The Bristol Method

how to increase public transport use

In it for good

BRISTOL 2015 EUROPEAN GREEN CAPITAL
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Introduction

Bristol is a busy city and the urban hub of the West of England sub-region. Each and every day Bristol’s population swells as thousands of people travel into the city from the surrounding sub-region for work, education, and leisure.

Every weekday half a million vehicles cross into and out of the city centre. This represents a significant challenge to providing a sustainable transport network for the vast numbers of people who need reliable, accessible options for getting into, out of, and across the city.

Other modules in the Transport theme of the Bristol Method explain the negative effects of excessive car travel and the importance of finding sustainable alternatives for people to access workplaces, shops, education, healthcare, and all the many other destinations which form a part of an engaged civic life (see: ‘How to reduce traffic and its impacts’).

Bristol needs a sustainable transport network to support the increase in both residents and employment opportunities forecast over the next two decades. By 2036 the West of England City region is expected to grow by more than 40,000 households and 90,000 jobs, suggesting that more in-commuting will be necessary. This is on top of a historic deficit in transport infrastructure, with lower than average public transport for a city of its size.

The first part of this module explains the political, geographic, and historical transport challenges facing Bristol and the sub-region. It also describes how the local authorities have enthusiastically pursued new funding streams to kick-start a series of major projects which form the foundations of Bristol’s vision of a sustainable public transport system. The second part is devoted to explaining the next steps in Bristol’s public transport development, which involves several large-scale infrastructure projects designed to:

- Build on the work of the past decade
- Make journey times faster and more comfortable
- Connect people to areas of the city which were previously not accessible by public transport
Why promote public transport?

Public transport is the term commonly used to refer to shared passenger modes of travel – trains, buses, trams, ferries, cable cars - which are available to the general public.

Public transport modes are typically more sustainable than car travel because they allow a greater number of people to be transported by a single vehicle, which in general terms reduces the per-capita energy required to transport a person, and also the amount of road space that is needed.

In England in 2013, the average occupancy of cars and vans was just 1.57 people per vehicle – with 61% of private vehicles carrying just the driver¹. This equates to a huge amount of road space being taken up by private vehicles, which are most often largely empty.

By contrast, public transport vehicles typically carry many more people than private vehicles. As examples, on average buses in England carried 12.4 passengers per vehicle in 2013/2014, whilst buses in London carried 20.7 people². For urban light rail, there was an average of 46.25 passengers per vehicle². The bus on average therefore currently achieves 7.9 times the occupancy of private cars, and light rail achieves 29.5 times, and there is the potential for these modes to carry significantly more if people can be encouraged to use them.

Increasing the mode share of public transport can reduce levels of traffic and weaken dependence on private car ownership, which has many positive benefits, including:

- Reductions in levels of urban traffic congestion
- The mitigation of social issues created by auto-centric development, such as community severance and degradation
- Encouraging active travel and combating contemporary health crises such as increasing levels of obesity and heart disease

¹ Data sourced from Department for Transport National Statistics, derived from the National Travel Survey.
² This figure is an average calculated from Department for Transport statistics on eight light rail and tram systems in England. Source: DfT Light Rail and Tram Survey.
In spite of the established sustainability benefits of public transport, there remains a challenge in the UK – and in many auto-centric countries across the world – of encouraging people out of their cars and onto the bus or the train for some trips.

Today, bus travel comprises almost two-thirds of the trips made by public transport in the UK. However, buses only account for a small proportion of all trips. The UK transport network is dominated by car travel: for example, in England in 2013 approximately 64% of trips were made by car, compared with 7% of trips being made by bus.

In Bristol, a 2013 workplace survey of commuters found that 45.2% of people had travelled by car, 10.0% by public bus, 5.9% by train, 15.6% by bicycle, and 17.6% walked. The city has lower proportions of car use than the national average for commuting journey, however this is not representative of all trips in the city, and car was till by far the dominant mode.

