

Transport and Environment Committee

10.00am, Thursday, 20 April 2023

Major Junctions Review Update

**Executive/routine
Wards
Council Commitments**

**Executive
All**

1. Recommendations

- 1.1 It is recommended that Transport and Environment Committee:
 - 1.1.1 Notes the update on the Major Junctions Review and the methodology developed to prioritise safety improvements for people walking, wheeling and cycling at major junctions across the city;
 - 1.1.2 Approves the prioritised list of 40 junctions as set out in Appendix 1;
 - 1.1.3 Notes the measures in Appendix 2 to be considered as potential early interventions at these 40 junctions; and
 - 1.1.4 Approves the next stage of work: to progress with assessment and design of early interventions at these 40 junctions and commence feasibility work for more substantive, longer term improvements at the top 10 junctions.

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Report

Major Junctions Review Update

2. Executive Summary

- 2.1 This report provides an update on progress on the Major Junctions Review. This includes an overview of the methodology used to establish a prioritised list of 40 junctions across the city where short term early interventions could be introduced to improve safety and accessibility for those walking, wheeling, and cycling. The report also identifies 10 junctions for more substantive, longer term improvements.

3. Background

- 3.1 On [12 November 2020](#), Committee approved a motion which requested that senior officers urgently consider how we can achieve significantly improved safety for people walking, wheeling and cycling at the city's major junctions and which focuses on reducing the risk and likelihood of dangerous, sometimes lethal, conflict between vehicle drivers and other road users.
- 3.2 Work is already underway to develop substantive improvements to a number of major junctions in the city, as part of existing work programmes (such as the Active Travel Investment Programme, Edinburgh City Centre Transformation, Trams to Newhaven and the Local Development Plan Action Programme).
- 3.3 Should any of these junctions be prioritised through the review, consideration will be given to the potential for early interventions that could be implemented in advance of the more substantive planned changes.
- 3.4 Since the motion was approved, short term improvements at the junction of Portobello High Street, King's Road and Sir Harry Lauder Road have been implemented and design work for medium term improvements is progressing. Regular updates on these improvements have been presented to Committee.

4. Main report

- 4.1 Following the motion in November 2020, engagement commenced with key stakeholder groups representing people walking, wheeling and cycling in Edinburgh (Living Streets Edinburgh Group, Spokes and the Edinburgh Access Panel) to identify those major junctions within the city which present the greatest safety concerns.

- 4.2 An initial long list was drawn up of around 140 junctions for potential inclusion in the review and, following engagement with the stakeholder groups, a list of 40 junctions for detailed assessment was agreed.
- 4.3 An assessment and scoring methodology was then developed for the prioritisation of these 40 junctions.

Prioritisation Methodology

- 4.4 In order to inform the prioritisation, the following surveys were undertaken:
 - 4.4.1 35 Junction Turning Point Surveys were carried out on one neutral weekday over a 12-hour period;
 - 4.4.2 309 Automatic Traffic Count Surveys were carried out over a seven-day period; and
 - 4.4.3 158 Pedestrian and Cycle Count surveys were carried out on a neutral weekday over a 12-hour period.
- 4.5 The numbers and severity of personal injury collisions occurring at each junction, for a five year period up to the end of 2021, were also reviewed along with the location and layout of each junction and the condition and operation of its infrastructure.
- 4.6 The methodology considers 15 criteria, grouped into six categories, with a score assigned to each criterion.
- 4.7 The 15 criteria used are listed below:
 - 4.7.1 Casualties – assesses the number and severity of historic personal injury collisions at each junction over a 5-year period up to 2021;
 - 4.7.2 Potential hazards – assesses each junction against a list of potential hazards for people walking, cycling or wheeling, due to the junction’s operation, layout or the condition of its infrastructure;
 - 4.7.3 Active travel infrastructure – assesses the effectiveness of existing active travel infrastructure at each junction in providing for the safe movement of people walking, wheeling and cycling;
 - 4.7.4 Cycling continuity –assesses to what extent the junction acts as a barrier to people cycling, based on the numbers of people recorded pushing their bikes through the junction;
 - 4.7.5 Cycling on footways - assesses to what extent the junction acts as a barrier to people cycling, based on the numbers of people recorded cycling on the footways at the junction;
 - 4.7.6 Pedestrian waiting times - assesses to what extent the junction acts as a barrier to people walking, based on the maximum length of time people have to wait for a green man crossing phase;
 - 4.7.7 Traffic Volumes (light vehicles) – assesses the numbers of small or standard vehicles (e.g. motorbikes, cars, light vans etc) passing through the junction;

- 4.7.8 Traffic volumes (heavy vehicles) – assesses the numbers of larger vehicles (e.g. larger vans, lorries or buses) passing through the junction;
 - 4.7.9 Average traffic speeds – assesses the average speed of traffic passing through each junction while the signals are at green, based on the average speed recorded for the fastest approach;
 - 4.7.10 85th percentile traffic speeds - assesses the speed at or below which 85% of traffic passes through each junction while the signals are at green, based on the 85th percentile speed recorded for the fastest approach;
 - 4.7.11 Scottish Index of Multiple Deprivation (SIMD) – assessment based on the SIMD decile of the area in which the junction is located;
 - 4.7.12 Primary schools – assessment based on proximity of each junction to the closest primary school;
 - 4.7.13 Secondary schools – assessment based on proximity of each junction to the closest secondary school;
 - 4.7.14 Pedestrian numbers – assessment based on the total numbers of people passing through the junction on foot; and
 - 4.7.15 Cyclist numbers – assessment based on the total numbers of people passing through the junction on bicycles.
- 4.8 The six categories are listed below. Each category was assigned a different percentage weighting to allow a final score to be determined for each of the 40 junctions assessed. The weightings are as follows:
- 4.8.1 Casualties – 35%;
 - 4.8.2 Potential Hazards – 20%;
 - 4.8.3 Barriers to Active Travel – 15%;
 - 4.8.4 Vehicular Traffic – 15%;
 - 4.8.5 Equalities – 10%; and
 - 4.8.6 Non-Vehicular Traffic – 5%.

Prioritisation of Junctions

- 4.9 Based on this methodology, the 40 junctions assessed have been prioritised for improvements and the results of this are presented in Appendix 1.
- 4.10 It is proposed to progress feasibility work for longer term, substantive improvements that can be made for people walking, wheeling and cycling at the top 10 junctions, where these are not already being developed as part of existing work programmes.
- 4.11 A Concept Design for improvements to Maybury Junction is already under development as part of a package of prioritised Transport Actions arising from the Local Development Plan Action Programme. Feasibility work will also commence shortly for improvements to the West End, Charlotte Street and Tollcross Junctions as part of the Lothian Road Boulevard project, which is being taken forward as part of Edinburgh City Centre Transformation (ECCT). Options for improvements at the East End junction are also already under consideration as part of ECCT.

- 4.12 In addition, it is proposed to consider the potential for early interventions (as set out in Appendix 2) at all 40 junctions. Early interventions were introduced at King's Road junction in summer 2022.

Portobello High Street and Surrounding Streets

- 4.13 Alongside the major junctions review, Committee has received regular updates on short, medium and longer term plans to improve facilities for those walking, wheeling and cycling at the junction of Portobello High Street, King's Road, Sir Harry Lauder Road and Inchview Terrace.
- 4.14 Traffic modelling work is currently ongoing for the initial concept designs that have been developed for medium and longer term improvements. This will assess the potential impacts of the proposals on other users of the junction and on surrounding areas and, if necessary, explore options for how these can be mitigated. Once this work is complete, updates will be provided to the Key Stakeholder Group for the project and Committee.
- 4.15 Following this, further updates will be provided to Committee on a quarterly basis.

5. Next Steps

- 5.1 If Committee approve the recommendations:
- 5.1.1 Consultancy support will be commissioned to undertake the assessment and design of the early interventions at the 40 junctions identified by the review, and to undertake feasibility work for more substantive, longer term improvements at the top 10 prioritised junctions where this work is not already underway;
 - 5.1.2 Engagement will continue within the Council and with stakeholders as the designs are developed; and
 - 5.1.3 A progress update will be prepared for Committee before the end of the calendar year.

6. Financial impact

- 6.1 The Council's Transport Capital Investment Programme, supplemented by external funding sources, such as the Scottish Government's annual Cycling Walking Safer Routes grant, will be used to fund the design and delivery of both the quick wins and the longer term improvements.

7. Stakeholder/Community Impact

- 7.1 Engagement has been carried out with key stakeholder groups Spokes, Living Streets Edinburgh Group and the Edinburgh Access Panel and will continue throughout the development of short and longer term improvements.

- 7.2 Engagement will also be undertaken with other stakeholders potentially affected by proposed changes, including Lothian Buses and Edinburgh Trams.
- 7.3 Wider public engagement will be carried out with local communities as part of the design process for the longer term improvements.

8. Background reading/external references

- 8.1 Transport and Environment Committee Business Bulletin on [28 January 2021](#).
- 8.2 Transport and Environment Committee Business Bulletin on [17 June 2021](#).
- 8.3 Updates for Transport and Environment Committee on Portobello High Street and surrounding streets – [14 October 2021](#); [27 January 2022](#); [31 March 2022](#); [18 August 2022](#); [8 December 2022](#); [2 February 2023](#).
- 8.4 Major Junctions Review – Prioritisation Methodology and Outputs (available on request from officers)

9. Appendices

- 9.1 Appendix 1 – List of Prioritised Junctions
- 9.2 Appendix 2 – Potential Early Interventions
- 9.3 Appendix 3 – Consultants' Report – Major Junctions Review – Prioritisation Methodology and Outputs

Appendix 1 – List of Prioritised Junctions

Rank	Location	Score	Casualties (0 to 7)	Potential Hazards (0 to 7)	Barriers to Active Travel				Vehicular Traffic				Equalities			Non-Vehicular Traffic	
					Active Travel infrastructure (-3 to 3)	Cycling Continuity (1 to 7)	Cycling on Footways (0 to 7)	Pedestrian Waiting Time (-3 to 3)	Traffic Volumes (light vehicles) (1 to 7)	Traffic Volumes (heavy vehicles) (1 to 7)	Average Traffic Speeds (0 to 7)	85 th %ile Traffic Speeds (0 to 7)	SIMD (-3 to 3)	Primary Schools (0 to 7)	Secondary Schools (0 to 7)	Pedestrian Numbers (1 to 7)	Cyclist Numbers (1 to 7)
1	West End (Princes St Lothian Rd, South Charlotte St, Shandwick Pl, Queensferry St, Hope St)	5.20	7	7	3	7	7	2	2	2	1	4	-2	3	5	3	4
2	Tollcross (Earl Grey St Lauriston Pl, Brougham St, Home St, West Tollcross)	4.95	6	6	3	7	1	2	4	5	3	5	0	6	6	3	5
3	Haymarket Junction (Morrison St, Dalry Rd, Haymarket Ter, West Maitland St)	4.83	6	6	3	7	1	2	5	7	1	3	0	4	4	4	6
4	East End (Princes St, North Bridge, Waterloo Pl, Leith St)	4.81	6	6	3	7	3	1	2	4	1	3	0	4	5	7	7
5	Milton Link Junction (Milton Rd, Sir Harry Lauder Rd, Milton Rd East, Milton Link)	4.67	6	7	1	1	1	3	7	6	0	2	3	6	3	1	3
6	Holy Corner (Morningside Rd, Colinton Rd, Bruntsfield Pl, Chamberlain Rd)	4.55	6	6	3	7	2	2	3	3	1	4	-3	5	6	2	3
7	Crewe Toll Roundabout (Ferry Rd, Crewe Rd North and South, Telford Rd)	4.54	6	6	2	4	1	0	7	5	0	0	2	5	5	2	3
8	St Mary's Street (Pleasance, Cowgate, St Mary's St, Holyrood Rd)	4.45	6	4	3	7	3	1	4	3	5	4	3	4	4	2	2
9	King's Road Junction (Kings Rd, Sir Harry Lauder Rd, Seafield Rd East, Portobello High St, Inchview Ter)	4.35	7	4	3	4	1	2	6	4	0	2	-1	3	4	1	5
10	Maybury Junction (Glasgow Rd, Maybury Rd, Turnhouse Rd)	4.35	6	6	3	2	6	2	5	4	0	0	0	1	5	1	3
11	South Charlotte Street (Princes St, South Charlotte St)	4.32	6	6	3	7	4	2	1	1	1	3	-2	3	4	1	3
12	Jock's Lodge (London Road, Restalrig Road)	4.29	6	4	3	3	4	2	5	4	3	5	2	4	3	1	2

