

NORTH SOMERSET COUNCIL DECISION

DECISION OF: THE EXECUTIVE MEMBER FOR HIGHWAYS AND TRANSPORT



WITH ADVICE FROM: DIRECTOR OF ENVIRONMENT, ASSETS AND HIGHWAYS SERVICES

DECISION NO: 24/25 EAT 140

SUBJECT: BUS SERVICE IMPROVEMENT PLAN (BSIP) INFRASTRUCTURE SCHEME AT BACKWELL CROSSROADS

KEY DECISION: YES

REASON: The decision will result in the council incurring expenditure of over £500,000 and will be significant in terms of its effects on communities living or working in an area comprising two or more wards.

BACKGROUND:

Introduction

The 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) and bus operators.

Our communities tell us they want more reliable, frequent and affordable bus services. That's what we're working hard to deliver through our infrastructure schemes – improving junctions to offer better flow for all traffic, resulting in quicker, more reliable, bus services, that get people where they need to be more efficiently.

We want North Somerset communities to have a modern, efficient, reliable, and affordable public transport system they can enjoy for years to come. The BSIP is working to achieve this goal by delivering packages of joined-up improvements, from more frequent bus services to more affordable fares, which work alongside our new bus service and sustainable travel infrastructure schemes, to benefit residents and communities.

Together, these changes will help make bus travel the first public transport choice, and more financially sustainable longer-term, helping to protect our vital services for the future.

Current UK Government funding for improving bus services through the Bus Service Improvement Plan is available only for a short time. But its long-term legacy will be more reliable and efficient bus services, new electric buses which are better for the environment, and more financially secure bus services, fit for our growing population, now and in the future.

Our infrastructure schemes are designed to enhance and protect residents' bus services, and promote more sustainable travel for years to come, by:

- introducing dedicated bus lanes and intelligent traffic signals to give bus users priority in key areas, and at peak times. These changes help make bus services quicker, more reliable, and more affordable for residents – and more financially viable for bus operators to keep running, requiring lower or no public subsidy

- incorporating better crossings and pavements for pedestrians, cyclists and others using lower-carbon forms of transport. This will improve the travel experience, encouraging more people to walk, wheel and cycle wherever possible, and making it easier to get to bus stops in some locations
- creating attractive new transport hubs in communities, offering a range of facilities such as secure cycle parking, real-time information displays and electric charging points, and bringing a place-making boost to town and village centres
- and replacing or improving existing stops and shelters on priority routes – making the experience of waiting for, and making, travel connections better for residents.

Our current targets across the West of England area are summarised in the following table:

Category	Target	2018/19	2019/20	2020/21	2021/22	2022/23	2023/24	Target by 2025
Bus journey times	Reduce average bus journey times (minutes) on designated corridors by 2% by 2025 and by 10% by 2030	61	*63	No data	55	56	61	62
Bus punctuality	Achieve 95% of services running on time, defined as being no more than 1 minute early or 5 minutes late, by 2030. Target for 2024/25 is 82%	*77%	N/A	74%	71%	67%	72%	82%
Passenger growth	Return to pre-pandemic patronage levels by 2025 and grow patronage by at least 24% from that level by 2030	-	*70.2m	22.5m	46.8m	55.3m	63.7m	70m
Bus Passenger satisfaction	Increase bus passenger satisfaction to 89% for 2025 and 95% for 2030	85%	*86%	No data	No data	78%	79%	89%
Bus fleet de-carbonisation	By the end of 2023 all buses operating in the BSIP area will meet the Euro VI emission standard	No data	No data	48.2%	88.6%	96%	98%	100%
Bus fleet de-carbonisation	By 2030, at least 75% of the local fleet will be either zero-emission or ultra-low emission and by 2035 all buses will be zero-emission buses (ZEBs).	No data	No data	0%	0%	3.6%	6.6%	N/A

These targets will be monitored using the following methodology:

Metric	Timing	Scale
Bus journey times	4-week period pre-implementation monitoring in 'neutral' month within 1 year of starting works	Between two bus stops on either side of the bus priority scheme location
General traffic journey times		Between two bus stops on either side of the bus priority scheme location
Bus punctuality	4-week period post-implementation monitoring at 6-, 12 and 24-months in neutral months	Cumulative bus punctuality at timing points for bus routes using the bus priority scheme
Bus patronage		Cumulative bus patronage for bus routes using the bus priority scheme

To meet these targets, the BSIP's capital-funded infrastructure schemes are designed to work hand-in-hand with initiatives to improve passenger journeys, such as fare offers and more frequent services. These initiatives are funded through a separate BSIP grant of £57 million for the whole of the West of England area, which was jointly awarded to NSC and the West of England Combined Authority (WECA) to deliver in partnership. The BSIP is governed by an Enhanced Partnership (EP) between North Somerset Council, the Combined Authority, the other Highway Authorities in the West of England area, bus operators, and other key stakeholders. Through the EP process, capital and revenue investment from NSC and WECA is met with comparable and legally binding investment in improvements to services by the bus operators.

The indicative BSIP funding was subject to a final Department for Transport (DfT) outline review of the proposed schemes, which concluded in June 2022 and resulted in the confirmation of funding being granted in November 2022. With this confirmation of funding

being later than anticipated, a change request was submitted and accepted by the DfT to extend the deadline for delivery of investment to October 2025. A subsequent change request has been accepted by DfT to extend the deadline of investment to March 2026.

To deliver North Somerset's Bus Service Improvement Plan (BSIP) capital-funded infrastructure schemes, a variety of contractual arrangements are required. The initial schemes were delivered through the council's Term Service Contract. The remaining bus priority schemes are to be delivered through a Design and Build contract awarded to Alun Griffiths Contractors Ltd. The decision to award the contract was made by the October 2023 Executive Committee. The October 2023 decision requires a subsequent Executive Member decision at the design stage before commencing delivery of each scheme.

Please note: The BSIP funding from UK Government is ringfenced. This means it cannot be used to pay for any non-BSIP related council activities, such as filling potholes, or other council services.

Pause and review

In April 2024 we paused the live programme of BSIP infrastructure projects, such as junction updates, and the introduction of new bus lanes. The pause followed several months of engagement with local communities on early proposals for schemes in Backwell, Clevedon, Rownham Hill, Lime Kiln, Churchill and Worle High Street aimed at improving congestion, enhancing local travel experiences and creating infrastructure needed for now and in the future.

During this 2024 pause and review period, the only new BSIP infrastructure project delivered was at the A370 Wood Hill junction, as part of the Congresbury congestion scheme.

The 2024 pause and review period was implemented in order to:

- assess completed schemes to monitor their effectiveness and learn any lessons to apply to future works
- consider any changes we needed to make to our approach as a result of the then new Department for Transport guidance on bus priority (LTN1/24)
- continue to engage with communities and their representatives about the range of proposed schemes
- gather further data and undertake testing in areas where this is needed in order to make a decision, and;
- set a new timeline for decisions for approval of remaining schemes to allow fuller consideration of each scheme and reduce scheme-related disruption to the local road network for residents.

The assessment of delivered schemes' effectiveness, the 'lessons learned' from the delivery of the Brockley Combe scheme, and our review of the DfT LTN 1/24 guidance, were all [considered by the council's Transport, Climate and Communities Scrutiny Panel in July 2024](#). This ensured the BSIP programme was able to fully benefit from the review, by enabling us to draw on the additional data, and carry learning forward into future, approved, schemes.

Changes agreed to the BSIP programme as a result of the 2024 pause and review period include:

- reducing the scope of current proposals for several schemes, including Martcombe Road near the M5 junction 19 roundabout, Southern Way in Clevedon and Rownham Hill near Bristol, and removing the Portbury Hundred scheme completely
- continuing to monitor completed infrastructure schemes to understand their impact and draw out any lessons learned for future schemes
- undertaking a comprehensive review of the effectiveness of the programme delivery to identify areas of improvement for the remainder of the funding period
- developing a bus lanes policy to clarify restrictions and work towards a default position of motorcycles being allowed to use these unless a particular local issue prevents it
- continuing to develop the engagement approach to deliver improvements in the way stakeholders and the wider community are communicated with.

Both during, and since concluding, this period, we have:

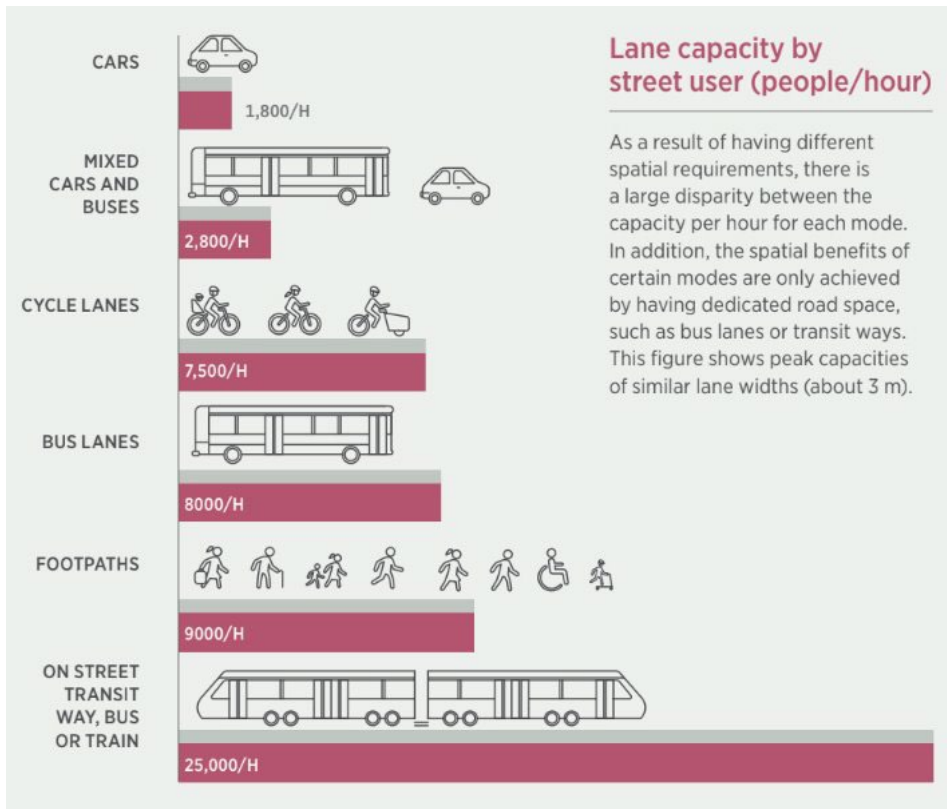
- continued to engage with local communities and their representatives on the next schemes, including for transport hubs, within the programme
- started to develop policies to reflect new national guidance, which were reviewed at an all-councillor session, hosted by the Transport, Climate and Communities Policy and Scrutiny Panel, in January 2025.

