Backwell | public transport design proposals

Date of report: April 2024

Context: Backwell and the Bus Service Improvement Plan

Backwell context

- The A370 Backwell crossroads is a key, four-arm signal junction in the North Somerset network, and an area of significant congestion.
- A popular commuter route for traffic between Weston-super-Mare and Bristol, including the X1 and X8 bus service routes, the A370 junction is already close to capacity with the amount of traffic it can support on a typical day.
- The A370 is categorised as a Primary Route, carrying c.13,000 vehicles/day. North Somerset's Place and Movement Framework (which sets the guiding principles for the district's place and movement needs) states this is the most appropriate route for longer distance trips. District-wide, the network of primary routes creates a Primary Distribution Network in North Somerset, connecting towns and service villages to cities, employment centres, and the national, strategic road network (SRN) of motorways and other main roads.
- Station Road in Backwell is categorised as a Neighbourhood Distributor road, carrying c.8,000 vehicles/day. Primary distributor roads facilitate traffic movement and cohesion within and between neighbourhoods and urban areas.
- Dark Lane in Backwell is categorised as a Local Access road, carrying c.2,500 vehicles/day. Local Access roads provide access to properties and local services.
- Our local population in North Somerset is growing well above the national average. Planned and proposed future housing developments – both within and outside the scope of North Somerset's draft Local Plan to meet local housing need – are also likely to increase demand on the A370.
- As a result, the amount of traffic passing through Backwell at peak times is expected
 to increase, worsening travel times and pressure on our roads, if changes are not
 made at this junction.
- In a recent general North Somerset bus service survey, 21.3% of respondents said the A370 Backwell was where they got held up during their bus journeys.
- The X1 service between Weston super Mare and Bristol has a 15-minute frequency made possible through temporary BSIP subsidy. It carries c.140,000+ passengers per month.











 We are working to create commercially sustainable bus services for our growing population that are future-proof and affordable, by making bus services more reliable and efficient. That way, more people can travel by bus, alleviating the pressure on our road network and lowering carbon emissions.

The Bus Service Improvement Plan context

- The North Somerset Bus Service Improvement Plan (BSIP) is a joint initiative between North Somerset Council (NSC), the West of England Combined Authority (WECA), the Department for Transport (DfT), bus operators, and other stakeholders. Its aim is to create commercially sustainable bus services, for our growing population, that are future-proof and affordable, by making bus services more reliable and efficient, and by growing bus usage locally.
- Our communities repeatedly tell us they want and need more reliable, frequent, affordable and sustainable bus services – and that's ultimately what BSIP is here to achieve.
- One of the ways the North Somerset BSIP aims to achieve this is by implementing a
 package of bus infrastructure improvements, called bus priority schemes bus lanes,
 signals or other measures that give buses priority over other traffic. These mainly
 focus on a chain of changes along three of our key routes, or bus corridors the
 A369, A38 and A370 where we are also investing time-limited funding in temporary
 fares subsidies and more frequent buses.
- Without bus priority improvements to help make bus travel faster, more reliable and more efficient, it is likely that bus services in North Somerset will have to be cancelled, or significantly scaled back, once the Department for Transport's financial support through BSIP ends. This is vital because, as a local authority, we simply do not have the funds to subsidise bus services in North Somerset, and this situation is unlikely to change in the future.
- We have faced this situation before: in 2022, North Somerset saw several local bus routes withdrawn as they could not be sustained financially by operators.
- In the last few months, BSIP teams have been actively engaging with North Somerset communities on a number of different concepts, proposals, and works for the next phase of bus priority schemes.
- The information, knowledge and views that residents share with us through our engagement activity is invaluable to the design and build process for BSIP. It is an important part of our process for checking and testing whether proposals will be effective, and further developing, remodelling, or refining schemes proposals before any final decisions are made to progress to construction.











