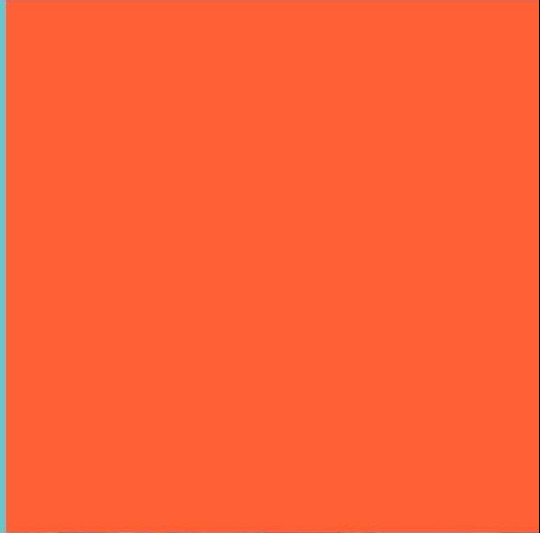
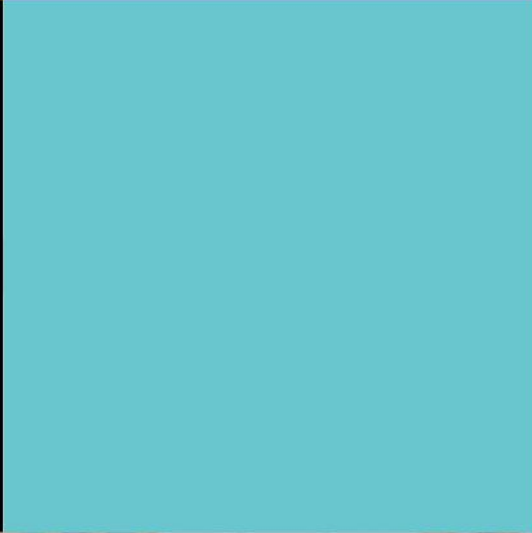
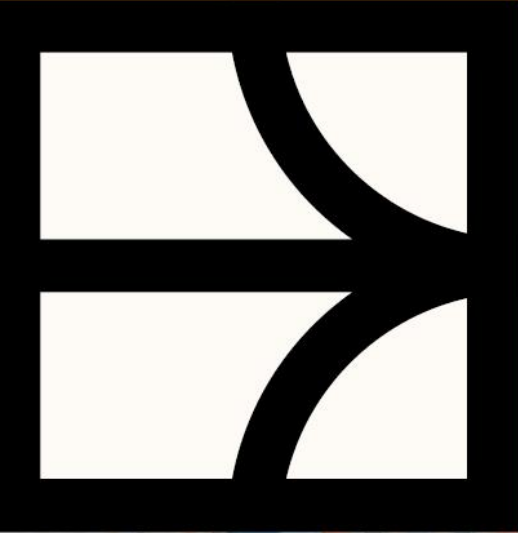
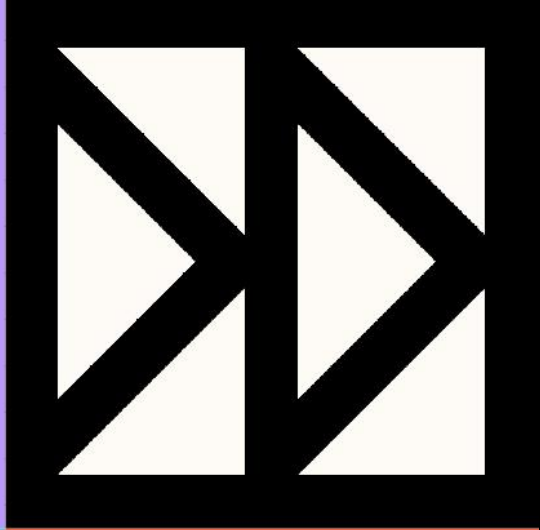
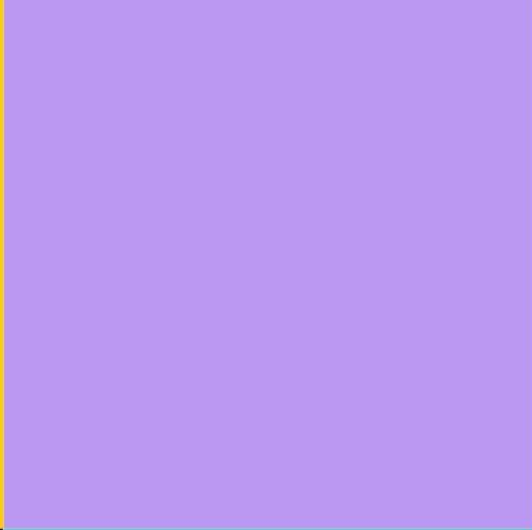


Shrewsbury Moves:

A 10-year vision and plan for transforming movement and public space in Shrewsbury





Foreword

Shrewsbury Moves: A 10-year vision and plan for transforming movement and public space in Shrewsbury presents our exciting and ambitious strategy to transform Shrewsbury. This strategy has been carefully developed by the Shrewsbury Big Town Plan Partnership, which brings together the expertise of Shropshire Council, Shrewsbury Town Council, and the Shrewsbury Business Improvement District. As the Shrewsbury Big Town Plan Partnership, we have prepared this strategy to demonstrate our commitment and ambitious vision for improving movement throughout the town. Our ultimate goal is to make Shrewsbury one of the most inclusive, accessible, and economically vibrant towns in the UK.

The strategy seeks to prioritise pedestrians, cyclists, and public transport above private motor vehicles. This will create more opportunities to transform Shrewsbury into a town that is not only more inviting, but also fosters a genuine sense of community. By doing so, we will be able to reclaim the heart of what makes Shrewsbury truly special – its rich history and stunning natural assets.

However, to do this, we need to reduce the volume of private motor vehicles in the town centre. Much of the traffic passing through the town centre fails to contribute to the town's economic prosperity and, in fact, is leading to congestion and air quality concerns.

We will be empowering local businesses and strengthening the economy of the town. With fewer private motor vehicles, we can welcome more shoppers, tourists, and visitors to Shrewsbury. This surge in footfall translates into more customers for our shops, cafes, and restaurants, injecting new life and energy into the local economy. As more and more people choose Shrewsbury as their preferred destination, the town will flourish, attracting fresh investment, creating more opportunities for growth.

We recognise that not all journeys can be undertaken by walking, cycling or public transport. Therefore, buses, trains and demand responsive transport will play a crucial role in developing a comprehensive transport network for Shrewsbury, helping to facilitate sustainable local, regional, and national trip making.

Nevertheless, we fully acknowledge that private motor vehicles still play a vital role for some individuals who need to travel to the town centre or move around



Shrewsbury. Therefore, those who wish, or have, to travel to the town centre by private motor vehicles will still be able to do so.

We understand that our plans are bold and ambitious. However, we are dedicated in making sure that our town is a highly attractive place for everyone to visit.

Together, we can create a future that exceeds all expectations and establish an inclusive, accessible, and economically vibrant town.

Executive Summary

Shrewsbury Moves: A 10-year vision and plan for transforming movement and public space in Shrewsbury has been collaboratively developed by the Shrewsbury Big Town Plan Partnership, which comprises Shropshire Council, Shrewsbury Town Council, and Shrewsbury Business Improvement District (BID).

The strategy seeks to deliver the vision set out in the Shrewsbury Big Town Plan (2018), notably the sections below:

“Traffic in the town centre is very light and slow moving. Pedestrians and cyclists can walk and move wherever they want, making the streets their own.

The whole town is much better connected by cycle or on foot, in a safe way, avoiding conflict with vehicular traffic. It is possible now to make your way across town by cycle or on foot.”

A series of interventions have been developed, split into four key themes:

Traffic management and active travel inside the river loop

Currently, a significant volume of private motor vehicles passes through Shrewsbury town centre without stopping. These vehicles do not benefit the local economy, contribute to congestion in the town centre and create an unwelcoming environment for pedestrians and cyclists. A town centre dominated by private motor vehicles, has a detrimental impact on pedestrians and cyclists, and the ability of the business community to stage events and provide seating outside hospitality venues. Public transport users are also disadvantaged as high levels of private motor vehicle traffic introduce delays, which makes provision of a continuous two-way bus corridor across town unfeasible with current traffic volumes.

To overcome this, it is proposed to separate the town centre into three traffic loops. This would result in all motor vehicles (including most delivery and servicing vehicles), unless exempt, being required to enter and exit the town from the same location, with vehicles being unable to travel between the different loops. Pedestrians, cyclists and public transport would have unrestricted movement across the traffic loops. If the traffic loops within the town centre were

implemented, it would be possible to provide a continuous two-way bus corridor between Welsh Bridge and English Bridge, another key intervention of the strategy.

The strategy would also seek to create distinctive, inviting, and unique gateways at each of the key entrances to the town centre, capturing Shrewsbury's cultural heritage, history, and traditions.

Traffic management and active travel outside the river loop

Outside of the river loop, there is a range of outdated cycle infrastructure which is characterised by missing links across main roads and roundabouts which makes cycling difficult. Moreover, some pedestrian routes into the town are not accessible for all users, and some residential neighbourhoods fail to create favourable walking and cycling conditions due to the dominance of private motor vehicles. Congestion on routes into the town centre contribute to unreliable and unattractive public transport options for local and regional travel.

To address these issues, the strategy includes interventions such as reducing speed limits across the town, contributing to improving road safety. Additionally, Local Access Priority Areas would be introduced across the town, whereby through traffic would be dissuaded to arterial roads, making neighbourhoods safer and more pleasant for walking and cycling. Local Access Priority Areas would only be implemented where local consent has been secured and would be implemented fairly with local support.

To encourage walking and cycling, pedestrian and cycle infrastructure would be upgraded to national standards as well as new and improved, fully accessible routes would be provided across the River Severn and railway. This will help people to access the town centre by sustainable means, particularly in the event of flooding whereby some roads in the town centre are closed. Routes to the north of Shrewsbury would also be improved for walking and cycling, helping to connect people and key destinations (i.e., Flaxmill Maltings) with the offerings of the town centre.

Public Transport & Micromobility

Bus

Bus services routing to and from north Shrewsbury are infrequent despite substantial demand for these journeys. Furthermore, buses lack priority over private motor vehicles, resulting in poor journey time reliability. Bus travel is further discouraged by a lack of a modern transport hub in the town centre that provides a seamless connection with rail services and the Park and Ride offer across the town fails to discourage people from travelling by private motor vehicle.

To address these challenges, the strategy includes relocating Park and Ride sites across the town as well as providing a new Park and Ride site to the east of Shrewsbury to capitalise on demand in this area. Additionally, the Park and Ride service would be integrated with general bus services across the town, ensuring that the service can be used across the town, rather than solely providing an express service to the town centre.

Bus services would be revised to ensure that they are frequent and reliable and priority measures would be introduced on key routes into the town centre to ensure that buses do not have to compete with other motor traffic.

Furthermore, the strategy recommends establishing a new public transport interchange hub at Shrewsbury Railway Station, which would enable seamless multi-modal travel and convenient transfers between bus and rail services in the town centre. Alternative bus facilities would continue to be provided on or near the current bus station as part of the Smithfield Riverside development.

Rail

Rail travel within Shrewsbury poses significant town-wide challenges. The forecourt of Shrewsbury Railway Station, a key gateway into the town centre, is currently dominated by parking and pick-up and drop-off facilities for motor vehicles. Additionally, there is a notable lack of fully accessible pedestrian entrances, particularly along the 'Dana' route. The lack of other nearby alternative railway stations further encourages most users to drive into the town centre to access rail services, primarily to then leave Shrewsbury for journeys to the West Midlands.

The strategy recommends enhancing Shrewsbury Railway Station, consisting of creating a new place for drop off and pick up activity generated by Shrewsbury

Railway Station on Howard Street. This would be relocated from the station forecourt and would be complemented with creating a new entrance to Shrewsbury Railway Station from Howard Street near the Buttermarket. All entrances to the station would be made fully accessible. Complementing the existing railway station in the town centre would be the introduction of a new Parkway Station 'Shrewsbury East' to capitalise on demand towards the West Midlands.

River

The River Severn currently offers limited river transport options, presenting an opportunity for improved and sustainable travel routes around Shrewsbury and to the West Midlands Showground.

To address this challenge, the strategy explores the implementation of a water taxi service around the river loop, subject to water levels.

Micromobility

The lack of sustainable travel options for hire within Shrewsbury, encourages increased private motor vehicle usage within the river loop.

The strategy proposed to provide mobility hubs throughout Shrewsbury, ranging from small community hubs, Park and Choose sites on the edge of the town centre and Park and Ride sites. Mobility hubs would providing easy to access sustainable transport solutions, such as bicycle rentals, electric vehicle charging stations and public transport services. In particular, Park and Choose sites would encourage people to not park in the town centre and instead, park on the edge of the town and take alternative, sustainable forms of transport into the centre.

Parking Plus

Car parks in the town centre generally have enough spaces to accommodate demand on weekdays and weekends. This means that many people feel confident that they can drive into the town centre and find a parking space without issue. Whilst there is already a graduated parking system in place, the cost of parking is relatively low compared to taking the bus depending on a range of factors, including number of occupants, time of day, duration of stay and choice of car park. This, alongside the frequency and quality of services, does not

encourage people to use Park and Ride. As a result, many people prefer to drive into the town centre and park, rather than use public transport.

Additionally, due to there being too many private motor vehicles in the town centre, some people who need to access Blue Badge Parking may find it takes a long time to find a space or need to circulate around the town to find a suitable space.

To address this, the strategy proposes to create a new 'parking plus strategy, which would build on the existing graduated system of parking charges in the town. This would consist of the most budget-friendly offer being provided at Park and Ride sites, with the highest parking fees continuing to be provided at car parks located within the river loop. Additionally, whilst it may be necessary to remove the majority of on-street parking in the town centre, any Blue Badge Parking that is removed would be replaced within the river loop, to ensure no net loss.

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1. Introduction

1.1. Local Context

Shrewsbury Moves: A 10-year vision and plan for transforming movement and public space in Shrewsbury presents the next step towards making Shrewsbury one of most inclusive, accessible, and economically vibrant towns in the UK.

The Shrewsbury Big Town Plan, adopted in 2018, set the scene and presented an overarching aspiration for movement within the town to be car-light, with pedestrians and cyclists being able to walk and move wherever they want, making the streets their own. The plan also set out 10 goals for Shrewsbury to achieve by 2036, with the first of these goals being to:

“improve pedestrian and cyclist conditions in the town centre, shifting the balance of priority given to movement across the town away from the private car.”

However, until now, tangible projects, interventions, and actions to fulfil this vision and achieve the goal of the Big Town Plan have not been implemented. As Shrewsbury continues to grow and change, it is necessary to develop this new strategy to address the current and future needs of the town in a sustainable way.

Shrewsbury is entering an exciting phase of transition and this strategy presents opportunities to enhance the towns environment, preserving its character whilst simultaneously enhancing the economic vitality and viability.

1.2. Purpose, Aims & Objectives

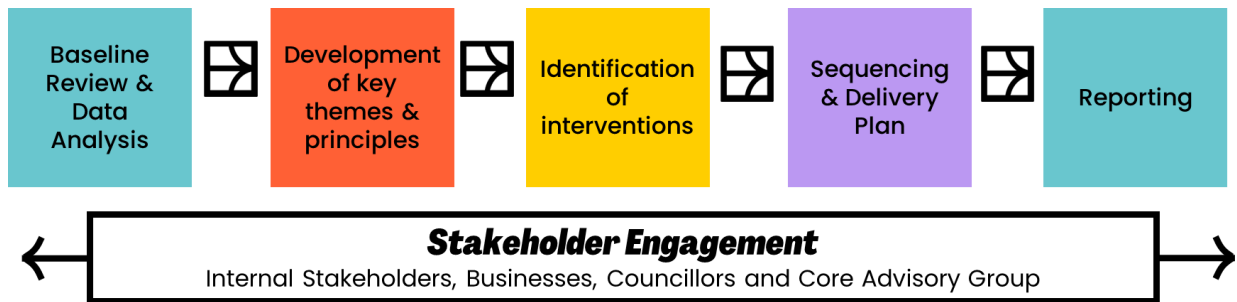
Shrewsbury Moves: A 10-year vision and plan for transforming movement and public space in Shrewsbury aims to bring the vision of the Shrewsbury Big Town Plan to life by creating a vastly improved town centre. This will be achieved by promoting sustainable modes of transport, reducing the reliance on private motor vehicles, and enhancing public spaces. This shift will positively contribute towards the health of Shrewsbury's people, economy, and the environment.

The aims of the Movement and Public Space Strategy are to:

- ☒ Create an **economically vibrant, safe, and inclusive town centre** for all to live, work, learn and enjoy throughout the day and night;
- ☒ Provide an appropriate setting to promote and **celebrate Shrewsbury's rich heritage;**
- ☒ Ensure a **resilient, place-based approach** to adapting to climate change;
- ☒ Establish principles for **enhancing mobility across Shrewsbury and fostering connections to and from neighbouring regions**, including West Midlands, the Marches, and the entirety of Great Britain.
- ☒ **Maximise opportunities for active travel**, particularly for people in protected characteristic groupings;
- ☒ **Maximise opportunities for health and well-being;**
- ☒ Provide a **framework for new major highway infrastructure projects**, promoting public and sustainable transport;
- ☒ Identify measures and incentives to **discourage through traffic in the town centre;**
- ☒ Identify a **prioritised programme of improvements to public spaces** which deliver the objectives of the strategy.

This report presents **Shrewsbury Moves: A 10-year vision and plan for transforming movement and public space in Shrewsbury** and has been informed by the preparation and analysis of a robust evidence base, engagement with stakeholders and a high-level review of relevant planning and transport strategies at a local, regional, and national level. This process is set out in Figure 1.

Figure 1 – Strategy Development Process

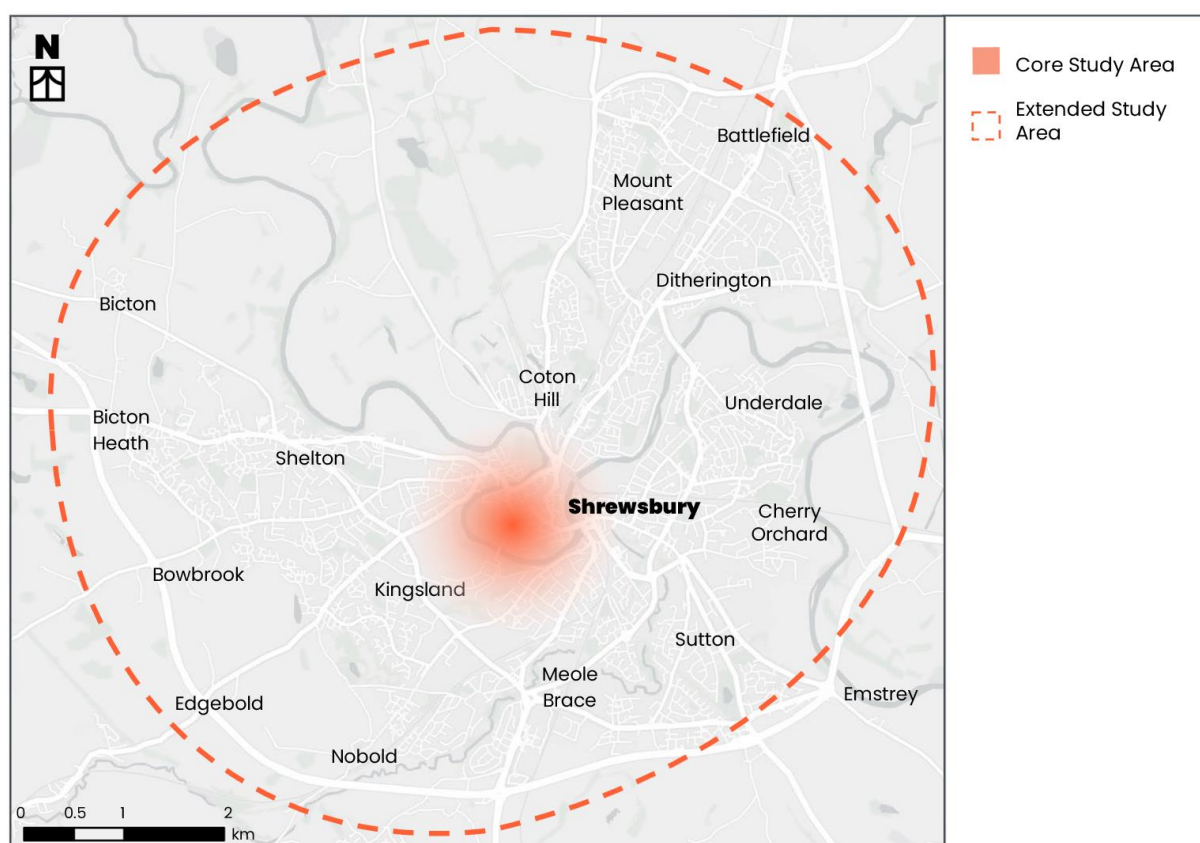


1.3. Geographical Scope

Shrewsbury Moves: A 10-year vision and plan for transforming movement and public space in Shrewsbury primarily addresses movement within Shrewsbury town centre and its immediate surroundings. Whilst the strategy has a town centre focus, it also recognises the importance of the town for individuals and businesses across the county.

Therefore, the strategy also considers an extended study area, which covers the main built-up area of Shrewsbury, and also considers Shrewsbury’s wider rural catchment. The geographical scope of this strategy is defined in Map 1.

Map 1 – Geographic Study Area



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

2. Baseline Assessment

2.1. Strategic Context

For the strategy to achieve success, it is crucial to establish a robust strategic alignment with local and regional policies and strategies. Additionally, it should be complementary to ongoing studies, activities, and in-flight projects to ensure coherence and maximise effectiveness.

As part of the early stages of development of the strategy, a review of policies, strategies and in-flight projects was undertaken. This involved undertaking a high-level review of the vision, objectives, and principles of each of these in terms of the issues and opportunities for movement and public spaces in the town centre, and wider study area. The policies, strategies and in-flight projects considered are set out in Figure 2.

Figure 2 – Policies, strategies, and in-flight projects



In-Flight Projects

- ☒ Levelling Up Fund (2)
- ☒ Bus Service Improvement Plan (BSIP)
- ☒ Shrewsbury Connect Park & Ride
- ☒ North-West Relief Road (NWRR)
- ☒ Local Cycling and Walking Infrastructure Plan
- ☒ Midland Connect / Network Rail Proposals
- ☒ Liveable Neighbourhood Trials;
- ☒ Weekend Low Traffic Trials
- ☒ Longden Road / Roman Road Roundabout Re-Design
- ☒ School Streets



Regional Policies & Strategies

- ❑ River Severn Partnership Investment Plan (2019)
- ❑ Midlands Connect Transport Strategy Refresh (2021)
- ❑ Shropshire Climate Change Strategy (2020)
- ❑ Economic Growth Strategy for Shropshire 2017 – 2022 (2017)
- ❑ The Marches LEP Strategic Economic Plan and Recovery Plan (2021)
- ❑ Shropshire Local Transport Plan (2011)
- ❑ Shropshire LTP4 (2022) (emerging)
- ❑ The Marches Freight and Mid Wales Freight Study (2018)
- ❑ Shropshire Core Strategy (2006 – 2026) (2011)
- ❑ Shropshire Site Allocations and Development Management Plan 2006-2026 (2015)
- ❑ Shropshire Local Plan Review (2016 – 2038) (emerging)
- ❑ Bus Service Improvement Plan (BSIP) (2021)
- ❑ Green Infrastructure Strategy (2020)
- ❑ Shropshire Health and Wellbeing Strategy 2022 – 2027 (2022)
- ❑ Shropshire Local Walking and Cycling Infrastructure Plan (LCWIP) 2022 – 2032 (2022)
- ❑ Shropshire Plan (May 2022)
- ❑ Shropshire Strategic Infrastructure and Investment Plan (2022)



Local Policies & Strategies

- ❑ Shrewsbury Big Town Plan (2018)
- ❑ Shrewsbury Big Town Plan Masterplan Vision (2020)
- ❑ Shrewsbury Big Town Plan: Access and Movement Framework (2021)
- ❑ NE Shrewsbury Future Connectivity Report (2022)
- ❑ Riverside Redevelopment Framework & SPD (2022)

2.2. Baseline Analysis

2.2.1. Overview

To inform the development of the themes, principles and interventions contained within this strategy, a robust evidence base of primary and secondary data has been collated, alongside extensive engagement with stakeholders.

This data provides specific and measurable information regarding transport movements, helping to understand the challenges and opportunities across the town.

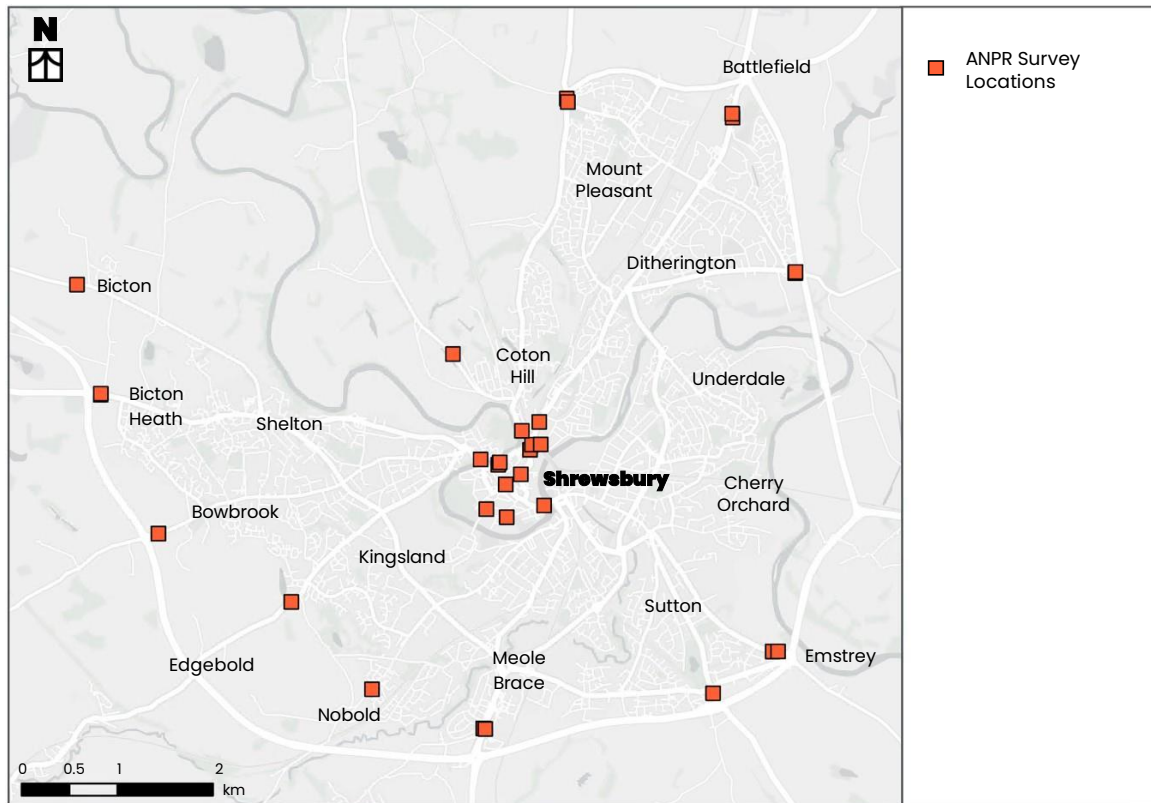
Subsequent analysis of this data has allowed for the further development of key issues and opportunities for transport and placemaking in Shrewsbury to be identified.

Full details of the data that informed the strategy and key outcomes of the analysis are provided within the accompanying *“Baseline Analysis and Policy Review”* report. This report contains analysis of the latest information and data available at the time at which the report was produced.

2.2.2. ANPR and MCC Traffic Counts

To understand trip making patterns across the town centre in a post COVID-19 world, primary data was collected through undertaking Automatic Number Plate Recognition (ANPR) surveys and Manual Classified Counts (MCC) across Shrewsbury in May and September 2022 (07:00 – 19:00, Thursday – Saturday). These were undertaken at the locations shown in Map 2.

Map 2 – ANPR Survey Locations



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

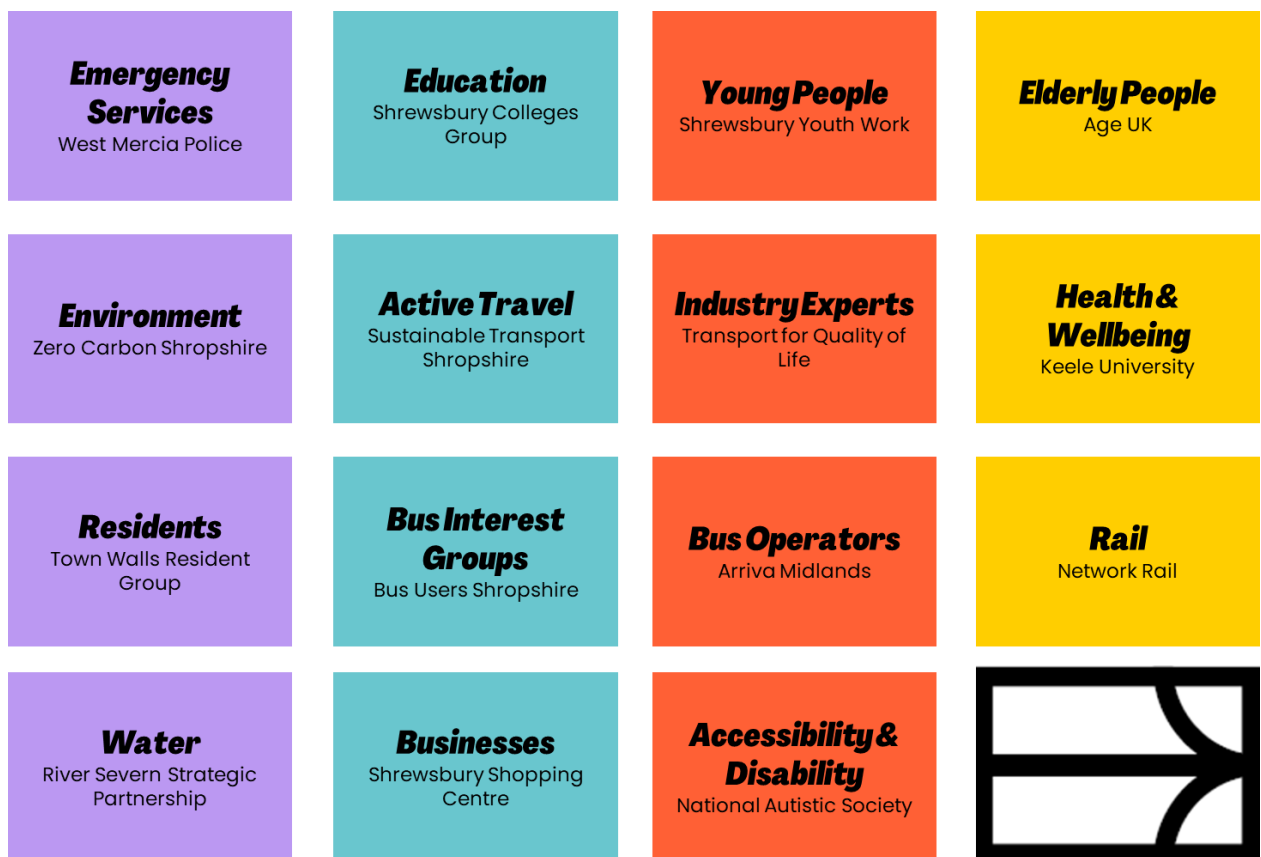
A strategic transport model was prepared by Shropshire Council in 2017 to assess the impact of the Shrewsbury North-West Relief Road (NWRR), within the modelling software, SATURN. This model included a Do Minimum scenario to quantify the operation of the local highway network for the then future year of 2023, without the NWRR in operation. The results of the ANPR and MCC surveys undertaken to inform preparation of this strategy have been reviewed alongside the outputs for the 2023 Do Minimum scenario on select links within the town centre. In terms of traffic volumes, the results between these two data sources are broadly comparable.

3. Stakeholder Engagement

Comprehensive stakeholder engagement has formed an integral part of the development of the Strategy.

To ensure a balanced representation of diverse groups from the public, private and charity sector and to maximise the utilisation of local knowledge and expertise, a Core Advisory Group was established. This group was asked to consider different interests and perspectives in the development of the Strategy.

Figure 3 – Stakeholders and key themes represented in Core Advisory Group



In addition to the Core Advisory Group, an invite-only stakeholder drop-in session was organised, to provide wider stakeholders with a comprehensive understanding of the strategy, along with the opportunity to provide feedback on proposals.

Workshops were also organised for businesses in the Shrewsbury BID, as well as with Shrewsbury Town Council councillors to ensure these key stakeholders were kept informed of decisions.

4. Key Themes, Principles & Strategic Interventions

4.1. Overview

A series of key themes, principles and strategic interventions have been developed to align with the vision and goals set out within the Big Town Plan. These have been formed based on the outcomes of the baseline assessment, policy and strategy review, and stakeholder engagement.

These key themes, principles and strategic interventions underline the strategy and put pedestrians, cyclists, and public transport at the heart of movement within Shrewsbury, particularly within the town centre.

It is important to note that the key themes, principles, and corresponding strategic interventions are interdependent and should be viewed holistically. Therefore, the strategy must be pursued as one entity to ensure that opportunities to create transformational change and achieve the objectives of the Big Town Plan are maximised.

4.2. Key Themes

The Shrewsbury Big Town Plan established the overarching vision for the future of Shrewsbury. This vision, combined with extensive feedback from the consultation exercise for the Big Town Plan, the baselining assessment and stakeholder engagement for this strategy, has led to the development of the key themes shown in Figure 4.

Figure 4 - Key Themes

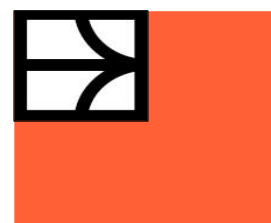
Traffic Management and active travel inside the river loop

Areas within the river loop will experience a considerable transformation, shifting the focus from private motor vehicle to sustainable transport modes such as; walking, cycling, wheeling, and public transport. This shift will create a vibrant and dynamic town centre where individuals can freely explore the streets whilst being able to enjoy Shrewsbury's history, cultural heritage, and hospitality offerings.



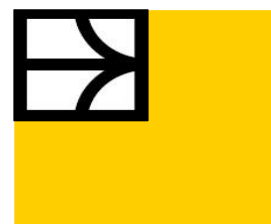
Traffic Management and active travel outside the river loop

Areas outside the river loop will be connected by sustainable travel routes, establishing links between residential neighbourhoods, key local facilities and employment opportunities. Use of walking, wheeling, cycling and public transport will be encouraged for local trips, helping to reduce the strain on the highway network, creating an inclusive and accessible environment.



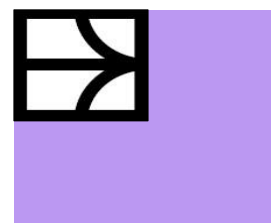
Public Transport and Micromobility

A comprehensive network of public transport and micromobility will be established throughout Shrewsbury, including an improved bus service and more appealing Park and Ride options. Regional connectivity will be bolstered by significant rail enhancements, and a flexible, demand responsive bus service will be provided to rural Shropshire areas. This will be complemented by exploring options for micromobility within Shrewsbury.



Parking Plus

To prioritise people over private motor vehicles in the town centre, it is essential to tackle parking challenges. This will consist of remodelling parking charges within Shrewsbury to make sustainable alternatives more cost effective, helping to discourage private motor vehicle dependency and seek alternative modes to travelling around the town.



4.3. Key Principles

Following the establishment of key themes, further analysis was conducted to quantify the current issues associated with movement across the town. Through stakeholder engagement, fourteen key principles have been formulated and aligned with the four key themes to emphasise the interconnectedness within the strategy. These principles serve as the foundation for the strategic interventions, outlined in Chapter 4. The key principles of the strategy are set out in Table 1 and have been developed in alignment with the adopted objectives of the Shrewsbury Big Town Plan.

Table 1 - Key Principles

	Traffic Management and Active Travel inside the river loop	Traffic Management and Active Travel outside the river loop	Public Transport and Micromobility	Parking Plus
A - Reduce / remove through traffic from the town centre				
B - Ensure convenient access to town centre and local facilities and uptake of sustainable modes for these journeys				
C - Reduce vehicle speeds and volumes of private motor vehicles				
D - Reduce severance caused by River Severn and railway line				
E - Increase priority given to buses, pedestrians and cyclists and improve road safety for all users				
F - Provide more sympathetic public spaces for historic and environmental assets				
G - Enhance Park and Ride offer, and incentivise use				
H - Improve resilience of local transport network to extreme weather events				
I - Provide an efficient public transport network with improved facilities in town centre				
J - Improve cross-town connectivity by sustainable transport modes				
K - Ensure servicing access to business and event sites is maintained				
L - Improve environmental quality and air quality				
M - Reallocate road space to provide for space for businesses and event activity, pedestrians and cyclists				
N - Enhance rail connectivity to better accommodate local, regional and national travel				

4.4. Strategic Interventions

To implement the key principles of the strategy, a set of strategic interventions have been created. These interventions present a holistic strategic framework for mobility within and around Shrewsbury, aligning with the goals and objectives of the Big Town Plan.

Whilst interventions would be adopted in a phased approach, delivering individual elements of the strategy is unlikely to generate significant change. Delivering a combination of the strategic interventions would help Shrewsbury realise the benefits of the strategy sooner than if each intervention is developed independently.

The key strategic interventions to be delivered within Shrewsbury are categorised into the four key themes of the Strategy, introduced in Figure 4.

Many of the strategic interventions would have far-reaching implications, and their implementation would require cross-discipline planning and design that is beyond the scope of this strategy. As each of the interventions are progressed, consideration should be given to each of the following, where relevant:

- ☒ All technical studies conducted for each strategic intervention would include an objective of at least maintaining the level of provision of designated parking spaces for Blue Badge holders;
- ☒ Interventions would not result in a negative impact on the natural and historical environment of Shrewsbury (for example, all interventions should use flood resilient construction materials);
- ☒ Interventions have been identified to align with Shropshire Council’s vision to be carbon net-neutral by 2030, and should continue to be developed in this manner;
- ☒ Interventions have been identified to provide a sympathetic public spaces to the towns rich cultural and heritage assets, and should continue to be developed in this manner; and
- ☒ Placemaking opportunities should be considered for each intervention and where possible, seek to enhance the “greening” of the town’s key movement corridors.

A list of all the strategic interventions is provided in Figure 5.

Figure 5 - Strategic Interventions

Traffic Management and active travel inside the river loop

- 1** Implement traffic loops to restrict general traffic from routing through the town centre
- 2** Provide a two-way bus corridor across the town centre
- 3** Improve gateway features at key entrances to the town centre
- 4** Maintain servicing access to businesses and event spaces

Traffic Management and active travel outside the river loop

- 1** Lower speed limits within Shrewsbury
- 2** Implement Local Access Priority Areas
- 3** Upgrade existing pedestrian and cycle infrastructure to national standards
- 4** Provide additional / improved walking and cycling links across the River Severn and railway
- 5** Provide active travel links to the north of Shrewsbury, better servicing local facilities

Public Transport & Micromobility

- 1** Integrate Park and Ride with general bus services
- 2** Create an enhanced Park and Ride offer across Shrewsbury, including new and relocated Park and Ride facilities
- 3** Provide bus priority measures on key routes into the town centre
- 4** Revise existing bus routes and frequency across Shrewsbury
- 5** Enhance Shrewsbury Railway Station
- 6** Provide new public transport interchange facilities in the town centre
- 7** Provide Parkway Station “Shrewsbury East”
- 8** Implement a water shuttle along the river, with regular stops (subject to water levels)
- 9** Expansion of mobility hubs across Shrewsbury, including creating Park & Choose sites

Parking Plus

- 1** Further develop the existing graduated system of parking charges, decreasing in stages as parking becomes less central
- 2** Maintain the level of provision of designated parking spaces for Blue Badge Holders within the river loop

Implement traffic loops to restrict through traffic from routing through the town centre

A reduction in the volume of unnecessary traffic in the town centre would enhance the overall charm of Shrewsbury by providing a more pleasant and safe environment for pedestrians and cyclists. Additionally, reducing traffic volumes in the town centre would enable more space to be provided for additional tree planting, seating and other public space improvements. Improvements would be integrated with the rich history and natural assets of the town, providing people with the ability to enjoy the town centre offerings without the overwhelming presence of private motor vehicles. Reducing traffic volumes within the town centre would also allow for space to be created for business and café spill out areas, helping to expand business offerings, contributing to the town’s economy. Finally, by reducing the amount of traffic within the town, air quality would improve, contributing to a healthier environment for people to enjoy.