1 http://www.bristol.gov.uk/page/transport-and-streets/big-commuter-count
This wasn’t always the case, bus travel used to be one of the main ways in which people got around, and was an integral part of daily life for the majority of people in the UK for the first half of the twentieth century. Bus patronage in the UK fell steadily after its peak in the 1950s, and over the past decade or so has stagnated (outside London).

Historically, this huge decline in the use of buses can be linked to the advent of affordable car travel, as greater numbers of people found themselves able to buy a car and were attracted by the perceived benefits of the car (in relation to public transport): convenience, privacy, control, freedom, and reliability.

Accommodating the boom in car travel has been a key focus of urban design in the 20th Century, and has had a negative effect on provision for other modes such as public transport. However, it is important to remember that the main effect of adoption of the car was not to replace public transport trips. Instead, people made more trips, longer trips, and trips to destinations that they would not have considered visiting in the absence of access to a car. In fact, in terms of overall passenger-km, public transport in Britain has about the same level of use as the 1950s, but travel by car has grown by a factor of eight.

A number of different studies have shown that the bus is perceived negatively by many people:

- Expensive, unreliable and inconvenient
- Poor representation in popular media
- Negative comparisons to the car
- A “mode of last resort”

Fares, punctuality, and reliability vary nationally, yet irrespective of how true these perceptions might be, they represent the main challenges to be overcome in encouraging greater use of the bus. So how can this problem be addressed?
The Challenge

Bristol has faced significant challenges in developing a transport network, which is not dominated by private car travel:

- The city region which encompasses the actual geographic urban area of Bristol is not controlled by one local authority, but by four, each with ‘unitary’ powers over its own area (Bath and North East Somerset Council, Bristol City Council, North Somerset Council, and South Gloucestershire Council). The lack of centralised control over transport policy, and differences in priorities by the four authorities, has been a challenge to efficient sub-regional planning for the past 20 years.

- As a historic city, Bristol is faced with a problem that is common to many old cities: a lack of space. Much of the city’s urban form was designed and built before the advent of mass car travel, meaning its roads are simply too narrow for the volume of traffic they now carry, and there is often little opportunity for road-widening or reallocation of existing road space to public transport or active travel.

- Historically, Bristol has suffered from underinvestment in transport infrastructure, and a focus on provision of road space for the private car at the expense of the development of an efficient and attractive public transport network.

- Bus services outside London are provided commercially in a free market and there are significant regulatory and financial constraints on local authorities providing or specifying public transport services. Bristol and its neighbouring authorities, unlike other large UK metropolitan authorities, have not formed an Integrated Transport Authority which would confer powers to regulate fares and minimum service levels on local train services.

- These factors combined have served to make Bristol among the most congested cities in the UK; average vehicle speeds in the morning peak on A roads in Bristol are just 23km/h in 2015.

- Over the past decade, however, there has been a dramatic change in the approach being taken by the local authorities and transport operators in the city. This began with the establishment of the first Joint Local Transport Plan (JLTP) for the sub-region for the period 2005/06 to 2010/11. This was a joint policy document setting out the four local authorities’ plan and commitment to collaborate and support one another and work with commercial transport operators to improve the transport network for all. Prior to 2005, the four authorities had published separate transport plans.

- Working together as the West-of-England sub-region, the JLTP is now in its third iteration. The four authorities have been very successful in securing funding for improvements to transport infrastructure, and public transport is a core element of Bristol’s sustainability vision.

Bristol’s solutions, so far

The core of Bristol’s approach to building a sustainable transport network has been to create and nurture innovative partnerships between local authorities and transport operators. As mentioned, Bristol’s transport network exists in a challenging political context which makes positive change difficult and time-consuming. The city’s transport authorities and operators have not allowed this to limit their aspirations however, and have worked hard to build a more sustainable network in spite of the barriers they face.