	South, Portobello Road, Willowbrae Road)																
13	Summerhall (Summerhall Cres, Sciennes, Melville Ter, Melville Dr, Hope Park Ter, Hope Park Cres)	4.27	6	4	3	6	3	-2	4	4	2	4	-3	5	4	2	6
14	Bread Street (Lothian Rd, Morrison St, Bread St)	4.25	6	4	3	7	2	2	2	2	1	3	0	6	6	4	4
15	Abbey Mount (Regent Road, Easter Road, Abbey Mount, Carlton Terr Brae)	4.20	6	3	3	7	1	2	3	5	3	5	1	6	4	2	3
16	Drum Brae Roundabout (Glasgow Rd, Drum Brae South, St John's Rd, Meadow Place Rd)	4.12	5	5	3	3	2	0	7	6	2	5	-3	5	4	2	3
17	Niddrie Crossroads (Peffermill Rd, Duddingston Rd West, Craigmillar Castle Rd, Niddrie Mains Rd)	4.04	6	3	3	6	4	2	2	2	0	0	3	6	6	1	7
18	Southfield Place (Baileyfield Rd, Duddingston Rd, Duddingston Park, Southfield Pl)	4.01	7	0	3	2	4	1	4	3	7	6	-2	7	7	1	2
19	Sighthill Roundabout (Calder Rd, Sighthill Ave, Broomhouse Rd)	3.92	6	4	-1	1	1	0	4	7	0	4	-1	7	5	1	1
20	Barnton Junction (Queensferry Rd, Maybury Rd, Whitehouse Rd)	3.89	5	6	3	3	3	2	6	4	0	0	-3	3	3	1	4
21	Duddingston Park (Milton Rd West, Duddingston Park, Milton Rd, Duddingston Park South)	3.79	7	0	3	7	1	1	3	2	3	4	-2	7	7	1	2
22	Kingston Crossroads (Gilmerton Rd, Kingston Ave and Mount Vernon Rd)	3.45	7	0	3	7	1	1	1	1	0	0	3	3	8	1	1
23	Comely Bank Roundabout (Orchard Brae, Orchard Rd, Craigleith Rd, Crewe Rd South, Comely Bank Rd)	3.44	3	4	3	7	1	0	6	4	4	5	-2	7	6	2	2
24	West Approach Road (East) (Lothian Rd, West Approach Rd)	3.32	4	3	3	4	1	2	3	3	4	7	-2	4	5	3	3
25	Angle Park Terrace (Northeast) (Angle Park Ter, Henderson Ter, Dundee St, West Approach Rd)	3.25	2	6	2	2	2	1	4	4	6	6	-2	5	6	1	2

26	Commonwealth Pool (Dalkeith Rd, Holyrood Park Rd)	3.22	2	6	3	3	5	2	5	5	3	4	-3	6	3	1	2
27	West Granton Access (South) (Ferry Rd, West Granton Access, Easter Drylaw Dr)	3.03	1	6	1	2	5	2	7	5	1	3	2	6	5	1	5
28	Bankhead Roundabout (Calder Rd, Bankhead Ave, Wester Hailes Rd)	2.94	3	4	-1	1	1	0	4	7	1	4	2	6	4	1	1
29	Broughton Street Roundabout (Broughton St, East London St, London St, Bellevue)	2.85	1	5	3	4	1	0	6	6	3	4	-2	6	7	2	3
30	Saughton Roundabout (Calder Rd, Longstone Rd, Saughton Rd)	2.79	4	1	-1	1	1	0	4	7	1	4	3	6	6	1	1
31	Craigleith Junction (Queensferry Rd, Craigleith Rd, South Groathill Ave, Craigleith Retail Park Access)	2.70	3	5	3	3	1	3	4	2	0	0	-3	2	3	1	3
32	Fort Kinnaird (East) (Newcraighall Rd, Whitehill Rd, Fort Kinnaird Retail Park Accesses)	2.68	2	4	3	1	1	0	5	3	7	6	0	3	1	1	2
33	Liberton Brae Junction (Liberton Brae, Kirk Brae, Blackford Glen Rd, Braefoot Ter, Mayfield Rd, Liberton Rd)	2.61	3	4	3	2	1	2	2	3	0	1	-2	5	4	1	2
34	Dundee Street Slip-Road (Dundee St, West Approach Rd access ramp)	2.59	1	3	3	7	1	0	3	4	6	6	2	6	6	1	1
35	Rodney Street (Canonmills, Broughton Rd, Rodney St, Eyre Pl)	2.30	1	4	3	7	2	2	3	2	1	3	-3	4	6	2	3
36	Lady Road Roundabout (Lady Rd, Cameron Toll Shopping Centre Access)	2.22	2	4	3	2	1	0	3	4	0	1	-3	4	2	1	3
37	Craiglockhart Avenue (North) (Lanark Rd, Craiglockhart Ave, Slateford Rd)	2.18	1	3	3	7	2	2	4	3	4	5	-3	3	4	1	1
38	Corn Exchange (Slateford Rd, Hutchison Ter)	1.76	0	4	2	1	1	2	4	2	3	5	-1	5	3	1	1
39	East Preston Street (East) (Dalkeith Rd, East Preston St)	1.74	1	0	3	7	3	1	2	4	3	6	-3	7	4	1	2
40	Grange Loan (Kilgraston Rd, Grange Loan, Whitehouse Ter)	1.53	0	3	3	7	1	0	1	1	2	4	-3	3	5	1	1

Appendix 2 – Potential Early Interventions

The table below sets out potential early interventions for consideration at the 40 junctions listed in Appendix 1:

	<u>Hazard to be addressed</u>	<u>Potential early interventions to be investigated (using temporary or permanent materials as appropriate)</u>
1	Roundabouts with more than one circulatory lane	Redesign road markings e.g. hatch off a circulatory lane or introduce spiral road markings
2	More than two traffic lanes on a junction approach	Reallocate roadspace to replace a traffic lane with wider footways and/or a cycle lane (may also involve some widening of the remaining traffic lanes if these are narrow)
3	Separately signalled left turn lanes, left turn only lanes or slip lanes	Remove or close off slip lane (may not be possible at some junctions, if this would require substantive layout changes) Review junction phasing and lane configuration
4	No separate right turn phase(s) at signals	Introduce right turn phase(s)
5	Steep uphill gradients	Install handrail for pedestrians Introduce cycle lane and/or cycle early release at signals
6	Large kerb radii	Reduce radii
7	Long distance for cyclists to clear junction	Introduce cycle early release at signals
8	Tram tracks	Introduce guidance markings for cyclists at crossing points or where adjacent to tram tracks
9	Bus stop on immediate junction approach	Review whether stop can be relocated
10	Potential for driver confusion due to nearby signalised pedestrian crossing	Link phasing of junction and crossing, so that green man phases occur at the same time at both (may not be possible at some locations without introducing excessive pedestrian waiting times)
11	Kerbside walls, barriers, fences, or guardrails	Assess location for guardrail removal Widen footway Provide buffer zone or soft segregated cycle lane
12	Sunken/excessively worn covers	Repair/replace cover or serve notice on relevant utility to effect repair
13	Worn high skid resistant surfacing	Relay appropriate length for speed limit (dependant on condition of underlying road surface)

14	Worn road markings	Renew markings
15	Excessive waiting times for pedestrian crossing phases	Review signals phasing
16	Inadequate crossing area width	Relay drop kerbs and footway at crossing point
17	Inadequately sized pedestrian islands	Review potential to increase size of islands
18	Inadequate footway widths	Widen footway
19	Unnecessary street clutter	Remove or relocate
20	No advanced stop lines or cycle lead-in lanes	Install where possible
21	Kerbside or inter-lane advisory cycle lanes	Make mandatory and/or introduce soft segregation
22	Missing or non-compliant drop kerbs at crossing points	Install or alter drop kerbs in line with current design guidance
23	Missing or incorrect layout of tactile paving at crossing points	Install or alter tactile paving in line with current design guidance
24	No tactile cones/audible crossing alerts on signals apparatus	Install where possible
25	Poor surface condition	Relay footways and carriageways in poor condition at crossing points Relay carriageways in poor condition on cycle routes through junctions
26	Most appropriate paths for cyclists through junction not clear	Introduce guidance markings
27	Street furniture obscuring visibility	Remove or relocate
28	Vegetation obscuring visibility	Cut back or serve notice on private owners to do same
29	Parked vehicles blocking crossing points or obscuring visibility	Promote Traffic Regulation Order to introduce waiting and/or loading restrictions



Major Junctions Review

Prioritisation Methodology and Outputs

April 2023

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Major Junctions Review

Prioritisation Methodology and Outputs

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1 Executive Summary

The primary focus of the City of Edinburgh Council's (the Council) Major Junctions Review at this stage is to develop a scoring methodology for the prioritisation of major junctions across the city. This will enable the Council, in the next stage, to establish a programme of interventions aimed at improving the safety of people walking, wheeling, and cycling through the prioritised junctions.

An initial long list of 140 junctions was developed. The long list was sifted to a short list of 40 junctions to be taken forward for detailed assessment and prioritisation. This sifting exercise was completed in consultation with key stakeholder groups Spokes, Living Streets, and the Edinburgh Access Panel. The initial long list of junctions is presented in Appendix E.

The outcomes of the baseline scenario prioritisation are detailed below and are presented in Table 18, while those from two alternative scenarios, developed to test the sensitivity of the methodology, are shown in Tables 19 and 20.

Baseline Scenario	
Junction Name	Baseline Score
West End	5.20
Tollcross	4.95
Haymarket Junction	4.83
East End	4.81
Milton Link Junction	4.67
Holy Corner	4.55
Crewe Toll Roundabout	4.54
St Mary's Street	4.45
King's Road Junction	4.35
Maybury Junction	4.35

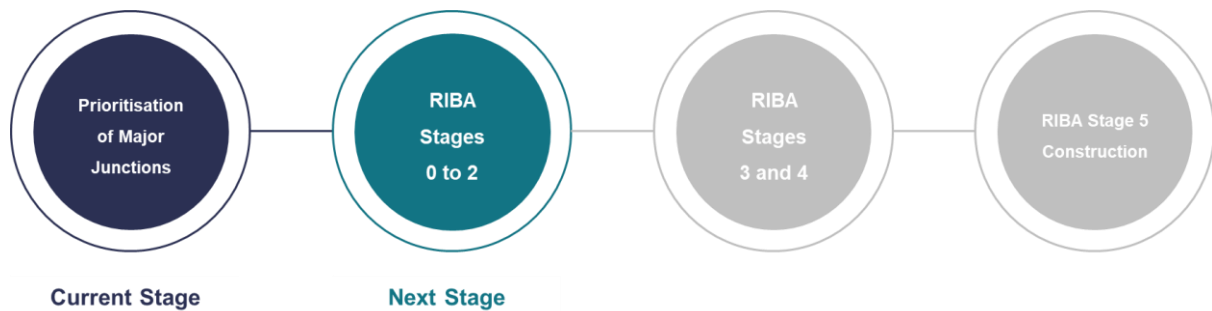
The surveys carried out include:

- 35 Junction Turning Point Surveys carried out on a neutral weekday over a 12-hour period.
- 309 Automatic Traffic Count Surveys over a 7-day period.
- 158 Pedestrian & Cycle Count surveys carried out on a neutral weekday over a 12-hour period.