How does this deliver the Shrewsbury Big Town Plan?

This intervention aligns with the key principles of this strategy, and therefore the Shrewsbury Big Town Plan vision and objectives as set out in Table 2.

Table 2 - Alignment with Key Principles

Key Principle		Key Principle	
A - Reduce / remove through traffic from the town centre		H - Improve resilience of local transport network to extreme weather events	
B - Ensure convenient access to town centre/local facilities and uptake of sustainable modes for these journeys		I - Provide an efficient public transport network with improved facilities in town centre	
C - Reduce vehicle speeds and volumes of private motor vehicles		J - Improve cross-town connectivity by sustainable transport modes	
D - Reduce severance caused by River Severn and railway line		K - Ensure servicing access to business and event sites is maintained	



Key Principle		Key Principle	
E - Increase priority given to buses, pedestrians and cyclists and improve road safety for all users		L - Improve environmental quality and air quality	
F - Provide more sympathetic public spaces for historic and environmental assets		M - Reallocate road space to provide for space for businesses and event activity, pedestrians, and cyclists	
G - Enhance Park and Ride offer, and incentivise use		N - Enhance rail connectivity to better accommodate local, regional, and national travel	

Why is this intervention required?

A considerable number of vehicles currently pass through the town centre without stopping which means they do not bring any social, economic, or environmental benefits to the town centre.

Trips that pass through the town centre, without stopping to interact with town centre amenities and facilities are defined as ‘through trips’. According to surveys conducted in 2022 using ANPR technology:

- ☒ During a typical Thursday morning (08:00 – 09:00) and evening (17:00 – 18:00) 44% and 51% of the vehicles captured on Smithfield Road were identified as through trips, respectively.
- ☒ On a typical Saturday, 43% of all vehicles captured on Smithfield Road during a 12-hour period (07:00 – 19:00) were identified as through trips.

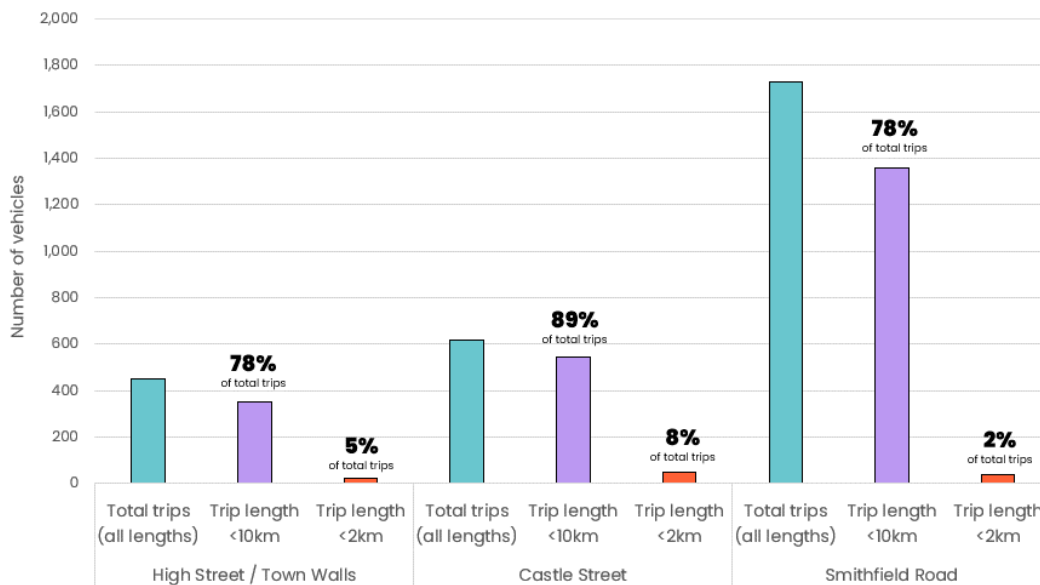
When vehicles pass through the town centre without interacting with its amenities and facilities, it reduces opportunities for local businesses to attract customers. This hampers the economic growth and vitality of the local town centre economy. Moreover, high levels of through traffic create a negative impression for visitors. The constant movement of vehicles and associated congestion along the streets make the town centre less appealing for people to visit and spend time, failing to truly reflect the towns historic and natural assets.

Most of vehicle trips that currently pass through the town centre are relatively short (i.e., less than 10km) and could therefore be undertaken using sustainable and active modes of travel.



Trips up to 10km typically have the potential to be replaced by cycling. Based on the outputs from the NWRR SATURN model for the 2023 Do Minimum scenario, during the morning (08:00 – 09:00) and evening (17:00 – 18:00) peak, a high proportion of all trips forecast to use key links in the town centre have a trip length of less than 10km, which by bike, could take up to 35 minutes. In addition, there are a proportion of trips which are less than 2km, during the morning and evening peaks. These short, local trips (i.e., running errands, going to nearby shops etc.) could be undertaken within approximately a 24-minute walk. This analysis is shown in Figure 6 and Figure 7, below.

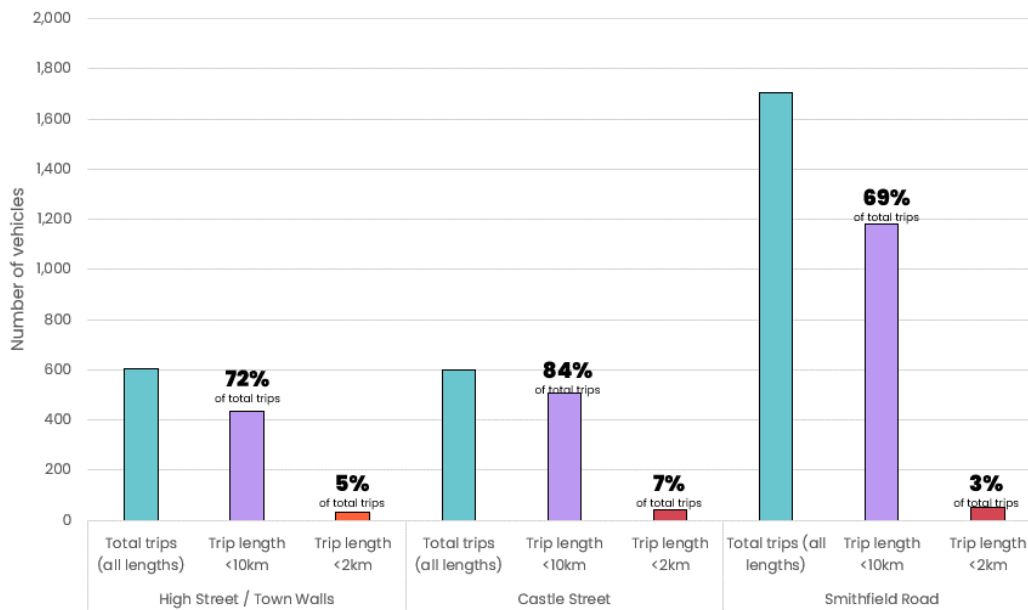
Figure 6 – Graph showing trip lengths of journeys routing through river loop, AM Peak (Total Vehicles)



Source: NWRR SATURN Model, 2023 Do Minimum Morning Peak



Figure 7 – Graph showing trip lengths of journeys routing through river loop, PM Peak (Total Vehicles)



Source: NWRR SATURN Model, 2023 Do Minimum Evening Peak

The high volume of motor vehicles in the town centre is contributing to poor air quality.

Shropshire Council actively monitors air quality in Shrewsbury, including nitrogen dioxide. Nitrogen dioxide (NO₂) is a hazardous gas that primarily originates from burning fossil fuels, particularly from vehicles such as cars, heavy good vehicles, and buses. In Shrewsbury town centre, an Air Quality Management Area (AQMA) has been established due to NO₂ levels surpassing the annual average national objective of 40ug/m3.

Data collected in 2020 by Shropshire Council indicates that only one monitoring location within the AQMA (Castle Foregate) exceeded the national objective level. For a typical Thursday and Saturday, MCC surveys undertaken in 2022 recorded 9,038 and 8,983 two-way vehicles travelling on Castle Foregate (south of New Park Road) respectively, across a 12-hour period (07:00 – 19:00). These vehicles release harmful pollutants, including NO₂, impacting local air quality in the town centre.

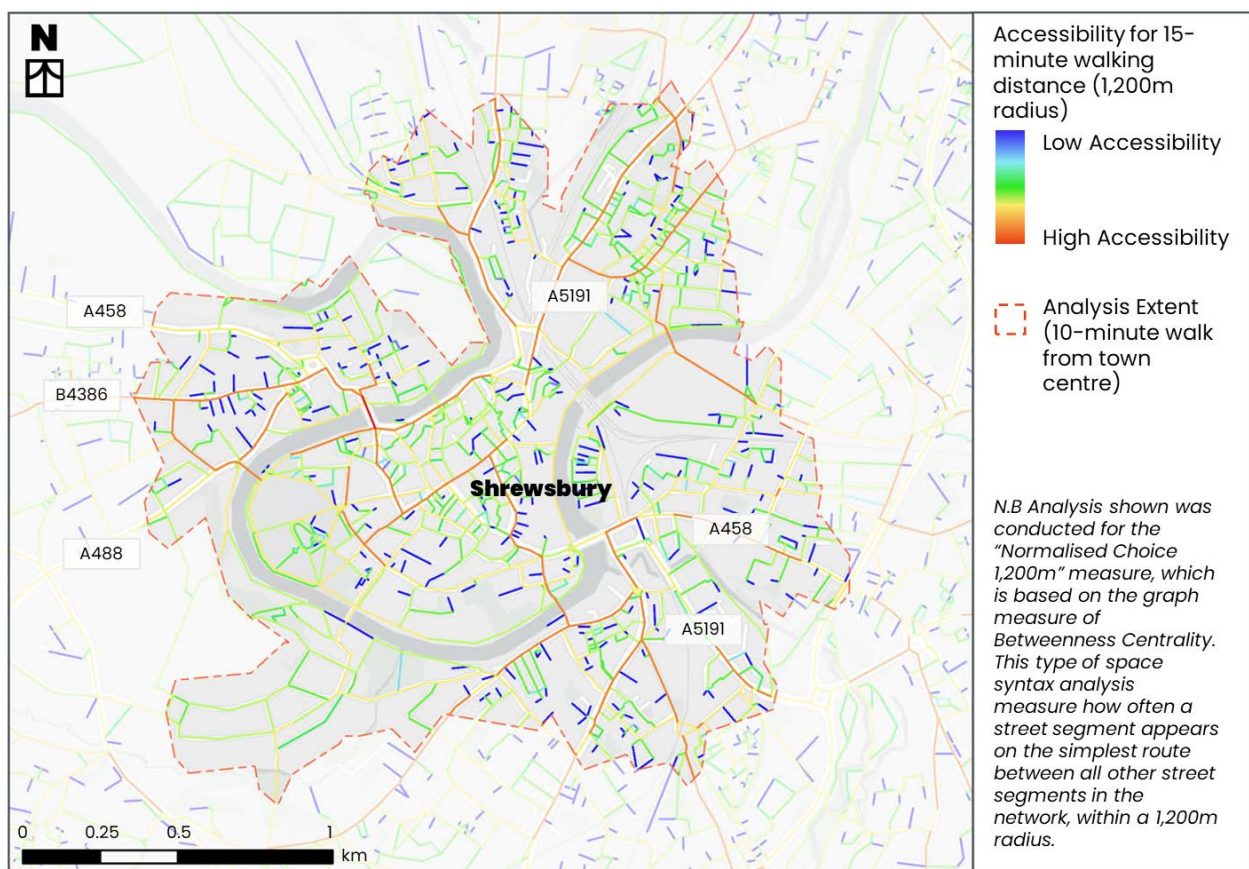
Although Shrewsbury town centre has well-connected network of streets for pedestrians, many of these streets are currently dominated by a high volume of private motor vehicles. These routes are also not conducive for most people to cycle on.



Shrewsbury town centre has a compact layout with narrow medieval streets. These streets play a vital role in creating a connected town centre that helps both residents and visitors navigating through and around the town.

Map 3 presents the results of a 'space syntax' analysis. This analysis helps to understand the connectivity of Shrewsbury and how people move through its streets. Red streets indicate highly connected routes that provide direct access through the town centre, whilst blue routes represent more challenging and indirect routes for pedestrians.

Map 3 – Space Syntax Analysis



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS. Segment map data derives from OS Open Road and Masterplan Path layer. Contains public sector information licensed until the OGL v3.0

Table 3 presents average data from MCC surveys conducted on a Thursday and Saturday over a 12-hour period (07:00 – 19:00) on two dates in 2022. It shows that routes that are highly connected for pedestrians are also used by a high number of motor vehicles.



National technical guidance for the design of cycle infrastructure (LTN 1/20) states that roads with traffic volumes of over 2,000 vehicles per day are not appropriate for most people to feel comfortable cycling on the carriageway. Alternative routes in Shrewsbury town centre include the shared pedestrian and cycle route on Smithfield Road, which is also noted within the national guidance as not being appropriate for pedestrians or cyclists in certain circumstances, such as in streets with high pedestrian or cyclist flows, due to concerns of potential conflict between users.

Table 3 – 12hr traffic flows (2022) against Space Syntax ratings

Street Name	Space Syntax Rating	Average Thursday (07:00 – 19:00)	Average Saturday (07:00 – 19:00)
Castle Foregate	Orange	9,038	8,983
Smithfield Road	Orange	18,769	16,807
Town Walls	Yellow	2,775	3,823
Welsh Bridge	Red	16,494	14,560
High Street	Yellow	4,310	No data available

Source: Manual Classified County Surveys, May & September 2022

What is this intervention?

The town centre would be divided into three traffic loops.

Each traffic loop would have a network of routes that would require all motor vehicles, unless exempt, to enter and exit the town centre from the same location. This allows vehicular access to the town centre whilst preventing through traffic. Vehicles would enter the town centre using the traffic loop that best serves their intended destination.

Motor vehicle access to each loop would be limited to one or two locations on the outer boundary of each loop. The loops and their entry/exit locations are noted below and shown in Map 4:

- ☒ Welsh Bridge / Frankwell Loop – entry/exit via Welsh Bridge
- ☒ English Bridge / Kingsland Bridge Loop – entry/exit via English Bridge and/or Kingsland Bridge



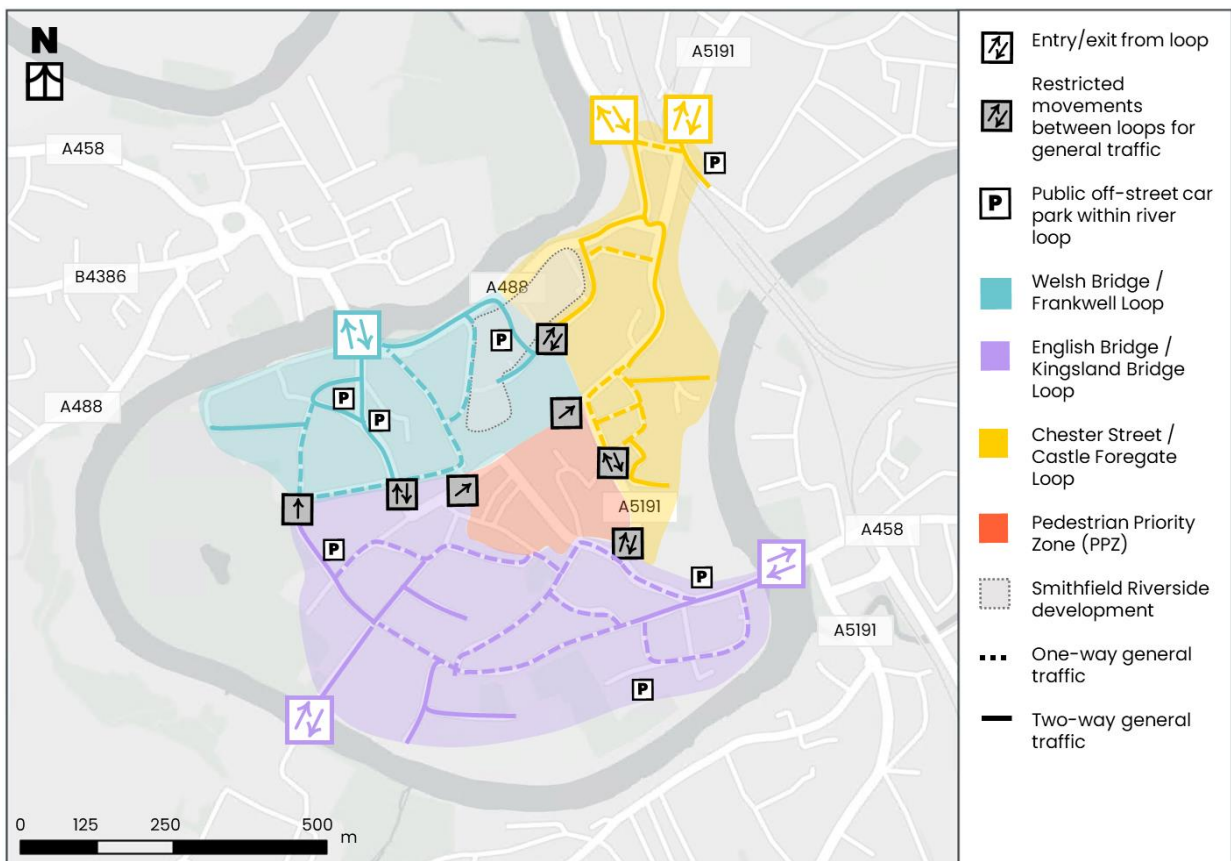
- ☒ Chester Street / Castle Foregate Loop – entry/exit via Chester Street and/or Castle Foregate

Map 4 – Proposed traffic loops

One-way streets would be created within the loops, as shown in Map 5.

To prevent vehicles from moving between traffic loops, modal filters would be placed at the inner boundaries.

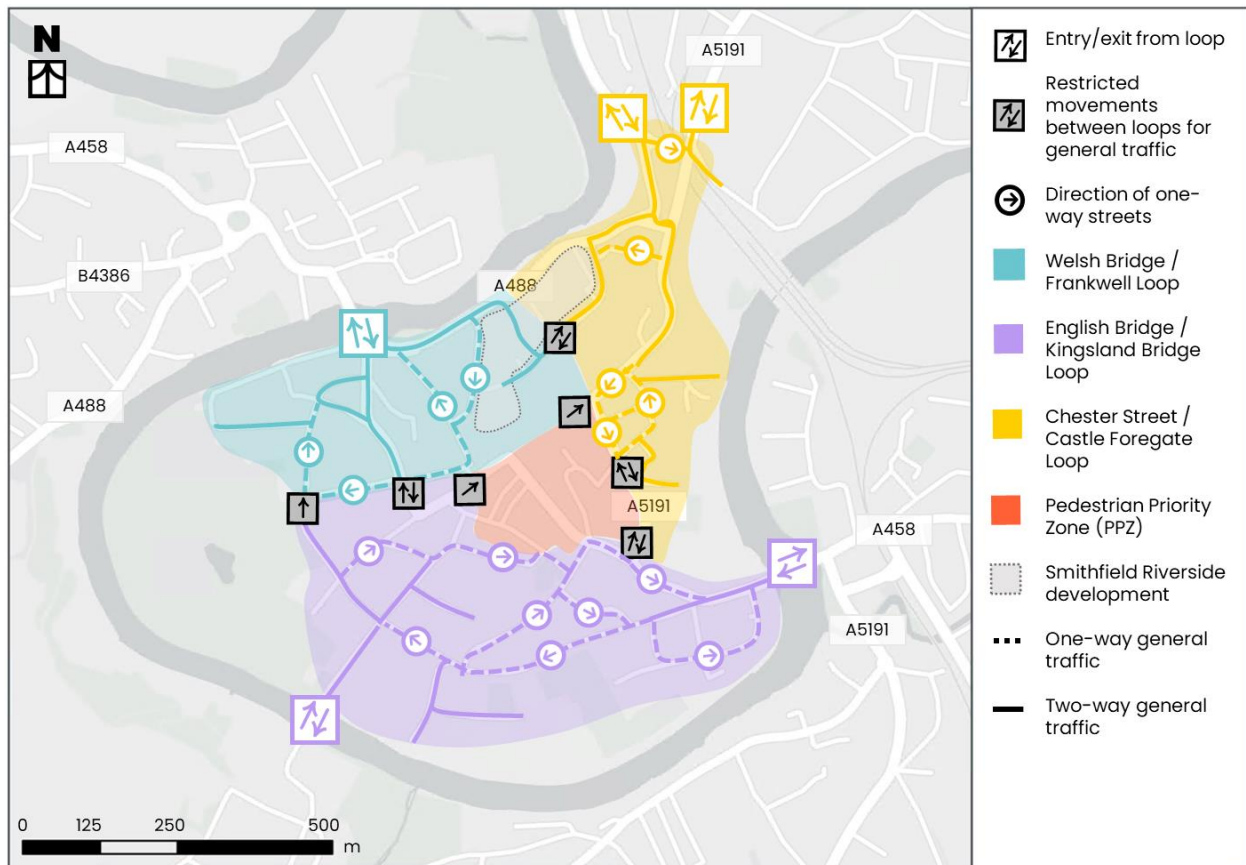
Modal filters are features that control the types of vehicles that can pass through it. This could be a physical barrier, such as a planter or could be operated by technology such as ANPR cameras. In this instance, modal filters would mean that private motor vehicles, unless exempt, would not be able to cross between different traffic loops.



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS



Map 5 – Direction of one-way streets within the traffic loops



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

Movement between traffic loops would be unrestricted and enhanced for pedestrians, cyclists, and public transport. Special permissions would be granted to allow some vehicles to make movements in between traffic loops.

Some people would need to cross the boundaries of traffic loops by private motor vehicle, even where modal filters are in place. To ensure that these vehicles can pass through, a list of exemptions would need to be created which would specify which vehicles would be permitted to bypass the modal filters. This list of exemptions would be subject to further detailed consideration, but could include Blue Badge holders, exceptional service vehicles and residents who live inside the river loop. Emergency vehicles would be able to bypass all modal filters within the town centre.

Access to the railway station would be maintained for exceptional service vehicles, including the British Transport Police and Network Rail staff. More information concerning the reconfiguration of the railway station forecourt and

plans for a drop off and pick up facility can be found in the intervention '*Enhance Shrewsbury Railway Station*'.

The three traffic loops across the town centre would create a Pedestrian Priority Zone (PPZ) in the historic core, and other streets within the town centre would also be much improved for pedestrians.

Through implementing the three traffic loops, there would be spaces in the town centre where no motor vehicles, unless exempt, would be permitted between certain hours of the day. This would create a Pedestrian Priority Zone encompassing the streets of; Butcher Row, St Alkmonds Place, Pride Hill, Shoplatch, High Street and the Square.

It is anticipated that the timings of the PPZ would be aligned with the current arrangements on Pride Hill for consistency purposes. This would mean that no motor vehicles, unless exempt, would be permitted in the PPZ between the hours of 10:00 and 16:00. It is important to note that these timings are not fixed at this stage, meaning that there is potential to adjust this timeframe as the Movement and Public Space Strategy progresses with the collaboration of key stakeholders and local businesses.

Outside of the Pedestrian Priority Zone's times of operation, servicing vehicles would be permitted, but would be subject to the restrictions of a one-way loop system.

There is also potential to enhance streets for pedestrians such as Roushill and Milk Street, as they feature a diverse range of independent shops and restaurants. This would be dependent on the final traffic loop arrangements and configuration of one-way loop systems.

Traffic loops would be implemented gradually over time.

Each traffic loop would be subject to additional modelling and further design refinements, and the outcome of other highway improvement projects, notably the North West Relief Road (NWRR) In principle, the town centre traffic loops can be established independently of the NWRR, but it is acknowledged that without the NWRR, other sustainable transport interventions may need to be rephased.

What are the impacts of this intervention?

Safety

Reducing the volume of private motor vehicles within the town centre would create a safer environment for pedestrians, cyclists, and other vulnerable road users, who would be able to freely move around the town without conflicting with high volumes of private motor vehicles. Additionally, improvements to public spaces in the town centre would take into consideration the needs of all user groups, ensuring that any street furniture implemented is clearly delineated from pedestrian routes and uses appropriate colour and accessible signage. This would encourage more people to visit the town and choose sustainable modes of transport.

When designing modal filters, consideration would be given to the draft Protect Duty, to ensure that suitable protect measures are integrated within the design process.

Economy

Reducing the volume of private motor vehicles in the town centre, would allow for there to be additional space for activities such as business/café spill out areas and/or entertainment spaces, enhancing economic growth. This would particularly be the case in the Pedestrian Priority Zone, where no motor vehicles, unless exempt, would be permitted between the hours of 10:00 and 16:00, maximising opportunities for this area to be enhanced with business activity.

People would be more inclined to visit the town centre on foot rather than by private motor vehicle. As pedestrians tend to spend more than car-based shoppers, businesses can benefit from increased customer spending¹, thereby boosting the economic vitality of the town.

Development opportunities

Transforming the town centre into a vibrant place filled with people instead of private motor vehicles would support the development of key regeneration sites across the town. For example, the Smithfield Riverside development would benefit from reduced traffic flow throughout the area, allowing existing road space to be

¹ Living Streets (2014) The Pedestrian Pound. Just Economics: London. Available at: <https://www.livingstreets.org.uk/media/3890/pedestrian-pound-2018.pdf>

used more productively for activities such as restaurant or café spill out, or public space enhancements. This would contribute to creating an attractive and lively destination for visitors.

Air Quality & Health

The introduction of traffic loops would result in fewer vehicles releasing harmful pollutants such as NO₂ into the air within the town centre, leading to positive health outcomes such as improved lung function and respiratory health².

It is recognised that a variety of factors, such as trip purpose, time of travel and individual mobility requirements could influence the ability to shift to sustainable modes of travel. However, encouraging people to opt for active travel modes and public transport instead of solely relying on private motor vehicles can yield significant benefits for people living, working, and visiting the town. With more people opting to walk and cycle to the town centre, physical activity would become a part of their daily routine, which can contribute to lowering the risk of cardiovascular disease³.

As per the Environmental Act (2021), local authorities are required to develop a clear Action Plan outlining measures aimed at achieving and maintaining air quality standards and objectives. The implementation of traffic loops aligns with Shropshire Council's legal obligations within the designated AQMA and could contribute towards potentially revoking the AQMA.

Traffic displacement/evaporation

It is expected that many of the short trips, within the town currently taken by private motor vehicles, would shift to walking and cycling. This phenomenon is known as traffic evaporation or 'disappearing traffic'.

The timeframe for traffic evaporation can vary considerably, but it is important to note that it does not happen overnight. However, by creating quieter and safer

² Rice, M.B., Ljungman, P.L., Wilker, E.H., Dorans, K.S., Gold, D.R., Schwartz, J., Koutrakis, P., Washko, G.R., O'Connor, G.T. and Mittleman, M.A. (2015) Long-term exposure to traffic emissions and fine particulate matter and lung function decline in the Framingham heart study. *American journal of respiratory and critical care medicine*, 191(6), pp.656-664.

³ Saunders, L.E., Green, J.M., Petticrew, M.P., Steinbach, R. and Roberts, H. (2013) What are the health benefits of active travel? A systematic review of trials and cohort studies. *PLoS one*, 8(8).

conditions in the town centre, more people would likely choose to walk or cycle. Research from over 100 locations across the UK has demonstrated that, after a typical 'settling in' period, there was an average overall reduction of 25% in traffic levels⁴. This means that congestion effects on the wider highway network for interventions aiming to reduce capacity are typically less severe than those predicted by traffic models because these models underestimate the impact of traffic evaporation⁵.

Modelling

It is acknowledged that to understand the full impact on the wider transport network, a detailed transport model would need to be used to assess the operation and impacts of the proposed traffic loops. Whilst further modelling is required, it is anticipated that the wider highway network in Shrewsbury would likely have spare capacity to accommodate the remaining vehicle trips that may re-route across the local network, for example on Roman Road, Pritchard Way/Bage Way and A5.

Case Studies

Ghent

Before 2017, Ghent, a vibrant city in Belgium, faced similar challenges as Shrewsbury regarding high levels of motor through traffic in the town centre, which accounted for approximately 40% of trips.

To address this and improve pedestrian conditions, Ghent implemented the '*circulatie plan*' (circulation plan). Through this plan, Ghent was divided into six district zones and a large car-free/pedestrian zone created, eliminating through traffic from the city. To travel between zones, vehicles must use the inner-city ring road, prohibiting direct journeys between zones except for buses, taxis, pedestrians, and cyclists.

Ghent aimed for cycling to represent a 35% mode share across the city by 2030. By 2018, this goal was already achieved, 11 years ahead of schedule. In addition,

⁴ Goodwin, P., Hass-Klau, C. and Cairns, S., 1998. Evidence on the effects of road capacity reduction on traffic levels. *Traffic Engineering+ Control*, 39(6), pp.348-54.

⁵ Nello-Deakin, S. (2022) Exploring traffic evaporation: Findings from tactical urbanism interventions in Barcelona. *Case Studies on Transport Policy*, 10(4), pp.2430-2442.

during the morning and evening peak periods, there was a 12% reduction in the volume of cars, and the key cycling routes experienced a 40% decrease in vehicular traffic, enhancing safety for cyclists.

For more information about this case study: <https://stad.gent/en/mobility-ghent/circulation-plan>

Pontevedra, Spain

Pontevedra, a historic city on the River Leréz, has a population of 65,000 residents. Since the late 1990s, Pontevedra has undergone a transformative change to become a car-free city, including creation of a large pedestrianised zone. Major roads in the city do not directly go into the centre and car parks are strategically placed outside the pedestrianised zone.

As a result of the intervention, 65% of travel within the city is undertaken on foot or by bicycle, and as a result the city has achieved a 67% reduction in CO2 emissions.

The car-free environment in Pontevedra allows people to move comfortably throughout the city, enhancing its people-centred nature. Many small businesses have thrived, benefitting from increased space for activities such as restaurants and cafés.

For more information about this case study: <https://360.pontevedra.gal/publicacions/Better-on-foot/24/>

Key Considerations for delivery of the intervention

- ☒ Further analysis considering the re-routing of residual traffic away from the town centre, using strategic transport modelling;
- ☒ Explore emerging technologies to monitor traffic movements;
- ☒ Establish an exception list for vehicles;
- ☒ Engage with key stakeholders, businesses and residents concerning changes;
- ☒ Agree extents and timings of Pedestrian Priority Zone;
- ☒ Explore opportunities for trialling measures using Experimental Traffic Regulation Orders; and



- ☒ Consider 'prepare and protect' measures concerning the forthcoming Protect Duty in the design of modal filters.

Provide a two-way bus corridor across the town centre

This intervention would establish a dedicated cross town centre bus corridor, accommodating seamless two-way bus movements across the town. Buses would be able to travel across the three traffic loops, including between Welsh and English Bridge. This bus corridor would revolutionise the public transport offer in Shrewsbury through enhanced bus reliability and decreased overall journey times, increasing the attractiveness of the bus for cross-town movements over private motor vehicles. This enhanced efficiency would increase bus patronage and reduce the number of private motor vehicles within the town centre. In addition, an increased proportion of Shrewsbury residents would be directly connected to the town centre by bus, further increasing bus patronage and boosting economic activity. By providing an inclusive and accessible transport option, the town centre would thrive, enabling everyone to participate and contribute to the economic success of Shrewsbury.

How does this deliver the Shrewsbury Big Town Plan?

This intervention aligns with the key principles of this strategy, and therefore the Shrewsbury Big Town Plan vision and objectives as set out in Table 4.

Table 4 - Alignment with Key Principles

Key Principle		Key Principle	
A - Reduce / remove through traffic from the town centre		H - Improve resilience of local transport network to extreme weather events	
B - Ensure convenient access to town centre/local facilities and uptake of sustainable modes for these journeys		I - Provide an efficient public transport network with improved facilities in town centre	
C - Reduce vehicle speeds and volumes of private motor vehicles		J - Improve cross-town connectivity by sustainable transport modes	
D - Reduce severance caused by River Severn and railway line		K - Ensure servicing access to business and event sites is maintained	
E - Increase priority given to buses, pedestrians and cyclists and improve road safety for all users		L - Improve environmental quality and air quality	



Key Principle		Key Principle	
F - Provide more sympathetic public spaces for historic and environmental assets		M - Reallocate road space to provide for space for businesses and event activity, pedestrians, and cyclists	
G - Enhance Park and Ride offer, and incentivise use		N - Enhance rail connectivity to better accommodate local, regional, and national travel	

Why is this intervention required?

Currently, there are no cross-town centre bus services due to congestion and indirect bus routing.

The bus network fails to provide a single cross-town corridor that all buses can use. This means that currently, no bus services operate between Welsh Bridge to English Bridge. Bus services therefore do not provide a comprehensive and interconnected offer for cross-town travel. In addition, the current bus service offering is inconsistent, as bus routes are altered on Saturdays due to weekend road closures on High Street, Wyle Cop and Shoplatch. As a result of these existing constraints, people are more inclined to opt for alternative modes of travel, with private motor vehicles being the most obvious choice, further contributing to traffic congestion and environmental concerns in the town centre.

It is currently not feasible to implement a two-way bus corridor in the town centre because of high traffic volumes.

St Mary's Street currently operate one-way southbound for all vehicles. However, there is an opportunity to convert this route into a two-way route specifically for buses (with local access retained) controlled through a series of traffic signals.

MCC data collected in 2022, recorded 5,863 and 6,620 vehicles on a typical Saturday and Thursday, respectively, across a 12-hour period (07:00 – 19:00) along St Mary's Street. This equates to an average of approximately 500 vehicles per hour on each day. With the current high traffic volumes, it would not be feasible to establish a two-way bus corridor on St Mary's Street, as the introduction of traffic signals would generate additional queueing and delay on an already constrained highway network. This congestion would have adverse effects on the overall functioning of the town and its transport network.

What is this intervention?

A two-way bus corridor would be established across the town centre, subject to the implementation of traffic loops within the town centre.

It would only be possible to achieve a two-way bus corridor through the town centre if traffic volumes in the town centre are reduced. It is considered that this would be achieved by implementing a traffic loop system within the river loop, which would allow buses to operate a continuous route connecting Welsh Bridge, Chester Street Gyratory, Shrewsbury Railway Station and English Bridge.

The indicative corridor is shown in Map 6, overleaf.

At this stage of development, it should be noted that the concept of a two-way bus corridor is a general principle only.

The suggested bus corridor is subject to further detailed modelling work, particularly around St Mary's Street, where shuttle working systems would be required to accommodate two-way bus movements due to the constrained width of the street at specific locations.

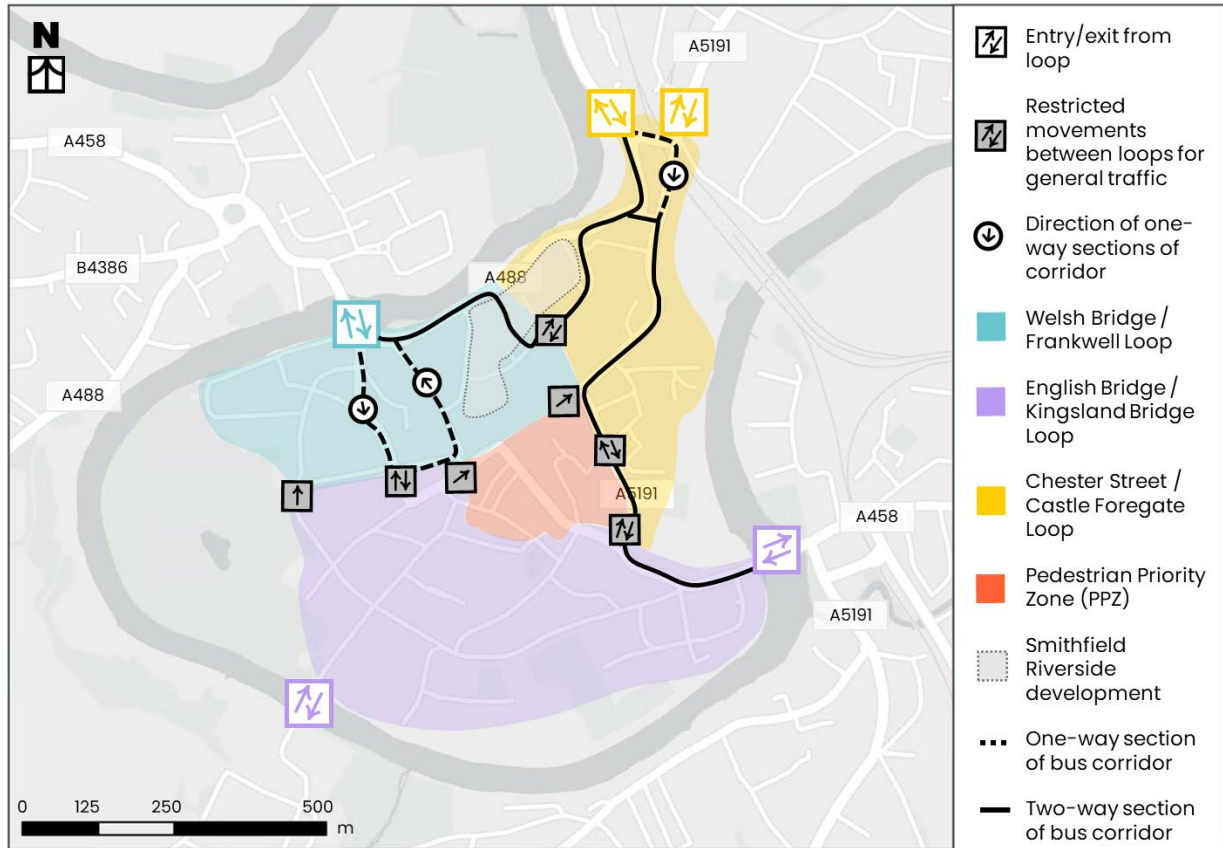
Preliminary findings indicate that this corridor may be feasible, subject to:

- ☒ Geofencing bus speeds;
- ☒ Implementation of bus detection systems; and
- ☒ A considerable reduction in the number of private motor vehicles in the town centre that would be achieved through the implementation of the aforementioned traffic loops.

Buses that travel around Shrewsbury would be much smaller in size and would be more fitting for the historic streets of the town, helping to facilitate two-way bus movements.



Map 6 – Proposed two-way bus corridor



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

What are the impacts of this intervention?

Journey times & reliability

Enabling buses to operate on a continuous route across the town centre would reduce journey times and improve journey time reliability for journeys undertaken by public transport. An increase in journey time reliability would also enable bus operators to remove some of the excess time built into their timetable to account for current levels of congestion and reinvest this time into revised routing.

Provision of a consistent route throughout the week, would also increase the legibility of bus services for passengers, and couple with improved journey time reliability, the customer experience would be enhanced.

The two-way bus corridor would be able to bypass modal filters, establishing a direct connection across the town centre. This would mean that bus journey times for cross-town trips would be quicker than that by private motor vehicles, making

public transport more appealing for local trip making. In addition, the modal filters would mean that buses would no longer have to compete for limited road space, allowing buses to adhere to their schedules more effectively, contributing to a bus network that is more reliable and needing fewer resources.

