2030:  Our vision for a carbon neutral transport system

The Sustainable Transport Network – who are we?

The Sustainable Transport Network (STN) is a group of transport organisations working together from across Bristol to help create positive dialogue about transport and space in our city and to set out a vision for an integrated and sustainable transport network that can be shared by all. We are a thematic board supported by Bristol Green Capital Partnership.

What have we done?

We have not been constrained by the existing One City Plan or the Bristol Transport Strategy objectives. Neither plan proposed the kind of urgent action required to deliver carbon neutrality, and whilst both plans contain lots of good outcomes and deliverables their timelines are too high level and aren’t prioritised.

We believe the city needs a Transport Plan and in order to ensure delivery against key objectives it would benefit from focusing on top priorities, and setting a clear committed timeline of actions for each one. The One City Plan timeline contains too many items, with arbitrary timing making it difficult to see the interdependencies and sequencing required for delivery of the objectives.

We have not been constrained by funding availability as we believe we need to first define our aims and then look for low-cost actions that accelerate the necessary change whilst defining a funding strategy as sub-regional and national levels.

As a result, the Sustainable Transport Network held a workshop with its members on 17 October 2019 to map out the timeline to carbon neutrality by 2030 for three key objectives. These were:

1. At least 40% of all journeys by active travel by 2030
2. A maximum of 30% of all journeys by car by 2030
3. At least 20% of all journeys by public transport by 2030
A timeline of actions required to deliver the objectives was developed and three priority actions for each objective have been put forward for inclusion in the One City Plan timeline. These are highlighted below:

Our recommendations

Active Travel

2020: A programme of walking and cycling capital and revenue investment is established

2023: City-wide liveable neighbourhoods as mitigation to rat-running caused by clean air zone avoidance

2025: Deliver a comprehensive network of 8 to 80 segregated cycling routes on arterial and other major roads

Car reduction

2020: Deliver promotional activity to advertise alternatives to car travel

2023: City-wide controlled parking zones to include residents’ parking and red routes on arterial corridors

2024: Introduce a congestion charge or workplace parking levy

Public Transport

2022: Contactless card payments and daily, weekly and monthly fare cap for all modes

2025: Implement bus deal priority corridors and double bus frequency

2025: Mobility Stations (enhanced park and ride) delivered on all corridors
Why now?

The Sustainable Transport Network has tended to operate by responding to consultations, but now is a good time to be proactive. Since the declaration of a Climate Emergency in late 2018, focus has shifted to how the city takes action on carbon emissions at a faster rate than previously planned. Existing plans such as the One City Plan provide a vision for the city up to 2050, but do not currently convey the urgency for the actions needed, nor a prioritisation of the types of action required to meet a carbon neutral objective by 2030. We believe that the Sustainable Transport Network has the expertise to help populate this timeline, and in doing so play a useful role in shaping the refresh of the One City Plan.

Active Travel

**Objective:** At least 40% of all journeys by active travel (20% walking and 20% cycling) by 2030

**Baseline:**
2011 Census 18% walking, 8% cycling commuting journeys

**Narrative:** Bristol has very high levels of active travel compared with other UK core cities; more people in Bristol commute to work by cycle or on foot than in any other local authority in England and Wales. Despite this, two-thirds of journeys in Bristol are still made by car and only 29% of people in Bristol currently feel safe while cycling in the city.

With an ever-growing population, increasing the percentage of active travel journeys is required for the city to meet its carbon reduction targets, and will also have huge public health benefits through improving air quality and increased physical exercise. Some active travel interventions have the added benefit of being cheap and quick to implement.

Space-efficient transport modes reduce congestion, making it easier for local businesses to thrive and operate. To do this, the city’s residents need safe, attractive and seamless journeys from their front doors to their destination or to a public transport interchange. For walking there needs to be a walking network that prioritises people, not just in residential neighbourhoods and local centres, but also on major routes into the city centre. Every arterial road corridor should also have high quality segregated cycling facilities that enable all ages and abilities to cycle. A comprehensive, joined-up cycle network needs to be planned and implemented connecting liveable neighbourhoods with key destinations and transport hubs across the city.
Car reduction

Objective: A maximum of 30% of all journeys by car by 2030

Baseline:
2011 Census 50% car commuting journeys

Narrative: For too long there’s been an implicit expectation that the number of journeys by car will reduce simply by having stated objectives to increase the mode share of more sustainable modes. This often means that individuals are able to externalise their behaviour and expect others to make more sustainable choices on their behalf. Without an explicit car reduction target, people who currently drive will direct the responsibility for behaviour change at other people, believing they have no part to play in increasing levels of walking, cycling or public transport use.

Car reduction is necessary because a greening of the vehicle fleet does not have a significant positive impact on the ability of the city to meet World Health Organisation targets for particulates, for which there is no safe human exposure limit. Neither does changing the propulsion technology reduce the congestion or road danger that vehicles create on our streets.

We need fewer vehicles to enable a more liveable city where the space created can be given back to active and sustainable modes.

Public transport

Objective: 20% of all journeys to be by public transport by 2030

Baseline:
2011 Census 8% commuting journeys
Bristol Transport Strategy estimated 11% of commuting journeys

Narrative: Public transport provision in Bristol is predominantly met by buses, with bus use in the city currently comprising 11% of journeys to work. This figure is increasing rapidly year on year, but with an ever-growing population, even maintaining this level of usage will mean a greater number of journeys across the network. With average bus speeds across some parts of Bristol’s bus network at just 6 miles per hour, there needs to be an increase in journey speeds to make public transport more attractive and encourage a shift away from cars. Mobility stations (enhanced park and ride sites) are required on all corridors in order to intercept car journeys that would otherwise travel into the city enabling onward journeys by a variety of sustainable modes.

