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**south**yorkshire  
local transport plan partnership

**SOUTH YORKSHIRE STRATEGIC NETWORK  
OCTOBER 2010**

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## SOUTH YORKSHIRE STRATEGIC NETWORK (October 2010)

### 1 INTRODUCTION

1.1 The Sheffield City Region Transport Strategy 2011 – 2026 (Draft for Consultation – July 2010), establishes a network hierarchy based on the following categories:-

- **National** – includes the rail network, managed by Network Rail, and the motorways and trunk road network managed by the Highways Agency.
- **Strategic** – includes the strategic road network (subject of this paper), and accommodates the strategic public transport network (bus and tram).
- **Local** – Comprises the majority of the road network, but less of its total traffic, and includes residential streets / local bus routes.

1.2 As stated above, the **National Network** has been defined in respect of those routes managed by the Highways Agency - they include the M1, A1(M), M18, M180, plus sections of the A616, A628 and A61. As noted in the emerging Transport Strategy, our role in relation to these is to work in partnership with the Highways Agency and lobby to ensure they meet the needs of the sub-region.

### 2 OUR STRATEGIC NETWORK

2.1 Although the fifteen year Transport Strategy relates to the City Region area, the South Yorkshire LTP Partnership's "Congestion and Network Management Implementation Group" (CNMIG), has led on defining the **Strategic Network** for the County. The CNMIG comprises of nominated Traffic / Network Managers from the four South Yorkshire Local Highway Authorities and a representative from South Yorkshire Passenger Transport Executive (SYPTTE).

2.2 The South Yorkshire **Strategic Network** has been defined in recognition of those routes which:-

- Reflect discrete travel corridors between main urban areas and / or the National Network.
- Provide the main links between key settlements (within and outside South Yorkshire).
- Are traffic sensitive / critical in terms of network resilience (i.e. those which are particularly managed to ensure disruption is minimised).
- Take account of 'Emergency Diversion Routes' as agreed with the Highways Agency (i.e. in respect of alternative routes which motorists are encouraged to use when motorways are closed).
- Include bus "key routes" (as identified by SYPTTE).
- Are important for Freight.

2.3 The **Strategic Network**, as defined in South Yorkshire and shown in APPENDIX A, comprises of thirty-nine discrete routes, some sections of which replicate others (e.g. the identified Barnsley to Rotherham route follows some of the same sections as the Barnsley to Doncaster routes). This approach enables our analysis of routes that comprise the network to consider whole route / corridor (origin and destination), as well as a focus on logical segments along the routes. This analysis informs which routes, or segments thereof, are the most important for stronger management, and has considered the following:-

- Annual Average Daily Flows – sourced from DfT Matrix Data Repository, average of 2008 data - by segment, supplemented by South Yorkshire ATC data.
- Annual Average Daily Goods Vehicle Flows – sourced as above.
- Proportion of the route identified as a bus key route – defined by SYPTTE as ‘Bus Key Routes’ (as per information supplied on 7th April 2010).
- Proportion of the route identified as a Emergency Diversion Route – utilising information supplied by the Highways Agency (as at June 2010).
- Whether the route links to the National Network.
- Resilience issues – as advised by Local Authority Traffic Managers (June 2010), relating to those parts of the network on which significant problems would arise if the route were closed due to incidents.
- Journey times – sourced from the ‘StrateGIS’ analysis tool, relating to average ‘peak’ (07:00 – 10:00), journey times per KM (utilising data from May 2009).
- Journey delays – sourced from the ‘StrateGIS’ analysis tool, relating to comparisons between the average ‘free-flow’ journey times (22:00 – 06:00), and the ‘peak’ journey times (07:00 – 10:00), to estimate delays per KM (utilising data from May 2009).
- Road casualty rates – utilising road collision statistics (average over the period 2005 – 2009), and reported per 1,000 vehicles. Reported separately in respect of collisions involving ‘killed or seriously injured’ casualties or ‘slight’ casualties.
- Contribution to Housing / Employment growth – the extent to which the route (or section thereof), contributes, based on High / Medium / Low.

### **3 DEVELOPING IMPLEMENTATION / INVESTMENT PROGRAMMES**

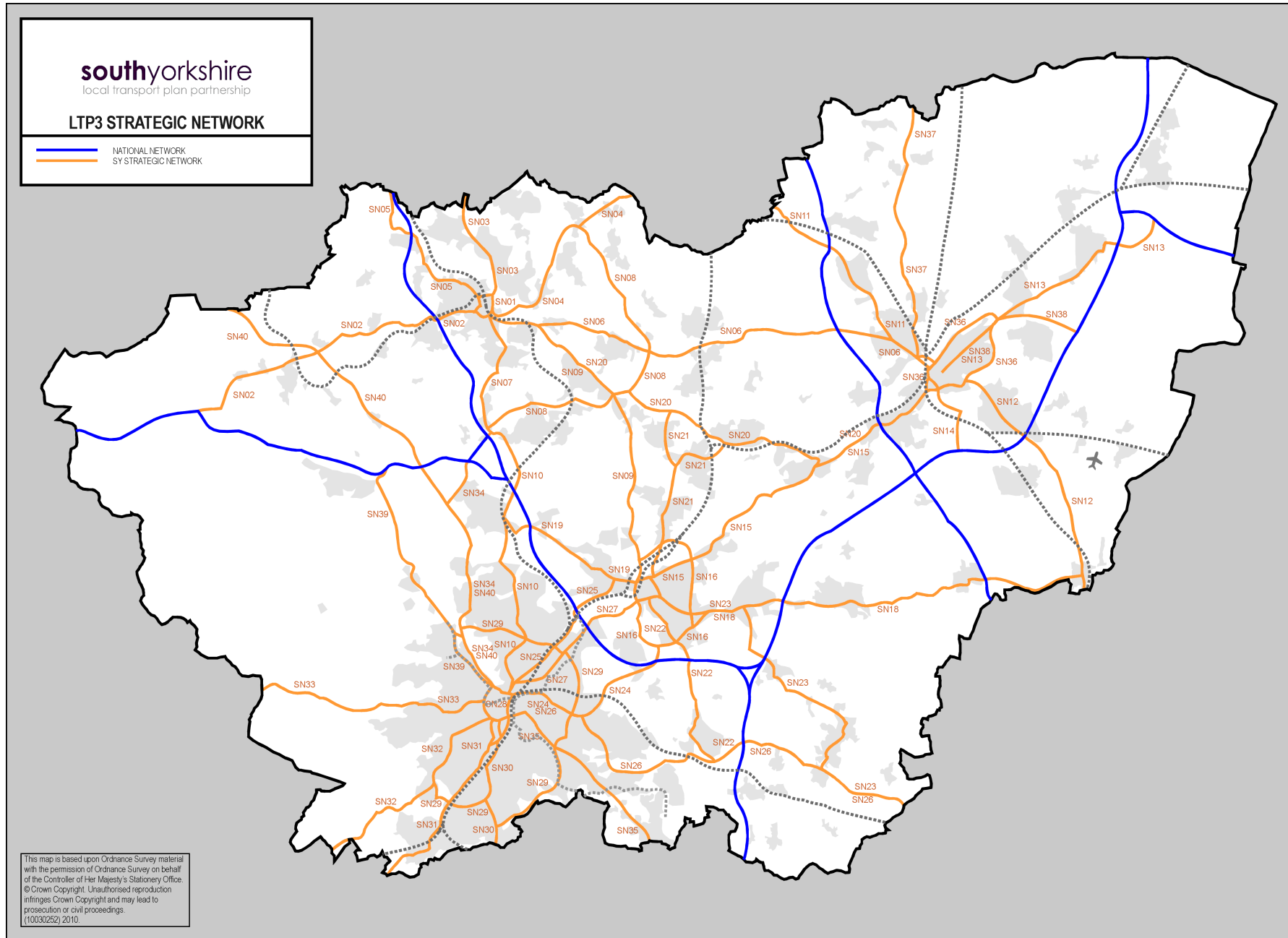
- 3.1 Having agreed the South Yorkshire **Strategic Network** (approved by Strategic Leadership Group on the 16<sup>th</sup> July 2010), the routes have been ‘segmented’, in order to facilitate analysis of relevant data / information, many of which are referred to above. The process of segmenting the routes took account of:-
- Route characteristics (including type of highway and urban / rural location).
  - Intersections with main routes, particularly links with other routes on the Strategic and National networks.
- 3.2 A total of 158 discrete route segments have been defined. Initial analysis on these segments was undertaken against the following:-
- Bus Key Route;
  - Emergency Diversion Route;
  - Resilience;
  - Average daily vehicle flows;
  - Average daily goods vehicle flows;
  - Vehicle delays;
  - Journey times;
  - Collisions per 1,000 vehicles.
- 3.3 Our analysis ranked each of the criteria results into equal groups of ten, whereby “1” related to route segments with greatest impact against that particular criterion, and “10” least impact – for those criteria with either ‘yes’ or ‘no’ responses (e.g. is the route segment part of an Emergency Diversion Route?), then a value of “2” was awarded for ‘yes’ and “9” for ‘no’. These ranked scores were then summed to provide an overall value (it was our initial intention to include road collision data as part of this process, but we felt that doing so would ‘skew’ the results too much and we, therefore, concluded that they should be omitted). The ranked scores were then split into (approximate) thirds, with those segments scoring between 26 and 43 ranked RED (total number = 59); those scoring between 44 and 52 ranked AMBER (total number = 49); and those scoring between 53 and 67 ranked GREEN (total = 50). The results of this exercise are shown on the map and accompanying schedule in APPENDIX B.

- 3.4 It should be noted that this exercise, although presenting a prioritised schedule, does not necessarily mean significant levels of spend on the ground. Segments of the Strategic Network that are defined, through the above process, as RED indicate those elements that are the most important in terms of managing the network. It is important to note that our approach is based on managing the “whole route” network and that although our focus of attention may relate to these RED ranked parts of the network, funding resources may be required / justified at other locations, such as those that impact most on the efficient and effective working of the network. The scoring criteria for future Strategic Fund bids will be revised, over the next month or so, to take account of the above.
- 3.5 It is envisaged that refinement of this process will be undertaken having regard to the input from other LTP Implementation Groups, particularly the Public Transport Board, Quality of Life Implementation Group and Asset Management & Maintenance Implementation Group.
- 3.6 It is not envisaged that specific, named projects will need to be identified for the emerging LTP3 Implementation Plan. The CNMIG’s input into this is expected to cover the following three “THEMES” for investment:-
- South Yorkshire Intelligent Transport System (syITS).
  - Core Network Management Activities.
  - Selective Interventions on the Strategic Network (utilising information from the RAG ranking of routes, as shown in APPENDIX B).
- 3.7 The Consultation Draft Transport Strategy was formulated having regard to a number of strategy policy options. The ones of most relevance to CNMIG, include:-
- High occupancy vehicle lanes.
  - Conventional Traffic Management.
  - Road improvements (minor).
  - Car parking charges.
  - Regulatory restrictions.
  - Road User Charging.
  - Lorry routes / bans.
  - Intelligent Transport Systems.
  - Private parking charges (such as Workplace Parking Charges).
  - Better enforcement for network management.
  - Urban Freight Consolidation Centres and Freight Management Strategy.
  - Public Transport priority.

#### **4 MONITORING PERFORMANCE**

- 4.1 Precise monitoring protocols will have to be refined once the new Government’s approach to performance monitoring becomes clearer. It is almost certain that less intensive performance monitoring will be required by the DfT – the expectation being that localities will determine what is important for their particular areas. The Partnership will need to consider issues such as our approach to which corridors / routes we monitor; what form that monitoring should take; what targets should be adopted (and over what period); what data sources should be utilised; and other detailed issues, such as what time periods should be adopted (e.g. PM peak).
- 4.2 In terms of managing our programme of interventions and assessing their impacts, it is suggested that we base assessments / reviews on the route “storyboards” that were developed during LTP2 and the Congestion Delivery Plan.

# APPENDIX A



## APPENDIX B

ORDER	REF	ROUTE	LENGTH (KM)	BUS KEY ROUTE	BUS KEY ROUTE	EMERGENCY DIVERSION ROUTE	RESILIENCE	AVERAGE FLOWS (AADF)	AVERAGE GOODS VEHICLE FLOWS	EXISTING DELAYS Secs / KM (CJAMS)	EXISTING JT Secs / KM (CJAMS)	OVERALL RANKING SCORE
1	SN06e / SN11d	York Road (A635 / A638) to Bentley Road (A638 / A19)	2.82	100%	1	2	2	5	6	5	5	26
2	SN15c / SN20g	Carr House Road (A630 / A18) to Sandford Road (A630 / A60)	2.32	100%	1	2	2	2	5	8	7	27
3	SN24b	M1J33 (A630 / M1) to Mosborough Parkway (A630 / A57)	10.91	70%	3	2	2	1	1	9	9	27
4	SN34e	Herries Road South (A61 / A6102) to Parkside Road (A61 / A6102)	0.49	100%	1	9	2	4	6	1	4	27
5	SN36d / SN40g	Cleveland Street (A638 / A630) to North Bridge (A630 / UC)	1.18	100%	1	2	2	4	6	6	6	27
6	SN34d / SN40f	Leppings Lane (A61 / B6079) to Herries Road South (A61 / A6102)	0.91	100%	1	9	2	6	7	1	3	29
7	SN15a / SN20h	Trafford Way (A630 / A638) to Carr House Road (A630 / A18)	1.30	100%	1	2	2	7	7	5	6	30
8	SN15d / SN20f	Sandford Road (A630 / A60) to A1J36 (A630 / A1)	4.24	100%	1	2	2	6	7	7	7	32
9	SN18c	M18J1 (A631 / M18) to Morthen Road (A631 / B6060)	4.20	100%	1	2	2	6	7	7	7	32
10	SN28i	Park Square Roundabout (A61 / A6135) to Granville Road (A61 / B6070)	1.30	100%	1	9	2	4	6	6	4	32
11	SN25e	Attercliffe Road (A6109 / A6178) to Spital Hill (A6109 / A6135)	0.72	100%	1	9	2	8	8	1	4	33
12	SN34f / SN40h	Parkside Road (A61 / A6102) to Bradfield Road (A61 / A6101)	1.20	100%	1	9	2	1	4	9	7	33
13	SN34g / SN40i	Bradfield Road (A61 / A6101) to Shalesmoor (A61)	4.39	100%	1	9	2	2	5	8	7	34
14	SN12c	Church Lane (A638 / UC) to Ledger Way (A638 / A18)	6.35	100%	1	9	2	5	7	5	6	35
15	SN16c	East Bawtry Road (A6123 / A631) to Moorgate Road (A631 / A618)	2.13	100%	1	2	2	7	8	8	7	35
16	SN30d	Scarsdale Road (A61 / UC) to Wolseley Road (A61 / A621)	1.78	100%	1	9	2	8	8	3	4	35
17	SN33b	Glossop Road (A57 / B6069) to Brook Hill (A57 / A61)	2.68	80%	2	9	2	9	9	1	3	35
18	SN06f / SN11e / SN37c	Bentley Road (A638 / A19) to Church Way (A19 / A630)	2.33	0%	10	2	2	2	5	8	7	36
19	SN16f	Sheffield Road (A630 / A6178) to New Wortley Road (A630 / A629)	2.29	0%	10	2	2	4	3	8	7	36
20	SN28a	Granville Road (A61 / B6070) to Bramall Lane (A61 / A621)	1.71	100%	1	9	2	4	7	8	5	36
21	SN28d	Moore Street (A61 / A625) to Brooke Hill (A61 / A57)	2.07	10%	9	9	2	5	7	1	3	36
22	SN18d /	Morthen Road (A631 / B6060) to East Bawtry	4.08	100%	1	2	2	5	10	9	8	37

## APPENDIX B

ORDER	REF	ROUTE	LENGTH (KM)	BUS KEY ROUTE	BUS KEY ROUTE	EMERGENCY DIVERSION ROUTE	RESILIENCE	AVERAGE FLOWS (AADF)	AVERAGE GOODS VEHICLE FLOWS	EXISTING DELAYS Secs / KM (CJAMS)	EXISTING JT Secs / KM (CJAMS)	OVERALL RANKING SCORE
	SN23c	Road (A631 / A6021)										
23	SN24c / SN26g	Mosborough Parkway (A630 / A57) to Derek Dooley Way (A57 / A61)	7.42	100%	1	9	2	2	5	9	9	37
24	SN27b	M1J34s (A6178 / M1) to Broughton Lane (A6178 / A6102)	3.44	100%	1	9	2	5	6	8	6	37
25	SN01c	Alhambra Roundabout (A61 / A628) to Townend Roundabout (A628 / UC)	1.55	100%	1	9	2	5	7	8	6	38
26	SN02c	M1J37 (A628 / M1) to Townend Roundabout (A628 / UC)	4.18	100%	1	9	2	7	7	6	6	38
27	SN15i	St. Anne's Road (A630 / A633) to New Wortley Road (A630 / A629)	1.91	100%	1	9	2	5	6	8	7	38
28	SN30f	Bramall Lane (A61 / A621) to Granville Road (A61 / B6070)	2.23	100%	1	9	2	9	9	4	4	38
29	SN36e	North Bridge (A630 / UC) to New Bridge Road (A630 / A19)	0.88	0%	10	2	2	5	6	7	6	38
30	SN11c	Doncaster Lane (A638 / B1220) to Barnsley Road (A638 / A635)	5.34	100%	1	2	2	7	8	10	9	39
31	SN28b	Bramall Lane (A61 / A621) to London Road (A61 / B6388)	0.42	0%	10	9	2	2	6	5	5	39
32	SN29f	City Road (A6102 / A6135) to Sheffield Parkway (A6102 / A57)	4.33	0%	10	2	2	5	6	7	7	39
33	SN30c	Abbey Lane (A61 / B6068) to Scarsdale Road (A61 / UC)	4.80	100%	1	9	2	8	9	5	5	39
34	SN32d	Brocco Bank (A625 / B6069) to St. Mary's Gate (A625 / A61)	3.36	100%	1	9	2	8	9	5	5	39
35	SN15e / SN20e	A1J36 (A630 / A1) to Low Road (A630 / A6023)	8.29	100%	1	2	9	7	7	7	7	40
36	SN16j	Wickersley Road (A631 / A6021) to Herringthorpe Valley Road (A631 / A6123)	2.34	100%	1	2	2	8	9	10	8	40
37	SN24a	West Bawtry Road (A630 / A631) to M1J33 (A630 / M1)	2.20	0%	10	2	2	5	8	6	7	40
38	SN25c	M1J34n (A6109 / M1) to Hawke Street (A6109 / A6102)	4.84	100%	1	9	2	8	8	6	6	40
39	SN28e	Brooke Hill (A61 / A57) to Shalesmoor (A61)	1.91	0%	10	9	2	5	7	3	4	40
40	SN29e	Gleadless Road (A6102 / B6388) to City Road (A6102 / A6135)	3.64	0%	10	2	2	5	7	7	7	40
41	SN03c	Rotherham Road (A61 / A633) to Harborough Hill Roundabout (A61 / A635)	4.09	100%	1	9	2	8	9	6	6	41
42	SN10c	Herries Road (A6135 / A6102) to Saville Street (A6135 / A6109)	5.34	100%	1	9	2	8	8	7	6	41
43	SN16e	Rotherway (A631 / A630) to Sheffield Road (A630 / A6178)	5.89	30%	7	2	2	6	5	10	9	41
44	SN29c / SN30b	Chesterfield Road (B6068 / A61) to Meadowhead Roundabout (A61 / A6102)	3.25	100%	1	9	2	8	9	6	6	41

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45	SN30e	Wolseley Road (A61 / A621) to Bramall Lane (A61 / A621)	4.96	100%	1	9	2	8	7	7	7	41
46	SN01b	Pontefract Road (A61 / A628) to Alhambra Roundabout (A61 / A628)	0.79	100%	1	9	2	6	7	9	8	42
47	SN14a	M18J3 (A6182 / M18) to Carolina Way (A6182 / UC)	3.67	0%	10	2	2	6	6	8	8	42
48	SN16d	Moorgate Road (A631 / A618) to Rotherway (A631 / A630)	2.51	0%	10	2	2	6	7	8	7	42
49	SN28c	London Road (A61 / B6388) to Moore Street (A61 / A625)	0.55	0%	10	9	2	3	5	7	6	42
50	SN28f	Shalesmoor (A61) to Saville Street (A61 / A6109)	2.12	50%	5	9	2	7	8	7	4	42
51	SN31c	Springfield Road (A621 / UC) to Wolseley Road (A621 / B6081)	4.94	100%	1	9	2	8	9	7	6	42
52	SN01a	Harborough Hill Roundabout (A61 / A635) to Pontefract Road (A61 / A628)	1.70	100%	1	9	2	7	8	9	7	43
53	SN06a / SN09a / SN20a	Alhambra Roundabout (A61 / A628) to Stairfoot Roundabout (A635 / A633)	5.63	100%	1	9	2	9	9	7	6	43
54	SN19c / SN25a	Wilton Gardens (A629 / A6109) to Centenary Way (A629 / A630)	2.71	100%	1	2	9	7	7	9	8	43
55	SN27d	Fred Mulley Road (A6178 / A6109) to Spital Hill (A6109 / A6135)	1.06	100%	1	9	9	8	8	3	5	43
56	SN29d	Meadowhead Roundabout (A6102 / A61) to Gleadless Road (A6102 / B6388)	8.29	0%	10	2	2	5	7	9	8	43
57	SN32c	Psalter Lane (A625 / UC) to Brocco Bank (A625 / B6069)	1.97	20%	8	9	2	6	9	4	5	43
58	SN36b	Bawtry Road (A18 / A638) to White Rose Way (A18 / A6182)	3.23	0%	10	2	2	5	7	9	8	43
59	SN39d	Middlewood Road (A6102 / B6079) to Penistone Road (A6102 / A61)	1.21	0%	10	9	2	9	9	3	1	43
60	SN15b / SN20i	Trafford Way (A18 / A638) to Cleveland Street (A18 / A630)	1.64	0%	10	2	2	7	8	8	7	44
61	SN15h	Herringthorpe Valley Road (A630 / A6123) to St. Anne's Road (A630 / A633)	4.31	100%	1	9	2	8	8	8	8	44
62	SN18e / SN23d	East Bawtry Road (A631 / A6021) to Centenary Way (A6021 / A630)	6.09	100%	1	2	9	9	9	7	7	44
63	SN28g	Saville Street (A61 / A6109) to Sheffield Parkway (A61 / A57)	2.45	0%	10	9	2	6	7	6	4	44
64	SN28h	Sheffield Parkway (A61 / A57) to Park Square Roundabout (A61 A6135)	1.18	0%	10	9	2	2	5	9	7	44
65	SN36c	White Rose Way (A18 / A6182) to Cleveland Street (A638 / A630)	1.62	0%	10	2	2	6	8	9	7	44
66	SN06d	A1J37 (A635 / A1) to York Road (A635 / A638)	5.89	100%	1	2	9	9	7	9	8	45
67	SN07b	Park Road (A61 / A6133) to Alhambra Roundabout (A61 / A628)	0.92	100%	1	9	9	9	7	6	4	45

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68	SN23a / SN26a	County Boundary to Ryton Road (A57 / B6060)	9.94	100%	1	2	9	7	7	10	9	45
69	SN25d	Hawke Street (A6109 / A6102) to Attercliffe Road (A6109 / A6178)	5.13	100%	1	9	2	8	8	9	8	45
70	SN19b	M1J35 (A629 / M1) to Wilton Gardens (A629 / A6109)	10.06	100%	1	2	9	8	8	10	8	46
71	SN25b	Wortley Road (A629 / A6109) to M1J34n (A6109 / M1)	5.59	100%	1	2	9	9	8	9	8	46
72	SN27a	Centenary Way (A6178 / A630) to M1J34s (A6178 / M1)	6.59	100%	1	2	9	9	8	9	8	46
73	SN30g	Queens Road (A621 / A61) to St. Mary's Gate (A621 / A61)	1.45	0%	10	9	2	8	8	4	5	46
74	SN10a	Dearne Valley Parkway (A6135 / A6195) to Cowley Lane (A6135 / A629)	10.71	100%	1	2	9	9	9	9	8	47
75	SN12b	Sheep Bridge Lane (A638 / B6463) to Church Lane (A638 / UC)	4.05	100%	1	9	2	8	9	9	9	47
76	SN15g	Park Lane (A630 / UC) to Herringthorpe Valley Road (A630 / A6123)	4.09	100%	1	2	9	9	9	9	8	47
77	SN31b	Abbey Lane (A621 / B6068) to Springfield Road (A621 / UC)	2.82	100%	1	9	2	9	9	9	8	47
78	SN14b	Carolina Way (A6182 / UC) to Carr House Road (A6182 / A18)	3.69	0%	10	2	2	8	8	9	9	48
79	SN15f	Low Road (A630 / A6023) to Park Lane (A630 / UC)	12.25	100%	1	2	9	9	8	10	9	48
80	SN19a	Station Road (A629 / A6135) to M1J35 (A629 / M1)	3.76	100%	1	2	9	9	9	10	8	48
81	SN27c	Broughton Lane (A6178 / A6102) to Fred Mulley Road (A6178 / A6109)	5.07	100%	1	9	9	9	6	8	6	48
82	SN34c / SN40e	Salt Box Lane (A61 / UC) to Leppings Lane (A61 / B6079)	5.55	30%	7	9	2	6	7	9	8	48
83	SN02b	High Lee Lane (A629) to M1J37 (A628 / M1)	14.09	100%	1	2	9	9	9	10	9	49
84	SN21e	Great Eastern Way A633 / A6123) to Centenary Way (A633 / A630)	3.93	100%	1	9	9	7	8	8	7	49
85	SN29g	Sheffield Parkway (A6102 / A57) to Attercliffe Common (A6102 / A6178)	6.54	0%	10	9	2	6	6	9	7	49
86	SN29h	Attercliffe Common (A6102 / A6178) to Barnsley Road (A6102 / A6135)	4.94	0%	10	9	2	7	7	8	6	49
87	SN30a	County Boundary to Meadowhead Roundabout (A61 / A6102)	2.46	0%	10	2	9	5	6	9	8	49
88	SN26b	Ryton Road (A57 / B6060) to Todwick Road (A57 / B6463)	5.39	0%	10	2	9	7	6	8	8	50
89	SN31d	Wolseley Road (A621 / B6081) to St. Mary's Gate (B6081 / A61)	2.23	0%	10	9	2	8	9	7	5	50
90	SN05b	Barugh Green Road (A637 / A635) to Church Lane (A635 / UC)	5.42	100%	1	9	9	9	9	7	7	51

## APPENDIX B

ORDER	REF	ROUTE	LENGTH (KM)	BUS KEY ROUTE	BUS KEY ROUTE	EMERGENCY DIVERSION ROUTE	RESILIENCE	AVERAGE FLOWS (AADF)	AVERAGE GOODS VEHICLE FLOWS	EXISTING DELAYS Secs / KM (CJAMS)	EXISTING JT Secs / KM (CJAMS)	OVERALL RANKING SCORE
91	SN13a	M180J1 (A18 / M180) to Westmoor Link (A18 / A630)	19.52	50%	5	2	9	8	9	9	9	51
92	SN21b	Wath Road (A6022 / A6023) to Warren Vale Road (A6022 / A633)	6.03	90%	1	9	9	8	9	8	7	51
93	SN29i	Barnsley Road (A6102 / A6135) to Penistone Road North (A6102 / A61)	7.23	0%	10	9	2	8	8	7	7	51
94	SN35b	Ridgeway Road (A6135 / A6102) to Granville Square (A6135 / A61)	5.83	100%	1	9	9	7	10	8	7	51
95	SN39b	Catch Bar Lane (A6102 / B6079) to Bradfield Road (B6069 / A6101)	2.16	0%	10	9	2	10	10	6	4	51
96	SN01e	Huddersfield Road (UC / A635) to Harborough Hill Roundabout (A635 / A61)	1.24	100%	1	9	9	9	9	8	7	52
97	SN04c	Rotherham Road (A628 / A633) to Harborough Hill Road (A628 / A61)	5.33	100%	1	9	9	9	9	8	7	52
98	SN10b	Cowley Lane (A6135 / A629) to Herries Road (A6135 / A6102)	12.42	100%	1	9	9	9	9	8	7	52
99	SN13b / SN38b	Westmoor Link (A18 / A630) to Hall Gate (UC / UC)	7.97	100%	1	9	9	8	10	8	7	52
100	SN18b	Grange Lane (A631 / B6427) to M18J1 (A631 / M18)	7.73	100%	1	9	9	9	9	8	7	52
101	SN21c	Rockingham Road (A633 / A6022) to Kilnhurst Road (A633 / UC)	3.89	100%	1	9	9	7	8	9	9	52
102	SN21d	Kilnhurst Road (A633 / UC) to Great Eastern Way A633 / A6123)	4.30	100%	1	9	9	8	8	10	7	52
103	SN22a / SN26d	M1J31 (A57 / M1) to Mansfield Road (A57 / A618)	3.63	0%	10	2	9	7	6	9	9	52
104	SN22c	East Bawtry Road (A618 / A631) to Alma Road (A618 / A6178)	5.30	100%	1	9	9	9	10	7	7	52
105	SN26c	Todwick Road (A57 / B6463) to M1J31 (A57 / M1)	4.33	0%	10	2	9	7	5	10	9	52
106	SN26f	Eckington Way (A57 / B6053) to Sheffield Parkway (A57 / A630)	9.88	0%	10	2	9	6	7	9	9	52
107	SN31e	Abbeydale Road (A621 / B6081) to Queens Road (A621 / A61)	6.26	100%	1	9	2	10	10	10	10	52
108	SN38a	M18J4 (A630 / M18) to Thorne Road (A630 / A18)	9.12	5%	10	2	9	6	6	10	9	52
109	SN04b	Engine Lane (A628 / A6195) to Rotherham Road (A628 / A633)	9.79	100%	1	9	9	9	9	8	8	53
110	SN09b / SN20b	Stairfoot Roundabout (A635 / A633) to Brampton Road (A633 / B6089)	9.71	100%	1	9	9	8	9	9	8	53
111	SN32b	Abbey Lane (A625 / B6068) to Psalter Lane (A625 / UC)	3.82	0%	10	9	2	8	9	8	7	53
112	SN39c	Bradfield Road (B6069 / A6101) to Shalesmoor (B6069 / A61)	4.52	0%	10	9	2	10	10	7	5	53
113	SN03b	Lee Lane (A61 / B6428) to Rotherham Road (A61 / A633)	4.04	100%	1	9	9	9	9	9	8	54

## APPENDIX B

ORDER	REF	ROUTE	LENGTH (KM)	BUS KEY ROUTE	BUS KEY ROUTE	EMERGENCY DIVERSION ROUTE	RESILIENCE	AVERAGE FLOWS (AADF)	AVERAGE GOODS VEHICLE FLOWS	EXISTING DELAYS Secs / KM (CJAMS)	EXISTING JT Secs / KM (CJAMS)	OVERALL RANKING SCORE
114	SN06b	Stairfoot Roundabout (A635 / A633) to Dearne Valley Parkway (A635 / A6195)	12.09	100%	1	9	9	8	8	10	9	54
115	SN06c	Dearne Valley Parkway (A635 / A6195) to A1J37 (A635 / A1)	20.07	100%	1	9	9	9	7	10	9	54
116	SN07a	M1J36 (A61 / M1) to Park Road (A61 / A6133)	13.44	100%	1	9	9	9	9	9	8	54
117	SN08b	Wath Road (A6195 / A633) to Manvers Way (A6195 / A633)	1.51	100%	1	9	9	7	9	10	9	54
118	SN16a	Doncaster Road (A6123 / A630) to Wickersley Road (A6123 / A6021)	5.61	0%	10	2	9	8	8	9	8	54
119	SN23b	Ryton Road (A57 / B6060) to Bawtry Road (B6060 / A631)	22.50	100%	1	9	9	9	9	9	8	54
120	SN26e	Mansfield Road (A57 / A618) to Eckington Way (A57 / B6053)	8.55	0%	10	2	9	7	7	10	9	54
121	SN36a	Wheatley Hall Road (A18 / A630) to Bawtry Road (A18 / A638)	8.55	5%	10	2	9	8	8	9	8	54
122	SN01d	Townend Roundabout (A628 / UC) to Huddersfield Road (UC / A635)	1.69	0%	10	9	9	9	9	5	4	55
123	SN20d	Manvers Way (A6195 / A633) to Sheffield Road (A6023 / A630)	23.78	100%	1	9	9	9	9	10	8	55
124	SN21a	Manvers Way (A633 / A6023) to Rockingham Road (A633 / A6022)	5.72	90%	1	9	9	10	9	9	8	55
125	SN22d	Broom Road (A6178 / A6021) to Centenary Way (A6178 / A630)	2.99	50%	5	9	9	9	10	7	6	55
126	SN35a	County Boundary to Ridgeway Road (A6135 / A6102)	13.68	50%	5	9	9	9	8	8	7	55
127	SN31a	County Boundary to Abbey Lane (A621 / B6068)	10.48	70%	3	9	9	9	9	9	8	56
128	SN11b	A1J38 (A638 / A1) to Doncaster Lane (A638 / B1220)	6.56	0%	10	2	9	9	8	10	9	57
129	SN37b	Victoria Road (A19 / UC) to York Road (A19 / A638)	6.58	0%	10	9	9	8	8	7	6	57
130	SN06g / SN11f / SN37d	Bentley Road (UC / A19) to Church Way (UC / A630)	1.68	100%	1	9	9	10	9	10	10	58
131	SN09d / SN16g	Mangham Road (B6089 / A6123) to Centenary Way (A6123 / A630)	2.24	0%	10	9	9	8	6	8	8	58
132	SN22b	Mansfield Road (A57 / A618) to East Bawtry Road (A618 / A631)	13.66	60%	4	9	9	10	9	9	8	58
133	SN40b	Barnsley Road (A629 / A628) to Stockesbridge Bypass (A629 / A616)	16.10	0%	10	2	9	9	9	10	9	58
134	SN29b	Abbeyle Road South (B6068 / A621) to Chesterfield Road (B6068 / A61)	4.16	0%	10	9	9	8	9	7	7	59
135	SN36f	New Bridge Road (A630 / A19) to Thorne Road (A630 / A18)	8.90	0%	10	9	9	7	8	8	8	59
136	SN40a	County Boundary to Barnsley Road (A629 / A628)	9.14	0%	10	2	9	10	9	10	9	59

## APPENDIX B

ORDER	REF	ROUTE	LENGTH (KM)	BUS KEY ROUTE	BUS KEY ROUTE	EMERGENCY DIVERSION ROUTE	RESILIENCE	AVERAGE FLOWS (AADF)	AVERAGE GOODS VEHICLE FLOWS	EXISTING DELAYS Secs / KM (CJAMS)	EXISTING JT Secs / KM (CJAMS)	OVERALL RANKING SCORE
137	SN11a	County Boundary to A1J38 (A638 / A1)	8.14	0%	10	2	9	10	9	10	10	60
138	SN16i	Rotherham Hill (A6123 / A633) to Doncaster Road (A6123 / A630)	4.07	0%	10	9	9	7	8	9	8	60
139	SN05a	M1J38 (A637 / M1) to Barugh Green Road (A637 / A635)	10.13	50%	5	9	9	10	9	10	9	61
140	SN08c	Manvers Way (A6195 / A633) to Doncaster Road (A6195 / A635)	4.20	0%	10	9	9	7	7	10	9	61
141	SN34b / SN40d	Crown Inn (A61 / A625) to Salt Box Lane (A61 / UC)	8.20	0%	10	9	9	7	7	10	9	61
142	SN02a	Flouch Roundabout (A628 / A616) to High Lee Lane (A628 / A629)	14.59	40%	6	9	9	10	10	9	9	62
143	SN08a	Sheffield Road (A6195 / A61) to Wath Road (A6195 / A633)	15.61	0%	10	9	9	8	7	10	9	62
144	SN16h	Mangham Road (A6123 / B6089) to Rotherham Road (A6123 / A633)	3.36	0%	10	9	9	9	8	9	8	62
145	SN08d	Doncaster Road (A6195 / A635) to Collier Road (A6195 / A628)	14.78	30%	7	9	9	10	9	10	9	63
146	SN16b	Wickersley Road (A6123 / A6021) to East Bawtry Road (A6123 / A631)	1.06	0%	10	9	9	9	9	9	8	63
147	SN29a	Ecclesall Road (B6068 / A625) to Abbeydale Road South (B6068 / A621)	3.33	0%	10	9	9	8	9	10	8	63
148	SN34a	Stocksbridge Bypass (A61 / A616) to Crown Inn (A61 / A625)	4.94	0%	10	9	9	8	8	10	9	63
149	SN04a	County Boundary to Engine Lane (A628 / A6195)	6.15	0%	10	9	9	9	8	10	9	64
150	SN33a	County Boundary to Glossop Road (A57 / B6069)	23.01	0%	10	9	9	9	9	9	9	64
151	SN12a	County Boundary to Sheep Bridge Lane (A638 / B6463)	14.02	0%	10	9	9	9	9	10	9	65
152	SN37a	County Boundary to Victoria Road (A19 / UC)	20.38	0%	10	9	9	9	9	10	9	65
153	SN39a	Stocksbridge Bypass (A6102 / A616) to Catch Bar Lane (A6102 / B6079)	19.76	0%	10	9	9	9	10	10	8	65
154	SN03a	County Boundary to Lee Lane (A61 / B6428)	2.97	0%	10	9	9	10	9	10	9	66
155	SN18a	High Street (A631 / A638) to Grange Lane (A631 / B6427)	25.07	5%	10	9	9	10	9	10	9	66
156	SN09c	Brampton Road (A633 / B6089) to Mangham Road (B6089 / A6123)	18.46	0%	10	9	9	10	10	10	9	67
157	SN32a	County Boundary to Abbey Lane (A625 / B6068)	13.77	0%	10	9	9	10	10	10	9	67
158	SN40c	Stocksbridge Bypass (A629 / A616) to Crown Inn (A629 / A61)	4.94	0%	10	9	9	10	10	10	9	67

# APPENDIX B

