



Telford & Wrekin  
Co-operative Council

Protect, care and invest  
to create a better borough

TravelTelford



# National Bus Strategy

*Bus Service Improvement Plan*

November 2022



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# 1 Overview

This Bus Service Improvement Plan (BSIP) covers the entire administrative area of Telford & Wrekin Council, as illustrated at Figure 1-1. It does not cover any other authority's area.

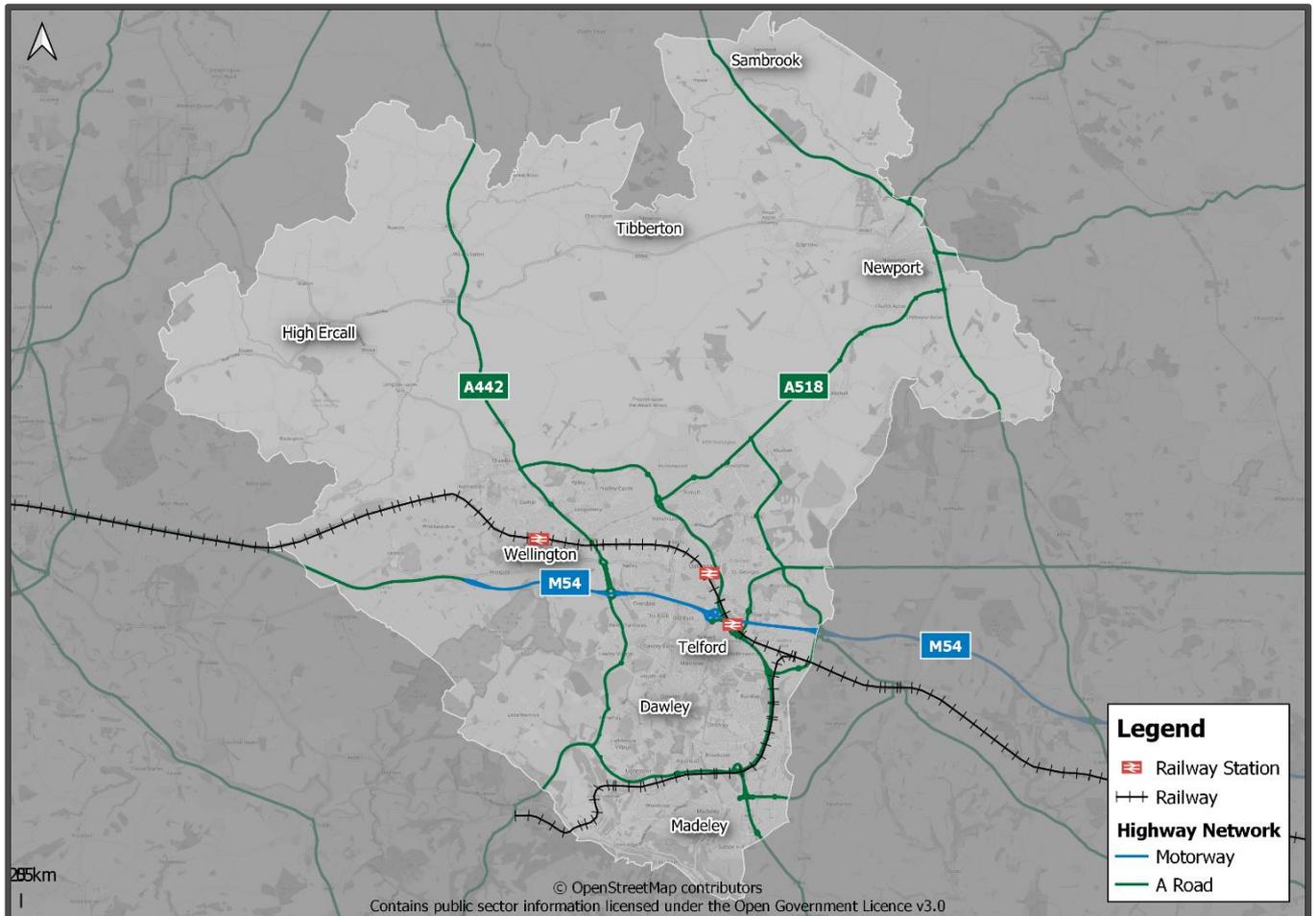


Figure 1-1 Telford & Wrekin Council Administrative Area

Telford & Wrekin Council intends to enter into an Enhanced Partnership. Its notice can be found here: [https://www.telford.gov.uk/info/20174/public\\_transport/5300/the\\_national\\_bus\\_strategy](https://www.telford.gov.uk/info/20174/public_transport/5300/the_national_bus_strategy)

This Bus Service Improvement Plan (BSIP) was originally published in October 2021. Telford & Wrekin Council will publish a review of the BSIP by 31 October of each subsequent year for as long as the Enhanced Partnership is in force. This document acts as the first BSIP update after initial publication.

The BSIP is consistent with the wider Local Transport Plan 3 covering the period 2011 – 2026 and has been developed in conjunction with, and aligned to, the emerging Local Transport Plan 4. LTP3 can be found here:

[https://www.telford.gov.uk/info/1019/roadworks\\_transport\\_and\\_streets/497/local\\_transport\\_plan](https://www.telford.gov.uk/info/1019/roadworks_transport_and_streets/497/local_transport_plan)

## 1.1 Background

Telford and Wrekin is situated in the north-west of the West Midlands region, with borders to Shropshire and Staffordshire. It is a unitary authority, covering approximately 290 km<sup>2</sup>. The principal urban area of Telford includes the towns of Dawley, Ironbridge, Madeley, Oakengates and Wellington, with the market town of Newport situated in the north of the Borough as a focus for the more rural northern half of the authority's area.

The current population of the authority's area is approximately 180,000, giving an average population density of 620/km<sup>2</sup>. Approximately 26% of the population is aged 20 and under, with approximately 24% aged 60 and over.



## 2 Current bus offer to passengers

This section describes the bus service offer in Telford, assesses its quality and suitability for Telford residents, and analyses the impact of background highway and socio-demographic conditions on buses. At a number of points it refers to the “Telford BSIP Baseline Evidence Base” (TBEB) which addresses these issues in some details and to which the reader is referred for more detail.

### 2.1 Analysis of existing local bus services compared to BSIP outcomes

#### 2.1.1 Operator Context

Telford’s bus network is provided by two operators, with a split between commercial services and others operating under tender to Telford & Wrekin Council. Many services operate wholly within urban Telford, with longer-distance routes extending out to Stafford, Cannock, Shrewsbury, Bridgnorth, Much Wenlock and Wolverhampton.

The majority of services are operated by Arriva Midlands, with Banga Buses operating the 891 route to Wolverhampton. To the south-east is the West Midlands, but none of the conurbation’s major operators, including National Express West Midlands and Diamond Bus, operate into Telford.

Separately, Telford & Wrekin Council also operate a small in-house fleet, providing dial-a-ride and other specialist, bespoke services.

Figure 2-1 shows the bus map for Telford as of August 2022.

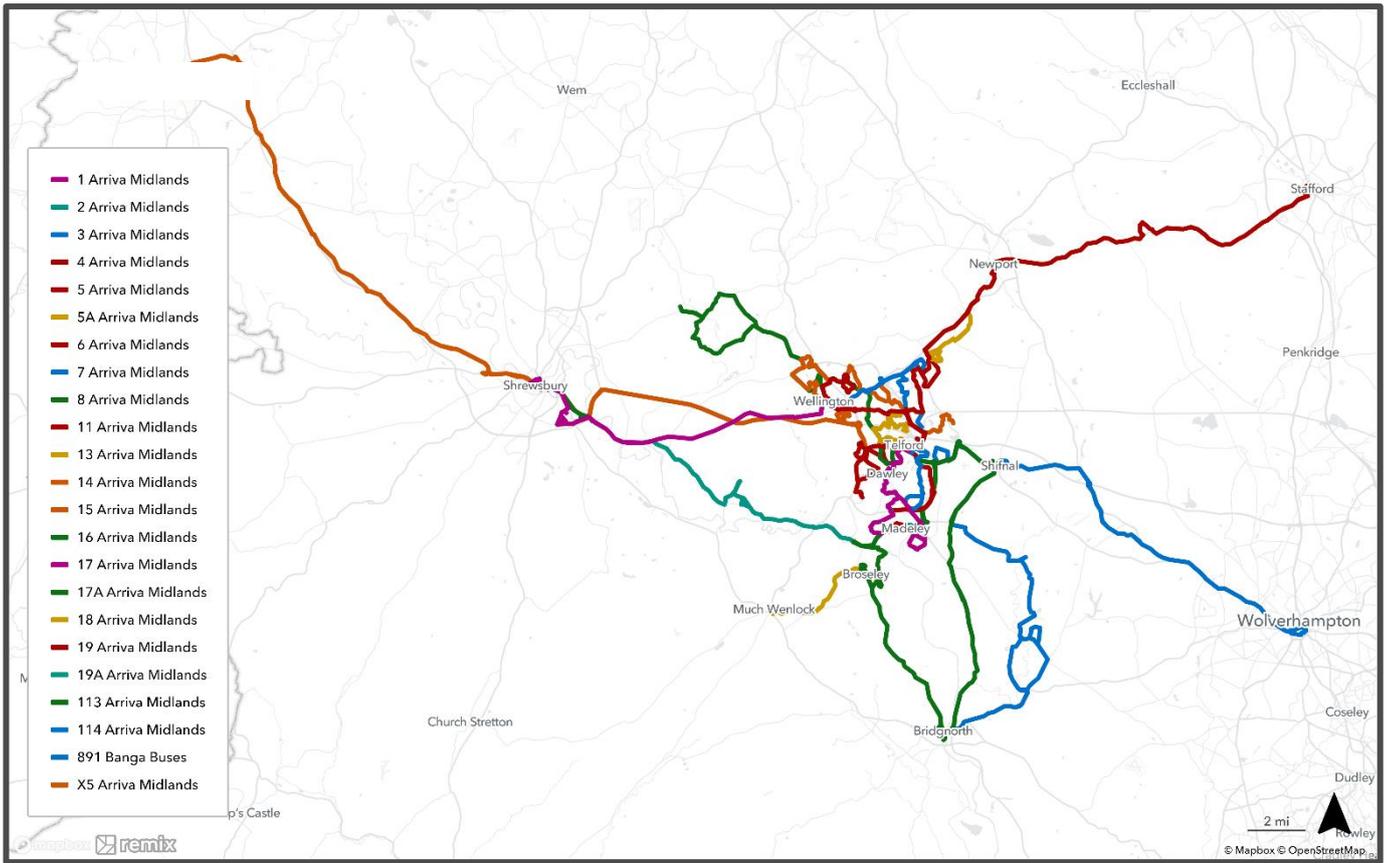


Figure 2-1 Telford whole bus network, August 2022

Figure 2-2 shows the network for the main Telford urban area.

