University of the West of England
BRISTOL

West of England Sustainable Travel (WEST) Baseline and Year One (2012/13) Annual Outcomes Monitoring Report

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

13 December 2013

Centre for Transport & Society

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 integrated project programmes. The West of England Sustainable Travel (WEST) 'Large Project' programme involves an integrated package of measures covering the entire West of England travel to work area to be implemented in 2012/13 to 2014/15. It follows the Key Commuter Routes (KCR) project programme which was implemented 2011/12 to 2012/13.

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]. Annual outcome monitoring reports will be produced at the end of 2013, 2014, 2015 and 2016 and this document represents the first of these reports. It reports on the first year of the WEST programme (2012/13) and also establishes the baseline position on outcomes. This 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). As well as outcomes, the report contains a summary of progress with delivering different elements of the programme in 2012/13 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 2012/13 to 2014/15 and is aligned with the planned development of homes and jobs in priority growth areas up to 2030.

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

- 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

[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.

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 there is an aim to create 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 these points 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:

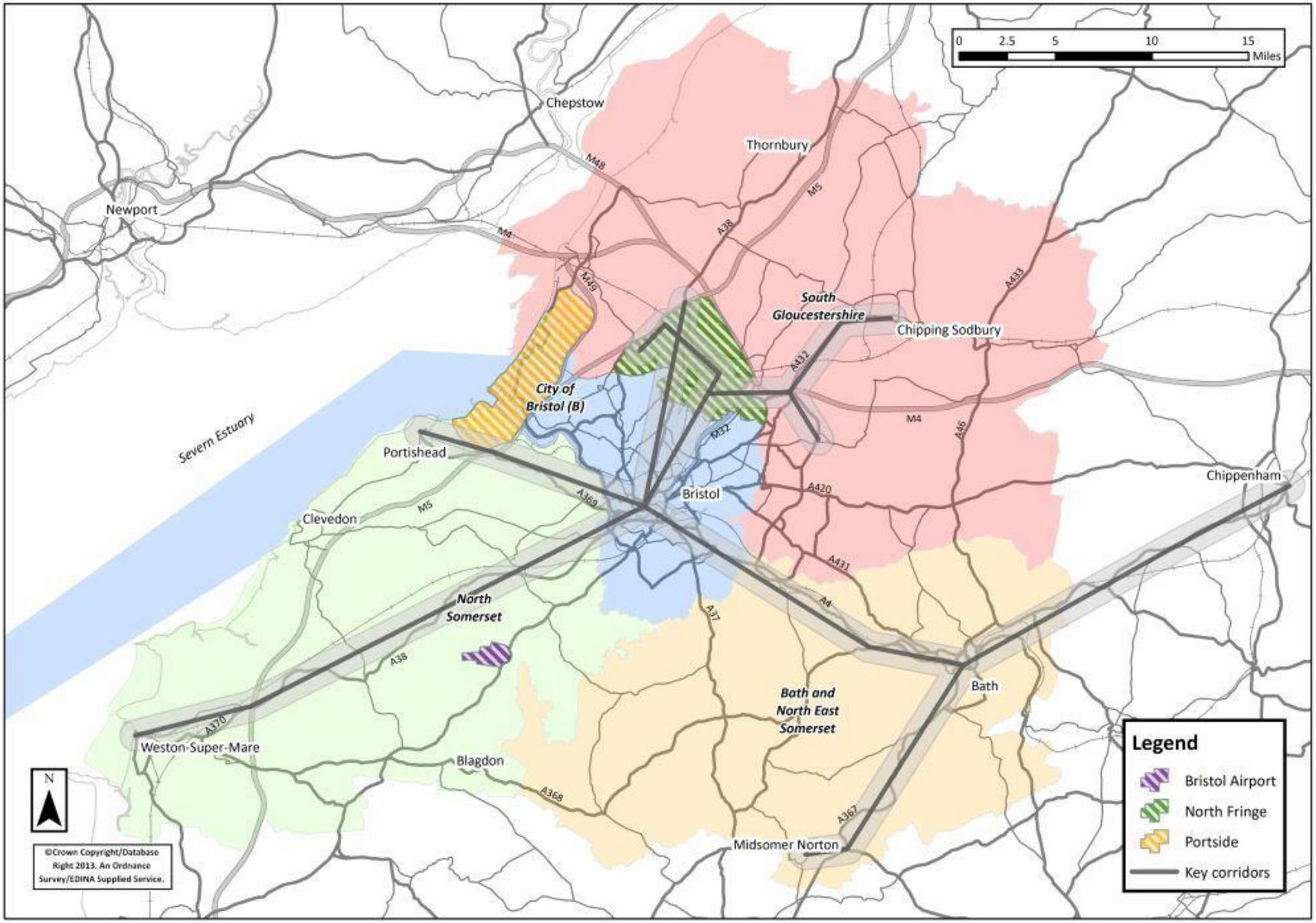
- support the local economy and facilitate economic development, for example by reducing congestion, improving the reliability and predictability of journey times or enhancing access to employment and other essential services; and
- reduce carbon emissions, for example by bringing about an increase in 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. In the next section, it is explained how the WEST project programme will be evaluated.

Map 0 - West of England project area



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 evaluation needs to address 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[3]. 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/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). In section 2.2 it is explained 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, it has been decided to learn about the *process* of delivering the programme. Hence *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 can 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/measures within the WEST programme with another form for those who manage wider project areas, tranches or themes.

Summary findings from the first round of process evaluation are included in section 8 of this report.

[3] 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/

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/users (participation), changes in travel perceptions, behaviour and satisfaction (outcomes) and benefits to society (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 achieved.

An Indicators Framework produced for the OMP is shown in Table 2.1. It is similar to the programme logic map but 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. It is shown in the Indicators Framework which indicators are required to be monitored by DfT. The indicators in Table 2.1 are area-wide indicators that apply across the entire West of England area/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 sections on 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 Annual Outputs Report. It is 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, 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 included in the Annual Outputs Report as this 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. This report has a main focus on presenting baseline results and first year results for outcome and impact indicators. 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

Programme broad themes	Projects	Outcome indicators	Impact indicators	Local objectives (impacts)
Theme 1: Stimulating growth in priority areas	Area travel plans	**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	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	1.1 Widened lower carbon access to employment and improved economic growth through reduced congestion
	Key commuter routes			1.2 Reduced carbon emissions per capita for journeys to work
	Business travel			1.3 Improved health, reduced sickness levels and increased workforce productivity
Theme 2: Connected and thriving centres	Local economic activity in urban areas			2.1 Strengthened local economies
	Sustainable travel in key centres			2.2 Improved sustainable transport links / access for employment, training, retail, education and leisure
Theme 3: Transitions to a low carbon lifestyle	The move to secondary schools			2.3 Increased physical activity and improved health through greater use of walking/cycling for local journeys
	Access to work and skills			3.1 Improved sustainable transport access to work and training for young people
	Universities			3.2 Increased use of sustainable transport among students and reduced congestion in adjacent points in the network
	New developments			3.3 New sustainable travel habits among residents in new developments

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 particular value in understanding their reactions and experiences to 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 no. vehicles/cars over 24 hours/7-10am	Traffic count data (ATCs and MCCs across 4 UAs)
	Bus patronage (JLTP3 primary indicator)	No 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	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
"To promote physical activity through active	Walking level per person	Walk for 30 mins or more, walk at all)	Active People Survey

Outcome	Indicators	Metrics	Sources
travel"	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	CO2, 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 2012/13

The Annual Outputs Report 2012/13 was submitted to DfT in July 2013. It provides summary details about inputs and outputs delivered in the first financial year of the WEST programme and is organised under the following categories:

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

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

Reference to the Annual Outputs Report 2012/13 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 2012/13) is included in this report.

Each of the following sections reports progress with delivery and data collection, and establishes the baseline position.

3. Area wide data

This section reports on area-wide outcomes **for the period 2010/11 to 2012/13** 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 2010 with response/issue sample sizes in 2012 of 863/4500 in BANES, 844/6000 in BCC, 965/4500 in NSC and 879/4500 in SGC. Mode use frequency is only available for 2011 and 2012.

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

Cycling

Table 3.1 - Satisfaction with cycle parking

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

Table 3.2 - Satisfaction with location of cycle lanes

	2008	2009	2010	2011	2012	2013
BANES	N/A	N/A	N/A	N/A	52.6	54.3
Bristol	N/A	N/A	N/A	N/A	53.8	53.7
North Somerset	N/A	N/A	N/A	N/A	56.1	57.0
South Gloucestershire	N/A	N/A	N/A	N/A	60.6	63.0
WoE sub-region	N/A	N/A	N/A	N/A	55.8	57.0

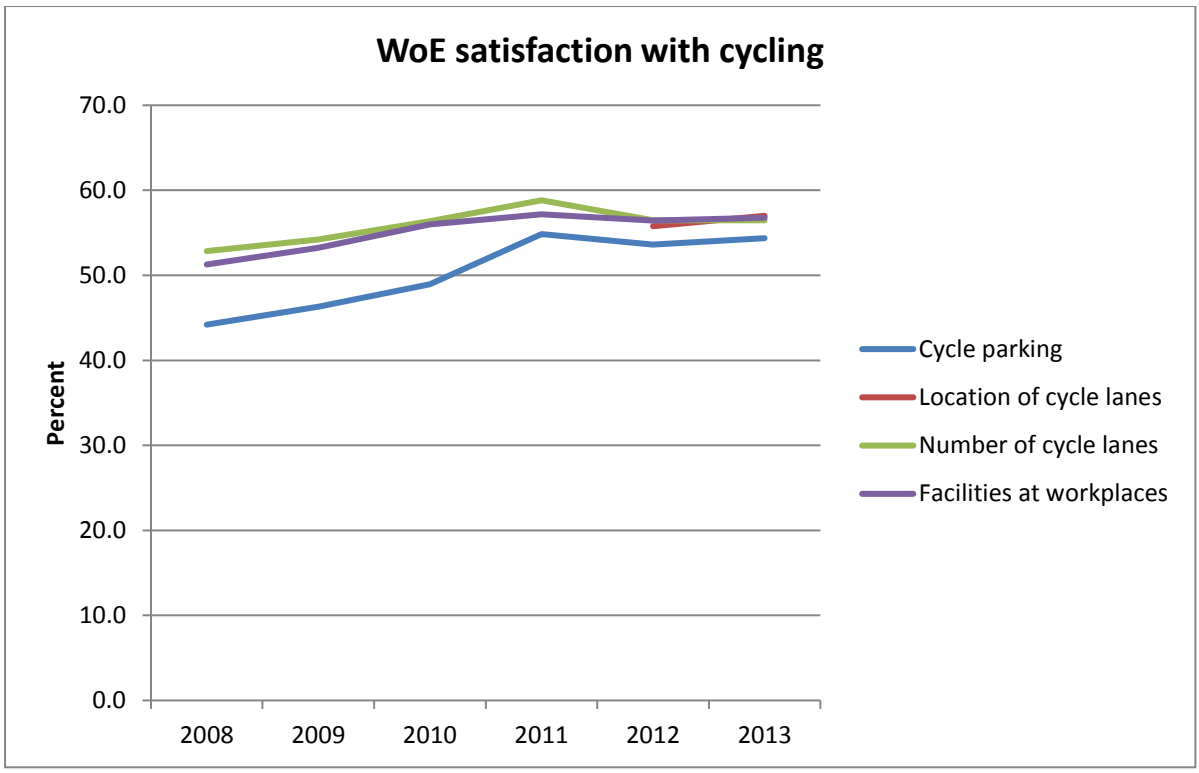
Table 3.3 - Satisfaction with number of cycle lanes

	2008	2009	2010	2011	2012	2013
BANES	48.2	50.4	50.0	55.5	51.6	53.2
Bristol	49.5	51.6	53.8	57.3	56.8	53.6
North Somerset	51.3	53.4	57.7	57.7	55.6	56.2
South Gloucestershire	62.4	61.4	64.0	64.8	61.9	62.9
WoE sub-region	52.9	54.2	56.4	58.8	56.5	56.5

Table 3.4 - Satisfaction with cycle facilities at workplaces

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

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 calculated as the mean value of the individual authority figures. We are considering the development of a more precise population-weighted formula.

The results on satisfaction with cycling provision show that generally levels of satisfaction have slightly increased since the 2010 baseline in all categories (Chart 1). This positive trend continues the longer-term increase in satisfaction since 2008. The greatest change in satisfaction since 2010 has been with the number of cycle parking facilities available (+5.4%), whilst the smallest change in satisfaction has been recorded with the number of cycle lanes available (+0.1%) (N.B: not including the new category of 'satisfaction with location of cycle lanes').

Buses

Table 3.5 - Satisfaction with bus fares

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

Table 3.6 - Satisfaction with bus service frequency

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

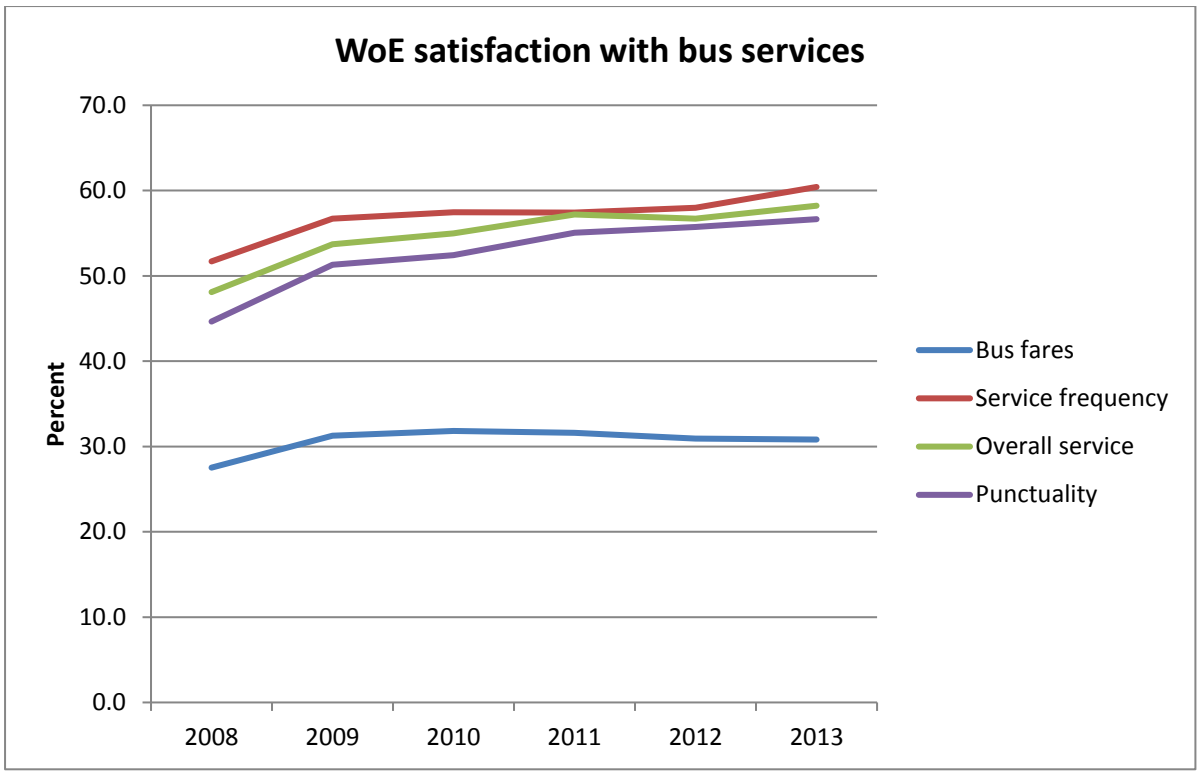
Table 3.7 - Satisfaction with bus service overall

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

Table 3.8 - Satisfaction with bus punctuality

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

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



The results on levels of satisfaction with bus services demonstrate that generally levels of satisfaction have risen since the 2010 baseline (Chart 2) – with the exception of satisfaction with bus fares, which have seen a 1% fall since 2010. Satisfaction with bus fares stands out as a category in which the public are considerably less satisfied than in other areas, and indeed, sub-regional gains in satisfaction in this area over the longer term since 2008 have been modest (+3.3%). Satisfaction with fares appears to be an area of particular concern in Bristol and Bath, with changes of -3.1% and -0.7% respectively.

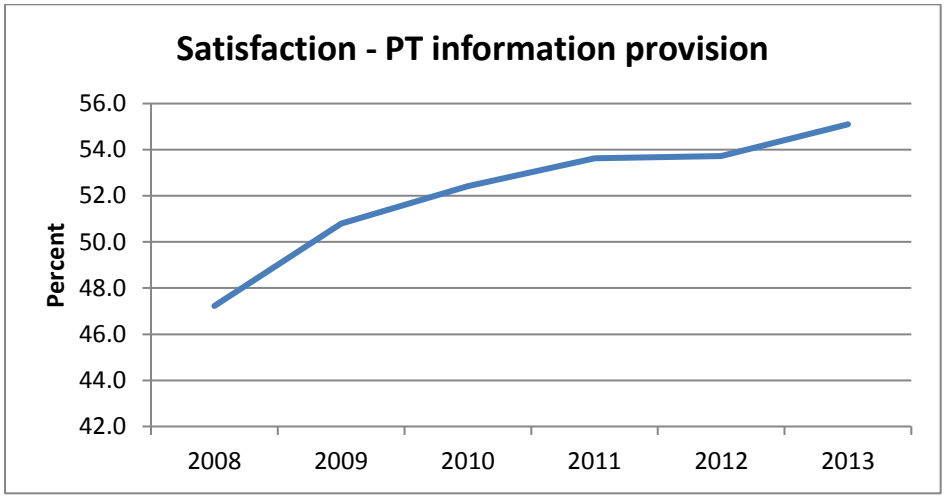
More generally, there have been gains in overall satisfaction with services in all of the UA areas, and the overall change in satisfaction across the sub-region is +3.2% since 2010. This is in line with a general positive trend of +10.1% since 2008. A comparison between trends since 2008 and 2010 suggests that the rate of increase in levels of satisfaction with bus services is perhaps slowing. The greatest change in satisfaction across the sub-region is seen in the punctuality category (+4.3%), and the lowest increase seen in the fares category (see above).

Public transport travel information

Table 3.9 - Satisfaction with public transport information provision

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

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



Satisfaction with public transport travel information provision is an area in which there has been an increase in satisfaction since the 2010 baseline. Across the WoE sub-region, there has been a change of +7.9%. South Gloucestershire is the local authority with the greatest change in levels of satisfaction, with a +11% rise since 2008.

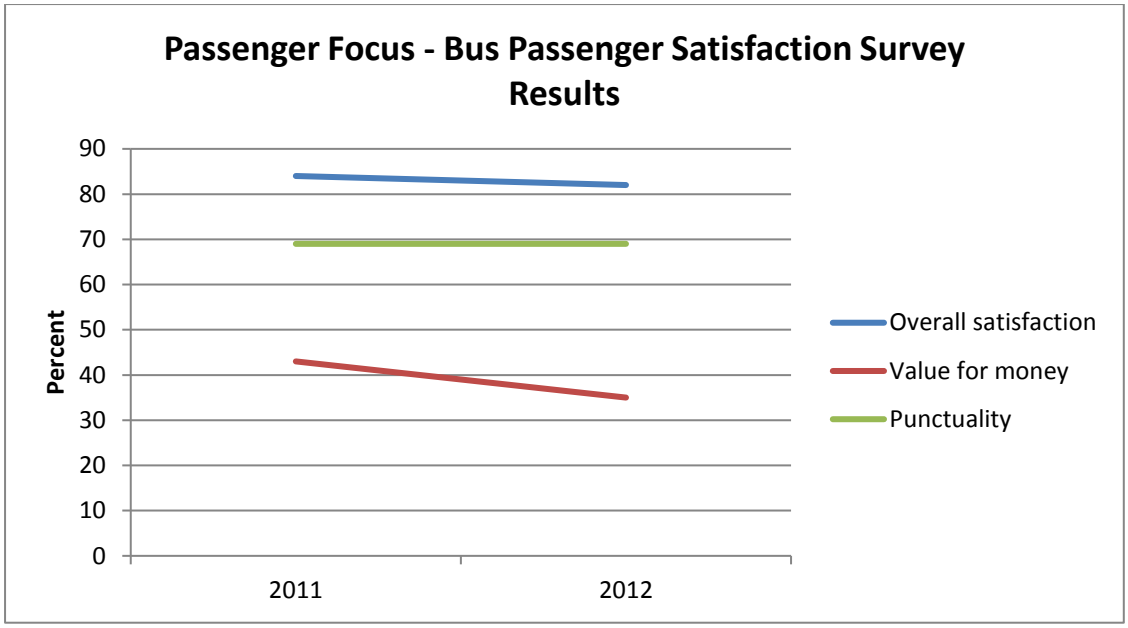
Passenger Focus Bus Passenger Satisfaction Survey – Bus satisfaction

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.

Table 3.10 - Passenger Focus - Bus Passenger Satisfaction Survey (WoE sub-region)

	2011	2012
Overall satisfaction	84	82
Value for money	43	35
Punctuality	69	69

Chart 4 - Bus passenger satisfaction survey results



Data from the BPSS is only available for 2011 and 2012. The survey results suggest a slight decline in overall satisfaction (-2%), in contrast to the general positive NHTS data trend between 2008 and 2013. However, when examining the same time periods in each set of data, it is evident that levels of satisfaction were generally either stable or fell between 2011 and 2012 for NHTS. The BPSS findings show that once again, fares are an area of particular concern, and public satisfaction with these fell by 8% from 2011 to 2012 across the WoE area.

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. 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 3.11 - 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	.9
I am considering using public transport more often sometime soon	.7
I tried to use public transport previously, but decided not to continue	16.4
I do sometimes use public transport	10.3

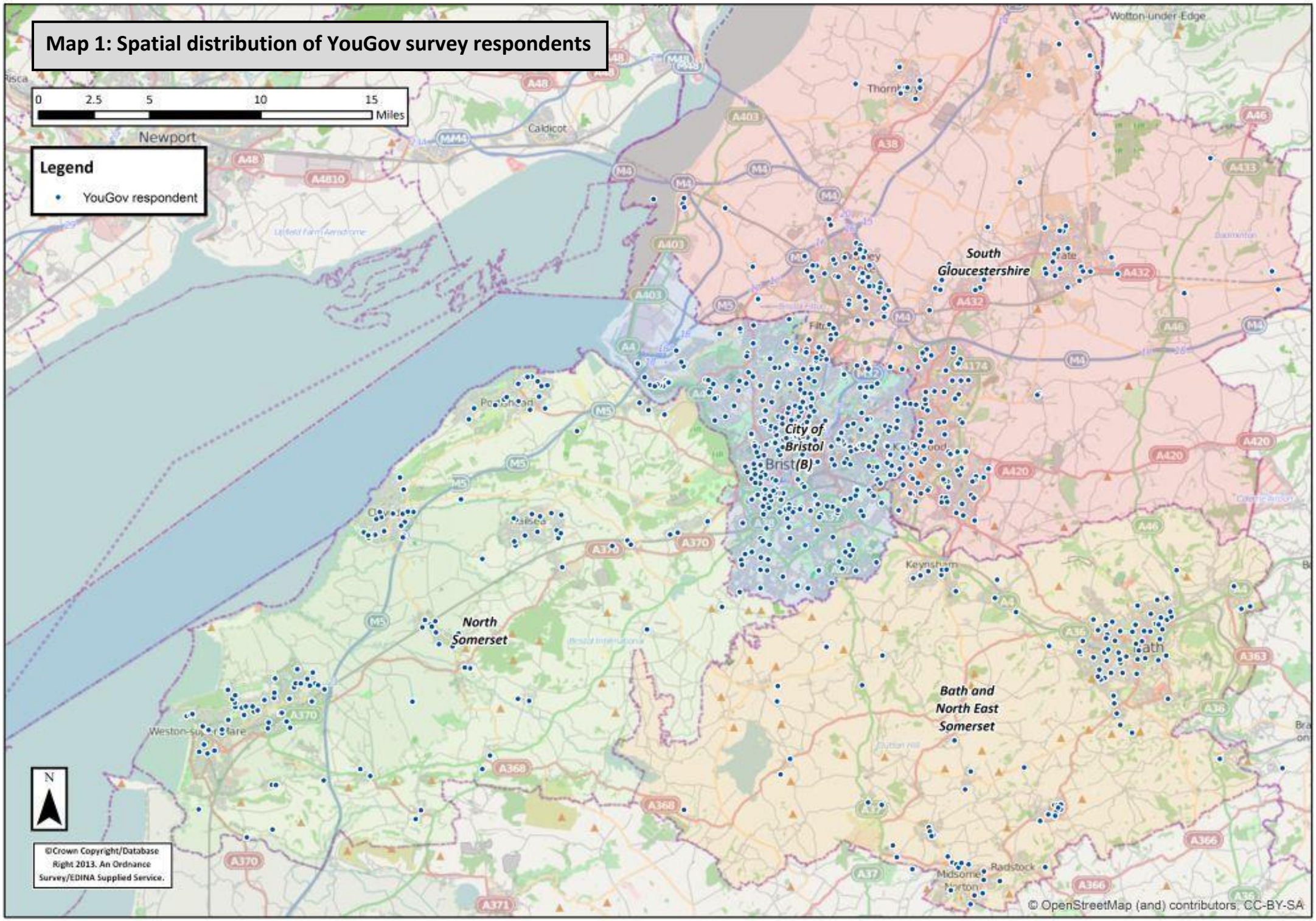

Map 1: Spatial distribution of YouGov survey respondents
0 2.5 5 10 15
Miles
Legend
YouGov respondent
Newport
Caldicot
Wotton-under-Edge
South Gloucestershire
City of Bristol (B)
North Somerset
Bath and North East Somerset
Keynsham
Weston-super-Mare
Radstock
N
©Crown Copyright/Database Right 2013. An Ordnance Survey/EDINA Supplied Service.
© OpenStreetMap (and) contributors, CC-BY-SA

Table 3.12 - Views and attitudes on car use

	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 3.13 - Views and attitudes on public transport use

	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 3.14 - Perceptions and experiences of consequences of not owning a car

	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%) and 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 active mode 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 is the main mechanism by which the WEST programme is intended to generate positive impacts relating to the economy, carbon, etc. 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 is currently restricted to 2013 and we will look to obtain historical data for 2011 and 2012 from Ipsos Mori.