One of the key messages to be taken from Bristol’s experience is that sufficient financial support is a critical element of progress toward a sustainable transport future. Through prioritising investment in sustainable transport solutions, local, national, and international governments can take the lead in supporting our transition away from a car-dependent world into one in which travel is more sustainable, accessible, and healthy for all.

Greater Bristol Bus Network

The establishment of the Greater Bristol Bus Network\(^1\) recognises the vital role that bus services must play as the backbone of cost effective urban public transport systems. In the context of UK bus deregulation, the delivery of bus network enhancements can only be achieved effectively in partnership between the commercial bus operators and local authorities.

The councils, working in partnership with bus operator First, brought 10 key routes up to showcase standard, with:

- Over 120 new buses
- Nearly 1,000 improved bus stops - new shelters, new information panels, level access
- More than 300 new real time information displays
- New bus priority signals at junctions that turn green when buses approach helping them stay on time
- Bus priority lanes allowing buses to bypass general traffic
- Improvements to pedestrian and cycle access and safety
- Road widening in key traffic hot spots
- Tree planting and localised public realm/environmental improvements


Bristol’s bus network

The predominant mode of public transport in Bristol is the bus and there is an extensive bus network covering the Greater Bristol area. Services are provided by a number of private operators, with the largest of these being First Bus. First’s main competitor is Wessex, and there are a number of smaller operators which also run routes across the sub-region.

Over the past three decades, Bristol’s bus services and operators have come under regular criticism, with passenger numbers dwindling, and the 2006 Local Transport Plan describing the bus network as “unattractive” and “expensive”.

In the past few years however, there has been a concerted effort on the part of both the operators and the local authorities to turn this around and increase the attractiveness of bus travel.

Efforts to increase bus patronage

One of the major approaches was the creation of the Greater Bristol Bus Network, which would form the foundation of a high quality modern public transport system for Bristol and the surrounding sub-region.
The initial £80 million investment in GBBN comprised £42.3 million of grant funding from the Department for Transport, a contribution of £22.5 million from FirstGroup and a local and property developer contribution of £15.2 million.

As the project progressed, the West of England authorities allocated additional funds for work above and beyond what was initially planned with a total of £91 million being invested in the West of England bus network.

Working in partnership with local bus companies, each authority delivered schemes specific to their local area; such as bus stops and bus lanes. However for cross cutting projects such as real time information and communications, one lead authority was nominated, with all partners involved to ensure a consistent approach across the network.

A formal structure with project managers, a programme board and specific leads for key areas such as real time information and communication established rigorous governance and ensured delivery.

The aims of these measures are to make the bus more attractive. They can be grouped into three categories:

- Measures such as **providing bus lanes, widening roads, and altering priorities** all help to improve punctuality and reliability, which are regularly reported as the most important issues to passengers.
- Measures such as **new vehicles, nicer stops, public realm improvements, and better accessibility**, which improve perceptions of service quality.
- **Providing Real Time Passenger Information** – such as live bus times at the stop – is very important for managing people’s expectations of the service and improving perceptions of punctuality and reliability by removing uncertainty while waiting at the bus stop.
These measures had significant positive impact on perceptions of the bus network, and also on passenger numbers and punctuality.

- Between September 2008 and the end of 2012, First Bus saw a growth of 17.6% in passenger number on their main corridor routes.
- The average percentage of buses starting their journey on time in 2013 was 91.7%, an increase of 13.1 percentage points on the 2008 average of 78.6%.
- The average percentage of buses keeping on time during their journey in 2013 was 80.0%, an increase of 6.4 percentage points on the 2008 average of 73.6%.