Increasing the efficiency of connectivity will improve accessibility to jobs and education for everybody in the city. This will require greater levels of bus priority and
dedicated facilities on Bristol’s congested road network. To achieve prioritisation will require reallocation of road space on all corridors. Bus routes need to enable orbital journeys, and ticketing needs to be contactless and cross-mode with a daily fare-cap across different travel modes. Public transport interchanges will need to make combining a bus or train journey with walking or cycling much easier. In terms of rail provision, the frequency of the MetroWest rail network will need to increase to every 15 minutes with a growth in the number of passenger carriages in operation in the West of England.

The timeline

The actions in the timeline are grouped by mode and colour coded as per the colours below. The priority actions are indicated by white text.
<table>
<thead>
<tr>
<th>Year</th>
<th>Action</th>
<th>2020</th>
<th>2021</th>
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<th>2026</th>
<th>2027</th>
<th>2028</th>
<th>2029</th>
<th>2030</th>
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<tbody>
<tr>
<td>2020</td>
<td>LCWIP is adopted as the delivery plan for walking and cycling</td>
<td>Ban pavement parking and roll out street enforcement for other temporary obstructions (e.g. bins and A-boards)</td>
<td>Develop neighbourhood active travel champions scheme to roll out with grant funding to deliver change</td>
<td>15% of all transport funding spent on active travel</td>
<td>LCWIP phase 2 schemes identified and prioritised</td>
<td>Deliver a comprehensive network of 6 to 80 segregated cycling routes on arterial and other major roads</td>
<td>15 minute rail frequency at all stations</td>
<td>Public transport free for under 25s</td>
<td>Maximum 5 minutes’ walk to any bus stop or rail station for all citizens</td>
<td>Free public transport for all</td>
<td>Free public transport for all</td>
<td>Trans on pedestrian centre</td>
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<td>2021</td>
<td>Clarification of enforcement &amp; rules for active travel routes</td>
<td>Increased staff resource for delivery of active travel programme</td>
<td>Paid roles for walking buses to schools supervisors</td>
<td>City-wide liveable neighbourhoods as mitigation to rat-running caused by clean air zone avoidance</td>
<td>Congestion charge and/or workplace parking levy introduced</td>
<td>Car-free local centres delivered</td>
<td>MetroWest phase 3 Horfield, Ashton Gate &amp; St. Anne’s</td>
<td>MetroWest phase 4 Coalpit Heath &amp; Thornbury</td>
<td>Dynamic road user charging introduced</td>
<td>Moving block train signalling</td>
<td>MetroWest phase 5 Yate &amp; Hardwood</td>
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<td>2022</td>
<td>Develop and publish design standards for walking</td>
<td>Identify funding for neighbourhoods to deliver minor improvements in their local area</td>
<td>Mandatory business travel plans for businesses and new developments with enforcement powers</td>
<td>Deliver a quietway cycling network using modal filters, traffic reduction and junction treatments suitable for an unaccompanied bikeability trained 10 year old to cycle to school</td>
<td>Electrification of Bristol rail services</td>
<td>All first phase LCWIP schemes delivered</td>
<td>Longer trains</td>
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<td>2023</td>
<td>A programme of walking and cycling capital and revenue investment is established</td>
<td>Identify and deliver liveable neighbourhood pilot</td>
<td>Work with businesses to develop car park management policies</td>
<td>City-wide controlled parking zones to include residents’ parking and red routes</td>
<td>Free travel for under 18s</td>
<td>School Streets established at all schools with ANPR camera enforcement</td>
<td>In Bristol new rail stations within 10 minutes of whole population</td>
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<td>2024</td>
<td>Pilot school streets programme</td>
<td>Deliver city-wide e-bike hire scheme</td>
<td>Contactless card payments and daily, weekly and monthly fare cap for all modes</td>
<td>Pedestrianisation of old city in Bristol city centre</td>
<td>100% biogas bus fleet</td>
<td>Mobility Stations (enhanced park and ride) delivered on all corridors</td>
<td>Electric or hydrogen buses</td>
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<td>2025</td>
<td>Promotion and facilitation of car sharing</td>
<td>Deliver Parking Strategy</td>
<td>Cycle lockers at stations and park and ride sites</td>
<td>Bus/rail interchanges delivered</td>
<td>Reduced rail and bus fares</td>
<td>Implement bus deal priority corridors and double bus frequency</td>
<td>Electric or hydrogen buses</td>
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<td>2026</td>
<td>Investigate demand management measures such as work place parking levy, congestion charge, class D CAZ</td>
<td>Develop circulation plan and identify traffic cells (liveable neighbourhoods)</td>
<td>Real time information available at all bus stops</td>
<td>My First Mile available where required</td>
<td>MetroWest phase 2 Henbury and Yate</td>
<td>Bus/Rail real time information at all stops</td>
<td>Electric or hydrogen buses</td>
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<td>2027</td>
<td>Information about impact of car journeys</td>
<td>Vehicle scrappage for mobility credits</td>
<td>Half hour rail service to all stations</td>
<td>15 minute service on key routes</td>
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<td>2028</td>
<td>Enable greater working hours flexibility including working from home</td>
<td>Produce Bristol transport plan</td>
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<td>2029</td>
<td>Promotional activity to advertise alternatives to car travel</td>
<td>All rail stations accessible</td>
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<td>2030</td>
<td>Increased cycle carrying capacity on trains</td>
<td>MetroWest phase 1a Portishead and Severn Beach</td>
<td>Preserve bus subsidy for uneconomic routes</td>
<td>Free travel for school children by public transport</td>
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