About the original proposed BSIP scheme for Backwell

Bus priority schemes aim to create time savings for buses along an entire corridor. Their purpose is to help buses through congestion points, including those along the A369, A38 and A370 routes, so that bus services can be more reliable, efficient and commercially sustainable.

The proposed locations for the BSIP schemes were carefully and jointly identified between North Somerset Council and bus operators using bus delay and punctuality information.

The initial concept designs for Backwell included:

- Creating a new, full-time bus lane on the A370 south-westbound only.
- A bus priority traffic light system, allowing buses to run smoothly through the junction, bypassing other traffic.
- New pavements for pedestrians and mobility users, by clearing soft verges.
- Proposals to turn Dark Lane from two-way to one-way entry-only into Dark Lane at its A370 junction, with traffic exiting via Church Lane back onto the A370.
- Options for location of a community transport hub, and proposals for relocating current bus stops.

The proposal is a congestion reduction scheme, that incorporates key aspects (such as bus lane and signals changes) to improve bus journey times. The scheme also seeks to improve overall traffic flow on the A370 and Station Road to help buses and general traffic move more quickly through the junction. The original proposal partially restricted Dark Lane access to benefit the other arms of the crossroads. This proposed scheme aligned with the adopted North Somerset Place and Movement Framework.

As part of the business case for the BSIP grant funding agreed by the Department for Transport, these changes were proposed to achieve:

- X1 bus service: 3.5 minutes round-trip journey time saving at peak times
- X8 bus service: 2.5 minutes round-trip journey time saving at peak times.

Together with journey time savings from other schemes along the A370 corridor, the BSIP programme aims to reduce bus operating costs by over £750k each year which is the level of subsidy currently provided by the Council through the time limited BSIP national grant. The council will not be financially able to support this subsidy once temporary BSIP funding ends.











Summary of engagement activity

Local people were invited to give their feedback and help shape proposals through:

- An online survey, which was open for public comment for six weeks (13 November to 29 December 2023). Paper copies of the survey were also made available.
- A public drop-in event on Wednesday 29 November 2023 in Backwell. There were 304 attendees, with 225 aged 65-plus, and 79 aged between 20 and 60.

Survey overview and context

- We received 652 total responses to the survey.
- Of these, 491 were from people living in Backwell, which represents 10.2% of the Backwell population against latest census data (4,815 in 2021).
- A remaining 107 respondents said they live in Nailsea, and 54 in 'Wider North Somerset'.

! An important note on this survey

- The purpose of the survey and engagement period was to gather local views and insight to help inform the development of an appropriate bus priority scheme for Backwell that supports the current and future needs of a growing population.
- The survey was based on a self-selecting sample of participants. It was not a survey of a representative sample of the local population. For a survey to be considered representative, the participant sample would have to be weighted to reflect local characteristics in terms of age, gender, income bracket, ethnic heritage, disability, and so on. This means any outputs should be considered with this in mind.
- The survey was made up of mainly open-ended (qualitative) questions (nine out of 14 questions). This means respondents were invited to give mainly free-text responses. Analysis has therefore been conducted to identify the most common themes across these free-text responses. More than one theme was allowed per answer when analysing free-text answers.
- This survey is one part of shaping proposed designs, alongside technical testing, monitoring and data gathering at proposed scheme locations. We consider all data sets in the round alongside community representations in order to make informed, technically sound recommendations about the design of each scheme.