This document provides an overview of the proposed methodology which has incorporated stakeholder input. It also details the scores resulting from applying the methodology and the final short-list of junctions to move on to the next stage of developing concept designs for the

implementation of long-term interventions. This process is outlined in Figure 1 : Future Stages of the Major Junctions Review below.

Figure 1 : Future Stages of the Major Junctions Review



- RIBA stage 0 - Strategic definition.
- RIBA stage 1 - Preparation and briefing.
- RIBA stage 2 - Concept design.
- RIBA stage 3 - Spatial coordination.
- RIBA stage 4 - Technical design.
- RIBA stage 5 - Manufacturing and construction.

2 Methodology

The proposed prioritisation methodology combines initial research and analysis work carried out by the Council and stakeholders. It has a set of 15 criteria grouped in 6 different categories and relies on data from traffic and pedestrian surveys, collision retrievals, site visits and desktop research. Criteria assessed via objective measures are assigned a score based on an 8-point scale ranging from 0 – 7. The remaining criteria are assessed via subjective measures and are assigned a score based on a 7-point scale ranging from -3 to +3.

Each of the 6 categories have been assigned a different percentage weighting which allows a final score to be determined for each of the long-list junctions. These percentage weightings have been subject to sensitivity testing, developing two alternative sensitivity scenarios in addition to the baseline scenario detailed below.

2.1 Prioritisation Categories

The methodology presented in this document is structured around 6 prioritisation categories as outlined in Table 1 below. Each category has been assigned a weighting in accordance with the overall impact it could have on the safety of the junction under assessment.

Table 1 Overarching Prioritisation Categories

Category	Description	Baseline Weighting
Casualties	This category refers to the number and severity of personal injury collisions recorded at the junction. Collision data retrievals covering a 5-year period up to the end of 2021 have been used to establish the scores against this category.	35%
Potential Hazards	This category is based on the assessment of a set list of potential hazards at each of the long-list junctions. Data has been collected through an initial desktop review using Google Maps' Street View functionality and confirmed through site visits.	20%
Barriers to Active Travel	This category includes four criteria that evaluate pedestrian waiting times, the provision of existing active travel infrastructure, the number of cyclists pushing their bikes through the junction and those cycling on the footway. Data from the surveys, together with a desktop review and site visits, have allowed the scores against this category to be established.	15%
Vehicular Travel	This category covers the volumes of different types of vehicular traffic through the junctions, as well as their average and 85th percentile speeds when the lights are green. Traffic surveys have been carried out at each of the long-list junctions to obtain the required data to establish the scores against this category.	15%
Equalities	This category refers to the distributional aspects of the level of risks over the safety of people walking, wheeling, and cycling through the junctions. The Scottish Index of Multiple Deprivation has been used as the key source of data to establish the scores against this category. In addition, the distance between the junction and the closest primary and secondary school has also been included in the assessment.	10%
Non-Vehicular Traffic	This category refers to the volumes of pedestrians and cyclists passing through the junctions. Surveys have been carried out at each of the long-list junctions to obtain the required data to establish the scores against this category.	5%

2.2 Sensitivity Testing

As noted above, each category has been assigned a weighting as shown in Table 1. These weightings are a baseline and have been subject to sensitivity testing with two additional scenarios as shown in Table 2 below.

Scenario 1 reduces the weighting of the Casualties category; assigning a higher percentage to the Non-Vehicular Traffic category, which provides a score against the volume of

pedestrians and cyclists passing through the junction. Similarly, Scenario 2 reduces the weighting of the Casualties category. However, in this case, it is the weighting for the Vehicular Traffic category that is increased.

These scenarios are intended to reflect how these categories may affect the results of the prioritisation exercise when their weightings are modified. The traffic categories have been chosen because they are based purely on data and no subjective observations are involved in their scoring.

Table 2 Sensitivity Testing Scenarios

Category	Baseline Weighting	Scenario 1 Weighting	Scenario 2 Weighting
Casualties	35%	25%	25%
Potential hazards	20%	20%	20%
Barriers to Active Travel	15%	15%	15%
Vehicular Traffic	15%	15%	25%
Equalities	10%	10%	10%
Non-Vehicular Traffic	5%	15%	5%
Total	100%	100%	100%

The outcomes of the baseline scenario are presented in Table 18, while those from the alternative scenarios are shown in Tables 19 and 20.

2.3 Prioritisation Criteria

A set of 15 prioritisation criteria have been used to inform the scores against each of the categories presented above. These criteria are presented in the set of tables below for each of the categories.

2.3.1 Casualties

A single criterion has been used in this category and its scoring methodology is presented in Table 3.

Table 3 Casualties Criterion

Number and Severity of Collisions	
Description	This criterion assesses historic personal injury collision data available for each of the junctions over a 5-year period up to the end of 2021.
Scoring	<ul style="list-style-type: none"> A score of 7 for those junctions where there have been one or more fatalities of pedestrians or cyclists within the last 5 years to the end of 2021.

Number and Severity of Collisions

- A score of 6 for junctions where there have been one or more serious injuries involving pedestrians or cyclists within the last 5 years.
- A score of 1 to 5 on a pro-rata basis depending on the number of slight injuries within the last 5 years.
- A score of 0 for junctions with no injury collisions.

2.3.2 Vehicular Traffic

This category differentiates between standard (light) and heavy vehicles. Additional details of the vehicles included in each category are provided in Appendix B. The rationale for this is to recognise that heavy-vehicle traffic increases the risk by a greater degree than traffic consisting of lighter vehicles.

Additional criteria in the category are the average and 85th percentile vehicle speeds when the traffic lights are green. The scoring system used for each criterion is presented in the tables below.

Table 4 Standard Traffic Volume

Standard Traffic Volume	
Description	Number of vehicles over a 7-day period belonging to the following categories: <ul style="list-style-type: none"> • MC Very Short – Bicycle or Motorcycle • SV Short – Sedan, Wagon, 4WD, Utility, Light Van • SVT Short Towing – Trailer, Caravan, Boat, etc.
Scoring	Scores are assigned from 1 to 7 on a pro-rata basis based on data resulting from the traffic count surveys.

Table 5 Heavy Traffic Volume

Heavy Traffic Volume	
Description	Number of vehicles over a 7-day period belonging to the following categories: <ul style="list-style-type: none"> • TB2 Two axle truck or Bus • TB3 Three axle truck or Bus • T4 Four axle truck • Articulated vehicle or rigid vehicle and trailer
Scoring	Scores are assigned from 1 to 7 on a pro-rata basis based on data resulting from the traffic count surveys.

Table 6 Average Traffic Speeds

Average Traffic Speeds	
Description	This is the highest of the mean traffic speeds recorded on all legs when lights are green.

Scoring	<ul style="list-style-type: none"> A score of 0 for junctions where the highest average speed is below or equal to the speed limit. A score from 1 to 7 on a pro-rata basis for all the remaining junctions and based on average speed data resulting from the surveys.
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Table 7 85th Percentile Traffic Speed

85 th Percentile Traffic Speed	
Description	This is the highest of the 85th percentile speeds recorded on all legs when lights are green.
Scoring	<ul style="list-style-type: none"> A score of 0 for junctions where the highest 85th percentile speed is below or equal to the speed limit. A score from 1 to 7 on a pro-rata basis for all the remaining junctions and based on 85th percentile speed data resulting from the surveys.

2.3.3 Non-Vehicular Traffic

The Non-Vehicular Traffic category scores each of the junctions according to the volumes of pedestrians and cyclists separately. The purpose of this is to understand the actual dynamics of these two user groups in terms of volume.

Table 8 Pedestrians

Pedestrians	
Description	This criteria scores each of the junctions against the total volume of pedestrians passing through the junction on all legs.
Scoring	Scores are assigned from 1 to 7 on a pro-rata basis based on data resulting from the traffic count surveys.

Table 9 Cyclists

Cyclists	
Description	This criteria scores each of the junctions against the total volume of cyclists passing through the junction on all legs.
Scoring	Scores are assigned from 1 to 7 on a pro-rata basis based on data resulting from the traffic count surveys.

2.3.4 Potential Hazards

This category scores each of the junctions against a set list of potential hazards, based on a list developed by Spokes (project stakeholder) previously and agreed with stakeholders. The hazards are listed below:

- Roundabouts with more than one circulatory lane
- More than two traffic lanes on approach(es)

- Separately signalled left turn lanes/left turn only lanes/slip lanes
- No separate right turn phase at signals
- Steep uphill gradients
- Large kerb radii
- Long distance for cyclists to clear junction
- Tram tracks
- Bus stop(s) on immediate junction approach
- Potential for driver confusion with nearby signalised pedestrian crossings
- Kerbside walls/barriers/fences/guardrails
- Sunken/excessively worn covers
- Worn high skid resistant surfacing
- Worn road markings
- No signalised crossing phases
- Missing signalised crossing phases
- Multiple stage signalised crossings
- Excessive waiting times for crossing phases
- Inadequate crossing area widths
- Inadequately sized pedestrian islands
- Inadequate footway widths

Table 10 Presence of Potential Hazards

Presence of Potential Hazards	
Description	This criterion assesses the presence of the potential hazards listed above that may affect the safe movement of people walking, wheeling, and cycling through the junction.
Scoring	Scores are assigned from 0 (no hazards) to 7 based on the number of hazards identified at each junction.

2.3.5 Barriers to Active Travel

There are three criteria included in this category. These are aimed at understanding the effectiveness of the provision of active travel infrastructure in facilitating the movement of people walking, wheeling, and cycling through the junction. They also include counts of the number of cyclists pushing their bikes and the number of people cycling on footways.

Table 11 Provision of Active Travel Infrastructure

Provision of Active Travel Infrastructure	
Description	Effectiveness of active travel infrastructure, when present in the junction, in guaranteeing the safe movement of people walking, wheeling, and cycling
Scoring	+3 to -3 based on the quality of active travel infrastructure when present

Table.12 Cycling Continuity

Cycling Continuity	
Criteria	Cycling Continuity
Description	Number of cyclists pushing their bikes through the junction
Scoring	A score of 7 for junctions where more than 50% of cyclists passing through the junction are dismounted. A score of 1 to 6 on a pro-rata basis depending on the number of cyclists pushing their bikes through the junction

Table.13 Cyclists Cycling on Footways

Cyclists Cycling on Footways	
Criteria	Cyclists cycling on footways
Description	Number of cyclists cycling on the footways through the junction
Scoring	0 to 7 on a pro-rata basis based on data resulting from the surveys

Table 14 Pedestrian Waiting Times

Pedestrian Waiting Times	
Description	The length of waiting time at crossings experienced by people walking, wheeling, and cycling through and across the junction.
Scoring	+3 to -3 based on the length of time pedestrians wait for the 'Green man' signal

2.3.6 Equalities

The Equalities category consists of three criteria, the Scottish Index of Multiple Deprivation (SIMD) and the proximity of the junction to both primary and secondary schools. Junctions located within SIMD deciles 1 and 2 (the most deprived areas) will receive the highest score on a +3 to -3 scale while junctions in deciles 9 and 10 (the least deprived areas) will receive a negative score.