In addition to the complete data presented by local authority, select categories have been drawn out and presented in Charts 5-9 to more clearly show the differences in levels of use of key modes across the sub-region.

Table 3.15 - BANES - Frequency of mode use (percent) 2013

	Daily	2-3 times p/w	Weekly	Monthly	Less/Never	N/A
Walking	58	22	9	3	6	3
Cycling	5	6	8	9	67	5
Bus	7	17	15	25	32	3
Car (or Van)	47	30	8	2	11	2
Motorcycle	1	1	1	1	91	5
Taxi/Minicab	1	2	5	24	64	3
Train	2	2	4	23	65	4
CT	0	0	1	1	94	3
DRT	0	0	0	1	90	6
P&R	2	2	6	21	65	4
Mobility aid	1	1	1	0	93	4

Table 3.16 - Bristol - Frequency of mode use (percent) 2013

	Daily	2-3 times p/w	Weekly	Monthly	Less/Never	N/A
Walking	59	21	9	2	6	3
Cycling	8	9	7	7	64	5
Bus	9	17	14	27	30	3
Car (or Van)	41	27	12	4	13	3
Motorcycle	1	1	2	2	90	5
Taxi/Minicab	1	1	5	31	57	5
Train	1	1	5	24	65	4
CT	0	1	1	2	92	4
DRT	0	1	1	1	92	5
P&R	1	0	1	6	87	5
Mobility aid	1	1	1	1	91	5

Table 3.17 - North Somerset - Frequency of mode use (percent) 2013

	Daily	2-3 times p/w	Weekly	Monthly	Less/Never	N/A
Walking	53	26	10	4	6	2
Cycling	5	6	7	10	68	4
Bus	7	11	14	23	43	3
Car (or Van)	59	24	5	1	8	2
Motorcycle	1	1	1	1	92	4
Taxi/Minicab	0	2	5	20	71	3
Train	2	1	2	16	77	3
CT	0	0	1	2	94	3
DRT	1	1	0	1	93	5
P&R	1	1	3	18	72	5
Mobility aid	1	1	0	0	92	4

Table 3.18 - South Gloucestershire - Frequency of mode use (percent) 2013

	Daily	2-3 times p/w	Weekly	Monthly	Less/Never	N/A
Walking	53	22	12	4	6	3
Cycling	6	7	7	9	66	5
Bus	6	10	14	26	39	4
Car (or Van)	59	25	5	1	7	3
Motorcycle	2	2	1	1	89	6
Taxi/Minicab	0	0	2	17	76	5
Train	1	0	2	14	79	5
CT	0	0	1	1	93	5
DRT	1	0	1	2	92	5
P&R	0	1	2	12	80	6
Mobility aid	2	1	1	0	91	5

Chart 5 - Frequency of walking by UA

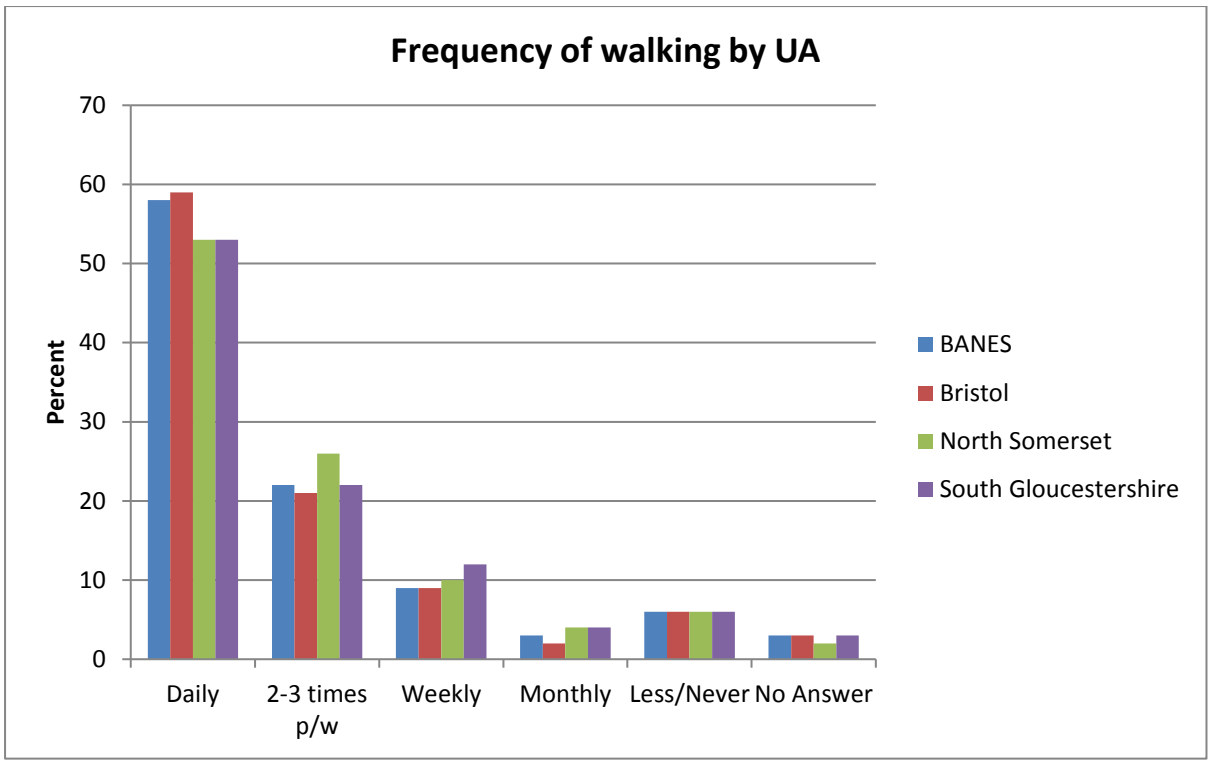


Chart 6 - Frequency of cycling by UA

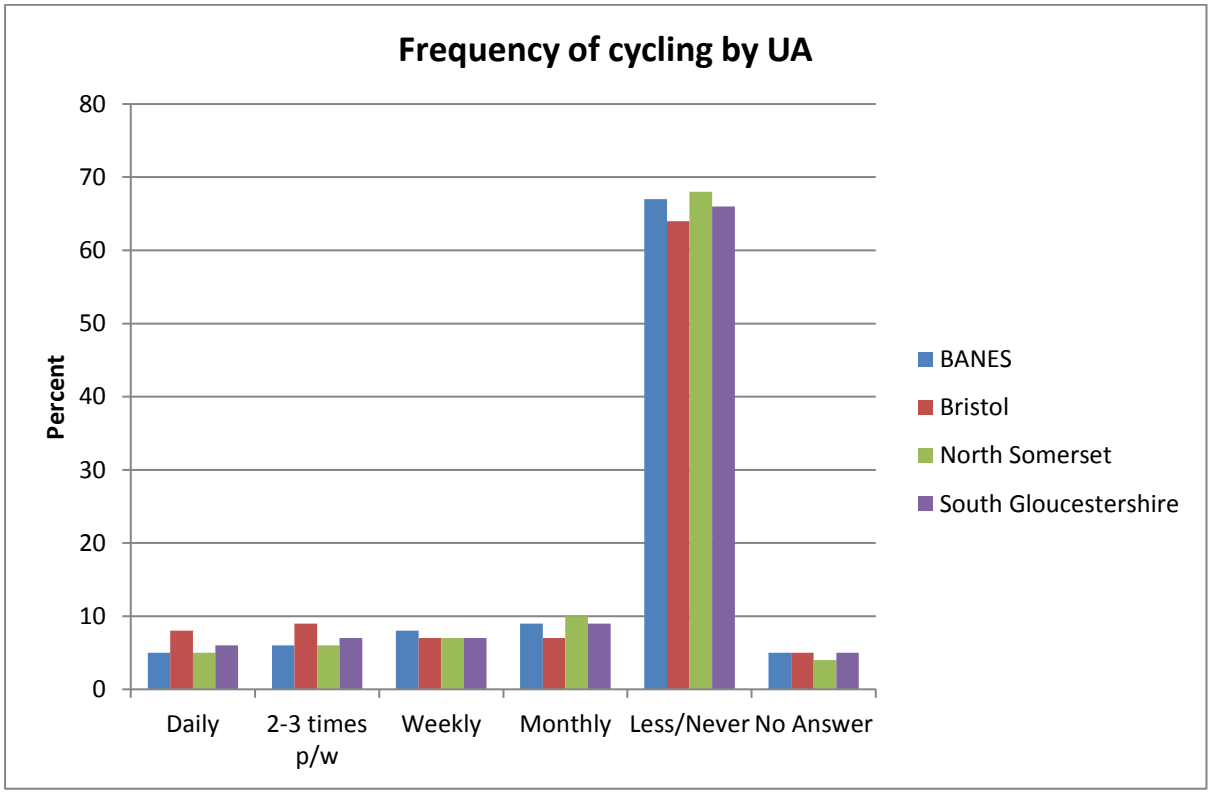


Chart 7 - Frequency of bus use by UA

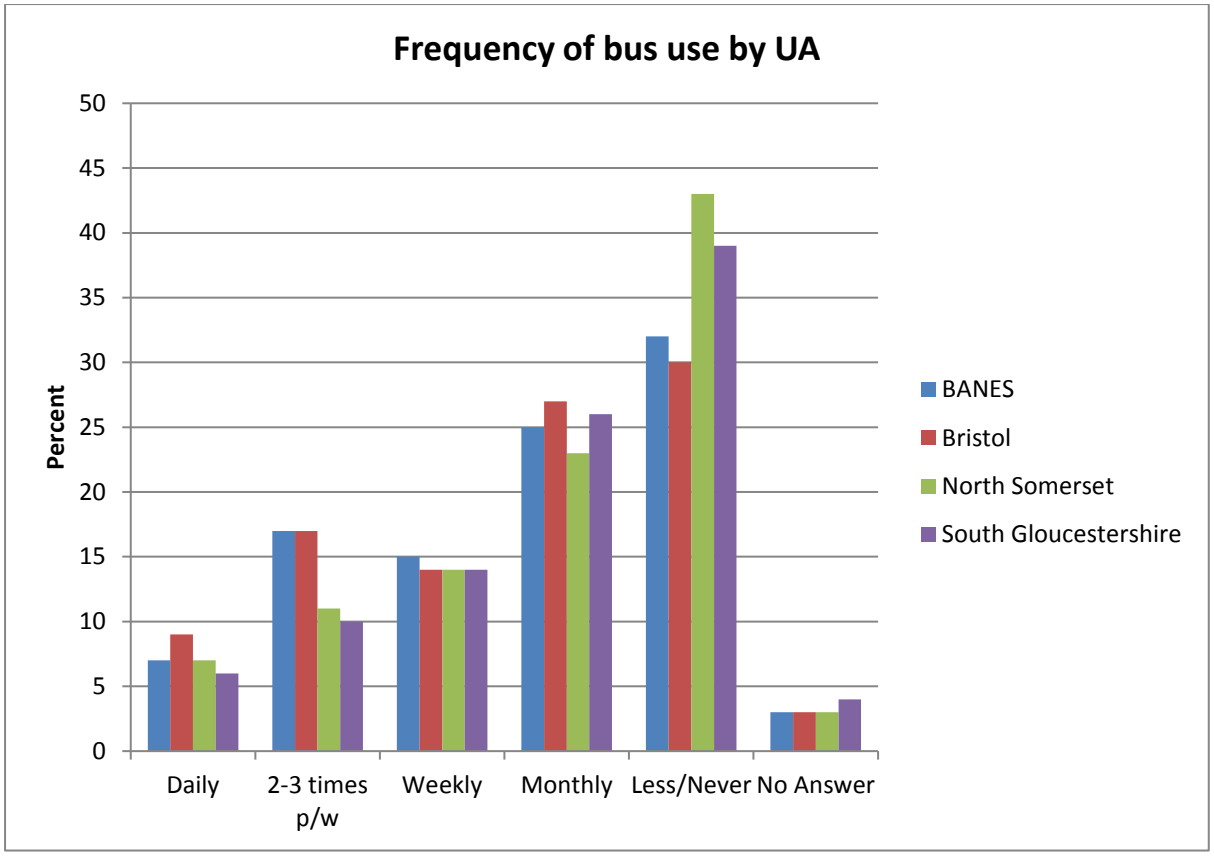


Chart 8 - Frequency of car use by UA

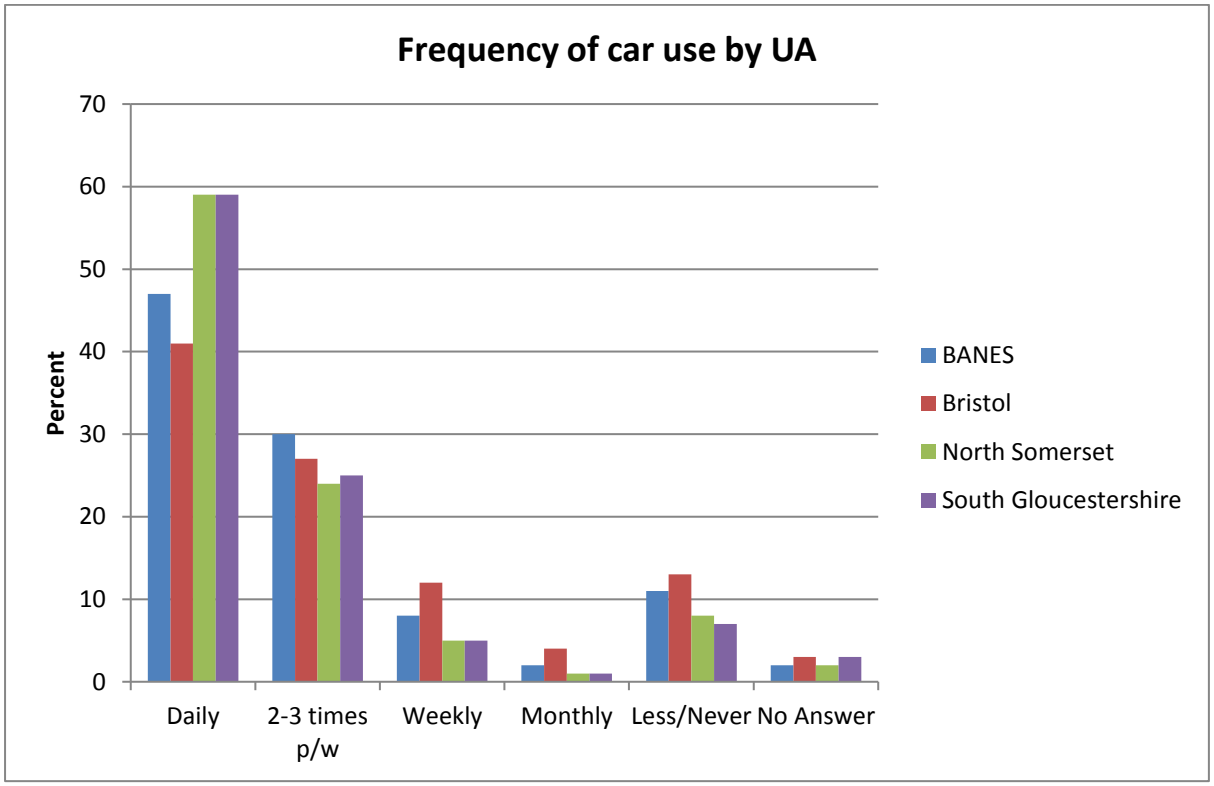
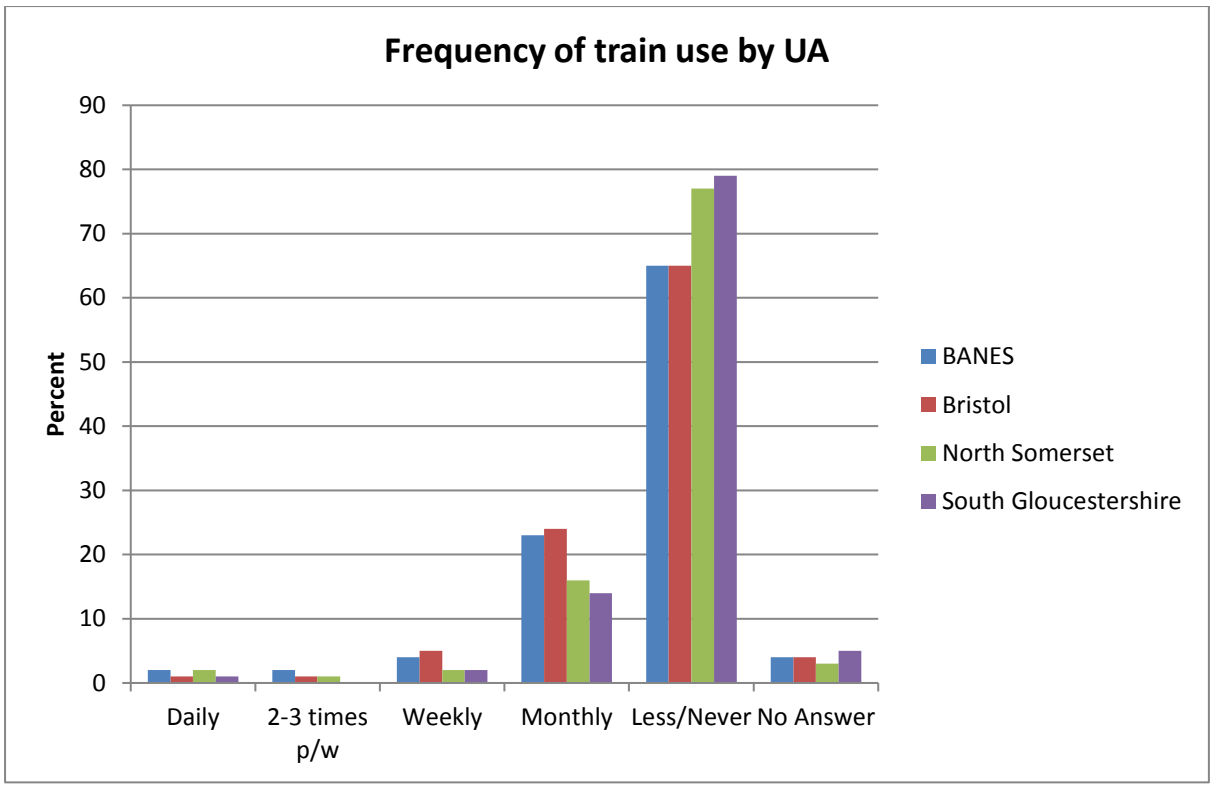


Chart 9 - Frequency of train use by UA



In Charts 5-9 the frequency of mode use for the 5 most popular modes (walking, car, bus, cycling, and train) has been drawn out for each UA. The data show that walking and car travel are the modes used most frequently, with 40-60% of people using these every day. The bus is only 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. There are consistent levels of cycling across several of the frequency categories, with 5-10% of people in each category using the bike daily, weekly, or monthly – the vast majority of people however (~60-70%) use a bike rarely or never. Very low proportions of people use the train daily or weekly (<3%), however approximately 15-25% of people use the train less frequently on a monthly basis. Again here, the majority of people either rarely or never use the train (~65-80%).

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

Vehicle flows data

Data from traffic counts will 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

An overview follows on these data, and discusses ways in which the data will be analysed. Baseline data is then presented.

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 is applied based on the ATC data. 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);
- Number of car vehicle kilometres (Table 8905); and
- Number of motor vehicle kilometres excluding trunk roads (table 8906).

We will report these data for a period including five years before the baseline year of 2010/11. Our analysis will 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.

Table 3.19 - Motor vehicle traffic (vehicle kilometres) by local authority in Great Britain

Million vehicle kilometres

Local Authority	2005	2006	2007	2008	2009	2010	2011	2012
BANES	1,142	1,173	1,189	1,189	1,153	1,120	1,134	1,129
Bristol	2,242	2,261	2,325	2,312	2,292	2,228	2,257	2,253
North Somerset	2,238	2,232	2,326	2,369	2,309	2,252	2,237	2,269
South Glos	3,702	3,790	3,853	3,837	3,786	3,739	3,747	3,668
South West Region	*48,682*	*49,668*	*50,203*	*50,594*	*49,935*	*49,168*	*49,057*	*48,608*
Great Britain*	*306.9*	*311.4*	*314.1*	*311.0*	*308.1*	*303.2*	*303.8*	*302.6*

(*Billion vehicle kilometres)

Table 3.20 - Index of motor vehicle traffic (vehicle kilometres) by local authority in Great Britain

Million vehicle kilometres

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

(*Billion vehicle kilometres)

Table 3.21 - Car traffic (vehicle kilometres) by local authority in Great Britain

Million vehicle kilometres

Local Authority	2005	2006	2007	2008	2009	2010	2011	2012
BANES	932	959	965	970	942	911	922	921
Bristol	1,822	1,839	1,879	1,875	1,869	1,807	1,834	1,832
North Somerset	1,827	1,818	1,882	1,921	1,871	1,826	1,813	1,833
South Glos	2,949	3,028	3,048	3,038	3,018	2,984	2,998	2,927
South West Region	*38,989*	*39,783*	*39,831*	*40,244*	*39,925*	*39,190*	*39,096*	*38,793*
Great Britain*	*244.0*	*246.9*	*247.3*	*245.4*	*244.8*	*239.8*	*240.7*	*240.3*

(*Billion vehicle kilometres)

Table 3.22 - Index of car traffic (vehicle kilometres) by local authority in Great Britain

Million vehicle kilometres

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

(*Billion vehicle kilometres)

Table 3.23 - Motor vehicle traffic (vehicle kilometres) excluding trunk roads by local authority in Great Britain

Million vehicle kilometres

Local Authority	2005	2006	2007	2008	2009	2010	2011	2012
BANES	1,044	1,073	1,084	1,085	1,050	1,024	1,039	1,031
Bristol	1,929	1,947	1,997	1,975	1,955	1,899	1,925	1,937
North Somerset	1,313	1,349	1,371	1,369	1,358	1,312	1,313	1,304
South Glos	1,849	1,876	1,832	1,833	1,791	1,750	1,737	1,727
South West Region	*34,258*	*34,985*	*35,292*	*35,261*	*34,847*	*34,191*	*34,016*	*33,740*
England	*290,293*	*292,761*	*295,892*	*291,796*	*288,772*	*284,021*	*282,922*	*280,664*

Table 3.24 - Index of motor vehicle traffic (vehicle kilometres) excluding trunk roads by local authority in Great Britain

Million vehicle kilometres

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

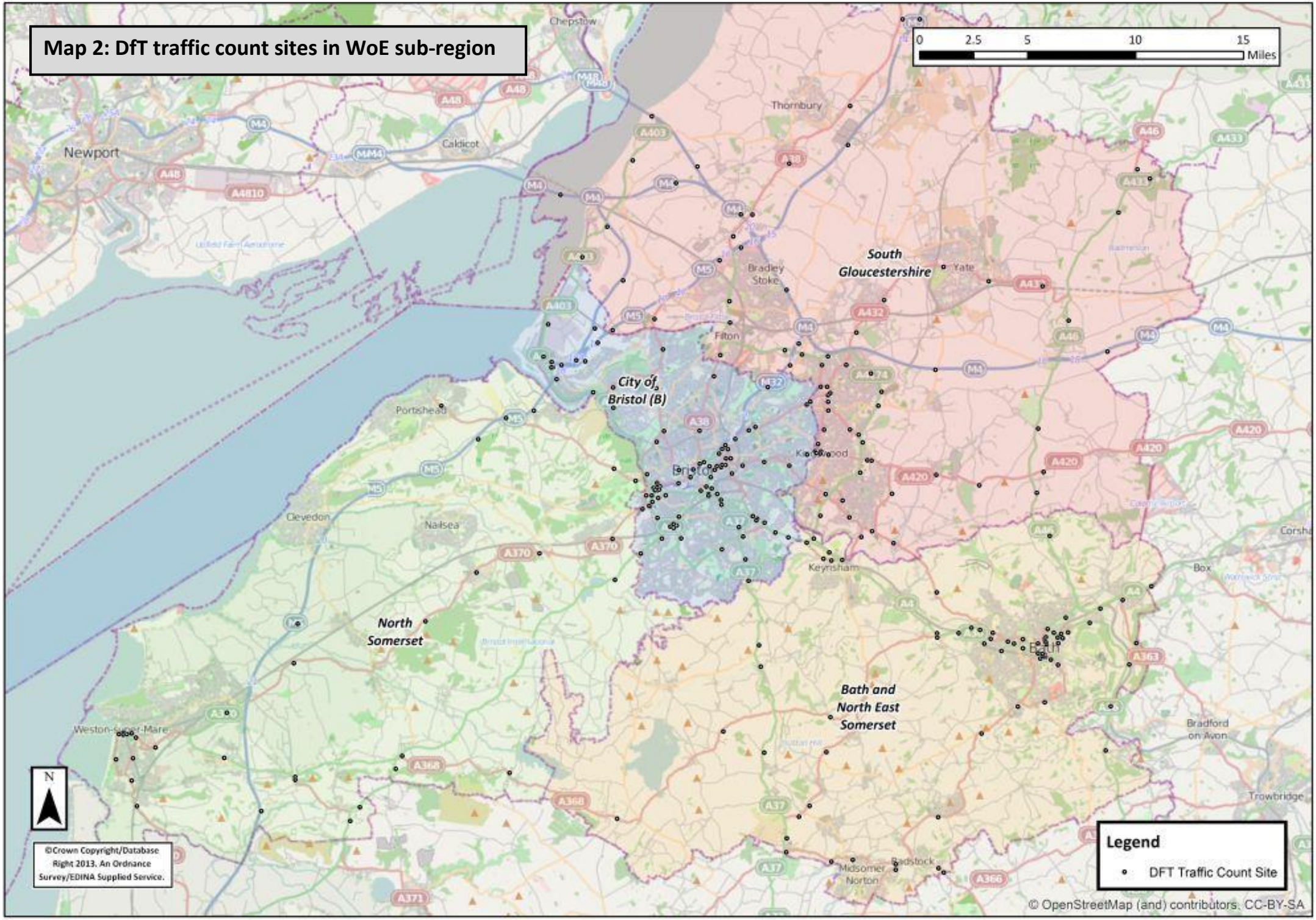
Count data collected by the DfT

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 2012). Table 3.18 shows the breakdown of the sites and indicates whether they are on the trunk road or principal road network.

