

Cycle Safety Intersections

AECOM Imagine It.
Delivered.

Peter Leslie



Improving the safety of junctions for all users in Scotland by analysing cycle accident data.



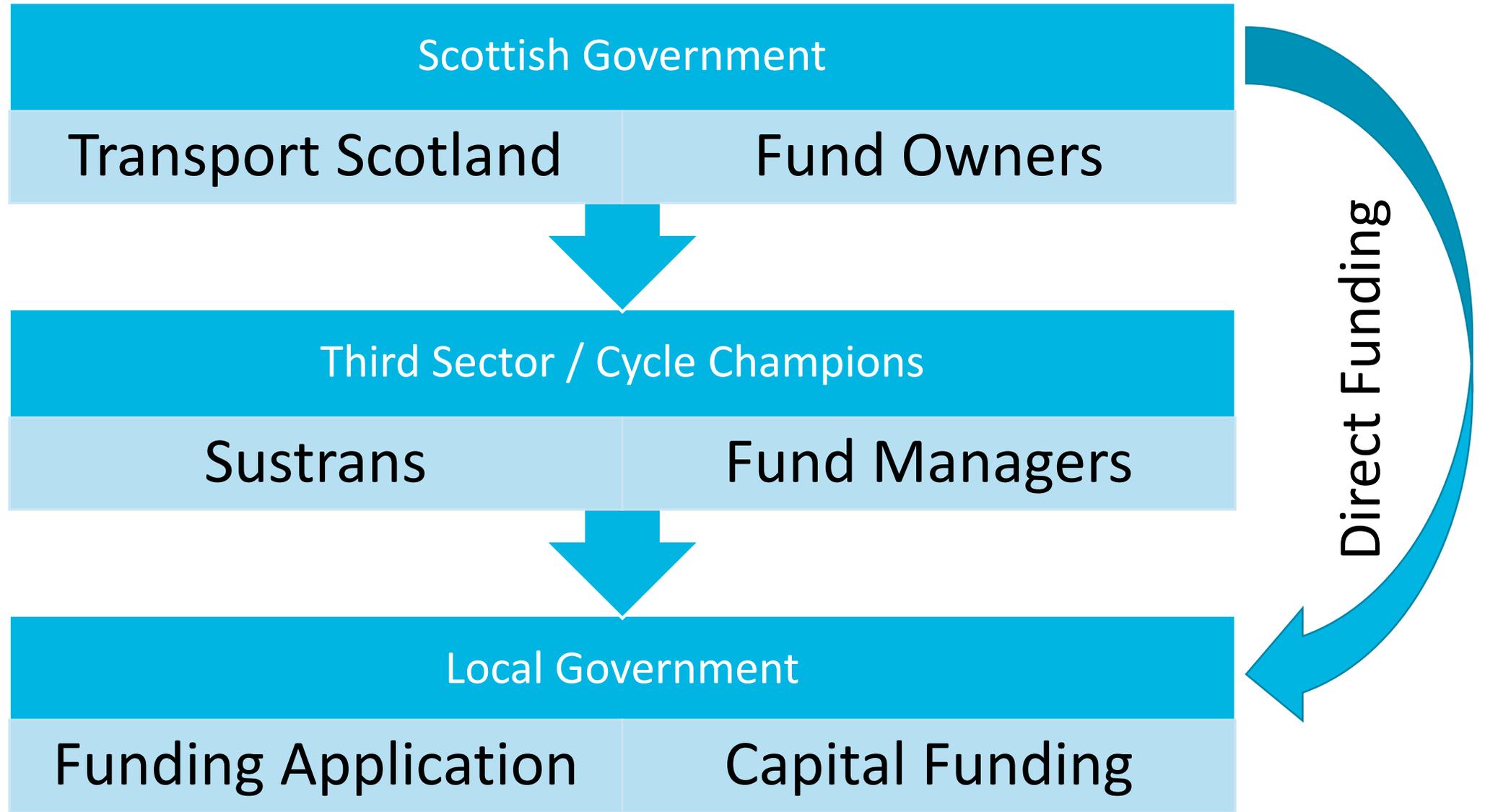




MEADOWS TO GEORGE STREET

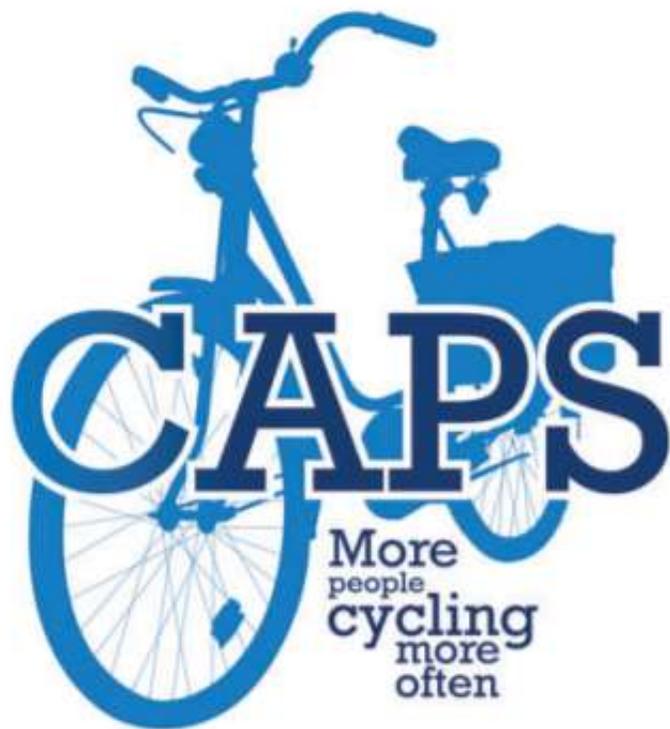
Our vision is to transform cycling, walking, public spaces and accessibility for all on some of Edinburgh's busiest and most iconic streets.

Scotland Funding Platform



Cycling Action Plan for Scotland 2017-2020

Cycling as a form
of transport



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Top 20 danger junctions for Scottish cyclists revealed

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Cycling safety in Scotland: Cycle collision hotspots

Part of the Scottish Research Programme

June 2016





MODE SHARE ¹



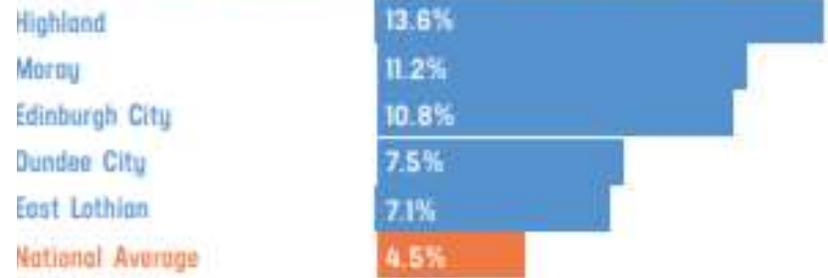
1.2%

of people cycled as a main mode of travel in 2016.

This figure has fluctuated between 0.8% and 1.4% since 2010.

Local Area specific highlights - Top 5

THE TOP 5 LOCAL AUTHORITIES WHO USUALLY OR REGULARLY CYCLE TO WORK ¹²