Table 15 SIMD

Equalities - SIMD	
Criteria	SIMD
Description	Junction location with regards to the SIMD percentile areas
Scoring	+3 to -3 based on the junction SIMD percentile it is located at

Table 16 Proximity to Primary Schools

Proximity to Primary Schools	
Criteria	Proximity to primary schools
Description	Junction location with regards to Primary schools
Scoring	0 to 7 based on the minimum distance between the junction and a primary school

Table 17 Proximity to Secondary Schools

Proximity to Secondary Schools	
Criteria	Proximity to Secondary schools
Description	Junction location with regards to Secondary schools
Scoring	0 to 7 based on the minimum distance between the junction and a secondary school

3 Prioritisation Outputs

Table 18 demonstrates the junction scores using the baseline weightings detailed in section 2.2 of the methodology. The ten highest scoring junctions have been highlighted. In accordance with the methodology, these junctions have been identified as posing the highest potential risk to people walking, cycling, and wheeling through the area. Tables 19 and 20 provide scoring scenarios with alternative weightings and outputs.

Table 18 Junction Score: Baseline Scenario

Baseline Scenario	
Junction Name	Baseline Score
West End	5.20
Tollcross	4.95
Haymarket Junction	4.83
East End	4.81
Milton Link Junction	4.67
Holy Corner	4.55
Crewe Toll Roundabout	4.54
St Mary's Street	4.45
King's Road Junction	4.35
Maybury Junction	4.35
South Charlotte Street	4.32

Jock's Lodge	4.29
Summerhall	4.27
Bread Street	4.25
Abbey Mount	4.20
Drum Brae Roundabout	4.12
Niddrie Crossroads	4.04
Southfield Place	4.01
Calder Road - Sighthill	3.92
Barnton Junction	3.89
Duddingston Park	3.79
Kingston Crossroads	3.45
Comely Bank Roundabout	3.44
West Approach Road (East)	3.32
Angle Park Terrace (Northeast)	3.25
Commonwealth Pool	3.22
Calder Road - Saughton	3.16
West Granton Access (South)	3.03
Bankhead Roundabout	2.94
Broughton Street Roundabout	2.85
Craigleith Junction	2.70
Fort Kinnaird (East)	2.68
Liberton Brae Junction	2.61
Dundee Street Slip-Road	2.59
Rodney Street	2.30
Lady Road Roundabout	2.22
Craiglockhart Avenue (North)	2.18
Corn Exchange	1.76
East Preston Street (East)	1.74
Grange Loan	1.53

Table 19 Junction Score: Alternative Scenario 1

Scenario 1	
Junction Name	Score
East End	4.91
West End	4.85
Tollcross	4.75
Haymarket Junction	4.73
Milton Link Junction	4.27
Holy Corner	4.20
Crewe Toll Roundabout	4.19
Summerhall	4.07
St Mary's Street	4.05
Bread Street	4.05
Maybury Junction	3.95
King's Road Junction	3.95
South Charlotte Street	3.92
Drum Brae Roundabout	3.87
Abbey Mount	3.85
Jock's Lodge	3.84
Niddrie Crossroads	3.84
Barnton Junction	3.64
Southfield Place	3.46
Calder Road - Sighthill	3.42
Comely Bank Roundabout	3.34
Duddingston Park	3.24
West Granton Access (South)	3.23
West Approach Road (East)	3.22
Angle Park Terrace (Northeast)	3.20
Commonwealth Pool	3.17
Broughton Street Roundabout	3.00

Calder Road - Saughton	2.86
Kingston Crossroads	2.85
Bankhead Roundabout	2.74
Fort Kinnaird (East)	2.63
Craigleith Junction	2.60
Dundee Street Slip-Road	2.59
Liberton Brae Junction	2.46
Rodney Street	2.45
Lady Road Roundabout	2.22
Craiglockhart Avenue (North)	2.18
Corn Exchange	1.86
East Preston Street (East)	1.79
Grange Loan	1.63

Table 20 Junction Score: Alternative Scenario 2

Scenario 2	
Junction Name	Score
Tollcross	4.77
West End	4.72
Haymarket Junction	4.63
East End	4.46
Milton Link Junction	4.45
St Mary's Street	4.25
Crewe Toll Roundabout	4.24
Holy Corner	4.23
Drum Brae Roundabout	4.12
Jock's Lodge	4.11
Summerhall	4.02
Abbey Mount	4.00
Maybury Junction	3.97
King's Road Junction	3.95
South Charlotte Street	3.87

Bread Street	3.85
Southfield Place	3.81
Calder Road - Sighthill	3.69
Barnton Junction	3.64
Comely Bank Roundabout	3.62
Angle Park Terrace (Northeast)	3.55
Niddrie Crossroads	3.54
Commonwealth Pool	3.45
Calder Road - Saughton	3.41
Duddingston Park	3.39
West Approach Road (East)	3.35
West Granton Access (South)	3.33
Broughton Street Roundabout	3.23
Bankhead Roundabout	3.04
Fort Kinnaird (East)	3.01
Dundee Street Slip-Road	2.97
Kingston Crossroads	2.80
Craigleith Junction	2.55
Craiglockhart Avenue (North)	2.48
Liberton Brae Junction	2.46
Rodney Street	2.42
Lady Road Roundabout	2.22
Corn Exchange	2.11
East Preston Street (East)	2.02
Grange Loan	1.73

The results of the sensitivity testing demonstrate that the prioritised list of junctions remains largely unchanged even when the category weightings are adjusted

Appendix A – Junction Scoring Matrix

Baseline Scenario		Weighting	0.35	0.20	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.03	0.03	0.03	0.03	0.03
			Casualties	Potential Hazards	Barriers to Active Travel	Barriers to Active Travel	Barriers to Active Travel	Barriers to Active Travel	Vehicular Traffic	Vehicular Traffic	Vehicular Traffic	Vehicular Traffic	Equalities	Equalities	Equalities	Non-Vehicular Traffic	Non-Vehicular Traffic
Junction Name	Junction ID	Baseline Score	Number and Severity of Incidents	The presence of potential hazards	Provision of Active Travel Infrastructure	Cyclists Walking	Cyclists cycling on footways	Waiting Times Pro rata 3 to -3	Light Vehicles	Medium and Heavy Vehicles	Average traffic speeds	85 th %ile traffic speeds	SIMD	Distance to Closest Primary School	Distance to Closest Secondary School	Pedestrians Pro-rata 1 to 7	Cyclists Pro-rata 1 to 7
West End	CC3	5.20	7	7	3	7	7	2	2	2	1	4	-2	3	5	3	4
Tollcross	CC10	4.95	6	6	3	7	1	2	4	5	3	5	0	6	6	3	5
Haymarket Junction	CC2	4.83	6	6	3	7	1	2	5	7	1	3	0	4	4	4	6
East End	CC9	4.81	6	6	3	7	3	1	2	4	1	3	0	4	5	7	7
Milton Link Junction	NE8	4.67	6	7	1	1	1	3	7	6	0	2	3	6	3	1	3
Holy Corner	SW31	4.55	6	6	3	7	2	2	3	3	1	4	-3	5	6	2	3
Crewe Toll Roundabout	NW10	4.54	6	6	2	4	1	0	7	5	0	0	2	5	5	2	3
St Mary's Street	CC36	4.45	6	4	3	7	3	1	4	3	5	4	3	4	4	2	2
King's Road Junction	NE6	4.35	7	4	3	4	1	2	6	4	0	2	-1	3	4	1	5
Maybury Junction	NW16	4.35	6	6	3	2	6	2	5	4	0	0	0	1	5	1	3
South Charlotte Street	CC4	4.32	6	6	3	7	4	2	1	1	1	3	-2	3	4	1	3
Jock's Lodge	NE14	4.29	6	4	3	3	4	2	5	4	3	5	2	4	3	1	2
Summerhall	SE9	4.27	6	4	3	6	3	-2	4	4	2	4	-3	5	4	2	6
Bread Street	CC12	4.25	6	4	3	7	2	2	2	2	1	3	0	6	6	4	4
Abbey Mount	NE13	4.20	6	3	3	7	1	2	3	5	3	5	1	6	4	2	3
Drum Brae Roundabout	NW17	4.12	5	5	3	3	2	0	7	6	2	5	-3	5	4	2	3
Niddrie Crossroads	SE27	4.04	6	3	3	6	4	2	2	2	0	0	3	6	6	1	7
Southfield Place	NE10	4.01	7	0	3	2	4	1	4	3	7	6	-2	7	7	1	2
Calder Road - Sighthill		3.92	6	4	-1	1	1	0	4	7	0	4	-1	7	5	1	1
Barnton Junction	NW1	3.89	5	6	3	3	3	2	6	4	0	0	-3	3	3	1	4
Duddingston Park	NE16/NE10	3.79	7	0	3	7	1	1	3	2	3	4	-2	7	7	1	2
Kingston Crossroads	SE14	3.45	7	0	3	7	1	1	1	1	0	0	3	3	8	1	1
Comely Bank Roundabout	NW20	3.44	3	4	3	7	1	0	6	4	4	5	-2	7	6	2	2
West Approach Road (East)	CC13	3.32	4	3	3	4	1	2	3	3	4	7	-2	4	5	3	3
Angle Park Terrace (Northeast)	SW14	3.25	2	6	2	2	2	1	4	4	6	6	-2	5	6	1	2
Commonwealth Pool	SE23	3.22	2	6	3	3	5	2	5	5	3	4	-3	6	3	1	2
West Granton Access (South)	NW13	3.03	1	6	1	2	5	2	7	5	1	3	2	6	5	1	5
Bankhead Roundabout		2.94	3	4	-1	1	1	0	4	7	1	4	2	6	4	1	1
Broughton Street Roundabout	CC23	2.85	1	5	3	4	1	0	6	6	3	4	-2	6	7	2	3

Calder Road - Saughton	SW1	2.79	4	1	-1	1	1	0	4	7	1	4	3	6	6	1	1
Craigleith Junction	NW6	2.70	3	5	3	3	1	3	4	2	0	0	-3	2	3	1	3
Fort Kinnaird (East)	SE30	2.68	2	4	3	1	1	0	5	3	7	6	0	3	1	1	2
Liberton Brae Junction	SE4	2.61	3	4	3	2	1	2	2	3	0	1	-2	5	4	1	2
Dundee Street Slip-Road	SW15	2.59	1	3	3	7	1	0	3	4	6	6	2	6	6	1	1
Rodney Street	CC24	2.30	1	4	3	7	2	2	3	2	1	3	-3	4	6	2	3
Lady Road Roundabout	SE26	2.22	2	4	3	2	1	0	3	4	0	1	-3	4	2	1	3
Craiglockhart Avenue (North)	SW9	2.18	1	3	3	7	2	2	4	3	4	5	-3	3	4	1	1
Corn Exchange	SW10	1.76	0	4	2	1	1	2	4	2	3	5	-1	5	3	1	1
East Preston Street (East)	SE24	1.74	1	0	3	7	3	1	2	4	3	6	-3	7	4	1	2
Grange Loan	SE32	1.53	0	3	3	7	1	0	1	1	2	4	-3	3	5	1	1

Scenario 1

Weighting

0.25 0.20 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.04 0.03 0.03 0.03 0.08 0.08