Access to Services

Although the specific locations of bus stops are yet to be finalised, the two-way bus corridor would enable the provision of stops along key routes within the town centre that are frequently visited by passengers, for example, Shoplatch. This would offer improved convenience, as passengers are able to board and disembark in close proximity to popular destinations such as Shrewsbury Market Hall and Shrewsbury Railway Station.

The two-way bus corridor would also remove public buses from Town Walls, diverting these larger vehicles away from this historic street.

Flexibility

In October 2023, Shropshire Council began trialling a DRT bus service, replacing two fixed services in the south of Shrewsbury. This service offers a sustainable public transport option that can be booked and tailored to individual needs, providing flexibility and connectivity between rural towns, villages, and major destinations, such as Shrewsbury. The proposed two-way bus corridor would facilitate the operation of these on-demand services, by offering a fast and convenient route across the town.

Whilst not all buses would utilise the entire bus corridor, the concept provides buses with the flexibility to utilise at least some of the corridor, which would provide much quicker bus journey times than what is currently witnessed through the town centre.

Case Studies

Swindon

In 2010, Swindon Council transformed Ermin Street, a narrow residential street on the outskirts of Swindon, into a two-way bus corridor. Previously, the street allowed

only one-way bus traffic and was closed to through traffic, except for local residents.

To address bus delays caused by traffic congestion, a two-way bus corridor on Ermin Street was implemented. This improvement aimed to provide faster journeys to the town centre and nearby industrial areas, encouraging the use of public transport instead of private motor vehicles.

To address safety concerns, measures were taken to ensure slower traffic speeds on Ermin Street such as using speed limitation devices and introducing a passing place to minimise conflicts when buses approach from opposite directions.

For more information about this case study:

<http://ww5.swindon.gov.uk/moderngov/documents/s32189/Reintroduction%20if%20Two%20Way%20Bus%20Link%20-%20Ermin%20Street%20Stratton%20St%20Margaret%20Swindon.pdf>

Key Considerations for delivery of the intervention

- ☒ Continue discussions with bus operators regarding bus routes, stop locations and layover facilities;
- ☒ Conduct additional swept path analysis outside Shrewsbury Railway Station;
- ☒ Model the operation of shuttle working sections using outputs from strategic transport model, and standalone junction/network modelling software; and
- ☒ Agree on the most suitable route of two-way bus corridor through the town centre.

Improve gateway features at key entrances to the town centre

Shrewsbury town centre is an attractive destination renowned for its picturesque views of the River Severn and rich historical heritage, including notable landmarks such as Shrewsbury Abbey and over 660 listed buildings. However, the current entrances to the town centre do not offer a welcoming experience to visitors, as they are often congested, making it difficult to recognise the transition into the town centre. To create a more inviting atmosphere, the entrances to the town would undergo improvements, prioritising the needs of pedestrians and cyclists. These enhancements could involve the addition of more vegetation, the installation of benches, and the creation of spaces for social interaction. These changes would contribute to creating a vibrant and strong first impression of the town whilst maintaining an appropriate setting for its rich historical assets, drawing people into the town centre.

How does this deliver the Shrewsbury Big Town Plan?

This intervention aligns with the key principles of this strategy, and therefore the Shrewsbury Big Town Plan vision and objectives as set out in Table 2.

Table 5 - Alignment with Key Principles

Key Principle		Key Principle	
A - Reduce / remove through traffic from the town centre		H - Improve resilience of local transport network to extreme weather events	
B - Ensure convenient access to town centre/local facilities and uptake of sustainable modes for these journeys		I - Provide an efficient public transport network with improved facilities in town centre	
C - Reduce vehicle speeds and volumes of private motor vehicles		J - Improve cross-town connectivity by sustainable transport modes	
D - Reduce severance caused by River Severn and railway line		K - Ensure servicing access to business and event sites is maintained	



Key Principle		Key Principle	
E - Increase priority given to buses, pedestrians and cyclists and improve road safety for all users		L - Improve environmental quality and air quality	
F - Provide more sympathetic public spaces for historic and environmental assets		M - Reallocate road space to provide for space for businesses and event activity, pedestrians, and cyclists	
G - Enhance Park and Ride offer, and incentivise use		N - Enhance rail connectivity to better accommodate local, regional, and national travel	

Why is this intervention required?

Shrewsbury town centre has five primary gateways: Welsh Bridge, English Bridge, Chester Street Gyrotory, Shrewsbury Railway Station and Shrewsbury Bus Station. The entrances to the town centre do not effectively showcase the beauty of Shrewsbury, resulting in a negative first impression.

Currently, visitors arriving in Shrewsbury town centre are unaware of their arrival due to the gateways' failure to reflect the historical and natural charm of Shrewsbury. This creates an unimpressible initial experience. For example, Grade I listed Shrewsbury Abbey is located on the outskirts of the town, yet it does not feel connected to the town centre. The unappealing road environment surrounding the Abbey, characterised by limited pedestrian space and a dominant presence of private motor vehicles passing by, contributes to this disconnection.

Main vehicular entrances to the town are heavily congested with high volumes of traffic.

Based on MCC data collected in 2022 shown in Table 6, a high number of motor vehicles are present on the entrances to the town centre, leading to a perception that the town centre is dominated by motor vehicles. For example, Welsh Bridge serves as a key route between west Shrewsbury and the town centre for pedestrians and cyclists, alike. However, the presence of high traffic volumes along this route, combined with narrow footways and limited dedicated infrastructure for cyclists, creates an unpleasant and stressful experience for pedestrians and cyclists.

Table 6 – 12hr traffic flows (2022)

Street Name	Total Traffic Flow Average Thursday (07:00 – 19:00)	Total Traffic Flow Average Saturday (07:00 – 19:00)
Castle Foregate	9,038	8,983
Smithfield Road	18,769	16,807
Town Walls	2,775	3,823
Welsh Bridge	16,494	14,560
High Street	4,310	No data available

Source: Manual Classified County Surveys, May & September 2022

Despite their close proximity, entrances to the town centre are not clearly connected to nearby key visitor attractions.

The newly developed Flaxmill Maltings attraction is approximately a 12-minute walk from Shrewsbury Railway Station, however, it currently feels disconnected from the offerings of the town centre due to an inadequate entrance from the north.

What is this intervention?

The key entrances to the town centre would undergo significant improvements, transforming these areas into more appealing and inclusive spaces that could be enjoyed by everyone.

The implementation of traffic loops within the town centre would result in a notable reduction in private motor vehicles entering the town centre. By reducing motor traffic near the gateways, these areas can prioritise people and offer safer and more direct walking and cycling routes. This would create an opportunity to repurpose space around these entrances, making them more attractive and welcoming for visitors.

Gateways would also be designed in a way that discourages private motor vehicles whilst improving public spaces. This could include:

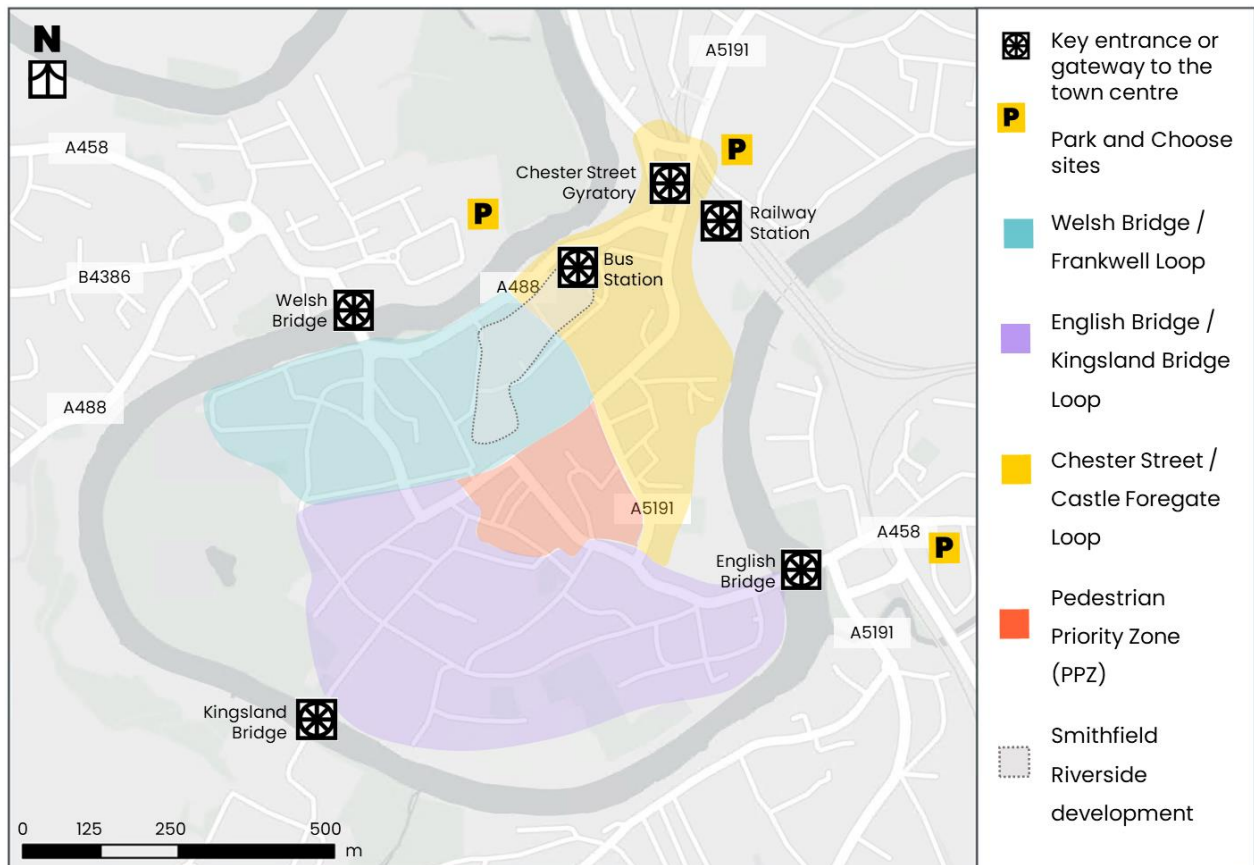
- Road Narrowing
- Widening of footways
- Implementation of signage to key destinations



- ☒ Installation of public art reflecting the history of the town;
- ☒ Provision of seating; and/or
- ☒ Planting of trees and vegetation.

The specific details of these enhancements would be further developed in collaboration with key stakeholders.

Map 7 – Proposed locations for gateway improvements



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

The car parks located at the edge of the river loop would be enhanced to act as the primary gateways to the town centre.

Frankwell Car Park and Abbey Foregate Car Park would be converted into Park and Choose sites, to encourage individuals arriving in Shrewsbury by private motor vehicle to use these locations rather than driving directly into the river loop. These sites would provide visitors with sustainable transport alternatives for their onward journey into the town centre, such as bicycle rentals, bus services, and rickshaw services.

Additional information is provided in intervention '*Expansion of mobility hubs across Shrewsbury, including creating Park and Choose sites outside the river loop*'.

What are the impacts of this intervention?

Economic Impact

The gateway features would create visually appealing entrances to the town centre, adding to its overall aesthetic appeal. These entrances would draw people into the town centre, making people aware they have arrived in Shrewsbury. When people have a positive first experience, they are more inclined to explore the town, spend more time there, and participate in activities such as shopping, dining, and visiting attractions. As a result, there would be an increase in footfall and economic activity, which could contribute to creating an economically vibrant town centre.

Enhanced Identity

The gateway features implemented in the town centre would play a crucial role in defining its unique identity. These features would incorporate elements of the town's distinct characteristics, reinforcing its individuality and creating a strong sense of arrival.

Particular attention would be given to enhancing the surroundings of significant landmarks such as Shrewsbury Abbey and Flaxmill Maltings. By creating a more suitable environment around these historical assets, the town centre would more effectively reflect its rich history, whilst also connecting it to the exciting future of Shrewsbury.

Climate Resilience

The inclusion of trees, plants, and sustainable drainage systems in gateway features would play a vital role in increasing the resilience of the town centre to extreme weather events. These measures would help to effectively manage high volumes of rainwater, reducing surface water run-off and ensuring that the town centre remains accessible during flood events.

Social Gatherings

Gateway features would create a sense of curiosity and interest amongst people, further complemented by the inclusion of public spaces designed for gathering, resting, and socialising. By providing these amenities, a strong sense of community and connection among residents and visitors could be established, contributing to creating a vibrant and inclusive atmosphere within the town.

Case Studies

Chesterfield Gateway Enhancement Scheme

In 2014, Chesterfield Borough Council implemented a series of improvements at key gateways. These enhancements showcased Chesterfield's industrial heritage by incorporating public artwork and sculptures into the street design to elevate the reputation and appeal of Chesterfield as an attractive destination for investment, tourism, and residential living. The entrance to the railway station was also upgraded, which included footway widening, introduction of a segregated cycle lane, and creation of a rain garden to reduce the release of surface water run-off.

For more information about this case study:

<https://www.chesterfield.co.uk/developments/completed-developments/gateway-enhancement/>

Altrincham Town Centre Regeneration

In Altrincham, Greater Manchester, £15 million was used to improve public spaces in the town centre, establish a new market, and enhance food and drink establishments. This comprehensive revitalisation scheme resulted in a decline in shop vacancy rates, decreasing from over 30% in 2010 to just 7.9% in 2017. Concurrently, there was a notable 25% rise in footfall.

For more information about this case study:

<https://www.livingstreets.org.uk/media/3890/pedestrian-pound-2018.pdf>



Key Considerations for delivery of the intervention

- ☒ Agree an approach to 'decluttering'; and
- ☒ Consider the requirements of the forthcoming Protect Duty as part of the design of public space interventions.

Maintain servicing access to businesses and event spaces

Servicing plays a vital role in ensuring the uninterrupted operation and smooth functioning of businesses. Heavy Goods Vehicles (HGVs) are currently able to enter the town centre at any time of day, which creates an unwelcoming and unpleasant environment for pedestrians and cyclists. The traffic loops implemented in the town centre would also apply to servicing vehicles, preventing them from using the town centre as a through route. Additional restrictions would also be in place on specific loops to restrict use by servicing vehicles during certain time periods. This approach would create a pedestrian and cycle friendly environment and would encourage businesses to adopt more sustainable models of servicing, benefitting both businesses and the local community alike.

How does this deliver the Shrewsbury Big Town Plan?

This intervention aligns with the key principles of this strategy, and therefore the Shrewsbury Big Town Plan vision and objectives as set out in Table 7.

Table 7 - Alignment with Key Principles

Key Principle		Key Principle	
A - Reduce / remove through traffic from the town centre		H - Improve resilience of local transport network to extreme weather events	
B - Ensure convenient access to town centre/local facilities and uptake of sustainable modes for these journeys		I - Provide an efficient public transport network with improved facilities in town centre	
C - Reduce vehicle speeds and volumes of private motor vehicles		J - Improve cross-town connectivity by sustainable transport modes	
D - Reduce severance caused by River Severn and railway line		K - Ensure servicing access to business and event sites is maintained	
E - Increase priority given to buses, pedestrians and cyclists and improve road safety for all users		L - Improve environmental quality and air quality	
F - Provide more sympathetic public spaces for historic and environmental assets		M - Reallocate road space to provide for space for businesses and event activity, pedestrians, and cyclists	



Key Principle		Key Principle	
G - Enhance Park and Ride offer, and incentivise use		N - Enhance rail connectivity to better accommodate local, regional, and national travel	

Why is this intervention required?

Businesses in the town centre rely on regular delivery of goods and services.

Table 8 presents the number and percentage of total trips on key streets in the town centre that are ‘through traffic’, i.e., trips that pass through the town centre without any interaction, or only brief interaction with its facilities and businesses. This data shows that:

- ☒ There is a considerable quantum of HGVs and LGVs on these key streets, a proportion of which are serving and accessing businesses and destinations in the town centre, maintaining, and facilitating their operation;
- ☒ On these key streets, there is a considerable proportion of ‘through traffic’ generated by both HGVs and LGV, particularly on Smithfield Road.

Table 8 – 12hr traffic flows (2022, 07:00 – 19:00) on key streets in town centre

Street Name	Total Vehicles		Light Goods Vehicles (LGV)		Heavy Goods Vehicles (HGV)	
	Total Captured Vehicles	“Through traffic”	Total Captured Vehicles	“Through traffic”	Total Captured Vehicles	“Through traffic”
Smithfield Road (Northbound)	12,312	5,082 (41%)	1,768	858 (49%)	176	75 (43%)
Smithfield Road (Southbound)	4,369	2,366 (54%)	612	374 (61%)	58	9 (16%)
Town Walls	1,963	655 (33%)	220	72 (33%)	0	-
High Street	3,806	1,186 (31%)	632	212 (34%)	61	13 (21%)
St Mary’s Street	6,620	2,383 (36%)	926	383 (41%)	85	25 (29%)

Source: Automatic Numberplate Surveys, September 2022

This continuous flow along key streets of *'through traffic'*, which has no/limited interaction with town centre businesses and destinations, has negative consequences for the town centre, contributing to poor air quality and perceived safety concerns for pedestrians and cyclists.

Servicing vehicles using the town centre during peak periods of non-motorised user activity creates an unpleasant experience for pedestrians and cyclists.

High volumes of LGV and HGV activity, within a constrained highway network, can pose a safety risk to pedestrians and cyclists, both in terms of perception and reality. Cyclists, in particular, face safety concerns as some servicing vehicles have large blind spots, making it difficult for drivers to see cyclists riding alongside or behind them. The increased risk of collisions between vehicles and cyclists deters many from cycling in the town. These vehicles also contribute to an unpleasant environment for pedestrians and cyclists due to their noise, exhaust fumes and safety concerns.

Shrewsbury town centre is home to the Quarry, a key event space.

The Quarry, a popular tourist spot, hosts various events such as Shrewsbury Flower Show and Lets Rock Shrewsbury. These events attract a large number of visitors and exhibitors and generate a substantial volume of HGV traffic. Currently, HGVs enter and exit the area through Victoria Quay, which introduces conflict with the needs of the local business community along this street. This is particularly problematic for the numerous hospitality businesses on Victoria Quay, as it hinders the ability to provide outdoor seating.

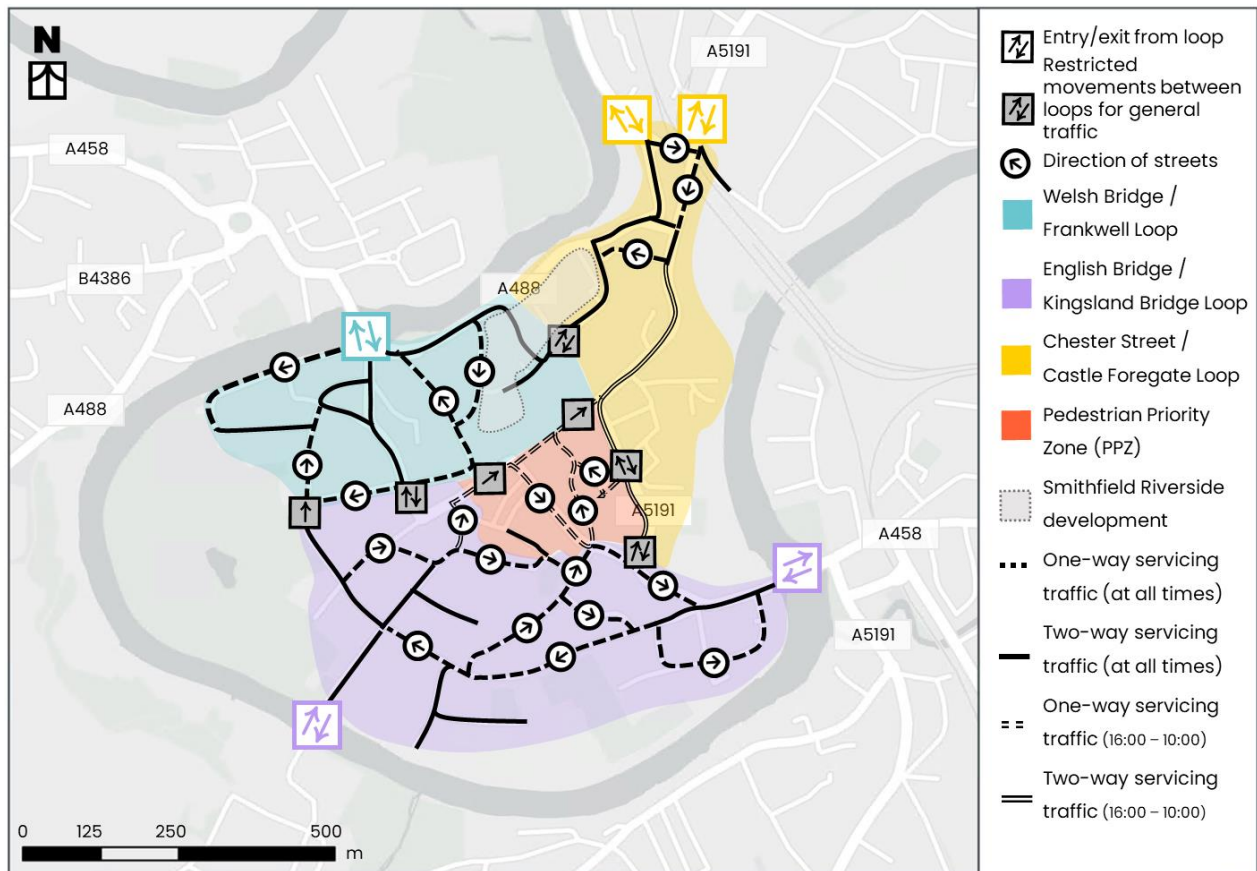
What is this intervention?

The majority of servicing vehicles would be subject to operating within the traffic loops identified in intervention *'Implement traffic loops to restrict through traffic from routing through the town centre'*.

This means that servicing vehicles would be required to enter and exit the town centre from the same location, eliminating the possibility of servicing vehicles using the town centre as a through route. This is shown spatially in Map 8.



Map 8 – Proposed traffic management arrangements for servicing vehicles



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

Some roads within the town centre would allow servicing vehicles, but they would only be permitted during certain times of the day.

Specific roads in the town centre would be accessible to servicing vehicles only between the hours of 16:00 and 10:00. These roads are shown in Map 8.

This restriction would apply to all roads within the Pedestrian Priority Zone, as well as Castle Street, St Mary's Street, and Dogpole.

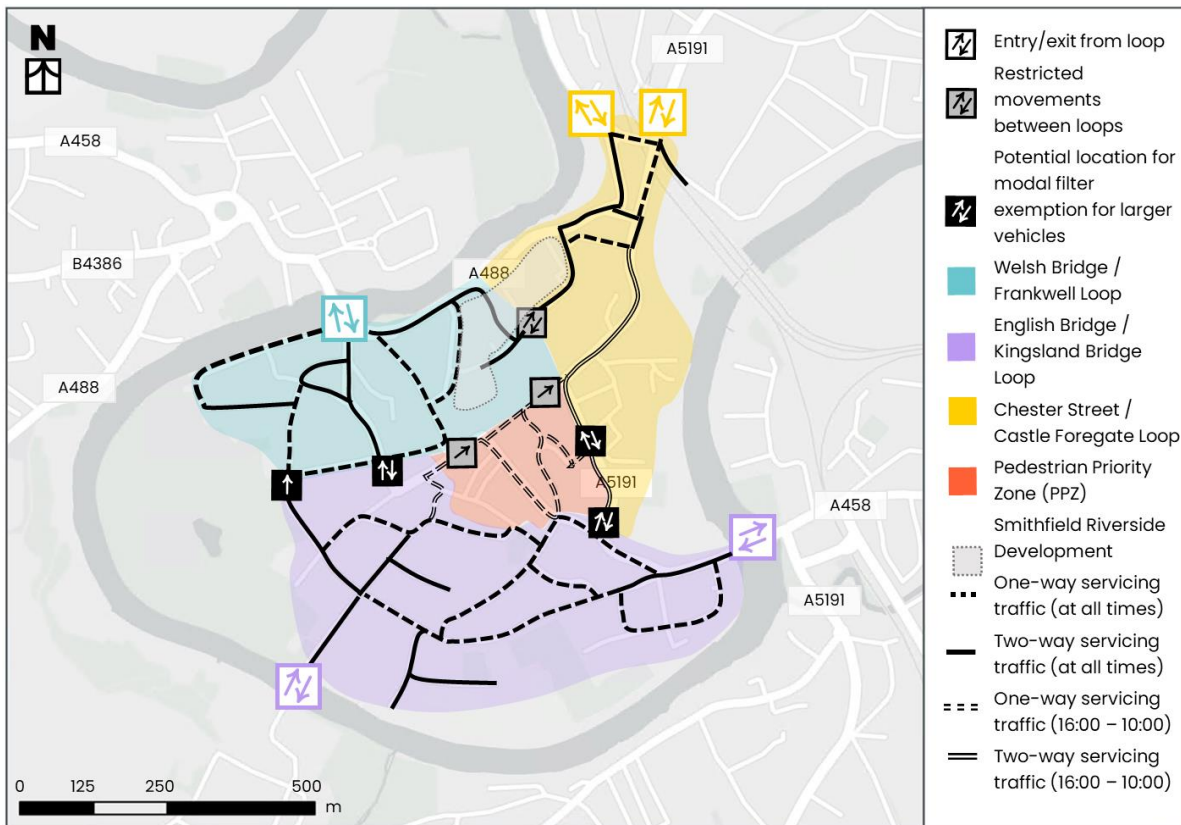
These restrictions align with existing regulations on Pride Hill and Butchers Row. The operational hours would be given further consideration in the future, especially in light of the development of the traffic loops and the Pedestrian Priority Zone. Any changes would be made in consultation with local businesses and key stakeholders.

In some instances, larger vehicles would need to be exempt from modal filters at the traffic loop boundaries.



A detailed assessment of each traffic loop is required prior to determining which streets are suitable for servicing vehicles. However, it is acknowledged that certain streets within the traffic loops are impassable for larger vehicles. In these exceptional circumstances, larger vehicles would be exempt from the modal filters implemented at the boundaries to the traffic loops, to ensure their safe entry and exit to/from the town centre. These locations are shown in Map 9.

Map 9 – Potential locations for modal filter exemptions for larger vehicles



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

The specific methods for granting permission to larger servicing vehicles to bypass modal filters are to be determined. One potential approach could involve the use of ANPR cameras to enforce moving traffic offences. Shropshire Council received permission from National Government in Summer 2023 to implement these enforcement powers. This could include a case-by-case evaluation of larger servicing vehicles, potentially involving businesses registering their vehicles online to obtain time-restricted permits.

Further details regarding freight would be addressed and incorporated into a separate strategy specifically focussing on these elements in detail. This would

include consideration of new routes to service the Quarry, based on further detailed modelling and assessments.

Park and Choose sites could act as freight consolidation hubs on the outskirts of the town centre.

In addition to acting as mobility hubs (further information in intervention *'Expansion of mobility hubs across Shrewsbury, including creating Park and Choose sites'*), Park and Choose sites could also act as freight consolidation hubs. Delivery vehicles would be able to park at these sites to unload goods, which would then be transported into the town centre using sustainable methods such as rickshaws or e-cargo bicycles.

Any trips that are unable to utilise these services but still wish to access the Pedestrian Priority Zone, would need to schedule deliveries outside the operating hours of the Pedestrian Priority Zone.

Sustainable last-mile servicing modes such as e-cargo bicycles, cargo scooters and rickshaws would be able to navigate between traffic loops.

As outlined in the intervention *'Implement traffic loops to restrict through traffic from routing through the town centre'*, pedestrians and cyclists would have the freedom to travel across the town, bypassing all modal filters.

Vehicles such as e-cargo bicycles are capable of carrying substantial loads exceeding 200kg and can provide a real alternative for businesses. Businesses would be able to receive deliveries to meet their needs at any time of day if they choose to utilise these forms of transport.

It is recognised that businesses would need time to adapt to changes and adopt a new way of being serviced.

In the town centre, many businesses currently rely on servicing during the hours of 10:00 and 16:00. As part of this intervention, certain roads in the town centre would have restricted access during these hours. Therefore, businesses may need to adapt their servicing arrangements, which could involve modifying the timing of service deliveries, or adopting increased use of sustainable methods of servicing. By embracing sustainable modes of service, businesses can ensure they continue to receive necessary services during their preferred hours.

What are the impacts of this intervention?

Freight reduction

Implementation of traffic loops would limit the use of the town centre as a through route for servicing vehicles. This would be expected to decrease the number of servicing vehicles passing through the town, which would reduce the dominance of large vehicles in the town centre, creating a more pleasant environment for all road users.

Pedestrian and cyclist priority

Reducing the number of large servicing vehicles routing through the town would help address safety concerns faced by pedestrians and cyclists, promoting a more pedestrian and cyclist-friendly environment. This in turn would encourage more people to choose walking and cycling as their preferred method of transport within the town and the reduction in noise and exhaust emissions would make the town a more attractive space.

Two-way bus corridor

Implementing traffic loops, in conjunction with only permitting servicing vehicles along Castle Street / St Mary's Street during certain times of the day would reduce the number of vehicles travelling along this section of the network. This would ensure that implementation of a two-way bus corridor across the town centre would be achievable.

Economic Impact

Businesses adopting sustainable delivery practices would be able to benefit from use of vehicles that are more fuel-efficient and use sustainable sources of energy, leading to reduced fuel costs. In addition, businesses would be able to consolidate deliveries, combining multiple orders to maximise vehicle capacity utilisation, further reducing the number of trips and associated fuel costs.

Air Quality

Encouraging businesses to adopt sustainable modes of servicing would reduce the number of servicing vehicles, resulting in reduced air pollution in the town centre. This would also enhance sustainability credentials of local businesses through investing in a sustainable supply chain, helping to enhance their

reputation, which may in turn improve their business image and customer perception.

Case Studies

Bath City Centre traffic restrictions

To enhance safety and attractiveness in Bath City Centre, Bath and North-East Somerset Council has implemented vehicle restrictions during 'core shopping hours' from 10:00 to 18:00 every day.

This includes a timed 'Pedestrian Zone' restriction on key streets and a length restriction of 19ft 8 inches / 6m within the city centre gyratory system. Delivery vehicles are required to unload before the 10:00 restriction, utilising loading bays outside the restricted zone and vehicles such as cargo bikes for the final part of the journey, reducing congestion.

Businesses can apply for a one-off permit on a case-by-case basis, accommodating essential access requirements during street closure hours that cannot be re-arranged outside normal operating hours.

For more information about this case study:

https://www.bathnes.gov.uk/sites/default/files/city_centre_leaflet_ccl0713.pdf

Hammersmith and Fulham Clean Air Neighbourhoods

In 2021, the London Borough of Hammersmith and Fulham implemented a permanent clean-air neighbourhood project to discourage motorists from using residential streets as shortcuts. This involved the installation of five ANPR cameras to prevent drivers from taking popular shortcuts through these streets. Access to the area was regulated using RingGo. This service was used to provide permits to exempt vehicles, such as those belonging to affected residents and businesses, allowing them to travel through the Clean Air Neighbourhood without facing penalties.

For more information about this case study:

<https://www.lbhf.gov.uk/transport-and-roads/clean-air-neighbourhoods/south-fulham-clean-air-neighbourhood-project>

Key Considerations for delivery of the intervention

- ☒ Undertake swept path analysis of servicing vehicles across the town centre, establishing a short, medium, and long-term plan for servicing requirements;
- ☒ Feasibility study exploring servicing for The Quarry;
- ☒ Finalise the timings that servicing vehicles would be permitted into the PPZ; and
- ☒ Develop a freight, delivery, and servicing strategy in consultation with local businesses.



***Traffic Management and active travel
outside the river loop***



Lower speed limits within Shrewsbury

Most residential streets in Shrewsbury have a speed limit of 30mph or above, which is not a favourable speed for pedestrians or cyclists cycling on-carriageway to feel safe. To address this concern, lower speed limits throughout the town would be implemented to encourage drivers to slow down. This would promote improved road safety by reducing the likelihood and severity of collisions, which would encourage modal shift from private motor vehicles to walking and cycling. As a result, there would be a greater number of pedestrians and cyclists in Shrewsbury, reducing the dominance of motor vehicles and creating a more enjoyable environment for everyone.

How does this deliver the Shrewsbury Big Town Plan?

This intervention aligns with the key principles of this strategy, and therefore the Shrewsbury Big Town Plan vision and objectives as set out in Table 9.

Table 9 - Alignment with Key Principles

Key Principle		Key Principle	
A - Reduce / remove through traffic from the town centre		H - Improve resilience of local transport network to extreme weather events	
B - Ensure convenient access to town centre/local facilities and uptake of sustainable modes for these journeys		I - Provide an efficient public transport network with improved facilities in town centre	
C - Reduce vehicle speeds and volumes of private motor vehicles		J - Improve cross-town connectivity by sustainable transport modes	
D - Reduce severance caused by River Severn and railway line		K - Ensure servicing access to business and event sites is maintained	
E - Increase priority given to buses, pedestrians and cyclists and improve road safety for all users		L - Improve environmental quality and air quality	
F - Provide more sympathetic public spaces for historic and environmental assets		M - Reallocate road space to provide for space for businesses and event activity, pedestrians, and cyclists	



Key Principle		Key Principle	
G - Enhance Park and Ride offer, and incentivise use		N - Enhance rail connectivity to better accommodate local, regional, and national travel	

Why is this intervention required?

Vehicles travelling at lower speeds present significant safety benefits for pedestrians and cyclists.

Every type of motor vehicle carries a certain level of risk for vulnerable road users. However, when motor vehicles are traveling at high speeds, the potential for causing significant harm to vulnerable road users in the event of a collision increases.

Research indicates that the most effective way to mitigate the risks associated with motor vehicles is by reducing their speed⁶. Studies have demonstrated that the likelihood of a fatal injury occurring between a vehicle traveling at 31 mph and a pedestrian is more than twice as high as at 25 mph, and over five times higher than at 19 mph⁷.

Therefore, implementing a 20mph speed limit can achieve multiple safety benefits, as it reduces the severity of collisions, improves pedestrian safety, and provides a safer cycling environment.

Vehicles travelling at lower speeds contribute less emissions and toxic air pollution.

Academic research has demonstrated that CO₂ emissions from a small hatchback car at a speed limit of 30mph is 29% greater than at a speed limit of 15mph, and 35% greater than at 20mph. For a diesel SUV, CO₂ emissions were

⁶ Davnall, R., 2020. Solving the single-vehicle self-driving car trolley problem using risk theory and vehicle dynamics. *Science and Engineering Ethics*, 26(1), pp.431-449.

⁷ Rosén, E., & Sander, U. (2009). Pedestrian fatality risk as a function of car impact speed. *Accident Analysis and Prevention*, 41, 536-542



found to be 54% higher at a speed limit of 30mph than at 15mph, and 38% higher than at 20mph⁸.

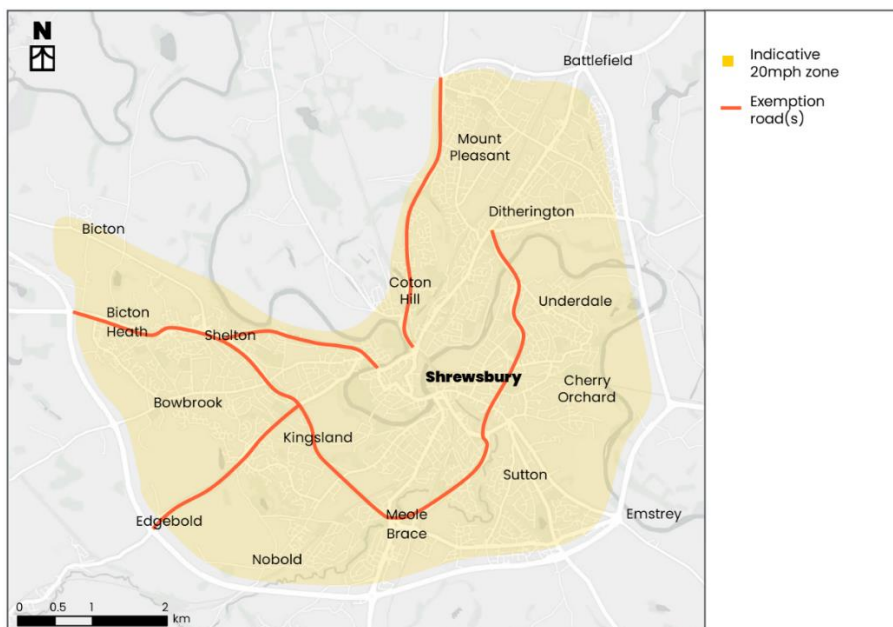
This shows that 20mph speed limits in urban areas do not just make roads safer, they also cut emissions and toxic air pollution.

What is this intervention?

Most residential roads in Shrewsbury with a current speed limit of 30mph would be changed to a default speed limit of 20mph.

To ensure the successful implementation of these speed limit changes, the proposal would involve detailed analysis and engagement with key stakeholders. This collaborative approach would involve seeking input from the local community, residents, and relevant authorities, such as traffic management experts and law enforcement agencies. Other roads, such as arterial roads, may not be subject to 20mph, with the exact speed limit being determined on a case-by-case basis, as shown in Map 10.

Map 10 – Indicative 20mph zone and exemption road(s)



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

⁸ Future Transport Research (2023) Urban transport modelling – An investigation into the effects of urban traffic, speed limits and driving style on travel times, fuel efficiency and CO2 and NOx emissions. Available at: <https://futuretransport.info/wp-content/uploads/2022/05/Urban-Transport-Modelling-2022-05-16.pdf>

The default speed limit would be self-enforcing.

20mph speed limits can be effectively enforced through the implementation of street designs that act as physical and psychological deterrents. Measures such as road narrowing and strategic street planning contribute to reducing traffic speeds, thereby creating safer environments for pedestrians and cyclists.

Furthermore, many new private motor vehicles are equipped with adaptive speed limiter, which automatically limit vehicle speeds to the speed limit. As this technology progresses, this could help to ensure vehicles drive at the appropriate speed.

What are the impacts of this intervention?

Safety

It is likely that lowering the default speed limit to 20mph would contribute to a decrease in traffic speeds. Evidence from similar initiatives in Wales show that converting streets to a default 20mph speed limit resulted in an average reduction of 3mph in vehicle speeds⁹. This reduction in speed has been found to correspond to a decrease in collision rates, as even a mere 1mph decrease in speed can lead to an approximate 6% reduction in collision frequency.^{10, 11}

Additionally, speed limits of 20mph have experienced a 70% reduction in child pedestrian facilities in the UK compared with higher speed limit zones¹². Reducing speed limits can help create a safer environment for children to feel more confident travelling to school by walking or cycling.

Implementing lower speed limits therefore contributes to establishing a safer environment for everyone by mitigating the occurrence of collisions.

⁹ Transport for Wales (2023) Default 20mph Speed Limit on Restricted Roads Phase 1. Available at: <https://tfw.wales/about-us/transparency/publications/default-20mph-speed-limit>

¹⁰ Finch, D., Kompfner, P., Lockwood, C., Maycock, G. 1994. Speed, speed limits, and accidents. TRL Project Report 58, Cowthorne: TRL.

¹¹ Taylor, M., Lynam, D., Baruya, A. 2000. The effects of drivers' speed on the frequency of road accidents, Crowthorne: TRL.

¹² Webster DC, Mackie AM. Review of traffic calming schemes in 20 mph zones: TRL report 215, 1996

Increased active travel

The reduction in speeds could potentially result in streets being more conducive for most people to feel comfortable cycling on the road. National technical guidance on the design of cycle infrastructure (LTN 1/20) notes that cycling on the carriageway is acceptable for most people, so long as traffic speeds are less than 20mph and traffic volumes are less than 2,000 vehicles per day.

There is strong evidence that 20mph speed limits create a more pleasant and safer space for people to walk and cycle. A report by the University of the West of England found area-wide 20mph pilots in Bristol witnessed the number of residents walking and cycling increasing between 2010 (pre-implementation) and 2015 (post-implementation)¹³.

