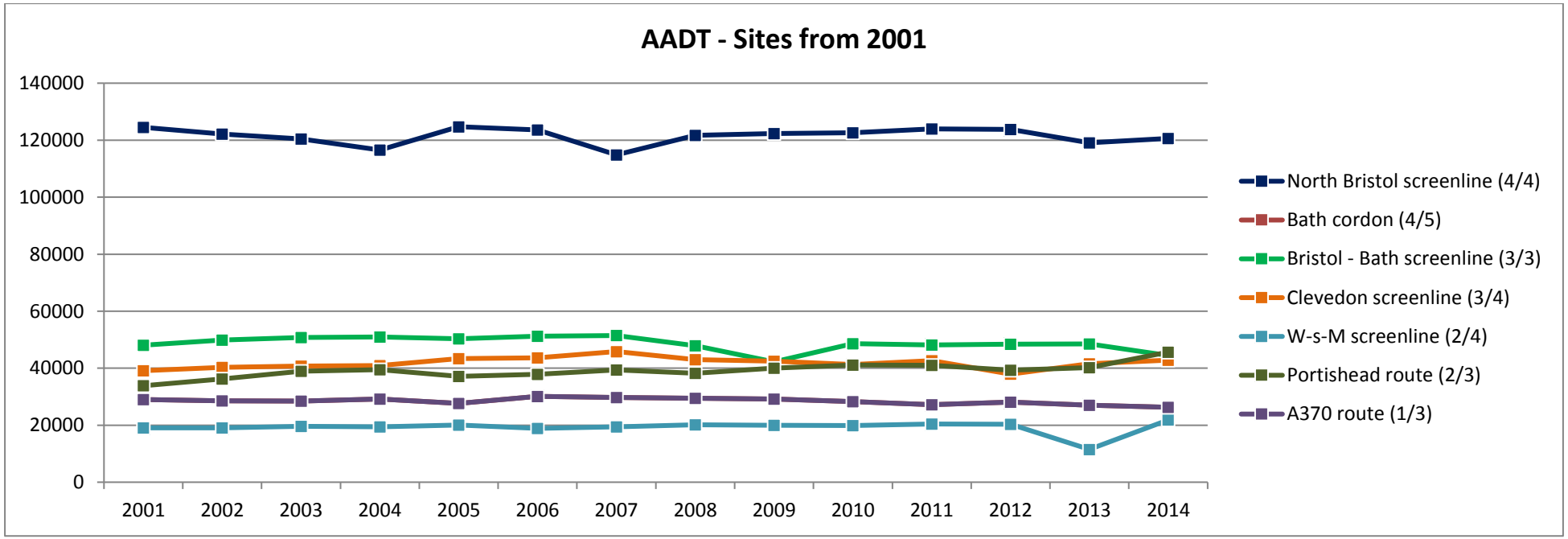


Table 27 - AADT - sites from 2001*

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	*2010-2014*
North Bristol screenline (4/4)	124490	122143	120462	116506	124722	123627	114849	121658	122334	122640	123959	123815	119102	120583	0.98
Bath cordon (4/5)	29032	28541	28425	29180	27657	30114	29701	29443	29206	28267	27207	28077	27001	26291	0.93
Bristol - Bath screenline (3/3)	48102	49884	50766	50945	50364	51205	51457	47919	42227	48610	48177	48410	48531	44474	0.91
Clevedon screenline (3/4)	39087	40254	40785	40885	43356	43654	45849	43015	42474	41305	42682	37928	41538	42833	1.04
W-s-M screenline (2/4)	19065	19033	19605	19393	20017	18874	19460	20113	19980	19876	20422	20351	11516	21836	1.10
Portishead route (2/3)	33845	36238	38898	39521	37171	37889	39354	38255	40008	41064	41052	39278	40212	45645	1.11
A370 route (1/3)	29032	28541	28425	29180	27657	30114	29701	29443	29206	28267	27207	28077	27001	26291	0.93

***Figures in brackets show number of sites within analysis area which have data going back to 2001. Only these sites are included in the data in this table**

Chart 11 - Sites with data back to 2001



Data from Table 26 shows traffic counts going back as far as data is available for all sites within the analysis area. Data in Table 27 presents traffic counts from only the sites within an analysis area which have data going back to 2001 – the proportion of sites included from each analysis area are shown following the name.

The data in **Table 26** shows that since 2010, AADT has remained relatively stable across all of the analysis areas. The North Bristol screenline and the Clevedon screenline showed very little change over the period. The Bath cordon and A370 route show a 5% decrease in AADT since 2010, and the Bristol-Bath screenline showed a 9% decrease. The Portishead route showed a 14% increase. The Weston-super-Mare screenline experienced an anomalous result in the 2013 data, attributed to a fault with a counter, but in 2014 this was corrected and the screenline is now showing a 16% increase on the 2010 baseline.

As expected, the data in Table 27 from the sites going back to 2001 mirrors this trend between 2010 and 2013. This greater volatility in the figures is explained by the lower number of count points being used – making the figures more susceptible to fluctuations at a single counter. This demonstrates the importance of using data from as many count sites as possible in examining the routes, cordons, and screenlines, and suggests that the figures in Table 26 are the more robust in terms of providing estimates of changes in AADT in the different analysis areas.

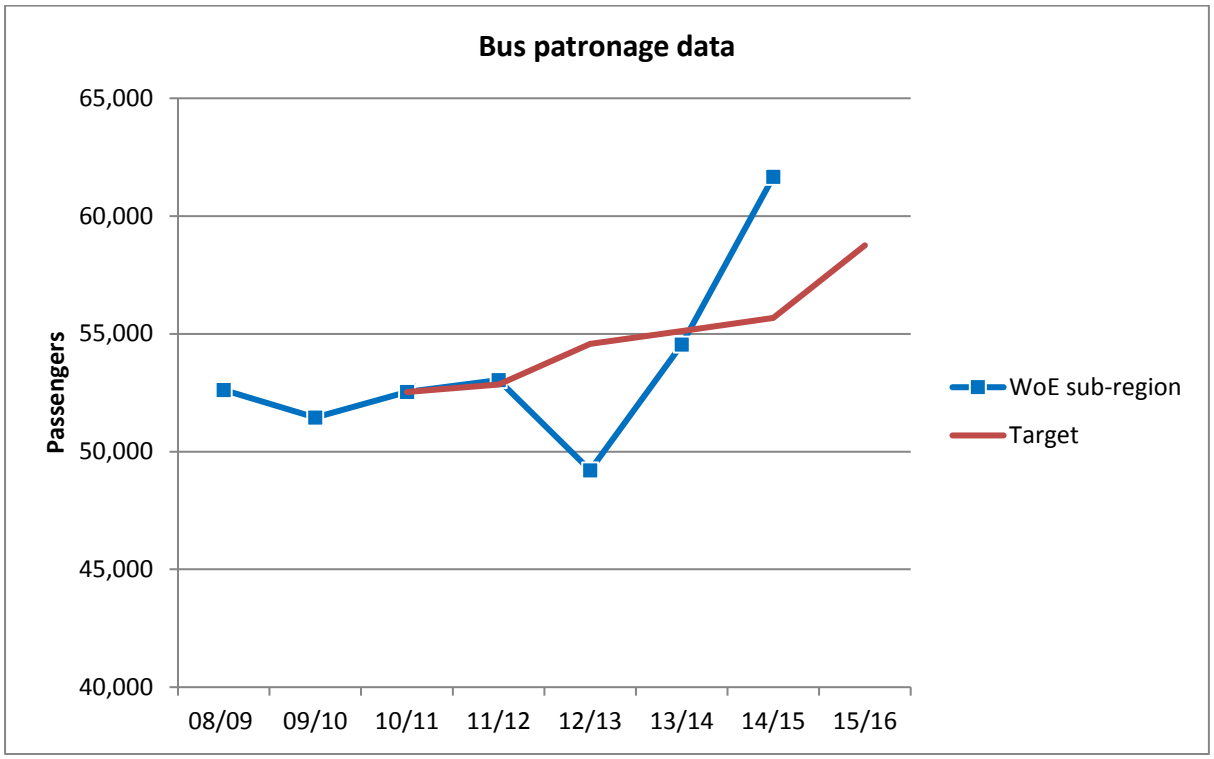
Bus patronage statistics – JLTP3 indicator

Presented below are the figures for bus patronage across the West of England authorities.

Table 28 - Bus patronage figures by UA/sub-region

	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16
WoE sub-region	52,611	51,443	52,531	53,035	49,207	54,553	61,663	
Target			*52,531*	*52,846*	*54,576*	*55,122*	*55,673*	*58,756*
BANES	11,753	11,280	11,898	11,913	11,015	12098	12953	
Bristol	27,451	27,908	28,011	28,475	25,804	28813	33838	
North Som.	5,118	4,909	4,776	5,061	4,963	5399	5972	
South Glos.	8,290	7,346	7,846	7,586	7,425	8243	8900	

Chart 12 - JLTP3 bus patronage data



Note: 2012/2013 figures in Chart 12 are provisional.

The data shows an increase in bus patronage over the period 2010-2015. There was a sharp decrease in the period 2012-13. First Bus, the principal local bus operator, has suggested this is due to under-reporting in 2012-2013 and is looking into this issue with the prospect of revised figures being issued. The figures for 2014-2015 continue the increasing trend in bus patronage since 2010 and suggest that this explanation is correct, and that bus patronage continues to grow and has done so by 17.4% snce 2010.

Cycling flows – JLTP3 indicator

Table 3.30 presents the figures for cycling flows across the UAs, reported in the JLTP3 2015 dataset. Level of cycling is an important outcome indicator and accurate aggregate data on levels of cycling in the sub-region will form an important part of the evaluation of the impacts of WEST measures aimed at increasing cycling.

Table 29 - WoE cycling data

Sub-regional combined AAWT & MCC cycling data

	08/09	09/10	10/11	11/12	12/13	13/ 14	14/ 15	15/ 16
Target*	*100*	*109*	*118*	*128*	*139*	*150*	*163*	*176*
Actual	100	108	112	131	139	*N/A*	*N/A*	

Note: Due to the breakdown of Bristol City Council's cycle counter network no data was collected in Bristol in 2013/14

Revised cycling target (excluding Bristol City Council)

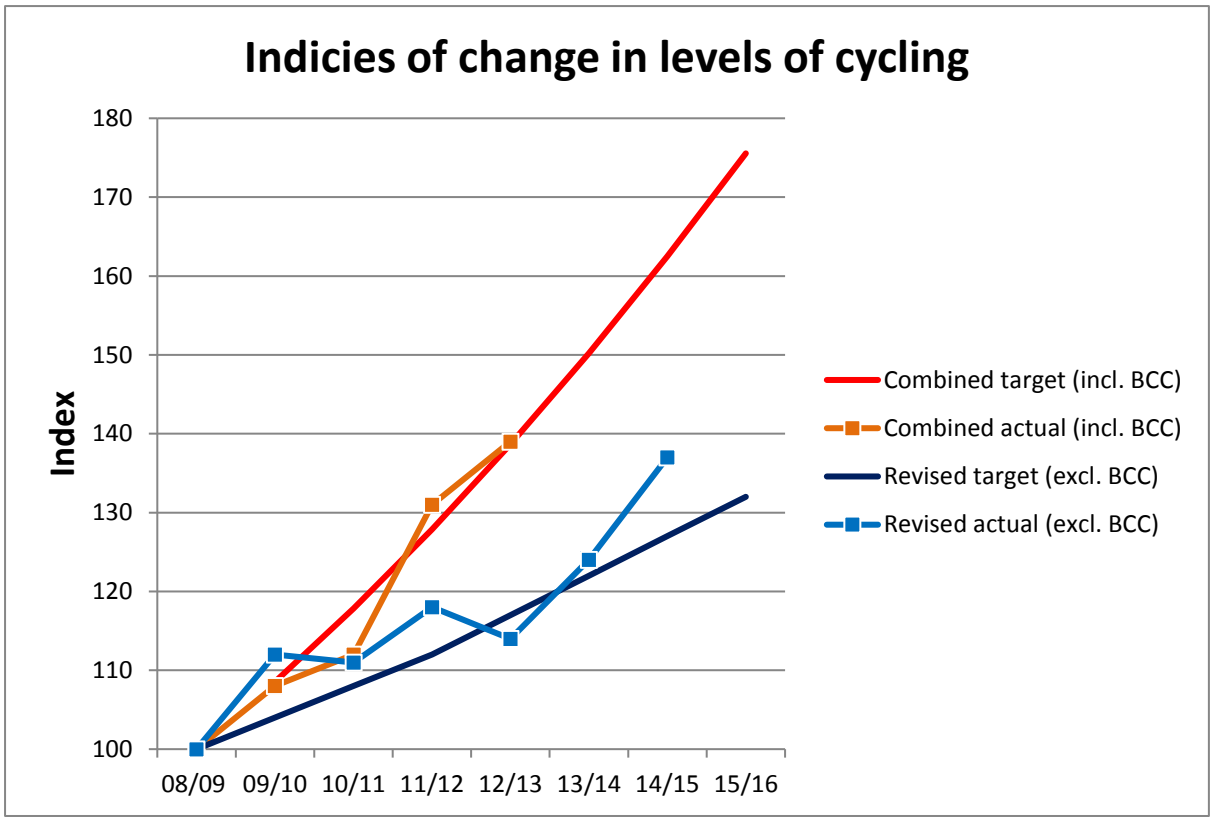
Target	*100*	*104*	*108*	*112*	*117*	*122*	*127*	*132*
Actual	100	112	111	118	114	124	137	

Actual trips

Rest of WoE	53575	59818	59366	63288	61014	66523	73610	
WoE incl. Bristol	137726	150378	154267	180148	191913	*N/A*	*N/A*	

*Bristol City Council states that the cycling target is based on a combined trajectory with a 91% increase by 2015/16 for the Cycling City area (a 10% per annum) and monitoring sites that fall outside of this area will continue to aim for an annual 4% increase. When combined with the 'Cycling City' trajectory this equates to a 76% increase across the sub-region by 2015/16.

Chart 13 - Sub-regional index of changes in levels of cycling



The JLTP3 dataset notes that: *"Due to problems with BCC's counters no data was collected in 2013/14. New counters have now been installed but the data coverage for 2014/15 is incomplete. So as with 2013/14 the figures reported for 2014/15 are for the West of England without BCC. These figures show a healthy 10.7% increase in cycling. Where data is available Bristol is showing a 9% increase on 2012/13. A new target and baseline will be set for 2015/16."*

Data for cycling flows show that, across the WoE sub-region (excluding Bristol), there was an increase of 24.0% over the period 2010/11-2014/15. This trend dipped below the revised target in the period 2012/2013, however this recovered in the period 2013/14 and in 2014/15 the target was being exceeded by 10 percentage points.

The issue with data collection in Bristol in the current AOMR reporting period has meant that it is not possible to include full sub-regional index figures for the period 2014/2015. The most recent sub-regional figure from 2013 shows that the increase in cycle flows was meeting the target, and the Bristol City Council posits a 9% increase in Bristol since 2012/13 with what data is available. Complete sub-regional trend reporting will be continued in the final evaluation report for 2015/16.

3.3 Congestion and reliability

This section presents results relating to congestion and reliability.

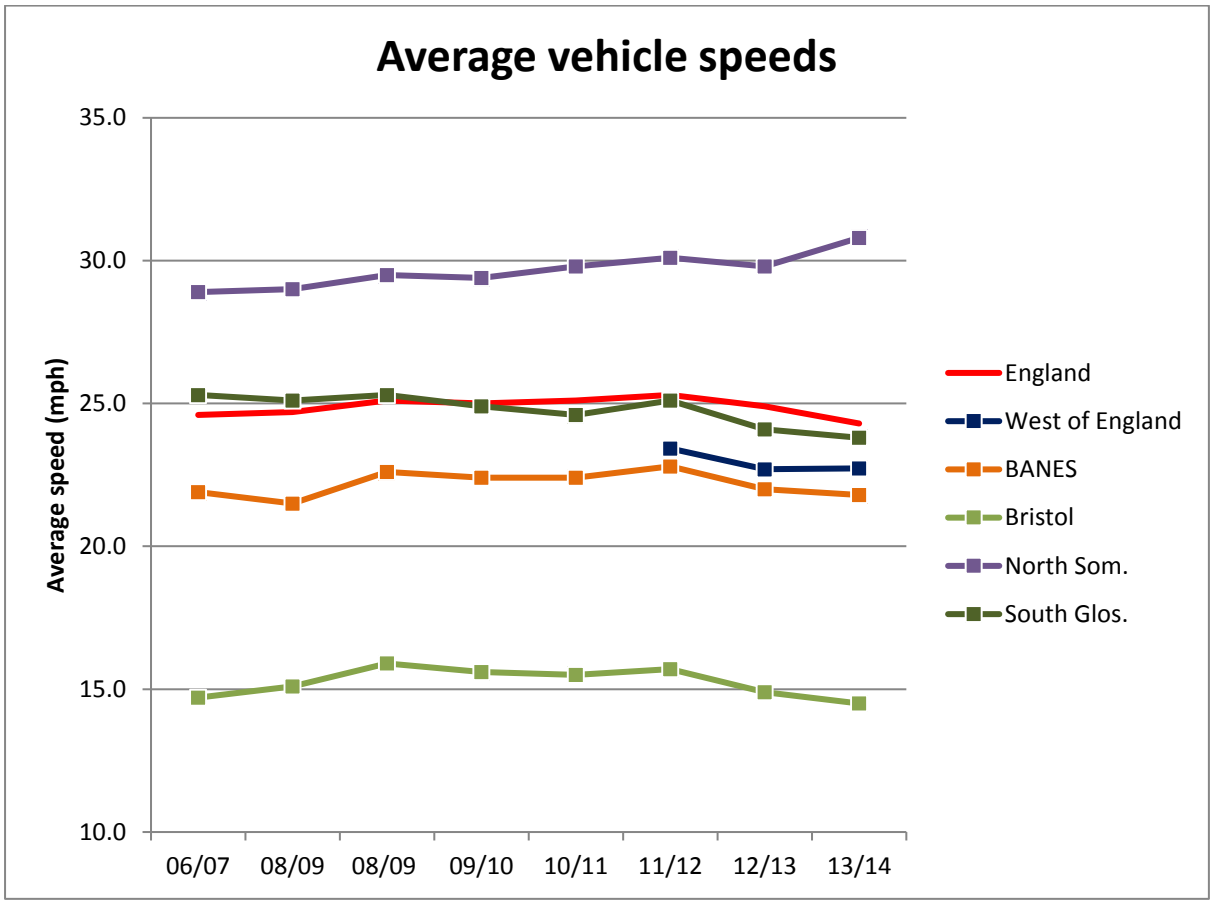
Trafficmaster data – Average AM peak journey time by mile – JLTP3 indicator

Table 3.31 presents figures for average journey time by mile across the four WoE authorities along with national comparator data.

Table 30 - Average vehicle speeds (mph) during AM peak

Area	06/07	08/09	08/09	09/10	10/11	11/12	12/13	13/14	*(% +/-) 10/11- 13/14*
England	*24.6*	*24.7*	*25.1*	*25.0*	*25.1*	*25.3*	*24.9*	*24.3*	*-3.2*
West of England	*N/A*	*N/A*	*N/A*	*N/A*	*N/A*	*23.4*	*22.7*	*22.7*	*N/A*
BANES	21.9	21.5	22.6	22.4	22.4	22.8	22.0	21.8	*-2.7*
Bristol	14.7	15.1	15.9	15.6	15.5	15.7	14.9	14.5	*-6.5*
North Som.	28.9	29.0	29.5	29.4	29.8	30.1	29.8	30.8	*3.4*
South Glos.	25.3	25.1	25.3	24.9	24.6	25.1	24.1	23.8	*-3.3*

Chart 14 - Average vehicle speeds



Vehicle speeds are relatively stable over time, and this is to be expected. Vehicle speeds in Bristol fell by more than the fall in the other three UAs, and by over double the speed drop in England as a whole, reducing by 6.5% over the period 2010/11-2012/13.

Between 2010/11 and 2014/15, speeds reduced slightly across BANES, Bristol, and South Gloucestershire. However in North Somerset they rose by 3.4%. Bristol had the lowest average vehicle speeds (14.5mph), whilst North Somerset had the highest (30.8mph). This is likely to be a reflection of the different urban and transport network densities of the two areas.

Trafficmaster data – Journey time variability

We are in the process of designing a methodology to assess journey time variability and average delays from the raw Trafficmaster data. In the case of calculating average delays, we intend to use the DfT's recommended approach for comparisons with historic free flow speeds, using the 85th percentile speed (ranking speeds from low to high) at baseline (2010). Percentage journey time delay is then estimated as follows:

$$\left(\frac{v_{ff}}{\bar{v}_{am}} - 1\right) \times 100\%$$

Wherev_{ff} = free flow speed

$\bar{v}_{am}$ = mean morning peak speed

Bus punctuality data – JLTP3 indicator

Figure 3.32 presents the figures for bus punctuality across the WoE sub-region. In addition to the average vehicle speed data presented in the previous section, bus punctuality data is a further metric which can be used to evaluate the impact of the WEST programme on congestion and reliability.

Table 31 - Percentage of buses starting on time

	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15
Actual	66.5	74.6	64.1	75.7	77.0	79.4	80.9	83.0	85.7	83.1
Target	*66.5*	*67.5*	*68.5*	*70.5*	*71.5*	*74.5*	*78.4*	*82.3*	*N/A*	*N/A*

Table 32 - Percentage of buses on time at intermediate timing points

	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15
Actual	51.5	58.6	56.2	61.0	61.8	70.2	70.9	71.0	71.3	71.6
Target	*51.5*	*53.1*	*54.8*	*58.4*	*60*	*64.6*	*71*	*77.3*	*N/A*	*N/A*

Table 33 - Average excess waiting time on frequent bus services (min)

	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13	13/14	14/15
Actual	2.92	2.73	2.36	2.23	1.52	1.22	1.32	0.93	0.79	N/A
Target	*2.92*	*2.75*	*2.6*	*2.3*	*2.15*	*1.85*	*1.7*	*1.55*	*1.4*	*N/A*

Note: BCC no longer collect excess waiting time on frequent services data because there are not enough frequent services to produce a robust statistic. Only NSC still collects data. Due to incomplete coverage this indicator is no longer reported.

Chart 15 - Percentage of buses starting on time

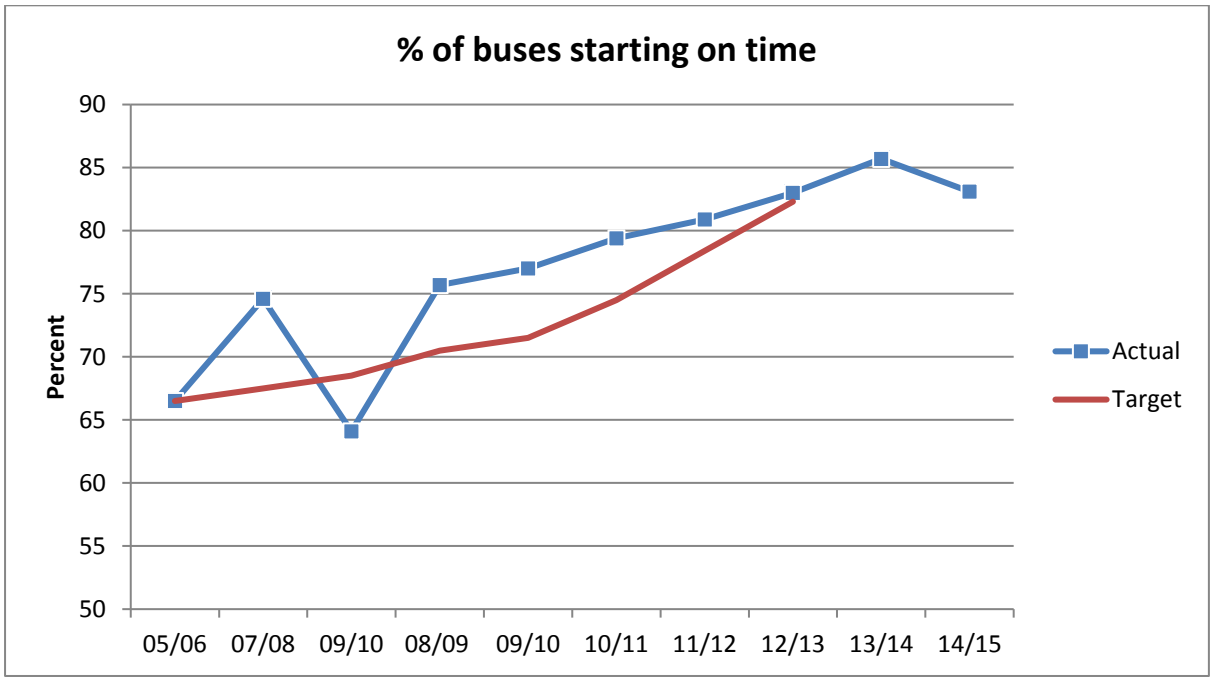


Chart 16 - Percentage of buses on time at intermediate timing points

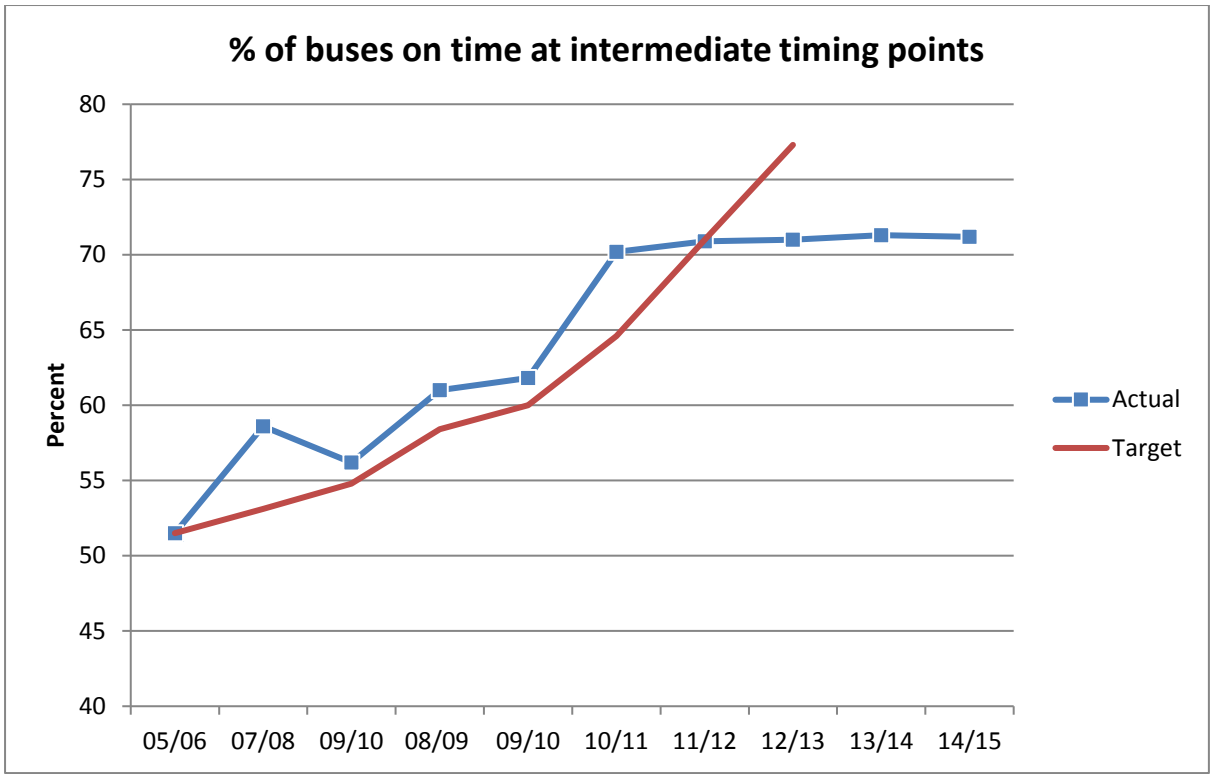
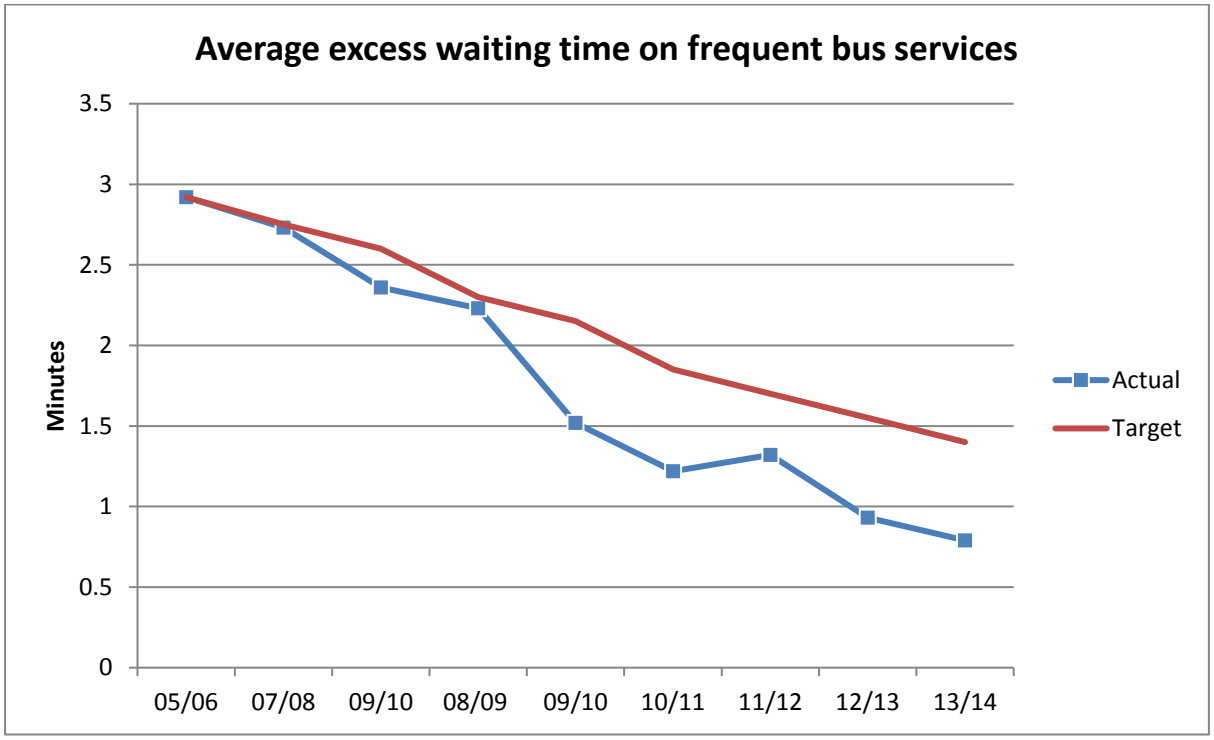


Chart 17 - Average excess waiting time on frequent bus services



The results for bus punctuality demonstrate that generally the WoE sub-region is maintaining positive outcomes in this area, however, there has been a drop in the proportion of buses starting on time in the 2014/15 reporting period when compared to the previous year. Nonetheless, improvements in bus punctuality have been made in the period 2010/11-2014/15, and this continues the increasing trend since 2005/06.

Since 2010/11, 4.7% more buses are starting on time, 2.0% more buses are on time at intermediate timing points (although this figure dipped below the target in 2012/13 and currently remains approximately 6% below the last target figure for 2012/13).

Data on average excess waiting times stopped being collected in 2013/14, and so it is not possible to continue reporting on this metric.

To contextualise this trend – since 2005/06, 25.0% more buses are starting on time, 38.2% more buses are on time at intermediate timing points, and average excess waiting times in 2013/14 were down by two minutes from almost three minutes in 2005/06 to just under 0.8 of a minute in 2013/14.

The JLTP dataset notes that: *"Overall bus punctuality was unchanged in 2014/15. Where major construction projects have finished, for example in Weston-super-Mare, there has been a significant improvement in bus punctuality but elsewhere continuing construction and utilities work has caused disruption to local bus services. Insufficient data is now collected for 'waiting time for frequent services' so this indicator is deleted."*

3.4 Carbon emissions

This section presents results relating to carbon emissions.

Carbon emission statistics – JLTP3 indicator

Presented below are the figures for levels of carbon dioxide emissions across the four UAs, and at the WoE sub-regional level.

Table 34 - Total kilotonnes carbon dioxide for road transport

	2006	2007	2008	2009	2010	2011	2012	2013
BANES	265.9	267.8	261.0	247.6	243.4	239.4	235.7	232.5
BCC	476.8	488.5	475.5	461.6	446.8	441.6	436.3	428.3
NSC	310.6	315.3	309.9	300.8	291.2	285.8	269.2	265.2
SGC	425.9	436.4	427.9	411.4	402.0	392.6	384.0	381.4
WoE	*1479.2*	*1508*	*1474.3*	*1421.4*	*1383.4*	*1359.4*	1325.2	1307.4

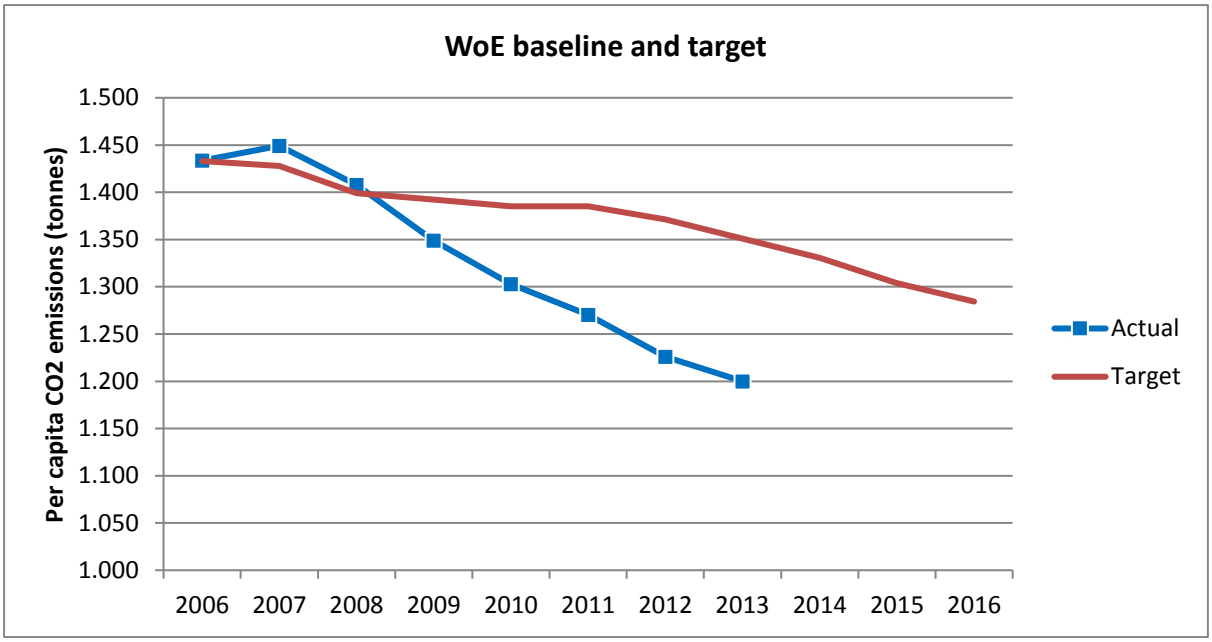
Table 35 - Carbon dioxide per capita emissions: Transport

	2006	2007	2008	2009	2010	2011	2012	2013
BANES	1.55	1.55	1.50	1.43	1.40	1.36	1.33	1.29
BCC	1.17	1.19	1.15	1.10	1.06	1.03	1.01	0.98
NSC	1.58	1.58	1.54	1.49	1.43	1.41	1.32	1.29
SGC	1.67	1.70	1.66	1.58	1.54	1.49	1.44	1.42
WoE	*1.43*	*1.45*	*1.41*	*1.35*	*1.30*	*1.27*	1.23	1.20

Table 36 - WoE baseline and target: per capita CO2 emissions (tonnes)

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Actual	1.433	1.449	1.408	1.349	1.303	1.270	1.226	1.200	N/A	N/A	N/A
Target	1.433	1.428	1.399	1.392	1.385	1.385	1.371	1.351	1.331	1.304	1.284

Chart 18 – Carbon dioxide WoE baseline and target



The results for carbon emissions shows that after initially exceeding target values, since 2009 the WoE sub-region has reduced carbon emissions year-on-year to well beneath target levels.

Reductions in carbon dioxide emissions have been recorded across all four of the UAs, and annual area-wide levels emissions of carbon dioxide from road transport have fallen by 171.8 kilotonnes between 2006 and 2013. This represents an overall reduction of 11.6%.

DVLA licensing data – Low emissions vehicles statistics

Low emissions licensing data from the DfT is supplied as standard at the UK level. A request for the regional breakdown of this data was submitted to DfT via the .gov.uk portal, and this regional data was provided. However, it should be noted that the data in the table below is from the South West region as a whole, and should therefore be considered as a provisional example whilst we liaise on the feasibility of extracting the specific West of England sub-regional data.

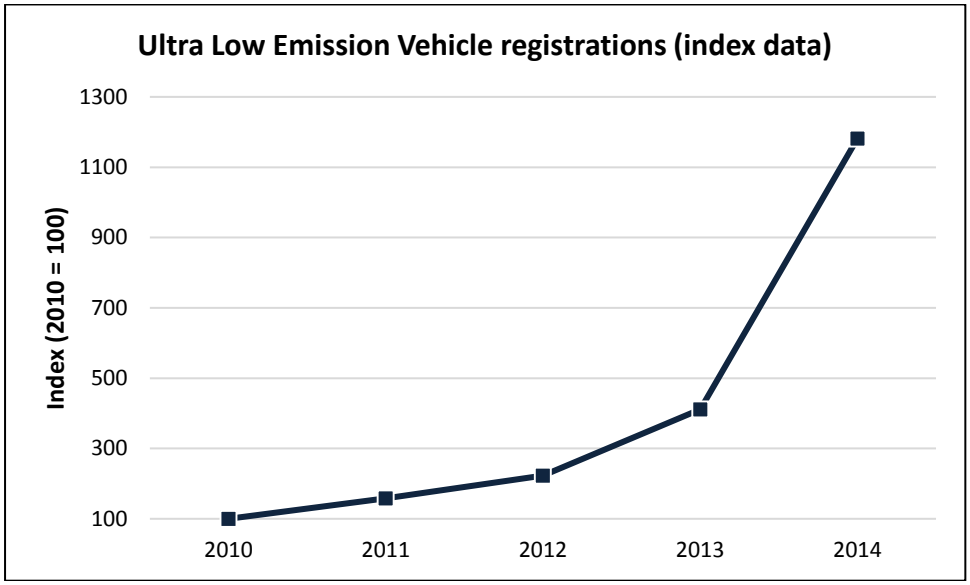
Table 37 - Ultra-low emission vehicles (ULEV)1 registered for the first time, South West: 2010 - 2014

	2010	2011	2012	2013	2014
Plug-in-Grant Eligible Cars	19	151	261	594	1789
Non Plug-in-Grant Eligible Cars	6	5	2	1	2
Quadricycles	0	0	40	24	6

All Cars (inc. quadricycles)	*25*	*156*	*303*	*619*	1797
Motor cycles & tricycles	108	75	18	17	33
Plug-in Grant Eligible Vans	0	2	30	31	109
Non Plug-in Grant Eligible Vans	22	17	11	5	13
All Vans	*22*	*19*	*41*	*36*	122
Heavy goods	0	0	0	0	0
Buses and coaches	0	0	2	0	0
Other vehicles	11	13	6	11	9
Total	*166*	*263*	*370*	*683*	*1961*
Index	*100*	*158*	*223*	*411*	*1181*

NOTE: The Department for Transport uses the term 'Ultra-Low Emission Vehicles' to refer to vehicles with significantly lower levels of tailpipe emissions than conventional vehicles. In practice, the term currently refers to electric, plug-in hybrid and hydrogen fuel-cell vehicles. For the purposes of this indicator, vehicles with fully electric powertrains, and cars with tail-pipe emissions below 75 g/km of carbon dioxide have been included at this stage.

Chart 19 - Index trend of new Ultra Low Emission Vehicle registrations



The data for ULEV shows that across the South West region as-a-whole, there has been an increase year-on-year in the number of low emissions vehicles licensed. Since the 2010 baseline there has been well over a tenfold increase in the number of new low emissions vehicles licensed – rising from 166 in 2010 to 1,961 in 2014. As mentioned, this is a regional trend, and the final evaluation report will comment more specifically on the data for the WoE sub-region, if this breakdown is available.

3.5 Access to employment and commercial centres

Accession – Access to employment and key commercial centres

Accession is no longer in use, and a new accessibility model (TRAC) is being procured by Bristol City Council. We are liaising with the authorities to explore the feasibility of using a measure or measures from this model in the analysis.

Employee surveys – Modal split at workplaces

Results on modal split at workplaces are presented in the Business Engagement section of this report.

WoE Labour Market Report – Levels of employment

Table 3.39 presents figures for levels of employment and unemployment in the WoE sub-region. These data have been sourced from the West of England Partnership Labour Market report, and these data provide a useful aggregate perspective on the state of the economy in the West of England sub-region.

Table 38 - Employment data for WoE sub region

Indicator	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15
Employment level	536,500	543,100	535,800	545,200	552,700	541,200
Employment rate	74.6	74.8	72.6	73.6	73.7	77.4
Unemployment level	36,400	36,400	44,400	40,100	34,300	24,700
Unemployment rate	6.3	6.3	7.7	6.7	5.8	4.4

The number employed in the WoE region in 2014/15 is 541,200, a 0.88% increase on the 2009/10 period. The employment rate has increase from 74.6% to 77.4%. Numbers unemployed have reduced over the same period by 32% to 24,700, representing an unemployment rate of 4.4%, 1.9% points less than in 2009/10.

This suggests that additional jobs have been created in the sub-region, and reductions are evident in the rates of unemployment meaning that a greater proportion of those able to work are in employment. It should be noted however that whilst the economic figures are a useful contextual addition to the analysis, they are almost certain to be most heavily influenced by wider macroeconomic factors beyond the scope of the transport interventions under evaluation here.

3.6 Air quality and road casualties

This section presents data relating to air quality and road casualties.

AQMA data – Nitrogen dioxide levels – JLTP3 indicator

Figure 3.40 presents data for nitrogen dioxide levels in two AQMA areas, one in Bath, and one in Bristol. The AQMA in Bath was extended in area and both the original and extended areas are reported.