Table 3.25 - 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 DfT has already used these counts to produce the National Road Traffic Estimates for each of the UAs, it will be possible to monitor trends at sub-sets of count sites 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
Chepstow
Newport
Caldicot
Thornbury
South Gloucestershire
Bradley Stoke
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
N
©Crown Copyright/Database Right 2013. An Ordnance Survey/EDINA Supplied Service.
Legend
DFT Traffic Count Site
© OpenStreetMap (and) contributors. CC-BY-SA

Count data collected by the four Unitary Authorities

Count data is also available from manual and automatic traffic counts conducted by the four UAs. The results of annual cordon counts for Bath and Central Bristol are shown below. We are assessing the availability of counter data to identify a more comprehensive approach to monitoring vehicle traffic activity in the WoE sub-region.

Table 3.26 – Traffic cordon count results

Location	Type	2005	2006	2007	2008	2009	2010	2011	2012	2013
Bath	Cordon	91878	95198	92543	85975	87267	83748	85389	80958	82212
Central Bristol	Cordon	48774	49674	45109	43439	45562	46564	47628	46814	46815

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. Note that the screenlines in some cases incorporate DfT count sites, and are created from a combination of the spatial data in maps 1 and 2, which have been presented separately for clarity at this scale. Map 4 also shows the key corridors which were identified in the WEST programme bid.

We have identified six screenlines, 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.

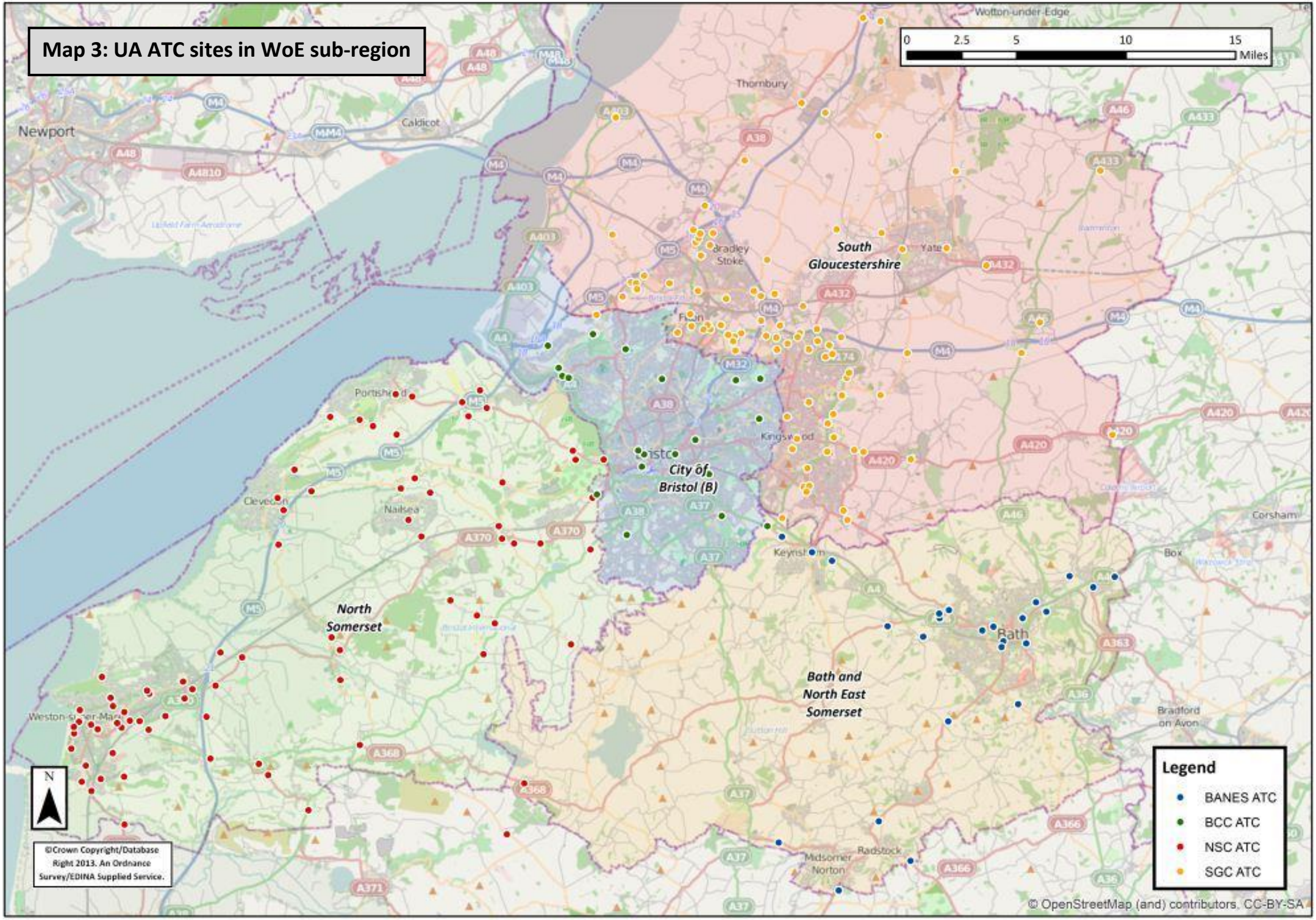
We have identified two cordons as follows:

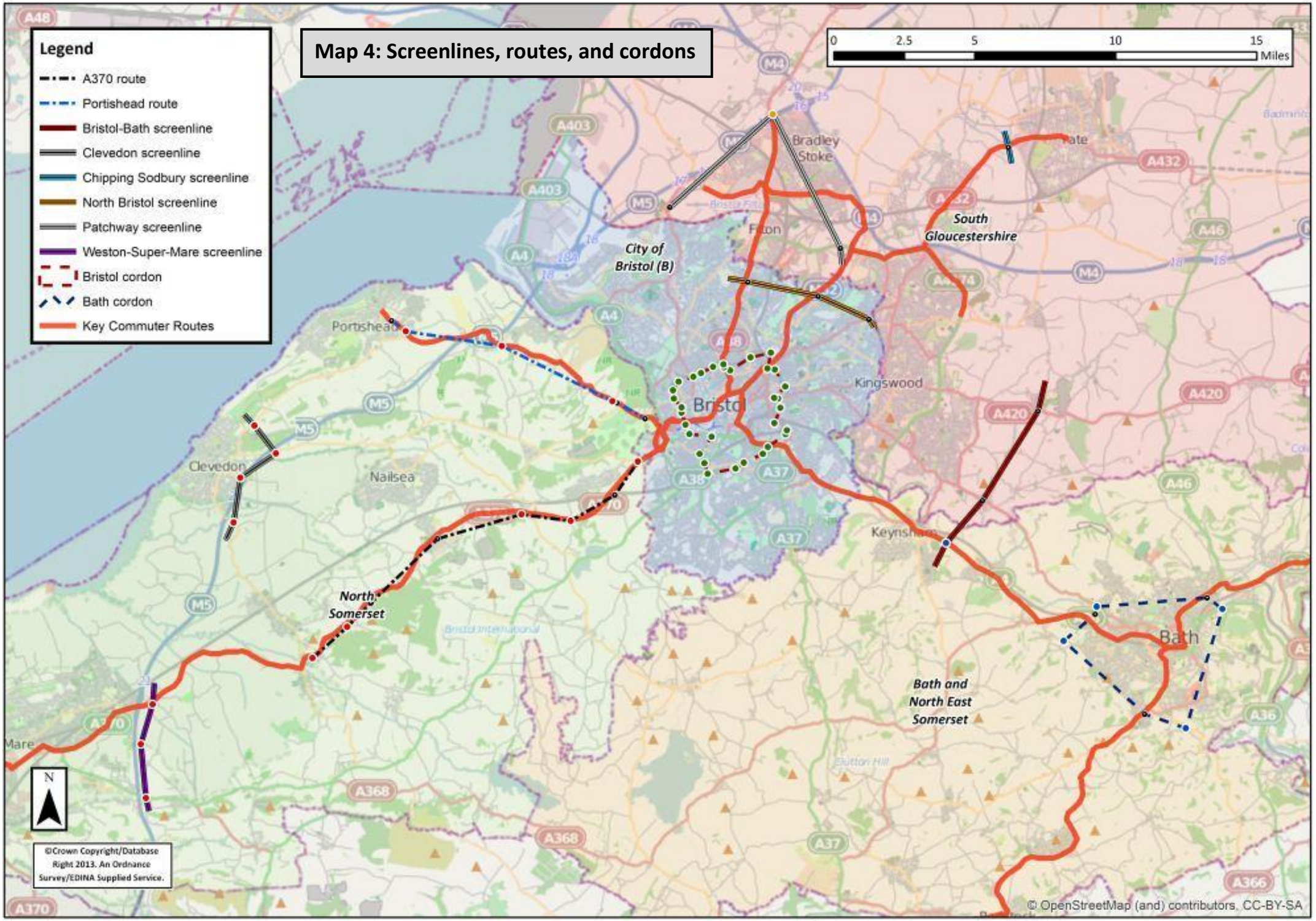
- **Bristol Central Cordon**; and
- **Bath Central Cordon**

We have identified two routes of interest:

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

Some more detailed work is required to finalise the count sites which will be included as part of these screenlines, cordons and routes. However, 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 route, 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


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
Portishead
Kingswood
City of Bristol (B)
Clevedon
Nailsea
Keynsham
Corsham
Box
North Somerset
Bath
Bath and North East Somerset
Bradford on Avon
Weston-super-Mare
Midsomer Norton
Radstock
N
Legend
BANES ATC
BCC ATC
NSC ATC
SGC ATC
©Crown Copyright/Database Right 2013. An Ordnance Survey/EDINA Supplied Service.
© OpenStreetMap (and) contributors, CC-BY-SA


Map 4: Screenlines, routes, and cordons
Legend
A370 route
Portishead route
Bristol-Bath screenline
Clevedon screenline
Chipping Sodbury screenline
North Bristol screenline
Patchway screenline
Weston-Super-Mare screenline
Bristol cordon
Bath cordon
Key Commuter Routes
0 2.5 5 10 15 Miles
City of Bristol (B)
South Gloucestershire
North Somerset
Bath and North East Somerset
Bristol
Bradley Stoke
Kingswood
Nailsea
Clevedon
Portishead
Keynsham
Bath
N
©Crown Copyright/Database Right 2013. An Ordnance Survey/EDINA Supplied Service.
© OpenStreetMap (and) contributors, CC-BY-SA

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 estimate 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, broadly speaking, the differences will be due to differences in the impact of the LSTF measures on commuting travel versus 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.

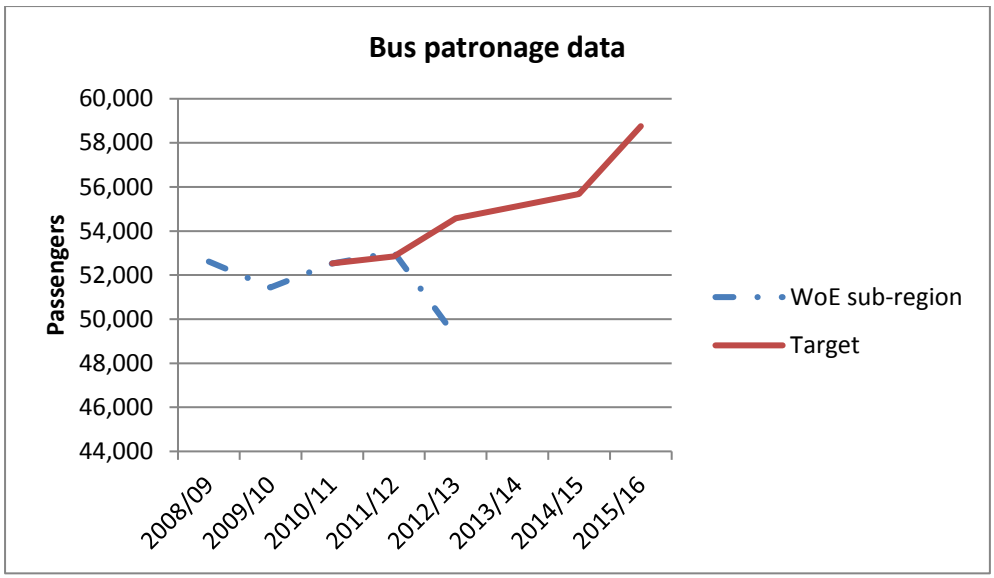
Bus patronage statistics – JLTP3 indicator

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

Table 3.27 – 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			
Target			*52,531*	*52,846*	*54,576*	*55,122*	*55,673*	*58,756*
BANES	11,753	11,280	11,898	11,913	11,015			
Bristol	27,451	27,908	28,011	28,475	25,804			
North Som.	5,118	4,909	4,776	5,061	4,963			
South Glos.	8,290	7,346	7,846	7,586	7,425			

Chart 10 - JLTP3 bus patronage data



Note: 2012/2013 figures in Chart 10 are provisional.

The bus patronage data shows a slight increase in bus patronage over the period 2010-2012; however, this is followed by an apparent 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 at revising the figures.

Cycling flows – JLTP3 indicator

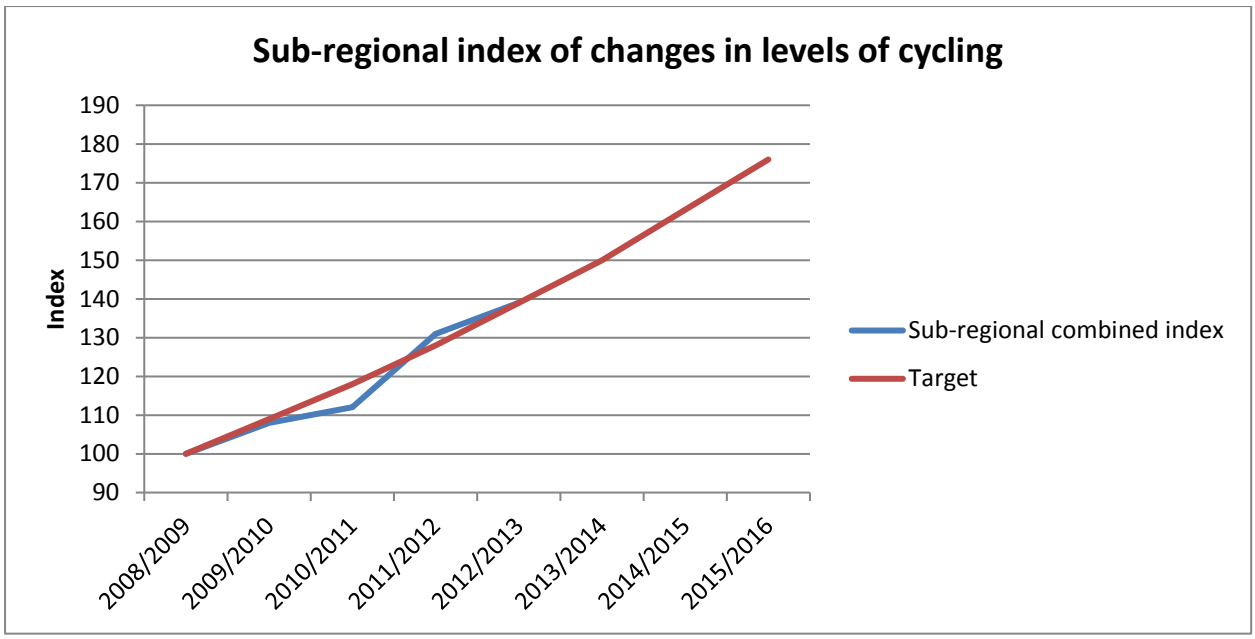
Presented below are the figures for cycling flows across the UAs, as reported in the JLTP3 dataset for 2013. Level of cycling is an important outcome indicator and accurate aggregate data on levels of cycling in the sub-region will form an important part of the evaluation of the impacts of WEST measures aimed at increasing cycling.

Table 3.28 - Combined AAWT & MCC cycling data

	08/09	09/10	10/11	11/12	12/13	13/14	14/15	15/16
Sub-regional combined index	100	108	112	131	139			
Target*	*100*	*109*	*118*	*128*	*139*	*150*	*163*	*176*
BANES	19366	24737	20585	22396	21986			
Bristol	106699	113751	120016	146093	162678			
North Somerset	14430	14613	16221	17155	15304			
South Gloucestershire	22483	23115	25459	27065	26347			
JLTP representative cycle trips	162978	176216	182281	212709	226315			

***Combined Trajectory** includes 91% increase by 2015/16 for Cycling City area (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 11 - Sub-regional index of changes in levels of cycling



Data for cycling flows shows that across the WoE sub-region there has been an increase of ~24% since 2010/11. The most recent figure for 2013 shows that the increase in cycle flows meets the target.

Within the four UAs, Bristol has seen the greatest increase in cycle flows since 2010/11, with a rise of 35.5% to 2012/13.

3.3 Congestion and reliability

This section presents results relating to congestion and reliability.

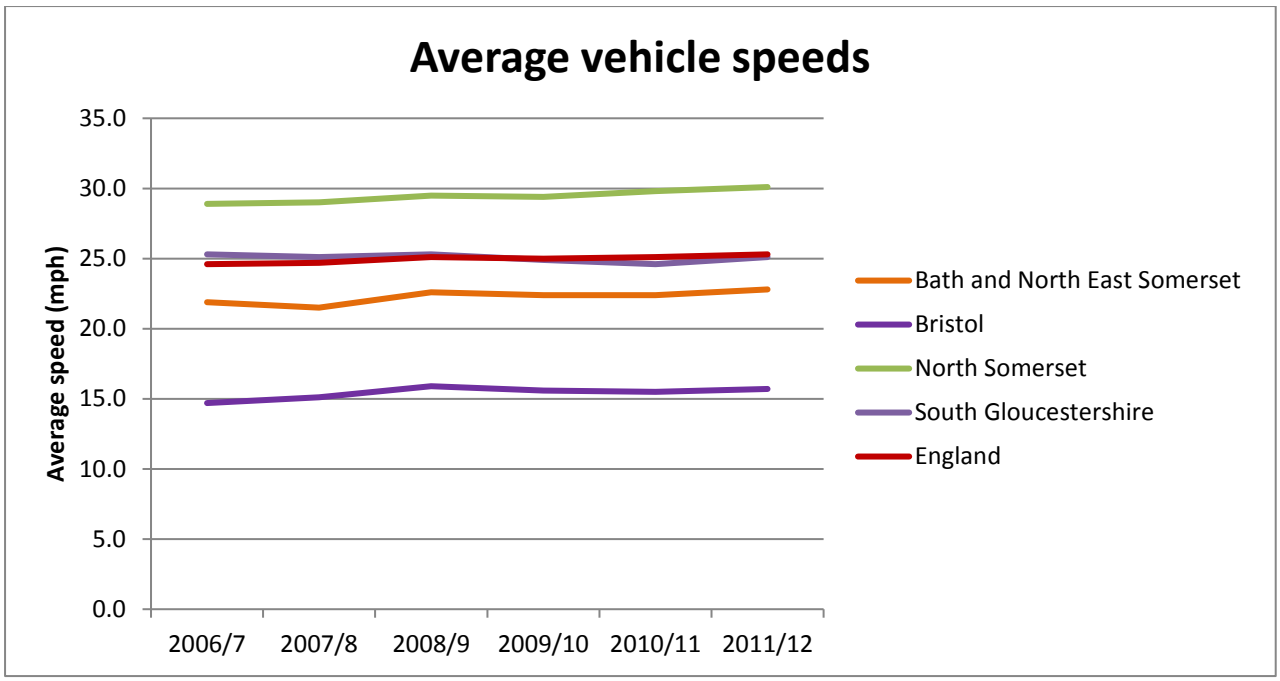
Trafficmaster data – Average AM peak journey time by mile – JLTP3 indicator

Presented below are the figures for average journey time by mile across the four WoE authorities along with national comparator data.

Table 3.29 – Average vehicle speeds during AM peak

	Average speed (mph)						
Area	**2006/7**	**2007/8**	**2008/9**	**2009/10**	**2010/11**	**2011/12**	***(% +/-) 10/11 – 11/12***
BANES	21.9	21.5	22.6	22.4	22.4	22.8	*+1.5*
Bristol	14.7	15.1	15.9	15.6	15.5	15.7	*+1.1*
North Somerset	28.9	29.0	29.5	29.4	29.8	30.1	*+0.8*
South Glos	25.3	25.1	25.3	24.9	24.6	25.1	*+2.0*
England	*24.6*	*24.7*	*25.1*	*25.0*	*25.1*	*25.3*	*+0.8*

Chart 12 - Average vehicle speeds



Average vehicle speeds have remained relatively stable since 2010/11, and this is consistent with the national average.

South Gloucestershire has shown the greatest rise in average vehicle speeds across the period 2006/07-2011/12, with an increase of 2.0%. Bristol has the lowest average vehicle speeds (~15mph), whilst North Somerset has the highest (~29mph). This is a reflection of the different urban and transport network densities of the two areas.

Trafficmaster data – Journey time variability

Potentially, Trafficmaster data could be processed to assess journey time variability at different spatial levels (authority-wide, specific routes). This is a significant undertaking and we are currently assessing the viability of developing this analysis.