Air Quality

Lower speed limits can help towards improving air quality, as vehicles travelling at lower speeds have better levels of fuel consumption. Lower speeds can also help to avoid sudden braking and acceleration, contributing to better traffic flows and lower levels of pollution^{14,15}.

Case Studies

Bristol

In July 2012, Bristol City Council made the decision to implement city-wide 20mph speed limits to enhance health and well-being and encourage greater participation in walking and cycling.

An assessment of the implementation of these 20mph speed limits across the city revealed that, on average, there was a decrease of 2.7mph in vehicle speeds on roads where the new speed limit was enforced. The most significant reduction in speed was observed on A- and B-roads that were subjected to the 20mph limit. Furthermore, following the introduction of the 20mph speed limit, the annual rate

¹³ Pilkington, P., Bornioli, A., Bray, I. and Bird, E. (2018) The Bristol Twenty Miles Per Hour Limit Evaluation BRITE Study. University of the West of England.

¹⁴ TEAG (2013). An evaluation of the estimated impacts of vehicle emissions of a 20mph speed restriction in central London. Centre for Transport Studies. Imperial College London.

¹⁵ Archer, J., Fotheringham, N., Symmons, M et al (2008). The impact of lowered speed limits in urban and metropolitan areas. MONASH University Accident Research Centre

of fatal, serious, and slight injuries decreased compared to the respective rates prior to the implementation, indicating an improvement in road safety.

For more information about this case study:

<https://www.yhphnetwork.co.uk/media/1610/the-bristol-twenty-miles-per-hour-limit-evaluation-study-analysis-of-the-20mph-rollout-project-uwe-2018.pdf>

Faversham

In September 2020, Faversham implemented a 20mph speed limit on a trial basis, which lasted for 17 months. After the trial period and a public consultation, it was identified that over 60% of residents approved of the new speed limit. In February 2022, the decision was made to make the 20mph speed limit permanent.

During the trial, speed data was analysed, revealing a 4.1% decrease in vehicle speeds throughout Faversham. Out of the 12 monitored sites, 10 exhibited average speeds below 24mph after the implementation of the speed limit. Overall, there have been positive changes in behaviour, including increased usage of active modes of transport and reductions in both average and 85th percentile speeds.

For more information about this case study:

<https://www.kent.gov.uk/roads-and-travel/road-projects/in-progress-road-projects/emergency-active-travel-fund-schemes/faversham-20mph-limit#tab-1,2,3>

Key Considerations for delivery of the intervention

- ☒ Develop and agree draft 20mph policy, including desired objectives and outcomes;
- ☒ Agree on roads which would be exempt from the town-wide 20mph speed limit; and
- ☒ Agree most suitable location for the pilot(s).

Implement Local Access Priority Areas in Shrewsbury

In Shrewsbury, many residential streets experience excessive through traffic, commonly referred to as 'rat running'. These vehicles not only pose significant safety risks but also inhibit residents' ability to fully appreciate their local environment. By implementing Local Access Priority Areas, vehicles would be unable to drive through these neighbourhoods, resulting in fewer vehicles driving along the streets. This would enhance air quality by reducing overall emissions of nitrogen dioxide and carbon dioxide from vehicles and would create a more inviting atmosphere, transforming the streets into vibrant spaces for people to enjoy.

How does this deliver the Shrewsbury Big Town Plan?

This intervention aligns with the key principles of this strategy, and therefore the Shrewsbury Big Town Plan vision and objectives as set out in Table 10.

Table 10 - Alignment with Key Principles

Key Principle		Key Principle	
A - Reduce / remove through traffic from the town centre		H - Improve resilience of local transport network to extreme weather events	
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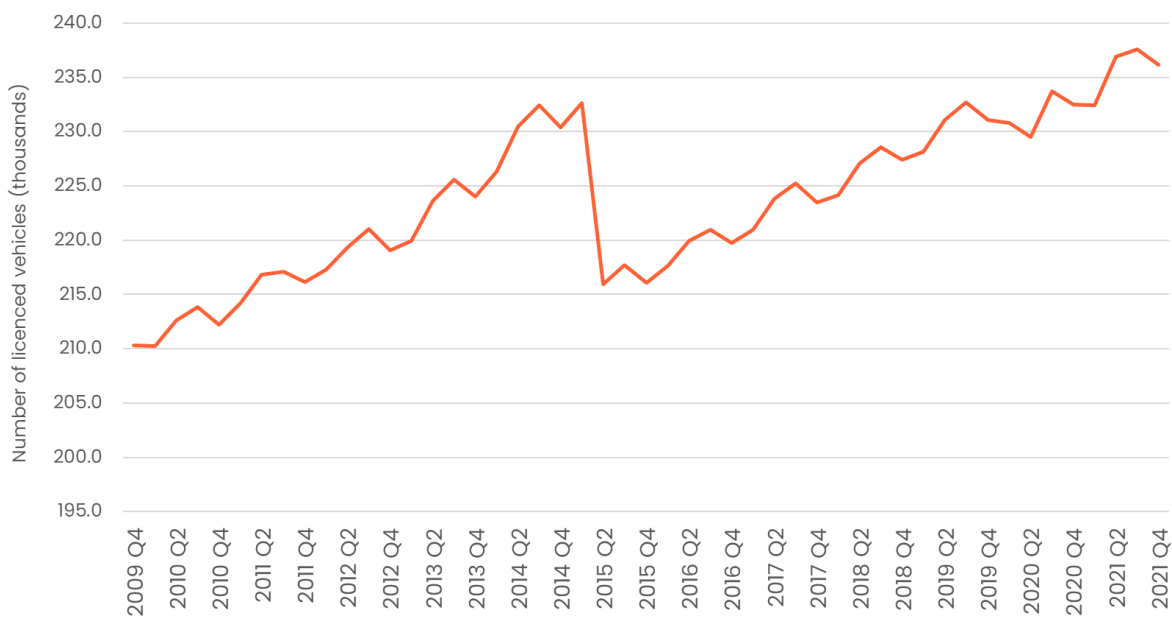
Key Principle		Key Principle	
G - Enhance Park and Ride offer, and incentivise use		N - Enhance rail connectivity to better accommodate local, regional, and national travel	

Why is this intervention required?

In recent years, there has been a notable rise in private motor vehicles on residential roads in Shrewsbury.

At a county level, there has been a consistent increase in the number of registered vehicles, increasing from 210,000 in 2009 to an estimated 230,000 in 2021. This growth in registered vehicles has resulted in an increased likelihood of more vehicles utilising the streets of key towns within the county, including Shrewsbury.

Figure 8 - Total Licenced Vehicles in Shropshire (2009 - 2021)



Traffic levels have risen on residential streets in Shrewsbury, such as along Monkmoor Road, where MCC surveys show a 55% increase in the number of motor vehicles between 2015 and 2019. A range of factors could be attributed to this increase, such as an increase in private motor vehicle ownership across the town, population growth or new developments in the area. The introduction of sat-nav

technology, which seeks to find the most direct route, may also be attributed to the rise in the number of motor vehicles along residential streets.

Many roads across the town have high traffic volumes which are higher than the maximum limit recommended for accommodating on-street cycling suitable for most people.

National technical guidance on the design of cycle infrastructure (LTN 1/20) states that roads that exceed 2,000 vehicles per day are not suitable for most people to cycle on-carriageway.

Table 11 shows that the number of vehicles during the morning and evening peaks combined are already close 2,000 vehicles, without accounting for vehicles travelling at other times of the day. This means that it is likely that these roads do not provide a favourable environment for most people to cycle on the carriageway.

Table 11 – Total number of motor vehicles in the morning (08:00 – 09:00) and evening peaks (17:00 – 18:00) combined

Location	Total vehicles, combined morning and evening peak periods
The Mount	1,159 vehicles
Copthorne Road	1,522 vehicles
New Street	1,279 vehicles

Source: NWRR SATURN Model, 2023 Do Minimum scenario

There is limited space on the highway network to build segregated cycle infrastructure.

Given the historic layout of Shrewsbury, particularly in the town centre, building large-scale dedicated infrastructure for cyclists is not always feasible. Table 11 also shows that traffic volumes within the town centre are also higher than the maximum for most people to feel comfortable cycling on-carriageway.

Some people do not like to walk and cycle across Shrewsbury.

During the consultation process for the Masterplan Vision, residents of Shrewsbury consistently voiced their concerns regarding the safety and suitability of walking

and cycling infrastructure throughout the town. Notably, individuals cited several key reasons for their reluctance to engage in active travel, including:

- ☒ The behaviour of other road users whilst cycling on the road;
- ☒ The presence of high volumes of traffic;
- ☒ Excessive speeds of vehicles; and
- ☒ A lack of well-connected and cohesive cycle routes.

These concerns highlight the need for the development of comprehensive cycling infrastructure to encourage and facilitate safer and more appealing walking and cycling options in Shrewsbury.

What is this intervention?

Local Access Priority Areas would be created across Shrewsbury

Residential neighbourhoods would be converted into Local Access Priority Areas, as shown in Map 11. This would mean implementing modal filters so that private motor vehicles, unless exempt, would be unable to use residential streets as a through route. Instead, vehicles would be redirected to more appropriate arterial roads.

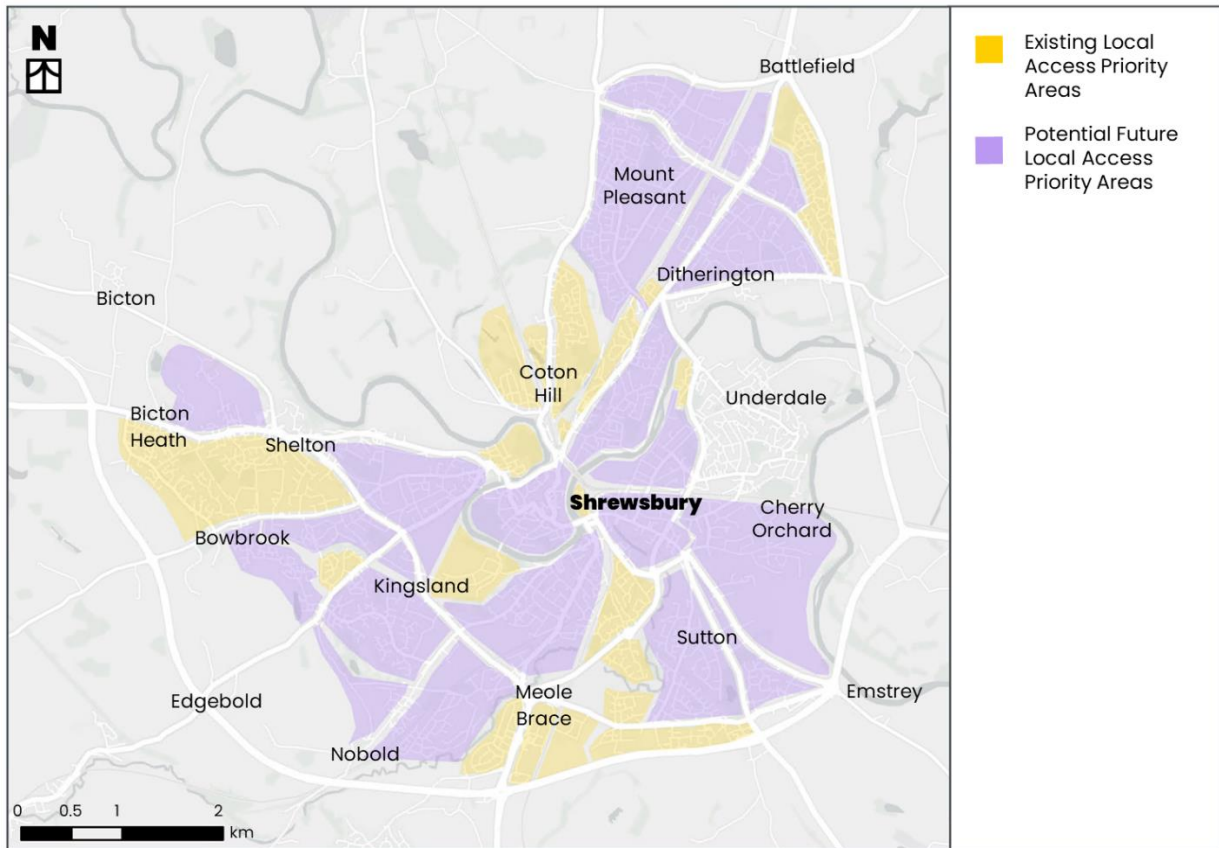
Measures could also be introduced to dissuade or prevent people from parking on street through the potential introduction of Controlled Parking Zones.

Measures would only be implemented where local consent has been obtained

Measures would only be implemented where local consent has been secured. This would make sure that Local Access Priority Areas are deployed fairly and with local support.



Map 11 – Potential Local Access Priority Areas



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

What are the impacts of this intervention?

Safety

The implementation of Local Access Priority Areas would lead to a reduction in the number of private motor vehicles on residential streets. Through traffic would be eliminated, allowing only vehicles with a genuine purpose to enter the area. This transformation could enhance the attractiveness of active travel modes, as high traffic volumes are a deterrent for individuals considering walking or cycling.

Vibrant Neighbourhoods

With fewer private motor vehicles, streets would become more pleasant, inviting people to explore and engage with their local surroundings. This transformation would create a safer space for children to play outside, helping to enhance community cohesion. Neighbours would also be able to gather and chat more easily

on the streets, fostering a strong sense of community, pride and belonging to their neighbourhood.

Air Quality

Streets would witness a decrease in the number of harmful pollutants such as carbon dioxide and nitrogen dioxide, helping to enhance air quality and improve health and wellbeing for residents. The implementation of Local Access Priority Areas would contribute to a reduction in noise levels generated by private motor vehicles, creating a more peaceful and enjoyable living environment.

Emergency Access

Emergency vehicles would not face restrictions within these areas. The design of modal filters for Local Access Priority Areas would be developed in collaboration with emergency services to address any potential obstacles related to emergency access.

Boundary Roads

By introducing Local Access Priority Areas, private motor vehicles would be redirected to arterial roads, which could lead to a slight increase in the number of private motor vehicles on certain streets at the edges of these areas. However, it is expected that boundary roads would be able to accommodate the additional traffic demand, and any increase would be minimal. This is because some motor traffic would "evaporate" from the road network as people opt not to make the journey or choose to walk, wheel or cycle instead. More detailed modelling is required to understand the exact impact on the road network prior to implementation.

Case Studies

Walthamstow Village

A series of cycling and walking improvements have been implemented in the London Borough of Waltham Forest, including the closure of major roads to motorised vehicles either fully or partially. Prior to the road closures, the village experienced a daily influx of over 25,000 vehicles. Traffic surveys indicate a

substantial reduction in vehicle movements within the neighbourhood, with average speeds decreasing from 17.7mph to 15.8mph within the area. Moreover, there has been a significant increase in the number of cyclists and pedestrians, with a 124% rise observed on Orford Road, situated in the heart of the village.

For more information about this case study:

<https://www.enjoywalthamforest.co.uk/wp-content/uploads/2016/09/2017-08-23-WV-report-FINAL.pdf>

Oxford Cowley

In March 2021, Oxfordshire County Council initiated a trial closure of some residential streets in Cowley. During the trial, the volume of cars within zones dropped by 42% compared to a pre-COVID-19 baseline. Furthermore, cycling volumes increased by 22.5% and pedestrian volumes increased by 19%. On the boundary roads, there was a slight increase in vehicle volumes, with a 3.1% rise compared to the levels recorded in 2019.

For more information about this case study:

<https://mycouncil.oxfordshire.gov.uk/documents/s59614/22.02.24%20CHMD%20Item%204%20-%205.%20Annex%204%20Preliminary%20Evaluation%20Perception%20Report.pdf>

Key Considerations for delivery of the intervention

- ☒ Develop draft policy and prioritisation tool;
- ☒ Agree on trial location(s);
- ☒ Detailed modelling required to understand the total number of vehicles removed from each proposed Local Access Priority Area as a result of implementing modal filters;
- ☒ Determine the type of modal filter to be implemented in each Local Access Priority Area; and
- ☒ Agree on modal filter exemption list.



Upgrade existing pedestrian and cycle infrastructure to national standards

The existing pedestrian and cycle infrastructure in Shrewsbury does not create an environment that encourages active travel. To address this, the town’s active travel infrastructure would be improved, enhancing the quality of infrastructure and coherence of routes in line with the latest national standards where possible, acknowledging potential physical constraints. Walking and cycling would become more attractive for all users, which would not only promote an increase in the number of individuals choosing active travel modes but would also allow them to experience the various health and wellbeing benefits it offers.

How does this deliver the Shrewsbury Big Town Plan?

This intervention aligns with the key principles of this strategy, and therefore the Shrewsbury Big Town Plan vision and objectives as set out in Table 12.

Table 12 - Alignment with Key Principles

Key Principle		Key Principle	
A - Reduce / remove through traffic from the town centre		H - Improve resilience of local transport network to extreme weather events	
B - Ensure convenient access to town centre/local facilities and uptake of sustainable modes for these journeys		I - Provide an efficient public transport network with improved facilities in town centre	
C - Reduce vehicle speeds and volumes of private motor vehicles		J - Improve cross-town connectivity by sustainable transport modes	
D - Reduce severance caused by River Severn and railway line		K - Ensure servicing access to business and event sites is maintained	
E - Increase priority given to buses, pedestrians and cyclists and improve road safety for all users		L - Improve environmental quality and air quality	
F - Provide more sympathetic public spaces for historic and environmental assets		M - Reallocate road space to provide for space for businesses and event activity, pedestrians, and cyclists	



Key Principle		Key Principle	
G - Enhance Park and Ride offer, and incentivise use		N - Enhance rail connectivity to better accommodate local, regional, and national travel	

Why is this intervention required?

Cycle infrastructure in Shrewsbury does not consistently meet modern design standards.

In 2009, Shropshire Council received national funding to transform Shrewsbury into a 'cycling demonstration town.' One of the main objectives of this programme was to expand and enhance the town's cycle network, primarily by developing shared use routes that accommodate both pedestrians and cyclists.

However, in recent years, cycling design guidance produced by the Department for Transport has critiqued the use of shared use paths, particularly in urban areas where high pedestrian footfall is experienced. Whilst considered best practice in 2009, shared use paths are now not favoured by pedestrians or cyclists, and they can pose significant challenges for visually impaired people.

There is no coherent cycle infrastructure across Shrewsbury.

Currently, Shrewsbury has a disjointed network of cycling routes that are sporadically located across the town. These routes fail to form a cohesive and interconnected network for cycling between trip origins and destinations.

Although Shrewsbury boasts many cycle routes, the lack of connectivity poses significant challenges for cyclists attempting to travel across town. This is particularly evident at key junctions, which can be hazardous for cyclists. For example, wide entry and exits widths can encourage high speeds through junctions. This results in many routes being unsuitable for most people wishing to cycle and can pose a high risk even for experienced cyclists. With a lack of alternatives, this results in cyclists facing difficulty reaching their destinations.

The quality of some footways in Shrewsbury are not fit for purpose.

The footways in Shrewsbury sometimes fall short in meeting the needs of pedestrians, as they may be uneven and lack important accessibility features such as wheelchair ramps and tactile paving. This can create an environment

that feels unsafe and unwelcoming for pedestrians. As a result, some individuals may choose alternative transport options instead of walking.

Shropshire Council has identified key walking and cycling routes across the town.

Shropshire Council has recently published their draft Local and Cycling Infrastructure Plan (LCWIP) for Shrewsbury. This strategic document identifies and prioritises infrastructure enhancements for walking and cycling throughout the town. The plan outlines primary and secondary routes along with recommended interventions to make them more suitable for active travel, and to create a holistic active travel network.

What is this intervention?

Cycle routes outlined within the draft Shrewsbury LCWIP would be progressed and developed to conform with the latest national cycle design guidance standards, where feasible.

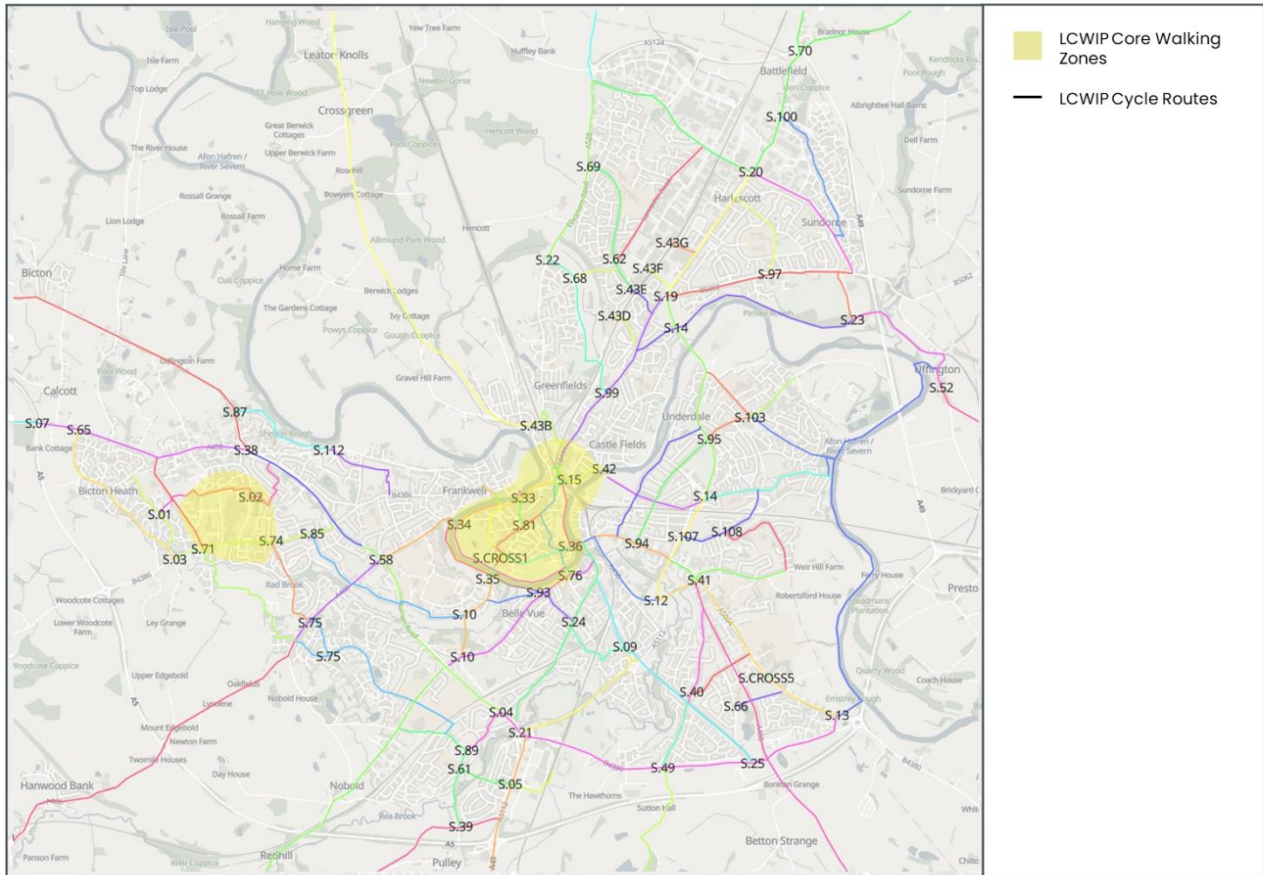
Walking routes would be enhanced within Core Walking Zones identified as part of the draft Shrewsbury LCWIP.

A comprehensive assessment of the current walking and cycling infrastructure in the town has been carried out within the LCWIP, which has identified additional barriers and obstacles that hinder active travel.

This audit has identified and addressed key factors that create division and disruption for across Shrewsbury for people seeking to walk and cycle (e.g., bollards). Recommendations relating to these barriers would be taken forward subsequently as projects outlined within the LCWIP are taken forward.



Map 12 – Proposed walking and cycling route upgrades (LCWIP)



Credits: Contains OS Data © Crown copyright and database rights 2018.
Source: Shropshire LCWIP

What are the impacts of this intervention?

Health

Cycling and walking infrastructure would be developed in accordance with the latest national guidelines to create a safe and appealing environment for walking and cycling in Shrewsbury. This would generate more pedestrian and cycling activity across the town. The construction of these routes would utilise attractive materials, ensuring comfortable conditions for active travel.

By promoting walking and cycling, individuals can enjoy the physical and mental health benefits of regular exercise whilst reducing their dependence on private motor vehicles. This shift towards active travel would contribute to improved air quality and further enhance public health.

Inclusivity

Designing walking and cycling infrastructure in accordance with national guidelines is essential for creating inclusive routes that cater to the needs of people of all ages and abilities. Specifically, the design of the routes would accommodate different types of bicycles, including adapted cycles. Additionally, footways would be designed to be of adequate widths to accommodate inclusive mobility, promoting a comfortable environment for all pedestrians.

Affordability

Establishing a comprehensive walking and cycling network in Shrewsbury would provide people with the ability to walk, wheel, or cycle to/from important amenities and workplaces, resulting in cost-saving benefits for the individual. By reducing their reliance on private motor vehicles, people can opt for sustainable travel behaviours, thereby reducing fuel costs.

Case Studies

Solihull

In 2022, a new two-way cycle route was created in the town, linking the town centre with residential areas around the town, identified through the town's LCWIP. The new cycle route was developed as part of the West Midlands Active Travel Fund and delivers a safe, high-quality space for people to cycle to/from the town centre.

For more information about this case study:

<https://www.solihull.gov.uk/news/solihulls-new-active-travel-route-shortlisted-national-award#:~:text=The%203%20km%20Active%20Travel,car%20use%20during%20the%20pandemic>

Salford

In 2017, Salford City Council produced one of the country's first Local Cycling and Walking Infrastructure Plans. Salford benefits from an extensive traffic-free network sections of which form important parts of the active travel network plan.

Parts of Salford are hilly, and the Greenways offer relatively flat routes mainly along canals and former railway lines. However, some of the routes are in cuttings or on embankments creating challenging gradients at some access points.

Salford City Council has taken a pragmatic approach to these, providing new ramps in line with current guidance where possible but accepting that in many locations, routes must follow existing topology and making those routes as accessible as possible, such as through surfacing improvements and, where possible, clear signage and wayfinding to accessible routes and access points.

For more information about this case study:

<https://www.salford.gov.uk/media/393982/off-the-beaten-track.pdf>

Key Considerations for delivery of the intervention

- ☒ Development of priority LCWIP schemes;
- ☒ Develop funding and delivery strategy for LCWIP; and
- ☒ Undertake detailed design of schemes in line with national guidance and deliver 'quick wins'.

Provide additional/improved walking and cycling links across the river and railway

The River Severn and Shrewsbury Railway Station bring significant advantages to the town. However, they also create notable divisions within the community. To address this issue, walking and cycling links would be enhanced to overcome these barriers. By creating simpler and direct connections between key destinations currently separated by the railway line and the river, more people would be able to reach the town by active modes, reducing the overreliance on private motor vehicles. Active travel links would also ensure that even during extreme flood events, all individuals would have access to the town, contributing to the safe and convenient reach of Shrewsbury, helping to maintain its economic viability.

How does this deliver the Shrewsbury Big Town Plan?

This intervention aligns with the key principles of this strategy, and therefore the Shrewsbury Big Town Plan vision and objectives as set out in Table 13.

Table 13 - Alignment with Key Principles

Key Principle		Key Principle	
A - Reduce / remove through traffic from the town centre		H - Improve resilience of local transport network to extreme weather events	
B - Ensure convenient access to town centre/local facilities and uptake of sustainable modes for these journeys		I - Provide an efficient public transport network with improved facilities in town centre	
C - Reduce vehicle speeds and volumes of private motor vehicles		J - Improve cross-town connectivity by sustainable transport modes	
D - Reduce severance caused by River Severn and railway line		K - Ensure servicing access to business and event sites is maintained	
E - Increase priority given to buses, pedestrians and cyclists and improve road safety for all users		L - Improve environmental quality and air quality	
F - Provide more sympathetic public spaces for historic and environmental assets		M - Reallocate road space to provide for space for businesses	

Key Principle		Key Principle	
		and event activity, pedestrians, and cyclists	
G - Enhance Park and Ride offer, and incentivise use		N - Enhance rail connectivity to better accommodate local, regional, and national travel	

Why is this intervention required?

There are limited active travel connections between the outskirts and the town centre.

Accessing the town centre from the west, south, and east requires crossing the River Severn, limiting pedestrians and cyclists to six available routes. This funnelling effect restricts the directness and desirability of walking into Shrewsbury.

The Welsh Bridge and English Bridge offer the most direct routes for pedestrians and cyclists, but these routes are also shared with high volumes of vehicles, as shown in Table 14. During the AM peak, a substantial number of motor vehicles travel along Welsh Bridge and English Bridge every minute, equating to approximately 1 vehicle every 2.5 seconds.

Table 14 – Total number of vehicles on Thursday on English and Welsh Bridge (2022)

Location	Total Vehicles, Weekday 12hr (07:00 – 19:00)	Total Vehicles, Weekday Morning Peak (08:00 – 09:00)	Total Vehicles per minute, Weekday Morning Peak (08:00 – 09:00)
Welsh Bridge	16,494 vehicles	1,584 vehicles	26 vehicles
English Bridge	13,171 vehicles	1,435 vehicles	24 vehicles

Source: Manual Classified County Surveys, May & September 2022

Some routes for pedestrians and cyclists to the town centre across the river are not fully accessible.

Frankwell Footbridge, an important route into Shrewsbury's town centre from the west and Frankwell Car Park, fails to provide an appealing and inclusive

connection for pedestrians and cyclists. The current footbridge does not comply with the Equality Act 2010 and is therefore inaccessible for individuals with mobility, cyclists, cyclists, and people with pushchairs, as it lacks lifts or ramps. As an alternative, pedestrians and cyclists are directed to use the Welsh Bridge, which lacks dedicated cycling infrastructure, has narrow footways, and experiences high traffic volumes.

The railway line introduces barriers for pedestrians and cyclists.

The Cambrian, Salop, and Welsh Marches railway lines route through the centre of Shrewsbury. In many parts of the town, there are no accessible routes across the railway line. For example, whilst there is a connection across the railway line in Coleham between Montague Place and Buttercup Way, the route is severed by bollards and is extremely narrow, making for an uncomfortable pedestrian experience and unviable for wheelchair users.

The railway lines and River Severn pose significant barriers for connectivity between the railway station and Shrewsbury Abbey.

Shrewsbury Abbey is situated 500m from the railway station as the crow-flies, but these connections are currently severed by the River Severn and the railway line, meaning the actual walking distance to the station is over 1.0km.

Historically, a route existed from Abbey Foregate to the station, using a series of footpaths. However, this route is now fenced off, failing to provide a suitable access to the station. The alternative route is considerably longer, pedestrians are required to access the railway station through the town centre and to navigate the fairly steep gradient along St Mary's Street and Castle Street.

What is this intervention?

Additional and improved crossing points could be provided across the River Severn and the railway.

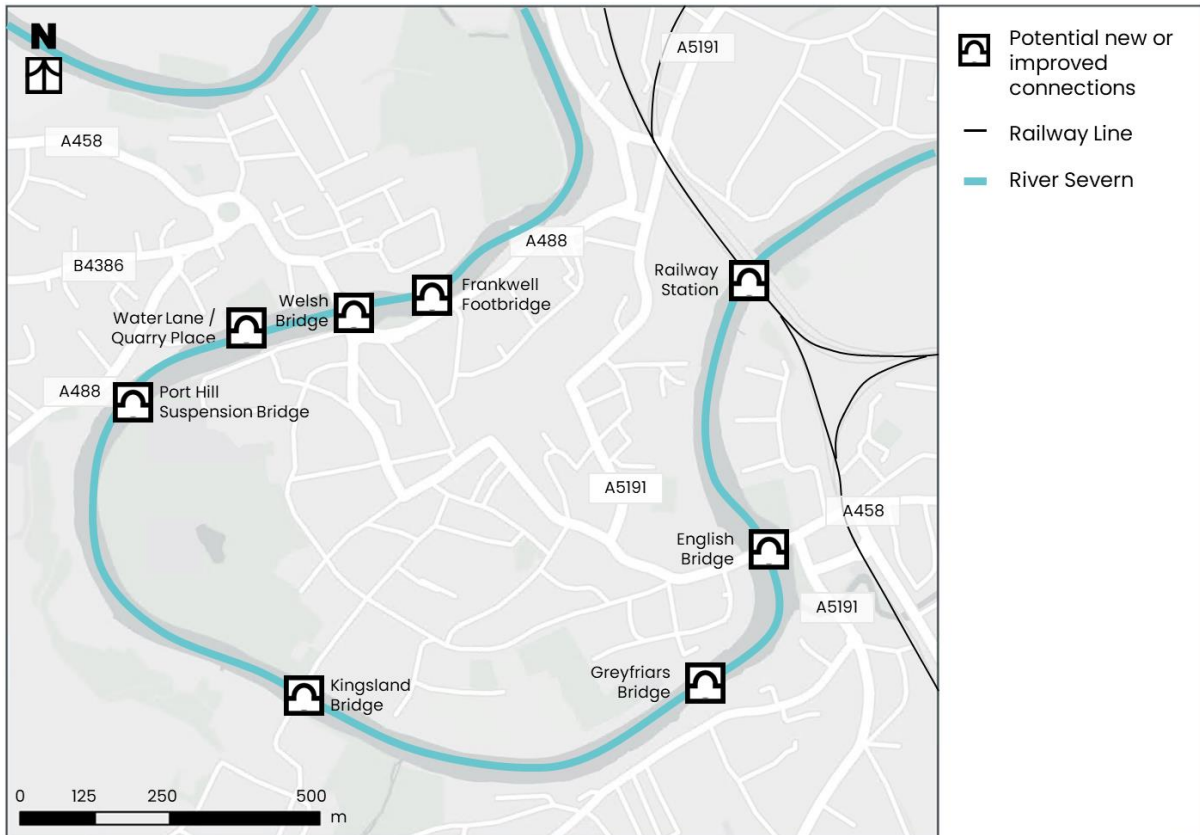
The location of crossing points would be assessed as part of a more detailed technical study, however preliminary analysis has indicated the following locations where a new or improved connections could be beneficial:

- ☒ **Frankwell Footbridge:** To be replaced with a new, inclusive bridge that provides a fully accessible route into the town centre for all users. This bridge would be positioned in the same location as the current footbridge.
- ☒ **Quarry Way / Water Lane:** A feasibility study would be conducted to assess the viability of providing a new active travel bridge across the River Severn.
- ☒ **Welsh Bridge:** As a result of the Traffic Loop approach, there would be fewer private motor vehicles routing along Welsh Bridge, helping to provide a much more pleasant environment for pedestrians and cyclists.
- ☒ **English Bridge:** Subject to a feasibility study, a new pedestrian access to the railway station from English Bridge would be established.
- ☒ **Port Hill Suspension Bridge, Kingsland Bridge and Greyfriars Bridge:** A feasibility study would be conducted to assess the viability of providing improvements for pedestrians and cyclists on these routes.
- ☒ **Shrewsbury Railway Station:** More information concerning improvements to Shrewsbury Railway Station can be found under intervention '*Enhance Shrewsbury Railway Station*'.

The locations of these connections are shown in Map 13.



Map 13 – Potential locations of new or improved connections across River Severn and railway line



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

What are the impacts of this intervention?

Economic Benefit

The increased accessibility and convenience in accessing the town would attract more visitors, resulting in a positive economic impact. Moreover, the introduction of new links would serve as a catalyst for growth in residential areas situated on the outskirts of the town that currently experience a sense of disconnection. Strengthened linkages would help these areas thrive, transforming them into vibrant and economically desirable places.

Inclusivity

All pedestrians would be able to access the amenities of the town centre by sustainable means as all routes into the centre would be fully accessible, helping

to provide a safe, attractive, and viable route for all. This would reduce reliance on the private motor vehicle and empower people to travel by sustainable modes.

Social Inclusion

Reducing severance and improving connectivity through the implementation of improved pedestrian and cycling connectivity would have a positive impact on social cohesion. By providing safe and accessible pathways for walking and cycling, individuals are more likely to engage in active travel, interact with their surroundings, and connect with fellow community members. This could lead to increased social interactions, community engagement, and a sense of belonging, enhancing social cohesion within the community.

Flood resilience

The construction of a new Frankwell Bridge that fully complies with the Equality Act 2010 would guarantee continued accessibility to the town centre for all individuals, even during flood events. Currently, Welsh Bridge becomes impassable during flood events, making Frankwell Footbridge the primary direct route connecting Frankwell to the town centre. The replacement of Frankwell Bridge would address accessibility issues and contribute to the resilience and sustainability of the town centre during flood events, ensuring that everyone can continue to reach it safely and conveniently.

Case Studies

Kepax Bridge, Worcester

In 2021, the construction of a walking and cycling bridge over the River Severn in Worcester was approved by Worcestershire County Council. This bridge aims to enhance access to the city centre for pedestrians and cyclists, offering a more efficient and direct route. By reducing travel times for pedestrians and cyclists, the bridge would improve connectivity and facilitate better connections to National Cycle Network Route 45. The primary objective of this scheme is to promote the use of alternative modes of transport within the city, contributing to reduced congestion levels and enhanced safety for all road users.

For more information about this case study:

<https://www.worcestershire.gov.uk/major-infrastructure-improvements/cycling-and-pedestrian-improvements/kepax-walking-and-cycling>

Skelton Bridge, Leeds

In 2017, a new bridge was inaugurated by Leeds City Council, facilitating pedestrian, and cycling passage over the River Aire near Skelton Lake. This bridge serves as a crucial link for active travel across the Lower Aire Valley and connects to an existing cycle route leading to the city centre. Furthermore, it creates opportunities for future access to Rothwell Country Park, encouraging active modes of travel. The bridge project, which involved legal negotiations, design, and construction, had a total cost of £500,000.

For more information about this case study:

<https://news.leeds.gov.uk/news/new-bridge-puts-cyclists-on-the-right-path>

Key Considerations for delivery of the intervention

- ☒ Further analysis of the most suitable locations for enhanced walking and cycling connections to the town centre across the River Severn and Railway;
- ☒ Continued alignment with the outcomes of Smithfield Riverside development; and
- ☒ Further exploration of land ownership and the possibility of establishing a second pedestrian access point to the Railway Station.

Provide active travel links to the north of Shrewsbury, better serving local facilities

Providing active travel links to the north of Shrewsbury would contribute to improved public health outcomes by encouraging physical activity, reduced dependency on use of private motor vehicles, and improved air quality. Additionally, active travel improvements would enhance social connectivity and inclusivity by providing equitable access to the town centre, for individuals to the north of Shrewsbury. Overall, these active travel connections would present a holistic solution to help establish healthier lifestyles, stronger communities, and a greener, more economically vibrant future for local populations.

How does this deliver the Shrewsbury Big Town Plan?

This intervention aligns with the key principles of this strategy, and therefore the Shrewsbury Big Town Plan vision and objectives as set out in Table 15.

