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**Active Travel Audit** 

Executive Summary: Forfar

Issue | 28 August 2017



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#### 1 Introduction

Forfar is a town of approximately 14,000 residents, located centrally within the local authority area of Angus. It is a town whose main manufacturing employment base has decreased over time. One of the main current employers is Angus Council, located in a business park on the western boundary of the town (adjacent to the A90 which bypasses the town). The town continues to expand on its boundaries, with the recent addition of the Forfar Community Campus on the northern perimeter, which is home to one of the largest high schools in Angus (the Forfar Academy). The town has a local retail core, consisting of Castle Street and the High Street (intersecting at 'The Cross'). Elsewhere, green spaces in the suburban areas of the town include Forfar Loch, Balmashanner Hill (both protected in the LDP for their environmental qualities) and its adjoining Reid Park.

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 Forfar 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:

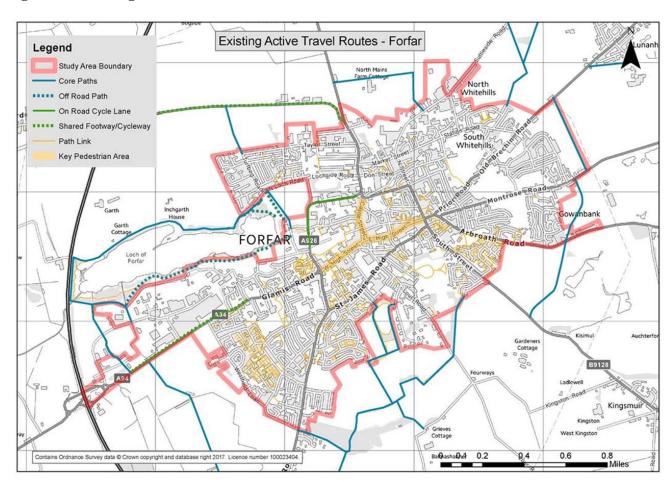
- Up-to-date information of existing active travel networks to include an account of infrastructure and facilities for walking and cycling;
- Information and mapping of potential active travel networks of Forfar to include an account of recommended infrastructure and facilities needed within Forfar; and,
- A proposal for investment in active travel infrastructure in Forfar, 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 Forfar. 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 Forfar. 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 were identified. Example movements include routes to and from the new Community Campus (located to the north of the town centre), centres of employment (located centrally and to the west), health facilities (to the east), retail (in the town centre) and leisure (examining routes to and within the Forfar Loch area). Significant development areas in the north and south-west were also taken into account, alongside providing strategic active travel routes to and from existing residential neighbourhoods. 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

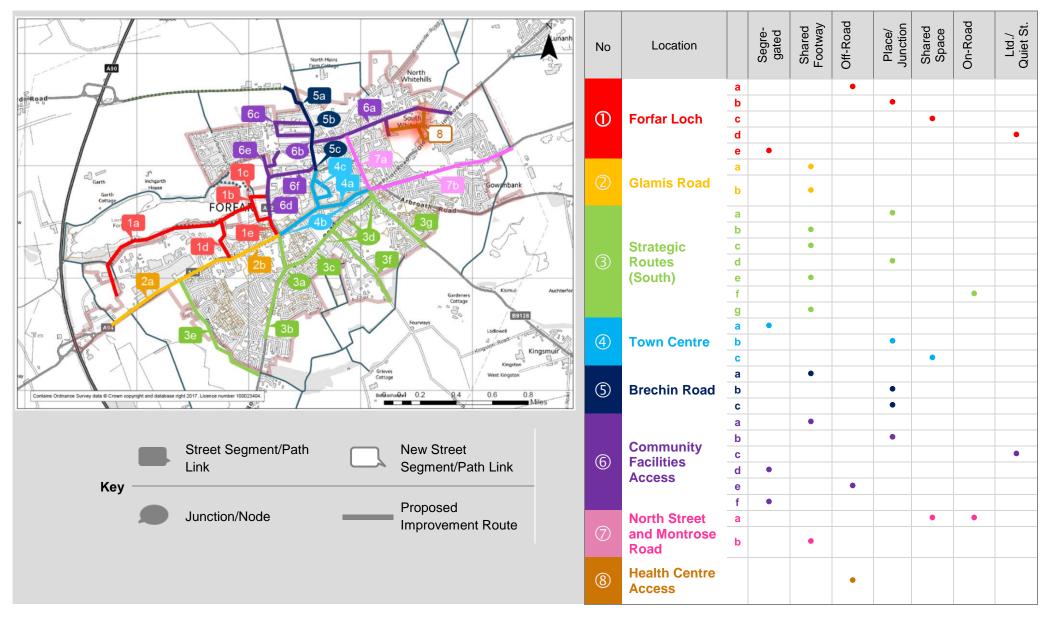
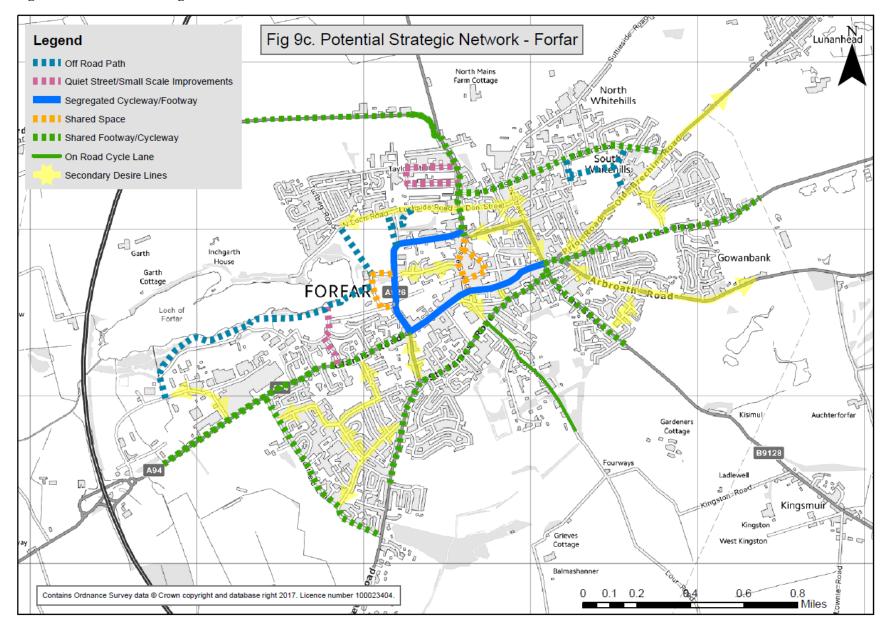