Bus punctuality data – JLTP3 indicator

Presented below are the figures for bus punctuality across the WoE sub-region. In addition to the average vehicle speeds 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 3.30 - Percentage of buses starting on time

	05/06	06/07	07/08	08/09	09/10	10/11	11/12	12/13
Actual	66.5	74.6	64.1	75.7	77	79.4	80.9	83
Target	*66.5*	*67.5*	*68.5*	*70.5*	*71.5*	*74.5*	*78.4*	*82.3*

Table 3.31 - 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
Actual	51.5	58.6	56.2	61	61.8	70.2	70.9	71
Target	*51.5*	*53.1*	*54.8*	*58.4*	*60*	*64.6*	*71*	*77.3*

Table 3.32 - 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
Actual	2.92	2.73	2.36	2.23	1.52	1.22	1.32	0.93
Target	*2.92*	*2.75*	*2.6*	*2.3*	*2.15*	*1.85*	*1.7*	*1.55*

Chart 13 - Percentage of buses starting on time

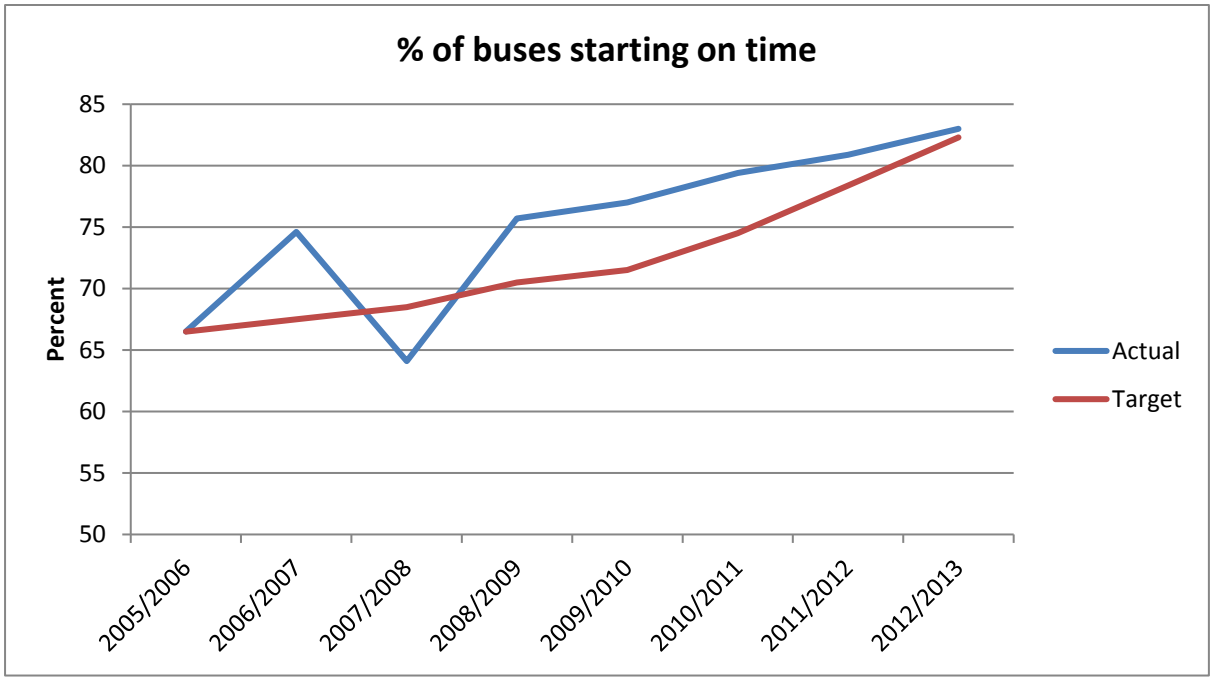


Chart 14 - Percentage of buses on time at intermediate timing points

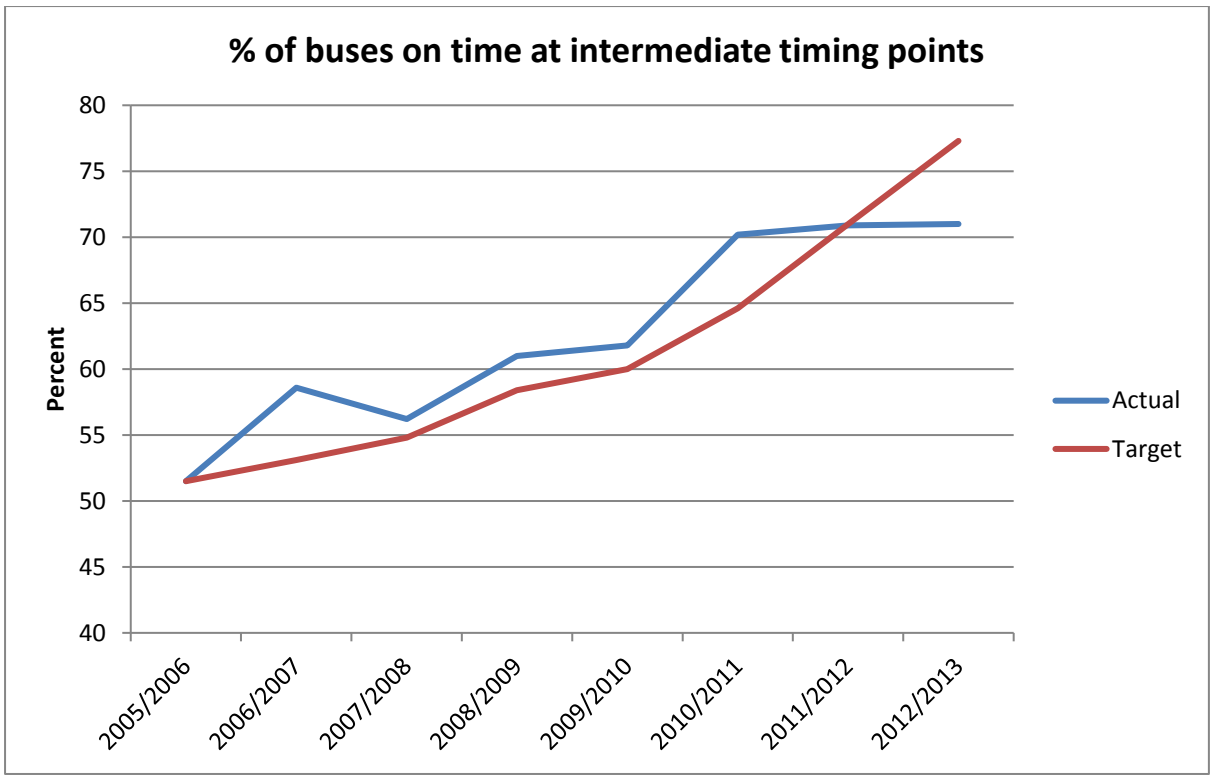
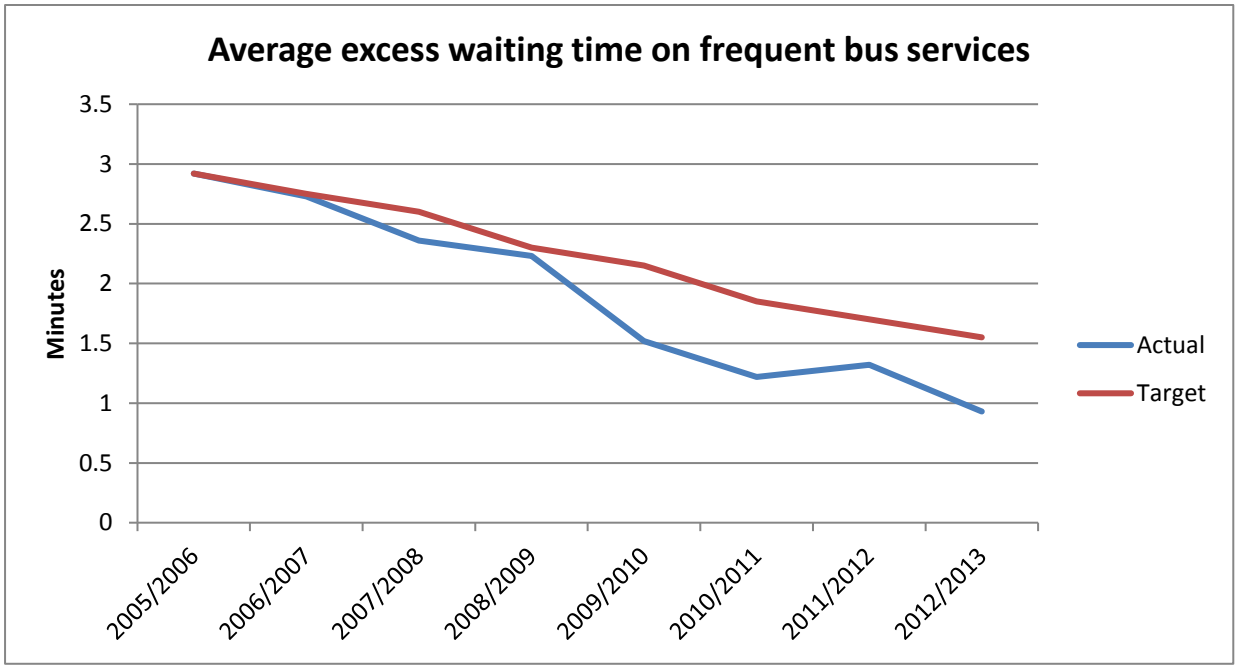


Chart 15 - Average excess waiting time on frequent bus services



The results for bus punctuality demonstrate that generally the WoE sub-region is ahead of target in this area. Improvements in bus punctuality have been made in the period 2010/11 - 2012/13, and this continues a positive trend since 2005/06

Since 2010/11, 3.6% more buses are starting on time, 0.8% more buses are on time at intermediate timing points (although this figure has dipped below the target in 2012/13), and average excess waiting times are down by 0.3 minutes.

To contextualise this trend – since 2005/06, 15.8% more buses are starting on time, 19.5% more buses are on time at intermediate timing points, and average excess waiting times are down by two minutes from almost three minutes in 2005/06 to just under one minute in 2012/13.

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 CO_2 emissions across the four UAs, and at the WoE sub-regional level.

Table 3.33 - Total Kt CO_2 for Road Transport

	2006	2007	2008	2009	2010	2011
B&NES	265.9	267.8	261.0	247.6	243.4	239.4
BCC	476.8	488.5	475.5	461.6	446.8	441.6
NSC	310.6	315.3	309.9	300.8	291.2	285.8
SGC	425.9	436.4	427.9	411.4	402.0	392.6
WoE	*1479.2*	*1508*	*1474.3*	*1421.4*	*1383.4*	*1359.4*

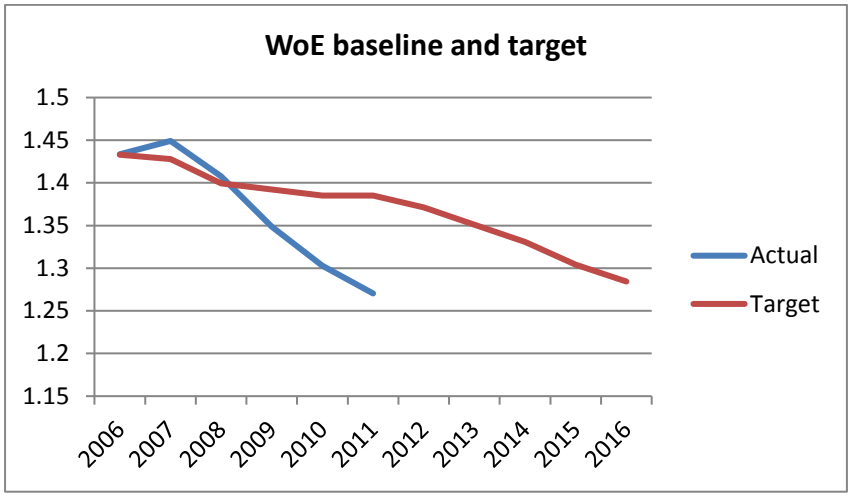
Table 3.34 - CO_2 Per Capita Emissions: Transport

	2006	2007	2008	2009	2010	2011
B&NES	1.55	1.55	1.50	1.43	1.40	1.36
BCC	1.17	1.19	1.15	1.10	1.06	1.03
NSC	1.58	1.58	1.54	1.49	1.43	1.41
SGC	1.67	1.70	1.66	1.58	1.54	1.49
WoE	*1.43*	*1.45*	*1.41*	*1.35*	*1.30*	*1.27*

Table 3.35 - WoE baseline and target

	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Actual	1.433472	1.449	1.408	1.349	1.303	1.270	N/A	N/A	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 16 - CO_2 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 to well beneath target levels year-on-year.

Reductions in $C0_2$ emissions have been recorded across all four of the UAs, and at the area-wide levels emissions of CO_2 from road transport have fallen by 119.8kt since 2006. This represents an overall reduction of 8.1%.

DVLA licensing data – Low emissions vehicles statistics

A request for this data was submitted to DfT in October 2013 through the '.gov' statistics service – but the data has not been provided to date. The data for this will be sought further and included in the next AOMR for 2013/14.

3.5 Access to employment and commercial centres

Accession – Access to employment and key commercial centres

A replacement for the Accession accessibility model is currently being investigated by the WoE UAs, and there is the possibility that use of Accession will be discontinued. An update on the situation will be included in the AOMR for 2013/14.

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

Presented below are figures for levels of employment and unemployment in the WoE sub-region. This data has been sourced from the West of England Partnership Labour Market report, and this data will provide a useful aggregate perspective on the state of the economy in the West of England sub-region.

Table 3.36 – Employment data for WoE sub region

Indicator	2009/2010	2010/2011	2011/2012	2012/2013
Employment level	536,500	543,100	535,800	545,200
Employment rate	74.6	74.8	72.6	73.6
Unemployment level	36,400	36,400	44,400	40,100
Unemployment rate	6.3	6.3	7.7	6.7

Labour market data shows that since 2010/11 the West of England sub-region has seen an improvement in some of the metrics, but a decline in others. At the overall level, the employment level has risen – with 2,100 more people in employment in the sub-region. At the same time however, the employment rate is slightly lower than in 2010/11, with a 1.2% decline in the proportion of people in the sub-region in employment. Similarly, the unemployment level has risen – with 3,700 more people in unemployment; the unemployment rate has also risen, with 0.4% more people in unemployment in 2012/13 than in 2010/11.

This suggests that whilst additional jobs have been created in the sub-region, more people are registering as available for work and recorded as unemployed.

3.6 Air quality and road casualties

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

AQMA data – NO_2 levels – JLTP3 indicator

Presented below are the figures for nitrogen dioxide levels in two AQMA areas, one in Bath, and one in Bristol.

Table 3.37 – Bristol AQMA data

µg/m³ of nitrogen dioxide

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Actual	48	40.3	49.5	48.7	48.53	45.3	51	45.2	43.27
Target	*48*	*47.6*	*47.3*	*47*	*46.7*	*46.3*	*46*	*45.6*	*45.2*

Table 3.38 – Bath AQMA data

µg/m³ of nitrogen dioxide

	2004	2005	2006	2007	2008	2009	2010	2011	2012
Old AQMA Actual	53.3	62	69	62	65	63	60	57	56
Old AQMA Target	*53.3*	*52.2*	*51.2*	*50.2*	*49.1*	*48.1*	*47*	*46*	*45*
Extended AQMA Actual	40	49	55	48	50	49	50	45	46

Chart 17 - Bristol AQMA data

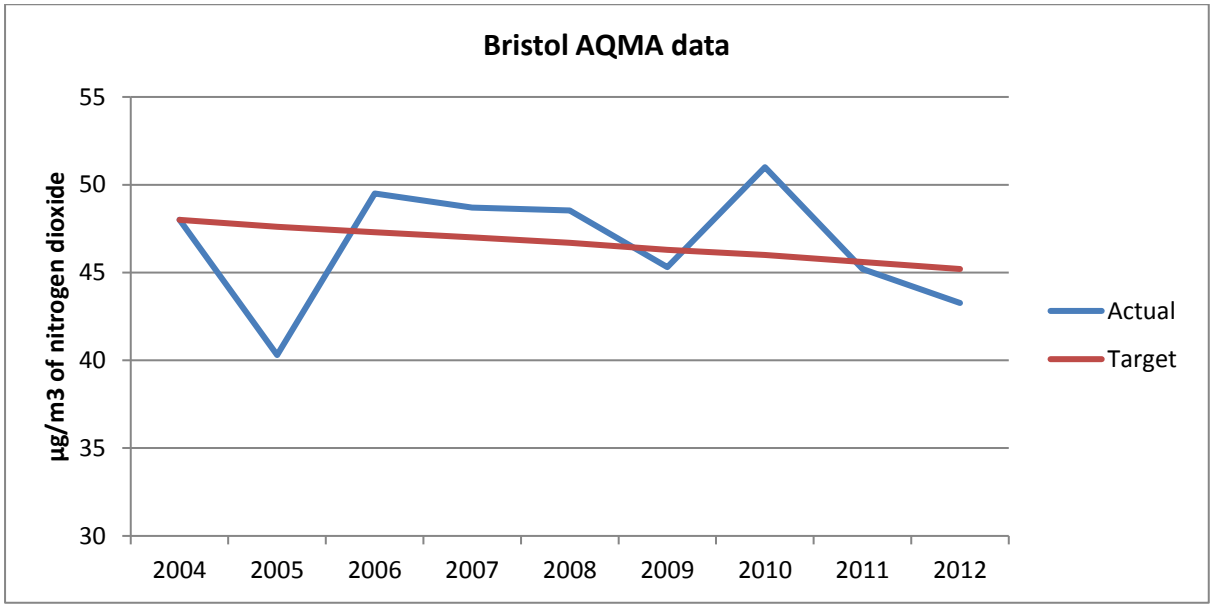


Chart 18 - Bath AQMA data

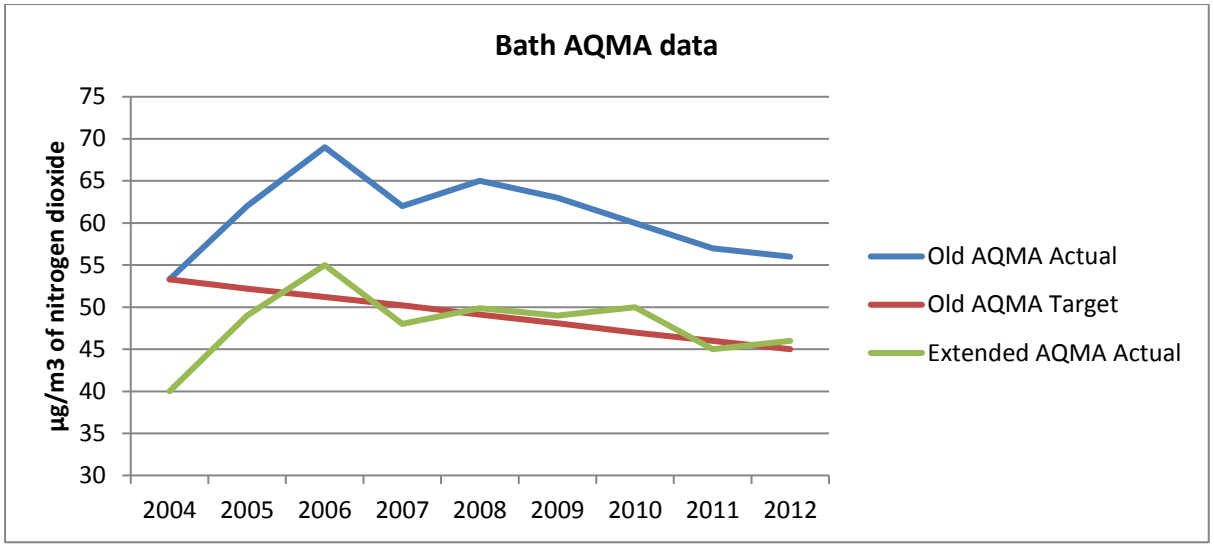


Table 3.39 – South Gloucestershire AQMA data

	Kingswood				**Staple Hill**			
Year	Average Annual Mean AQMA Sites (µg/m³)	**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

The AQMA results for Bath, Bristol, and South Gloucestershire show a mixed picture.

In Bath, air quality has not seen an improvement since 2004 levels, although there has been an improvement over the period 2008-2012 from peak NO_2 levels of 2006. The old AQMA target for NO_2 has not been met, although the extended AQMA results exceeds the target only slightly. In Bath, there has been an increase of 6µg/m^3 NO_2 within the extended AQMA over the period 2006-2012.

In Bristol, there has been a general improvement in air quality since 2006, although there has been considerable fluctuation in levels of NO_2 year-on-year. In Bristol, there has been a reduction of 4.7µg/m^3 NO_2 within the AQMA over the period 2006-2012.

In South Gloucestershire, there has been an increase of 3µg/m^3 NO2 in Kingswood from 2010-2012 and a decrease of 2.9µg/m^3 NO2 over the same period in Staple Hill. Focussing specifically on exceeding sites, the same pattern is observed, with an increase of 1.4µg/m^3 NO2 in Kingswood from 2010-2012 and a decrease of 0.4µg/m^3 NO2 over the same period 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 3.40 - 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 Bristol QoL results show that in Bristol there has been a decrease in the percentage of people reporting a problem with the air quality and traffic pollution in their neighbourhood. Over the period 2009-2012, there has been a decrease of 8% in this percentage.

This result is a tentative corroboration of the air quality data in the previous section, which showed a modest fall in NO_2 levels within the AQMA in Bristol.

STATS19 data – Road casualties KSI – JLTP3 indicator

Presented below are the figures for the numbers of road casualties killed or seriously injured (KSI) across the four UAs in the sub-region.

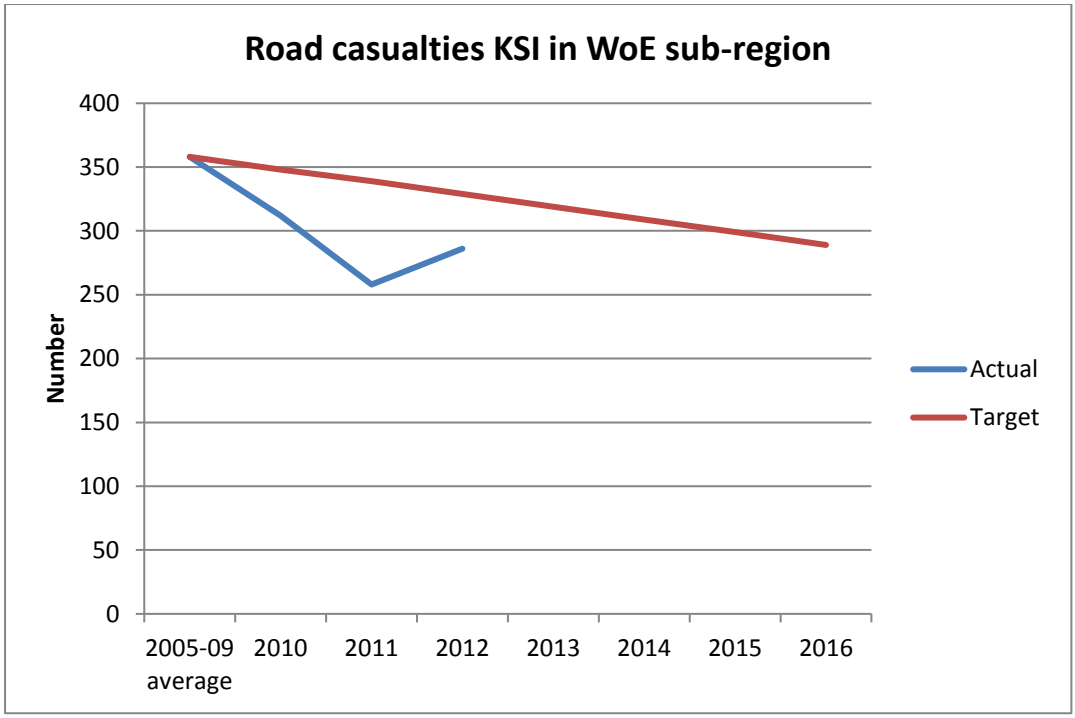
Table 3.41 – Road casualties KSI in the WoE sub-region

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

Table 3.42 - STATS19: Detailed statistics (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 19 - 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 2005-2012. In total, in 2012 there has been a reduction of 20.0% in the number of road casualties from the 2005-2009 average figure.

3.7 Physical activity

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

Active People Survey – Levels of Walking and Cycling

The results below show authority-level data for walking and cycling activity in the WoE sub-region.

Note: the Active People Survey (APS) data for the years 2011/2012 is incorrect in the reports issued by the DfT. We are working to acquire the complete APS datasets to construct our own time-series for this data, and this will be included in next AOMR for 2013/14.