Table 15 - Alignment with Key Principles

Key Principle		Key Principle	
A - Reduce / remove through traffic from the town centre		H - Improve resilience of local transport network to extreme weather events	
B - Ensure convenient access to town centre/local facilities and uptake of sustainable modes for these journeys		I - Provide an efficient public transport network with improved facilities in town centre	
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E - Increase priority given to buses, pedestrians and cyclists and improve road safety for all users		L - Improve environmental quality and air quality	
F - Provide more sympathetic public spaces for historic and environmental assets		M - Reallocate road space to provide for space for businesses and event activity, pedestrians, and cyclists	



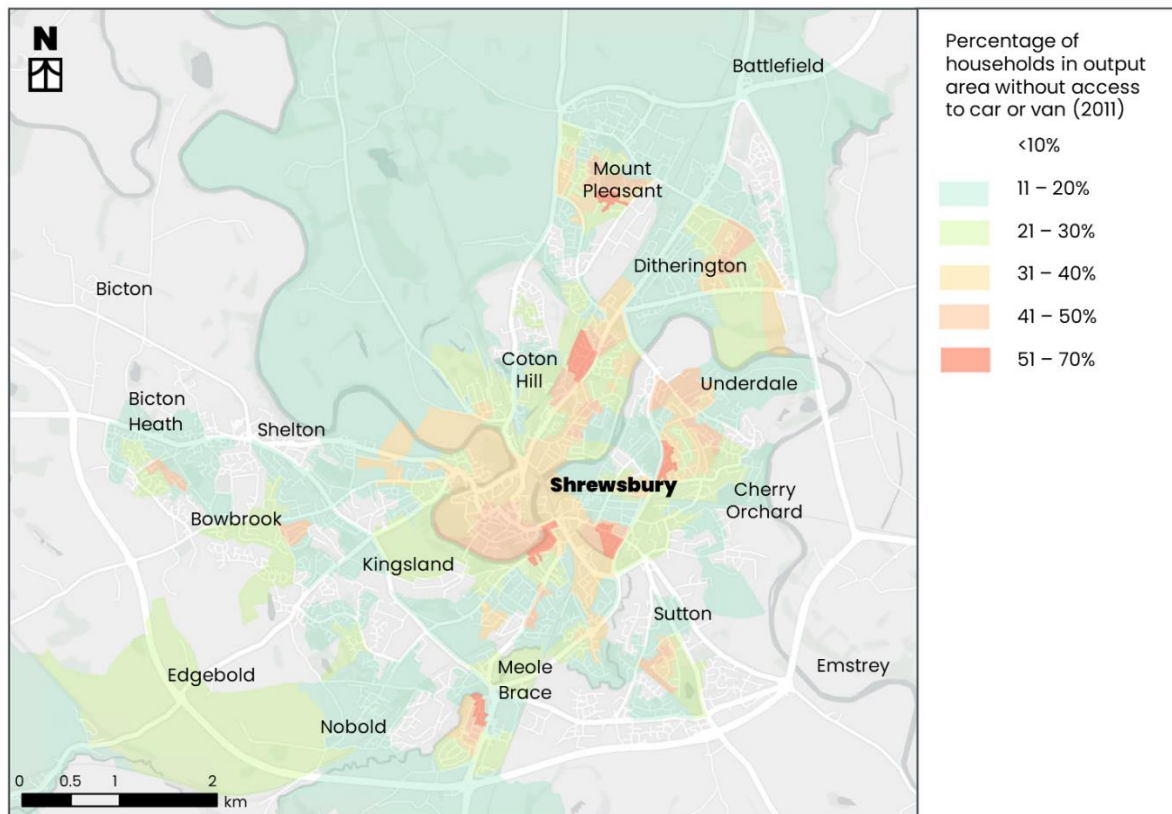
Key Principle	Key Principle
G - Enhance Park and Ride offer, and incentivise use	N - Enhance rail connectivity to better accommodate local, regional, and national travel

Why is this intervention required?

There is a lack of suitable active travel routes to the north of Shrewsbury.

Routes between the town centre and North Shrewsbury are characterised by narrow footways, limited wayfinding, and high traffic volumes, which make active travel connections to the town centre unappealing.

Map 14 – Levels of car ownership in Shrewsbury

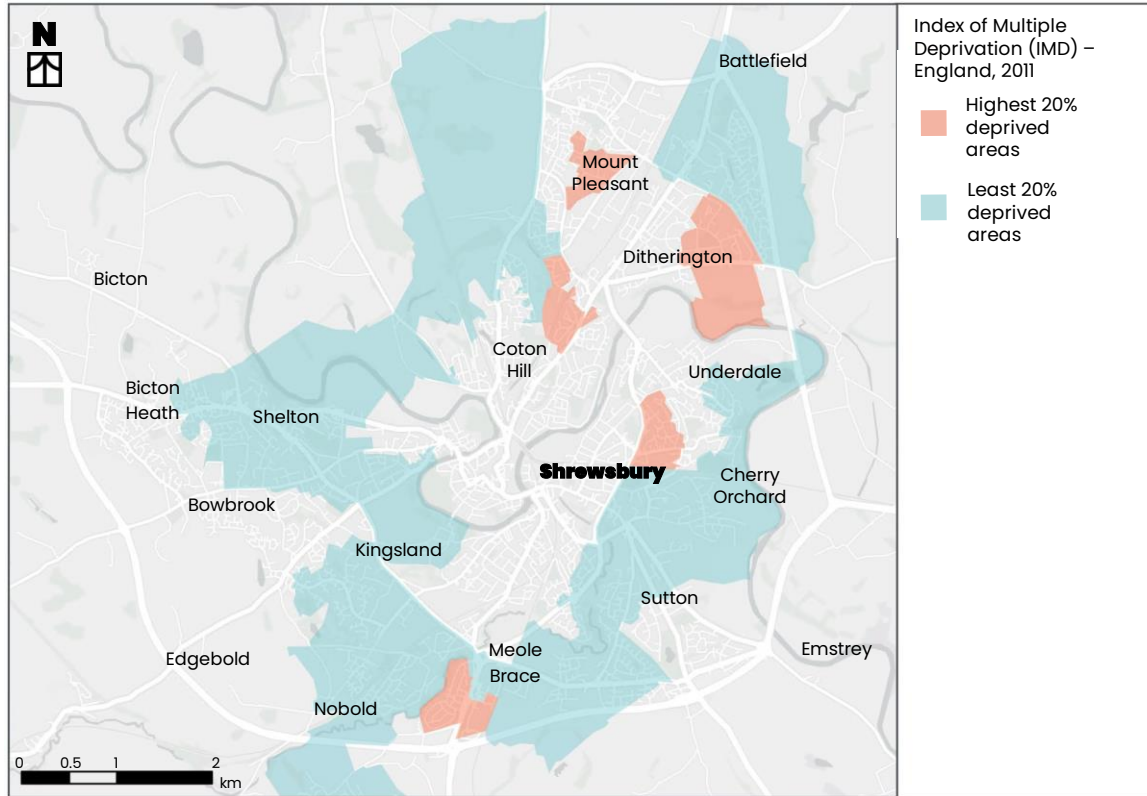


Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS.
OS API – Contains OS data © Crown Copyright 2022. Some data provided by Shropshire Council.

Additionally, Map 14 and Map 15 illustrate that areas to the north of Shrewsbury typically have higher levels of deprivation and lower car ownership levels compared to other areas of Shrewsbury. The lack of active travel infrastructure in these deprived areas results in lower rates of active travel and higher rates of car dependency.



Map 15 – Indices of Multiple Deprivation



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS.
OS API – Contains OS data © Crown Copyright 2022. Some data provided by Shropshire Council.

There is a demand for trips routing to and from the north of Shrewsbury.

Outputs from the NWRR SATURN Model for the 2023 Do Minimum scenario show that during the morning and evening peak hours, most of the vehicles on St Michael’s Street are travelling to/from the north of Shrewsbury.

Table 16 – Total number of vehicles on St Michael’s Street, Shrewsbury, by origin-destination (2023)

Scenario	Total vehicles, Morning Peak (08:00 – 09:00)	Total vehicles, Evening Peak (17:00 – 18:00)
Vehicle trips between South-West Shrewsbury and Shrewsbury North, routing via. St Michael’s Street.	110	84
Vehicle trips between Shrewsbury Town Centre and Shrewsbury North, routing via. St Michael’s Street.	107	72

Scenario	Total vehicles, Morning Peak (08:00 – 09:00)	Total vehicles, Evening Peak (17:00 – 18:00)
Vehicle trips between North Shrewsbury and Shrewsbury North, routing via. St Michael's Street.	73	54
Vehicle trips between South-East and Shrewsbury North, routing via. St Michael's Street.	19	57
Vehicle trips between Outside Shrewsbury and Shrewsbury North, routing via. St Michael's Street.	77	72
Total vehicles on St Michael's Street	386	339

Source: NWRR SATURN Model, Do Minimum, 2023

The north of Shrewsbury, including Battlefield Enterprise Park and Monkmoor Industrial Estate, hosts many important employment sites, which are significant trip generators in Shrewsbury. The lack of active travel connections results in most employees in this area being forced to depend on private motor vehicles for their daily commuting needs.

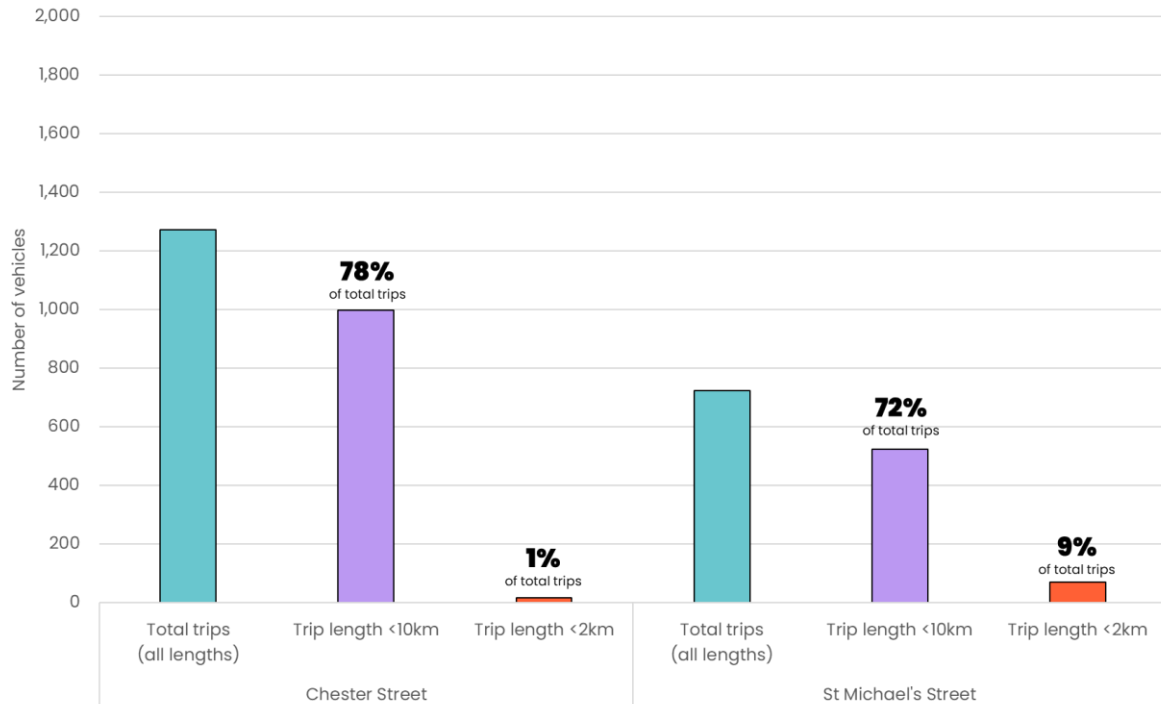
Most journeys travelling on key routes to the north of Shrewsbury are short in length.

Outputs from the NWRR SATURN Model for the 2023 Do Minimum scenario, presented in Figure 6 and Figure 7, show that on Chester Street and St Michael's Street, most journeys made by vehicles during the morning and evening peak hours are less than 10km in length.

Whilst it is recognised that some of these journeys are required to be undertaken by private motor vehicle due to personal circumstances and journey requirements, it is considered that a proportion of these trips could be undertaken by cycling or public transport, if infrastructure was improved.

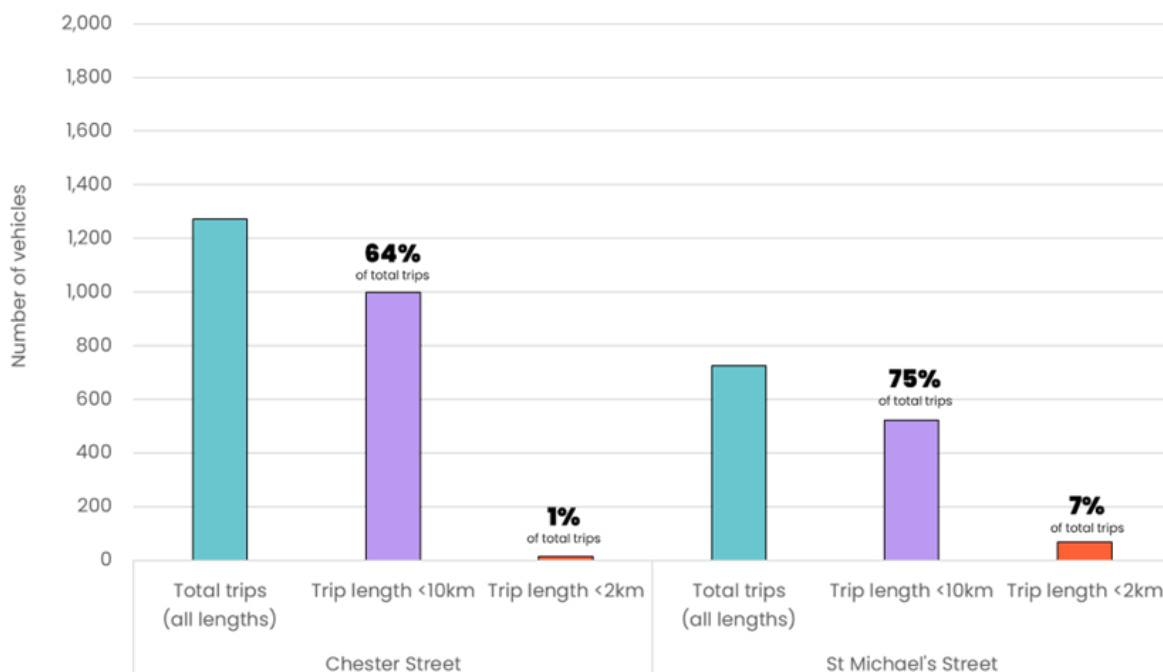


Figure 9 - Trip lengths of journeys routing on Chester Street and St Michael's Street, AM Peak (Total Vehicles)



Source: NWRR SATURN Model, 2023 Do Minimum Morning Peak

Figure 10 - Trip lengths of journeys routing on Chester Street and St Michael's Street, PM Peak (Total Vehicles)



Source: NWRR SATURN Model, 2023 Do Minimum Evening Peak

There is poor connectivity, via active travel modes, to Flaxmill Maltings.

Flaxmill Maltings is an important historic site comprised of eight listed buildings, four of which have been recently restored by Historic England. Opened in 2023, the site has significant economic potential to spur future regeneration to the north of the town and attract visitors to Shrewsbury. However, the site currently feels separated from the amenities to the town centre, particularly for people wishing to access the site by walking, wheeling, or cycling.

What is this intervention?

Key routes to the north of Shrewsbury would prioritise walking, cycling, and wheeling, to improve connectivity to local facilities and communities.

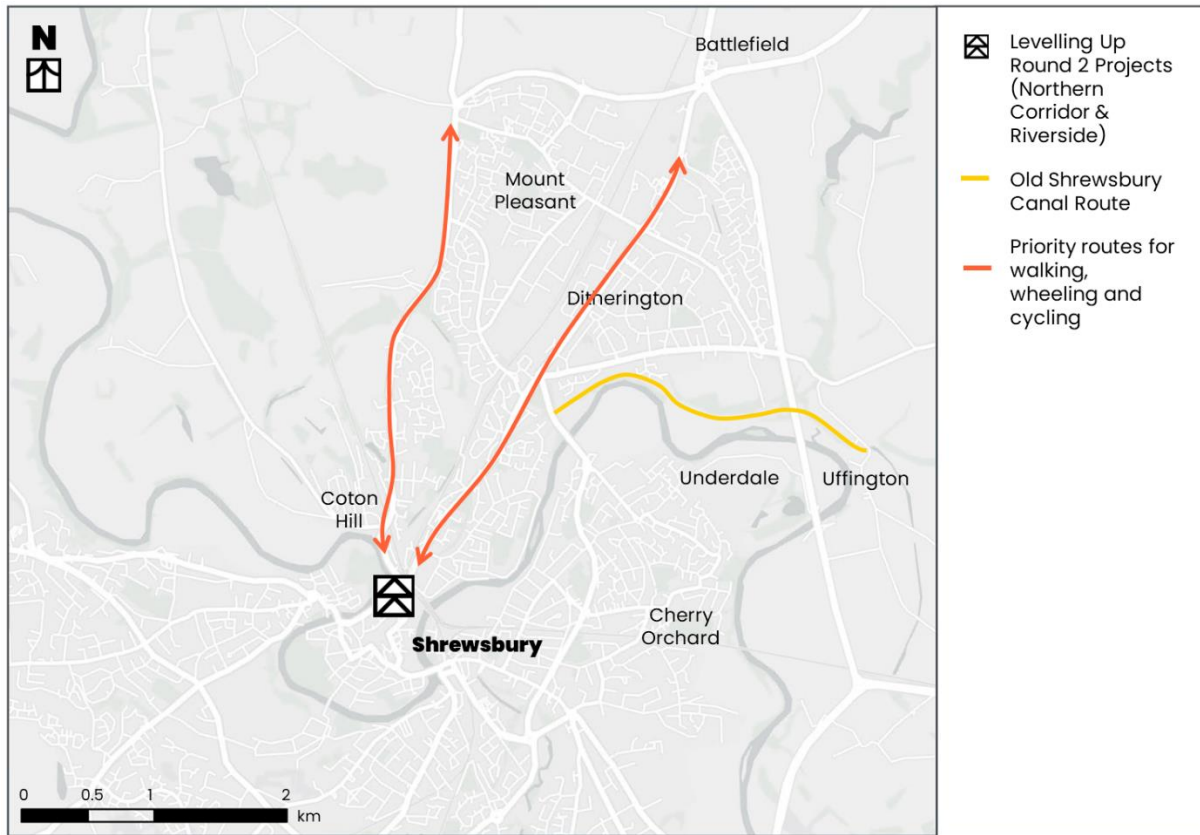
Shropshire Council has been granted £18.7 million in funding from the Levelling Up Fund Round 2 to support the revitalisation of Shrewsbury's town centre.

This funding has been allocated to two interrelated projects, including various transport, active travel, and public space initiatives near the railway station.

It is recommended a detailed feasibility study should be conducted to assess the viability of reinstating Shrewsbury Canal.

This would explore previous aspirations to re-open and re-connect Shrewsbury town centre with the canal network to the north, considering its suitability for active travel to complement, other, more direct routes.

Map 16 – Active Travel Links to link to north Shrewsbury



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

What are the impacts of this intervention?

Active Travel

By enhancing active travel connectivity between the town centre and northern Shrewsbury, a considerable proportion of existing private motor vehicle trips could shift to sustainable modes of transport, such as walking, wheeling, cycling, or public transport. The reinstatement of the canal network to the north would provide an alternative off-road walking and cycling link to Flaxmill Maltings and the surrounding existing cycling network, helping to establish a coherent active travel network. These interventions would reduce traffic congestion in the town centre and provide improved access to employment and leisure opportunities.

Economic benefits

Improving active travel connections between Shrewsbury town centre and Flaxmill Maltings would have a positive impact on the towns cultural heritage. This

would enable more people to easily reach and explore the site, leading to more people spending money on entrance fees, souvenirs, food, and other local businesses around the site. This would contribute to the development of a thriving local economy that benefits both residents and businesses in the area.

Additionally, the enhanced accessibility would provide better opportunities for people to access jobs in the vicinity, leading to economic growth and unlocking the economic potential of the northern part of Shrewsbury.

Case Studies

Glasgow, Scotland

In 2023, Glasgow City Council began developing a £3.6 million package to encourage walking, wheeling, and cycling in Glasgow. This project seeks to further develop active travel routes to make it easier for people to access services, facilities and amenities within a short walk, wheel, cycle, or public transport journey from home. In particular, an active travel route would be implemented which would serve several communities and provide a direct active travel link to the town centre, helping to encourage more people to walk and cycle.

For more information about this case study:

<https://www.glasgow.gov.uk/index.aspx?articleid=30142#:~:text=The%20%C2%A33.6m%20package,and%20cycling%2C%20and%20pedestrian%20safety>

Key Considerations for delivery of the intervention

- ☒ Continued liaison with Shrewsbury Levelling Up Fund project to ensure high quality walking and cycling links;
- ☒ Establish monitoring and evaluation to assess benefits of Levelling Up Fund project;
- ☒ Undertake detailed feasibility study assessing the viability of restoring Shrewsbury Canal; and
- ☒ Continued engagement with Flaxmill Maltings concerning further restoration plans for the site.



***Public Transport
and Micromobility***



Integrate Park and Ride with general bus services

The current utilisation of Park and Ride services is low, mainly due to their low frequency and limited routing patterns. To enhance their attractiveness, the Park and Ride offer would be integrated with the general bus service. By doing so, users of the Park and Ride facilities would have the opportunity to access a wider range of destinations, creating a more enticing and convenient travel option. This integration would not only attract more individuals to utilise bus services in Shrewsbury but also promote a reduction in private motor vehicle usage and congestion within the town. Furthermore, it would contribute to the economic viability of bus services by increasing patronage and overall attractiveness. Most major recent developments in the town, and allocated sites for development, are located at the urban fringe, and have bus services provided or proposed and therefore would require fast links to the town centre to which this intervention can contribute to.

How does this deliver the Shrewsbury Big Town Plan?

This intervention aligns with the key principles of this strategy, and therefore the Shrewsbury Big Town Plan vision and objectives as set out in Table 17.

Table 17 - Alignment with Key Principles

Key Principle		Key Principle	
A - Reduce / remove through traffic from the town centre		H - Improve resilience of local transport network to extreme weather events	
B - Ensure convenient access to town centre/local facilities and uptake of sustainable modes for these journeys		I - Provide an efficient public transport network with improved facilities in town centre	
C - Reduce vehicle speeds and volumes of private motor vehicles		J - Improve cross-town connectivity by sustainable transport modes	
D - Reduce severance caused by River Severn and railway line		K - Ensure servicing access to business and event sites is maintained	
E - Increase priority given to buses, pedestrians and cyclists and improve road safety for all users		L - Improve environmental quality and air quality	



Key Principle		Key Principle	
F - Provide more sympathetic public spaces for historic and environmental assets		M - Reallocate road space to provide for space for businesses and event activity, pedestrians, and cyclists	
G - Enhance Park and Ride offer, and incentivise use		N - Enhance rail connectivity to better accommodate local, regional, and national travel	

Why is this intervention required?

Public perception of Park and Ride is low.

As part of previous consultations relating to Shropshire Council’s Bus Service Improvement Plan, members of the public have expressed their dissatisfaction with the current Park and Ride service. The feedback noted that the service is tired and outdated and fails to provide a frequent and direct service due to increased volumes of private motor vehicles and road closures. In addition, the lack of a Sunday and evening service fails to provide a convenient route to the town centre.

Park and Ride services are currently not financially sustainable.

Shrewsbury Park and Ride provides passengers with a semi-express link to the town centre. It is organised and funded by Shropshire Council and operated by Arriva on a 20-minute frequency. Since 2011, annual Park and Ride passenger numbers have declined by 50%, dropping from 1.2 million passengers in 2010 to 600,000 passengers in 2019. Due to low patronage, the service is operating at a financial deficit and requires additional financial support from the Council.

The current Park and Ride service fails to provide a flexible service for passengers.

Park and Ride passengers are currently given one choice in destination between the outskirts of Shrewsbury into the town centre. Whilst the town centre has much to offer, the service fails to connect to other key destinations across the entire town. Additionally, the service does not run frequently, with no services on Sundays or after 6:30pm. It is also not reliable because buses do not have priority over other motor vehicles, meaning they are often delayed in congestion during peak periods.

Operating separate Park and Ride and general bus services result in a poor vehicle optimisation.

The increased number of buses on the road, combined with low patronage of the Park and Ride service, leads to these vehicles being underutilised and a decrease in their overall efficiency. As a consequence, services have become cost, time, and resource inefficient. This inefficiency translates to a higher number of buses traveling on the roads than necessary, contributing to congestion and poor air quality throughout the town.

What is this intervention?

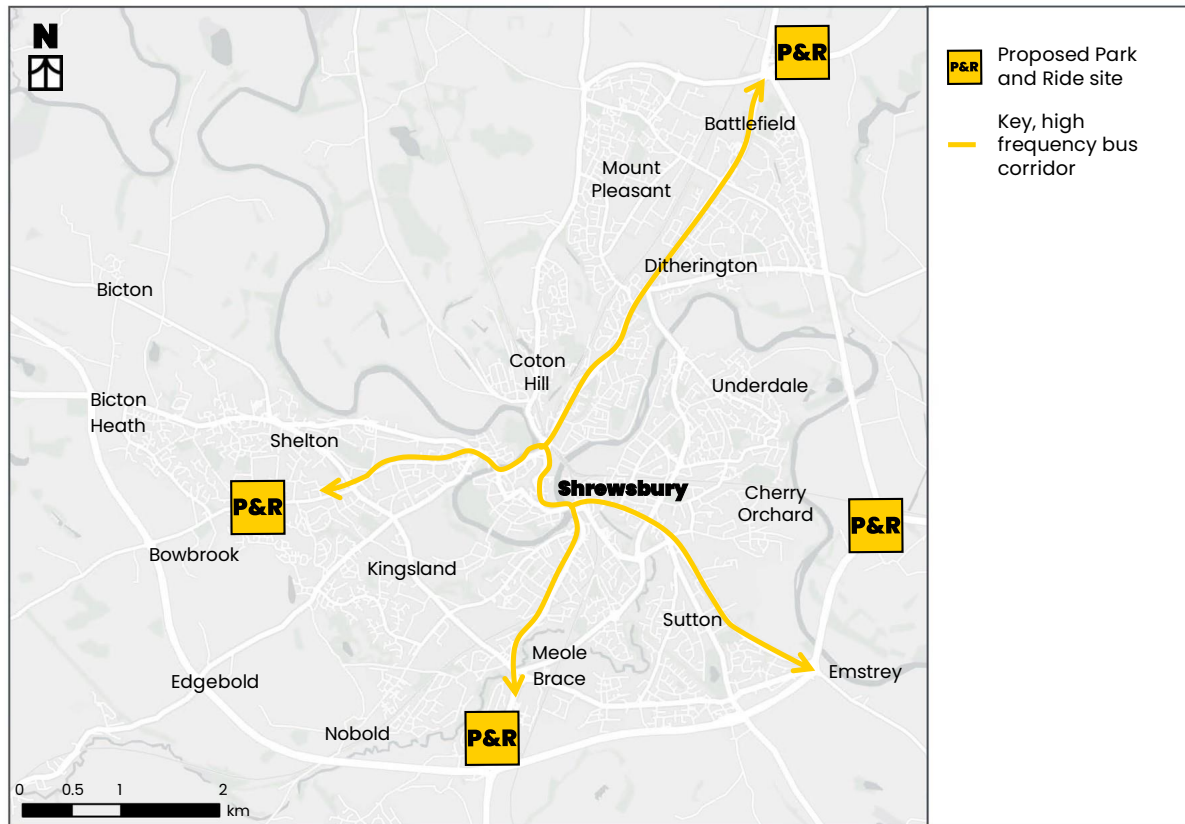
Park and Ride would be integrated with the general bus service.

In order to enhance accessibility and the financial sustainability of the bus service, Park and Ride in Shrewsbury would integrate with the existing bus network instead of operating a separate service (whilst maintaining an express element).

This integration would enable passengers boarding at Park and Ride sites to conveniently access a range of destinations across the town, rather than only being provided with one destination.

It is vital that the integrated Park and Ride and bus service offer is embedded alongside a comprehensive parking plus strategy. This strategy would aim to improve the attractiveness of public transport to reduce overall dependence on using private motor vehicles by offering affordable charging arrangements at Park and Ride locations in comparison to other car parks which are situated closer to the town centre.

Map 17 – Integration of general buses and Park and Ride services



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

What are the impacts of this intervention?

Air Quality

Integrating the Park and Ride service with the general bus service would boost its attractiveness, encouraging people to choose Park and Ride as a preferred option for accessing the town centre. By offering a combined service, the integration also reduces the reliance on private motor vehicles for reaching destinations on the outskirts of the town. This would contribute to reducing the number of private motor vehicles within the town centre, lowering emissions of harmful pollutants such as carbon dioxide and nitrogen dioxide into the atmosphere.

Economic benefits

The integration of Park and Ride with the general bus service in Shrewsbury would enhance the overall convenience and accessibility of public transport. This integration is expected to lead to increased patronage on Park and Ride services, which is essential for ensuring the services long-term financial sustainability and

efficiency. Additionally, this intervention would reduce the size of the overall bus fleet, generating further economic efficiencies.

Flexibility

Integrating Park and Ride with the bus service would enable visitors, residents, and commuters to benefit from a range of stops located across Shrewsbury, such as Royal Shrewsbury Hospital, Flaxmill Maltings and/or Shrewsbury Business Park. This would increase the attractiveness of public transport for accessing key amenities not just within the river loop, but across the town.

Case Studies

York

The City of York Council operates the York Park and Ride service, in collaboration with First York, which is the largest Park and Ride network in the UK. With six strategically located sites on the outskirts of the city, the service seamlessly integrates with the wider bus network. This integration offers significant benefits to passengers, who can conveniently purchase a single ticket that allows them to travel on both the Park and Ride buses and other city bus services.

The integrated ticketing system has been well-received by passengers, with 10% of Park and Ride users from York frequently connecting with other city bus services, and an additional 31% occasionally making such connections. This flexibility enables passengers to not only reach the city centre but also access various bus stops throughout the city, expanding their transport options and promoting sustainable travel choices.

Key Considerations for delivery of the intervention

- ☒ Agree on the bus route from Park and Ride stations to key local facilities, including the town centre and railway station;
- ☒ Agree on service frequency and ticketing structure of service;
- ☒ Further consideration of alternative measures to increase patronage e.g., optimising signals for Park and Ride services; and
- ☒ Conduct a network planning exercise in conjunction with Shropshire Enhanced Partnership.

Create an enhanced Park and Ride offer, including new and relocated facilities

The current underutilisation of Park and Ride services across Shrewsbury can be attributed to a variety of factors such as poor service frequency, lack of investment, poor quality infrastructure, lack of attractiveness compared to private motor vehicle and inconvenient, or absent locations. To address this issue, a new Park and Ride station to the east of Shrewsbury would be created. Additionally, Oxon and Battlefield Park and Ride would be relocated to better serve local populations and to better intercept motor traffic arriving from the Strategic Road Network.

How does this deliver the Shrewsbury Big Town Plan?

This intervention aligns with the key principles of this strategy, and therefore the Shrewsbury Big Town Plan vision and objectives as set out in Table 18.

Table 18 - Alignment with Key Principles

Key Principle		Key Principle	
A - Reduce / remove through traffic from the town centre		H - Improve resilience of local transport network to extreme weather events	
B - Ensure convenient access to town centre/local facilities and uptake of sustainable modes for these journeys		I - Provide an efficient public transport network with improved facilities in town centre	
C - Reduce vehicle speeds and volumes of private motor vehicles		J - Improve cross-town connectivity by sustainable transport modes	
D - Reduce severance caused by River Severn and railway line		K - Ensure servicing access to business and event sites is maintained	
E - Increase priority given to buses, pedestrians and cyclists and improve road safety for all users		L - Improve environmental quality and air quality	
F - Provide more sympathetic public spaces for historic and environmental assets		M - Reallocate road space to provide for space for businesses and event activity, pedestrians, and cyclists	



Key Principle		Key Principle	
G - Enhance Park and Ride offer, and incentivise use		N - Enhance rail connectivity to better accommodate local, regional, and national travel	

Why is this intervention required?

The lack of Park and Ride facility in east Shrewsbury encourages people to drive directly into the town centre.

Shrewsbury's Park and Ride services currently operate from three sites, located to the north, west, and south of the town centre. This means that visitors wishing to travel to the town centre from the east lack a dedicated Park and Ride facility, which encourages private motor vehicles to travel into the town centre to reach a car park.

The current location of Harlescott Park and Ride is not appropriate for intercepting private motor vehicles routing from the north of Shrewsbury.

Harlescott Park and Ride is approximately 0.9km south of Battlefield Roundabout and 4km north of the town centre. This location is counterproductive as it fails to be close enough to the roundabout to immediately discourage vehicles travelling from the A53 or A49 from parking in the town centre.

Oxon Park and Ride may need to be relocated to maximise connectivity to the new residential development proposed in Bicton Heath.

Land to the north of Welshpool Road in Bicton Heath has been granted planning permission for the development of mixed residential development of 340 dwellings. As part of the proposals, the Park and Ride site would be relocated to the south of Welshpool Road, approximately 140m east of the A5/A458 roundabout, with access gained from a new traffic signal-controlled junction with the Welshpool Road.

What is this intervention?

A new Park and Ride site would be positioned to the east of Shrewsbury.



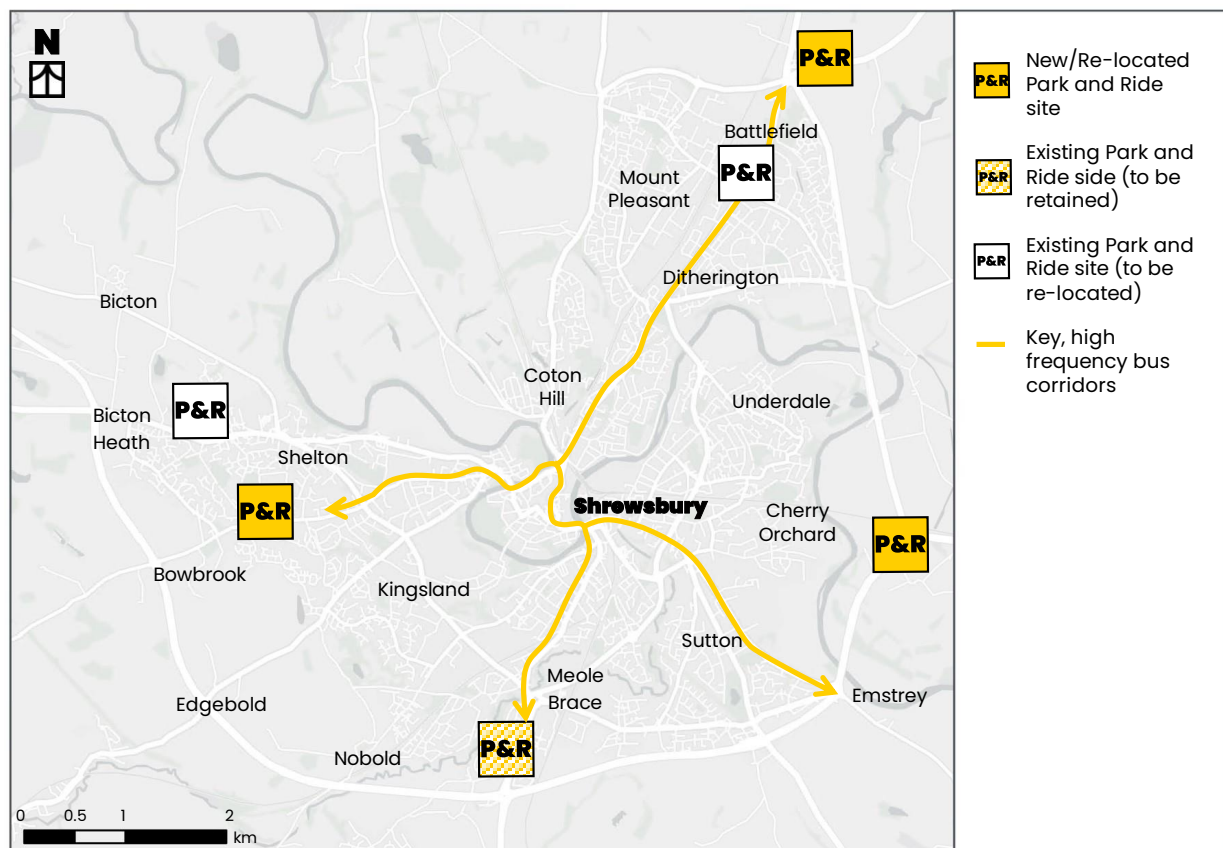
Opportunities to locate this Park and Ride facility near the Emstrey Roundabout Island would be explored, given its proximity to the town centre and the A5 / B4380 that provides access to/from Birmingham and Wolverhampton. In the future, this site could be subsumed as part of the development of Parkway “East” as stated in intervention ‘Provide Parkway Station “Shrewsbury East”’.

Harlescott Park and Ride would be relocated to a location further north than its current location.

This would be situated in close proximity to Battlefield Roundabout, intercepting traffic routing along the A49 and the A53.

Oxon Park and Ride would be relocated to maximise connectivity between the new residential development, Royal Shrewsbury Hospital, and the town centre.

Map 18 – New and re-located Park and Ride sites



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

Park and Ride facilities could also serve as important destinations themselves.

Park and Ride sites could be designed with both mobility and non-mobility components to attract visitors. These components could include amenities such as:

- ☒ Parcel lockers;
- ☒ Cafes;
- ☒ Co-working spaces; and
- ☒ Play Areas.

Further information concerning the potential for Park and Ride sites can be found in the Intervention '*Expansion of mobility hubs across Shrewsbury, including creating Park and Chose sites*'.

What are the impacts of this intervention?

Accessibility

By relocating Oxon Park and Ride, a connection would be established between the new residential development and the Park and Ride site, thereby improving the potential for a high demand route. This relocation would enable buses to serve the new residential area, Royal Shrewsbury Hospital and the town centre, providing users with an attractive route that serves key destinations across the town.

Moreover, the relocation of the Park and Ride site, would also address the additional parking requirements of the hospital. The site would provide staff and visitors to the hospital with a sustainable public transport route to a high-quality stop within walking distance of the hospital.

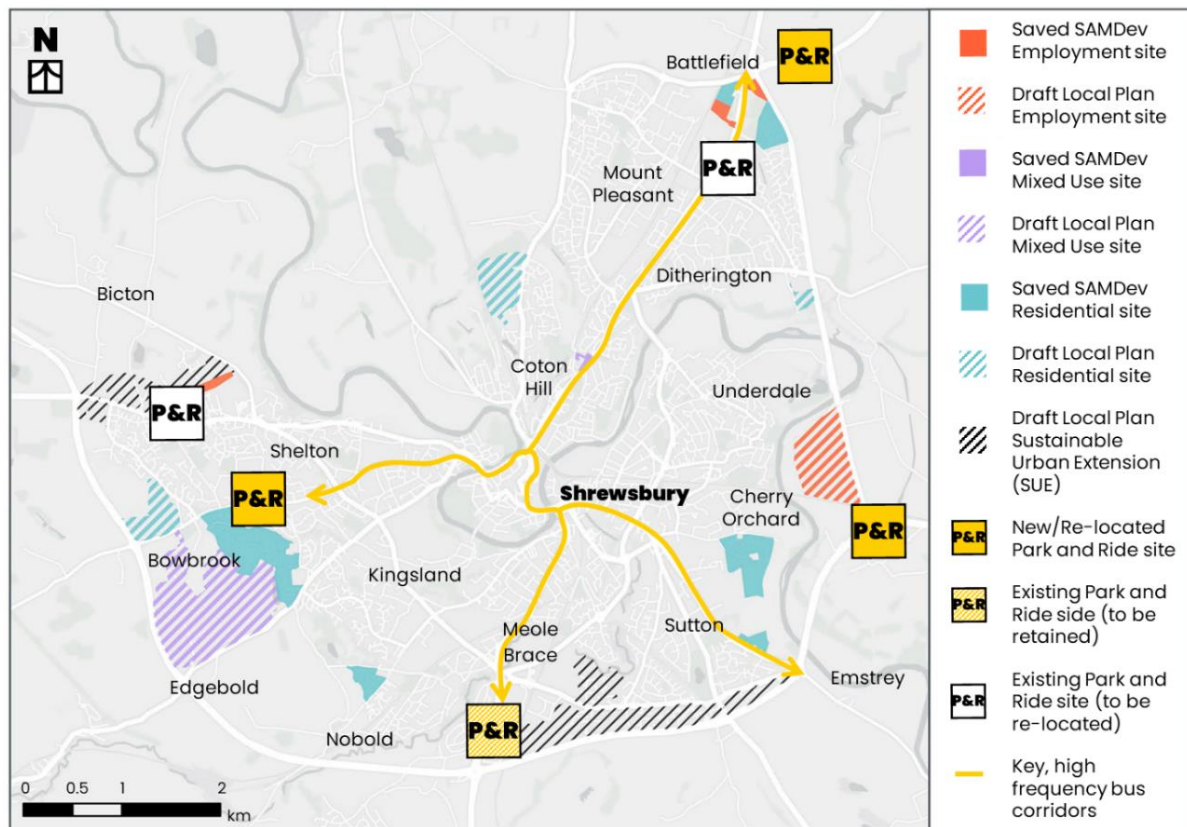
Development opportunities

As shown in Map 19, allocated sites for residential and development in the draft Local Plan are strategically situated near the proposed Park and Ride sites. By relocating Park and Ride facilities, these development sites would benefit from dedicated public transport infrastructure that becomes an integral part of daily routines from the outset, reducing dependency on private motor vehicles for accessing essential services across the town.



