

London to Scotland West Route Strategy Evidence Report Technical Annex April 2014



Document History

Technical annex to London to Scotland West route-based strategy evidence report

Highways Agency

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Part A Supporting evidence

A1 Introduction

A1.3 Route description

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A2 Route capability, condition and constraints

A2.1 Route performance

50 busiest sections on the route

Road Link Description	AADF vehicles per day	AADF National Rank (out of 2475 road links -rank 1 is the busiest)
M6 between M6 J9 and M6 J8 (LM1020)	79,148	26
M6 between M6 J8 and M6 J9 (LM1019)	78,020	29
M6 between M6 J21 and M6 J20 (LM955)	77,349	31
M6 between M6 J20 and M6 J21 (LM954)	77,317	32
M6 between M6 J7 and M6 J6 (LM1016)	75,768	36
M6 between M6 J21 and M6 J21A (LM950)	74,877	39
M6 between M6 J21A and M6 J21 (LM951)	74,126	45
M6 between M6 J20A and M6 J20 (LM948)	72,927	50
M6 between M6 J10 and M6 J9 (LM1022)	71,890	58
M6 between M6 J9 and M6 J10 (LM1021)	71,385	64
M6 between M6 J30 and M6 J31 (LM978)	70,712	66
M6 between M6 J31 and M6 J30 (LM979)	70,621	67
M6 between M6 J4A and M6 J5 (LM1010)	70,020	69
M6 between M6 J6 and M6 J7 (LM1015)	69,791	70
M6 between M6 J20 and M6 J20A (LM949)	69,408	71
M6 between M6 J10 and M6 J10A (LM926)	69,217	74
M6 between M6 J5 and M6 J4A (LM1011)	68,578	77
M6 between M6 J8 and M6 J7 (LM1018)	67,492	82
M42 between M42 J7 and M42 J6 (LM509)	67,079	86
M6 between M6 J10A and M6 J10 (LM927)	66,543	92
M6 between M6 J31A and M6 J31 (LM975)	66,339	94
M6 between M6 J7 and M6 J8 (LM1017)	65,911	98
M42 between M42 J6 and M42 J5 (LM507)	65,796	99
M42 between M42 J5 and M42 J4 (LM505)	65,577	102
M6 between M6 J31 and M6 J31A (LM974)	65,379	104
M42 between M42 J6 and M42 J7 (LM510)	65,057	105
M42 between M42 J5 and M42 J6 (LM508)	64,694	109
M42 between M42 J4 and M42 J5 (LM506)	64,663	111
M6 between M6 J31A and M6 J32 (LM976)	63,648	121
M6 between M6 J18 and M6 J17 (LM941)	62,008	139
M40 between M40 J1A and M40 J2 (LM471)	61,750	140
M40 between M40 J2 and M40 J1A (LM472)	61,670	141
M6 between M6 J17 and M6 J18 (LM940)	61,629	142
M40 between M40 J3 and M40 J2 (LM474)	61,557	144

M6 between M6 J19 and M6 J18 (LM943)	61,489	147
M42 between M42 J4 and M42 J3A (LM499)	61,317	149
M40 between M40 J2 and M40 J3 (LM473)	61,262	150
M6 between M6 J18 and M6 J19 (LM942)	61,079	154
M42 between M42 J3A and M42 J4 (LM500)	60,978	155
M6 between M6 J6 and M6 J5 (LM1012)	60,929	157
M6 between M6 J17 and M6 J16 (LM939)	60,848	158
M6 between M6 J16 and M6 J17 (LM938)	59,031	192
M6 between M6 J13 and M6 J12 (LM931)	58,976	193
M6 between M6 J5 and M6 J6 (LM1013)	58,584	196
M6 between M6 J24 and M6 J25 (LM960)	58,198	205
M6 between M6 J12 and M6 J13 (LM930)	58,163	206
M6 between M6 J32 and M6 J31A (LM977)	57,313	216
M6 between M6 J14 and M6 J13 (LM933)	56,965	223
M6 between M6 J13 and M6 J14 (LM932)	56,769	230
M6 between M6 J11A and M6 J12 (LM928B)	55,742	248

50 links with highest proportion of freight on the route

RoadLinkDescription	Goods vehicles (>5.2m long) as a proportion of all traffic	Goods Vehicle Rank (out of 1977 road links - rank 1 has highest Goods traffic proportion)	Flow_Bin1 vehicles (<5.2m long) as a proportion of all traffic	Flow_Bin2 vehicles (5.2m to 6.6m long) as a proportion of all traffic	Flow_Bin3 vehicles (6.6m to 11.6m long) as a proportion of all traffic	Flow_Bin4 vehicles (>11.6m long) as a proportion of all traffic
M6 between M6 J19 and M6 J20A (LM946)	56%	1	44%	33%	8%	16%
M6 between M6 J11 and M6 J11A (LM928C)	46%	11	54%	13%	9%	24%
M6 between M6 J20A and M6 J20 (LM948)	46%	15	54%	27%	7%	12%
M6 between M6 J21 and M6 J20 (LM955)	44%	20	56%	25%	7%	12%
M6 between M6 J20 and M6 J21 (LM954)	42%	26	58%	22%	7%	12%
M6 between M6 J4A and M6 J5 (LM1010)	41%	29	59%	22%	8%	12%
M6 between M6 J21 and M6 J21A (LM950)	39%	38	61%	20%	7%	12%
M6 between M6 J8 and M6 J7 (LM1018)	36%	53	64%	18%	7%	11%
M6 between M6 J14 and M6 J15 (LM934)	35%	62	65%	14%	7%	14%
M6 between M6 J21A and M6 J22 (LM952)	34%	68	66%	17%	6%	10%
M6 between M6 J22 and M6 J21A (LM953)	34%	70	66%	16%	6%	11%
M6 between M6 J16 and M6 J17 (LM938)	33%	72	67%	12%	6%	15%
M6 between M6 J24 and M6 J25 (LM960)	33%	82	67%	17%	6%	9%
M6 between M6 J5 and M6 J4A (LM1011)	32%	91	68%	13%	7%	11%
M6 between M6 J23 and M6 J22 (LM957)	32%	92	68%	15%	6%	11%
M6 between M6 J40 and M6 J41 (LM1000)	32%	97	68%	7%	7%	18%
M6 between M6 J10 and M6 J10A (LM926)	32%	98	68%	13%	7%	12%
M6 between M6 J27 and M6 J26 (LM967)	32%	100	68%	16%	6%	9%
M5 between M5 J4 and M5 J3 (LM732)	31%	115	69%	15%	7%	9%
M6 between M6 J20A and M6 J19 (LM947)	30%	117	70%	10%	6%	15%
M6 between M6 J17 and M6 J18 (LM940)	30%	130	70%	10%	6%	14%
M6 between M6 J15 and M6 J14 (LM935)	29%	146	71%	10%	6%	14%

M6 between M6 J20 and M6 J20A (LM949)	29%	149	71%	12%	6%	11%
M6 between M6J44 and M6J45 (LM1059)	29%	154	71%	5%	6%	18%
A74(M) between M6J45 and Border (LM97A)	29%	154	71%	5%	6%	18%
M6 between M6 J18 and M6 J17 (LM941)	29%	165	71%	9%	6%	14%
M6 between M6J45 and M6J44 (LM1058)	28%	171	72%	5%	6%	18%
A74(M) between Border and M6J45 (LM98A)	28%	171	72%	5%	6%	18%
M6 between M6 J44 and M6 J43 (LM1007A)	28%	176	72%	6%	5%	17%
M6 between M6 J13 and M6 J14 (LM932)	28%	187	72%	9%	6%	13%
M6 between M6 J15 and M6 J16 (LM936)	27%	206	73%	7%	6%	14%
M6 between M6 J37 and M6 J38 (LM990)	27%	209	73%	6%	6%	15%
M6 between M6 J10A and M6 J11 (LM924)	27%	215	73%	7%	5%	15%
M6 between M6 J11A and M6 J11 (LM929C)	27%	222	73%	5%	6%	15%
M5 between M5 J3 and M5 J4 (LM733)	26%	242	74%	11%	6%	8%
M6 between M6 J7 and M6 J8 (LM1017)	26%	255	74%	10%	6%	10%
M5 between M5 J1 and M5 J2 (LM723)	26%	257	74%	11%	6%	8%
M40 between M40 J16 and M42 J3A (LM467)	26%	258	74%	13%	5%	8%
M6 between M6 J27 and M6 J28 (LM968)	26%	264	74%	10%	6%	10%
M6 between M6 J19 and M6 J18 (LM943)	25%	280	75%	6%	6%	14%
M5 between M5 J4A and M5 J4 (LM734)	25%	295	75%	11%	6%	9%
M42 between M42 J6 and M42 J5 (LM507)	25%	307	75%	11%	5%	8%
M6 between M6 J17 and M6 J16 (LM939)	25%	308	75%	5%	6%	14%
M6 between M6 J5 and M6 J6 (LM1013)	24%	318	76%	8%	5%	11%
M6 between M6 J26 and M6 J25 (LM965)	24%	329	76%	9%	5%	10%
M42 between M42 J6 and M42 J7 (LM510)	24%	339	76%	10%	5%	8%
M6 between M6 J18 and M6 J19 (LM942)	24%	341	76%	5%	5%	14%
M6 between M6 J29 and M6 J30 (LM972)	23%	346	77%	9%	6%	9%
M6 between M6 J33 and M6 J34 (LM982)	23%	355	77%	5%	6%	12%
M5 between M5 J4 and M5 J4A (LM735)	23%	356	77%	9%	6%	9%

50 least reliable journey-time locations on the route 2012/13

Road Link Description	On Time Reliability - Percentage Vehicle Miles On Time	On Time Reliability National Rank (out of 2497 road links - rank 1 has lowest OTRM score)
M6 between M6 J6 and M6 J7 (LM1015)	27.0%	2
M6 between M6 J7 and M6 J8 (LM1017)	31.7%	3
M6 between M6 J9 and M6 J8 (LM1020)	48.3%	7
M6 between M6 J10 and M6 J9 (LM1022)	54.5%	23
M6 between M6 J8 and M6 J9 (LM1019)	59.2%	61
M5 between M5 J2 and M5 J1 (LM722)	63.0%	164
M5 between M5 J1 and M5 J2 (LM723)	63.3%	176
M42 between M42 J3A and M42 J3 (LM503)	65.2%	268
M42 between M42 J3 and M42 J3A (LM504)	66.0%	321
M6 between M6 J10A and M6 J10 (LM927)	66.1%	331
M42 between M42 J6 and M42 J7 (LM510)	66.2%	343
A40 between M40 J1 and A40 (AL2216)	66.8%	383
M40 between M40 J15 and M40 J14 (LM464)	67.1%	402
M6 between M6 J11 and M6 J10A (LM925)	67.7%	471
M6 between M6 J20A and M6 J20 (LM948)	68.0%	490
M6 between M6 J9 and M6 J10 (LM1021)	68.1%	495
M42 between M42 J7 and M42 J6 (LM509)	68.4%	530
M6 between M6 J6 and M6 J5 (LM1012)	68.6%	543
M40 between M40 J14 and M40 J15 (LM463)	68.7%	554
M6 between M6 J4 and M6 J4A (LM1008A)	69.0%	596
M5 between M6 J8 and M5 J1 (LM747)	69.4%	637
M42 between M42 J5 and M42 J6 (LM508)	69.6%	670
M42 between M42 J4 and M42 J3A (LM499)	70.0%	705
M42 between M42 J5 and M42 J4 (LM505)	70.1%	715
M42 between M42 J4 and M42 J5 (LM506)	70.5%	776
M6 between M6 J8 and M6 J7 (LM1018)	70.5%	783
M40 between M40 J16 and M42 J3A (LM467)	70.7%	809
M42 between M42 J6 and M42 J5 (LM507)	70.7%	813
M6 between M6 J10 and M6 J10A (LM926)	70.7%	814
M6 between M6 J21 and M6 J20 (LM955)	70.9%	835
M6 between M6 J11 and M6 J11A (LM928C)	71.0%	852
M6 between M6 J25 and A49 (LM962)	71.0%	856
M6 between M6 J12 and M6 J11A (LM929B)	71.1%	857
M42 between M5 J4A and M42 J1 (LM496)	71.1%	870
M6 between M6 J11A and M6 J11 (LM929C)	71.4%	896
M40 between M40 J1 and M40 J1A (LM469)	71.4%	901

A74(M) between M6J45 and Border (LM97A)	71.5%	913
M42 between M42 J2 and M42 J3 (LM502)	71.6%	937
M6 between M6 J4A and M6 J4 (LM1009A)	71.7%	945
M6 between M6 J19 and M6 J18 (LM943)	71.9%	965
M5 between M5 J4A and M5 J4 (LM734)	72.1%	995
M6 between M6 J20 and M6 J21 (LM954)	72.5%	1,049
M6 between M6 J24 and M6 J25 (LM960)	72.7%	1,073
A40 between A40 and M40 J1 (AL2217)	72.8%	1,095
M6 between M6 J26 and M6 J25 (LM965)	72.9%	1,107
M6 between A49 and M6 J25 (LM963)	73.2%	1,152
M42 between M42 J3A and M42 J4 (LM500)	73.2%	1,160
M6 between M6 J10A and M6 J11 (LM924)	73.2%	1,161
M6 between M6 J20 and M6 J20A (LM949)	73.2%	1,163
M5 between M5 J3 and M5 J4 (LM733)	73.2%	1,168

A2.2 Road Safety

The information set out in this technical annex supports the London to Scotland West Route Based Strategy evidence report. Tables 1 to 5 below set out the latest available accident statistics over the period from 2002 to 2011 and show the 2011 performance of the roads comprising the London to Scotland West Route in relation to the average baseline figures for the period 2005 to 2009.

Table 1 - Collision Numbers Summary

Route	05-09 Average Baseline	02	03	04	05	06	07	08	09	10	11	% Diff 2011to 05-09 average
M6	433.6	487	453	537	505	469	458	402	334	417	315	-27%
M5	128.6	146	163	156	137	131	127	125	123	103	93	-28%
M42	104.6	169	117	152	114	93	106	122	88	92	95	-9%
M40	25.6	30	25	24	31	24	21	24	28	24	17	-34%

Table 2 - Collision Rates per 100 million vehicle miles Summary

Route	05-09 Average Baseline	02	03	04	05	06	07	08	09	10	11	% Diff 2-11 to 05-09 average
M6	13.8	16.6	15.4	18.0	16.3	14.9	14.2	12.7	10.7	13.1	9.2	-33%

M5	8.2	9.8	11.0	10.3	8.9	8.2	7.9	8.1	8.1	6.9	6.3	-23%
M42	6.9	12.4	9.1	11.1	7.7	6.2	6.9	7.8	5.8	6.0	6.5	-6%
M40	7.6	9.2	7.8	6.9	10.0	7.3	6.2	6.7	8.0	7.2	5.1	-33%

Table 3 - Casualty Numbers.

Route	KSI 05-09 Average Baseline	KSI 09	KSI 10	KSI 11	KSI 3 year average	Slight 09	Slight 10	Slight 11	Slight 3 year average	Current Year Monitoring Point	KSI Diff*
				A						B	
M6	69.0	47	43	54	48.0	505	650	469	541.3	56.5	-2.5
M5	17.6	22	27	11	20.0	197	137	142	158.7	14.4	-3.4
M42	16.6	9	11	9	9.7	132	116	162	136.7	13.6	-4.6
M40	6.6	1	4	4	3.0	48	37	21	35.3	5.4	-1.4

*KSI difference between Current Annual Performance (column A) and Current Year Monitoring Point (Column B)

Table 4 - KSI Rates per 100 million vehicle miles

Route	05-09 Average Baseline	02	03	04	05	06	07	08	09	10	11	% Diff 2-11 to 05-09 average
M6	2.2	2.1	1.9	2.6	2.3	2.4	2.4	2.3	1.5	1.4	1.6	-28%
M5	1.1	2.1	1.4	1.8	1.2	1.3	0.7	0.9	1.4	1.8	0.7	-34%
M42	1.1	2.9	1.2	1.9	1.7	1.3	1.1	0.8	0.6	0.7	0.6	-44%
M40	2.0	3.7	2.5	1.4	3.5	2.7	1.5	2.0	0.3	1.2	1.2	-39%

Table 5 - Slight Casualty Rates per 100 million vehicle miles

Route	05-09 Average Baseline	02	03	04	05	06	07	08	09	10	11	% Diff 2-11 to 05-09 average
M6	20.1	24.3	23.3	26.2	23.6	21.9	20.5	18.1	16.2	20.5	13.7	-32%
M5	12.0	13.8	16	15.1	13.0	11.2	11.4	11.5	13.0	9.2	9.6	-20%
M42	10.4	16.1	12.2	14.3	10.9	9.1	9.2	13.9	8.7	7.6	11.0	+6%
M40	10.8	11.0	11.2	12.5	10.6	14.2	8.6	7.3	13.7	11.1	6.2	-42%

The statistics demonstrate generally improving performance of the London to Scotland West Route based on the 2011 performance compared to the average baseline over the 2005 -2009 period. The only exception is the M42 which shows an increase in 2011 of +6% over the baseline average for the period 2005 - 2009 for slight casualties taking it into a RAG status of red.

Cluster Sites Information

The types of cluster analysis undertaken that are relevant to the London to Scotland West Route are:

- Trunk Road Clusters
- Trunk Road routes by collision rates
- Motorway Links by collision rates
- Motorway Junctions.

The London to Scotland West route comprises only motorway standard roads and therefore only the latter two categories of cluster analysis are relevant. The methodology for identifying motorway link clusters is that all motorway links are split by direction and have their respective collision rate calculated annually. They are also analysed by cause, such as loss of control, lane change and entering/leaving collision types and compared over the previous 5 year period to determine trends. This analysis determines a list of links requiring action which is prioritised according to the collision rate trends, and severity of collisions. The methodology for determining motorway junction clusters is similar whereby annually each motorway junction performance is analysed individually and compared over the previous 5 year period and ranked by collision trend and severity.

Tables 6 and 7 show the current status of the top 10 locations identified by this methodology on the London to Scotland West Route and the proposed actions.

Table 6 - Top 10 Motorway Links by Collision Rate

Section	Proposed action
M6 J10 to J9	M6 BBMM phase 2 review (BBMM - Birmingham)

	Box Managed Motorway)
M6 J9 to J10	M6 BBMM phase 2 review
M6 J7 to J8	M6 BBMM phase 3 in progress
M6 J5 to J6	M6 BBMM phase 3 in progress
M6 J8 to J9	M6 BBMM phase 2 review
M6 J3a to J4	Scheme starts 2015/16
M6 J6 to J5	M6 BBMM phase 3 in progress
M6 J12 to J13	M6 BBMM phase 4 design 2013 to 2014
M6 J7 to J8	M6 BBMM phase 3 in progress

Table 7 – Top 10 Motorway Junctions for Collision rates

Junction	Proposed Action
M6 J2	Proposed collision review 2013/14
M6 J6	Proposed study with Local Authority 2013/14
M6 J16	Possible PPP scheme
M42 J10	PPP scheme 2013 to 2015
M6 J8	Proposed PPP scheme/BBMM phase 3
M40 J15	Proposed collision review 2013/14
M42 J9	PPP scheme 2013-2015
M5 J8	Proposed study 2013/14

A number of Local Network Management Schemes are relevant to the London to Scotland West Route. These are shown in Table 8 below.

Table 8 – Local Network Management Schemes (LNMS) in 2013/14

Route	LNMS Category	Project Title	PIC	KSI	Cost £m	Proposed Completion	Comments
M6	Safety	J1 to J4	480	76	0.384	2013	Predicted annual collision saving of 1.638
M6	Safety	Junction 11 Slip Roads	18	0	0.155	2014	Predicted annual collision saving of 1.51
M6	Pinch Point	Salford	44	0	0.834	2015	Predicted annual collision saving

		Circus					of 4.15
M6	Pinch Point	Junction 16	53	6	7.493	2015	Predicted annual collision saving of 5.3
M6	Pinch Point	Junction 9 Traffic Signals	23	0	0.367	2015	Predicted annual collision saving of 1.0
M42	Pinch Point	Junction 10	34	2	2.810	2015	Predicted annual collision saving of 2.0
M42	Pinch Point	Junction 6	22	3	7.410	2015	Predicted annual collision saving of 0.?
M5	Pinch Point	Junction 4 widening	13	0	11.343	2015	Predicted annual collision saving of 0.7
M5	Pinch Point	Junction 2 widening	15	2	1.754	2015	Predicted annual collision saving of 0.8
M42	Pinch Point	Junction 9	40	4	0.518	2015	Predicted annual collision saving of 1.1
M5	Other	Wildmore Lane	0	0	0.032	2013	0

A2.3 Asset Condition

Pavements

The London to Scotland West Route consists of sections of all-purpose trunk roads and motorways. Roads included within the route are shown in Table 1 below:

Table 1 – Roads in the London to Scotland West Route

Road	Standard	Location
M40	Motorway	From its junction with the A46 at Warwick up to its junction with the M42 (Junction 3A),
M42	Motorway	From its junction with the M5 to its junction with the M6 (Junction 4),
M5	Motorway	From Junction 4A (M42) to the M6 (Junction 8 Ray Hall),
M6	Motorway	the M6 From its junction with the M42 (M6 Junction 4) to its Junction with the A500 (M6 Junction 16 Stoke on Trent).

The general condition of pavement assets is shown on the National Asset Condition Map. The pavement condition is categorised according to the proportion of flexible pavement surfacing reaching the end of its design life by 2020. Using a red amber green (RAG) colour coding the carriageway is categorised into 6 bands, depending on the percentage of pavement within that section likely to reach its design life by 2020. Sections of carriageway pavement where 100% of the surfacing is expected to reach the end of its design life by 2020 are shown in red through to green where 0% of the surfacing is expected to reach the end of its design life by 2020.

The carriageway condition is assessed using a variety of assessment techniques. The National Asset Condition Map is supported by other information provided in the relevant Asset Management Plans.

Carriageway condition is assessed by considering the following aspects:

- Enhanced Longitudinal Profile Variance
- SCRIM – measuring the skidding resistance of the surface
- Cracking – visual inspection and High Speed Road Monitor information
- Rutting – measuring the degree of longitudinal rutting caused by HGVs
- Fretting
- Texture

The National Pavement Asset Condition Map summarises the condition of section of carriageway taking into account these above factors at individual road level.

Structures - General Issues

The Asset Management Plan for Area 9 references addition relevant information. Much of this information is general to the asset management of the Area however any specific information relevant to the London to Scotland West Route is included in this technical annex.

In common with the network as a whole, critical to the condition scoring indices with structures, is that many were constructed within the period 1964-1979, a period of boom in the motorway/trunk road building programme. The period saw the introduction of many initiatives with regard to both construction techniques and material specifications, some of which have resulted in underlying defects that have significant impact on the original 120 year design life required. In addition the design processes did not tend to consider the need for proactive maintenance during the lifetime of a structure. Particular issues with the bridge stock of this era are:

Thaumasite Attack – Construction techniques have resulted in the situation that bridge foundations and substructure concrete members in bridges have been subject to sulphate attack that has led to:

- i. Reduction in capacity that could eventually result in structural failure/collapse if left untreated.
- ii. Reduced capacity to withstand pier impact loading

Identified measures:

- i. Extensive reconstruction of all sub-surface concrete, including measures to prevent reoccurrence OR demolition and reconstruction.
- ii. Pier protection measures.

Alkali Carbonate Reaction (ACR) Affected Structures

Material specification to a section of the M5 (junctions 9 -13) has resulted in deterioration to 13 structures for which ACR has been confirmed as having a contributory factor. Levels of deterioration have varied from localised surface crazed cracking with loss of bond, to extensive delamination of deck construction. These are not within the London to Scotland West Route but included as a general example of issues with structures built around this time and which may occur elsewhere.

Concerns for affected structures are:

- i. Deterioration of deck edge beams continuing to be exacerbated by annual freeze-thaw action, resulting in loose and friable concrete over live carriageway with a potential for detaching and falling onto traffic below.
- ii. Further deterioration of deck edge beams resulting in containment capability of parapets being affected.
- iii. Delamination of deck structure leading to reduced capacity and ultimately failure of the structure.

Bearing Failure

Many structures on the route are carrying higher traffic levels than they were designed for and as such bearings are at risk of failing sooner than designed for.

Bridge Deck Waterproofing

Some structures have waterproofing systems in place > 30 years old, where the accepted effective life span of waterproofing systems is 30 years. Failure to repair can lead to water ingress into structural elements causing corrosion and delaminating of surfaces due to freeze/thaw

Steel Parapets

Parapets and other barrier types on structures are in exposed positions and are subject to corrosion from the effects of winter salting of roads and general exposure. By their nature they are also subject to damage. Recent investigations have identified a number of locations where corrosive action within both posts and rails has significantly reduced containment capability. Localised replacement of rails and wholesale provision of temporary secondary protection measures have been utilised previously.

Post-tensioned Structures

During the 1980`s problems in the UK were identified in an increasing number of post-tensioned bridges such bridges were mainly constructed in the 1970`s and previous investigations have highlighted significant underlying defects that could compromise long term stability. Defects include voided and ungrouted post-tensioning ducts, water filled ducts and corrosion to post-tensioning strands

Steel Beam Painting

Structures with main span steel beams that have protective coating systems that have reached the limit of their effectiveness will be a risk of further deterioration due to their age and the effects of weathering. Whilst the risk factors built into the SMIS database do not place these in a high risk category, the defects associated have a major impact on structure condition indicator scoring.

Expansion Joints and Half-Joints

High levels of traffic and lack of regular maintenance are causing expansion joints to fail sooner than might be expected.

Alkali Silicate Reaction

Evidence of initiation of Alkali Silica Reaction at structures can lead to the need for deck refurbishment works to eliminate the potential for future significant deterioration at these types of structures.

Specific Issues Relating to the London to Scotland West Route

Midlands Links Motorway Viaducts.

The asset condition of structures is dominated by the importance of the Midlands Link Motorway Viaducts – the elevated sections of the M6 (Junctions 5-8) and M5 (Junctions 1-3) and the condition of these structures. These structures are in variable condition and require continual remedial works. The Midlands Links Motorway Viaducts are vulnerable resulting from poor detailing, with 1,302 bridge joints over a 21km length, susceptible to rapid modes of concrete deterioration, safety critical resulting from the loss of structural integrity caused by the rates of concrete deterioration, subject to high volumes of traffic and high spread rates of winter de-icing materials. The reinforced concrete crossheads are susceptible to chloride induced corrosion being positioned below bridge joints that have leaked. The crossheads are poorly detailed as they were constructed with no facilities to accommodate bridge joint drainage. There is a risk of reduced structural capacity leading to restrictions on the network affecting the operation of the Birmingham Box Managed Motorways.

The viaducts contain complex structures including longitudinal and transverse steel box girder elements. Work is ongoing to investigate and assess known problems with limited fatigue life and seized bearings.

Through the EICG (Early Intervention on Cost Grounds) bid work is planned to reduce the rate of deterioration of 300 unrepaired crossheads by

- repairing or replacing guttering,
- painting of steel deck beams where the system has reached the end of its serviceable life.
- Concrete repairs
- Renewal of cathodic protection to prolong the serviceable life of repaired crossbeams

Other Structures Issues

M6 Junction 10 Overbridges - There is a risk of hinge joint failure caused by deterioration resulting in structural failure or loss of capacity.

Bromford Viaduct - There is a risk of loss of structural integrity in pile caps caused by ASR cracking resulting in restrictions to the M6 Motorway.

The risk of failures at half joint structures in general and seized bearings causing stresses on box girder and column elements of structures, wherever they occur has been identified as a critical risk for this route.

The risk of damage to structures caused by acts of terrorism or vandalism resulting in loss of network availability has been identified as high risk.

A2.4 Route Operation

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A2.5 Technology

Route	asset type	asset count	distance in km	assets per km
M5 Juc 4a-0	Midas Out Stations	66	26.9	1.7
	Message Signs	44		1.1
	Signals	118		3.0
	Ramp Metering	3		0.1
	Phones	73		1.8
	CCTV	23		0.6
M42 Juc 3a to M42 Juc 7	Midas Out Stations	192	16.7	11.5
	Message Signs	83		5.0
	Signals	266		15.9
	Ramp Metering	6		0.4
	Phones	48		2.9
	CCTV	211		12.6
M40 (Southern Boundary) to Juc 0	Midas Out Stations	16	38.3	0.4
	Message Signs	19		0.5
	Signals	45		1.2
	Ramp Metering	0		0.0
	Phones	65		1.7
	CCTV	11		0.3
M42 (Southern Boundary) to Juc 3a	Midas Out Stations	44	19	2.3
	Message Signs	34		1.8
	Signals	36		1.9
	Ramp Metering	2		0.1
	Phones	39		2.1
	CCTV	21		1.1
M6 Juc 4 to Juc 8 For Message Sign, Midas, Signals & Phones the values provided include assets to be installed by MM phase three (M6 Juc 5-8). As	Midas Out Stations	75	22.1	3.4
	Message Signs	70		3.2

the asset count for CCTV and Ramp Metering to be installed by MM Phase three is not yet available the values for these systems only includes M6 Juc 4-5 assets	Signals	273		12.4
	Ramp Metering	2		0.1
	Phones	39		1.8
	CCTV	TBC		#VALUE!
M6 Juc 8 to (Nothern Boundary)	Midas Out Stations	174	68.6	2.5
	Message Signs	129		1.9
	Signals	200		2.9
	Ramp Metering	4		0.1
	Phones	127		1.9
	CCTV	163		2.4
A38M	Midas Out Stations	0	2.4	0.0
	Message Signs	1		0.4
	Signals	88		36.7
	Ramp Metering	0		0.0
	Phones	25		10.4
	CCTV	9		3.8

A2.6 Vulnerable Road Users

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A2.7 Environment

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A3 Future considerations

A3.2 Economic development and surrounding environment

The source for this information is referenced in the Bibliography within Part C.