Table 3.43 - Proportion of residents who walk or cycle for at least 30 minutes, at least once per month

	2010/2011	2011/2012
BANES	78	
Bristol	76	
North Somerset	71	
South Gloucestershire	72	
South West Region	*75*	
England	*72*	

Table 3.44 - Proportion of residents who cycle for at least 30 minutes three or more times per week

	2010/2011	2011/2012
BANES	1	
Bristol	7	
North Somerset	2	
South Gloucestershire	4	
South West Region	*3*	
England	*2*	

Table 3.45 - Proportion of residents who walk for at least 30 minutes three or more times per week

	2010/2011	2011/2012
BANES	38	
Bristol	31	
North Somerset	30	
South Gloucestershire	28	
South West Region	*31*	
England	*29*	

Table 3.46 - Proportion of residents who walk or cycle for at least 30 minutes, at least once per month, for utility purposes

	2010/2011	2011/2012
BANES	42	
Bristol	50	
North Somerset	31	
South Gloucestershire	37	
South West Region	*35*	
England	*36*	

Bristol Quality of Life Survey – Levels of cycling

Presented below are figures for levels of cycling amongst local residents in Bristol. 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 3.47 – Percentage of people cycling at least once a week

	2009	2010	2011	2012
Percentage of respondents who ride a bicycle at least once a week	15.5	15.0	14.3	15.1

Table 3.48 – Percent of respondents using different modes for work

	2009	2010	2011	2012
Car (as driver)	55	54	49	47
Car (as passenger)	5	5	7	7
Bus	10	10	14	13
Cycle	9	10	7	8
Walk	17	17	17	17

The data shows that the proportion of people cycling at least once a week has remained relatively stable since 2010. In terms of journeys to work, it is evident that there has been a decline in the proportion of people driving to work since 2010, with 7% fewer people travelling to work as the car driver. This has been matched by a rise in the proportions of people getting a lift to work as the passenger, and also using the bus. Levels of cycling to work have fallen from 10% to 8% since 2010, whilst walking has remained the same.

The relatively stable levels of cycling reported from the QoL survey (for general cycling and for commuting) for 2009 – 2012 are in contrast to cycle count data which shows a 43% increase in cycle flows in the Bristol area over the period 2008/09 to 2012/13. Census data shows that the percentage of employed Bristol residents cycling to work increased from 4.9% in 2001 to 8.1% in 2011. An assessment will be made of the sampling process used in the QoL survey and whether sampling error or bias may need consideration.

4. Business Engagement

This section describes progress with delivery and collection of outcome data for the Business Engagement project area. It reports baseline results where available. This section is broken down into the following areas of activity, reflecting the OMP:

- 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. This category also includes:

- Sustainable Travel Roadshows
- Supporting activities

Employer grants and Sustainable Travel Roadshows are included as headings in the Annual Outputs Report submitted in July 2013. An additional category, 'Supporting activities', has been included under the Area Travel Plans section to cover those items not described in the Annual Outputs Report. This category includes meetings, setting up of travel forums, car sharing and any other engagement-type interventions that have been undertaken in the reporting period 1st April 2012 to 31st March 2013.

4.1 Delivery progress with Area Travel Plans and Employer Grants

This section describes progress with delivery of Area Travel Plans and employer grants in the reporting period, including Sustainable Travel Roadshows and supporting activities.

Employers across the whole WoE sub-region constituted the target group for business engagement activities, including visits from the Sustainable Travel Field Team (also referred to as the Roadshow Team) and implementation of on-site measures funded through employer grants. These interventions were implemented across the four UAs. Sections 4.1.1 and 4.1.2 therefore report on employer grants and roadshows across all four UAs.

However, there are three strategic employment areas which are a particular focus of the monitoring and evaluation strategy: Portside, North Fringe and Bristol Airport. An Area Travel Plan is being developed for each of these employment areas. Each of these areas has clusters of employers and the Area Travel Plans are intended to facilitate site-specific packages to enhance access by alternatives to the car. These include: the provision of grants to employers to implement on-site measures (4.1.1); the setting up of car-share groups (4.1.3); the provision of information about travel options (e.g. travel maps – 4.1.3) and the implementation of off-site infrastructure measures such as new/enhanced bus services (e.g. the X18 service to the North Fringe - see Chapter 6) and cycle routes (see Chapter 5).

The development of the Area Travel Plans also includes the aim of developing existing or establishing new networks of employers to work together to identify issues and solutions. In the North Fringe (South Gloucestershire), this has involved the development of close links between the LSTF team and SusCom – the North Bristol Sustainable commuting network, comprising 19 employers. This process of collaboration was gearing up during the latter part of the reporting period. An existing Area Travel Plan developed by Suscom was reviewed, and plans for updating and extending this were initiated.

A list of meetings held between the LSTF Business Engagement Account Manager (South Gloucestershire) and the SusCom Director from January 2013 is included in Table 4.4. Sixteen of the SusCom members companies took part in the 2013 travel to work survey, reported in section 4.3. The LSTF Business Engagement Account Manager (Portside) attended meetings of the SevernNet business network between December 2012 and February 2013, and these are listed in Table 4.4.

At Bristol Airport a new Staff Travel Plan was produced during the reporting period (August 2012). This sets out mode share targets for 2015 along with proposed measures designed to achieve them. The LSTF Business Engagement Account Manager (North Somerset) attended the Airport Transport Forum in May 2012 and November 2012 (Table 4.4).

Because of the focus on the three Area Travel Plans within the monitoring and evaluation strategy, the results reported in this chapter draw on the travel to work surveys conducted in these areas during 2012/13.

Overall, the following employers have been engaged during the reporting period in the sub-region (including, but not limited to the Area Travel Plan areas. The list includes businesses with whom engagement meetings were held and/or took part in the spring 2013 surveys[4] in the Area Travel Plan areas.

Bristol	**B&NES**
Hamptons	Employers in the city centre including
Veale Wasbrough	independent retailers and retailers located
Parkview	in Southgate Shopping Centre, plus:
Bristol University	Bath Spa University
Arup	Gradwell Communications
Base Structures	Bath Riverside
Bristol Prison	WSP
Bristol University	Crest Nicholson for Bath Riverside
City of Bristol (Hengrove)	Royal United Hospital
Clarke Willmott	Buro Happold
College of Law	Somer Housing
DAS	Wessex Water
Highways Agency	Aquaterra Leisure
Knightstone Housing	University of Bath
Police Bridewell	Curo
Pukka Herbs	CFH Total Document Management
South Bristol Hospital	Sirona Care and Health
St Brendans	Avon and Somerset Police
Vehicle Certification Agency	Bath and NE Somerset Council
Wind Prospect	

[4] In the Portside area, the list comprises those employers who submitted more than 5 responses to the Travel to Work survey, plus those with whom engagement meetings were held.

North Fringe (South Gloucestershire)

Airbus
Atkins
Avon and Somerset Police
Boeing
Bristol and Bath Science Park
Friends Life
GE Capital
Hewlett Packard
HTF
ISG Pearce
John Lewis
Kendall Kingscott
Knorr-Bremse
MITIE
Ministry of Defence North
Ministry of Defence South
Mouchel
National Composites Centre
NHS South Gloucestershire
NHS Blood and Transfusion Service
North Bristol NHS Trust, Frenchay Hospital
Rolls Royce
Selex
South Gloucestershire and Stroud College
South Gloucestershire Council
ST Microelectronics
University of the West of England

Portside (South Gloucestershire, Bristol and North Somerset)

A Gas
Accolade Wines
Avon and Somerset Police
Bristol Port Company
DS Smith Packaging
Elemis
GKN Aerospace
IDS Refrigeration
John Lewis Partnership
New Earth Solutions
Post Office/Royal Mail
Powersprays UK
Siniat
Tocris
Toyota UK
Warburtons
Wessex Water
Yankee Candles
IJS Global
Toyota UK
ASDA

North Somerset

Employers located at Bristol Airport and those located in its surroundings, including the Langford Veterinary School.

Additional organisations with whom meetings were held:
Knightstone Housing
Nailsea Chamber of Commerce
Nailsea Shopping Centre
Edwards Vacuums
Weston College
Weston Hospital

4.1.1 Employer grants

In 2012/2013, 37 grants were awarded to employer organisations. Twenty two of the grants were for cycling facilities, principally cycle parking, showers, changing facilities and electric bikes. Other funded schemes included RTPI displays, car-share signage, a car-share private group, motorcycle parking, leasing electric vehicles, general changing and drying facilities, and a high visibility winter campaign.

Table 4.1 shows the distribution of grants across the UAs and by sector (public, private and third sector). Businesses benefitting included Airbus, Hewlett Packard, Clark Willmott, Garrad Hassan, Somerset Wood Recycling and Greenmode. Public sector recipients included: the universities of Bristol, Bath and West of England; City of Bristol College; hospital and health trusts; local authorities; and one school.

Table 4.1: Number of employer grants by local authority and sector

	Number of employer grants					
Sector of recipient organisations	**B&NES**	**Bristol**	**North Somerset**	**South Glos.**	**Various**	**Grand Total**
Private		6	3	4		13
Public	9	5	2	4	1*	21
Third Sector	1	1	1			3
Grand Total	**10**	**12**	**6**	**8**	**1**	**37**

*Avon and Somerset Police – locations across the area.

A system for monitoring the use of funded facilities was instigated in March 2013; therefore no data on usage is available for 2012/13.

4.1.2 Sustainable Travel Roadshows

Approximately 348 Sustainable Travel Roadshows were held in 2012/13, staffed by the Sustainable Travel Field Team (STFT) provided by Steer Davies Gleave and funded through the WEST project. Of these, 215 were Employer (Business) Roadshows, the remainder being predominantly public events and activities in schools.

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' daily mode of travel to work. This was achieved with a range of 'Key Support Services 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 resources available to all.

Table 4.2 shows the total number of Business Roadshows in each local authority, 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 left contact details, requested a Key Offer, or took up a Key Offer.

Table 4.2: Business Roadshows, 2 April 2012 to 27 March 2013: individuals engaged

Authority	Number of Roadshows	a) Number exposed	b) Number of participants	Total people engaged (a+b)
B&NES	41	400	269	669
Bristol	96	878	611	1489
North Somerset	20	332	208	540
South Gloucestershire	57	835	535	1370
West Of England[5]	1			
Grand Total	215	2445	1623	4068

Table 4.3 shows the total number of Roadshows held in each local authority, separated into the three relevant LSTF tranches: Business, Communities and Transitions. This table shows only those roadshows held between September 2012 and March 2013, as the roadshows were not allocated to the different tranches before this period[6].

Table 4.3: All Roadshows, 3 September 2012 to 28 March 2013: Authority and LSTF tranche

Authority	Tranche				
	Business	Transitions	Communities	Other[7]	Grand Total
B&NES	22	4	5	1	32
Bristol	53	38	9	2	102
North Somerset	9	3	8		20
South Gloucestershire	28	25	6		59
West Of England	1			8	9
Grand Total	113	70	28	11	222

The STFT Customer Satisfaction Survey

The STFT team has a core Key Performance Indicator to undertake follow-up with at least 10% of all roadshow participants. The survey was administered to the selected 10% of participants either

[5] LSTF award event

[6] In future reports it will be possible to report on the roadshows categorised as Communities and Transitions in the relevant chapters.

[7] Cross-authority bike loan events and LSTF awards events

online (for those who had provided an email address) or by telephone. The customer satisfaction survey was finalised by the LSTF team in early February 2013, hence the survey results reported here were conducted among participants approached between January and March 2013.

The sampling frame for the survey in this period comprised 426 roadshow participants, using the definition of 'participants' provided previously. Responses were therefore required from 43 participants to achieve the 10% sample. Fifty responses were obtained.

Headline results of the survey are supplied in the SDG Quarterly Report for April 2013:

- 43 of the 50 respondents rated their interaction with the STFT as 'very good' or 'good.' The remaining respondents to this question described it as 'average'.
- 32 respondents described the quality of information as 'very good' or 'good' with one person describing it as 'average'.
- Several respondents reported that the STFT had allowed them to 'see more of [their local area]'.
- 41 respondents agreed or agreed strongly that their interaction with the STFT was relevant to their travel interests.
- 29 people said they had increased their use of the bus, cycling and walking since the interaction, 9 said they had reduced their use of the car, and 1 person said they used the bus less. 17 people said that this change had been influenced by the STFT.
- The most popular reasons for change were health, saving money and saving the environment.

4.1.3 Supporting Activities

During April to December 2012 Key Component funded work resulted in 25 engagement meetings across the sub-region. A number of additional activities supporting the Area Travel Plans started in the 2013 with the recruitment of additional capacity, namely: business engagement meetings as the new LSTF Business Engagement Account Managers came into post; initial steps to set up Employer-related car share groups; and development of travel maps for businesses in the Portside area. These activities are detailed in table 4.4. The majority of these activities did not commence before January 2013.

Table 4.4: Supporting Activities, January 2013 to March 2013					
	Bristol	BANES	South Gloucestershire	'Portside'	North Somerset
Employer group meetings attended	Institute of Directors Transport event (Feb 13) WoE Travel awards (Feb 13) 3 networking meetings with Nina Skubala (Business West) 9 engagement meetings with businesses including Hamptons, Veale Wasbrough, Parkview, Bristol Uni, Base Structures.	BANES Employer Forum - 20/02/13 South West Travelwise meeting, 21/02/13. 3 Business Engagement Working Group meeting, 22/01/13, 19/01/13 and 20/03/13. Travel awards in Feb 2013. 6 engagement meetings with: Bath Spa Uni, Gradwell Communications, Bath Riverside / WSP / Crest Nicholson	2 North Bristol Suscom Meetings (Jan and March 13), attended by approx. 15 major employers on each occasion. Institute of Directors Transport event (Feb 13). WoE Travel Awards (Feb 13). 3 personal meetings with North Bristol Suscom Director (Jan, Feb, March 13). 7 engagement meetings with businesses: MOD Abbeywood, Friends Life; Airbus; NHS Blood & Transplant; Hewlett Packard; John Lewis.	Attended SevernNet Meetings on 18/12/12, 10/01/13 and 21/02/13. 10 engagement meetings with businesses: DS Smith Packaging, IJS Global, John Lewis Partnership, Toyota UK, Accolade Wines, Elemis, ASDA, Power Sprays UK, A Gas.	Airport Transport Forum in May 2012 and November 2012. LSTF was starting to be discussed on the agenda. Engagement meetings with employers: Bristol Airport, Weston Hospital, Langford Vet School, Knightstone Housing Nailsea Chamber of Commerce, Nailsea Shopping Centre, Edwards Vacuums, Weston College, Weston Hospital.
Car share groups	None set up in this	None set up.	None set up.	None set up.	Avon and Somerset

	time period.				Police at Portishead HQ – Jan 13.
Travel maps developed	None in this time period.	None	None	Began developing a mapping project, which is now near completion.	None

4.2 Data collection plan for Area Travel Plans

The data collection methods identified in the OMP for monitoring and evaluating ATPs are as follows:

- Employee travel survey
- Employee panel
- Employee focus groups
- Employer interviews
- Cordon counts

Although data is being collected on all three Area Travel Plans, the most intensive evaluation work will henceforth be carried out in the North Fringe and Portside areas as part of the Strategic Employment Sites case study evaluation. This will, from December 2013, run in parallel with the main WEST monitoring and evaluation activities.

4.3 Results for Area Travel Plans

Four major employee travel surveys were carried out in the reporting period April 2012 to March 2013, corresponding with the three Area Travel Plans. These are:

- The South Gloucestershire 'Snapshot' survey (including the North Fringe)
- The Portside Travel Survey
- The Bristol Airport staff survey and the Langford Veterinary School Travel Survey

The Langford Veterinary School survey was linked to the development of the Bristol Airport Area Travel Plan because a joint bus service was under development at this time, but came to fruition after the current reporting period (the A2 link bus service).

These surveys constitute the baseline position in relation to measuring employee modal split, which is the key outcome indicator for this project area.

4.3.1 South Gloucestershire Council Travel to Work Snapshot Survey (including the North Fringe)

On Tuesday 12th March 2013, South Gloucestershire Council undertook its annual Travel to Work Snapshot Survey. Twenty seven employer organisations participated, comprising approximately 40,000 employees. Although the survey was conducted across South Gloucestershire, the majority of participating businesses were in the North Fringe Area Travel Plan area. There were 6481 responses to the full survey. Additionally, John Lewis undertook a shorter version which is excluded from the present analysis, but which brought overall responses to 6777. The full version of the survey was administered online, and in most companies all staff were invited to participate via email or an intranet message.

In the summary below, 434 students were removed from the 6481 responses to the full survey, in order to limit the analysis to employees (the focus of study). The total number of responses used in this analysis is therefore 6047. Based on a total employee base of 40,000, the response rate was 15%.

Figure 4.1: Modal split (%) – South Gloucestershire survey

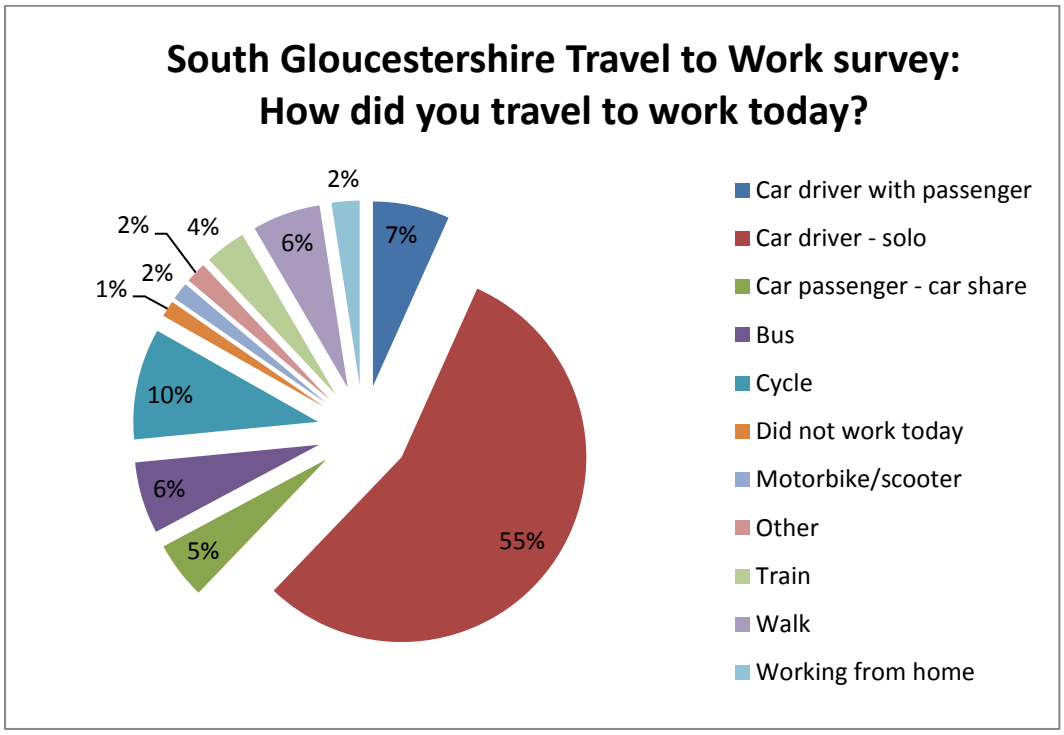


Table 4.4: Modal split (count) – North Fringe survey

Mode	Count
Car driver with passenger	406
Car driver - solo	3353
Car passenger - car share	304
Bus	380
Cycle	588
Did not work today	86
Motorbike/scooter	93
Other	111
Train	217
Walk	361
Working from home	148
Total	**6047**

4.3.2 The Portside area: Royal Portbury Dock, Avonmouth and Severn Approach

The survey was carried out between February and April 2013 and administered both online and through paper questionnaires. There were 784 responses from 29 companies, although 15 of these produced 5 or fewer responses. The remaining 14 companies generated a total of 746 responses from an estimated total employee base of 2150. The response rate from these 14 companies was therefore 35%.

Figure 4.2: Modal split (%) – Portside survey

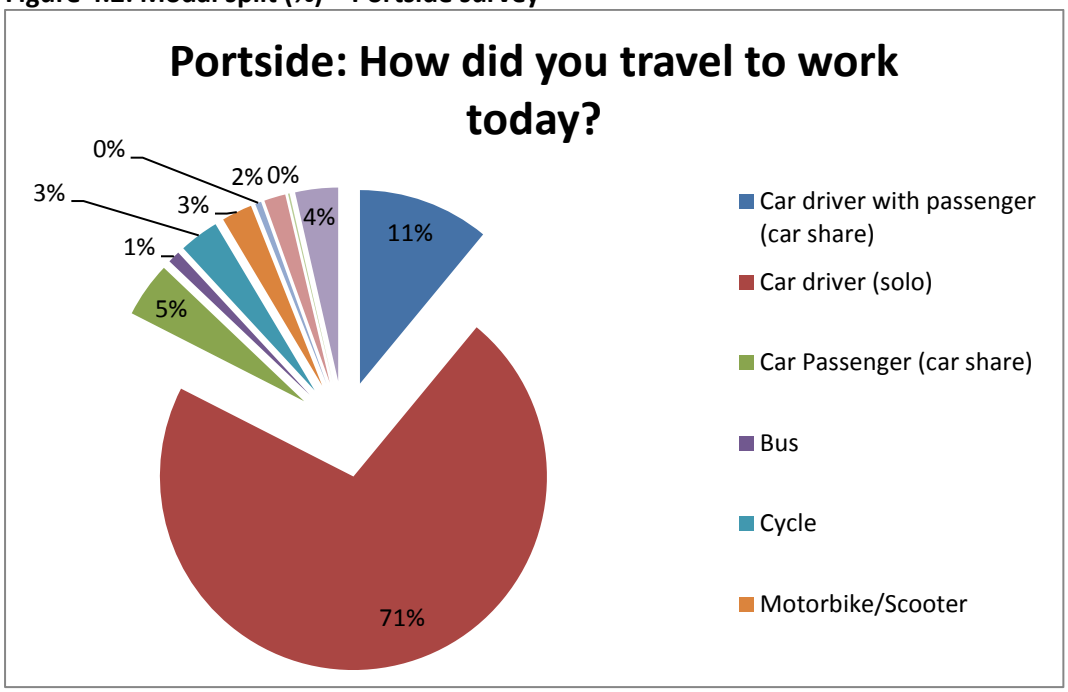


Table 4.5: Modal split (count) - Portside survey

Mode	Count
Car driver with passenger	86
Car driver - solo	560
Car Passenger - car share	36
Bus	8
Cycle	26
Motorbike/Scooter	20
Other	4
Train	14
Working from home	1
No answer	28
Total	**783**

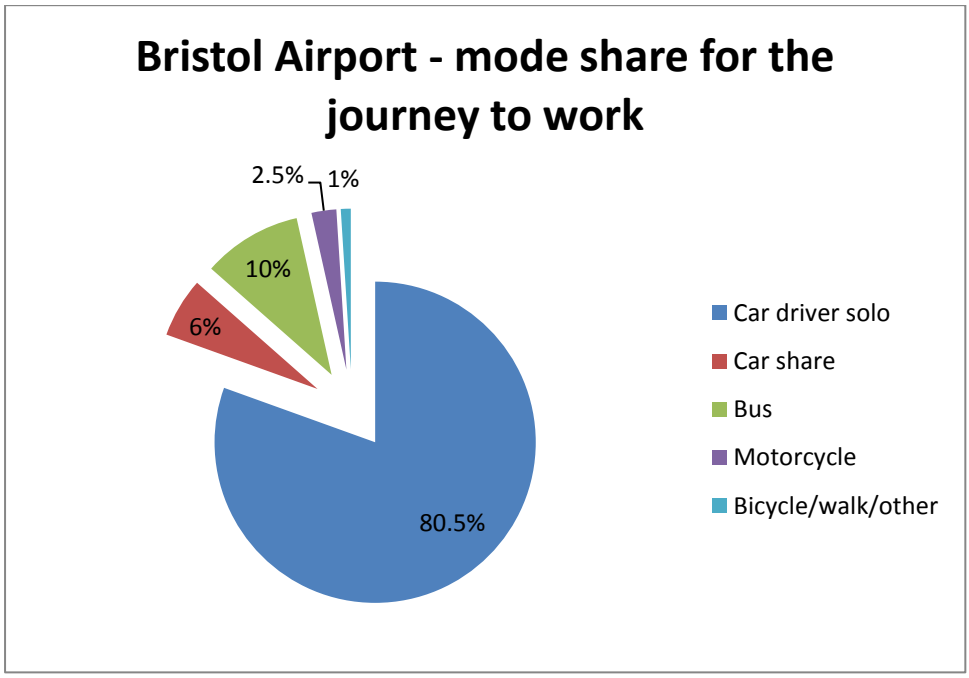
4.3.3 Bristol Airport employee travel survey

A baseline staff survey was undertaken at the airport in June 2012. The staff travel questionnaire was sent to businesses at the airport in hard copy format and an online version was also available. 221 responses were received including 105 responses from Bristol Airport Ltd staff. Bristol Airport Ltd employs only 230 people directly, with other notable employers such as EasyJet, Servisair and the terminal building concession operators employing the remainder.

The 44 businesses at the Bristol Airport site currently provide 2,564 full-time equivalent jobs (2900 headcount) in the summer peak, of which approximately 110 employees work for the airport taxi operator and the Flyer bus service. These staff are not permanently based at the Airport and

therefore do not undertake a journey to work as such. 95% of staff work shifts and around 22% of staff are employed on a seasonal basis for the summer peak.

Figure 4.3 : Bristol Airport Employee Mode Share (adjusted survey results)



The above proportions[8] are derived principally from the 2012 survey, but with adjustments made through comparisons with other data sources. For example, the questionnaire results for car sharing were checked against the number of passes that are in use on the Bristol Airport Car Share Database. Whilst it is suspected that the database does not capture all car sharing, it was considered appropriate to adopt the proportion based on pass issues (6%) –a more conservative figure than the one suggested by the survey.