With the 2024 pause and review period complete, our BSIP infrastructure programme is now moving forward, with improvements and updates under way, planned, and proposed, across North Somerset. This means some of the next infrastructure schemes in the programme are now set for an Executive Member decision.

A370 corridor

The A370 is a major arterial transport route running through North Somerset and connects Weston-super-Mare to Bristol. At Junction 21 of the M5, the A370 into Weston carries approximately 60,000 vehicles per day. Further along the corridor on the Long Ashton Bypass, it carries approximately 13,000 to 14,000 vehicles per day. The A370 commonly suffers from congestion in the morning and evening peak periods, which is exacerbated in the summer months due to increased holiday traffic. It can also be significantly affected by displaced traffic from incidents affecting the M5 motorway or the A38.

Buses have the capacity to carry a large number of passengers within existing road space. On the northern part of the A370, approximately 14,500 people are transported each day by 13,000 non-bus vehicles, whereas around 3,000 to 3,600 people are transported by around 110 buses per day – meaning that buses carry almost 20% of trips while accounting for just 1% of the traffic. Increasing the capacity of bus services using the A370 is a key means of reducing the impact of future growth on congestion of our road network.



The A370 corridor is currently served by six scheduled bus routes on top of community transport and school buses, totalling up to 23 buses an hour in total – the 6, 7, X1, X11, X7/X7a, X9 and the A3 (noting that some services use only a part of the corridor).

At Backwell, the following services use the crossroads junction:

- The X1 service between Weston-super-Mare and Bristol serves the whole of the A370 corridor, at a frequency of up to one bus every 15 minutes. Between April 2024 and March 2025, the X1 carried an average of 142,000 passengers per month, with 150,000 passengers carried in March 2025. This is North Somerset's busiest bus service.
- The X7 and X7a service between Clevedon and Bristol use Station Road and Farleigh Road. The X7 is direct from Backwell to Bristol, whereas the X7a travels via Long Ashton. The service is approximately hourly. Prior to the service changes in April 2025, this service was known as the X8, but only linked Nailsea to Bristol. Between April 2024 and March 2025, the X8 carried an average of 12,000 passengers per month, with over 14,000 passengers carried in March 2025.

Focusing on the X1 service, the highway improvements that the BSIP aims to collectively bring to the A370 at Queensway, Smallway, Wood Hill, Brockley Combe, Backwell and Long Ashton Bypass, as well as the traffic signal upgrades in various locations, aim to deliver an operational cost reduction that should allow a commercial operator to retain the current 15-minute frequency on the X1 without ongoing subsidy from the Council or government. This requires an average 22-minute round-trip journey time reduction. The schemes at Long Ashton Bypass, Brockley Combe and Wood Hill have been delivered and are contributing to the required journey time savings. However, remaining schemes are required to yield the necessary efficiencies.

As well as journey time savings, the bus priority measures are intended to provide improvements to journey reliability and punctuality and encourage more people who can choose to use the bus to do so.

In March 2024, North Somerset successfully secured £2.1 million in Government funding to support the introduction of 24 electric buses to the X1 and X4 routes. This exciting development means that from March 2025, electric buses are a common sight along the A370 corridor. The buses deliver enhanced comfort and reliability, along with reducing carbon emissions that helps us evidence our commitment towards being a carbon neutral area by 2030.

Corridor business case elements

To understand the effects of congestion on the A370, bus and general traffic journey times were analysed between the Interchange bus stop (in Weston-super-Mare) and the Blackmoors Lane / Winterstoke Road bus stop (in Bristol) in both directions. While the two bus stops on the Bristol-side of the corridor have different names, they are in similar locations on either side of the Cumberland Basin junction in Bristol. This covers a nearly 19-mile section of the A370. The analysis took into consideration four 4-week time periods in June 2023, November 2023, June 2024 and November 2024. The detailed bus journey time and general traffic journey time for these time periods are displayed in Appendix 2; Table 1 and Table 2 (bus journey time) and Table 3 and Table 4 (general traffic journey time).

Bus journey times for the A370 corridor towards the Weston Interchange vary on average by around four minutes, however it experiences a morning peak between 7am and 9am where journey times can vary by between 6.5 to 10 minutes, with an average total journey time of 57 minutes and 6 seconds. The largest peak is visible in the afternoon-to-evening period, starting roughly at 2pm until 6pm, where journey times generally vary by 6 to 13 minutes, with an average total journey time of around 1 hour and 3 minutes.

Bus journey times travelling on the A370 corridor towards Bristol peak mostly in the morning between 7am and 9am, when journey times can vary by between six and 15 minutes, with an average journey time of 1 hour and 13 minutes. The afternoon-to-evening peak is much less visible and on average a bus journey would take 1 hour and 2 minutes.

To help manage the variability in journey times, the service timetables are designed with slack which improves overall punctuality to the advertised timings but artificially increases overall journey times.

The existing punctuality data for the affected services is below:

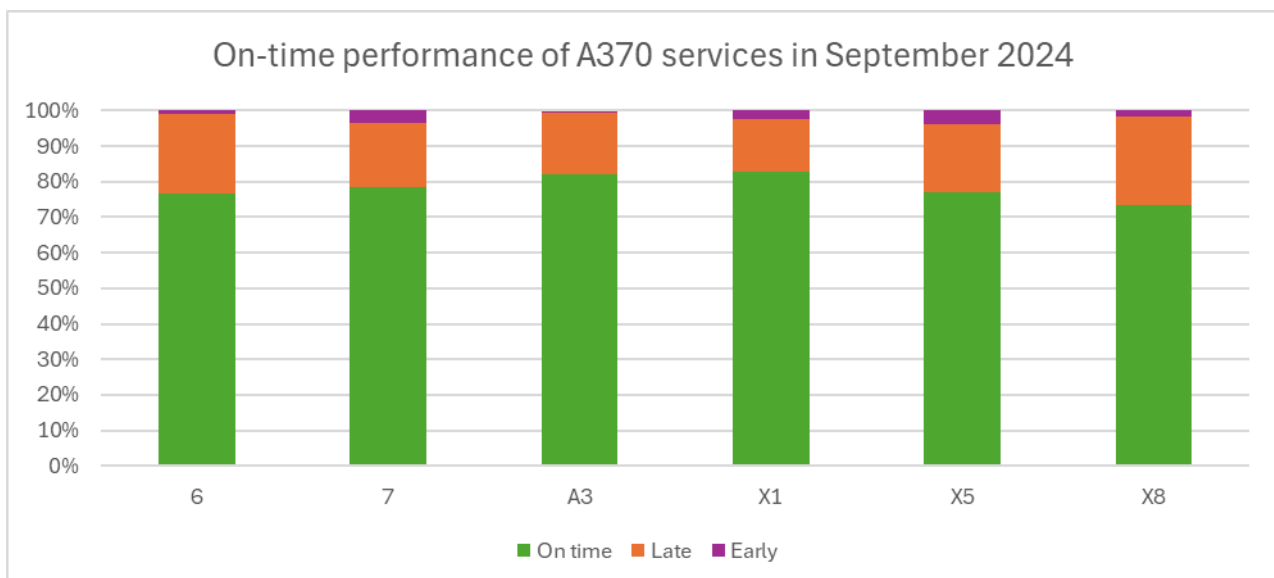


Figure 1: Punctuality data for bus services operating on the A370 corridor

Around 20 per cent of the 6, 7, and X1 services, and around 28 per cent of the X5 services are currently not running on time (defined through national measures as being between 1 minute ahead of schedule and 5 minutes behind schedule). Poor punctuality is considered a significant barrier to people who might use these services.

General traffic journey times towards Bristol from Weston-super-Mare are generally between 32 minutes and 46 minutes outside of the peaks. However, during the AM peak this can increase to between 45 and 55 minutes, a difference of around 15 minutes. The PM peak shows a slightly reduced peak of around 48 to 52 minutes.

In the Weston-bound direction between the Bristol boundary and Weston-super-Mare Interchange, general traffic experiences a 37 to 43-minute journey time outside of the peaks. The slowest peak is in the PM peak, with a journey time that can increase to between 50 and 54 minutes. In the AM peak this is significantly faster, with a slowest journey time of between 38 and 42 minutes.