Junction Name	Junction ID	Scenario 1 Score	Casualties	Potential Hazards	Barriers to Active Travel	Barriers to Active Travel	Barriers to Active Travel	Barriers to Active Travel	Vehicular Traffic	Vehicular Traffic	Vehicular Traffic	Vehicular Traffic	Equalities	Equalities	Equalities	Non-Vehicular Traffic	Non-Vehicular Traffic
			Number and Severity of Incidents	The presence of potential hazards	Provision of Active Travel Infrastructure	Cyclists Walking	Cyclists cycling on footways	Waiting Times Pro rata 3 to -3	Light Vehicles	Medium and Heavy Vehicles	Average traffic speeds	85 th %ile traffic speeds	SIMD	Distance to Closest Primary School	Distance to Closest Secondary School	Pedestrians Pro-rata 1 to 7	Cyclists Pro-rata 1 to 7
East End	CC9	4.94	6	6	3	7	3	1	2	4	1	3	0	4	5	7	7
West End	CC3	4.89	7	7	3	7	7	2	2	2	1	4	-2	3	5	3	4
Tollcross	CC10	4.78	6	6	3	7	1	2	4	5	3	5	0	6	6	3	5
Haymarket Junction	CC2	4.76	6	6	3	7	1	2	5	7	1	3	0	4	4	4	6
Milton Link Junction	NE8	4.28	6	7	1	1	1	3	7	6	0	2	3	6	3	1	3
Holy Corner	SW31	4.23	6	6	3	7	2	2	3	3	1	4	-3	5	6	2	3
Crewe Toll Roundabout	NW10	4.20	6	6	2	4	1	0	7	5	0	0	2	5	5	2	3
Summerhall	SE9	4.10	6	4	3	6	3	-2	4	4	2	4	-3	5	4	2	6
St Mary's Street	CC36	4.09	6	4	3	7	3	1	4	3	5	4	3	4	4	2	2
Bread Street	CC12	4.08	6	4	3	7	2	2	2	2	1	3	0	6	6	4	4
Maybury Junction	NW16	3.98	6	6	3	2	6	2	5	4	0	0	0	1	5	1	3
King's Road Junction	NE6	3.97	7	4	3	4	1	2	6	4	0	2	-1	3	4	1	5
South Charlotte Street	CC4	3.95	6	6	3	7	4	2	1	1	1	3	-2	3	4	1	3
Drum Brae Roundabout	NW17	3.89	5	5	3	3	2	0	7	6	2	5	-3	5	4	2	3
Abbey Mount	NE13	3.88	6	3	3	7	1	2	3	5	3	5	1	6	4	2	3
Niddrie Crossroads	SE27	3.87	6	3	3	6	4	2	2	2	0	0	3	6	6	1	7
Jock's Lodge	NE14	3.86	6	4	3	3	4	2	5	4	3	5	2	4	3	1	2
Barnton Junction	NW1	3.66	5	6	3	3	3	2	6	4	0	0	-3	3	3	1	4
Southfield Place	NE10	3.48	7	0	3	2	4	1	4	3	7	6	-2	7	7	1	2
Calder Road - Sighthill		3.42	6	4	-1	1	1	0	4	7	0	4	-1	7	5	1	1
Comely Bank Roundabout	NW20	3.37	3	4	3	7	1	0	6	4	4	5	-2	7	6	2	2
Duddingston Park	NE16/NE10	3.26	7	0	3	7	1	1	3	2	3	4	-2	7	7	1	2
West Granton Access (South)	NW13	3.25	1	6	1	2	5	2	7	5	1	3	2	6	5	1	5
West Approach Road (East)	CC13	3.24	4	3	3	4	1	2	3	3	4	7	-2	4	5	3	3
Angle Park Terrace (Northeast)	SW14	3.21	2	6	2	2	2	1	4	4	6	6	-2	5	6	1	2
Commonwealth Pool	SE23	3.20	2	6	3	3	5	2	5	5	3	4	-3	6	3	1	2
Broughton Street Roundabout	CC23	3.02	1	5	3	4	1	0	6	6	3	4	-2	6	7	2	3
Kingston Crossroads	SE14	2.88	7	0	3	7	1	1	1	1	0	0	3	3	8	1	1
Bankhead Roundabout		2.74	3	4	-1	1	1	0	4	7	1	4	2	6	4	1	1
Fort Kinnaird (East)	SE30	2.65	2	4	3	1	1	0	5	3	7	6	0	3	1	1	2
Craigleith Junction	NW6	2.62	3	5	3	3	1	3	4	2	0	0	-3	2	3	1	3

Dundee Street Slip-Road	SW15	2.62	1	3	3	7	1	0	3	4	6	6	2	6	6	1	1
Calder Road - Saughton	SW1	2.49	4	1	-1	1	1	0	4	7	1	4	3	6	6	1	1
Rodney Street	CC24	2.48	1	4	3	7	2	2	3	2	1	3	-3	4	6	2	3
Liberton Brae Junction	SE4	2.47	3	4	3	2	1	2	2	3	0	1	-2	5	4	1	2
Lady Road Roundabout	SE26	2.24	2	4	3	2	1	0	3	4	0	1	-3	4	2	1	3
Craiglockhart Avenue (North)	SW9	2.21	1	3	3	7	2	2	4	3	4	5	-3	3	4	1	1
Corn Exchange	SW10	1.87	0	4	2	1	1	2	4	2	3	5	-1	5	3	1	1
East Preston Street (East)	SE24	1.82	1	0	3	7	3	1	2	4	3	6	-3	7	4	1	2
Grange Loan	SE32	1.66	0	3	3	7	1	0	1	1	2	4	-3	3	5	1	1

Scenario 2

			Weighting														
			0.25	0.20	0.04	0.04	0.04	0.04	0.06	0.06	0.06	0.06	0.03	0.03	0.03	0.03	0.03
			Casualties	Potential Hazards	Barriers to Active Travel	Barriers to Active Travel	Barriers to Active Travel	Barriers to Active Travel	Vehicular Traffic	Vehicular Traffic	Vehicular Traffic	Vehicular Traffic	Equalities	Equalities	Equalities	Non-Vehicular Traffic	Non-Vehicular Traffic
Junction Name	Junction ID	Scenario 2 Score	Number and Severity of Incidents	The presence of potential hazards	Provision of Active Travel Infrastructure	Cyclists Walking	Cyclists cycling on footways	Waiting Times Pro rata 3 to -3	Light Vehicles	Medium and Heavy Vehicles	Average traffic speeds	85 th %ile traffic speeds	SIMD	Distance to Closest Primary School	Distance to Closest Secondary School	Pedestrians Pro-rata 1 to 7	Cyclists Pro-rata 1 to 7
East End	CC9	5.20	6	6	3	7	3	1	2	4	1	3	0	4	5	7	7
Tollcross	CC10	4.95	6	6	3	7	1	2	4	5	3	5	0	6	6	3	5
West Approach Road (East)	CC13	4.83	4	3	3	4	1	2	3	3	4	7	-2	4	5	3	3
Drum Brae Roundabout	NW17	4.81	5	5	3	3	2	0	7	6	2	5	-3	5	4	2	3
West End	CC3	4.67	7	7	3	7	7	2	2	2	1	4	-2	3	5	3	4
Barnton Junction	NW1	4.55	5	6	3	3	3	2	6	4	0	0	-3	3	3	1	4
Craigleith Junction	NW6	4.54	3	5	3	3	1	3	4	2	0	0	-3	2	3	1	3
Crewe Toll Roundabout	NW10	4.45	6	6	2	4	1	0	7	5	0	0	2	5	5	2	3
Maybury Junction	NW16	4.35	6	6	3	2	6	2	5	4	0	0	0	1	5	1	3
King's Road Junction	NE6	4.35	7	4	3	4	1	2	6	4	0	2	-1	3	4	1	5
Holy Corner	SW31	4.32	6	6	3	7	2	2	3	3	1	4	-3	5	6	2	3
Liberton Brae Junction	SE4	4.29	3	4	3	2	1	2	2	3	0	1	-2	5	4	1	2
Lady Road Roundabout	SE26	4.27	2	4	3	2	1	0	3	4	0	1	-3	4	2	1	3
Haymarket Junction	CC2	4.25	6	6	3	7	1	2	5	7	1	3	0	4	4	4	6
South Charlotte Street	CC4	4.20	6	6	3	7	4	2	1	1	1	3	-2	3	4	1	3
Bread Street	CC12	4.12	6	4	3	7	2	2	2	2	1	3	0	6	6	4	4
St Mary's Street	CC36	4.04	6	4	3	7	3	1	4	3	5	4	3	4	4	2	2
West Granton Access (South)	NW13	4.01	1	6	1	2	5	2	7	5	1	3	2	6	5	1	5
Comely Bank Roundabout	NW20	3.92	3	4	3	7	1	0	6	4	4	5	-2	7	6	2	2
Milton Link Junction	NE8	3.89	6	7	1	1	1	3	7	6	0	2	3	6	3	1	3
Jock's Lodge	NE14	3.79	6	4	3	3	4	2	5	4	3	5	2	4	3	1	2
Craiglockhart Avenue (North)	SW9	3.45	1	3	3	7	2	2	4	3	4	5	-3	3	4	1	1
Corn Exchange	SW10	3.44	0	4	2	1	1	2	4	2	3	5	-1	5	3	1	1
Angle Park Terrace (Northeast)	SW14	3.32	2	6	2	2	2	1	4	4	6	6	-2	5	6	1	2
Summerhall	SE9	3.25	6	4	3	6	3	-2	4	4	2	4	-3	5	4	2	6
Niddrie Crossroads	SE27	3.22	6	3	3	6	4	2	2	2	0	0	3	6	6	1	7
Fort Kinnaird (East)	SE30	3.03	2	4	3	1	1	0	5	3	7	6	0	3	1	1	2
Grange Loan	SE32	2.94	0	3	3	7	1	0	1	1	2	4	-3	3	5	1	1
Dundee Street Slip-Road	SW15	2.85	1	3	3	7	1	0	3	4	6	6	2	6	6	1	1
Broughton Street Roundabout	CC23	2.79	1	5	3	4	1	0	6	6	3	4	-2	6	7	2	3
Rodney Street	CC24	2.70	1	4	3	7	2	2	3	2	1	3	-3	4	6	2	3
Abbey Mount	NE13	2.68	6	3	3	7	1	2	3	5	3	5	1	6	4	2	3

Duddingston Park	NE16/NE10	2.61	7	0	3	7	1	1	3	2	3	4	-2	7	7	1	2
Commonwealth Pool	SE23	2.59	2	6	3	3	5	2	5	5	3	4	-3	6	3	1	2
Bankhead Roundabout		2.30	3	4	-1	1	1	0	4	7	1	4	2	6	4	1	1
Calder Road - Sighthill		2.22	6	4	-1	1	1	0	4	7	0	4	-1	7	5	1	1
Calder Road - Saughton	SW1	2.18	4	1	-1	1	1	0	4	7	1	4	3	6	6	1	1
Southfield Place	NE10	1.76	7	0	3	2	4	1	4	3	7	6	-2	7	7	1	2
East Preston Street (East)	SE24	1.74	1	0	3	7	3	1	2	4	3	6	-3	7	4	1	2
Kingston Crossroads	SE14	1.53	7	0	3	7	1	1	1	1	0	0	3	3	8	1	1