Similarly, the number of motorbike/scooter journeys to work was checked against a count of the number of staff vehicles parked at the airport. This suggests that the questionnaire results have slightly under recorded powered two vehicle use and a mode share of 2.5% has been adopted.

4.3.4 Langford Veterinary School travel survey

The travel survey ran from 8th March to 26th March 2013. The survey was sent out by email to all site users (staff and students, amounting to around 1,000 individuals), and respondents completed the survey on the TravelWest website. The total number of responses received was 281. The mode share question asked respondents how they had travelled to work/study that week, and they were able to select more than one mode.

[8] Source: Bristol Airport Staff Travel Plan, 2012

Figure 4.4[9] : Mode use over one week – Langford Veterinary School, North Somerset

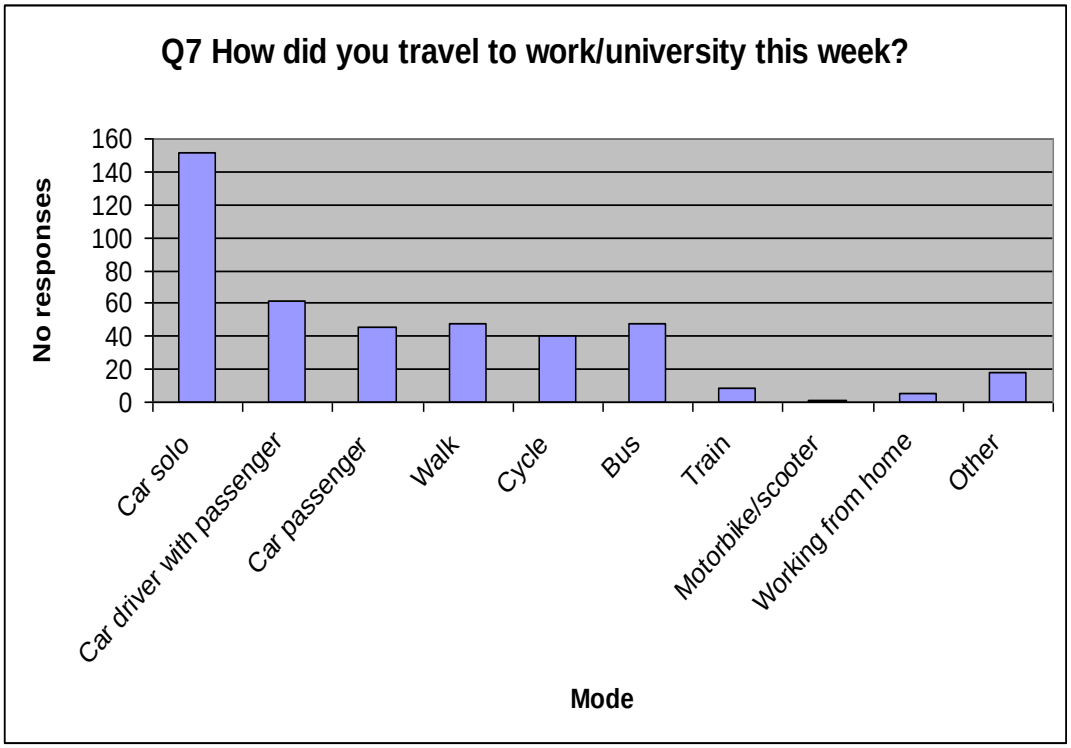


Table 4.6[10] : Mode use over 1 week – Langford Veterinary School

Mode	Count
Car - solo	152
Car driver with passenger	61
Car passenger	46
Walk	48
Cycle	40
Bus	48
Train	8
Motorbike/scooter	1
Working from home	5
Other	18
total responses to question	427
total participants in survey	281

These results are presented as the total count per mode rather than as a percentage, because respondents could select more than one mode. However the counts do suggest that car use (including car share) was 50% greater than the use of all other modes combined (the top three figures in the table account for 60% of the total responses).

[9] Source: Langford Veterinary School 2013 survey report.
[10] Source: Langford Vet School 2013 survey, raw data

4.4 Delivery progress with Low Emission Vehicles

This section describes progress with delivery in the reporting period 1st April 2012 to 31st March 2013. This includes installation of electric charging points and expansion of Go Low across the sub-region.

Concerning **electric charging point infrastructure**, in the reporting period the following was delivered:

- Meetings to agree an initial plan and setting up of Source West consortium, July 2012
- Preparation of tender documents for procurement of electric vehicle charging posts, October 2012
- Contract awarded to electric vehicle charging point supplier, December 2012
- Meeting set up to identify potential sites, with key site identified at University of Bath.

Paperwork was signed for electric charging points to be installed at the following six locations:

- Millennium Square, Bristol
- Scrap Store, Bristol
- Charlotte Street Car park, Bath
- Odd Down Park and Ride, Bath
- Lansdown Park and Ride, Bath
- Hewlett Packard, South Gloucestershire

Go Low offers an innovative approach to the management of staff travel and transport for health and social care organisations. The service provides fleet management of very low emission and zero emission vehicles including cars, electric bikes and cycles leased or purchased at low cost which enables very low basic running costs to be passed on. Access to travel choices will be made through a single portal. The aim of Go Low is to create a structure that allows maximum efficiency and return on all travel options. By having a shared resource controlled by via a single on-line portal, staff and users of the system can be flexible and serve different needs.

The health and social care organisations that have expressed interest in being stakeholders in the Go Low scheme have over 50,000 staff members and currently pay business mileage for over 13 million miles of staff travel. A large proportion of this mileage is conducted by staff whose total claims are below 3,500 miles per year. This indicates that there is large potential for using shared vehicle resources. If the Go Low project has 100 low emission cars in operation this would be projected to account for 7.2% of the total business travel and make savings of 125 tonnes of CO2.

Go Low began by setting up meetings with North Bristol NHS Trust, Avon Fire And Rescue Service, BANES council, Bristol PCT (now Bristol Community Health) and University of the West of England. Initial plans were to set up a steering group but this was pushed back by the businesses as they felt it may compromise objectivity. They were met with individually on an ad-hoc basis throughout the initial year of the project with roughly 10 meetings taking place. Table 4.7 presents details of the organisations targeted by Go Low.

During the reporting period a total of 8 electric vehicles were leased for the project.

Table 4.7: Go Low organisations target

Organisation	Number of Staff	Annual Business Miles	Cost of Business Travel	Rate Paid per Mile Average	No. Staff Claiming Miles Banded	Cost of Business Miles	Potential for Pool Car Allocation	Potential for Electric Bike Allocation
Avon & Wiltshire Mental Health Partnership	4k	4.2 M	2.1 M	54p	1500 <1k 445 1k<2k 393 2k<3.5k 212 3.5k<5k 163 5k<	£255k £371k £320k £413k £474k	50 (22 in place)	20 (19 in place)
Bristol City Council	12k	4.2M	1.8 M	43p	2500 < 1k 1300 1k < 3k 225 3k < 5k 72 5k <	£379k £1,385k £369k £218k	20	20
South Gloucester Council	10k	2.9M	1.2 M	40p	NK	1.2 M	10	5
Bristol Community Health &	5k	1.2M	0.5 M	54p	NK		10	5
Bristol PCT				54p	NK			
Avon Fire Service	1K	1.1M	0.35 M	55p C 43p E 80 Ancillary Fleet Vehicles	700 <1K 200 <3K 30 <5K 30 5K<	£350K	5	5
University of West of England	(29k students)	NK	NK	NK	NK	NK	5	
North Bristol Trust NHS	10k	.14K	.58M	54p			5	5
University Hospital Bristol	9k	NK	NK	52p	500		3	2
TOTAL	51k	13.7M	£6.5M	51p av	–	–	103	62

4.5 Data collection plan for Low Emission Vehicles

Given the relatively smaller scale of these set of measures, compared with those affecting workplaces, the data collection plan focuses primarily with collecting outputs and participation data. In addition and subject to available resources, including in-kind support from the involved organisations, the UWE research team will seek to conduct an online survey of users of low emission vehicles to understand perceptions and attitudes towards the end of the project.

4.6 Results for Low Emission Vehicles

No baseline outcome data are required for this project. In the next AOMR (for the period 2013/14) results concerning usage will be provided where available.

4.7 Delivery progress with Freight Consolidation

4.7.1 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 is to be introduced in Bath city centre in Spring 2014.

4.7.2 Delivery Progress

In the period 1st April 2012 – 31st March 2013 the project has supported the operation of the centre. In Bath, the scheme attracted a further 9 retailers, taking the total number of participating retailers to 29 (from 20). In Bristol the scheme attracted 5 retailers, taking the total number of participating retailers to 85 (from 80). Overall, the scheme attracted 14 additional retailers in the reporting period.

The Business Engagement managers have raised awareness about the consolidation centre and promoted its services across the targeted employers in BANES and BCC.

4.8 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.

4.9 Results for Freight Consolidation

4.9.1 Bath

Table 4.8 reports the key indicators since January 2011, when the consolidation centre started its operation with Bath retailers. In the period April 2012 – March 2013 the following reductions have been achieved:

- Average reduction on number of delivery trips into Bath: 81.5%
- CO_2 emission reduction: 9992.81 kg
- CO emission reduction: 62.53 kg
- NO_x emission reduction: 325.08 kg
- PM_{10} emission reduction: 9.70 kg

The reporting period has been highlighted in yellow in the table below.

Table 4.8: Freight consolidation outcome indicators in Bath

		Indicator				Number of retailers in Bath	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)		Artic	18t	7.5t	Van	Electric	Euro 4 diesel	Reduction number	Delivery reduction %
2011	January	122.97	N/A	4	0.12	4	4	8	0	0	9	1	10	16.67
	Feb	337.87	N/A	10.98	0.33	9	11	17	3	0	16	0	16	48.39
	Mar	397.09	2.48	12.91	0.39	9	11	15	10	6	19	0	23	54.76
	Apr	394.68	2.49	12.92	0.39	9	13	11	9	7	15	0	25	62.5
	May	473.9	2.97	15.4	0.46	9	12	17	18	4	18	0	33	64.71
	Jun	545.5	3.41	17.73	0.53	12	13	18	25	4	18	0	42	70
	Jul	626.03	3.92	20.35	0.61	14	18	13	24	13	21	0	47	69.12
	Aug	761.76	4.77	24.76	0.74	15	12	10	49	46	14	9	94	80.34
	Sep	984.49	6.16	32	0.95	15	23	14	36	69	11	11	120	84.51
	Oct	740.47	4.63	24.07	0.72	15	5	21	51	47	11	10	103	83.06
	Nov	750.56	4.7	24.39	0.73	17	6	20	48	53	11	11	105	82.68
	Dec	705.93	4.42	22.94	0.68	17	25	1	28	35	11	11	67	75.28
2012	January	902.38	5.65	29.33	0.88	19	26	3	44	40	15	6	92	81.42
	Feb	824.38	5.16	26.79	0.8	19	24	6	41	37	10	11	87	80.56
	Mar	887.92	5.56	28.86	0.86	20	26	6	33	55	11	11	98	81.67
	Apr	720.81	4.51	23.43	0.7	20	19	4	41	42	5	15	86	81.13
	May	746.96	4.67	24.28	0.72	21	20	4	49	44	0	23	94	80.34
	Jun	739.26	4.63	24.03	0.72	23	20	4	49	38	0	20	91	81.98
	Jul	790.41	4.95	25.69	0.77	23	19	6	45	58	0	22	106	82.81
	Aug	950.37	5.95	30.89	0.92	24	26	10	40	69	0	23	122	84.14
	Sep	745.05	4.66	24.21	0.72	26	19	5	45	47	0	20	96	82.76
	Oct	969.77	6.07	31.52	0.94	26	24	6	42	51	23	0	100	81.3
	Nov	881.63	5.52	28.65	0.86	25	17	6	52	43	22	0	96	81.36
	Dec	913.82	5.72	29.7	0.89	26	24	12	40	39	18	5	92	80
2013	January	959.71	6.00	31.19	0.93	28	18	18	41	52	25	0	104	80.62
	Feb	761.16	4.76	24.74	0.74	30	14	16	30	43	20	0	83	80.58
	Mar	813.86	5.09	26.75	0.79	29	17	16	31	42	20	0	86	81.13
	Apr	878.58	5.5	28.55	0.85	29	18	11	46	39	21	0	93	81.58
	May	864.46	5.41	28.09	0.84	29	18	7	43	47	23	0	92	80
	June	773.53	4.84	25.14	0.75	31	18	16	28	34	20	0	76	79.17
	July	891.45	5.58	28.97	0.86	31	16	32	30	37	23	0	92	80
	August	794.87	4.97	25.83	0.77	35	14	22	26	46	22	0	86	79.63
	September	776.99	4.86	25.25	0.75	35	12	18	33	46	21	0	88	80.73
	October													
	November													
	December													

4.9.2 Bristol

Table 4.9 reports the key indicators since January 2011, when the consolidation centre started its operation with Bristol retailers. In the period April 2012 – March 2013 the following reductions have been achieved:

- Average reduction on number of delivery trips into Bath: 78.7%
- CO_2 emission reduction: 14,217.88 kg
- CO emission reduction: 88.97 kg
- NO_x emission reduction: 462.07 kg
- PM_{10} emission reduction: 13.79 kg

The reporting period has been highlighted in yellow in the table below.

Table 4.9: Freight consolidation outcome indicators in Bristol

		Emisions Indicator				Number of retailers	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)		Artic	18t	7.5t	Van	Electric	Euro 4 diesel	Reduction number	Delivery reduction %
2011	January	1026.4		33.36	1	55	43	26	16	12	13	14	70	72%
	Feb	975.99		31.72	0.95	61	39	26	17	16	14	15	69	70%
	Mar	926.08	5.79	30.1	0.9	64	32	25	19	11	23	2	62	71%
	Apr	1071.75	6.71	34.83	1.04	68	36	31	19	14	28	0	72	72%
	May	853.64	5.34	27.74	0.83	69	23	27	22	18	26	0	64	71%
	Jun	1138.59	7.12	37	1.1	71	32	29	30	30	31	0	90	74%
	Jul	1010.78	6.32	32.85	0.98	71	28	19	29	36	29	0	83	74%
	Aug	948.46	5.93	30.82	0.92	72	33	19	29	25	10	14	82	77%
	Sep	969.17	6.06	31.5	0.94	76	44	19	11	11	11	11	63	74%
	Oct	820.63	5.13	26.67	0.8	75	28	29	23	4	10	11	63	75%
	Nov	964.62	6.04	31.35	0.94	79	30	27	28	23	11	11	86	80%
	Dec	1088.76	6.81	35.38	1.06	79	46	13	33	7	11	11	77	78%
2012	January	1198.01	7.5	38.94	1.16	79	45	10	26	40	22	5	94	78%
	Feb	1152.7	7.21	37.46	1.12	80	47	11	30	23	15	10	86	77%
	Mar	1194.41	7.47	38.82	1.16	80	52	10	27	21	11	11	88	80%
	Apr	962.2	6.02	31.27	0.93	80	35	9	42	20	6	15	85	80%
	May	1004.1	6.28	32.63	0.97	83	42	9	35	25	0	23	88	79%
	Jun	969.06	6.06	31.49	0.94	83	42	9	29	22	0	20	82	80%
	Jul	1108.47	6.94	36.03	1.08	80	43	7	42	35	0	22	105	70%
	Aug	1198.27	7.5	38.94	1.16	81	45	17	38	37	0	23	114	83%
	Sep	1085.27	6.79	35.27	1.05	83	46	10	27	33	0	20	96	83%
	Oct	1281.34	8.02	41.64	1.24	82	43	12	42	31	26	0	102	80%
	Nov	1452.33	9.09	47.2	1.41	81	53	9	43	34	30	0	109	78%
	Dec	1151.95	7.21	37.44	1.12	81	45	12	33	27	18	12	87	74%
2013	January	1368.05	8.56	44.46	1.33	85	38	26	44	41	31	0	118	79%
	Feb	1294.13	8.1	42.06	1.26	82	45	23	24	34	28	0	98	78%
	Mar	1342.71	8.4	43.64	1.3	85	42	20	31	50	30	0	113	79%
	Apr	1388.18	8.69	45.12	1.35	86	47	19	31	43	29	0	111	66%
	May	1111.9	6.96	36.14	1.08	86	39	11	28	32	23	0	87	79%
	June	1117	6.99	36.3	1.08	86	39	20	23	31	20	4	89	79%
	July	1364.24	8.54	44.34	1.32	89	46	27	27	34	28	0	106	79%
	August	1147.41	7.18	37.29	1.11	92	39	23	22	28	24	0	88	79%
	September	1257.4	7.87	40.87	1.22	97	43	25	29	23	25	0	95	79%
	October	1378.33	8.62	44.8	1.34	107	50	25	28	46	16	15	118	79%
	November													
	December													

5. Local Communities

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

- Community grants and neighbourhood fund measures
- Walking and cycling infrastructure measures
- 20mph measures

5.1 Delivery progress with Community Grants and Neighbourhood Fund measures

5.1.1 Overview of interventions

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

- 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 Council (BCC). 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.

5.1.2 Delivery progress

South Gloucestershire Council's engagement in the Neighbourhood Fund measures was not scheduled to commence until after the 2012/13 reporting period, and so information on delivery progress and baseline data will be reported in the next AOMR for 2013/14.

- During the reporting period South Gloucestershire drafted the terms and conditions of their grants for committee approval. Engagement was secured with all six Priority Neighbourhoods in South Gloucestershire.
- Bristol City Council has completed two rounds of grant applications in the reporting period, with the first application period closing in July 2012, and the second running from January to March 2013. Successful grant applicants from the 2012 round of applications were informed in November. Engagement occurred with all 14 Neighbourhood Partnerships in Bristol.
    - In the first round, 22 schemes were awarded funding.
    - In the second round, a further 58 schemes were awarded funding.
- During the reporting period 2.4 FTE CATOs were recruited to post (0.6 for the full period).

5.2 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.

The above are scheduled to take place in 2013/14 and 2014/15.

5.3 Results for Community grants and neighbourhood fund measures

The evaluation methodology relies on outcome data collected towards the end of the project and no baseline is required.

5.4 Delivery progress with Walking and Cycling infrastructure measures

5.4.1 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/improve route signage.
    - A continuous cycle route (mainly off-carriageway), linking Portishead, Portbury Dock, Pill, and Bristol. This will be through improving and signing existing sections of routes, and providing 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 2 Tunnels Greenway, shared cycling/walking path NCN4 cycle path to Bath Spa University and Batheaston Bridge.
    - The M32 crossing to provide a safe route across 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 managements 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.

5.4.2 Delivery progress

Progress with the delivery of the Walking and Cycling infrastructure schemes which occurred in the 2012/13 reporting period is presented below (these tables also include schemes completed shortly after the reporting period). It is to be noted that these tables contain only a summary of scheme completions in the reporting period and have been drawn from the Annual Outputs Report 2012/13:

Table 5.1: Walking and Cycling infrastructure projects delivered in BANES

Deliverable	Completion date
Construction of crossing at Pennyquick Hill (Globe Roundabout). Included dropped kerbs and central island.	**February 2013**
Construction of crossing at A39 (Globe Roundabout). Included dropped kerbs and central island.	**February 2013**
Construction of shared path between the Bath Spa University and the Globe Roundabout (alongside A39).	**February 2013**
Construction of one mile of upgraded shared pedestrian and cycle path between Twerton Fork and the Globe Roundabout (alongside A4).	**April 2013**

Table 5.2: Walking and Cycling infrastructure projects delivered in Bristol

Deliverable	Completion date
Bath Bridge cycle safety scheme completed	**2012/2013**
Construction of improvement to cycle route along Barrow Road in Barton Hill.	**2012/2013**
Lamb Street shared use path provision.	**2012/2013**
Path widening work completed in Newton Park Open Space scheme (Bristol-Bath Railway Path).	**2012/2013**
Provision of cycle stands to organisations in the city.	**2012/2013**

Table 5.3: Walking and Cycling infrastructure projects delivered in North Somerset

Deliverable	Completion date
Completion of section 8 of the Festival Way walking and cycling route. Used for commuting, leisure, and as a link to local schools. Involved a 3m x 800m tarmac path alongside carriageway.	**March 2013**
Completion of section 11 of the Festival Way walking and cycling route. Used for commuting, leisure, and as a link to local schools. Involved a 3m x 1300m stonedust path.	**October 2013**

Table 5.4: Walking and Cycling infrastructure projects delivered in South Gloucestershire

Deliverable	Completion date
New lighting provided along a 260m stretch of cycle path near the MOD at Filton Abbey Wood. The aim is to make the path more user-friendly in the hours of darkness.	**2012/2013**
Frome Bridge cycle improvements to footway/cycle path segregation. Road lanes adjacent to path narrowed and hatching added to provide extra space for pedestrians and cyclists.	**2012/2013**
Widening of a traffic island and re-surfacing of grass verge to provide a safer and more direct route for cyclists at the Bromley Heath Island.	**2012/2013**
Improvements to the junction for cyclists at Golf Course Lane	**2012/2013**
Yate Spur – M4 to Westerleigh Road section – Construction of a cycle path on a disused railway line to provide a part of the link between the Bristol-Bath Cycle Path and Yate. Link to be continued over the remainder of the LSTF WEST programme.	**July 2012**
Repositioning of bus stop on A4174 to remove obstruction to the existing shared use cycle path.	**2013/2013**
Construction of off-road cycle path in Little Stoke Park area of the North Fringe. This provides a link between existing cycle routes.	**2012/2013**
Introduction of additional signage on Concorde Way cycle path.	**2012/2013**

5.5 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 is to be installed at the Claude Avenue ramp access point to the Two Tunnels greenway path.

Bristol

- Initial monitoring through data collected for Bristol schemes through a series of surveys and interviews. These constitute the baseline data.
- Newton Park Open Space scheme to be assessed through qualitative survey of relations between cyclists and pedestrians.
- Ongoing scheme-specific cycle counts through existing ACC infrastructure.

North Somerset

- A cycle counter is to be installed on Festival Way and monitoring to commence from Q4 2013.
- Periodic cycle counts along the Festival Way to be conducted by Sustrans

5.6 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. No specific baseline results are available yet for new schemes and these will be reported in the AOMR for 2013/14.

5.7 Delivery progress with 20mph measures

5.7.1 Overview of interventions

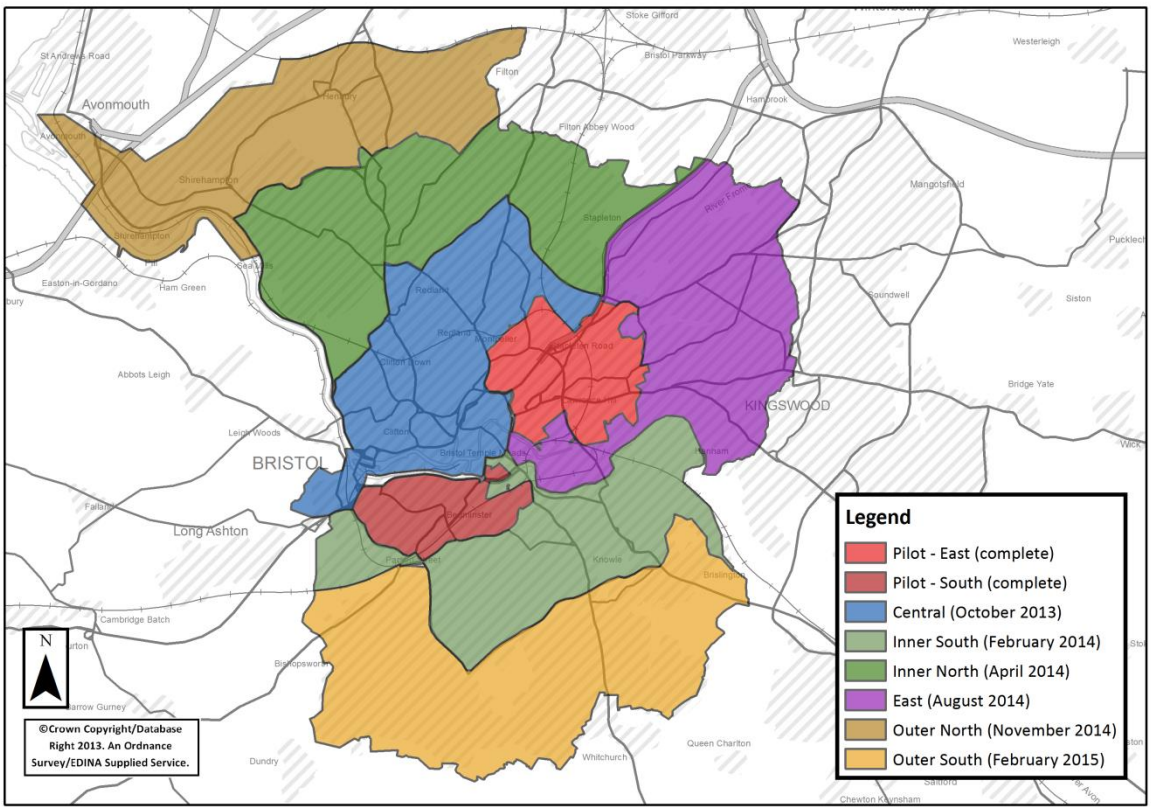
The introduction of 20mph areas across Bristol is intended to improve road safety, increase active travel and enhance the local environment. The current timetable for the roll-out of 20mph areas is presented below with Map 5.1 showing the locations of the areas.

