Executive Summary

Introduction

This Strategic Outline Case (SOC) sets out the case for investment in a new river crossing in Bradford on Avon. The Safer Crossing project aims to identify river crossing options for active travel users and is being developed by Bradford on Avon Town Council.

The provision of a new river crossing to supplement the Town Bridge in Bradford on Avon has been a long-standing aspiration for many local people and organisations. To support these priorities an additional river crossing is deemed as essential in providing a safe, high-quality walking and cycling route across the town centre transport network, improving the quality of environment for people walking, cycling, wheeling and spending time in the town centre.

Strategic Dimension

The purpose of the Strategic Case is to show if change is needed and why.

The case for change is summarised below:

	The severance impact of the existing situation caused by the River Avon and the limited existing crossing points. Here, it is demonstrated based on traffic counts from July 2023 that the Town Bridge is used for 15,000 to 20,000 vehicle trips per day.
	Based on best practice current walking and cycling design guidance, this level of traffic flow presents a serious challenge to pedestrians and cyclists, especially given the constrained space available on the Town Bridge.
	In the latest available five-year period, there have been 14 recorded collisions in the vicinity of Town Bridge, of which 13 resulted in injury to a pedestrian or cyclist. Evidence also suggests that the level of collisions are likely underreported.
	Low vehicle speeds due to congestion is evident on Town Bridge. High levels of congestion acts as a deterrent due to noise/air pollution impacts and reduced visibility for all users when crossing roads.
	The geospatial layout of Bradford on Avon, with key trip attractors both south and north of the River Avon, plus residential areas on both sides, means that crossing the river is a core desire line in both directions.

Source: PJA

Supporting Policy

The project is strongly supported by National, Regional and Local policy. It will deliver on key priorities of the Bradford on Avon Town Council Future of Transport Study Wiltshire Council's Local Transport Plan and Cycle Strategy including:

- Reducing the need for people to use their cars on a daily basis;
- Investing in low-carbon, accessible, efficient and sustainable transport infrastructure, that enable more people to walk and cycle; and
- Adapting out infrastructure to support modal shift.

Project objectives

The project vision and objectives were agreed with Bradford on Avon Town Council. The project objectives are:

1 Improve **road safety** of Bradford on Avon by reducing prevalence of collisions causing personal injury to pedestrians and cyclists;

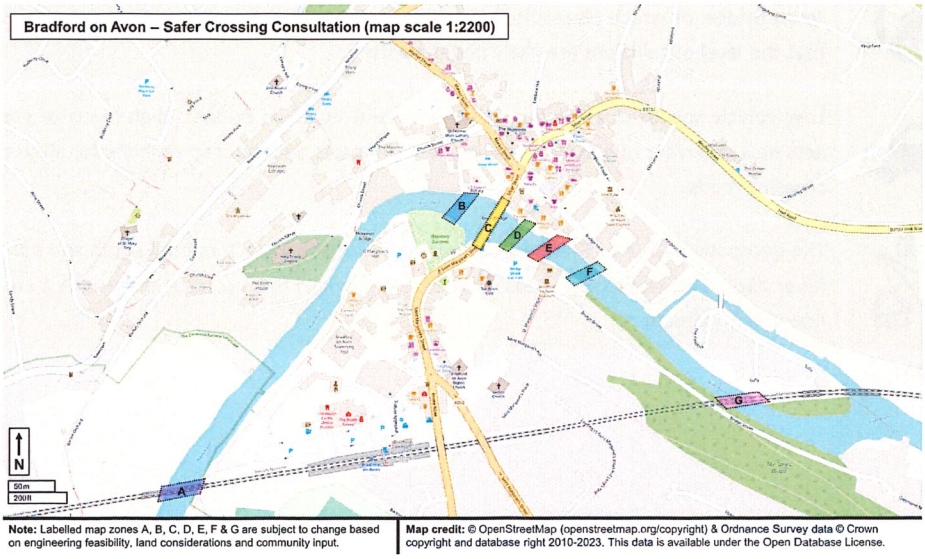
2 Increase **active travel** mode share; and

3 Provide a **new river crossing** and dedicated active travel infrastructure.

At this stage of the process, these objectives are high-level and will be refined during future stages as the Business Case process continues to OBC.

Option development

Seven zones for a new river crossing were considered. These are as follows:



Source: Sustrans

Options assessment

In order to identify an appropriate intervention to achieve the study objectives, an option assessment process is required. A two-stage sifting process was undertaken; including a high-level strategic assessment against a Do-Nothing scenario. A multi-criteria assessment of each shortlisted option was then undertaken considering the following criteria:

- Assessment compared to objectives;
- Indicative engineering feasibility undertaken by Sustrans;
- Assessment of public acceptability based on the December 2023 public engagement;
- Indicative deliverability; and
- Affordability; based on costings provided by Sustrans.

This assessment clearly identified Zone D and Zone E as top two scoring zones. Therefore, both Zone D and Zone E was taken forward for further appraisal.

Economic Dimension

The Economic Dimension sets out what the expected impacts of the project are and whether the project will provide value for public money. As per the outcomes of the options assessment, both Zones D and E were considered in the Economic Dimension.

The Department for Transport's (DfT's) industry-standard Active Mode Appraisal Toolkit (AMAT) was used to forecast the uplift in demand for walking and cycling as a result of each option; and subsequently, to monetise the benefits resulting from that change in demand.

Table 0-1 summarises the Present Value of Benefits (PVB) and Benefit Cost Ratio (BCR) for each of the active mode impacts over the 60-year appraisal period. It should be noted that the current forecast benefits are likely to be a conservative estimate.

Table 0-1: Summary of active mode impacts (£000s, 2010 prices)

Impact	Zone D	Zone E
Mode shift	23	27
Health	1,159	1,352
Journey Quality/Ambience	2,773	2,796
Present Value Benefit (PVB)	3,955	4,174
Present Value Cost (PVC)	1,766	2,159
BCR	**2.24**	**1.93**

Financial Dimension

The Financial Dimension sets out the cost and affordability of the options.

Table 0-2 presents a range of estimated costs for the construction of river crossing structure and supporting infrastructure.

Table 0-2: Estimated Costs (2019 Nominal Prices)

Zone	Low Scenario	Central Scenario	High Scenario
B	£5,430,000	£7,500,000	£10,930,000
C*	£4,010,000	£5,010,000	£7,020,000
D	£1,450,000	£2,380,000	£3,690,000
E (22m span)	£1,330,000	£2,160,000	£3,340,000
E (33m span)	£1,750,000	£2,910,000	£4,530,000

Source: Sustrans

All elements of the capital costs will need to be considered further as the options develop, with the potential for some increases in overall costs, particularly in relation to utilities diversions, environmental mitigation, as well as potentially land acquisition.

Commercial Dimension

The Commercial Dimension demonstrates if the project is commercially viable and how the scheme will be procured.

The project comprises the delivery of physical infrastructure (i.e. a new river crossing). Scheme level outputs could potentially include the following (list not exhaustive):

- Bridge structure;
- Acquisition of third-party land;
- Diversion of utilities; and
- Earthworks.

At this stage, no preferred procurement strategy has been defined, as the delivery body for the project is yet to be confirmed. Specific procurement options will continue to be investigated during the completion of future work stages and a preferred procurement method chosen.

Management Dimension

The Management Dimension demonstrates whether the project is achievable. At this stage of the process the Management Dimension is emerging at strategic level and will be updated as the business case process develops. At this SOC stage, there are a number of risks for the project. The highest ranked risks register are:

Table 0-3: Key project risks

Risk	Description
External funding	Inability to secure funding, resulting in the project not going ahead
Scheme cost increases	Capital costs exceed capital budget, leading to a funding shortfall which would result in either the scheme being de-scoped or further funding required.
Environmental	The scheme crossing has a number of environmental impacts which could result in adverse impacts upon the watercourse, species and habitats and flood risk
Land ownership	Potential for legal implications of having to secure land on both sides of the river to build bridges
Engineering feasibility	The buildability of bridge carries some risks due to the need to elevate the connecting link across the river

Source: PJA

Conclusion

At this SOC stage, it can be concluded that:

- There is a strong strategic case for the project. There is a clear case for change; and a safer river crossing for active travel users is strongly supported.
- The project will deliver on key priorities of the Wiltshire Local Transport Plan and supporting policies and the BoATC Future Transport Study, by reducing the need for people to use their cars, investing in low-carbon infrastructure, and future-proofing the transport network;
- The project would have a positive impact on mode shift away from car travel; and
- There is strong stakeholder support for proceeding the project to the next stages of design and appraisal.

There is therefore a strong case for continuing the development of the project into Outline Business Case stage.