Table 39 - Bristol AQMA data

µg/m³ of nitrogen dioxide

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Actual	48.00	40.30	49.50	48.70	48.53	45.30	51.00	45.20	43.27	45.20	40.06
Target	*48*	*47.6*	*47.3*	*47*	*46.7*	*46.3*	*46*	*45.6*	*45.2*	44.8	

Table 40 - Bath AQMA data

µg/m³ of nitrogen dioxide

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Old AQMA Target	*53*	*52*	*51*	*50*	*49*	*48*	*47*	*46*	*45*	44	
Old AQMA Actual	53	62	69	62	65	63	60	57	56	57	57
Ext. AQMA Actual	40	49	55	48	50	49	50	45	46	45	47

Chart 20 - Bristol AQMA data

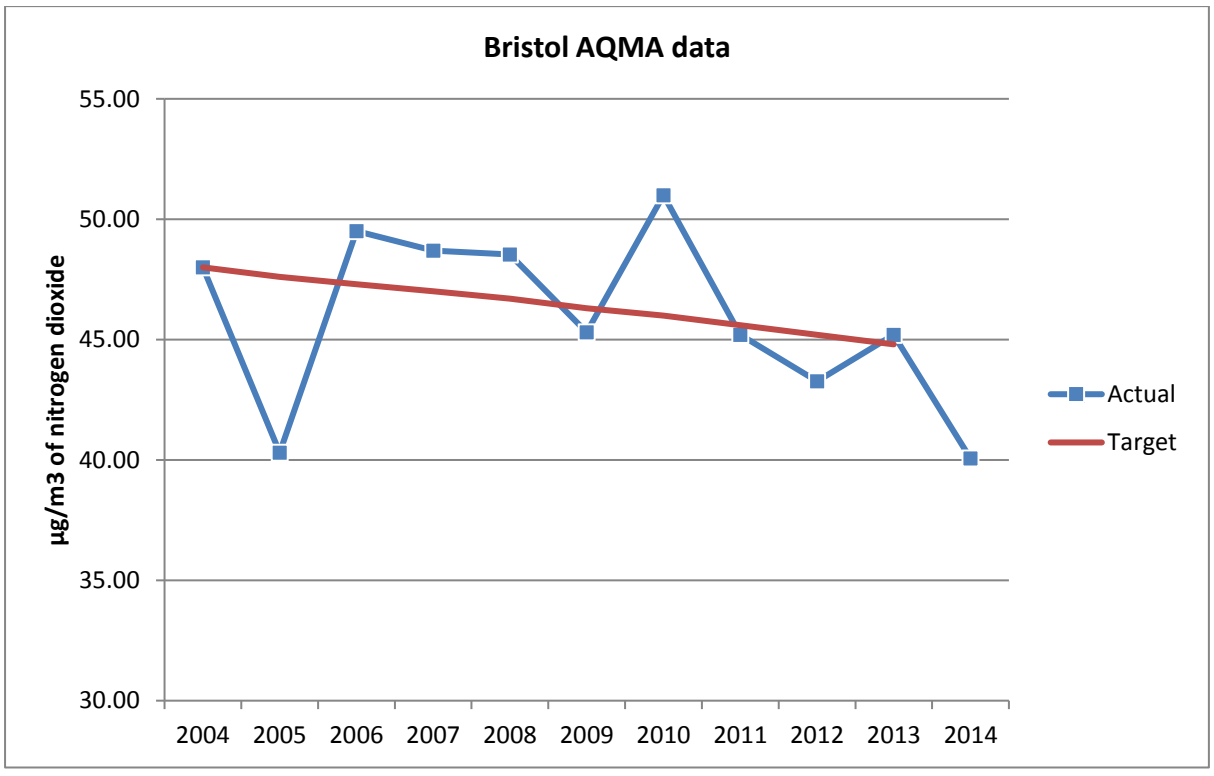


Chart 21 - Bath AQMA data

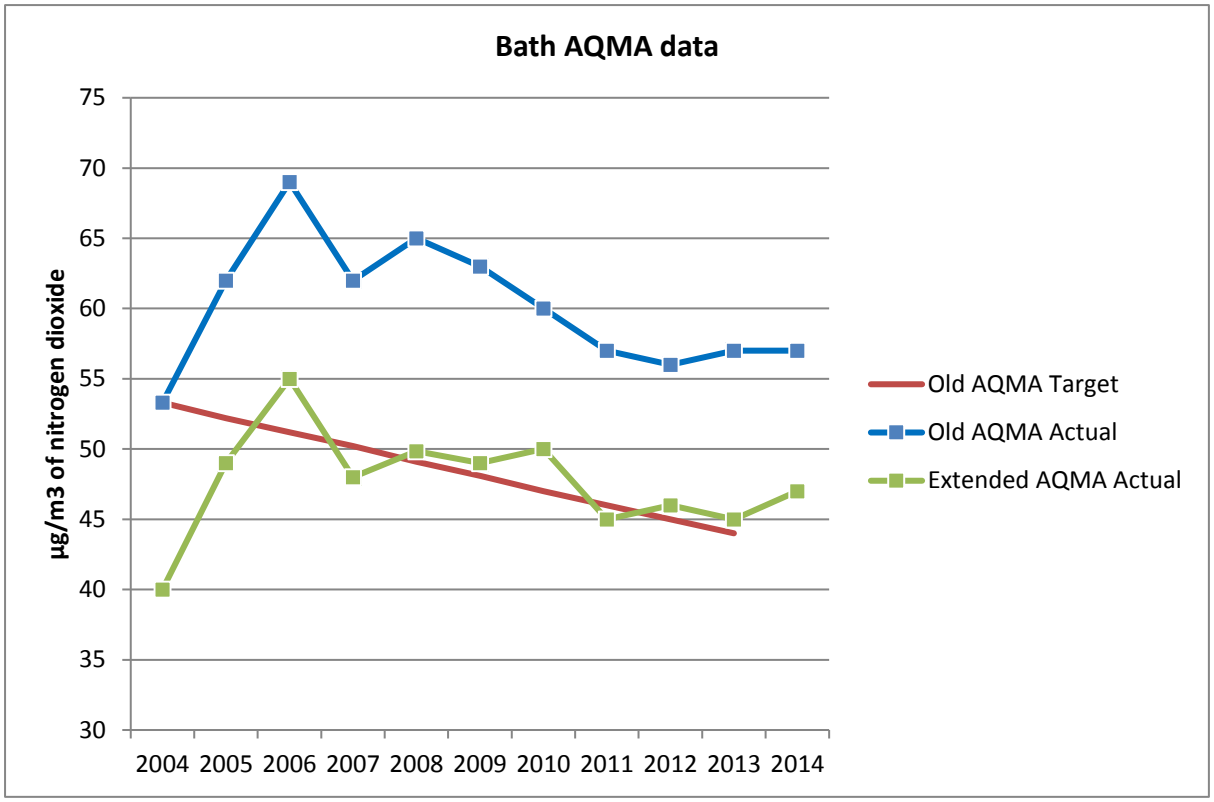


Table 41 - South Gloucestershire AQMA data

	Kingswood				**Staple Hill**			
Year	Average Annual Mean AQMA Sites	**Average Annual Mean AQMA Exceeding sites (previously used for LTP3c)**	2012 Average Annual mean AQMA sites used in 2010	2012 Average Annual mean AQMA sites used in 2011	Average Annual Mean AQMA Sites	**Average Annual Mean AQMA Exceeding sites (previously used for LTP3c)**	2012 Average Annual mean AQMA sites used in 2010	2012 Average Annual mean AQMA sites used in 2011
	(µg/m³)				(µg/m³)			
2010	38.9	42.7	-	-	44.4	45.4	-	-
2011	36.7	42.9	-	-	39.9	41.7	-	-
2012	41.9	44.1	45.9	47.9	41.5	45	45.2	46.6
2013	37.1	42.1	39.4	41.1	36.6	43	39.5	41.6
2014	35.6	40.2	40.2	40.2	35.9	43.4	39.8	41.5

The AQMA results for Bath, Bristol, and South Gloucestershire show a mixed picture. In Bristol, there has been a general improvement in air quality since 2006, although there has been considerable fluctuation in levels of Nitrogen dioxide year-on-year. In Bristol, air quality was slightly worse in 2013 than in 2012, but then improved dramatically in 2014, placing the latest figure below the previous

target. Since the baseline in 2010 there has been a reduction of 10.94µg/m^3 in Nitrogen dioxide within the AQMA over the period to 2014.

In Bath, air quality has not demonstrated an improvement since 2004 levels, although there has been an improvement over the period 2008-2014 from peak Nitrogen dioxide levels of 2006. The old AQMA target for Nitrogen dioxide has not been met, and the extended AQMA result exceeds the target. In Bath since the baseline in 2010 there has been a reduction of 3µg/m^3 in Nitrogen dioxide within the extended AQMA over the period to 2014, but a 2µg/m^3 increase since the 2013 AOMR.

In South Gloucestershire, there has been a decrease of 2.5µg/m^3 Nitrogen dioxide for sites exceeding thresholds in Kingswood from 2010-2014 and a decrease of 2.0µg/m^3 Nitrogen dioxide over the same period in sites exceeding thresholds in Staple Hill.

Bristol QoL survey – Perception of traffic pollution

Presented below are figures for the perception of traffic pollution by local residents in Bristol. Note these figures are taken from the Bristol Quality of Life (QoL) survey and as such represent only the perceptions of residents of Bristol and not the other three UAs.

Table 42 - Bristol Quality of Life survey - Public perceptions of traffic pollution

	2009	2010	2011	2012
Percentage of respondents who think air quality and traffic pollution is a problem in their neighbourhood	64	57	58	56

The question regarding perceptions of air quality and traffic pollution has been excluded from the 2013 and 2014 Bristol QoL survey. Therefore it has not been possible to comment on current public perception of these issues.

STATS19 data – Road casualties KSI – JLTP3 indicator

Table 3.44 presents data on the numbers of road casualties killed or seriously injured (KSI) across the four UAs in the sub-region.

Table 43 - Road casualties KSI in the WoE sub-region

	Average 05-09	2010	2011	2012	2013	2014	2015	2016
Actual	358	312	258	286	283	277	N/A	N/A
Target	*358*	*348*	*339*	*329*	*319*	*309*	*299*	*289*

Table 44 - STATS19: Detailed statistics

2014

	Fatal	Serious	KSI Total	Slight	Total

BANES	6	45	51	330	381
Bristol	6	110	116	1051	1167
N Somerset	1	50	51	454	505
South Glos	6	53	59	496	555
WoE Total	*19*	*258*	*277*	*2331*	*2608*

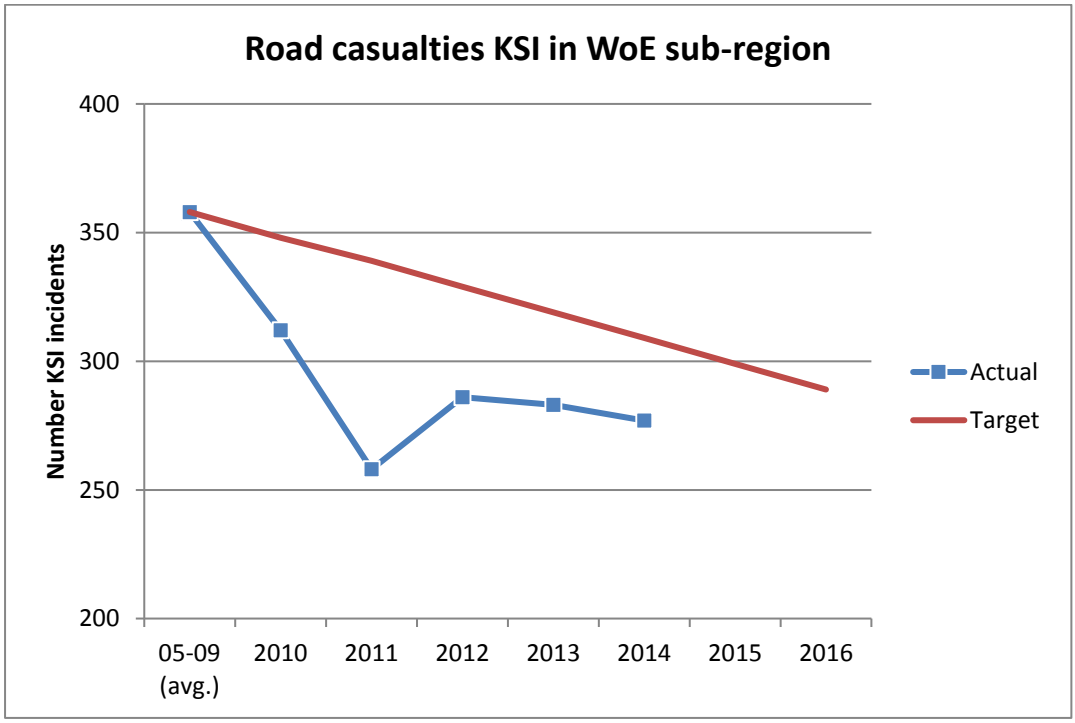
2013

	Fatal	Serious	KSI Total	Slight	Total
BANES	6	45	51	360	411
Bristol	12	94	106	1004	1110
N Somerset	4	63	67	492	559
South Glos	9	50	59	586	645
WoE Total	31	252	283	2442	2725

2012

	Fatal	Serious	KSI Total	Slight	Total
BANES	4	29	33	405	438
Bristol	7	139	146	1188	1334
N Somerset	6	50	56	495	551
South Glos	7	44	51	602	653
WoE Total	*24*	*262*	*286*	*2690*	*2976*

Chart 22 - Road casualties KSI with target comparator



The road causalities results shows a considerable reduction in the number of people killed or seriously injured on the roads in the WoE sub-region over the period 2005-2014. In total, by 2014 there had

been a reduction of 22.6% in the number of road casualties killed or seriously injured compared with the 2005-2009 baseline average of 358. There has been a reduction of 11.2% in KSI incidents in relation to the 2010 baseline.

3.7 Physical activity

This section presents data relating to physical activity and health impacts.

Active People Survey – Levels of Walking and Cycling

We have concerns in relation to the sample size of the Active People Survey for demonstrating change over time. We are still in the process of considering these issues and we currently do not report any data. In addition, the questions have frequently changed from year to year.

Bristol Quality of Life Survey – Levels of cycling

Presented below are figures for levels of cycling amongst local residents in Bristol[6]. Note these figures are taken from the Bristol Quality of Life survey and as such represent only the perceptions of residents of Bristol, and not the remaining three UAs.

Table 45 - Percentage of people cycling at least once a week

	2009	2010	2011	2012	2013	2014
Percentage of respondents who ride a bicycle at least once a week	19.3	19.5	18.4	20.0	19.4	24.5

[6] *The data for the entire trend (2009-2014) has been revised in line with sampling concerns. The explanatory note below is taken from the 2014 Bristol Quality of Life report:*

A lower response rate in 2014 raised concerns that the survey would be more subject to non-response bias. This is when some groups have more of a tendency than others to participate in the survey or not. In the past more women than men responded and a disproportionate number of older people. Also some wards are under-represented in the sample, despite attempts to bolster this, together with the very different demographic profile of respondents compared to previous years. The responses therefore were weighted according to sex, age and ward to help compensate for this bias.

In addition, the low response combined with substantial "missing not at random" issues suggested a nominal 95% confidence for the true response may not have an actual coverage of 95% -- it may be much less. A "replicate weight method" of calculating confidence limits, the "bootstrap", was introduced to produce more statistically robust results than the "Taylor series linearization method" of calculating standard errors used in previous years. Bootstrapping can be less sensitive to the underlying assumptions.

These changes mean that the 2014 results are not directly comparable to the previous QoL data already published. To provide comparison for 2014, previous year's results (for Bristol overall only, not yet individual wards) for a 5-year trend have been recalculated in the same way as outlined above for comparison purposes, so these 2009-2013 figures may be different to previously published.

Table 46 - Percent of respondents using different modes for work

	2009	2010	2011	2012	2013	2014
Car (as driver)	55	54	49	47	49	42
Car (as passenger)	5	5	7	7	7	3
Bus	10	10	14	13	13	12
Cycle	9	10	7	8	9	16
Walk	17	17	17	17	15	20

In terms of journeys to work, there has been a 7 percentage point decrease in the proportion of people driving to work in 2014 as compared with 2013, and a reduction of 12 percentage points since 2010. The proportion of people getting a lift to work as a passenger has also fallen by 2 percentage points since 2010. This has been matched by a rise in the proportions of people using the bus of 2 percentage points. Levels of cycling in 2014 increased by 7 percentage points as compared with 2013, and 6 percentage points as compared with 2010. Proportions of people walking have risen by 3 percentage points from 17% to 20% since 2010. However, as the caveat from the Bristol Quality of Life Survey mentions, because of the sampling issues, a direct comparison between 2014 and the preceding years is not possible.

4 Business Engagement

This section describes progress with delivery and collection of outcome data for the Business Engagement project area, reporting results where available. The section is divided into the following areas of activity, reflecting the Outcome Monitoring Plan:

- Area Travel Plans and employer grants
- Low emission vehicles
- Freight consolidation

Area Travel Plans and employer grants represent the most substantial area in terms of funding.

4.1 Delivery progress with Area Travel Plans and Employer Grants

Business activities engagement continued across the three Area Travel Plan areas in 2014-15 (North Fringe, Portside and Bristol Airport), although the dedicated business engagement programme for the Portside area had closed in early 2014. Engagement activities with businesses in the Ports area were undertaken by the three separate UAs which 'Portside' crosses (Bristol, South Gloucestershire and North Somerset).

4.1.1 Employers engaged through LSTF business support activities

The following tables show the employers engaged with by all four UAs, in both the three Area Travel Plan areas and across the UAs as a whole.

Bristol: Employers engaged with intensively during 2014-15

The LSTF team in Bristol engaged with a total of 235 employers in 2014/15, through activities such as newsletters, face to face meetings, seasonal campaigns and Cycle Champions. Sixty five of the employers received 'intensive engagement'. Of this group, 20 employers were awarded one or more employer grants. 'Intensive Engagement' is defined in the following way:

A combination of item 1) AND any of or a combination of the below elements:

1. A preliminary Business Engagement meeting (face to face) with the Business engagement manager.
   AND
2. One or more business engagement follow up services, specifically Site Audits, Staff Surveys and Roadshows
3. An employer grant
4. A significant external pressure such as Residents Parking Scheme.

The 65 employers (out of the total 235) who were intensively engaged, and those among them who received grants, are shown in **Table 47**.

Table 47 Bristol Employers receiving intensive engagement and grants in 2014/15

Employer	Intensive Engagement	Grant Awarded
Arup	Y	N
Askew Architects	Y	Y
Avon and Somerset Police Bridewell & Steele House	Y	N
Avon Fire and Rescue Service	Y	N
Axa - Marlborough Street Bristol	Y	N
Bridewell Space/Meanwhile Creative	Y	N
Bristol City Council - 100 Temple Street (Business Change)	Y	N
Bristol City council - City Hall	Y	N
Bristol City Council - Create Centre	Y	Y
Bristol City Council - Parkview	Y	N
Bristol Water	Y	Y
Bristol Zoo	Y	N
Burges Salmon	Y	N
CentreSpace	Y	N
Clifton College	Y	N
Clifton High School	Y	N
Coexist	Y	N
Computershare	Y	N
Curtins	Y	N
DAS	Y	Y
Destination Bristol	Y	N
DNV GL (was Garrad Hassan)	Y	Y
Films at 59	Y	N
Fowlers	Y	Y
Gloucestershire Cricket Ground	Y	Y
Green Hat Design	Y	N
Harmsen Tilney Shane	Y	N
Hartnell Taylor Cook	Y	Y
Hengrove Leisure Centre (Hengrove Park)	Y	N
Holymead Primary	Y	N
Jones Lang LeSalle	Y	N
Lawrence Weston Community Farm	Y	N
Lyons Davidson	Y	N
Nameless	Y	Y
North Bristol NHS Trust (Southmead Hospital)	Y	Y
Osborne Clarke	Y	Y
Parsons Brinckerhoff	Y	N
PASCE Ltd (Mini Rigs)	Y	Y
Peter Evans Partnership	Y	Y
PH3 Design (Hamilton House)	Y	N
Places for People	Y	N

Pukka Herbs	Y	Y
Redland High School for Girls	Y	N
Science Research Centre (Engine Shed)	Y	N
Second Step	Y	N
Sift Ltd	Y	N
Simply Health	Y	Y
Source	Y	N
South Bristol Community Hospital (Hengrove Park)	Y	N
St Stephens Church	Y	N
St Werburghs City Farm	Y	Y
Stirling Dynamics	Y	N
Stride Treglown	Y	N
Taxi Studio	Y	Y
Teleperformance	Y	N
The Greenhouse	Y	Y
The Southville Centre	Y	N
Tobacco Factory	Y	N
Tooga	Y	Y
Travel Planning Associates (TPA)	Y	N
UHB Bristol (Marlborough Street)	Y	N
University of Bristol	Y	N
UNUM	Y	N
Vehicle Certification Agency	Y	N
Wessex Garages	Y	Y

North Somerset: Employers engaged with during 2014-15

The North Somerset business engagement programme involved contact with 47 employers, with intensive engagement work carried out with 11 employers. Eight were awarded an employer grant (including two schools) in 2014-15.

Table 48 North Somerset Employers receiving intensive engagement and grants in 2014/15

Employer	Intensive engagement	Grant Awarded
All Ability Cycling		
Alliance Homes		
ASC Recruitment		
Avon and Somerset Police HQ, Portishead	Y	
Avon and Somerset Probation service		
B & Q		
Bristol Airport and business partners	Y	Y
Broadway Lodge		
Business West		
Cadbury Garden Centre		
Cadbury House, Frost Hill, Congresbury		
Capita Symonds		
Castlan Group		
Claverham Ltd/UTC areospace		
Edwards Ltd	Y	
Fountain Forestry		
GE Oil and Gas	Y	Y (2)
Hutton Moor Leisure Centre		
Knightstone Housing		
Langford Vet School/Services		
Lyecross/ Alvis Brothers		
Mendip Snowsport Activity Centre		Y
Milton Park Primary School		Y
Moraghan Mushroom Farm, Stock Lane,		
North Somerset Council & partners	Y	
Oxford Instruments		
Portisfields Business Park		
Pure Offices, Portishead	Y	Y
Pure Offices, Weston-super-Mare	Y	Y
Second Step		
Siniat	Y	
SITA		
Smart Systems		
Smurfit Kappa		
Solarsense		
Somerset Wood Recycling		

Sovereign Centre		
St Monica Trust		
St Peter's Hospice		
Strawberry Line Café		
Thatchers Cider Company Ltd		
The Hive	Y	
Westhaven School		Y
Weston College, Knightstone Campus		
Weston Hospital	Y	
Weston Works and partners	Y	Y
Yeo Valley Farms Ltd, Yeo Valley HQ, Rhodyate, Blagdon		

Bath and North East Somerset: Employers engaged with during 2014-15

The 27 employers engaged with in Bath and North East Somerset are shown in **Table 49** . Four employer grants were awarded in 2014-15.

Table 49 BaNES Employers receiving intensive engagement and grants in 2014/15

Employer	Intensive engagement	Grant Awarded
University of Bath	Y	N
Royal United Hospital NHS Trust	Y	N
Bath Spa University (multiple sites)	Y	N
Curo Group (formerly Somer Housing)	Y	Y
Sirona Care and Health (multiple sites + other NHS Staf)	Y	N
Buro Happold Limited	Y	N
Gradwell Communications	N	N
City of Bath College	N	N
Avon and Somerset Police, Kensham	Y	N
Avon and Somerset Police, Bath	N	N
Bath and NE Somerset Council (multiple sites)	Y	Y (2)
Bath Riverside / Crest Nicholson	Y	N
Bath Chamber of Commerce	N	N
Bath City Centre businesses	N	N
Jollys (House of Fraser)	N	N
Withy King (Solicitors)	N	N
BBA Architects	N	N
Ethical Property Company, Bath	N	N
Nash Partnership - Architects	N	N
Integrity Print	N	N
Avon Fire Service - re-locating Keynsham building	N	N
Farrington's Farm Shop Ltd	Y	Y
Bath Rugby	Y	N
Helphire / Redde Plc	N	N
Loss Management Group Jewellery	N	N
B&NES Carers' Centre	Y	N
Integral Engineering Design	N	N

South Gloucestershire: Employers engaged with during 2014-15 (includes North Fringe)

South Gloucestershire Council engaged with 67 employers during 2014/15, of whom intensive engagement took place with 37. Six received one or more employer grants.

Table 50 South Gloucestershire Employers receiving intensive engagement and grants in 2014/15

Employer	Intensive engagement	Grant Awarded
Aardman Animations	Y	
AbbeyWood Shopping Park	N	N
Agility Logistics Ltd	N	N
Airbus Operations Ltd	Y	N
Assystem	N	N
Atkins	Y	Y
Avon and Somerset Constabulary	Y	N
Avon Magistrates Court	N	N
Aztec Hotel & Spa	Y	N
Babcock / Cavendish Nuclear.	Y	N
Bristol City College	Y	N
Boeing Defence UK	Y	N
Bristol & Bath Science Park	Y	N
Capgemini	Y	N
DHL / Sainsbury's Distribution	Y	N
CBRE, The Mall	N	N
CSR	N	N
EE	N	N
Filton 20: Airbus Innovations	Y	N
Filton 20: Altran Alliance	Y	N
Filton 20: BAE Systems ATC	Y	N
Filton 20 BAE Systems - Combat Vehicles (UK)	Y	N
Filton 20: BAE Systems - MAI-DI	Y	N
Filton 20: BAE Systems - Maritime Submarines	Y	N
Filton 20: BAE Real Estate Solutions	Y	Y (2)
Filton 20: MBDA	Y	N
Filton20: Selex	N	N
Forestry Commission	N	N
Friends Life	Y	N
GE Capital Equipment Finance Ltd	N	N
GKN Aerospace - Filton	Y	N
GKN Aerospace - Western Approach (Ports)	N	N
Goodman (Workman)	N	N
Hewlett-Packard Ltd (HP)	Y	N
HEFCE	Y	N
HfT	N	N
Hoare Lea	N	N
Holy Trinity Primary School	N	N

Integral UK Ltd	N	N
ISG Construction	Y	N
John Lewis	Y	N
Kendall Kingscott Limited	N	N
Knorr- Bremse SfCV Ltd	N	N
L-3 Communications Marine Systems UK	N	N
Marine Current Turbines	Y	N
MITIE	Y	N
MOD Abbey Wood North	Y	N
MOD Abbeywood South	Y	N
Motability Operations	N	N
Mouchel	N	N
MTI Independent Mortgages LTD	N	N
NCC: National Composites Centre	Y	N
South Gloucestershire Clincial Commissioning Group (previously NHS SG)	N	N
NHS Blood & Transplant; Filton	Y	N
North Bristol NHS Trust (all sites)	Y	N
NVIDIA Technology UK Ltd.	Y	Y
Precision Profiles	Y	N
Property Solutions	N	N
Rolls Royce	N	N
Smart Stream	N	N
South Gloucestershire & Stroud College	N	N
South Gloucestershire Council	N	Y
South West News Services	N	Y
ST Microelectronics	Y	N
Sysemia	Y	N
Thales	N	N
University of the West of England (Frenchay)	Y	Y (2)

4.1.2 Employer grants

In 2014/15, 42 employer grants were awarded to 38 different employers across the sub-region, compared with 50 grants in 2013/2014 and 37 grants in 2012/13. The value of grants totalled £222,389, and this attracted an additional £537,562 of match funding from the businesses.

The largest number of grants was awarded for cycling facilities, principally cycle parking, shelters, showers, lockers, changing and drying facilities, and pool bike schemes. Three grants were provided for electric bicycles and tricycles. Other funded schemes included 'myPTP' credits, support for electric vehicle charging points, promotion of car-share schemes and other sustainable transport.

Table 51 shows the distribution of grants across the UAs and by sector (public, private and third sector in 2012/13, 2013/14 and 2015/16). These tables include, but are not limited to, grants awarded to employers located within the Area Travel Plan areas.

The proportion of the employer grants budget allocated to each UA for employer grants was as follows:

BCC – 40%
SGC – 40%
NSC – 10%
BANES – 10%

The expenditure breakdown per UA in 2014/15 was as follows:

Bristol £72,295 awarded to 20 employers.

South Gloucestershire £110,752 awarded to 6 employers.

North Somerset £29,675 awarded to 8 employers

BANES £9,668 awarded to 4 employers

Table 51 : Number of employer grants by local authority and sector in 2012/13, 2013/14 and 2014/15

	Number of employer grants																	
Sector of recipient employers	**BANES**			**Bristol**			**North Somerset**			**South Glos.**			**Various**			**Grand Total**		
	12/13	**13/14**	**14/15**	**12/13**	**13/14**	**14/15**	**12/13**	**13/14**	**14/15**	**12/13**	**13/14**	**14/15**	**12/13**	**13/14**	**14/15**	**12/13**	**13/14**	**14/15**
Private		3	2	7	18	17	3	5	6	4	9	6			0	13	35	31
Public	9		2	5	4	3	2	2	3	4	6	3	1		0	21	12	11
Third Sector	1			1	2		1	1								3	3	
Grand Total	**10**	**3**	**4**	**13**	**24**	**20**	**6**	**8**	**9**	**8**	**15**	**9**	**1**	**0**	**0**	**37**	**50**	**42**

4.1.3 Sustainable Travel Roadshows

The total number of Sustainable Travel Roadshows taking place in 2014/15 was 415. Of these, 159 were held with employers (Business Roadshows). The remainder were held predominantly at public events, and in schools and universities (within Transitions), and have been categorised according to the relevant LSTF tranche. This represents an increase in the number of overall events compared with 2013/14 (357 Roadshows held), but a slight fall in the number within the Business category (178 in 2013/14).

Table 52 shows the total number of Roadshows held in each local authority, separated into the relevant LSTF tranches.

Table 52 All Roadshows, 2014/15: Authority and LSTF tranche

LSTF Tranche	Authority					
	BANES	Bristol	North Somerset	South Glos	West of England	Grand Total
Business	29	79	10	40	1	159
Communities	2	80	1	20		103
New Developments				26		26
Transitions	17	45	26	39		127
Grand Total	48	204	37	125	1	415

The roadshows were staffed by the Sustainable Travel Field Team (STFT) and funded through the WoE LSTF programme. The STFT engaged with employees using motivational interviewing techniques to explore how far sustainable transport options including cycling, walking, buses, trains, car sharing, car clubs and motorcycling could be incorporated into employees' journeys to work. This was achieved with a range of 'Key Support Service Offers', including a loan bike scheme, cycle training, Personal Travel Planning, accompanied rides, bus and rail taster tickets, park and ride taster tickets, motorcycle accompanied rides, car share matchmaking services and Dr Bike sessions, as well as tailored advice and guidance, maps and other resources.

In addition to the roadshows, the STFT also delivered and collected loan bikes on 9 occasions.

Table 53 shows the total number of Roadshows in each local authority (all tranches), and the number of individuals engaged during these events, either through 'exposure' or 'participation'. 'Exposure' refers to those with whom the advisers spoke about travel and behaviour change, but who did not want to leave contact details or take up one of the Key Offers. 'Participants' comprise those additional individuals who either left contact details, requested a Key Offer, or took up a Key Offer. The overall numbers show a large increase over 2013/14 (14,161, compared with 8,631 in 2013/14), but the balance between 'exposures' and 'participants' saw a substantial shift from the latter to the former. In 2013/14 'participants' made up 37% of total numbers engaged, but in 2014/15 the proportion of 'participants' had dropped to 14%.

Table 53 All Roadshows 2014/15: individuals engaged

	a) Number exposed	b) Number of Participants	Total people engaged (a+b)
BANES	1036	252	1288
Bristol	6829	950	7779
North Somerset	606	174	780
South Glos.	3717	597	4314
Grand Total	12188	1973	14161

Table 54 provides the same information for the Business Roadshows only.

The Roadshows reached 5254 employees at 159 events, offering services such as loan bikes, electric pool bikes, Dr Bike sessions, route planning and personal travel advice, cycle training, public transport taster tickets and car share initiatives. Despite fewer events than in the previous year, the number of people engaged at Business Roadshows increased by over 1000 (from 4211 in 2013/14). The proportion of 'exposures' rose from 58% in 2013/14 to 82% in 2014/15. This change reflects in part the reduction in Dr Bike sessions held at workplaces.

Table 54 Business Roadshows, 2014/15: individuals engaged

Authority	a) Number exposed	b) Number of participants	Total people engaged (a+b)
BANES	605	202	807
Bristol	2039	420	2459
North Somerset	181	29	210
South Glos.	1478	300	1778
Grand Total	4303	951	5254

The numbers of key offers accepted by participants across all the Roadshows are shown in **Table 55**.

Table 55 : All Roadshows, 2014/15: Key offers accepted by participants

	Q1 2014/15	Q2 2014/15	Q3 2014/15	Q4 2014/15	Total
Electric Loan bike given	5	7	4	5	21
Bristol/South Glos Loan bikes	72	84	32	25	213
BaNES Loan bike referrals	42	32	15	16	105
North Somerset Loan bike referrals	2	2	0	3	7
Dr Bike services completed	284	194	136	166	780
Accompanied rides	2	2	0	1	5
Route planning - key offer	27	31	44	54	156
Route planning - conversation		188	63	147	398
Cycle training (Bristol)	29	34	37	57	157
Cycle training (South Glos)	10	10	5	10	35
Cycle training (B&NES)	3	3	1	3	10
Cycle training (North Somerset)	1	0	0	1	2
Rail tickets given	0	0	0	0	0
Car club referrals	0	0	0	0	0
All bus tickets	255	103	65	96	519
Total	732	690	402	584	2408

The STFT Customer Satisfaction Surveys

The STFT team has a core Key Performance Indicator to undertake follow-up with at least 10% of all roadshow participants (i.e. those who had provided contact details). The survey was administered to the selected 10% of participants either online (for those who had provided an email address) or by telephone.

The sampling frame for the survey in this period comprised nearly 2000 roadshow participants, using the definition of 'participants' provided previously. 482 responses were obtained during 2014/15, thus exceeding the 10% target response.

Respondents answered a structured questionnaire covering topics such as: satisfaction with conversations with travel advisers; relevance of conversation/materials provided; whether this prompted them to change their travel behaviour; how they changed; and perceived benefits of change.

The following process was followed

- On a weekly basis participants who received their key offer four weeks previously and have a phone number are identified for phone contact.
- Participants with only phone numbers are contacted two times before they are removed from the feedback pool.
- For all participants that only provide an email address or do not respond to phone contact, a Survey Monkey questionnaire is used and sent twice.

- If it is not possible to reach 10% through these means, participants who received only the email survey, and have a phone number, are contacted by phone twice, in addition to the emails sent.

Results

The majority of participants gave a high rating to their interactions with the travel advisers and the quality of the materials they received.

Table 56 shows that 35% of respondents said they had changed their travel choices following their conversation with a travel adviser at a Roadshow.

Table 56 Numbers reporting a change in travel behaviour following interaction with travel adviser

	Yes - I've changed my travel choices		No - I haven't changed my travel choices		Blank		**Total**	
	N	%	N	%	N	%	N	%
Following your conversation with the travel advisor, have you changed anything about the way you travel?	171	35	307	64	4	1	482	100

Those who said they had made changes were then asked whether these changes had been influenced by the conversation they had or the support they had received. One hundred and thirty two (77%) of these respondents said the changes had been influenced by the Roadshow conversation or support, and just 21 (12%) said they had not.

4.1.4 Sustainable Travel Roadshows

Examples of other business engagement work undertaken in the four UAs are reported below.

Across all Authorities:
The 2014 West of England business travel awards had 122 attendees, and the 2014 commuter challenge had over 3000 registered participants.

Bristol

- Cycle Champions were enlisted to promote initiatives such as the commuter challenge, winter commuting promotions and a Liftshare week promoting car sharing.
- Business emergency repair cycle kits continued to be provided to workplaces.
- Bristol Workplace Travel Network meetings were set up.
- An online travel plan toolkit for businesses was developed for the Temple Quarter Enterprise Zone.

South Gloucestershire

- Links with Suscom continued to strengthen with sharing of contacts and resources, and collaboration in running initiatives such as the travel to work survey, Commuter challenge and liftshare week.
- A business shuttle serving the Aztec and North Fringe area was piloted, but not sustained.
- An Area Travel Plan for the North Fringe area was published.

North Somerset

- Over 200 eco driving sessions were delivered in 5 major employers in North Somerset.
- Business engagement activities at Bristol Airport and the implementation of on-site measures, such as an electric vehicle and public transport digital totem.
- An Area Travel Plan for Bristol Airport was published.
- 13 Business emergency cycle repair kits were provided to workplaces in North Somerset.

Bath and North East Somerset

- A programme of roadshows was completed at Royal United Hospital.
- Employers Travel Forum meetings were run to engage businesses throughout the authority area.
- The production of travel plans was facilitated for new developments at Warminster Road and Bath Riverside.

4.2 Data collection plan for Area Travel Plans

The South Gloucestershire and Bristol 2015 travel-to-work survey and the 2014/15 Bristol Airport survey provided the data for monitoring and evaluating ATPs in 2014/15.

To allow comparability with previous years, results were analysed for all South Gloucestershire businesses taking part, and separately for the North Fringe employers taking part in the SES case study evaluation. The North Fringe SES employers fell in number from 15 to 13 in 2015, due to radical down-sizing of one business, and the closure of another. None of the Portside businesses participating in the SES study participated in the travel-to-work survey in 2015.

In addition, an employee panel survey started in July 2014 (with 1560 respondents from 3233 employees invited to participate from across the SES employers) and was repeated every 3 months until October 2015. Results will be provided in the 2015/16 AOMR alongside detailed results from the SES follow-up study.

4.2.1 Results for Area Travel Plans

4.2.2 South Gloucestershire Council and Bristol City Council Travel to Work Survey

The South Gloucestershire Council and Bristol City Council Travel to Work survey includes the North Fringe ATP area. The 2015 Travel to Work survey was run in March as in previous years. Employers in both South Gloucestershire and Bristol took part this year. The total response was 11,309, comprising 7001 responses from employees of South Gloucestershire businesses, and 4308 responses from Bristol employees.

The majority of participating businesses in South Gloucestershire were located within the North Fringe Area Travel Plan area. This included the 13 SES employers in the North Fringe, which provided a total of 5070 responses (72% of South Gloucestershire responses and 45% of total responses across the two UAs). The 13 SES employers were estimated to employ a total of 32,475 staff, producing a response rate of 16%.

The survey was run using the same protocol as in 2014, although fewer resources were available to provide intensive support to certain businesses in 2015, which may have contributed to the lower overall response rate (16%, compared with 27% among SES employers in 2014). For purposes of comparability with previous reports, **Table 57** shows the mode share results from the SES employers only.

Although caution should be used in comparing year-on-year changes in mode share (as there were some changes in the employers which participated), the results suggest a continued, modest decrease in single occupancy car use in the North Fringe, from 56.2% in 2013, to 51.3% in 2014, to 49.8% in 2015. Bus use rose from 6.4% in 2013, to 6.1% in 2014, to 9.3% in 2015. Cycling continued its upwards trajectory, rising from 9.1% in 2013, to 11.7% in 2014, to 13.5 % in 2015.

Table 57 : North Fringe and Portside: mode used to travel to work on the day of the survey – 2013, 2014 and 2015 comparison

How did you travel to work today?

		North Fringe		Portside		Total		North Fringe
		2013	2014	2013	2014	2013	2014	2015
Car (alone)	N	3353	4550	560	545	3913	5095	2526
	%	56.2%	51.3%	74.2%	66.5%	58.3%	52.6%	49.8%
Car share	N	710	1300	122	172	832	1472	634
	%	11.9%	14.7%	16.2%	21.0%	12.4%	15.2%	12.5%
Motorbike/ scooter	N	93	160	20	10	113	170	112
	%	1.6%	1.8%	2.6%	1.2%	1.7%	1.8%	2.2%
Cycle	N	588	1086	26	46	614	1132	672
	%	9.9%	12.3%	3.4%	5.6%	9.1%	11.7%	13.5%
Walk	N	361	573	0	16	361	589	331
	%	6.1%	6.5%	0.0%	2.0%	5.4%	6.1%	6.5%
Bus/coach	N	380	541	8	6	388	547	473
	%	6.4%	6.1%	1.1%	0.7%	5.8%	5.6%	9.3%
Train	N	217	454	14	15	231	469	75
	%	3.6%	5.1%	1.9%	1.8%	3.4%	4.8%	3.3%
Work from home	N	148	115	1	2	149	117	10
	%	2.5%	1.3%	0.1	0.2%	2.2%	1.2%	1.5%
Other	N	111	86	4	7	115	93	82
	%	1.9%	1.0%	0.5%	0.9%	1.7%	1.0%	1.6%
Total	N	5961	8865	755	819	6716	9684	5070
	%	100%	100%	100%	100%	100%	100%	100%

The 'Other' category in 2015 includes 10 people who selected 'electric/hybrid' vehicle, which was a new category in the 2015 survey.

Table 58 shows levels of satisfaction with the journey to work from the 2014 and 2015 surveys. The 2015 results are from the 13 North Fringe SES employers only. The results show that a higher proportion of people were satisfied than dissatisfied in both years, with a slight increase in 2015. In 2015, 55.6% of North Fringe employees were 'very satisfied' or 'quite satisfied' with their journey to work, an increase from 48.5% the previous year.

It is notable, however, that North Fringe commuters appear to be more dissatisfied with their journey from work, compared with their journey to work. In 2015 the survey asked respondents to rate both journeys, whereas only the question had related only to the journey to work in 2014. In 2015, 23.8% of respondents were either 'quite dissatisfied' or 'very dissatisfied with their trip to work, compared with 34.5% who rated their journey from work in this way. The change in the question means that the year-on-year changes shown in **Table 58** should be treated with caution.

Table 58 : 2014 and 2015 respondents' satisfaction with journey to work

To work			North Fringe 2014	Portside 2014	Total 2014	North Fringe 2015
How satisfied or dissatisfied are you with your journey to work?	Very satisfied	N	1391	138	1529	914
		%	16.0%	17.3%	16.1%	18.4%
	Quite satisfied	N	2827	243	3070	1843
		%	32.5%	30.4%	32.3%	37.1%
	Neither	N	2218	264	2482	1023
		%	25.5%	33.0%	26.2%	20.6%
	Quite dissatisfied	N	1635	120	1755	878
		%	18.8%	15.0%	18.5%	17.7%
	Very Dissatisfied	N	620	34	654	305
		%	7.1%	4.3%	6.9%	6.1%
Total		N	8691	799	9490	4963
		%	100.0%	100.0%	100.0%	100%

4.2.3 Bristol Airport Employee Travel Survey, 2014

A small staff survey was undertaken at the airport between 4 December 2014 and 14 February 2015. The airport survey was administered online and, additionally, paper copies were distributed to rest rooms for partner organisations. There were 189 responses to the survey. The largest group of respondents (66 people) were direct employees of Bristol Airport, whist the second largest group (41 people) was employed by a partner business. The rest of the responses were distributed among some 34 different employers located at the airport. There are 2,835 jobs at the airport in the summer peak season, of which 2,235 are full-time equivalent jobs and 600 are part-time equivalent. Around 162 of those employees are working for the airport taxi operator and the Flyer bus service, and are not permanently based at the Airport; therefore they do not undertake a journey to work in the conventional sense.

Mode share results on a 'typical day' are shown in **Table 59**.

In 2014/15, 81.5% of respondents reported that they had travelled by car on their own – a very similar result to 2013 (82.3%).

Table 59 : Bristol Airport: Typical mode of travel to work
What is your typical mode of travel to work?

	2013		2014/15	
	N	%	N	%
Car solo	121	82.3	154	81.5
Car driver with passenger (car share)	12	8.2	11	5.8
Car passenger (car share)	1	0.7	5	2.6
Airport flyer service	3	2.0	7	3.7
Other bus i.e. 121, Greyhound	0	0.0	0	0.0
Walk	0	0.0	0	0.0
Cycle	5	3.4	3	1.6
Motorbike/scooter	4	2.7	3	1.6
Train	1	0.7	4	2.1
Work from home	0	0.0	0	0.0
Missing	0	0	2	1.1
Total	147	100.0	189	100.0

Satisfaction with the journey to work continued to be relatively high among respondents; **Table 60** shows that the proportion of people who were either very or fairly satisfied rose from 71.9% in 2013 to 76.7% in 2014/15.