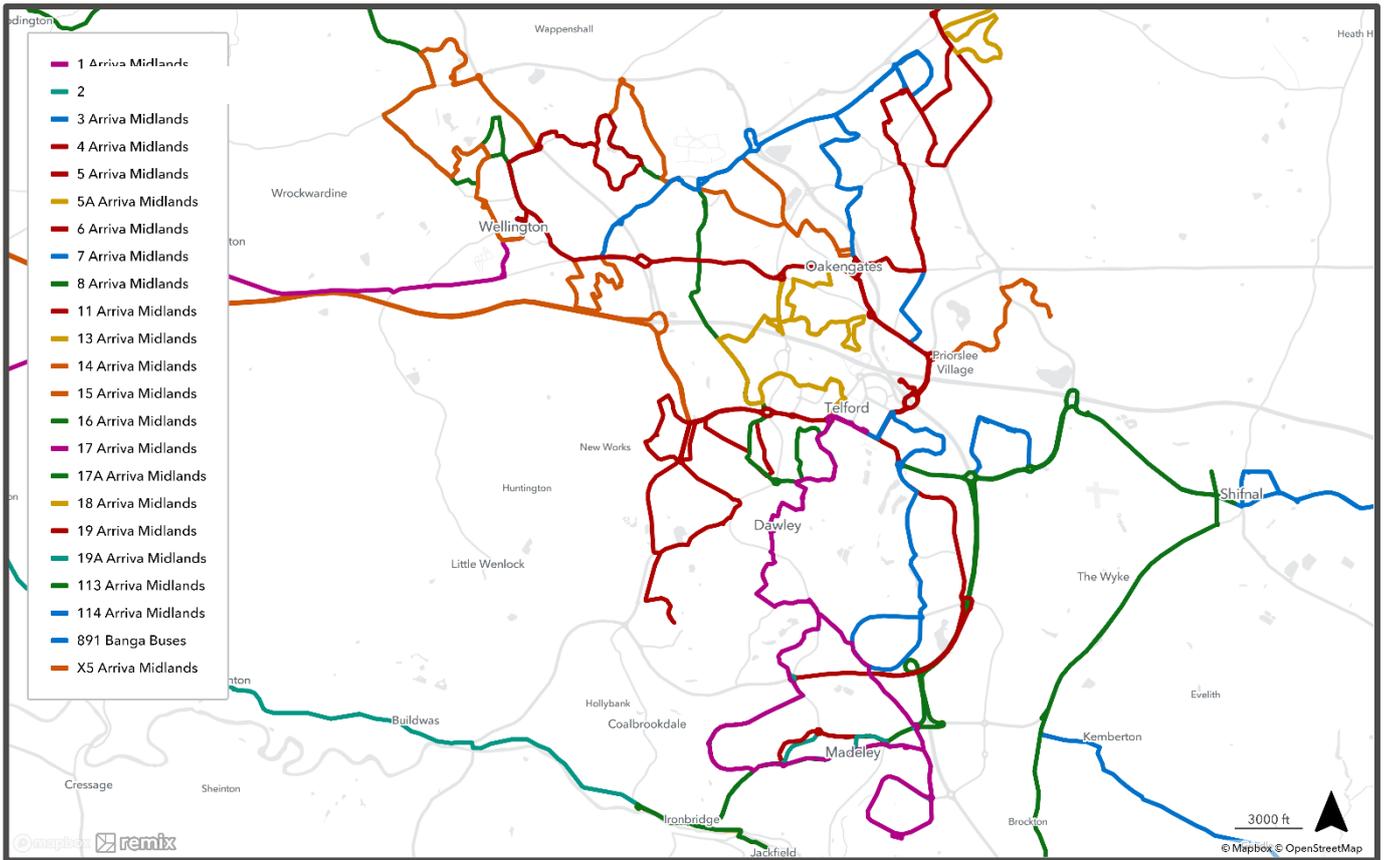


Figure 2-2 Bus network coverage in urban Telford

In addition to the network shown in Figure 2-1 and Figure 2-2, the Borough are tendering for new services to address some of the connectivity issues identified in following sections. These services will provide new direct links to major employment areas, additional capacity for some school movements and restore some connections lost from the rural areas in the north of the Borough. It is expected that these services will commence operations in late 2022 or early 2023.

### 2.1.2 Bus Service Supply

The highest frequency is Arriva Midlands' service 4, which operates between Leegomery and Madeley every 12 minutes Monday to Saturday daytimes, with a half-hourly operation evenings and Sunday daytime. Next is Arriva Midlands' 3 from Telford bus station to Brookside, which operates every 15 minutes daytimes and half-hourly Monday to Saturday evenings and Sunday daytime.

Most services operate half-hourly Monday to Saturday daytimes, with half-hourly or hourly evening and Sunday daytime services on the 1/2, 5, 7 and 19.

The longer-distance services operating away from the authority's area are generally hourly Monday to Saturday daytimes only, with no evening or Sunday services.

For journeys between key centres (Telford town centre, Wellington, Oakengates, Madeley) the current network provides a few route options, but many residential areas are only covered by

one service and so are susceptible to interruptions if network congestion or delays are experienced. The variable resilience in the network can cause problems for passengers at times of significant disruption.

The Borough are introducing four new supported bus services during 2022/23, to address some of the connectivity gaps identified. These will cover many parts of the council's area and restore some links lost during recent years. The services are:

- Madeley/Sutton Hill to Wellington via Halesfield, Stafford Park and Hortonwood employment areas (Monday-Sunday hourly, targeting shift change times);
- Madeley – Princess Royal Hospital via Dawley and Lawley (Monday-Friday, hourly);
- High Ercall to Ellerdine via Wellington and Princess Royal Hospital (Monday-Friday 2-hourly); and
- Tibberton to Wellington via Newport, Donnington and Priorslee (Monday-Friday hourly/2-hourly)

**BSIP baseline:** Only one bus service provides a 'walk-up' frequency of 5 bph. Other services are regular but relatively low frequency.

**BSIP baseline:** Improving connectivity to all three major employment areas of Telford, with new supported hourly week-round service operating early to late.

**BSIP baseline:** Poor service provision evenings and Sundays, with only main connections provided. No Sunday evening network.

**BSIP baseline:** Low frequency services outside the main urban area, including to and within the rural north, within Newport and to major settlements outside Telford.

### 2.1.3 Bus Fares

Bus fares in Telford vary substantially. TBEB Section 5-3 provides a summary of published fares. From this there is substantial variation in fares and the offers to different groups, notably younger people.

Single and return cash fares information is not readily publicly available from Arriva. However discussions between Arriva and Telford & Wrekin have confirmed that the operator has 12 single fares for services in the Borough, ranging from £1 between Telford town centre and Telford railway station, then £1.50 up to £3.60 but with uneven increments. Return fares are available for less than two singles, but with variable multipliers from the single fare.

Table 2.1 illustrates some key fares charged and benchmarks these against other nearby towns.

## Telford Bus Service Improvement Plan 2022

Area	Operator	Day Ticket	Weekly Ticket	Carnet Product
Telford	Arriva – Telford area	£4.90	£19.00	3 Day flexi £13.00
Telford	Banga Buses	No day ticket. Shifnal to Telford return, £4.00. Wolverhampton to Telford return, £5.40	£19.00	-
Benchmark – West Midlands	National Express	£4.00	£15.00	5 Day ticket bundle £19.00 10 Day ticket bundle £36.00
Benchmark – Shrewsbury	Arriva	£4.80	£18.00	3 Day flexi £12.50
Benchmark – Worcester	First Worcester: City County	£4.70 £7.50	£17.00 £23.00	-
Benchmark – Kidderminster and Redditch	Diamond Buses: Kidderminster Redditch	£4.50 £3.50	£18.00 £15.00	-
Benchmark – Stoke-on-Trent/Staffordshire	D&G Buses	No day ticket. £4.50 Potteries return (allows change of bus) £5.50 Network return (allows change of bus) Potteries - £2.30 single flat fare	£18.00 Network (a young person can accompany an Adult Weekly ticket-holder for free)	-
Benchmark – London	Transport for London	£4.95 (daily cap)	£23.30 weekly cap	-
Benchmark – Reading	Reading Buses	£4.30	£17.00 (electronic)	10 single journeys £17.00
Benchmark – High Wycombe Town	Arriva	£4.20	£16.00	3-day bundle £11.00
Benchmark – Luton & Dunstable	Arriva	£4.70	£17.50	3 day bundle £12.50 12 day bundle £46.00
Benchmark – Southampton	Bluestar buses	£3.80	Bundle of 5 day tickets £17.00, or carnet of singles	12 trips £18.50 24 trips £36.00 36 trips £51.00
Benchmark – Brighton	Brighton	£5.80 24 hour citySAVER (via app or The Key smartcard)	£21.60 7 day citySAVER (via app)	10 trips £24.00 20 trips £46.50 30 trips £62.00 all via The Key

Table 2.1 - Bus Fare Comparison

This analysis suggests that fares in Telford are higher than some neighbouring towns in the wider West Midlands, and that therefore a reduction in fares would be an attractive offer to passengers. At present a number of cash fares are available within Telford (up to ten different staged cash fares), which as a poly-centric settlement makes it difficult to publicise fares in a clear manner. As can be seen from Table 2.1, Telford's fares are at the higher end of other comparator unitary authority locations across England, including other locations served by Arriva.

Bus fares are slightly higher than rail fares, with Telford Central to Oakengates or Wellington being £3.30 Anytime return, falling to £2.80 Off Peak return. Telford has an active taxi and private hire market, although for most journeys the bus fare will be cheaper than a taxi fare for a single passenger. Group travel is often cheaper by taxi than bus.

The provision of concessionary travel to older and disabled people is mandated by the English National Concessionary Travel Scheme, and Telford & Wrekin Council operates the scheme between 09:30 and 23:00 on weekdays and all-day on Saturday, Sunday and Public Holidays.

The provision of discounted fares to young people varies, with the fare reduction varying between operators. Availability of information relating to child fares is difficult to determine before boarding the bus. The Telford Teen Card has recently been relaunched jointly between Telford & Wrekin Council and Arriva. It is available to people 16-19 years old living in the authority's area, and allows the holder to purchase an adult weekly ticket usually priced at £18 at a reduced £15 fare.

There is no multi-operator ticketing scheme in Telford. This particularly impacts passengers accessing the Princess Royal Hospital, near Wellington, which is only served by Arriva Midlands' services.

The four new tendered services, as outlined in Section 2.1.2, will have lower fares at £2 single maximum and a £4 day ticket. The council will work with other operators on wider aspirations and the forthcoming January-March 2023 national capped £2 single fare.

**BSIP baseline:** Bus fares in Telford are relatively high, particularly for the size of the urban area, and confusing with multiple cash fares charged.

**BSIP baseline:** There is no multi-operator ticketing scheme.

**BSIP baseline:** Young persons' fares are not standardised.

**BSIP baseline:** Lack of fare offers for key groups (including students and job seekers).

#### **2.1.4 Bus Passenger Information**

Much information is available on channels which are universally available across the UK: Traveline, Google Maps, and a variety of open-source websites such as Citymapper.

Telford & Wrekin Council does not provide timetable information itself, but signposts users to Traveline West Midlands and operators' websites. For journey planning purposes, all operators

provide websites with service information. Provision of fares information is variable. Paper timetable leaflets are generally no longer produced, particularly by Arriva, who have also closed their travel and enquiries shop formerly in Telford bus station.