LEP	Development Type	Scale by 2021	Anticipated Location of Impact on Route
Greater Birmingham and Solihull	Housing	55,096 dwellings	Motorway box around Greater Birmingham.
	Economic	154,819 jobs ⁺	
Coventry and Warwickshire	Housing	28,702 dwellings	M40 and M42.
	Economic	80,285 jobs	
South East Midlands	Housing	98,674 dwellings	M40 passes through all districts, but only slightly through Aylesbury Vale.
	Economic	134,756 jobs ⁺	
Stoke-on-Trent and Staffordshire	Housing	42,373 dwellings	M6 passes through all districts.
	Economic	100,975 jobs	
Black Country	Housing	39,997 dwellings	M5 and M6 pass through two metropolitan boroughs, and along the border of Dudley.
	Economic	36,699 jobs	
Worcestershire	Housing	32,540 dwellings	M40 passes through Bromsgrove.
	Economic	48,783 jobs	
Northamptonshire	Housing	38,190 dwellings	M40 passes through South Northamptonshire.
	Economic	47,500 jobs	

Note: All economic growth figures are for the entire Core Strategy/Local Plan period.

⁺ Figure excludes Solihull/Luton (figure unknown)

Local authority growth data by Local Enterprise Partnership

Location of Development	Development Type	Scale by 2015	Scale by 2021	Scale by 2031	Anticipated Location of Impact on Route
Greater Birmingham and Solihull					
Birmingham	Residential	20200	To 2021		
	Commercial	50ha			
Lichfield	Residential	5655 by 2021 (av. 435pa)			
	Commercial	9000 jobs over plan period ^d			
Solihull	Residential	6500 by 2021 (av. 500pa)			
	Commercial	Unspec. ⁱⁱ			
Cannock Chase	Residential	4543 by 2021			
	Commercial	86ha ⁱⁱⁱ			
Tamworth	Residential	3175 to 2021	Over plan period		
	Commercial	38ha ^{iv}			
Redditch	Residential	3358 av. To 2021	Over plan period		
	Commercial	55ha ^v			
Bromsgrove	Residential	3684 av. To 2021	Over plan period		
	Commercial	28ha ^{vi}			
Wyre Forest	Residential	3000 av. to 2021	Over plan period		
	Commercial	44ha ^{vii}			
COVENTRY AND WARWICKSHIRE					
Rugby	Residential	676 units	4,039 units	3,083 units ^{viii}	M6 J1, A46
	Commercial	67ha over plan period			
Warwick	Residential	780 units	3,370 units	6,725 units ^{ix}	A46
	Commercial	66ha over plan period			
Stratford-on-Avon	Residential	899 units	2,000 approx	600 approx ^x	A46/M40
	Commercial	80ha over plan period (approx)			
Coventry	Residential	2,365 units	7,720 units	3,120 units ^{xi}	A46/A45
	Commercial	100ha over plan period			
North Warwickshire	Residential	345 units (approx)	1,680 units (approx)	1,010 units ^{xii} (approx)	A5/M42
		22 48.5ha over			

	Commercial	plan period			
Nuneaton and Bedworth	Residential	4828 av by 2021			
	Commercial	75 ha over plan period ^{xiii}			
STAFFORDSHIRE					
East Staffordshire	Residential	302 units	4,679 units	5,217 units ^{xiv}	A50
	Commercial	30ha over plan period			
Staffordshire Moorlands	Residential	490 units	1,888 units	1,720 units ^{xv}	A50
	Commercial	18ha over plan period			
Newcastle-under-Lyme	Residential	601 units	1,752 units	1,293 units ^{xvi}	A50/A500
	Commercial				
Newcastle-under-Lyme and Stoke-on-Trent joint	Residential	6257/13500 over plan period			A50/A500
	Commercial	112/220 over plan period ^{xvii}			
South Staffordshire	Residential	3850	Over plan period		
	Commercial	14ha			
Stafford	Residential	11523	Over plan period		
	Commercial	25ha ^{xviii}			
THE MARCHES AND WORCESTERSHIRE LARGE STRATEGIC DEVELOPMENT SITES					
Leominster Enterprise Park	Residential				A49/A44 Junction
	Commercial		1,105 jobs	None	
Shobdon Airfield	Residential				A49/A44 Junction
	Commercial		2,210 jobs	2,211 jobs	
Battlefield Enterprise Park	Residential				A49/A53 Junction
	Commercial	384 jobs	None	None	
Shrewsbury South SUE	Residential		579 units	321 units	A5/A49 Junction
	Commercial		2,377 jobs	1,320 jobs	
Shrewsbury West SUE	Residential		482 units	268 units	A5/A548 Junction
	Commercial		1,235 jobs	687 jobs	
Southwater	Residential	1,050 units (to 2016)	None	None	M54 J5
	Commercial	3,956 jobs (to 2016)	None	None	
Telford town centre (existing shopping area)	Residential		900 units	None	A5/A442 Junction, M54 J5
	Commercial		4,132 jobs	None	
BLACK COUNTRY LEP					

Wolverhampton City Council	Residential		1,020 units	None	M6 J10-11
	Commercial		5,931 jobs	2,501 jobs	
Dudley Metropolitan Borough Council	Residential		666 units	None	M5 J1-2
	Commercial		3,063 jobs	3,829 jobs	
Walsall Council	Residential		None	None	M6 J7-10
	Commercial		2,223 jobs	2,779 jobs	
Sandwell Metropolitan Borough Council	Residential		1,305 units	None	M5 J1, M6 J8-9
	Commercial		7,277 jobs	9,096 jobs	

A3.3 Network improvements and operational changes

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A3.4 Wider transport networks

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A4 Key challenges and opportunities

A4.2 Timescales

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A4.3 Stakeholder priorities

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A4.4 Operational challenges and opportunities

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A4.5 Asset condition challenges and opportunities

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A4.6 Capacity challenges and opportunities

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A4.7 Safety challenges and opportunities

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A4.8 Social and environmental challenges and opportunities

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Table A4.1 Schedule of challenges and opportunities

	Location	Description	Is there supporting evidence?	Timescales			Was this Identified through stakeholder engagement?	Stakeholder Priorities		
				Short-term	Medium-term	Long-term		Low	Medium	High
Network Operation	M6 J15-16	Smart motorways will be provided in the surrounding sections why not this section?	Partial	X	X		✓	✓		
	M6 J18 to J20	Signing is an issue. Signing to Chester encourages drivers onto the local highway network before it is required. Improved signage is required to keep traffic on the strategic road network (SRN) for longer.	Yes	x			✓	✓		
	M6 from J32 to Scottish border	Incident management and response times. Impact on reliable journey times and investment in diversion routes. Low bridge on Sutton Weaver bridge (diversion route)	Yes	x			✓		✓	
	M6 / M65 (Preston)	Incidents – high number and long clear up time with lots of motorway closures. Does the area have a greater degree of incidents? The consequences on the operation of the network could impact on economic growth.	Yes	x			✓	✓		
	M6 J32-33 strategic diversion routes	There are issues with some of the strategic diversion routes (e.g. J32-33 is a long distance link). They present challenges in that the local road network cannot cope with the traffic demands. Better resilience / reaction required to incidents.	Yes	x			✓	✓		

	Location	Description	Is there supporting evidence?	Timescales			Was this Identified through stakeholder engagement?	Stakeholder Priorities		
				Short-term	Medium-term	Long-term		Low	Medium	High
	Ribble Crossing (M6 South of Preston)	M6 is only strategic crossing of the Ribble. If this section is blocked traffic can't cross river	Yes	x			✓	✓		
	Warrington	Network resilience – Diversion routes when incidents on the M6 / M62 cause conflicts with the use of the Ship Canal	Yes	x			✓	✓		
Asset Condition	All	Need to ensure that the SRN is properly maintained. Pavement is reaching the end of its design life – there is a need to coordinate maintenance works with improvement schemes both in region and between regions.	Yes	X			✓		✓	
	Birmingham Box to M6 J10	Structures on this section will need significant further work with the potential to cause significant disruption as the busiest sections of the route (section 2.3)	Yes	X	X		X			
	M6 J16-20	Significant interventions will be required on the structures within this section	Yes	X	X		X			
	M6 J16-31, J32-33, J35-36	Pavement is expected to reach the end of its design life for these significant stretches (section 2.3)	Yes	X	X		X			
	M6 J18-19	Drainage issues are having an impact on the carriageway of the M6 especially during severe weather	Yes	X			X			
Capacity	M40/M25 J1a	High Speed Rail 2 (HS2) construction traffic for HS2 will impact SRN	Partial (in production)		X		✓	✓		
	M40 J2	Wilton Park development and associated infrastructure improvements will have an impact on the SRN.	Yes		X		✓	✓		

	Location	Description	Is there supporting evidence?	Timescales			Was this Identified through stakeholder engagement?	Stakeholder Priorities		
				Short-term	Medium-term	Long-term		Low	Medium	High
	M40 J3b (proposed)	Requirement for additional capacity onto the M40 - new employment development required for Wycombe District would act as a trigger.	Yes		X		✓	✓		
	M40 J4	Roundabout is an issue: its complexity and a lack of data, combined with a public perception that it is a pinchpoint. The junction has limited capacity. Growth plans for High Wycombe are focussed near the motorway.	Yes	X			✓			✓
	M40 J6/J2	The planned development in Aylesbury Vale is for housing, but all the employment is south in the Thames Valley. This affects in particular the A4010. The role of J6 in providing access to the north should be better defined, as should the A413 to J2. The greenbelt review will have an impact on this too.	Yes	X			✓	✓		
	M40 J10	Growth at Silverstone - impact on A43 / M40 / A34	Yes		X	X	✓	✓*		
	M40 J12	4,500 new houses proposed for Gaydon which the road system will not be able to cope with.	Yes			X	✓	✓		
	M42 J1-3a	Planned development with affect local and strategic routes to the north of Redditch. Pressure on the SRN result in knock on problems for A38 problems – particularly serious in Bromsgrove. Lack of smart motorways on this section contributes to congestion	Yes	X		X	✓			✓*

	Location	Description	Is there supporting evidence?	Timescales			Was this Identified through stakeholder engagement?	Stakeholder Priorities		
				Short-term	Medium-term	Long-term		Low	Medium	High
	M42 J6	The junction is in the heart of the country so is nationally significant. However it suffers from congestion and will continue to do so with the level of growth allocated for this area. This would make journey times unreliable and could have a negative impact on the economy.	Yes	X	X	X	✓	✓		
	M5 J3-5	Pressure on the SRN result in knock on problems for A38 problems – particularly serious in Bromsgrove.	Yes	X			✓			✓*
	Birmingham Box	A Western Relief Road would solve M5/M6 issues	No			X	✓	✓		
	M6 / M6 Toll	M6 Toll empty while M6 congested	Partial	X			✓		✓	
	M6 / A49	The A49 could provide an opportunity to relieve traffic issues on M6	No	X			✓	✓		
	M6 J10a-8 / M5 J1-3	Strategic congestion and journey time issues northbound and southbound on these sections with particular congestion issues at the southbound M6 J10a-10 and at the intersection of M6 with M5. These sections are already at capacity. This can have a knock on effect to local traffic at junctions and impacts local economies	Yes	X			✓			✓
	M6 J13-19	Delays to trade traffic	Partial	X			✓	✓		
	M6 Birmingham	There is a need for sufficient capacity to allow development around M6.	Yes	X		X	✓	✓		
	M6-M54 Link, Featherstone	Potential transport impact of strategic employment sites in the vicinity. There is an on-going study to support evidence gathering	Partial		X		✓	✓		

	Location	Description	Is there supporting evidence?	Timescales			Was this Identified through stakeholder engagement?	Stakeholder Priorities		
				Short-term	Medium-term	Long-term		Low	Medium	High
	M42 J7-J11 M42 (M5 J4 – M42 J3a) M6 J8 – M5 J4	Centro's west midland freight strategy highlights some issues on these sections	Yes	X			✓	✓		
	M42 (from junction with M40 to junction with M6)	The Local Enterprise Partnerships' Strategic Economic Plan will have a major impact on growth and employment. This will require highway capacity, particularly on the strategic routes/junctions Key site is UK Central – the M42/Solihull corridor in the vicinity of M42 J5 and J6 and M6 J4 Birmingham City Centre enterprise zone is major growth area and will affect traffic growth. M42 J6 Runs at 98% capacity and is often gridlocked. Not seasonal – remains constant. Concerns for future Solihull Gateway/Airport expansion.	Yes	X	X	X	✓			✓
	M6 J9 to 10A	There are two Local Enterprise Zones in the black country: (DSDA Walsall and IS4 Wolverhampton) that will introduce significant growth and travel demand on SRN	Anticipated growth maps, Black Country LEP	X	X	X	✓	✓		
	All	Housing proposals in Lichfield, Cannock and Birmingham are/will put pressure on park and ride points on the outskirts of Metropolitan areas.	Anticipated growth maps, local authorities	X	X	X	✓	✓		

	Location	Description	Is there supporting evidence?	Timescales			Was this Identified through stakeholder engagement?	Stakeholder Priorities		
				Short-term	Medium-term	Long-term		Low	Medium	High
	All+	Employment is needed ASAP, so the SRN shouldn't constrain anticipated growth. Growth more regionally outside of this region needs to be accounted for as they will impact on this route.	Anticipated growth maps.	X			✓	✓		
	M6 between junction with A500 and J20	Increased capacity provided through introduction of hard shoulder running.	Yes	x			✓			✓
	M6 Corridor (Cheshire East)	Maintaining flow and access for travel within the NW and further afield.	Yes	x			✓			✓
	Lack of smart motorways by Stoke (M6 J15)	Potential bottleneck on the network with planned schemes either side of this location	Yes	x			✓		✓	
	M6 J16	One way problem accessing the Junction from A500 Barthomeley Link	Yes	x			✓	✓		
	Access to Manchester	Noted that the county as a whole depends on access to Manchester via M6, M61 and A56/M66. Congestion in Greater Manchester affects Lancashire	Yes	x			✓		✓	
	M6 / M65 (Preston)	Various future development pressures with additional traffic demands: - Cuerden / Bamber Bridge - City Deal	Yes		x		✓			✓
	M6 J28	Future development pressures at Buckshaw Village- development not yet built out. Local network will become over capacity and have subsequent impacts on the SRN.	Yes		x		✓			✓

	Location	Description	Is there supporting evidence?	Timescales			Was this Identified through stakeholder engagement?	Stakeholder Priorities		
				Short-term	Medium-term	Long-term		Low	Medium	High
	M6 J31	Future development pressures at Samlesbury Enterprise Zone (6000 jobs) mean that the junction will become over capacity. In addition 100s of residential dwellings at Clitheroe will add to pressures.	Yes		x		✓	✓		
	M6 J31a	Future development pressures at Preston East. Concerns with level of traffic generation, but there is potential for a solution.	Yes		x		✓	✓		
	M6 J33	Galgate signals cause operational issues on the local road network, with subsequent consequences on the SRN. Strong emphasis of Wyre growth on the areas surrounding M6 J32-33.	Yes	x			✓	✓		
	South Lancaster	Strategic housing sites and University / Science Park still aspirational developments	Yes		x		✓	✓		
	M6 / M61 Merge Northbound	AM Peak congestion issues – due to the layout of the merge / driver behaviour issues	Yes	x			✓		✓	
	M58 / M6	Junction issues & issues for freight accessing Port of Liverpool & distribution sites in East Lancs	Yes	x			✓	✓		
	M56 to M6 South	Lack of direct link at this point	Yes	x			✓		✓	
	M6 J26	Capacity and operation post-proposed improvements schemes	Yes		x		✓		✓	
	M6 J25	Southbound on only junction – N/B traffic requires long detour to J26; S/B on requires detour to J2 through an urban area.	Yes	x			✓		✓	

	Location	Description	Is there supporting evidence?	Timescales			Was this Identified through stakeholder engagement?	Stakeholder Priorities		
				Short-term	Medium-term	Long-term		Low	Medium	High
	M6 J18-19	Known hot spot for delays and unreliable journey times for users with no obvious source.	Yes	x			✓	✓		
	M6 J32-45	Junction operational issues – M6 J32, J33, J34, J42 and J45. Weaving issues at J33 to J45 – northbound on-slip and off-slip substandard layout	J32 & J45 Yes	x	x		✓	✓		
	M6 J26	Capacity and operation post-proposed improvements schemes	Yes		x		✓		✓	
	M6 J25	Southbound on only junction – N/B traffic requires long detour to J26; S/B on requires detour to J2 through an urban area.	Yes	x			✓		✓	
	M6 J18-19	Known hot spot for delays and unreliable journey times for users with no obvious source.	Yes	x			✓	✓		
	M6 (Cheshire to Staffs)	Congestion / delay	Yes	x			✓		✓	
	M6	Issues regarding perception of access to the North West via the SRN	No	x			✓	✓		
	M6 / A580	Congestion issues – possibly resolved through Pinch point improvements	Yes	x			✓	✓		
Safety	M40 J4	Weaving (possibly due to signing for 2 lanes vs 3 lanes) is resulting in queuing and safety concerns	Yes	X			✓	✓		
	M40	Safety management through technology applications required, e.g. Speed enforcement (SPECS) and managed motorway functionality.	Partial	X			✓	✓		
	M6 J4-5	Compared to the rest of the network is in the highest category of collision rates across the SRN	Yes	X			X			

	Location	Description	Is there supporting evidence?	Timescales			Was this Identified through stakeholder engagement?	Stakeholder Priorities		
				Short-term	Medium-term	Long-term		Low	Medium	High
	M6 J8 and J9	Ranked in the top national 250 collision cluster sites across the SRN								
	M6 J15 Stoke	Safety Issue Junction is ranked in the top national 250 collision cluster sites across the SRN	Yes	X			✓	✓		
	M6 J19	Congestion and high accident record experienced at junction. Reported to experience the highest accident rate in the country.	Partial	x			✓			✓
	M6 J15 to J20	Accident and incident hot spot. Accidents / incidents along the M6 cause congestion and encourage drivers onto the local highway network. This results in congestion on the local highway network. M6 J16 and J19 are ranked in the top national 100 collision cluster sites across the SRN	Yes	x			✓			✓
	M6 J23	Ranked in the top national 100 collision cluster sites across the SRN	Yes	X			X			
Social and environment	All	Water pollution – Outfalls of non permitted discharge not included on HA maps but can be a risk depending on what water bodies they flow into.	Evidence not yet received	X	X	X	✓	✓		

	Location	Description	Is there supporting evidence?	Timescales			Was this Identified through stakeholder engagement?	Stakeholder Priorities		
				Short-term	Medium-term	Long-term		Low	Medium	High
	All	Lorry parking and the location and availability of lay-bys is becoming an increasing issue. Lay-bys on the SRN are being used increasingly by HGV drivers to take rest breaks which they are required to take by law. However the HGV's often become a target of anti-social behaviour. Recent expansion of parks on A5; similar facilities are required in other areas.	No	X			✓	✓		
	All	Flood risk map shows flooding issues to be a lot less extensive than the Environment Agency have ascertained. Need to improve forward planning of maintenance to address environmental damage caused by flooding at bridges and culverts. Night maintenance has improved network performance. Need to consider Water Framework Directive when planning new roads. Possible need for new drainage technology	Yes	X	X	X	✓		✓	
	M40	Resurfacing plans - this should be a chance for sections where residents are affected by noise to be positively impacted. Alternative barriers should be explored.	Partial			X	✓	✓		
	Birmingham	Need to address the impact that high levels of transport movements have on noise/air quality/light pollution.	Yes	X			✓		✓	
	Bromsgrove	Air quality issues on SRN around Bromsgrove. Problems on motorway means that traffic diverts through Bromsgrove along A38 southwards to rejoin M5 at M5 J5. This causes local congestion and air quality issues	Yes	X			✓	✓		

	Location	Description	Is there supporting evidence?	Timescales			Was this Identified through stakeholder engagement?	Stakeholder Priorities		
				Short-term	Medium-term	Long-term		Low	Medium	High
	M6 J10a-8 / M5 J1-3	There are pollution concerns at these locations (Nitrogen Oxide), particularly at M6 J10 where EU limits are currently being exceeded Developments around this area will exacerbate the challenge. M6 creates severance and air quality issues on the east side of the M6 section	Yes	X			✓	✓		
	M6 J19	Congestion and air pollution experienced between and around these junctions. To improve air quality, congestion needs to be addressed. Noise is less of an issue due to car technology.	Yes	x			✓		✓	
	Lancaster South	Air quality issues due to motorway junction location & proximity to obstructions i.e. railway lines.	No	x			✓	✓		
	All	Air Quality. Significant issue along much of the route.	Yes	x			✓			✓
Other	-	-	-	-	-	-	-	-	-	-

Part B Stakeholder engagement

B1 Stakeholder events

B1.1 Engagement events

Stakeholder engagement events for the route based strategies were undertaken on a geographical (LEP area) rather than route basis. Therefore, there were nine stakeholder events held by the Agency relating to the London to Scotland West route;

- High Wycombe, on 30 September 2013 at Holiday Inn, High Wycombe
- Oxfordshire, on 11 October 2013 at Oxford Town Hall, Oxford
- Northamptonshire and South East Midlands
- Coventry and Warwickshire and Leicester and Leicestershire, on 24 September 2013 at Warwick University
- Greater Birmingham and Solihull, Stoke and Staffordshire and Black Country, on 20 September 2013, at Maple House, Birmingham
- Cheshire and Warrington
- Lancashire
- Manchester
- Merseyside

B2.1 Stakeholder event invitees

High Wycombe

Contact Name	Organisation
Richard Harrington	Buck Thames Valley LEP
Warren Ralls	
Stephen Walford	Bucks County Council
Ryan Bunce	
Tony Blackmore	
Tony Blackmore	
Dave Roberts	
Anne James	
Alan Goodrum	South Bucks District Council
Peter Beckford	

Paul Geehan	
Chris Marchant	Chiltern District Council
Rosie Brake	Wycombe District Council
Ian Manktelow	
Charles Brocklehurst	
Andrew Grant	Aylesbury Vale District Council
Andy Kirkham	
Ivan Dunleavy	Pinewood Studios
Will Hancock	South Central Ambulance NHS Trust
Mark Jones	Bucks Fire & Rescue
John Croxton	Hampshire & Thames Valley Roads Policing JOU - Thames Valley Police
Colin Clark	
Rupert Waters	Bucks Business First
Chris Rawson	
Nick Jenkins	Sainsburys (Turley Associates - Consultants)
Shirley Karat	Eden Shopping Centre (Firstplan - Consultants)
Daniel Tomkinson	Eden Shopping Centre
Jill McGregor	John Lewis (CBRE - owning body)
Robert Hanna	Bucks Local Nature Partnership
Alison Heath	British Horse Society
Paul Rhodes	Buckinghamshire, Milton Keynes and West Middlesex Area Ramblers
Lawrence Jones	
Dan Sullivan	Aylesbury and District Ramblers Association
Anne Mograby	Chilterns Weekend Walkers
Lawrence Jones	
Ronnie Lee	Hillingdon Walkers

Oxfordshire

Contact Name	Organisation
Nigel Tipple	Oxfordshire Local Economic Partnership
Martin Tugwell	Oxfordshire County Council
Llewelyn Morgan	
Tom Flanagan	
Ian Davies	Cherwell District Council
Andrew Tucker	West Oxfordshire District Council
Ian Matten	Vale of White Horse and South Oxford District Councils
Ian Robinson	
Adrian Roche	Oxford City Council
Richard Mace	Department for Transport
Susanne Isaacs	
Tim Abbott	BMW Group
Saied Faghiri	Oxford Welcome Break J8a and A40
Jeff Parfrey	Moto Cherwell Valley J10 & A43
Duncan Rogers	Harwell Science Park
Caroline Morgan	Abingdon Business Park
Mr Sean O'Brien	Oxford University
Martin Sutton	Stage Coach in Oxfordshire/Oxford Tube
Phil Southall	Oxford Bus Company
Andrew Moore	National Express Coaches
Matt Goggins	
Ian Hudspeth	Oxfordshire Local Transport Board
Mark Hopwood	First Great Western
Aubrey Bell	South Central Ambulance NHS Trust

Will Hancock	
Alison Clapton	Oxfordshire Fire and Rescue Service
Sarah Thornton CBE QPM	Thames Valley Police
Colin Clark	
Claire Benson	
John Croxton	
Superintendent Chris Brown	Hampshire Police
Picked up from this address	Environment Agency
Jim Fletcher	CPRE, Oxfordshire
Hilary Phillips	Local Nature Partnership Oxfordshire
Richard Lemon	Natural England
Gerry Hamersley	
John Meudell	Cyclist Touring Club **
Troth Wells	British Horse Society **

Coventry and Warwickshire and Leicester and Leicestershire

Stakeholder group	Invitees	Organisation
LEP	Andy Rose	Leicester & Leicestershire LEP
	Alan Cockburn	Coventry & Warwickshire LEP
Local Authorities	Adrian Hart	Warwickshire County Council
	Mike Waters	Coventry City Council
	Robert Weeks	Stratford on Avon District Council
	Dorothy Barratt	North Warwickshire Borough Council
	Karen McCulloch	Rugby Borough Council
	Dave Barber	Warwick District Council
	Ashley Baldwin	Nuneaton and Bedworth Council
	Sarah Hines	Nuneaton and Bedworth Council

	Paul Sheard	Leicester County Council
	Bill Cullen	Hinckley & Bosworth Borough Council/A5 Forum
	Rob Back	Blaby District Council
	Beverley Jolly	Harborough District Council
	Mark Wills	Leicester City Council
	Christine Marshall	Melton Borough Council
	David Hughes	North West Leicestershire
	Ben Wilson	Oadby and Wigston Borough Council
	Richard Bennett	Charnwood Borough Council
	Alan Franks	Nuneaton and Bedworth Council
Passenger Transport groups	Kenneth Treadaway	RAC Foundation
	Chris Hodder	The British Motorcyclist Federation
	Marie-Pilar Machancoses	Centro Area Manager Coventry and Solihull
Local Freight Groups	Sally Gilson LLTG	Freight Transport Association
	Ann Morris	Road Haulage Association - Warwickshire
Strategic traffic generators	Trevor Barnsley	Coventry Airport
	Colleen Hempson	East Midlands Airport
	Adrian Young	Fosse Park
	Brian Reid	Mira Technology
	Chris Lewis	Prologis
Local Chamber of Commerce	Angela Tellyn	Coventry & Warwickshire Chamber of Commerce
	Martin Traynor	Leicestershire Chamber of Commerce
	John Merison	North West Leicestershire Chamber of Commerce
Emergency Services	Phil Moore	Warwickshire and West Mercia Police Safer Partnership Group
	Adrian Sharp	West Midlands Fire Service
	Andy Hickmott	Warwickshire Fire and Rescue Service
	Graham Compton	Leicestershire Police Headquarters

Countryside/Environmental Groups	Tim Atkinson	Coventry Friends of the Earth
	Terry Kirby	FOE
	John Fenlon	South Warwickshire Environmental Association
	Gerard Kells	Warks CPRE
	Jane Scott, RABO East Midlands	British Horse Society
Vulnerable Road User Groups	George Riches	Coventry Cyclists' Touring Club
	Edward Healey	Sustrans West Midlands
Motorway Service Areas	David Blackmore	Corley (M6)
	Saied Faghiri	Warwick (M40)
Other government departments	Ian Smith	Department for Business Innovation and Skills
	Joshua Fox	Department for Transport
	Fiona Keates	Environment Agency

Greater Birmingham and Solihull, Stoke and Staffordshire and Black Country

Stakeholder group	Invitees	Organisation
LEP	Andy Street	Greater Birmingham and Solihull LEP
	Craig Jordan	GBSLEP Planning/Lichfield DC
	Stewart Towe	Black Country LEP
	Peter Davenport	LEP Partnership Manager
	Ron Dougan	Stoke on Trent & Staffordshire LEP
Local Authorities	Stephen Hughes	Birmingham City Council
	Ann Osola	Birmingham City Council
	Stephen Brown	Cannock Chase District Council
	Andy O'Brien	East Staffordshire Borough Council
	Diane Tilley	Lichfield District Council
	Mark Rogers	Solihull Metropolitan Borough Council
	Matthew Bowers	Tamworth Borough Council