Table 60 : Satisfaction with the journey to work
How satisfied are you with your typical journey to work?

	2013		2014/15	
	N	%	N	%
Very satisfied	51	34.9	68	36.0
Fairly satisfied	54	37.0	77	40.7
Neither satisfied nor dissatisfied	24	16.4	29	15.3
Fairly dissatisfied	14	9.6	10	5.3
Very dissatisfied	3	2.1	3	1.6
Missing	0	0	2	1.1
	146	100%	189	100%

4.4 Delivery progress with Low Emission Vehicles

This section describes progress with delivery of Low Emission Vehicles interventions in the reporting period **1st April 2014 to 31st March 2015.** These interventions concern the installation of electric charging points and expansion of the Co-Wheels low emission car-pooling scheme across the sub-region.

4.4.1 Overview of intervention

The installation of Electric Vehicle Charging Points across the sub-region funded by the LSTF grant is delivered with the Source West project, which has also been supported by the European Commission's ICT for Electric Vehicle Enhancing the User Experience (ICT 4 EVEU) project.

The project named Co-Wheels was initially set up as 'GoLow', which eventually re-branded as Co-Wheels in line with the nationally recognised project in November 2013. Co-Wheels is a social enterprise which aims to reduce public sector travel costs by providing low emission/electric vehicles across a number of public sector organisations, creating a viable pool car system for staff during the day and making the vehicles available to the public in the evenings as a car club. The project seeks to change travel perceptions, attitudes and capabilities with respect to transport alternatives and in particular in relation to how vehicles are used for business purposes, with the aim to reduce staff petrol or mileage allowances.

4.4.2 Delivery progress

Concerning the e-charging points project, there have been further installations in the reporting period across businesses and public sites in the sub-region. This takes the total number of charging points to 68 across 56 sites, accounting for 104 sockets in total. This project has raised the profile of EVs across the West and has promoted their use within businesses and to the public through a number of events.

The network of charge points are based in car parks which equates to approximately 13,000 parking spaces in total. The private charging points installed on business sites are now available to a total in excess of 19,576 staff across the West of England.

Concerning Co-Wheels, the project has enabled operation of 22 low emission vehicles and 13 bikes (including electric bikes) across the West of England. Currently, the Co-Wheels scheme is available to over 76,000 employees across the sub-region.

4.4.3 Data collection plan

Given the relatively smaller scale of these set of measures, compared with those affecting workplaces, the data collection plan focuses primarily with collecting output and participation data.

4.4.4 Results

The electric charging points were used a total of 3,071 times between 01.04.12 and 01.01.15 with total electricity usage being 36,826 kWh. The following businesses and public sector organisations have benefitted from the installation of charging points during the reporting period:

- In Bristol: Create centre (3, public), Bristol Zoo (3, public), Tobacco Factory (2), Simply Health (1), Bordeaux Quay (2), BBC (2), Avon Fire and Rescue (2), Bristol Sandy Park, 100 Temple Street (4), Bristol Pest Control (2).
- In BANES: St Martins Hospital (1) and Midsomer Norton Sports Centre (1, public).
- In South Gloucestershire: Hewlett Packard (2), Hoare Lea (2) and Babcock (2).
- In North Somerset: Bristol Airport (2, public), Avon and Somerset Police (4), and Harmsen Tilney Shane (2).

Co-Wheels low emission vehicles and bikes have been made available to 76,470 employees across the sub-region, including the following organisations: Bristol City Council, North Bristol NHS Trust, Bristol & Bath Science Park, RUH Bath, B&NES Council, Avon Fire & Rescue Service, Gloucester Rd GP Practice, Second Step Housing Association, Sirona Health Care, Bristol Community Health, Knowle West Media Centre, University of the West of England, CREATE Centre, Bristol Community Transport.

Monthly average usage ranged from about 20 to over 60 hires.

Delivery progress with Freight Consolidation

Overview of intervention
This project enhances the already operating joint Bristol/Bath freight consolidation centre with additional resources to facilitate the expansion of the service to further retailers and organisations across BANES and BCC. Urban freight consolidation centres reduce the number of large delivery vehicle journeys entering city centres by providing a facility on the edge of the city close to the strategic road network, where goods can be consolidated for onwards dispatch in smaller, fully-loaded delivery vehicles. DHL operates the Bristol/Bath consolidation centre at their depot, close to Junction 18 of the M5 Motorway at Avonmouth near Bristol. Goods are consolidated for onwards dispatch in pre-arranged time slots using two 'Smith Newton' 9 tonne electric delivery vehicles.
The scheme will also be enhanced through priorities for consolidation centre vehicles in terms of parking bays, potential use of bus lanes and exemption from delivery restrictions. The first phase of delivery restrictions in Bath city centre has not yet been introduced.

Delivery Progress
In the period 1st April 2014 – 31st March 2015 the project has supported the operation of the centre. In Bath, the scheme did not attract further retailers hence the total number of participating retailers is still 36 as in the previous year. In Bristol the scheme lost 12 retailers, taking the total number of participating retailers to 97, from 109. Overall, the scheme serves 133 retailers in Bristol and Bath. The Business Engagement managers raised awareness about the consolidation centre and promoted its services across the targeted employers in BANES and BCC.

Data collection plan for Freight Consolidation
In accordance with the monitoring strategy set out in the OMP, evaluation of this particular project relies on the data collected by DHL, the contractor of the consolidation centre. DHL compiles monthly reports for both BANES and BCC, providing the following details:

- Total number of participating retailers
- Type and number of freight vehicles delivering to the consolidation centre
- No of trips from the consolidation centre (to Bath and Bristol) made by electric lorry
- Reduction on number of trips
- CO_2, CO, NO_x and PM_{10} emission reduction

The emissions figures by vehicle type are taken from the National Atmospheric Environmental Inventory (NAEI) website (www.naei.defra.gov.uk). This website gives figures relating to emissions per kilometre travelled by vehicle type. Every day, when a vehicle delivers to the consolidation centre a record is made by DHL of the vehicle type and whether or not the vehicle will be making other deliveries to Bath or Bristol. If the vehicle is making other deliveries, it is excluded from any calculation made. If the vehicle is not making a delivery to Bath or Bristol, a calculation of emissions reduced is made based on the distance the vehicle would have travelled from Avonmouth. As the consolidation centre uses an electric lorry to make consolidated deliveries into Bath and Bristol, there are no local CO_2 and other pollutant emissions.

Results for Freight Consolidation

Overall, the freight consolidation scheme serves a total of 133 retailers across Bristol and Bath (12 less than in the previous financial year) and as a result of their participation in the scheme the consolidation centre has prevented over 6,800 delivery trips to both cities. The scheme achieved the following results, summarised in Table 61.

Table 61: Summary of results concerning freight consolidation

	BATH			TOTAL BATH	BRISTOL			TOTAL BRISTOL	TOTAL COMBINED
	2012-13	2013-14	2014-15		2012-13	2013-14	2014-15		
No of new participating retailers	9	7	0	36	5	24	-12	97	133
CO_2 emission reduction (kg)	9993	9937	10214	30144	14218	15180	13443	42841	72985
CO emission reduction (kg)	63	62	64	189	89	95	84	268	457
NO_x emission reduction (kg)	325	323	332	980	462	493	437	1392	2372
PM_{10} emission reduction (kg)	10	10	10	30	14	15	13	42	71
Absolute reduction in delivery trips	1156	1095	1077	3328	1197	1203	1097	3497	6825
Average delivery reduction	85%	81%	81%		79%	79%	79%		

The detailed results for each city are reported as follows.

Bath

Table 62 reports the key indicators for the reporting period.

Table 62: Freight consolidation outcome indicators in Bath

		Indicator					Delivery Vehicles							
							Vehicles in				Vehicles out			
Year	Month	8 – CO_2 emissions reduction (kg)	9 – CO emissions reduction (kg)	10 – NOx emissions reduction (kg)	11 – Particulate emissions reduction (kg)	Number of retailers in Bath	Artic	18t	7.5t	Van	Electric	Euro 4 diesel	Reduction number	Delivery reduction %
2014	April	856.93	5.36	27.85	0.83	38	20	19	34	31	21	0	83	80
	May	870.05	5.44	28.28	0.84	38	18	18	38	37	22	0	89	80
	June	882.16	5.52	28.67	0.86	38	20	20	29	42	21	0	90	81
	July	897.24	5.61	29.16	0.87	38	13	22	33	56	24	0	100	81
	August	852.94	5.34	27.72	0.83	38	18	20	26	42	21	0	85	80
	September	937.25	5.86	30.46	0.91	38	20	25	26	44	22	0	93	81
	October	897.42	5.62	29.17	0.87	37	15	19	37	48	23	0	96	81
	November	706.39	4.42	22.96	0.69	37	9	25	32	27	18	0	75	81
	December	802.41	5.02	26.08	0.78	34	17	26	36	30	11	10	88	81
2015	January	854.69	5.35	27.78	0.83	34	17	2	55	41	20	1	94	82
	February	690.77	4.32	22.45	0.67	35	8	12	42	39	20	0	81	80
	March	966.14	6.05	31.4	0.94	36	23	1	38	63	22	0	103	82
TOTAL		10214	64	332	10	36							1077	81

Bristol

Table 63 reports the key indicators for the reporting period.

Table 63: Freight consolidation outcome indicators in Bristol

		Emissions Indicator				Number of retailers	Delivery Vehicles			
Year	Month	8 – CO_2 emissions reduction (kg)	9 – CO emissions reduction (kg)	10 – NOx emissions reduction (kg)	11 – Particulate emissions reduction (kg)		Vehicles in	Vehicles out	Reduction number	Delivery reduction %
2014	**Apr**	1268	7.93	41.2	1.23	109	127	28	99	78%
	May	1189	7.44	38.63	1.15	109	124	27	97	78%
	June	1131	7.08	36.75	1.1	109	116	24	92	79%
	July	1048	6.59	34.07	1.02	107	121	25	96	79%
	August	1181	7.39	38.38	1.15	107	124	27	97	78%
	Sep	1375	8.61	44.7	1.33	107	139	28	111	80%
	October	1133	7.09	36.83	1.1	102	129	27	102	79%
	Nov	1098	6.87	35.67	1.06	102	109	23	86	79%
	December	989	6.19	32.14	0.96	90	108	23	85	79%
2015	**January**	997	6.24	32.41	0.97	90	104	21	83	80%
	Feb	919	5.75	29.86	0.89	93	94	20	74	79%
	Mar	1116	6.98	36.25	1.08	97	97	22	75	77%
TOTAL		**13443**	**84**	**437**	**13**	**97**	**1392**	**295**	**1097**	**79%**

4. Local Communities

This chapter describes progress with delivery and collection of outcome data for the Local Communities projects. It reports baseline results where available. The project area includes the following:

- Community grants and neighbourhood fund measures;
- Walking and cycling infrastructure measures; and
- 20mph measures in Bristol.

4.1 Delivery progress with Community Grants and Neighbourhood Fund measures

4.1.1 Overview of interventions

Interventions in the Community Grants and Neighbourhood Fund category are predominantly related to the provision of funding and expertise to help improve travel within and between local communities. They are focussed on:

- Active Neighbourhood fund grants. These grants involve community engagement through providing funding to local community groups (including additional complementary funding for promotion, awareness-raising, and events) in Bristol City. The intent is to empower these groups to develop initiatives to address local barriers to sustainable travel.
- Priority Neighbourhood Fund capital grants. In a similar ways to the Active Neighbourhood Fund grants, this measure provides funding to local communities in South Gloucestershire Council (SGC).
- Community Active Travel Officers (CATOs) and Walking to Health officers. These measures provide funding for officers who will work closely with local communities and assist them in engaging with Active Neighbourhood Fund grants and in the uptake of active travel initiatives. The officers are divided between BCC and SGC.

4.1.2 Delivery progress

South Gloucestershire Council's engagement in the Neighbourhood Fund began in the 2013/2014 reporting period, whilst Bristol City Council continued with their second round of scheme implementation. All fourteen Neighbourhood Partnerships within Bristol and all six Priority Neighbourhoods in South Gloucestershire have been actively engaged as a part of the programme.

- South Gloucestershire implemented 18 approved schemes in its six Priority Neighbourhoods. The remaining 13 schemes (of the original 18) were progressed to conclusion in the final year.
- The third and final round of Active Neighbourhood Transport Grants was delivered by Bristol City Council between April 2014 and March 2015. These were small revenue grants of up to £3,000. All fourteen Neighbourhood Partnership areas were engaged with opportunities to apply for grants. The breakdown of application and awards are as follows:
    - Application received: 42 to a value of £99,614;
    - Applications awarded: 21 to a value of £46,293.
- The Community Active Travel Officers (CATOs) continued to support community groups with the delivery of grant funded projects. 19 new grant funded projects were delivered by March 2015.
- The CATOs have supported 81 community events to disseminate sustainable travel information and actively engage local residents in walking and cycling activities.
- The CATOs have delivered added value in communities through building capacity and making vital links broadly as follows:

- Supporting residents access to statutory and other processes for raising concerns relating to sustainable travel, for example through Neighbourhood Forums, Park Events team and the cycle forum;
- Encouraged and supported groups to raise the profile of their activities through a range of online, social media and publicity channels; and
- Linked projects together to offer support that meets their needs, for example through recruiting a team of Bike Maintenance Volunteers to support three bike loan fleets in East Bristol.

4.2 Data collection plan for Community grants and neighbourhood fund measures

The evaluation approach for the Community Grants and Neighbourhood Fund measures identified in the OMP consists of the following:

- Community Grant/Fund monitoring system: Bespoke monitoring requirements have been developed for the Community Grant schemes, and this is being managed by Bristol City Council. A similar approach is being developed for South Gloucestershire.
- Community focus groups: Six community focus groups are planned to run with a selection of the successful schemes. Work is underway to identify six schemes suitable to a community focus group approach – the intention is to conduct three focus groups in Bristol and three in South Gloucestershire.
- CATO interviews: CATO interviews are planned near the end of the project period.

This section reports on evaluation activities which have been completed to-date. These are as follows:

- Monitoring agreements from Community Grant schemes in Bristol; and
- Summary of three focus groups with organisers and beneficiaries of Community Grant schemes in Bristol.

As a result of the implementation schedule, monitoring activities for the South Gloucestershire Neighbourhood Fund schemes and the CATOs will be reported in the final evaluation report.

4.2.1 Community Grant monitoring agreements

Bristol City Council has provided the data from the returned monitoring agreements completed by the Community Grant scheme organisers. The results of these are currently being analysed and will be included in the final evaluation report alongside data from South Gloucestershire, once this becomes available.

A case study of the Lawrence Hill Underpass scheme is included below as an example of the data collected from the monitoring agreements.

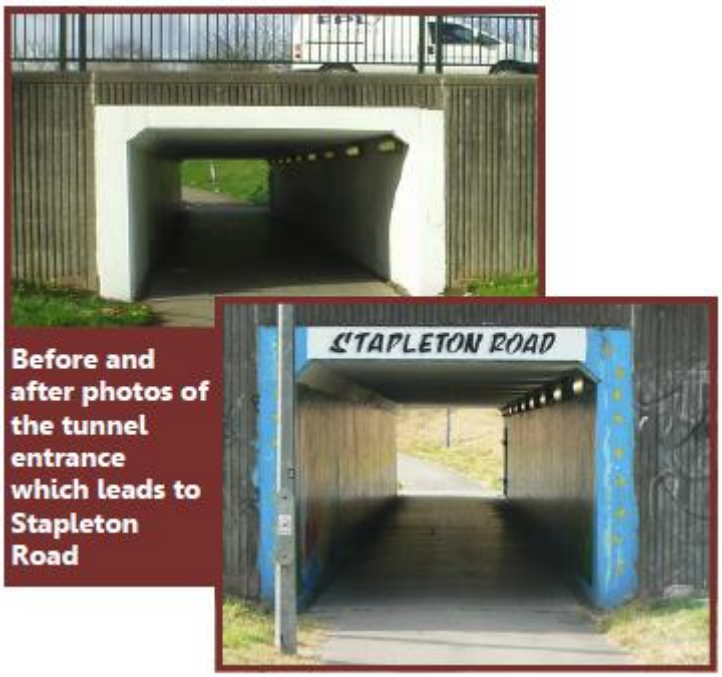
Lawrence Hill Underpass

This scheme aimed to improve aspects of an underpass at the Lawrence Hill roundabout, which provides off-road pedestrian and cycle access across the busy junction of the A420/A4320 on the North eastern outskirts of the city centre. The crossing is an important point of access and links four areas of the city that are divided by main roads. Initial survey work by the community group identified that local residents using the underpass felt that it was unwelcoming for a number of reasons, and that this was discouraging people from using the underpass, therefore reducing accessibility to the

areas it connects. Points of particular concern were issues with feeling safe when using the underpass at night and confusion over which paths led to where.

Following this initial survey work, the group applied for funding to improve the lighting and signage in the underpass, and this work was completed in quarter three of 2013. New signage and lighting was provided, as well as regular cleaning of the underpass to make it a more desirable route, as shown in Figure 1.

Figure 1 - Photograph from monitoring agreement showing one of the underpass tunnels before and after the completion of the scheme



The table below provides summary data from a before and after survey conducted by the community group to understand how perceptions of the underpass have changed since the completion of the scheme.

Table 64 - Change in public perception of Lawrence Hill Underpass

	Rating				Use						Sample
	Positive		Negative		Okay to use		Didn't use		Other		
	n	*%*	*n*	*%*	*n*	*%*	*n*	*%*	*n*	*%*	n
2012	13	*11*	29	*25*	45	*39*	15	*13*	13	*11*	115
2013	30	*29*	0	*0*	51	*50*	15	*14*	9	*7*	105
% change	+18		-25		+11		+1		-4		

The data suggests that there has been a general improvement in perception since the completion of the scheme. Positive ratings of the underpass increased by 18% following the completion of the improvements, whilst negative ratings dropped by 25%. In terms of actual usage, there is a mixed picture, with 18% more respondents than previously stating that they felt happy to use the underpass, however this is not reflected in a complementary fall in the proportion of people who did not feel happy to use the underpass.

Taken together, it is evident that these findings suggest that the scheme has had a positive impact on people's perceptions of the underpass, and has contributed to a rise in the proportion of people who feel happy using the underpass.

4.2.2 Community focus groups

Three focus groups were conducted in April/May 2014 with scheme providers and beneficiaries of LSTF WEST Community Grants. A summary of the initial findings is presented below. A more thorough qualitative analysis will be included in the final evaluation. The aim of this summary is to identify the key themes arising from the discussion in the groups, and to understand the impacts of the community schemes.

A further three focus groups were conducted with schemes in South Gloucestershire in April/May of 2015. The findings from these will be presented in the final evaluation report.

Art, Play, and Environment (APE) project

In the school in which the focus group was conducted, participants considered the 'Art, Play, and Environment' (APE) project successful in creating high-visibility cycling workshops for children and parents. These workshops have proved increasingly popular, and attendance at them has grown as children and parents have become used to their regular presence at the school.

One of the key impacts of the scheme has been to help address the cost barrier associated with cycling for those families who might previously have been unable to afford the necessary bikes and equipment to get their children out cycling safely in their local area. By reducing this barrier through the provision of free or discounted bikes, it was suggested that a proportion of children who had previously been unable to cycle for cost reasons could now do so. As an aspect of this, the scheme was also credited by a number of participants with either creating or reinvigorating an interest in cycling amongst parents, with the suggestion that this would be beneficial to both them and their children.

The scheme also provided a range of extra-curricular outdoor activities for children related to the development of physical and social skills and to aspects of active travel – particularly walking and developing a greater appreciation for the natural world and the local area.

Whilst the scheme produced a number of positive impacts for beneficiaries, there were some challenges to be overcome and areas for development. Scheme providers explained that the popularity of the scheme has meant that they are now operating near capacity in the cycle workshops, and so there is arguably an issue in terms of extending the benefits of the scheme to more children if there is currently no additional space to accommodate them.

In addition to this, whilst the scheme had been successful in reducing the cost barriers to children and adults cycling in their local area, it had not changed people's perception of road safety in the local area, and consequently this remained a significant barrier for a number of parents when discussing cycling with their children.

Overall, however, the discussions with beneficiaries about the scheme were very positive, and with the main message being that the scheme is doing good things. There is an appetite and opportunity for it to do more.

Playing Out

The principal impact of Playing Out that was discussed by beneficiaries was its success in encouraging and facilitating social interactions between people in the local community. The scheme had given

some local residents both the impetus and the space to socialise outdoors, and has provided children with a safe space to play in their street – which for many was a novel experience. Previous to the introduction of the scheme, most parents had not felt that it was safe for their children to play and socialise in their street because of traffic, and would have taken them either further afield to a local park, or kept them indoors.

Participants discussed a general positive change in perception of the local area for both adults and children – particularly in relation to children playing outside. Whilst not supported by all local residents, *in general,* for those that had experienced the scheme, there was the suggestion of a greater connection to their local area, and a strengthening of the sense of community.

Perhaps the most concrete impact of this scheme was the perceived change in awareness and engagement with issues of road safety and traffic awareness amongst children as a result of the scheme. The scheme enabled children to experience their local street in a safe way, as opposed to simply being told that it was a place that was 'off-limits'. This activity engagement had prompted children and parents to discuss traffic and road safety, and some parents felt this had deepened their children's understanding and awareness of these issues.

However there were also some challenges to scheme implementation, particularly in relation to getting the support of neighbours that might be opposed to the schemes, and indeed a number of schemes had failed to get off the ground as a result of objections from local residents. Some parents also explained that whilst those who had experienced the scheme generally experienced benefits, there was some negative perception amongst those who had not experienced the scheme or were trying it for the first time. There is the potential that this issue will lessen as these schemes become more widespread and visible; however there is also the opportunity to consider ways in which more information might be delivered to local residents ahead of a proposed scheme being set up.

Roll for the Soul

The Roll for the Soul café was described by its users as having become the 'hub' of Bristol's cycling culture. Bristol has experienced decent growth in levels of cycling over the past decade, however in discussion with participants they felt that up until this point there had not been a focus for the city's emergent cycling culture, and that this was what Roll for the Soul provides.

The scheme provider listed the main positive impact of the café as its success in creating a welcoming atmosphere which has attracted a relatively diverse set of customers – both cyclists and non-cyclists. The café provides space free-of-charge for cycling-related events and meetings, and the scheme beneficiaries discussed a range of cycling events which they had attended at the venue. The focus of the scheme is firmly on cycling; however its function as a café has meant that it is a popular destination for non-cyclists. It is not possible to quantify the effect of this on people's travel behaviour (there is no robust way to examine a link between non-cyclists using the café and then subsequently being encouraged to take up cycling); however it was suggested that there was the strong potential for a positive impact on people's levels of active travel simply through being gently immersed in a cycle-focussed environment. At the very least non-cycling customers were sharing the space with a broad range of different cyclists, and also had the opportunity to see the cycle maintenance workshop in action and to experience cycle-related events.

In addition to being a café, the scheme provides a workshop, which allows people to bring their bikes in for fixing, and also to learn about basic bicycle maintenance themselves. The scheme provider explained this as one of the most direct routes through which the scheme is supporting and encouraging active travel. By providing cyclists with the opportunity to learn basic bike maintenance skills from the trained mechanics, the scheme was suggested to be reducing the cost barrier to cycling through allowing people to do their own repairs.

The scheme provider explained that whilst the scheme has social objectives it is nonetheless a social enterprise, and therefore the main concern is that it be financially sustainable. The current indications are that this is going to be the case; however the scheme provider highlighted the level of commitment and cost involved in a scheme such as this, and also the uncertainty surrounding any new enterprise in its first years of operation. The scheme beneficiaries were generally very positive about the café, however they suggested that there was the opportunity to make a different use of the space by making the cycle repair shop more visible within café to increase non-cyclists' exposure to cycling culture.

4.3 Delivery progress with Walking and Cycling infrastructure measures

4.3.1 Overview of interventions

These measures concern the provision of new infrastructure to encourage greater uptake of active travel and enhance the public realm. These measures include:

- Cycling and walking infrastructure. A number of different measures are planned to improve infrastructure across the sub-region, including:
    - Lawrence Weston link route for cyclists and pedestrians using a new cycle/foot bridge on the Lawrence Weston Road.
    - Cycling and walking improvements in key centres. To include pinch point treatments, cycle parking and infrastructure works in the central area, and new/improved route signage.
    - A continuous cycle route (mainly off-carriageway), linking Portishead, Portbury Dock, Pill, and Bristol. The scheme will improve sections of route and signing, and provide missing links.
    - An Access to Work and Skills Infrastructure Scheme in North Somerset comprised of an off-road walking and cycling route linking to existing routes and helping people to travel safely to Weston Hospital, Weston College University Campus, industrial estates, local schools, local businesses, Weston town centre and new housing and business developments planned for the old Weston airfield site.
    - Bath schemes – Claude Avenue ramp to Two Tunnels Greenway, shared cycling/walking path as part of National Cycle Network Route 4 (NCN4) cycle path to Bath Spa University and Batheaston Bridge.
    - The M32 crossing to provide a safe route across the southbound on-slip of J1 of the M32.
    - The Yate Spur to improve the cycling connection between north Bristol to Yate.
    - The Little Stoke Park cycle and walk way, which will provide an entirely new route through Little Stoke Park.
- University bike hire hub (Bath): Docking stations will be installed at Bath University and Bath Spa University, linking them to Bath's cycle hire network.
- The Weston Town Centre Gateway. Linking with other Weston-super-Mare town centre developments, the project will seek to provide legible pedestrian routes and public realm improvements, including enhancements of footways, better access, and improved street scene. The parking management system will provide variable message signs to aid motorists in destination decisions. The system will help minimise traffic circulation and assist in town-centre traffic management.

4.3.2 Delivery progress

Progress with the delivery of Walking and Cycling infrastructure schemes which occurred in the 2014/15 reporting period is presented below (these tables also include schemes completed shortly after the reporting period). These tables contain a summary of scheme completions in the reporting period, full details are in the Annual Outputs Report 2014/15.

Table 65 - Walking and Cycling infrastructure projects delivered in BANES

Deliverable	Opening date
Bridge across River Avon at Batheaston	**15th July 2014**
Claude Avenue Ramp	**10th Sep 2014**
New Bath cycle hire operation (Nextbike in Bath)	**17th June 2014**
Completion of ramp from railway path to A4	**March 2015**

Table 66 - Walking and Cycling infrastructure projects delivered in Bristol up to and including during 2014/15

Name	Description
Completed projects	
Stokes Croft Gateway	Better urban design, walking environment, cycling infrastructure and cycle parking
St James Barton Gateway	Transforming a grade separated roundabout with pedestrian tunnels with better urban design, walking environment, cycling infrastructure and cycle parking
Clifton Suspension Bridge Gateway	Providing an exemplar pedestrian route to Clifton suspension bridge from bus stops and Clifton Village
Clarence Road	Provides 8-80 provision along a busy road, contributing to the Avon Promenade route and demonstrating the very highest quality provision
King Weston Lane	Partial lighting of route to improve safety
Cycle parking provision	Around 400 on street cycle spaces and over 200 cycle parking spaces for shops and small businesses to install on their own land
Monitoring equipment upgrades	Modernisation of monitoring equipment to better measure the impact of the schemes
Old Market - Castle Park Gateway	Linking the city centre route through Castle Park to Old Market interchange
Bristol Bath Railway	Path widening at Hassell Drive
Completed design studies	
Airport Road	This has led to a successful LGF bid in 15/16
Blackberry Hill	This led to a successful CAF2 bid
A403	This led to a successful Lottery and DfT Maintenance fund bid
Commercial Road	This has influenced design of MetroBus
Bedminster bridges	This will be funded from BCC resources

Redcliffe Hill	This has influenced the design of MetroBus
LSTF part-funded projects (to be completed with other funding sources in 2015/16)	
St Philips Rd	Improvements to the popular Bristol Bath Railway Path between the city centre and the off-road section
Bristol to Bath Railway Path	Widening of the path at a pinch-point on the busy southern section of the route
Old Market Gateway	Replacing grade separated pedestrian tunnels with surface crossings, better urban design, walking environment, cycling infrastructure and cycle parking
Easton Way	Creation of an off road cycle track to avoid busy dual carriageway with significant urban realm improvements for local residents, creation of a linear park with planting landscaping

Table 67 - Walking and Cycling infrastructure projects delivered in North Somerset

Deliverable	Completion date
Public Realm – Weston-super-Mare Town Centre	**2014/15**
Winterstoke Road, Weston-super-Mare – Access to Work and Skills – shared cycle / pedestrian route	**2014/15**
Rectors Way, Weston-super-Mare – Safer Routes to School	**2014/15**

Table 68 - Walking and Cycling infrastructure projects delivered in South Gloucestershire

Deliverable	Completion date
Lighting scheme on the Bristol-Bath Railway Path.	**2014/15**

4.4 Data collection plan for Walking and Cycling infrastructure measures

In accordance with the OMP, cycle counters across the sub-region will be used to collect data on cycling levels. Below is an overview of new monitoring facilities introduced in relation to the schemes identified above.

BANES

- Automatic cycle count site on the A4 path
- A cycle counter has been installed at Batheaston Bridge.

Bristol

- Snap shot surveys to be completed or completed for all schemes over £100,000. These to constitute the baseline data.
- Ongoing scheme-specific cycle counts through existing or new ACC infrastructure for schemes over £100,000.

North Somerset

- Automatic Cycle counter on Portbury Bridle Path

- Automatic Cycle counter on A369 Pill Road shared path
- Automatic Cycle counter on Festival way
- Pill – Portbury path automatic counter has been in operation for a number of years as a part of the National Cycle Network and is included in this analysis

South Gloucestershire

- Automatic Cycle Counter on A4174 (M32 junction 1)
- Automatic Cycle Counter on A4174 (UWE north entrance)

4.5 Results for Walking and cycling infrastructure measures

The baseline position in relation to cycling levels at the WoE sub-region level is reported in Section 3 of this report. Below are presented the most recent available statistics for scheme-specific cycle count monitoring.

4.5.1 BANES

Table 69 - LSTF-specific cycle count data for BANES (24H, 0-24, 7 day)

	2014	2015*
Bristol - Bath Cycleway (west of Saltford)	47995	29194
Bristol - Bath Cycleway (Newbridge)	40753	14656
Avon & Kennet Canal Towpath (Darlington Wharf)	5590	0
A4 Bristol Road Cycleway	3077	1512
Batheaston Bridge	1443	2189

*Note: 2015 data is incomplete

Chart 23 - BANES cycle count data (Bristol - Bath Cycleway)

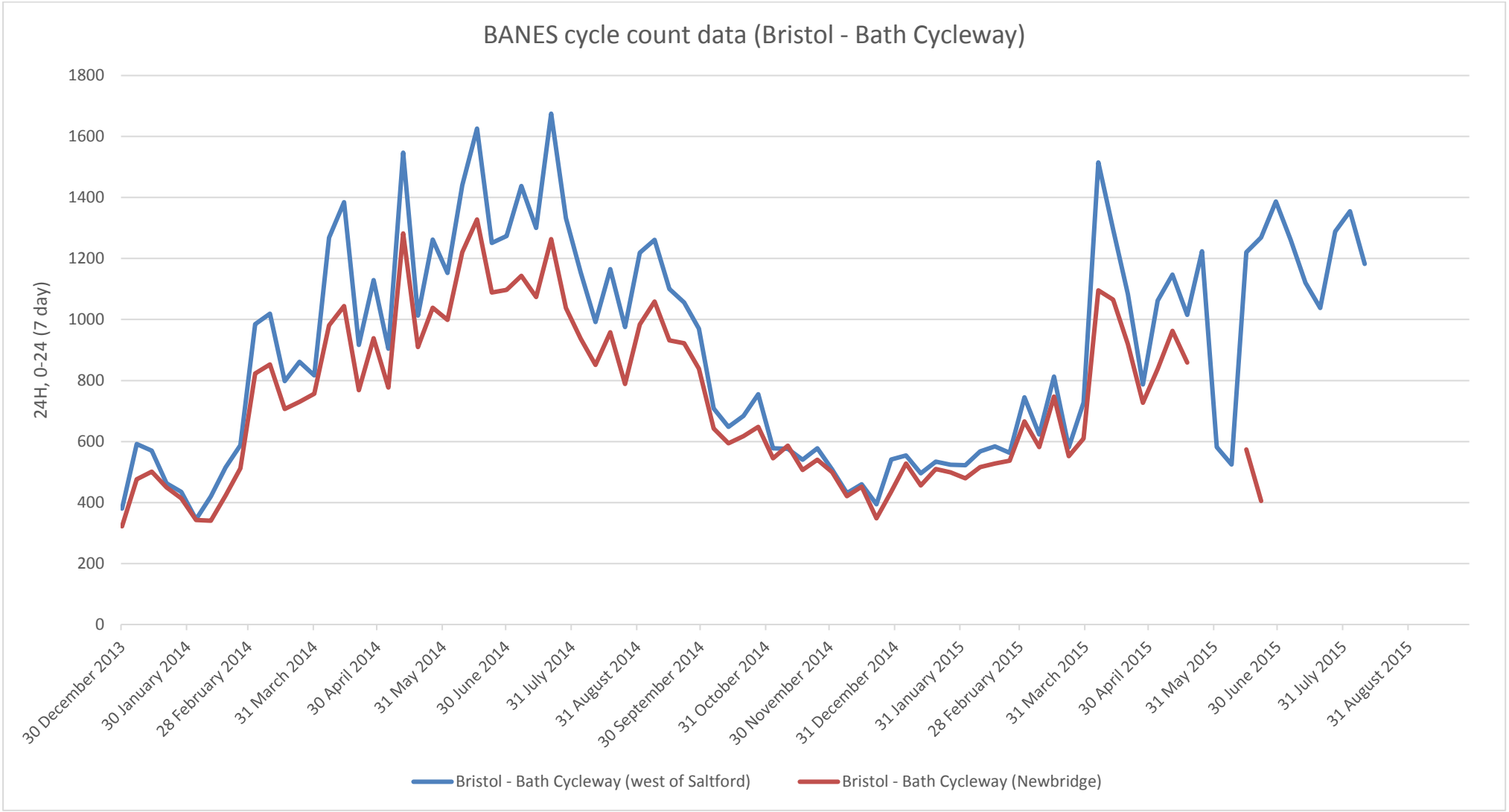
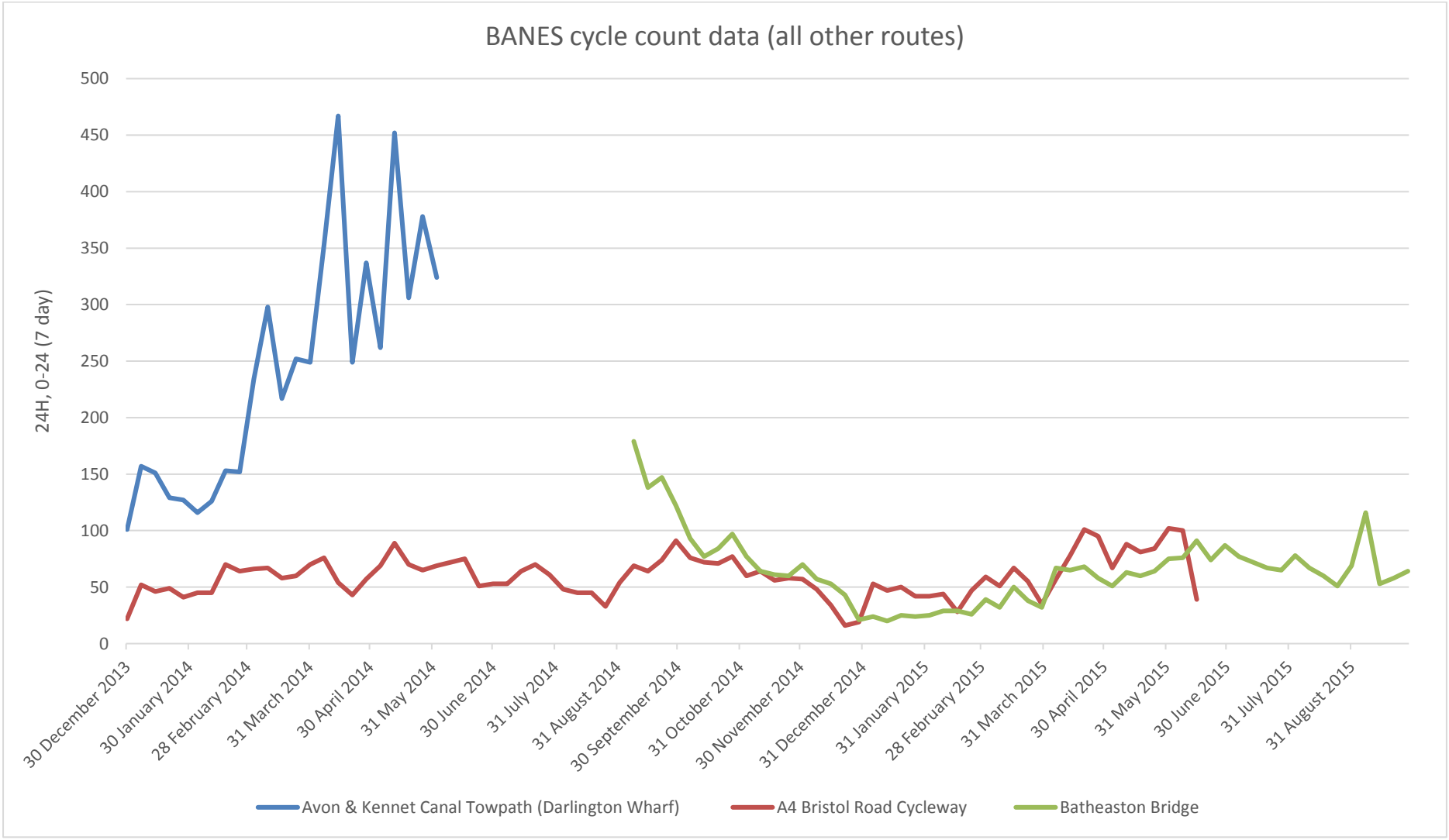


Chart 24 - BANES cycle count data (all other routes)



4.5.2 North Somerset

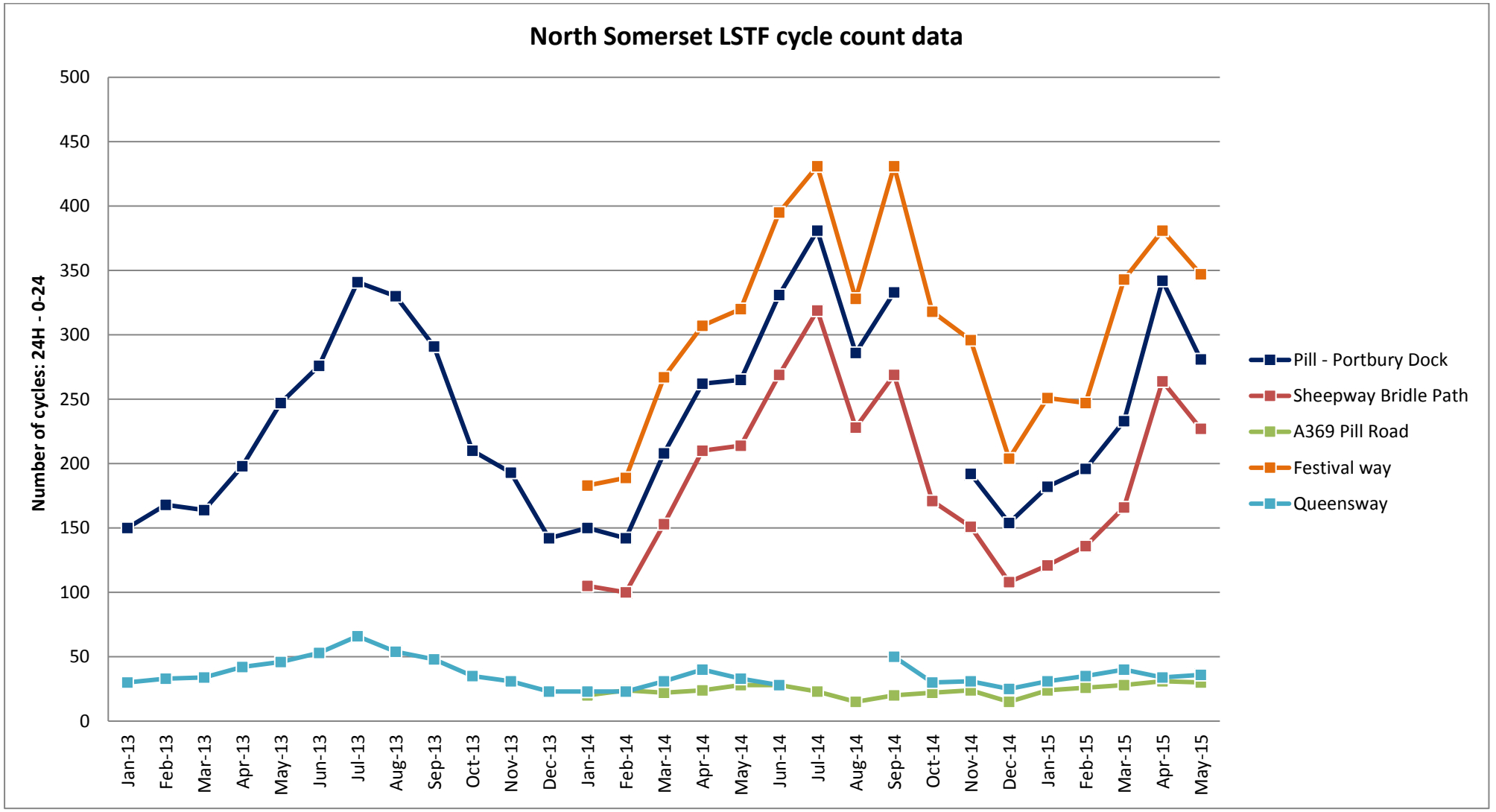
Table 70 - LSTF-specific cycle count data for North Somerset (24H, 0-24, 7 day)

	2013	2014	2015*
Pill - Portbury Dock	2710	2704	2694
Sheepway Bridle Path	N/A	2297	2092
A369 Pill Road	N/A	265	278
Festival way	N/A	3669	2321
Queensway	495	314	271
Winterstoke Road	N/A	N/A	N/A

*Note: the 2014 average for Queensway was constructed using incomplete data. Data for the peak months of June and July were not available

*Note: 2015 data is incomplete

Chart 25 – LSTF-specific cycle count data for North Somerset



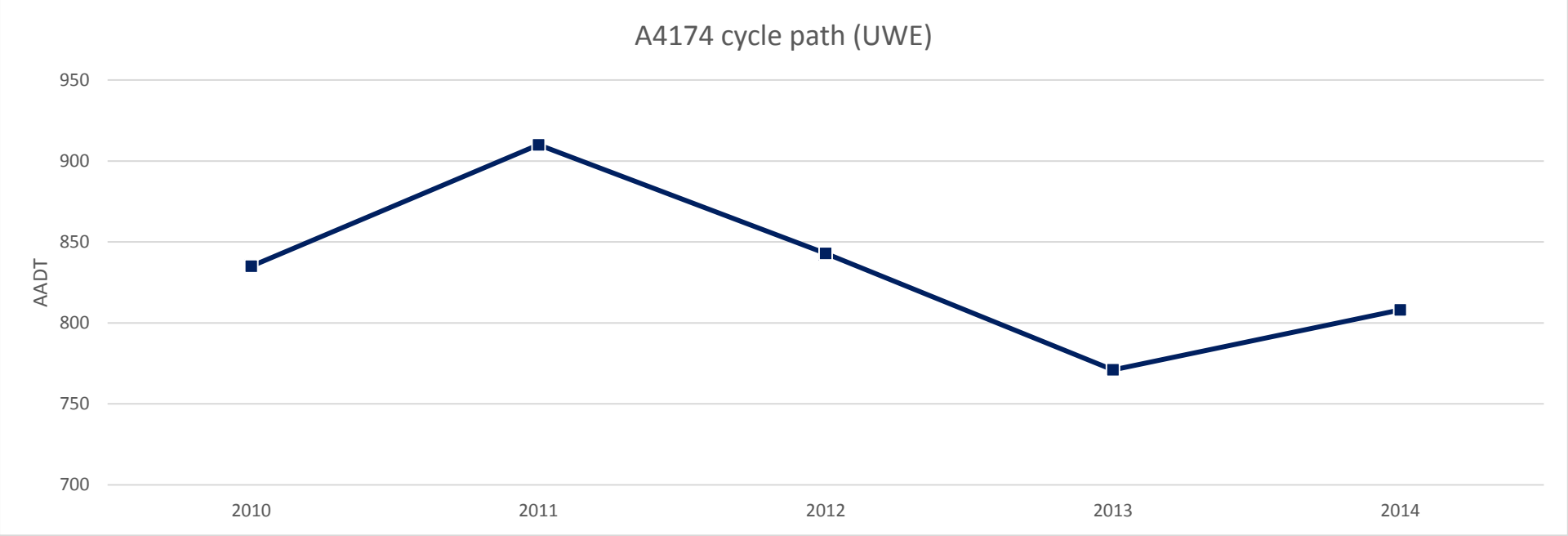
4.5.3 South Gloucestershire

Table 71 - LSTF-specific cycle count data for South Gloucestershire (AADT)

	2010	2011	2012	2013	2014
A4174 cycle path (UWE)	835	910	843	771	808
A4174 cycle path (M32 Junction)					729

**Note: 2013 data for the A4174 cycle path (UWE) was extracted from incomplete data (June-December only)*

Chart 26 – LSTF-specific cycle count data for North Somerset



4.6 Delivery progress with 20mph measures in Bristol

4.6.1 Overview of interventions and delivery progress

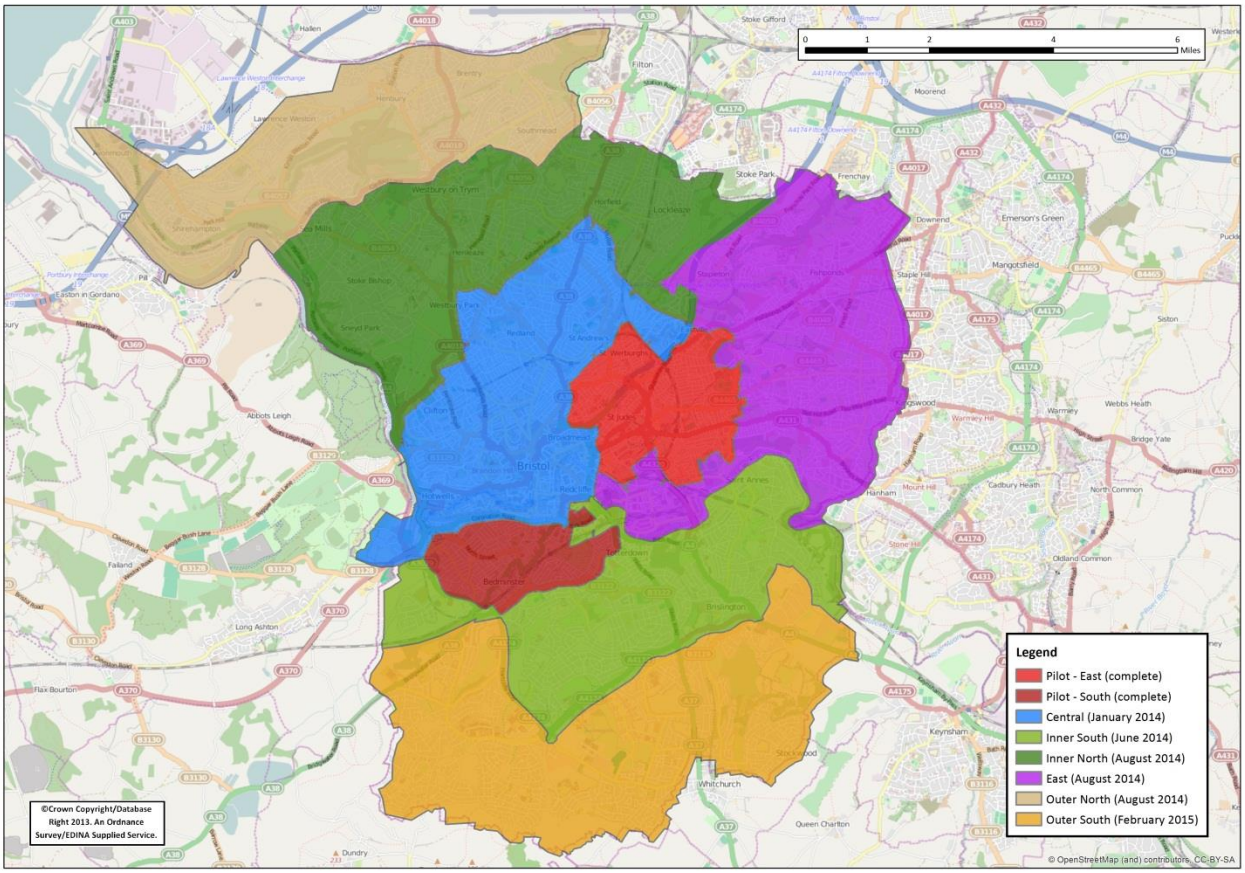
The introduction of 20mph areas across Bristol is intended to improve road safety, increase active travel and enhance the local environment. The current timetable for the roll-out of 20mph areas is presented below with Map 5.1 showing the locations of the areas.