The topline findings from participants' survey responses were:

- Bus services are currently seen as unreliable, with more buses needed in peak times and evenings, and better connections needed (reflected across 265 responses)
- Views that the proposed changes to the current junction would have undesirable outcomes, for example, by having a negative impact on traffic flow and congestion, the village and pedestrian safety (reflected across in 482 free-text responses).
- Opinion was evenly split on the merits of the changes proposed to footways for pedestrians and mobility users (290 respondents disagreed, while 271 respondents agreed or were neutral), with some disagreement on clearance of verges to create wider pavements.
- Concerns about the impact of the scheme proposals on Dark Lane and nearby Church Lane in turn, such as existing volume of peak time traffic (mentioned in 309 responses), accessibility issues in Church Lane (mentioned in 282 responses) and pedestrian safety (mentioned in 161 responses).
- Opinion was relatively evenly split across the three proposals to relocate existing Backwell A370 bus stops:
 - moving the Bristol-bound bus stop from 39 Farleigh Road to the Leisure Centre (285 people supported this while 278 people disagreed)
 - moving the Bristol-bound bus stop from Cadogan Grove to Rodney Road, (228 people supportive, 334 people disagreed)
 - moving the Weston-bound bus stop from 7 West Town Road to outside the dental surgery (285 people agreed, whereas 279 people disagreed).
- Finally, opinion was split over the concept of a potential transport hub at one of two locations at Rodney Road or Backwell Leisure Centre. A range of questions and suggestions were raised in terms of location, design, and safety features.











Actions and next steps following engagement period

- Reducing congestion and bus delays at the Backwell A370 crossroads is critical for improving the reliability and commercial sustainability of local bus services, and alleviating the pressure on our road network as our population grows (see Context).
- We are grateful to everyone who took time to share their views on the initial concept plans. We are continuing to work through the insights and views raised to explore if there are different feasible options that would help to deliver the intended benefits to the junction and our bus services.
- We are listening to the concerns that have been raised by some participants around
 the proposed one-way closure of Dark Lane. The Council does not intend to progress
 the suggested changes at Dark Lane in their current form. However, over the next
 several months, we are planning to undertake further technical research to explore if
 there are any other options that would feasibly address congestion and bus delays at
 this A370 junction, without requiring a full one-way closure of Dark Lane.

We will investigate the feasibility of the following scheme options:

- The suggestion from the community of a peak hours-only closure of Dark Lane.
- A suggestion from the community to explore a longer bus lane and its placement.
- Traffic signals changes. We will look at a range of scheme options that could maximise capacity for general traffic and create bus journey time savings, including:
 - Increased cycle time at the junction
 - o Reduced green time on Station Road, to prioritise the A370
 - Amending the staging of traffic light signal changes at the junction (so that, for example, Station Road and Dark Lane run at the same stage)
 - o A ban on currently permitted movements (such as right turns).

Our work over the coming months will include:

- Working with the community for their input on the facilities that would be a priority for Backwell for a prospective transport hub(s).
- Considering any changes we need to make to our approach, as a result of new DfT guidance on bus priority.
- Undertaking additional surveys at the Church Lane junctions and around the school.
- Further analysing accessibility issues and pedestrian safety in Church Lane.
- Reviewing concerns about safety at the A370/Church Lane junctions.
- Considering latest technical survey data, including traffic volumes, and origin and destination data for Dark Lane and Church Lane, to better understand the use of the











lanes and main routes. We will consider the proposals within the context of the North Somerset Place and Movement Framework, and how any proposals can mitigate any rat-running issues.

- Update our bus delay analysis by working with national datasets and bus operators.
- Complete a wider mitigation analysis for all options considering any unintended negative impacts.
- Complete a risk assessment relating to Church Lane, the school area and the transport hubs.
- Undertake modelling of the junction options.
- Undertake a benefits assessment.

Once all the above work has been completed, we will:

- Share information on any new proposals with Ward and Parish Councillors.
- Determine whether further engagement or consultation is needed depending on what is proposed at that time.

Please note: Council approvals for BSIP schemes are completed in two stages. The first approval stage is in consultation with the BSIP Formal Board and Executive Member, and the final approval is an Executive Member Decision. This happens before a scheme is approved to proceed to be built.

The anticipated date of the Executive Member decision will be published in the Council's Forward Plan, which is currently being updated at the time of this report's publication.

We do not anticipate a decision to be made on the Backwell A370 junction before December 2024.