Additionally, Park and Ride buses would operate cross-town, facilitating public transport routes that connect new and existing residential areas with new and existing employment sites.

Map 19 – New and re-located Park and Ride sites and facilities and allocated/draft allocated development sites



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

Enhanced town centre experience

By relocating existing Park and Ride sites and establishing a new Parkway site to the east, individuals would be encouraged to park their vehicles outside the town centre and utilise public transport or opt for walking and cycling to access the town centre. This shift would reduce the prevalence of private motor vehicles in the town centre, fostering a more enjoyable and inviting atmosphere for residents and visitors alike. Additionally, the more people using public transport within Shrewsbury would help to reduce the overall number of vehicles on the road, leading to lower emissions of harmful pollutants such as carbon dioxide and nitrogen dioxide.

Economy

Ensuring that Park and Ride services are strategically located across Shrewsbury would likely enhance patronage levels for the service. This increase in patronage means more passengers purchasing tickets, resulting in an overall increase in revenue, leading to fewer subsidies being required to cover bus operational costs. In particular, the Oxon Park and Ride service would benefit from connecting to the residential development and the hospital, helping to generate further demand for this route.

Case Studies

Oxford Park and Ride

Oxford's Park and Ride services are popular due to their affordable combined parking and bus ticket options. Prices range from £4 for a car with 1 adult to £5 for a car with 2 adults. To meet increasing demand, Oxford County Council began constructing a new 850-space Park and Ride facility in Eynsham, east of Oxford on the A40. The facility will be operational 24/7 and will offer amenities such as cycle storage, public toilets, and electric vehicle parking. The Eynsham site will reduce congestion on the A40 and enhance the availability of reliable public transport to and from Oxford. The project is expected to be completed in early 2024, with an opening date in late 2025.

For more information about this case study:

<https://www.oxfordshire.gov.uk/residents/roads-and-transport/roadworks/future-transport-projects/a40-improvements/eynsham-park-and-ride>

Cambridge

Cambridgeshire and Peterborough Combined Authority launched their new fleet of 30 electric vehicles in May 2023. These zero-emission, double decker uses will operate along the Park and Ride network across Cambridge, making the service fully electrified and carbon-free. The Park and Ride network operates on a fully commercial basis and the Combined Authority are currently seeking to expand Park and Ride sites across the city, such as Newmarket Road Park and Ride from 259 spaces to over 2,000.

For more information about this case study:

<https://www.stagecoachbus.com/promos-and-offers/east/cambridges-electric-buses>

Key Considerations for delivery of the intervention

- ☒ Identify a suitable location in Emstrey for a Park and Ride site;
- ☒ Undertake a formal land registry search across Shrewsbury for potential location of Park and Ride facility;
- ☒ Agree frequency of bus service and linkages with Parkway East; and
- ☒ Detailed technical study to explore procurement of electric powered buses and explore opportunities for funding.

Revise existing bus routes and frequencies across Shrewsbury

Many residents in Shrewsbury lack a reliable bus service, resulting in an overreliance on private motor vehicles. To address these issues and improve sustainable transport connections, existing bus routes and frequencies would be revised, particularly in the north of Shrewsbury. Improvements would facilitate better connectivity between key destinations in the north, fostering stronger connections with the town centre. Moreover, a strong public transport offer would facilitate the development of new residential and employment areas in the north by ensuring that residents and employees have access to reliable public transport options, reducing dependence on private motor vehicles. Additionally, an improved flexible Demand Responsive Transport System would be in place, enabling people in rural areas to be picked up and dropped off at their preferred destination.

How does this deliver the Shrewsbury Big Town Plan?

This intervention aligns with the key principles of this strategy, and therefore the Shrewsbury Big Town Plan vision and objectives as set out in Table 19.

Table 19 - Alignment with Key Principles

Key Principle		Key Principle	
A - Reduce / remove through traffic from the town centre		H - Improve resilience of local transport network to extreme weather events	
B - Ensure convenient access to town centre/local facilities and uptake of sustainable modes for these journeys		I - Provide an efficient public transport network with improved facilities in town centre	
C - Reduce vehicle speeds and volumes of private motor vehicles		J - Improve cross-town connectivity by sustainable transport modes	
D - Reduce severance caused by River Severn and railway line		K - Ensure servicing access to business and event sites is maintained	
E - Increase priority given to buses, pedestrians and cyclists and improve road safety for all users		L - Improve environmental quality and air quality	



Key Principle		Key Principle	
F - Provide more sympathetic public spaces for historic and environmental assets		M - Reallocate road space to provide for space for businesses and event activity, pedestrians, and cyclists	
G - Enhance Park and Ride offer, and incentivise use		N - Enhance rail connectivity to better accommodate local, regional, and national travel	

Why is this intervention required?

In the northern part of Shrewsbury, there are many households who do not have access to a car or van, and these areas also have poor bus frequencies compared to other areas of the town.

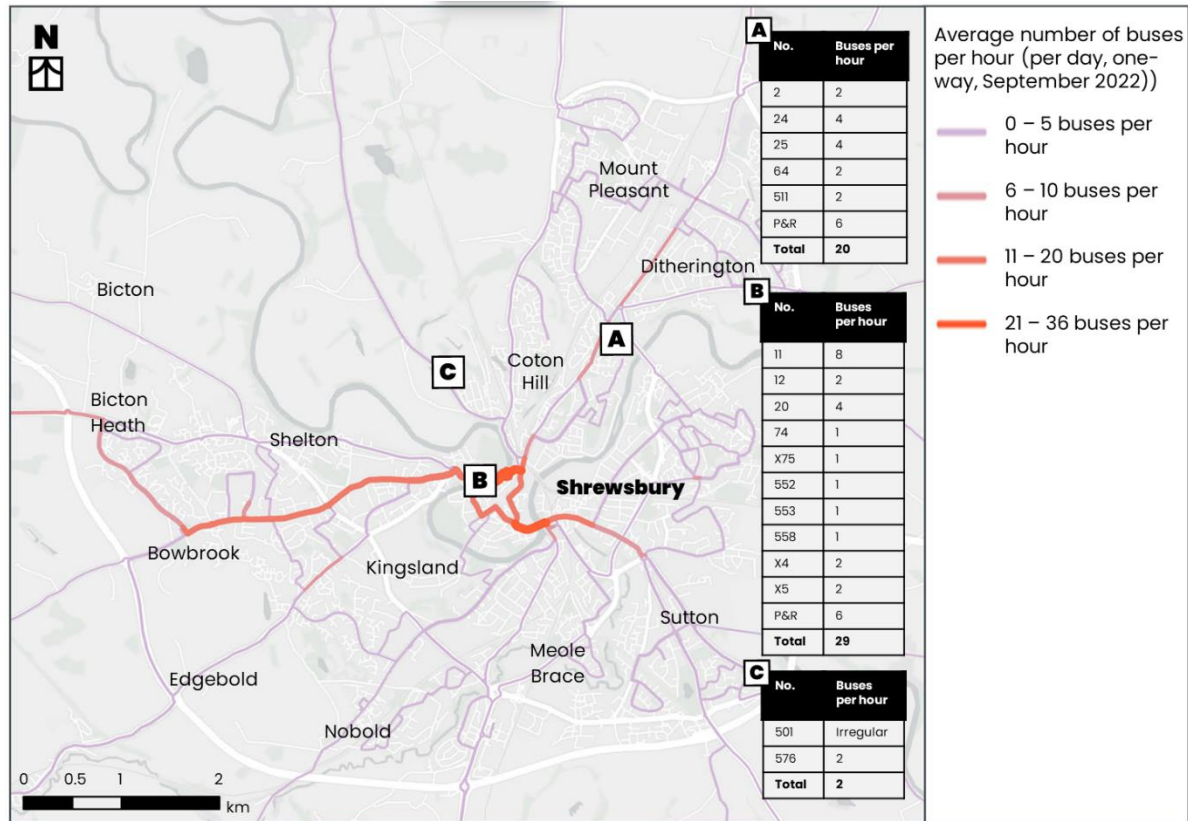
The majority of bus routes in Shrewsbury are oriented in an east-west direction, with many of them crossing Welsh Bridge or English Bridge. However, there are limited connections from the north of Shrewsbury to the town centre by public transport.

As shown in Map 20, during a typical weekday, only 20 buses per hour travel both ways (into and out of the town centre) along Whitchurch Road, which is located to the north of Shrewsbury. Additionally, bus services along Berwick Road are more infrequent, with only 2 buses travelling both ways per hour. This number is considerably lower than the 29 buses per hour that travel from the western part of the town centre via Frankwell.

This poor frequency excludes populations in the north of Shrewsbury, including many households with no access to a car or van and those which are classified as living in the highest 20% of the most deprived neighbourhoods in the UK.



Map 20 – Current bus frequency on key corridors (September 2022)



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS
 Contains data from OS Zoomstack. Contains public sector information under the Open Government Licence v.3.0

Bus services across Shrewsbury fail to provide an attractive alternative to using a private motor vehicle.

Many bus services in Shrewsbury have irregular schedules, with frequencies ranging from every 20 minutes to as little as every two hours. This limited frequency, combined with congestion in the town centre and poor connectivity to areas north of the centre and to the rural hinterland, results in limited cross-town bus services.

Furthermore, the current bus services fail to meet the needs of the evening economy in Shrewsbury. There is a lack of evening bus services, preventing people from accessing the town for entertainment, leisure, shopping, and hospitality purposes. This limitation hinders the potential of the night-time economy and forces people to rely on private motor vehicles for transport. Additionally, the absence of bus services on Sundays discourages people from using buses to travel to the town centre.

The infrequent bus service also excludes individuals without private motor vehicles from accessing the town.

Public transport connectivity to and from Shrewsbury from rural areas is poor.

Many rural towns and villages in Shropshire are currently served by bus services that have infrequent schedules to the town centre, often operating only two or three days a week.

These buses are outdated and frequently experience delays or cancellations, which has led to a negative public perception of public transport and low numbers of passengers across Shropshire:

- ☒ 56% of responses stated that the current provision of bus services in Shropshire was poor;
- ☒ 1,367 respondents stated that buses are not frequent enough;
- ☒ 1,184 respondents stated that no bus services are available; and
- ☒ 1,733 respondents stated that buses do not run at suitable times.

What is this intervention?

Bus routes to the north of Shrewsbury would be enhanced.

This would consist of increasing the frequency of buses, allowing for more frequent and reliable transport options for residents and visitors in the northern part of the town. Bus routes would also be amended to best reflect demand.

An improved Demand Responsive Transport (DRT) System would operate in urban and rural areas offering more frequent and reliable services to the town centre.

DRT is a flexible transport system designed to cater to the unique requirements and preferences of passengers. In October 2023, Shropshire Council began trialling a DRT bus service, replacing two fixed services in the south of Shrewsbury. The service currently operates from 07:30 – 18:30 Monday to Saturday and single journeys cost up to £2, with concessionary and school passes accepted. If successful, it is hoped that DRT could be extended to other areas across the county, offering residents the convenience of accessing the town centre and essential amenities in Shrewsbury. This would mean that individuals would be able to request a ride based on their specific needs and be picked up and dropped off at their desired location.

What are the impacts of this intervention?

Connectivity

Improved connections between key destinations to the north of Shrewsbury, such as Flaxmill Maltings, would be facilitated by a robust public transport network. This network would establish stronger links between the town centre and this destination, making it easily accessible for all. By combining this connection with well-developed active travel options, people would have a range of attractive alternatives to relying on private motor vehicles.

New developments

Improving the public transport options, particularly to the north of Shrewsbury, would enhance accessibility to allocated residential and employment developments. The draft Shropshire Local Plan outlines plans for approximately 1,075 dwellings in areas to the north of Shrewsbury between 2016 and 2038, in addition to around 45 hectares of employment land for development. By facilitating better access to these areas, new development sites would be more appealing and conducive to growth through being able to capitalise on sustainable transport opportunities.

In addition, as a strong public transport offer would be established initially, residents and employees located at new development sites would be encouraged to adopt sustainable behaviours from the outset.

Inclusivity

A strong public transport system would benefit users who previously faced limitations in using public transport due to infrequent services. By offering a reliable and frequent service, residents would have better access to leisure and employment opportunities across the town. This inclusivity ensures that transport is accessible to all, promoting equal opportunities and reducing disparities within the community. Furthermore, this increased accessibility would contribute to the economic growth of Shrewsbury by enabling more individuals to access employment, education, and recreational opportunities.

Flexibility

The introduction of a DRT System would complement the existing bus network in Shrewsbury. This flexible system would provide residents from rural areas with on-

demand transport to strategically located bus stops in the town centre. This would create an efficient transport option tailored to residents' needs, eliminating concerns about return journeys, and offering a reliable alternative to private motor vehicles for rural travel.

Case Studies

Halifax

To address congestion across the town centre, Calderdale Council are investing in an enhanced bus network between the railway station and key amenities. This includes the revitalisation of bus stop facilities across the town to provide better amenities for passengers.

For more information about this case study:

<https://calderdalenextchapter.co.uk/projects/a629-halifax-town-centre>

Warwickshire

In May 2022, Warwickshire County Council began operating the IndieGo PLUS service, a demand responsive transport offer across the county. This service enables residents to book and pay direct from their smartphone through a mobile app. The service is a fast and low-cost way to travel across the area, with fare prices of £2 for a single trip. Since its launch, over 22,425 passengers have used the service, totalling over 39,000 miles.

For more information about this case study:

<https://www.warwickshire.gov.uk/news/article/4208/hatton-and-west-warwick-s-innovative-on-demand-bus-service-celebrates-its-first-birthday>

Key Considerations for delivery of the intervention

- ☒ Agree on service frequency and routing with bus operators through the Shropshire Enhanced Partnership; and
- ☒ Identify the most suitable bus route to serve local populations in Shrewsbury.

Provide bus priority measures on key routes into the town centre

The town currently lacks sufficient measures to prioritise public transport over private motor vehicles. To address this issue, bus priority measures would be introduced, helping to establish faster and more direct routes into the town centre. This would make bus travel a more appealing choice compared to private motor vehicles, as it ensures a more reliable and efficient service. In addition to benefitting bus users, pedestrians and cyclists would also be able to take advantage of bus priority measures. These routes would not be through routes for private motor vehicles, creating a safer and more enjoyable experience for vulnerable road users, allowing them to move around the town more comfortably. By prioritising buses and providing a dedicated space for public transport services, these measures contribute to a more sustainable and inclusive transport system.

How does this deliver the Shrewsbury Big Town Plan?

This intervention aligns with the key principles of this strategy, and therefore the Shrewsbury Big Town Plan vision and objectives as set out in Table 20.

Table 20 - Alignment with Key Principles

Key Principle		Key Principle	
A - Reduce / remove through traffic from the town centre		H - Improve resilience of local transport network to extreme weather events	
B - Ensure convenient access to town centre/local facilities and uptake of sustainable modes for these journeys		I - Provide an efficient public transport network with improved facilities in town centre	
C - Reduce vehicle speeds and volumes of private motor vehicles		J - Improve cross-town connectivity by sustainable transport modes	
D - Reduce severance caused by River Severn and railway line		K - Ensure servicing access to business and event sites is maintained	
E - Increase priority given to buses, pedestrians and cyclists and improve road safety for all users		L - Improve environmental quality and air quality	



Key Principle		Key Principle	
F - Provide more sympathetic public spaces for historic and environmental assets		M - Reallocate road space to provide for space for businesses and event activity, pedestrians, and cyclists	
G - Enhance Park and Ride offer, and incentivise use		N - Enhance rail connectivity to better accommodate local, regional, and national travel	

Why is this intervention required?

There are limited dedicated bus priority measures across Shrewsbury.

In Shrewsbury, there are minimal bus priority measures currently in place, with the exception of a single bus lane on Castle Gates. This bus lane does not improve travel times for buses, and it is often occupied by servicing vehicles for adjacent businesses, leading to congestion as buses navigate through the town.

The absence of dedicated bus priority measures hinders the effectiveness and public perception of buses, as they have to share the limited road space alongside other vehicles. This situation exacerbates congestion issues and undermines the overall vitality of the bus system.

Bus travel in Shrewsbury is unreliable.

Due to the absence of dedicated bus priority measures, bus travel in Shrewsbury is unreliable. This concern was highlighted by feedback gathered from residents as part of the Council's Bus Service Improvement Plan, where they expressed dissatisfaction with the network's frequency, reliability, and route options. Without dedicated bus lanes or signal priority, buses often get caught in congestion, leading to inconsistent and unreliable arrival times. The lack of reliability can deter people from choosing buses as their preferred mode of transport.

During peak periods in Shrewsbury, certain bus routes often experience congestion caused by the road layout and high volumes of traffic. Given there are limited bus priority measures in place across the town, buses are unable to bypass the general congestion. This leads to queues and delays, impacting the reliability of bus services.

For example, at 07:18 the X5 bus timetable indicates that it should take 9 minutes to travel from Bicton to the town centre. However, at 17:17, the same journey is

scheduled to take 15 minutes, resulting in a 40% increase in the timetabled journey time. This additional time incorporated into the timetable is likely due to bus operators accounting for congestion and ensuring they can meet their operational timetables. It is unlikely that the longer journey time is solely due to more passengers boarding, as the minimum timetabled time throughout the day is 13 minutes.

What is this intervention?

Key routes into Shrewsbury would be made bus-only.

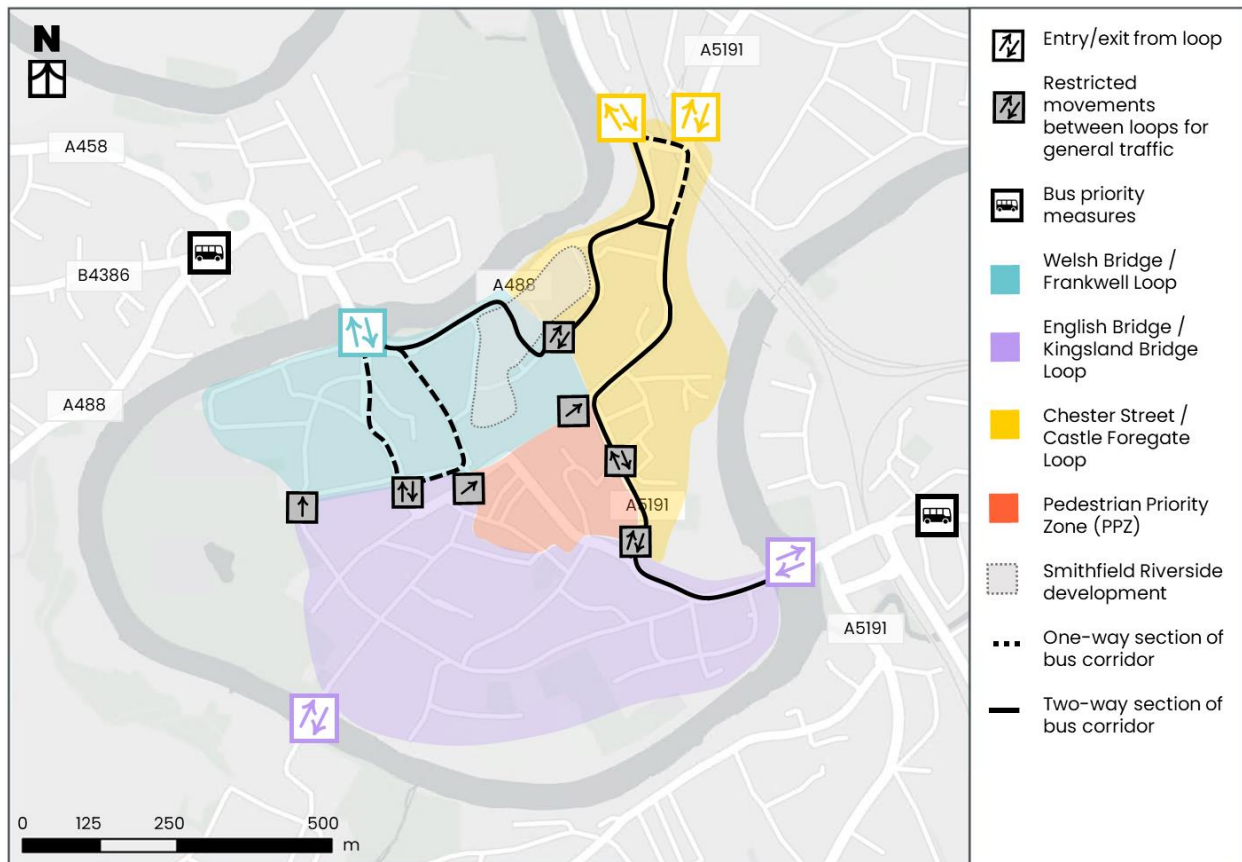
Detailed modelling would be necessary to determine the specific sections of road that would be converted into bus-only routes across Shrewsbury. However, a bus lane may be applicable at Frankwell Gyratory, inbound into Shrewsbury. This would effectively form a '*bus gate*', enabling buses to have priority over other vehicles, providing a journey time saving compared to private motor vehicles primarily arriving via A458 (The Mount).

Modal filters implemented as part of Local Access Priority Areas would exempt public transport.

Modal filters outlined in intervention '*Implement traffic loops to restrict through traffic from routing through the town centre*' would restrict private motor vehicles from using residential streets as through routes. However, any residential roads that fall within the Local Access Priority Areas and currently serve as bus routes would retain their access. This would ensure that public transport continues to have a convenient and efficient route, offering a direct and appealing option for all users.



Map 21 – Locations of potential bus priority in Shrewsbury



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

What are the impacts of this intervention?

Improved service efficiency and reliability

By implementing bus-only routes, the length of bus journeys would be reduced as buses would not have to share parts of their route with private motor vehicles. Bus operators would therefore be able to operate services more efficiently as buses would not be held up in general congestion. The smoother flow of buses through traffic would minimise delays and enhance the overall efficiency of the bus service. Buses would also be better able to adhere to their schedules, offering a more reliable mode of transport that encourages people to choose public transport over private motor vehicles.

Enhanced safety

The implementation of bus-only routes would not only benefit buses but also other sustainable modes of transport, such as walking, wheeling, and cycling. This

would create more pleasant and direct route for pedestrians and cyclists, ensuring their safety by reducing the number of private motor vehicles they encounter along their route.

Regional connectivity

The implementation of bus priority measures in Shrewsbury aims to encourage individuals to access the town centre and subsequent Shrewsbury Railway Station by public transport instead of opting to drive. This would enhance sustainable multi-modal connectivity and enable the residents of Shrewsbury to access regional and nationwide rail connections via bus.

Case Studies

Orford Road, Waltham Forest

Orford Road was previously a street that was dominated by private motor vehicles. However, since 2017, the street has been transformed into a street filled with people, enjoying time outside and socialising. This was achieved by reducing the dominance of private motor vehicles, expanding the space available for pedestrians, creating a pleasant environment for cycling and walking.

The scheme also functions as a bus priority corridor, prioritising sustainable transport between the hours of 10:00 and 22:00. This helps to prioritise bus travel along this route, providing the most direct route for buses.

Cambridge

Cambridgeshire County Council have implemented a series of bus gates across the city of Cambridge. They have also recently approved plans to implement a bus gate on Mill Road, a key route into the city centre following a period of public consultation which saw 72% of respondents supporting restricting private motor vehicles from crossing the bridge. The aim of this bus gate is to encourage people to choose sustainable travel options, such as walking and cycling and will help enable buses to operate more efficiently by reducing the need for buses to share road space with other private motor vehicles.

For more information about this case study:

<https://www.cambridgeshire.gov.uk/residents/travel-roads-and-parking/transport-projects/cycling-pedestrian-improvements/mill-road-bridge-tro>

Key Considerations for delivery of the intervention

- ☒ Agree on locations where bus priority measures would be most suitable;
- ☒ Agree on modal filter exemption list and type of modal filter to be used across Shrewsbury; and
- ☒ Detailed study to assess most suitable location for bus gate to the north of Shrewsbury.

Enhance Shrewsbury Railway Station

The first thing people travelling to Shrewsbury by rail see when entering the town is the Station. Currently, there is a lack of fully accessible and inclusive routes to access the station, particularly from the north. This is coupled with no direct route for people wishing to travel to/from the station to the south-east of the town. To address this, Shrewsbury Railway Station would be rejuvenated through public space enhancements and a transformation of the station forecourt area. Opening up the station forecourt would create more space to accommodate public transport, improving interchange facilities for multi-modal journeys. Provision of a new fully inclusive entrance to the station from the north of Shrewsbury would improve connectivity into the station from the north for all, reducing reliance on private motor vehicles for short distance trips to the station. There are also economic benefits from upgrading the station, unlocking currently dormant areas of the station to provide greater space for economic development, helping to create a vibrant station and a more positive first impression of the town.

How does this deliver the Shrewsbury Big Town Plan?

This intervention aligns with the key principles of this strategy, and therefore the Shrewsbury Big Town Plan vision and objectives as set out in Table 21.

Table 21 - Alignment with Key Principles

Key Principle		Key Principle	
A - Reduce / remove through traffic from the town centre		H - Improve resilience of local transport network to extreme weather events	
B - Ensure convenient access to town centre/local facilities and uptake of sustainable modes for these journeys		I - Provide an efficient public transport network with improved facilities in town centre	
C - Reduce vehicle speeds and volumes of private motor vehicles		J - Improve cross-town connectivity by sustainable transport modes	
D - Reduce severance caused by River Severn and railway line		K - Ensure servicing access to business and event sites is maintained	



Key Principle		Key Principle	
E - Increase priority given to buses, pedestrians and cyclists and improve road safety for all users		L - Improve environmental quality and air quality	
F - Provide more sympathetic public spaces for historic and environmental assets		M - Reallocate road space to provide for space for businesses and event activity, pedestrians, and cyclists	
G - Enhance Park and Ride offer, and incentivise use		N - Enhance rail connectivity to better accommodate local, regional, and national travel	

Why is this intervention required?

Currently, the layout of the station primarily facilitates private motor vehicles.

The station forecourt plays a significant role in Shrewsbury's local identity and acts as a pivotal gateway to the town. However, there is ample opportunity for improvement in both the station design and the surrounding area to better accommodate the cultural heritage of the building, ultimately enhancing the experience for both residents and visitors.

One notable concern to the current layout is the publicly accessible car park that is located on the station forecourt. This car park is also used as a drop-off and pick-up facility for taxis as well as providing car parking spaces for the British Transport Police. This layout results in traffic dominating the arrival experience for passengers, contributing to congestion in the vicinity and failing to create a positive first impression for visitors.

Entrances to the railway station are poor and not fully accessible from all sides of the town.

Whilst access to the south of the railway station is directly accessible via the station forecourt, access to the north is not accessible for all. The 'Dana route' provides the most direct route for people wishing to walk, wheel or cycle to the town centre from areas to the north of Shrewsbury. However, this footbridge does not comply with the Equality Act 2010 and is inaccessible for individuals with mobility issues, cyclists, and people with pushchairs, as it lacks lifts or ramps. Instead, people are required to route via the Chester Street Gyratory, which is a less direct route and lacks natural surveillance.

Access to the railway station from south-east Shrewsbury is limited.

As mentioned in intervention '*Provide additional/improved walking and cycling links across the River Severn and railway*', there was previously an alternative entrance to the railway station from Shrewsbury Abbey. However, this route is no longer accessible, meaning there is no direct connection to the railway station from this part of the town.

Shrewsbury Railway Station needs to become fit for purpose.

Shrewsbury Railway Station was built in 1848 and is a grade II listed building. Despite previously undergoing renovations, the building still has many dormant rooms, which could be repurposed and revitalised to enhance the offer of the station.

What is this intervention?

A new drop off and pick up facility would be provided on Howard Street.

A new place would be developed, specifically designed to cater to the needs of taxis, private hire vehicles, and pick up and drop off purposes, on the northern side of the station. This would be relocated from the front of the station and could tie in with adjacent development aspirations.

A new entrance would be created from the Buttermarket, situated on Howard Street.

This new access point would provide a direct and convenient route for individuals travelling to/from the station from north Shrewsbury. It is anticipated that this new access point would be situated along Howard Street near the Grade II listed Buttermarket and has the potential to tie into adjacent development aspirations within the area.

Enhancements would be made to the Dana route to ensure inclusive access for all individuals.

This would create an accessible environment, allowing everyone, to navigate the footbridge with ease by ensuring that the footbridge is Equality Act 2010 compliant. This would be complemented by any necessary improvements to other entrances to the station so that it is fully accessible.



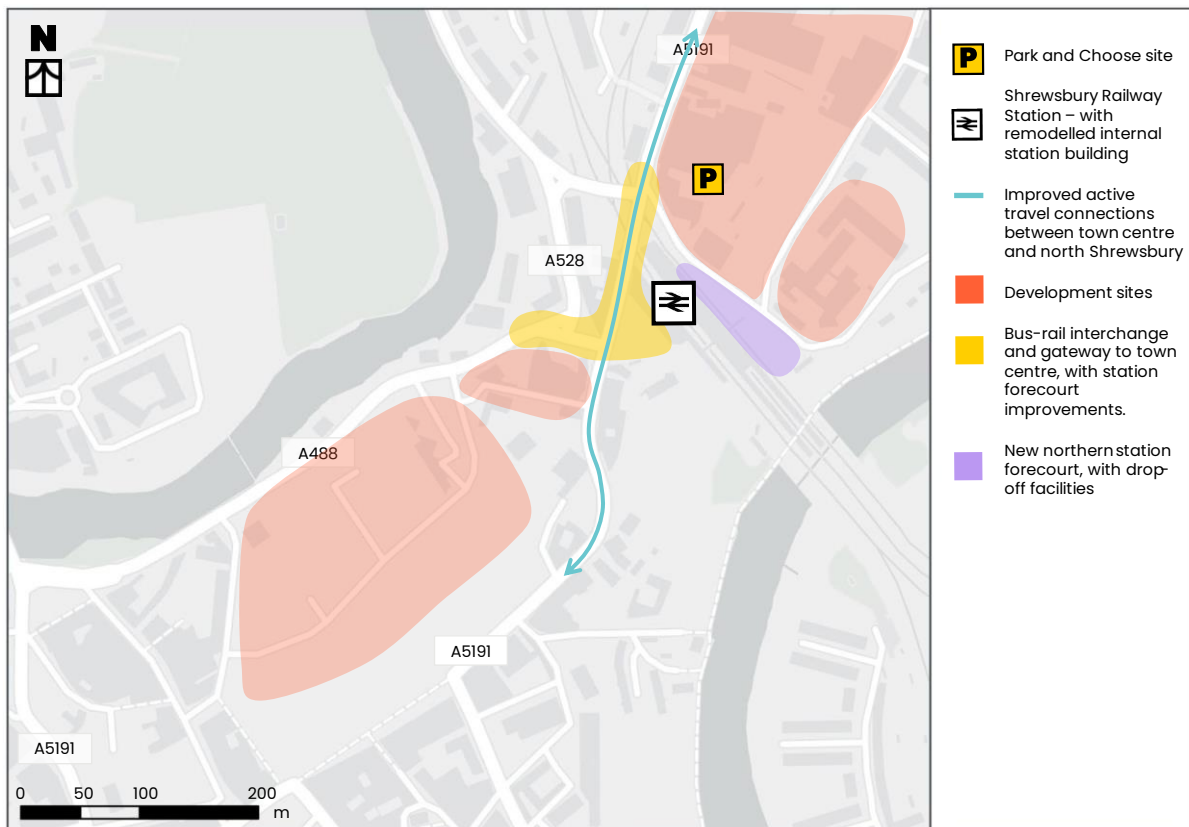
The current station forecourt area would be repurposed to establish a bus-rail interchange.

Further details are described in intervention ‘Provide new public transport interchange facilities in the town centre’. However, the British Transport Police, Network Rail and other emergency services would still be able to use the existing station forecourt, if required.

Shrewsbury Railway Station would be renovated.

This would result in the railway station becoming a modern station, incorporating contemporary features and new technology that would enhance the overall passenger experience, efficiency, and sustainability. This would include ensuring that the station is designed to be accessible for all passengers, integrating digital technologies to improve passenger information and communication.

Map 22 – Enhancements to Shrewsbury Railway Station



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

What are the impacts of this intervention?

First Impression

Removing the dominance of private motor vehicles outside Shrewsbury Railway Station, and renovating the station would create a strong, positive first impression for visitors. This would create a more enjoyable and comfortable experience for visitors, enabling them to walk, explore and access the town, whilst enjoying a more vibrant and inviting atmosphere around the railway station. In addition, renovating the station would also enhance its appeal as a destination in its own right.

Convenience

Provision of a new entrance from the north of the main station building, would tie into improvements to active travel and public transport infrastructure identified elsewhere in this strategy. This would improve access to the station for communities in north Shrewsbury, by walking, wheeling, cycling and public transport, encouraging modal shift away from private motor vehicles and enhancing the convenience of access to rail services.

Inclusivity

Pedestrian routes to the station would be enhanced and made inclusive, enabling all people to access and use the route comfortably and safely. This would eliminate the physical barriers that currently exist (i.e., stepped access and narrow paths) to provide a safe, direct, and secure route for all.

Emergency Vehicles

As part of the transformation of the existing forecourt into a bus-rail interchange, special considerations would be given to accommodate emergency vehicles and operational parking spaces for Network Rail and British Transport Police vehicles. Access for these vehicles would be maintained to ensure that essential services remain accessible and operational, without limiting the functionality of a bus-rail interchange.

Case Studies

Oxford Railway Station

In April 2023, Network Rail began a £161 million project to upgrade Oxford Station and the railway system. The primary objective of this is to expand the railway infrastructure, facilitating increased rail services for both passengers and freight transport.

In conjunction with the rail station upgrades, improvements to the adjacent road network are also planned. These enhancements would focus on creating safer junctions, particularly with Botley Road. Moreover, the project aims to promote sustainable transport by bolstering bus travel facilities and providing greater space for cyclists and pedestrians. To achieve this, a four-metre-wide cycle and footway would be added on each side of the main road, further encouraging active modes of transport. These combined efforts signify a significant investment in the overall transport infrastructure of Oxford, aiming to improve connectivity, safety, and accessibility for both rail and road users.

For more information about this case study:

<https://www.networkrail.co.uk/running-the-railway/our-routes/western/oxfordshire/>

Key Considerations for delivery of the intervention

- ☒ Detailed assessment of the Dana footbridge;
- ☒ Assess most appropriate location for a new entrance to the rail station near the Buttermarket; and
- ☒ Liaise with Network Rail concerning Shrewsbury Railway Station enhancements.

Provide new public transport interchange facilities in the town centre

To improve bus facilities and improve connectivity with rail services, there is a need for improved public transport interchange facilities in Shrewsbury. By establishing a modern and inviting public transport interchange, Shrewsbury can create a positive impression on visitors, leaving a lasting impact as they transition from bus and rail to the town. Additionally, these facilities would strengthen the connections with the rail services throughout the town, facilitating smooth and convenient multi-modal travel across the county. This would promote sustainable modes of transport and discourage excessive use of private motor vehicles in the town centre, providing an attractive public transport offer in core of the town. High quality alternative bus facilities would be provided on or near to the site of the current bus station as part of the Smithfield Riverside development.

How does this deliver the Shrewsbury Big Town Plan?

This intervention aligns with the key principles of this strategy, and therefore the Shrewsbury Big Town Plan vision and objectives as set out in Table 22.

Table 22 - Alignment with Key Principles

Key Principle		Key Principle	
A - Reduce / remove through traffic from the town centre		H - Improve resilience of local transport network to extreme weather events	
B - Ensure convenient access to town centre/local facilities and uptake of sustainable modes for these journeys		I - Provide an efficient public transport network with improved facilities in town centre	
C - Reduce vehicle speeds and volumes of private motor vehicles		J - Improve cross-town connectivity by sustainable transport modes	
D - Reduce severance caused by River Severn and railway line		K - Ensure servicing access to business and event sites is maintained	
E - Increase priority given to buses, pedestrians and cyclists and improve road safety for all users		L - Improve environmental quality and air quality	



Key Principle		Key Principle	
F - Provide more sympathetic public spaces for historic and environmental assets		M - Reallocate road space to provide for space for businesses and event activity, pedestrians, and cyclists	
G - Enhance Park and Ride offer, and incentivise use		N - Enhance rail connectivity to better accommodate local, regional, and national travel	

Why is this intervention required?

Facilities at Shrewsbury Bus Station are outdated and unsuitable for accommodating a modern public transport interchange.

Shrewsbury Bus Station is situated between the Darwin Shopping Centre and the railway station. Although the station is conveniently located near the Darwin Centre and the River Severn, the building itself does not create a favourable impression of the town, failing to reflect the rich history of Shrewsbury. Additionally, passenger facilities at the station are poor, resulting in bus travel being unfavourable.

There is limited connectivity between the bus and railway station.

In Shrewsbury, the railway and bus station are located approximately 300m apart. Whilst there are bus stops on Castle Foregate to facilitate some interchange between the two modes, the infrastructure for dedicated bus stops and waiting facilities is limited. This lack of connectivity between the two facilities restricts the potential for multi-modal journeys, particularly for longer-distance routes, and creates a separation in the public transport options available within the town.

New development opportunities in the town are interlinked with the bus station.

The Smithfield Riverside development is an ambitious regeneration plan for the east of the town centre around Darwin Centre, Roushill and the River Severn. As part of the plans for the area, it is vital that the existing bus station is reconfigured or relocated to align with the wider masterplan.

It should be noted that Shropshire Council has recently reaffirmed its commitment to retain public transport provision within the town centre and provide a well-designed and conveniently located bus interchange as part of the Riverside development to maximise connectivity across Shropshire.

Coaches currently have limited connections in the town centre.

Currently, coaches in Shrewsbury are required to drop off passengers in the town centre. However, after the drop-off, coaches are required to exit the town centre and park at either Abbey Foregate Car Park or Frankwell Coach Park. Whilst this arrangement may be convenient for coaches that are on day trips, it fails to provide a suitable location within the town centre for quick and seamless pick-up facilities for short duration trips. At a minimum, there should be a dedicated area in the town centre for coach arrival and departures, facilitating regional and national connections.

What is this intervention?

A new public transport interchange facility would be provided at Shrewsbury Railway Station.

A new public transport interchange facility could be provided within the heart of the town centre, located at the railway station to enhance bus/rail interchange facilities. This strategic location would allow for seamless transfers between bus and rail and would feature suitable waiting facilities and real-time bus information systems. As mentioned in intervention '*Enhance Shrewsbury Railway Station*', this would be achieved by repurposing the station forecourt and parts of Castle Street and would be accompanied by significant improvements to the public space in proximity to the station.

Rail replacement services would be accommodated as part of the new public transport interchange.

Bus stops would be located on-street along an enhanced Castle Gates and Chester Street.

It is recognised that Castle Gates and Chester Street in their current form are not suitable places for passengers to wait. In order to attract more people to utilise the on-street bus facilities, improvements would be made to the public space along Castle Gates and Chester Street. These enhancements could incorporate public art and street greening, creating an attractive waiting area. The design of the public space interventions would be carefully crafted to reflect the history of Shrewsbury and contribute to a more inviting atmosphere for passengers entering the town.

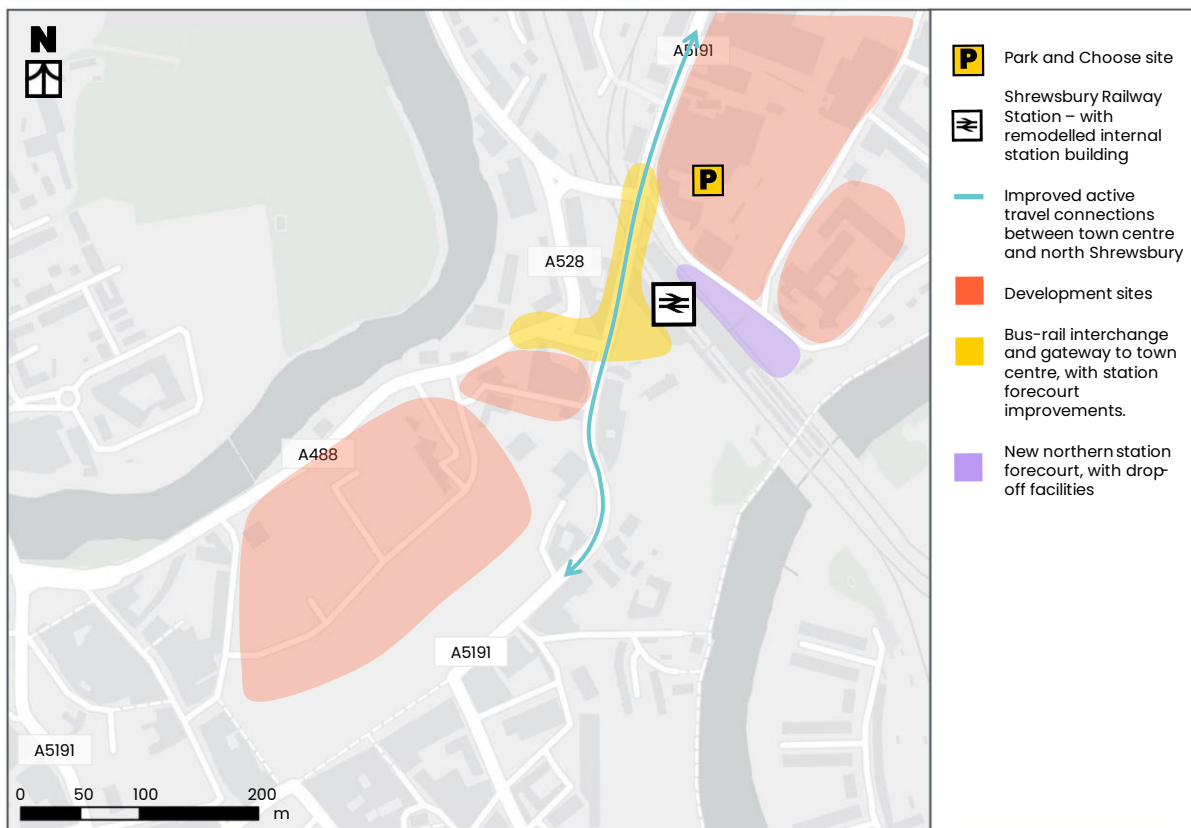


Funding received from the Levelling Up Fund Round 2 in 2023 from National Government will result in active travel and public space works near to the railway station.

High quality alternative bus facilities would be provided as part of the Smithfield Riverside development.

Rather than having a single bus interchange facility in Shrewsbury, there is the potential to establish a high-quality bus facility on or near to the site of the current bus station. This new facility would maintain convenient public transport access near the Darwin Centre and Pride Hill Shopping Centre, serving as an important hub for rural bus services and enabling seamless interchanges between different routes.

Map 23 – Public Transport Interchange locations



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

What are the impacts of this intervention?

Attractive destination

A new public interchange would create opportunities to develop visually appealing and socially engaging spaces, which would leave a positive impression at the northern gateway of the town. This would transform currently underutilised and dormant areas into attractive and inviting spaces.

Alongside the implementation of the traffic loop system, the surrounding environment of the new public transport interchange would undergo a significant transformation. The number of private motor vehicles circulating around the town centre would be reduced, which would provide sufficient space for buses on the station forecourt and on-street. This could involve reallocating parking spaces, effectively converting the area into a public transport interchange.

Multi-modal sustainable journeys

The integration of bus and rail at an interchange facility encourages the use of public transport. By facilitating convenient and efficient connections between different modes of public transport, the interchange would encourage people to opt for public transport instead of relying on their private motor vehicle, particularly for longer distance trip marking. As a result, this would help reduce traffic congestion and reduce carbon emissions, contributing to a more sustainable transport system.

Accessibility

The integration of bus and rail services enhances connectivity to local and regional destinations, offering passengers the convenience of accessing multiple modes of transport in one location. This improved connectivity is beneficial as it allows people to easily access the railway station and take advantage of the extensive rail network, even if their initial location is not served by a rail line. By providing equal access to transport options, the bus-rail interchange promotes inclusivity and ensures that everyone can conveniently reach their desired destinations.

Air Quality

The introduction of layover facilities near Chester Street and Castle Gates may result in longer dwell times for buses in that area. However, considering the

Department for Transport are committed to stopping the sale of new non-zero emission buses by the end of 2023 and the implementation of the traffic loops across the town, on balance, it is considered that overall, this intervention would result in no significant net impact on air quality in the town.

Cross-town services

As stated in intervention *'Provide a two-way bus corridor across the town centre'* bus services would have the ability to travel across the entire town, reducing the need for dedicated layover facilities in the town centre. This would result in buses not needing to terminate in the centre, freeing up valuable kerbside space. This space could be used to accommodate economic opportunities, such as areas for cafés and restaurants, leading to significant economic benefits for the town.

Electric buses

It is recognised that new electric buses would be rolled out across Shropshire over the coming years. Some single decker electric buses are taller than the current diesel bus fleet which may introduce issues for services routing via the northern section of Chester Street Gyratory to access layover facilities at the station forecourt.

However, there are electric vehicles that would be of a suitable height to navigate the gyratory e.g., Enviro100. Additionally, the removal of private motor vehicles from this area would help enable buses to be able to navigate the tunnel of the Gyratory in the centre of the road, easing any concerns over height restraints.

Bus layover

High quality bus facilities would be provided as part of Smithfield Riverside development and would be accommodated at the railway station. This could incorporate bus layover facilities, with these facilities being identified as part of a subsequent study. In addition, as buses would have the opportunity to operate as a cross-town service, bus layover could occur at the Park and Ride sites, assuming appropriate facilities are available for drivers.

Two-way bus corridor

It is important to note that whilst this strategy recommends that bus interchange facilities could be provided at the railway station, the core intervention to enhance public transport patronage within Shrewsbury is the introduction of a

two-way bus corridor across the river loop. The implementation of the two-way bus corridor is not dependent on where the location of a new public transport interchange is situated, rather, the new public transport interchange could be located anywhere along the two-way bus corridor.

Case Studies

Altrincham

In 2015, the redevelopment of Altrincham Bus Station resulted in the establishment of the Altrincham Transport Interchange. This enhanced facility integrates various modes of public transport, including buses, taxis, trains, trams, and cycling. The interchange plays a crucial role in connecting Altrincham to Greater Manchester. It serves as a welcoming entrance to the town centre, creating a fully integrated, accessible, and sustainable transport hub that reflects the town's vibrant history.

For more information about this case study:

<https://www.newcivilengineer.com/archive/the-gallery-altrincham-transport-interchange-19-06-2015/>

Port Talbot

In March 2018, a new integrated transport hub was completed, providing a centralised location for various sustainable transport options. The hub consists of a new bus terminal, cycle facilities, a taxi rank, and designated areas for drop-off and pick-up, all within predominantly pedestrianized concourses. The project was funded by the Welsh Government, with support from the Local Transport Fund and EU Funds, with a total cost of £5.6 million.

For more information about this case study:

<https://www.insidermedia.com/news/wales/port-talbot-transport-hub-complete>

Key Considerations for delivery of the intervention

- Agree on a suitable layover facility with bus operators;
- Agree on facilities to be provided with the at new public transport interchange; and
- Establish the most suitable route for double-decker buses.

Provide Parkway Station “Shrewsbury East”

The majority of ticket sales at Shrewsbury Railway Station are for destinations located to the east of the town. However, due to the absence of a suitable railway station in close proximity to the eastern part of Shrewsbury, many who wish to travel by rail, travel by private motor vehicle into the town centre. Introducing a new Parkway Station to the east of Shrewsbury would reduce the need for people to travel into the town to access rail services, freeing up space for the town to cater to those individuals who directly contribute to its economic growth. Additionally, the Parkway Station could reduce rail journey times for those heading east by eliminating the necessity of driving directly into the town centre, where there is currently congestion at peak periods, releasing suppressed demand caused by the inadequate parking offer at Shrewsbury Railway Station.

How does this deliver the Shrewsbury Big Town Plan?

This intervention aligns with the key principles of this strategy, and therefore the Shrewsbury Big Town Plan vision and objectives as set out in Table 23.

Table 23 - Alignment with Key Principles

Key Principle		Key Principle	
A - Reduce / remove through traffic from the town centre		H - Improve resilience of local transport network to extreme weather events	
B - Ensure convenient access to town centre/local facilities and uptake of sustainable modes for these journeys		I - Provide an efficient public transport network with improved facilities in town centre	
C - Reduce vehicle speeds and volumes of private motor vehicles		J - Improve cross-town connectivity by sustainable transport modes	
D - Reduce severance caused by River Severn and railway line		K - Ensure servicing access to business and event sites is maintained	
E - Increase priority given to buses, pedestrians and cyclists and improve road safety for all users		L - Improve environmental quality and air quality	
F - Provide more sympathetic public spaces for historic and environmental assets		M - Reallocate road space to provide for space for businesses and event activity, pedestrians, and cyclists	



Key Principle	Key Principle	
G - Enhance Park and Ride offer, and incentivise use	N - Enhance rail connectivity to better accommodate local, regional, and national travel	

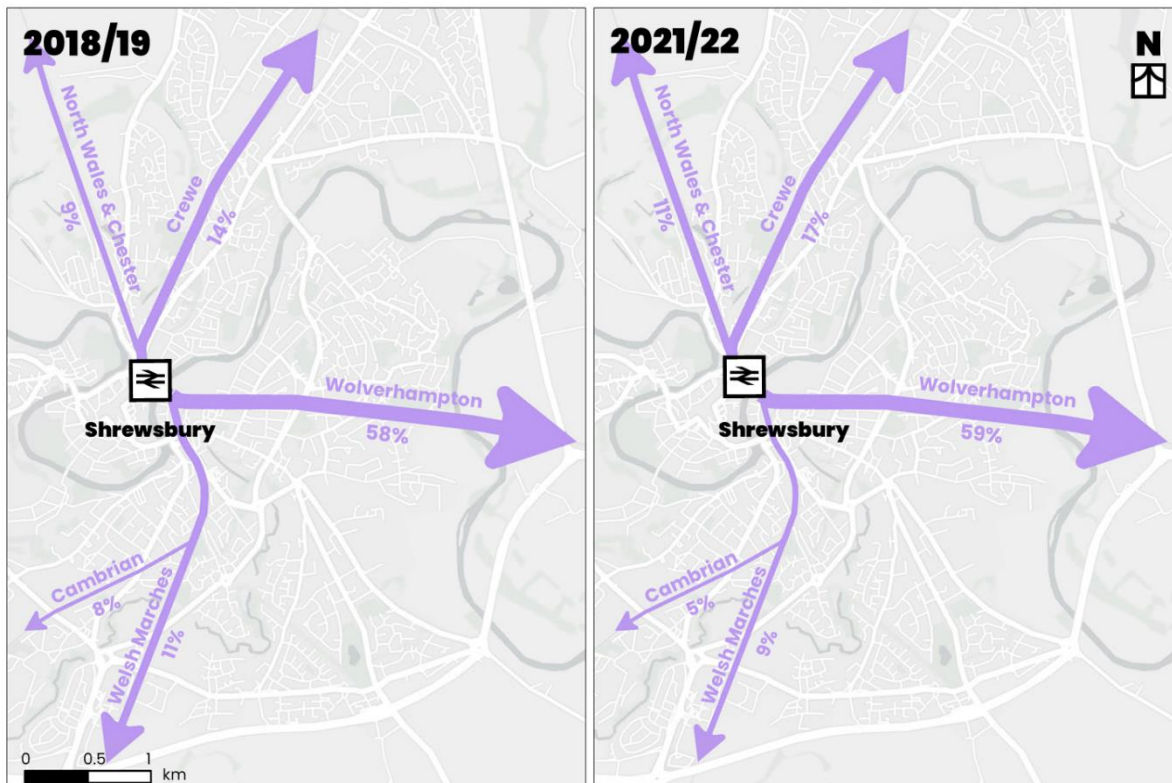
Why is this intervention required?

Most journeys from Shrewsbury are traveling to destinations to the east.

Shrewsbury is a hub for rail services and provides both regional and national connections, in particular to Manchester and Birmingham.

Analysis of ticketing data has identified that 59% of total ticket sales from Shrewsbury Railway Station were in the direction of Wolverhampton and Birmingham, in both 2019 and 2022.

Map 24 – Directional split of trips from Shrewsbury for the top 40 destinations



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS
 Source: LENNON (Latest Earning Networked Nationally Overnight) data from West Midlands Trains

There is no nearby railway station to Shrewsbury, other than that in the town centre.

The existing railway station in Shrewsbury is conveniently situated in the heart of the town centre, benefiting visitors whose destination is the town centre. However, for journeys originating in Shrewsbury, such as commuting trips to regional and national destinations, the location of the station leads to an influx of rail passengers entering the town solely to depart via rail. This is a particular issue given that the nearest railway station to the east of Shrewsbury is Wellington, approximately 10 miles away. Due to the lack of convenient, direct, and appealing sustainable travel options from nearby residential areas, most of these rail passengers to Shrewsbury are likely to rely on private motor vehicles to reach the station. This contributes to increased congestion in the town centre and near the railway station.

What is this intervention?

A new Parkway station would be provided to the east of Shrewsbury.

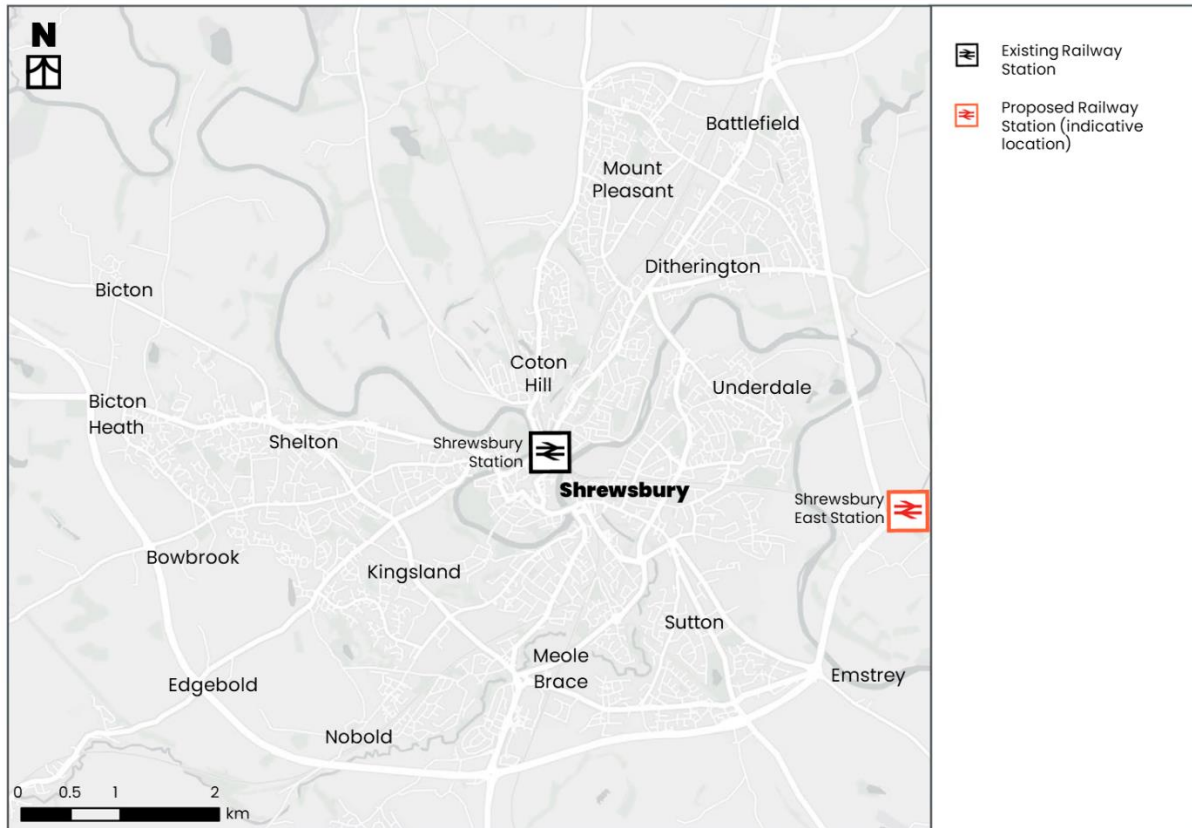
Whilst the exact location of the Parkway station is yet to be determined, it is anticipated that land could be acquired near to Preston Boats. This location is deemed appropriate given the high level of demand to the east of Shrewsbury, its prime location in proximity to the A5, M54 and M6 and the ability to capitalise on the electrification upgrades on the train line between Shrewsbury and Wolverhampton.

Complementing the parkway station would be the provision of a bus service that would serve the station and provide connections to the town centre, helping to unlock development opportunities in the area.

Shropshire Council would continue to assess the deliverability and viability of other new stations across the county based on locations where high demand is likely, in liaison with Network Rail.



Map 25 – Indicative location of Shrewsbury Parkway “Shrewsbury East” Station



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

What are the impacts of this intervention?

Journey times

A new Parkway Station to the east of Shrewsbury would reduce journey times to the West Midlands by rail. This would provide a benefit for existing rail users, and also attract new passengers who previously may have travelled by private motor vehicle.

Congestion

This would reduce traffic volumes in Shrewsbury town centre to facilitate delivery of the other interventions within this strategy and facilitate modal shift for longer distance journeys originating from Shrewsbury, providing capacity and journey time benefits on the wider Strategic Road Network.

Economic development

The Parkway Station would help unlock development opportunities, with a well-connected station providing an attractive proposition for co-located residential and employment development.

Park and Ride integration

Parkway Station East and a new Park and Ride facility near Emstrey are both vital components of the wider strategy. As the Parkway Station East is developed, there is the opportunity to integrate Park and Ride with this service, subject to more detailed feasibility and monitoring of capacity at Parkway East.

Capacity

The introduction of an eastern parkway station in Shrewsbury is expected to increase capacity, not only within the town centre but also regionally, benefiting Shropshire, the Marches, and Mid-Wales. This initiative is anticipated to decrease the reliance on private motor vehicles, promoting the use of public transport and thereby enhancing overall network capacity.

Case Studies

Worcestershire Parkway

Worcestershire Parkway, established in 2020, is strategically positioned near Junction 7 of the M5, where the Worcester – London Paddington and Birmingham – Bristol railway lines intersect. This advantageous location enables the station to attract a considerable number of passengers heading to important destinations along both railway lines, as well as those seeking convenient access from the nearby motorway. The Parkway station offers key features such as a 500-space car park, a modern and accessible station building, and seamless connectivity to local bus services through a bus/rail interchange. The station would also help unlock adjacent land for residential-led mixed use development, providing a substantial housing supply for the region.

For more information about this case study:

<https://slcrail.com/projects/worcestershire-parkway-station/>

Bristol

In August 2023, Portway Park and Ride station opened in Bristol. Situated approximately 6 miles from the city centre, the station serves as a valuable addition to the existing Park and Ride bus service. The station offers the local community an additional sustainable transport option whilst also providing Park and Ride users from surrounding areas with a rail connection to destinations within the city.

For more information about this case study:

<https://www.gwr.com/stations-and-destinations/stations/new-stations/portway-Park and Ride>

Warwick Parkway

Opened in October 2000, Warwick Parkway is located to the east of the town and provides rail connections across the country. Additionally, the Parkway Station also incorporates park and ride facilities on the outskirts of town, helping to attract visitors to the town by sustainable forms of transport.

For more information about this case study:

<https://www.nationalrail.co.uk/stations/wrp/>

Key Considerations for delivery of the intervention

- ☒ Establish the most favourable location for the proposed station;
- ☒ Identify suitable capital funding source;
- ☒ Review land ownership boundaries to identify a suitable location for the station; and
- ☒ Consider sustainable transport options which could serve Parkway Station East.

Implement a water taxi along the River Severn (subject to water levels)

The River Severn is a valuable asset to Shrewsbury, and is one of the main appeals for visitors, with regular tourist boat trips offered by a single provider. However, the river is currently not fully utilised for its potential to provide a movement option, which could be a hop-on and hop-off water taxi service. By introducing a water taxi along the river, sustainable transport opportunities can be unlocked, resulting in potential reductions in travel times to important destinations that are severed by the River Severn, such as the West Midlands Showground. Moreover, this initiative would improve the economic appeal of the town centre by offering an attractive hop-on and hop-off service, allowing visitors, particularly tourists to conveniently access appealing waterfront destinations. This would contribute to enhancing various areas of the town through a service that provides convenient access to attractive spots along the river.

How does this deliver the Shrewsbury Big Town Plan?

This intervention aligns with the key principles of this strategy, and therefore the Shrewsbury Big Town Plan vision and objectives as set out in Table 24.

Table 24 - Alignment with Key Principles

Key Principle		Key Principle	
A - Reduce / remove through traffic from the town centre		H - Improve resilience of local transport network to extreme weather events	
B - Ensure convenient access to town centre/local facilities and uptake of sustainable modes for these journeys		I - Provide an efficient public transport network with improved facilities in town centre	
C - Reduce vehicle speeds and volumes of private motor vehicles		J - Improve cross-town connectivity by sustainable transport modes	
D - Reduce severance caused by River Severn and railway line		K - Ensure servicing access to business and event sites is maintained	
E - Increase priority given to buses, pedestrians and cyclists and improve road safety for all users		L - Improve environmental quality and air quality	



Key Principle		Key Principle	
F - Provide more sympathetic public spaces for historic and environmental assets		M - Reallocate road space to provide for space for businesses and event activity, pedestrians, and cyclists	
G - Enhance Park and Ride offer, and incentivise use		N - Enhance rail connectivity to better accommodate local, regional, and national travel	

Why is this intervention required?

The transport network of Shrewsbury is failing to take full advantage of the River Severn.

The town centre boasts numerous attractions that revolve around the River Severn. However, the available transport options utilising the river are limited, indicating a missed opportunity for a transport system that offers passengers a route between important destinations such as the Quarry, Abbey Foregate, and Frankwell.

In addition, the historic, narrow streets of the town centre become extremely busy during tourist months. The lack of a tourist route which operates around the River Severn fails to relieve some of the pressure on the street network.

There is a lack of sustainable connections between the town centre and the West Midlands Show Ground.

Despite the West Midlands Showground being located approximately 300m from Frankwell, direct access is currently obstructed by the River Severn. Moreover, the area surrounding the Showground lacks sufficient public transport connections and dedicated facilities for active travel. As a consequence, people are forced to rely on private motor vehicles or walk along Coton Hill to reach the Showground, which has limited pedestrian infrastructure.

What is this intervention?

It is proposed to implement a water 'hop on and hop-off' taxi system, operating around Shrewsbury town centre.

The extent of the water taxi operation would be subject to further feasibility studies, but as a minimum could include the section between The Showground and Frankwell. There may be additional opportunities to extend this on a seasonal basis, depending on demand and river levels. Along the route, stops could be provided on alternate sides of the riverbanks to provide a connection across the town, and the river itself.

Map 26 – Potential stop locations for river shuttle



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

What are the impacts of this intervention?

Timesaving

The water taxi would provide a more scenic and accessible route, offering a unique experience for residents and visitors attending events at the Showground.

Economic growth

The implementation of a water taxi system would play a pivotal role in enhancing the local economy by creating a vibrant waterfront culture. This would generate

employment opportunities, draw tourists, and provide support to complementary industries such as waterfront dining and recreational activities.

Linkages with existing service

The current Sabrina Boat offers a popular leisure river cruise that attracts many visitors. This initiative aims to complement this service by introducing a hop-on and hop-off taxi service, complementing the existing offer and providing a range of transport options utilising the River Severn.

Case Studies

Bath Marina

Bath Marina is located near Newbridge Park and Ride, approximately two miles west of the City Centre. As part of Bath and North-East Somerset Council's water space masterplan, it is proposed to provide a future river shuttle service. This would help enhance the role of the River Avon, providing a leisure route for Park and Ride passengers to access the City by a sustainable alternative to private motor vehicles.

For more information about this case study:

https://www.bathnes.gov.uk/sites/default/files/sitedocuments/Environment/ba303_waterspace_study_update_05_final_for_web_part_2.pdf

Key Considerations for delivery of the intervention

- ☒ Identify a suitable funding stream;
- ☒ Further detailed feasibility study of the practical operation, subject to the status of the River Severn; and
- ☒ Identify a suitable operator to run the service.

Expansion of mobility hubs, including creating Park and Choose sites

In Shrewsbury, there are a lack of locations where people can conveniently access a variety of sustainable modes of transport in a single place. Additionally, despite their close proximity to the town, car parks located on the outskirts of the town centre feel disconnected, failing to create a vibrant and engaging space. Visitors feel the need to drive inside the river loop to park, with key locations such as the Abbey not seen as being town centre locations despite their proximity. To address these issues, create Park and Choose sites would be created at edge of town centre car parks, supplemented with a range of smaller community mobility hubs across Shrewsbury. These hubs would serve as centralised spaces where people could easily access a range of sustainable transport options in one location. This approach would increase access to sustainable transport modes, reducing the need for individuals to purchase their own sustainable modes of transport.

How does this deliver the Shrewsbury Big Town Plan?

This intervention aligns with the key principles of this strategy, and therefore the Shrewsbury Big Town Plan vision and objectives as set out in Table 25.

Table 25 - Alignment with Key Principles

Key Principle		Key Principle	
A - Reduce / remove through traffic from the town centre		H - Improve resilience of local transport network to extreme weather events	
B - Ensure convenient access to town centre/local facilities and uptake of sustainable modes for these journeys		I - Provide an efficient public transport network with improved facilities in town centre	
C - Reduce vehicle speeds and volumes of private motor vehicles		J - Improve cross-town connectivity by sustainable transport modes	
D - Reduce severance caused by River Severn and railway line		K - Ensure servicing access to business and event sites is maintained	
E - Increase priority given to buses, pedestrians and cyclists and improve road safety for all users		L - Improve environmental quality and air quality	



Key Principle		Key Principle	
F - Provide more sympathetic public spaces for historic and environmental assets		M - Reallocate road space to provide for space for businesses and event activity, pedestrians, and cyclists	
G - Enhance Park and Ride offer, and incentivise use		N - Enhance rail connectivity to better accommodate local, regional, and national travel	

Why is this intervention required?

There are no sustainable transport public hire schemes in Shrewsbury.

In Shrewsbury, there are no public hire schemes for bicycles or scooters. Moreover, whilst there are car clubs in the town that allow residents to access shared vehicles, these services do not cover the entire town and are limited in availability. This can lead to problems such as congestion as residents and visitors have to rely on private motor vehicles. This can also hinder mobility for individuals who do not own a bicycle.

Opportunities to offer a public bicycle hire scheme across the town are currently being explored as part of the UK Shared Prosperity Fund, of which Shropshire Council have received £13.4 million to support levelling up initiatives across the county, focused on the parameters of communities and place, local businesses and people and skills.

There is a lack of inclusive, accessible options for individuals wishing to travel to the town centre from the outskirts of town centre.

There is a notable absence of shopmobility services within Shrewsbury. Additionally, the available routes into the town centre are either of poor quality or designed in a way that excludes people with mobility issues from using them. As a result, many individuals are left with no choice but to drive into the town centre or face exclusion from accessing it altogether.

What is this intervention?

Mobility hubs would be implemented across Shrewsbury.

There would be three different types of mobility hubs that would be implemented across Shrewsbury:

- ☒ Small-scale, 'community' mobility hubs;
- ☒ Park and Choose sites; and
- ☒ Park and Ride sites.

These mobility hubs would encompass a collection of public transport, shared transport, and active travel options in one place. Whilst the exact types of mobility options are yet to be determined, this could include; cycle hire, car clubs, rickshaws, electric vehicle charging infrastructure, taxis and/or bus. This would provide end to end journeys for residents and visitors.

Mobility hubs would become importance destinations in their own right

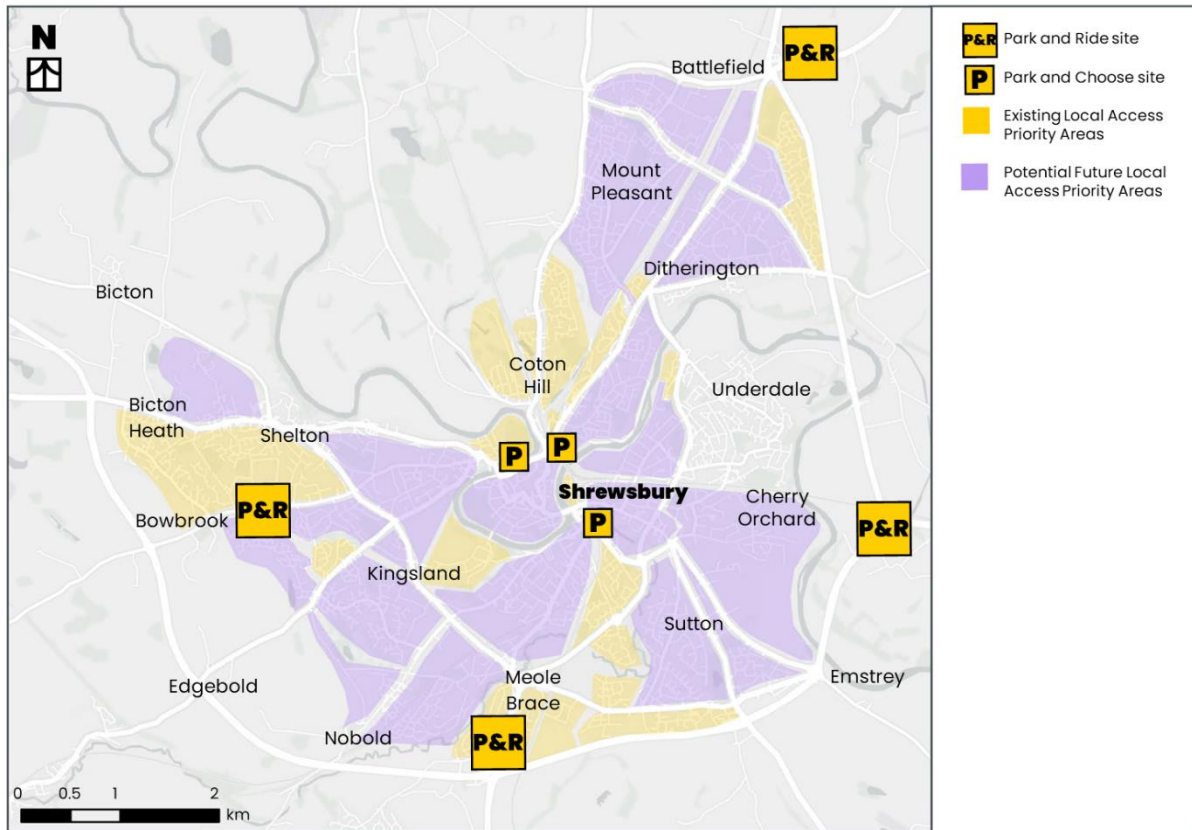
Each mobility hub would include measures to improve the surrounding public space, rather than just being a transport facility. This could consist of having a café spill out spaces, planting, shops, electric charging points or anything that encourages people to spend time in a place rather than just being where people are able to change modes of transport. In essence, mobility hubs would have a strong 'place' element which would attract people to spend time in these locations.

Park and Choose sites would act as freight consolidation hubs

Park and Choose sites, would have an additional role to act as freight consolidation hubs. Businesses would have the option to combine their deliveries at these locations and transport their goods into the river loop using sustainable modes of transport. This would promote eco-friendly freight solutions whilst enabling businesses to bypass modal filters as outlined in intervention '*Implement traffic loops to restrict through traffic from routing through the town centre*'.



Map 27 – Expansion of Mobility Hubs and creation of Park and Choose sites



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

Mobility hubs would encompass inclusive transport options.

Park and Choose / Park and Ride sites would offer shopmobility services or equivalent and would also provide accessible car parking spaces.

Small-scale ‘community’ mobility hubs

The exact location of community hubs would be based on available space within the highway boundary and would also be developed in collaboration with local residents. However, community mobility hubs would be located within Local Access Priority Areas and could be positioned near focal points such as; community centres, village halls and cafés. Community mobility hubs would typically consist of access to and from; local bus services, demand responsive transport systems, rickshaws, car clubs, cycle (including cargo-bike) hire and walking/cycling infrastructure.

Park and Choose sites

Located on the outskirts of the river loop (i.e., Abbey Foregate Car Park, Frankwell Car Park and potentially a new car park to the north of Shrewsbury, Park and Choose sites would attract people to drive and park their private motor vehicle outside of the river loop, entering the river loop by alternative, sustainable forms of travel such as by walking, cycling or by public transport.

Park and Ride sites

As mentioned in intervention *'Provide new and relocated Park and Ride facilities across Shrewsbury'*, Park and Ride sites would take on more than just a stop for visitors. These sites would be transformed into highly attractive destinations that would consist of multiple forms of sustainable mobility, extending beyond public transport to provide a multi-modal offer for residents and visitors to access key destinations. These sites would also foster opportunities for social interaction through providing space for economic activities such as pop-up cafes.

What are the impacts of this intervention?

Accessibility

By strategically placing mobility hubs in accessible locations for residents, sustainable transport options would be available for everyone. This inclusive approach would ensure that residents, who may not have had the means or opportunities to afford or access such services, can benefit from these options.

Additionally, this initiative would facilitate easier access to essential amenities throughout Shrewsbury, reducing dependence on private motor vehicles and offering attractive, environmentally friendly alternatives for everyone to enjoy. This would help overcome accessibility barriers and enable all individuals to reach their destinations, providing convenient opportunities for exploring the town and its surroundings.

In the event of floods, Park and Choose sites would serve as officially designated areas for public transport. This measure is particularly important considering the susceptibility of the town centre to flooding. By designating these sites, the town centre would remain accessible and operational for business purposes, regardless of the weather conditions.

Economic benefits

Small-scale community mobility hubs, Park and Choose sites, and Park and Ride sites, would evolve into significant destinations themselves. Each mobility hub would allocate space for economic activities, fostering a lively atmosphere in their vicinity.

Furthermore, Park and Choose sites would transform into freight consolidation hubs, providing advantages to businesses in the town centre. These businesses would have the opportunity to receive timely and cost-effective deliveries, facilitated by sustainable modes of transport such as e-cargo bikes. These sustainable deliveries would be able to bypass traffic loops, creating an efficient process for businesses.

Case Studies

Redbridge, London

In June 2021, the UK's first accredited mobility hub opened in London, bringing together sustainable transport options with community facilities. The mini-hub is created by reallocating on-street car parking spaces into a space for shared transport options, such as bike share schemes and car clubs as well as enhanced walking and cycling provision. The mobility hub also consists of a parklet, where there are suitable resting spots and a community-led café, acting as a central hub for people to travel sustainably.

For more information about this case study:

<https://www.meristemdesign.co.uk/redbridge-mobility-hubs>

Calderwood, Edinburgh

In June 2021, Stirling Developments, the developer of Calderwood, a new village in Scotland, introduced the country's first Mobility Hub. Calderwood, a sizable housing development, benefits from excellent rail and bus connections to Edinburgh.

The hub comprises two primary bus routes and offers EV car club facilities and bicycle parking. There are plans to implement a bike-sharing scheme to serve the

community. Strategically positioned next to the National Cycle Route 754, the hub facilitates convenient active travel connections leading to the heart of Edinburgh.

For more information about this case study:

https://uploads-ssl.webflow.com/6102564995f71c83fba14d54/62dabc2455b45c5127ab83df_CoMoUK%20Mobility%20Hubs%20Case%20Study_Calderwood.pdf

Key Considerations for delivery of the intervention

- ☒ Identify most suitable location for 'community' mobility hubs;
- ☒ Identify most suitable modes of transport to be provided at each mobility hub / Park and Choose site;
- ☒ Identify operators to run services from mobility hubs / Park and Choose site; and
- ☒ Establish detailed designs for mobility hubs / Park and Choose site.



Parking Plus



Further develop the existing graduated system of parking charges, decreasing in stages as parking becomes less central

Car parks in the town centre generally have enough spaces to accommodate demand on weekdays and weekends. This means that many people feel confident that they can drive into the town centre and find a parking space without issue. Whilst there is already a graduated parking system in place, the cost of parking is relatively low compared to taking the bus depending on a range of factors including; number of occupants, time of day, duration of stay and choice of car park. This, alongside the frequency and quality of services, does not encourage people to use Park and Ride.

To address this issue, a parking plus strategy would be created for Shrewsbury, building on the existing graduated system of parking charges in the town. This would consist of the most budget-friendly offer being provided at Park and Ride sites, where the whole cost of travelling to the town centre would be cheaper than any other Shropshire-Council owned car park in Shrewsbury. Parking fees would decrease as you move further away from the river loop, with the highest parking fees continuing to be at car parks located within the river loop.

How does this deliver the Shrewsbury Big Town Plan?

This intervention aligns with the key principles of this strategy, and therefore the Shrewsbury Big Town Plan vision and objectives as set out in Table 26.

Table 26 - Alignment with Key Principles

Key Principle		Key Principle	
A - Reduce / remove through traffic from the town centre		H - Improve resilience of local transport network to extreme weather events	
B - Ensure convenient access to town centre/local facilities and uptake of sustainable modes for these journeys		I - Provide an efficient public transport network with improved facilities in town centre	
C - Reduce vehicle speeds and volumes of private motor vehicles		J - Improve cross-town connectivity by sustainable transport modes	



Key Principle		Key Principle	
D - Reduce severance caused by River Severn and railway line		K - Ensure servicing access to business and event sites is maintained	
E - Increase priority given to buses, pedestrians and cyclists and improve road safety for all users		L - Improve environmental quality and air quality	
F - Provide more sympathetic public spaces for historic and environmental assets		M - Reallocate road space to provide for space for businesses and event activity, pedestrians, and cyclists	
G - Enhance Park and Ride offer, and incentivise use		N - Enhance rail connectivity to better accommodate local, regional, and national travel	

Why is this intervention required?

Car parking within the town centre is readily available.

Over 2,000 car parking spaces are available within Shropshire Council-owned car parks within the town centre and on the edge of the river loop.