Table 72 - Current timetable for roll-out of 20mph measures

Phase	Date of introduction	Before HIS*	Post HIS*
Central	January 2014	20 July-3 Aug 2013	Jan 2015
Inner South	July 2014	14-27 Oct 2013	Oct 2015
Inner North	September 2014	15-28 Jan 2014	Jan 2016
East	March 2015	12-25 May 2014	May 2016
Outer North	June 2015	11-24 Aug 2014	Aug 2016
Outer South	Sept 2015	17-30 Nov 2014	Nov 2016

*Household Interview Survey

Map 5 - Phases of 20mph area roll-out in Bristol



4.7 Data collection plan for 20mph measures

The data collection plan for 20mph is focussed on a series of before and after Household Interview Surveys (HIS) in areas in which the 20mph measures are being introduced (see Table 5.5), and on phase-specific traffic count monitoring. Use will also be made of vehicle speed data collected via TrafficMaster. All six pre-HIS have now been completed, and the results of these and the subsequent post-surveys will be reported over the course of the monitoring period.

4.8 Results for 20mph measures

4.8.1 Household Interview Surveys

For each of the six Phases of the 20mph rollout, a survey is being undertaken six months prior to and twelve months after implementation. Thus, 12 surveys are being carried out; 6 pre-implementation and 6 post-implementation. In each survey, a representative sample of around 250 adults living in the 20 mph areas is being interviewed face-to-face, in their homes. Quotas are set for each ward within the phase areas based on adult population density. Within each ward, quotas are then set for gender, age (16-24, 25-44, 45-64, 65+) and economic activity, based on Census data for that ward. To achieve a good geographical spread across each 20 mph area interviews are conducted in all the Lower Level Super Output Areas within the area. The same questionnaire is being used in all the pre-implementation surveys. The post-implementation questionnaire is identical to the pre-implementation questionnaire in order to be able to track changes in behaviour and attitude, but with some additional questions specifically about the impact of the 20 mph speed limit.

Pre-implementation surveys have now been conducted in all the Zones. Only one post-implementation survey has been conducted, this is in the Central Zone. The results presented here are a summary of the findings from the full HIS reports, and focus mainly on the pre- and post-implementation figures from the Central Zone. Further comparator data from the scheduled post-implementation surveys will be included in the final evaluation.

Table 73 - Levels of cycling and walking in the local area

Central		Inner South		Inner North		East		Outer North		Outer South		Bristol total	
% pre	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*
Residents who cycle for ten minutes or more at least once per week in the local area													
31	36	11		15		14		9		5		14	
Residents who cycle for ten minutes or more most days in the local area													
16	12	4		5		4		4		1		6	
Residents who walk for ten minutes or more most days in the local area													
78	88	47		48		53		49		42		53	

There are similar levels of cycling in the Inner South, Inner North, East, and Outer North Zones. The lowest levels of daily and weekly cycling are in the Outer South Zone. All Zones however have levels

much lower than in the Central Zone where cycling is more popular, with 31% of people cycling for ten minutes or more once a week, and 16% cycling most days.

Similarly, smaller proportions of people in the non-central Zones walk daily or weekly when compared to the central Zone, where 78% walk for ten minutes or more on most days.

When comparing the pre- and post-implementation data for the central Zone, there has been an increase in people cycling daily, rising from 31% before the intervention to 36% after the intervention. Conversely however, there has been a fall in people who cycle on most days, with a drop of 4 percentage points from 16% to 12%. There has been a rise in walking activity of of 10% points from 78% pre-implementation to 88% post-implementation.

Table 74 - Levels of driving

Central		Inner South		Inner North		East		Outer North		Outer South		Bristol total	
% pre	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*
Residents who travel by car most days													
34	33	54		59		57		63		63		55	

The non-central Zones all have higher levels of daily driving than the central Zone, with those in the peripheral Outer North and Outer South Zones having the highest proportions of people travelling by car most days (63% each).

In terms of the pre- and post-implementation results for the Central Zone, there was a small decline of 1 percentage point from 34% to 33% after the intervention.

Table 75 - School travel

Central		Inner South		Inner North		East		Outer North		Outer South		Bristol total	
% pre	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*
Junior school age children who are driven to school													
9	11	37		35		37		42		38		34	
Junior school age children travelling to school not accompanied by an adult													
19	9	9		12		10		24		11		13	
Senior school age children who are driven to school													
13	8	12		23		24		14		29		19	
Senior school age children travelling to school not accompanied by an adult													
80	88	88		60		76		76		67		74	

Pre-implementation, 60-80% of senior school children travel unaccompanied by an adult and 10-19% of junior school children travel unaccompanied. In the central area, there has been an 8% point increase in senior school children travelling unaccompanied and a 10% reduction in junior school children travelling unaccompanied. More junior school children were being driven to school after the implementation than before it (9% before, 11% after) Looking at senior school children however, in the pre-survey, 13% were being driven to school, whilst in the post-survey, 8% were dreiven to school, a fall of 5 percentage point.

Table 76 - Noise pollution from traffic

Central		Inner South		Inner North		East		Outer North		Outer South		Bristol total	
% pre	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*
Residents who are disturbed by the sound of passing traffic													
43	28	49		35		46		34		40		41	

In the pre-intervention survey, perceptions of noise pollution from traffic were relatively poor in all areas of the city, with the highest proportion of people reporting it as an issue in the Inner South Zone (49%), and the lowest proportion in the Outer North (34%).

In the Central Zone however there has been a reduction in the proportion of people reporting disturbance from noise pollution in the post-survey. The pre-intervention survey recorded 43% of residents in the Central Zone being disturbed by noise pollution, whilst the post-intervention survey reported just 28%, a fall of 15 percentage points between the two surveys.

Table 77 - Interaction with neighbours

Central		Inner South		Inner North		East		Outer North		Outer South		Bristol total	
% pre	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*
Residents who stop and speak to neighbours most days													
36	31	42		30		39		43		31		37	

In the pre-survey results, interaction with neighbours in the local area is lowest in the Inner North Zone, where just under 1 in 3 people reported stopping to speak with neighbours most days. Neighbourly interaction was highest in the Outer North Zone, with 43% of people stopping to chat most days.

Comparing the pre- and post-implementation results in the Central Zone, the proportion of people who speak to their neighbours most days fell from 36% to 31%, a drop of 5 percentage points.

Table 78 - Children's' social interaction in the local area[7]

Central		Inner South		Inner North		East		Outer North		Outer South		Bristol total	
% pre	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*
Pre-school age children who meet or play with friends in a street near them													
25	0	2		19		1		6		3		10	
Junior school age children who meet or play with friends in a street near them													
71	42	33		43		37		54		50		47	
Senior school age children who meet or play with friends in a street near them													
66	56	60		62		49		72		54		61	

[7] Note: In the first survey (Central Phase area, pre-implementation) the wording to this question was 'meeting and playing with friends in the streets near you', which may have been interpreted as 'meeting/playing with friends who live locally' i.e. not necessarily playing/meeting outside in the street. In subsequent surveys the wording was clarified to 'in fine weather, how often does … play or meet friends out in the street?'

Around half to two-thirds of older children (of senior school age) meet or play with friends in the streets around them across all areas. For junior school age children , the findings show that social interaction varies greatly by area; interaction in this age group is highest in the Central Zone (71%) and lowest in the Inner South Zone (33%). As footnote 7 explains though, a change in question wording following the initial Central Zone pre-survey means these data might be misleading.

Between the pre- and the post-implementation surveys, children's social interactions in their local area appear to have fallen dramatically in all three age groups. Again however, the results for all of these questions are suggested to have been skewed by a change to the wording of the question between the pre- and post-implementation surveys in the Central Zone (see footnote 7), and so a direct comparison of these results is not possible.

Table 79 - Perceptions of local area

Central		Inner South		Inner North		East		Outer North		Outer South		Bristol total	
% pre	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*
Residents whose own street feels pleasant and relaxed													
87	86	83		86		77		80		81		82	
Residents whose streets in the local area feel pleasant and relaxed													
86	88	78		81		69		68		71		76	
Residents who feel they belong in the local area													
86	84	88		79		77		74		81		81	
Residents who are satisfied with their local area as a place to live													
91	93	87		90		84		81		87		87	

Positive perceptions of the local area were generally high across the areas. Large majorities (greater than 77%) of residents in all zones reported that their own streets felt pleasant and relaxed. Similar (albeit slightly lower, 68%) proportions felt that other streets in the local area felt pleasant and relaxed. In terms of overall satisfaction with their areas, the proportions were particularly high across all the Zones, the highest being in the Central Zone (91%), and the lowest in the Outer North (81%).

Between the pre-implementation and the post-implementation surveys, there was little change in satisfaction in the Central Zone Satisfaction for the street that someone lived in, with a reduction by one percentage point from 87% to 86%. Satisfaction with local streets rose by two percentage points, from 86% to 88%. Feelings of belonging in the local area fell by two percentage points from 86% to 84%, whilst general satisfaction with the area as a place to live rose by two percentage points from 91% to 93%.

Table 80 - Perceptions of on-road safety in local area

Central		Inner South		Inner North		East		Outer North		Outer South		Bristol total	
% pre	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*
Residents who feel safe driving in local area													
89	84	90		87		82		87		85		87	
Residents who feel safe cycling in local area													
59	62	53		48		45		58		42		51	

The results suggest that most respondents feel safe driving (87% of respondents across Bristol), but smaller proportions felt safe cycling (between 42% and 62%, with an average of 51%).

In the Central Zone, perceptions of driving safety fell by 5 percentage points between the pre-implementation and the post-implementation survey (from 89% to 84%), whilst perceptions of cycling safety improved by 3 percentage points (from 59% to 62%).

Table 81 - Perceptions of safety in local area

Central		Inner South		Inner North		East		Outer North		Outer South		Bristol total	
% pre	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*
Residents who feel safe crossing roads on foot in local area													
81	84	68		72		64		81		67		72	
Residents who feel local area is safe for elderly pedestrians													
58	57	54		53		41		55		54		53	
Residents who feel it is safe for children to play in the street on their own in the local area													
23	20	33		23		22		29		26		26	
Residents who feel it is safe for children to walk to school on their own in the local area													
50	63	48		41		35		43		53		45	
Residents who feel it is safe for children to cycle to school on their own in the local area													
29	32	28		21		18		22		22		23	

In the pre-implementation survey, the number of people who reported feeling that the area was safe for themselves and others as pedestrians varied dependent on the age of the person in question. Relatively high proportions of respondents felt safe themselves with crossing roads in their area, with the people in the Central and Outer North Zones feeling most safe, at 81% each. The worst perceptions of safety in this category were in the East Zone, with 64% of people feeling safe crossing the road.

Fewer people in all zones felt that it was safe for elderly pedestrians to cross local roads. The highest proportions of those feeling this was safe were again in the Central Zone (58%), with the lowest again being in the East Zone (41%). This compares to a Bristol average of 53% across all zones.

Perceptions of the safety of children were generally less positive. First, in terms of playing out in the local area, only just over a quarter (26%) of people across Bristol as a whole felt it was safe for children to play in their local streets. Greater proportions of respondents felt that it was safe for children to walk to school unaccompanied in their local area, with 45% of people across all zones being

comfortable with this. Perceptions of safety for children cycling to school unaccompanied however were again less positive, with just 23% in total feeling this was safe.

The results in all categories demonstrate that perceptions of road safety are consistently the worst in the East Zone. Particular attention will be paid to this in the analysis when the results of the post survey are available.

Thinking in terms of the pre-implementation and post-implementation survey results in the Central Zone, there was again a mixed set of results. Perceptions of one's own safety rose by 3 percentage points, from 81% to 84%, whilst older persons' perceptions of safety fell from 58% to 54%. Perceptions of children's safety fell in regard to children playing in the local streets (23%-20%), but rose for children walking to school (50%-63%) and cycling to school (29%-32%).

Table 82 - Awareness of the 20mph scheme rollout

Central		Inner South		Inner North		East		Outer North		Outer South		Bristol total	
% pre	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*
Residents who are aware of imminent introduction of 20mph limit to own area													
34	91	29		42		38		39		39		37	
Residents who are aware of introduction of 20mph limit elsewhere in the city													
N/A		62		79		82		85		82		79	

Generally, more respondents were aware of the 20mph rollout in other areas of the city than in their own area, which is perhaps an unusual finding, but linked with general publicity rather than specific publicity or consultation for their zone. Awareness of the imminent introduction of the scheme in their own area was highest amongst residents in the Inner North Zone, at 42%, and lowest in the Inner South Zone, at 29%.

Perhaps unsurprisingly, awareness of the 20mph rollout increased dramatically between the pre-implementation and post-implementation surveys in the Central Zone. Before the scheme was implemented, 34% of residents were aware of it. Following its introduction, this percentage had risen to 91%.

Table 83 - Perceptions of anti-social driving practices

	Central		Inner South		Inner North		East		Outer North		Outer South		Bristol total	
	% pre	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*	*% pre*	*% post*
When residents think it is anti-social to drive over the speed limit on residential streets														
Always	88	70	85		80		78		78		84		82	
Some-times	11	26	12		18		20		21		16		16	
Never	0	2	1		0		1		3		0		1	
Don't know	0	1	3		1		1		0		0		1	
When residents think it is anti-social to drive over the speed limit on main roads														
Always	65	52	72		70		70		69		68		69	

Some-times	34	44	24		28		26		28		30		28	
Never	0	2	1		1		3		3		1		1	
Don't know	0	2	3		1		1		0		1		1	

Perceptions of the anti-social nature of breaking the speed limit in general became more negative on residential streets and less negative on main roads. Higher proportions of people across all of the areas felt it was sometimes acceptable to break the speed limit on main roads, and that this was more acceptable than on residential roads.

Between the pre-implementation and the post-implementation survey in the Central Zone, there was an interesting shift in opinions about when it is anti-social to break the speed limit on different roads. Fewer people in the post-implementation survey said they thought it was always unacceptable to break the speed limit on both local and main roads than suggested this was the case in the pre-implementation survey, with this change shifting towards the 'sometimes' category'.

Table 84 - Support for 20mph scheme

Central		**Inner South**		**Inner North**		**East**		**Outer North**		**Outer South**		**Bristol total**	
% pre	***% post***	***% pre***	***% post***	***% pre***	***% post***	***% pre***	***% post***	***% pre***	***% post***	***% pre***	***% post***	***% pre***	***% post***
Residents in favour of 20mph in their own street													
74	88	77		72		80		74		78		76	
Residents in favour of 20mph on local residential streets													
80	82	76		73		82		74		73		76	
Residents in favour of 20mph on local main roads													
35	41	36		26		28		15		17		26	

Generally, support for the 20mph scheme was high on one's own street and local residential streets, but considerably lower on local main roads. Whilst approximately 70-80% of respondents across the three areas expressed support for the 20mph scheme in both their own streets and other local residential streets, only a quarter to just over a third of people supported its rollout on local main roads.

In the Central Zone, support for the 20mph zone increased in all three categories following implementation. In the case of the respondents' own street, the proportion of people in favour rose by 14 percentage points in the post survey, up from 74% to 88%. On other local streets, there was a small increase of 2 percentage points from 80% to 82%. Whereas for those in favour on local main roads, the proportion of those in favour rose by 6 percentage points from 35% to 41%.

5. Public Transport

This section describes progress with delivery and collection of outcome data for the Public Transport project area.

5.1 Delivery progress with Public Transport

5.1.1 Overview of interventions - Services and infrastructure

The majority of the WEST Public Transport measures fall into the category of improvements to services and infrastructure. These measures are focused on:

- The creation of new bus services. A number of new bus routes have been implemented:
  - The X18 commuter bus service running from Kingswood to Aztec West.
  - An express commuter coach service running from Weston-super-Mare to the North Fringe of Bristol.
  - An extension of the Greater Bristol Bus Network (GBBN) route to Portishead through the introduction of two new services, the X2 and the X3. These add to the already-existing X1 service, which was introduced as part of the Key Commuter Routes programme and was operational before the start of WEST.
  - The number 19 and number 13 university bus services. These services extend the universities' bus network to Bradley Stoke and the University of Bristol. In the case of the number 13 service, the LSTF scheme provided for an extension to the existing 13 service, moving the northern terminus from UWE Frenchay Campus to Bradley Stoke. As of September 2014, this extension of the 13 was discontinued by Wessex and replaced this part of the route with a new number X74 service.
  - Community transport and demand-responsive commuter services. Four minibuses have been provided to operate a community transport service and a demand-responsive service to link communities in North Somerset to each other and the GBBN, improving access to employment opportunities for residents.
- Bus punctuality improvements being implemented on a number of routes through infrastructure development including the following:
  - The A4174;
  - Little Stoke Lane; and
  - Emersons Way.
- Infrastructure improvements made on the 24 route and the 6/7 route in Bristol.
- Financial support measures providing funding for the expansion of services and the implementation of promotions, including:
  - GBBN service enhancements. This measure will provide financial support to increase services on the 379 (Midsomer Norton – Bristol)

5.1.2 Overview of interventions - On-board improvements and service promotion

A number of the WEST measures together with Better Bus Area funded schemes involve improvements to the on-board travel environment, the provision of travel information, and the promotion of services. These measures include:

- Improvements to Real Time Information (RTI) provision. These measures involve the implementation of new RTI units on buses and RTI displays at bus stops, as follows:

    - RTI on all buses in the sub-region. This measure aims to cover all services in all four authorities within the WEST sub-region. It should be noted that this is an umbrella measure containing all other individual RTI measures.
- Next-stop displays and audio announcements to be installed on at least 75 buses allocated to GBBN routes.
- Network management measures in BANES to improve bus priority at traffic signals and to improve RTI on services as described above.
- Wi-Fi installation on 300 buses in the WEST sub-region. The aim of this measure is to improve the passengers' experiences of riding the bus through the provision of free internet access for use during the journey.

5.1.3 Delivery progress

Progress with the delivery of Public Transport schemes which occurred in the 2014/15 reporting period is presented below (these tables also include schemes completed shortly after the reporting period).

Table 85 - Public transport projects delivered in 2014/15

Deliverable	Completion date
X74 launched to replace service 13 between UWE and Bradley Stoke. Reduced £1.50 introductory fare campaign supported in South Gloucestershire area of route to match launch fare being offered on the Bristol part of the route by First.	**Sept 2014**
X18 promotion: Free ticket flyer sent as direct mail to all households living within 400m of route. 52 tickets redeemed.	**May 2014**
X18 promotion: Free 10 journey tickets and promotional package distributed to all businesses along route. 698 tickets redeemed. Patronage figures for Oct/Nov/Dec up 39%. Around 3000 passengers per month.	**October 2014**
In January two free weeks were offered from Blue Monday (19th January 2015) to payday, and a week in February. This campaign received TV coverage on Made in Bristol. 4138 journeys were made during the two week free period. Over the entire 2 week period there was a 13% uplift in passengers, with the greatest uplift in week 2 (20%). Unfortunately there were three vehicle breakdowns during the campaign period (service did not run).	**January 2015**
The Kings Ferry follow-up marketing campaign	**April 2014**
The Kings Ferry first anniversary marketing campaign	**November 2014**
Installation of new bus shelters in Timsbury	**February 2015**
Construction of raised kerbs on Service 178 route (Marksbury, High Littleton, Timsbury, Farmborough)	**February 2015**
New bus service leaflets (665)	**May 2014**
New bus service leaflets (636)	**August 2014**
New bus service leaflets (City Centre and 768)	**September 2014**
New bus service leaflets (2,12,620,768)	**November 2014**

Deliverable	Completion date
New bus service leaflets (20A/C,700,716,734)	**February 2015**

5.2 Data collection plan

Data collection for Public Transport measures involves satisfaction surveys on corridors served by new or enhanced services, and collecting service specific patronage figures.

The WEST bus passenger satisfaction survey has been developed from the existing GBBN satisfaction survey. This allows comparability to be maintained with historic GBBN satisfaction data, whilst at the same time allowing for the introduction of questions relevant to the WEST project. The data collection schedule for Public Transport remains unchanged from that reported in Appendix 16 of the OMP.

5.3 Results for Public Transport

This section presents data collected during the reporting period. In some cases it has been appropriate to report summary patronage and satisfaction data before this period (where it is available) to show patterns of change.

5.3.1 Commuter bus and coach services

Bus user surveys have been conducted in March 2014 and March 2015 on LSTF-funded bus and coach services serving the North Fringe employment area in the West of England. The surveys were aimed at understanding if the new bus services have attracted car commuters and how satisfied users are with the services. This report presents the findings from both surveys with an analysis of the ways in which the user profiles and levels of satisfaction with services have changed over the one year period.

Service context

There are two relevant services which have been introduced to provide enhanced public transport access to the North Fringe employment area in the West of England.

X18 Express Commuter Bus Service

The X18 is an express commuter bus service which was introduced in December 2012 and is operated by FirstGroup. The X18 service links residential areas in the east of Bristol with large employer sites in the North Fringe of Bristol. A service diagram of the X18 route is included below.

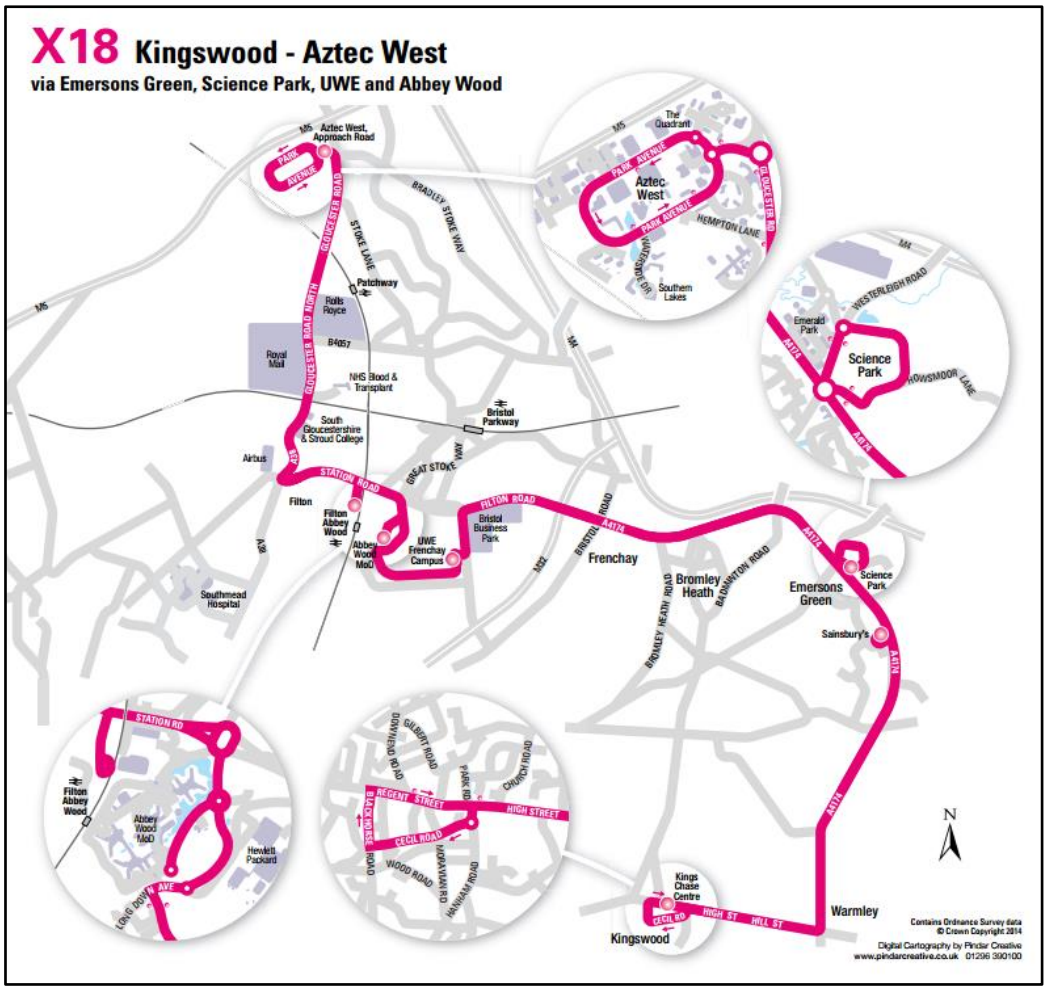


Figure 2 - X18 service diagram. ***Available from:*** ***http://www.firstgroup.com/uploads/maps/X18_Leaflet_WEB.pdf***

The X18 service operates four services in both the morning and afternoon peaks inbound from Kingswood/Emersons Green to the North Fringe, and four services in both the morning and afternoon peak outbound from the North Fringe to Kingswood/Emersons Green. The inbound morning peak services operate at 06:00, 06:50, 07:20, and 07:20, whilst the outbound services run at 06:55, 07:50, 08:30, and 09:00. The inbound afternoon peak services run at 15:25, 15:55, 16:40, and 17:40; the outbound afternoon peak services run at 15:35, 16:35, 17:05, and 17:45.

It should be noted that levels of service on the X18 have been reduced since the time of the 2014 survey. At that time, the X18 service operated five services in the morning peak and five services in the afternoon peak inbound from Kingswood/Emersons Green to the North Fringe, and six services in the morning peak and five services in the afternoon peak outbound from the North Fringe to Kingswood/Emersons Green. Therefore there has been a reduction of 1-2 services in each peak period, and this should be taken into consideration when assessing the findings related to satisfaction, which are presented later in this report.

Since its introduction the X18 service has experienced a relatively steady growth in patronage, shown in Chart 27.

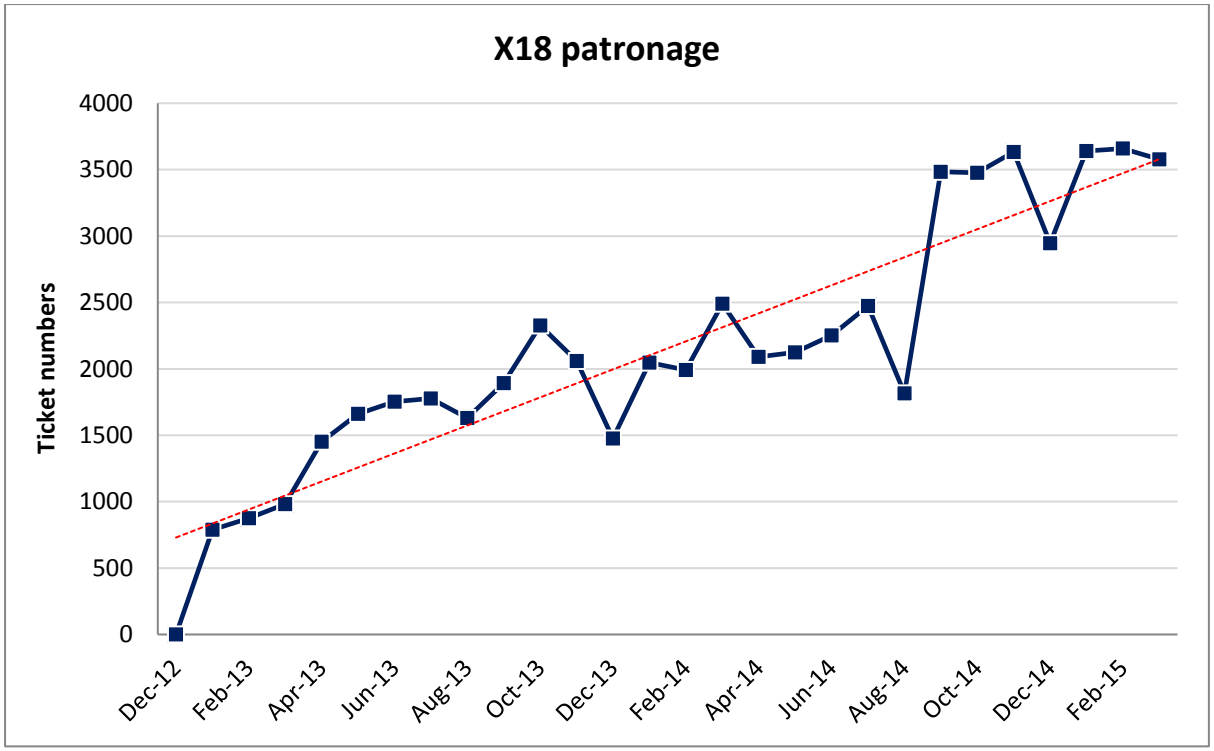


Chart 27 - X18 monthly patronage data

The service is designed to give a 'premium' bus experience for commuters, and there is a focus on providing a desirable on-board environment. Buses running on the X18 route are equipped with free Wi-Fi, on-board screens displaying next-stop announcements and BBC news, and comfortable seating with extended space. The aim of this approach is to provide a travel experience which will encourage commuters out of their cars and on to public transport for their journeys to and from work.

The Kings Ferry North Bristol Commuter Coach Service

The North Bristol commuter coach service was introduced in November 2013 and is operated by The Kings Ferry. The service links the towns of Portishead and Weston-super-Mare to the major employer sites in the North Fringe of Bristol. The service runs in the morning and afternoon peak times, and travels only inbound in the morning peak, and only outbound in the afternoon peak. The Kings Ferry service operates four services in the morning peak inbound from Weston-Super Mare to the North Fringe (06:15, 06:45, 07:15, 08:15), and then five return services in the afternoon (13:00, 16:00, 17:05, 17:50, 18:20). It operates four services in the morning peak inbound from Portishead to the North Fringe (06:40, 07:40, 08:25, 09:05), and then five return services in the afternoon peak (13:00, 15:50, 16:35, 17:15, 18:30). It should be noted that the two 13:00 return services have been newly introduced since the time of the 2014 strategic employment sites report.

Patronage data for The Kings Ferry are shown in Chart 28.

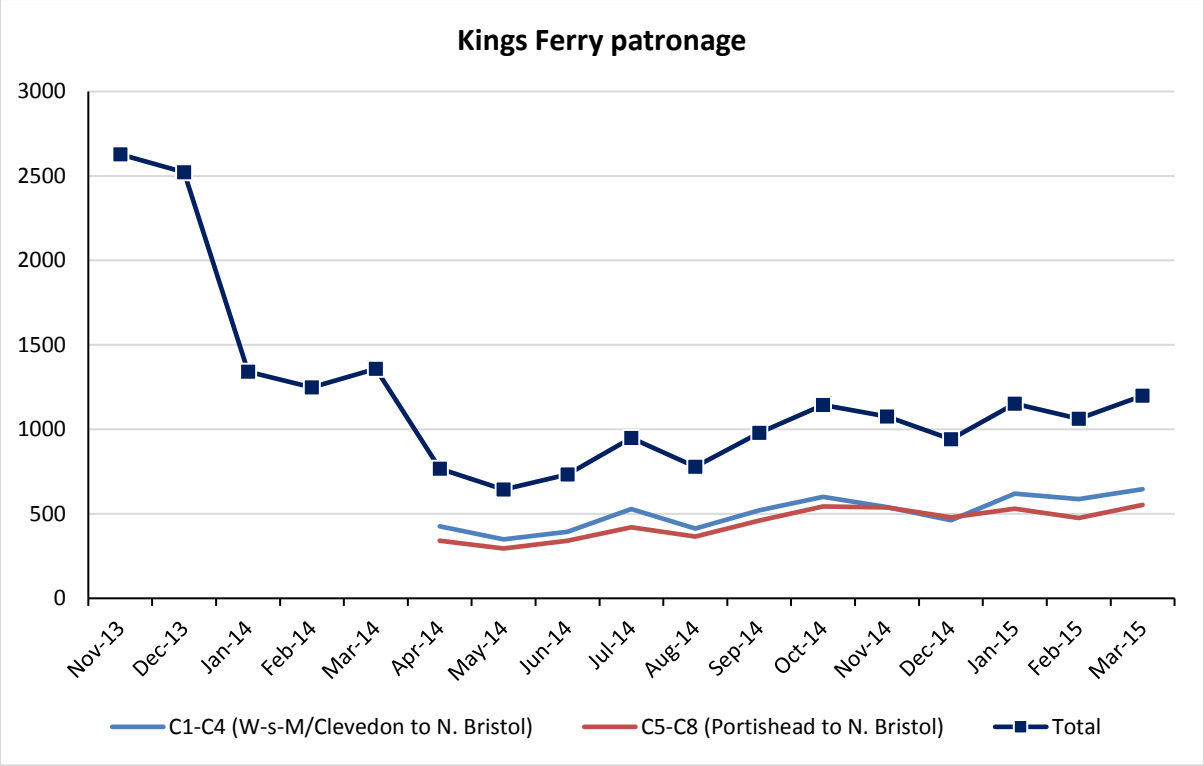


Chart 28 – The Kings Ferry monthly patronage data

It should be noted that as a part of the launch of the service, free fares were offered for the first two months of operation (November and December 2013). The data suggest that this offer was responsible for attracting particularly high levels of use during the first two months, followed by a drop in patronage when fares were introduced. Patronage dropped to a low in April 2014, and since then has been increasing.

The Kings Ferry service also aims to offer a premium service with the rationale that the desirable (or 'executive') travel experience offered on The Kings Ferry coaches can attract commuters away from their cars. The Kings Ferry service offers an extended range of facilities on-board, including free Wi-Fi, reclining seats, air conditioning, refreshments, and toilets.

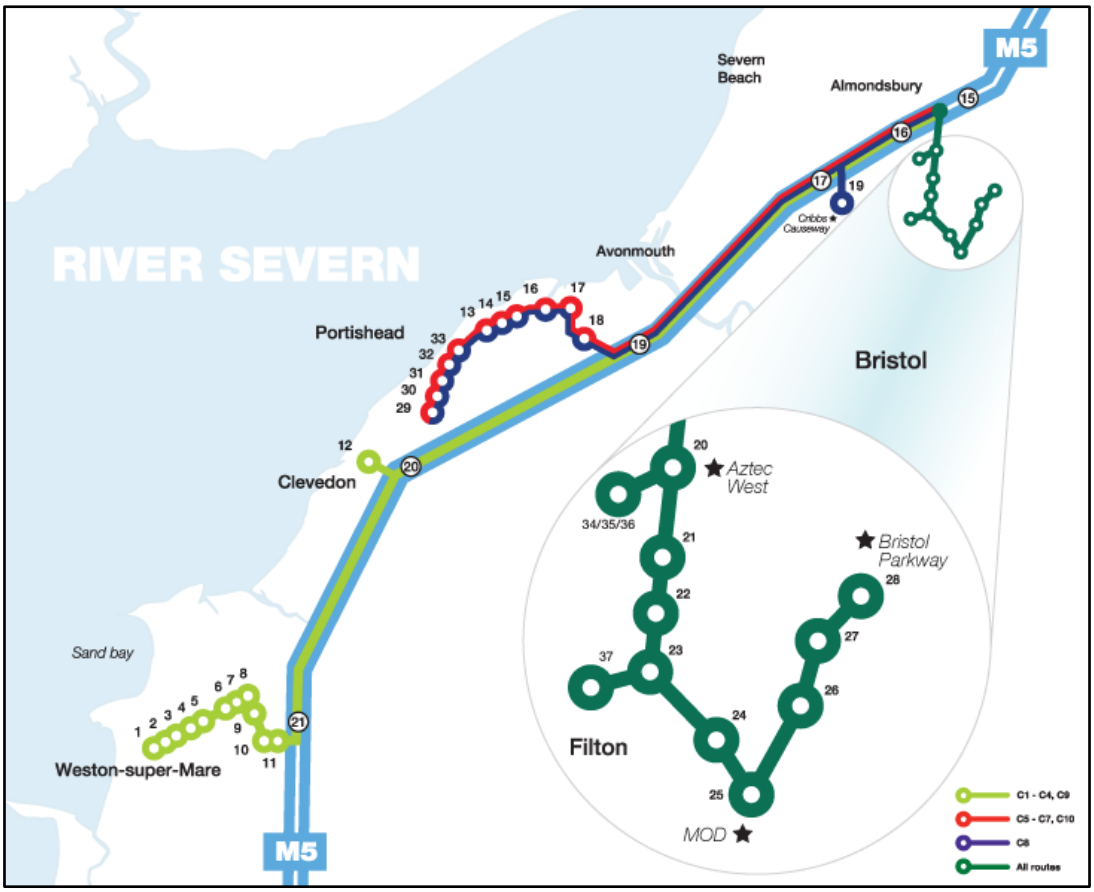


Figure 3 - The Kings Ferry service diagram. ***Available from:*** ***www.thekingsferry.co.uk/north-bristol/route-map***

Chart 25 provides some insight into whether the services have continued to attract new passengers, or whether they are increasingly serving a static and loyal passenger base. It is evident that the patterns of uptake on both are similar, with the majority of passengers having started using the services in 2014, when they had been operational for some time and had become more established and visible. The data for 2015 demonstrates that the services are continuing to attract new passengers, with these data representing just the first quarter of 2015.

Conduct

An on-board survey was conducted with the aim of achieving high response rates from existing users. The survey followed a dual administration method, utilising both a self-completion and a face-to-face interview approach. All passengers on the surveyed services were approached and asked to participate in the self-completion survey, which was designed to take approximately five minutes to complete. Ample time was given for passengers to complete the survey as journey times between residential areas and employment areas are at least 15 minutes. Whilst the self-completion surveying was the primary method of data collection, it was understood that some passengers might not be able to complete a survey themselves during the journey. In these instances, the surveyors would make a note of the individual and ask them if they would be willing to take part in a face-to-face interview, in which case the surveyor asked the questions and completed the form on behalf of the passenger. If the passenger agreed, the surveyor would return to them – *after having handed out the remaining survey forms to other passengers.*

Research Design

The four unitary authorities (UAs) in the West of England each have existing bus user satisfaction surveys which they run periodically on a range of different services, with the aim of monitoring levels of satisfaction on services as a part of the Greater Bristol Bus Network (GBBN). It was decided to use an updated version of the survey forms already in use. The survey forms used by the UAs are similar and based on a common set of core questions; however there was a need to consolidate the design of the survey forms further, to ensure that comparability is possible. The new survey forms were developed based on four principles:

1) The forms should maintain the main questions from the existing GBBN satisfaction survey forms to allow the UAs to continue to compile time-series data on their services.
2) The forms should be re-designed as self-completion surveys (previously the UAs had been exclusively using a face-to-face interview approach) to maximise the sample size.
3) The forms should all contain a core set of questions which will be included in all West of England LSTF bus user satisfaction surveys. This will allow for the data from the numerous smaller surveys to be compiled into one dataset to examine levels of satisfaction at the sub-regional level across all West of England LSTF funded services.
4) The forms should also contain the option for bespoke questions relevant to different individual services, which will allow for an analysis of service-specific issues.