Real-time information is available on Arriva's mobile phone app. Telford & Wrekin Council has also introduced QR code real-time information, starting with services 1/2, 3, 4 and 7 and intends to roll this out further within the Borough.

Real-time information is available at Telford Town Centre bus station and Oakengates bus station via screens.

The authority is also trialling an e-ink screen at its International Centre bus stop which is the country's first completely off grid bus shelter, powered through a combination of energy harvested from shelter-mounted solar panels and a vertical axis wind turbine.

The authority has an on-going bus shelter replacement programme to roll out further real-time information screens at key interchange hub locations. The 2022 award-winning upgrade of Wellington bus station has further expanded the trial of e-paper screens for timetable information and provides real-time information screens at all stands in the facility.

**BSIP baseline:** The environment of different operators providing services results in a potentially confusing presentation of information to passengers.

**BSIP baseline:** Information on fares is particularly opaque, with no information provided at stops.

**BSIP baseline:** Limited provision of real time passenger information across the Borough.

### 2.1.5 Bus Fleet

Much of the bus fleet in Telford is mid-life, with Arriva's fleet of 61 single-deck buses of various types and seating capacities having an average age of approximately 10 years. The newest vehicles are from 2017, with the oldest being from 2007.

Banga Buses' fleet of 15 smaller single-deck buses is of a similar average age to Arriva's.

Emission standards are commensurate with the age profile of the fleet, with few buses understood to be to Euro VI standards (principally Banga Buses' vehicles, as Euro VI is a requirement to operate in the West Midlands Combined Authority area). There are currently no zero-emission buses in the fleet.

Passenger environment onboard all fleets is functional, with the age of the vehicles meaning that none provide modern facilities such as USB charging points or next stop audio-visual announcements.

**BSIP baseline:** A mixed fleet of poorer emissions standards, not supporting net zero carbon targets.

**BSIP baseline:** Fleet presentation is variable, as is the quality of the passenger saloon and seating.

**BSIP baseline:** No vehicles provide next stop announcements.

### 2.1.6 Bus Priority Measures

Telford & Wrekin Council have few physical bus priority measures, those present are mostly on the approaches to bus stations and interchanges.

Traffic congestion within the authority's area is variable, with the older parts of the area (Wellington, Oakengates) having more constrained highway networks and junctions, and so are more prone to congestion. The new town areas of Telford generally have wider distributor roads, with bus services routed through the residential districts and local centres, which can experience slower traffic speeds due to schools' traffic and general local access movements.

Average speeds and delays within Telford are generally significantly better than the national average, suggesting there is limited congestion and delay on the locally-managed A roads. Figure 2-3 shows average delays across Telford's highway network, with a few hot-spots and sensitive links identified, but with most links showing low values of delay as measured by Seconds Per Vehicle Per Minute.

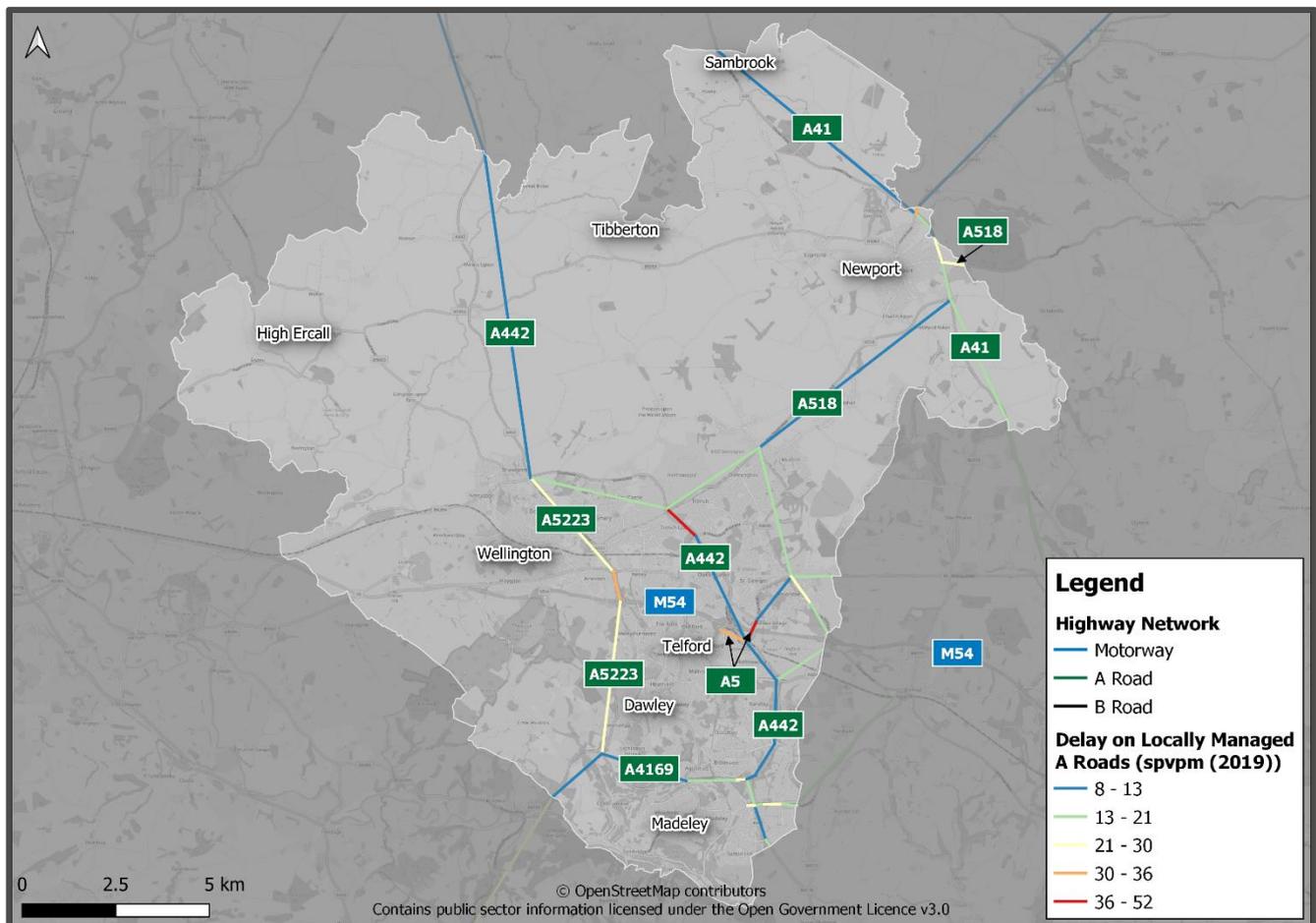


Figure 2-3 Delays on local 'A' roads in Telford & Wrekin

**BSIP baseline:** Few priority measures and a number of pinch-points on the bus network. Some sensitive junctions space-constrained, so consideration of intelligent solutions.

### 2.1.7 Telford & Wrekin Council Staffing

As explained in Section 8 of the TBEB, three staff are engaged in public transport operations and delivery, but all three have a wide range of duties of which public transport is only one. To date they have been supplemented by specialist resource provided by Atkins Ltd through Telford's existing Specialist Services Framework.

Contact with bus operators has in recent years been regular, exploring specific operational and commercial issues.

Regular discussions are held with neighbouring authorities, particularly Shropshire Council and Transport for West Midlands, regarding existing cross-boundary links and the potential for new connections as relevant.

Political engagement regarding bus services could be regarded as 'active' with members and the Cabinet Member providing regular comments to the public transport officers. Concerns regarding service changes due to Covid-related travel habit changes, as well as the quality of service delivery, are frequent issues raised.

**BSIP baseline:** Limited officer capacity to engage with bus operators and to provide proactive policy and operational direction.

### 2.1.8 Views of Passengers and Stakeholders

To understand perception of Telford's current bus network, a public engagement questionnaire was launched in late July 2021 and ran for three weeks. The survey was promoted via the Council's social media channels, and also by Arriva. Engagement was sought from existing bus users and non-users; of the 253 responses received, 106 were bus users and 147 non-users.

Of bus users, 70% stated that they used them for shopping, with social activities and health and medical appointments, at 59% and 29% being the second and third top responses. 19% said they used it to travel to and from work and 10% said they used buses during the course of their employment or business activities. When asked about feelings of safety, 64% of bus users said they felt safe when travelling on the bus.

For non-users, when asked why they don't use bus services, the responses shown in Figure 2-4 were given.

**Why don't you currently use about the bus service? (select all that apply)**

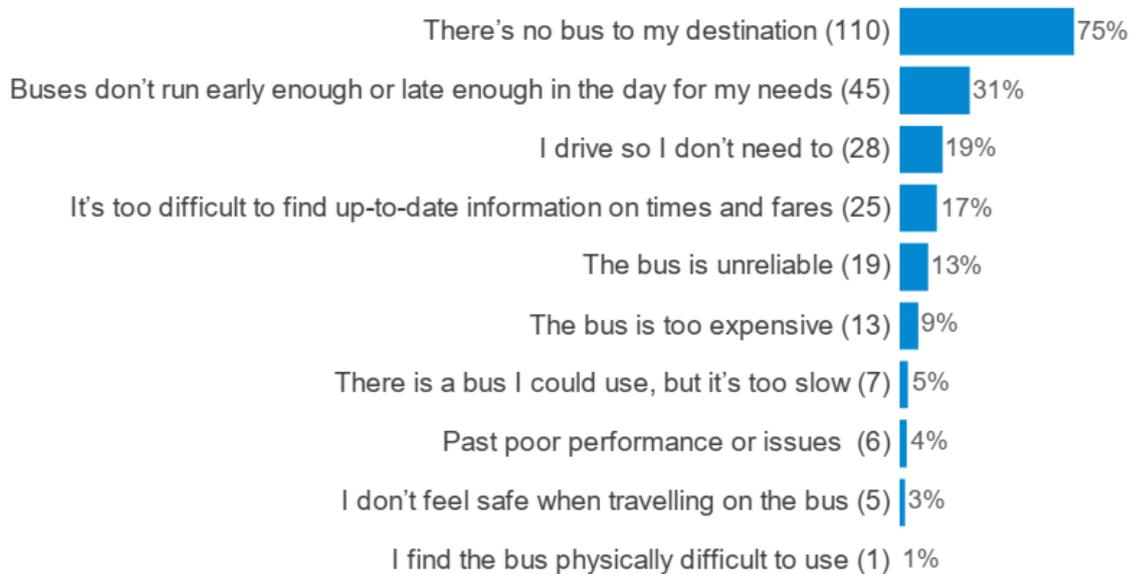


Figure 2-4 Non-user reasons for not using the bus

Cuts to services during the pandemic, particularly in the rural north of the Borough, have led to feelings of social isolation. One such route, provided under contract by a neighbouring authority due to the links it provided within that authority's area, was mentioned several times.

Fares (simpler, better value, multi-operator and payment options), network coverage (number of destinations and earlier/later journeys), service reliability/journey times and information availability (timetables and real time) were key themes amongst both groups of respondents, indicating that the well-understood basics of bus service delivery (punctual, reliable, frequent, value-for-money fares and easily-understood network) are still key concerns amongst passengers and potential users in Telford.

Detailed comments received from the survey, and other communications received from the public and other interest groups, have been used to develop plans for new services and amendments to existing routes. Whilst many suggestions have been able to be considered, some require longer-term planning.