### Satisfaction with bus services before and after GBBN

<table>
<thead>
<tr>
<th>Service</th>
<th>2007</th>
<th>2011/12</th>
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<tbody>
<tr>
<td>Overall satisfaction</td>
<td>38%</td>
<td>73%</td>
</tr>
<tr>
<td>Punctuality</td>
<td>41%</td>
<td>66%</td>
</tr>
<tr>
<td>Service frequency</td>
<td>44%</td>
<td>70%</td>
</tr>
<tr>
<td>Journey time</td>
<td>52%</td>
<td>81%</td>
</tr>
<tr>
<td>Ease of access</td>
<td>62%</td>
<td>88%</td>
</tr>
<tr>
<td>Bus stop quality</td>
<td>40%</td>
<td>78%</td>
</tr>
<tr>
<td>Travel information</td>
<td>44%</td>
<td>75%</td>
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First Bus upgrades its buses

First Bus is delivering a programme of substantial investment in its services. In 2013/14, 48 brand new buses were introduced to the West of England fleet providing capacity improvements to serve the growing network. The company has also invested in a refurbishment programme which saw 140 existing vehicles get leather seats, LED lighting and a new, brighter external paint scheme. Furthermore it has installed free on-board Wi-Fi on all of its services in the city. The company is also continuing to focus on improving the customer experience for those using the bus, investing more in customer service as well as driving skills - and this is already starting to show tangible results in feedback from passengers.
The West of England Sustainable Travel project

It was being implemented from 2012/13 to 2014/15 by the four West of England unitary authorities¹ with nearly £30 million of central government funds².

Public transport improvements are a core element of the WEST project, which also includes area travel plans, provision of electric and low-carbon vehicles for business travel, promoting and facilitating cycling and walking, and travel behaviour change interventions.

The majority of the WEST public transport measures are focused on the creation of new bus services, bus punctuality improvements delivered through better infrastructure, and financial support for the expansion of services and the implementation of promotions.

Early indications from the evaluation of the WEST project are promising. Chart XXXX shows the latest bus satisfaction figures for Bristol since 2008³. Within these data it is possible to see the positive trends in satisfaction attributed to the GBBN, and in the final period reported, which was the first year of the WEST project, there was a further increase in satisfaction.

¹ Bath & North East Somerset, Bristol City, North Somerset and South Gloucestershire Councils
² Local Sustainable Transport fund awarded by the Department for Transport
³ National Highways and Transport Survey (NHTS). Conducted by Ipsos Mori via a postal distribution of questionnaires to residential addresses in participating local authorities. The survey has been conducted in Bristol since it started in 2008, with a response sample size in 2014 of 994.

Bus satisfaction in Bristol (%)

![Chart showing bus satisfaction in Bristol from 2008 to 2014](chart.png)
Emissions reduction

The transport module on reducing traffic and traffic impacts module identifies the importance of reducing the number of private car trips in reducing emissions. Public transport vehicles which run on traditional diesel fuel also produce significant amounts of pollution and efforts to reduce emissions for these vehicles are described below.

Case Study: First Bus – Reducing emissions from the bus fleet

First Bus is one of Britain’s largest bus operators. In Bristol, it runs some 400 buses and is the largest bus operator in the city.

Low emission diesel buses

First is upgrading its bus fleet in Bristol with substantial investments committed in 2015 and 2016. This includes replacing single-deckers and older vehicles in the fleet with 50 new double-decker buses that meet the sixth tier of European emission standards (Euro VI). As well as replacing older buses, the company will also be adding extra vehicles to the fleet boosting capacity on the network.

Euro VI came into force in 2014 and compared with the Euro V standard, it results in eight times less oxides of nitrogen (NOx) and particulate matter (PM) emissions. Tests of the new Euro VI buses on London’s 159 bus route show a 95% drop in NOx emissions over older Euro V vehicles.

Alternative fuels

Two of the Euro VI buses being introduced in Bristol are super-hybrid Enviro 400 buses with smart geo-fencing technology. This GPS technology will enable vehicles to recognise when they enter areas of the city with poor air quality and then switch to electric mode.