Through following this design it has been possible to collect data which can be analysed at both the sub-regional and individual service levels, and also which can be compared to previous baseline data on levels of passenger satisfaction.

Conduct

The X18 satisfaction surveys were conducted over two day periods in both March of 2014 and 2015, with all services in the morning peak surveyed on the first day, and services in the afternoon peak surveyed on the second day. The 2015 X18 survey collected 94 valid responses (124 valid responses were obtained in 2014.)

The Kings Ferry satisfaction survey was conducted on a single day in both March of 2014 and 2015, on all of the services in the morning peak. 54 The Kings Ferry passengers participated in the 2015 survey (the figure was 36 in 2014).

5.4 Satisfaction survey results

The results are presented differently dependent upon the questions being reported. For the more general sample characteristics, the data from all passengers are included. This is intended to give an overview of the passenger make-up of the services and to understand their use by commuters within the wider context of all users. Following the data for journey purpose, only the data collected from passengers travelling on commuting journeys to the North Fringe are included. This is to allow for a specific analysis of those passengers using the services to access the North Fringe for employment. In order to create this specific subset, passengers were selected based upon them being on either a morning peak inbound commuting journey, or an evening peak outbound commuting journey.

5.4.1 Gender

Table 86 - Gender of survey respondents

All Gender	N	%	X18 Gender	N	%	The Kings Ferry Gender	N	%
2014								
Male	69	*54.3*	Male	44	*48.4*	Male	25	*69.4*
Female	58	*45.7*	Female	47	*51.6*	Female	11	*30.6*
Total	127		Total	91		Total	36	
2015								
Male	87	*60.0*	Male	47	*51.6*	Male	40	*74.1*
Female	58	*40.0*	Female	44	*48.4*	Female	14	*25.9*
Total	145		Total	91		Total	54	

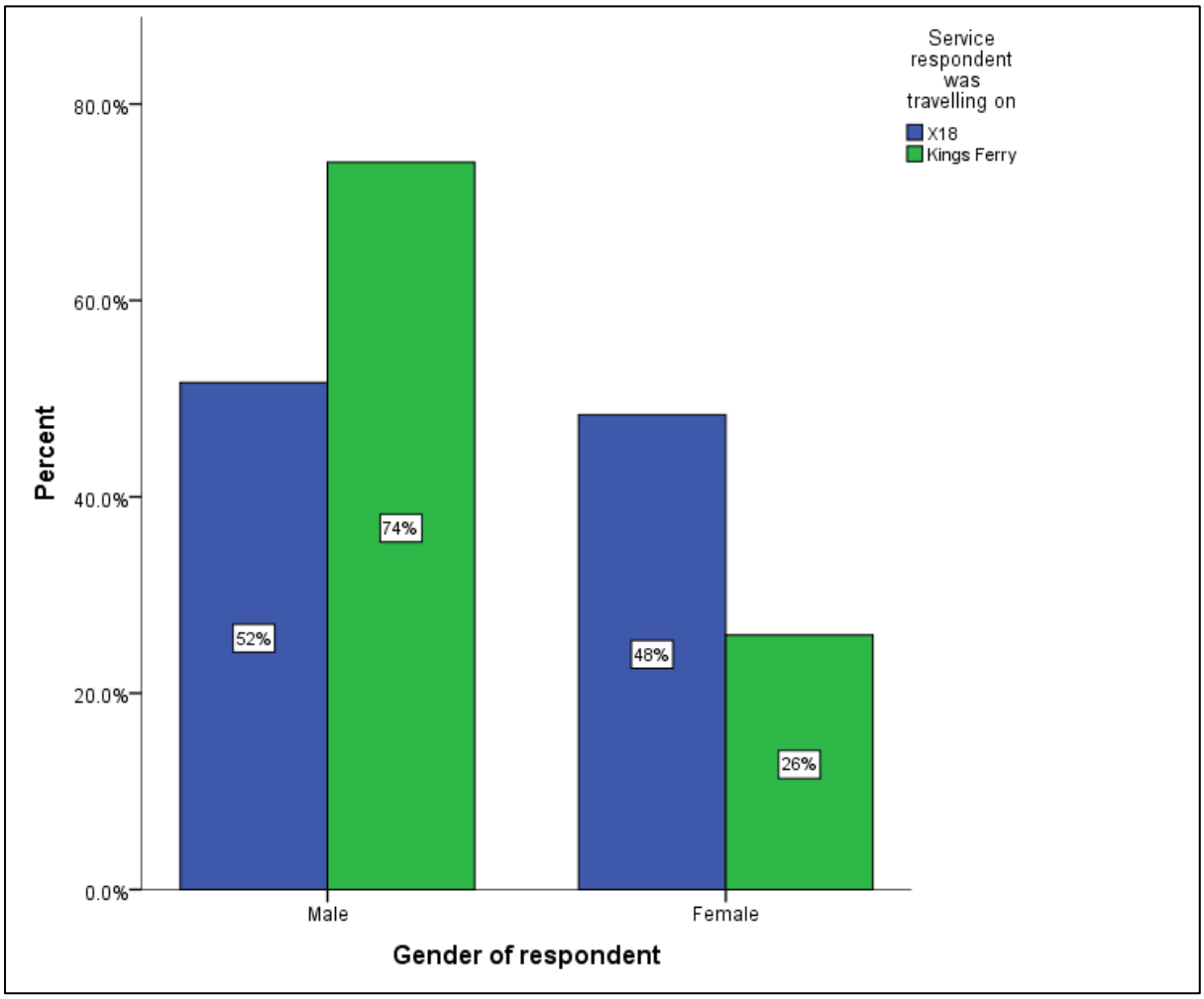


Chart 29 - Gender of survey respondents – 2015 survey

In the 2015 survey there was a higher proportion of men travelling compared to women. In total, 87 men were surveyed in comparison to 58 women. It is evident that the majority of this imbalance is accounted for by the strong gender disparity on The Kings Ferry service, where 40 men (71%) were surveyed in comparison to just 14 women (26%). On the X18 the gender split is more even, with 47 men surveyed (52%) in comparison to 44 women (48%).

In comparison with the previous year's results, the gender gap has widened. In 2014 at the aggregate level there were still slightly more men travelling than women – with 69 men travelling compared to 58 women – however there has been a shift of +5.7 percentage points towards more men travelling compared to women. Again, when the services are examined in isolation it is clear that this result is largely produced by the widening of the gender disparity on The Kings Ferry service – on which 25 men (69%) were travelling in comparison to 11 women (31%) in 2014. This represents a shift of +4.7 percentage points towards men. The gender ratio on the X18 has remained relatively even, although it has moved slightly more towards a higher proportion of men compared to 2014, which saw 44 men travelling (48%) compared to 47 women (52%).

The results suggest that The Kings Ferry service is particularly attractive to male commuters; however additional data are needed to better understand this finding.

5.4.2 Age

Table 87 - Age of survey respondents

All			**X18**			**The Kings Ferry**		
Age	**N**	***%***	**Age**	**N**	***%***	**Age**	**N**	***%***
2014								
17-20	13	*12.6*	17-20	8	*11.9*	17-20	5	*13.9*
21-29	18	*17.5*	21-29	12	*17.9*	21-29	6	*16.7*
30-39	23	*22.3*	30-39	18	*26.9*	30-39	5	*13.9*
40-49	37	*35.9*	40-49	28	*41.8*	40-49	9	*25.0*
50-59	7	*6.8*	50-59	0	*0*	50-59	7	*19.4*
60-69	4	*3.9*	60-69	1	*1.5*	60-69	3	*8.3*
70+	1	*1.0*	70+	0	*0*	70+	1	*2.8*
Total	103		Total	67		Total	36	
2015								
17-20	27	*19.4*	17-20	24	*28.2*	17-20	3	*5.6*
21-29	37	*26.6*	21-29	29	*34.1*	21-29	8	*14.8*
30-39	25	*18.0*	30-39	18	*21.2*	30-39	7	*13.0*
40-49	27	*19.4*	40-49	9	*10.6*	40-49	18	*33.3*
50-59	14	*10.1*	50-59	4	*4.7*	50-59	10	*18.5*
60-69	7	*5.0*	60-69	1	*1.2*	60-69	6	*11.1*
70+	2	*1.4*	70+	0	*0.0*	70+	2	*3.7*
Total	139		Total	85		Total	54	

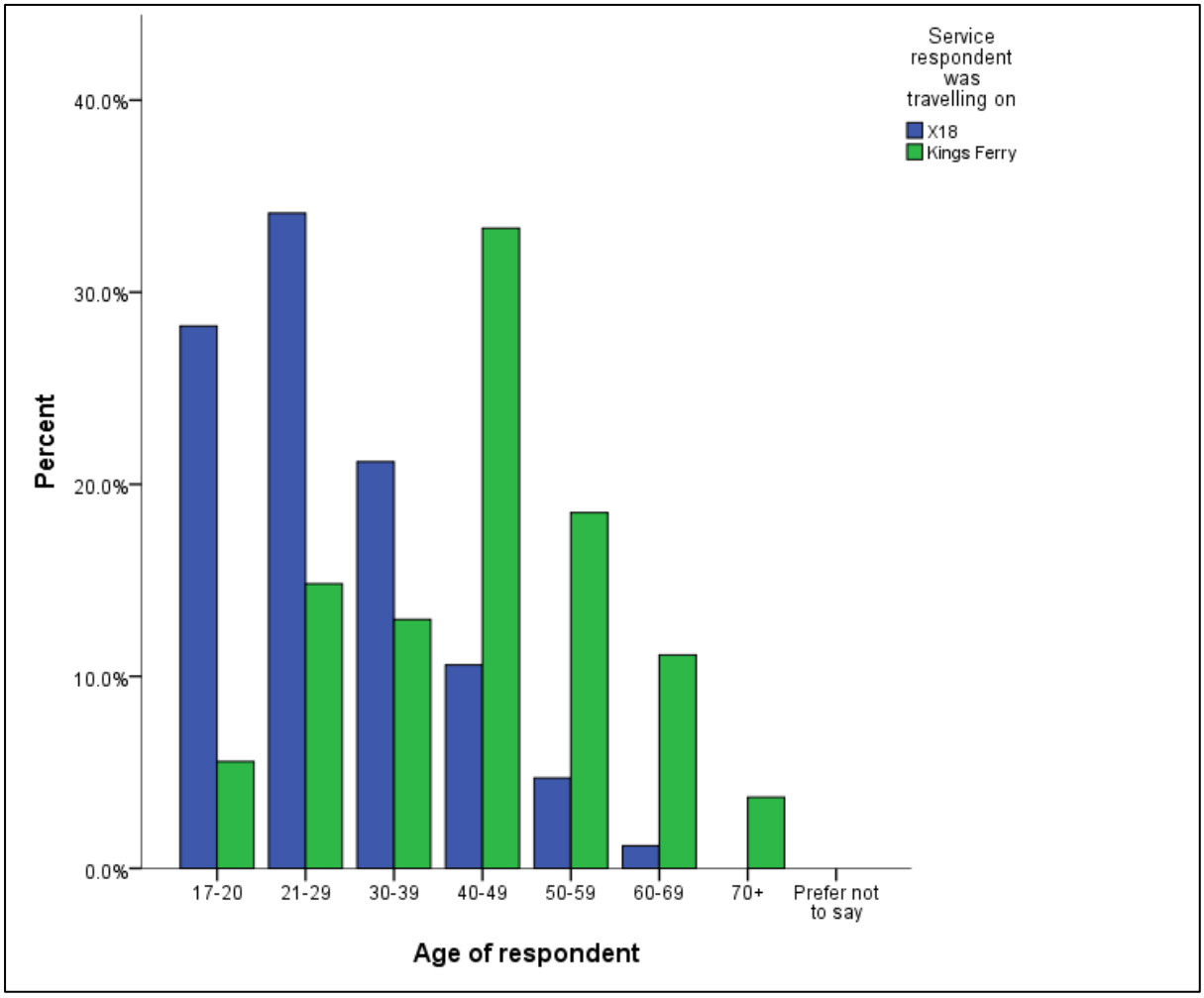


Chart 30 - Age of survey respondents – 2015 survey

The results for age show that at the aggregate level the services have different age profiles, and this is a marked change from the 2014 survey where these were more similar.

On the X18, the highest proportions of passengers are in the lowest age ranges, with 24 passengers in the 17-20 range (28%), and 29 passengers in the 21-29 range (34%). The proportion of passengers in each range then tails off towards the older end of the scale, with just 6% of passengers aged over 50, and no passengers aged 70 or above.

On The Kings Ferry however, mode for the proportion of passengers is in the middle age ranges. On this service, 18 passengers were in the 40-49 range (33%), and a further 10 (19%) were in the 50-59 age range. To either side of these age ranges, there are relatively few passengers. At the lower end, the curve tails off to only 3 passengers (6%) in the 17-20 range, whilst at the upper end, there were 6 (11%) aged 60-69, and 2 (4%) aged 70 or above. These last two results are interesting when compared to that of the X18, where there was almost no people in these upper ranges.

Since the 2014 survey the greatest change has been amongst the demographic of the X18 passengers, where there has been a strong shift towards the younger end of the scale. Previously, the X18's profile far more closely matched that of The Kings Ferry, which has maintained approximately the same profile, albeit with a slight shift towards the older end of the scale. Where in 2014 at the aggregate

level both services were being used in the greatest number by people in the middle age ranges, now the two services cater rather different age profiles.

This change in age demographic suggests that the X18 has become more attractive to younger passengers, however the data does not provide further insight into possible explanations for this. In the case of The Kings Ferry, as with in 2014, the service remains particularly attractive to older travellers, potentially in more senior positions in employment – which would fit with the 'executive' focus of the service. More data is required to interrogate this further however.

5.4.3 Journey purpose

Table 88 - Journey purpose of survey respondents

All Journey Purpose	**N**	***%***	**X18 Journey Purpose**	**N**	***%***	**The Kings Ferry Journey Purpose**	**N**	***%***
2014								
Business	7	*5.6*	Business	0	*0*	Business	7	*20.6*
Commuting	100	*80.0*	Commuting	76	*83.5*	Commuting	24	*70.6*
Leisure	4	*3.2*	Leisure	2	*2.2*	Leisure	2	*5.9*
Education	11	*8.8*	Education	11	*12.1*	Education	0	*0*
Shopping	3	*2.4*	Shopping	2	*2.2*	Shopping	1	*2.9*
Total	125		Total	91		Total	34	
2015								
Business	47	33.3	Business	26	29.9	Business	21	38.9
Commuting	73	51.8	Commuting	42	48.3	Commuting	31	51.8
Leisure	3	2.1	Leisure	3	3.4	Leisure	0	0.0
Education	14	9.9	Education	14	16.1	Education	0	0.0
Shopping	4	2.8	Shopping	2	2.3	Shopping	2	3.7
Total	141		Total	87		Total	54	

In 2015, the majority of trips on both services were for commuting or business purposes. Given the nature of the services and the responses of passengers to the later question regarding their frequency of trips on the services, it is suggested that passengers are not making a strong distinction between these two categories, and that the majority of 'business' trips in fact represent the daily commute. As such, in the subsequent analyses, the 'Business' and 'Commuting' categories have been combined for the analysis of those travelling to the North Fringe for the purposes of employment.

The only distinguishing difference between the two services in respect of journey purpose is that the X18 is carrying a greater proportion of passengers travelling for the purposes of education (14/16%) and leisure (3/3%). By contrast, on The Kings Ferry, no passengers were travelling for educational or leisure purposes.

Overall, 73 passengers (52%) were on commuting trips, and a further 47 (33%) travelling for business. This makes a total of 85% of trips on all services being to access employment. This finding demonstrates that the services are performing well in terms of serving their core demographic as commuter routes.

There has been very little change in comparison to the 2014 survey. In the previous year, 107 out of 125 (86%) of passengers were travelling for the purpose of employment.

It should be noted that the results presented in the remainder of this section are only those from passengers travelling in the morning peak for the purposes of employment on inbound trips to the North Fringe. The revised sample sizes for these analyses are provided below.

Table 89 - Sample sizes for employees on commuting services

	N		
	All	**X18**	**The Kings Ferry**
2014: Travelling for employment	76	45	31
2015: Travelling for employment	102	50	52

5.4.4 Commuter – length of employment

Table 90 - Length of current employment amongst survey respondents

All Employment length	**N**	***%***	**X18 Employment length**	**N**	***%***	**The Kings Ferry Employment length**	**N**	***%***
2014								
< 6 months	11	*15.7*	< 6 months	6	*15.0*	< 6 months	5	*16.7*
6 mths – 1 yr	17	*24.3*	6 mths – 1 yr	12	*30.0*	6 mths – 1 yr	5	*16.7*
1 – 2 years	11	*15.7*	1 – 2 years	10	*25.0*	1 – 2 years	1	*3.3*
2 – 5 years	13	*18.6*	2 – 5 years	5	*12.5*	2 – 5 years	8	*26.7*
> 5 years	18	*25.7*	> 5 years	7	*17.5*	> 5 years	11	*36.7*
Total	70		Total	40		Total	30	
2015								
< 6 months	20	20.0	< 6 months	12	24.5	< 6 months	8	15.7
6 mths – 1 yr	10	10.0	6 mths – 1 yr	7	14.3	6 mths – 1 yr	3	5.9
1 – 2 years	14	14.0	1 – 2 years	10	20.4	1 – 2 years	4	7.8
2 – 5 years	18	18.0	2 – 5 years	8	16.3	2 – 5 years	10	19.6
> 5 years	38	38.0	> 5 years	12	24.5	> 5 years	26	51.0
Total	100		Total	49		Total	51	

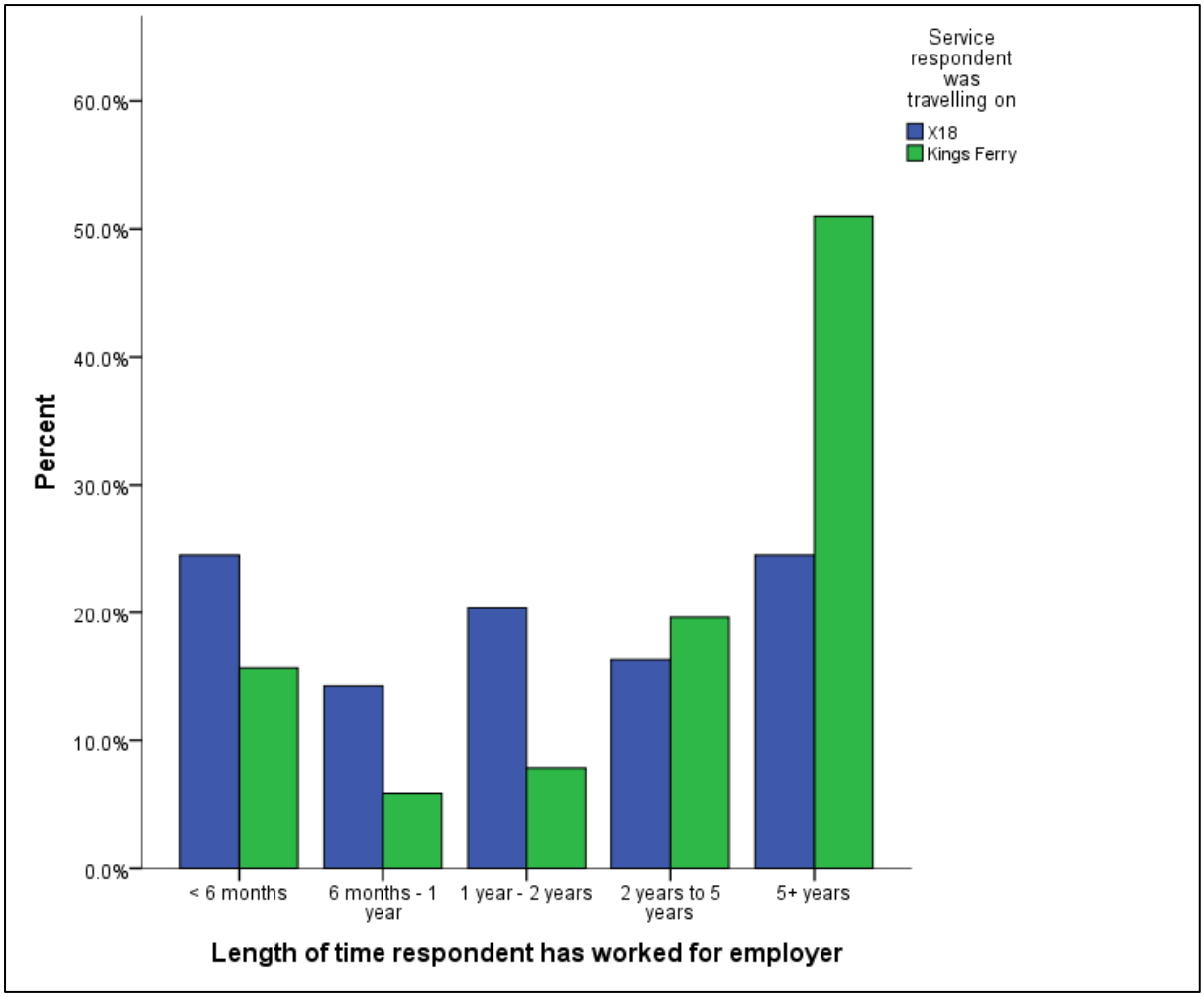


Chart 31 - Length of current employment amongst survey respondents – 2015 survey

The data demonstrate that there is a difference in the profile of X18 and The Kings Ferry users with respects to the length of time passengers have worked for their current employer. In the case of the X18, there is a relatively even spread in lengths of employment, with identical proportions of passengers having worked for under 6 months (12/25%) and over 5 years (12/25%). Slightly fewer passengers had been employed for between 6 months and 5 years, but the difference is modest.

In the case of The Kings Ferry, the profile is quite different. The majority of passengers on this service have been in their current employment for over 5 years (26/51%). Only 3 passengers (6%) had been employed for 6 months to a year and 8 passengers (16%) had been employed for under 6 months.

Compared to the 2014 survey, there has been a slight shift on both services towards passengers having worked for their employer for a longer period of time. The data does not allow for a thorough investigation of this, however possible explanations could be that either the services have become more attractive to longer-term employees over the course of the year in between surveys (potentially as they become more entrenched and visible), or that the 2015 survey is capturing some of the same participants as in 2014, and these people have simply moved over the threshold and into a higher category during the period.

The difference in profile between the two services is consistent with the earlier findings related to age, and could support the hypothesis that a high proportion of commuters on The Kings Ferry are those employees in more senior positions within their respective organisations.

5.4.5 Frequency of travel on service

Table 91 - Frequency of service use amongst service respondents

All Frequency of use	N	%	X18 Frequency of use	N	%	The Kings Ferry Frequency of use	N	%
2014								
Almost every day	46	*64.8*	Almost every day	27	*65.9*	Almost every day	19	*63.3*
At least once a week	15	*21.1*	At least once a week	9	*22.0*	At least once a week	6	*20.0*
About 1-3 times a month	6	*8.5*	About 1-3 times a month	4	*9.8*	About 1-3 times a month	2	*6.7*
Less often	4	*5.6*	Less often	1	*2.4*	Less often	3	*10.0*
Total	71		Total	41		Total	30	
2015								
Almost every day	81	*79.4*	Almost every day	41	*82.0*	Almost every day	40	*76.9*
At least once a week	12	*11.8*	At least once a week	6	*12.0*	At least once a week	6	*11.5*
About 1-3 times a month	3	*2.9*	About 1-3 times a month	1	*2.0*	About 1-3 times a month	2	*3.8*
Less often	6	*5.9*	Less often	2	*4.0*	Less often	4	*7.7*
Total	102		Total	50		Total	52	

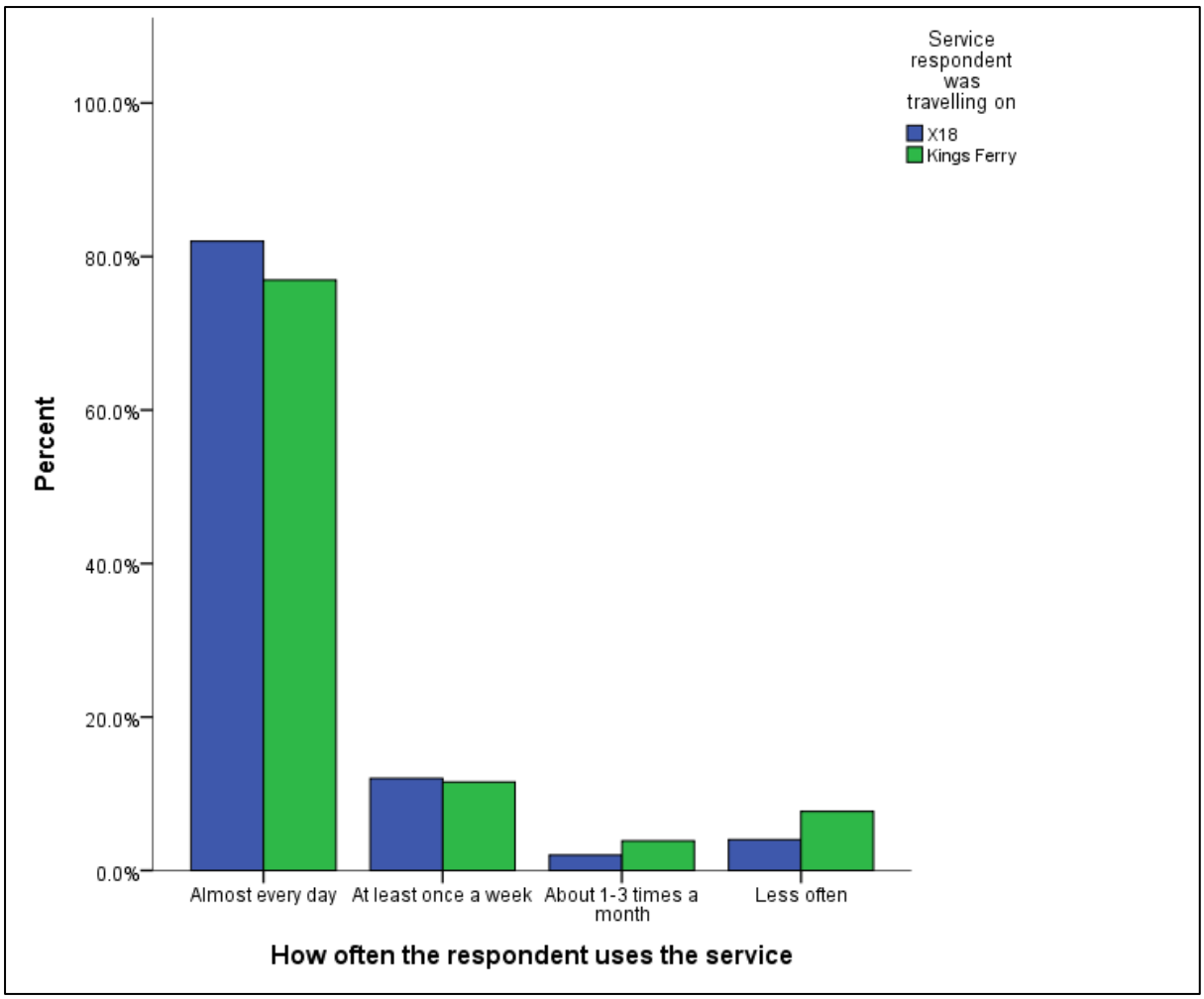


Chart 32 - Frequency of service use amongst survey respondents – 2015 survey

Across both of the services, the highest proportions of passengers are using the service very frequently, with 81 out of 102 (79%) using the service every day. A further 12 out of 102 (12%) were using the service at least once a week, meaning that a total of 91% of passengers are using the services on a weekly basis.

There has been a shift towards more frequent usage since the 2014 survey. In 2014, 65% of people were using the services on a daily basis, in 2014 this has risen to 79%. This suggests that many passengers are now using the service more often than they were a year ago.

5.4.6 Passenger satisfaction

Table 92 - Overall standard of the service

All Satisfaction	N	%	X18 Satisfaction	N	%	The Kings Ferry Satisfaction	N	%
2014								
Very satisfied	22	*29.3*	Very satisfied	0	*0*	Very satisfied	22	*71.0*
Satisfied	27	*36.0*	Satisfied	18	*40.9*	Satisfied	9	*29.0*
Neutral	21	*28.0*	Neutral	21	*47.7*	Neutral	0	*0*
Dissatisfied	5	*6.7*	Dissatisfied	5	*11.4*	Dissatisfied	0	*0*
Very dissatisfied	0	*0*	Very dissatisfied	0	*0*	Very dissatisfied	0	*0*
Total	75		Total	44		Total	31	
2015								
Very satisfied	45	44.6	Very satisfied	6	12.2	Very satisfied	39	75.0
Satisfied	32	31.7	Satisfied	19	38.8	Satisfied	13	25.0
Neutral	19	18.8	Neutral	19	38.8	Neutral	0	0.0
Dissatisfied	5	5.0	Dissatisfied	5	10.2	Dissatisfied	0	0.0
Very dissatisfied	0	0.0	Very dissatisfied	0	0.0	Very dissatisfied	0	0.0
Total	101		Total	49		Total	52	

Table 93 - Punctuality of services

All Satisfaction	N	%	X18 Satisfaction	N	%	The Kings Ferry Satisfaction	N	%
2014								
Very satisfied	19	*25.7*	Very satisfied	0	*0*	Very satisfied	19	*61.3*
Satisfied	19	*25.7*	Satisfied	8	*18.6*	Satisfied	11	*35.5*
Neutral	30	*40.5*	Neutral	29	*67.4*	Neutral	1	*3.2*
Dissatisfied	6	*8.1*	Dissatisfied	6	*14.0*	Dissatisfied	0	*0*
Very dissatisfied	0	*0*	Very dissatisfied	0	*0*	Very dissatisfied	0	*0*
Total	74		Total	43		Total	31	
2015								
Very satisfied	40	39.6	Very satisfied	1	2.0	Very satisfied	39	75.0
Satisfied	22	21.8	Satisfied	9	18.4	Satisfied	13	25.0
Neutral	22	21.8	Neutral	22	44.9	Neutral	0	0
Dissatisfied	12	11.9	Dissatisfied	12	24.5	Dissatisfied	0	0
Very dissatisfied	5	5.0	Very dissatisfied	5	10.2	Very dissatisfied	0	0
Total	101		Total	49		Total	52	

Table 94 - Frequency of services

All Satisfaction	N	%	X18 Satisfaction	N	%	The Kings Ferry Satisfaction	N	%
2014								
Very satisfied	14	*19.7*	Very satisfied	0	*0*	Very satisfied	14	*48.3*
Satisfied	24	*33.8*	Satisfied	10	*23.8*	Satisfied	14	*48.3*
Neutral	30	*42.3*	Neutral	29	*69.0*	Neutral	1	*3.4*
Dissatisfied	3	*4.2*	Dissatisfied	3	*7.1*	Dissatisfied	0	*0*
Very dissatisfied	0	*0*	Very dissatisfied	0	*0*	Very dissatisfied	0	*0*
Total	71		Total	42		Total	29	
2015								
Very satisfied	26	25.7	Very satisfied	3	6.1	Very satisfied	23	44.2
Satisfied	33	32.7	Satisfied	14	28.6	Satisfied	19	36.5
Neutral	18	17.8	Neutral	11	22.4	Neutral	7	13.5
Dissatisfied	22	21.8	Dissatisfied	19	38.8	Dissatisfied	3	5.8
Very dissatisfied	2	2.0	Very dissatisfied	2	4.1	Very dissatisfied	0	0
Total	101		Total	49		Total	52	

Table 95 - Value for money of the journey

All Satisfaction	N	%	X18 Satisfaction	N	%	The Kings Ferry Satisfaction	N	%
2014								
Very satisfied	10	*14.3*	Very satisfied	0	*0*	Very satisfied	10	*33.3*
Satisfied	23	*32.9*	Satisfied	12	*30.0*	Satisfied	11	*36.7*
Neutral	29	*41.4*	Neutral	23	*57.5*	Neutral	6	*20.0*
Dissatisfied	7	*10.1*	Dissatisfied	5	*12.5*	Dissatisfied	2	*6.7*
Very dissatisfied	1	*0*	Very dissatisfied	0	*0*	Very dissatisfied	1	*3.3*
Total	70		Total	40		Total	30	
2015								
Very satisfied	28	28.0	Very satisfied	9	18.4	Very satisfied	19	37.3
Satisfied	41	41.0	Satisfied	19	38.8	Satisfied	22	43.1
Neutral	22	22.0	Neutral	13	26.5	Neutral	9	17.6
Dissatisfied	5	5.0	Dissatisfied	5	10.2	Dissatisfied	0	0
Very dissatisfied	4	4.0	Very dissatisfied	3	6.1	Very dissatisfied	1	2.0
Total	100		Total	49		Total	51	

Table 96 - Journey time of the service

All Satisfaction	N	%	X18 Satisfaction	N	%	The Kings Ferry Satisfaction	N	%
2014								
Very satisfied	22	*32.8*	Very satisfied	4	*11.1*	Very satisfied	18	*58.1*
Satisfied	26	*38.8*	Satisfied	16	*44.4*	Satisfied	10	*32.3*
Neutral	17	*25.4*	Neutral	14	*38.9*	Neutral	3	*9.7*
Dissatisfied	2	*3.0*	Dissatisfied	2	*5.6*	Dissatisfied	0	*0*
Very dissatisfied	0	*0*	Very dissatisfied	0	*0*	Very dissatisfied	0	*0*
Total	67		Total	36		Total	31	
2015								
Very satisfied	35	35.0	Very satisfied	8	16.3	Very satisfied	27	52.9
Satisfied	38	38.0	Satisfied	20	40.8	Satisfied	18	35.3
Neutral	19	19.0	Neutral	14	28.6	Neutral	5	9.8
Dissatisfied	7	7.0	Dissatisfied	6	12.2	Dissatisfied	1	2.0
Very dissatisfied	1	1.0	Very dissatisfied	1	2.0	Very dissatisfied	0	0
Total	100		Total	49		Total	51	

Passenger satisfaction with the services is generally high across all of the categories measured. There has been an increase in general satisfaction with both services since the 2014 survey.
The data show that in 2015 in general, The Kings Ferry passengers continued to give consistently high ratings of satisfaction, with very few instances of dissatisfaction recorded. However there has been a slight negative shift in satisfaction with the frequency of services since 2014. On the X18, there is more of a spread of responses; however generally responses are positive.

In 2015, the majority of passengers – 77 out of 101 (76%) were either satisfied or very satisfied with the services. This is an increase of 11 percentage points in overall general satisfaction since 2014. This increase in general satisfaction can be largely attributed to improvements on the X18 service; 25 out of 49 people (51%) identified themselves as satisfied or very satisfied in 2015, compared to 18 out of 44 (41%) in 2014. On The Kings Ferry, at the aggregate level satisfaction remained the same, with 100% of passengers reporting themselves as satisfied or very satisfied. Within this however, there has been a positive shift towards those reporting themselves as very satisfied: in 2015 39 out of 52 passengers (75%) were very satisfied, up from 71% in 2014.

The aggregate results for punctuality show that 62 out of 101 passengers (61%) were either satisfied or very satisfied. This is an increase of 10 percentage points on the 2014 results, where 51% were satisfied with punctuality. This result can be explained in part by the X18 data. In 2014 the majority of passengers (67%) were neutral on the issue of punctuality, however in 2015 a lower proportion reported themselves as neutral (45%), and 10 out of 49 (20%) reported themselves as either satisfied or very satisfied with punctuality, an increase of 1 percentage points on the 2014 results (19%). At the same time however, a higher proportion of X18 passengers in the 2015 survey reported themselves as dissatisfied or very dissatisfied with punctuality. In 2014, 14% of passengers had reported themselves as being dissatisfied with punctuality, whereas in 2015, 17 out of 49 (35%) reported being either dissatisfied or very dissatisfied. On The Kings Ferry, satisfaction with punctuality improved slightly from the 2014 result, achieving 100% (51 out of 51) of passengers reporting themselves as either satisfied or very satisfied with punctuality. This is an improvement on the previous year, where The Kings Ferry recorded 97% satisfaction. These findings suggest that whilst the X18 has seen a slight rise in the proportion of people reporting themselves as satisfied with punctuality, this is outweighed

by the opposing increase in those reporting dissatisfaction, and attending to issues of punctuality should be a key focus on this service.

Taken together, the data for frequency of services shows that the majority of passengers (59/101: 69%) were either satisfied or very satisfied. This is an improvement from 2014, where 54% reported the same. When looking at the X18, in 2014 the majority of passengers reported themselves neutral (29/42: 69%). In 2015, this proportion has dropped to 23%, and there have been resultant increases in both the proportions of passengers reporting themselves as either satisfied or very satisfied (17/49: 35%), but also in those reporting themselves as dissatisfied or very dissatisfied (21/49: 43%). Indeed, it is the result for dissatisfaction on the X18 which represents the larger change, where in 2014 just 7% of passengers reported themselves as dissatisfied. As mentioned in the introduction to this section, the X18 service has witnessed the reduction of its scheduled services over this period, and this has evidently been reflected in the satisfaction results for this aspect of the service. In the case of The Kings Ferry, the majority of passengers reported good levels of satisfaction, with 42 out of 52 (81%) being either satisfied or very satisfied. Nonetheless, in this area The Kings Ferry has experienced a decline in satisfaction since 2014, when 97% reported themselves as either satisfied or very satisfied. This result is somewhat counterintuitive considering the fact that the level of service provision has in fact increased.

There have been improvements in satisfaction with value for money across both services, with the X18 reporting the biggest increase. At the aggregate level, 69 out of 100 passengers (69%) were either satisfied or very satisfied with fares on the services. This represents an increase of 22 percentage points on the 2014 score of 47%. On the X18, 28 out of 49 (57%) were satisfied or very satisfied with value for money, which is an increase of 27 percentage points over the 30% figure from 2014. On The Kings Ferry, 41 out of 51 passengers (80%) were either satisfied or very satisfied with value for money, an increase of 10 percentage points on 2014. These results suggest that both services are improving in this area, and this increase is a particularly relevant finding for the X18, where satisfaction with fares in 2014 was quite low.

For satisfaction with journey times, across both services 73 out of 100 passengers (73%) were either satisfied or very satisfied. The 2014 survey reported 72% for this measure, and so there has been a slight increase of 1 percentage point in this area. When looking at the services individually, the X18 reported 28 out of 49 (57%) passengers as either satisfied or very satisfied, and when compared to the previous year's result of 56% there has been a slight increase of 1 percentage point. On The Kings Ferry, there has been a slight decrease in this measure over the period: 45 out of 51 passengers (88%) in 2015 reported themselves as satisfied or very satisfied, compared to 90% in 2014, a reduction of 2 percentage points. The low sample sizes in both of these cases mean that these small discrepancies should be treated with caution. However, the main message in this category appears to be that satisfaction with journey time has been maintained over the year.

As a whole, the satisfaction results for the services are encouraging, and the data demonstrate a number of areas in which the services have either improved or maintained high levels of satisfaction over the period. There are a number of areas which warrant attention however. On the X18, there is a generally positive overall perception of the service, with punctuality and frequency being the most important issues, whilst there have also been some good improvements in satisfaction with fares. The Kings Ferry enjoys a consistently high rating of satisfaction, showing it to be providing a quality service which has improved on results which were already high in the previous year.

5.4.7 Year respondent began using service

Table 97 - Year respondent began using service

All			X18			The Kings Ferry		
Year	**N**	***%***	**Year**	**N**	***%***	**Year**	**N**	***%***
2012	2	*2.0*	2012	2	*4.3*	2012	0	*0*
2013	28	*28.6*	2013	14	*30.4*	2013	14	*26.9*
2014	47	*48.0*	2014	20	*43.5*	2014	27	*51.9*
2015	21	*21.4*	2015	10	*21.7*	2015	11	*21.2*
Total	98		Total	46		Total	52	

Table 12 provides some insight into whether the services have continued to attract new passengers, or whether they are increasingly serving a static and loyal commuter base who are accessing the North Fringe for employment. It should be noted that these services started operating at different times, and so the results will be influenced by this. The Kings Ferry was not operational in 2012, which explains the finding that no passengers reported using the service that year. Beyond this however, it is evident that the patterns of uptake on both services are relatively similar, with the majority of passengers having started using the services in 2014, when they had been operational for some time and had become more established and visible. In the case of The Kings Ferry, the data for 2013 demonstrate that the service had a particularly attractive and effective opening offer, considering that it only began operations in November of that year, and yet the proportion of its passengers which reported starting to use it then closely resembles that of the X18, which was in operation for the entirety of 2013. As mentioned previously, this could well be linked to the initial offer of free travel for the first two months of the service's operation.

The data for 2015 demonstrate that the services are continuing to attract new passengers – with these data representing just the first quarter of 2015.