Appendix B – Junction Traffic Data

		Vehicular Traffic	Vehicular Traffic	Vehicular Traffic	Vehicular Traffic	Vehicular Traffic	Vehicular Traffic	Vehicular Traffic
		Light Vehicles	Heavy Vehicles		Average traffic speeds	Percentage Over Speed Limit	85%ile Speeds	Percentage Over Speed Limit
Junction Name	Junction ID	Total Vehicles Over a 7-day Period (Light)	Total Vehicles Over a 7-day Period (Medium)	Min. Speed Limit (mph)	Max. Mean Speed (mph)		Max. leg speed (mph)	
East End	CC9	16,883	4,251	20	20.2	1.0%	23.5	17.5%
Tollcross	CC10	33,585	5,577	20	22.1	10.5%	26.5	32.5%
West Approach Road (East)	CC13	27,757	3,559	20	24.1	20.5%	28.5	42.5%
Drumbrae Roundabout	NW17	58,597	7,038	20	24.4	9.0%	29.1	27.5%
West End	CC3	13,320	1,641	20	20.7	3.5%	25.1	20.3%
Barnton Junction	NW1	48,542	4,911	40	26.1	-34.8%	33.2	-20.5%
Craigleith Junction	NW6	32,250	2,548	30	23.0	-23.3%	29.1	-3.1%
Crewe Toll Roundabout	NW10	55,154	5,423	30	23.4	-22.0%	27.2	-10.3%
Maybury Junction	NW16	37,503	4,968	40	26.5	-33.8%	34.1	-17.3%
King's Road Junction	NE6	46,810	4,693	20	24.3	-5.5%	30	9.5%
Holy Corner	SW31	27,972	2,978	20	20.6	3.0%	25.0	20.0%
Liberton Brae Junction	SE4	17,005	3,060	20	24.4	-9.0%	29.5	3.4%
Lady Road Roundabout	SE26	28,626	4,521	20	24.6	-11.5%	28.6	4.3%
Haymarket Junction	CC2	45,566	8,379	20	20.6	3.0%	24.3	17.7%
South Charlotte Street	CC4	7,900	834	20	20.1	0.5%	23.8	16.0%
Bread Street	CC12	20,199	2,394	20	20.7	3.5%	24.7	19.0%
St Mary's Street	CC36	29,883	3,453	20	24.6	23.0%	25.1	20.3%
West Granton Access (South)	NW13	58,414	5,520	20	23.0	2.0%	26.8	16.0%
Comely Bank Roundabout	NW20	48,784	4,478	20	23.9	19.5%	27.8	28.1%
Milton Link Junction	NE8	55,643	7,463	30	37.0	-7.5%	43.7	8.5%
Jock's Lodge	NE14	38,987	4,692	20	23.2	16.0%	28.3	29.3%
Craiglockhart Avenue (North)	SW9	32,108	2,834	20	24.3	21.5%	27.5	27.3%
Corn Exchange	SW10	28,918	2,329	20	23.0	15.0%	27.3	26.7%
Angle Park Terrace (Northeast)	SW14	36,789	4,127	20	26.2	31.0%	31.5	36.5%
Summerhall	SE9	36,357	4,591	20	21.9	9.5%	26.5	24.5%
Niddrie Crossroads	SE27	19,318	2,557	30	22.5	-25.0%	27.8	-7.9%
Fort Kinnaird (East)	SE30	42,207	3,627	20	27.6	38.0%	31.8	37.1%
Grange Loan	SE32	7,417	785	20	21.9	9.5%	25.3	20.9%
Dundee Street Slip-Road	SW15	25,924	4,424	20	26.9	34.5%	31.2	35.9%
Broughton Street Roundabout	CC23	52,071	6,785	20	22.4	12.0%	25.9	22.8%

Rodney Street	CC24	24,530	1,950	20	20.5	2.5%	24.8	19.4%
Abbey Mount	NE13	27,347	5,680	20	22.5	12.5%	27.4	27.0%
Duddingston Park	NE16/NE10	21,542	2,302	20	27.1	10.5%	32	23.1%
Commonwealth Pool	SE23	43,656	5,974	20	22.1	10.5%	26	23.1%
Bankhead Roundabout	-	35,829	15,757	20	42.4	0.7%	45.5	23.1%
Calder Road Roundabout - Sighthill	-	35,046	15,625	20	40.0	-6.5%	45.5	23.1%
Calder Road Roundabout - Saughton	-	36,542	28,712	20	34.3	1.5%	38.7	23.1%
Southfield Place	NE10/NE16	35,472	3,243	20	27.1	35.5%	32	37.5%
East Preston Street (East)	SE24	18,139	4,762	20	23.0	15.0%	30.3	34.0%
Kingston Crossroads	-	8,622	678	20	23.4		27.1	34.0%

Appendix C – Junction Pedestrian and Cyclist Data

		Casualties	Non-Vehicular Traffic	Non-Vehicular Traffic	Barriers to Active Travel				Barriers to Active Travel
		Number and Severity of Incidents 1 to 5 Pro-rated based on number of Sis	Pedestrians Tuesday 21st June 2022	Cyclists Tuesday 21st June 2022	Cyclists Walking Tuesday 21st June 2022	Aux.	Percentage of Cyclists Walking	Cyclists Cycling on Footway (PC ON KERB) 22 June 2022	Provision of Active Travel Infrastructure Rationale for Scoring
Junction Name	Junction ID	Slight Injuries (SI) within the last 5 years	Total count between 7:00 and 19:00	Total count between 7:00 and 19:00	Total count between 7:00 and 19:00			Total count between 7:00 and 19:00	
East End	CC9		45,171	233	181		77.7%	135	Provision for cycling is limited to advanced stop signs for cyclists; Signalised pedestrian crossings do not necessarily present the most direct routes through the junction.
Tollcross	CC10		17,889	158	111		70.3%	16	Provision for cycling is limited to advanced stop signs for cyclists; Signalised pedestrian crossings do not necessarily present the most direct routes through the junction.
West Approach Road (East)	CC13	6	16,170	65	32	32	49.2%	12	Provision for cycling is limited to advanced stop signs for cyclists. However, the rate of cyclists pushing their bikes through the junction is below 50%; Signalised pedestrian crossings do not necessarily present the most direct routes through the junction.
Drumbrae Roundabout	NW17	9	4,567	68	26	26	38.2%	39	This junction does not have any meaningful provision for active travel; Signalised pedestrian crossings do not necessarily present the most direct routes through the junction.
West End	CC3		17,025	136	95		69.9%	1,047	Provision for cycling is limited to advanced stop signs for cyclists; Signalised pedestrian crossings do not necessarily present the most direct routes through the junction.
Barnton Junction	NW1	10	870	107	23	23	21.5%	120	The junction is provided with shared off-road paths from both Maybury Rd and Whitehouse Rd arms into Queensferry Rd (West); Signalised pedestrian crossings at Maybury Rd and Queensferry Rd (East) do not necessarily present the most direct routes through the junction.
Craighleith Junction	NW6	4	3,139	69	24	24	34.8%	6	Provision for cycling is limited to advanced stop signs for cyclists. However, the rate of cyclists pushing their bikes through the junction is below 50%; Signalised pedestrian crossings do not necessarily present the most direct routes through the junction.
Crewe Toll Roundabout	NW10		4,729	90	27	27	30.0%	8	The junction is provided with shared off-road paths between Crewe Rd N and Ferry Rd. However, there is no provision for Telford Rd or Crewe Rd S; Signalised pedestrian crossings do not necessarily present the most direct routes through the junction.
Maybury Junction	NW16		1,163	93	7	7	7.5%	315	This junction does not have any meaningful provision for cycling; Signalised pedestrian crossings do not necessarily present the most direct routes through the junction.

King's Road Junction	NE6		3,764	153	31	31	20.3%	29	The junction is provided with a shared off-road path from King's Rd into Portobello High St (Southbound). However, further provision for cycling is limited to advanced stop signs in the West-East arms. The rate of cyclists pushing their bikes through the junction is below 50%; Signalised pedestrian crossings do not necessarily present the most direct routes through the junction.
Holy Corner	SW31		9,707	87	50		57.5%	72	Provision for cycling is limited to advanced stop signs for cyclists; Signalised pedestrian crossings could provide a direct route through the junction but may be affected by crossing times.
Liberton Brae Junction	SE4	4	1,006	56	13	13	23.2%	19	Provision for cycling is limited to advanced stop signs for cyclists. However, the rate of cyclists pushing their bikes through the junction is below 50%; Signalised pedestrian crossings do not necessarily present the most direct routes through the junction. The Mayfield Rd arm does not have a signalised pedestrian crossing.
Lady Road Roundabout	SE26	2	2,855	65	16	16	24.6%	33	This junction does not have any meaningful provision for cycling, walking, or wheeling.
Haymarket Junction	CC2		24,448	183	99		54.1%	6	This junction does not have any meaningful provision for cycling; Signalised pedestrian crossings do not necessarily present the most direct routes through the junction.
South Charlotte Street	CC4		3,052	75	53		70.7%	195	Provision for cycling is limited to advanced stop signs for cyclists; Signalised pedestrian crossings do not necessarily present the most direct routes through the junction.
Bread Street	CC12		22,158	110	79		71.8%	96	Provision for cycling is limited to advanced stop signs for cyclists at Lothian Rd; Signalised pedestrian crossings could provide a direct route through the junction but may be affected by crossing times.
St Mary's Street	CC36		6,651	37	23		62.2%	129	This junction does not have any meaningful provision for cycling; Signalised pedestrian crossings do not necessarily present the most direct routes through the junction.
West Granton Access (South)	NW13	1	534	172	10	10	5.8%	282	This junction presents dedicated cycle lanes on the Ferry Rd approaches as well as North-South shared off-road paths; The rate of cyclists pushing their bikes through the junction is below 10% Signalised pedestrian crossings do not necessarily present the most direct routes through the junction; The junction counts with temporary measures delivered as part of Spaces for People.
Comely Bank Roundabout	NW20	5	4,399	35	29		82.9%	33	This junction does not have any meaningful provision for cycling; Signalised pedestrian crossings do not necessarily present the most direct routes through the junction.
Milton Link Junction	NE8		290	92	1	1	1.1%	3	The junction is provided with a shared off-road path on the East-West arms (A1 into A199); Further provision for cycling is limited to advanced stop signs for cyclists; The rate of cyclists pushing their bikes through the junction is below 10%.
Jock's Lodge	NE14		1,935	42	20	20	47.6%	159	This junction presents painted cycle lanes on the East-West approaches; Further provision for cycling is limited to advanced stop signs for cyclists; Signalised pedestrian crossings could provide a direct route through the junction but may be affected by crossing times.

Craiglockhart Avenue (North)	SW9	1	270	10	6		60.0%	36	Provision for cycling is limited to advanced stop signs for cyclists; Signalised pedestrian crossings do not necessarily present the most direct routes through the junction.
Corn Exchange	SW10		1,460	12	5	5	41.7%	9	This junction presents painted cycle lanes from Hutchison Terrace into Slateford Rd; Further provision for cycling is limited to advanced stop signs for cyclists; Signalised pedestrian crossings do not necessarily present the most direct routes through the junction.
Angle Park Terrace (Northeast)	SW14	2	1,146	31	12	12	38.7%	36	This junction presents painted cycle lanes from Angle Park Terrace into Dundee St; Further provision for cycling is limited to advanced stop signs for cyclists; Signalised pedestrian crossings do not necessarily present the most direct routes through the junction; There is no pedestrian crossing on the Dundee St arm.
Summerhall	SE9		9,839	205	52	52	25.4%	114	Provision for cycling is limited to advanced stop signs for cyclists; Signalised pedestrian crossings could provide a direct route through the junction but may be affected by crossing times.
Niddrie Crossroads	SE27		2,332	237	51	51	21.5%	171	Provision for cycling is limited to advanced stop signs for cyclists; Signalised pedestrian crossings could provide a direct route through the junction but may be affected by crossing times.
Fort Kinnaird (East)	SE30	3	1,153	34	3	3	8.8%	9	This junction does not have any meaningful provision for cycling; Signalised pedestrian crossings only present at Newcraighall Rd and do not necessarily present the most direct routes through the junction.
Grange Loan	SE32		1,005	9	8		88.9%	6	This junction does not have any meaningful provision for cycling, walking, or wheeling.
Dundee Street Slip-Road	SW15		1,332	13	9		69.2%	12	This junction presents a painted cycle lane at Dundee Street; Slip Rd only for vehicular traffic.
Broughton Street Roundabout	CC23		7,965	74	36	36	48.6%	12	This junction does not have any meaningful provision for cycling; Signalised pedestrian crossings do not necessarily present the most direct routes through the junction.
Rodney Street	CC24		4,088	60	37		61.7%	48	This junction presents a painted cycle lane at Cannonmills / Rodney St; Further provision for cycling is limited to advanced stop signs for cyclists; Signalised pedestrian crossings could provide a direct route through the junction but may be affected by crossing times.
Abbey Mount	NE13		6,002	74	67		90.5%	9	Provision for cycling is limited to advanced stop signs for cyclists; Signalised pedestrian crossings do not necessarily present the most direct routes through the junction.
Duddingston Park (Baileyfield Rd)	NE16/NE10		808	20	6		30.0%		Provision for cycling is limited to advanced stop signs for cyclists; Signalised pedestrian crossings could provide a direct route through the junction but may be affected by crossing times.
Commonwealth Pool	SE23	2	2,659	48	22	22	45.8%	249	Provision for cycling is limited to advanced stop signs for cyclists; Signalised pedestrian crossings do not necessarily present the most direct routes through the junction.
Bankhead Roundabout	-	5	8	1	0		0.0%		Underpass offers an off-road option for people cycling, walking, and wheeling through the junction. There may be, however, concerns over personal safety and security during the hours of darkness and it may not be the most direct route as there are no on-road crossing facilities.