Table 5.5 - Timetable for roll-out of 20mph measures

Phase	Date of introduction	Before HIS*	Post HIS
Central	January 2014	20 July-3 Aug 2013	13-26 Oct 2014
Inner South	June 2014	14-27 Oct 2013	Jan 2015
Inner North	August 2014	15-28 Jan 2013	Apr 2015
East	November 2014	12-25 May 2014	Aug 2015
Outer North	January 2014	11-24 Aug 2014	Nov 2015
Outer South	March 2015	17-30 Nov 2014	Feb 2016

*Household Interview Survey

Map 5.1 - Phases of 20mph area roll-out in Bristol



5.7.2 Delivery progress

No 20mph areas were completed in the 2012/13 reporting period. The introduction of the first WEST-funded 20mph area (Central) is scheduled for January 2014. Delivery progress will be reported in the AOMR for 2013/14.

5.8 Data collection plan for 20mph measures

The data collection plan for 20mph is focussed on a series of before and after Household Interview Surveys 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. The first two HIS have been completed in Q2/Q3 of 2013, and the results of these and the subsequent surveys will be reported over the course of the monitoring period.

5.9 Results for 20mph measures

No data was collected in the 2012/13 reporting period. Data from the Phase 1 and 2 before Household Interview Surveys has been collected and will be reported in the AOMR for 2013/14.

6. Public Transport

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

6.1 Delivery progress with Public Transport

6.1.1 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 upon:

- The creation of new bus services. A number of new bus routes are being implemented:
  - The X18 commuter bus service running from Kingswood to Aztec West. This measure is already complete and operational.
  - 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 13/13a university bus services. These services extend the universities' bus network to Bradley Stoke, Oldbury Court, and Cotham/Redland. These services are already operational.
  - 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:
  - The A4174
  - Little Stoke Lane
  - Emersons Way
- Infrastructure improvements made on the 24/25 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)

6.1.2 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 RTI provision. These measures involve the implementation of new RTI units on buses and RTI displays at bus stops:
  - RTI on all buses in 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.

    - Additional RTI units. This measure will increase the number of RTI units on buses in North Somerset.
- On-board display screen equipment to be installed on all buses operating on GBBN routes, and next-stop displays to be installed on buses in the sub-region.
- 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.

6.1.3 Delivery progress

Progress with the delivery of Public Transport schemes which occurred in the 2012/13 reporting period is presented below (these tables also include schemes completed shortly after the reporting period).

Table 6.1: Public transport projects delivered in 2012/13

Deliverable	Completion date
New service number X18. This is an express service linking the residential areas in the east of Bristol with large employer sites on the North Fringe.	**January 2013**
Enhancements to bus service number 13. The pre-existing route of the 13 stopped at UWE's Frenchay campus. LSTF WEST funding has been used to extend this service to the Bradley Stoke area and to link more effectively with the UoB.	**January 2013**
New service number 19. This is a university route linking the UWE to the city centre through the previously-unserved areas of Cotham and Redland. The service also links to the UoB.	**October 2012**
Service enhancement to GBBN routes in BANES. Financial support was provided to increase services on the 379 (Midsomer Norton – Bristol).	**January 2013**
Two new services: X2 and X3 (Centre – Portishead). These services extend the range of the previously existing service (X1). It should be noted that the X1 service was in operation before WEST, and was introduced as a part of the Key Component project.	**March 2013**

6.2 Data collection plan

Data collection for Public Transport measures involves satisfaction surveys on corridors served by new/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.

Service specific patronage figures will be available for all services benefitting from LSTF funding. Work is underway to compile the data for these services.

6.3 Results for Public Transport

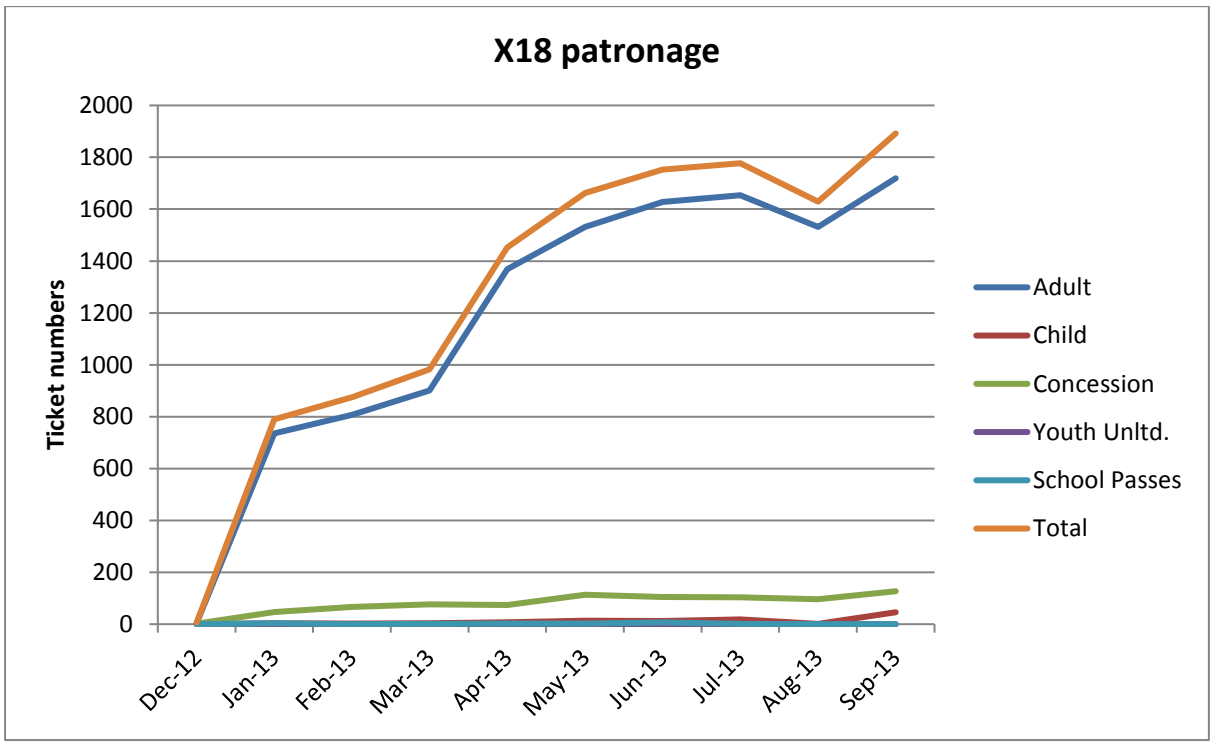
This section presents data collected during the reporting period. In some cases it has been appropriate to report summary patronage and satisfaction data before this period (where it is available) to show patterns of change.

6.3.1 Service X18

Table 6.1: X18 patronage figures

Fares	Dec 12	Jan 13	Feb 13	Mar 13	Apr 13	May 13	Jun 13	Jul 13	Aug 13	Sep 13
Adult	4	735	807	901	1369	1531	1628	1654	1532	1719
Child	0	4	2	4	7	14	12	19	1	46
Concession	2	47	66	76	74	114	105	103	96	127
Youth Unltd.	0	0	0	0	0	1	0	0	0	0
School Passes	0	4	0	1	2	2	7	1	0	0
Total	6	790	875	982	1452	1662	1752	1777	1629	1892

Figure 6.1: Patronage of service X18 since its introduction



In addition to the patronage data for the X18 service, a bus passenger satisfaction survey was completed in March 2013. Thirty two responses were recorded from passengers. The results of this

survey will be included in the AOMR for 2013/14 alongside comparative data from the service after a year of operation.

6.3.2 Services 13 and 19

Table 6.2: Service 13 patronage figures

	Tickets	Passes	Concessions	Passengers
Oct-12	52688	2323	3187	58,198
Nov-12	45,916	5656	3,490	55,062
Dec-12	27,400	16	2858	30,274
Jan-13	31,241	3,315	3,531	38,087
Feb-13	40,003	4,584	3,758	48,345
Mar-13	41,329	5,837	3,955	51,121
Apr-13	27,930	3,940	3,830	35,700
May-13	30,419	5,096	5,771	41,286
Jun-13	19,003	4,223	5,337	28,563
Jul-13	15,047	4,821	5,169	25,037
Aug-13	13,857	5,042	5,970	24,869
Sep-13	52,126	9,991	9,981	72,098

Figure 6.2: Patronage of service 13

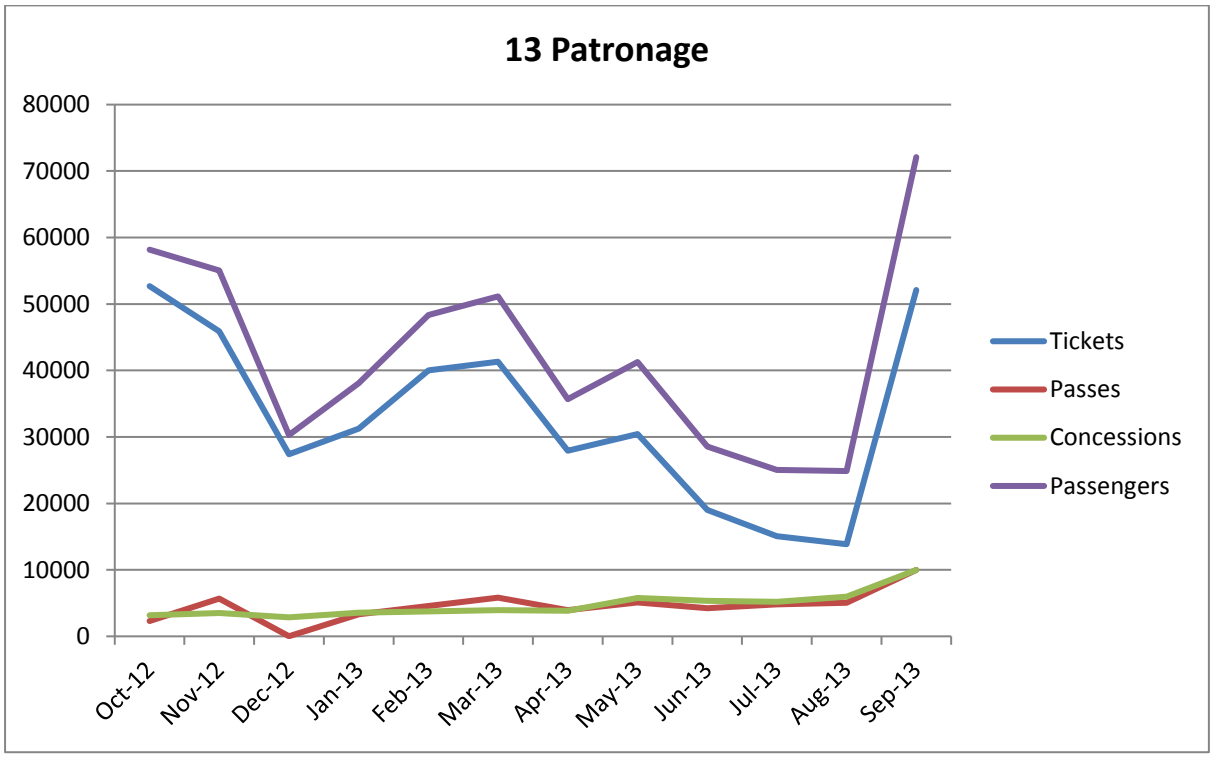
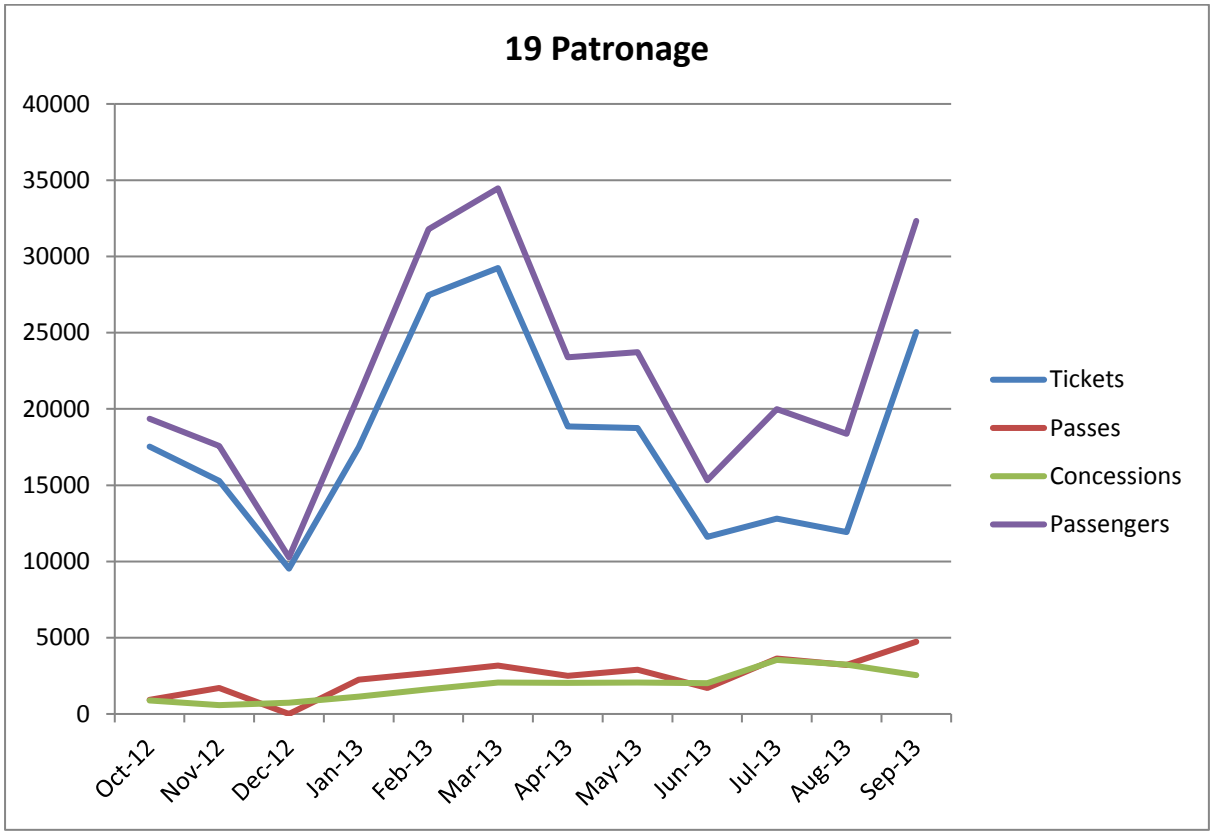


Table 6.3: Service 19 patronage figures

	Tickets	Passes	Concessions	Passengers
Oct-12	17533	934	886	19353
Nov-12	15,275	1713	578	17566
Dec-12	9527	0	743	10270
Jan-13	17,489	2,257	1,133	20,879
Feb-13	27,463	2,696	1,623	31,782
Mar-13	29,240	3,170	2,055	34,465
Apr-13	18,854	2,496	2,039	23,389
May-13	18,749	2,899	2,070	23,718
Jun-13	11,609	1,713	2,013	15,335
Jul-13	12,808	3,638	3,544	19,990
Aug-13	11,929	3,222	3,226	18,377
Sep-13	25,038	4,736	2,547	32,321

Figure 6.3: Patronage of service 19



In addition to the patronage data for the 13 and 19 services, a bus passenger satisfaction survey is in preparation and results will be included in the AOMR for 2013/14.

6.3.3 GBBN Kickstart

Existing data for the GBBN Kickstart measures relates 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, and 2012. The sample compositions of these services are presented below, followed by the satisfaction data.

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

X2/X3 corridor sample composition:

337 responses on bus services 358 and 359 in October 2007

251 responses on bus services 357, 358 and 359 in September 2011

323 responses on bus services 357, 358 and 359 in October 2012

Table 6.4: X1 corridor satisfaction

	Year	Very satisfied	Satisfied	Adequate	Dissatisfied	Very dissatisfied	*Average*
		(5)	*(4)*	*(3)*	*(2)*	*(1)*	
The overall quality of the bus service	2007	20%	29%	26%	17%	8%	3.4
	2011	25%	26%	30%	14%	5%	3.5
	2012	30%	38%	17%	9%	6%	3.8
Whether buses arrive on time	2007	17%	26%	26%	20%	11%	3.2
	2011	24%	27%	28%	18%	3%	3.7
	2012	26%	26%	24%	16%	8%	3.5
The frequency of the buses	2007	21%	24%	23%	21%	11%	3.2
	2011	23%	27%	26%	15%	9%	3.3
	2012	37%	29%	16%	10%	8%	3.8
The value for money of the journey*(a)*	2011	8%	19%	19%	31%	22%	2.6
	2012	21%	29%	18%	15%	17%	3.2
The journey time to your destination	2007	25%	28%	19%	18%	10%	3.4
	2011	25%	32%	21%	14%	8%	3.5
	2012	39%	26%	19%	9%	7%	3.8
The route the bus takes	2011	41%	26%	13%	10%	10%	3.8
	2012	43%	25%	16%	8%	8%	3.9
The way the bus is driven	2011	32%	27%	21%	13%	7%	3.6
	2012	41%	33%	11%	8%	7%	3.9
The comfort and cleanliness of the bus	2011	19%	33%	30%	13%	5%	3.5
	2012	34%	35%	18%	8%	5%	3.9
How easy buses are to get on and off of	2007	39%	23%	11%	14%	13%	3.6
	2011	47%	22%	12%	9%	10%	3.9
	2012	59%	23%	5%	5%	8%	4.2
The quality of the bus stops and shelters	2007	19%	28%	27%	17%	9%	3.3
	2011	27%	34%	23%	10%	6%	3.7
	2012	37%	36%	12%	9%	6%	3.9
The availability of timetable and route information	2007	18%	23%	29%	19%	11%	3.2
	2011	26%	28%	24%	13%	9%	3.5
	2012	37%	30%	16%	8%	9%	3.8

Note: (a) – responses exclude concessionary pass holders

Figure 6.4: X1 overall satisfaction

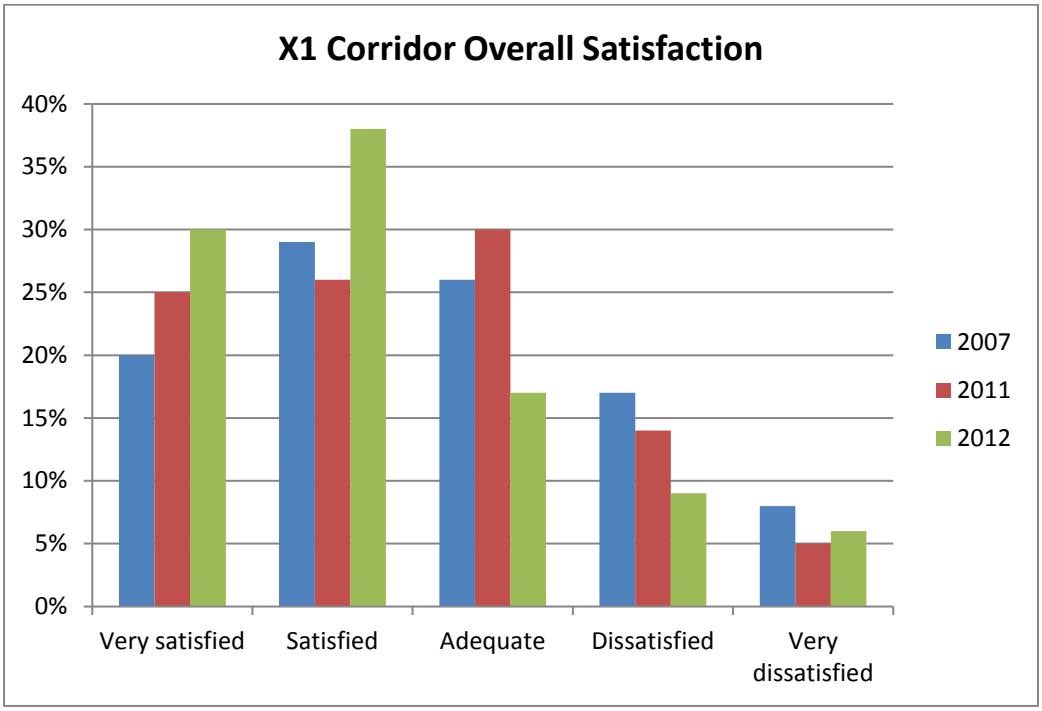
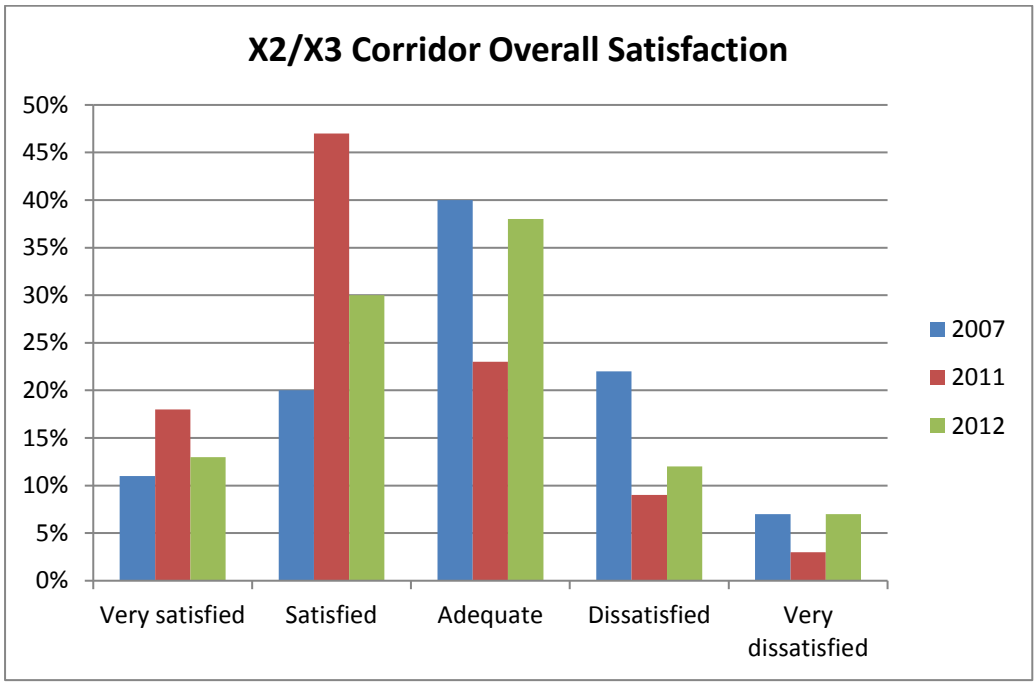


Table 6.5: X2/X3 corridor satisfaction

	Year	Very satisfied *(5)*	Satisfied *(4)*	Adequate *(3)*	Dissatisfied *(2)*	Very dissatisfied *(1)*	*Average*
The overall quality of the bus service	2007	11%	20%	40%	22%	7%	3.1
	2011	18%	47%	23%	9%	3%	3.7
	2012	13%	30%	38%	12%	7%	3.3
Whether buses arrive on time	2007	8%	16%	24%	31%	21%	2.6
	2011	12%	36%	39%	9%	4%	3.4
	2012	8%	19%	36%	20%	7%	3.1
The frequency of the buses	2007	9%	24%	35%	23%	9%	3.0
	2011	15%	22%	47%	10%	6%	3.3
	2012	16%	24%	32%	15%	13%	3.2
The value for money of the journey*(a)*	2011	24%	16%	23%	24%	13%	3.1
	2012	5%	15%	36%	19%	25%	2.6
The journey time to your destination	2007	15%	33%	25%	16%	11%	3.3
	2011	22%	45%	20%	8%	5%	3.7
	2012	18%	34%	28%	12%	8%	3.4
The route the bus takes	2011	31%	43%	13%	8%	5%	3.9
	2012	26%	27%	27%	12%	8%	3.5
The way the bus is driven	2011	27%	52%	12%	5%	4%	3.9
	2012	25%	32%	26%	8%	9%	3.6
The comfort and cleanliness of the bus	2011	11%	43%	32%	10%	4%	3.5
	2012	8%	30%	34%	23%	5%	3.1
How easy buses are to get on and off	2007	24%	20%	18%	22%	16%	3.1
	2011	39%	45%	5%	5%	6%	4.1
	2012	38%	30%	13%	9%	10%	3.8
The quality of the bus stops and shelters	2007	10%	27%	40%	17%	6%	3.2
	2011	23%	52%	14%	6%	5%	3.9
	2012	22%	31%	27%	11%	9%	3.5
The availability of timetable and route information	2007	14%	35%	24%	15%	12%	3.2
	2011	25%	27%	34%	9%	5%	3.6
	2012	22%	31%	24%	14%	9%	3.4

Note: (a) – responses exclude concessionary pass holders

Figure 6.5: X2/X3 overall satisfaction



The data for levels of satisfaction on the X1 corridor shows a general positive trend in levels of satisfaction since 2011, and this is consistent with the longer-term positive trend since 2007. In terms of overall satisfaction, there has been a combined increase of 17% in the proportions of passengers reporting themselves as either 'satisfied' or 'very satisfied' from 2011 to 2012.