5.4.8 Previous mode of access

Table 98 - Previous mode of travel amongst survey respondents

All			X18			The Kings Ferry		
Previous mode	**N**	***%***	**Previous mode**	**N**	***%***	**Previous mode**	**N**	***%***
2014								
Car	35	*53.8*	Car	18	*52.9*	Car	17	*54.8*
Car share	5	*7.7*	Car share	5	*14.7*	Car share	0	*0*
Other bus	6	*9.2*	Other bus	3	*8.8*	Other bus	3	*9.7*
Rail	8	*12.3*	Rail	0	*0*	Rail	8	*25.8*
Cycle	1	*1.5*	Cycle	1	*2.9*	Cycle	0	*0*
Walk	0	*0*	Walk	0	*0*	Walk	0	*0*
Didn't make trip	10	*15.4*	Didn't make trip	7	*20.6*	Didn't make trip	3	*9.7*
Total	65		Total	34		Total	31	
2015								
Car	26	*26.5*	Car	2	*4.3*	Car	24	*47.1*
Car share	4	*4.1*	Car share	1	*2.1*	Car share	3	*5.9*
Other bus	27	*27.6*	Other bus	19	*40.4*	Other bus	8	*15.7*
Rail	5	*5.1*	Rail	0	*0*	Rail	5	*9.8*
Cycle	2	*2.0*	Cycle	1	*2.1*	Cycle	1	*2.0*
Walk	1	*1.0*	Walk	1	*2.1*	Walk	0	*0*
Didn't make trip	32	*32.7*	Didn't make trip	22	*46.8*	Didn't make trip	10	*19.6*
Total	98		Total	47		Total	51	

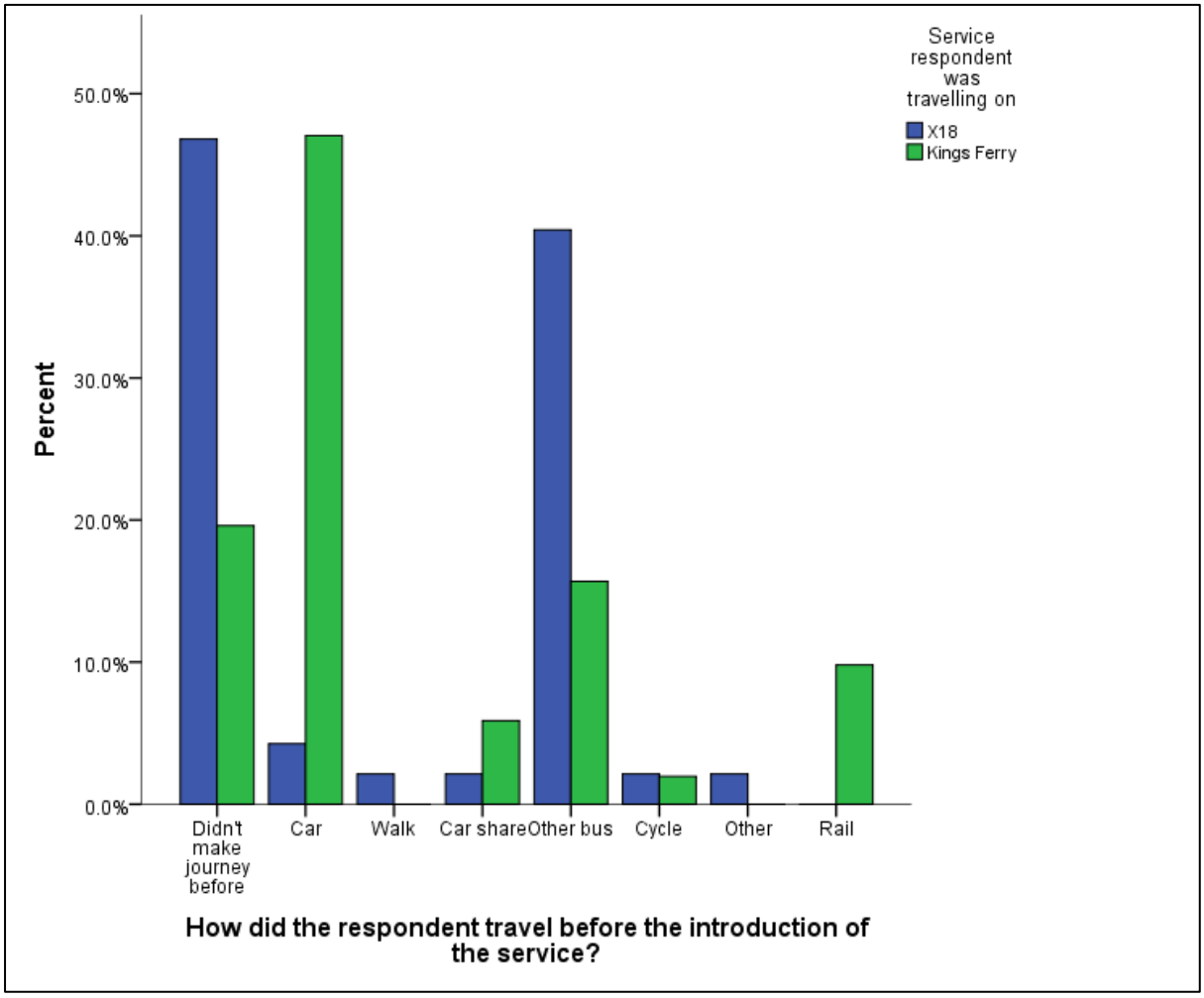


Chart 33 - Previous mode of travel amongst survey respondents – 2015 survey

When looking at previous mode of access, there is a difference between the two services in terms of how people used to travel.

On the X18, the highest proportions of participants reported having either not made the journey before the introduction of the service (22/47: 47%), or having switched from using another bus service (19/47: 40%). This finding represents an interesting shift from the previous year's results, where the majority (53%) of X18 users had reported switching from car travel. The data do not provide any more information about this result, although it may be that initially the service was attractive mainly to car users, and then once this group of travellers had shifted to the service, it then caught the attention of other local bus users and those people starting to make journeys to the North Fringe.

On The Kings Ferry, the 2015 results are very similar to those from 2014. The largest proportion of passengers had switched from car travel (24/51: 47%), and the second highest did not make the journey before (10/51: 20%), demonstrating that this service has been effective at both attracting car users, and also at providing a link to the North Fringe which did not exist before for some passengers.

5.4.9 Method of introduction to service

Table 99 - Method by which respondents were introduced to the new service

All Method	N	%	X18 Method	N	%	The Kings Ferry Method	N	%
2014								
Operator website	2	*3.0*	Operator website	2	*5.1*	Operator website	0	*0*
Council website	10	*15.2*	Council website	9	*23.1*	Council website	1	*3.7*
Bus stop	12	*18.2*	Bus stop	7	*17.9*	Bus stop	5	*18.5*
Newspaper	2	*3.0*	Newspaper	0	*0*	Newspaper	1	*7.4*
Work email	1	*1.5*	Work email	1	*2.6*	Work email	0	*0*
Poster	4	*6.1*	Poster	3	*7.7*	Poster	1	*3.7*
Timetable	5	*7.6*	Timetable	5	*12.8*	Timetable	0	*0*
Roadshow	8	*12.1*	Roadshow	8	*20.5*	Roadshow	0	*0*
Facebook/Twitter	1	*1.5*	Facebook/Twitter	1	*2.6*	Facebook/Twitter	0	*0*
Other	3	*4.5*	Other	3	*7.7*	Other	0	*0*
Employer	9	*13.6*	Employer	0	*0*	Employer	9	*33.3*
Recommendation	4	*6.1*	Recommendation	0	*0*	Recommendation	4	*14.8*
Several of these	5	*7.6*	Several of these	0	*0*	Several of these	5	*18.5*
Total	66		Total	39		Total	27	
2015								
Operator website	28	*29.5*	Operator website	12	*25.0*	Operator website	16	*34.0*
Council website	1	*1.1*	Council website	0	*0*	Council website	1	*2.1*
Bus stop	12	*12.6*	Bus stop	12	*25.0*	Bus stop	0	*0*
Newspaper	3	*3.2*	Newspaper	1	*2.1*	Newspaper	2	*4.3*
Work email	1	*1.1*	Work email	0	*0*	Work email	1	*2.1*
Poster	6	*6.3*	Poster	1	*2.1*	Poster	5	*10.6*
Timetable	2	*2.1*	Timetable	1	*2.1*	Timetable	1	*2.1*
Roadshow	6	*6.3*	Roadshow	6	*12.5*	Roadshow	0	*0*
Facebook/Twitter	N/A	N/A	Facebook/Twitter	N/A	N/A	Facebook/Twitter	N/A	N/A
Other	5	*5.3*	Other	4	*8.3*	Other	1	*2.1*
Employer	12	*12.6*	Employer	0	*0*	Employer	12	*25.5*
Recommendation	8	*8.4*	Recommendation	0	*0*	Recommendation	8	*17.0*
Several of these	11	*11.6*	Several of these	11	*22.9*	Several of these	0	*0*
Total	95		Total	48		Total	47	

The 2015 data for the ways in which passengers were introduced to the service demonstrate that there were a variety of different channels which were successful over the year. On the X18, the most important methods of introduction were through: the operator website (12/48: 25%); bus stops (12/48: 25%); roadshows (6/48: 13%); or a combination of several (11/48: 23%). On The Kings Ferry, the most important methods of introduction were through: the operator website (16/47: 34%); employer (12/47: 26%); recommendation (8/47: 17%); and poster (5/47: 11%).

5.4.10 Car access

Table 100 - Car access for current journey amongst survey respondents

All Could have used car for journey	N	%	X18 Could have used car for journey	N	%	The Kings Ferry Could have used car for journey	N	%
2014								
Yes	41	*61.2*	Yes	18	*50.0*	Yes	23	*74.2*
No	26	*38.8*	No	18	*50.0*	No	8	*25.8*
Total	67		Total	36		Total	31	
2015								
Yes	48	*47.1*	Yes	18	*36.0*	Yes	30	*57.7*
No	54	*52.9*	No	32	*64.0*	No	22	*42.3*
Total	102		Total	50		Total	52	

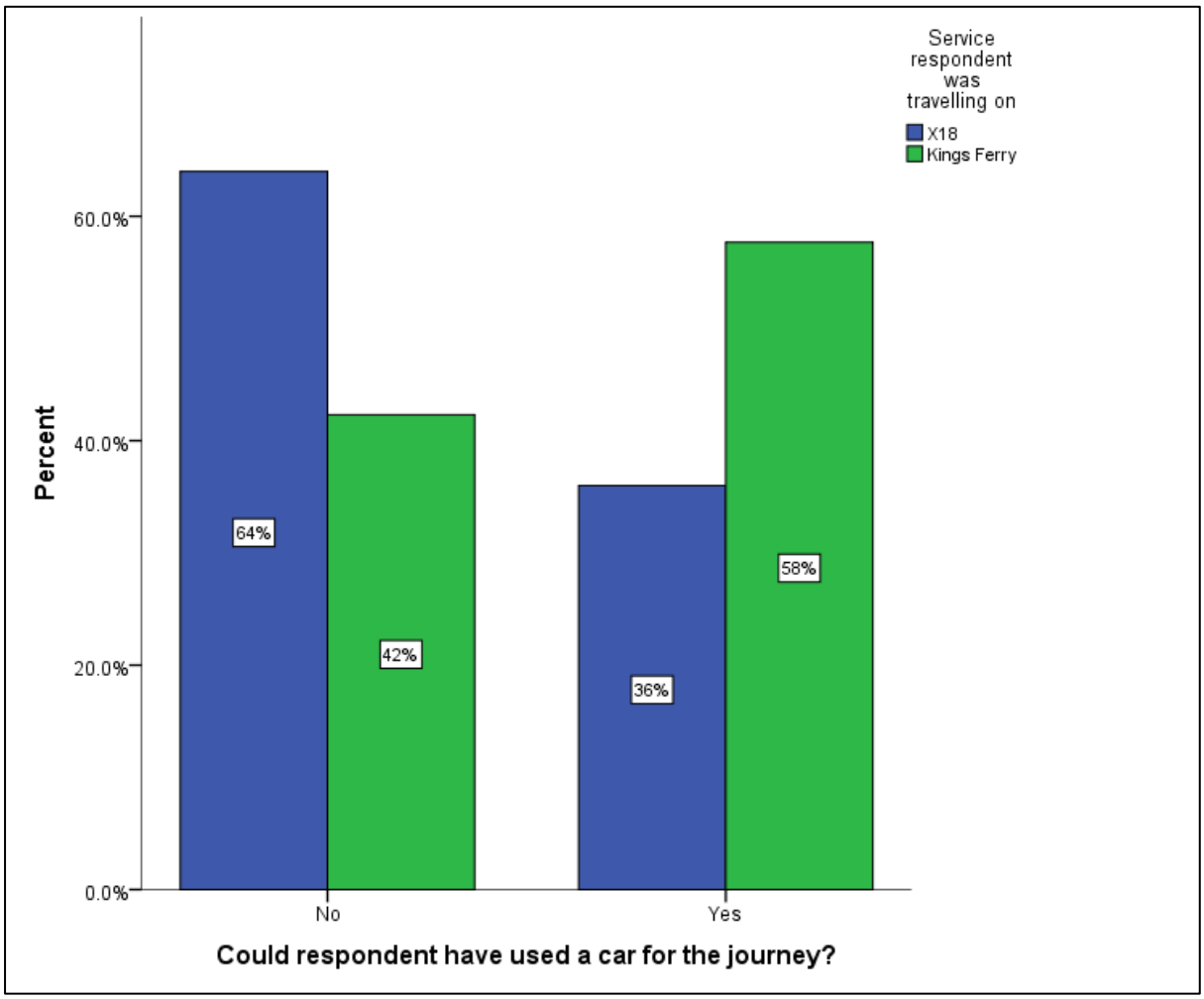


Chart 34 - Car access for current journey amongst survey respondents – 2015 survey

The services have different profiles for access to a car in the 2015 survey. At the aggregate level, 48 out of 102 passengers (47%) had access to a car for their journey. A lower proportion of passengers had access to a car (18/50; 36%) on the X18 compared to The Kings Ferry (30/52: 58%). Car access is reasonably high on both services, demonstrating that they are appealing to people who would otherwise have the option of driving.

5.4.11 RTI use

Table 101 - RTI use on the X18

Has respondent used RTI?	2014 N	2014 %	2015 N	2015 %
Yes	13	*37.1*	23	*46.9*
No	22	*62.9*	26	*53.1*
Total	35		49	

Table 102 - RTI use on The Kings Ferry

Has respondent used The Kings Ferry Coach Tracker?	2014 N	2014 %	2015 N	2015 %
Yes, on website and mobile app	1	*3.2*	7	*13.5*
Yes, on website only	1	*3.2*	4	*7.7*
Yes, on mobile app only	5	*16.1*	13	*25.0*
No, have not used service	24	*77.4*	28	*53.8*
Total	31		52	

The proportions of people using RTI have increased on both services over the period. *Note: the RTI systems for the two services are different, and as such in this case it was necessary to ask different questions on the two services, and as such a direct comparison has not been possible.*

On the X18, in 2015, 23 out of 49 passengers (47%) had used the RTI service, and this represents an increase of 9 percentage points over the 2014 total of 37%.

There is a similar story on The Kings Ferry, where in 2015, 24 out of 52 passengers (46%) had used some form of RTI, an increase of 23 percentage points on the previous year's total of 23%. At the disaggregate level, the mobile app was the most popular form of RTI access on the Kings Ferry, with 13 out of 52 passengers using this.

The previous report noted an opportunity to increase usage of RTI amongst passengers, and it is evident that both services have managed to do so over the 2014-2015 period. Continuing to promote the use of RTI could be of potential benefit in increasing levels of confidence in using services and also potentially in addressing issues such as *perceptions* of punctuality and reliability.

Summary

The long-term viability of the two LSTF-funded bus services serving commuters working in the North Fringe of Bristol depends upon their ability to attract sufficient users. The current patronage data demonstrates that the X18 has experienced a steady growth in passengers since 2012. The Kings Ferry experienced initially high patronage, which fell sharply in coincidence with the end of the promotional free travel offer introduced at the service's inception. Following this initial decline, The Kings Ferry has seen a moderate increase in patronage over the past year.

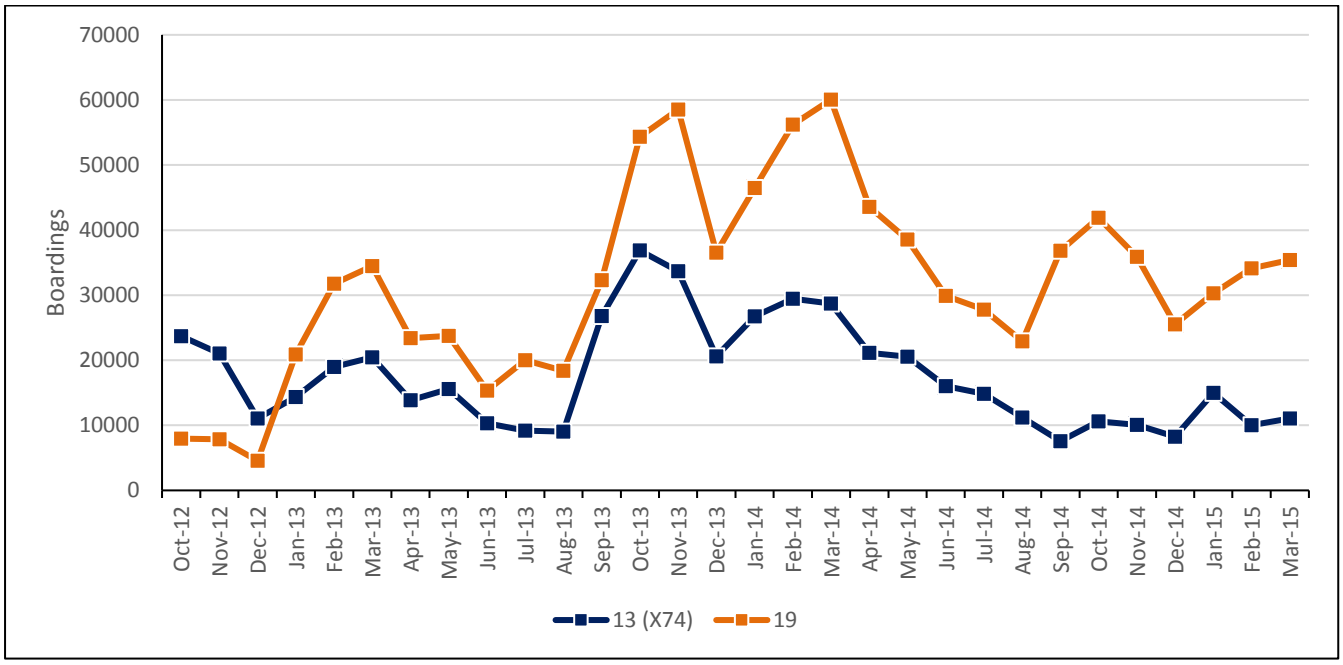
The results for 2015 show that the services are both catering predominantly for commuters - their intended target group at peak times. The Kings Ferry service is successfully attracting passengers who had previously used the car to travel to work, while for the X18 service most passengers had used other bus services previously or had not made the journey before. About half of all users have access to a car for their commute with this ability to access a car being higher for The Kings Ferry users.

The services have markedly different age profiles with most X18 users being under 40 years and most The Kings Ferry users being over 40 years. The Kings Ferry users are predominantly male. Most The Kings Ferry users had been in their current job for at least two years, while for the X18 more than half of users had been in their current job less than two years.

The Kings Ferry service enjoys a consistently high rating of satisfaction, showing it to be providing a quality service which has improved upon results which were already high in the previous year. On the X18, there is a generally positive overall perception of the service, with punctuality and frequency providing dissatisfaction to some users. Overall satisfaction levels with these two services provide an interesting contrast to the results of the March 2014 Employee Survey for North Fringe and Portside, which showed that only 31% of public bus users were either quite satisfied or very satisfied with their journey to work. This demonstrates that the objective of establishing public transport services that are rated highly by commuters has been achieved.

5.4.12 Services 13 and 19

Chart 35 - Patronage on service 13 and service 19



Note: These figures are for South Gloucestershire boardings only

Chart 31 shows patronage on the 13 and 19 services, which serve the University of the West of England and link with the city centre via routes through the northwest and east of the city. Patronage on the 13 service initially rose throughout 2013, but then has fallen in 2014. Patronage on

the 19 has risen and fallen across the period of its operation, however there has been a general positive trend in passengers numbers since 2012.

It should be noted that the patronage trends for these services will have been affected by service changes over their operation. The most significant of these has been the replacement of part of the 13 service by the service X74, which occurred in September 2014. In September 2014, the 19 service began to operate commercially without the need for authority support.

5.4.13 GBBN Kickstart

Existing data for the GBBN Kickstart measures relate to bus passenger satisfaction surveys carried out on services operation on the X1, X2, and X3 corridors. Surveys on these corridors were conducted on a number of services in 2007, 2011, 2012, 2013, 2014, and 2015.

It should be noted that construction commenced in Bristol city centre in October 2015 on an 18 month project to deliver MetroBus. This alongside the temporary closure of a car park has had a significant impact on the punctuality and reliability of bus services to Weston super Mare, Portishead and Clevedon. Operators and the highway authorities are seeking to minimise the impact through the provision of improved information and making changes to the timetable as necessary.

The sample compositions and satisfaction data for these services are presented below.

X1 corridor sample composition:

599 responses on bus services 350, 351, 352, 353 and X1 in October 2007
316 responses on bus services 351, 352, 353 and X1 in March 2011
332 responses on bus services 352, 353 and X1 in October 2012
212 responses on bus services 1 and X1 in October 2013
154 responses on bus service X1 in October 2014
185 responses on bus service X1 in October 2015

X2/X3 corridor sample composition:

308 responses on bus services 358 and 359 in October 2007
257 responses on bus services 357, 358 and 359 in September 2011
323 responses on bus services 357, 358 and 359 in October 2012
356 responses on bus services X2 / X3 in October 2013
309 responses on bus services X2 / X3 in October 2014
290 responses on bus services X2 / X3 in October 2015

Table 103 - X1 corridor satisfaction

	Year	Very Satisfied (5)	Satisfied (4)	Adequate (3)	Dissatisfied (2)	Very Dissatisfied (1)
The overall quality of the bus service	2007	20%	29%	26%	17%	8%
	2011	25%	26%	30%	14%	5%
	2012	30%	38%	17%	9%	6%
	2013	39%	29%	14%	13%	5%
	2014	37%	44%	15%	1%	3%
	2015	4%	4%	17%	40%	35%
Whether buses arrive on time	2007	17%	26%	26%	20%	11%
	2011	24%	27%	28%	18%	3%
	2012	26%	26%	24%	16%	8%
	2013	28%	29%	21%	11%	10%
	2014	25%	39%	23%	9%	5%
	2015	5%	12%	20%	40%	23%
The frequency of the buses	2007	21%	24%	23%	21%	11%
	2011	23%	27%	26%	15%	9%
	2012	37%	29%	16%	10%	8%
	2013	41%	25%	13%	12%	9%
	2014	35%	34%	23%	4%	4%
	2015	8%	8%	16%	44%	24%
The journey time to your destination	2007	25%	28%	19%	18%	10%
	2011	25%	32%	21%	14%	8%
	2012	39%	26%	19%	9%	7%
	2013	34%	31%	18%	11%	5%
	2014	37%	35%	20%	4%	4%
	2015	3%	7%	24%	42%	24%
The route the bus takes	2011	41%	26%	13%	10%	10%
	2012	43%	25%	16%	8%	8%
	2013	51%	22%	11%	5%	10%
	2014	48%	31%	13%	3%	5%
	2015	3%	4%	12%	33%	48%
The way the bus is driven	2011	32%	27%	21%	13%	7%
	2012	41%	33%	11%	8%	7%
	2013	44%	35%	9%	8%	4%
	2014	43%	41%	12%	3%	2%
	2015	2%	5%	9%	41%	42%
The comfort and cleanliness of the bus	2011	19%	33%	30%	13%	5%
	2012	34%	35%	18%	8%	5%
	2013	46%	27%	12%	9%	6%
	2014	33%	42%	16%	6%	3%
	2015	2%	6%	25%	43%	25%
How easy buses are to get on and off	2007	39%	23%	11%	14%	13%
	2011	47%	22%	12%	9%	10%
	2012	59%	23%	5%	5%	8%
	2013	59%	22%	6%	5%	8%
	2014	59%	28%	10%	2%	1%
	2015	0%	3%	10%	30%	57%
The quality of the bus stops and shelters	2007	19%	28%	27%	17%	9%
	2011	27%	34%	23%	10%	6%
	2012	37%	36%	12%	9%	6%
	2013	30%	35%	22%	8%	5%
	2014	28%	41%	23%	6%	2%
	2015	2%	7%	33%	39%	18%
The availability of timetable and route information	2007	18%	23%	29%	19%	11%
	2011	26%	28%	24%	13%	9%
	2012	37%	30%	16%	8%	9%
	2013	32%	32%	17%	12%	7%
	2014	34%	40%	18%	5%	3%
	2015	5%	5%	22%	38%	30%

Table 104 - X2/X3 corridor satisfaction

	Year	Very Satisfied (5)	Satisfied (4)	Adequate (3)	Dissatisfied (2)	Very Dissatisfied (1)
The overall quality of the bus service	2007	11%	20%	40%	22%	7%
	2011	18%	47%	23%	9%	3%
	2012	13%	30%	38%	12%	7%
	2013	16%	31%	29%	18%	7%
	2014	16%	46%	28%	8%	2%
	2015	2%	7%	30%	39%	21%
Whether buses arrive on time	2007	8%	16%	24%	31%	21%
	2011	12%	36%	39%	9%	4%
	2012	8%	19%	36%	20%	7%
	2013	9%	24%	35%	24%	9%
	2014	7%	22%	31%	25%	15%
	2015	10%	17%	38%	26%	9%
The frequency of the buses	2007	9%	24%	35%	23%	9%
	2011	15%	22%	47%	10%	6%
	2012	16%	24%	32%	15%	13%
	2013	23%	25%	23%	19%	9%
	2014	21%	31%	28%	13%	7%
	2015	8%	15%	24%	31%	22%
The journey time to your destination	2007	15%	33%	25%	16%	11%
	2011	22%	45%	20%	8%	5%
	2012	18%	34%	28%	12%	8%
	2013	18%	32%	24%	18%	7%
	2014	21%	41%	21%	10%	7%
	2015	5%	9%	14%	46%	27%
The route the bus takes	2011	31%	43%	13%	8%	5%
	2012	26%	27%	27%	12%	8%
	2013	21%	31%	24%	14%	10%
	2014	32%	36%	20%	8%	4%
	2015	7%	8%	17%	41%	28%
The way the bus is driven	2011	27%	52%	12%	5%	4%
	2012	25%	32%	26%	8%	9%
	2013	29%	36%	17%	11%	8%
	2014	33%	42%	20%	3%	1%
	2015	5%	3%	15%	48%	29%
The comfort and cleanliness of the bus	2011	11%	43%	32%	10%	4%
	2012	8%	30%	34%	23%	5%
	2013	15%	37%	23%	17%	8%
	2014	28%	41%	24%	5%	2%
	2015	3%	6%	23%	45%	22%
How easy buses are to get on and off	2007	24%	20%	18%	22%	16%
	2011	39%	45%	5%	5%	6%
	2012	38%	30%	13%	9%	10%
	2013	46%	26%	7%	10%	10%
	2014	50%	39%	8%	2%	1%
	2015	5%	3%	7%	28%	57%
The quality of the bus stops and shelters	2007	10%	27%	40%	17%	6%
	2011	23%	52%	14%	6%	5%
	2012	22%	31%	27%	11%	9%
	2013	24%	34%	23%	14%	4%
	2014	24%	35%	29%	9%	3%
	2015	4%	10%	27%	35%	24%
The availability of timetable and route information	2007	14%	35%	24%	15%	12%
	2011	25%	27%	34%	9%	5%
	2012	22%	31%	24%	14%	9%
	2013	23%	25%	23%	20%	9%
	2014	22%	36%	27%	10%	4%
	2015	6%	11%	26%	34%	23%

Chart 36 - X1 overall satisfaction

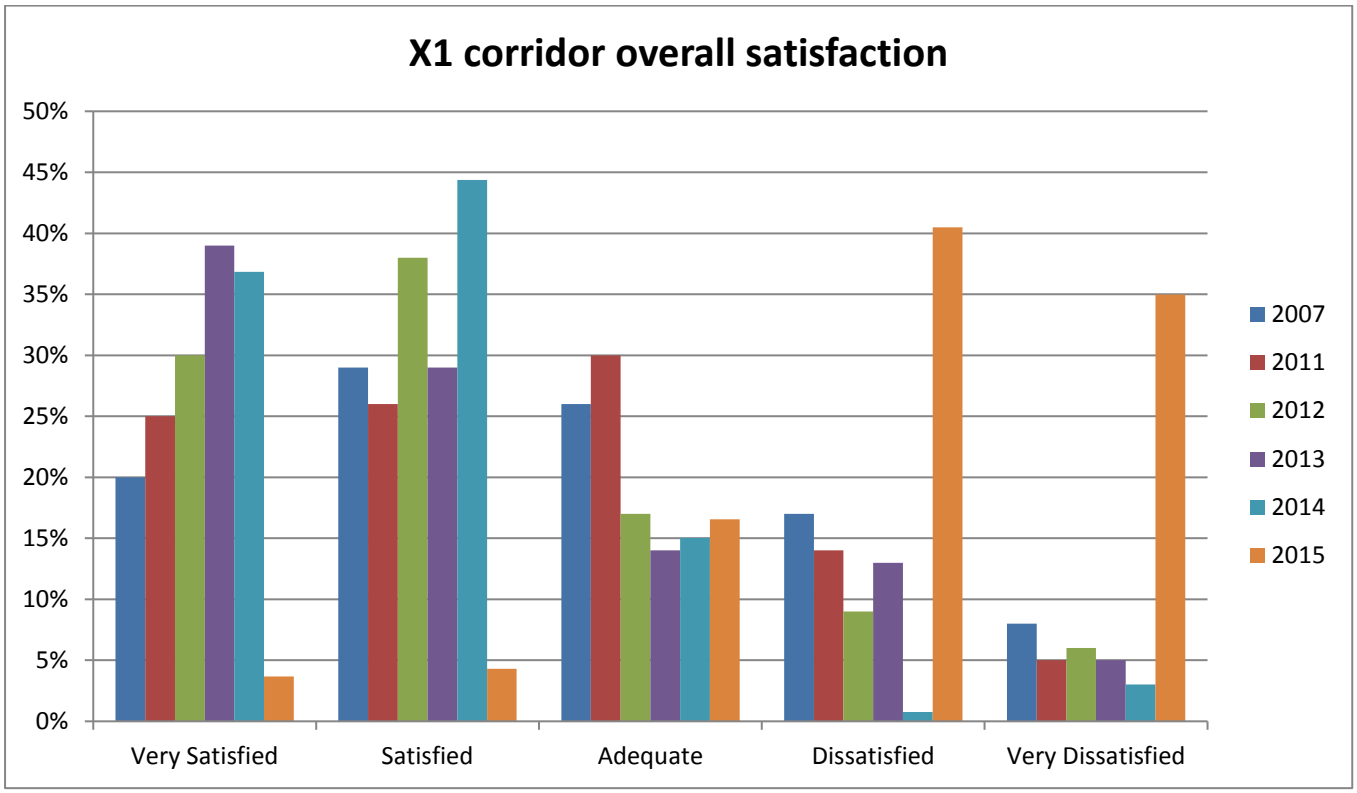
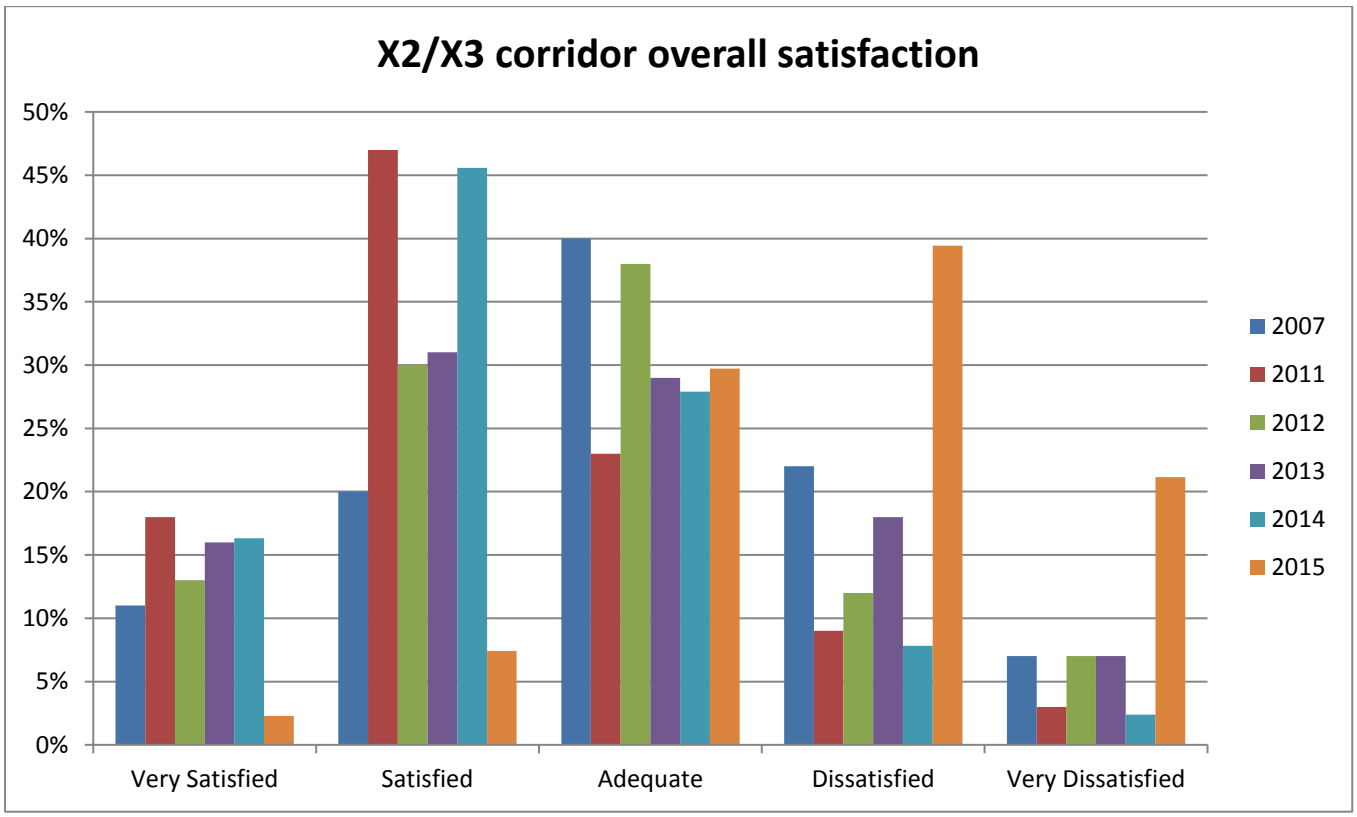


Chart 37 - X2/X3 overall satisfaction



The data for levels of satisfaction on the X1 corridor shows a general positive trend in levels of satisfaction between 2011 and 2014, and this is consistent with the longer-term positive trend since 2007. In terms of overall satisfaction in 2015 however, there has been a dramatic decrease in satisfaction, with 75% of passengers in 2015 reporting themselves as either dissatisfied or very dissatisfied. A very similar pattern is seen on the X2/X3 corridor, with a generally positive trend up to 2014, and a sudden dramatic reduction in satisfaction in 2015 – in this case 60% of passengers reported themselves as either dissatisfied or very dissatisfied.

As mentioned at the start of this section, the X1, X2, and X3 corridors have been subject to significant punctuality issues as a result of unrelated constructions works, which have had a very negative effect on service quality. The 2015 data is therefore suggested to be highly anomalous in the context of the more general positive trends in satisfaction on these services, and therefore not particularly useful in understanding the real outcomes of LSTF service improvements on these routes.

Further data will be necessary to understand the longer-term trends in satisfaction on this corridor.

5.4.14 GBBN Service enhancements (BANES)

Following the GBBN service enhancements implemented in BANES, annual satisfaction surveys have been conducted alongside patronage monitoring. The 2012-2014 results for these are presented below.

Table 105 - Gender of survey respondents

2012			2013			2014			% point
Gender	**N**	***%***	**Gender**	**N**	***%***	**Gender**	**N**	***%***	**(+/-) 12-14**
Male	48	*42.5*	Male	50	*47.6*	Male	30	*36.6*	-5.9
Female	65	*57.5*	Female	55	*52.4*	Female	52	*63.4*	5.9
Total	113		Total	105		Total	82		

In terms of gender there is a disparity between the proportions of women and men travelling. In the 2014 survey almost two-thirds of respondents were women (63.4%/n=52) compared to 36.6% (n=30) being male. This represents a change from the previous surveys, in which gender was more evenly balanced.

Chart 38 - Gender of survey respondents

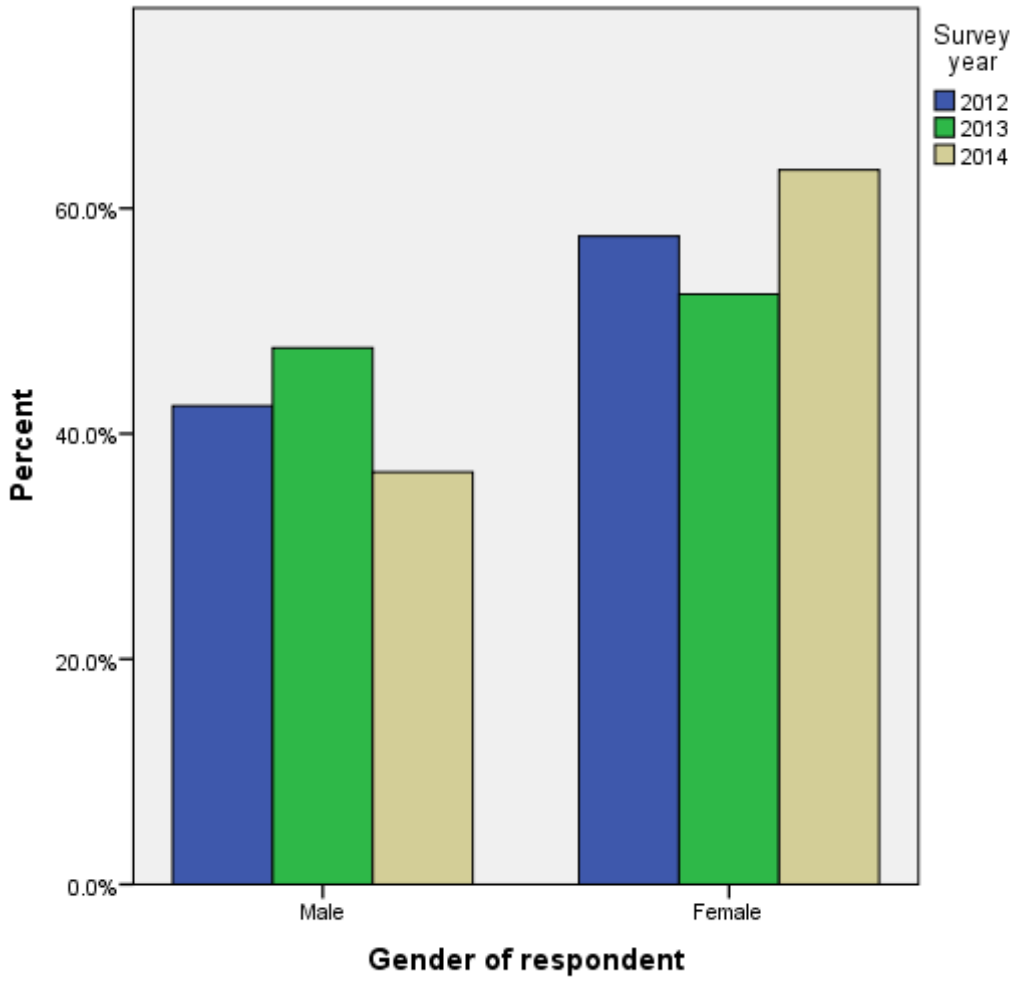


Table 106 - Age of survey respondents

2012			2013			2014			% point
Age	**N**	***%***	**Age**	**N**	***%***	**Age**	**N**	***%***	**(+/-) 12-14**
Under 18	17	*14.9*	Under 18	5	*4.8*	Under 18	13	*16.0*	1.1
18-24	17	*14.9*	18-24	13	*12.4*	18-24	22	*27.2*	12.3
25-34	10	*8.8*	25-34	18	*17.1*	25-34	10	*23.3*	14.5
35-44	17	*14.9*	35-44	13	*12.4*	35-44	7	*8.6*	-6.3
45-54	14	*12.3*	45-54	12	*11.4*	45-54	6	*7.4*	-4.9
55-64	12	*10.5*	55-64	14	*13.3*	55-64	6	*7.4*	-3.1
65+	27	*23.7*	65+	30	*28.6*	65+	17	*21.0*	-2.7
Total	114		Total	105		Total	81		

The results for age show that the highest proportions of passengers were from the younger and older age categories, with relatively lower proportions of people from the middle age ranges travelling. The highest proportion of passengers were in the 18-24 age range (27.2%/n=22), and in total 66.5% (n=35)

of those surveyed were aged 18-34. 21.0% (n=17) were aged 65 and over, meaning that just 23.4% (n=19) of passengers were aged 35-64.

This again represents a change from the previous years' surveys, in which age was more evenly spread across the categories, and there were lower proportions of younger passengers travelling relative to those in the middle age ranges. There have been high proportions of older passengers (65+) in each year.

Chart 39 - Age of survey respondents

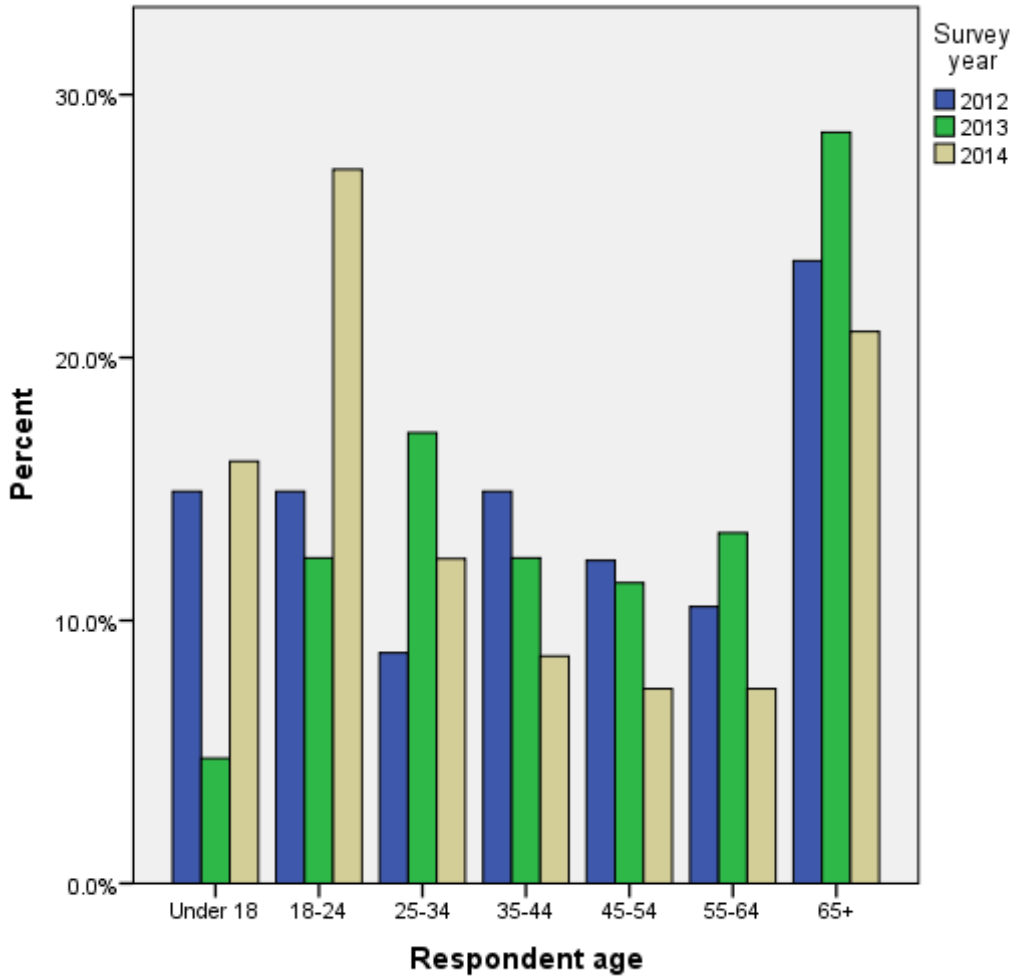


Table 107 - Journey purpose of survey respondents

2012			2013			2014			% point (+/-)
Journey Purpose	**N**	***%***	**Journey Purpose**	**N**	***%***	**Journey Purpose**	**N**	***%***	**12-14**
Business	28	*23.7*	Business	23	*20.5*	Business	11	*13.4*	-10.3
Commuting	6	*5.3*	Commuting	25	*22.3*	Commuting	14	*17.1*	17.0
Leisure	23	*20.2*	Leisure	20	*17.9*	Leisure	12	*14.6*	-2.3
Education	13	*11.4*	Education	6	*5.4*	Education	20	*24.4*	-6.0
Shopping	39	*34.2*	Shopping	30	*26.8*	Shopping	15	*18.3*	-7.4
Health/medical	5	*4.4*	Health/medical	3	*2.7*	Health/medical	10	*12.2*	-1.7

Other	1	*0.9*	Other	5	*4.5*	Other	0	*0.0*	3.6
Total	114		Total	105		Total	82		

In the 2014 survey, there was a relatively even split of journey purposes: education (24.4%/n=20), shopping (18.3%/n=15) commuting (17.1%/n=14), leisure (14.6%/n=12), business (13.4%/n=11), and health/medical (12.2%/n=10).