In addition, First Bus has introduced 11 new low carbon micro-hybrid buses, which are lighter than conventional single deck buses and, together with advanced engine technology, are around 25-30% more fuel efficient overall.
As part of plans to invest in clean technology, the company is also investigating the use of alternative vehicle propulsion solutions, e.g., in partnership with GENeco, Scania GB and Roadgas, trialling the Bio-Bus, the UK’s first bus to be powered entirely by human and food waste.

The Bio-Bus can seat up to 40 people and produces significantly fewer emissions than diesel engines. The gas is generated through anaerobic digestion – under which process oxygen-starved bacteria break down biodegradable material to produce methane-rich biogas.

Challenges

Fuelling the Bio-Bus in Bristol is one of the challenges that First Bus will have to overcome while it is running the vehicle. While the rest of its fleet can be fuelled in its depots, for the duration of the trial the Bio-Bus will need to fill up at a special site in Avonmouth, where GENeco turns sewage and inedible food waste into the biomethane gas. If the trial is successful then, as part of a further rollout of vehicles, First Bus will need to find a way to fuel the buses within its depot facilities.

In addition, the company has had to manage uncertainty around reliability and how well the bus would cope with the demands of a city-wide operation. It has also been testing how the general public react to it. To date, the pilot has been a success, operating regularly in service and has been well received by members of the public and bus passengers who have nicknamed it the ‘Bristol Poo Bus’.

Operating in service

For the duration of the trial, all the households along the route used by the Bio-Bus will, indirectly, help to fuel it since these households have their waste processed at sewage treatment works at Avonmouth.

Over the course of each month it is thought that each household along the route will contribute enough waste to fuel the Bio-Bus for 10.5km (6.5miles). The route is around 15 miles in each direction, meaning it would take each household around two months to produce enough waste to fuel an end-to-end journey on it. Collectively, all the households along the route could produce enough waste over the course of a year to run the Bio-Bus for 4.1 million kilometres (2.5 million miles).

Biomethane gas is a sustainable fuel source, and if the trial with the Bio-Bus proves successful, First Bus plans to bring more Bio-Buses into operation in the future.
The potential of smart ticketing

Technology has fundamentally changed the way people travel. Not only distances covered, but also the way people access information about services, and the way they pay. The application of new technology allows operators to improve the quality of transport services, as well as offer additional services, so creating a more informed, understandable, integrated, and value for money transport experience.

The trouble with tickets

Bristol is currently ‘behind the times’ when it comes to smart-ticketing and multi-operator tickets, which is a serious issue considering the positive impacts on accessibility, passenger numbers, and customer satisfaction that a properly implemented and integrated ticketing system could have. Modern payment technologies have gifted Bristol’s bus operators with a fantastic opportunity to increase patronage and improve customer satisfaction, but to make the most of this will require them to work together to create a simple, integrated ticketing system for the benefit of the passengers and the city.

Bristol however faces a challenge common to many of the public transport networks in the UK; that the deregulated system means that there is no centralised political control over the bus network, and as such ultimately no effective means by which local authorities can enforce changes or improvements around issues such as ticketing. Bristol and the West of England sub-region urgently needs a comprehensive and integrated system of ticketing, which makes use of the latest contactless payment technology. At the current time, bus operators in the city offer a limited multi-operator tariff, however there is no cross-operator smart card option. This makes the tariff structure overly complicated, and passengers are losing out due to operators’ concerns about commercial sensitivity and the barriers this creates to real cooperation. The individual smart card options that operators do currently offer are piecemeal and limited. As a result, in Bristol the vast majority of journeys are still paid for with the ‘traditional’ cash and paper ticket system, which wastes time at bus stops, causes stress for passengers having to find the correct change, and creates a significant barrier for potential new users who have no knowledge of the pricing structure or payment process.

Nevertheless there is hope for Bristol’s bus ticketing system. There is a new integrated “West Card” in development, which will be initially deployed on the new Metrobus system (see page 18), before being expanded to cover all services. Operators are also beginning to offer limited mobile ticketing options through smartphones, which is promising.