	Laura Shoaf	Black Country Director of Transport
	Mark Corbins	Walsall Council
	Richard Banner	Walsall Council
	Paul Sheehan	Walsall Council
	Jan Britton	Sandwell Council
	Simon Warren	Wolverhampton City Council
	John Polychronakis	Dudley Metropolitan Council
	Jonathan Dale	LTB Vice Chair
	John Sellgren	Newcastle under Lyme - Chief Executive
	Michael Dunphy	Bromsgrove District Council
	Steve Winterflood	South Staffordshire Council
	Nick Bell	Staffordshire County Council
	John van de Laarschot	Stoke on Trent City Council
	Peter Price	Stoke on Trent City Council
Passenger Transport groups	Rik Thomas	RAC Foundation
	Maria-Pilar Machancoses	Centro Area Manager Coventry and Solihull
Local Freight Groups	Sally Gilson, Policy Manager – Midlands FTA	Freight Transport Association
	Nick Payne, Midlands and West	Road Haulage Association
Local Chamber of Commerce	Jerry Blackett	Birmingham Chamber of Commerce
	Chris Plant	Chase Chamber of Commerce
	Marilyn Castree	Lichfield and Tamworth Chamber of Commerce
	Margaret Corneby	Black Country Chamber

	Sara Williams / Jane Gratton ACEO	North Staffordshire Chamber of Commerce and Industry
	Chris Plant	Solihull Chamber of Commerce
	Colin Bell	GVA Planning, Development and Regeneration
Emergency services	Inspector Derek Roberts	Central Motorway Police Group
Countryside/Environmental Groups	Gerard Kells	CPRE
	Adam McCusker	Foe
	Edward Healey	Sustrans
	Jane Scott, RABO East Midlands	British Horse Society
	Kevin Chapman	West Midlands Campaign for Better Transport
Strategic transport groups	Michelle Thurgood	Birmingham Airport
	Janis Homer	NEC Group
	James Hodson	Director Midlands Expressway Limited
	Ian Chambers	Network Rail
Other government departments	Joshua Fox	Department for Transport
	Fiona Keates	Environment Agency
	Andrea Whitworth	Department for Business Innovation and Skill

B3.1 Stakeholder event attendees

Oxfordshire

Break out group	Delegates name	Initials	Organisation
Two	Martin Sutton	MS	Stagecoach in Oxfordshire
Two	Richard Godfrey	RG	Moto Cherwell
Two	Susanne Issacs	SI	DfT Engagement Team
Two	Tom Flanagan	TF	Oxfordshire County Council
Two	Martin Tugwell	MT	Oxfordshire County Council
Two	Gerry Hamersley	GH	Natural England
Two	Ian Matten	IM	Vale of the White Horse / South Oxfordshire Council
	Troth Wells	TW	British Horse Society
	Phil Moule	PM	Vale of the White Horse / South Oxfordshire Council
One	Nigel Tipple	NT	Oxfordshire Local Economic Partnership
One	Llewelyn Morgan	LM	Oxfordshire County Council
One	Ian Robinson	IR	Vale of the White Horse / South Oxfordshire Council
One	Adrian Roche	AR	Oxford City Council
One	Sean O'Brien	SOB	Oxford University
One	Phil Southall	PS	Oxford Bus Company
One	Val Crawford	VC	Senior Parliamentary Researcher
One	Nicola Blackwood	NB	MP Oxford West and Abingdon

High Wycombe

Break out group	Delegates name	Initials	Organisation
One	Warren Ralls	WR	Buck Thames Valley LEP
	Stephen Walford	SW	Buckinghamshire County Council
	Ian Manktelow	IM	Wycombe District Council
	Charles Brocklehurst	CB	Wycombe District Council
	John Croxton	JC	Hampshire & Thames Valley Roads Policing JOU - Thames Valley Police
	Daniel Tomkinson	DT	Eden Shopping Center
Two	Richard Harrington	RH	Buck Thames Valley LEP
	Ryan Bunce	RB	Buckinghamshire County Council
	Tony Blackmore	TB	Buckinghamshire County Council
	Rosie Brake	RBr	Wycombe District Council
	Andy Kirkham	AK	Aylesbury Vale District Council
	Colin Clark	CC	Hampshire & Thames Valley Roads Policing JOU - Thames Valley Police
	Claire Benson	CB	Hampshire & Thames Valley Roads Policing JOU - Thames Valley Police

SEM and Northamptonshire

Name	Organisation	Group
Andrew Longley	North Northamptonshire	Yellow
Paul Woods	North Northamptonshire	Yellow
Caroline Wardle	North Northamptonshire Development Company	Yellow
Simon Richardson	Kettering Borough Council	Yellow
Helen Russell-Emmerson	Northamptonshire County Council	Yellow
S Bateman	Wellingborough Borough Council	Yellow
Karen Britton (CEO)	East Northamptonshire	Yellow
Peter Orban	Sustrans	Red
Ben Gadsby	Amey	Red
Brian Hayward	Bedford Borough Council	Red

Geraldine Davies	Central Bedfordshire Council	Red
Manouchehr Nahvi	Central Bedfordshire Council	Red
Ade Yule	Bedfordshire & Luton Fire and Rescue Service	Red
Ishwer Gohil	Milton Keynes Council	Green
Keith Dove	Luton Borough Council	Green
Mark Lawman	Luton Airport	Green
Dorian Holloway	Open University Milton Keynes	Green
Sue Dawson	Stadium MK (MK Dons)	Green
Hilary Chipping	SEMLEP	Green
Neil Biggs	Thames Valley Police	Green
David Grindley	Northamptonshire County Council	Blue
Richard Palmer	Northampton Borough Council	Blue
David Allen	South Northamptonshire	Blue
Simon Bowers	Daventry	Blue
Chris Lewis	Daventry International Rail Freight Terminal	Blue
Lee Sambrook	Department for Transport	Blue
Will Moorlidge	Department for Business Skills and Innovation	Blue

Coventry and Warwickshire and Leicester and Leicestershire

Break out group	Delegates name	Initials	Organisation
Blue	Mike Waters	MW	Coventry City Council
Blue	Ken Treadaway	KT	RAC foundation
Blue	Chris Slack	CS	Vectos - on behalf of Fosse Park Shopping Centre
Blue	Bill Cullen	BC	A5 Partnership and Hinckley and Bosworth District Council
Blue	Fiona Keates	FK	Environment Agency
Blue	Sarah Garland	SG	Highways Agency
Blue	Jenny Oakes		Facilitator
Blue	Abigail Finch		Note-taker
Green	Paul Sheard	PS	Leicestershire County Council
Green	Chris Lewis	CL	Prologis
Green	Ross Middleton	RM	Rugby Borough Council
Green	Vicky Allen	VA	British Horse Society
Green	Paul Tebbitt	PT	Charnwood Borough Council
Green	Ian Smith	IS	BIS
Green	Dave Lynch	DL	Highways Agency
Green	Graham Fry		Facilitator
Green	Darren Abberley		Note-taker

Orange	Adrian Hart	AH	Warwickshire County Council
Orange	Martyn Traynor	MT	Leicestershire Chamber of Commerce
Orange	Graham Compton	GC	Leicestershire Police
Orange	Terry Kirby	TK	Friends of the Earth
Orange	Tim Andrews	TA	Environment Agency
Orange	James Sharma	JS	MIRA Ltd
Orange	Neil Hansen	NH	Highways Agency
Red	Paul Harris	PH	Stratford-upon-Avon District Council
Red	Rhys Williams	RW	Road Haulage Association
Red	Sarah Hines	SH	Nuneaton and Bedworth Council
Red	George Riches	GR	Coventry CTC
Red	Adrian Johnson	AJ	Highways Agency
Red	Phil Moore	PM	Warwickshire and West Midlands Police
Red	Graham Stevenson		Facilitator
Red	Amie Coleman		Note-taker

Greater Birmingham and Solihull, Stoke and Staffordshire and Black Country

Break out group	Delegates name	Initials	Organisation
Orange	Richard Banner	RB	Black Country representative
Orange	Philip Somerfield	PS	East Staffordshire Borough Council
Orange	Maria-Pilar Machancoses	MPM	Centro
Orange	James Hodson	JH	Midlands Expressway Ltd
Orange	Paul Leighton	PL	Walsall Council
Orange	Orminder Bharj	OB	Highways Agency
Orange	Peter Hardy		Facilitator
Orange	Andrew Rattan		Note-taker
Blue	Ann Osola	AO	Greater Birmingham and Solihull LEP and Birmingham City Council
Blue	Guy Benson	GB	Newcastle under Lyme Borough Council
Blue	Sally Gilson	SG	Freight Transport Association
Blue	Bhanu Dhir	BD	Black Country Chamber of Commerce
Blue	Andrea Whitworth	AW	BIS
Blue	Patrick Walker	PW	South Staffordshire Council
Blue	Adrian Slack	AS	Highways Agency
Blue	Alan Bain		Facilitator
Blue	Jan Gondzio		Note-taker
Red	Peter Davenport	PD	Staff & Stoke LEP
Red	Austin Knott	AK	Stoke-on-trent City Council
Red	Gerard Kells	GK	Campaign for Rural England
Red	Gary Masters	GM	NEC group

Red	Lisa Maric	LM	Highways Agency
Red	Elizabeth Boden	EB	Lichfield District Council
Red	Danny Lamb		Facilitator
Red	Oliver McLaughlin		Note-taker
Yellow	Mark Corbin	MC	Walsall Council
Yellow	Adam McCusker	AMC	Friends of the Earth
Yellow	Ann Morris	AM	Road Haulage Association
Yellow	Will Spencer	WS	Staffordshire County Council
Yellow	Rosemary Williams	RW	Bromsgrove District Council
Yellow	Andy Butterfield	AB	Highways Agency
Yellow	Sarah Loynes		Facilitator
Yellow	Derek Jones		Note-taker
Green	John Morgan	JM	Cannock Chase District Council
Green	Amrik Manku	AM	Solihull Metropolitan Borough Council
Green	Laura Shoaf	LS	Black Country Director of Transport
Green	Colin Bell	CB	GVA
Green	Will Heyes	WH	Birmingham Airport
Green	Fiona Keates	FK	Environment Agency
Green	Matt Taylor	MT	Highways Agency
Green	Lee White		Facilitator
Green	Anthony Hogan		Note-taker

Cheshire & Warrington

Organisation	Name	Org. Initials	Del. Initials
B.I.S. NW	Martin Wood	BISNW	MW
Brereton PC	Jane Deans	BPC	JD
Cheshire & Warrington Local Enterprise Partnership and Cheshire East Council	Andrew Ross	C&WLEP & CEC	AR
Cheshire West & Chester Council	Kevin Carrol	CWAC	KC
Cheshire West & Chester Council	Richard Flood	CWAC	RF
Council for the Protection of Rural England (& North West Transport Activists Roundtable)	Lillian Burns	CPRE & NWTAR	LB
Freight Transport Association	Malcolm Bingham	FTA	MB
Halton BC	Stephen Rimmer	HBC	SR
High Legh PC	Richard Wright	HLPC	RW
Mere PC	Ian Hodgson	MPC	IH
Mersey Gateway	Ian Draycott	MG	ID

Organisation	Name	Org. Initials	Del. Initials
N&MWTRA	Dave Evans	N&MTRA	DE
Warrington BC	Alan Dickin	WBC	AD
Welsh Government	David Peel	WG	DP
Welsh Government	Peris Jones	WG	PJ
Wirral MBC	Julie Barnes	WMBC	JB

Lancashire

Organisation	Name	Org. Initials	Del. Initials
Blackburn with Darwen Council	Mike Cliffe	BwDC	MC
Blackpool Council	Jeremy Walker	BC	JW
Burnley BC	Sarah Taylor	BBC	ST
Chorley Council	Gary Hall	CC	GH
Council for the Protection of Rural England (& North West Transport Activists Roundtable)	Lillian Burns	CPRE & NWTAR	LB
Environment Agency	Jo Bradley	EA	JB
Fylde BC	Mark Sims	FBC	MS
Greenhalgh with Thistleton PC	Ken Dodsworth	GTPC	KD
Hyndburn BC	Simon Prideaux	HBC	SP
Lancashire CC	Dave Colbert	LCC	DC
Lancashire CC	Martin Porter	LCC	MP
Lancashire CC	Simon Emery	LCC	SE
Lancashire Police	Ross Willis	LCC	RW
Peel Ports	Warren Marshall	PP	WM
Rossendale BC	Adrian Smith	RBC	AS
Thornton Area Action Group	Audrey Jenkins	TAAG	AJ
Thornton Area Action Group	Philip Jenkins	TAAG	PJ
Wyre BC	David Thow	WBC	DT

Manchester

Organisation	Name	Org. Initials	Del. Initials
British Cycling	Martin Key	BC	MK
Bury MBC	Ian Lord	BMBC	IL
Friends of the Peak District (CPRE & CNP)	Anne Robinson	FPD	AR

Organisation	Name	Org. Initials	Del. Initials
Manchester Airport Group	Jon Bottomley	MAG	JB
Manchester City Council	Richard Elliot	MCC	RE
North West Transport Activists Roundtable	Adrian Dunning	NWTAR	AD
Oldham MBC	Joanne Betts	OMBC	JB
Peel	Peter Nears	PEEL	PN
Rochdale MBC	Lisa Houghton	RMBC	LH
Stagecoach Buses Mcr	Chris Icely	SBM	CI
Stockport MBC	Sue Stevenson	SMBC	SS
Tameside MBC	Nigel Gilmore	TMBC	NG
Transport for Greater Manchester	David Bland	TfGM	DB
Transport for Greater Manchester	Maira Percy	TfGM	MP
Trafford Centre	Andrew Douglas	TC	AD
Trafford MBC	Dominic Smith	TMBC	DS
Unity/Oldham MBC	David Dalrymple	OMBC	DD

Merseyside

Organisation	Name	Org. Initials	Del. Initials
Cumbria CC	Andrew Moss	CCC	AM
Department for Transport	Richard Perry	DfT	RP
Halton MBC	Mick Noone	HMBC	MN
Knowsley MBC	Sean Traynor	KMBC	ST
Merseyside LEP	Claire Delahunty	MLEP	CD
North West Transport Activists Roundtable	Adrian Dunning	NWTAR	AD
Sefton MBC	Stephen Birch	SMBC	SB
Wigan MBC	Dave Round	WMBC	DR

B4.1 Note-taker's sheets from the engagement events

Breakout Session 1: what are the key challenges for the routes?

Workshop Name		Coventry and Warwickshire, and Leicester and Leicestershire		Date:			24/09/13		Breakout Group		Blue Team	
Group Facilitator		Jenny Oakes (JO)		Note-taker			A. Finch				Page 1	
Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	When does this issue become critical?			Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received		
			Already is	2018-21	After 2021							
A5	Emerging as a key economical route which is already operating at capacity, and will be even more so from future development. A large amount of new development is planned along the corridor with direct access onto the A5.	Capacity The pinch point scheme to be delivered by 2015 will only provide enough capacity for 2-3 years.	X			Yes – Vehicle Hours Delay	The A5 Strategy, by the A5 Partnership, provides a good evidence base. This proved helpful with the Pinch Points work. DaSTS Study demonstrates the corridors economic importance.	Bill Cullen, HBBC	BC	2		
A46 & M69	Growth plans will put a considerable strain on this section of the SRN. Requires a study similar to the A5. Approx. 21-22,000 houses proposed in the Coventry area. A46 is a strategic cross country route that's inadequate for the load it's currently taking. Particular issues exist between Alcester and Stratford due to a lack of capacity. M69 improvements have linkages to key development priorities.	Running at capacity	X	X	X	Yes – Vehicle Hours Delay	Coventry Core Strategy? Developments shown on HA maps underestimates amount of development planned around Coventry.		MW & KT	11 for A46 4 for M69		

Workshop Name		Coventry and Warwickshire, and Leicester and Leicestershire		Date:		24/09/13		Breakout Group		Blue Team	
Group Facilitator		Jenny Oakes (JO)		Note-taker		A. Finch				Page 2	
Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	When does this issue become critical?			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received	
			Already is	2018-21	After 2021						
The two A45/A46 junctions	The TGI and Walsgrave islands around Coventry could undermine the existing investment that's being made on A46 improvements. They are the only at-grade junctions remaining along the corridor and are therefore pinch points on the network. They were not put forward for pinch point funding due to enormous costs.	Capacity/ Safety	X			Yes – Vehicle Hours Delay & Safety map		MW			
M42 corridor	Major capacity issues on M42. HS2 and the big allocation of development in the future close by will put greater pressure on this already struggling road. A46 will have a role in relieving the M42 but is under pressure itself.	Capacity.	X			Yes – Vehicle Hours Delay		BC	11		
Gaydon J12 M40	4,500 new houses proposed for Gaydon which the road system will not be able to cope with.	Capacity			X	-	Stratford Revised Core Strategy	-	KT		
M54 – linkages to M6 Toll	Link required from M54 to M6 toll to reduce traffic on M54 and improve access to the underutilised M6 Toll but controversial with district authorities.	Capacity	X			-	-	-	MW		

Workshop Name		Coventry and Warwickshire, and Leicester and Leicestershire		Date:		24/09/13		Breakout Group		Blue Team	
Group Facilitator		Jenny Oakes (JO)		Note-taker		A. Finch				Page 3	
Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	When does this issue become critical?			Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received	
			Already is	2018-21	After 2021						
M6 Toll	Underutilised but the alternative SRN (particularly the M42, M6 & M54) is generally operating over capacity. Although the toll road is not under the HA remit, if M6 Toll was priced to attract more traffic it would alleviate a lot of the problems the HA face on the SRN, therefore affecting future HA strategies and spend. Solihull Metropolitan Borough Council looking into the M6 Toll issue and its one of the joint LEP priorities.	Operational	X			Yes – Speed map and Vehicle Hours Delay map	Regional Logistics Study for West Midlands has been commissioned (2012) by a consortium of authorities in the West Midlands. Possible evidence base for issues on the SRN in the area.	-	BC & MW	5	
M1 J21 – J21a	Pinch Point delivery by March 2015 but won't address all congestion problems between J21 and J21a. Pinch Point scheme is a short term fix not long term solution. Safety hazard. Southbound traffic getting off onto M69 blocking back on M1. Signalisation has improved things but still issues remain. Also the link is short between 21-21a which results in significant weaving.	Capacity & Safety	X			Yes –Vehicle Hours Delay map	-	-	CS MW	4	

General	Water pollution – Outfalls of non permitted discharge not included on HA maps but can be a risk depending on what water bodies they flow into.						FK will provide Environmental Agency maps showing the priority areas of non permitted discharge.		FK	
Workshop Name		Coventry and Warwickshire, and Leicester and Leicestershire	Date:			24/09/13		Breakout Group	Blue Team	
Group Facilitator		Jenny Oakes (JO)	Note-taker			A. Finch			Page 4	
Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	When does this issue become critical?			Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
			Already is	2018-21	After 2021					
A5 Dodwells & Long Shoot junctions	Capacity and safety issues along this stretch of the A5. As above Pinch Points not necessarily going to fix the problem. Dualling is needed to increase capacity and improve safety.	Capacity & Safety	X			Yes –Vehicle Hours Delay, Speed and Safety map	-	BC	10	
A46 outside of Stratford	More segregation for cyclists required to improve safety. Pedestrian and cycle crossings near Stratford are an issue.	Safety	X			Safety map	See Stratford Core Strategy for issues. Well documented evidence in the Route Management Strategy (RMS).	KT MW		
A38 Burton to Lichfield	Good off road cycle route but very stop-start in nature. Cyclists are poorly catered for at junctions so cyclists tend to go along the A38 mainline which presents a safety issue and can reduce traffic speeds. Cycle network needs to be better coordinated and less disruptive.	Safety	X			Safety map	-	FK		
M6 Jnc 2-4	Heavy usage. Lots of local hopping on and off. Also new engine plant for Jag/Land Rover near I54 will use M6 for delivering to Solihull.	Capacity	X							

M1, M6, A5 and A38	Emergency Route Planning - When incidents occur on M1 & M6 they impact on the A5 and bring Hinckley to a grinding halt. Flooding of the Trent can result in the closure of several parts of the A38. Can alternative routes be planned?	Operational	X			-	-	-	BC	5
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Route-based strategies stakeholder events

Breakout Session 2: what should the priorities be?

Workshop Name	Coventry and Warwickshire, and Leicester and Leicestershire		Date:	24/09/13	Breakout Group	Blue Table
Group Facilitator	Jenny Oakes (JO)		Note-taker	A Finch		Page 5
Description of challenge / Location Nb. these could be from any of the groups – not limited to the ones raised by this group	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types	Why is this considered to be a priority? Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary	How does this compare to other priorities? Why? Are there any trade-offs? Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be.		Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities. Solution Type (& additional notes) Maintenance & renewals / Operational / Junction improvement / Adding capacity / New road / other	
A5 Dodwells junction & A5 - Atherstone to M42 junction	Capacity	Two key blockages on the A5 which should be priority following on from the Pinch Point improvements so that there is a seamless improvement to the whole route. Capacity / safety improvements (probably dualling) required by 2018. Dodwells is also a priority for Environmental Agency as there are water quality issues around the area. A water body close by is failing due to road run off. EA to be considered in any improvements to this junction.	Emerging as a key route for supporting economic growth. A string of logistics companies along the A5 who are being and will continue to be impacted on.		Environmental Agency to be considered for any improvements to the Dodwells junction.	
TGI (Binley Junction) and Walsgrave Islands, A444 and	Operating close to	Top priority for Coventry City Council in order to deliver growth. Economic case for				

A428 Toll Bar scheme will move issues up to these junctions.	capacity.	this is from DaSTS study. Fixes required before 2021.		
M1/M69 J21	Safety	Safety hazard due to blocking back to mainline and weaving to J21a.		
Stratford – Alcester A46/A435 single carriageway with safety and speed issues.	Capacity and Safety	Low priority.	Lengthy route hence expensive solutions so low on priority list, as several of the other SRN issues could be addressed for the same money.	
M6 Toll efficiency and link with M54	Capacity	Will make a big difference in alleviating problems on the SRN if more traffic used the toll road and link road provided with the M54.	Politically sensitive and the M6 Toll would have to be more financially attractive to traffic for a direct link from the M54 to be beneficial.	
Need to focus priorities to where job growth will take place and to parts of the economy that are doing well e.g. Mira Enterprise Zone on A5.	Delivering growth.	Safeguarding our economic outturn for the future.		
Priorities should also be governed by housing growth areas. Accident areas tend to correlate well with these areas.		.		
Emergency routing.	Capacity	Some emergency routes place increased pressure on an already congested network which results in standstill.	Better communication between HA and LHA required.	

Breakout Session 1: what are the key challenges for the routes?

Workshop Name		Cov/Warks and Leics/Leicestershire LEP's			Date:	24/09/13		Breakout Group	Green	
Group Facilitator		Graham Fry			Note-taker	Darren Abberley				
Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	When does this issue become critical?			Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
			Already is	2018-21	After 2021					
SRN-wide	Lorry parking and the location and availability of lay-bys is becoming an increasing issue. Lay-bys on the SRN are being used increasingly by HGV drivers to take rest breaks which they are required to take by law. However the HGV's often become a target of anti-social behaviour.	Society and Environment	X			No	Lorry parks may not be attractive economic investments but a truck stops has recently been expanded on the A5 – this wouldn't have been done if not worthwhile. Similar facilities are required in other areas. Northampton lorry parking study provides evidence of the issue in that County.	N/A	CL	0
A5	The road acts as a barrier and a 'Berlin Wall' between the Leicestershire and Warwickshire border. The route presents a number of difficulties for non-motorised users to use and cross.	Safety/Society and Environment	X			No	Anecdotal evidence e.g. lack of verges for horse riders.	N/A	VA	3
A5	Lots of development is proposed along this corridor. Especially at Rugby Radio station and Rugby Gateway. These are highlighted on the RBS maps but the figures are too low at the Rugby Radio station site (6,200 homes and 31 hectares of employment land are proposed for this site). This will put further pressure on the link.	Capacity/Operational		X	X	Yes (but figures inaccurate).	Data provided in the 'Rugby Radio Station Additional Information Guide' document.	Hard copy version of document provided at the workshop with further documentation to follow should it be available.	RM	1

A5	There has been a lack of investment on this link and there is large variation in the standard of the link. For example, from Hinckley to Tamworth the link suffers from congestion issues which are likely to be exacerbated (with development growth) in the future.	Capacity/Asset Condition/Operational	X	X	×	Yes	Possible information available from LCC – LLITM forecast year outputs.	N/A	PS	1
M1 J21- J21A	The M1 SB between M1 J21a and J21 at peak times is a crucial congestion hotspot. Long distance traffic often avoids it and uses the local road network which creates associated problems. The motorway is a link of national importance and its poor performance can have detrimental impacts upon the national and regional economy. J21's poor performance also threatens Leicester's ability to attract inward investment. Also issues associated with noise and air quality.	Capacity/Safety/Operational/Society and Environment	X			Yes	South West Leicester and Leicestershire Study	N/A	PS	10
M1 J23	Growth in Loughborough and Shepshed will impact on M1 J23; congestion will be experienced, particularly during university semesters	Capacity/Operational		X	×	Yes	N/A	N/A	PS	

M1 J24	<p>M1 J24 is a nationally important part of the M1 as it links to the A50 and A453 routes. and with the airport and SRFI in close proximity. On top of this, it is an important gateway for Nottingham and Derby. However the junction suffers from congestion, it has not been improved and with a large amount of development proposed for the area, its performance will continue to deteriorate.</p> <p>A pinch point scheme is scheduled at this junction for Summer 2014. This will change the way traffic on the A50 EB enters the M1 SB. A new carriageway will be created through the junction. However Leicestershire County Council does not think that these measures are sufficient in the long term.</p>	Capacity/ Operational	X	X	X	Yes	N/A	N/A	PS	5
A45	Development growth – Prologis Ryton Site A and Site B (SW of Coventry) are missing from the growth plans; development traffic from these sites will exacerbate congestion on the A45 link.	Capacity/ Operational/		X	X	No	Evidence provided by CL, a commercial developer from Prologis	N/A	CL	1
A5 Longshoot and Dodwells	The A5 at Hinckley currently suffers from congestion. There is a plan in place for new traffic signals and a widening of the approaches at Dodwells roundabout as well as changes to the Longshoot junction. However Leicestershire County Council (LCC) does not think that these measures are sufficient in the long term. A long term strategy for improvement is needed as it is crucial to growth in Hinckley and Nuneaton. Need to maximise ability to secure developer funds.	Capacity/ Operational	X	X	X	No	Evidence gathered by LCC through the Leicester and Leicestershire Integrated Transport Model (LLITM), Transport Trends Report, NMP Congestion Plan 2026, DfT Transport Innovation Fund Congestion Study in the East Midlands.	N/A	PS	6

A453	Currently suffers from congestion. There is a scheme planned to upgrade a section of the A453 between the M1 and A52 by widening the urban section and upgrading the rural section to become a dual carriageway. However LCC have concerns about the impacts this will have on Kegworth (and possibly other areas in NW Leicestershire).	Capacity/ Operational	X	X	X	No	Modelling work for NWLDC Core Strategy and for the SRFI	N/A	PS	0
Catthorpe Interchange (M1, M6, A14)	Development pressures in this area will affect the performance of this junction – but should be resolved by the current major scheme.	Capacity/ Operational		X	X	Yes	N/A	N/A	RM	0
M6 J1	Development pressures in this area will affect the performance of this junction.	Capacity/ Operational	X	X	X	Yes	N/A	N/A	RM	5
M6 J2-4	Current congestion in this area leads to instability, unreliable journey times and traffic diverting onto the LRN, creating congestion issues on the local road links.	Capacity/ Operational	X	X	X	Yes	N/A	N/A	IS	1
M6 Toll	Under-utilised and tolls discourage use, exacerbating congestion on the M6.	Operational	X			No	Published traffic information for M6 Toll.	N/A	CL	7
Connections to A45 WB and M45 WB from A5 around M1 J18	Local concerns about the prevalence of HGV's on the LRN, due to the poor accessibility of the M45 WB.	Safety/ Asset Condition/ Operational	X			No	N/A	N/A	CL	1

Roundabout on A46 SW of M40 J15.	Concerns about the roundabout's safety, which was built as part of the J15 Improvements. The roundabout is too small, badly aligned and dangerous.	Safety	X			No	Anecdotal evidence	N/A	CL	5
M42 J6	The junction is in the heart of the country so is nationally significant. However it suffers from congestion and will continue to do so with the level of growth allocated for this area. This would make journey times unreliable and could have a negative impact on the economy.	Capacity/ Operational	X	X	X	Yes	N/A	N/A	IS	1
M42 J9	Potential development near this junction and to the west, in and around Curdworth will cause congestion at this junction.	Capacity/ Operational		X	X	No	Birmingham City Council	N/A	CL	1
A42 J13	The nearby A511 is a growth corridor which would increase congestion at this junction. Strategic improvements are required to alleviate this pressure. A strategy to secure developer contributions is needed.	Capacity/ Operational		X	X	Yes	N/A	N/A	PS	1
Hobby Horse Roundabout	This roundabout has capacity issues which will be exacerbated by development pressures. This could also affect the performance of the Leicester Outer Ring Road. Associated air quality issues.	Capacity/ Operational/ Society and Environment	X	X	X	No	N/A	N/A	PS	2
General	Vulnerable road users have difficulties crossing/using the SRN	Safety	X			No	Anecdotal evidence	N/A	VA	10

Breakout Session 2: what should the priorities be?