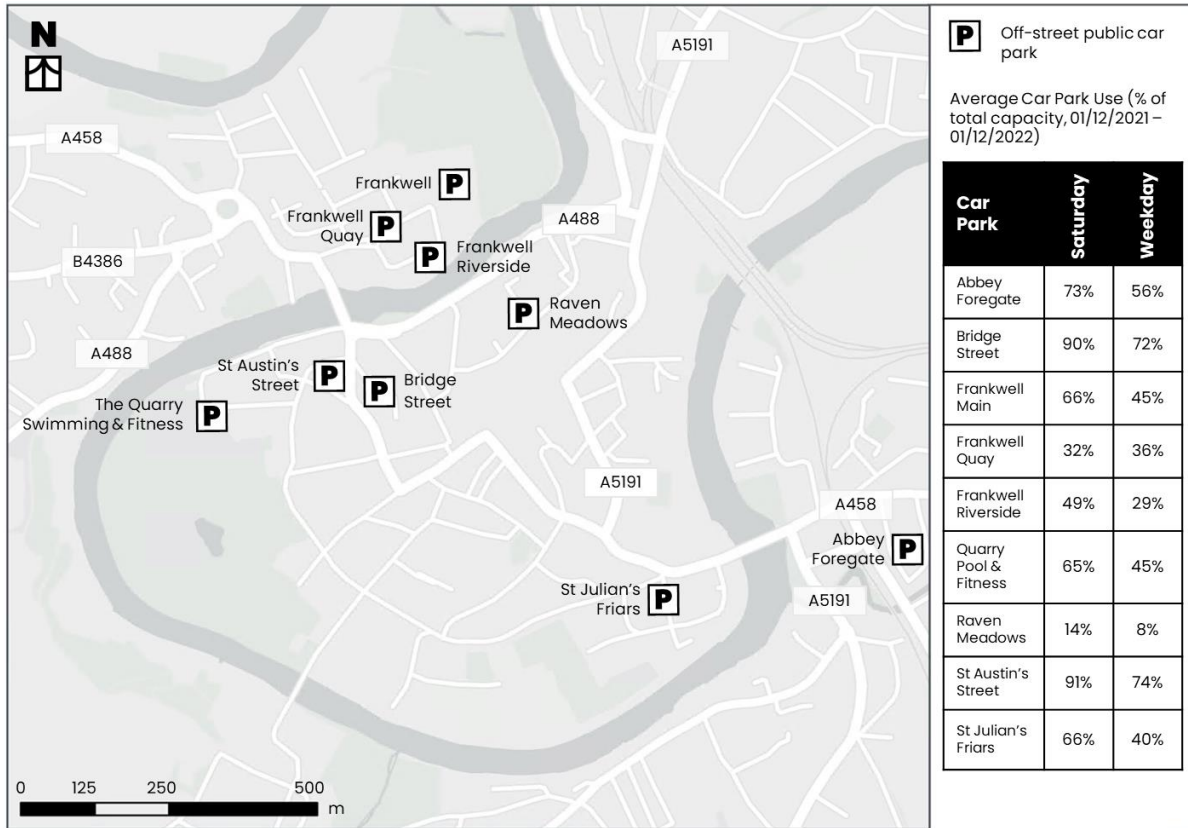
The most frequently used car park in Shrewsbury is Bridge Street and St Austin's Street, operating at an average 90/91% capacity across all time periods on Saturdays between December 2021 and December 2022.

Whilst it is recognised that some days might have higher demand, generally people have assurance that there would be an available car parking space in the town centre. This means that many people feel confident that they can drive into the town centre and find a parking space without issue.

The availability of capacity within the current town centre parking supply, presents an opportunity to rationalise car parking in the town.



Map 28 – Average car park use in Shrewsbury (01/12/2021 – 01/12/2022)



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

Car parking prices are relatively cheap compared to a bus ticket.

Whilst there is a graduated parking system in place across Shrewsbury, people are encouraged to drive into Shrewsbury by relative affordable car parking, particularly on Sundays and Bank Holidays at Frankwell and Abbey Foregate, where car parking is free on these days.

Car parking is still modestly priced throughout the week at 80 pence and 60 pence per hour at Frankwell Car Park and Abbey Foregate Car Park respectively. Car parking charges within the river loop are on average, £2 per hour.

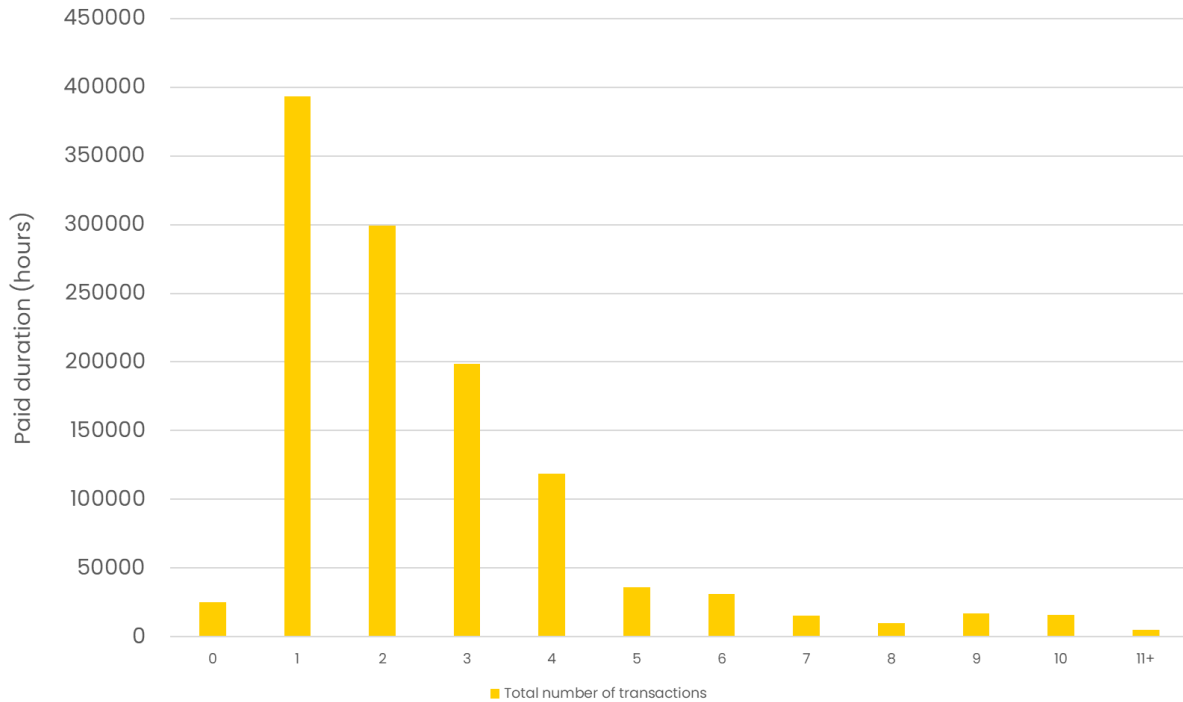
Therefore, the cost of parking is relatively low compared to taking the bus (depending on a range of factors including; number of occupants, time of day, duration of stay and choice of car park), which results in many people preferring to drive into the town centre and park, rather than use, Park and Ride.

The most commonly chosen parking duration within the town centre is 1 hour. Between December 2021 and December 2022, more than 30% of visitors who used car parks in Shrewsbury bought parking tickets for only one hour. This might imply



that these short stays are either a result of local journeys, which could be undertaken by alternative forms of transport, or indicate that Shrewsbury attracts visits for specific purposes.

Figure 11 - Total number of hours car parking purchased, by number of hours



What is this intervention?

A three-staged structure would be implemented for parking charges in Shropshire Council-owned car parks in Shrewsbury, building on the graduated system currently in place:

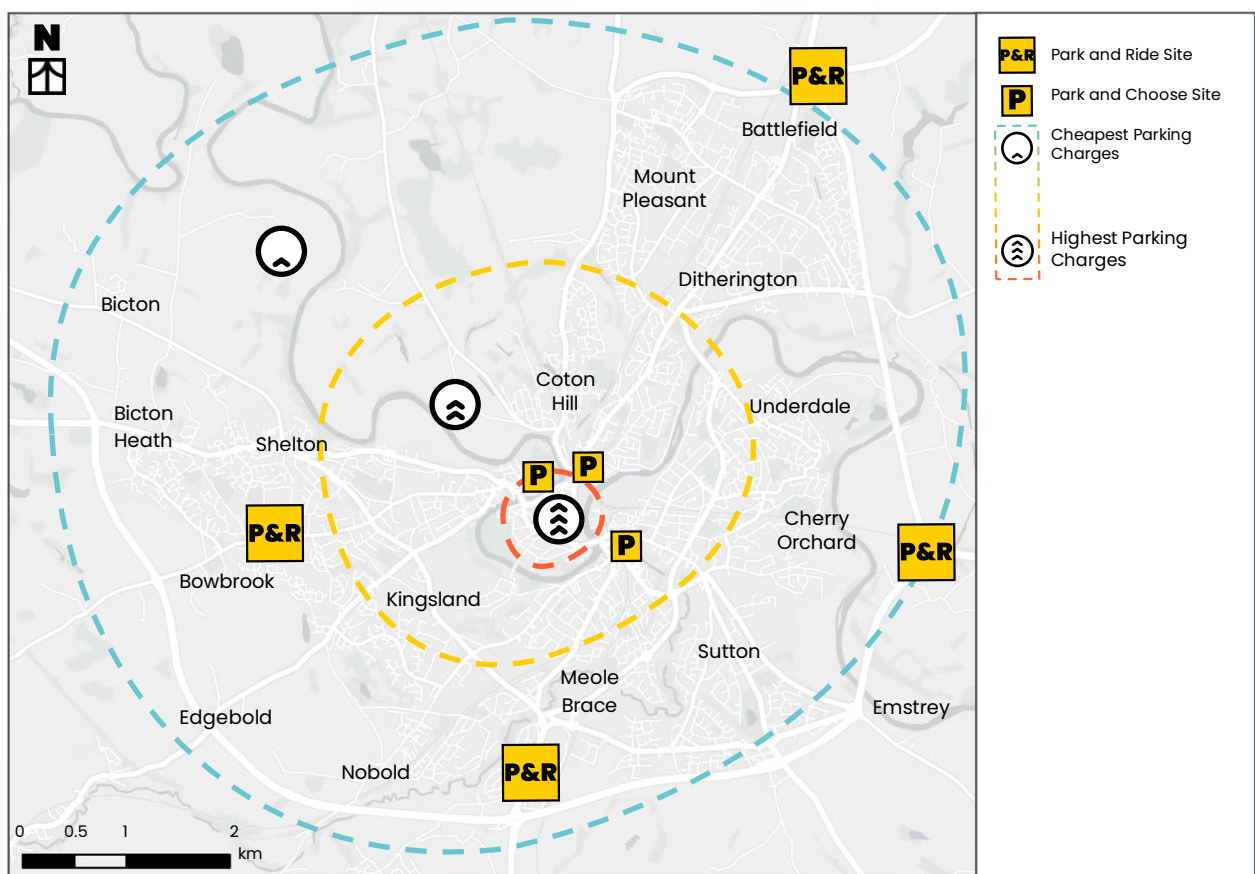
- ☒ The most budget-friendly offer of parking would be provided at Park and Ride sites, where the whole cost of travelling to the town centre would be cheaper than any other Shropshire-Council owned car park in Shrewsbury.
- ☒ Parking fees would decrease as you move further away from the river loop, such as Park and Choose sites. Park and Choose sites would be equipped with sustainable modes of transport so that people are able to park on the edge of the town and travel easily to the town centre without having to rely on a private motor vehicle.
- ☒ The highest parking fees would continue to be at car parks located within the river loop.



The 'parking plus' strategy would be implemented alongside other interventions to enhance the sustainable transport offer and Park and Ride facilities across the town.

It is recognised that improvements to active travel and public transport are required before changes to parking are made. Therefore, it is vital that supplementary interventions, as outlined within this strategy, are taken forward to ensure that alternative sustainable modes of transport are attractive and feasible.

Map 29 – Graduated parking charges



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

What are the impacts of this intervention?

Sustainable transport

Lower parking charges outside the river loop and improvements to sustainable travel infrastructure may encourage people to park outside of the town centre,

helping to facilitate modal shift from private motor vehicles to walking, cycling or taking the bus.

Development opportunities

If more people are travelling to the town centre by sustainable modes, specific Shropshire-Council owned car parks within the river loop could potentially be used for more productive land uses.

Park and Ride

The total cost of using the Park and Ride service to access the town centre would be cheaper than the package of parking in any other Shropshire-Council owned car parks in Shrewsbury. Improvements to Park and Ride services, supplemented with budget-friendly parking could lead to increased patronage.

Case Studies

Canterbury

In 2021, Canterbury City Council unveiled its plans to increase parking fees in the city centre. Under these proposals, drivers using the most popular city centre car parks would face a 'premium rate,' with the hourly fee rising from £2.80 to £3.50.

Parking rates at other locations in Canterbury have also gone up from £2.30 to £2.50 per hour, but these parking lots are situated on the outskirts of the city centre. Meanwhile, the cost of the park and ride service remains unchanged at £4 per day.

This plan aims to encourage more visitors to use alternative parking facilities outside the city centre and promote the increased utilisation of the Park and Ride service.

For more information about this case study:

<https://democracy.canterbury.gov.uk/documents/s105591/Parking%20review%20report.pdf>

Key Considerations for delivery of the intervention

- Adopt new car parking plus strategy for Shrewsbury;

- ☒ Establish a phasing plan for introducing new car parking prices across Shrewsbury; and
- ☒ Discuss management strategies with private car providers within the town centre.

Maintain the level of designated parking spaces for Blue Badge holders in river loop

To implement the interventions outlined in this strategy it may be necessary to remove the majority of on-street car parking. However, there would be no overall reduction in the number of Blue Badge parking spaces within the town centre. This commitment would ensure that individuals who require access to the town centre would continue to have the necessary parking facilities available. Specifically designated car parking spaces would be provided in the town centre to accommodate these journeys, ensuring that the needs of individuals relying on Blue Badge parking are met. By maintaining the availability of Blue Badge parking, the town centre would continue to be accessible for those who require access.

How does this deliver the Shrewsbury Big Town Plan?

This intervention aligns with the key principles of this strategy, and therefore the Shrewsbury Big Town Plan vision and objectives as set out in Table 27.

Table 27 - Alignment with Key Principles

Key Principle		Key Principle	
A - Reduce / remove through traffic from the town centre		H - Improve resilience of local transport network to extreme weather events	
B - Ensure convenient access to town centre/local facilities and uptake of sustainable modes for these journeys		I - Provide an efficient public transport network with improved facilities in town centre	
C - Reduce vehicle speeds and volumes of private motor vehicles		J - Improve cross-town connectivity by sustainable transport modes	
D - Reduce severance caused by River Severn and railway line		K - Ensure servicing access to business and event sites is maintained	
E - Increase priority given to buses, pedestrians and cyclists and improve road safety for all users		L - Improve environmental quality and air quality	
F - Provide more sympathetic public spaces for historic and environmental assets		M - Reallocate road space to provide for space for businesses and event activity, pedestrians, and cyclists	



Key Principle		Key Principle	
G - Enhance Park and Ride offer, and incentivise use		N - Enhance rail connectivity to better accommodate local, regional, and national travel	

Why is this intervention required?

Blue Badge parking is a vital enabler for accessing key services.

It is recognised that provision of Blue Badge parking is vital in ensuring that the town centre remains inclusive and accessible for all. Ensuring that Blue Badge parking is provided within the river loop helps to ensure that people with disabilities can park in a convenient location, without having to travel long distances or navigate difficult terrain and topography.

High levels of congestion in the town may mean Blue Badge holders find it takes a long time to find a car parking space or need to circulate around the town to find a suitable space.

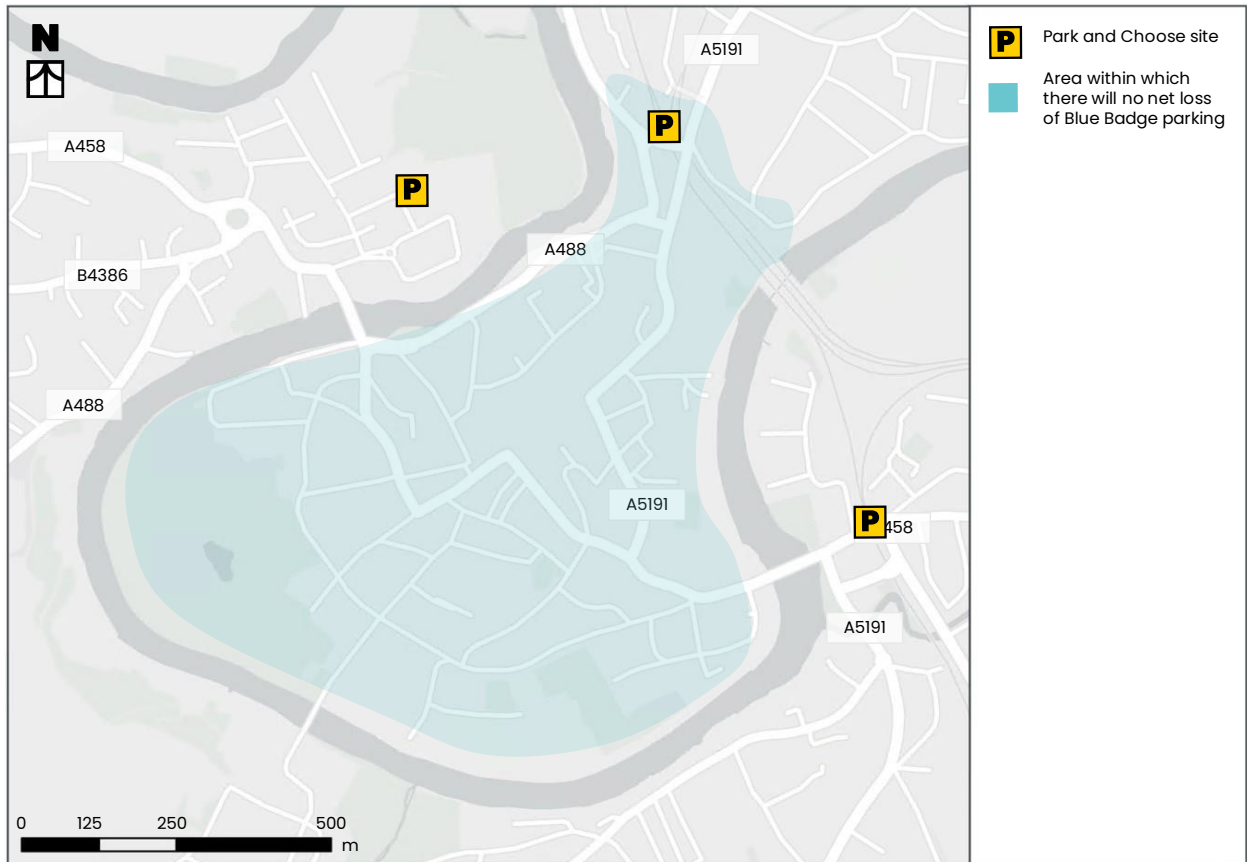
People with disabilities seeking to park within the town centre currently have to navigate highly congested streets, which could result in significant wait times. This may result in people having to park far away from their destination, which can be a significant barrier to access, resulting in it being difficult for people with disabilities to access the town centre. Alternatively, people with disabilities may opt to not travel to Shrewsbury completely and choose to shop out of town.

What is this intervention?

There would be no net loss of on-street Blue Badge parking within the river loop.

It is recognised that as part of the implementation of some of the traffic management interventions inside the river loop, the majority of on-street car parking may need to be removed/relocated. However, any Blue Badge parking removed would be relocated to an alternative destination inside the river loop, ensuring that this parking is close to destinations that people want to visit.

Map 30 – Area within which there would be no net loss of Blue Badge parking



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

The number of Blue Badge parking spaces would be safeguarded at Park and Ride and Park and Choose sites, with suitable active, inclusive modes of transport to access the town centre.

Any alterations to parking arrangements in the town centre would be carefully evaluated in consultation with key stakeholders, including disability interest groups.

What are the impacts of this intervention?

Accessibility

Ensuring Blue Badge parking spaces are maintained within the river loop would have a positive impact on the quality of life for people with disabilities. This would enable people with disabilities with greater independence and access to services and activities. This would enable people with the ability to engage in work,

education, and leisure activities, accessing services and being fully integrated with society.

Case Studies

Basingstoke

In December 2022, Basingstoke and Deane Borough Council adopted the Basingstoke Town centre Parking Strategy. As part of the strategy, it is proposed to consolidate car parking spaces within the town, helping to promote activity in the town and create an improved pedestrian environment. However, the parking strategy outlines that the reduction in the overall provision, consolidation or relocation of parking spaces must ensure that allocated Blue Badge parking spaces are maintained in both convenient and central parking locations, given associated mobility considerations. In addition, it is proposed that any changes to the provision of parking retain the required level of Blue Badge parking across the town.

For more information about this case study:

https://www.basingstoke.gov.uk/content/page/72827/Parking%20Strategy%20_%20adopted.pdf

Key Considerations for delivery of the intervention

- Agree key amenities within the town centre where provision of Blue Badge parking is critical.



5. Next Steps for Delivery

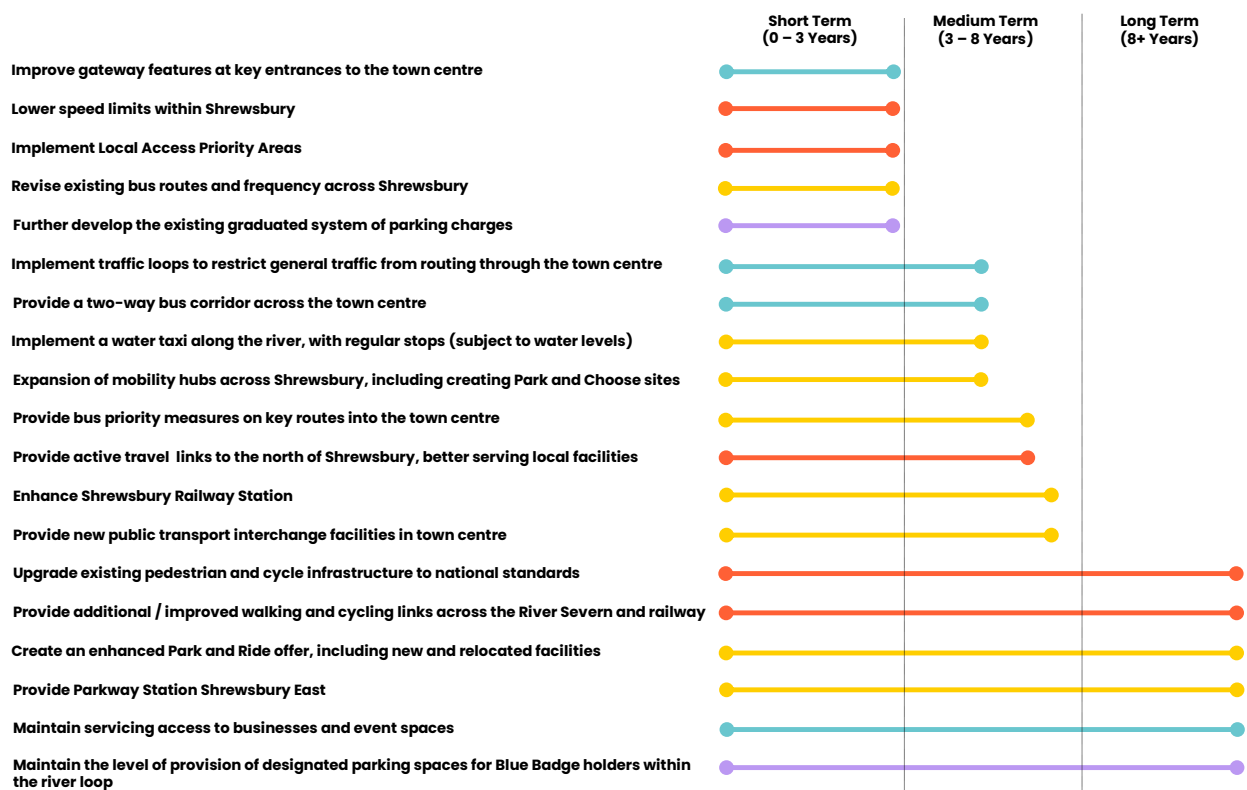
5.1. Delivery and Phasing Plan

To effectively implement the strategic interventions outlined in this strategy, Shrewsbury Big Town Plan Partnership has developed a Delivery and Phasing Plan. This plan establishes a logical sequence of projects, along with timelines and potential resource requirements. This will be regularly reviewed and updated, considering any available funding sources.

The Delivery and Phasing Plan determines how the strategic interventions could be executed in the short, medium, and long term, considering interdependencies between them. Whilst high-level, indicative cost estimates have been provided, more detailed cost analysis would be conducted as each intervention progresses, accompanied by the preparation of detailed designs and business cases.

Figure 12 presents an indicative timeline of interventions presented within the strategy.

Figure 12 - Delivery and Phasing timeline



The Shrewsbury Movement and Public Space Strategy serves as a blueprint for achieving the goals of the Big Town Plan. However, it is recognised that further work is needed, including; detailed cost analysis, designs, testing and modelling to inform the implementation of strategic interventions. Consultation with key stakeholders and the public would also be conducted prior to implementation, ensuring that all perspectives are considered.

It is recommended that the following studies are undertaken initially to complement the strategy:

- ☒ **Bus Operations study** – To confirm the final routing arrangement of individual services for now and in the future. The study would need to identify general locations and capacity requirements of bus stops and layover facilities. This would need to be carried out in close collaboration with bus operators.
- ☒ **Traffic Operations study** – Modelling would assess the capacity of the highway network, including any displaced vehicular movements and air quality implications. This would also consider vehicle tracking to provide important information and explore mitigation measures for any adverse impacts.
- ☒ **Traffic Management trials** – It may be appropriate to carry out trials of the traffic management loop system before it is finalised. This may mean that the overall design process becomes an iterative process being modified depending on the outcome of the trials.

5.2. Public Spaces

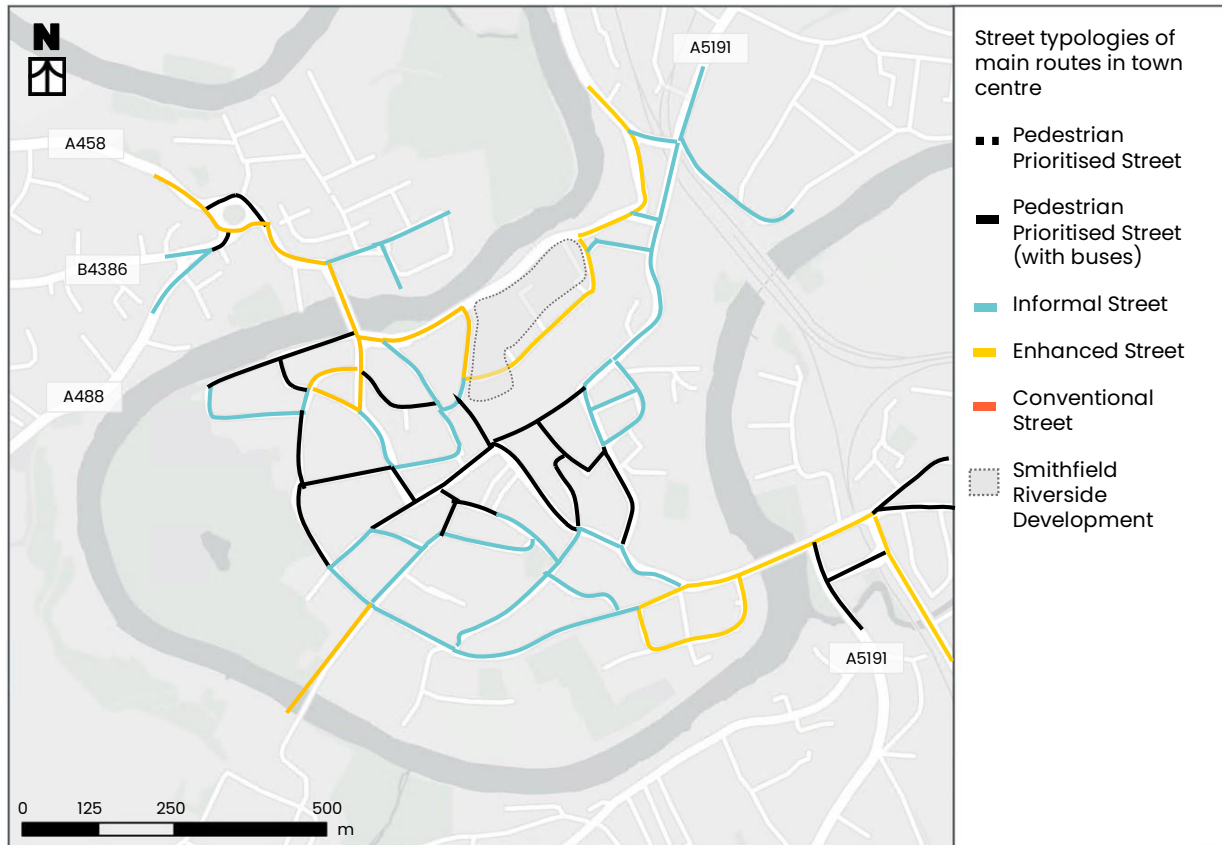
Public space improvements are reliant upon reallocation of highway space. As a result, public space improvements are intrinsically linked to the phasing of traffic management improvements, particularly within the river loop. Following traffic management changes being made, the strategy to enhance public spaces in Shrewsbury can be initiated subject to funding being available.

Public space interventions would align with the Shrewsbury Design Code, which sets out the vision for the design of buildings, public spaces, and streets. This Code outlines strategic principles, design guidelines and parameters to form a clear framework for both designers and decision makers to shape the high-quality buildings and spaces in the town.



Map 31 is a guide that has been used alongside the Design Code to determine the future character and design of streets within Shrewsbury. It is important to note that whilst the plan aligns with the strategy, the plan may change dependent on more detailed analysis undertaken as the strategy progresses.

Map 31 – Indicative street typologies



Credits: Esri UK, Esri, HERE, Garmin, Foursquare, GeoTechnologies, Inc, METI/NASA, USGS

5.3. Funding Opportunities

Shrewsbury Moves: A 10-year vision and plan for transforming movement and public space in Shrewsbury is intended to guide the Shrewsbury Big Town Plan Partnership in prioritising resources and/or bidding opportunities for external funding. It is considered that having an established strategy in place would be beneficial in providing a clear sense of direction for future funding opportunities. This would enable the development of business cases and delivery plans, enhancing the viability of the strategic interventions and would provide “shovel ready” schemes to be developed as funding opportunities arise. Further discussion of funding opportunities is provided in the accompanying delivery plan.

6. **Summary and Conclusion**

Shrewsbury Moves: A 10-year vision and plan for transforming movement and public space in Shrewsbury outlines a series of strategic interventions that have been designed to align with key themes and principles that support the aims and objectives of the Big Town Plan.

The strategic interventions outlined within this strategy would involve significant changes to movement within Shrewsbury, particularly by private motor vehicles. However, it is considered that the subsequent economic, social, health and well-being benefits obtained from reducing the dominance of vehicular traffic in Shrewsbury could be significant and would provide a strong sense of place within the town as well as providing much better conditions for walking and cycling.

The proposals for each strategic intervention summarised in the preceding chapters of this strategy are not designed to be fixed, but rather to offer a flexible framework that can accommodate the varied and complex future transport landscape of Shrewsbury as individual projects move forward.

Extensive stakeholder engagement has informed the development of strategic interventions to date. However, further engagement with stakeholders and members of the public would be required as strategic interventions are developed in greater detail.

The recommended strategy for public space improvements focuses on re-prioritising road space and public space within the town centre. These improvements are dependent upon the wider programme of through traffic reduction measures as presented within the strategy.

Enabling the reduction of through traffic through the town centre in particular, would unlock placemaking opportunities and would create healthier street environments which support safe conditions for walking and cycling as well as provide space for economic growth through relieving pressure on the towns limited amount of road space.

It is important to emphasise that the interventions described in this strategy must be considered as in unison. When combined, these interventions would create and promote attractive alternatives to using private motor vehicles in Shrewsbury. At the core of this strategy is the commitment to put people at the forefront of decision making for the town.

This strategy aims to achieve this by presenting a holistic set of transformative projects that if successfully implemented, would contribute to realising the vision for mobility in the town and make Shrewsbury one of the most inclusive and accessible towns in the UK.




7. Glossary

Active Travel	Modes of travel which require physical activity. This includes walking, wheeling, and cycling.
Air Quality Management Areas (AQMA)	If a Local Authority identifies any locations within its boundaries where the Air Quality Objectives are not likely to be achieved, it must declare the area as an Air Quality Management Area (AQMA). The area may encompass just one or two streets, or it could be much bigger. The Local Authority is subsequently required to put together a plan to improve air quality in that area – a Local Air Quality Action Plan.
Automatic Number Plate Recognition (ANPR) Surveys	Traffic surveys that use advanced cameras to record number plates at specific locations, stamped by time and date, to understand vehicle routing and origin–destination pairs through a defined study area.
Blue Badge parking	A permit that is displayed upon parking a vehicle which enables people to park in a space reserved for persons with disabilities.
Bus Priority	The use of technology or physical infrastructure to influence the environment in which buses operate to deliver speed and reliability improvements, to mitigate the impact of non–public transport traffic. This can include, but is not limited to; bus lanes, bus gates and alterations to traffic signals.
Car Clubs	Short–term car–sharing services, allowing members access to parked cars. They are typically operated on a short–term rental basis either by the minute, hour, day or by the number of miles driven.
Demand Responsive Transport (DRT)	A flexible service that provides shared transport to users who specify their desired location and time of pick–up and drop–off.
Disability Discrimination Act (DDA)	The act that protects the right of disabled people, including (but not limited to) those with a physical disability, mental impairment, or visual impairment. The act makes it mandatory for providers to take reasonable steps to provide access for disabled people.
‘Do Minimum’ scenario	Baseline data, taken from the SATURN model which presents data for the existing highway network with modifications which represent proposals that are currently committed to be constructed.
Gateway Features	Easily identifiable areas at key entrances to a destination, which create a memorable sense of arrival to the town centre and places within it. They typically reflect the town’s cultural and historical assets, providing an attractive and welcoming entrance.



Light Goods Vehicles (LGVs)	Commercial carrier vehicles with a gross vehicle weight of no more than 3.5 metric tons. This can include vehicles such as vans, pick-up trucks, and three-wheelers.
Local Cycling and Walking Infrastructure Plans (LCWIPs)	LCWIPs are a strategic approach to identifying cycling and walking improvements required at a local level. They form an integral part of the Government's strategy to increase the number of trips made on foot or by bicycle.
Local Transport Note (LTN) 1/20	National guidance for local authorities on designing high-quality, safe cycle infrastructure. It includes guidance on designing junctions, crossings, cycle parking, traffic signs, road marking and other key infrastructure to create a step change which will make cycling more appealing for most people.
Local Access Priority Area	A scheme where private motor vehicle traffic in residential streets is greatly reduced through implementing modal filters. This minimises the amount of traffic that routes through residential roads and restricts through traffic.
Manual Classified Count (MCC)	MCC's record all vehicles passing the camera, allowing for totals to be counted by vehicle class/type and, therefore, to estimate a sample rate for the ANPR captures.
Micromobility	Small, lightweight vehicles which are used to transport people or goods. For this strategy, micromobility devices include; bicycles, e-bikes, rickshaws and/or electric scooters.
Mobility Hubs	Places which bring together shared transport with public transport and active travel in spaces which are designed to provide sustainable travel options in improved public spaces.
Modal Filters	A feature at a specific point on a street that limits through journeys by certain vehicles e.g., private motor vehicles. Common types of modal filters allow walking, cycling, buses, taxis, and emergency vehicles to pass through. Modal filters can be time limited e.g., school streets. Modal filters can either be physical restrictions, such as bollards or planters or can be technological restrictions, such as the use of ANPR cameras.
Modal Shift	A change from one form of transport to another, more sustainable option.
Park and Choose	A concept whereby people travelling into a town/city can park and travel the final section of their journey by a sustainable mode of transport, typically either by public transport, walking, wheeling, or cycling.
Park and Ride	A system where people drive their private motor vehicles to a car park on the outskirts of a town or city, travelling into the centre by sustainable means of transport, typically public transport.
Parkway Station	A railway station with car park, normally on the outskirts of a regional or city centre, allowing further onward travel by rail.

Pedestrian Priority Zone (PPZ)	Areas where the priority of pedestrians is paramount over other street users. During designated hours, no private motor vehicles unless exempt are permitted to enter the PPZ. Whilst the PPZ does not prevent people from entering the area outside of the designated hours of operation, vehicles are still treated as 'guests' within the zone.
Placemaking	The process of creating quality places that people want to live, work, play and learn in.
Primary data	First-hand data collected for the purpose of this strategy.
Protected Characteristics	<p>The Equality Act 2010 defines protected characteristics as:</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Race <input checked="" type="checkbox"/> Sex <input checked="" type="checkbox"/> Gender reassignment status <input checked="" type="checkbox"/> Disability <input checked="" type="checkbox"/> Religion or belief <input checked="" type="checkbox"/> Sexual orientation <input checked="" type="checkbox"/> Marriage and civil partnership status <input checked="" type="checkbox"/> Pregnancy and maternity <p>It is against the law to discriminate against anyone because of any of the above protected characteristics.</p>
Public Spaces	Any publicly owned streets, roadways, sidewalks, parks, plazas, and other open spaces that comprise the shared space of a city for its visitors, employees, and residents.
Public Space improvements	Interventions that aim to create better places to live, work and visit by improving the physical environment. This can include any space that is accessible by the public and typical examples include; improved street lighting, improved footpaths and footways, planting trees and/or providing public art.
Public Transport Interchange	A location where facilities are provided for a range of public transport, including, but not limited to; rail, bus, and taxis.
Road space reallocation	Shifting road space which is currently dedicated to private motor vehicles or car parking, to serve other forms of mobility, such as bus lanes, cycle lanes, parklets, footways or public space.
Secondary data	Second-hand data that has already been collected and recorded for other research purposes.
Sense of Place	An emotion that a person can attach to an area based on their experience. A place that is welcoming and attractive can result in people being more inclined to visit time and time again.
Severance	The negative impact of infrastructure, motorised traffic and other physical barriers which restrict the ability for people to move freely.
Shopmobility	A nationwide scheme that enables people with limited mobility to access shops and leisure facilities within a town, city, or shopping centre. It provides an affordable, short-term loan service with accessible mobility options, creating an inclusive environment.

Simulation and Assignment of Traffic to Urban Road Networks (SATURN) Model	<p>A piece of modelling software which simulates and assigns traffic onto the network to model the impact of queueing and delay within a defined study area. Within this strategy, reference is made specifically to the SATURN model developed for Shrewsbury, as part of the business case for the Shrewsbury North West Relief Road (NWRR).</p>
Space Syntax	<p>A set of theoretical techniques for analysing spatial layouts and human activity patterns in buildings and urban areas. One of the most popular analysis methods is "Choice", which provides a measure of likely a street is to be passed through from one destination to another. This method can therefore provide an indication of the flows with the highest volume of activity, or the number of intersections that need to be crossed to reach a specific street.</p>
Strategic Road Network (SRN)	<p>The strategic road network is the largest, most important piece of infrastructure in the UK, consisting of over 4,500 miles of motorways and major A roads. It is managed by National Highways.</p> <p>Within Shrewsbury, the following roads are classified as the strategic road network:</p> <ul style="list-style-type: none">  A5  A458  A49
Sustainable Transport	<p>Efficient, safe, and accessible modes of transport with lower social and environmental impacts on the environment than travel by diesel/petrol single occupancy private motor vehicles. In the context of this strategy this includes walking, wheeling, and cycling, low and ultra-low emission vehicles, car sharing and public transport"</p>
Swept Path Analysis	<p>Evaluation and calculation of space required when a specific vehicle makes turning manoeuvres, typically undertaken within CAD (Computer Aided Design) software.</p>
Through trip	<p>A trip that starts and end outside Shrewsbury town centre and makes no stops within the town.</p>
Traffic Loop	<p>The Traffic Loop system would change how vehicular access to the town centre is operated. This would involve segmenting Shrewsbury town centre into three Traffic Loop, with vehicular access being limited to one location on each of the Traffic Loop.</p> <p>Vehicles are prevented from travelling across the inner boundaries between segments, preventing through traffic through the town centre. This would unlock significant opportunities for public space improvements, regenerating the town centre.</p>

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Shrewsbury Movement &
Public Space Strategy
Summary

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