Looking specifically at satisfaction with fares – which has earlier been identified as an area of particular concern in the aggregate data section – it is clear that passenger satisfaction with value for money on the X1 corridor has increased between 2011 and 2012, with a combined 23% rise in the proportions of passengers reporting themselves as either 'satisfied' or 'very satisfied'. This is in contrast to the sub-regional experience, and there may be merit in exploring differences between fare structures on this corridor and those across other services.

In contrast to the data from the X1 corridor, levels of satisfaction on the X2 and X3 corridor have fallen between 2011 and 2012. This result however appears somewhat anomalous in the context of the longer-term trend from 2007, in which satisfaction has risen over the period to 2012. Over the period 2011-2012, there was a combined fall of 22% in the proportions of passengers reporting themselves as either 'satisfied' or 'very satisfied'. Over the period 2007-2012, there has been an increase in overall satisfaction, with a combined rise of 12% in the proportions of passengers reporting themselves as either 'satisfied' or 'very satisfied'.

Focussing again specifically on fares, it is evident that the X2/X3 corridor has experienced a fall in satisfaction between 2011 and 2012. In 2012, a combined fall of 20% is evident in the proportions of passengers reporting themselves as either 'satisfied' or 'very satisfied' with value for money since 2011.

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

6.3.4 GBBN Service enhancements (BANES)

Following the GBBN service enhancements implemented in BANES, a satisfaction survey has been conducted alongside patronage monitoring. The data for these will be presented in the annual outcomes monitoring report for 2013/14.

7. Transitions

This section describes progress with delivery and collection of outcome data for the Transitions project area. Transitions include four different types of projects 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.

7.1 Delivery progress with The Move to Secondary School

7.1.1 Overview of interventions

This project seeks to engage with a section of primary school pupils (Year 4, 5 and 6) and secondary school students (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/interventions, which are offered to the participating schools in accordance to their specific needs and circumstances:

Table 7.1: Overview and description of schools interventions

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	Officers 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 win a prize.
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 will 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.

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

7.1.2 Delivery progress

North Somerset Council started formal engagement with schools under the WEST project only in September 2013, so information on delivery progress and baseline will be reported in the AOMR for

2013/14. Across the other three UAs, the project delivered the following outputs in the period 1st April 2012 - 31st March 2013. It should be noted that BANES are not engaging directly with primary schools as part of WEST but are working in partnership with the *Go By Bike Project* which is looking at encouraging cycling in primary schools.

In 2012/13 the project fully engaged with 36 primary schools and 6 secondary schools across the sub-region, accounting for over 6,000 participating students. Each participating school received a series of interventions (described in Table 7.1) selected according to their specific needs and circumstances. These are recorded by each participating UA.

The participating schools are listed in Table 7.2 It must be noted that this table only reports schools that were fully engaged during the reporting period. Additional schools that were invited to participate in the programme but fully engaged after March 2013 will be reported in the next AOMR for 2013/14. Output and participation data associated with the delivered interventions are reported in Table 7.3.

Table 7.2: Schools engaged in 2012/13

BCC Cluster 1 North-central	**South Gloucestershire Council**
Bannerman Road Primary, All Hallows Road, Easton	Bowsland Green Primary
Colston's Primary, 18 Cotham Grove, Cotham	Bromley Heath Junior
Easton Primary, Beaufort Street, Easton	Hanham Abbots Junior
Filton Avenue Junior School, Lockleaze Road, Horfield	Holy Trinity Primary
Lockleaze Primary, Brangwyn Grove, Lockleaze	Longwell Green
St Bonaventures Catholic Primary, Egerton Road, Bishopston	Mangotsfield Primary
St Johns, Worrall Road, Clifton	Meadowbrook Primary
St Werburghs Primary, James Street, Montpelier	St Mary's Primary
Upper Horfield Primary School, Sheridan Road, Horfield	Stoke Lodge Primary
Whitehall Primary, Johnsons Road, Whitehall	Wheatfield Primary
BCC Cluster 2 East-south east	Wick Primary
Air Balloon Hill Primary, Hillside Road, St George	St Stephens
Chester Park Juniors, Ridgeway Road, Fishponds	John Cabot Academy (Secondary school)
Fishponds Academy (St Matthias and Dr Bells Primary), Fishponds Road, Fishponds	**BANES (only secondary schools)**
Holymead Juniors, Wick Road, Brislington	Hayesfiled Girls' School
May Park Primary, Coombe Road, Eastville	Ralph Allen Secondary School
St Bernadette RC Primary, Gladstone Road, Hengrove	Wellsway Secondary School
Waycroft Academy, Selden road, Stockwood	
BCC Cluster 3 South	
Ashton Park, Blackmoors Lane, Bower Ashton (Secondary school)	

Bedminster Down, Donald Road, Bedminster Down (Secondary school)
Connaught Primary, Melvin Square, Knowle West
Hareclive Primary, Moxham Drive, Hartcliffe
Knowle Park Primary, Queenshill Road, Knowle Park
Luckwell Primary, Luckwell Road, Bedminster
Merchants Academy Primary (formerly Gay Elms), Withywood Road, Withywood
Parson Street Primary, Bedminster Road, Bedminster
School of Christ the King, Hartcliffe Road, Filwood Park

Table 7.3: Output and participation data 2012/13

	BCC	SGC	BANES
Number of primary schools engaged	24	12	0
Number of secondary schools engaged	2	1	3
Number of primary school students engaged (Year 4-5-6)	2700	2071	0
Number of secondary school students engaged (Year 7-8)	281	139	1045 Note: this includes Years 7-13
Total number of students engaged in each UA	2981	2210	1045
Total number of students engaged in the sub-region	6236		
Infrastructure installed	N/A	March 2013 - Cycle parking installed at: • Severn Beach Primary (1 x cycle shelter + 10 cycle stands for 20 cycles) • Stoke Lodge Primary (3 x scooter racks for 60 scooters) • Meadowbrook Primary (1 x cycle shelter + 6 cycle stands for 12 cycles). March 2013 - Completed footway outside Brimsham School	Cycle parking designed and procured, Wellsway Secondary School (the installation was delivered after March 2013)
20mph around schools	N/A	Installed 20MPH zone at St Bernard Lovell, March 2013	N/A

7.1.3 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)

The following section reports baseline results for the participating schools in the sub-region collected via the hands up survey and the school Census.

7.1.4 Results for The Move to Secondary School

For each participating school, baseline results from the hands up surveys are available and have been summarised in Table 7.4. 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
- If walking/cycling, with whom pupils travel

Table 7.4 presents the modal split results for each participating school in 2012/13 and provides the modal split from the school Census where available. It should be noted that the school Census, which takes place three times a year (January, May and October) in every school in England, included a question about usual mode of travel to school until 2011. The question was only included in the Spring term survey (January)[11]. From 2012 onwards the question has been dropped as a mandatory question in the Census survey but some schools still collect this information. In North Somerset Council, all the schools still collect travel mode data in January, while in Bristol City Council travel mode data is collected in September but not in all participating schools.

Results from all the hands up survey questions are available and can be further disaggregated by year group. The data from the School Census refers to the whole school (i.e. all year groups) and the mode 'walk' includes scooting and skating.

[11] See http://www.education.gov.uk/researchandstatistics/stats/schoolcensus

Table 7.4: Hands up survey and school census results 2012/13

Bristol City Council		**Hands up survey results 12/13 (Baseline for the engaged schools) (%)**							**Modal split data from school Census 12/13 (%)**			
BCC Cluster 1 North-central	**Hands up survey sample size per school**	**Cycle**	**Walk**	**Scoot**	**Park and stride**	**Train / other**	**Bus**	**Car**	**Cycle**	**Walk**	**PT**	**Car**
Bannerman Road Primary, All Hallows Road, Easton	62	0	72.5	0	0	0	0	20.9				
Colston's Primary, 18 Cotham Grove, Cotham	137	3.6	62.7	10.2	0	2.1	0	17.5	1.0	74.8	0.5	16.2
Easton Primary, Beaufort Street, Easton	85	23.1	42.1	1	0	0	10.5	22.1	0.1	67.2	1.4	28.6
Filton Avenue Junior School, Lockleaze Road, Horfield	202	4.8	44.1	5.3	0	0	0.9	44.6	2.3	53.4	1.6	37.6
Lockleaze Primary, Brangwyn Grove, Lockleaze	56	3.5	39.2	8.9	0	12.5	0	33.9				
St Bonaventures Catholic Primary, Egerton Road, Bishopston	154	3.2	54.5	10.3	0	0	0	29.8				
St Johns, Worrall Road, Clifton	138	5	47.1	5.7	0	0.7	0.7	42	3.1	59.0	2.8	29.1
St Werburghs Primary, James Street, Montpelier	82	17	48.7	9.7	0	0	0	24.3				
Upper Horfield Primary School, Sheridan Road, Horfield	54	1.8	61.1	0	0	1.8	0	35.1				

Whitehall Primary, Johnsons Road, Whitehall	121	3.9	59.6	3.9	0.6	0	0	30.4	6.9	57.1	1.2	30.9
BCC Cluster 2 East-south east	**Hands up survey sample size per school**	**Cycle**	**Walk**	**Scoot**	**Park and stride**	**Train / other**	**Bus**	**Car**	**Cycle**	**Walk**	**PT**	**Car**
Air Balloon Hill Primary, Hillside Road, St George	193	0.5	51.2	5.1	0	1	0	41.9	0.1	62.0	1.6	34.6
Chester Park Juniors, Ridgeway Road, Fishponds	109	1.4	47.8	8.6	0	1.4	7.2	33.3				
Fishponds Academy (St Matthias and Dr Bells Primary), Fishponds Road, Fishponds	156	3.2	47.4	3.2	0	7	0.6	40.3				
Holymead Juniors, Wick Road, Brislington	186	13.4	57.5	2.6	0	0.5	0	25.8	0.0	57.4	1.5	28.5
May Park Primary, Coombe Road, Eastville	164	3.7	45.9	4.9	0	3.7	0	32.9	2.8	66.	2.9	26.5
St Bernadette RC Primary, Gladstone Road, Hengrove	91	0	18.6	10.9	2.1	0	0	68.1	1.9	27.5	1.4	62.1
Waycroft Academy, Selden road, Stockwood	175	1.7	45.1	8.5	1.1	0.5	0	38.8	0.2	73.8	0.2	21.4
BCC Cluster 3 South	**Hands up survey sample size per**	**Cycle**	**Walk**	**Scoot**	**Park and stride**	**Train / other**	**Bus**	**Car**	**Cycle**	**Walk**	**PT**	**Car**

	school											
Ashton Park, Blackmoors Lane, Bower Ashton (Secondary)	209	4.3	47.8	0.4	0	34.4	0	11	4.6	53.1	33.1	7.4
Bedminster Down, Donald Road, Bedminster Down (Secondary)	72	8.3	79.1	0	1.3	2.7	0	8.3	2.9	59.9	11.4	17.5
Connaught Primary, Melvin Square, Knowle West	57	5	65	6.6	1.6	0	0	16.6	1.2	48.6	1.2	18.0
Hareclive Primary, Moxham Drive, Hartcliffe	34	5.8	47	0	0	0	0	41.1	2.2	64.8	0.8	28.8
Knowle Park Primary, Queenshill Road, Knowle Park	109	8.2	57.7	9.1	0	1.8	0	24.7	3.1	58.7	0.7	35.8
Luckwell Primary, Luckwell Road, Bedminster	52	1.1	57.3	7.6	0.5	0	0.5	26.9				
Merchants Academy Primary (formerly Gay Elms), Withywood Road, Withywood	89	12.3	32.5	5.6	0	1.1	0	48.3				
Parson Street Primary, Bedminster Road, Bedminster	116	2.7	60.1	10.4	0	2	0	23.7	0.0	72.9	0.5	20.7
School of Christ the King, Hartcliffe Road, Filwood Park	78	0	64.1	0	2.5	0	0	26.9	0.0	63.1	0.5	33.8
South Gloucestershire Council	**Hands up survey sample size per school**	**Cycle**	**Walk**	**Scoot**	**Park and stride**	**Train / other**	**Bus**	**Car**	**Car Share**			
Bowsland Green Primary	224	3.6	45.1	8.9	N/A	0.9	1.8	39.3	0.4			
Bromley Heath Junior	172	2.9	61.6	7.6	N/A	0.0	0.0	25.0	2.9			
Hanham Abbots Junior	255	0.8	47.8	6.7	N/A	0.0	0.4	42.7	1.6			

Holy Trinity Primary	85	3.5	47.1	5.9	N/A	0.0	0.0	43.5	0.0			
Longwell Green	155	4.5	35.5	14.8	N/A	0.0	0.6	44.5	0.0			
Mangotsfield Primary	160	1.9	70.0	1.9	N/A	0.0	0.0	25.6	0.6			
Meadowbrook Primary	160	4.4	42.5	11.9	N/A	0.0	0.0	39.4	1.9			
St Mary's Primary	84	7.1	16.7	3.6	N/A	2.4	0.0	64.3	6.0			
Stoke Lodge Primary	136	6.6	47.1	9.6	N/A	8.8	0.0	27.9	0.0			
Wheatfield Primary	324	6.2	52.2	18.2	N/A	0.0	0.0	23.1	0.3			
Wick Primary	72	1.4	56.9	8.3	N/A	0.0	4.2	29.2	0.0			
St Stephens	244	2.5	44.3	4.5	N/A	0.4	1.2	44.7	2.5			
John Cabot Academy (secondary)	139	8.6	21.6	0.0	N/A	0.0	30.2	33.8	5.8			
Bath & North East Somerset Council	**Hands up survey sample size per school**	**Cycle**	**Walk**	**Scoot**	**Park and stride**	**Train / other**	**Bus**	**Car**				
Hayesfiled Girls' School	468	1.7	54.5	0.0	0	12.4	2.8	28.8				
Ralph Allen	577	3.8	19.4	0.2	0	40.6	1.4	33.8				

7.2 Delivery progress with Wheels to Work West

7.2.1 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, if the client lives in South Gloucestershire Council, 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 clients can apply to the schemes, through the partner organisation, if they comply with the following requirements:

- Free bus tickets: aged 16 or over, unemployed and if their travel journey can be reasonably made by existing bus services
- Loan bikes: aged 16 or over, unemployed and if their travel journey cannot be reasonably made by bus
- Loan to buy scooter: aged 17 or over and have a job offer

7.2.2 Delivery progress

In the period 1st April 2012 – 31st March 2013 the project was in its preparation and planning stage, while the schemes were officially launched in October 2013.

During this period, the project engaged with a number of organisations across the four UAs to better understand the travel needs of an individual looking to access work and skills, and what services were already provided. The organisations involved in this scoping exercise include housing associations, national career service, national apprenticeship schemes, Learning Partnership West and others. The project team visited local authorities across the UK which had implemented, or were about to implement, Wheels to Work schemes, to better understand challenges and lessons learnt in this type of projects.

During the reporting period, the project secured the full participation of the following stakeholders, which became partner organisations:

- Job Centre Plus across the four UAs
- Weston College (NSC)
- City of Bristol College (BCC)
- South Gloucestershire and Stroud College (SGC)
- Norton Radstock College (BANES)

7.2.3 Data collection plan for Wheels to Work West

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

- Survey of 16+ receiving the interventions (free bus tickets, loan bikes and scooters)

The above data will be collected towards the end of the project.

7.2.4 Results for Wheels to Work West

There are no baseline results to report. The survey forms that will be used to monitor and evaluate the effectiveness of the interventions were designed by November 2013.

7.3 Delivery progress with Universities

7.3.1 Overview of interventions

This project is targeted to first and second year students at the University of the West of England (UWE) and University of Bristol (UoB), as they move to student halls (first year) and from halls to private accommodation (second year). The activities/interventions that have been included in a pilot phase in the 2013/14 academic year are:

- An e-marketing strategy - promoting existing route planners and travel apps, using social media, email & web-pages to deliver targeted communications.
- Developing a network of cycling champions - using fellow students & senior residents to help normalise cycling and external agents to provide face-to-face services and advice (i.e. maintenance and PTP – personalised travel planning).
- A cycle lease scheme - optional in place of the bus pass. Provided alongside a cycle pack and other support services.

7.3.2 Delivery progress

The project started in April 2013 with the appointment of the Universities Project Officer therefore no interventions have been implemented in the reporting period. A pilot phase targeting students about to start their first year at university commenced in the Summer of 2013 (targeting students in the academic year 2013/14) and has been undertaken to inform the implementation of the main intervention phase which is scheduled to take place in the academic year 2014/15. The pilot phase targeting second year students will commence in the academic year 2014/15. A cycle lease scheme has been put in place in September 2013, targeting 1st year students at both UWE and UoB, in particular those living in Marketgate and Stoke Bishop Halls of Residence respectively. As of November 2013, 40 bicycles have been leased. The scheme will run for a year.

7.3.3 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
- Student panel (subject to resource availability)

7.3.4 Results for Universities

No data was collected in the reporting period as this project effectively started after 31st March 2013.

An online survey of both first and secondary year students at UWE and UoB was undertaken in August 2013 and summary results have been produced.

7.4 Delivery progress with New Developments

7.4.1 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. The project is piloting sustainable travel initiatives and engagement with developers and residents in two new residential development sites (Cheswick and Charlton Hayes in South Gloucestershire). The aim is to promote sustainable travel to new residents to reduce single occupancy car trips from/to the new residential development site. Cheswick Village has 1,000 dwellings planned and around 600 occupied (as of March 2013), while Charlton Hayes has 2,200 dwellings planned and 200 occupied, with 150-200 more to be occupied between March 2013 and September 2014.

7.4.2 Delivery progress

In the period 1st April 2012 – 31stMarch 2013 the project team engaged with developers and residents in Cheswick Village and established contact with developers in Charlton Hayes. In Cheswick Village, the project delivered the following activities/interventions:

- Design and production of Cheswick Village Travel Information Pack (TIP), in collaboration with main developer Redrow and the neighbourhood community representative. The pack includes maps of the local area and updated information on bus routes and timetables, cycle routes and other practical information on how to travel sustainably from/to the site. For existing residents, the pack was distributed in print copies (see below);
- Promotion of bus service changes and improvements in the area in January 2013, through email communication to the residents group;
- Engagement with residents through door-knocking and distribution of TIPs in March 2013, carried out by the Sustainable Travel Roadshow Team as follows:
    - 1st March 2013: Flyer drop to notify residents of door knocking event
    - 4th March - 10th April 2013: Door knocking event. Travel advisors on site between 10am - 6pm (including Saturday shifts). Over this period the Roadshow team had conversations with 302 households out of 564 available on site (the rest did not respond to door-knocking); distributed the TIPs; offered a range of support services to residents including Personalised Travel Planning, loan bikes and free bus taster tickets (worth up to £60 per household) (Table 7.5 reports on uptake of services):
    - Saturday 23rd March 2013: Dr Bike roadshow event, with free bike servicing.

Table 7.5: Participation data concerning Cheswick Village

Type of resource offered	**Number requested & delivered**
Dr Bike	19
Loan bike	28
Accompanied ride	0
Cycle training	6
Motorbike ride	1
Bus Ticket - First 10	53
Bus Ticket- Wessex £30	66
Bus Ticket - First day	2
Bus Ticket - Wessex day	14
Pedometer	1
PTP and Road planning	1
Cheswick travel pack	155 offered in person 262 left in letterboxes
Youth concession form	6
Bus timetables	20
Train timetables	4
Bristol cycle map	94
South Gloucestershire cycle map	91
Bath and North East Somerset cycle map	30
North Somerset cycle map	28
Get Cycling	10
Bristol leisure ride	46
South Gloucestershire leisure ride	52
Railway Path	17
Strawberry Line	16
Concord way	3
Carsharing Postcard	1
Drive Smart Leaflet	0
Car Club info sticker	1
Participation	**Data**
Total number of households in Cheswick Village at time of intervention	564
Total number of households visited by Roadshow team	302
Total number of residents living in households visited by Roadshow team	582
Total number of residents engaged in conversation with Travel Advisor and completing survey forms	223
Total number of residents taking up an offer/service as a result of conversation with Travel Advisor	215

In Charlton Hayes, the project established contact with the South West Director of Bovis Homes, the main developer of the site, who confirmed full support to developing a TIP for the site.

7.4.3 Data collection plan for New Developments

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

- Survey of residents, principally to elicit mode of travel
- In-depth interviews with residents (conducted in Cheswick Village in Summer/Autumn 2013)

7.4.4 Results for New Developments

As part of the door-knocking in Cheswick Village, the Sustainable Travel Roadshow team surveyed households that were willing to complete a face-to-face questionnaire. Of the 564 available households on site (ranging from one bedroom flats to 6 bedroom family homes), 223 completed the questionnaire which asked primary and secondary mode of travel. Table 7.6 summarises the results concerning modal split.

Table 7.6: Modal split at Cheswick Village

	Primary mode		**Secondary mode**	
Car	140	63%	39	17%
Bus	28	13%	49	22%
Bike	16	7%	34	15%
Walk	16	7%	50	22%
Car share	6	3%	10	4%
Train	2	1%	8	4%
Motorbike	1	Less than 1%	2	1%
Taxi	0	0	1	Less than 1%
Other	0	0	2	1%
No answer	14	6%	27	12%
Total	223	100%	223	100%

Subsequently, the Roadshow team carried out a telephone Customer Satisfaction Survey with 24 participants, out of the 162 that had provided contact details on the survey form. Satisfaction with the service provided was high, with 23 respondents stating that the helpfulness of the Travel Advisor was good/very good, and one stating 'Average'. Additionally, 8 (a third) said they had changed their travel behaviour, while 6 expressed their intention to change in the future and 10 said they had not and would not change travel behaviour.

A number of in-depth face-to-face qualitative interviews were also undertaken in July to September 2013 by a UWE postgraduate student as part of their dissertation (MSc in Transport Planning). The aim of the interview was, among other things, to understand how the interventions, in particular the residents' Travel Information Pack, played a role in changing travel awareness, attitudes and behaviours. The dissertation report is being prepared for submission in April 2014 and findings will be reported in AOMR for 2013/14.

8. Process Evaluation

8.1 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.

8.2 Methodology

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 is administered twice a year for the duration of the programme to all the managers and project officers involved. The procedure itself is undergoing improvements after the first round of data collection undertaken in July 2013 (for the reporting period January to June 2013).

8.3 Results for the period January - June 2013

Overall, there was a strong level of engagement with the process evaluation procedure and all participants provided meaningful and useful responses in the forms. A total of 60 forms were completed, out of 67, achieving an overall 90% response rate. Thematic analysis of the completed process evaluation survey forms has found that:

- Different typologies of **drivers** motivated and helped staff in delivering the programme interventions, with more senior staff mentioning strategic high level objectives and aspirations (e.g. achieving shift to sustainable travel in the West of England), whilst work package managers and project officers tended to be driven by more practical and context-specific factors (e.g. clarity of plans and budgets, good levels of communication and collaboration etc.).
- Several types of **barriers** were encountered, ranging from intervention-specific factors to broader problematic issues originating from organisational and institutional structures and practices. WEST is a complex programme of interventions bringing together staff from four different UAs. The programme delivery created the need to have additional layers of responsibilities, lines of management and communication channels, and to harmonise *practices* (i.e. 'ways of doing things') as much as possible to facilitate collaborative work. It is apparent that some new roles were created specifically for WEST whilst other existing roles were linked to the programme delivery, with more or less substantial changes to the nature and scope of the roles themselves. In many ways, the programme created the need for new (or at least revised) 'rules of engagement' among the four UAs and the programme sub-regional staff. Most barriers seem to be the consequence of such complexity, and to have originated from the inevitable 'glitches' that a new organisational set up brings about in the early phases of a novel collaborative project.

- There is evidence that the barriers identified have been acted upon and addressed over the course of the reporting period. The second round of process data collection, which is scheduled in December 2013, will assess whether and to what extent the barriers experienced in the first half of 2013 are overcome, and whether any new factors will be perceived as barriers.