Workshop Name	Cov/Warks and Leics/Leicestershire LEP's	Date:	24/09/13	Breakout Group	Green
Group Facilitator	Graham Fry	Note-taker	Darren Abberley		
Description of challenge / Location Nb. these could be from any of the groups – not limited to the ones raised by this group	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types	Why is this considered to be a priority? Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary	How does this compare to other priorities? Why? Are there any trade-offs? Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be.	Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities. Solution Type (& additional notes) Maintenance & renewals / Operational / Junction improvement / Adding capacity / New road / other	
M1-congestion in vicinity of M1 J21 and M1 J24	Capacity/Operational/Safety	PS- It is a top priority due to the airport, SRFI, three cities being in close proximity. It is a nationally important route; if journey times are unreliable, this could have detrimental impacts on the economy. Also, if nothing is done, then the LRN will become a 'rat run' creating associated problems on this network.	PS- Junction improvements may create other implications on the LRN, including accessibility issues to the SRN.		
General – viewing the network as a whole and not individual links/junctions	Capacity/Operational	CL -Viewing the UK as a whole and identifying what is needed for the SRN at a nationwide level should be the starting point e.g. A46 v M42 routes. VA- Focusing on individual junctions/links can move the problems elsewhere, rather than eradicating them.	PS – It is difficult to assign priorities as the network should be considered holistically.		
A46	Capacity/Operational	CL- Strategic improvement to A46 could relieve the M42 and M5 which currently experience congestion.			

General – vulnerable users have difficulties crossing/using the SRN	Safety	VA- Non-motorised vehicles have difficulty/feel unsafe using the SRN. However, in line with the agenda for more sustainable modes of transport to be used, these road users should be encouraged.	An increase in the number of crossing points could have impacts on congestion on the SRN.	VA- The Vulnerable Users Crossings Improvement Programme from 2003 should be revisited.
M6 Toll	Capacity/Operational/	CL- Taking the M6 Toll back into public ownership. This would make it toll free and thus more attractive to road users – helping to relieve M6 congestion and support economic growth in the Midlands region.	CL- This would relieve pressures on the M6 and make better use of the network.	IS- This solution is unlikely to happen.
A5 Longshoot and Dodwells	Capacity/Operational	PS – Improving the performance of this section of the SRN is crucial to securing growth in Hinckley and Nuneaton.		PS- Need a long term strategy for improvement and maximise ability to secure developer contributions.
M45- spare capacity	Capacity/Operational	CL- This link currently has spare capacity and so better use could be made of it which could help to alleviate pressures on other, more congested sections of the SRN.		Target employment growth around this area.
General- timescales/lessons to be learnt	Capacity/Operational	VA- Getting schemes deliverable over the next 5 years is the priority. CL- the timescales are too short. A thorough, unbiased prioritisation of schemes cannot happen in the allocated timeframe. The priority should be to take time and make sure to get things right rather than being under pressure to deliver within the time period. Lessons should be learnt from M1 J19. The current junction was completed on an ad hoc basis and so still suffers from problems.	Schemes need to be delivered within the time frames otherwise promises will not be met.	

Breakout Session 1: what are the key challenges for the routes?

Workshop Name:	Route based strategies Nottingham Workshop: Leicester, Leicestershire, Coventry and Warwickshire.	Date: 24/09/13	Breakout Group:	Orange
Group Facilitator:	Note-taker:			
Sarah Guest	Tom McNamara			

Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	When does this issue become critical?			Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
			Already is	2018-21	After 2021					
Overall	Flood risk map shows flooding issues to be a lot less extensive than the Environment Agency have ascertained.	Environment	x	x	x	Provided some evidence including some for Nottingham workshop	Can and will provide more. Contact the EA for more if needed.	TA		
A5 around MIRA	Shows red on the pavement life cycle map, but it has recently been resurfaced.	Asset condition	x					JS		
Overall	Most flooding is not water course related (i.e. flooding of river floods carriageway) MAINLY run-off from the highway network.	Environment Asset condition	x					TA		
A46 North Warwick of	Sheer amount of run-off is flooding the immediate area. In cold weather this is freezing.	Safety Environment Asset condition	x					TA		
M1 J21	Major issue for the police and other emergency services, on the motorway and adjacent junctions. 5 to 6 miles of tail backs southbound and congestion accessing Leicester northbound.	Safety Capacity	x	x	x			GC		

M1 J21	Weaving on/off the M1 to access the services causing safety issues	Safety (RTCs) Capacity	×	×	×				GC	3
M1 J23/24 Also J21/22	Lots of development proposed in the wider area which will exacerbate already congested junctions. Business/enterprise park in Loughborough - growth 6000+ jobs	Capacity		×	×				MT	6
Overall	Up to 2021, the focus should be on existing problems that will only get worse beyond 2021 without intervention.		×	×	×				AH	
A5/A47 Junc	Heavy congestion - there was talk of a flyover - something needs to be done as this congestion leads to 'rat runs' developing through towns e.g. Higham On The-Hill	Capacity Society Environment Safety	×						TK	
A5 Leicester/ Warwick	MIRA / Dodwells developments introducing additional traffic.	Capacity							GC	
M1	Undertaking maintenance without causing traffic problems - when is the maintenance going to take place? At night? Seems like there is a lot to do in the next 3 to 4 years.		×	×					GC	
Bridges throughout the network	Electrification of the rail network is going to take place in the future. Are we/HA using this opportunity to change bridges which will have to undergo transformation for electrification? Which Bridges need doing?	Asset condition Operational			×				MT	
Bridges throughout the network cont.	Highly problematic dealing with Network Rail (got to get in early) Need to think about this <u>now</u>	Asset condition	×						GC	

A14	Market Harborough grinds to a halt when there is ANY issue on the A14. Incidents seem to be frequent - is there a way to manage the effect on surrounding towns if there is a problem on the SRN? Keeping one lane operational during incidents might help.	Capacity Operational Safety	×						TK	
Overall	MT asked about models, how good they were now and is there cooperation between authorities. AH indicated that cross county council cooperation was used in the area to develop meaningful accurate models	Capacity	×						MT AH	
A42	A42 is used like a motorway but should be brought is not motorway standard. Difficult to use by the emergency services, also the addition of development in the area. 2 lanes bring the associated constraints; The Police have had ongoing concerns over safety on the A42.	Safety Capacity Operational	×	×					GC	3
A46 Stratford to Alcester	The A46 is only two lanes and carries a lot of traffic - not really suitable as Strategic Road Network.	Safety Capacity	×						AH	2
M45	Very quiet, under used. Could lead to speeding due to low vehicle numbers.	Safety	×						AH	
M40 J12	Potential new settlement near to Stratford-Upon -Avon	Capacity			×				AH	

A46	LEP Priorities Coventry and Warwickshire. East of Coventry A428 TGI Junc. Need to keep the existing network attractive to businesses – so need to keep the M40/M42/M6 moving. Avoid restricting movement from the East to the rest of the Midlands.	Capacity		×	×				AH	
M42 Corridor	HS2 will bring further congestion on the M42 as will investment in business along the corridor, is there the option to use another corridor on the SRN? Suggests using the A46/M69 down M5 as opposed to the M42.	Capacity Operational			×				AH	3
M69 and Overall	Inadequate strategic signing.	Operational	×						GC	1
All e.g. backing up of the A46	Lack of coordination between the HA and Highway authority schemes. Different operators? Doing their own little bits. Due to road works Nottingham is currently a no-go zone. Leicester has different works all around the ring road causing congestion. Also UTILITES companies pitch in with their works.	Safety (mainly because people speed up after the congestion) Operation	×						TA MT	0
All	There doesn't seem to be a shortage of money, so we can expect to see lots of work to improve the network, so these improvements need to be balanced with the pain of works on the network short term. Can't be done over night, there need to be an acceptance and plan for a period of disruption.	Operation Capacity		×	×				AH	

M1 J21 Asda Island in Enderby	There was some coordination between HA and the Emergency services and other Highway Authorities. – picking up on point raised earlier by TA and MT.	Operational Asset condition	×						GC	0
M1 Corridor Loughborough	Developments are building right up to the M1. The Noise from the motorway is an issue, despite people choosing to live there.	Environment (Noise) Society	×	×	×				GC	1
A5 – along the whole route	Severance for Pedestrian and cyclists trying to cross the corridor. Particular problem for pedestrians.	Safety Operational Society	×						AH	5
Overall	Has any thought been given to Autonomous vehicle use in the future? Sparked a debate on the length of time for road investment strategies. Length of a parliament vs. 50 years (China)	Capacity Safety			×				JS MT	1
A46 North Leicester of M1 J21	Variable Message Signs (VMS) need to be better utilised to reduce burden on nearby towns when there is an incident on the SRN. 'No route onto the M69' – not good enough when A46 closed There is an opportunity to use signs in conjunction with contingency plans when SRN is affected by incidents. Such contingency planning could help prevent the development of rat runs through small towns.	Operational Capacity	×						AH	1

M1 A46	<p>Water quality</p> <p>Most of the water issues/ flooding come from the carriageway, not from flooding of surrounding rural area. Issues with drainage and ditches on highways.</p> <p>The claim is that these are maintained, but in reality maintenance is very poor. No treatment of water, not even primary treatment, leading to the quality and quantity of water coming off the carriageways being sub standard.</p> <p>If HA are seen to be doing nothing to move forward and deal with this issue it can damage reputation but also if water quality diminishes it could have legal implications.</p>	Environment	×					Will try and find information in specific areas where this has taken place and been documented.	TA	1
A14 Market Harborough	<p>The 'Diversion Route Plan' needs to be kept up to date. Otherwise towns like Market Harborough get swapped by traffic leaving the SRN.</p> <p>There is the consensus that spontaneous incidents will have this affect and that it is unavoidable, but for planned works it is considered unacceptable.</p>	Operational Capacity	×						GC	1
Shepshed M1 J23	<p>2500 more houses, not 500 as shown on the maps from core strategy data.</p>	Capacity		×		Maps don't reflect what MT claim			MT	
M1 J24 South Derby and Notts	<p>Strategic Rail Freight Interchange is going to create 6000 jobs with related car and freight journeys.</p> <p>Want reassurances this is being considered.</p>	Capacity	×	×		Not on map (maybe because not in area covered by this workshop)			MT	
General Maintenance		Operational								4

A46 North of Leicester	Temporary crossovers for maintenance have led to reduction in infiltration and therefore flood issues actually caused by 'maintaining' the network	Environment Operational	×						TA	1
A46 / A428	Junction will become a problem once Toll Bar is sorted out	Capacity		×					AH	4
A46 Stanks Junc	Starting to queue back onto the main carriageway of the A46, will get worse with further developments.	Capacity	×						AH	3
A46 Leek Wootton / Kenilworth	Localised flooding caused by run-off from adjacent fields.	Environment Safety	×						AH	
A47 / A5	Dodwells Bridge. Development pressures from sustainable urban extensions at Barwell and Earl Shilton.	Capacity Safety	×	×					TK	4
A5 near Dordon	Floods during sharp rainfall intensity periods.	Safety	×						JS	2
M6 Toll	Spreading strategic traffic more evenly between the existing routes and the M6 Toll would improve the operability and congestion on A5/M6. Suggestion is 'De-toll' it to encourage better use.		×						AH	5
A5 / MIRA Redgate junction	MIRA major development will cause increased problems.	Safety Capacity		×					TK	4

Breakout Session 2: what should the priorities be?

Workshop Name:	Route based strategies Nottingham Workshop: Leicester, Leicestershire, Coventry and Warwickshire.	Date: 24/09/13	Breakout Group:	Orange
Group Facilitator:	Note-taker:			
Sarah Guest	Tom McNamara			

Description of challenge / Location	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	Why is this considered to be a priority?	How does this compare to other priorities? Why? Are there any trade-offs?	Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities. Solution Type (& additional notes) Maintenance & renewals / Operational / Junction improvement / Adding capacity / New road / other	Raised by
Nb. these could be from any of the groups – not limited to the ones raised by this group	Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types	Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary	Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be.		
A5 corridor. From Daventry to Tamworth including the anticipated Rail Freight interchange.	Capacity				TK
What is the purpose of the A5? Not considered a strategic corridor.	Operational	A5 is important because it links areas of economic growth in the 'local' area. i.e. Coventry, Warwick and Leicester. Not the entire strategic road network. Economic development of area depends on the A5 functioning – it is a major employment area, MIRA etc. It has got to be made fit for purpose.		Find out what the HA consider the function of the A5 is. Maybe devolve control of the A5 from HA to local authorities?	AH
Trunk roads are the main problem in the area.	Operational Capacity	Trunk roads are the priority as Motorways are not considered to be a problem (with the exception of M42)			AH

M1 J21	Capacity	Long term problem. Growth projections in the area are significant, thought needs to be given to considering this predicted growth.			TK AH
M1 J23/24 24 – Airport traffic/access 23 – Equally as bad	Capacity Operational	This will need attention. It is going to be very important in opening up investment for the area and attracting business.			GC
M6 Toll Empty because it is overpriced.	Capacity Operational	The A5/WM conurbation is suffering from capacity issues that could be eased by vehicles using the M6 Toll, but pricing structure discourages most use.	Money. Presumably 100's of Millions to acquire from the private sector, given there is probably 30-35 year concession left on it. Benefits for the A5, and cheaper than building a new one. It is a Government issue though, not a HA one.	De-toll it. Government buy it.	AH
Leicester – Nuneaton – Coventry – Warwick – Stratford – Evesham	Operation Capacity	This is the spine of the area, the backbone of the local/regional economy and needs transport infrastructure to match.			AH
A46 Toll Bar maybe cause a problem north of it Pushing problems along the network, not dealing with them	Capacity	It is a priority to consider all of the developments together, because there is a danger of just pushing the problem along the routes to the next junction/pinch point.			AH
A46/A426 TGI Junction	Capacity	Will become an issue when A46 Toll Bar improvement is finished and traffic is unblocked and flows to this junction..			TK
Stratford to Alcester Road	Capacity Safety	Single winding carriageway not suitable for strategic road network. If this road does become more frequently used with anticipated development growth (and as a link from M1 to M5, it needs to be made fit for that purpose.		Duel Carriageway	AH
Congestion at Junctions in Warwick area eg Stanks Junction	Safety Capacity	Starting to see queuing onto the carriageway, which is a safety issue too. HA vs County councils, there is a need for joined up thinking/cooperation.			AH

<p>Maintenance A46 North of Leicester Major resurfacing resulting in the removal of the verge for cross overs. Rising flood risk (less infiltration)</p>	<p>Safety Environment Asset condition</p>	<p>This problem was created by the actions taken to maintain the carriageway. investment should not be creating problems.</p>			<p>TA</p>
<p>Strategic Signage</p>	<p>Operational</p>	<p>This should be straight forward to implement, and because it is an easy way to improve capacity it should be prioritised. There is a plan in place for diversions – use VMS to implement it more readily/effectively? Could be used to help stop huge congestion issues in local towns.</p>		<p>Make better use of VMS</p>	<p>GC</p>
<p>A5 Been forgotten about because the suspicion is that HA don't see it as a strategic route.</p>	<p>Capacity Operational</p>	<p>Perception that HA does not consider that the A5 has a strategic role, but it has a vital role to play in the local/regional economy - so this needs to be addressed.</p>		<p>Devolve responsibility from the HA to local authorities. At least make the HA declare what they see what its function is.</p>	<p>HA</p>

Breakout Session 1: what are the key challenges for the routes?

Workshop Name	Warwick University	Date:	24/09/13	Breakout Group	Red Group
Group Facilitator	Graham Stevenson	Note-taker	Amie Coleman		

Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	When does this issue become critical?			Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
			Already is	2018-21	After 2021					
Nuneaton	3000 new homes are being built to the North of Nuneaton. They are not included on the development map. This development will have a significant impact on the A5. There are 7900 homes planned within Nuneaton and Bedworth by 2028	Society and Capacity			✓	Yes - the A5 has High Vehicle Delay hours and low average speeds	None provided		SH	2
Rugby	7000 new homes and 3 schools are planned for Rugby 'Mast' development	Society and Capacity		✓		No - not within the area of consideration at this engagement event	None provided		PM	0
Gaydon	4000 dwellings planned adjacent to junction 12 of the M40, Gaydon. Junction improvements planned for the area. Planned start date 2018, completion 2040.	Society and Capacity		✓	✓	No – but developments included in development plan	None provided		PH	0
A5 Hinckley/ Nuneaton section	Problems with congestion which will only get worse with future development. The A5 is impacted due to many industrial areas, supermarkets etc. Also if the M6/ M1 are closed all of the traffic is diverted to the A5. Improvements are required from The Longshoot junction to the M69. Junction improvements are already planned for the area (SH)	Capacity and Operational	✓			Yes - this section of the A5 shows high vehicle delay hours, low average speed and a high number of casualties	None provided		RW	0

A5	The A5 is needed for freight vehicles as it is a major route. If congestion was eased along the A5 it would allow freight to make deliveries quicker, would also reduce environmental impact due to queuing freight vehicles	Capacity, operational environment	safety, and	✓		Yes - sections of the A5 show high vehicle delay hours, low average speed, a high number of casualties and poor pavement quality	None provided		RW	0
A5 Hickley	Low railway bridge - HGV's hit the bridge, causing problems on the network and railway. Is there a possibility of lowering the road in the area as large freight vehicles currently have to go through villages to avoid the low bridge (RW)? There is currently a strategy in place to put more signs before the bridge to warn freight vehicles (AJ)	Safety and operational		✓		No	None provided		SH & RW	1
A45/ A46 - Tollbar End	There are issues on the A45 and A46 for cyclists. The current Toucan crossings on the A46 in Coventry cause delays for cyclists and are not safe as motorists ignore the red lights. The Tollbar End junction improvement scheme should improve safety for cyclists (PM)	Safety		✓		No	None provided		GR	2
A46 Stratford-Upon-Avon	There have been a number of accidents involving cyclists, signs have been introduced to raise awareness of cyclists	Safety		✓		No - would be useful to show the number of casualties per cyclist on a separate map rather than total casualties per billion vehicle miles (GR)	None provided		PM	0
A46 Stratford-Upon-Avon	There is a change in lane widths between Alcester and Stratford, the carriageway reduces to a single lane. The single carriageway causes problems for drivers who get stuck behind large HGV's.	Capacity and Operational		✓		Yes - a section of the road shows high vehicle delay hours and medium average speeds	None provided		PH	0
A46 Stratford-Upon-Avon	Two employment sites are planned on the A46 on the Northern edge of Stratford-upon-Avon. Two 18 hectare sites have been set aside for development. The planned start date for both sites is 2018, completion 2030				✓	✓	No	None provided	PH	0

A46 Stratford-Upon-Avon	Need a traffic management on the A46 such as the use of traffic lights at peak times	Capacity	✓			Yes - a section of the road shows high vehicle delay hours and medium average speeds	None provided		PH	4
A5 North of Coventry	There are crossing issues for cyclists in this area. Need a segregated solution to keep cyclists safe	Safety	✓			No	None provided		GR	0
M6 Junction 3 to 4	It costs the economy if HGV's have to wait for incidents to be cleared. The M6 junctions 3 to 4 are a key issue area. Toll charges on the M6 should be lifted to enable it to be used as a diversion route after an incident has occurred	Safety, Operational and Capacity	✓			No	None provided		RW	2
A46 Stratford-upon-Avon and Alcester Junctions	Congestion issues especially during the morning peak - improvements needed	Capacity	✓			Yes - high number of casualties at the junction	None provided		PH	2
Coventry airport	The airport could expand - will cause problems on the network	Capacity			✓	No	None provided		PM	0
Ricoh Arena/ other event holders	Large events cause issues on the network. Event organisers need to better plan for large events and how they may affect the SRN. There are plans to introduce a train station at the Ricoh arena to ease the traffic around the stadium (SH). The Ricoh blocks the SRN, A444 and Nuneaton Bypass.	Safety, Operational and Capacity	✓			No - one off events	None provided		PM & SH	0
A46	The A46 has quickly developing potholes which cause problems for all road users	Safety and asset condition	✓			Yes - some sections show poor pavement quality	None provided		PM	0
Hinckley to Nuneaton	The potential impact of the MIRA upgrade is a concern. At peak times the A5 is busy the busses get re-routed and leave villages along the A5 isolated	Capacity, operational and society	✓			Yes - the A5 has High Vehicle Delay hours and low average speeds	None provided		SH	1
Hinckley to Nuneaton to Atherstone	Desire locally to cycle Hinckley to Nuneaton to Atherstone	Society and environment	✓			No	None provided		SH	1
Junction 12 and 15 of the M40	Issues with capacity, could managed motorways be introduced?	Capacity	✓			No	None provided		PM	3

North of Nuneaton	There is an Air Quality Management Area in place	Society and environment	✓			No	None provided		SH	3
Trunk roads	Crossings across trunk roads cause the most issues for cyclists (GR). Some roads are just not suitable for cyclists as they are too dangerous. Cyclists want to be on the road, need more safety implications. Want people to cycle but safety issues.	Safety	✓			No	None provided		GR & PM	0
The whole network - specifically the A5 between Rugby and Dordon	There needs to be more suitable rest areas provided for HGV's. The lay-bys are often overloaded, particularly on the A5. Magna Park off the A5 uses clamping enforcement which means that drivers park in the entrance to the park, this causes issues (RW)	Safety	✓			No	None provided		PM & RW	2
The whole network	If diversions are in place need to ensure that they are suitable for HGV's e.g. Height and weight restrictions	Safety and operational	✓			No	None provided		RW	2
The whole network	Safety cameras don't work. They aren't affective if they aren't working. The signing for the cameras needs to be consistent	Safety and Operational	✓			No	None provided		PM	1
The whole network	In some places the most direct route for cyclists between trip generators is not along HA roads but the only right of way is along HA roads. So an alternative to improving cycling conditions on the HA roads would be the construction of a cyclist/ pedestrian road on a more direct route; would require the HA to "think outside the box".	Safety and social	✓			No	None provided		GR	3
The whole network	The HA need better incident management procedures. Need the right resources in the right place. Need better planned diversion schemes. Currently it can take up to 1.5 hours to close a section of the motorway. Require the following: ISU's, Screens, resources, information on diversions and de-briefs after an incident	Safety and Operational	✓			No	None provided		PM	2

The whole network	Need to promote road user awareness. Need to explain to the public how to use systems such as managed motorways as there is evidence that motorists are using the hard-shoulder even when the scheme is not in place (signs switched off)	Safety and Operational	✓			No	None provided		PM	2
The whole network - specifically Nuneaton	Cycle lane segregation will encourage more people to travel by bike rather than using the car; it would also reduce congestion and improve air quality. There is currently an Air Quality Management Area (AQMA) around Nuneaton. Reducing the number of cars using the network in this area would improve the air quality (SH). Just using a white line to segregate cyclists from vehicles does not make them safe. Wish to promote cycle and HGV awareness (RW)	Capacity, safety, operational, society and environment	✓			No	None provided		RW	6
The whole network	Incidents on the network cause most of the issues. Enforcement tries to prevent incidents. All lane running prevents police using the hard shoulder and so more platforms are required	Safety and Operational	✓			No	None provided		PM	1
The whole network	There are concerns amongst the Police about turning the lights off on the motorways	Safety	✓			No	None provided		PM	0
Additional comments	There has been good investment in the infrastructure in the area, particularly the introduction of the managed motorways on the M6. Managed motorways improve safety and capacity.	Safety, Operational and Capacity	✓						PM	-
Additional comments	Junction 15 of the M40 (Bridge Island) has been improved greatly and reduced queues	Capacity	✓						PH	-

Breakout Session 2: what should the priorities be?

Workshop Name	Warwick University	Date:	24/09/13	Breakout Group	Red Group
Group Facilitator	Graham Stevenson	Note-taker	Amie Coleman		

Description of challenge / Location	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	Why is this considered to be a priority?	How does this compare to other priorities? Why? Is there any trade- offs?	Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.
Nb. these could be from any of the groups – not limited to the ones raised by this group *Not in order of priority	Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types	Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary	Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be.	Solution Type (& additional notes) Maintenance & renewals / Operational / Junction improvement / Adding capacity / New road / other
Wherever there is a major change to a section of the network the HA need to include segregated lanes for cyclists. For example at roundabouts cyclists currently have to use drop kerbs - not ideal (GR)	Safety and society	If a better cycle network is provided then it will encourage more people to use it as a mode of transport	Important as it will improve safety for cyclists	Could provide underpasses or bridges for cyclists at nodes as these are the most difficult part of a route
The A5 corridor, particularly through the North of Nuneaton. Problems: Congestion, Safety, Air Quality Management (SH). When an incident occurs on the motorway there is additional congestion on the A5 due to traffic been diverted. The A5 is only 1 lane wide (per direction) in some areas and so it cannot cope with the additional traffic. The congestion often results in trucks sitting in queues which causes environmental issues (RW)	Capacity, Safety and environment	There are a number of issues on the A5 which need to be resolved as they effect a large number of road users (commuters, freight and cyclists)	One of the most important priorities for the group	
Safety - need to continue to make roads safer as high impact accidents have a knock on effect on the rest of the network (diversions). Need to educate road users on signs, managed motorways etc. More safety cameras need to be introduced. Areas of particular concern: Capthorpe junction, M6 junction 2, M42/M6 Toll merge, M40 junction 15 (PM).	Safety	Important as better safety levels on the network will reduce accidents	One of the most important priorities for the group	

<p>A46 between Alcester and Stratford - single carriageway causes congestion. Do not want to see it duelled from an environmental point of view (PH) however something needs to be done about the congestion.</p>	<p>Capacity</p>	<p>Need a method to ease congestion on the A46 as current levels are not acceptable</p>	<p>Important to ease congestion on the road</p>	<p>Need a traffic management scheme on the A46 such as the use of traffic lights at peak times</p>
<p>A46/ A3400 Bishopton Hill island - there is a 5 lane roundabout planned to ease congestion. This junction is critical to the function of Stratford-upon-Avon</p>	<p>Capacity</p>	<p>Need a method to ease congestion on the A46 as current levels are not acceptable</p>	<p>Important - plans are already in place</p>	

Breakout Session 1: what are the key challenges for the routes?

Workshop Name	Birmingham	Date:	20/09/2013	Breakout Group	Blue
Group Facilitator	Alan Bain	Note-taker	Jan Gondzio		

Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	When does this issue become critical?			Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
			Already is	2018-21	After 2021					
M6 J15,16,17 Stoke	Getting on and off at junctions, especially A500(T) with M6 is difficult, leading to a constraint on economic development around the A500	Operational / Capacity	X			Yes - Peak hour speeds		GB	4	
M6 J13-19	Delays to trade traffic	Operational	X				Freight company journey times, e.g. from DHL	SG	2	
A50 east of Stoke, towards M1	Unreliable journey times; delays on important trunk route	Operational	X					SG	1	
M5/M6 interchange	Unpredictable journey times and delays due to insufficient capacity affect all users	Capacity	X					SG, AO, BD	4	
A500(T)	Lack of safe and secure stopping points/lay-bys for HGVs / freight Trucks are stuck in traffic just before they are due a break.	Safety	X					SG, BD	2	
M6	Sufficient capacity to allow development around M6	Operational	X		X		BCC: city mobility action plan – March 2014 LEP models: economic (KPMG) and transport	AO		
M6 / M6 Toll	M6 Toll empty while M6 congested	Operational	X					BD	10	

A5 to A38	Single carriageway on journey to M1 causes delays (See Delay Map)	Capacity	X			Yes - Delays		BD	2
Black Country	Poor accessibility to/from the SRN across Black Country, e.g. journey time/distance to get onto M6 from Dudley	Operational	X					BD	1
Black Country	Business relocating outside Black Country because of congestion	Society	X					BD	
i54, M6 North	Need to improve accessibility once Jaguar Land Rover plant open	Capacity		X				BD	11
Featherstone, M54-M6 link	Potential transport impact of strategic employment sites in the vicinity	Society					Study ongoing	PW	3
Whole network	Need to provide additional information to drivers to let them know where to stop if there is congestion up ahead on the network	Safety	X			n/a		SG	
Whole network	Need to ensure there is network resiliency and efficiency optimisation of the strategic/local routes. Incidents on the strategic network have knock-on effects elsewhere. The appropriate use of technology (e.g. VMS) could be provided	Operational						AO	
North Staffordshire	Need to manage the impact on the local non-strategic road network and consequences of blockages in North Staffs/ South Cheshire	Operational						GB	2
M6 J10a-6	Delays and unreliable journey times due to congestion and mix of traffic e.g. HGVs	Operational						BD	3
Whole network	Need to manage general capacity on motorways	Operational						AO	2
A5	Concerns about safety record	Safety						GB	2

M6 J8 and J7 to South	Insufficient capacity at motorway junctions	Capacity							SH	1
General	Impact of poorly maintained roads on truck tyres	Asset condition							BD	
Whole network	Congestion creates delays for freight traffic and this creates problems for HGV drivers – they cannot drive longer than the legal times	Operational							BD	
M6 / M42	<p>The LEPs' Strategic Economic Plan will have a major impact on growth and employment. This will require highway capacity, particularly on the strategic routes/junctions</p> <p>Key site is UK Central – the M42/Solihull corridor in the vicinity of M42 J5 and J6 and M6 J4</p> <p>Birmingham City Centre enterprise zone is major growth area and will affect traffic growth</p>						<p>Birmingham Mobility Action Plan outputs / analysis</p> <p>Birmingham Development Plan modelling / analysis</p> <p>Solihull MBC work on UK Central</p> <p>Birmingham Airport Surface Access work – SDG study</p> <p>Work being undertaken for GBS LGF investment packages</p> <p>GBS LTB KPMG economic development work</p> <p>Cross-LEP strategic connectivity work</p>		AO	

Breakout Session 2: what should the priorities be?