Calder Road Roundabout - Sighthill	-	7	22	0	0		0.0%		Underpass offers an off-road option for people cycling, walking, and wheeling through the junction. There may be, however, concerns over personal safety and security during the hours of darkness and it may not be the most direct route as there are no on-road crossing facilities.
Calder Road - Saughton	-	6	10	1	0		0.0%		Underpass offers an off-road option for people cycling, walking, and wheeling through the junction. There may be, however, concerns over personal safety and security during the hours of darkness and it may not be the most direct route as there are no on-road crossing facilities.
Southfield Place (Southfield Rd)	NE10/NE16		1,120	52	10	16	19.2%	183	Provision for cycling is limited to advanced stop signs for cyclists; Signalised pedestrian crossings do not necessarily present the most direct routes through the junction.
East Preston Street (East)	SE24	1	2,031	34	18		52.9%	102	Provision for cycling is limited to advanced stop signs for cyclists; Signalised pedestrian crossings could provide a direct route through the junction but may be affected by crossing times.
Kingston Crossroads	-	2	287	4	1		25.0%		

Appendix D – Junction Equalities Data

		Equalities		Equalities		SIMD	SIMD		Hazards
		Proximity to Primary School	Aux.	Proximity to Secondary School	Aux.	Data Zone	Min. Decile	Max. Decile	Identified Hazards
Junction Name	Junction ID	Closest Primary School	Distance	Closest Secondary School	Distance				
East End	CC9	St Mary's RC Primary School	690m	Drummond Community High School	835m	Old Town, Princes Street and Leith Street	5	5	9
Tollcross	CC10	Tollcross Primary School	275m	St Thomas of Aquin's High School	360m	Tollcross	5	7	9
West Approach Road (East)	CC13	Tollcross Primary School	540m	St Thomas of Aquin's High School	745m	Tollcross	7	7	5
Drumbrae Roundabout	NW17	Gylemuir Primary School	455m	Craigmount High School	990m	East Craigs South / Corstorphine	10	10	8
West End	CC3	Tollcross Primary School	770m	St Thomas of Aquin's High School	965m	Tollcross / Deans Village	7	7	11
Barnton Junction	NW1	Clermiston Primary School	880m	The Royal High School	1,425m	Barnton, Cammo and Cramond South	9	9	10
Craigleith Junction	NW6	Ferryhill Primary School	915m	Broughton High School	1,440m	Blackhall / Craigleith, Orchard Brae and Crewe Toll	9	10	8
Crewe Toll Roundabout	NW10	Forthview Primary School	410m	Craigroyston Community High School	970m	West Pilton / Boswall and Pilton / Craigleith, Orchard Brae and Crewe Toll / Drylaw	3	10	9
Maybury Junction	NW16	Gylemuir Primary School	1,160m	Craigmount High School	730m	Ratho, Ingliston and Gogar / South Gyle	5	7	9
King's Road Junction	NE6	Towerbank Primary School	740m	Portobello High School	1,020m	Craigentiny / Portobello	6	10	6
Holy Corner	SW31	Bruntsfield Primary School	395m	Boroughmuir High School	455m	Merchiston and Greenhill	10	10	9
Liberton Brae Junction	SE4	Liberton Primary School	410m	Liberton High School	1,130m	Liberton West and Braid Hills	7	10	6
Lady Road Roundabout	SE26	Liberton Primary School	515m	Liberton High School	1,720m	Blackford, West Mains and Mayfield Road	9	9	6
Haymarket Junction	CC2	Dalry Primary School	610m	Boroughmuir High School	1,010m	Dalry and Fountainbridge / Deans Village / Tollcross	5	10	9
South Charlotte Street	CC4	Tollcross Primary School	800m	St Thomas of Aquin's High School	1,045m	Deans Village	7	7	10
Bread Street	CC12	Tollcross Primary School	315m	St Thomas of Aquin's High School	570m	Tollcross	5	7	7

St Mary's Street	CC36	Royal Mile Primary School	515m	St Thomas of Aquin's High School	1,125m	Old Town, Princes Street and Leith Street / Canongate, Southside and Dumbiedykes	2	4	6
West Granton Access (South)	NW13	Forthview Primary School	290m	Craigroyston Community High School	720m	West Pilton / Drylaw	3	4	10
Comely Bank Roundabout	NW20	Flora Stevenson Primary School	90m	Broughton High School	440m	Craigleith, Orchard Brae and Crewe Toll / Comely Bank	8	10	7
Milton Link Junction	NE8	Brunstane Primary School	205m	Portobello High School	1,425m	Joppa / Bingham, Magdalene, and The Christians	2	9	11
Jock's Lodge	NE14	The Royal High Primary School	510m	Holyrood High School	1,620m	Willowbrae and Duddingston Village / Northfield and Piershill	3	8	7
Craiglockhart Avenue (North)	SW9	St Cuthbert's RC Primary School	760m	Firrhill High School	1,170m	Craiglockhart	10	10	5
Corn Exchange	SW10	St Cuthbert's RC Primary School	495m	Firrhill High School	1,350m	Craiglockhart / Slateford and Chesser	6	10	6
Angle Park Terrace (Northeast)	SW14	Dalry Primary School	330m	Tynecastle High School	440m	Polwarth	7	10	9
Summerhall	SE9	Sciennes Primary School	360m	St Thomas of Aquin's High School	990m	Meadows and Southside / Marchmont East and Sciennes	9	9	7
Niddrie Crossroads	SE27	St Francis' RC Primary School	315m	Castlebrae Community High School	590m	Craigmillar	1	4	5
Fort Kinnaird (East)	SE30	Newcraighall Primary School	820m	Castlebrae Community High School	2,115m	Jewell, Brunstane and Newcraighall	5	5	7
Grange Loan	SE32	James Gillespie's Primary School	825m	James Gillespie's High School	755m	Morningside	10	10	5
Dundee Street Slip-Road	SW15	Dalry Primary School	260m	Tynecastle High School	525m	Polwarth / Dalry and Fountainbridge	3	7	5
Broughton Street Roundabout	CC23	St Mary's RC Primary School (Edinburgh)	140m	Drummond Community High School	170m	New Town East and Gayfield	8	10	8
Rodney Street	CC24	Broughton Primary School	555m	Drummond Community High School	345m	Canonmills and New Town North / Broughton North and Powderhall	9	10	6
Abbey Mount	NE13	Abbeyhill Primary School	230m	Leith Academy	1,255m	Hillside and Calton Hill / Abbeyhill	4	9	5
Duddingston Park	NE16								
Commonwealth Pool	SE23	Preston Street Primary School	140m	St Thomas of Aquin's High School	1,525m	Newington and Dalkeith Road	10	10	10
Bankhead Roundabout	-	Broomhouse Primary School	300m	Forrester High School	1,275m	Broomhouse and Bankhead / Longstone and Saughton / Parkhead and Sighthill	3	7	6
Roundabout at Calder Road - Sighthill	-	Murrayburn Primary School	100m	Forrester High School	900m	Broomhouse and Bankhead / Parkhead and Sighthill	6	6	6

Roundabout at Calder Road - Saughton	-	Sighthill Primary School	305m	Wester Hailes Education Centre	550m	Broomhouse and Bankhead / The Calders	2	5	2
Cameron Toll Roundabout	SE22	Prestonfield Primary School	285m	Castlebrae Community High School	1,760m	Newington and Dalkeith Road / Blackford, West Mains and Mayfield Road / Cragmillar / Prestonfield	2	9	5
Southfield Place	NE10	St John's RC Primary School	85m	Portobello High School	310m	Duddingston and Portobello South	7	7	2
East Preston Street (East)	SE24	Preston Street Primary School	45m	Liberton High School	1,170m	Newington and Dalkeith Road	10	10	
Kingston Crossroads	-	St John's Vianney RC Primary School	483m	Liberton High School	483m	Liberton East and	2	9	2

Appendix E – Initial Junctions Long-list

Area	Main Route	Ref	Junction Name	Full List of Streets
City Centre	A8	CC1	Haymarket Gyratory	Morrison Street, West Maitland Street, Torphichen Street, Torphichen Place
		CC2	Haymarket Junction	Morrison Street, Dalry Road, Haymarket Terrace, West Maitland Street
	Princes Street	CC3	West End	Princes Street, Lothian Rd, South Charlotte Street, Shandwick Place, Queensferry Street, Hope Street
		CC4	South Charlotte Street	Princes St, South Charlotte St
		CC5	The Mound	Princes Street, The Mound, Hanover Street
		CC6	South St David Street	Princes St, South St David St
		CC7	Waverley Bridge	Princes Street, Waverley Bridge
		CC8	South St Andrew Street	Princes Street, South St Andrew St
		CC9	East End	Princes Street, North Bridge, Waterloo Place, Leith Street
	Lothian Road	CC10	Tollcross	Earl Grey Street, Lauriston Place, Brougham Street, Home Street, West Tollcross
		CC11	Fountainbridge	Lothian Road, Fountainbridge, Earl Grey Street, East Fountainbridge
		CC12	Bread Street	Lothian Road, Morrison Street, Bread Street
		CC13	West Approach Road (East)	Lothian Road, West Approach Road
		CC14	Castle Terrace	Lothian Road, Kings Stables Road, Castle Terrace
	George Street	CC15	Charlotte Square	George Street, Charlotte Square
		CC16	Hanover Street	George Street, Hanover Street
		CC17	St Andrew Square	George St, St Andrew Square
	Queen Street	CC18	North Charlotte Street	Queen Street, North Charlotte Street
		CC19	Queen St Gardens West	Queen Street, Queen St Gardens West, Frederick Street
		CC20	Queen St Gardens East	Queen Street, Queen St Gardens East, Hanover Street
		CC21	Elder Street	Queen St, Elder St, Elder St East
		CC22	Bristo Gyratory	Bristo Place, Teviot Place, Forrest Road
		CC23	Broughton Street Roundabout	Broughton Street, East London Street, London Street, Bellevue

		CC24	Rodney Street	Canonmills, Broughton Road, Rodney Street, Eyre Place
		CC25	Gardner's Crescent	Morrison Street, Gardner's Crescent, Dewar Place
	Royal Mile	CC26	George IV Bridge	High Street, George IV Bridge, Bank St
		CC27	North Bridge	High Street, North Bridge, South Bridge
	A900	CC28	Greenside Row	Leith Street, Greenside Row
		CC29	Calton Road	Leith Street, Calton Road
		CC30	Picardy Place	Leith St, York Place, Picardy Place, Leith Walk
		CC31	London Road Roundabout	Leith Walk, Elm Row, London Road, Royal Terrace
	West Port/ Grassmarket/ Cowgate	CC32	Bread Street	West Port, Bread Street, East Fountainbridge, Lauriston Street
		CC33	Lady Lawson Street	West Port, Lady Lawson Street
		CC34	Cowgatehead	Grassmarket, West Bow, Cowgatehead
		CC35	Candlemaker Row	Cowgatehead, Candlemaker Row, Cowgate
		CC36	St Mary's Street	Pleasance, Cowgate, St Mary's Street, Holyrood Road
North West	A90	NW1	Barnton Junction	Queensferry Road, Maybury Road, Whitehouse Road
		NW2	Drum Brae North	Queensferry Road, Drum Brae North
		NW3	Clermiston Road North	Queensferry Road, Clermiston Road North
		NW4	Quality Street Junction	Queensferry Road, Quality Street, Craigcrook Road
		NW5	Telford Junction	Queensferry Road, Telford Road, Strachan Road, House O' Hill Avenue
		NW6	Craigleith Junction	Queensferry Road, Craigleith Road, South Groathill Avenue, Craigleith Retail Park Access
		NW7	Randolph Cliff	Queensferry Road, Randolph Cliff, Lynedoch Place, Bell's Brae
		NW8	Randolph Place	Randolph Place, Queensferry Street, Melville Street
		NW9	Orchard Road	Queensferry Road, Orchard Road, Orchard Road South
	A902	NW10	Crewe Toll Roundabout	Ferry Road, Crewe Road North and South, Telford Road
		NW11	Pennywell Roundabout	Muirhouse Parkway, Marine Drive, West Granton Road, Pennywell Road
		NW12	West Granton Access (North)	West Granton Road, West Granton Access, Waterfront Broadway
		NW13	West Granton Access (South)	Ferry Road, West Granton Access, Easter Drylaw Drive
		NW14	Granton Square	West Granton Road, West Shore Road, Lower Granton Road, Granton Road

	A901	NW15	Craighall Roundabout	Starbank Road, Craighall Road, Pier Place
	A8	NW16	Maybury Junction	Glasgow Road, Maybury Road, Turnhouse Road
		NW17	Drum Brae Roundabout	Glasgow Road, Drum Brae South, St John's Road, Meadow Place Road
		NW18	Western Corner	Western Terrace, Ellersly Road, Saughtonhall Drive
		NW19	Roseburn Junction	Roseburn Terrace, Roseburn Street
		NW20	Comely Bank Roundabout	Orchard Brae, Orchard Road, Craigleith Road, Crewe Road South, Comely Bank Road
North East	A900	NE1	Foot of the Walk	Great Junction Street, Duke Street, Leith Walk, Constitution Street
	A902	NE2	Coburg Street	Ferry Road, Great Junction Street, North Junction Street, Coburg Street
	A901	NE3	Sandpiper Drive	Lindsay Road, Sandpiper Drive, Newhaven Place, Great Michael Rise
		NE4	Ocean Terminal	Lindsay Road, Ocean Drive, Commercial Street, North Junction Street
	A199	NE5	Constitution Street	Bernard Street, Constitution Street, Baltic Street
		NE6	King's Road Junction	Kings Road, Sir Harry Lauder Road, Seafield Road East, Portobello High Street, Inchview Terrace
		NE7	Baileyfield Junction	Sir Harry Lauder Road, Baileyfield Road
		NE8	Milton Link Junction	Milton Road, Sir Harry Lauder Road, Milton Road East, Milton Link
		NE9	Eastfield Junction	Milton Road East, Millerhill, Eastfield
	A6106	NE10	Southfield Place	Baileyfield Road, Duddingston Road, Duddingston Park, Southfield Place
		NE11	Craigentinny Avenue	Moirra Terrace, Craigentinny Avenue
		NE12	Dalmeny Street	Easter Road, Dalmeny Street, St Clair Street
	A1	NE13	Abbey Mount	Regent Road, Easter Road, Abbey Mount
		NE14	Jock's Lodge	London Road, Restalrig Road South, Portobello Road, Willowbrae Road
		NE15	Willowbrae	Willowbrae Road, Duddingston Road, Milton Road West, Duddingston Road West
		NE16	Duddingston Park	Milton Road West, Duddingston Park, Milton Road, Duddingston Park South
South West	A71	SW1	Saughton Road Roundabout	Calder Road, Saughton Road, Longstone Road
		-	Bankhead Roundabout	Calder Road, Bankhead Avenue, Wester Hailes Road

		-	Saughton Road Roundabout - Sighthill	Calder Road, Sighthill Avenue, Broomhouse Road
		SW2	Hutchison Crossway	Gorgie Road, Balgreen Road, Hutchison Crossway
		SW3	Westfield Road	Gorgie Road, Westfield Road, Gorgie Park Road
		SW4	Ardmillan Terrace (North)	Gorgie Road, Murieston Road, Dalry Road, Henderson Terrace, Ardmillan Terrace
		SW5	Westburn Avenue	Wester Hailes Road, Murrayburn Road, Westburn Avenue
		SW6	Longstone Roundabout	Longstone Road, Murrayburn Road
	A70	SW7	Gillespie Crossroads	Lanark Road, Gillespie Road, Wester Hailes Road
		SW8	Inglis Green	Lanark Road, Inglis Green Road
		SW9	Craiglockhart Avenue (North)	Lanark Road, Craiglockhart Avenue, Slateford Road
		SW10	Corn Exchange	Slateford Road, Hutchison Terrace
		SW11	Robertson Avenue (South)	Slateford Road, Robertson Avenue, Stewart Terrace, Hermand Crescent
		SW12	Shandon Place	Slateford Road, Shandon Place, Shandon Crescent
		SW13	Ardmillan Terrace (South)	Slateford Road, Ardmillan Terrace, Angle Park Terrace, Harrison Road
		SW14	Angle Park Terrace (Northeast)	Angle Park Terrace, Henderson Terrace, Dundee Street, West Approach Road
		SW15	Dundee Street slip-road	Dundee Street, West Approach Road access ramp
		SW16	Balgreen Roundabout	Balgreen Road, Stevenson Road
	Colinton Road	SW17	Redford Road (West)	Colinton Road, Redford Road
		SW18	Oxgangs Road North	Colinton Road, Oxgangs Road North
		SW19	Craiglockhart Avenue (South)	Colinton Road, Craiglockhart Avenue, Glenlockhart Road
		SW20	Polwarth Terrace	Colinton Road, Polwarth Terrace
		SW21	Gray's Loan	Colinton Road, Myreside Road, Gray's Loan, Merchiston Gardens
		SW22	Redford Road (East)	Oxgangs Road, Redford Road, Oxgangs Road North
		SW23	Colinton Mains Drive	Colinton Mains Drive, Tesco Superstore Access
	A702	SW24	Biggar Road Roundabout	Biggar Road, A720 Edinburgh City Bypass Slip Roads
		SW25	Fairmilehead Junction	Biggar Road, Oxgangs Road, Buckstone Terrace, Frogston Road West
		SW26	Braid Road (North)	Buckstone Terrace, Pentland Terrace
		SW27	Riselaw Crescent	Comiston Road, Comiston Springs Avenue, Riselaw Crescent

		SW28	Braidburn Terrace	Comiston Road, Greenbank Crescent, Greenbank Terrace, Braidburn Terrace
		SW29	Cluny Gardens	Comiston Road, Belhaven Terrace, Morningside Road, Cluny Gardens
		SW30	Church Hill	Morningside Road, Church Hill
		SW31	Holy Corner	Morningside Road, Colinton Road, Bruntsfield Place, Chamberlain Road
		SW32	King's Theatre	Gilmore Place, Tarvit Street, Home Street, Leven Street.
		SW33	Strathearn Place	Greenhill Gardens, Strathearn Place
		SW34	Argyle Place	Melville Drive, Argyle Place
South East	A701	SE1	Straiton Junction	Burdiehouse Road, Lang Loan, A720 Edinburgh City Bypass Slip Roads
		SE2	Kaimes Junction	Burdiehouse Road, Captain's Road, Frogston Road East, Howden Hall Road
		SE3	Liberton Drive	Liberton Gardens, Liberton Drive, Kirkgate, Liberton Brae
		SE4	Liberton Brae Junction	Liberton Brae, Kirk Brae, Blackford Glen Road, Braefoot Terrace, Mayfield Road, Liberton Road
		SE5	Gilmerton Road (Northwest)	Liberton Road, Gilmerton Road
		SE6	Lady Road Junction	Lady Road, Craigmillar Park, Esslemont Road, Liberton Road,
		SE7	East Preston Street (West)	Newington Road, East Preston Street, West Preston Street, South Clerk Street
	A7	SE8	Chambers Street	South Bridge, Chambers Street, Infirmary Street
	A700	SE9	Summerhall	Summerhall Crescent, Sciennes, Melville Terrace, Melville Drive, Hope Park Terrace, Hope Park Crescent
	Lasswade Road	SE10	Lang Loan	Lasswade Road, Lang Loan
		SE11	Captain's Road	Lasswade Road, Captain's Road, Gilmerton Dykes Street
	A772	SE12	Gilmerton Station Road	Gilmerton Road, Gilmerton Station Road, Drum Street
		SE13	Gilmerton Crossroads	Drum Street, Ferniehill Drive, Newtoft Street
		SE14	Kingston Avenue (South)	Gilmerton Road, Kingston Avenue, Mount Vernon Road
	A7	SE15	Sherifhall Park & Ride	Old Dalkeith Road, Sherifhall Park & Ride Access, Shawfair Business Park Access
		SE16	Danderhall	Old Dalkeith Road, Newton Church Road
		SE17	The Wisp (South)	Old Dalkeith Road, The Wisp
		SE18	Ferniehill Road	Old Dalkeith Road, Ferniehill Road
		SE19	Little France Road	Old Dalkeith Road, Little France Road

		SE20	Little France Drive	Old Dalkeith Road, Little France Drive
		SE21	Little France Crescent	Old Dalkeith Road, Little France Crescent
		SE22	Cameron Toll Roundabout	Lady Road, Dalkeith Road, Peffermill Road, Old Dalkeith Road
		SE23	Commonwealth Pool	Dalkeith Road, Holyrood Park Road
		SE24	East Preston Street (East)	Dalkeith Road, East Preston Street
		SE25	Bernard Terrace (West)	South Clerk Street, Hope Park Terrace, Bernard Terrace
		SE26	Lady Road Roundabout	Lady Road, Cameron Toll Shopping Centre Access
	A6095	SE27	Niddrie Crossroads	Peffermill Road, Duddingston Road West, Craigmillar Castle Road, Niddrie Mains Road
		SE28	The Wisp (North)	Niddrie Mains Road, The Wisp, Duddingston Park South, Newcraighall Road
		SE29	Fort Kinnaird (West)	Newcraighall Road, Whitehill Road, Fort Kinnaird Retail Park Access
		SE30	Fort Kinnaird (East)	Newcraighall Road, Whitehill Road, Fort Kinnaird Retail Park Accesses
	A1	SE31	The Jewel Roundabout	Milton Link, The Jewel, A1
		SE32	Grange Loan	Kilgraston Road, Grange Loan, Whitehouse Terrace
		SE33	Blackford Junction	Blackford Avenue, Maurice Place, Charterhall Road, West Savile Terrace
		SE34	King's Buildings	West Mains Road, Mayfield Road, Esslemont Road



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