Other stakeholder engagement has included discussions with employer groups, through existing travel forums or green travel coordinators, where current transport barriers to potential staff accessing jobs have been raised. Engagement is also being improved with major employers, such as the NHS, to work with them to identify any issues that can be explored for longer-term network developments.

In addition, internal links within Telford & Wrekin Council have been used to explore issues some key vulnerable groups have identified with using bus services. In particular, a Learning Disability Consultation exercise identified that 42% of respondents felt that access to public transport was not easy and safe. Some of the issues around access relate to understanding

fares and timetables, gaining experience with using buses and being able to cope when problems arise with bus services (late or very busy buses). Travel training programmes will be considered to assist users identified as being able and willing to use buses on their own, once appropriate familiarisation and support has been given. Disability awareness training will also be considered for the operators.

Recent engagement has been focussed on enquiries about reduced fares for teenagers (the Teen card) and options for expanding this fares initiative. As was highlighted, the National Bus Strategy and the Bus Service Improvement Plan's funding request presents opportunities for securing funding to improve the discount offered and also to expand the scheme to other young person ages, thereby supporting access to education, training and employment opportunities and also to promote continued bus travel rather than learning to drive.

**BSIP baseline:** Focus on delivery of key bus service basics (reliable and affordable journeys, with easy access to information) remain key concerns amongst both existing users and current non-users.

### 2.1.9 Bus Service Outcomes

According to DfT bus statistics, the bus passenger trip-rate is around 21 per year and has been falling over recent years (TBEB Figure 6-2). This rate is lower than in neighbouring West Midlands and benchmark authorities and is lower than would be suggested by the level of zero car ownership amongst households in Telford. This suggests that the bus passenger trip-rate should be around 66% greater at around 35 trips per year (TBEB Figure 6-3).

There are a number of exogenous factors for this:

- There is a high level of both in- and out-commuting. The in-commuting in particular takes place over a very wide geographical area, to the town centre and Stafford Park, Halesfield and Hortonwood business parks, some distance from the town centre (TBEB Figure 3-5). It is therefore difficult for public transport to capture these trips at either trip origin or trip end, a key consideration for interventions developed for this BSIP;
- Telford town centre has lost a significant amount of retail activity over recent years;
- There is no university in the town. The University of Wolverhampton has some facilities– universities are associated with higher levels of bus usage;
- As a poly-centric settlement, patterns of movement across Telford are varied and dispersed; and
- Covid-19 pandemic severely impacted bus patronage through mandatory national lockdowns and social distancing guidance. Lower demand couple with loss of revenue resulted in a reduced service provision to many people in the Telford and Wrekin catchment area.

Historic difficulties in serving major employment areas due to factors such as different working patterns, the nature of the jobs offered, relative ease of access by car, and, anecdotally, businesses not wanting their staff to share public transport (and so discussing wages and employment conditions), means that public transport mode share is lower than might be

expected. Demographic analysis and feedback from the Employment Service indicates that some areas with a higher propensity to use bus services, for all categories of journey, are poorly connected to the major employment sites, with public transport journeys involving interchange with associated interchange penalties of longer trip times.

**BSIP baseline:** demand for journeys to work lower than would be expected for the socio-demographic characteristics of Telford.

## 2.2 LTA financial support for bus services

The support that Telford & Wrekin Council currently provides in the form of tendered bus services is shown at Table 2.2.

Route	Description
1 / 2, 4, 7a	Routes same as daytime services. Evenings only.
11	Telford – Lawley. Evenings and Sundays.
14	Telford- Priorslee - Snedshill,- Ketley Bank - Ketley Grange - Oakengates 60 minutes.
15 and 16	Route 15 - Telford – Oakengates – Wombidge – Hadley – Leegomery – Princess Royal Hospital – Shawbirch – Admaston – Dothill – Wellington. 60 minutes Route 16 - Telford – Malinslee – Dawley Bank – Overdale – Hadley – Princess Royal Hospital – Wellington. 2 hours
19	Telford – Dawley Bank – Lawley – Lightmoor. All journeys, Monday to Sunday daytime.

Table 2.2 - Telford & Wrekin Council Supported Bus Services

## 2.3 Other factors that affect the use of local bus services

The majority of parking provision in Telford & Wrekin that is managed by the Authority is operated free of charge, with the exception of Telford Town Centre and Ironbridge. As such, this is a direct challenge to bus travel, but is in place to support our local centres.

In Telford town centre where our main bus station is located, all car parks operate on a charged basis. However, the vast majority are operated privately where we have no control over the setting of prices.

The authority adopted enforcement of on street parking through the adoption of Civil Parking Enforcement in early 2020. Our parking enforcement operation is a key element of our network management function, and we use the team to provide education and enforcement of restrictions to maintain the expeditious flow of traffic on the network. Our enforcement team work closely with partners internally such as Highways and Public Transport teams and external partners such as Town and Parish Councils and transport operators to understand problems on the network. This is particularly important on our bus routes where illegal parking can impact on service reliability if not managed effectively.



# 3 Headline Targets

## 3.1 Bus Journey Times

### 3.1.1 Target Development

We estimate that the average one-way bus journey time in the AM peak is 15.5 minutes within the Telford boundary, although some key journeys are significantly longer, such as south Telford to Wellington which can take up to 50 minutes. As a result of implementation of all bus priority and other traffic management measures described in Section 4, by 2024/25 we estimate a time saving on the average journey time of just over 1 minute, or a 6.5% reduction. This estimate is at present a very high level one.

We will review the target as design work on bus priority and traffic management measures proceeds, and as TWC gains a more in-depth understanding of the scope for journey time improvements. It is T&WC's ambition that bus journey times should not increase after 2025 (due to impacts of background traffic growth) but the target for 2030 will be developed in light of the implementation of all schemes identified in this BSIP, and also in light of availability of funding for further bus priority infrastructure investment.

### 3.1.2 Monitoring Proposal

We propose to measure performance in two ways:

- Analysis of bus scheduled journey times within the Telford boundary, for key core routes; and
- Analysis of real-time data from bus operators, both including and excluding bus stop dwell times.

## 3.2 Bus Journey Time Reliability

### 3.2.1 Target Development

DfT Bus Statistics give a figure of 91.0% 'on-time' performance for the latest year for which data is available, 2020/21, which is a 7% improvement to the 84.0% observed in 2019/20. Further information including a time-series is shown at Figure 5-5 of TBEB. According to the DfT definition of high frequency services (at least 6 buses per hour), no services in Telford currently operate to a high frequency. The highest frequency bus service in Telford, service 4, operates at a frequency of 5 buses per hour for most of the operating day.

Therefore no services should currently be measured using the 'Excess Wait Time' (EWT) formula. EWT measures the additional time that, on average, a passenger who turns up at a bus stop at random can expect to wait for a bus and is considered to be a measure that better reflects the passenger experience of reliability for high frequency services than deviation from the timetable.

### 3.2.2 Monitoring Proposal

We propose to implement a target of a 4.3% improvement in reliability to be achieved by 2024/25. This will see:

- The target for low-frequency services move from 87.7% to 92% 'on time' at all timing points within the Telford boundary; and
- The target for any services increased in frequency and meeting the definition of high-frequency (six or more buses per hour) to have an Excess Wait Time of 1.0 minutes.

Reliability will be monitored using real-time data provided by operators and by TWC's real-time passenger information system.

## 3.3 Passenger Numbers

### 3.3.1 Target Development

As outlined in TBEB, bus passenger numbers in Telford have been declining over the past 10 years, from a peak of 5.9 million journeys in 2010/11 to 3.8 million in 2019/20.

If all the interventions outlined in Section 4 are delivered, our target is a 17.0% uplift in patronage numbers by 2024/25, or a return to pre-pandemic patronage figures in 2018/19, whichever the higher.

The impact of the pandemic on patronage has further reduced passenger numbers, but discussions with the bus operators suggest that current (October 2022) patronage has rebuilt to approximately 92% of the pre-pandemic figure for fare-paying passengers, but growth has slowed and concessionary pass use is lagging significantly lower. The impacts of changes to the retail offer in Telford and Wellington centres is still playing out, with operators remaining cautious regarding general patronage growth before the benefits of investments from BSIP funding.

The development of the target increase in patronage resulting from measures implemented under the BSIP is summarised at Table 3-1 below. These are structured according to elements of Generalised Cost, which is a helpful framework in which to consider the changes to a passenger's journey from walking to a bus stop, waiting for a bus, paying a fare, travelling on a bus, and experiencing 'soft' measures like real-time passenger information and on-bus audio announcements.

Generalised Cost Element	Change	Elasticity Factor 1	Target % Change	% Passengers the Change Applies to	Forecast Demand Response
Scheduled wait time	Headway	-0.25	-33%	25%	2.1%
Journey time variability	'On Time' or EWT performance	-0.25	-10%	100%	2.5%
Walk	Service Density	-0.25	0%	0%	0%
In-Vehicle Time	On-bus journey time	-0.60	-6.7%	50%	2.0%
Fare	Average fare / paid passenger journey	-0.30	-25%	70%	5.3%
Real-Time Information	Number of passengers who receive RTP1 while waiting at a bus stop	-0.25	-3.9%	75%	0.7%
Simplified Ticketing	Number of passengers who benefit from simplified ticketing	-1.1	-2.2%	100%	2.4%
On-bus audio announcements	Number of passengers who benefit from simplified ticketing	-0.6	-3.3%	100%	2.0%
Target	-	-	-	-	17.0%

Table 3.1 - Target Development

Taking each of these in turn:

- Scheduled wait time: this is a function of the bus service headway, and reflects a target that a 33% reduction in headway will apply to 25% of passenger journeys – described further in Section 4;
- Journey time variability: again, this is a function of the bus service headway, and reflects a target that additional waiting time resulting from late or irregular operation will reduce by 10%;
- Walk time: no change to service density or coverage is proposed, so walk time remains 'as is';

<sup>1</sup> Bus fare and journey time elasticities and diversion factors for all modes, RAND Europe and SYSTRA, 2018

- In-vehicle time: as per the journey time target, this reflects the target that on average 50% of passenger journey times will fall by 5%;
- Fare: With the fare proposals being discussed with operators, we estimate that 30% of passengers will experience a reduction in fare. We target a 20% reduction in average fare paid per journey as described further in Section 4;
- Real-time information: as described in Section 4, we propose measures to extend real-time to every bus stop in Telford, by a mixture of at-stop displays and QR codes, benefiting an additional 75% of users. To estimate the change in generalised journey time (GJT) we have taken the TAG value of 1.47 minutes and expressed this as a percentage of the GJT – estimated at 2.5 times the estimated mean passenger journey time of 15 minutes. This gives a 3.9% reduction in GJT, applied to the headway elasticity;
- Simplified ticketing: as described in Section 4, we propose measures to simplify ticketing in Telford. To estimate the change in generalised journey time (GJT) we have taken the TAG value of 0.84 minutes and expressed this as a percentage of the GJT – estimated at 2.5 times the estimated mean passenger journey time of 15 minutes. This gives a 2.2% reduction in GJT, applied to the total GJT elasticity; and
- On-bus announcements: as described in Section 4, we propose measures to introduce on-bus announcements to every bus in Telford. To estimate the change in generalised journey time (GJT) we have taken the TAG value of 1.22 minutes and expressed this as a percentage of the GJT – estimated at 2.5 times the estimated mean passenger journey time of 15 minutes. This gives a 3.3% reduction in GJT, applied to the in-vehicle journey time elasticity.