Workshop Name	Birmingham	Date:	20/09/2013	Breakout Group	Blue
Group Facilitator	Alan Bain	Note-taker	Jan Gondzio		

Description of challenge / Location	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	Why is this considered to be a priority?	How does this compare to other priorities? Why? Are there any trade-offs?	Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities. Solution Type (& additional notes) Maintenance & renewals / Operational / Junction improvement / Adding capacity / New road / other
<p>Nb. these could be from any of the groups – not limited to the ones raised by this group</p>	<p>Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types</p>	<p>Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary</p>	<p>Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be.</p>	
<p>Need to identify the appraisal criteria</p> <p>Need to identify strategic movements</p> <p>Consider the interaction between road and rail for long-distance travel</p> <p>Identify which issues are short-term (e.g. peak) vs those that are all-day</p> <p>Timescale of priorities (which are short-term vs long-term on a scale up to 2030)</p> <p>i54 / JLR / M54</p>	<p>All</p> <p>Operational</p>	<p>Need to consider what journey purposes/trips are high value and then what trips to prioritise e.g. commuting vs freight traffic</p> <p>Local trips are easier to re-route while e.g. freight can't be diverted</p>	<p>Challenge in the long term/trade off between commuting and freight traffic. What should have priority? Do they have the same value?</p> <p>Pinch-point schemes / quick wins need to keep future strategic objectives in mind but can be a good start in improving delays.</p> <p>Is there a trade-off between short term solutions that tackle congestion and answering the long term structural problems of rising car-use for example.</p>	

<p>Integration/inter-connectivity across road and rail to get goods from train to shop via road</p>		<p>Short term priority (pre 2021)</p> <p>Long term priority (post 2021)</p> <p>Further comments raised in discussion:</p> <p>Do accidents have large knock-on effect on development – should safety be put first?</p> <p>Cost of traffic congestion estimated to cost economy £4.3 billion per year (CEBR?)</p> <p>Highway management structure/processes to help economic growth</p> <p>For business to operate, you need:</p> <ul style="list-style-type: none"> - Freight movement - Business travel ease - Access to pools of people - Reliability of journey times <p>Need to assess delivery risk of projects</p> <p>Need to consider how to prioritise for different timescales with available funds</p>		
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Breakout Session 1: what are the key challenges for the routes?

Workshop Name	Greater Birmingham and Solihull, Black Country, Stoke and Staffs	Date:	20th September 2013	Breakout Group	Red
Group Facilitator	Danny Lamb	Note-taker	Oliver McLaughlin		

Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	When does this issue become critical?			Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
			Already is	2018-21	After 2021					
Network-wide	Are the traffic growth forecasts accurate enough to inform future strategies?	Capacity		x	x			GK		
Network-wide (related to supply chain)	Does the RBS process adequately understand the needs and locations of current major employers? Most of the future jobs growth will come from existing employers such as Jaguar Land Rover and JCB. The RBS evidence needs to cover existing employers particularly those that use/rely on the strategic network for access to their supply chain.	Capacity	x		x	Yes	More evidence can be provided by LAs and LEPS e.g. Stoke City Deal report	PD	5	
Junction 15 (M6)	Traffic can be delayed and create unreliable journey times. Route management should be more focused on problem areas. There is a need for VMS to tell people to avoid M6 J15 when there are problems	Operational	x					PD		

A38 Lichfield Burton	Traffic delays create unreliability. There is a need for VMS/better traffic information to inform people about problems on the A38 so they can avoid the area or choose an alternative route/time.	Operational	x						EB	
M6 Toll	Under utilised due to prices. Suggestion that casualties on the A5 may relate to HGVs not using the toll due to pricing	Capacity Safety	x				Enquiry into M6 toll – reports being produced. Long term evidence already available.		EB/ AK/ PD	5
A50/A500 North	The route carries circa 50% of through traffic. The route severs the Stoke conurbation, as there are limited crossing points and limited opportunities for sustainable modes	Safety Society	x				Vulnerable users study (Stoke City Council/Sustrans)		AK	
M42 J6	Runs at 98% capacity and is often gridlocked. Not seasonal – remains constant. Concerns for future Solihull Gateway/Airport expansion.	Capacity	x				Anecdotal evidence from NEC; Arup study/gateway research		GM	3
Stafford	Growth plans for 10,000 houses will create additional transport demand. It is unlikely all the residents will work in Stafford so this will add pressure to the strategic network during peak periods for commuting traffic	Capacity		x					GK	
Birmingham	Need to address the impact that high levels of transport movements have on noise/air quality/ light pollution	Society & Environment	x				CPRE Studies; CPRE study demonstrated level of light pollution, this has not been updated for 8 years		GK	
A5	Perception that poor highway standards create HGV accidents at junctions	Safety	x						PD	

A38	Lack of slip roads can create safety issues.	Safety	x			Yes	Local Authority accident data		AK	
A50	Accidents caused by short slip roads. This creates traffic delays/congestion as the incidents are managed by local police, not HA traffic officers	Safety	x			Yes – accident data displayed on map/			AK	
Lichfield Trent Valley Station	Potential for people to shift to under-utilised rail mode. Better information could direct users to station.	Capacity	x						PD	
A500	Congestion at peak times could be alleviated with better traffic information/VMS	Capacity/Safety/Operational	x				North Staffs connectivity study		PD	5
M6 Junction 6-10	Traffic is diverted onto the local highway network during the peak hours due to congestion on M6	Capacity	x						PD/ AK	6
Key routes M6, M6 Toll, M42, M54, A38, A50	<p>There is a common challenge across the network to provide more/better/reliable/real time information about incidents and delays on the strategic routes.</p> <p>The consequences of congestion affect a wide range of issues including journey time reliability which has a knock on effect on business activity.</p> <p>It also adversely affects air quality with vehicles stuck in traffic.</p> <p>Opportunity to prioritise HGV movements.</p>		x							

A38 Fradley. HGVs queuing on to carriageway	Capacity Issues at junction with Fradley – HGVs queuing on to carriageway	Capacity	x							2
General	Adopted and emerging Core Strategies should be included in evidence base.				x	Yes				
General	HS2 may provide some opportunities for mode shift in some places and this could alleviate pressure on the HA network. But some areas will be marginalised/disadvantaged.						KPMG HS2 report			AK

Breakout Session 2: what should the priorities be?

Workshop Name	Greater Birmingham and Solihull, Black Country, Stoke and Staffs	Date:	20th September 2013	Breakout Group	Red
Group Facilitator	Danny Lamb	Note-taker	Oliver McLaughlin		

Description of challenge / Location	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	Why is this considered to be a priority?	How does this compare to other priorities? Why? Are there any trade-offs?	Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.
Better traffic management in Staffordshire/Stoke City Deal locations This includes better information/VMS/incident management to reduce congestion and improve journey time reliability on A38/A500/A50	Safety Capacity	Access to jobs – current and future employment e.g. JCB. Everyone in agreement	Priority is to deal with current issues to enable businesses to support the economy	Controlling flow and increasing safety
M42 Gateway/UK Central is very important for supporting local economy, including M42 J6	Capacity	Need for economic growth in area can be supported at NEC/Airport/Solihull. GM		
Strategic road network through Birmingham	Maintenance	Asset management neglected over long period.		
To reduce congestion and improve reliability/resilience there is a need for better incident management/reliable real time traffic information/VMS and more traffic officers	Operational Safety	Whole group agreed this is a priority – to keep the routes running and reducing adverse impacts of congestion/delays		

M6 Toll underutilisation		Distribution of HGVs needs to be managed in order to increase safety/relieve congestion. All in agreement	Increasing the patronage of the M6 Toll will help alleviate many of the other issues detailed above.	Can toll for HGVs be reduced?
Need to encourage more people to change travel behaviour and mode shift off the strategic routes	Capacity	Expansion of the strategic network will encourage more road users. Mode shift will help to reduce congestion and pollution issues. GK		

Route-based strategies stakeholder events

Breakout Session 1: what are the key challenges for the routes?

Workshop Name	Birmingham	Date:	20th September 2013	Breakout Group	Yellow
Group Facilitator	Sarah Loynes	Note-taker	Derek Jones		

Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	When does this issue become critical?			Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
			Already is	2018-21	After 2021					
A50 JCB Uttoxeter and growth on A50 corridor generally	Rocester junction is not adequate for future growth. Concern that there is no strategy for A50. Not all employment sites are shown on HA map	Capacity		x	x	No	Scheme funding report	WS to provide scheme funding report. JCB can provide evidence	WS	8
A5 Staffordshire Area	Single carriageway sections create congestion	Capacity	x			Yes	A5 Strategy	HA has this document (Ominder Bharj)	WS	
Major employment sites; I54 in South Staffs, Alton Towers, JCB	RBS needs to take account of future plans for economic growth	Capacity		x	x	Yes	-	-	WS	
Motorway sections	Need to address the impact of noise on local residents due to the volume of traffic travelling on the motorway	Society & Environment	x			No	-	-	MC	
M5 J1 & J2. M6 J9 & J10	Need to address the consequences of congestion at these junctions	Capacity	x			Yes	Report re M6 Toll Free Lorry Trials	Ann Morris – Road Haulage Association	AM	

A49 Improvement Opportunity	The A49 could provide an opportunity to relieve traffic issues on M6	Capacity	x			No	-	-	AM	
Black country route approach to M6 J10	The area is already heavily congested and future development opportunities are likely to impact further on the road network	Capacity	x	x	x	No	-	-	AM	1
A50	To improve safety there is a need to close lay-bys	Safety	x			No	-	-	AM	
All; and in particular the M6	Need to improve air quality, therefore need to reduce congestion. Air quality needs research and monitoring	Society and Environment	x			Yes	-	-	AM C/M C	10
M6 J10, J9, J8, M5 J1, J2.	Traffic congestion and slow speeds affect public health issues (air quality). M6 creates severance and air quality issues on the east side of the M6 section	Capacity and Society and Environment	x	x	x	Yes- some	Information re growth and jobs and air quality action plan	Mark Corbin – Walsall Council	MC	
M5 J6	Need to accommodate development growth in Bromsgrove and Redditch	Capacity and Society and Environment		x	x	Yes - some	Transport Network Analysis and Mitigation Report (Halcrow/WCC May 2013); Air Quality Reports, AQMA M42 J1, AQMA Town Centre	Rosemary Williams – Bromsgrove District Council	RW	
M42 closures and diversion routes	Diversion routes cause issues on A38 on local road network	Capacity	x			Yes - some	Transport Network Analysis and Mitigation Report (Halcrow/WCC May 2013); Air Quality Reports, AQMA M42 J1, AQMA Town Centre	Rosemary Williams – Bromsgrove District Council	RW	
M6 corridor	Need to address the impacts on Enterprise Zone and future job creation in the area; employment growth and housing growth	Capacity		x	x	Yes	-	-	MC	3
A38 Fradley	Inadequate substandard junction at Fradley Village	Safety	x			No	A38 Pell Frischmann Modular Road Report	Held by HA – Ominder Bharj	WS	

Area Wide	Strategic network diversion routes impact on the local roads – need to consider how diversions should work in future	Capacity	x			No	-	-	MC	
M6 J15-J16	ATM will be provided in the surrounding sections why not this section?	Operational		x		No	-	-	WS	
A5 AQMA Bridgetown (Cannock)	The issues could have been resolved by the proposed HA pinchpoint scheme, but it was not taken forward. AQMA concerns remain	Society and Environment	x	x	x	No	-	-	WS	1
ATM Areas	Need to improve the relationship between ATM and local road network - sudden changes in signage type and understanding of this	Operational	x			No	-	-	MC	
ATM Areas	Public do not understand ATM so their driving behaviour causes congestion	Operational	x			No	-	-	AM	
ATM Areas	Need to consider and manage the effect of ATM on local roads and traffic volumes	Capacity	x			No	-	-	MC	
ATM Areas	Need to manage ATM. When signs are left on 'for no reason' this causes unnecessary congestion. Signs need to be reset faster	Operational Capacity	x			No	-	-	AM	
All Motorway	Need to manage the disruption created by continued roadworks	Operational	x			No	-	-	AM	
Bilston	Bilston Urban Village missing from map	Other	x			No	-	-	AM	

M6 J9/J10	Economic activity and general access to area is adversely affected by congestion	Capacity	x			Yes	-	-	MC	7
M6 Elevated Sections	Noise on elevated motorway sections of M6	Society and Environment	x			No	Noise Mapping	Mark Corbin – Walsall Council	MC	
Bromsgrove Area SRN	Air Quality Issues	Society and Environment	x			No	Air Quality Report	Rosemary Williams – Bromsgrove District Council	RW	
All Areas	Safety can be improved with concrete central reservations	Safety	x			No	-	-	AM	
A5 Cannock Area	Need to address safety issue	Safety	x			Yes	Year 2009 Staffordshire County Council Report	Will Spencer- Staffordshire County Council	WS	
M6T	M6T could provide more capacity and relieve congestion if it was not tolled/changed ownership	Capacity	x			No	-	-	AM C	
M6T	M6 experience congestion as the M6T is under utilised	Capacity	x			Yes	-	-	WS	1
All HA routes	Opportunity for HA to act in relation to the provision of electric charging points	Society and Environment	x	x	x	No	-	-	AM C	
M6 J15 Stoke	Safety Issue	Safety	x			Yes	-	-	WS & AM	
M5/M42 Bromsgrove Area	SRN capacity needs to facilitate growth. Site are still to be allocated (e.g. for 2500 homes)	Capacity		x	x	No	-	-	RW	
M5/M6 to west of Birmingham	Would congestion on M5/M6 be alleviated with the provision of a western relief road?	Capacity	x			Yes – in terms of existing capacity issue	-	-	AM	

M42 J1.	Problems on motorway means that traffic diverts through Bromsgrove along A38 southwards to rejoin M5 at M5 J5. This causes local congestion and air quality issues	Capacity Environment	x	x	x	Yes – in terms of existing capacity issue	-	-	RW	6
M5 J1 & J2	Need to address the adverse impacts of congestion at these junctions i.e. delays, unreliable journey times	Capacity	x	x	x	Yes	-	-	AM	3
Birmingham Motorway box	To support the activity and performance of the West Midlands the Motorway Box should run freely	Capacity	x	x	x	Yes – in terms of existing capacity issue	-	-	AM	2

Route-based strategies stakeholder events

Breakout Session 2: what should the priorities be?

Workshop Name	Birmingham	Date:	20th September 2013	Breakout Group	Yellow
Group Facilitator	Sarah Loynes	Note-taker	Derek Jones		

Description of challenge / Location	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	Why is this considered to be a priority?	How does this compare to other priorities? Why? Are there any trade-offs?	Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.
Nb. these could be from any of the groups – not limited to the ones raised by this group	Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types	Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary	Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be.	Solution Type (& additional notes) Maintenance & renewals / Operational / Junction improvement / Adding capacity / New road / other
M6 J10	Capacity	Development Growth – Enterprise Zones aspirations and poor existing situation re delays	MC – but noted importance of other issues as well	Needs large scale improvement
A5 in Staffordshire	Capacity Safety	Growth aspirations	Based on evidence presented in Staffordshire Area – WS	
Birmingham Motorway Box	Capacity	Affects performance of whole region	AM	
A50 Uttoxeter	Capacity Safety	JCB Growth Aspirations	Based on evidence presented in Staffordshire Area – WS	
M42 J1. Problems on motorway means that traffic diverts through Bromsgrove along A38 southwards to rejoin at M5 J5. This causes local congestion and air quality issues	Capacity	Likely to be exacerbated by significant future growth i.e. Bromsgrove 7000 homes, Redditch 7000 homes, Birmingham 30,000 homes (shortfall). Bromsgrove is 90% greenbelt, an attractive place to live and located centrally for business. This creates pressures for development	RW	

A5 Cannock Area	Safety	Significant safety issues to be resolved	AMC	
M6 J9	Safety	Pedestrian safety - school crossing route	MC	
M5 J1/J2	Capacity	Current capacity issues to be exacerbated by growth	MC/AM	
M6 J15-J16, for continuity should be ATM	Safety	For continuity/safety as is a 'missing link' of ATM	AM	
Resurfacing in urban areas to be prioritised to reduce road noise to receptors	Safety	Priority to urban areas as greater number of receptors	MC	

Breakout Session 1: what are the key challenges for the routes?

Workshop Name	Birmingham	Date:	20th September 2013	Breakout Group	Green
Group Facilitator	Lee White	Note-taker	Anthony Hogan		

Relevant RBS	Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	When does this issue become critical?			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
				Already is	2018-21	After 2021					
North and East Midlands	A50 JCB Uttoxeter and growth on A50 corridor generally	Rocester junction is not adequate for future growth. Concern that there is no strategy for A50. Not all employment sites are shown on HA map	Capacity		x	x	No	Scheme funding report	WS to provide scheme funding report. JCB can provide evidence	WS	8
South Midlands	A5 Staffordshire Area	Single carriageway sections create congestion	Capacity	x			Yes	A5 Strategy	HA has this document (Ominder Bharj)	WS	
London to Scotland West Midlands to Wales and Gloucestershire	Major employment sites; I54 in South Staffs, Alton Towers, JCB	RBS needs to take account of future plans for economic growth	Capacity		x	x	Yes	-	-	WS	
All	Motorway sections	Need to address the impact of noise on local residents due to the volume of traffic travelling on the motorway	Society & Environment	x			No	-	-	MC	
London to Scotland West	M5 J1 & J2. M6 J9 & J10	Need to address the consequences of congestion at these junctions	Capacity	x			Yes	Report re M6 Toll Free Lorry Trials	Ann Morris – Road Haulage Association	AM	
London to Scotland West Midlands to Wales and Gloucestershire	A49 Improvement Opportunity	The A49 could provide an opportunity to relieve traffic issues on M6	Capacity	x			No	-	-	AM	
London to Scotland West	Black country route approach to M6 J10	The area is already heavily congested and future development opportunities are likely to impact further on the road network	Capacity	x	x	x	No	-	-	AM	1
North and East Midlands	A50	To improve safety there is a need to close lay-bys	Safety	x			No	-	-	AM	
London to Scotland West	All; and in particular the M6	Need to improve air quality, therefore need to reduce congestion. Air quality needs research and monitoring	Society and Environment	x			Yes	-	-	AMC/MC	10

London to Scotland West	M6 J10, J9, J8, M5 J1, J2.	Traffic congestion and slow speeds affect public health issues (air quality). M6 creates severance and air quality issues on the east side of the M6 section	Capacity and Society and Environment	x	x	x	Yes- some	Information re growth and jobs and air quality action plan	Mark Corbin – Walsall Council	MC	
Birmingham to Exeter	M5 J6	Need to accommodate development growth in Bromsgrove and Redditch	Capacity and Society and Environment		x	x	Yes - some	Transport Network Analysis and Mitigation Report (Halcrow/WCC May 2013); Air Quality Reports, AQMA M42 J1, AQMA Town Centre	Rosemary Williams – Bromsgrove District Council	RW	
South Midlands	M42 closures and diversion routes	Diversion routes cause issues on A38 on local road network	Capacity	x			Yes - some	Transport Network Analysis and Mitigation Report (Halcrow/WCC May 2013); Air Quality Reports, AQMA M42 J1, AQMA Town Centre	Rosemary Williams – Bromsgrove District Council	RW	
London to Scotland West	M6 corridor	Need to address the impacts on Enterprise Zone and future job creation in the area; employment growth and housing growth	Capacity		x	x	Yes	-	-	MC	3
South Midlands	A38 Fradley	Inadequate substandard junction at Fradley Village	Safety	x			No	A38 Pell Frischmann Modular Road Report	Held by HA – Ominder Bharj	WS	
All	Area Wide	Strategic network diversion routes impact on the local roads – need to consider how diversions should work in future	Capacity	x			No	-	-	MC	
London to Scotland West	M6 J15-J16	ATM will be provided in the surrounding sections why not this section?	Operational		x		No	-	-	WS	
South Midlands	A5 AQMA Bridgetown (Cannock)	The issues could have been resolved by the proposed HA pinchpoint scheme, but it was not taken forward. AQMA concerns remain	Society and Environment	x	x	x	No	-	-	WS	1
London to Scotland West	MM Areas	Need to improve the relationship between MM and local road network - sudden changes in signage type and understanding of this	Operational	x			No	-	-	MC	

London to Scotland West	MM Areas	Public do not understand MM so their driving behaviour causes congestion	Operational	x			No	-	-	AM	
London to Scotland West	MM Areas	Need to consider and manage the effect of MM on local roads and traffic volumes	Capacity	x			No	-	-	MC	
London to Scotland West	MM Areas	Need to manage MM. When signs are left on 'for no reason' this causes unnecessary congestion. Signs need to be reset faster	Operational	x			No	-	-	AM	
All	All Motorway	Need to manage the disruption created by continued roadworks	Operational	x			No	-	-	AM	
London to Scotland West	Bilston	Bilston Urban Village missing from map	Other	x			No	-	-	AM	
London to Scotland West	M6 J9/J10	Economic activity and general access to area is adversely affected by congestion	Capacity	x			Yes	-	-	MC	7
London to Scotland West	M6 Elevated Sections	Noise on elevated motorway sections of M6	Society and Environment	x			No	Noise Mapping	Mark Corbin – Walsall Council	MC	
London to Scotland West Birmingham to Exeter	Bromsgrove Area SRN	Air Quality Issues	Society and Environment	x			No	Air Quality Report	Rosemary Williams – Bromsgrove District Council	RW	
All	All Areas	Safety can be improved with concrete central reservations	Safety	x			No	-	-	AM	
South Midlands	A5 Cannock Area	Need to address safety issue	Safety	x			Yes	Year 2009 Staffordshire County Council Report	Will Spencer-Staffordshire County Council	WS	
South Midlands	M6T	M6T could provide more capacity and relieve congestion if it was not tolled/changed ownership	Capacity	x			No	-	-	AMC	
South Midlands	M6T	M6 experience congestion as the M6T is under utilised	Capacity	x			Yes	-	-	WS	1
All	All HA routes	Opportunity for HA to act in relation to the provision of electric charging points	Society and Environment	x	x	x	No	-	-	AMC	
London to Scotland West	M6 J15 Stoke	Safety Issue	Safety	x			Yes	-	-	WS & AM	
London to Scotland West Birmingham to Exeter	M5/M42 Bromsgrove Area	SRN capacity needs to facilitate growth. Site are still to be allocated (e.g. for 2500 homes)	Capacity		x	x	No	-	-	RW	
London to Scotland West	M5/M6 to west of Birmingham	Would congestion on M5/M6 be alleviated with the provision of a western relief road?	Capacity	x			Yes – in terms of existing capacity issue	-	-	AM	
London to Scotland West	M42 J1.	Problems on motorway means that traffic diverts through Bromsgrove along A38 southwards to rejoin M5 at	Environment	x	x	x	Yes – in terms of existing capacity issue	-	-	RW	6

		M5 J5. This causes local congestion and air quality issues									
London to Scotland West	M5 J1 & J2	Need to address the adverse impacts of congestion at these junctions i.e. delays, unreliable journey times	Capacity	x	x	x	Yes	-	-	AM	3
London to Scotland West	Birmingham Motorway box	To support the activity and performance of the West Midlands the Motorway Box should run freely	Capacity	x	x	x	Yes – in terms of existing capacity issue	-	-	AM	2

Breakout Session 2: what should the priorities be?

Description of challenge / Location	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	Why is this considered to be a priority?	How does this compare to other priorities?	Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities. Solution Type (& additional notes) Maintenance & renewals / Operational / Junction improvement / Adding capacity / New road / other
M6 J10	Capacity	Development Growth – Enterprise Zones aspirations and poor existing situation re delays	MC – but noted importance of other issues as well	Needs large scale improvement
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A50 Uttoxeter	Capacity / safety	JCB Growth Aspirations	Based on evidence presented in Staffordshire Area – WS	
M42 J1. Problems on motorway means that traffic diverts through Bromsgrove along A38 southwards to rejoin at M5 J5. This causes local congestion and air quality issues	Capacity	Likely to be exacerbated by significant future growth i.e. Bromsgrove 7000 homes, Redditch 7000 homes, Birmingham 30,000 homes (shortfall). Bromsgrove is 90% greenbelt, an attractive place to live and located centrally for business. This creates pressures for development	RW	
A5 Cannock Area	Safety	Significant safety issues to be resolved	AMC	
M6 J9	Safety	Pedestrian safety - school crossing route	MC	
M5 J1/J2	Capacity	Current capacity issues to be exacerbated by growth	MC/AM	
M6 J15-J16, for continuity should be ATM	Safety	For continuity/safety as is a 'missing link' of ATM	AM	
Resurfacing in urban areas to be prioritised to reduce road noise to receptors	Environment	Priority to urban areas as greater number of receptors	MC	
Need to increase use of M6T	Capacity	Everyone in group in agreement	No other viable solution to Midland congestion - seems ludicrous to have the infrastructure in place but not use it	

Route-based strategies stakeholder events

Breakout Session 1: what are the key challenges for the routes?

Workshop Name	Cheshire	Date:	24th September 2013	Breakout Group	Table 1
Group Facilitator	Mike Sinnott	Note-taker	Frank Mohan		
Attendees – Dave Evans (NMWTRA), Kevin Carrol (CWAC), Alan Dickin (Warrington BC), Richard Wright (High Legh PC), Ian Draycott (Mersey Gateway), Jane Deans (Brereton PC)					

Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	When does this issue become critical?				Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by*	Number of sticky dots received
			Already is	Pre 2018	2018-21	After 2021					
Area wide	Getting the right message to motorway drivers about the scale of delays ahead and what the delay might be if they divert to the local authority network.	Operational	X				No	Impact on, for example, Warrington road network if delay / diversion signs on M6 Thelwall.	AD to try and collate suitable data from WBC control centre.	AD	
Area wide	Availability of suitable diversion routes for motorway traffic in event of an incident.	Operational	X				No	As above.	As above.	AD	
Area wide	Credibility of VMS information; particularly time for delay signs to clear when motorway is free flowing.	Operational	X				No	Anecdotal.		RW	
M56 / M53 / M6	How to accommodate / manage new routes taken by motorway traffic once Mersey Gateway opens.	Capacity Operational			x	x	No			ID	
Area wide	Maintenance regime – short lifespan of SMA (7 years) is a false economy due to ongoing need to repairs.	Asset Condition Operational	x	x	x	x	No	Resurfacing failing early. Compare to regime adopted by DBFO / PFI who adopt HRA as standard.		KC	
Area wide	Maintaining up to date information on status / scale of developments.	Capacity Operational		x	x	x	Partially			ID	

Area wide	Incident clearance times – balance seems to be biased against operational considerations.	Operational	x				No				ID KC
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Route-based strategies stakeholder events

Breakout Session 2: what should the priorities be?

Description of challenge / Location	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	Why is this considered to be a priority?	How does this compare to other priorities? Why? Are there any trade-offs?	Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.
Nb. these could be from any of the groups – not limited to the ones raised by this group	Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types	Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary	Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be.	Solution Type (& additional notes) Maintenance & renewals / Operational / Junction improvement / Adding capacity / New road / other
M6 through Cheshire and Warrington	Capacity Operational Safety	Clear evidence of problems from data sources. Impact felt across many neighbouring authorities as traffic seeks to avoid M6. No network resilience.	Scale and geographical coverage of adverse impacts.	Managed motorways. Individual junction assessments. Need to look over very wide area to capture impacts.
A556 / M56 approaches to Manchester	Capacity Operational Safety	Clear evidence of problems from data sources.		Need to consider wider area alternatives e.g. role / function of A34.
M62 J9 (M6 J21a) & J8	Capacity Operational	J9 is a key junction on the motorway network as it links M6 and M62. J8 provides access to major employment area.		
M6 J21 to J19	Capacity Operational			
M6 / M56 Junction	Capacity Operational	Key junction on the motorway network as it links M6 and M56.		
M6 J17	Capacity Operational	Existing problems plus impacts of proposed developments and infrastructure.		

Route-based strategies stakeholder events

Breakout Session 1: what are the key challenges for the routes?

Workshop Name	Cheshire & Warrington	Date:	24th September 2013	Breakout Group	Table 2
Group Facilitator	Kristian Marsh	Note-taker	Jonathan Parsons		
Attendees – Malcolm Bingham (FTA), Stephen Rimmer (Halton BC), Lillian Burns (CPRE & NW TAR), Andrew Ross (C&W LEP & Cheshire East Council), Martin Wood (BIS NW), Peris Jones (Welsh Government)					

Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	When does this issue become critical?				Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by*	Number of sticky dots received
			Already is	Pre 2018	2018-21	After 2021					
M6 Corridor (Cheshire East)	Maintaining flow and access for travel within the NW and further afield.	Capacity	x				Yes (Pinchpoint locations)	-	-	AR	
Crewe to The Potteries	Improvements to the local road network required to maintain this link and access	Asset Condition	x				No	-	-	AR	
Importance of a strategic network for freight	Importance of a reliable network	Operational Safety /	x				No	-	-	MB	
Lack of Managed Motorways by Stoke (M6 Junction 15)	Potential bottleneck on the network with planned schemes either side of this location	Capacity			x	x	No	-	-	AR	
Airport City	Impact on corridors – M56 / M60 / A34 – South Manchester / North Cheshire	Operational Capacity /		x	x	x	No	-	-	AR	
M6 Junction 16	One way problem accessing the Junction from A500 Barthomeley Link	Operational	x				No	-	-	LB	

No Rail links on maps	-	-					No	-	-	LB
Freight Interchanges / Multi-modal	Access to freight interchanges and maintaining reliable links to them	Operational	x	x	x	x	No	-	-	MB / AR
North West	Air / noise pollution – Impact on communities	Environmental Society /	x				Yes (Partially)	DEFRA maps	-	LB
North West	Controlling of speed through average speed cameras	Capacity / Environmental Safety /	x	x	x	x	No	-	-	LB
North West (M6)	Incident management and response times. Impact on reliable journey times and investment in diversion routes. Low bridge on Sutton Weaver bridge (diversion route)	Operational	x				No	-	-	SR
Data Issues	Access to the datasets of information as a consequence of incidents and diversions	Operational Safety /	x	x	x	x	No	-	-	MB
Incidents on SRN	Use of red diesel as a cause of incidents / accidents. Can the HA enforce sanctions on offenders?	Safety	x				No	HA Road Users / Environment Committee (18 months ago)	KM (HA)	LB
North West	Ensure growth aspirations are considered	Capacity / Operational			x	x	Yes	-	-	MW
Cheshire & Warrington	Prioritisation of funding in this location due to a thriving economy	Operational	x	x	x	x	No	-	-	AR
North West	Potential for more VMS on M53 & M56	Operational	x				No	-	-	SR

Route-based strategies stakeholder events

Breakout Session 2: what should the priorities be?

Description of challenge / Location	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	Why is this considered to be a priority?	How does this compare to other priorities? Why? Are there any trade-offs?	Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities. Solution Type (& additional notes) Maintenance & renewals / Operational / Junction improvement / Adding capacity / New road / other
Nb. these could be from any of the groups – not limited to the ones raised by this group	Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types	Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary	Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be.	
The SRN is the strategic road network, and should be maintained as such	Asset Condition / Operational	Network condition and operation		
Average Speed Cameras & VMS (Technology)	Operational / Environmental / Society (Air & Noise)	Keep the network moving. Journey time reliability. Air Pollution & Noise	60mph speed enforcement via cameras. Responsive speeds to network conditions.	
A550 to The Potteries	Operational (A500 dualling west of M6)	Access to development sites & maintain strategic access		
Second Mersey Crossing	Operational	Facilitation of impacts of the Mersey Crossing on M56 (Junction 11 & 12 – as well as proposed Junction 11a)		
Accessibility of Chester & Deeside to the M6 Corridor	Operational	Need to enable this part of the North West to access the M6 easily.	Potential trunking of the A41?	
Signage of Northwich and Chester	Asset Condition	Inconsistent signage of these locations on the SRN		
M6 Junction 14 – Junction 16 M6 (No Managed Motorways planned)	Operational	Potential for bottlenecks due to inconsistent infrastructure proposals		
Importance of the M6	Capacity	Journey time reliability		
Heysham & Port of Liverpool	Operational	Access to ports is very important to industry & network resilience of these links.		

Table Priorities – Journey Time Reliability, M6 Corridor, Technology & Network Resilience

Route-based strategies stakeholder events

Breakout Session 1: what are the key challenges for the routes?

Workshop Name	Cheshire	Date:	24th September 2013	Breakout Group	Table 3
Group Facilitator	Dave Dickinson	Note-taker	Fiona Soutar	Attendees	David Peel – Welsh Government Richard Flood – Cheshire West and Chester Council Julie Barnes – Wirral Council Ian Hodgson – Mere Parish Council

Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	When does this issue become critical?				Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
			Already is	Pre 2018	2018-21	After 2021					
All	General consensus amongst attendees that the maps are generally accurate and represent existing conditions. RF can provide exact locations of proposed developments in Chester West. Some proposed developments missing from map: <ul style="list-style-type: none"> • Airport City • Wirral Waters 						Exact locations of proposed developments. Wirral Waters modelling data available	RF - development locations in Cheshire West. JB – modelling data for Wirral Waters.	All		
M6 J19	Congestion and high accident record experienced at junction. Reported to experience the highest accident rate in the country.	Safety Capacity	X				Yes		IH		

M6 J15 to J20	Accident and incident hot spot. Accidents / incidents along the M6 cause congestion and encourage drivers onto the local highway network. This results in congestion on the local highway network.	Safety	X				Partially. Maps identify accidents, but not incidents. Mapping should be expanded.	Incident records.	HA should have statistics available.	IH
Mersey Gateway	Area is currently a pinchpoint. Proposed Mersey Gateway scheme will form a relief road to the A556 and M6.	Capacity	X				No – Mersey Gateway is not marked on maps.	Planning data available for Mersey Gateway.		IH
M6	Signing is an issue. Signing to North Wales and Chester encourages drivers onto the local highway network before it is required. Improved signage is required to keep traffic on the SRN for longer.	Operational	X				No	HA's signing strategy.		RF
M56 J7 M6 J19	Congestion and air pollution experienced between and around these junctions. To improve air quality, congestion needs to be addressed. Noise is less of an issue due to car technology.	Environment Capacity	X				Yes	Cheshire East Council are monitoring air quality around these junctions. Air quality monitoring stations exist at Mere and Bucklow Hill crossroads.		IH
M6 between junction with A500 and J20	Increased capacity provided through introduction of hard shoulder running.	Capacity	X				No			RF
Cheshire	Poor pavement condition and repair speed, particularly since the new Area 10 contract has been implemented. Potholes are an issue.	Asset condition	X				No			RF
Cheshire	A number of junctions are coming to the end of their life.	Asset condition	X				No			RF / IH

Route-based strategies stakeholder events

Breakout Session 2: what should the priorities be?

Workshop Name	Warrington	Date:	24th September 2013	Breakout Group	Table 3
Group Facilitator	Dave Dickinson	Note-taker	Fiona Soutar	Attendees	David Peel – Welsh Government Richard Flood – Cheshire West and Chester Council Julie Barnes – Wirral Council Ian Hodgson – Mere Parish Council

Description of challenge / Location	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	Why is this considered to be a priority?	How does this compare to other priorities? Why? Are there any trade-offs?	Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.
Nb. these could be from any of the groups – not limited to the ones raised by this group	Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types	Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary	Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be.	Solution Type (& additional notes) Maintenance & renewals / Operational / Junction improvement / Adding capacity / New road / other
Asset condition and maintenance are considered to be a high priority.	Asset condition	Maintaining assets in good condition is considered important to ensure ease of use, journey time reliability and to help minimise / manage future problems. DP and RF lead this discussion.	Maintenance of existing infrastructure and facilities is considered to be a higher priority than new development.	Maintenance regimes should be planned for new infrastructure at the design stage. These maintenance regimes should be agreed in partnership between Local Authorities and the HA. Maintenance down-time should be planned in partnership with Local Authorities.
There is a careful trade-off between allowing new development and congestion levels. Some level of additional congestion is considered appropriate to enable development to come forward. These two issues are closely interconnected.	Capacity	New development is important to enable economic growth and to ensure the Government's growth targets are met. However, growth needs to be carefully managed to ensure traffic growth will not result in an unacceptable level of congestion. Some level of additional congestion is considered acceptable to enable growth to be achieved. Congestion always has to remain at an acceptable level.	Growth and economic development must be allowed, but not at the cost of unacceptable levels of congestion.	Government policy will dictate growth targets.

		JB lead this discussion.		
Importance of NW in relation to other regions	Management	RF queried how the North West was prioritised in comparison to other regions in the UK.		
M6 in Cheshire	Capacity	Lack of capacity results in congestion. The capacity issues experienced impact on development planning and future developments. IH and RF lead this discussion.	Questions were raised over whether congestion issues should be addressed now, or dealt with in the future (when they come to fruition). If left, they will be more difficult and expensive to deal with.	
Safety on the highway network is a high priority	Safety	IH / DP / JB lead this discussion.	Safety was agreed as the highest priority overall. It is a higher priority than speed and journey time reliability.	
Environmental issues are lower priority	Environment	Car and fuel technology contribute to improved environment. This is considered to have greater impact than highway schemes or other influences on emissions.	If congestion is reduced, this will contribute towards lower pollution. Congestion is therefore a higher priority than environmental issues.	
Development /improvements in industrial areas are considered higher priority than in rural areas.	Society	Government policy dictates that development / improvements should be prioritised in areas with highest demand for travel. DP lead this discussion.	Industrial / built-up areas are higher priority than rural locations. However, this also depends on local conditions. It is very difficult to apply generic policies / scenarios. In some locations, improvements in locations where lower demand for travel exist should be prioritised above high demand for travel locations.	
A careful balance needs to be made between building new developments and providing infrastructure.	Operational Management /	Local Authorities have been asked to support new development. HA has been asked to enable development. The need for any new development needs to be carefully considered, and development prioritised in areas of highest need. Need should be identified through discussions with Local Authorities, and through local plans. More timely collaboration between HA and Local Authorities is also required. Group discussion, all attendees contributing equally.	Local Authorities should take the lead in development planning and control, as they have a better understanding of the need for the development.	More joined-up-thinking and greater collaboration between Local Authorities and HA is required.
Greater collaboration and consideration of the interface between the SRN and local highway network is required.	Operational Management /	Consideration needs to be given to the entire journey, not just the element undertaken on the SRN or local roads. HA needs to work more closely with Local Authorities when planning work and new developments on		

		SRN.		
<p>OVERALL PRIORITIES:</p> <p>1 – Safety</p> <p>2 – Asset Condition</p> <p>3 – Flexibility with development schemes / proposals. The need for development should be carefully identified and managed. A planned improvement may need to be reduced in priority to enable another scheme which supports development with a greater economic benefit.</p>				

Route-based strategies stakeholder events

Breakout Session 1: what are the key challenges for the routes?

Workshop Name	Lancashire	Date:	26 ^h September 2013	Breakout Group	Table 1
Group Facilitator		Note-taker	Jonathan Addy		
<p>Attendees – Mike Cliffe (Blackburn with Darwen Council), Mark Sims (Fylde Borough Council), Ken Dodsworth (Greenhalgh with Thistleton Parish Council), Simon Prideaux (Hyndburn Borough Council), Simon Emery (Lancashire County Council), Audrey Jenkins (Resident & Thornton Action Group)</p>					

Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition / Operational Society Environment &	When does this issue become critical?				Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by*	Number of sticky dots received
			Already is	Pre 2018	2018-21	After 2021					
Ribble Crossing	M6 is only strategic crossing of the Ribble. If this section is blocked traffic can't cross river	Capacity operational /	x				Yes	-	-	SE	
Access to ports	Need to maintain or improve access to ports along Lancashire coast	Operational Capacity /	x				No	MS to approach ABP to see if they have evidence regarding future traffic	MS	MS	
Access to Manchester	Noted that the county as a whole depends on access to Manchester via M6, M61 and A56/M66. Congestion in Greater Manchester affects Lancashire	Capacity Operation /	x				Yes			SE	

County wide	Impact of Preston City Deal upon wider county	Operational Capacity	/	x	x			No	None as yet. Too early.	-	SE
County wide	County has a “physical” economy with strong manufacturing sector hence movement of goods and people is crucial.	Capacity Operational	/	x	x	x	x	Yes	Anecdotal but information present on maps – most strategic employment sites are based around high value manufacturing.	-	SE
South Lancaster	Strategic housing sites and University / Science Park still aspirational developments	Operational Capacity	/		x	x	x	No	New Lancaster Strategic Housing Needs Assessment in production	-	SE
County wide	Huge unknown regarding the potential for shale gas extraction to provide employment & hence demand for housing	Capacity Operational	/			x	x	No	No evidence available.	-	SE
Lancaster South	Air quality issues due to motorway junction location & proximity to obstructions i.e. railway lines.	Environmental		x				No	SE indicated Lancaster City Council may hold some evidence	SE	SE
Nationwide	Lack of landscaping & vegetation reduces journey ambience. Indication that improved landscaping of routes would help journeys	Operational		x				No	Anecdotal evidence	-	SP
Need to grow Warton Enterprise Zone	New Ribble crossing is very important in providing access from the south	Operational		x				Yes	Response from LEP to be sought	SE	SE
<p>Table Priorities: A585, Access to Manchester via M61, M66 & A56, M65 Corridor & Preston Motorway Box.</p>											

Route-based strategies stakeholder events

Breakout Session 2: what should the priorities be?

Description of challenge / Location	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	Why is this considered to be a priority?	How does this compare to other priorities? Why? Are there any trade-offs?	Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities. Solution Type (& additional notes) Maintenance & renewals / Operational / Junction improvement / Adding capacity / New road / other
Nb. these could be from any of the groups – not limited to the ones raised by this group	Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types	Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary	Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be.	
The SRN is the strategic road network, and should be maintained as such	Asset Condition / Operational	Network condition and operation		
Average Speed Cameras & VMS (Technology)	Operational / Environmental / Society (Air & Noise)	Keep the network moving. Journey time reliability. Air Pollution & Noise	60mph speed enforcement via cameras. Responsive speeds to network conditions.	
Importance of the M6	Capacity	Journey time reliability		
Heysham & Port of Liverpool	Operational	Access to ports is very important to industry & network resilience of these links.		
Table Priorities – Journey Time Reliability, M6 Corridor, Technology & Network Resilience				

Route-based strategies stakeholder events

Breakout Session 1: what are the key challenges for the routes?

Workshop Name	Lancashire	Date:	26 th September 2013	Breakout Group	Table 2
Group Facilitator	Kristian Marsh	Note-taker	Jonathan Parsons		
Attendees – GH (Chorley Council), GM (Lancashire Police), NW (Pendle BC), ST (Burnley Council), AS (Rossendale Council), LB (CPRE & NW TRT), WM (Peel), DC (Lancashire Council)					

Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition /	When does this issue become critical?	Is the evidence for this challenge shown	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by	Raised by*	Number of
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		Operational / Society Environment	Already is	Pre 2018	2018-21	After 2021	on our maps?		(name, org)		
North West	AQMA and Railway Stations not shown on maps	Environment	x				No	-	-	LB	
North West	LEP Growth & LPA aspirations – how will this growth be considered?	Capacity		x	x	x	No	East Lancashire Masterplan	-	NW	
Heritage sites	What are the parameters used for the heritage sites on the maps?	-	-	-	-	-	Yes & No	CLG Website	-	AS	
Freight in the North West (Heysham & Port of Liverpool)	How has this be taken into account of within the evidence? Access to ports needs to be maintained. Legacy issues with HA and LHA ownership of access routes into NW ports.	Operational / Asset Condition	x				Yes	-	WM (Peel) – Data & Proposals	WM	
M6 / M61 Merge Northbound	AM Peak congestion issues – due to the layout of the merge / driver behaviour issues	Capacity / Operational	x				No	-	-	DC	
M58 / M6	Junction issues & issues for freight accessing Port of Liverpool & distribution sites in East Lancs	Capacity / Operational	x				No	-	-	WM	
Warrington	Network resilience – Diversion routes when incidents on the M6 / M62 cause conflicts with the use of the Ship Canal	Operational	x				No	-	-	WM	
M61 / M60 Interface	Growth in Central Lancs City Region may compromise access to Manchester Airport & M60	Operational		x	x	x	No	-	-	DC	

Route-based strategies stakeholder events

Breakout Session 2: what should the priorities be?

Description of challenge / Location	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	Why is this considered to be a priority?	How does this compare to other priorities? Why? Are there any trade-offs?	Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.
Nb. these could be from any of the groups – not limited to the ones raised by this group	Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types	Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary	Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be.	Solution Type (& additional notes) Maintenance & renewals / Operational / Junction improvement / Adding capacity / New road / other
Importance of keeping a free-flowing network	Operational	Journey Time Reliability / Air Quality / Safety		
Use of average speed cameras	Operational	Journey Time Reliability / Air Quality / Safety		
Development pressures / growth aspirations close to SRN junctions	Operational	Need to unlock growth / potential for congestion to impact on growth		
Identification of the benefits of growth in different socio-economic areas within the North West	Society	Deprivation in East Lancs Establishment of the economic benefits of growth Regional joined-up thinking needed		
Importance of SRN junctions	Operational	Interface between HA and LHA networks		
M6 / M61 / M65 'Triangle'	Operational	Importance of maintaining this route for regional access, as well as to key growth areas and EZs		

Table Priorities – M6 / M61 / M65 Triangle, Access to M60 & Manchester Airport and A56 / M66 Corridor

Route-based strategies stakeholder events

Breakout Session 1: what are the key challenges for the routes?

Workshop Name	Lancashire	Date:	26th September 2013	Breakout Group	Table 3
Group Facilitator	Dave Dickinson	Note-taker	Gavin Nicholson		
Attendees – Ross Willis (Lancashire Police) [RW], Jeremy Walker (Blackpool Council) [JW], David Thow (Wyre Borough Council) [DT], Phillip Jenkins (Thornton Action Group) [PJ], Jo Bradley (Environment Agency) [JB], Martin Porter (Lancashire County Council) [MP]					

Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	When does this issue become critical?				Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by*	Number of sticky dots received
			Already is	Pre 2018	2018-21	After 2021					
Various (issues with operational performance and safety plans)	<p>Issues with the operational performance plans presented:</p> <ul style="list-style-type: none"> - seems to show that the A585(T) operates ok – other data is needed to support the true picture. - a need to show the relationship between delay and the queue on the ground: queues are often severe. - stakeholders would like to have seen reference to Journey Time reliability as a key indicator. - stakeholders would like to have seen information relating to junctions (as these are the main throttles). - additional information to support the plans would have been useful (e.g. information behind the safety plot). 					Information needs supplementing			Various		

Various (issues with growth plan)	Issues with growth areas on the plans: - some locations not in the right place. - residential growth in Wyre is not referred to (Wyre Council identified that this could be 60-70% higher than previously envisaged). - Enterprise Zone missing from the plan.	Capacity Operational /					Incorrect information		Discussion required with DT to identify evidence that could be used in relation to Wyre housing	Various
M6 / M65 (Preston)	Various future development pressures with additional traffic demands: - Cuerden / Bamber Bridge - City Deal	Capacity Operational (Economy) /		x	x	x	In part	Transport Assessment (In the plan but not currently developing)		MP
M6 J28	Future development pressures at Buckshaw Village- development not yet built out. Local network will become over capacity and have subsequent impacts on the SRN.	Capacity Operational (Economy) /		x	x	x	In part	Transport Assessment (In the plan and development currently progressing)		MP
M6 J31	Future development pressures at Samlesbury Enterprise Zone (6000 jobs) mean that the junction will become over capacity. In addition 100s of residential dwellings at Clitheroe will add to pressures.	Capacity Operational (Economy) /		x	x	x	No	Transport Assessment for Masterplan		MP
M6 J31a	Future development pressures at Preston East. Concerns with level of traffic generation, but there is potential for a solution.	Capacity Operational (Economy) /		x	x	x	In part	Transport Assessment		MP

M6 / M65 (Preston)	<p>Incidents – high number and long clear up time with lots of motorway closures.</p> <p>Does the area have a greater degree of incidents? The consequences on the operation of the network could impact on economic growth.</p>	Safety Operational	/	x					Could be shown better.	Needs to be looked at how could be shown.		MP / JB
M6 J33	<p>Galgate signals cause operational issues on the local road network, with subsequent consequences on the SRN.</p> <p>Strong emphasis of Wyre growth on the areas surrounding M6 J22-23.</p>	Capacity Operational (Economy)	/	x					In part			MP / DT
M55 J1	<p>Capacity issue – a scheme on site at present. Scheme will provide capacity for a few years but not all cover developments.</p>	Capacity (Economy)		x	x	x	x	No				DT
M55 J2	<p>New junction as part of city deal and new link road linked to Enterprise One and residential growth.</p>	Capacity Operational (Economy)	/		x	x	x	No				MP
Various (environment)	<p>Water Framework Directive has a 2027 target for watercourses which means that they have to be in a good ecological state. Work is ongoing with EA / HA relationship with outfalls.</p> <p>There is an associated challenge with getting environmental focussed schemes through the Value Management process.</p>			x	x	x	x	No (better data is available)		Ongoing work in relation to the prioritisation of watercourses. Mike Barker at CH2M Hill is involved. Data sets exist (Mike Whitehead at HA co-ordinating).		JB

Various (safety)	Not huge capacity issues relative to other parts of the country. Considered that safety is the primary issue. Issue is getting traffic off the motorway (traffic queuing on the nearside lane).	Safety Capacity (safety)	x x				In Part No	No (perceptual view)		RW
Various (seasonality)	Seasonality is an issue for the network – in some locations this is key to the consideration (e.g. Blackpool illuminations).	Capacity / Operational	x				No	HA should prepare the data		RW
Various (strategic diversion routes)	There are issues with some of the strategic diversion routes (e.g. J32-33 is a long distance link). They present challenges in that the local road network cannot cope with the traffic demands. Better resilience / reaction required to incidents.	Operational	x				No			RW
Various (working together)	There is a challenge of organisations working better together. Including integration with rail required. The interface is currently poor particularly in relation to long distance travel. Rail integration would take some pressure of the SRN.	Operational	x							Various

Route-based strategies stakeholder events

Breakout Session 2: what should the priorities be?

Description of challenge / Location Nb. these could be from any of the groups – not limited to the ones raised by this group	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment Prompt if the same types are raised to consider whether they	Why is this considered to be a priority? Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary	How does this compare to other priorities? Why? Are there any trade-offs? Nb In this session we most interested in <u>how</u> they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be.	Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities. Solution Type (& additional notes)
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	are viewed as a higher priority than other types			Maintenance & renewals / Operational / Junction improvement / Adding capacity / New road / other
The “central triangle” is key to the sub-region – development growth, safety of network and incidents. (Central triangle is the M6, M61, M65 triangle and associated links and junctions).	Capacity / Safety / Operational	Key to the sub-region as the gateway. M6 J29 and 31 critical for future economic growth. M6 J30 associated with safety issues.	The main priority. Recognised and agreed by all parties at the table.	Better working together from the operational side but also data sharing.
Compliance with statutory responsibilities for water quality (i.e. discharge from the SRN).	Environment	Difficult to trade-off against other priorities.	While there are huge consequences on the country (but not specific to the HA), accepted that this may not come above economic growth and safety.	
Supporting the visitor economy and balancing this with the general economy (e.g. Blackpool).	Capacity / Operational / Society	Balance needs to be struck between the two to consider the needs of each without compromising either.		
Link to development planning and economic growth	Capacity / Operational (Economy)	The pressure from central government to provide significant levels of housing could cause an increase in out-commuting from the area with knock-on consequences.		

Table Priorities – The “central triangle”, A585 corridor (operational issues, balance between strategic and local networks, NMU issues), Incidents and Clear-up times, Network safety.

Route-based strategies stakeholder events

Breakout Session 1: what are the key challenges for the routes?

Workshop Name	Merseyside	Date:	1st October 2013	Breakout Group 1	Table 1
Group Facilitator	David Dickinson	Note-taker	Bruce Allan		
Attendees – Adrian Dunning (NW TAR), Andrew Moss (Cumbria County Council), Dave Round (Wigan MBC), Sean Traynor (Knowsley MBC)					

Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition /	When does this issue become critical?	Is the evidence for this challenge shown	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by	Raised by*	Number of
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		Operational Society Environment	/ &	Already is	Pre 2018	2018-21	After 2021	on our maps?		(name, org)		
SRN across NW Region	Maps do not show structural maintenance condition issues	Asset Condition		x	x	x	x	No	Bridge closures or works detrimental to ongoing network performance	HA to procure from managing consultants	ST	0
National / all NW	LEP growth strategies and Single Pot bids	Society Environment	&	x	x			No	Strategies being written now will affect investment in coming years. May divert transport funds to other areas and conflict with Local Plan priorities and strategies.	LEPs / Cumbria CC (AM)	AM	3
M6 Junction 26	Capacity and operation post-proposed improvements schemes	Capacity Operational	/		x			No	Proposed HA Pinch Point scheme may not interact well with proposed local major scheme at this junction?	Wigan MBC to provide local scheme details	DR	4
M62 Junctions 8 to 10 (Warrington)	Omega and Birchwood	Capacity Operational	/	x		x		Yes?	Existing pressures worsened by the development impact of Omega and potential expansion of Birchwood?	-	ST	1
M6 Junction 40 / 41	Development and growth strategy could generate significant development-related trips in this section.	Capacity Operational	/		x	x	x	No? (may be on Cumbria maps)	LEP growth strategy likely to prioritise these locations despite existing network pressures	Cumbria CC (AM)	AM	2
M6 Carlisle / A69 Warwick Bridge	Access to Carlisle from east	Capacity Operational	/	X				No? (may be on Cumbria maps)	Difficulty in right-turning towards Carlisle at Warwick Bridge	Cumbria CC (AM)	AM	0
M6 Junction 25	Southbound on only junction – N/B traffic requires long detour to J26; S/B on requires detour to J2 through an urban area.	Capacity Operational	/	x	x	x	x	No	Access issues are constraining Local Plan development proposals in this location with major industrial and warehousing land uses being stalled	Wigan MBC Planning Department (DR)	DR	4
M61 corridor (Bolton-Mcr)	Potential for commuter trips to transfer on to rail is not being realised due to lack of trains	Capacity		x	x	x	x	No	Aspiration for additional hourly train from Network Rail's Route Utilisation Strategy has never been delivered	Check Network Rail evidence of passenger growth on Bolton line	AD	1
National	Lack of consistent funding and objectives over time for all modes limits the co-ordination	Capacity / Society & Environment					x	No	Diversion of investment funds (e.g from LHAs to LEPs) to short term priorities and loss of income from developer contributions in new policy	Department of Transport?	AM	2

Merseyside area SRN	LEP SuperPort aspirations will increase local and strategic HGV movements across SRN	Capacity / Operational/Society & Environment		x	x	x	? (development locations)	Port-centric development proposals could move goods by road between Ports and local warehousing sites?	Check Liverpool LEP and Peel data and evidence; HA assess future patterns and forecasts?	ST	3
M6 Junction 18-19	Known hot spot for delays and unreliable journey times for users with no obvious source.	Operational / Asset Condition	x				? (locations of delay)	Significant journeys time unreliability may show up in data. Structures and carriageway works also contribute.	HA to check / LA's may have own evidence (Trafficmaster?)	AM	1

Route-based strategies stakeholder events

Breakout Session 2: what should the priorities be?

Description of challenge / Location	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	Why is this considered to be a priority?	How does this compare to other priorities? Why? Are there any trade-offs?	Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.
Nb. these could be from any of the groups – not limited to the ones raised by this group	Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types	Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary	Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be.	Solution Type (& additional notes) Maintenance & renewals / Operational / Junction improvement / Adding capacity / New road / other
The SRN is the strategic road network, and using it to access key points to and within the region should be maintained	Capacity / Asset Condition / Operational	Should be primary purpose of SRN and thus serve as the key objective of each RBS (AM)	Should be considered overarching priority of each RBS	Strategy development
Interface between local roads arms and the SRN at junctions	Operational / Safety	Local road signing and lane layouts at some junctions and approaches is often deficient	Cheap and easy to remedy; need to broker agreements on lane priority and signals to improve junction efficiency	Joint agreements with local authorities on Level of Service
M6 Junctions 21-19 and 19-16	Capacity	Access to/from SRN and capacity problems on the M6 itself are long-standing issues	Damages strategic access to wider NW as well as local development aspirations close to or accessed from SRN	Managed Motorway scheme for all of this section
M56 – M53; M55/M6; and M6 / A590	Capacity / Operational	Significant Friday PM peak traffic due to tourism at North Wales/Blackpool/The Lakes	Journey time unreliability and impacts on the economy	Traffic management and mode shift policy solutions?
Network improvement funding through planning applications	Capacity	Policy changes may mean loss of Section 278 scheme funds and more unconstrained development at already-congested locations	Trade-off from more the relaxed attitude to development means strategic role of SRN is less well-defended and less funding contributed to improvements by developers	HA could take harder line on developer funding through planning applications process
LEP Growth Strategies	Capacity	Alignment of priorities between this transport funding and other sources necessary to gain budget and commitment to key improvements	Strategy development issues (especially with timing of RBSs) and competition for the funds from other priorities outside transport could reduce overall investment levels.	Consult direct with LEPs on short-term priorities and align the RBS's with their strategies

Demand management through e.g. travel plans to limit growth	Capacity / Society & Environment	Fewer benefits being gained from Travel Plan related mode shift than previously – less use of enforceable and operationally-viable TPs?	Easy win if enforced; can extend life of available network capacity significantly, “banking” it for later developments	Better/wider use of Travel Planning enforced by HA/LAs
Traffic management (including ITS options) to manage peaks	Operational	Need to improve local road signing and lining for SRN routes and rationalise brown signs	Relatively cheap options compared to infrastructure enhancements; can manage ineffective use of capacity	Better use of ITS and better maintenance of signs & lines
Table Priorities – matching RBS and LEP priorities; M62 Omega impacts; M57 Corridor; M6 Corridor				

Route-based strategies stakeholder events

Breakout Session 1: what are the key challenges for the routes?

Workshop Name	Merseyside	Date:	1st October 2013	Breakout Group	Table 2
Group Facilitator	Kristian Marsh	Note-taker	Jonathan Parsons		
Attendees – Richard Perry (DfT), Stephen Birch (Sefton Council), Mick Noone (Halton Council), Claire Delahunty (Liverpool LEP)					

Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	When does this issue become critical?				Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence (name, org)	Raised by*	Number of sticky dots received
			Already is	Pre 2018	2018-21	After 2021					
Mersey Gateway	Not included in the future year / growth maps	Operational			x	x	No	-	-	MN	
North West	AM Peak / PM Peak Hour congestion	Capacity / Operational	x				Yes	-	-	MN	
M6 (Cheshire to Staffs)	Congestion / Delay	Capacity / Operational	x				Yes	-	-	SB	
Ports	Trip patterns from movements in and out of expanded Ports, impact on the SRN – A5036 / M6	Capacity	x	x	x	x	No	-	MDS Report – CD (Liverpool LEP)	RP	

M6	Issues regarding perception of access to the North West via the SRN	Capacity Operational	/	x					Yes	-	North West on the Move – RP (DfT)	MN / RP
Liverpool	Cruise Terminal growth & access to Liverpool via the SRN – accessibility / reliability	Operational		x					No	-	-	CD
North West	Freight capacity on rail is limited – impact on the SRN	Operational		-	-	-	-		No	-	-	MN
North West	Importance of quick and reliable access to and from the SRN. Important for businesses to have a reliable SRN.	Operational		x	x	x	x		-	-	-	SB
North West	Importance of maintaining network resilience in tandem with incident management and diversion routes. A562 / A5300 (Huyton) can get congested when used as a diversion route	Operational		x	x	x	x		-	-	-	MN
M6 / A580	Congestion issues – possibly resolved through Pinchpoint improvements	Operational		x					Yes (Pinchpoint map)	-	-	SB / MN
M58/M6 J26	Skelmersdale – development pressures	Capacity				x	x		No	-	-	SB

Route-based strategies stakeholder events

Breakout Session 2: what should the priorities be?

<p>Description of challenge / Location</p> <p>Nb. these could be from any of the groups – not limited to the ones raised by this group</p>	<p>Type of challenge</p> <p>Capacity / Safety / Asset Condition / Operational / Society & Environment</p> <p>Prompt if the same types are raised to consider whether they are viewed as a higher</p>	<p>Why is this considered to be a priority?</p> <p>Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary</p>	<p>How does this compare to other priorities? Why? Are there any trade-offs?</p> <p>Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be.</p>	<p>Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.</p> <p>Solution Type (& additional notes)</p> <p>Maintenance & renewals /</p>
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	priority than other types			Operational improvement / capacity / New road / other	Junction Adding / other
M62 / M6 (Croft Interchange)	Operational / Capacity	Accessibility into wider SRN /. Key commuting routes	-		
Access to Airports – Manchester & Liverpool	Operational	Freight / passengers – access to Manchester Airport from Liverpool City Region	KM (HA) to liaise with Susan Williams (Atlantic Gateway)		
M6 (south of the M58) – access to North West via the SRN	Capacity / Operational	Wider issues – accessibility to city regions	-		
Table Priorities – A5036, Mersey Gateway & M6 (South of the M58)					

Route-based strategies stakeholder events

Breakout Session 1: what are the key challenges for the routes?

Workshop Name	Greater Manchester	Date:	4th October 2013	Breakout Group	Table 1
Group Facilitator	Neville McKenzie	Note-taker	Jonathan Parsons		
Attendees – Martin Key (British Cycling), Jon Bottomley (MAG), Sue Stevenson (Stockport Council), Moira Percy (TfGM)					

Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	When does this issue become critical?				Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises supporting evidence to provide by (name, org)	Raised by*	Number of sticky dots received
			Already is	Pre 2018	2018-21	After 2021					
Wigan / Tameside	Committed development and land allocations not shown on the maps	-	-	-	-	No	-	-	SS		

Cheshire East / A34	2000 dwellings proposed close to the A34 – potential for impacts	Capacity Operational	/		x	x	x	No	-	-	SS
Manchester Airport	Has a wide catchment area (Northern England & Midlands) – needs a reliable network to ensure access	Operational		x				No	-	-	JB
Airport City & HS2	Need to access opportunities at Airport City via public transport	Operational Environment	/		x	x	x	Yes	-	-	MP
Manchester Airport / Airport City	Need for public transport routes and infrastructure to access the Airport / Airport City	Capacity Operational	/		x	x	x	No	-	Manchester Airport Transport Strategy – JB (before Christmas)	JB
SRN in Greater Manchester	Noise / Air pollution – impact of HGVs on noise and air	Environment		x				No	-	Noise / Air Documents – MK (BC)	MP
SRN in Greater Manchester	Use of the SRN on a 24-hour basis for freight / HGVs to avoid peak hour travel	Operational		x				No	-	-	SS

Route-based strategies stakeholder events

Breakout Session 2: what should the priorities be?

Description of challenge / Location	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	Why is this considered to be a priority?	How does this compare to other priorities? Why? Are there any trade-offs?	Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.
Nb. these could be from any of the groups – not limited to the ones raised by this group	Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types	Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary	Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be.	Solution Type (& additional notes) Maintenance & renewals / Operational / Junction improvement / Adding capacity / New road / other
HA's thinking towards the SRN, it's function and variety of users	Operational / Society		Serverance / local issues. Needs to be improvements for non-SRN users. Possibly cheaper solutions on the local road network.	

Major development to the west of the M60 & Atlantic Gateway	Capacity	Integrated transport strategy needed to help facilitate economic growth and employment	<ul style="list-style-type: none"> - Where do people come from to access employment? - Constraints to capacity improvements - Commuter patterns are not aligned with growth
High quality accessibility to regional drivers of growth		Jobs / Growth / Economic Benefits <ul style="list-style-type: none"> - Includes development of SEMMMS - Not all solutions are on the SRN - Needs wider GM collaboration 	<ul style="list-style-type: none"> - What is a strategic journey? - What is the balance of priorities for user types / groups
Table Priorities – All			

Route-based strategies stakeholder events

Breakout Session 1: what are the key challenges for the routes?

Workshop Name	Manchester	Date:	4 October 2013	Breakout Group	Table 2
Group Facilitator	Kristian Marsh	Note-taker	Simon Snow		
Attendees – Anne Robinson (FPD/CPRE/CNP), Andrew Douglas (Trafford Centre), Joanne Betts (Oldham Council), Dominic Smith (Trafford MBC), Ian Lord (Bury BC)					

Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	When does this issue become critical?				Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by*	Number of sticky dots received
			Already is	Pre 2018	2018-21	After 2021					
Whole network / RBS process	Air Quality <ul style="list-style-type: none"> • Existing & • Future 	Environmental	X	X			Partly	Question as to why Air Quality not identified as an RBS consideration specifically in relation to identified / promoted growth and, therefore, increase in vehicles	AR		

RBS process	Concern that RBS process a return to 'predict and provide' & need to outcome to be in context of wider transport planning	Var	X					N/A	Road capacity (SRN) only one aspect of delivering economic growth. Potential to undermine existing joint work (between LPA / LHA & HA, as well as TfGM & rail providers) to ensure sites are within correct location and delivered sustainably.		DS & all
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Route-based strategies stakeholder events

Breakout Session 2: what should the priorities be?

Description of challenge / Location	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	Why is this considered to be a priority?	How does this compare to other priorities? Why? Are there any trade-offs?	Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.
Nb. these could be from any of the groups – not limited to the ones raised by this group	Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types	Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary	Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be.	Solution Type (& additional notes) Maintenance & renewals / Operational / Junction improvement / Adding capacity / New road / other
Integration with other modes and reduction in number & type of car borne trips – whole network / RBS process	Capacity / Operation / Safety / Environmental	<ul style="list-style-type: none"> Resolution of issues should not be restricted to delivery of increase in car trips Inter-conurbation trips should take priority (local home to work) to facilitate economic growth & not encourage longer distance car journeys between cities [A¹] 	Conflict between RBS process's outcomes and wider transport planning aims	
RBS outcomes	Capacity / Operation / Safety	Addressing of existing issues should be aimed towards journey time reliability for existing journeys & and increased confidence regarding inwards investment and facilitation of economic growth (access to employment of vital importance)		

Table Priorities – M60 west & connecting routes, Journey Time Reliability, A663 and route function(s), integration with other modes

Route-based strategies stakeholder events

Breakout Session 1: what are the key challenges for the routes?

Workshop Name	Manchester	Date:	4th October 2013	Breakout Group	Table 3
Group Facilitator	Mike Sinnott	Note-taker	Frank Mohan		
Attendees – David Dalrymple (Unity / Oldham BC), Adrian Dunning (NWTRT), Lisa Houghton (RMBC), Peter Nears (Peel)					

Location	Description of challenge	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	When does this issue become critical?				Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by*	Number of sticky dots received
			Already is	Pre 2018	2018-21	After 2021					
General	Access to funding routes for LAs to improve network to accommodate growth – hindering development potential	Capacity / Operational / Also Funding	X						DD / LH		
General	Co-ordination of operational and development information. At least “20 development sites not shown on plans”	Capacity / Operational	X	X	X	X	No – highlighting shortcomings of information on development locations		PN		
General	Lack of completed Local Plans identifying sites – leads to underprovision of network	Capacity / Operational	X	X	X	X			PN		
General	Changes in consumer habits (e.g. click & collect) impacting on consumer and freight patterns. Concern that forecasting not accurate enough in dealing with this.	Capacity / Operational		X	X	X		Changes in freight movements already occurring. Linking of web-based and traditional distributors (e.g. Amazon – Argos)	PN / LH / AD		
General	Lack of interaction with Network Rail particularly in respect of freight opportunities.	Capacity / Operational	X						LH		

General	Asset maintenance – particularly obscuring of critical sign information by vegetation.	Safety / Operational / Asset Condition	X								DD
M6 / M62 Croft	Key node on the SRN – capacity and safety concerns over operation.	Operational / Safety / Capacity	X								LH
M56 to M6 South	Lack of direct link at this point – preferable to A556 scheme	Operational / Capacity	X								PN / DD

Route-based strategies stakeholder events

Breakout Session 2: what should the priorities be?

Description of challenge / Location	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	Why is this considered to be a priority?	How does this compare to other priorities? Why? Are there any trade-offs?	Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.
Nb. these could be from any of the groups – not limited to the ones raised by this group	Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types	Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary	Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be.	Solution Type (& additional notes) Maintenance & renewals / Operational / Junction improvement / Adding capacity / New road / other
Roadside furniture (signs etc.) being properly maintained and visible. State of network generally.	Asset condition.	Primarily a safety issue but also operational – if worth putting signs in then they must be maintained. Also important from perspective of making area look attractive to business / tourism.		
Incident Management	Operational	Ensures journey time reliability and helps safety. Where capacity is already reached / exceeded, important to ensure current network is optimised and not unduly impacted by incidents.		

Route-based strategies stakeholder events

Breakout Session 1: what are the key challenges for the routes?

Workshop Name	Manchester	Date:	4th October 2013	Breakout Group 4	Table 4
Group Facilitator	David Dickinson	Note-taker	Bruce Allan		
Attendees – David Bland, (Transport for Greater Manchester), Richard Elliott (Manchester City Council), Nigel Gilmore (Tameside MBC), Chris Icely (Stagecoach Buses Manchester)					
All comments from this breakout group in session 1 related to the South Pennines RBS. No comments were made in relation to London Scotland West during Breakout Session 1, nor were any general comments made.					

Route-based strategies stakeholder events

Breakout Session 2: what should the priorities be?

Description of challenge / Location	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environment	Why is this considered to be a priority?	How does this compare to other priorities? Why? Are there any trade-offs?	Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.
Nb. these could be from any of the groups – not limited to the ones raised by this group	Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types	Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary	Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be.	Solution Type (& additional notes) Maintenance & renewals / Operational / Junction improvement / Adding capacity / New road / other
Journey time reliability	Operational	Means most to users; helps freight/deliveries	Can schemes deliver this? (junction and operational management issues)	
Prioritise key constraints now	Capacity / Operational	Remove actual “pinch points” (not just PPP programme schemes) – see examples below	Remove the constraints on growth (but don’t seek to accommodate it – developments can deal with that)	
Airport growth	Capacity	New node of development pressure on an already-congested section of the network	Opportunities to support significant growth in this area	
Table Priorities – key M60 junctions (J1-4 and M56 link; J13, J18, J24); M602 and A57 Corridor; M60 Corridor				

Event Location	Group	London to Scotland West	Table	Location	Description of challenge	Capacity	Safety	Asset Condition	Operational	Society & Environment	Capacity / Safety / Asset Condition / Operational / Society & Environment	Already is	2018-21	After 2021	Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
High Wycombe	n/a	X	ONE	North-South Linkage between M40 and Aylesbury Vale	The topography of High Wycombe results in restricted access from the north to the M40 and the Thames Valley. The planned development in Aylesbury Vale is for housing, but all the employment is south in the Thames Valley. This affects in particular the A4010. The role of Junction 6 in providing access to the north should be better defined, as should the A413 to Junction 2. The greenbelt review will have an impact on this too.	x					Capacity	x			NO		REQUEST: development planning data from county and district councils and infrastructure planning from BCC (to include Milton Keynes)	Charles Brocklehurst/Ian Manktelow	3
High Wycombe	n/a	X	ONE	General	A lack of alternatives: the A40 is not a politically attractive alternative route to the M40, which results in issues with incident management and getting signage agreed for alternative/diversion routes				x		Operational	x			NO		REQUEST: policy statement from Wycombe DC with regards to the A40 as an alternative route	John Croxton	4
High Wycombe	n/a	X	ONE	North-South Linkage between M40 and Aylesbury Vale	The AONB/greenbelt constrains the linkages between north and south	x					Capacity	x			NO		REQUEST: Mapping of the environmental constraints from WDC	Charles Brocklehurst	3
High Wycombe	n/a	X	ONE	Aylesbury Vale	Aylesbury has massive growth in housing planned, but poor links to the strategic road network	x					Capacity		x		NO		<i>To be covered by request for planning data from AVDC and BCC</i>	John Croxton	

High Wycombe	n/a	X	ONE	Handy Cross Roundabout (M40 Jct 4)	Roundabout is an issue: its complexity and a lack of data, combined with a public perception that it is a pinchpoint. The junction has limited capacity.	x					Capacity	x				NO		REQUEST: plans to improve the junction from Charles Brocklehurst/BCC and operational data from the M40 DBFO (include SCOOT plans). Police reports from John Croxton	Stephen Walford	11
High Wycombe	n/a	X	ONE	High Wycombe	A lack of clear plans for the Southern Quadrant	x					Capacity		x			NO		<i>To be covered by request for planning data from WDC and BCC, as well as infrastructure plans from BCC</i>	Charles Brocklehurst	
High Wycombe	n/a	X	ONE	Handy Cross Roundabout (M40 Jct 4)	Lack of data on its operations				x		Operational	x				NO		<i>To be covered by request for operational data from M40 DBFO</i>	Daniel Tomkinson	
High Wycombe	n/a	X	ONE	M40	Resurfacing plans - will this take all the money available to the HA and leave nothing for other improvements?				x		Asset Condition			x		n/a	n/a		Daniel Tomkinson	
High Wycombe	n/a	X	ONE	M40	Resurfacing plans - this should be a chance for sections where residents are affected by noise to be positively impacted. Alternative barriers should be explored.					x	Society & Environment			x		YES		REQUEST: parts of the M40 / A404 where residents have been affected by noise from WDC	Daniel Tomkinson	
High Wycombe	n/a	X	ONE	M40	Resurfacing plans - this will have a disruptive impact on the road network and liaison is very important	x					Capacity			x		n/a	n/a		Charles Brocklehurst	

High Wycombe	n/a	X	ONE	Handy Cross Roundabout (M40 Jct 4)	Slip lane from A404 to M40 northbound should be lengthened to avoid vehicles being caught in back of queue from roundabout.	x						Capacity	x							NO	n/a			Daniel Tomkinson
High Wycombe	n/a	X	ONE	Handy Cross Roundabout (M40 Jct 4)	Performance monitoring of the junction to improve understanding of operations and issues.					x		Operational	x							NO	n/a			Daniel Tomkinson
High Wycombe	n/a	X	ONE	M40	Does the fact that the M40 is managed by a DBFO constrain/limit what can be done?	x						Capacity	x							NO	n/a			Stephen Walford
High Wycombe	n/a	X	ONE	General	It is important to maintain the operational viability of existing junctions and accommodate growth	x						Capacity	x							NO	n/a			Stephen Walford
High Wycombe	n/a	X	ONE	Wycombe District	Longer term growth at Pinewood/Wilton Park and a potential Junction 3b	x						Capacity	x							NO	n/a			Stephen Walford
High Wycombe	n/a	X	ONE	Wycombe District	If HGVs from High Heavens (waste facility) in Wycombe could access the SRN south of Jct 4 this would relieve pressure on Jct 4	x						Capacity		x						NO	n/a			Stephen Walford
High Wycombe	n/a	X	ONE	Wycombe District	Development sites: 1) Wycombe Airport site may become development site - 200 acres 2) Cressex Business Park 3) Handy Cross Hub 4) Junction 3a business parks 5) Wilton Park (Junction 2) 6) Globe business park	x						Capacity				x				NO			REQUEST: plans/ideas from Warren Ralls and development details from BCC/WDC	Warren Ralls

High Wycombe	n/a	X	TWO	Throughout LEP area	Development inside the M40 / M1 will result in capacity issues on M40 and A34. Proposed / planned development includes: 1. Growth at Silverstone - impact on A43 / M40 / A34 2. Development at Buckingham - duelling connecting A43 and Milton Keynes 3. Aylesbury to Leighton Buzzard Extension of Dualling 4. Luton 5. Aylesbury - new link road east of Aylesbury - may impact A41 East 6. Possible J3A on M40 7. Development of Pinewood Studios - impact on M40 junction 1 8. Princes Risborough - new access n/s onto M40 9. Development at Aylesbury Vale 10. Aylesbury - strategic Employment site at Westcott 11. Development at Bicester 11. Development at Bicester - impact on A34 / M40 / A43	x					Capacity							Richard Harrington - LEP's	6	
High Wycombe	n/a	X	TWO	M25 / M40 / M1 Buckinghamshire -	HS2 Construction traffic for HS2 will impact SRN	x					Capacity			x				Transport Assessment being produced	Rosie Brake - WDC	2
High Wycombe	n/a	X	TWO	Throughout LEP area	Lack of real time information that compliments other journey experience on other networks - esp. on SRN.						Operational			x					Rosie Brake - WDC	2

High Wycombe	n/a	X	TWO	M40 Jct 3A	Capacity issues	x					Capacity	x						Rosie Brake - WDC	2
High Wycombe	n/a	X	TWO	General	Opening up development and economic growth	x					Capacity	x		NO	n/a				1
Oxford	n/a	X	One	Generic and A34 specific (North Oxford Business park) + A40 and M40	Local businesses are suffering as a result of unreliability of the network. A34 capacity is therefore becoming a constraint to growth. Businesses cite A34 and unreliability as the top barrier to growth	X		X	X		X	X	X			Apparently businesses identify A34 congestion and unreliability issues as the top barrier to growth as this leads loss of clients, loss of productivity and extra costs		2	
Oxford	n/a	X	One	A34 J9 and J10. Hinksey Hill is also a particular issue.	The junctions are affected by trips across the wider area / inter-regionally and we are tending to look at all this from a very local perspective. Transport interchange between the A34 / M40 / A40 is generally seen as a big problem affecting journey times. How do we get traffic off the A34 and better cater for E-W movements. We also need to plan for strategic movements and how all of this supports growth.	X		X	X		X	X	X					16	
Oxford	n/a	X	One	Junctions with other roads (A34-M40 & A40) - impacts on Cherwell	The issue of catering for East - West traffic is critical. HGVs have no alternative but the A34 for access to M4 and M40. This is adversely affecting businesses that are mobile. The A34 also has issues with widening e.g. the viaduct and Hinksey and the Peartree junction for the Northern Gateway at Begbroke	X		X			X							1	

Oxford	n/a	X	One	A34 - Didcot	Oxford Bus runs a strategic Coach service from Heathrow Airport to Oxford and journey time is 90 minutes, however the route is unreliable, often because of M40 access to the M25. (Is there scope for bus priority) Connectivity to Heathrow from Didcot is also poor. M4 Access to Heathrow is also poor and unreliable due to lack of capacity issues	X			X			X						
Oxford	n/a	X	One	A43	The A43 operates as a transfer route between the M40 and the M1, however it doesn't have effective VMS to enable this re-routing and regional management of diversion routes seems poor				X	X		X						
Oxford	n/a	X	One	A43	This is an important growth corridor (motorsport industry) that impacts on the M40 - A43 and A45. Junction 9, 10 represent a constraint on the growth of North Oxfordshire and the Motorsport Valley. There is also significant growth in South Northants. Towcester has no spare capacity and roundabouts are a problem. The junction with the A5 is also an issue.	X			X			X						1
Oxford	n/a	X	One	General	Simultaneous roadworks on local roads and HA roads seems crazy (e.g. M40 and M4 disrupting London access) Why? Also why do road closures associated with roadworks take so long				X			X						
Oxford	n/a	X	One	A34 / A40	Low standards of junctions are a contributory factor but this isn't always identified to be the case					X		X						
Oxford	n/a	X	Two	M40 Junction 9	Bicester Village needs improved access as it is a major visitor attraction	X						X						

Oxford	n/a	X	Two	M40 Junction 10	Development at Bicester, 6000 houses needs to be accommodated	X				X			X					
Oxford	n/a	X	Two	A34 / A43	Investment in rail has reduced the volume of freight movements in this corridor, HA needs to capitalise on this opportunity	X						X						

Workshop Name	SEM LEP / Northamptonshire LEP	Date:	8 th October 2013	Breakout Group	Yellow Group
Group Facilitator	Jonathan Price	Note-taker	Graham Fry		

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society & Environment	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
			Already is	2015-21	After 2021					
SRN wide General Comments	Growth information for Northamptonshire looks accurate but this needs to be the case across all regions so that where growth information is being taken into account in identifying priorities, it is reliable e.g. not based on previous RSS data.	Society and Environment	✓			No	N/A	Further growth information can be provided by respective JPUs in Northamptonshire.	Andrew Longley [AL] (N Northants)	

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society &	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
A14, A45, A43 and A5 Felixstowe to Midlands Solent to Midlands London to Scotland East	Lorry parking and the location and availability of lay-bys is becoming an increasing issue. Lay-bys on the A14 in particular and also the A45, A43 and A5 are used for overnight stops by HGV drivers. However the HGV's often become a target of anti-social behaviour.	Society and Environment	✓			No	Lorry parks may not be attractive economic investments and the government/HA need to consider taking a more proactive role in providing lorry parking facilities. Northampton CC's A14 Challenge and Summit work provides evidence of this and other issues in respect of the A14 (details forwarded post-meeting).	N/A	Helen Russell-Emmerson [HRE] (NCC) and Andrew Longley [AL] (N Northants)	8
A14 Felixstowe to Midlands	Delivery of housing and employment in Kettering East is dependent on the need for SRN infrastructure - a new junction (10a) and substantial new local road infrastructure (WEWA link to the A43 north of Kettering).	Growth/Society and Environment	✓			Yes – on growth plans	Information produced in support of the Kettering East planning application and AECOM study work.	Information being produced as part of the Kettering East Funding Bid being coordinated by KBC.	Simon Richardson [SR] (Kettering BC)	17
A14 Felixstowe to Midlands	Future pressures on A14 between junctions 3 and 7 and at A14 J4 itself – from growth of Kettering and Corby and wider network growth.	Capacity/Operational		✓	✓	No (not a significant existing problem).	Study work associated with the Kettering Bypass widening scheme.	NCC may have some information on future traffic issues on A14 in Kettering area e.g. NSTM	Andrew Longley [AL] (N Northants), Simon Richardson [SR] (Kettering BC), and Helen Russell-Emmerson [HRE] (NCC)	4

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society &	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
A14 Felixstowe to Midlands	Some congestion already at A14 junctions 8 and 9 which will increase as a result of future development in the Kettering area and in Wellingborough and Northampton.	Capacity/ Operation	✓			No – maps concentrate on SRN only not on local roads at SRN junctions	Transport assessments associated with proposed developments and AECOM study work.	NCC may have some information on future traffic issues on A14 in Kettering area e.g. NSTM (Northamptonshire Strategic Transport Model)	Andrew Longley [AL] (N Northants)	
A14 Felixstowe to Midlands	A14 not fit for purpose as a nationally important route over the longer term as much of the route in Northamptonshire and wider afield is only two lanes in each direction. Kettering Bypass widening may create problems east of Junction 9 where difficult to widen.	Capacity/ Operational			✓	No (not a significant existing problem except in some specific locations).	Study work associated with the Kettering Bypass widening scheme.	NCC may have some information on future traffic issues on A14 in Kettering area e.g. NSTM	Andrew Longley [AL] (N Northants)	8
SRN wide including A1 General Comments Felixstowe to Midlands	A14 has good provision of ITS (e.g. VMS). However, limited alternative routes except A45. Other routes have limited ITS - better real time traveller information is required on all strategic routes.	Capacity/Safety/ Operational/	✓			NA	N/A	N/A	Helen Russell-Emmerson [HRE] (NCC)	10

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society &	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
				✓	✓					
M1 J19 London to Scotland East	This junction is a major congestion point on the A14 – should be largely resolved by the current major scheme – but some key local movements will not be accommodated with adverse consequences for local roads and development. The operation of the improved junction and local network will need to be reviewed.	Capacity/ Operational		✓	✓	Yes	N/A	NCC will be able to provide information on local roads affected by limitations of the improved Cathorpe Interchange.	Caroline Wardle [CW] (North Northamptonshire Development Company) and Helen Russell-Emmerson [HRE] (NCC)	
A45 Felixstowe to Midlands	Main issue on the A45 in Northamptonshire is congestion at Chowns Mill junction – affecting both the A45 (e.g. long queues westbound in the morning peak) and A6 route. Development growth will significantly increase congestion at this junction e.g.growth in Rushden area	Capacity/ Operational	✓	✓	✓	Yes	Information from current HA scheme/ study work and NSTM.	Rushden Transport Study commissioned by ENDC	Caroline Wardle [CW] (North Northamptonshire Development Company) and Paul Woods [PW] (North Northants) and Andrew Longley [AL] (N Northants)	13
A45 Felixstowe to Midlands	Accident problems on the A45 e.g. at Raunds.	Capacity/ Operational/	✓			Yes	N/A	N/A	Andrew Longley [AL] (N Northants)	

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society &	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
				✓	✓					
A45 Felixstowe to Midlands	Single carriageway section of the A45 between Stanwick and Thrapstone already has poor journey times and future pressures will increase congestion on this section of the A45.	Capacity/ Operational		✓	✓	Yes	N/A	NCC can provide information from NSTM.	Andrew Longley [AL] (N Northants)	
A45 Felixstowe to Midlands	Junction problems in Wellingborough/Rushden area e.g. at Turnells Mill and Wilby Way (PPP scheme at Wilby Way will come under future pressure from development growth).	Capacity/ Operational		✓	✓	Yes	Current HA study work with input from NSTM.	Town Transport Strategies being produced by NCC.		
A45 Felixstowe to Midlands	A45 causes severance in the Rushden and Stanwick areas.	Society / Environment		✓	✓	No	Rushden Transport Study commissioned by ENDC, and Town Transport Strategies being produced by NCC. Destination Nene Valley Report	ENDC and NCC to provide information.	Karen Britton [KB] (East Northants)	3
A45 Felixstowe to Midlands	Possible impact of Rushden Lakes development proposal – subject to SoS decision on Public Inquiry.	Capacity/ Operational		✓	✓	No	Transport Assessment for the development includes a significant improvement to the A45 Skew Bridge junction.	N/A	Andrew Longley [AL] (N Northants)	

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society &	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
A45 Felixstowe to Midlands	Heavy traffic volumes on A45 and its junction in the Northampton area causing flow breakdown on the A45 and congestion on local roads crossing the A45.	Capacity/ Operational	✓	✓	✓	Yes	HA study work (HA and local authorities have agreed the need for the A45 Northampton Growth Management Scheme to be delivered principally through developer contributions).	N/A	Helen Russell-Emmerson [HRE] (NCC)	1
A5 London to Scotland East	A5 traffic through constrained historic Towcester causes air quality and other environmental problems. HA should consider addressing this through a Towcester Bypass possibly through a joint scheme with developer of Towcester South.	Society / Environment		✓	✓	Yes	N/A	N/A	Helen Russell-Emmerson [HRE] (NCC)	2
A43 Solent to Midlands	Existing congestion in Towcester at the Tove and Abthorpe roundabouts which will get worse as proposed growth takes place at Silverstone and Towcester. PPP scheme at Tove will help ease existing congestion but problems will build up in the future.	Capacity/ Operational	✓	✓	✓	Yes	HA PPP scheme modelling and Silverstone/Towcester modelling provides detailed information.	N/A	Helen Russell-Emmerson [HRE] (NCC)	

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society &	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
			✓	✓	✓					
A43, M40, M1 Solent to Midlands London to Scotland West London to Scotland East	Congestion at M40 J10 and section of A43 between M40 and Brackley and at M1 J15a.	Capacity/ Operational	✓	✓	✓	Yes	N/A	N/A	Helen Russell-Emmerson [HRE] (NCC)	
A5 and M1 London to Scotland East	Air quality issues associated with A5 in Towcester and M1 in the Northampton area (J15 – J15a). AQMAs have been designated.	Society/ Environment	✓	✓	✓	Not evident on the HA maps	N/A	NCC has information of AQMAs.	Helen Russell-Emmerson [HRE] (NCC)	
General - Local Road Network – Strategic Links General Comments	The SRN network in Northamptonshire is part of a wider network which includes key strategic links which are administered by NCC. NCC has key priorities for improvements to the A509 (Wellingborough to Kettering), A43 (Northampton to Kettering), A45 (Daventry to Northampton) and WEAST rail bridge/Route 4. Also potential future problems on A6116 from growth in Corby. Schemes to improve these routes may assist the operation of the SRN and priority needs to be given to addressing issues relevant to both the HA and NCC.	Capacity/ Operational Society/ Environment Growth	✓	✓	✓	No	NCC Strategic Priorities and Northamptonshire Arc.	NCC to provide information.	Helen Russell-Emmerson [HRE] (NCC)	8

Workshop Name	SEM LEP / Northamptonshire LEP	Date:	8 th October 2013	Breakout Group	Yellow Group
Group Facilitator	Jonathan Price	Note-taker	Graham Fry		

Description of challenge / Location	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environmental	Why is this considered to be a priority?	How does this compare to other priorities? Why? Are there any trade-offs?	<i>Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.</i> <i>Solution Type (& additional notes)</i> <i>Maintenance & renewals/Operation / Junction improvement / Adding capacity / New road / other</i>
<i>Nb. These could be from any of the groups – not limited to the ones raised by this group</i>	<i>Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types</i>	<i>Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary</i>	<i>Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be</i>	
A45 Chowns Mill junction – Traffic Congestion now and increasing with growth Felixstowe to Midlands	Capacity/Operational/ Growth	CW, KB and AL - General agreement that this is a very high priority owing to existing problems of congestion and need to support growth in the surrounding area.	AL – Worst congestion point on the A45 now that Wilby Way has a PPP scheme.	HA recognises this is a priority and is already undertaking preliminary design work in order to submit a bid for funding detailed design of an improvement scheme at the junction – but not yet clear whether this will adequately cater for growth.
Need to have a transparent methodology for assessing priorities – e.g. a matrix based prioritisation framework. This could be used to compare SRN priorities against NCC priorities. General Comment	Partnering	HRE – It will be important for the HA to demonstrate how it has identified priorities and that they are consistent with LEP/NCC priorities (and compare well against NCC priorities).	HRE – It is difficult to assign priorities as the network should be considered holistically.	
A14 Existing junctions around Kettering and new Junction 10a Felixstowe to Midlands	Providing SRN infrastructure to support growth	SR – Significant SRN infrastructure has been identified as essential to support growth of Kettering. Kettering Bypass widening is committed but A14 junction improvements at Junctions 8, 9 and 10 are also required as is a new Junction 10a. Developer funding cannot deliver all this infrastructure so it must be considered within the RBS approach.	Equal or higher priority with A45 Chowns Mill.	Solutions have been identified – this issue is funding and delivery.
A45 Junctions in	Capacity/Operational/	KB - Significant issues of existing congestion and future development	Second A45 priority after Chowns Mill (A6) junction but severance issues a	Existing PPP scheme at Wilby Way (A509) junction. HA already

<p>Description of challenge / Location</p> <p><i>Nb. These could be from any of the groups – not limited to the ones raised by this group</i></p>	<p>Type of challenge</p> <p>Capacity / Safety / Asset Condition / Operational / Society & Environmental</p> <p><i>Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types</i></p>	<p>Why is this considered to be a priority?</p> <p><i>Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary</i></p>	<p>How does this compare to other priorities?</p> <p>Why? Are there any trade-offs?</p> <p><i>Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be</i></p>	<p><i>Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.</i></p> <p><i>Solution Type (& additional notes)</i></p> <p><i>Maintenance & renewals/Operation / Junction improvement / Adding capacity / New road / other</i></p>
<p>Wellingborough/Rushden area Felixstowe to Midlands</p>	<p>Growth Society/ Environment</p>	<p>pressures coupled with severance effect of the A45 for non-motorised trips between Rusden and Wellingborough areas.</p>	<p>priority in their own right.</p>	<p>considering mitigation/improvement schemes at Skew Bridge and Turnells Mill Lane junctions.</p>
<p>A45 Northampton Felixstowe to Midlands</p>	<p>Capacity/Operational Growth</p>	<p>HRE - Breakdown in traffic flow already occurs on the A45 owing to high volume of traffic on mainline and at junctions. Also significant delays on local roads crossing the A45.</p>	<p>Important to have a strategy for managing future pressures on the A45 in the Northampton area. Local authorities support need for developer contributions to be used to address future impacts on the A45.</p>	<p>HA has identified the A45 Northampton Growth Management Strategy (NGMS) to be delivered principally through developer contributions.</p>
<p>A5 Towcester London to Scotland East</p>	<p>Capacity/Operational Society/ Environment</p>	<p>HRE - A5 traffic has severe impacts on Towcester and this issue needs to be given higher priority.</p>	<p>LAs are attempting to deliver a Towcester bypass through a SUE on the south side of Towcester. But this cannot deliver all the infrastructure needed to deliver an effective A5 bypass of Towcester.</p>	<p>Developer scheme for Towcester southern link road.</p>
<p>A14 Longer Term - fit for purpose issue Felixstowe to Midlands</p>	<p>Capacity/Operational</p>	<p>AL - Consensus that the A14 is a route of national importance and that its standard should reflect its importance. Sections of A14 west of J7 and east of J9 will not be able to cope in the future.</p>	<p>No discussion at the workshop on possible environmental issues of upgrading the A14 – just support for it to be a high standard route.</p>	<p>A14 Kettering Bypass widening scheme has started.</p>
<p>A14 Lorry Parking issue Felixstowe to Midlands</p>	<p>Operational Society/Environment</p>	<p>AL and HRE – Demand for lorry parking is evident on the A14 and something needs to be done to address the issue.</p>	<p>Has been a problem for some time and should be treated as a high priority.</p>	<p>Some developer interest in providing lorry parks but not considered sufficient.</p>
<p>Improving strategic links in the local road network General Comments</p>	<p>Capacity/Operational</p>	<p>Improvements to the local road network can help relieve pressures on the SRN as well as supporting local objectives</p>	<p>High priority for local authorities in the area.</p>	<p>Schemes listed in NCC Cabinet Report 19/06/2013.</p>

Workshop Name	SEM LEP / Northamptonshire LEP	Date:	8 th October 2013	Breakout Group	Red Group
Group Facilitator	Eric Cooper	Note-taker	Tom McNamara		

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society & Environment	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
			Already is	2015-21	After 2021					
Overall General Comments	There are economic benefits to using/providing public transport routes; installing crossings at junctions etc.	Society Capacity	✓			No	None discussed	None	Peter Orban (Sustrans)	0
Overall General Comments	60% of journeys that are less than 5 miles are undertaken by car. If a shift to more sustainable modes is achieved for some of these, it would free up some space on the network for 'Economic Driver Vehicle trips'.	Capacity Society	✓			No		Sustrans will provide evidence for this in due course.	Peter Orban (Sustrans)	0
Hockliffe, A5 London to Scotland East	Congestion and road safety issues. Worries are connected to the 'de-trunking' of this section of the A5. After the A5/M1 link is completed there is concern that there will be more traffic at this point on the A5	Capacity Safety	✓	✓		This is an anticipated challenge	Traffic modelling forecasting suggests an increase in traffic at Hockliffe	Yes – Further evidence to come.	Manouchehr Nahvi (Central Bedfordshire Council)	2

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society & Environment	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
M1, Junctions 9-11 London to Scotland East	A lot of traffic 'self-diverts' from the M1 to the A5, through Dunstable, if there is a problem on the M1. This has a detrimental effect on the town of Dunstable; noise/air quality. Increase in traffic with the introduction of the A5/M1 link of 14%	Capacity Society Environment Safety	✓			No	Traffic modelling forecasting suggests an increase at Dunstable	GD will provide evidence of this; Central Bedfordshire Council has a wealth of evidence to support this.	Manouchehr Nahvi (Central Bedfordshire Council) Geraldine Davies (Central Beds Council)	13
Leighton Buzzard, A5 London to Scotland East	Described as being 'imprisoned' by trunk roads and motorway. Little provision to cross these barriers for non-motorised road users. These roads don't provide for 'multi usage' i.e. pedestrians and cyclists.	Environment Society	✓			No	None discussed	No promise of evidence	Peter Orban (Sustrans)	0
Leighton Buzzard, A5 London to Scotland East	Growth in Leighton Buzzard will result in more stress on the A5 at Hockliffe	Capacity		✓	✓	Development growth maps indicate growth to the east of Leighton Buzzard which could generate additional traffic.	Not discussed	None discussed	Brian Hayward (Bedford Borough Council)	0
Hockliffe Junction A5 London to Scotland East	It is considered that there is an existing problem with A5 traffic and not solely local traffic using the network for local journeys.	Capacity	✓			Yes – Delays and average speeds demonstrate delay.	N/A	N/A	Manouchehr Nahvi (Central Bedfordshire Council)	2*

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society & Environment	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
North of Hockliffe (Woburn Rd Roundabout on A5) London to Scotland East	Road safety issues here.	Safety	✓			Is not on the maps, but the consensus is that the HA know about the problems here.	N/A	N/A	Manouchehr Nahvi (Central Bedfordshire Council)	0
M1 Managed motorways London to Scotland East	When there is an incident, management and recovery is considered to be difficult (there is no hard shoulder so it is difficult to access incidents for emergency services). Major incidents cause a problem and the Highways Agency is refusing to authorise reverse flow traffic, which could ease some of the resulting congestion following an incident.	Operational Capacity	✓			No	Not discussed	None discussed	Ade Yule (Bedfordshire and Luton Fire and Rescue Service)	8
M1 Junction 11A London to Scotland East	Once the M1/A5 Link is completed, there will be sufficient capacity for Highways Agency network. What about local traffic?	Capacity Operational	✓	✓		The HA are aware, but felt it needed to be highlighted.		MN will provide modelling evidence.	Manouchehr Nahvi (Central Bedfordshire Council)	0

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A1/A421 Black Cat Roundabout Felixstowe to Midlands London to Leeds (East)	The junction is considered to be poorly laid out, with huge capacity issues in the AM and PM peak. The operation of the junction appears to favour one flow of traffic over others where there is also high traffic demand	Capacity Operational	✓			Delays are shown to some degree on the maps.	N/A	N/A	Geraldine Davies (Central Beds Council) Ben Gadsby (Amey)	0
A1/A421 Black Cat Roundabout Felixstowe to Midlands London to Leeds (East)	The worry is that the signalisation/pinch point investment scheme will only 'buy time' with the projected development in the area. Consensus was that grade separation is required.	Capacity			✓	No	Not discussed	None discussed	Brian Hayward (Bedford Borough Council)	0
A1 South of Black Cat Roundabout 'The Bends' London to Leeds (East)	Massive safety concern. There is a high interaction between the SRN and local roads as well of bends in the road which increase accident potential. Growth scheduled, needs more capacity. Constraint on the network. Growth means there is the perception that more commuting is going to affect the ability of the A1 to serve Bedford's	Safety Capacity	✓	✓	✓	No – the maps do not show a predominate accident hotspot.	Not discussed	None discussed	Brian Hayward (Bedford Borough Council) Geraldine Davies (Central Beds Council)	0

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society & Environment	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
	needs. Worry that dealing with problems in isolation will only push them up the corridor – to Bedford. How is the A1 going to be used?									
A1(M) Junctions 6-8 London to Leeds (East)	If you ease the congestion along this section of the network, promoting the London to Leeds route, again, you risk pushing the problems up towards Bedford. There is a need for 'strategic thinking'	Capacity Operational		✓	✓	No	Not discussed	None discussed	Geraldine Davies (Central Beds Council) Brian Hayward (Bedford Borough Council)	3
Luton to Bedford. A6 Felixstowe to Midlands	Big barrier to movement between these places on the National Cycle Network (NCN). There is no way to cross the A421 to get onto the NCN in Bedford, North of the A6/A421 roundabout.	Safety Environment Society	✓			No	See right	Will email with the NCN evidence.	Peter Orban (Sustrans)	0
New Bedford bypass. New A6 S of Bedford. Felixstowe to Midlands	Will increase the pressure on the A6 S of Bedford. A6/A421 junction is going to be a problem post 2021.	Capacity Environment (Noise)		✓	✓	No	Not discussed	None discussed	Brian Hayward (Bedford Borough Council)	0

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society & Environment	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
M1 Junc 13 Exit on A421 London to Scotland East Felixstowe to Midlands	Very poor signage. Confusing if you are not familiar with it. Leads to people travelling in the incorrect lane. Lots of accidents are seen here (anecdotal)	Safety Operational	✓			Not known. Is it on accident statistics?			Geraldine Davies (Central Beds Council) Ben Gadsby (Amey)	4
M1 Managed Motorways London to Scotland East	Some parts are not lit during the night. There is no hard shoulder meaning a broken down vehicle is exposed; this is a real safety problem.	Safety Operational	✓			No	Not discussed	None discussed	Ade Yule (Bedfordshire and Luton Fire and Rescue Service)	0
A5 (the section due for de-trunking) London to Scotland East	Drainage issues. There is the perception that maintenance on this section though Dunstable has been neglected due to its inevitable de-trunking in the near future.	Asset Condition Environment Operational	✓			No	Not discussed	None discussed	Ben Gadsby (Amey) Geraldine Davies (Central Beds Council)	13*
Overall – Junctions General Comments	Junction design. Highways Agency appears to put 'safety' above everything, but this can cause severance, reducing accessibility for other road users. On top of this it is also considered to look 'awful' having metal railings up everywhere.	Society Safety	✓	✓	✓	No	Not discussed	None discussed	Geraldine Davies (Central Beds Council)	0

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society & Environment	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
Overall – Junctions General Comments	HA designs are always set to DMRB standards, whereas a lot of local authorities are using guidance such as the Manual for Streets, as a departure from DMRB standards in order to better serve the communities the junction serve/impact upon.	Society Safety	✓	✓	✓	No	Not discussed	None discussed	Ben Gadsby (Amey)	0
A5 London to Scotland East	Road side barriers are along this as it runs through towns such as Dunstable and Hockliffe. These cause severance. The speeds are so low on these roads; it is hard to justify the resulting severance and barriers to crossing the network.	Society Safety	✓			No	Not discussed	None discussed	Ben Gadsby (Amey)	2
A5 London to Scotland East	These barriers and other safety features, used in order to satisfy DMRB standards, often impact on the look of a town, which can be very important to the local economy.	Safety Society and Environment	✓			No	Not discussed	None discussed	Geraldine Davies (Central Beds Council)	0

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society & Environment	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
Dunstable – A5 London to Scotland East	Dunstable is an Air Quality Management Area (AQMA). Worries over the effects that diverted traffic from the M1 onto the A5 has on the air quality in Dunstable.	Environment (AQ)	✓			No	Enquired as to whether the AQMA information is used to inform HA decisions and used as an evidence base for RBS.	Manouchehr Nahvi (Central Bedfordshire Council) Geraldine Davies (Central Beds Council)	13*	

* Duplicate scores for identical or overlapping challenge

Workshop Name	SEM LEP / Northamptonshire LEP	Date:	8 th October 2013	Breakout Group	Red Group
Group Facilitator	Eric Cooper	Note-taker	Tom McNamara		

Description of challenge / Location	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environmental	Why is this considered to be a priority?	How does this compare to other priorities? Why? Are there any trade-offs?	<i>Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.</i> <i>Solution Type (& additional notes)</i> <i>Maintenance & renewals/Operation / Junction improvement / Adding capacity / New road / other</i>
<i>Nb. These could be from any of the groups – not limited to the ones raised by this group</i>	<i>Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types</i>	<i>Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary</i>	<i>Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be</i>	
Congestion on A5 in Dunstable (caused by 'self-diverting' traffic from M1) London to Scotland East	Capacity Operational	Gridlock in Dunstable, will make it less attractive for investment.	No trade offs were discussed.	When the congestion is not incident related is there an option to use VMS and Managed motorway signage to alert drivers to the fact that Dunstable is also busy, possibly discouraging vehicles from electing to use this route?
Bedfordshire East/West constraints Felixstowe to Midlands General Comments	Capacity		Considered 1 st long-term priority. (post 2021)	Not discussed
Identify problematic junctions on the A1. Assess the accessibility/severance in the Bedford/A1 area. London to Leeds (East)	Capacity Environment Social	Problems are known to exist along this stretch of the A1. An assessment is needed to prioritise and offer best solution to severance issues. It is important that in dealing with one junction on the A1 the problems aren't just pushed along to the next junction.	Considered 2 nd long-term priority. (post 2021)	Not discussed
Infrastructure issues at A1 Junctions London to Leeds (East)	Capacity Environment Social	These are existing issues which need addressing prior to growth coming forward	No trade offs were discussed.	Not discussed
Congestion in communities around Bedford. Accessibility for non-motorised road users.	Capacity Social	There is an existing deficit and an opportunity to influence travel behaviour through improvements	No trade offs were discussed.	Not discussed

Description of challenge / Location <i>Nb. These could be from any of the groups – not limited to the ones raised by this group</i>	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environmental <i>Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types</i>	Why is this considered to be a priority? <i>Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary</i>	How does this compare to other priorities? Why? Are there any trade-offs? <i>Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be</i>	<i>Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.</i> <i>Solution Type (& additional notes)</i> <i>Maintenance & renewals/Operation / Junction improvement / Adding capacity / New road / other</i>
Felixstowe to Midlands General Comments	Environment			
Severance for Pedestrian and Cyclists at the A421/A6 junction. Felixstowe to Midlands	Social Environment	There is an existing deficit and an opportunity to influence travel behaviour through improvements	No trade offs were discussed.	Not discussed
M1 (managed motorway) – Post accident Operation. London to Scotland East	Operational Safety	This is an existing issue.	No trade offs were discussed.	Major incidents cause a problem and the Highways Agency are refusing to authorise reverse flow traffic, which could ease some of the resulting congestion following an incident.
Area Wide Freight Management General Comments	Capacity	Not discussed	No trade offs were discussed	Not discussed
A5 Hockliffe junction London to Scotland East	Capacity	Considered a priority because it is a 'strategic movements' issue, not predominantly caused by local traffic. Growth in Leighton Buzzard will contribute to an increase in problems at Hockliffe in the future.	Considered 3 rd long-term priority. (post 2021)	
M1 Junction 13 – Signage London to Scotland East	Operational Safety	Confusing if you are not familiar with the junction layout. Leads to people travelling in the incorrect lane. Lots of accidents are seen here (anecdotal observations)	No trade offs were discussed - however see right	Improve on-road signage. Regarded as a 'quick win' that could be addressed in the short term.
A5 – Around Kensworth London to Scotland East	Safety	Not discussed	No trade offs were discussed	Not discussed

Workshop Name	SEM LEP	Date:	8 th October 2013	Breakout Group	Green Group
Group Facilitator	Chris Shaw	Note-taker	Tasha Duggan		

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society & Environment	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what <u>evidence</u> is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
			Already is	2015-21	After 2021					
Milton Keynes Stadium A5 M1 Junctions 13-14 London to Scotland East	The stadium will be increasing capacity to 30k and will be facilitating daily events (rugby, football etc); it will be taking over the MK bowl. A leisure centre is also being built. This will cause movement issues especially on the A5. There are currently congestion issues around events. Additional growth and investment for residential and retail developments are planned	Capacity/ Operational	✓	✓	✓	The growth map indicates that there will be substantial growth in Milton Keynes; however there are no specific details of growth at the stadium.	There was no discussion of evidence. .	None	Sue Dawson (Stadium MK)	17
A5 to Milton Keynes London to Scotland East	This is a high speed section of the route and there are usually serious incidents because of a lack of lighting and speed. There are also blind spots.	Operational/ Safety	✓	✓	✓	The safety map indicates that this section of road has a relatively high level of vehicle casualties.	N/A	Whilst the workshop map shows there to be casualties, this does not necessarily indicate that there were near misses.	Neil Biggs (Thames Valley)	5
M1 Junction 10 London to Scotland East	There are proposals for growth in Luton including employment in the town centre which could increase congestion over the wider network.	Capacity/ Operational		✓	✓	The Key Growth map provides details of growth in Luton.	N/A	None	Keith Dove (Luton BC)	
A5 MK M1 Junctions 13	Proposals for residential and retail growth in Milton Keynes which will put pressure on the	All		✓	✓	The Key Growth map provides some details of	N/A	Ishwer Gohil (MK C) has commuting figures	Ishwer Gohil (MK)	12 (Jn 14)

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational /	When does this issue become critical	Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
<p>-14</p> <p>London to Scotland East</p>	<p>A5 and M1. MK is expected to grow from a population of 250k to 350k by 2031 and therefore there will need to be enough capacity on the roads. A key factor of this will be commuting which will be around 50k. Currently there are 53k commuters that come into MK from outside. Additionally, delegates felt that Junction 14 was already running at capacity and would not be able to cope with increases in traffic.</p> <p>Delegates also discussed issues exiting the M1 from the north and south at Junction 14 which form queues. This has been happening Southbound for quite some time. There are more issues at Junction 14 than at Junction 13.</p>			<p>growth in this area.</p> <p>Yes – the delay map indicates that this section of the route experiences high levels of vehicle delay.</p>		<p>up to 2026.</p> <p>Travel Plan data is available (Dorian Holloway (OU MK))</p> <p>Modelling being carried out.</p>	<p>C)</p> <p>Neil Biggs (Thames Valley)</p>	<p>3 (Jn 13)</p>
<p>M1 Junction 15 and 15a</p> <p>London to Scotland East</p>	<p>Issues with queuing northbound and southbound exits from the M1.</p>	<p>Capacity/Operational</p>	<p>✓</p>	<p>Yes – the delay map indicates that this section of the route experiences high levels of vehicle delay.</p>	<p>No further evidence discussed.</p>	<p>None</p>	<p>Sue Dawson (Stadium MK)</p>	<p>0</p>
<p>A421</p> <p>Felixstowe to Midlands</p>	<p>Improvements on this route have pushed the problems further down. Delegates felt that the HA need to keep in mind that when making improvements, that changes will also need to be made further along the route.</p>	<p>Capacity/Operational</p>	<p>✓</p>	<p>Yes/No – the potential economic benefit of congestion relief map indicates that the north-eastbound section between M1 J13 and Bedford would have a moderate to high benefit of congestion relief. The peak hour speeds map does not indicate a low traffic speed problem.</p>	<p>No further evidence was discussed.</p>	<p>None</p>	<p>Ishwer Gohil (MK C)</p>	<p>14</p>

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational /	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
				✓	✓					
A5 & M1 Link London to Scotland East	Delegates felt that the link would put pressure on this route further along.	Capacity/Operational		✓	✓	None	Evidence is anecdotal and based on an individuals' experience, but there seemed to be consensus from many of the delegates that this issue was commonplace.	None	Ishwer Gohil (MK C)	0
A5/ Towester London to Scotland East Solent to Midlands	A43 There are general congestion challenges in Towester. This has got much worse over the last two years, going north and south. There are also plans for growth around Towester and Silverstone.	Capacity/Operational	✓			No	Evidence is anecdotal and based on an individuals' experience, but there seemed to be consensus from many of the delegates that this issue was commonplace.	None	Sue Dawson (Stadium MK)	1
A5 Dunstable M1 Junction 11 London to Scotland East	There are plans for development in Central Beds, for example Houghton Regis where there are plans for 7k new homes which will link to the planned M1 Junction 11a.	All		✓	✓	Yes – the delay map indicates that this section of the route experiences high levels of vehicle delay. The growth maps show some of the growth planned for this area.	N/A	None	Keith Dove (Luton BC)	0
M1 Junction 10 London to Scotland East	Around 75% of people travelling to the airport use this corridor. Furthermore, the majority of employment is in this area or in the town which is close to the airport. There are issues at the roundabout of this junction. There are proposals to increase the airport from 9.8 to 18 mppa by 2028	Capacity/Operational	✓	✓	✓	The Key Growth map provides details of growth in this area.	No discussion of evidence.	None	Keith Dove (Luton BC)	0

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational /	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
M1 Junction 13 and 14 London to Scotland East	Delegates discussed current issues with E/W routes (including A421 and A509) which cause problems at these junctions.	Capacity/ Operational	✓			Yes – the delay map indicates that this section of the route experiences high levels of vehicle delay.	Evidence is anecdotal and based on an individuals' experience, but there seemed to be consensus from many of the delegates that this issue was commonplace.	None	Dorian Holloway (OU MK)	0
M1 Junctions 15-18 A43 A508 London to Scotland East	These junctions are close together. Queuing evidence needs to be gathered for the southbound carriageway in the AM peak from M1 Junction 21 down to 14. If there is an accident during peak time and the route is running to full capacity then queues sometimes go all the way back to Newport Pagnell. If there are issues then that motorists use the A43 and the A508 to avoid delays.	Capacity/ Operational	✓			Yes – the delay map indicates that this section of the route experiences high levels of vehicle delay.	Evidence is anecdotal and based on an individuals' experience, but there seemed to be consensus from many of the delegates that this issue was commonplace.	None	Ishwer Gohil (MK C)	0
A43 Towester London to Scotland East Solent to Midlands	The Abthorpe Roundabout failed to get pinch point funding; however there are still issues on this roundabout. There are schemes planned to improve Towester but funding has not been agreed.	Capacity/ Operational	✓			The potential benefit of congestion relief map shows some of the highest potential benefits on the north-eastbound section of the A43 approaching the roundabout.	No discussion of further evidence.	None	Hilary Chipping (SEMLEP)	6
M1 Junction 10-13 London to Scotland East	Delegates felt that a managed motorway would relieve traffic from M1 junction 10-13 and	Capacity/ Operational	✓			Yes – the delay map indicates that this section of the route experiences high levels of vehicle delay.	N/A	None	Ishwer Gohil (MK C)	0
General Comments	There are now far more heavy good vehicles on the motorway which adds pressure.	Capacity/ Operational	✓			N/A	Evidence is anecdotal and based on an individuals' experience, but there seemed to be consensus from many of the delegates that this issue	None	Neil Biggs (Thames Valley)	0

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational /	When does this issue become critical	Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received	
					was commonplace.				
M1 A5 Milton Keynes London to Scotland East	If there has been an incident on the M1 then there are huge delays on the A5. There are also issues when events are being held at the stadium.	Capacity/ Operational	✓		Yes – the delay map indicates that this section of the route experiences high levels of vehicle delay.	N/A	None	Ishwer Gohil (MK C)	0
M1 Junction 13 London to Scotland East	Delegates discussed congestion at this junction during peak times of the day.	Capacity/ Operational	✓		Yes – the safety on the network 2008-2011 map indicates that The M1 at J13 is a top 100 collision location (ranked 52). This may indicate that collisions are occurring at the junction however the cause is not known. The potential economic benefit of congestion relief map shows that there would be the highest level of economic benefit of congestion relief on the M1 either side of J13.	N/A	None	Ishwer Gohil (MK C)	0
M1 Junction 13-15a & Junction 15a-19 London to Scotland East	Issues with congestion and queuing northbound and southbound on these sections of the route.	Capacity/ Operational	✓		The potential economic benefit of congestion relief map shows that there would be the highest level of economic benefit of congestion relief on the M1 either side of J13.	N/A	None	All	4
A5/A421 Junction London to Scotland East	There is no lighting at this section of the route (around the Redmoor Roundabout).	Safety/ Operational	✓		No evidence presented on the maps to indicate high collision rate on this section of the A5.	Evidence is anecdotal and based on an individuals' experience, but there seemed to be consensus from many of the delegates that this issue	None	All	1

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational /	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
							was commonplace.			

Workshop Name	SEM LEP	Date:	25 th September 2013	Breakout Group	Green Group
Group Facilitator	Chris Shaw	Note-taker	Tasha Duggan		

Description of challenge / Location	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environmental	Why is this considered to be a priority?	How does this compare to other priorities? Why? Are there any trade-offs?	<i>Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.</i> <i>Solution Type (& additional notes)</i> <i>Maintenance & renewals/Operation / Junction improvement / Adding capacity / New road / other</i>
<i>Nb. These could be from any of the groups – not limited to the ones raised by this group</i>	<i>Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types</i>	<i>Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary</i>	<i>Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be</i>	
M1 Junction 14 queuing/ congestion. Delegates felt that Junction 14 was already running at capacity. London to Scotland East	Capacity / Operational	There are plans for growth which could increase problems.	There was no discussion of trade-offs. Amongst the group, there was an impression that this was a higher priority challenge.	Not discussed
A421 Improvements on this route have pushed the problems further down. Delegates felt that the HA need to keep in mind that when making improvements that changes will also need to be made further along the route. Felixstowe to Midlands	Capacity / Operational	Not discussed	There was no discussion of trade-offs. Amongst the group, there was an impression that this was a higher priority challenge.	Dualling on the A421 to improve traffic issues
M1 Junction 13 peak time traffic London to Scotland East	Capacity / Operational	There are plans for growth which could increase problems.	There was no discussion of trade-offs.	Not discussed.
M1 Junction 13-15a & Junction 15a-19 Issues with congestion and queuing N&S on these sections of the route. London to Scotland East	Capacity / Operational	Issues with queuing N&S.	There was no discussion of trade-offs.	Managed motorways at Junction 13-15a & Junction 15a-19

<p>Description of challenge / Location</p> <p><i>Nb. These could be from any of the groups – not limited to the ones raised by this group</i></p>	<p>Type of challenge</p> <p>Capacity / Safety / Asset Condition / Operational / Society & Environmental</p> <p><i>Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types</i></p>	<p>Why is this considered to be a priority?</p> <p><i>Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary</i></p>	<p>How does this compare to other priorities?</p> <p>Why? