



Tayside and Central Scotland
Transport Partnership

Active Travel Audit

Executive Summary: Brechin

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This report takes into account the particular instructions and requirements of our client.

It is not intended for and should not be relied upon by any third party and no responsibility is undertaken to any third party.

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1 Introduction

Brechin is a town of approximately 8,000 residents, located 7 miles inland of Montrose in the local authority area of Angus Council. The town is located adjacent to the River South Esk, which flows from Montrose. Employment centres include the Brechin Business Park and adjacent Castle Garden Centre located along the A90(T) to the west of the town. The town continues to expand on its boundaries, with significant further employment and housing development allocated on the west side of the town. The study area has a small central retail core, consisting of local shops, pubs and eateries. The town is unconnected by passenger rail services (aside from a heritage line) but lies adjacent to the A90(T) bypassing it between Forfar and Stonehaven. Green spaces in the town include Brechin Park in the east, and the Dalhousie Estates on the banks of the River South Esk in the south.

Active Travel is one of the key sub-strategies within the TACTRAN Regional Transport Strategy Refresh (2015 – 2036). Specifically, Action AT6, Audit, identifies that “*Where opportunities arise, locally focused active travel audits will identify priorities for future investment in developing the regional walking and cycling network*”, and this Active Travel Audit for Brechin seeks to support this action and will assist in delivering Angus Council’s Active Travel Strategy.

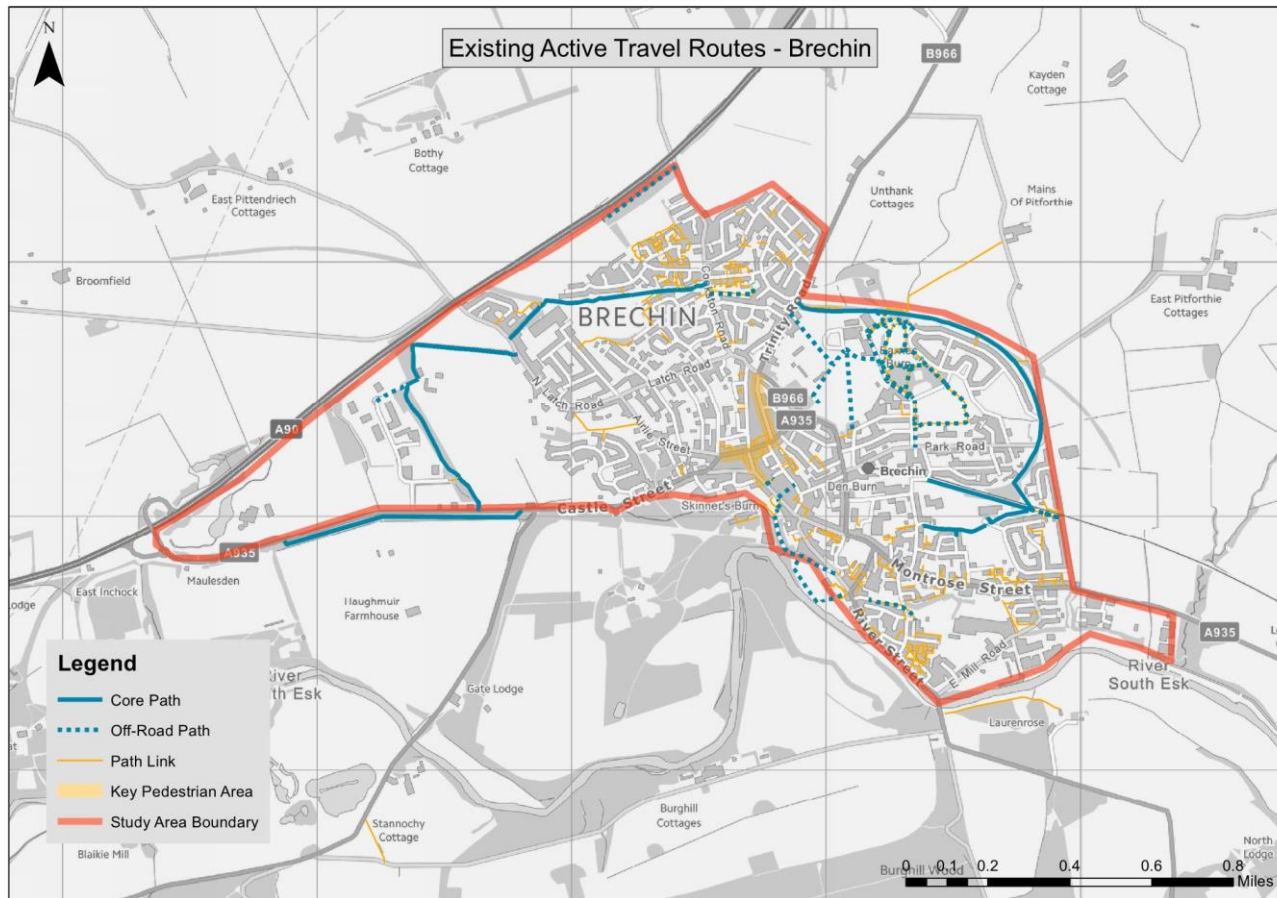
The aims of the Active Travel Audit are to provide:

- Up-to-date information of existing active travel networks to include an account of infrastructure and facilities for walking and cycling;
- Information and mapping of potential active travel networks of Brechin to include an account of recommended infrastructure and facilities needed within Brechin; and,
- A proposal for investment in active travel infrastructure in Brechin, with an indicative action plan, to help guide and secure potential future active travel investment.

2 Information on existing active travel networks

A multi-stage approach to data gathering has been followed. The approach combines the use of available secondary data with site visits, audits and observations and local insight and knowledge through stakeholder interviews to give a comprehensive understanding and record of the existing active travel network. The information collated resulted in a baseline report. Figure 1 shows the existing active travel network identified through this process. Throughout the data gathering exercise four aspects of active travel quality have been analysed (comfort, accessibility, safety and information).

Figure 1 – Existing Active Travel Networks



As Figure 1 displays, there are currently gaps in the active travel network in Brechin. Existing infrastructure does not always join up and as a consequence an active travel user is presented with a series of intermittent routes rather than a complete network. It is these gaps in which the focus lies moving forward as areas for potential interventions and upgrading. Further details are available in a Baseline Report on the Tactran website.

3 Information and mapping of potential active travel network

A series of high-level aims and objectives have been identified in response to the identified issues and barriers to achieving a comprehensive and high quality active travel network in Brechin. The aims and objectives were generated from a review of the existing active travel network. This process involved identifying key active travel routes between everyday activity destinations, and the level of service provided by the current active travel network. The spatial coverage of the current network was reviewed against key existing and future land uses.

Strategic desire lines to provide for key movements within the study area were identified. This forms the principle active travel network around which actions are based. In these locations upgraded or new protected infrastructure would serve or potentially generate a demand for active travel. Example movements include routes to and from schools and the college/community campus (located to the east, centre and north of the town), centres of employment (to the west within Brechin Business Park and the Castle Garden centre, and within the industrial areas around Commerce St), and centres of retail and tourism (around the High Street). The role of park spaces as hubs in the active travel network has been identified, as has the importance of active travel eastwards to Montrose, particularly for access to local authority support services. Particular attention has been given to ‘joining up’ the north and the south of the town, countering the perceived relocation of services away from the south of the town and towards the community campus in the north, and linking the east and west heritage areas (i.e. St Ninian’s Square and the High Street/Cathedral). Significant development areas in the west of the town north of Forfar Road have also been taken into account, alongside providing strategic active travel routes to and from existing residential neighbourhoods.

The proposed measures highlighted in Figure 2 were subject to two forms of analysis/modelling:

1. Multi-criteria assessment (MCA) considering all aspects of the active travel network, such as accessibility, safety, attractiveness, delivery; and,
2. Spatial Dynamic Network Analysis (sDNA) used to assess network connectivity and completeness and to predict potential usage.

This analysis allowed for the performance of individual active travel actions to be reviewed and ranked. Figure 3 illustrates the resulting potential strategic active travel network.

Figure 2 - Location of proposed active travel infrastructure measures

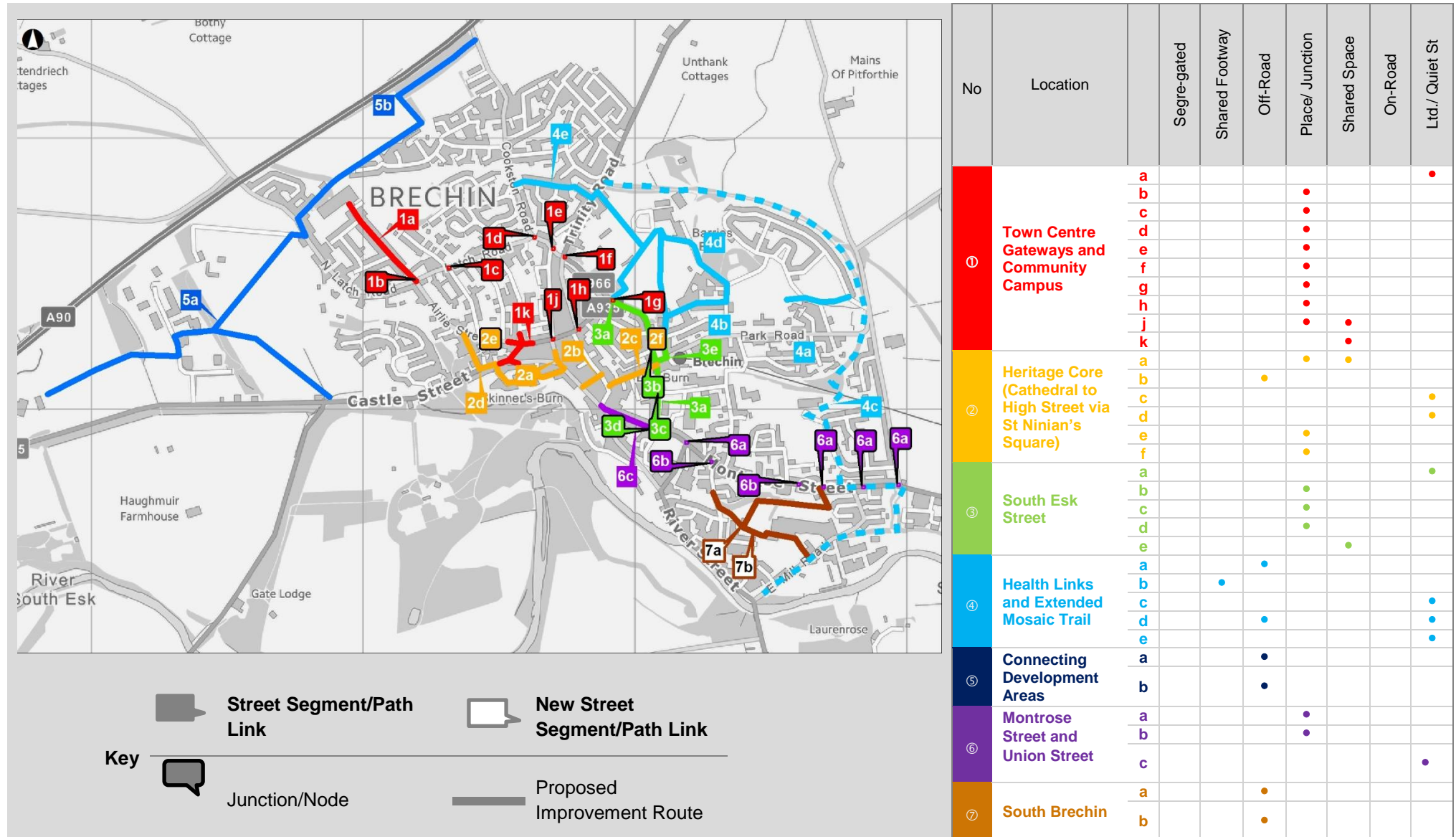
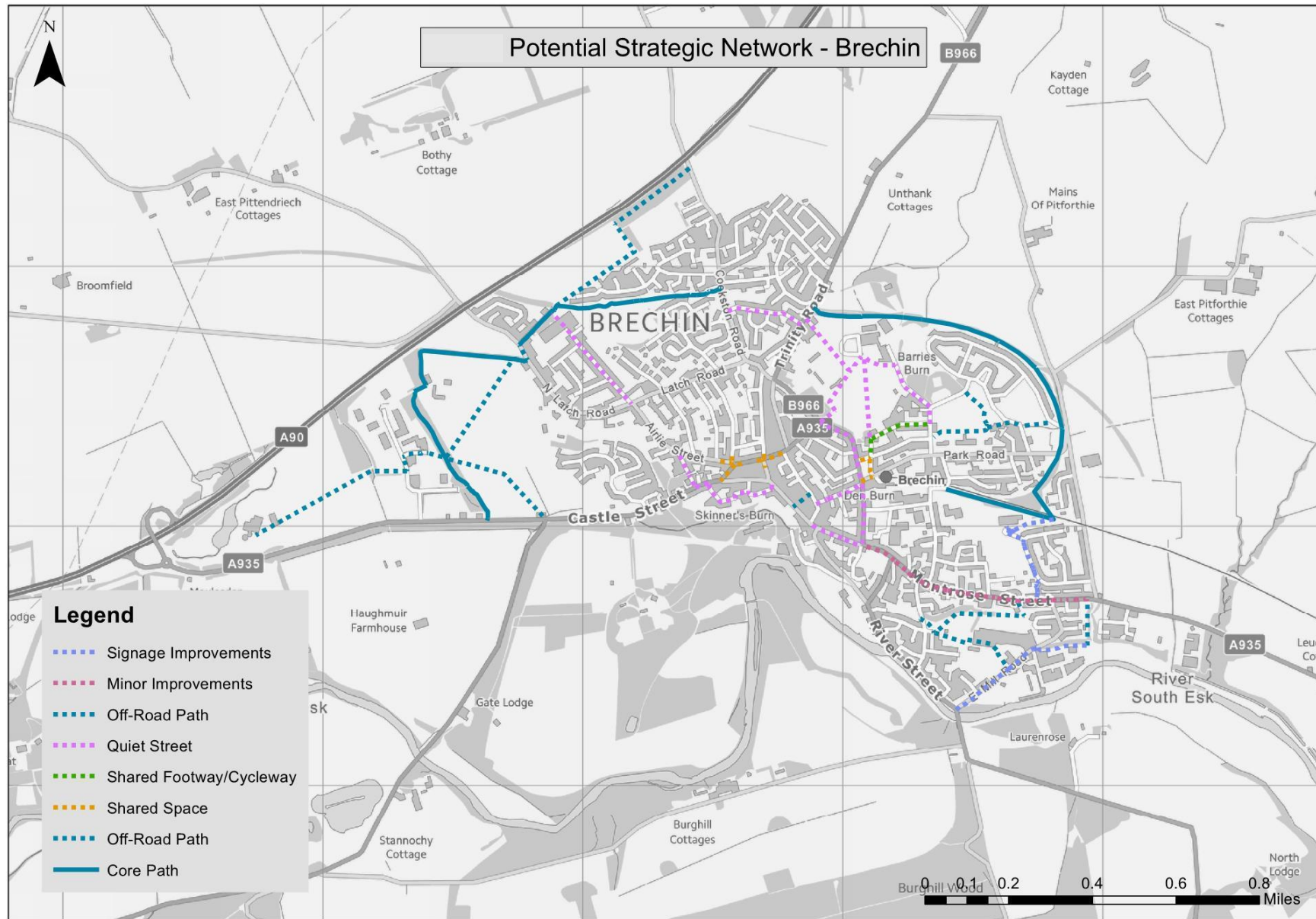


Figure 3 – Potential strategic active travel network



4 Opportunities for investment

The infrastructure action plan (Table 1) provides a description of proposed active travel infrastructure for Brechin, required to deliver the Potential Strategic Active Travel Network, covering:

- The type of infrastructure/intervention proposed, accompanied by a brief explanatory description;
- Approximate lengths of infrastructure (based on GIS measurements);
- Approximate duration of work (from feasibility to opening, assuming political and funding support);
- Indicative order of magnitude of cost.

Table 1 - Proposed action plan of potential active travel measures in Brechin

| | | Proposal | | | | Delivery | |
|-------------|---|---|---|---|------------------------------------|--|--|
| Action Ref. | | Location | Type of action* Junction On-road cycle lanes Shared footway/cycleway <i>Fietsstraat</i> - Cycle street with no overtaking Shared space Quiet street | Supporting information | Extent (number/length of path (m)) | Duration of work required (Short <1yr/ Medium <2yrs/ Long >2yrs) | Approx. scale of cost (£) Q - <£50k L - £50k-£150k M - £150k-£500k H - £500k-£1M S - £1M-£2.5M U - £2.5M-£5M |
| B6 | | Action 6: Montrose Street and Union Street (Ranking 1, indicative cost <£500k) | | | | | |
| B6 | a | Montrose Street | Crossings | Improve crossing facilities around bus stops, e.g. Witchden Road Dennis's East Mill Brae Drumachlie Loan | 4 | M | £50k-£150k |
| B6 | b | Montrose Street | Crossings | Provide traffic calming/carrageway treatment where Montrose Street narrows, e.g. between Nursery Lane and South Esk Terrace, and at Scotmid/Buster's Fast Food. Consider use of landscaping, e.g. trees set into carrageway and parklet footway extensions at strategic points around bus stops, shops and crossings | 2 | S | £50k-£150k |
| B6 | c | Union Street | Quiet Street/Signage | Small scale improvements including signage to the High Street along Union Street from the junction with Montrose Street, acknowledging high modelled pedestrian flows from the south of town to the High Street via this route | 221 | S | <£50k |
| B5 | | Action 5: Connecting Development Areas (Ranking 2, indicative cost <£500k) | | | | | |
| B5 | a | New Route | Off-Road Path | Provide high quality active travel corridor with priority measures through development between Castle Centre, Brechin Business Park and North Latch Road (to neighbouring residential areas) and Castle St (to town centre). Take advantage of existing routes and hedge lines between Castle Centre and Brechin Business Park to provide a dedicated active travel boulevard | 1800 | M-L | £150k-£500k |
| B5 | b | New Route | Off-Road Path | Link North Latch Road with Cookston Road through green space and existing Millennium marked trail to the east | 1062 | M-L | £50k-£150k |
| B1 | | Action 1: Town Centre Gateways and Community Campus (Ranking 3, indicative cost £500k-£1M) | | | | | |
| B1 | a | Duke Street | Quiet Street/part-time pedestrianisation | School street, bus/cycle gate, with possible one-way system for private vehicles (e.g. via Double Dykes or alternate give way system) | 377 | M | <£50k |
| B1 | b | Latch Road/Duke St/Airlie St | Junction | Raised table and build outs at junction mouth, reduced radii and crossing facilities | 1 | S | £50k-£150k |

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| B1 | c | Latch Road/Latch Gardens | Crossings | Continuous footway at Latch Gardens | 1 | S | <£50k |
| B1 | d | Latch Road/Cookston Road | Junction/Crossings | Provision of high quality pedestrian crossing facilities over Latch Road and Cookston Road, acknowledging high modelled pedestrian flows from the north of the town to Clerk/Market/South Esk streets via Cookston Road | 1 | L | £50k-£150k |
| B1 | e | Distillery Road/Market St | Junction/Crossing | Reduced radii and high quality pedestrian facilities/raised table across Market St | 1 | M | £50k-£150k |
| B1 | f | Clerk St/Southesk St/Distillery Rd/Trinity Rd | Junction | Significant junction improvements for walkers and cyclists reviewing desire lines and ensuring inclusive crossing facilities suitable for all are constructed on all arms of the junction | 1 | L | £150k-£500k |
| B1 | g | Southesk St/Panmure St | Junction | Junction improvements for walkers and cyclists reviewing desire lines and ensuring inclusive crossing facilities suitable for all are constructed across all arms of the junction. Design to acknowledge and enhance setting adjacent to bridge over den towards cemetery and church building to provide a gateway to the town centre via Panmure Place with potential raised crossings, build outs and placemaking interventions | 1 | L | £50k-£150k |
| B1 | h | Swan St/Clerk St/Panmure St | Junction | Junction improvements for walkers and cyclists reviewing desire lines and ensuring inclusive crossing facilities suitable for all are constructed across all arms of the junction (including Clerk St). Design to acknowledge and enhance setting to provide a further gateway to the town centre potential raised crossings, build outs and placemaking interventions. Review of vehicle priorities noting HGV traffic route via Swan St/Panmure St (currently priority movements via Swan St/Clerk St) | 1 | L | £50k-£150k |
| B1 | j | Market St/High St/Swan St | Junction | Shared space across central town cross roads with advanced measures at gateways away from the junction to reduce speed and calm behaviour of passing traffic in particular HGVs | 1 | M | £50k-£150k |
| B1 | k | St Mary St | Shared Space | Shared space at Church St/St Mary St with extension of footway areas to create a plaza around setting of Brechin Mechanics' Institute with traffic calming to provide an entrance gateway to town centre. Apply carriageway surface treatment/high quality resurfacing to change feel of space. Extend concept along St Mary St to and including Airlie St junction acknowledging start of retail streets | 80 | L | £150k-£500k |
| B4 | | Action 4: Health Links and Mosaic Trail (Ranking 4, indicative cost <£500k) | | | | | |
| B4 | a | Ward's Park | Off-Road Path | Complete path links on south side of park between Wards Road and Park View, addressing barrier between Park Grove and cricket ground | 234 | S | <£50k |

| Proposal | | | | | | Delivery | |
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| B4 | b | Infirmary St | Footway widening | Increase footway width along north side of Infirmary Street and extend double yellow lines along east section and Infirmary Road to facilitate | 310 | S | <£50k |
| B4 | c | Railway Path, Drumachie Park | Signed Off-Road Paths | Introduce extended Mosaic Active Trail with additional/new mosaic features around railway path around north and west of town linking around Drumachie Park to River South Esk and integrate into green infrastructure strategy | 3059 | M | <£50k |
| B4 | d | Brechin Park, Distillery and Cemetery | Off-Road Paths/Quiet Streets | Provide clear information on use of cemetery and distillery paths accompanied by clear information and map boards Provide widening of existing narrow roads where adjacent green space allows and where no existing path runs adjacent, particularly widen existing link between South Esk St and Smithbank Road adjacent to cemetery | 1240 | 1 | <£50k |
| B4 | e | Cookston Crescent | Quiet Street | Realign signed route between railway path to reflect modelled and Strava route with zebra crossings at interfaces with Trinity Road and Cookston Road | 297 | 1 | <£50k |
| B3 | | Action 3: South Esk Street (Ranking 5, indicative cost £1M-£2.5M) | | | | | |
| B3 | a | South Esk St | Speed limits and footway improvements | Implementation of 20mph limits between Panmure St and Montrose St, with particular traffic calming measures to reduce downhill traffic/HGV speeds between Commerce St and Union St Widening of southern/western footway around northern section of road, acknowledging high modelled pedestrian flows along South Esk St corridor Pedestrian entrance to Lidl direct from South Esk St | 546 | M | <£50k |
| B3 | b | South Esk St | Crossing | Raised table/street segment across and along South Esk Rd alongside St Ninian's Square (between Dalhousie St/library crossing point and Caledonian Hotel/Damacre Road), integrating with treatments around St Ninian's Square itself to bond the square with the town to the west | 1 | L | <£50k |
| B3 | c | Commerce St/South Esk St | Junction | Reduced radii and raised tables | 1 | M | £50k-£150k |
| B3 | d | Union St/Montrose St/South Esk St/Esk Park Terrace | Junction | Significant junction improvements for active travel, in particular crossing the junction mouth of Union St | 1 | M | £150k-£500k |
| B3 | e | St Ninian's Square (Park Road, Infirmary Road, Dalhousie St, South Esk St) | Shared space | Shared space and high quality streetscape and surfaces around perimeter of St Ninian's Square, relating it to desire lines between uses in and around the square (e.g. library, Caledonian heritage rail station, shops, bus stop) and identified routes towards the town centre (i.e. South Esk St, Damacre Road). Narrowing of carriageway on South Esk St with traffic calming measures and high quality resilient surfacing extending across South Esk St | 252 | L | >£1M |

| Proposal | | | | Delivery | | | |
|--------------------------------|---|---|------------------------|--|--|--|------------|
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| B2 | Action 2: Heritage Core (Cathedral to St Ninian's Square via High Street) (Ranking 6, indicative cost <£500k) | | | | | | |
| B2 | a | High St/Church St | Junction | Provide enhanced shared space including level surfaces at current footway/carriageway interface on desire lines around junction | 95 | M | £50-150k |
| B2 | b | High St to City Road | Off-Road Path | Provide signed and attractive cut through via Close/informal car parking area at rear of Arena building | 82 | L | <£50k |
| B2 | c | Damacre Road | Quiet Street | Footway widening and maintenance of existing double yellow lines, with potential one way system with cycling contraflow and raised table at junction with City Road to provide prominence/connectivity from Arena building link action (above) | 192 | S | <£50k |
| B2 | d | Channory Wynd, Bishop Close, Convenors Wynd | Quiet Street/Signage | Promotion of high quality and attractive heritage aspects through reinvigoration/reinvention/reimagination of heritage trail including signage and map boards, connecting this to mosaic flood defence trail and former railway path | 535 | S | <£50k |
| B2 | e | Castle St | Crossing | Provide zebra crossing between Convenor's Wynd and Channory Wynd to reflect route and access to proposed reinvigorated heritage trail and emphasise north-south connections within the town | 1 | S | <£50k |
| B2 | f | South Esk St | Crossing | Raised table across South Esk St between Caledonian Hotel/Damacre Road, integrating with proposed treatments around St Ninian's Square | 1 | M | <£50k |
| Significant Gap Schemes | | | | | | | |
| B7 | Action 7: South Brechin (Ranking 1, indicative cost <£500k) | | | | | | |
| B7 | a/b | Nursery Street, East Mills Road and Montrose Street | Off-Road Path | Seek strategic opportunities, e.g. through development and green infrastructure, to provide off-road links between Nursery Street, East Mills Road and Montrose Street taking into account existing desire lines | 759 | L | £50k-£150k |

*The type of action identified in the table above is the high-level optimum solution. Future detailed design work may result in the action type changing to a solution lower in the design hierarchy.