The packages of investments in key routes are expected to generate the majority of the aspired patronage growth, with network benefits then lifting patronage on all other routes. Therefore any reduction in funding available for route and vehicle upgrades will have a significant impact on the patronage target.

It will be noted that the forecast percentage increase in patronage of around 17.0% is lower than the 66% increase suggested by the comparison of bus passenger trip-rate and car ownership set out in section 2.1.9. There are two reasons for this. The first is that the target is derived from individual measures, and it is to be hoped that the combined effect of the measures put forward in the BSIP is greater than the sum of the individual parts. But it is also important to recognise the exogenous demand constraints also considered at section 2.1.9 – notably the reduced retail offer in Telford town centre and the limited tertiary education opportunities.

### **3.3.2 Monitoring Proposal**

We propose to monitor the patronage target using data collated from the bus operators in Telford, using passenger boardings in Telford to be consistent with the DfT's bus statistics.

Before the return of schools in September 2022, bus patronage nationally was at around 80% of pre-Covid volumes. The rate of Covid recovery has been considered in both the bus and rail industries and a number of scenarios constructed for rail reflecting the uncertainties around

Covid recovery. Much of this recovery relies on exogenous sources such as the demand for travel to work.

### 3.4 Passenger Satisfaction

Telford and Wrekin Council has not been the subject of the regular 'Bus Passenger Survey' designed and administered by Transport Focus. There is therefore limited information available on the baseline, with only Arriva's Staffordshire operation having been surveyed and reporting results (but not directly comparable for Telford). We have asked bus operators to provide information on customer comments and complaints which could form a baseline, and in terms of establishing a target or monitoring, could be used in future years. If this proves feasible, we will control this against patronage to provide a complaints or comments rate per 100,000 journeys.

In preparation of the BSIP we have undertaken an on-line survey of users and non-users which as requested, amongst other things, their views on the perceptions of the bus service. We intend to repeat this survey periodically to inform revisions to the BSIP, and so this will also provide an evidence base which we can use to monitor the trend on satisfaction as well as gain intelligence on how the perceptions of users and non-users change.

Our target is a 10% increase in the number of passengers who are satisfied or very satisfied with the bus network.



# 4 Delivery

## 4.1 Make improvements to bus services and planning

Changes in travel patterns, demographics, and employment patterns over recent years have led to some areas of Telford losing direct network links. The poly-centric nature of Telford means that leisure trips have different movement patterns to weekday commuting, despite regeneration initiatives being made by Telford & Wrekin Council to encourage more evening and night-time businesses to the town centre.

Bus service planning has previously relied on local knowledge, but with gaps in information some services have not been as successful as had been hoped. As part of the Enhanced Partnership ambition to support collaborative network development, including the identification of network improvements, Telford & Wrekin Council are investing in bus network planning software to provide evidence-based discussions to explore network enhancements with greater probabilities of being more commercially viable. Existing regular meetings with operators will be used to understand network delay locations and to identify where interventions may be of benefits. In addition, the fitting of passenger counting and Tap On Tap Off equipment to the whole Telford bus fleet will all more detailed boarding and alighting information to be collected, further improving the understanding of network usage patterns and to be fed through to further network planning initiatives.

The authority has long-held ambitions to speed up bus journey times across the borough, investing in key corridors to provide quicker bus journeys between the key town centres and other interchange locations. By developing a spine of frequent, rapid services on key connections, this will improve the attractiveness of bus services and allow resources to be reallocated between trunk and local routes. This review and reform of the bus network will also reduce barriers to accessing key employment and retail facilities, for example by reducing the current 50 minute journey time from south Telford to Wellington for an approximately crow-fly distance of 6 miles but a 12 mile bus journey.

Changes in travel behaviours during the pandemic, and follow-on rebuilding of patronage, is progressing at a slower rates than in some areas. This is despite initiatives between Telford & Wrekin and bus operators to promote bus travel as a safe, clean mode of transport. This impact on patronage levels means that, in order to attract passengers back to buses, additional funding is sought to bring forward some of the network enhancement aspirations previously considered for later years of the BSIP, thereby ensuring that bus travel becomes a more practical option for residents to access employment, education, health and leisure opportunities, generating a positive upward spiral of improvements and investment leading to patronage growth.

BSIP aspirations, subject to funding:

- Reviews of each route in conjunction with operators to identify potential for improved journey times
- Work with operators to determine services suitable for increased frequencies and new or enhanced network connections

## 4.2 More frequent and reliable services

Subject to funding made available under the National Bus Strategy and other sources, we will work with operators to build a stronger network with faster links between key centres and improved services connecting into these hubs.

Increased use of bus journey time data to monitor the impacts of general traffic congestion on bus service performance will help to focus investment, where feasible, on pinch-point locations. Where mitigation is determined to be beyond likely available budgets, partners will work together to review the whole route to determine whether small journey time improvements can be made elsewhere to reduce the impact of pinch-point delays. Bus priority and other highway measures, including review of Traffic Regulation Orders and enforcement, will promote reliability on the network.

Services to employment areas are a key concern, as identified in the public engagement exercise, and so opportunities for new services to these locations will be discussed with partners. Drawing on available data such as economically inactive and journey to work statistics, working with employers and the Employment Service, and recognising the need for cost-effective service options to ensure long-term sustainability (ideally commercial provision but likely initially requiring service support within adopted criteria), new options for network enhancements will be explored. These may take the form of Demand Responsive services, which are better suited to dispersed trip patterns and flexible enough to cater for different working patterns across large employment parks.

BSIP aspirations, subject to funding:

- Reviews of each route in conjunction with operators to identify potential locations for priority measures, operational issues, stop infrastructure quality

## 4.3 Review service frequency

Service frequencies at present are matched to demand and service viability, although have been reduced from pre-pandemic levels. Working with partners, service frequency improvements towards an ideal of a 10-minute daytime headway on agreed core services will be agreed. Second-tier routes will have an ambition of standardised half-hourly daytime headways. Further enhancements of Service 4, Telford's premium route, to a frequency better than six buses an hour is a key ambition (currently operating at five buses per hour)

Evening and Sunday service frequencies will be reviewed with the aspiration, subject to funding, to introducing additional services to boost connectivity across Telford at all times of day, particularly for vulnerable users and to areas of low car ownership. Sunday evening service provision will be discussed with partners to determine the factors likely to support their introduction – consideration of trial services with suitable promotion, tied-in with major events, will be discussed to determine stakeholders' opinions.

Overall network stability is a key ambition, to provide sound, viable services on which frequency and other enhancements can then be made. By securing the core network, through targeted

support funding, network enhancements build up from existing patterns rather than trying to re-establish previous journey opportunities.

BSIP aspirations, subject to funding:

- Reviews of each route in conjunction with operators to identify changes in travel patterns
- Work with operators to determine how services can be stabilised, to allow for increased frequencies and a return to patronage growth

#### 4.4 Increase bus priority measures

We propose a range of measures, from some new physical priority interventions, through the use of telematics to provide virtual priority, and reviewing Traffic Regulation Orders, to reduce bus journey times and facilitate reliable operation.

Subject to funding, technical and construction feasibility and delivery, the following bus priority measures are proposed:

- Traffic signal enhancements and Selected Vehicle Detection at Hollinswood, Apley and two other junctions, identified by using delay and patronage data, to allow buses to pass through the junctions more quickly;
- Reviews of all routes to identify pinch-points and deliver improvements to reduce regular delays, including infrastructure, re-sited bus stops, revised TROs; and
- Review of traffic signal coordination to better match bus journey times through sections.

We recognise there are other means by which journey times can be improved, and by which reliability will be enhanced. We will:

- Review the process of communicating roadworks with operators, with the aim of enabling better planning and communication of diversions;
- Review Traffic Regulation Orders in force at bus stop clearways, with a view to standardising on '24-7' operation; and
- Introducing Bus Lane Enforcement to ensure that buses are afforded unhindered use of the dedicated infrastructure, and associated expansion of parking enforcement to reduce delays to buses at stops or pinch-points with regular infringements of parking restrictions.



Finally, we will undertake a review of each bus route, to identify locations where minor works or a review of parking and loading controls could ease pinch-points for buses. It will also review the potential to fill in bus stop laybys, which are identified with delays to buses departing from the stop, and review the location of all stops to determine whether there are any which would benefit from minor relocation. Subject to funding we will commit to a programme of reviewing 3 bus routes a year under the Enhanced Partnership.

BSIP aspirations, subject to funding:

- Reviews of each route in conjunction with operators to identify potential locations for priority measures

#### **4.5 Increase demand responsive services**

Opportunities have been identified where DRT services could provide valuable additions to the public transport network. The withdrawal of service 519 between Newport and Shrewsbury has been identified as gap in provision much-missed by residents of that area, leaving Newport town now with only the service 5 from Telford to Stafford. This has left much of Newport without links to the town centre, along with supermarkets and employment sites on the outskirts of the town. To reinstate access for local people in this area, Telford and Wrekin Council have identified funding to support two new fixed bus routes to connect rural North Telford with Newport and Wellington.

A Rural North Telford DRT service aspires to supplement fixed bus routes in the area by providing local links that feed into the scheduled bus network at key location point thereby ensuring existing network viability is maintained whilst also broadening travel options for areas currently without public transport services.

A further DRT service is proposed within urban Telford, providing links to employment areas currently poorly served (or without any bus service at all). It is proposed that this DRT operation would act as a shuttle connection to key interchange locations, again to support and maintain viability of the commercial network, whilst removing barriers to accessing employment opportunities. The use of DRT also avoids the suggestion of diverting existing scheduled services, which could negatively impact on journey times for existing passengers, and hence reduce service viability.

Telford and Wrekin Council are committed to delivering a £500,000 bus shelter replacement programme. As part of this programme the authority will deliver 4 new interchange locations across Telford facilitating a future DRT scheme. These four interchange locations will include interactive screens which will allow access to the app to enable the passenger to book a DRT service from the interchange. The screens will also provide information on the DRT service and real-time information.

The existing Gorge Connect and Ironbridge World Heritage site Park & Ride services will also be reviewed, with the expectation that these services are rolled into the urban Telford DRT service, making effective use of vehicles when not required for employment trips, thereby strengthening connections into the main scheduled bus network.

BSIP aspirations, subject to funding:

- Use bus planning software and multiple datasets to identify where new scheduled routes may be introduced to improve access to employment and education opportunities, or where a more flexible operation would better suit residents

## 4.6 Consideration of bus rapid transport networks

Opportunities to develop a BRT network for Telford are being explored. Proposals to invest in Arriva's service 4, its current premier route, will lead this initiative to develop a strong spine for the potential network and to set standards to which other services will then progressively be upgraded. The implementation of priority and journey time reliability measures, simplified ticketing and a strong visual identity are core elements of a BRT network, and are all being proposed as part of this BSIP to then form the foundations on which a BRT network can subsequently be developed and implemented.

