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Job number 253786

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**Active Travel Audit** 

Executive Summary: Braehead

Issue | 28 August 2017



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#### 1 Introduction

The Braehead area of Stirling which forms the study area has approximately 6,000 residents. Stirling is located in the south of the Stirling Council local authority area. Braehead is part of the outward growth of the city, across significant historical former battleground sites. Consequently, the study area of 'Braehead' consists of Braehead itself and a number of further census output areas located to the east of the city such as Springkerse and Broomridge. Stirling Council, one of the current main employers, is located between Kerse Road and the railway line which both divide the area. The city continues to expand through infill development. Braehead has a local retail core, with of a number of small local shops and a major retail park in the east. Green spaces include Balquidderock Wood to the south (Green Belt, an SSSI, and a Local Nature Reserve), and Yellow Hill (a large central space incorporating an old landfill site). Heritage trails run through Braehead and connect with the surrounding path network.

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 Braehead seeks to support this action and will assist in delivering Stirling Council's Local Transport Strategy and the Active Travel Policy, Walking and Cycling to a Healthier Stirling.

The aims of the Active Travel Audit are to provide:

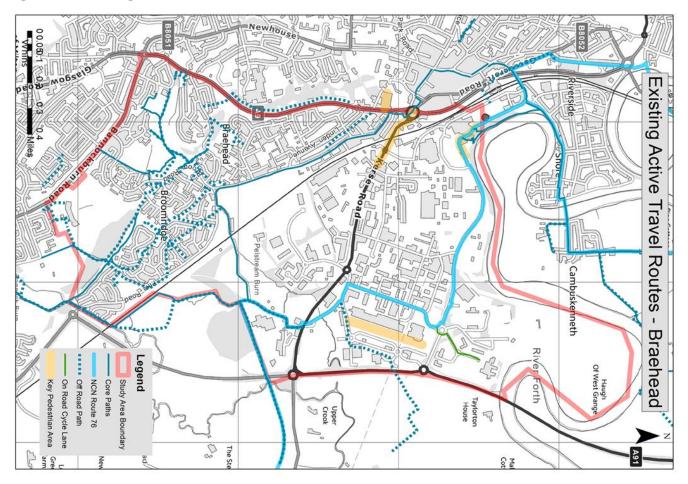
- Up-to-date information of existing active travel networks to include an account of infrastructure and facilities for walking and cycling;
- Information and mapping of potential active travel networks of Braehead to include an account of recommended infrastructure and facilities needed within Braehead;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

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# 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 Braehead. 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 Braehead. 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 east-west and north-south movements within the study area were identified. In these locations upgraded or new active travel infrastructure would serve or potentially generate a demand for active travel. Example movements include routes to and from schools (located to the north, centre, and south), centres of employment (located centrally and to the north), health facilities (around the A9 corridor), and retail (located in the north east and north west). Figure 2 highlights these routes and identifies the proposed infrastructure type.

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.

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Figure 2 - Location of potential active travel infrastructure measures

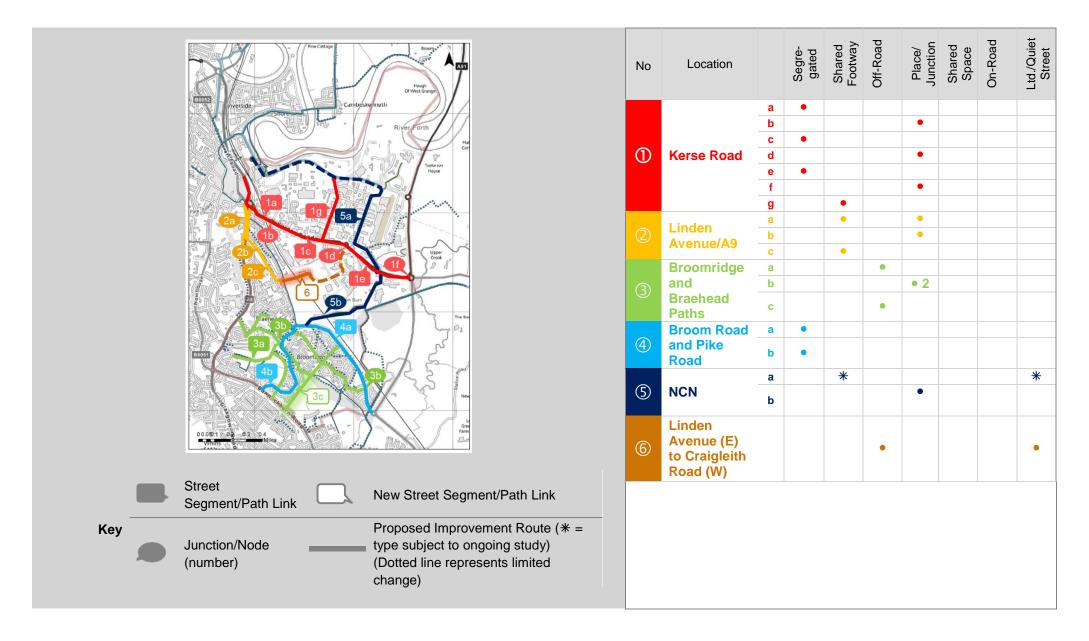
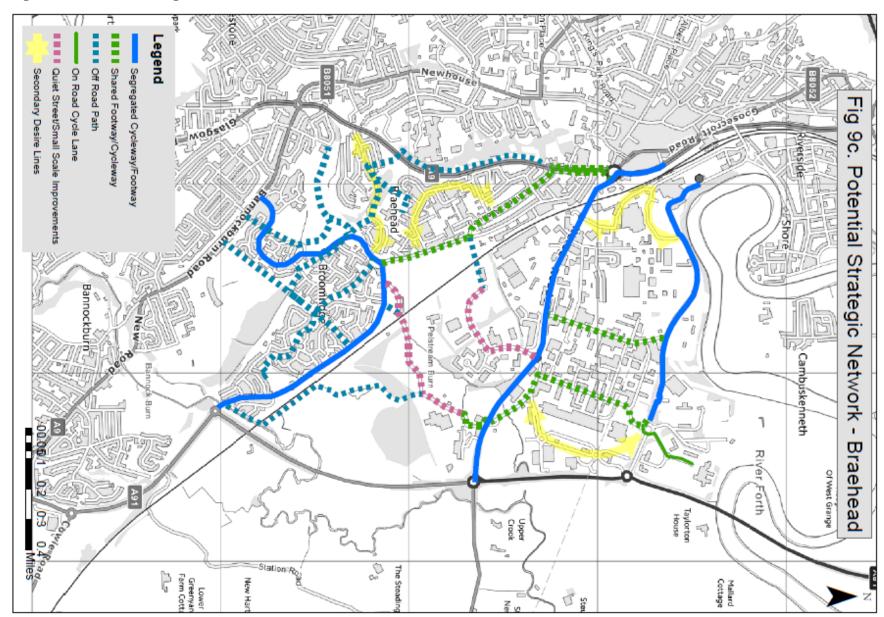


Figure 3 – Potential strategic active travel network



# **4** Opportunities for investment

The infrastructure action plan (Table 1) provides a description of proposed active travel infrastructure for Braehead, 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.

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Table 1 - Proposed action plan of active travel measures in Braehead

		Proposal				Delivery	
Action Ref.		Location	Type of action*	Supporting information	Extent (number/ length of path (m))	Duration of work required (Short <1yr/ Medium <2yrs/ Long >2yrs)	Approx. scale of cost (£)
		Action 1 Kerse Road					
		(Ranking 1, indicative cost £1M-£2.5M)					
B1	а	A905 Springbank Road	Segregated route	Transformation of current street (west of Players Road)	650m	М	£150k-£500k
B1	b	Springbank Road/Players Road	Junction	Remodelling of roundabout	1nr	S	£150k-£500k
B1	С	A905 Kerse Road	Segregated route	Transformation of current street (Players Road to Craigleith Road)	800m	L	£150k-£500k
B1	d	Kerse Road/Craigleith Road	Junction	Remodelling of roundabout	1nr	М	£150k-£500k
B1	е	A905	Segregated route	Transformation of current street (Craigleith Road to A91)	750m	L	£150k-£500k
B1	f	A905/A91	Junction	Junction arrangements to allow cycling N/S/E/W	1nr	L	£150k-£500k
B1	g	Whitehouse Road	Shared footway/cycleway	Modifications along existing pavement through industrial area	700m	S	£50k-£150k
		Action 4 Broom Road and Pike Road					
		(Ranking 2, indicative cost £1M-£2.5M)					
B4	а	Pike Road	Segregated route	Grass verges around existing streets	1150m	М	£500k-£1M
B4	b	Broom Road	Segregated route	Grass verges around existing streets	1300m	М	£500k-£1M
		Action 2 Linden Avenue/A9	3 3	J J			
		(Ranking 3, indicative cost <£500k)					
B2	а	A9 at Waitrose	Shared footway/cycleway	Placemaking and gateway improvements with crossings	300m	М	£50k-£150k
B2	b	Linden Avenue/Valleyfield Place	Junction	Placemaking improvements around mini roundabout	1nr	S	£50k-£150k
B2	С	Linden Avenue	Shared footway/cycleway	e.g. shared footway/cycleway	600m	S	£50k-£150k
		Action 3 Broomridge and Braehead Paths					
		(Ranking 4, indicative cost £500k-£1M)					
ВЗ	а	Braehead and Broomridge paths	Off-road path	Tarmacked paths/renewal up to an accessible for all condition throughout particularly where poor condition	3500m	S	£150k-£500k
В3	b	Broom Road and Pike Road	Crossings	Crossings (2, e.g. toucan/zebra) where crosses path network	2nr	S	£50k-£150k
В3	С	Between Bannockburn Road and Broomridge path network	Off-road path	New tarmacked path, east of curve in Broom Road	550m	S	£50k-£150k
		Action 5 NCN					
		(Ranking 5, indicative cost £2.5M-£5M)					
B5	а	Between Bannockburn Road and A91 via Pike Road	Mixed shared footway/quiet street	Upgrade path/NCN, pending third party study	3600m	М	£500k-£1M
B5	b	Between Broom Road and Forthside Way	Off-road path (bridge)	Upgrade existing railway crossing, pending third party study	1nr	М	£1M-£2.5M
	cant G	ap Scheme					
		Action 6 Linden Avenue (E) to Craigleith Road (W) (Ranking 6, indicative cost £2.5M-£5M)					
B6		Between Craigleigth Road (western extent) and Broom Road	Off-road path (bridge) and linking routes/quiet street	New Railway Bridge with small scale improvements to connecting routes, e.g. Craigleith Road	1nr bridge 800m total link between Broom Road and Kerse Road	L	£2.5M-£5M

<sup>\*</sup>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.