Figure 3 – Potential strategic active travel network



# **4** Opportunities for investment

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

		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)	Scale of cost (£)
		Action 4 Town Centre (Ranking 1, indicative cost £2.5M-£5M)					
F4	а	High Street	Segregated cycleway and footway improvements	Segregated cycleway E-W along High St and parking management. Proposed Roseburn Terrace improvements example (Edinburgh)	918	М	£150k-£500k
F4	b	High Street (W)/Craig O'Loch Road High Street (E)/North Street	Junctions	Junction improvements at both ends of High Street for pedestrians and cyclists	2	M	£150k-£500k
F4	С	Castle Street	Shared space	Shared space with movements for cycling in all directions (addressing one way issue), with placemaking and parking controls. Queen Street/Canmore Street to be considered as part of any solutions to avoid negative traffic impacts and in the context of oneway system.	683	L	£1M-£2.5M
		Action 3 Strategic Routes (South)					
		(Ranking 2, indicative cost £500k-£1M)					
F3	а	Dundee Road/St James Road	Junction	Place making	1	M	£150k-£500k
F3	b	Dundee Road north of Northampton Road	Shared footway/cycleway	Shared footway on east side. Some local constraints	1671	М	£150k-£500k
F3	С	St James Road/Academy St	Shared footway/cycleway	Generally wide enough for an shared footway e.g. north side	1671	М	<£50k
F3	d	Academy St/South Road Academy St/Couttie's Wind St James Road/New Road (Asda)	Junction	Placemaking/active travel improvements at main junctions and raised continuous footway treatments at minor junctions	3	M	£50k-£150k
F3	е	Westfield Loan	Shared footway/cycleway	Shared footways on north side. Potential low priority	1117	М	£150k-£500k
F3	f	Lour Road	Dutch Fietsstrook	On-road cycle lanes with carriageway centre line markings removed. Very narrow footways. Gogar Station Road example, Edinburgh	844	М	£50k-£150k
F3	g	South Street	Shared footway/cycleway		640	М	£50k-£150k
		Action 2 Glamis Road					
		(Ranking 3, indicative cost <£500k)					
F2	а	Glamis Road (west of Drummers Dell)	Shared footway/cycleway	Widening of existing facility and junction treatments to provide continuity	1692	М	£150k-£500k
F2	b	Glamis Road (east of Drummers Dell)	Shared footway/cycleway	Continuation of shared path on north side of carriageway	1092	М	<£50k
		Action 6 Community Facilities Access (Ranking 4, indicative cost £500k-£1M)					
F6	а	Market St and Fyfe Street to Station Road	Shared footway/cycleway	Shared footway on north side of street from Brechin Rd (W) to Old Brechin Road via Fyfe St (school via toucan crossing) and Station Road (hospital via toucan crossing)	1432	М	£150k-£500k