This contrasts with previous years. For example, in 2013, the highest proportions of participants were travelling for shopping (26.8%), commuting (22.3%) business (20.5%) and leisure (17.9%). Relatively fewer people in that year were travelling for the purposes of education (5.4%) and for health or medical reasons (2.4%). A low proportion of people reported their journey purposes as commuting in 2012 (5.3%). We are investigating the sampling process from each year to try and understand these changes, and will report on this fully in the final evaluation report.

Chart 40 - Journey purpose of survey respondents

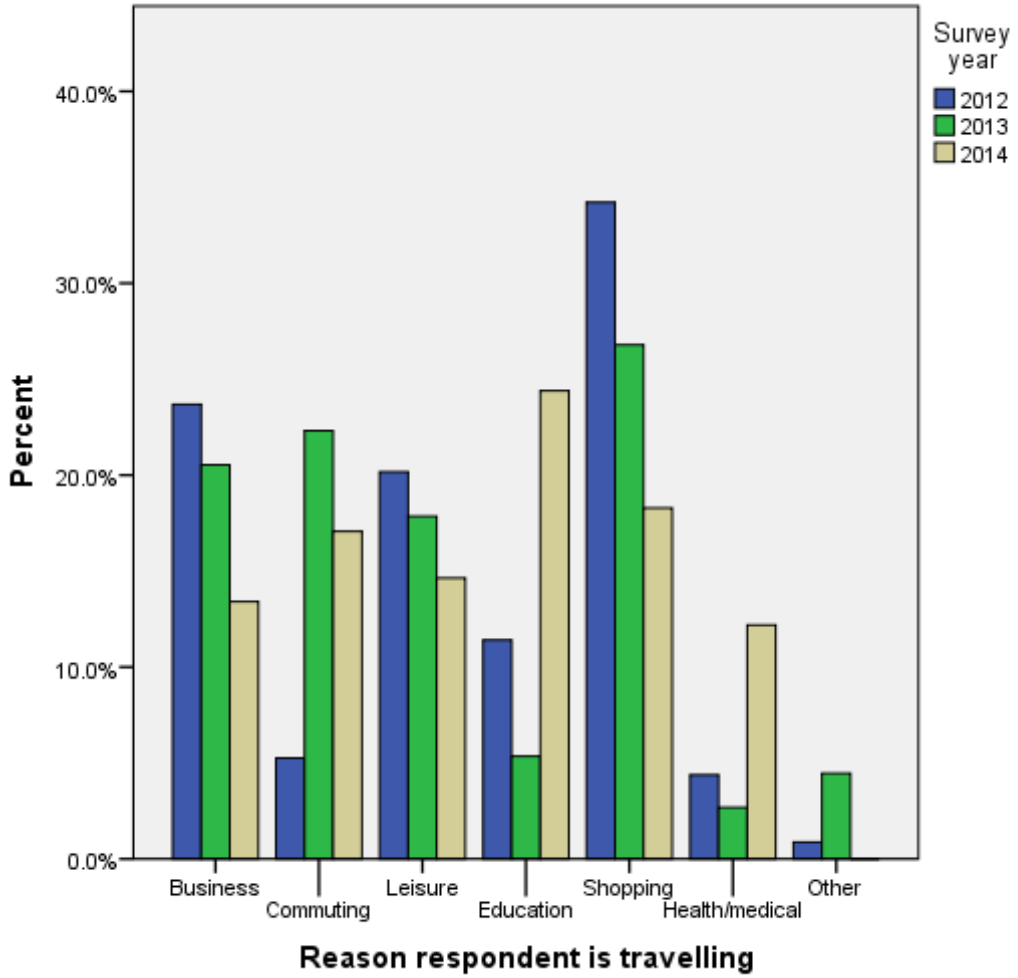


Table 108 - Frequency of use of service

2012			2013			2014			% point (+/-)
Frequency	**N**	***%***	**Frequency**	**N**	***%***	**Frequency**	**N**	***%***	**12-14**
Almost every day	41	*36.6*	Almost every day	54	*48.2*	Almost every day	48	*64.0*	27.4
At least once a week	42	*37.5*	At least once a week	33	*29.5*	At least once a week	21	*28.0*	-9.5
About 1-3 times a month	18	*16.1*	About 1-3 times a month	14	*12.5*	About 1-3 times a month	5	*6.7*	-9.4
Less often	11	*9.8*	Less often	11	*9.8*	Less often	1	*1.3*	-8.5
Total	112		Total	112		Total	75		

For frequency of use of the 379 there has been a trend towards more frequent use of the service over the period 2012-2014. Almost two thirds of respondents in 2014 used the service almost every day (64.0%/n=48), with a further 28.0% (n=21) of participants travelling at least once a week, totalling 92.0% (n=69) of passengers travelling on the service on at least a weekly basis. From 2012, there has been a shift of 27.4 percentage points towards using the service almost every day.

Chart 41 - Frequency of use of service

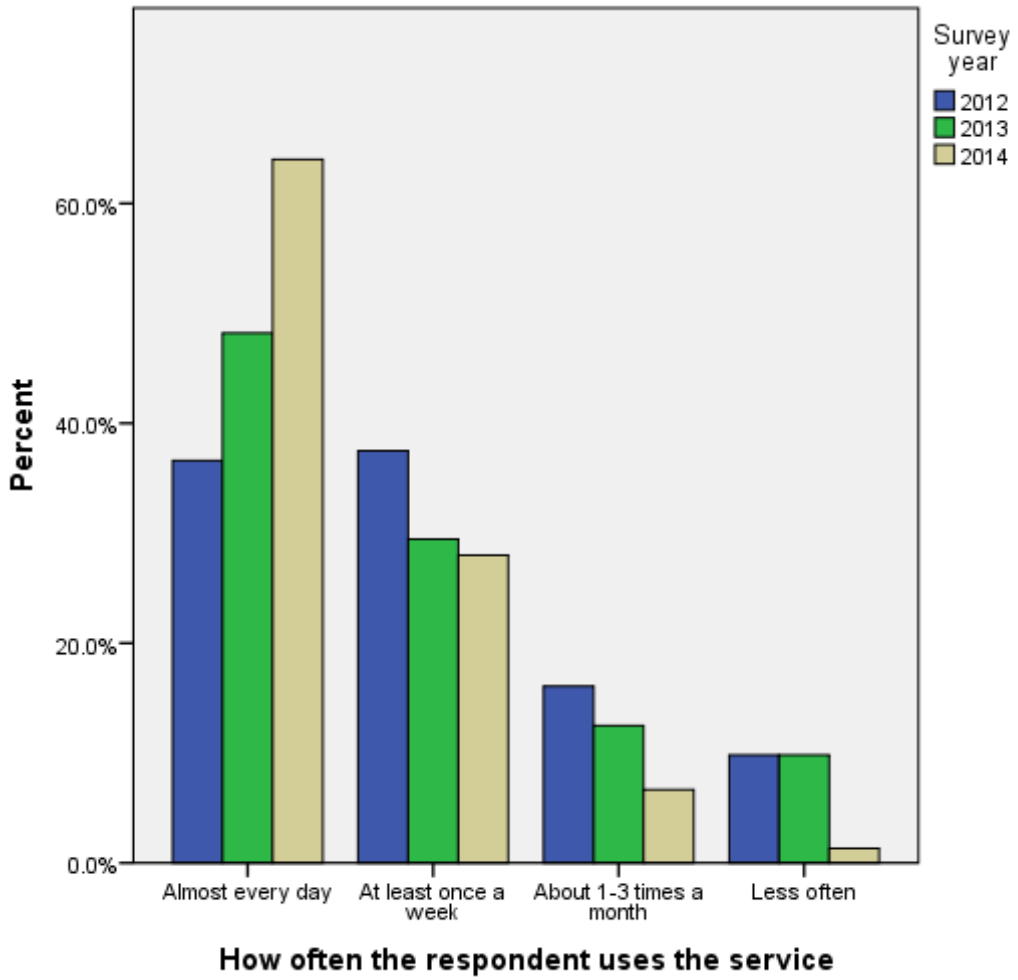


Table 109 - General satisfaction with service

2012			2013			2014			% point (+/-)
Satisfaction	**N**	***%***	**Satisfaction**	**N**	***%***	**Satisfaction**	**N**	***%***	**12-14**
Dissatisfied	2	*1.8*	Dissatisfied	3	*2.3*	Dissatisfied	7	*8.6*	6.8
Neutral	8	*7.0*	Neutral	20	*12.9*	Neutral	13	*16.0*	9.0
Satisfied	104	*91.2*	Satisfied	80	*84.8*	Satisfied	61	*75.3*	-15.9
Total	114		Total	103		Total	81		

Note: the original five data categories for levels of satisfaction have been clustered into the three categories presented here. Therefore the category 'Dissatisfied' represents all survey respondents that were 'Very dissatisfied' and 'Dissatisfied', and the category 'Satisfied' represents all survey respondents who were 'Very satisfied' and 'Satisfied'.

In general, satisfaction with the service is high, however it has been declining over the period 2012-2014. In 2013, 75.3% (n=61) of respondents reported being satisfied, whilst 8.6% (n=7) reported being dissatisfied. 16.0% (n=13) were neutral. Since 2012, there has been a reduction of 15.9 percentage points on the peak satisfaction figure of 92%.

Table 110 - Satisfaction with punctuality of the service

2012			2013			2014			% point (+/-)
Satisfaction	**N**	***%***	**Satisfaction**	**N**	***%***	**Satisfaction**	**N**	***%***	**12-14**
Dissatisfied	1	*0.9*	Dissatisfied	11	*10.5*	Dissatisfied	17	*20.7*	19.8
Neutral	7	*6.1*	Neutral	19	*18.1*	Neutral	19	*23.2*	17.1
Satisfied	106	*93.0*	Satisfied	75	*71.4*	Satisfied	46	*56.1*	-36.9
Total	114		Total	105		Total	82		

Satisfaction with punctuality is again in decline, at 56.1% (n=46) in 2014. There has been a sizeable negative shift in this result from 2012, with a reduction of 36.9 percentage points in the proportion of passengers reporting being satisfied with punctuality in 2014 than in 2012. This negative trend translates into a 17.1 percentage point rise in the proportion of passengers reporting being neutral, and a 19.8 percentage point rise in passengers reporting being dissatisfied.

Table 111 - Satisfaction with frequency of the service

2012			2013			2014			% point (+/-)
Satisfaction	**N**	***%***	**Satisfaction**	**N**	***%***	**Satisfaction**	**N**	***%***	**12-14**
Dissatisfied	5	*4.4*	Dissatisfied	20	*19.8*	Dissatisfied	6	*7.3*	2.9
Neutral	14	*12.3*	Neutral	29	*28.7*	Neutral	18	*22.0*	9.7
Satisfied	95	*83.3*	Satisfied	52	*51.5*	Satisfied	58	*70.7*	-12.6
Total	114		Total	101		Total	82		

In 2014, satisfaction with the frequency of the service improved from the 2013 result, however remains below the 2012 level. 70.7% (n=58) of passengers reported being satisfied with the frequency of buses running on the service, whilst 22.0% (n=18) were neutral, and 7.3% (n=6) were dissatisfied. These data show that satisfaction with frequency is still 12.6 percentage points lower than its high point at 83.3% in 2012, however it has recovered somewhat from the low of 2013.

Table 112 - Satisfaction with value for money of the service

2012			2013			2014			% point (+/-)
Satisfaction	**N**	***%***	**Satisfaction**	**N**	***%***	**Satisfaction**	**N**	***%***	**12-14**
Dissatisfied	15	*13.2*	Dissatisfied	26	*26.5*	Dissatisfied	11	*13.4*	0.2
Neutral	25	*21.9*	Neutral	18	*18.4*	Neutral	8	*9.8*	-12.1
Satisfied	74	*64.9*	Satisfied	54	*55.1*	Satisfied	63	*76.8*	11.9
Total	114		Total	98		Total	82		

Satisfaction with value for money in 2014 has improved on previous years. 76.8% (n=63) of participants reported being satisfied with fares in 2014, whilst 9.8% (n=8) were neutral and 13.5% (n=11) were dissatisfied. This represents another improvement of 11.9 percentage points in the proportions of passengers satisfied with fares since 2012, and may be a reflection of the 2014 changes to the fare structure introduced by First, which operate the route.

Table 113 - Satisfaction with provision of route and timetable information on the service

2012			2013			2014			% point
Satisfaction	**N**	***%***	**Satisfaction**	**N**	***%***	**Satisfaction**	**N**	***%***	**(+/-) 12-14**
Dissatisfied	7	*6.3*	Dissatisfied	11	*10.8*	Dissatisfied	3	*3.7*	-2.5
Neutral	21	*18.8*	Neutral	24	*23.5*	Neutral	12	*14.8*	-4.0
Satisfied	84	*75.0*	Satisfied	67	*65.7*	Satisfied	66	*81.5*	6.5
Total	112		Total	102		Total	81		

Satisfaction with the provision of route and timetable information was high in 2014, at 81.5% (n=66). There has been an improvement in this measure since 2012, with an increase of 6.5 percentage points in the proportion of passengers reporting themselves as satisfied, and this reverses the decline in satisfaction with this measure witnessed between 2013 and 2013.

Table 114 - RTI use on the 379 (2013)

Has respondent used RTI?	**N**	***%***
Yes	46	*48.9*
No	48	*51.1*
Total	94	

Data on the use of RTI only started to be collected in the 2013 survey, and was subsequently dropped from the 2014 survey.

From the results that are available it is evident that in 2013 approximately half of passengers had made use of the RTI system, with 48.9% reporting they had used it compared to 51.1% reporting that they had not, however the lack of additional data from 2014 limits the analysis to this snapshot view of RTI use.

6. Transitions

This section describes progress with delivery and collection of outcome data for the Transitions project area. Transitions include four different types of project each targeting a specific group of individuals to encourage sustainable behaviour change at, or near, key transition points in their lives:

- The Move to Secondary School – transition from primary to secondary school;
- Wheels to Work WEST – transition from compulsory education into jobs or further education and training;
- Universities - transition from College/Sixth Form to first year at university, and transition from first year hall of residence to second year private accommodation;
- New Developments – transition to a new home.

6.1 Delivery progress with The Move to Secondary School

6.1.1 Overview of interventions

The project concerned with the move to secondary school seeks to engage with primary school pupils (Year 4, 5 and 6) and secondary school pupils (Year 7 and 8) across the four UAs to encourage the uptake of sustainable forms of transport, especially cycling and walking, for the journey to school. The engagement is provided in collaboration with Active Travel School Officers (ATSOs) employed by Sustrans and managed by all four UAs. The engagement involves the following activities and interventions, which are offered to the participating schools in accordance to their specific needs and circumstances:

Table 115: Overview and description of interventions in participating schools

Intervention	Description
Active Travel Breakfast	Children walk, cycle or scoot to school to be rewarded with a free breakfast
Active Travel coffee morning	Parents are invited to attend a coffee morning where they will receive information and advice on travelling to school with their child.
Assembly	Officer presents different ideas to encourage active travel to whole school / year group assemblies (often with prizes / incentives).
After school / lunch time club	Activity with a group of pupils after school to encourage active travel e.g. Bike skill sessions, bike maintenance skills etc.
Classroom session	Officer teaches/runs sessions around active travel with whole classes e.g. route planning sessions, teaching bike safety, maintenance skills.
Bling It!	Pupils decorate their bikes, scooters or shoes and walk, cycle or scoot to school to increase enjoyment of active travel modes
Bike maintenance session / Dr. Bike	A qualified bike mechanic visits a school to provide an M.O.T for pupils' (and occasionally parents') bikes.
Bike to school event	Promote cycling to school for one day where pupils may win prizes.
Bike sports day	Fun races e.g. slowest bike race, often as part of larger school event.
Car Free day	A day where everyone is encouraged to leave the car at home through promotion and incentives.

Champion meeting	Officer meets with school champion to plan future activities / plan of action
Family learning session	Officer teaches skills to parents (usually around cycling/bike maintenance) e.g. puncture repair session.
Be safe, be seen / Be Bright	Pupils walk, cycle or scoot to school whilst dressing in bright, florescent and reflective gear to win a prize.
Staff meeting	Meeting with school staff to promote the project and active travel.
Crew meeting	Meeting with the schools 'Active Travel crew' (pupils who have volunteered to help in the project) to plan future activities.
Smoothie Bike	A bike powered smoothie maker is taken into a school and pupils are invited to make a fruit smoothie. Used to promote the project and get pupils interested in cycling.
Transition session bike ride	Guided bike ride with primary school pupils to their new secondary school to help prepare them for the new commute.
Equipment sale	Selling various safety equipment and bike gear e.g. lights, locks, at discount prices.
Big street survey	A series of lessons for older primary / younger secondary pupils where pupils investigate their local area and produce a manifesto for change. Links in with the geography curriculum.
Headteacher meeting	Officer meeting with Head Teacher to discuss project and assign champion.
Travel advice and information	Route planning, motivational interviewing (techniques used in delivering PTP), safety and equipment advice to encourage parents and older pupils to travel to school actively.
Puncture repair session	Working with a group of pupils in the school to learn to fix punctures.
Playground scooter skills	Setting up obstacle courses and running through basic scooter skills.
Scooterpod competition	All schools in a specific area are invited to take part in a competition to win a scooter pod (scooter storage). On a particular day, schools encourage as many children as possible to scoot to school. The school with the largest percentage of children scooting on that day will win.
Walk to School Week	A week dedicated to encouraging walking to school, usually with additional activities as above, as part of a national initiative in May each year
The Big Pedal	A national scooting and cycling competition run by Sustrans in spring to promote riding to school.

The project also supports the installation of cycle parking facilities and 20mph zones around selected schools.

6.1.2 Delivery progress

In 2014/15 the ATSOs engaged with over 20 Secondary Schools and over 75 Primary schools. In addition, in south Gloucestershire, 866 level 1, 400 level 2 and 300 level 3 Bikeability training sessions were run, alongside route planning, pedestrian training, scooter training and led bike rides. 208 scooter spaces and 112 cycle spaces were installed in schools and footways and signing

surrounding schools was improved. A schools travel challenge was run with participants from schools across the West of England.

Table 116: Engaged schools

Authority	Target	Actual
BaNES	4 Secondary Schools	4 Secondary Schools
Bristol	12 Secondary, 60 Primary	12 Secondary, 30 Primary
North Somerset	2 Secondary, 5 Primary	2 Secondary, 5 Primary
South Glos	5 Secondary, 55 Primary	4 Secondary, 30 Primary

In total in 2014/15, 129,020 children participated in sustainable transport activities delivered by the ATSOs ('beneficiaries').

Table 117: Interventions' beneficiaries across the participating authorities

Authority	Number of Activities	Number of child beneficiaries	Number of staff beneficiaries	Number of parent beneficiaries
BaNES	167	7656	471	949
Bristol	1325	77829	4721	5739
North Somerset	226	20371	1505	1653
South Glos	268	23164	846	1461

Travel Challenge
The Travel Challenge which took place in October 2014 re-engaged schools which had previously disengaged.

STEM sessions
BaNES trialled using STEM lessons for all year 7 students to deliver active travel activities. The STEM sessions were broken into 6 modules run on rotation throughout the year. The implementation of the Bike Module therefore means that all year 7 students have a term (normally 6 weeks) of hour lessons on bikes and Active Travel.

Bikeability
South Glos was the only Authority that funded Bikeability through LSTF.

Table 118: Bikeability results

Level	2012/13	2013/14	2014/5
1	433	866	866
2	100	400	400
3	100	300	300

Infrastructure improvements have been put in place in and around schools to create safe routes to schools, including scooter/cycle parking spaces, keep clear lines and footway and crossing improvements. 20 mph zones are now in place around 3 schools in South Gloucestershire.

Sustainable travel infrastructure installed in schools

In 2014/15 the following infrastructure supporting sustainable travel, mainly cycling, has been installed in the participating schools.

In BANES

The Council provided £25k match funding in the form of a grant to Ralph Allen School for extensive work to redesign their entrance, install showers, lockers and CCTV security for their new bike sheds. The school is expected to raise another £20k in match funding.

In BCC

School of Christ the King: capacity for 16 bikes and 10 scooters
Perry Court: capacity for 20 bikes and 30 scooters

In NSC

St Martins: capacity for 20 bikes, 20 scooters
Milton Park: capacity for 20 bikes, 20 scooters
St Marks: capacity for 20 scooters
Priory Community School: capacity for 20 scooters

In SGC

The Ridge (J) – 40 scooter spaces, 24 cycle spaces
St Pauls (P) – 10 cycle spaces
Courtney (P) – 60 scooter spaces
Brimsham Green (S) – 24 cycle spaces
Holy Trinity (P) – 20 scooter spaces
Meadowbrook (P) – 12 cycle spaces
Wallscourt (P) – 36 scooter spaces, 6 cycle spaces
Cadbury Heath (P) – 12 scooter spaces, 6 cycle spaces
Baileys Court (P) – 40 scooter spaces, 40 cycle spaces

Improved walking and cycling infrastructure surrounding schools

In BCC

Enforceable School Keep Clear lines were installed around the following schools in 2014/15:

- Bannerman Road Community Academy
- School of Christ the King
- Oasis Academy Connaught
- Hareclive Academy
- Luckwell Primary School
- Merchant's Academy
- Minerva Primary Academy
- St. Joseph's Catholic Primary School
- Upper Horfield Community School
- Waycroft Academy
- Whitehall Primary

In NS

In 2014/15 a shared path improvement scheme was delivered on Queensway North, Worle.

In SGC

Improved footway was delivered in 2014/15 at Brimsham Green School, Yate. 20mph schemes were implemented at Sir Bernard Lovell, Mangotsfield and John Cabot schools. Planning for 20mph scheme at Abbeywood school was achieved in 2014/15 in preparation for implementation in 2015/16.

6.2 Data collection plan for The Move to Secondary School

In accordance with the monitoring strategy set out in the OMP, the following data collection methods will be used for this project:

- Hands up survey (in particular to measure modal split for journey to school)
- School Census (where data collected for participating schools)
- Pupil panel (subject to resource availability, to understand how effective the interventions were in changing travel behaviour of students as they moved to secondary school)
- Interview with ATSOs (at end of project)

6.3 Results for The Move to Secondary School

Hands up surveys

Hands-up surveys were carried out as soon as the schools became engaged in the project and provide a snapshot of the surveyed pupils' travel behaviour before any interventions had taken place. The hands-up survey is generally administered in the classroom by the ATSOs to ensure methodological consistency across the schools.

For each school and year group, the following data have been collected:

- Usual mode of travel to school;
- Frequency of use of modes (walking, cycling, scoot/skate, car, public transport, train, other);
- Access to bike;
- How pupils would prefer to travel; and
- If walking/cycling, with whom pupils travel.

Hands up survey results, disaggregated by school and local authority, will be reported in the final evaluation report in 2016, to allow for all data to be checked for quality.

Focus groups with pupils

In addition to the hands up survey, three focus groups were conducted in two secondary schools in BANES and SGC to gain an in-depth understanding of how the project impacted on the students as they moved from primary to secondary school. These focus groups, involving pupils who had received LSTF-funded interventions during primary school, were carried out as a collaborative qualitative data collection exercise by the UWE evaluation team, Sustrans, the participating school and the relevant local authority. Due to time and staff resource limitations, it was not feasible to conduct further focus groups in other local authorities.

Summary of findings

The focus group followed a topic guide elaborated by the UWE evaluation team, which covered issues such as their travel behaviour, attitudes and intentions, travelling without adult supervision,

understanding and representations of sustainable transport, and their views on the Active Travel to School activities funded by WEST LSTF.

These are the emerging themes from the focus group discussion:

- **Children's mobility:** in accordance with existing evidence on this, most of the participating students seemed to be restrained in how much they were able to travel independently. Most of them were allowed to travel back from school preferably in daylight and in the company of older children, e.g. siblings, or to their friends or shops if they were proximate to their homes. There was also a lot of variation in each child's pattern of travel to and from school, which seemed to be shaped not just by the available transport options, but also by their parents' daily commitments and routines. Some children seemed to get lifts in the morning and then they would walk home after school.
- **Perceptions of travel modes:** cycling was almost unanimously framed as an uncool activity for girls. The image problem with cycling and girls is well-known in research and has a major role in the gender gap in cycling participation in the UK. However, even those girls who thought cycling was not cool for them to engage with did cycle for leisure, with their families. But only a couple of students cycled regularly to school.
- **Independent travel:** students become independent at different ages and for different types of journeys, from about 9-10 to 11-12. Some children reported parental concerns about their personal safety, in addition to road safety.
- **Road safety:** this emerged to a lesser extent as a key concern associated with travelling independently. Some of the students had undergone some kind of road safety training as part of the Active Travel to School project, primarily addressing cycling safety but also pedestrian safety, e.g. crossing roads. Some of them reported being worried about traffic when cycling or walking but agreed that practice made them more confident.
- **Perceptions of the Active Travel to School interventions:** the Active Travel School Officer operating in each participating school helped the students remember what activities they had taken part in. The student seemed to remember the activities well and they could name and describe them, however their perception was more positive about those which involved more participation and were less structured as a class lecture. Some of the activities involved practical elements that were described as "fun", e.g. Be Seen Be Safe and the bike repair workshops. The Bike Module was also highly praised in this respect. Two important issues were raised in relation to the activities. The first is that these were mostly focused on cycling and less on walking, so more pedestrian type of activities, involving practical interactive elements would be welcome. At the same time, however, a student pointed out that one of the drawbacks of 'fun' activities is that the students may lose sight of the purpose behind them. The second important issue was about fairness of participation, in particular in relation to those students who did not have a bike and could not take part in specific activities requiring participants to bring their own bikes.
- **Impact of the Active Travel to School interventions:** only a few students claimed that doing the School Active Travel Challenge motivated them to maintain the active travel behaviour beyond the duration of the challenge. There was little evidence of significant behavioural change as a result of these activities alone. From the focus group discussion it was evident that the interventions did help the students in different ways, for example to become more aware of sustainability and health issues, in particular about the relationship between active lifestyles and health; to become more confident about travelling on the their own, either on foot or by bike; to understand how to cycle safely on the road and to repair a bike; and finally, the interventions focussed on cycling and the presence of female ATSOs promoting cycling to girls were all considered useful to challenge gender stereotypes around cycling (among boys and girls) and help young girls to become confident cyclists.

6.4 Delivery progress with Wheels to Work West

6.4.1 Overview of interventions

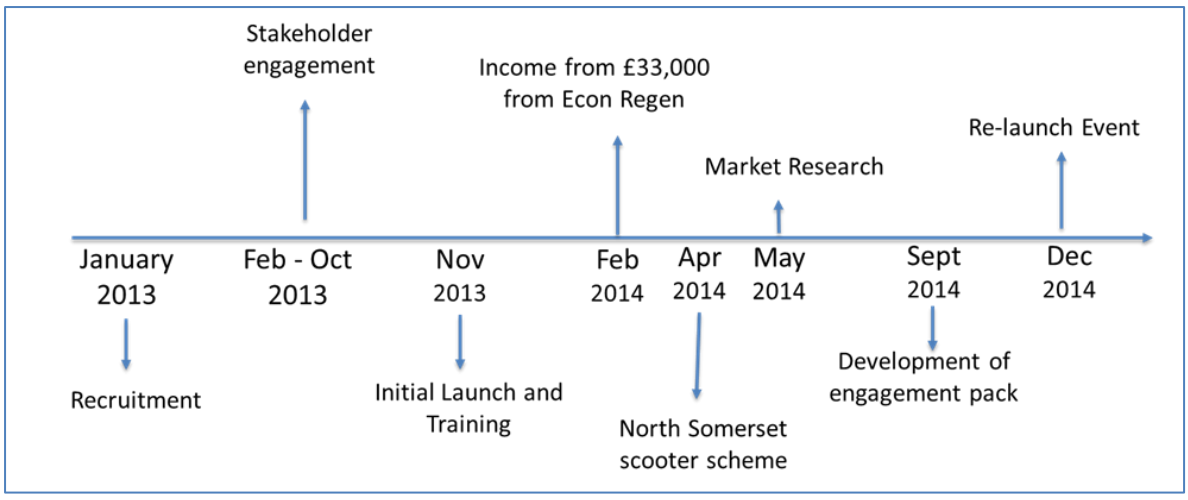
Wheels to Work West (formerly Access to Work & Skills) aims to overcome transport barriers that may prevent people accessing employment and training opportunities in the West of England. There are three schemes to support eligible people: free bus tickets, loan bikes and loans to buy a scooter. The schemes are promoted and delivered through partner organisations which already have an existing relationship with eligible people, such as job centres and further education institutions. Eligible people can apply to the schemes, through the partner organisation, if they comply with the following requirements:

- Free bus tickets: aged 16 or over, unemployed or within the first four weeks of a new job and if their travel journey can be reasonably made by existing bus services.
- Loan bikes: aged 16 or over, unemployed, or within the first four weeks of a new job.
- Loan to buy scooter: aged 17 or over and have a job offer.

6.4.2 Delivery progress

The Wheels to Work West scheme was launched in September 2013. Scooter and bike loan schemes have been run for people entering work. 25 bikes and 10 scooters were loaned over 2014/15. Additionally in excess of 3000 bus tickets were distributed to help people access work and training. The project had a delayed start due to the complexities in engaging and training the partner organisations. A re-launch event was delivered in December 2014 to share the lessons learnt to date, engage with further organisations and contribute to market the scheme to more potential users. A timeline of the Wheels to Work West project is shown in Figure 6.1.

Figure 6.1: Timeline of the project



Partner organisations engaged

20 new Wheels to Work West partner organisations have been engaged in 2014/15, taking the total number of engaged partners to 49.

BANES	11
Bristol	23
North Somerset	7
South Gloucestershire	8
TOTAL	**49**

Bus tickets
In excess of 3000 bus tickets were distributed to clients by partner organisations, with 2090 being recorded on SurveyMonkey as of 15th September 2015. Bus ticket uptake is split between the local authorities as follows:

UA	**%**
BANES	9
BCC	64
NS	10
SGC	17

Loan bike and scooter scheme

To date, 42 clients have used the bicycle loan scheme, mostly in Bristol. Up to March 2015, 26 clients had used the bikes: 3 in BANES, 19 in BCC, 1 in NS, 3 in SGC. Twelve clients (5 in BCC, 2 in NS, 5 in SGC) received scooters on the scheme. One scooter loan was paid in full and the client now owns the scooter. In addition to these schemes, the North Somerset 'Borrow a Bike' scheme delivered 64 bike loans to commuters, jobseekers and people in training/education.

Market research
Market research was undertaken with partner organisations and the target audience, to gather feedback on the design and accessibility of the schemes with the main aim of better understanding how to promote and increase uptake of the scheme. The recommendations from this research were used to develop various engagement resources to better engage the partner organisations to facilitate the project.

6.5 Data collection plan for Wheels to Work West

In accordance with the monitoring strategy set out in the OMP, surveys of those aged 16+ and receiving the interventions (free bus tickets, loan bikes and scooters) are undertaken.

6.6 Results for Wheels to Work West

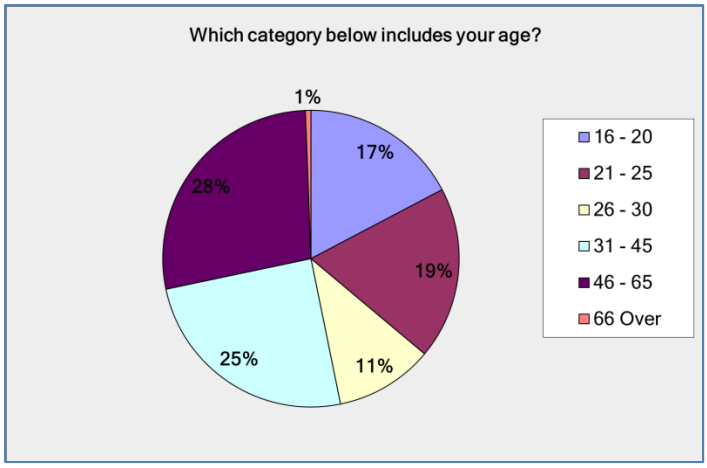
Bus tickets

An online questionnaire survey was designed in collaboration between the WEST LSTF Transitions Manager and the UWE evaluation team to gather data on bus ticket use at the time when they applied for their tickets at the partner organisation site (where they could be assisted in completing the survey). It was decided that this was the most cost-effective way of data collection as an ex-post questionnaire would have been difficult to administer as some of the applicants do not have access to internet, and they may not feel motivated to complete the survey.

A total of N=2,090 completed questionnaires were achieved during the period November 2013 to September 2015. It should be noted that, although the partner organisations had been briefed about the need to collect these data, most but not all applicants completed the questionnaire.

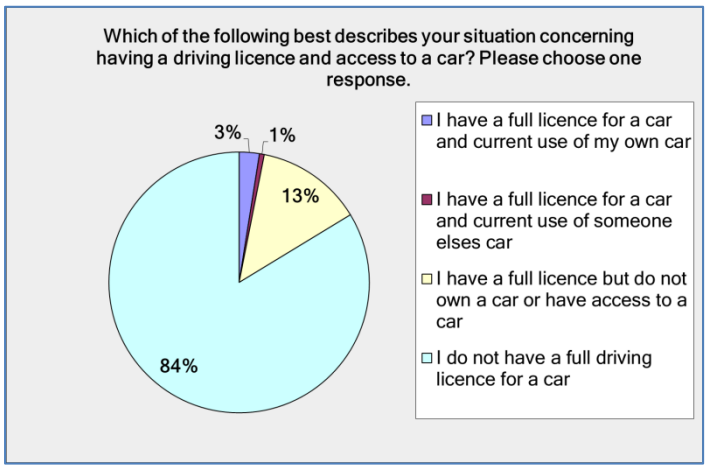
Gender split of the respondents reveals a prevalence of men among the applicants (61% vs 38%), while almost half of the sample is 30 years old or younger.

Figure 6.2: Age of free bus ticket applicants



The majority of respondents did not have a driving licence (84%) and only a minority of those with a driving licence had access to a car (either their own or that of someone else).

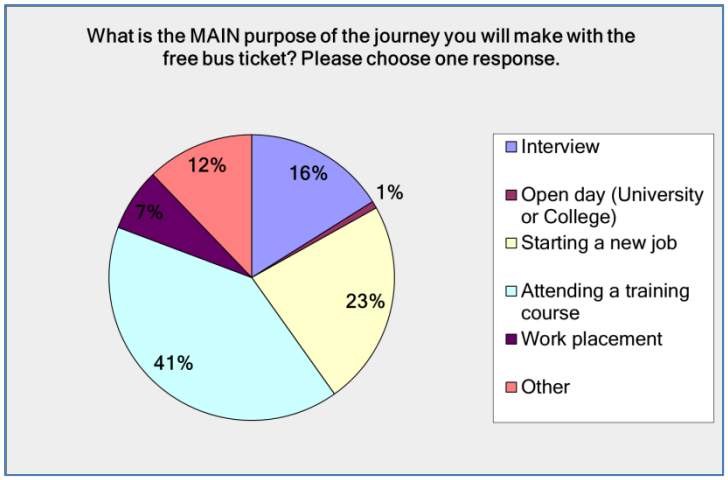
Figure 6.3: Applicants' situation in relation to having a driving licence and access to a car



Most respondents applied for day tickets (57%), with the next most frequent ticket type requested being weekly tickets (29%).

Attending a training course was selected by 41% of the sample as the main purpose of the free bus journey, followed by starting a new job (23%) and attending a job interview (16%). Although for most respondents the duration of the training/employment applied for was rather short (less than three months), one in five used the bus ticket to access a permanent post.

Figure 6.4: Main purpose the journey made with the free bus ticket



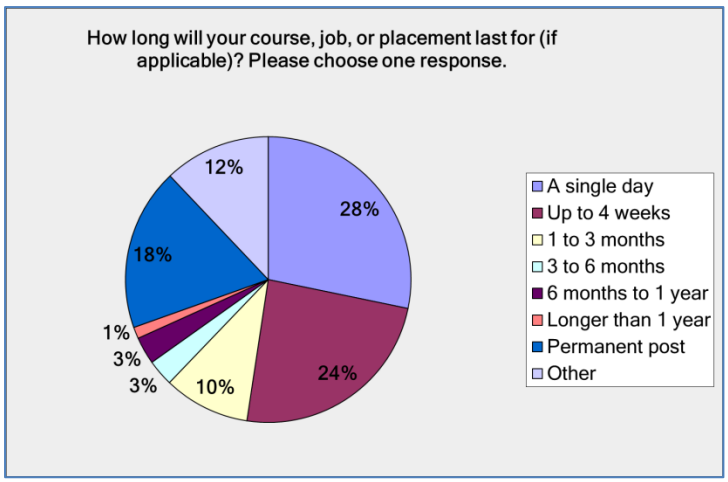
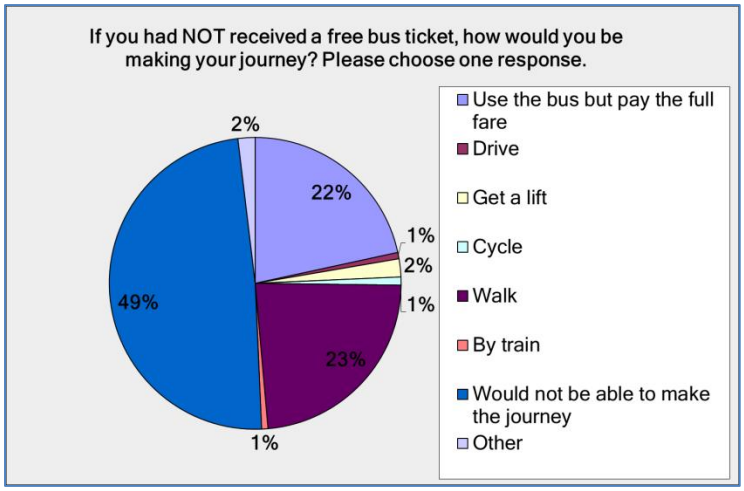


Figure 5: Duration of training/employment

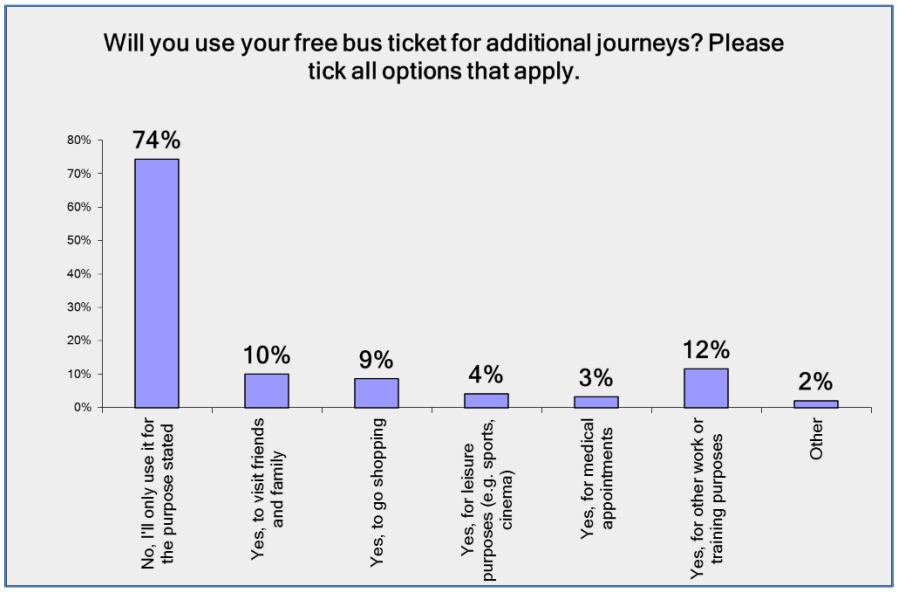
The questionnaire asked the applicants how they would be making their journey had they not received the free bus ticket. It must be noted that this question is hypothetical and relies on the assumption that the respondent's behaviour in the hypothetical situation follows their stated intentions. While a quarter of the sample stated they would still make the journey and pay the full bus fare, half (49%) claimed they would not be able to make the journey. However, about one in four said they would walk.

Figure 6.6: How applicants said they would make their journey in the absence of the intervention



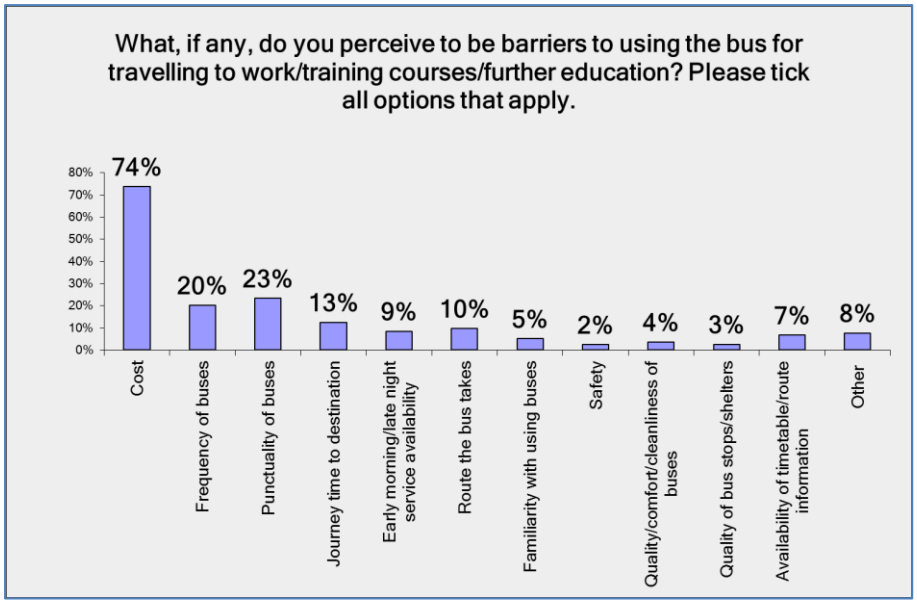
Whilst most respondents expected to use the free ticket only to attend their chosen education or employment activity (74% of the sample), others mentioned other purposes including social activities (10%), shopping (9%), and leisure activities (4%).

Figure 6.7: How applicants said they would use the free bus ticket



Cost appears to be the most frequently mentioned barrier to using the bus for education or training or employment purposes, with four in five respondents (74% of the sample) selecting it. Other key barriers appear to be **punctuality** and **frequency** of buses (selected by 23% and 22% respectively), **journey time to destination** (13%), the **bus route** (10%) and **availability of early morning/late night services** (9%).