The difference between bus and general traffic is more pronounced in the Bristol-bound direction, especially in the AM peak. However, it is also present in the Weston-bound direction, but the difference between the AM and PM peak is less significant.

The differences in journey times between peak and off-peak periods, and between general traffic and buses, demonstrates that useful bus journey time savings can be found on this corridor through congestion reduction and bus priority schemes.

Schemes for the Backwell Crossroads junction

Backwell Crossroads can be a junction of significant congestion. Delays are particularly prevalent eastbound towards Bristol in the morning peak, and westbound towards Congresbury in the evening peak. The resulting congestion has a major impact on road users and bus journey times. For example, bus timetables have to allow double the time to travel through the Backwell Crossroads at peak times.

The junction was identified as a location where a Bus Service Improvement Plan investment could make a significant difference to bus journey times both during and outside peak periods.

Existing traffic data and delays to bus services

To understand the existing issues at the Backwell crossroads, and the likely benefits of improvements there, traffic monitoring has been undertaken. Bus journey time and general traffic journey time data was collected for four 4-week periods in November and June 2023 and 2024. These periods provide data outside of school holidays and Christmas and represent different weather conditions for different times of the year.

Data was collected for several different segments of bus routes around the Backwell crossroads: between the second to last stop approaching the junction and the first stop after the junction, following both the X1 and the X8 routes, and in both directions. The detailed journey times for both buses and general traffic are displayed in Appendix 2 in Table 5, Table 6, Table 9, and Table 10 (bus journey times) and Table 7, Table 8, Table 11, and Table 12 (general traffic journey times).

On average, the bus journey time across Backwell crossroads is around 2 minutes and 50 seconds. Generally, the AM peak shows greater variability in the Bristol-bound direction, with a peak journey time of around 4.5 to 5.5 minutes. The PM peak equally impacts Bristol-bound and Weston-bound bus journeys, with a peak journey time of up to 5

minutes. The table below shows the variation in bus journey times recorded in November 2024.

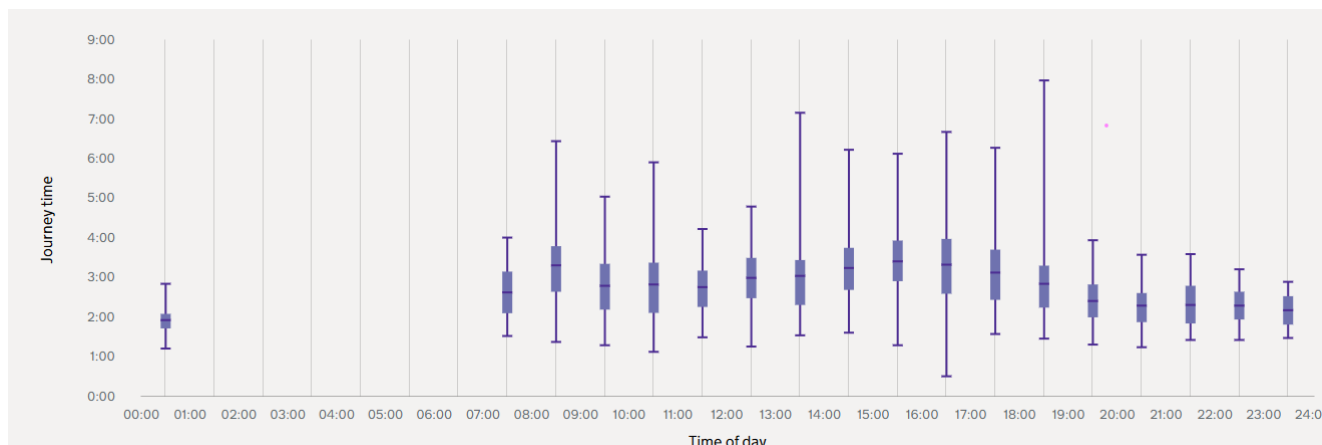


Figure 2: Graph showing the mean, 25th percentile, and 75th percentile bus journey times per hour for the X1 between Fairfield Way and Crossroads bus stops (Weston-bound) in November 2024.

The bus journey time for the X8 (prior to the service changes in April 2025) approaching the junction from the north, turning into Station Road is on average around 2 to 2.5 minutes in the off peak in both the Bristol-bound and Nailsea-bound direction. During the AM peak, the Bristol-bound direction sees a peak journey time of around 2.5 to 3 minutes, whereas the Nailsea-bound direction experiences a peak journey time of between 3.5 to 4.5 minutes to travel 0.5 miles. In the PM peak, the average peak journey time for both directions is around 4 minutes, which is showing a deterioration in the Nailsea-bound direction, and an improvement in the Bristol-bound direction.

The bus journey time variability at the junction demonstrates the potential benefits of a bus priority scheme at this location.

Scheme identification

At Backwell crossroads the following options were considered for improvements to alleviate congestion and improve bus journey times:

The junction is a four-arm crossroads. Dark Lane has a low level of use compared to the other three arms though the A370 is the dominant flow in both directions.

- 1) Bus lane on Farleigh Road – there is space on the southern side of Farleigh Road to provide a bus lane to allow buses to bypass queues on the Weston-bound approach to the crossroads. This forms part of the preferred option.
- 2) As above but with signal improvements at junction – Signal upgrades to include bus priority; approaching buses would be detected and signal timings adjusted automatically to give extra time to allow the bus through the junction with priority over other movements. This is considered effective and forms part of the preferred option.
- 3) As above but with full closure of Dark Lane – this would provide a general traffic benefit as this reduces and simplifies the number of movements that traffic signals cater for, allowing for a faster traffic signal cycle. Buses would also benefit from the improvement in general traffic flow on the A370 and Station Road. However, a full closure is not favoured due to a lengthy diversion route for people on Dark Lane and increased impact on Church Lane.

- 4) Partial closure of Dark Lane - inbound movement would be allowed so no additional signal control would be required. Benefits would still be realised, providing full benefit to buses as Option 3 but reducing the impact of diverted traffic on Church Lane. This option should also provide similar congestion relief. Therefore, this option is preferred over Option 3.

Option 4 was originally identified as the preferred option which was progressed to initial design.

The existing crossroad junction is operating very near to its maximum capacity, and future traffic growth (i.e. background growth, and that resulting from both committed developments and any additional developments identified within the Local Plan) is likely to cause increasingly severe congestion in the village. The part-time closure of Dark Lane's exit to A370 described above was proposed to help address this.

Detailed analysis and traffic modelling was undertaken to understand the potential impact of closing Dark Lane's exit to A370 at the crossroad junction, and to nearby roads which could be impacted by a closure and the resulting redistribution of traffic.

Analysis showed that some through-traffic displaced from Dark Lane would use Brockley Combe, reducing the overall volume of traffic using the roads and lanes to the south-east of the village centre. Local traffic would be displaced to Church Lane, with increased flows on both parts of Church Lane during the closure's operational hours. These increases were considered moderate and acceptable.

The analysis showed that a closure of Dark Lane's exit would provide a significant benefit to traffic using A370 and Station Road, with buses receiving a welcome benefit in terms of reduced journey times. It was expected that a further benefit of the predicted reduced congestion on A370 in Backwell would be a reduced prevalence of traffic taking alternative routes, e.g. Church Lane or Rodney Road, to bypass queues at the crossroads.

A 2030 scenario was tested without a closure of Dark Lane's exit. This showed significantly increased queuing on A370 with the likely consequence of increased rat-running on Church Lane and Rodney Road.

The design has since evolved, including the removal of the Dark Lane aspects of the proposal. The process of design development is described below.

Design development

The design now proposed for delivery is appended to this report.

The Backwell scheme has evolved significantly following design and modelling work and feedback from the local community.

The preferred option detailed above was first reviewed by the Executive Member for Highways, and the Transport, Climate and Communities Policy and Scrutiny Panel, in July 2023. This initial concept design was shared with local ward members and Backwell Parish Council, between July 2023 and December 2023 and was subject to a public engagement exercise at the end of 2023.

The initial concept design was reviewed by the appointed design consultants and has been amended to reflect feedback from various consultation exercises. The response to stakeholder and public feedback is summarised in the Consultation section of this report.

Following amendment, this proposed design was reviewed by the Executive Member for Highways October 2024. The amended design was also shared and discussed with Backwell Ward member in October and then more widely with Ward Members for Nailsea and Backwell in October 2024. The amended design was also discussed again with Backwell parish, most recently in November 2024.

It was latterly decided to remove the part-time closure of Dark Lane from the proposals because the projected benefits to bus journey times from this aspect (it being a proposal that would primarily benefit general traffic travelling on the A370 and Station Road) were considered to be outweighed by the potential community impact to residents of Dark Lane, Church Lane and adjoining roads.

An independent Road Safety Audit (Stage 1) has been undertaken.

The proposed scheme now comprises:

- A longer 260m bus lane from Backwell Leisure Centre travelling west on the A370 to the crossroad junction of Station Road and Dark Lane.
- The carriageway and footway will be widened to facilitate the bus lane and give a better footway for pedestrians.
- A proposed new puffin crossing outside Backwell Leisure Centre to improve pedestrian links.
- The A370, Station Road and Dark Lane crossroad junction will have new bus priority signals with GPS tracking to give oncoming buses priority at the junction.

This amended design is the topic of the analysis that follows.

Benefits analysis

The proposed design has been tested to understand its impact to bus journey times.

Bus journey times and reliability

The existing delays experienced by bus services, described in this report, demonstrate the potential for significant improvements to bus journey times and reliability through making changes at the Backwell junction.