Billy Clayton
First Bus has invested in mobile ticketing (known as m-ticketing) in a bid to make it easier to travel by bus. Since January 2015, bus users across the city have been able to buy bus tickets on smart phones, storing them in a ‘virtual wallet’ until they are ready to use them. The launch of the m-ticketing app followed a previously successful trial with university students in Bristol and Bath. First are now exploring further mobile applications to make it easier to use buses and enhance passenger’s journey experience.

M-ticketing has been made possible by working in partnership with financial services company Barclays to offer an app with a secure method of payment. The app utilises Pingit (the UK’s first person-to-person mobile payment app) providing a quick, easy to use and safe way to pay for transactions without the need to share account information. First Bus is the first nationwide public transport company to offer Pingit as a mobile payment option.

M-tickets are proving to be a popular technology among bus users in Bristol and, since March 2015, have been used to pay for over 90,000 bus journeys in the city.
Changes to fares

Bus passengers in Bristol have long been faced with higher fares than those in other major UK cities. Fares which are set too high can cause a vicious circle of decline for bus patronage, as people find themselves put off bus travel by the fares, and so the numbers of people using the bus falls, and the bus operators have to increase fares to offset the financial loss caused by this decline.

Recognising this, recently there has been a change of approach by the major operator, First Bus, which might be seen as an attempt to turn the vicious circle into a virtuous one: through lowering fares and rationalising the tariff structure, the bus is made more accessible and attractive to people, so passenger numbers increase, and so revenues improve.

The case study below explains the fare changes in more detail.

Case Study: Increasing public transport use by reducing fares and upgrading services

In November 2013 following an extensive public consultation called Fairer Fares, First Bus radically overhauled its fares in Bristol, simplifying and reducing many of them. This work, combined with other efforts to improve services and introduce new and more vehicles, has led to increases in the number of people using buses in the city. This effect has been amplified by other initiatives in Bristol occurring at the same time – for example the introduction of Residents Parking Zones in a number of areas across the city. The company experienced a 20% year-on-year increase in the number of fare paying passengers – roughly 70,000 additional passenger journeys a week. This demonstrates how a package of targeted measures can be effective in significantly increasing patronage.

Passenger response

Passenger surveys looking at overall levels of satisfaction in the city, and customer responses to the fare changes, also confirm that people are happier than ever before. In April the industry watchdog, Transport Focus, reported a 5% rise in passenger satisfaction with First’s services in the West of England from 2012 to 2014 - taking it to 85%.

In addition, separate research by First Bus, looking specifically at the fare consultation process and the outcomes of it, found that 59% of people in the city stated that they were more likely to travel by bus.

Wider data on satisfaction with fares in Bristol support this. As the chart below shows, there is a clear 19.7% surge in satisfaction with fares following the restructure.

This supports the approach and suggests that reducing fares to a level which are reasonable and attractive to passengers can have a very positive impact, and help to encourage people to choose public transport for some trips.


Satisfaction with fares in Bristol (%)
Integrating transport links

Good integration between different modes is a critical element of a sustainable, multi-mode transport system.

Travellers need to be able to change easily between different modes, meaning that public transport interchanges must be designed with multi-modal travellers in mind, timetables should be synchronised where possible across services and modes, and secure cycle parking and comprehensive cycling and walking networks be provided to facilitate cycling and walking to access bus and rail services.

Case Study: First Bus – Integrated mobility

Integrated transport solutions are those in which all modes work and operate together as one seamless network. Properly integrating our sustainable transport systems with one another can play a key role in reducing car dependence and private car ownership.

First Bus in the West of England is looking to develop comprehensive mobility solutions through stronger integrated transport networks. City Car Club is one of three car-sharing club operators present in Bristol. Working in partnership, the two companies are promoting public and shared transport into single service offers thereby reducing the need to own a car. The intention is that customers will be able to use the bus for the day-to-day commute without the stress of parking, but will have a car available as and when they need one.