If possible, any operator (or other stakeholder) suggestions for priority interventions will be considered for early implementation, to start delivering 'quick wins' and laying the foundations for additional and higher-profile schemes, which will build to form the BRT corridor(s).

Within Telford & Wrekin Council, Public Transport officers will work with Planning colleagues on masterplans for major new housing and employment sites, to ensure good penetration by bus, including priority measures, to ensure bus remains competitive and attractive. Again, this will set strong foundations on which services, including a BRT network, be built.

BSIP aspirations, subject to funding:

- Build on outputs of the route reviews and network stabilisation efforts to build the core network towards BRT qualities

## 4.7 Improvements to planning / integration with other modes

As a non-constituent member of the West Midlands Combined Authority, Transport for West Midlands is already a key transport partner for Telford & Wrekin Council. This extends to the West Midlands Rail Executive, and West Midlands Trains franchise, where investment is being made in the Birmingham to Shrewsbury line.

The proposed rollout, subject to funding, of the Swift card, which will provide integration with West Midlands Trains touch-and-go fares initiatives, will boost multi-modal journey options for users accessing rail services via the local bus network. This will also connect with local aspirations for a bike share scheme, which is in development.

BSIP aspirations, subject to funding:

- Work with TfWM to extend the Swift card to Telford, for rail, bus and cycle hire fares

## 4.8 Integrate services with other transport modes

As part of Telford & Wrekin's Interchange Investment programme, linkages to railway stations will be assessed, and appropriate wayfinding infrastructure incorporated, subject to funding. This is particularly relevant for Wellington and Oakengates interchanges, whereas the link between Telford Central and nearby bus stops (and the bus station, slightly further away) are already being improved as part of the wider Town Centre masterplan.

The further expansion of real time information screens within Telford will also allow the authority to display Point of Interest (PoI) information within the locations that they are installed. The screens are able to display easy-to-understand infographics alongside services, highlighting which bus services pass close to railway stations and locations for the future Telford bike hire scheme.

In addition, the forthcoming Telford bike hire scheme is proposed to use Swift as one of its payment methods, further promoting Swift as the ideal product for paying for a number of transport tickets without needing to create multiple accounts.

Further promotion of an integrated transport network, including first/last mile access to longer-distance services, will be achieved through the activities of the expanded public transport team. The additional resources to be recruited will be tasked with promoting sustainable travel across Telford (and beyond) and will be able to offer individual travel training support to those currently uncomfortable with using buses and other non-car modes.

Further modal integration will be achieved through the development and roll-out of the MaaS app and travel website, both of which will focus on promoting sustainable travel and demonstrating ease-of-use of bus and other modes as alternatives to the private car.

BSIP aspirations, subject to funding:

- Develop a MaaS app to simplify multi-modal journeys
- Work with TfWM to extend the Swift card to Telford, for rail, bus and cycle hire fares
- Identify locations where wayfinding and real time infrastructure would provide improved network integration
- Promotion of sustainable travel options through additional travel support officers

## 4.9 Simplify services

Working with bus operator partners, further reviews of bus services will be undertaken to see if further simplification can be achieved. This will be particularly beneficial once operating experience has been gained of the two proposed DRT schemes, along with further reviews of services currently requiring external funding.

Service changes will be limited to five times each year, namely: January; Easter; May (for summer rail timetable change), July; and September.

BSIP aspirations, subject to funding:

- Work with operators to stabilise the current network and standardise service change dates



#### **4.10 Review socially necessary services**

Budgetary pressures facing the socially necessary services will be resisted as far as possible. Working with operator partners to identify alternative operating and funding opportunities, Telford & Wrekin Council will seek to ensure that current bus network accessibility criteria are maintained. Where services are not delivering value-for-money, through multi-criteria reviews of services will be undertaken, to ensure that officers and operators are fully aware of the likely impacts on service change.

BSIP aspirations, subject to funding:

- Review service performance to determine if changes to route, operating hours or style of provision would be beneficial
- Identify any potential additional funding sources to provide socially-necessary services
- Engage with stakeholders and Members regarding options for improved service viability

#### **4.11 Invest in Superbus networks**

Superbus consists of a comprehensive network of bus priority measures; fares caps; and increased service frequencies. Subject to funding and feasibility we propose to implement each of these elements and so we believe that our proposals qualify for 'Superbus' designation.

BSIP aspirations, subject to funding:

- Build on route reviews, network stability, fares initiatives and BRT works to deliver a Superbus network across Telford

#### **4.12 Improvements to fares and ticketing: Lower fares**

The current range of single, return and day tickets are a legacy from historic fare structures, and are higher than fares in many comparable areas. As part of Telford & Wrekin Council's long-held bus network development aspirations, the desire to reduce the price of a day ticket is being realised, subject to funding.

Acknowledging the current legal framework regarding fares reductions and reimbursement, with reimbursement funding the price of single-operator day ticket products would be reduced to £4, valid within the T&WC area. We will work with operators to understand whether it is possible to commercially reduce single cash fares to better align with the £4 day ticket aspiration. Initial discussions with Arriva have indicated that they are willing to simplify their current 12 single tickets down to a much simpler fare structure, with corresponding child/teen and return fares.

Following the NBS' ambition:

“to see multi-operator ticketing everywhere, covering all bus services at a price little if at all higher than single-operator tickets”

work will continue with operators to introduce a multi-operator day ticket product, valid within the T&WC area, to remove cost barriers on a limited number of journeys within the Borough where

interchange is required between different operators' services. Once the multi-operator day ticket is established, work will continue to expand the product range to longer period tickets and across all age ranges.

With the lower cost of the day ticket, it is expected that the cost of a weekly and other period tickets will also be lowered, thereby increasing the attractiveness of bus services. As noted in Section 2, fares are one of the key issue areas identified during the public engagement exercise. Lower fares will contribute to levelling-up the cost and quality of the bus network in Telford when compared to other areas of England.

The Council will review the cash fares charged on its supported services and where possible reduce these to £2 single for adults, £1 single for children, with a £4 day ticket. The ambition is to extend these fare levels to all services in the T&WC area.

BSIP aspirations, subject to funding:

- Lower fares on supported and commercial services
- £4 day ticket available across all services

#### **4.13 Improvements to fares and ticketing: Simplify fares**

Alongside the reduction of the day ticket price, support is being given to the operators to bring their fare zones into alignment, and to agree a consistent young persons' eligibility criteria and discount.

Telford & Wrekin Council will further subsidise the Teen or Young Person's Card, to reduce barriers to travel for a key demographic with a higher propensity for bus use, and also to extend the age range to bring more young people into the scheme's remit, extending eligibility to those aged under 22.

Recognising the difficulties faced by teenagers and young adults leaving the care of the local authority, we propose to provide them with an annual bus pass, which will remove the potential barrier of travel costs from their daily considerations, and also mean that should they need to change home location, they are still able to travel without additional cost concerns.

Furthermore, support is being given to operators, acknowledging current competition law restrictions, to examine their cash single fares with a view to getting to a single flat fare for the Telford area. Given the size and demographics of Telford, the authority believes that reducing single fares to two prices at a level more closely aligned to local demographics will bring a significant boost to the attractiveness of the network, particularly for relatively longer journeys within urban Telford, providing better value for money and encouraging modal shift.

In advance of the national bus ticketing back office, including fare capping, discussions are continuing with operators to introduce a simple multi-operator ticketing product. This may take the form of mutual acceptance of each other's day tickets within the Telford & Wrekin boundary, or be the sale of a specific multi-operator ticket for the same price as the operator's own day ticket (allowing usage to be monitored, but with revenue lying where it falls).

If the dynamic of the bus market were to change in Telford, the role and form of a multi-operator product would be reviewed. If a more formal product with revenue allocation is deemed to be required, best practice knowledge would be sought from the Centre of Excellence, and with neighbouring or similar authorities who already have ticket products with revenue allocation.

Tap On, Tap Off ticketing equipment will also be introduced, to support fares capping for all contactless payment methods, including those unbanked but using the Swift ticketing card.

BSIP aspirations, subject to funding:

- Young Person's Card extending eligibility for reduced fares to the under 22s
- Care leaver's ticket, providing an annual bus ticket for all individuals leaving the care of the local authority
- Tap On, Tap Off to support fare capping, including by Swift card

#### **4.14 Improvements to fares and ticketing: Integrate ticketing between operators and transport**

Subject to funding, it is the ambition that Telford & Wrekin would adopt the Swift ticketing product, to support multi-modal journeys and ticket purchase across bus, rail and cycling. This would align well with journeys towards the West Midlands, as well as enabling the authority to introduce its cycle hire scheme using an efficient and proven back-office system.

The introduction of the multi-operator bus ticket is seen as a parallel route to enable wider ticketing integration, initially between bus operators but then leading through to multi-modal initiatives.

BSIP aspirations, subject to funding:

- Work with TfWM to extend the Swift card to Telford, for rail, bus and cycle hire fares

#### **4.15 Make improvements to bus passenger experience: Higher specification buses**

Reflecting on the public engagement survey outcomes, improved vehicle standards did score well with non-users as a consideration of encouraging modal shift. Recognising the current age profile of the combined Telford bus fleet, we will work with operators to identify a programme of fleet investment, and subject to funding, introduce a refurbishment programme to deliver an improved standard of presentation on vehicles with reduced emissions and better-quality passenger environment. The new battery-electric buses for services 1/2, 3 and 4 would deliver immediate upgrades, with 40% of the fleet replaced with new zero-emission vehicles.

The refurbishment programme will deliver vehicles with as-new qualities of presentation. Improved interior finishes, new seat coverings, replacement of damaged poles, seat-backs and panels, along with the fitting of USB charging facilities, will provide passengers with a much-enhanced on-board ambience.



Transport Focus research in 2018 suggested that free on-board Wi-Fi was one of three top requirements, particularly for younger passengers. We will keep this under review, as changes in mobile phone data bundles may mean that this is not the priority it was once perceived to be. Proposed investment in wifi equipment, as part of the vehicle refurbishment programme, would then be diverted to provide other improvements as suggested by the customer research.

BSIP aspirations, subject to funding:

- Zero emission vehicles, Package 1 – service 4, 14 vehicles
- Zero emission vehicles, Package 2 – services 1/2/3, 10 vehicles

#### **4.16 Make improvements to bus passenger experience: Invest in accessible and inclusive bus services**

Subject to funding, we will identify and develop solutions for bus stops which do not meet accessibility standards. This will include the route reviews, where the filling-in of bus stop laybys could assist with improving the quality and accessibility of stops, as well as reducing delays to buses in re-joining traffic flows (improving service reliability).

Subject to funding, we will mandate 'next stop' screens and announcements on vehicles as standard on all bus services, regardless of DfT moves to mandate such equipment on the bus. The installation of such equipment will be as part of the vehicle refurbishment plan proposed, as outlined in section 4.15, and would be fitted as standard from delivery for the battery-electric bus fleet for services 1/2, 3 and 4.

Improving access to information will be achieved through the roll-out of the MaaS app, which will provide an assisted technology solution to those unable to read timetables, or requiring confirmation of their location and any relevant interchange or access route information. Furthermore, all e-ink timetable displays will include push button audio facilities, providing information on forthcoming services from that stop and real time departure information.