Figure 6.8: Perceived barriers to using the bus



Loan bikes

Ex ante and ex post questionnaire surveys were developed for loan bike users and loan scooter users. Given the small scale of the project, only 42 responses were collected in the ex ante loan bike questionnaire. The majority of loan bike applicants were young, with 58% below the age of 30, male (81%) and without a driving license or access to a car. The questionnaire asked the applicants how they would be making their journey had they not received the loan bike. As in the case of the bus ticket applicant survey, this question is hypothetical and relies on the assumption that the respondent's behaviour in the hypothetical situation follows their stated intentions. Half the sample stated they would walk whilst 24% would use the bus. Only 12% said they would not be able to make the journey. However, unlike in the bus ticket applicant survey, loan bike applicants expected to use the bike not just for their training and/or employment purpose but for other social/leisure activities, medical appointments and shopping.

Only four people completed the ex post loan bike survey. Although the quantitative results cannot be included here because of their very limited usefulness, the qualitative comments made by these users are all positive:

- User 1: "Excellent scheme".
- User 2: "Sad to give it back".
- User 3: "I really appreciate the project. It has been great experience and the bike project team have been of great help. Well done!!!!"
- User 4: "Within a week of getting the bike I was able to go to an interview which I wouldn't have been able to go to without because it was so far."

Other results

Value for money: Once the schemes were operational they required very little investment to carry on. The project delivery team secured a 30% discount with First bus for tickets. Each bike loan cost approximately £60 per client (for 2-6 months use) and the scooter scheme costs approximately £550 per client.

Sustainable model: The aim of the project was to use LSTF to design and develop schemes that would continue to be delivered without LSTF funding. The project delivery team have successfully engaged 49 partners across the region to promote and deliver the scheme. The scooter scheme is continuing, being managed through the economic development team at Bristol City Council. Partners continue to deliver the bus ticket scheme with bus tickets purchased in 2015 and the bike loan scheme continues as part of the Communities and Business projects with very little investment required.

Making a real difference: Despite its moderate scale, the Wheels to Work project aimed to make a real difference to disadvantaged people's lives. The following quotes highlight this:

"I've been through a lot and people don't always seem to want to help. This scheme is really nice and I feel like it's designed to actually help people' *Scheme user, North Somerset*

"I thought it was too good to be true to begin with. Nobody does that for you, you don't get help like that, you just have to get on with it and struggle." *Scheme user, Bristol*

" Where Wheels to Work comes in, is that it becomes that enabler to allows us to say, not only can we help you reach your ultimate goal, we can help you get there as well." *Partner organisation, Bristol*

"This young person uses the scooter to travel from his home to his job as a trainee at a wood importer and distributor in Yate. Before signing up to the scheme, his only way of attending job interviews and getting around was by relying on his father and his employment support worker for lifts. [He] has now been working for 12 months and has his own independence through the scooter." *Support Worker, South Glos Council*

6.7 Delivery progress with Universities

6.7.1 Overview of interventions

This project is targeted to first and second year students at the University of the West of England, Bristol (UWE) and University of Bristol (UoB), as they generally move from home to student halls at the beginning of their first year and from halls to private accommodation in the transition from their first year to their second year. The Universities have targets to reduce car travel to university and increase active travel. Demand for university bus services is both high and growing. By promoting cycling, additional demand for bus services can be mitigated, and the numbers of students that drive to university reduced. By promoting cycling as a feasible option, the universities are helping to open up additional travel choices to students, thereby improving the student experience.

The objectives of the project are as follows:

- To reduce student single-occupancy car travel to campus;
- To reduce the pressure on university bus services; and
- To increase the use of active travel (cycling and walking) among students.

To achieve these objectives, the focus is to promote a sustained behaviour change towards active travel. The 2014/15 project activities have made use of learnings from pilot schemes in year 1.

The activities and interventions in the 2014/15 academic year are as follows:

- Development of a comprehensive travel marketing campaign
- Implementation of the marketing campaign with both e-marketing and personalised travel planning (PTP) elements.
- Creation of a marketing toolkit to be used for future years and to be shared with other higher and further education institutions in the region.

In parallel to this intervention both universities are undergoing big changes. UWE is in the middle of implementing a student parking exclusion zone that is expected to take over 1000 cars off the road at peak times by 2015/2016 which is seen as a big opportunity for behaviour change. More information on UWE's car parking policy and guidance is available at: http://www1.uwe.ac.uk/comingtouwe/campusmapsandinformation/carparking/carparkingpolicy/guidanceforstudents.aspx.

Bristol University has also received LSTF funding to:

- Support the Sustainability Manager (Transport) in the ongoing development of the UoB Travel Plan;
- Support the development of the University Cycle Strategy 2013 -2015 and installation of cycling infrastructure (over 400 new cycle parking spaces);
- Enhance public transport provision to and from the university premises, with the creation of a Transport Hub.

6.7.2 Delivery progress

Based on the previous year's pilots and the commissioned insight report, a travel marketing campaign was designed making use of some existing TravelWest branding. This was delivered from

May to November 2014 starting with a pre-arrival summer e-communications campaign which reached prospective students and followed-up with a series of events during the first 6 weeks of term. It was identified from the research that this period was the key time for influencing travel habits.

E-communications reach
Cumulative pre-arrival email campaign reach – about 80,000 people (May – September 2014)
Cumulative social media reach for first 6 weeks of term – about 104,655 people with 3,194 engagements (using Twitter and Facebook analytics tools)
Big Uni Travel Challenge (an online travel challenge tool hosted by Sustrans) – this ran during the month of October and had 1,307 registered participants with over 13,252 sustainable journeys logged.

Events Engagements
Face-to-face engagements at events during first 6 weeks of term – about 1500 engagements from 40 separate events

Printed materials
1000 travel info
4000 student travel info leaflets and bus flyers were included into each accommodation pack at Bristol University.
3500 Cycle and walking maps were handed out to new UWE students.

Outputs: A Travel Marketing Toolkit was produced, available from the following website: http://travelwest.info/universities

6.8 Data collection plan for Universities

In accordance with the monitoring strategy set out in the OMP, the following data collection methods will be used for this project:

- Online survey of incoming first year and second year students at UWE and UoB;
- Focus groups with students; and
- Student panel (subject to resource availability).

6.9 Results for Universities

Annual travel surveys are available to monitor any change in travel behaviours, although these may include also staff and visitors to the university. In any case the evaluation needs to account for many other interventions taking place at the same time, including an overhaul of parking policy, the introduction of residents parking zones, changes to bus stations and bus services and the improvement of cycle infrastructure.

UWE Travel Survey
The annual UWE travel cordon count is below (comparable data is only available for Frenchay and Bower Ashton campuses, not Glenside). This is a count of all travel to campus including students, staff and visitors on a given day in November. This does not include students living on campus.

UWE TRAVEL SURVEY	2013	2014

MODE SHARE GRAND TOTALS	TOTAL	TOTAL %	TOTAL	TOTAL %
Car on own	2531	34%	1977	28%
Bus	2274	31%	2365	28%
Walk	808	11%	914	12%
Car share	884	12%	869	13%
Cycle	477	6%	555	7%
Rail	89	1%	61	1%
Motorcycle/moped	49	1%	49	1%
Park & Walk	216	3%	241	7%
Bus & Walk	56	1%	61	1%
TOTAL	7383		7092	

University of Bristol Travel Survey

The table below shows the percentage splits for different modes of transport usually used by student respondents from their term-time accommodation to their main place of study based on an online survey. For full survey data visit - http://www.bristol.ac.uk/transportplan/surveys/

Year	Car driver - own (%)	Car driver - with a least one passenger	Car passenger (%)	Formal car share (%)	Walk (%)	Cycle (%)	Bus (%)	U6 Bus (%)	Other Wessex Red Bus (%)	Train (%)
2008	4	1	1	Less than 1	75	12	4	N/A	N/A	2
2012	5	1	2	Less than 1	62	11	3	9	Less than 1	3
2015	4	Less than 1	1	Less than 1	64	9	5	10	N/A	3

The follow-up perception survey (planned for Aug 2015) should give further insight into the success of the intervention in terms of changing behaviours and perceptions.

Results of the Wessex service 16 bus satisfaction survey

In 2013/2014 a New Stoke Bishop Transport Hub was created at the University of Bristol. The Wessex Service 16 benefited from enhanced frequency throughout the day every day. In 2014/2015, further enhancements to frequency throughout the day were made and a night bus funded by LSTF was introduced as a two year pilot project. High patronage figures have been achieved for the service 16 night bus. The service transports circa 1,000 passengers a night between the hours of 21:.30 and 04:30, Monday to Saturday.

In 2015 a customer satisfaction survey was undertaken on the Wessex Service 16, which is supported by LSTF. The results of this survey have been compared against the data from the previous satisfaction surveys which have been undertaken since 2011.
Survey forms were disseminated at the Stoke Bishop Transport Hub and Elton Road bus stops. Passengers were asked to complete the forms on board the bus and leave the completed forms in a box on the bus. A total of 226 individual surveys were undertaken of customers/passengers using the 16 bus service.

Concerning punctuality, in 2015 62% of respondents had a positive response for punctuality. This has increased from 38% the previous year, although it should be noted that last year the route was subject to several periods of road works which caused delays. This has decreased from 75% in 2013 and 2012. Overall satisfaction in 2015 was at 88% which has increased from 60% in 2014 and 47% in 2012. The lower satisfaction levels in 2014 are due to significant road works taking place around the University Estate. Over the last 3 years the most popular service enhancement origin is Stoke Bishop, where the majority of the passengers live. The results also show that there is a demand for a service to Bristol Temple Meads. However, as piloted in the past, it is not commercially sustainable for the service to include this destination due to the infrequency of the demand.

6.10 Delivery progress with New Developments

6.10.1 Overview of interventions

The New Developments project builds on the requirements of developers to produce residential travel plans and provide initiatives to promote sustainable travel to new residents. The project started by piloting sustainable travel initiatives and engagement with developers and residents in two new residential development sites in South Gloucestershire (Cheswick and Charlton Hayes) and has extended the approach to other new developments being built, or recently completed, across the West of England.

The objective of the project is to promote sustainable travel to new residents in order to reduce single occupancy car trips to and from new residential development sites, through the following:

- producing Travel Information Packs and associated publicity materials;
- providing personalised travel planning services and travel offers; and
- Partnership working with Developers and Planning officers.

6.10.2 Delivery progress

In 2012/13 a Travel Information Pack and other materials were produced for Cheswick and door knocking visits were made to 302 households (out of 564 homes occupied at the time). In 2013/14, further activities were conducted in Cheswick and the innovative approach to new developments was rolled out to Charlton Hayes, with the developers' sales teams proactively publicising and using the Travel Information Packs. In 2014/15 the project involved other new developments with the aim of creating a suite of legacy documents that can be rolled out to further developments after the project is completed. Overall, the project delivered engagement events and door knocking campaigns at 5 new housing developments in SGC and BANES with 1050 contacted households, 883 tailored information packs being distributed to new residents. 749 residents had conversation with Travel Advisors and 111 took up one of our key support offers.

The timeline of the project over the reporting period was as follows:

1) Development of monitoring strategy including start of in-depth interviews at Cheswick Village and Charlton Hayes: March 2014
2) Large scale events hosted at Cheswick Village and Charlton Hayes: March 2014
3) Completion of Westerleigh Road, Yate Travel Information Packs and associated support services: September 2014
4) Completion of Hanham Hall Travel Information Packs and launch event including associated support services: October 2014.
5) Large scale events hosted at Bath Riverside, BANES: October-November 2014
6) Installation of a Car Club at Cheswick Village: March 2015
7) Installation of Pedestrian /Cycle Signage at Cheswick Village: March 2015
8) Provision of pool bikes at Hanham Hall: March 2015
9) Purchase of three outdoor cycle pumps for Cheswick Village, Charlton Hayes & Hanham Hall: March 2013
10) Ongoing door knocking at Cheswick Village and Charlton Hayes as new residents move in.
11) Ongoing Action Plan of events and measures with Hanham Hall

12) Commissioning of research to review evidence on people moving home generally (March 2015).

The tables below present the activities carried out in each development in 2014/15 and their timeline:

Bath Riverside, BANES

Table 119: Types of interventions/activities carried out and when in BATH RIVERSIDE

Dates of flyer drop to notify residents of door knocking event	8th October 2014
Travel Roadshow event with Dr Bike and Smoothie Bike	11th September 2014
Door knocking event	22nd October 2014
Door knocking event	25th October 2014
Door knocking event	27th October 2014
Door knocking event	31st October 2014
Door knocking event	3rd November 2014
Door knocking event	21st November 2014

The following tables summarise the outcomes of the door-knocking activities carried out in Bath Riverside, including the resources taken up by participating households.

Table 120: Participation data concerning BATH RIVERSIDE

The total number of residents living on the development at the time of the intervention is not precisely known, as occupiers of some properties could not be contacted. The following data is available:	
Number of properties	291
Number of properties where residents were in during door knocking (contacted)	174
Contact Rate	59.8
Participation Rate	47.1%
Number of properties where residents participated	82
Number of properties where no contact made	117
Number of vacant dwellings	0
Number of properties where residents did not want to participate	72
Number of residents living in houses which engaged with team	

Table 121: Resources made available and requested in BATH RIVERSIDE

Resources made available in Bath Riverside	**Number requested**
Bristol cycle map	8

North Somerset Cycle Map	2
South Glos Cycle Map	2
BANES Cycle Map	20
Get Cycling	2
Bristol Leisure routes	0
South Gloucestershire Leisure Routes	0
Bristol to Bath Railway Path	8
Strawberry Line	0
Car Sharing Leaflet	0
Cutting Your Car Use Booklet	0
Bus Timetables	2
Train Timetables	0
South Glos Youth Concession Info	-
Greater Bristol Travel Map	-
Avon Rider Leaflet	-
Bradley Stoke Guide	-
Filton Guide	-
Adult Cycle Training Leaflet	-
Two Tunnels	2
Concorde Way	No record
City Car Club Flyer	7
Bath Riverside Travel Information Pack	-

The following resources and services were delivered in **Bath Riverside** in the period April 2014 to March 2015:

Table 122: Summary of resources and services delivered in BATH RIVERSIDE

Total Packs	-
Total Resources	86
Total Bus Tickets	13
Total Services	22 (Incl. 2 Electric Loan Bike requests, 5 Loan Bike Requests, 6 Bath Cycle Training Requests and 9 BaNES loan bike vouchers issued)
Total Freebies	-

Charlton Hayes (SGC)

Table 123: Types of interventions/activities carried out and when in CHARLTON HAYES

Dates of flyer drop to notify residents of door knocking event	17th March 2014
Travel Roadshow with Dr Bike and Smoothie Bike	23rd March 2014
Door knocking event	2nd April 2014
Door knocking event	17th April 2014
Door knocking event	2nd May
Door knocking event	22nd May 2014
Door knocking event	27th May 2014
Door knocking event	9th June 2014
Door knocking event	30th August 2014
Door knocking event	1st September 2014
Door knocking event	6th November 2014
Door knocking event	4th November 2014
Door knocking event	15th November 2014

The following tables summarise the outcomes of the door-knocking activities carried out in Charlton Hayes, including the resources taken up by participating households.

Table 124: Participation data concerning CHARLTON HAYES

The total number of residents living on the development at the time of the intervention is not precisely known, as occupiers of some properties could not be contacted. The following data is available:	
Total number of properties on Development at time of intervention	674
Number of properties where residents were in during door knocking (contacted)	408
Contact Rate	60.5
Participation Rate	62.7
Number of properties where residents participated	256
Number of properties where no contact made	266
Number of vacant dwellings	23
Number of properties where residents did not want to participate	395
Number of residents living in houses which engaged with team	

Table 125: Resources made available and requested in CHARLTON HAYES

Resources made available in Charlton Hayes	**Number requested**
Bristol cycle map	20

North Somerset Cycle Map	3
South Glos Cycle Map	20
BANES Cycle Map	4
Get Cycling	5
Bristol Leisure routes	4
South Gloucestershire Leisure Routes	11
Bristol to Bath Railway Path	6
Strawberry Line	6
Car Sharing Leaflet	0
Cutting Your Car Use Booklet	0
Bus Timetables	3
Train Timetables	0
South Glos Youth Concession Info	0
Greater Bristol Travel Map	0
Avon Rider Leaflet	0
Bradley Stoke Guide	0
Filton Guide	0
Adult Cycle Training Leaflet	0
Two Tunnels	1
Concorde Way	0
City Car Club Flyer	0
Charlton Hayes Development Guide	59

The following resources and services were delivered in **Charlton Hayes** in the period April 2014 to March 2015:

Table 126: Summary of resources and services delivered in CHARLTON HAYES

Total Travel Information Packs	-
Total Resources	142
Total Bus Tickets	18
Total Services	12 (incl. 1 Dr Bike, 5 Loan Bike requests, 2 Electric Loan Bike requests, 1 Cycle Training request and 3 Route Plans)
Total Freebies	-

Cheswick Village

Table 127: Types of interventions/activities carried out and when in CHESWICK VILLAGE

Dates of flyer drop to notify residents of door knocking event	11th and 13th March 2014
Travel Roadshow event with Dr Bike and Smoothie Bike	15th March 2014
Door knocking event	27th May 2014
Door knocking event	2nd July 2014
Door knocking event	8th July 2014
Door knocking event	30th August 2014
Door knocking event	13th November 2014
Door knocking event	19th November 2014
Door knocking event	20th November 2014
Door knocking event	26th November 2014
Door knocking event	27th November 2014
Door knocking event	6th December 2014
Door knocking event	16th December 2015
Door knocking event	10th January 2015
Door knocking event	9th February 2015

The following tables summarise the outcomes of the door-knocking activities carried out in Cheswick Village, including the resources taken up by participating households.

Table 128: Participation data concerning CHESWICK VILLAGE

The total number of residents living on the development at the time of the intervention is not precisely known, as occupiers of some properties could not be contacted. The following data is available:	
Total number of properties on Development at time of intervention	746 (513 contacted previously, 77 knocked during this door knock project)
Number of properties where residents were in during door knocking (contacted)	70
Contact Rate	91
Participation Rate	44.2
Number of properties where residents participated	31
Number of properties where no contact made	7
Number of vacant dwellings	10
Number of properties where residents did not want to participate	39
Number of residents living in houses which engaged with team	

Table 129: Resources made available and requested in CHESWICK VILLAGE

Resources made available in Cheswick Village	Number requested
Bristol cycle map	3
North Somerset Cycle Map	1
South Glos Cycle Map	3
BANES Cycle Map	1
Get Cycling	0
Bristol Leisure routes	1
South Gloucestershire Leisure Routes	3
Bristol to Bath Railway Path	1
Strawberry Line	0
Car Sharing Leaflet	0
Cutting Your Car Use Booklet	0
Bus Timetables	2
Train Timetables	0
South Glos Youth Concession Info	-
Greater Bristol Travel Map	-
Avon Rider Leaflet	-
Bradley Stoke Guide	-
Filton Guide	-
Adult Cycle Training Leaflet	-
Two Tunnels	1
Concorde Way	-
City Car Club Flyer	1
Cheswick Village Development Guide	27

The following resources and services were delivered in **Cheswick Village** in the period April 2014 to March 2015:

Table 130: Summary of resources and services delivered in CHESWICK VILLAGE

Total Travel Information Packs	-
Total Resources	44
Total Bus Tickets	13
Total Services	7 (incl. 5 Loan Bike requests, 1 Cycle Training request and 1 Route Plan given)
Total Freebies	-

Hanham Hall

Table 131: Types of interventions/activities carried out and when in HANHAM HALL

Travel Roadshow, Dr Bike and flyering event	4th October 2014
Door knocking event	8th October 2014
Door knocking event	15th October 2014
Door knocking event	23rd October 2014

The following tables summarise the outcomes of the door-knocking activities carried out in Hanham Hall, including the resources taken up by participating households.

Table 132: Participation data concerning HANHAM HALL

The total number of residents living on the development at the time of the intervention is not precisely known, as occupiers of some properties could not be contacted. The following data is available:	
Total number of properties on Development at time of intervention	107
Number of properties where residents were in during door knocking (contacted)	48
Contact Rate	44.8
Participation Rate	58.3
Number of properties where residents participated	28
Number of properties where no contact made	59
Number of vacant dwellings	0
Number of properties where residents did not want to participate	20
Number of residents living in houses which engaged with team	

Table 133: Resources made available and requested in HANHAM HALL

Resources made available in Hanham Hall	**Number requested**
Bristol cycle map	19
North Somerset Cycle Map	5
South Glos Cycle Map	13
BANES Cycle Map	9
Get Cycling	1
Bristol Leisure routes	6
South Gloucestershire Leisure Routes	4
Bristol to Bath Railway Path	5

Strawberry Line	1
Car Sharing Leaflet	1
Cutting Your Car Use Booklet	0
Bus Timetables	2
Train Timetables	0
South Glos Youth Concession Info	-
Greater Bristol Travel Map	-
Avon Rider Leaflet	-
Bradley Stoke Guide	-
Filton Guide	-
Adult Cycle Training Leaflet	-
Two Tunnels	2
Concorde Way	-
City Car Club Flyer	0
Hanham Hall Information Pack	50

The following resources and services were delivered in **Hanham Hall** in the period April 2014 to March 2015:

Table 134: Summary of resources and services delivered in HANHAM HALL

Total Travel Information Packs	-
Total Resources	72
Total Bus Tickets	31
Total Services	(incl. 1 Dr Bike, 1 Electric Loan Bike, 5 Loan Bikes requested, 1 Cycle Training, 2 Route Plans, 7 Travel Trials completed)
Total Freebies	-

Westerleigh

Table 135: Types of interventions/activities carried out and when in WESTERLEIGH

Dates of flyer drop to notify residents of door knocking event	17th September 2014
Door knocking event	19th September 2014
Door knocking event	29th September
Door knocking event	10th October

The following tables summarise the outcomes of the door-knocking activities carried out in Westerleigh, including the resources taken up by participating households.

Table 136: Participation data concerning WESTERLEIGH

The total number of residents living on the development at the time of the intervention is not precisely known, as occupiers of some properties could not be contacted. The following data is available:	
Total number of properties on Development at time of intervention	117
Number of properties where residents were in during door knocking (contacted)	70
Contact Rate	59.8
Participation Rate	28.6
Number of properties where residents participated	20
Number of properties where no contact made	47
Number of vacant dwellings	0
Number of properties where residents did not want to participate	50
Number of residents living in houses which engaged with team	

Table 137: Resources made available and requested in WESTERLEIGH

Resources made available in Westerleigh	**Number requested**
Bristol cycle map	4
North Somerset Cycle Map	1
South Glos Cycle Map	7
BANES Cycle Map	1
Get Cycling	0
Bristol Leisure routes	0
South Gloucestershire Leisure Routes	3
Bristol to Bath Railway Path	1
Strawberry Line	1
Car Sharing Leaflet	0
Cutting Your Car Use Booklet	0
Bus Timetables	0
Train Timetables	1
South Glos Youth Concession Info	-
Greater Bristol Travel Map	-

Avon Rider Leaflet	-
Bradley Stoke Guide	-
Filton Guide	-
Adult Cycle Training Leaflet	-
Two Tunnels	1
Concorde Way	-
City Car Club Flyer	1
Westerleigh Development Guide	9

The following resources and services were delivered in Westerleigh in the period April 2014 to March 2015:

Table 138: Summary of resources and services delivered in WESTERLEIGH

Total Travel Information Packs	-
Total Resources	30
Total Bus Tickets	10
Total Services (incl. 1 Loan Bike request, 2 Route Plans and 6 Travel Trials)	9
Total Freebies	-

6.11 Data collection plan for New Developments

In accordance with the monitoring strategy set out in the OMP, the following data collection methods were to be used for this project:

- Survey of residents during door knocking visit, principally to elicit travel mode usage;
- In-depth interviews with residents (conducted in Cheswick Village in Summer/Autumn 2013 and in Charlton Hayes in late 2014), principally to understand how travel behaviour has changed after moving to the new development and after receiving the intervention (Travel Information pack, etc.).

6.12 Results for New Developments

As part of the door-knocking in all five developments, the Sustainable Travel Field Team surveyed households that were willing to complete a face-to-face questionnaire. The following figures summarise the results concerning modal frequency of interviewed residents in each new development. These represent travel behaviour before the intervention. Follow up surveys have not been possible due to limited resources.

Figure 6.9: Modal frequency in Bath Riverside (N=66)

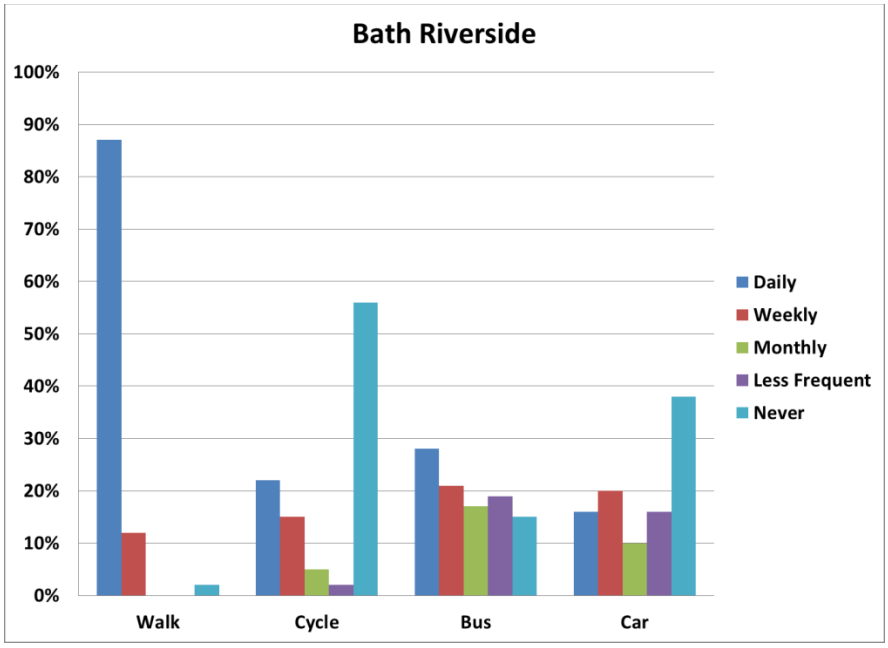


Figure 6.10: Modal frequency in Hanham Hall (N=46)

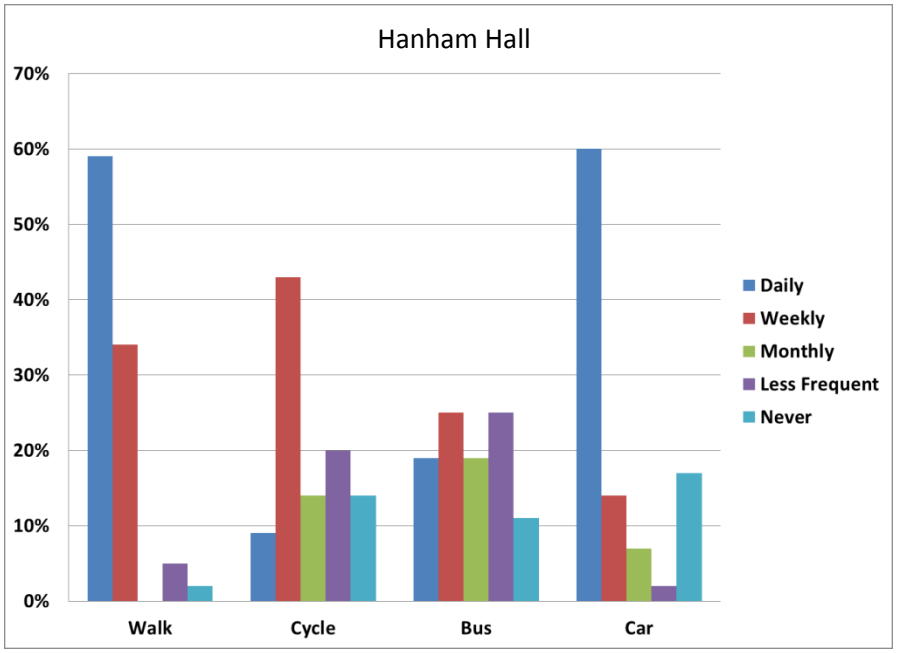


Figure 6.11: Modal frequency in Charlton Hayes (N=51)

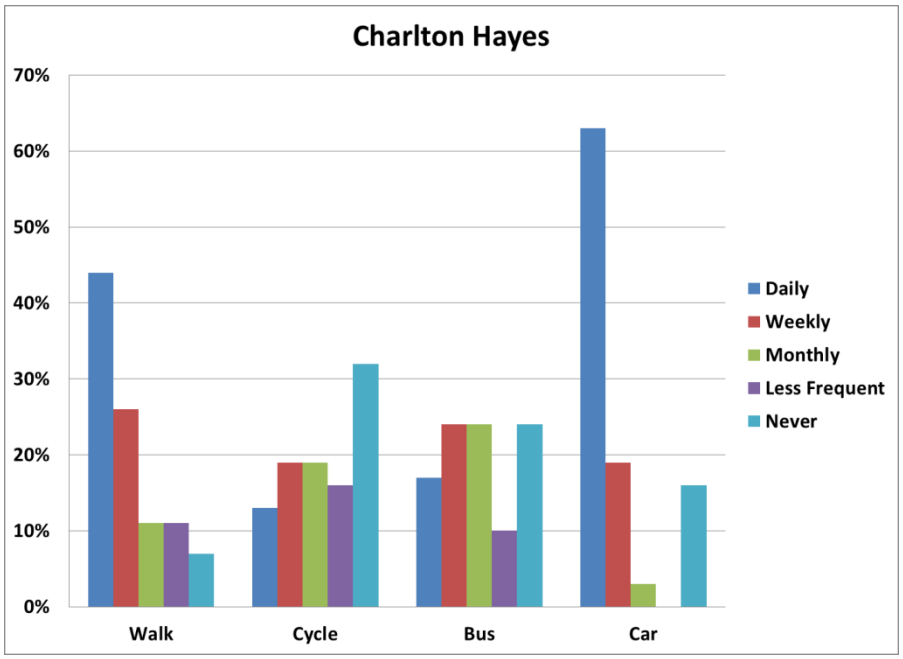
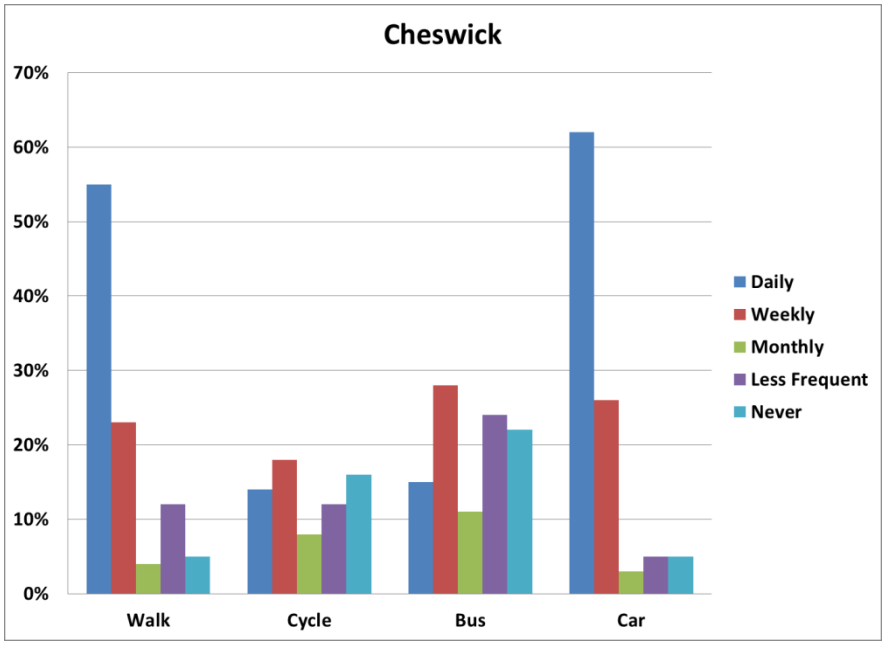


Figure 6.12: Modal frequency in Cheswick (N=104)



In-depth face-to-face qualitative interviews with eight new residents in Charlton Hayes were undertaken in November 2014. These took place after the residents had received intervention (STFT visits) and were aimed at understanding the usefulness and impacts of the intervention. Analysis of the interviews will be reported in Final AOMR.

7. Process evaluation

7.1 Purpose

The purpose of process evaluation in the WEST programme is to understand how the interventions were delivered, and how this affects the results (outcomes and impacts) that are generated. Process evaluation has been designed to also support impact evaluation, in particular to understand how different parts of the WEST programme contributed to the outcomes; and to support quality assurance. In this sense, it is both formative and summative.

7.2 Methodology: data collection and analysis

Process evaluation is following a predominantly qualitative approach, although it also relies on quantitative data measuring the financial resources committed to delivering the programme of interventions, and the specific outputs delivered.

The procedure of process evaluation has been agreed collectively between the evaluator (the UWE research team) and the programme partners. The core component of the methodological approach is a self-completion questionnaire survey that gathers process data about activities, barriers, drivers, actions and lessons learnt. The process evaluation survey was administered to all the managers and project officers involved in three waves:

- Wave 1 collected data for the period January to June 2013
- Wave 2 collected data for the period July to December 2013
- Wave 3 collected data for the entire year 2014

The analysis has been carried out with the software NVivo, which is widely used in qualitative data analysis in the social sciences. In NVivo, each completed form was treated as an individual case ('*node*' in NVivo) and the following attributes were assigned to each case:

- Name of compiler
- Type of project (Work-Package or wider tranche/UA project area)
- LSTF programme area (Business Engagement, Transitions, Public Transport, Marcomms, Cycling & Walking Infrastructure, 20 mph, Community Grants, STFT, UA)
- Geographical area covered (BCC, BANES, SGC, NSC and Sub-regional)
- Data collection wave (to reflect the reporting period under consideration)
- Change in perception of barriers (this records the responses to a Likert-scale question).

Overall, a total of 132 NVivo cases were created from the process evaluation forms submitted over the three waves, broken down as follows: 50 cases in wave 1, 45 cases in wave 2 and 37 in wave 3. While the first wave of data collection achieved nearly a 90% response rate, this declined throughout the period to about two thirds in the last wave.

The responses have been qualitatively analysed using *thematic analysis*, i.e. the text provided in each form was categorised ('*coded*') according to a broad set of 'themes', assigned by the researcher as they emerged in the forms. It is important to note that given the qualitative nature of the data it is not possible to extract statistical information. However, NVivo allows systematic coding of the data and then allows patterns to be found in how thematic codes are distributed across the various cases.

7.3 Results for the period January to December 2014

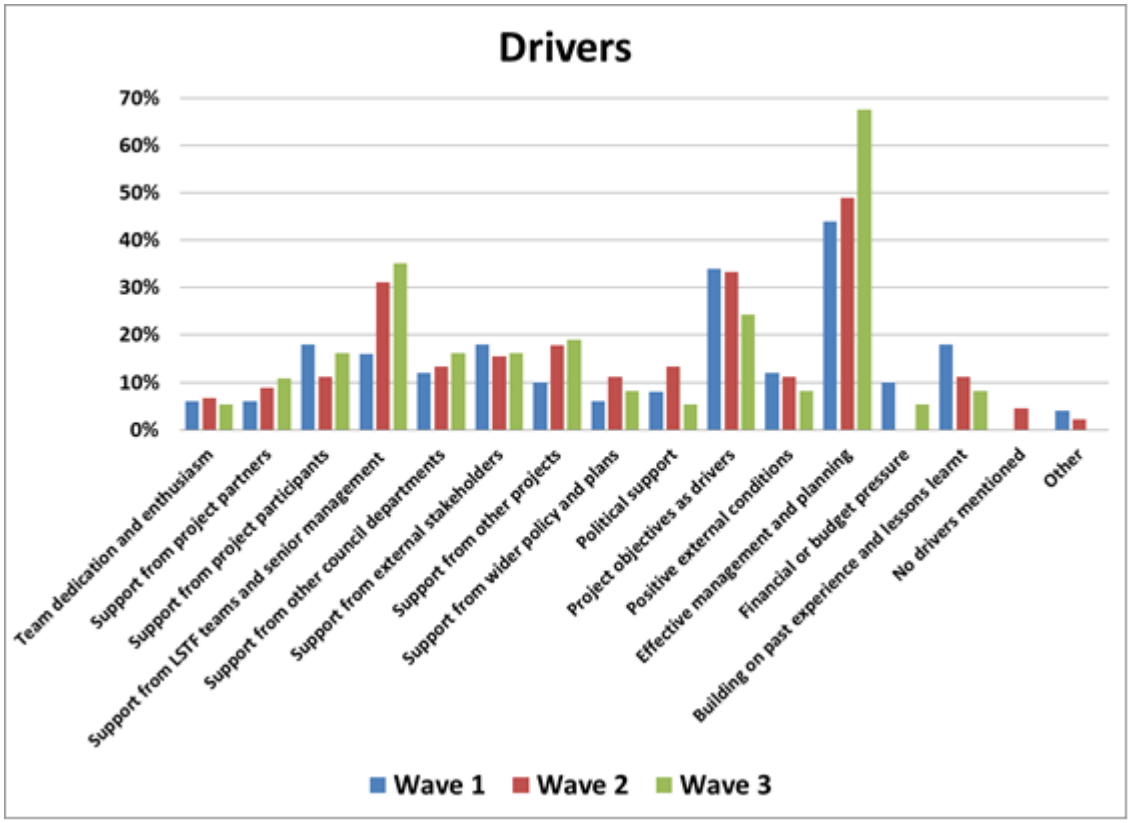


Figure 13: Drivers to programme delivery

Across all waves, **effective management and planning** emerged a key **driver** to programme delivery. This includes factors such as clarity of strategy, direction and budgets; clear line management and coordination within and across teams. WP managers and project officers tended to mention more practical and specific drivers, often related to the effectiveness of project planning, resourcing and management and support from a variety of 'agents' involved with the WEST programme.

Co-ordination with other teams involved in related areas of programme delivery and **support from senior management** was particularly perceived as a key driver by WP managers and project officers. High level tranche/area managers tended to mention strategic objectives and aspirations as drivers, as well as policy and political support and positive public perceptions.

In addition to the drivers mentioned above, the following factors were identified and described as drivers to delivery:

- Engagement with and buy-in from external stakeholders and/or recipients of the interventions, such as schools, businesses and other partner organisations involved in the programme;
- Having the required staff with the relevant competences in post in time;
- Enthusiasm and motivation of staff involved in project delivery;
- Management tools, such as Prince2, and dedicated financial and administrative support;
- Ability/opportunity to draw on past projects and existing networks of contacts;
- Effective collaboration with other council departments.

- Positive contextual conditions: this includes all the positive contextual factors that were found to have a beneficial impact on project delivery. This includes other initiatives in the local area or region that have a synergistic effect with the specific project, thus facilitating delivery of outputs and outcomes, and the existence of particularly favourable regulatory and cultural framework within which the specific project is set.

In terms of how perceptions of drivers changed over time, Figure 13 shows that more respondents mentioned factors included in 'effective management and planning' and 'support from LSTF teams and senior management'. This is likely to reflect the improvement of project management processes and cross-departmental/cross-authority working during the course of the programme.

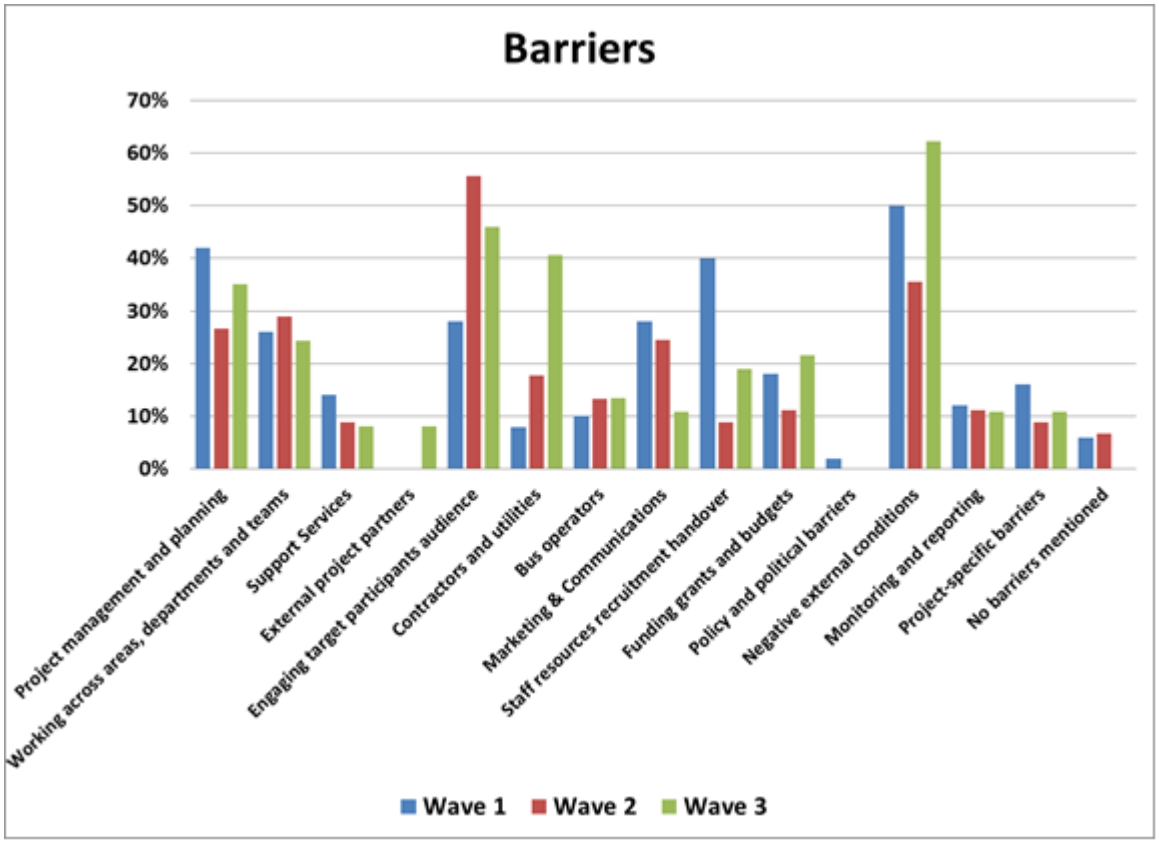


Figure 14: Barriers to programme delivery

Two types of **barriers** were frequently mentioned across the three data collection waves. One set comprises **negative external conditions** which are normally outside the control of those in charge of project delivery, such as adverse weather, quality of existing infrastructures, public concerns or opposition and unsupportive regulatory frameworks. This type of barriers was perceived as having a negative impact on the ability to deliver project outputs on time and in good order, and to achieve significant behaviour change in the targeted population. This set of barriers was predominantly mentioned in relation to infrastructure (capital) projects and public transport measures.

The other set of factors that were consistently perceived as barriers include **problems with engaging the target recipients** of the sustainable travel measures. This latter set of barriers was experienced mostly by those delivering engagement-type projects, predominantly funded with revenue budgets, such as marketing of sustainable travel to schools, university students, employers and their employees, and residents in new developments.

Other key barriers encountered over the three data collection waves concerned issues with the **institutional and organisational set up** of the programme and with **working across teams**, **departments and through jurisdictional boundaries**. These barriers were perceived to impact on the quality of project management and decision-making, for example by creating communication issues between staff working in different local authorities.

There is evidence that the barriers identified have been acted upon and addressed over the course of the reporting period. One key example concerns the issues experienced with the Marketing & Communications tranche, which were addressed over the course of the whole programme so that in 2014 were not prominent among the problems encountered by respondents in 2014.