Through the partnership, First Bus customers get complimentary membership and free driving credit with City Car Club when they purchase an annual bus ticket. The success of this initiative depends on the convenience and options available to customers: City Car Club has 63 locations in Bristol, including one that offers an electric car. Members simply pick up a car at the location most convenient to them and drop it off at the same location once finished.
The future: Large projects and infrastructural improvements

Over the next 10 years to 2026, Bristol is meeting the challenge of growth and infrastructure head on with more than £400m of investment in its local transport infrastructure to take place.

Case Study: Metrobus

MetroBus is a transformational bus-based rapid transport scheme which creates three routes linking Bristol’s Enterprise Areas to large parts of the urban area, and significantly improves access to deprived parts of South Bristol.

Construction has begun in 2015, and a full service will be up and running by 2017. Metrobus will be the first rapid transit scheme completed in the West of England, at a total scheme cost of £265m. The routes will be a mix of guideway and on street bus priority cutting travel times from south Bristol to the North Fringe employment areas by up to 40 minutes. The MetroBus network will also incorporate a new smart ticketing system – the West Card – which aims to be Bristol's first real step towards a full integrated, multi-modal ticketing system.
MetroWest transforms our local rail network with its irregular and confusing routes and timings into better ‘metro’ style system. The most significant improvement in phase 1 will be the re-opening of the Portishead branch line to serve the town of Portishead some 10 miles to the west of Bristol. New regular timetabling will result in simple to understand services and frequencies will generally be improved to 30 minutes on most routes. Through routes will link Yate and the North Fringe with Bath and Weston-super-Mare. New trains will be used as they are cascaded from the Thames Valley routes.

A second phase brings the total investment to £100m and will see services return to the Henbury freight-only line to serve new development at Filton airfield. The second phase has a target completion date of 2022.

The Temple Quarter Enterprise Zone is located in the heart of Bristol around Temple Meads station and will benefit from both MetroBus and MetroWest and Great Western Electrification.

A further £21m investment through the City Deal will improve the walking and cycling environment within and to the zone and drastically improving the urban realm, which is currently dominated by traffic.

Fig 01. Type of train expected to run on MetroWest services
Summary: Bristol’s public transport journey

Throughout this module we have seen how Bristol has begun to address the significant challenges that it faces on its journey to creating a truly sustainable public transport network which is accessible to all citizens, and which can help to mitigate the negative environmental, social, and health impacts of excessive car use.

The city and the four authorities in the West of England have made great progress over the first ten years of this journey. They have forged political relationships with one another, and entered into new types of partnership with public transport providers to tackle issues of falling patronage and poor public perceptions of services. Examples of measures which have worked particularly well in Bristol have been the bus priority measures established in the GBBN, the enhanced RTI systems allowing people more control over their journeys, and the new buses which make for a more attractive experience.

This being said, there remains a long way to go: Bristol is still the most congested of the UK’s major cities, and satisfaction and patronage on bus services is still nowhere near as high as it has the potential to be. There are a number of key areas for improvement, in particular a more comprehensive Park and Ride system serving the city, the establishment of fully integrated multi-operator smart ticketing, and additional measures to restrain car demand and reduce congestion.

The key messages throughout this module have been the importance of political collaboration to enable cross-boundary working, and sustained funding to allow investment in infrastructure and other service improvements. These messages must be taken within the context of the challenges presented by a deregulated bus market, which makes the necessary cooperation and leadership significantly more challenging.

It is also critical that any government, authority, or operator serious about improving sustainability through public transport provision to recognise the importance of sufficient financial support and political will to enable this to happen.
Key messages and advice

Below are the five key messages from Bristol’s public transport journey. These are the lessons that Bristol will reflect upon and follow as it embarks on the next stages of its transport infrastructure improvement plan, and we hope that these can be useful to other cities seeking to create a more sustainable, accessible, and popular public transport network.