For the purposes of this analysis, we will use the example of an X1 bus travelling through the scheme area, between the second to last stop approaching the junction and the first stop after the junction, in both directions.

As described elsewhere in this report, GPS data shows that existing bus journey times and delays are tidal, with Bristol-bound journeys taking significantly longer in the AM peak, while Weston-super-Mare bound journeys take longer in the PM peak.

The proposed changes will benefit bus services in two ways:

- the Weston-bound bus lane allows buses to bypass queues and save time when the road network is busy
- the revised traffic signals will have the capability to change their sequencing, and give priority to approaching buses, when safe to do so. The traffic lights do this by sensing the buses' GPS data, which then triggers them to change. This will help journey times at all times of day.

The resulting benefits from these elements are cumulative and are described below.

Weston and Nailsea-bound buses

The proposed design for the Backwell Crossroads junction includes a bus lane of 260 metres length approaching the junction from the east. At an assumed speed of 20mph, buses will take approximately 29 seconds to travel along the bus lane. In a traffic queue, the same distance would take 116 seconds at 5mph. The 87 second calculated maximum benefit has been reduced to account for variability in traffic – the assumption is therefore that buses will experience a typical (mean) 58 second time saving at busy times.

The traffic signal upgrade to allow the detection of approaching buses by GPS, and either skip or truncate stages to prioritise buses, is expected to yield a 25 second benefit off-peak and a 40 second benefit during peak periods. This assessment is based on the difference between minimum and mean off-peak journey times, which shows that there is a typical 35 second delay. It is considered that a typical journey time saving of 25 seconds is therefore likely off-peak, with a greater time saving (40s) when traffic is busier.

It is expected that Nailsea-bound buses (X7/X7a service) will see similar benefits from the traffic signal improvements but less from the bus lane due to the bus needing to exit the bus lane sooner to turn-right at the junction.

Bristol-bound buses

The benefits for Bristol-bound buses are less than Weston or Nailsea bound services because there is no bus lane on the western approach to the junction, however the benefits from the traffic signals upgrades are expected to be similar.

Combined bus benefits

The table below collate the various benefits described above for the X1 service, demonstrating a significant benefit to bus journey times particularly in peak periods.

X1	Journey time change (seconds, mean)	
	Off-peak	Peak
Benefit from 260m bus lane passing queuing traffic @ 20mph	0	-58
Benefit from bus priority signals	-25	-40
TOTAL (Westbound direction):	-25	-98
Benefit from bus priority signals	-25	-40
TOTAL (Eastbound direction):	-25	-40
TOTAL (round-trip):	-50	-138

Figure 4: Benefits analysis for likely bus journey time savings on the X1 route through the centre of Backwell.

The table below collate the various benefits described above for the X7/X7a service, demonstrating a significant improvement to bus journey times particularly in peak periods.

X7/X7a

	Journey time change (seconds, mean)	
	Off-peak	Peak
Benefit from 260m bus lane passing queuing traffic @ 20mph	0	-38
Benefit from bus priority signals	-25	-40
TOTAL (Westbound direction on A370):	-25	-78
Benefit from bus priority signals	-25	-40
TOTAL (Southbound direction on Station Road):	-25	-40
TOTAL (round-trip):	-50	-118

Figure 5: Benefits analysis for likely bus journey time savings on the X7/X7a route through the centre of Backwell.

It is expected that the changes will also provide increased service reliability and punctuality by reducing the variability of journey times through the junction.

The bus lane does not reduce lane capacity for general traffic. It is therefore expected to have no impact to the general traffic travelling through the junction.

Proposed scheme - other benefits

In addition to reduced bus journey times and improved service reliability the scheme will have the following benefits:

Active travel benefits:

- A new 2m wide southern footway on the A370.
- A new puffin crossing outside Backwell Leisure Centre.
- Improved pedestrian crossing facilities at the crossroads on the A370, Dark Lane, and Station Road.
- Cyclists will benefit from the protection of the bus lane.

Maintenance benefits:

- A new carriageway and southern footway surface on the A370 over the extent of the bus lane and crossroad junction which will have decades in design life.
- The road markings will be re-laid or refreshed where required through extent of scheme.
- The drainage will be upgraded and refurbished where necessary this will reduce flood risk and extend the life of the surface water sewer system.

Bus stop locations

As part of the wider scheme, bus stops will be relocated on A370.

The existing Bristol-bound bus stop to the east of the crossroads is proposed to be moved to the west of the junction. The final location is to be confirmed but is likely to be near the shops at 26-32 West Town Road.

The Transport Hubs proposed during the November/December 2023 public engagement are no longer being progressed following representations from Backwell Parish Council as the preferred location included Parish Council owned land.

Overall benefits

The proposed changes at Backwell crossroads are expected to provide a significant benefit to bus journey times and reliability during and outside peak periods. These upgrades will complement other work under way to improve bus travel in the area.

New pedestrian facilities will improve the existing provision for active travel users in Backwell.

The proposed scheme will provide significant maintenance for highway infrastructure within the scheme area. Extensive carriageway resurfacing, drainage improvements, new traffic signals at crossings and street lighting improvements will all provide a benefit for road users, while easing the pressure on local maintenance budgets.

Delivery programme

The next steps are the continuation of preliminary and detailed design processes, before reviewing the contractor's target cost in early summer 2025. Statutory consultation to make the necessary Traffic Regulation Orders (TROs) will take place in late spring 2025. We expect the works to start on site in late summer 2025. The main scheme works are expected to take a total of six months (subject to on-site conditions and requirements).

Further independent Road Safety Audits will be undertaken at Detailed Design (Stage 2) and following implementation (Stage 3).

DECISION:

- To approve the design principles for the BSIP improvement scheme at Backwell crossroads
- To authorise officers to proceed with implementing the BSIP infrastructure scheme at Backwell crossroads

REASONS:

To help realise the journey time and reliability improvements necessary to ensure the commercial sustainability of local bus routes and to mitigate the impact of projected future increases in general traffic on passage and viability of A370 bus services.

OPTIONS CONSIDERED:

- 1) A discussion around the alternative options considered for improvements at this location is provided in this report (see Scheme Identification).
- 2) A proposed closure of the exit from Dark Lane to A370 has been discounted from this scheme following engagement with the local community as the projected benefit to buses services specifically (which are the focus of this scheme) was determined to be outweighed by the potential impact to residents of Church Lane and adjoining roads.
- 3) Doing nothing is not considered a practical alternative due to delays to bus services at this location.

FINANCIAL IMPLICATIONS:

The October 2023 Executive Committee decision has authorised the award of the design and delivery phases of the project to Alun Griffiths, to a total value of £15.4million. Therefore, no financial decision is required at this stage.

Costs

Scheme costs are estimated to be £2.2 million, including a risk/contingency budget, which is within the overall available budget for the BSIP schemes. This includes all design work and surveys required for various aspects of the scheme such as drainage, Statutory Undertakers Apparatus and environmental mitigations.

Costs will be charged to KDT150 project code BSIP011 which has a current approved budget of £2,280,709 – funded by the DfT grant and £130,709 S38 funding.

Funding

In May 2022 the Department for Transport (DfT) awarded North Somerset Council (NSC) an indicative £47.8 million in capital funding to spend wholly on bus infrastructure schemes within North Somerset.

LEGAL POWERS AND IMPLICATIONS

The Highways Act 1980 provides the council with the necessary powers to make changes to the public highway.

The Road Traffic Regulation Act 1984 provides the council with the necessary powers to implement bus lanes and other traffic restrictions on the public highway. This is achieved by making Traffic Regulation Orders (TROs), for which there is a defined statutory process.

The Traffic Management Act 2004 provides the council with the powers to enforce bus lanes and related restrictions.

CLIMATE CHANGE AND ENVIRONMENTAL IMPLICATIONS

The wider BSIP programme, including the infrastructure scheme discussed in this report, will contribute to enhancing the reliability and attractiveness of the public transport network, with the aim of enabling more people to choose bus travel, thereby reducing the number of car journeys that need to be taken within North Somerset and beyond.

The BSIP has ambitious targets to:

- reduce bus journey times by 2 per cent by 2025 and by 10 per cent by 2030
- achieve 95 per cent of services running on time, defined as being no more than one minute early or five minutes late, by 2030
- return to pre-pandemic patronage levels by 2025 and grow patronage by at least 24 per cent from that level by 2030
- increase passenger satisfaction to 89 per cent for 2025 and 95 per cent for 2030
- aim for all buses to be zero emission by 2030.

The proposed scheme for Backwell will contribute towards achieving these targets, supporting a sustainable bus network, and encouraging modal shift from private cars to public transport, which will contribute towards the council's climate change and environmental objectives.

CONSULTATION

There have been various points of consultation and engagement on the BSIP programme and its specific schemes. For the A370 Backwell crossroads scheme, consultation and engagement has been undertaken with stakeholders over a period of more than a year. This includes discussions with ward members, Executive Members, parish councils, bus operators and the wider public.

In 2023, three briefing meetings were arranged with our Executive Member, local Nailsea and Backwell ward members, and parish council, to discuss the initial concept designs for the junction. In October 2023, a [press release](#) was issued, and published on the council's website and social media channels, announcing the A370 Backwell crossroads as one of ten different locations being considered for bus priority infrastructure schemes.

An online public survey was launched for feedback for six weeks in winter 2023 (Monday 13 November to Friday 29 December 2023) and had 652 respondents. A drop-in community event was also publicised locally and held on Wednesday 29 November 2023 and attended by 304 people. This engagement period has been summarised in an online report, available at: [Engagement Summary](#). This report was published on the council website in April 2024 and shared with ward members, event attendees, and through the Bus Times newsletter for local representatives, including town and parish councillors.

The local insights and feedback received through our engagement period have been worked through to inform the revised and refined concept design, which was further discussed with the local ward member and parish council in winter 2024. The evolving scheme design has been shared with First Bus and with the West of England Enhanced Partnership Infrastructure Working Group which includes representatives of bordering Local Authorities, bus operators and passenger representatives, who are supportive of the proposals.

Below is a summary of comments raised and key themes from the public consultation and briefings with local representatives, and how these have been considered by the project team.

Common or significant issues raised and officer responses

Source	Detail	Action taken
Local residents	The changes are not needed.	This report explains the justification for changes at Backwell crossroads, to provide journey time and reliability improvements for local buses.
Local residents	Request that the scheme includes improvements for pedestrians and cyclists.	Traffic signals will be upgraded on all arms of the junction. A new puffin crossing will be constructed outside Backwell Leisure Centre. The southern footway will be widened and resurfaced.
Local residents	Community concerns over impact of full closure on local congestion, traffic flow and residents of Dark Lane.	Analysis has been completed of how traffic would be re-routed if the exit from Dark Lane is closed.

		However, the Dark Lane closure is no longer part of these proposals.
Local residents	The bus lane is unnecessary. Length of bus lane a concern (will not achieve desired outcome but increase congestion)	<p>The bus lane achieves a significant time saving for buses at busy times (circa 1 minute - detailed elsewhere in this report) without impacting the road's capacity for other traffic.</p> <p>The bus lane has been made longer following public engagement to 260m which is double the previous length.</p> <p>Cyclists will also benefit from use of the bus lane.</p> <p>The end point of the bus lane at its western end will be determined through traffic modelling to ensure that there is enough space for right-turning traffic without conflicting with straight-ahead traffic.</p>
Local residents	Reports of flooding in the area due to poor drainage.	The surface water drainage system will be surveyed for condition and will be refurbished and upgraded where required.
Local residents	Proposed works may have negative effect on timings for the school run, commuting and using the junction as a through route for business. Overnight road closures will mean lengthy and expensive diversion.	<p>Traffic management requirements will be reviewed under the Construction Management Plan between NSC and the appointed contractor. We will endeavour to reduce the impact to local businesses and residents as a much as practicable.</p> <p>Timings and queue lengths for traffic will be closely monitored to minimise impact to the travelling public.</p> <p>Nighttime road closures for resurfacing works will be a necessary element of this scheme.</p>
Local residents	Suggestion from the community to include bus priority traffic signals.	New bus priority traffic signals with GPS tracking are incorporated into the design.
Local resident	Concerns over pedestrian safety (i.e. senior school children) at leisure centre.	A new Puffin crossing outside Backwell Leisure Centre is included as part of the proposed scheme.
Local resident	Concerns around traffic volumes, rat-running, pedestrian and cyclist	Analysis has been undertaken of how traffic would be re-routed if the exit from Dark Lane is closed.

	safety and limited visibility on Church Lane.	However, the Dark Lane closure is no longer part of these proposals.
Local resident	Concerns around safety of HGVs on Church Lane.	Analysis has been undertaken of how traffic would be re-routed if the exit from Dark Lane is closed. However, the Dark Lane closure is no longer part of these proposals.

Summary of future/remaining engagement

The design changes to the junction have been directly shaped by community engagement and discussions on the initial concept design. Future engagement will include communications to ward members, parish councils, residents and other stakeholder highlighting the decision to proceed, design elements which have been amended due to feedback on the initial proposals and the key role this has played in the scheme's evolution.

There will also be engagement activities focusing on information sharing for the local community around how any new developments might work, asking for their feedback when opportunities arise.

A Traffic Regulation Order (TRO) will also be published publicly on the council's website, giving a further, formal opportunity for the public to engage on the evolved concept designs.

Updates will be shared through the council's Bus Times newsletter to local representatives, on the BSIP website pages, and social media channels.

RISK MANAGEMENT

There is effective project and programme management led by officers with support by an external consultancy to aid in both design and contract management.

There is an agreed internal governance function to oversee decision making which includes regular reporting through appropriate boards.

A Quantified Risk Assessment (QRA) has been prepared for the scheme which will be reviewed at key milestones throughout both the design and build process. The QRA will be reviewed and updated on completion of the preliminary design. The risk register is a live document for the duration of the programme.

Key risks

The following risks are identified as the key risks affecting this project:

- **Community support** – members of the Backwell community have consistently expressed their concerns about the impact of the scheme to the village. Officers have assessed the concerns raised and responses are documented in this report. However, there is a risk that opposition to the scheme will continue following this decision, and that this will have to be managed during the ongoing design and construction phases by keeping the community and other stakeholders informed, identifying where there are continued opportunities for residents to influence the

detailed design of the scheme, providing opportunities for questions to be asked and answered and working to minimise the disruption of works on the community.

- **Statutory Undertakers Apparatus (SUs)** – As with all construction projects, the location of buried services and the potential need to divert or protect those during works present a key risk during the initial stages. This risk is being managed as far as possible by engaging with the SUs at an early stage, and, where possible, designing out any significant works.
- **Journey time delays, complaints, disruption during works** – The works to the Backwell Crossroads will take approximately 6 months to complete. This is a key commuter and bus corridor, and a link Bristol to Weston-super-Mare, and therefore we are preparing stakeholders to expect and prepare for a notable impact during the construction period. This risk will be managed by careful planning during the pre-construction phase and mitigated during the construction of the works. However, other traffic management will be in place throughout the works.
- **Drainage and carriageway condition** – The location, condition and suitability of existing drainage is a key risk. This risk will be managed at all stages of the scheme, throughout design and construction. This risk will be managed through investigation, CCTV and cleansing which will mitigate any significant issues associated with these works. The carriageway on the A370 is also showing signs that it may be in poor condition in places, investigation will be undertaken and any remediation will be undertaken within the extent of the scheme.

EQUALITY IMPLICATIONS

Have you undertaken an Equality Impact Assessment? Yes.

The assessment shows there are positive or neutral outcomes for this scheme for all users, albeit with low or negligible levels of impact across the various groups. Mostly it will aid disabled people, people on low incomes, and younger and older age groups, by helping to improve public transport viability.

CORPORATE IMPLICATIONS

The North Somerset Council Corporate Plan 2024-28 includes key commitments to:

- deliver the Climate Emergency Strategy and action plan and progress towards net zero by 2030
- deliver large-scale projects that improve the infrastructure and sustainability of North Somerset
- continue to invest in our highways and transport network to connect places and communities
- deliver on public transport improvements and support more cycling and walking across North Somerset to help decarbonise travel and promote preventative public health and encourage healthy lifestyles.

This includes *‘offering transport choices that make the most of our infrastructure and provide opportunities for better use of public transport’*.

Regionally, the council is a member authority of the Western Gateway Sub-national Transport Body (STB) and has recently adopted our Strategic Transport Plan 2024-2050. This firmly sets out the wider region’s commitment to act on the essential decarbonisation

of our transport networks with one of the five overarching principles being 'Decarbonisation and Air Quality' and sets the target to achieve a shift of 17% of current vehicle kilometres to sustainable modes.

Sub-regionally, as part of the West of England region, the Council's overarching transport strategy is the Joint Local Transport Plan 4 (JLTP4), that clearly states the direction of travel for decarbonising our transport network. This includes:

- that 'to transform our region, we will need to be flexible, agile and brave in our approach to the climate emergency'
- 'taking action against climate change and address poor air quality', as one of the five key objectives
- recognising the need to 'provide transformational alternatives' to car driving
- 'considering ways to manage demand possibly through congestion charging, emissions charging and workplace parking levy-type schemes', as a sub-region.

More specifically for public transport, the plan commits to:

- reinventing public transport through mass transit, smart ticketing and making it more user friendly, convenient, safe, direct and attractive linking key destinations to enable everyone to use it
- rethinking how we use our existing transport corridors including reallocating more road space to buses, pedestrians and cyclists
- demand management measures to influence travel choice and raise revenue to reinvest in alternatives
- first and last mile-type solutions to provide a linked-up transport network.

The emerging North Somerset Local Plan continues the strong 'predict and provide' approach to transport decarbonisation through its sustainable transport strategy, by proposing development in locations where sites will be required to reduce the need to travel and reduce car dependency, by being located close to existing facilities and connecting into existing and improved sustainable transport networks – providing more options to get around.

In December 2024, central government updated the National Planning Policy Framework (NPPF) with the aim of enabling local planning authorities and the development industry to deliver more homes to reduce the national shortage. This has meant a return to mandatory housing targets and has resulted in North Somerset Council needing to identify a minimum of 8,620 additional homes on top of the approximately 15,000 homes already identified in the Reg 19 Plan consulted on in 2023-24. This NPPF update includes the need to identify residential development within Green Belt land if no other appropriate locations can be identified.

The additional sites are still being identified, public consultation closed 21 March 2025 and responses are now being considered. Once the additional sites have been finalised for inclusion in the emerging Local Plan, strategic transport modelling will be updated. This will enable the Council to understand the impacts from the full scale of proposed Local Plan development (including the additional sites) and allow for the further refinement of transport mitigation schemes. These schemes will enable the developments to be delivered consistent with the objectives of the Local Plan and its Spatial Strategy for sustainable developments.

Due to the large number of live planning applications in the Nailsea and Backwell area, a comprehensive approach is needed to avoid piecemeal development. As a result, the

Council is preparing a Nailsea & Backwell Transport Strategy, to set out a vision and plan for improving transport connectivity to enhance transport options for existing and new communities. This will include a section on public transport and set out clearly that future-proofing our bus network for bus priority to help reduce congestion would be a sensible investment in light of this. This strategy will be consulted on in due course.

In Backwell, the existing crossroad junction is operating very near to its maximum capacity, and that future traffic growth (i.e. background growth, and that resulting from both committed developments and any additional developments identified within the Local Plan) is likely to cause increasingly severe congestion in the village. The BSIP scheme's part-time closure of Dark Lane's exit to A370 was intended to help address this by providing additional capacity for A370 and Station Road, with buses receiving a welcome secondary benefit. This element of the BSIP scheme has now been dropped.

If concerns about future congestion are realised, it is unlikely that North Somerset Council will have the funding available to implement changes to Dark Lane and Church Lane as we had proposed using the BSIP grant. It is possible that the changes may be brought forward by a developer or other third-party, in which case it would be unlikely that the suggested mitigations for Church Lane would be provided. The mitigations were suggested to address some of the concerns raised during our community engagement but are unlikely to be required by a planning process.

APPENDICES

Scheme concept plan.

BACKGROUND PAPERS


[Report to The Executive – 20th October 2021 - Update on the Development of a Joint Bus Service Improvement Plan \(BSIP\) with the West of England Combined Authority and Bus Operators](#)

[Report to The Executive – 22nd June 2022 – North Somerset Bus Service Improvement Plan](#)

[Executive Committee – 18th October 2023 - Bus Service Improvement Plan \(BSIP\) - Contract Award of Design and Build Contractor](#)

SIGNATORIES:

DECISION MAKER(S):

Signed:  Executive Member for Highways and Transport

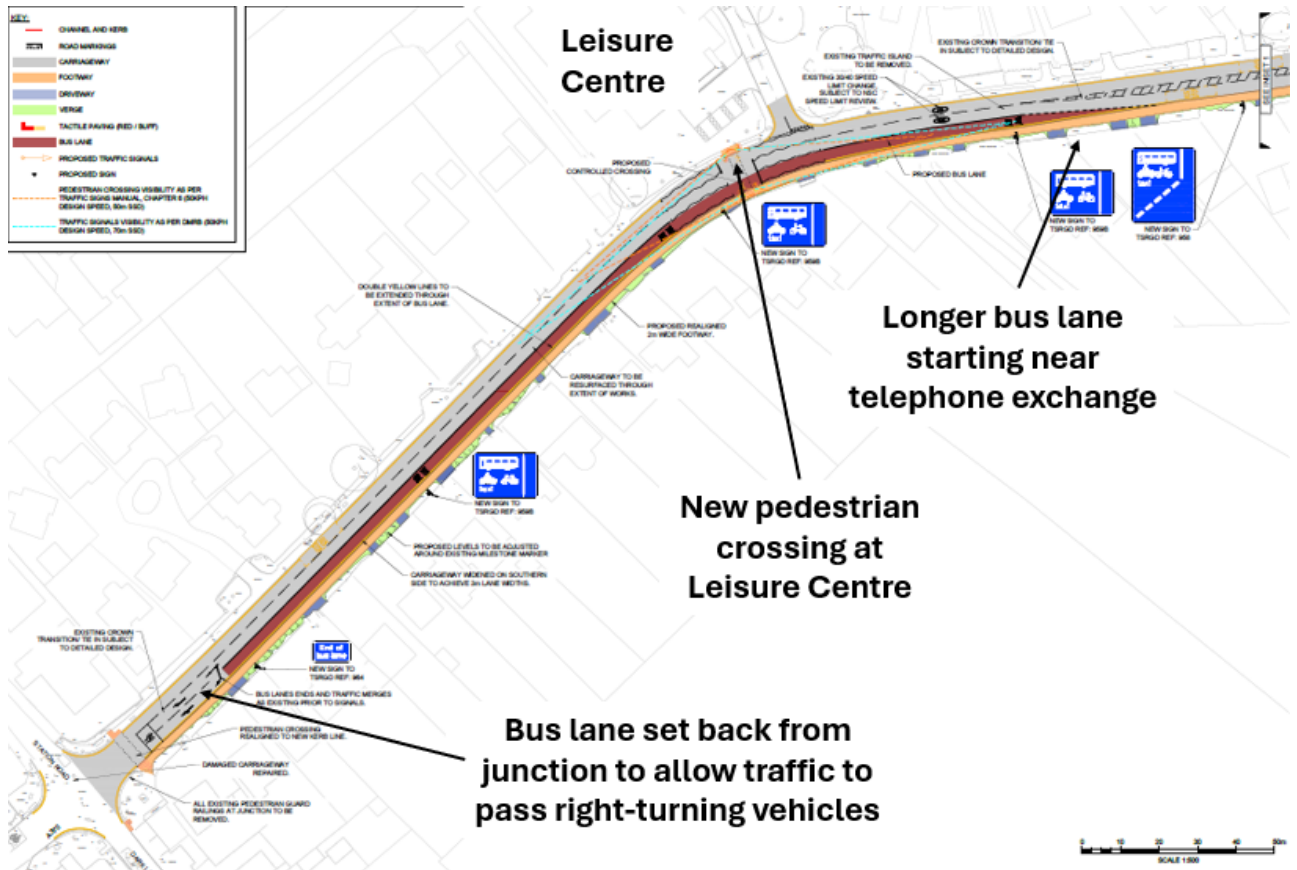
Date: 13 May 2025

WITH ADVICE FROM:

Signed:  Director of Environment, Assets and Highways Services

Date: 13 May 2025

Appendix 1 – Proposed BSIP Design



Appendix 2: Bus and general journey time tables

Table 1: Bristol-bound bus journey times along the A370, between Interchange and Winterstoke Road bus stops

Date	Peak	Time	Mean	25th percentile	75th percentile	Variability
Jun-23	Off peak	5:00-6:00	00:45:07	00:43:23	00:47:12	00:03:49
Jun-23	AM peak	7:00-8:00	01:09:26	01:05:30	01:12:27	00:06:57
Jun-23	Inter peak	13:00-14:00	00:53:33	00:50:33	00:55:32	00:04:59
Jun-23	PM peak	15:00-16:00	01:01:59	00:59:17	01:04:41	00:05:24
Nov-23	Off peak	5:00-6:00	00:48:28	00:45:13	00:49:22	00:04:09
Nov-23	AM peak	7:00-8:00	01:18:17	01:10:29	01:25:17	00:14:48
Nov-23	Inter peak	13:00-14:00	00:53:46	00:50:28	00:55:46	00:05:18
Nov-23	PM peak	15:00-16:00	01:02:23	00:58:28	01:06:07	00:07:39
Jun-24	Off peak	5:00-6:00	00:47:45	00:46:19	00:49:26	00:03:07
Jun-24	AM peak	7:00-8:00	01:10:45	01:06:45	01:16:01	00:09:16
Jun-24	Inter peak	13:00-14:00	00:57:08	00:52:30	00:57:02	00:04:32
Jun-24	PM peak	15:00-16:00	01:01:20	00:58:22	01:03:51	00:05:29
Nov-24	Off peak	5:00-6:00	00:49:31	00:45:10	00:50:39	00:05:29
Nov-24	AM peak	7:00-8:00	01:13:16	01:06:38	01:21:15	00:14:37
Nov-24	Inter peak	13:00-14:00	00:57:23	00:54:42	00:58:45	00:04:03
Nov-24	PM peak	15:00-16:00	01:02:04	00:58:10	01:04:40	00:06:30

Table 2: Weston-bound bus journey times along the A370, between Blackmoors Lane and Interchange Road bus stops

Date	Peak	Time	Mean	25th percentile	75th percentile	Variability
Jun-23	Off peak	19:00-20:00	00:47:01	00:44:45	00:49:08	00:04:23
Jun-23	AM peak	7:00-8:00	00:52:12	00:49:09	00:55:11	00:06:02
Jun-23	Inter peak	10:00-11:00	00:50:33	00:47:25	00:52:30	00:05:05
Jun-23	PM peak	16:00-17:00	01:00:41	00:55:32	01:04:51	00:09:19
Nov-23	Off peak	19:00-20:00	00:45:40	00:43:02	00:47:36	00:04:34
Nov-23	AM peak	7:00-8:00	01:00:38	00:54:31	01:05:08	00:10:37
Nov-23	Inter peak	10:00-11:00	00:50:38	00:47:49	00:53:28	00:05:39
Nov-23	PM peak	16:00-17:00	01:02:25	00:56:50	01:08:06	00:11:16
Jun-24	Off peak	19:00-20:00	00:48:45	00:46:14	00:50:35	00:04:21
Jun-24	AM peak	7:00-8:00	00:55:43	00:53:53	00:58:01	00:04:08
Jun-24	Inter peak	10:00-11:00	00:52:52	00:50:16	00:54:59	00:04:43
Jun-24	PM peak	16:00-17:00	01:04:05	01:00:35	01:07:25	00:06:50
Nov-24	Off peak	19:00-20:00	00:48:34	00:45:55	00:50:35	00:04:40
Nov-24	AM peak	7:00-8:00	00:59:49	00:54:40	01:02:58	00:08:18
Nov-24	Inter peak	10:00-11:00	00:53:43	00:51:07	00:56:17	00:05:10
Nov-24	PM peak	16:00-17:00	01:05:56	00:58:49	01:11:40	00:12:51

Table 3: Bristol-bound general traffic journey times along the A370, between Interchange and Winterstoke Road bus stops

Date	Peak	Time	Mean	25th percentile	75th percentile	Variability
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Jun-23	Off peak	5:00-6:00	00:32:11	00:26:50	00:33:57	00:07:07
Jun-23	AM peak	7:00-8:00	00:45:53	00:31:33	00:46:57	00:15:24
Jun-23	Inter peak	13:00-14:00	00:42:08	00:31:43	00:43:09	00:11:26
Jun-23	PM peak	15:00-16:00	00:48:20	00:33:02	00:50:02	00:17:00
Nov-23	Off peak	5:00-6:00	00:33:36	00:27:49	00:35:36	00:07:47
Nov-23	AM peak	7:00-8:00	00:56:02	00:34:03	00:59:20	00:25:17
Nov-23	Inter peak	13:00-14:00	00:43:04	00:32:06	00:44:57	00:12:51
Nov-23	PM peak	15:00-16:00	00:51:49	00:33:50	00:54:05	00:20:15
Jun-24	Off peak	5:00-6:00	00:33:33	00:27:27	00:35:43	00:08:16
Jun-24	AM peak	7:00-8:00	00:45:44	00:31:48	00:48:32	00:16:44
Jun-24	Inter peak	13:00-14:00	00:45:57	00:32:13	00:45:14	00:13:01
Jun-24	PM peak	15:00-16:00	00:51:44	00:33:24	00:54:02	00:20:38
Nov-24	Off peak	5:00-6:00	00:34:30	00:28:13	00:36:17	00:08:04
Nov-24	AM peak	7:00-8:00	00:53:15	00:33:29	00:56:15	00:22:46
Nov-24	Inter peak	13:00-14:00	00:45:20	00:32:38	00:47:07	00:14:29
Nov-24	PM peak	15:00-16:00	00:52:06	00:34:08	00:55:44	00:21:36

Table 4: Weston-bound general traffic journey times along the A370, between Blackmoors Lane and Interchange Road bus stops

Date	Peak	Time	Mean	25th percentile	75th percentile	Variability
Jun-23	Off peak	19:00-20:00	00:36:49	00:29:20	00:38:13	00:08:53
Jun-23	AM peak	7:00-8:00	00:38:47	00:29:54	00:39:51	00:09:57
Jun-23	Inter peak	10:00-11:00	00:40:42	00:31:20	00:41:56	00:10:36
Jun-23	PM peak	16:00-17:00	00:51:19	00:32:55	00:53:18	00:20:23
Nov-23	Off peak	19:00-20:00	00:39:16	00:30:50	00:41:10	00:10:20
Nov-23	AM peak	7:00-8:00	00:42:23	00:31:16	00:44:01	00:12:45
Nov-23	Inter peak	10:00-11:00	00:41:46	00:31:50	00:43:53	00:12:03
Nov-23	PM peak	16:00-17:00	00:54:01	00:34:46	00:59:36	00:24:50
Jun-24	Off peak	19:00-20:00	00:38:25	00:29:50	00:40:45	00:10:55
Jun-24	AM peak	7:00-8:00	00:40:16	00:30:26	00:42:35	00:12:09
Jun-24	Inter peak	10:00-11:00	00:41:45	00:31:51	00:44:01	00:12:10
Jun-24	PM peak	16:00-17:00	00:50:25	00:33:11	00:51:31	00:18:20
Nov-24	Off peak	19:00-20:00	00:40:08	00:30:55	00:42:19	00:11:24
Nov-24	AM peak	7:00-8:00	00:41:56	00:31:18	00:43:10	00:11:52
Nov-24	Inter peak	10:00-11:00	00:43:31	00:32:01	00:44:33	00:12:32
Nov-24	PM peak	16:00-17:00	00:53:40	00:34:37	00:55:32	00:20:55

Table 5: Bristol-bound bus journey times across Backwell Crossroads, between Kellways and Crossroads bus stops following the X1 route

Date	Peak	Time	Mean	25th percentile	75th percentile	Variability
Jun-23	Off peak	6:00-7:00	00:02:13	00:01:53	00:02:23	00:00:30
Jun-23	AM peak	8:00-9:00	00:04:44	00:02:50	00:05:26	00:02:36
Jun-23	Inter peak	13:00-14:00	00:03:01	00:02:20	00:03:17	00:00:57
Jun-23	PM peak	15:00-16:00	00:04:10	00:02:39	00:05:08	00:02:29
Nov-23	Off peak	6:00-7:00	00:02:07	00:01:47	00:02:19	00:00:32
Nov-23	AM peak	8:00-9:00	00:03:35	00:02:42	00:04:10	00:01:28
Nov-23	Inter peak	13:00-14:00	00:02:56	00:02:27	00:03:28	00:01:01
Nov-23	PM peak	15:00-16:00	00:03:24	00:02:29	00:04:01	00:01:32
Jun-24	Off peak	6:00-7:00	00:02:03	00:01:51	00:02:14	00:00:23
Jun-24	AM peak	8:00-9:00	00:04:24	00:02:45	00:05:32	00:02:47
Jun-24	Inter peak	13:00-14:00	00:02:11	00:02:23	00:03:19	00:00:56
Jun-24	PM peak	15:00-16:00	00:03:45	00:02:28	00:04:21	00:01:53
Nov-24	Off peak	6:00-7:00	00:02:06	00:01:52	00:02:14	00:00:22
Nov-24	AM peak	8:00-9:00	00:04:28	00:02:50	00:05:14	00:02:24
Nov-24	Inter peak	13:00-14:00	00:02:53	00:02:29	00:03:12	00:00:43
Nov-24	PM peak	15:00-16:00	00:03:16	00:02:34	00:03:40	00:01:06

Table 6: Weston-bound bus journey times across Backwell Crossroads, between Fairfield Way and Crossroads bus stops following the X1 route

Date	Peak	Time	Mean	25th percentile	75th percentile	Variability
Jun-23	Off peak	20:00-21:00	00:01:39	00:01:20	00:01:48	00:00:28
Jun-23	AM peak	8:00-9:00	00:03:22	00:01:42	00:02:51	00:01:09
Jun-23	Inter peak	13:00-14:00	00:02:38	00:01:35	00:02:46	00:01:11
Jun-23	PM peak	15:00-16:00	00:03:17	00:01:46	00:04:03	00:02:17
Nov-23	Off peak	20:00-21:00	00:01:30	00:01:12	00:01:45	00:00:33
Nov-23	AM peak	8:00-9:00	00:02:12	00:01:39	00:02:46	00:01:07
Nov-23	Inter peak	13:00-14:00	00:01:47	00:01:23	00:02:08	00:00:45
Nov-23	PM peak	15:00-16:00	00:02:27	00:01:43	00:02:49	00:01:06
Jun-24	Off peak	20:00-21:00	00:01:34	00:01:21	00:01:48	00:00:27
Jun-24	AM peak	8:00-9:00	00:02:38	00:01:47	00:03:07	00:01:20
Jun-24	Inter peak	13:00-14:00	00:02:04	00:01:33	00:02:24	00:00:51
Jun-24	PM peak	15:00-16:00	00:02:45	00:01:52	00:03:14	00:01:22
Nov-24	Off peak	20:00-21:00	00:02:18	00:01:53	00:02:37	00:00:44
Nov-24	AM peak	8:00-9:00	00:03:19	00:02:39	00:03:48	00:01:09
Nov-24	Inter peak	13:00-14:00	00:03:03	00:02:19	00:03:27	00:01:08
Nov-24	PM peak	15:00-16:00	00:03:25	00:02:55	00:03:56	00:01:01

Table 7: Bristol-bound general traffic journey times across Backwell Crossroads, between Kellways and Crossroads bus stops following the X1 route

Date	Peak	Time	Mean	25th percentile	75th percentile	Variability
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Jun-23	Off peak	6:00-7:00	00:01:39	00:01:27	00:01:47	00:00:20
Jun-23	AM peak	8:00-9:00	00:04:27	00:03:03	00:05:35	00:02:32
Jun-23	Inter peak	13:00-14:00	00:02:35	00:01:58	00:02:58	00:01:00
Jun-23	PM peak	15:00-16:00	00:03:47	00:02:31	00:04:43	00:02:12
Nov-23	Off peak	6:00-7:00	00:01:46	00:01:29	00:01:58	00:00:29
Nov-23	AM peak	8:00-9:00	00:03:33	00:02:26	00:04:11	00:01:45
Nov-23	Inter peak	13:00-14:00	00:02:26	00:01:57	00:02:47	00:00:50
Nov-23	PM peak	15:00-16:00	00:03:11	00:02:24	00:03:46	00:01:22
Jun-24	Off peak	6:00-7:00	00:01:34	00:01:22	00:01:42	00:00:20
Jun-24	AM peak	8:00-9:00	00:03:51	00:02:25	00:04:59	00:02:34
Jun-24	Inter peak	13:00-14:00	00:02:19	00:01:51	00:02:32	00:00:41
Jun-24	PM peak	15:00-16:00	00:03:31	00:02:13	00:03:52	00:01:39
Nov-24	Off peak	6:00-7:00	00:01:38	00:01:28	00:01:47	00:00:15
Nov-24	AM peak	8:00-9:00	00:03:40	00:02:28	00:04:31	00:01:43
Nov-24	Inter peak	13:00-14:00	00:02:18	00:01:50	00:02:33	00:00:41
Nov-24	PM peak	15:00-16:00	00:02:52	00:02:11	00:03:18	00:01:02

Table 8: Weston-bound general traffic journey times across Backwell Crossroads, between Fairfield Way and Crossroads bus stops following the X1 route

Date	Peak	Time	Mean	25th percentile	75th percentile	Variability
Jun-23	Off peak	20:00-21:00	00:01:18	00:01:06	00:01:26	00:00:20
Jun-23	AM peak	8:00-9:00	00:02:10	00:01:35	00:02:31	00:00:56
Jun-23	Inter peak	13:00-14:00	00:02:29	00:01:30	00:02:56	00:01:26
Jun-23	PM peak	15:00-16:00	00:03:33	00:01:57	00:05:20	00:03:23
Nov-23	Off peak	20:00-21:00	00:01:15	00:01:04	00:01:21	00:00:17
Nov-23	AM peak	8:00-9:00	00:01:59	00:01:29	00:02:18	00:00:49
Nov-23	Inter peak	13:00-14:00	00:01:44	00:01:20	00:02:00	00:00:40
Nov-23	PM peak	15:00-16:00	00:02:30	00:01:43	00:02:49	00:01:06
Jun-24	Off peak	20:00-21:00	00:01:15	00:01:03	00:01:22	00:00:19
Jun-24	AM peak	8:00-9:00	00:02:15	00:01:32	00:02:42	00:01:10
Jun-24	Inter peak	13:00-14:00	00:01:47	00:01:21	00:02:03	00:00:42
Jun-24	PM peak	15:00-16:00	00:02:52	00:01:41	00:03:37	00:01:56
Nov-24	Off peak	20:00-21:00	00:01:59	00:01:32	00:02:21	00:00:32
Nov-24	AM peak	8:00-9:00	00:03:13	00:02:27	00:03:51	00:01:02
Nov-24	Inter peak	13:00-14:00	00:02:51	00:02:15	00:03:19	00:00:54
Nov-24	PM peak	15:00-16:00	00:03:21	00:02:38	00:03:56	00:01:02

Table 9: Bristol-bound bus journey times across Backwell Crossroads, between Backwell Common and Crossroads bus stops following the X8 route

Date	Peak	Time	Mean	25th percentile	75th percentile	Variability
Jun-23	Off peak	18:00-19:00	00:02:21	00:02:07	00:02:26	00:00:19
Jun-23	AM peak	8:00-9:00	00:02:25	00:02:13	00:02:26	00:00:13
Jun-23	Inter peak	14:00-15:00	00:01:38	00:01:19	00:01:50	00:00:31
Jun-23	PM peak	15:00-16:00	00:05:14	00:03:30	00:06:29	00:02:59

Nov-23	Off peak	18:00-19:00	00:02:16	00:01:52	00:02:35	00:00:43
Nov-23	AM peak	8:00-9:00	00:02:58	00:02:01	00:03:11	00:01:10
Nov-23	Inter peak	14:00-15:00	00:02:38	00:01:59	00:02:45	00:00:46
Nov-23	PM peak	15:00-16:00	00:04:31	00:03:17	00:05:05	00:01:48
Jun-24	Off peak	18:00-19:00	00:02:03	00:01:44	00:02:17	00:00:33
Jun-24	AM peak	8:00-9:00	00:02:08	00:01:43	00:02:23	00:00:40
Jun-24	Inter peak	14:00-15:00	00:02:49	00:02:10	00:03:16	00:01:06
Jun-24	PM peak	15:00-16:00	00:03:10	00:02:12	00:03:22	00:01:10
Nov-24	Off peak	18:00-19:00	00:02:09	00:01:45	00:02:22	00:00:37
Nov-24	AM peak	8:00-9:00	00:02:21	00:01:48	00:02:30	00:00:42
Nov-24	Inter peak	14:00-15:00	00:02:27	00:02:11	00:02:35	00:00:24
Nov-24	PM peak	15:00-16:00	00:02:33	00:01:45	00:02:58	00:01:13

Table 10: Nailsea-bound bus journey times across Backwell Crossroads, between Fairfield Way and Crossroads bus stops following the X8 route

Date	Peak	Time	Mean	25th percentile	75th percentile	Variability
Jun-23	Off peak	18:00-19:00	00:01:56	00:01:08	00:02:00	00:00:52
Jun-23	AM peak	8:00-9:00	00:03:06	00:02:10	00:03:35	00:01:25
Jun-23	Inter peak	9:00-10:00	00:02:23	00:02:08	00:02:27	00:00:19
Jun-23	PM peak	15:00-16:00	00:03:14	00:01:49	00:03:17	00:01:28
Nov-23	Off peak	18:00-19:00	00:02:07	00:01:26	00:02:30	00:01:04
Nov-23	AM peak	8:00-9:00	00:02:48	00:02:02	00:03:46	00:01:44
Nov-23	Inter peak	9:00-10:00	00:01:54	00:01:29	00:02:17	00:00:48
Nov-23	PM peak	15:00-16:00	00:02:34	00:01:54	00:03:10	00:01:16
Jun-24	Off peak	18:00-19:00	00:01:57	00:01:39	00:02:10	00:00:31
Jun-24	AM peak	8:00-9:00	00:03:12	00:01:53	00:03:59	00:02:06
Jun-24	Inter peak	9:00-10:00	00:02:00	00:01:36	00:02:18	00:00:42
Jun-24	PM peak	15:00-16:00	00:03:11	00:02:06	00:03:52	00:01:46
Nov-24	Off peak	18:00-19:00	00:02:45	00:02:14	00:03:19	00:01:05
Nov-24	AM peak	8:00-9:00	00:03:54	00:03:07	00:04:40	00:01:33
Nov-24	Inter peak	9:00-10:00	00:02:33	00:01:43	00:03:10	00:01:27
Nov-24	PM peak	15:00-16:00	00:03:27	00:02:15	00:04:26	00:02:11

Table 11: Bristol-bound general traffic journey times across Backwell Crossroads, between Backwell Common and Crossroads bus stops following the X8 route

Date	Peak	Time	Mean	25th percentile	75th percentile	Variability
Jun-23	Off peak	18:00-19:00	00:01:56	00:01:25	00:02:17	00:00:52
Jun-23	AM peak	8:00-9:00	00:03:09	00:02:07	00:03:49	00:01:42
Jun-23	Inter peak	14:00-15:00	00:02:07	00:01:37	00:02:34	00:00:57
Jun-23	PM peak	15:00-16:00	00:03:26	00:02:17	00:04:23	00:02:06
Nov-23	Off peak	18:00-19:00	00:02:10	00:01:36	00:02:34	00:00:58
Nov-23	AM peak	8:00-9:00	00:02:42	00:01:44	00:03:16	00:01:32
Nov-23	Inter peak	14:00-15:00	00:02:12	00:01:40	00:02:35	00:00:55
Nov-23	PM peak	15:00-16:00	00:03:04	00:01:52	00:03:52	00:02:00

Jun-24	Off peak	18:00-19:00	00:01:43	00:01:20	00:01:58	00:00:38
Jun-24	AM peak	8:00-9:00	00:02:21	00:01:41	00:02:51	00:01:10
Jun-24	Inter peak	14:00-15:00	00:01:58	00:01:27	00:02:24	00:00:57
Jun-24	PM peak	15:00-16:00	00:02:44	00:01:48	00:03:23	00:01:35
Nov-24	Off peak	18:00-19:00	00:01:44	00:01:23	00:02:00	00:00:30
Nov-24	AM peak	8:00-9:00	00:02:31	00:01:42	00:03:03	00:01:01
Nov-24	Inter peak	14:00-15:00	00:01:51	00:01:24	00:02:08	00:00:36
Nov-24	PM peak	15:00-16:00	00:02:27	00:01:39	00:02:51	00:01:04

Table 12: Nailsea-bound general traffic journey times across Backwell Crossroads, between Fairfield Way and Crossroads bus stops following the X8 route

Date	Peak	Time	Mean	25th percentile	75th percentile	Variability
Jun-23	Off peak	18:00-19:00	00:02:17	00:01:19	00:02:26	00:01:07
Jun-23	AM peak	8:00-9:00	00:02:22	00:01:47	00:02:45	00:00:58
Jun-23	Inter peak	9:00-10:00	00:01:48	00:01:21	00:02:00	00:00:39
Jun-23	PM peak	15:00-16:00	00:02:59	00:01:42	00:03:56	00:02:14
Nov-23	Off peak	18:00-19:00	00:01:53	00:01:16	00:02:10	00:00:54
Nov-23	AM peak	8:00-9:00	00:02:03	00:01:28	00:02:30	00:01:02
Nov-23	Inter peak	9:00-10:00	00:01:39	00:01:12	00:01:57	00:00:45
Nov-23	PM peak	15:00-16:00	00:02:10	00:01:30	00:02:31	00:01:01
Jun-24	Off peak	18:00-19:00	00:01:39	00:01:11	00:01:56	00:00:45
Jun-24	AM peak	8:00-9:00	00:02:27	00:01:39	00:02:58	00:01:19
Jun-24	Inter peak	9:00-10:00	00:01:36	00:01:13	00:01:53	00:00:40
Jun-24	PM peak	15:00-16:00	00:02:23	00:01:33	00:02:40	00:01:07
Nov-24	Off peak	18:00-19:00	00:02:35	00:01:57	00:03:11	00:00:48
Nov-24	AM peak	8:00-9:00	00:03:23	00:02:33	00:04:11	00:01:09
Nov-24	Inter peak	9:00-10:00	00:02:37	00:01:59	00:03:01	00:00:50
Nov-24	PM peak	15:00-16:00	00:03:11	00:02:29	00:03:55	00:00:57