Building on earlier successes, but regrettably paused during previous funding constraints, a post 16/ adult Travel Training programme will be established. This will provide focussed support to any person who is unsure about using the bus network, whether due to mobility issues, neurological divergence or general apprehension about how to access and pay for bus travel. This programme will be delivered through the authority's expanded Public Transport team's capabilities, thereby ensuring that correct information is provided as part of the individual's targeted support sessions. Bus driver disability awareness training will also be required to be

provided as part of the Enhanced Partnership, with all drivers to have received the training within 12 months of the introduction of the EP.

Finally, we will ensure that as part of closer working with Planning colleagues, new developments take account of the needs of bus users, and efficient use by bus operators.

BSIP aspirations, subject to funding:

- Brand extension, Packages 1 and 2 – vehicle presentation refurbishment including audio-visual Next Stop announcements and roll-out of Travel Telford brand

#### **4.17 Make improvements to bus passenger experience: Protect personal safety of bus passengers**

Subject to funding, we will review access routes to bus stops, including footpaths as part of the series of route reviews described previously. We will incorporate safe route assessments and draw on recent research into safer design for lone female passengers, relevant for other vulnerable users. The opportunity will also be taken to trim or remove excess vegetation around stops, further increasing visibility of waiting passengers.

Many bus stops in the borough are in poor condition. Steps are needed to improve the condition of many bus stops. A well-designed bus stop would make effective promotion for the bus network. A series of attractive bus stops would change the perception of the bus and bring higher levels of patronage. It is also recognised that a standard bus stop design is required across the Borough.

The installation of standardised bus stop infrastructure will provide reassurance to passengers who will know what to expect at each stop type, including availability of real time information (confirmation of waiting time), seating (for passengers not able to stand for periods) and also regular maintenance and cleaning, meaning that waiting facilities are safe.

Subject to funding, we will implement CCTV at the key interchanges and upgraded bus shelters as part of their refurbishment programmes. All new shelters will be glazed, improving passive surveillance and hence improving personal safety at stops.

We will work with operator partners to ensure that drivers are regularly provided with training on protecting vulnerable passengers.

The proposal to provide an annual ticket to teenagers and young adults leaving the care system would mean that this sensitive group would be able to use the bus at any time of day or night to return home or reach a place of safety without having to worry about the bus fare.

BSIP aspirations, subject to funding:

- Improved bus stop quality, including new stop flags and timetable information, along with refurbished bus shelters with new glazing to help increase passive surveillance
- Network promotion to demonstrate the safety of services
- CCTV installed at key interchange locations

#### **4.18 Make improvements to bus passenger experience: Improve buses for tourists**

Subject to funding, the proposed improvements to the DRT services for Ironbridge will boost accessibility to the World Heritage site for tourists. This will also be encapsulated within the bus network marketing and promotion activities, ensuring that hotels in the region are aware of the non-car access opportunities available for travelling to the gorge.

The DRT services would be promoted on the interactive screens to be installed at the four key interchanges, widening the reach of promotional messages and raising awareness of options to access the attractions by public transport.

BSIP aspirations, subject to funding:

- Bus network promotion to highlight the tourist attractions accessible by bus
- Use network reviews and new/enhanced services to improve access to tourist locations by bus

#### **4.19 Make improvements to bus passenger experience: Invest in decarbonisation**

In July 2019, the Council declared a climate emergency and committed to ensure its activities and operations are carbon neutral by 2030.

We will seek funding opportunities to deliver a migration to zero-emission bus fleet with associated infrastructure over the coming years. A demonstration trial of zero-emission vehicles is being arranged, in conjunction with the area's major operator, to gain a thorough understanding of the likely performance of battery-electric buses across each of Telford's routes, thereby ensuring that future applications for zero-emission vehicles best-match technology and fleet capabilities to network operational requirements, and hence reduce over-specification of battery capacities to achieve better value-for-money.

Working with operators, the core network of key services will be the initial focus for zero emission vehicle investment, to bring benefits across the whole urban area and its principal centres. The first stage of this would be investment for route 4, linking Madeley to Telford town centre, Oakengates, Wellington and the Princess Royal Hospital, with the fleet of 16 vehicles required for this service representing nearly 25% of the total local fleet. A second package of investment would see the combined services 1/2 and 3 converted to battery-electric vehicles, with the total combined electric fleet of 26 vehicles then representing that 40% of the local fleet was zero-emission. The conversion of the four routes to new, zero-emission vehicles would mean that services to many of Telford's most deprived areas would be provided with an immediate enhancement in service quality, and bely the common misconception that new buses are only used on routes to less deprived areas of the town.

Although no area of Telford is an Air Quality Management Area<sup>2</sup>, poor air quality is still a concern. Recognising the age profile of the current fleet, subject to funding and as a lower-cost alternative to the request for zero emission vehicles for the 4, we will implement the retrofit of exhaust treatment systems to the whole fleet, as part of the refurbishment programme. This will reduce bus emissions during the transition to a zero-carbon fleet as wider funding allows, although does not contribute as positively to air quality enhancement as would the route 4 zero emission vehicle request.

Support will be given to wider bus industry initiatives, in collaboration with DfT and the Government, through the reform of Bus Service Operator's Grant to better incentivise and provide ongoing funding certainty for zero emission vehicles. Operator discussions have indicated that beneficial reform of BSOG would allow them to support enhanced zero emission fleet upgrades, beyond the 14 vehicles identified in the bid for core route 4.

In addition to fleet decarbonisation, Telford and Wrekin are seeking to decarbonise their roadside infrastructure. Currently 170 shelters within the Borough have a power supply; the power usage varies as each location has different power requirements, some power digital and paper advertising, most power lighting and some power real-time information. There is an aspiration to replace this on-grid supply with off-grid renewable energy shelters.

Moving forward and in line with the National Bus Strategy there is a requirement for more real-time and timetable information at bus stops, which will need powering. The e-paper screens have minimal power requirements as they are a "bi-stable" display, meaning that they only consume power as the display updates, placing markedly lower stress on the batteries being charged by the solar panels/wind turbine.

Furthermore, there is also an aspiration when installing new shelters to install sedum roofs which provide a habitat or at least a food-source for a diverse number of species. These include birds and bats (who feed on attracted insects) and the declining populations of butterflies, bees and other pollinators who rely on pollen to thrive. Certain sedum plants have long flowering seasons which can directly assist in their survival and provide a habitat/corridor for what would otherwise be empty space.

As well as the biodiversity advantages of sedum roofs, there are pollution reduction benefits which will help the council achieve its aspiration to be carbon neutral by 2030. Sedum roofs aid in capturing particulate matter, which helps meet air quality standards and reduces the associated health impacts. The urban heat island effect will also be reduced: air temperatures, as well as pollution levels within urban areas increase due to surfaces (pavement/buildings) that absorb heat. Sedum has a higher albedo, which enables the process of evapotranspiration and thus cools surrounding environments. Studies suggest that grey roofs (pavement/buildings) store 75% more heat than green roofs.

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<sup>2</sup> [https://www.telford.gov.uk/downloads/file/16967/annual\\_status\\_report\\_2020](https://www.telford.gov.uk/downloads/file/16967/annual_status_report_2020)

The recent installation of a new off-grid bus shelter and a sedum roof bus shelter is a visible demonstration of this ambition to reduce the total bus network emissions. The use of solar panels, low-energy lighting, timetable displays, CCTV, and Sedum-planted shelter roofs all contribute to further reducing the carbon emissions associated with traditional bus stop infrastructure electricity requirements. This also ties-in with the full roll-out of new e-ink timetable information displays across the borough, as outlined in section 4.22 below.

In 2021/22, the council have invested around £250,000 in new off-grid bus shelters at key locations across the borough, including for the upgrade of Wellington bus station as described below.



*Figure 4-1 Four-bay shelter with turbine and solar panel*

Furthermore, as part of the shelter replacement programme, and subject to funding the new shelters in key air-quality hot-spot locations will be fitted with air quality monitoring equipment. Current air quality monitoring within Telford is limited to a single monitoring site in Hollinswood. Information available for the surrounding areas is based upon synthesised computer modelling, not hard data. The implementation of a dense network of low-cost and low-power sensors will allow the authority to obtain more accurate representations of air quality in the Borough, specifically roadside, measuring the impact of our proposed upgrade of bus fleets.

The data gathered will be used to develop future service enhancement strategies, shaped around introducing zero-emission buses on routes through the areas of concern, as well as guiding wider policy initiatives at managing and reducing poor air quality from road traffic in general.

Further demonstrating Telford and Wrekin's ambitions, Wellington Bus Station has been completely refurbished to be the first off grid bus station in the country. The bus station has real-time information screens, CCTV, Sedum roofs, and harvest solar and wind power to make it

completely off grid. A new totem has been installed to aid wayfinding, provide timetables and multi modal information on the train station next to it. This project has won the DfT Special Recognition Award for Net Zero Project of the Year 2022.

BSIP aspirations, subject to funding:

- New stop flags and timetable cases at all stops without a shelter
- Continue programme of upgrading key interchange locations, to the standard of the newly-refurbished, award-winning Wellington bus station
- Installation of e-paper and RTI screens to improve the quality of stop infrastructure

#### **4.20 Improvements to passenger engagement: Passenger charter**

The council will continue working with its operator partners to commit to a passengers' charter which will be succinct and offer clear definitions of:

- Responsibility;
- Channels for feedback;
- Standards for information supply and
- Targets for responding honestly and individually.

It will outline aims in relation to:

- Quality;
- Safety;
- Reliability;
- Cleanliness and presentation;
- Environmental targets and
- Accessibility.

It is also likely to include some form of refund promise or mechanism following failure to deliver and a 'get you home' promise if last journeys fail to run. In addition to the anticipated standard Transport Focus short user questionnaire, TWC will procure additional in-depth annual surveys of passengers, to provide more detailed understanding of trends in satisfaction, and supporting the delivery of the Enhanced Partnership by indicating where targeted improvements may be required to improve passenger perception of the network and facilities.

BSIP aspirations, subject to funding:

- Develop passengers' charter with operators
- Undertake additional surveys of passengers and non-passengers to identify further network improvements
- Use additional Council resources to support network monitoring

#### **4.21 Improvements to passenger engagement: Strengthen network identity**

The majority of buses operating in Telford are based at locally, with only a limited number travelling extensively beyond the authority's boundary. Therefore the rollout of the Travel Telford

brand to vehicles operating wholly within Telford will mean that the majority of services will be distinctively branded and aligned to wider information and promotional visual identities.

The council are keen to create a strong local brand for travel within the Borough, a brand that is local, giving people a sense of pride in their network. New services operating under tender to the council, where the buses are dedicated to these routes, will use local branding.

## TravelTelford



For vehicles which are not based locally, or are allocated to services into other authority areas, we will work with operators to determine an appropriate brand presentation, ensuring that passengers are aware that the service is part of the Travel Telford brand and any associated ticketing initiatives.

Bus stop infrastructure upgrades will ensure that information is presented in a consistent manner, using the Travel Telford brand and colours. This will replace the current mis-matched inventory of shelter colours, bus stop flag designs and timetable case styles. The website and MaaS app will be similarly-branded, further strengthening network identity and familiarity.

Using additional Council resources funded from this BSIP, the former Telford Travel Training programme will be reactivated, to encourage potential passengers to use bus services through targeted support whilst familiarising themselves with the network and fares options.

BSIP aspirations, subject to funding:

- Promotion of the bus network using the Travel Telford brand across fleet, virtual and physical information and stop infrastructure
- Use additional Council resources to deliver travel training programme

### **4.22 Improvements to passenger engagement: Improve bus information**

The availability of accurate and clear information was a clear theme from the public engagement survey. We propose a suite of measures to improve the situation:

- The development and rollout of a Travel Telford MaaS app and website/portal, which provides access to clear timetable information, fares and ticketing details and also supports access to the DRT scheme booking facility, future cycle hire scheme, walking routes and aspiration to include rail for integrated journeys.
- Through the bus stop upgrade programme, ensure that at-stop information is standardised, to allow easy use and updating, including consistent network brand presentation and access to online information. This applies to both e-ink and paper timetable displays.

- Roll out Real-time QR codes to all services, ensuring the codes are prominently displayed at each stop. The QR codes also improve accessibility, as they leverage the users' own device to provide information, and services can be announced directly from their smart phone.
- Subject to funding, roll out solar-powered e-paper static timetable information displays (with push-button assisted audio technology) to 100 stops, as part of a large-scale demonstration project (potentially tying-in with other authorities seeking to deliver similar schemes). The updating of paper timetable displays is difficult to achieve on the day of service changes, leaving passengers unsure as to whether the timetable is current or not. In addition, different presentational styles of timetables, and different ownerships, means that further difficulties can be encountered when changing displays. The cost of changing a paper display, of around £4-£5 per case. This is not only significant and labour intensive but would also incur further environmental cost as it is unlikely the updating of all paper timetables could currently be served by an electric vehicle. Passenger research shows that timetable displays at stops are valued by passengers. Telford are trialling an off-grid e-paper display, and so the rollout of such technology across all relevant stops in Telford will demonstrate the possibilities of providing higher-quality information without needing to procure new power feeds to shelters.
- Utilise the new digital and e-paper technology to further raise awareness of improvements to the bus network. Effective Content Management of the displays will allow Telford to deliver advertising campaigns highlighting new fare structures and services.
- Display infrastructure will further enable the local authority to disseminate key disruption messaging, utilising the Content Management platform that we already have access to. Messaging can be prioritised and set by individual display/user-defined groups of displays or by service/route. This will enable the authority to get key information to the passengers waiting at stop.
- Subject to funding, expand the shelter replacement programme, building on the success of the demonstration shelters installed at the International Centre stops. The provision of new, high-quality off-grid shelters provides the opportunity for standardised information provision and safer waiting environments. These will act as visible investment in Telford's bus network, encouraging new passengers through the provision of clear timetable, real time arrival and fares information, thereby removing current uncertainties and barriers to accessing bus services for some potential users.

BSIP aspirations, subject to funding:

- Continue the roll-out of e-paper information displays
- Work with operators to improve the standards of information provided at stops and online
- Expand the shelter replacement programme, bringing more locations up to the quality of the refurbished Wellington bus station



Figure 4-2 International Centre off-grid stop, with wind turbine and solar panels, e-ink display and QR code



Figure 4-3 International Centre off-grid stop, with wind turbine and solar panels, e-ink display and QR code



Figure 4-4 International Centre stop with Sedum roof and QR code



# 5 Equality Impact Assessment

Access to public transport is a key freedom for many protected groups. Therefore improvements to the bus network, such as:

- increases in frequency and hours of operation;
- reduction in fares;
- enhanced information provision (including talking real time information screens);
- lower emission vehicles;
- upgraded waiting facilities;
- expanded travel training programmes; and
- greater access to employment opportunities

all contribute to the removal of barriers to accessing and using public transport.

Equality analysis has been conducted throughout the development of this Bus Service Improvement Plan, with the continuous outputs being integrated throughout the BSIP.



## 6 Reporting

We propose to publish performance against the four key targets on our website every six months. These will include:

- Bus journey times on a sample of routes, controlled against car journey times so that the context for changes in journey times can be properly understood;
- Reliability on the same sample of routes;
- Patronage as measured by the number of passengers boarding buses in Telford, using figures provided by operators; and
- Bus passenger satisfaction and perceptions, using results of a rolling survey administered by T&WC (likely to be the new survey being organised by Transport Focus).

The reporting will also summarise changes made to the bus product such as the implementation of bus priority and infrastructure, service development and fare changes.

The website link is:

[https://www.telford.gov.uk/info/20174/public\\_transport/5300/the\\_national\\_bus\\_strategy](https://www.telford.gov.uk/info/20174/public_transport/5300/the_national_bus_strategy)



# 7 Overview table

BSIP Overview Table Template

<b>Name of authority or authorities:</b>	Telford & Wrekin Council
<b>Franchising or Enhanced Partnership (or both):</b>	Enhanced Partnership
<b>Date of publication:</b>	30 November 2022
<b>Date of next annual update:</b>	31 October 2023
<b>URL of published report:</b>	<a href="https://www.telford.gov.uk/info/20174/public_transport/5300/the_national_bus_strategy">https://www.telford.gov.uk/info/20174/public_transport/5300/the_national_bus_strategy</a>

<b>Targets</b>	<b>2018/19</b>	<b>2019/20</b>	<b>Target for 2024/25</b>	<b>Description of how each will be measured (max 50 words)</b>
Journey time	15.5 minutes	15.5 minutes	14.5 minutes	Average journey time (taken as half of the scheduled journey time within Telford & Wrekin Council area for sample key core services, weighted by service frequency)
Reliability	87.7%	Not available	92%	DfT statistics BUS0902 or operator-provided data
Passenger numbers	3.8m	3.8m	3.9m	DfT statistics BUS0109 or operator-provided data
Average passenger satisfaction	No surveys undertaken	75% reliable 65% affordable	10% increase	New Transport Focus twice yearly passenger survey, plus TWC-commissioned more in-depth annual passenger survey

Delivery - Does your BSIP detail policies to:	Yes/No	Explanation (max 50 words)
Make improvements to bus services and planning	Yes	Collaborative working with operators using bus planning software to better plan routes and support network viability. Increased use of data sets accessible to the local authority to improve network planning. Improved integration with planning colleagues for accessibility to new developments.
More frequent and reliable services	Yes	Review locations of delay and determine appropriate interventions. Undertake whole route reviews to ensure reliability is maximised. Support network enhancements to provide better services to passengers, thereby virtuous spiral of patronage growth and further service enhancements.
Review service frequency	Yes	Review tendered service performance. Work to bring all services up to agreed minimum frequencies, depending on service type. Work with operators to identify quick wins for frequency increases, and to determine how to protect services currently struggling.
Increase bus priority measures	Yes	Combination of physical and intelligent solutions, as best fits highway network and bus service patterns. On-going monitoring of highway and bus network performance, to determine where issues may occur in the future, and work collaboratively to scope potential mitigation measures.
Increase demand responsive services	Yes	New DRT services in rural north around Newport, and Harper Adams University, and within urban Telford to improve connections to major employment areas of Halesfield, Stafford Park and Hortonwood. Also to improve tourist access to the Ironbridge Gorge World Heritage sites, connecting the various museums to the Telford Central station.
Consideration of bus rapid transport networks	Yes	Delivery of all elements of this BSIP contribute to a strong foundation for future BRT services. Future network enhancements being considered taking BRT principles of direct, fast services, providing the high-frequency spine connections between major interchanges and key destinations.
Improvements to planning / integration with other modes	Yes	As non-constituent member of West Midlands Combined Authority, work with Transport for West Midlands, West Midlands Trains and Swift card team to improve integration with rail and cycle hire in Telford and West Midlands.
Integrate services with other transport modes	Yes	Review and enhance connectivity between railway stations and key bus interchanges in Wellington and Oakengates. Work with West Midlands Rail Executive to receive advanced notice of railway timetable changes, to allow bus network revisions to fit with fixed timetable change dates.
Simplify services	Yes	Review network coverage, strengthen links between key centres and support integration of the DRT services. Reduce the number of service change dates each year.

Review socially necessary services	Yes	Monitor value-for-money of the services, and collaboratively review their effectiveness using the data available within the bus planning software. Target effective use of developer contributions to support enhanced network connections.
Invest in Superbus networks	Yes	All elements of this BSIP (fares, network, priority, quality stop infrastructure, enhanced information provision, promotion of quicker payment methods to reduce boarding times) contribute to forming a Superbus network in Telford.
<b>Improvements to fares and ticketing</b>		
Lower fares	Yes	Lower price of single-operator day tickets and associated longer-period ticket discounts; introduction of multi-operator versions of same, with consistent ticket boundaries. Extension of Teen/Young Person's Card eligibility to up to 22 years of age. Targeted additional fare initiatives. Working with operators to reduce cash fares.
Simplify fares	Yes	Work with operators to align fare zones, and move only two cash single fares within Telford & Wrekin, to allow clearer marketing of fares in publicity and at stops and demonstrate better value. Introduction of Tap On Tap Off to provide fares capping.
Integrate ticketing between operators and transport	Yes	Rollout Swift card product to support purchase of bus, rail and cycle hire and to allow the unbanked to access non-cash fare discounts. Introduction of new day ticket product valid on all operators' services, and continue discussions to progress this to week and longer-period products.
<b>Make improvements to bus passenger experience</b>		
<b>Higher spec buses</b>		
Invest in improved bus specifications	Yes	New zero-emission buses would replace 40% of the local fleet, giving instant quality uplift. Bus refurbishment programme improving the presentation of the remaining fleet, including interior refurbishment to provide USB charging, possibly wifi (although demand for this is falling) and clearer onboard information regarding the Telford bus network and fares.
Invest in accessible and inclusive bus services	Yes	As part of refurbishment programme, install 'next stop' audio visual equipment. Also review bus stop infrastructure to ensure stops are accessible and safe. Develop new Travel Training programme to support nervous and vulnerable users in gaining confidence to use buses. Driver training to assist vulnerable users.
Protect personal safety of bus passengers	Yes	Introduce CCTV at key interchanges, as part of site refurbishments. Review access routes to bus stops, as part of whole route reviews, to ensure safe and accessible. Driver training regarding protecting vulnerable and nervous passengers.
Improve buses for tourists	Yes	Improvements to Ironbridge Gorge services through extension of DRT services. Work with hotels and rail operators to promote non-car access to this World Heritage site.

Invest in decarbonisation	Yes	Follow opportunities for zero emission fleet funding, with two packages replacing 40% of the local bus fleet. Also as part of fleet refurbishment programme, retro-fit exhaust treatment systems to reduce bus fleet emissions.
<b>Improvements to passenger engagement</b>		
Passenger charter	Yes	Passenger Charter to be implemented as part of Enhanced Partnership.
Strengthen network identity	Yes	Rollout of Travel Telford brand, encompassing buses, stop infrastructure, new app and web portal. Clear identity and up-to-date information provision, to be search engine optimised to ensure top web search result.
Improve bus information	Yes	Consistent bus stop information displays as part of Travel Telford brand rollout. Implement e-ink timetable displays, to allow quicker updating of timetables at service change. Up-to-date information provision via web portal to be search engine optimised to ensure top web search result.
<b>Other</b>		
Other		