1. Working together is the key

Bristol’s experience has shown that working in partnership, rather than in competition, is the most important aspect of addressing large challenges such as transport sustainability. The big change in Bristol’s approach to transport came when the four local authorities in the West of England began working together. More recently this attitude of partnership and cooperation has extended to working with the local operators, and it is evident that this has had a very positive effect on the city and sub-region’s public transport system.

2. Funding must be made available

Through investing in the transport network, local, national, and international governments can bring about progress on sustainability. The improvements to Bristol’s transport infrastructure are the vision of the city and the people, but they would not have been possible without the ongoing financial support which is necessary to make these visions of a better city a reality.

3. ‘It’s about reframing the transport culture’

Bristol (and the UK more generally) is still very much in the grip of ‘car culture’. The car is the dominant mode of transport, and moreover holds the status as the icon of personal travel in popular media and culture. To have a car is to be successful, whereas to use public transport or active travel is not. There is evidence that this culture is beginning to weaken, and this is particularly true in places which have an excellent, attractive, and accessible public transport system – for example London (where driving around the city is often not seen as the best way to travel). The message is that if you can change cultural perceptions of transport, then it will become more acceptable to use public transport. To do this requires an integrated and comprehensive network which can offer a reliable alternative to the car.

4. Public transport must be affordable

One of the strongest outcomes from Bristol’s transport journey has been the positive change in levels of patronage and customer satisfaction with fares since the introduction of the updated tariff. This result is proof that people want to use public transport, but only if it is perceived to be both accessible and affordable. Having fares set to an attractive level starts off a virtuous cycle: more people are attracted to the service, revenues increase, more investment in the network becomes possible, services improve further, and yet more people are attracted to public transport.

5. Change is possible

Just a decade ago things did not look good for Bristol’s public transport network. With dwindling passenger numbers, and satisfaction with services at a low, it seemed an impossible task to turn the situation around. The change that has happened since then has been huge. Bristol still has a very long way to go before it has a fully sustainable, attractive, public transport network. However through working together on large-scale infrastructure projects, the local authorities and operators have turned the situation around; passenger numbers are now rising, and satisfaction with the bus network is improving dramatically.

6. Car demand restraint (controls on access, parking availability and costs)

This will also be key to effecting significant modal shift to public transport and cycling and walking and unlocking the congestion to further improve public transport journey times. The implementation of 15 residents’ parking areas in Bristol has significantly advanced this element of the West of England Transport Strategy.
ABOUT THE AUTHOR

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He is currently working on two research projects: the first is looking at the experiences of workers who travel away from their families for work; the second is a large-scale evaluation of the WEST Local Sustainable Transport Fund project.

BRISTOL 2015

European Green Capital is a prestigious annual award designed to promote and reward the efforts of cities to improve the environment. Bristol is the first ever UK city to win the award.

European Green Capital is run by The European Commission, recognising that Europe’s urban societies face many environmental challenges – and that sustainable, low-carbon living is vital to the future of our cities and our people.

The award was first won by Stockholm in 2010. Since then, Hamburg, Vitoria-Gasteiz, Nantes and Copenhagen have carried the torch. Bristol will hand over to Ljubljana at the end of the year.

THE BRISTOL METHOD

The Bristol Method is a knowledge-transfer programme aimed at helping people in other cities understand and apply the lessons that Bristol has learned in becoming a more sustainable city, not just in 2015 but in the last decade.

Each module of the Bristol Method is presented as an easy-to-digest ‘how to’ guide on a particular topic, which use Bristol’s experiences as a case study. The modules contain generic advice and recommendations that each reader can tailor to their own circumstances.

The Bristol Method modules are published on the Bristol 2015 website at www.bristol2015.co.uk/method

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