



Tayside and Central Scotland
Transport Partnership
Active Travel Audit
Executive Summary: Arbroath

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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

Arbroath is a large town of approximately 24,000 residents, located on the southern boundary of the local authority area of Angus Council on the North Sea coast. Historically it was one of the largest fishing ports in Scotland, leading to a growth in local housing which also supported jute and other formerly-prominent industries.

Today, Angus Council is a significant local employer, with Arbroath College supporting over 8,000 students, both located on the west of the town. Continuing industrially-based employment is supported in estates on the west and north of the town. The town has a large retail core, consisting of a pedestrianised High Street, indoor retail centre, town centre supermarkets, secondary shopping streets, and the tourist complex around the harbour. The town has its own rail and bus station.

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 Arbroath seeks to support this action and will assist in delivering Angus Council’s Active Travel Strategy.

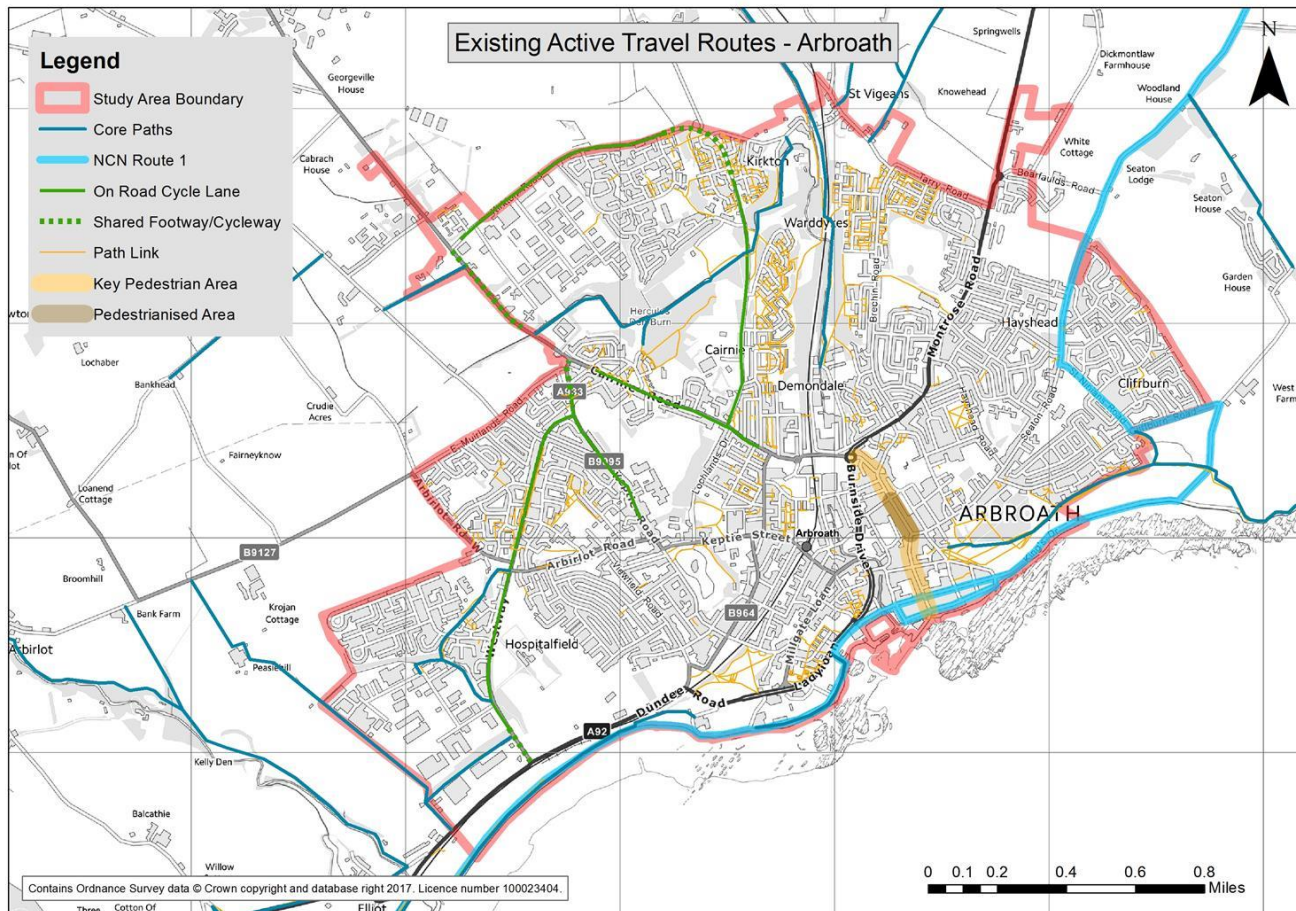
The aims of the Active Travel Audit are to provide:

- 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 Arbroath to include an account of recommended infrastructure and facilities needed within Arbroath; and,
- A proposal for investment in active travel infrastructure in Arbroath, 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 Arbroath. 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 Arbroath. 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 were identified. In these locations upgraded or new active travel infrastructure to serve or potentially generate a demand for active travel were identified. Example movements included routes to and from schools and the college (located to the east, west and north of the town), centres of employment (located in the town centre to the south, to the north within Kirkton and to the west around Elliot), and centres of retail and tourism (in the south around the High Street and harbour, alongside the bus and rail stations). Particular attention was given to ‘joining up’ the west and the east of the town, countering the barriers posed by rail, river (Brothock Water) and road (Burnside Drive) routes that have historically contributed towards the physical and perceptual disconnection of each side of the town. Significant development areas in the west of the town around East Muirlands Road 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.

Figure 2 - Location of potential active travel infrastructure measures

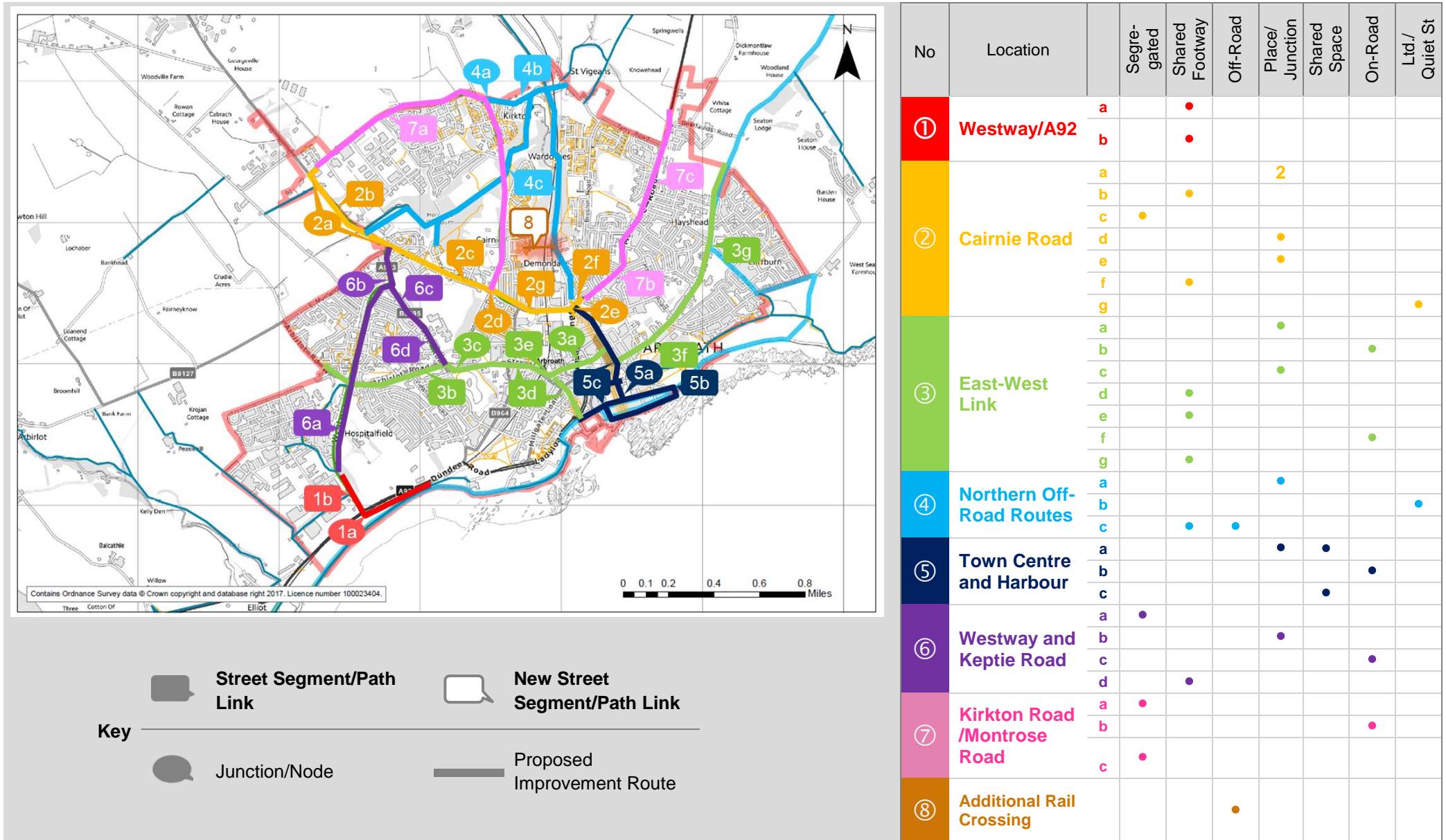
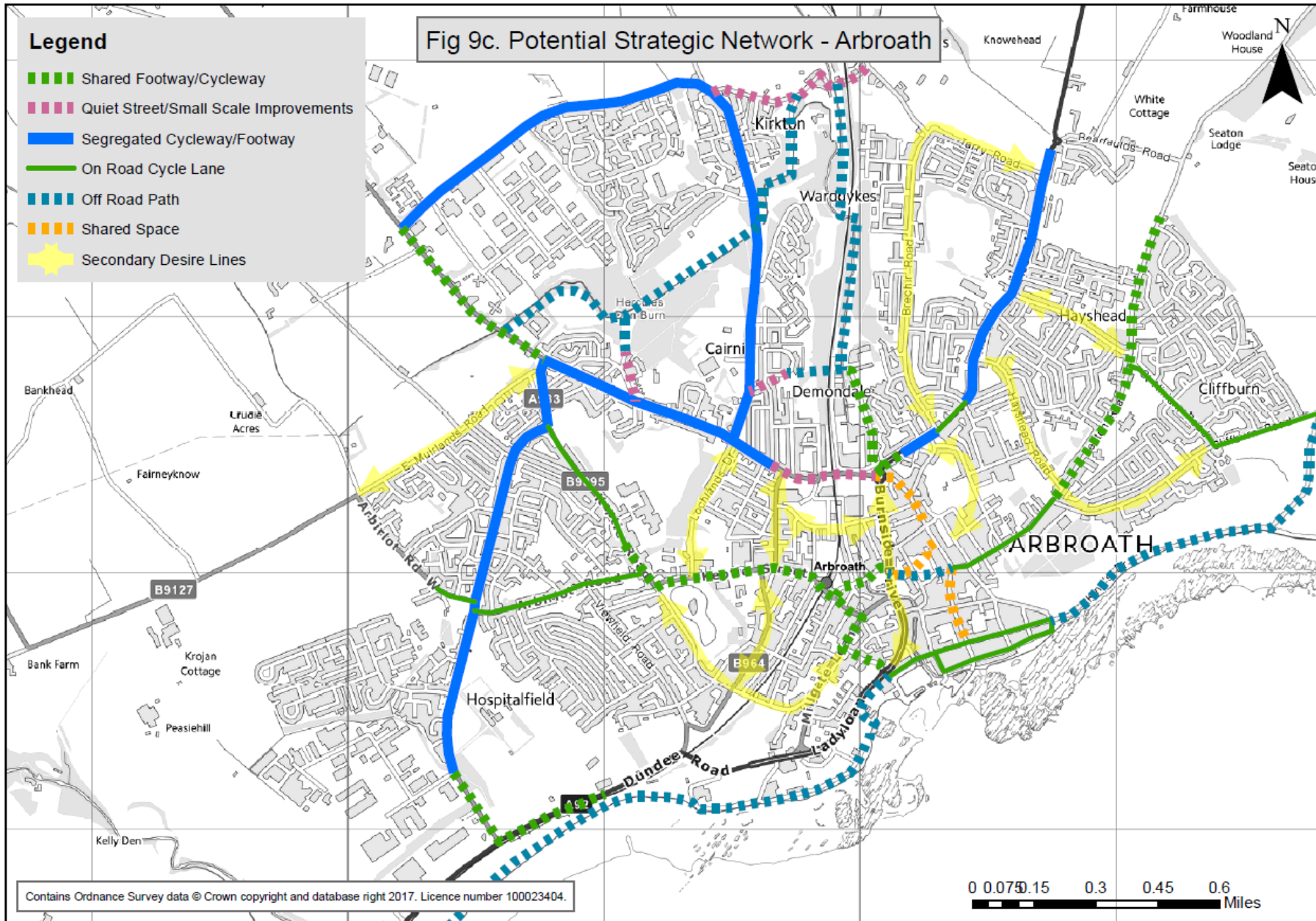


Figure 3 – Potential strategic active travel network



4 Opportunities for investment

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

Action Ref.	Proposal			Extent (number/length of path (m))	Delivery		
	Location	Type of action*	Supporting information		Duration of work required (Short <1yr/ Medium <2yrs/ Long >2yrs)	Approx. scale of cost (£)	
		Action 3: East-West Link (Ranking 1, indicative cost £1M-£2.5M)					
A3	a	Burnside Drive	Junction	Crossings (3) including placemaking at Burnside Drive, Keptie Road and Addison Place, e.g. Edinburgh Waverley Bridge/Bern shared spaces	3nr	L	£150k-£500k
A3	b	Arbilot Road	On-road cycle lanes	E-W	669	M	£50k-£150k
A3	c	Arbilot Road	Junction	Crossings (2) at Arbilot Road/Keptie Street	2nr	M	£150k-£500k
A3	d	Keptie Street, Milgate Loan and East Mary Street	Shared footway/cycleway	High quality materials through college, e.g. Queen Square, Bristol	1206	L	£150k-£500k
A3	e	Catherine St, West Port and car parks north of Lidl/Elgin Place	Mixture of shared space and quiet street segments	Including car parks east of Burnside Drive	258	L	£500k-£1M
A3	f	Ponderlaw Street	On-road cycle lanes	Width restriction	1098	L	£50k-£150k
A3	g	Seaton Road	Shared footway/cycleway	Serving school and NCN E-W	615	M	£50k-£150k
		Action 1: Westway/A92 (Ranking 2, indicative cost <£500k)					
A1	a	Westway	Junction	Crossings (3) and junction reconfigurations at south end of Westway	3nr	M	£150k-£500k
A1	b	Westway	Shared footway/cycleway	South end of Westway	773	S	£50k-£150k
		Action 6: Westway and Keptie Road (Ranking 3, indicative cost £1M-£2.5M)					
A6	a	Westway	Segregated cycleway and footway improvements		1722	M	£500k-£1M
A6	b	Keptie Road	Junction	Crossings/junction improvements at Westway	1nr	M	£150k-£500k
A6	c	Keptie Road (N)	On-road cycle lanes		435	M	<£50k
A6	d	Keptie Road (S)	Shared footway/cycleway		323	M	<£50k
		Action 7: Kirkton Rd and Montrose Rd (Ranking 4, indicative cost £1M-£2.5M)					
A7	a	Kirkton Road	Segregated cycleway and footway improvements	Junction with Carnie Road/St addressed in A2d above	2801	M	£1M-£2.5M
A7	b	Montrose Road (A92) (S)	On-road cycle lanes	Between Brechin Road and Hayswell Road	159	M	<£50k
A7	c	Montrose Road (A92) (N)	Segregated cycleway and footway improvements	Segregation at southern tip and northern section, either side of 7b south of Brechin Road and north of Hayswell Road	1218	M	£500k-£1M
		Action 2: Cairnie Road (Ranking 5, indicative cost £1M-£2.5M)					

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 (£)	
A2	a	Carnie Road	Junction	Crossings (2) at: - Forfar Rd/Keptie Road - Forfar Road/Kirkton Road (W)	2nr	S	£150k-£500k
A2	b	Carnie Road (W)	Shared footway/cycleway	Shared footway west of Keptie Road Junction, transitioning into segregated route eastwards	767	M	£50k-£150k
A2	c	Carnie Road (E)	Segregated cycleway and footway improvements		798	L	£150k-£500k
A2	d	Carnie Road	Junction	Crossings/junction improvements: - Carnie Road/Kirkton Road (E) - Cairnie St/Lochlands St	2nr	M	£150k-£500k
A2	e	A92	Junction	Signalisation of roundabout/crossings and placemaking with shared footway/cycleway at A92/Burnside Drive/Guthrie Port	1nr	L	£150k-£500k
A2	f	A92	Shared footway/cycleway	Upgrade to shared footway around junction at A92/Burnside Drive/Guthrie Port	140	L	<£50k
A2	g	Guthrie Port	Quiet Street	General street improvements	600	M	<£50k
		Action 5: Town Centre and Harbour (Ranking 6, indicative cost £2.5M-£5M)					
A5	a	Ladybridge St	Junction	Crossings/raised tables (2) at High Street	1nr	M	£50k-£150k
A5	b	John St	<i>Fietsstraat</i>	Cycle street with no overtaking	1256	M	£50k-£150k
A5	c	High Street/Harbour	Shared space	Traffic management/cycle contraflows and upgrade quality of pedestrianised area to include cycling/extend through shared space around existing pedestrianised area, with surrounding streets including links to/around Harbour	802	L	£1M-£2.5M
		Action 4: Northern Off-Road Routes (Ranking 7, indicative cost £500k-£1M)					
A4	a	St Vigeans	Junction	Crossing (1) at Unnamed Road/Kirkton Road	1nr	S	<£50k
A4	b	St Vigeans	Quiet Street	Unnamed Road	698	M	<£50k
A4	c	Hercules Den and Brothock Corridors	Off-road shared path and connections	Full upgrades to off-road paths (including information, lighting, comfort facilities) plus St Vigeans links. Shared footway link along Wardmill Road	3544	M	£150k-£500k
Significant Gap Schemes							
		Action 8 Added Railway Crossing (Ranking 1, indicative cost £2.5M-£5M)					
A8		New Railway Bridge	Off-road shared foot/cycle bridge	Between Grange Road and Demondale Road E-W	215 (1nr)	L	£2.5M-£5M

*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.