		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)	Scale of cost (£)
F6	b	Market St/Brechin Road	Junction	Major junction improvements for pedestrians and cyclists at west end of Market St	1	М	£50k-£150k
F6	С	Taylor St and Robertson Terrace	Quiet Street	Consider quiet street improvements and entry features to create 'zone' rather than 'road'. Move parking to one side to potentially create a cycleway. Segregation limited by number of driveways. Potential to follow Montreal example of one way residential streets. Both streets have evidence of pupil movements. Modelled as quiet street though potential for more significant actions	714	S	<£50k
F6	d	Craig O'Loch Road	Segregated cycleway and footway improvements	Segregated cycleway on west side of street (between Manor St and Queenswell Rd)	377	М	£150k-£500k
F6	е	Craig O'Loch Road (north of Queenswell Road) and green spaces to east and west, and Lochside Road	Off-road shared path	Potential for off-road path N-S through Lochside Park and/or SW/NE through Guthrie Park (perimeter of football ground). Zebra crossing on Lochside Road just east of junction of Craig O'Loch Road. Land ownership issues likely to affect Guthrie Park (Forfar Albion FC). Width and wall constraint on parts of Craig O'Loch Road north of Queenswell Road. Facilitating pedestrian/pupil movements	393	L	£50k-£150k
F6	f	Queenswell Road	Segregated cycleway and footway improvements and crossings	Segregated cycleway on north side of street and associated footway improvements to address dropped kerbs, to replace existing on-road lanes. Puffin crossings or zebra crossings with traffic calming along Queenswell Road	395	М	£150k-£500k
		Action 1 Forfar Loch					
		(Ranking 5, indicative cost £500k-£1M)					
F1	а	Forfor Loch (south)	Exemplar off-road shared path		1612	М	£150k-£500k
F1	b	Lochside Park	Place	Place making and gateway features	1	S	<£50k
F1	С	Lochside access roads	Shared space	Links to gateway. Land ownership (to Caravan Park) may provide constraints	414	S	£150k-£500k
F1		Lochview Terrace	Quiet Street	Links to Lochside Path - minor improvements (quiet street)		S	<£50k
F1	d	North of Lochview Terrace Through Inchmacoble Park	Off-road shared path	Links to Lochside Path - off-road path upgrade. Land ownership may provide constraints	386	S	<£50k
F1	е	Craig O'Loch Road (south of Manor St)	Segregated cycleway and footway improvements	Segregated cycleway link on west side to High St, addressing current gap in cycleway provision which exists further north	179	М	£50k-£150k
		Action 7 North Street and Montrose Road (Ranking 6, indicative cost <£500k)					
F7	а	North St from E High St to Market St	Fietsstraat/cycle street	On-road cycle provision through subtle measures to assign priority to cyclists	282	М	<£50k
F7	b	Montrose Road	Shared footway/cycleway	Provide shared footway on north side of street. Potential requirement to move kerb line on south side of street to facilitate/make use of verge/narrowing south side footway	1382	М	£150k-£500k

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		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)	Scale of cost (£)
		Action 5 Brechin Road (Ranking 7, indicative cost <£500k)					
F5	а	Castle Street (N)/Brechin Road	Shared footway/cycleway	From the Stag (S) to A926 facilities leading to community campus (N). New shared use footway on east side of street Muir Rd and on west side of street north of Muir Road (facilitated by Toucan crossing, 5b below). 20mph speed limit and carriageway traffic calming to control driver behaviour until north of the Community Campus.	936	M	£50k-£150k
F5	b	Brechin Road just north of Muir Road	Crossing	Toucan crossing facilities enabling school children to cross Brechin Road between Muir Road and Taylor St transferring from new shared use facility on east side of street (south of crossing), to west side of street (north of crossing). Fit with new infrastructure which already exists on Brechin Road to the north). Placemaking/raised table at Muir Rd junction. Google StreetView indicates demand from pupils. Consider alignment of road re. visibility	1	S	<£50k
F5	С	Castle St/Queenswell Road	Junction	Major junction improvements for pedestrians and cyclists at 'The Stag'	1	М	£150k-£500k
Signific	cant G	ap Schemes					
		Action 8 Health Centre Access (Ranking 1, indicative cost <£500k)					
F8	а	Between Weavers Way and through green space between primary school and health centre	Off-road shared path	Provide an off-road link between south end of Weavers Way (with place making at junction) using existing path northwards through forest/to farm buildings and introducing/formalising path E-W between school and health centre. Unclear land ownership and status of existing paths in greenspace (shown well in Bing oblique view). Weavers Walk narrow. Main health centre access off Old Brechin Road and Station Road. Potential obstruction of link to Weavers Way from west through existing buildings/development site	543	L	£50k-£150k

<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.