Annual Cycling Monitoring Report 2018

Rank	Location	Area	Number of cycle collisions 2005-2014
1	A761 / Arkleston Road	Paisley	3
2	A726 / Parkway roundabout	Near Erskine	4
3	A199 / B1361 / A6094 roundabout	Wallyford	3
4	B959 / Robertson Street	Dundee	4
5	Barrhead Road / Peat Road / Braidcraft Road / Brockburn Road roundabout	Glasgow	3
6	Glasgow Road / Viewlands Road	Perth	3
7	A8 / Cathedral street	Glasgow	3
8	High Street	Tranent	3
9	Main Street / B6482 / Newbattle Road mini roundabouts	Newtongrange	3
10	Mearns Road / A727	Clarkston	3
11	Drumbrae roundabout	Edinburgh	8
12	A7 / Craigmillar Castle Road	Edinburgh	7
13	A70 / Juniper Avenue	Edinburgh	3
14	Burdiehouse Road / Straiton Road / Lang long roundabout	Edinburgh	3
15	A823 / Laburnum Road roundabout	Dunfermline	3
16	Spiersbridge roundabout	Thornliebank	3
17	A8 / Springhill Parkway	Glasgow	3
18	B9006 / Tower Road	Inverness	5
19	University Road West / Hermitage Road	Stirling	7
20	Starlaw Road / Boghall roundabout	Bathgate	5

Inverness

T – Junction in a neighbourhood of Inverness.





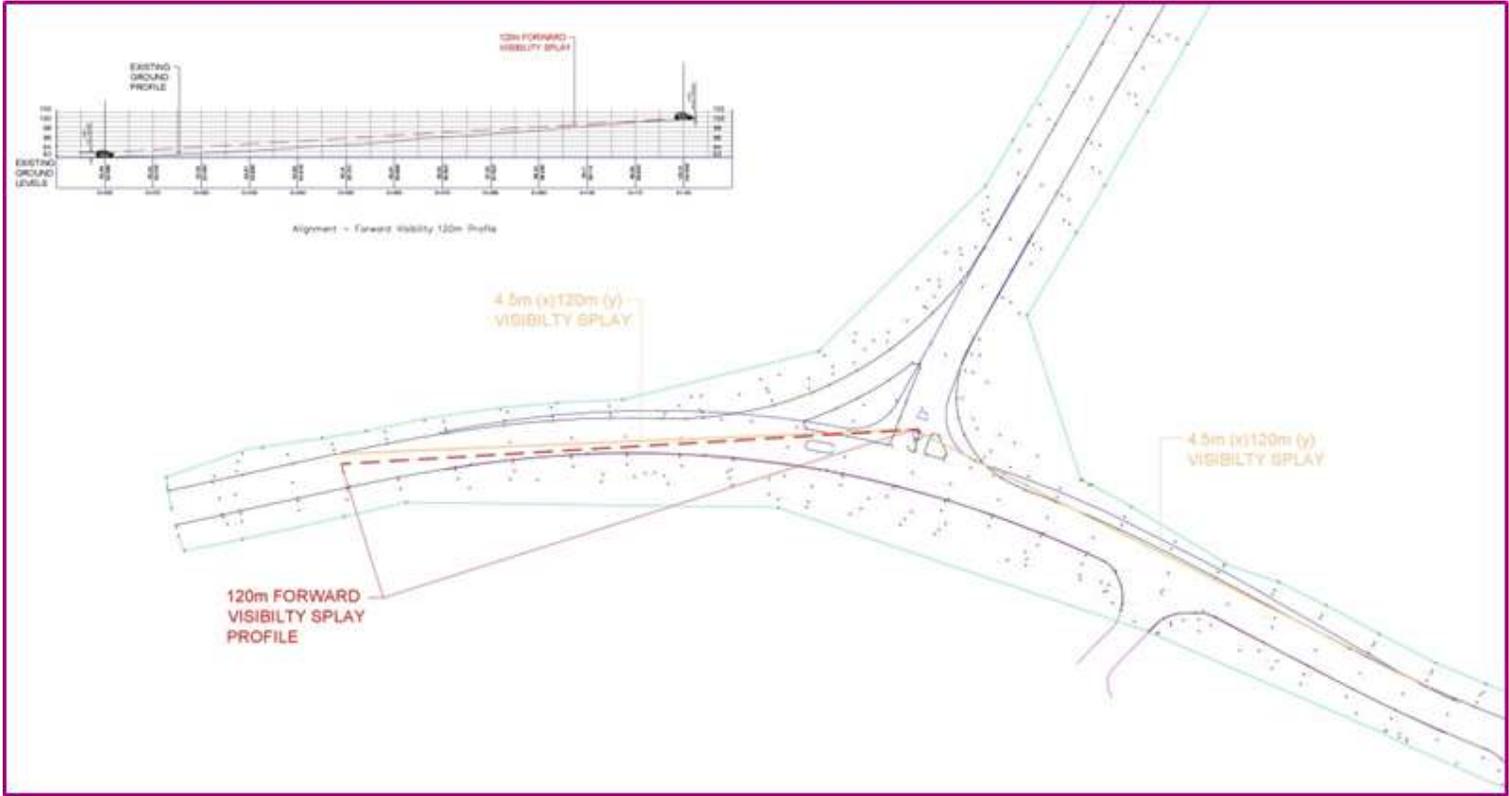
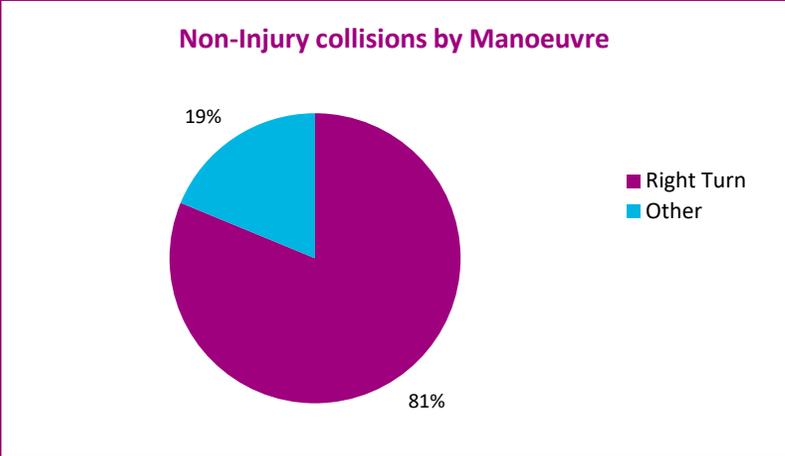
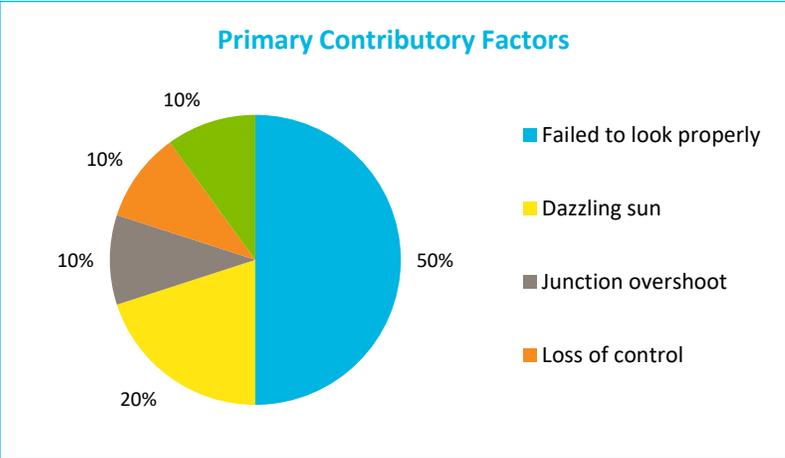
Inverness – All Accidents

Year	Slight	Serious	Fatal	Total
2012	1	1	0	2
2013	2	0	0	2
2014	3	0	0	3
2015	4	0	0	4
2016	2	0	0	2
Total	12	1	0	13

Inverness – Cycle Accidents

Collision Severity	B9006 Culloden Rd. / Tower Rd. Jct		Scotland (RRCS)	
	No. of Collisions	%	No. of Collisions	%
Fatal	0	0%	3	0.4%
Serious	0	0%	125	16.7%
Slight	3	100%	619	82.9%
Total	3	100%	747	100%

Inverness – Cause and Review



East Renfrewshire – Roundabouts

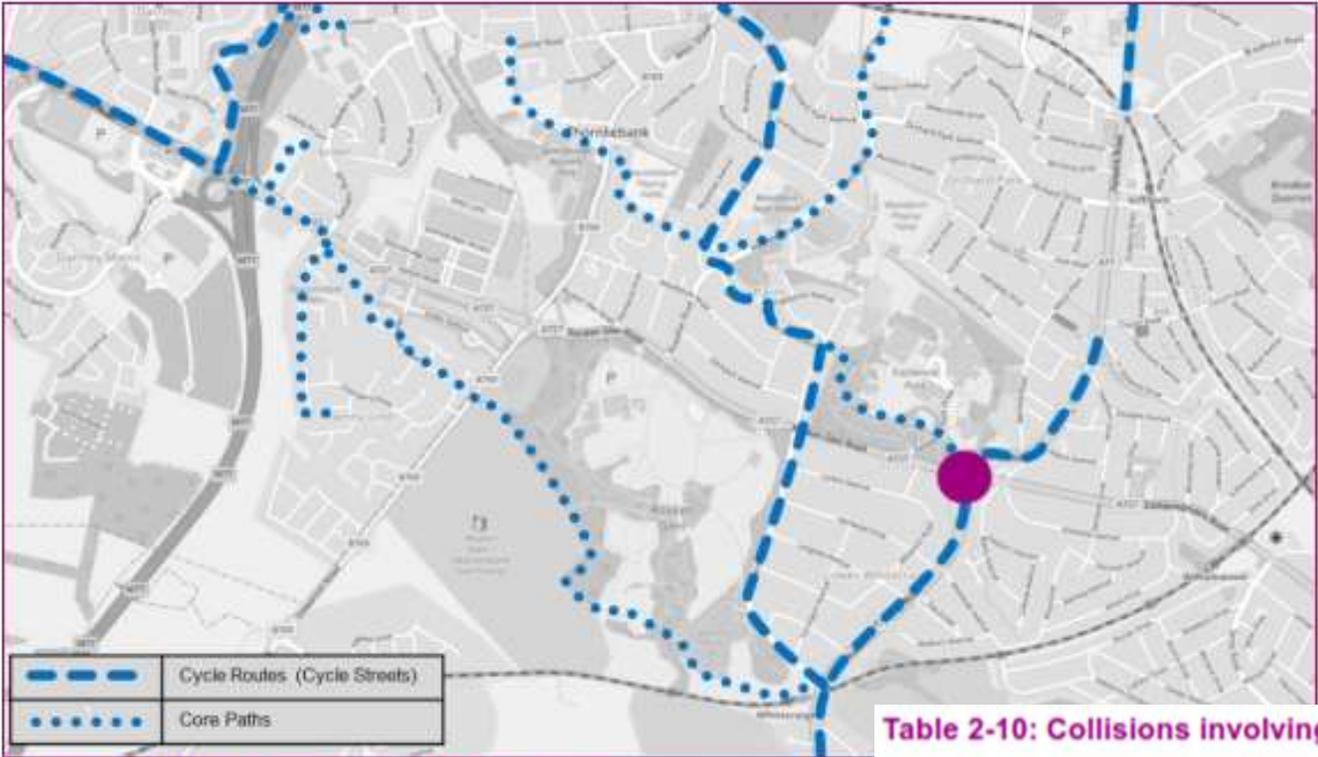


Figure 2-2: Existing Cycle Routes and Core Paths

Table 2-10: Collisions involving Cyclists

Collision Severity	Eastwood Toll Roundabout		National Average, 2012 to 2016, Built-up, Roundabouts Scotland (RRCS)	
	No. of Collisions	%	No. of Collisions	%
Involving Cyclists	4	23.5%	106	11.9%
Not Involving Cyclists	13	76.5%	783	88.1%
Total	17	100%	889	100%

Source: Table 14, Page 92, Reported Road Casualties Scotland 2016:
<https://www.transport.gov.scot/media/40042/sct09170291561.pdf>



477



Primary Contributory Factors

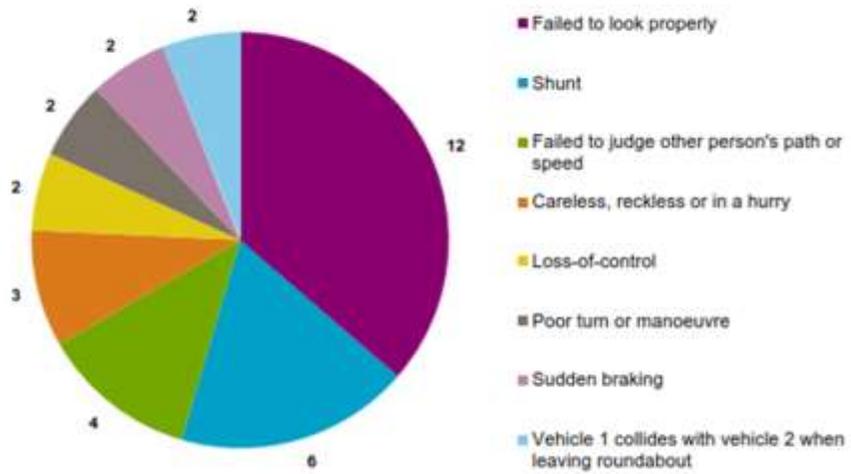


Figure 2-4: Primary Contributory Factors at Eastwood Toll Roundabout



Figure 3-4: Do Something Option 2 General Layout Plan



Figure 2-2: Existing Cycle Routes and Core Paths

Table 2-11: Chi-squared Statistical Analysis at Roundabouts involving Pedal Cycles

	Comparative Test		
	Site	Control	Totals
Involving Cyclists	3	106	109
Not Involving Cyclists	1	783	784
Totals	4	889	893

1796.5
 3227412.25
 2882079139

Chi squared = 9.48



Figure 3-4: Do Something Option 2 General Layout Plan



Figure 3-5: Do Something Option 3 General Layout Plan

North Lanarkshire

A town centre area with 3 roundabouts and pedestrianised area.



Figure 2.4: Collision Locations



Figure 3.2: A721 modifications (Option 2)





Places for Everyone

Application Guide
2019–2020

www.sustrans.org



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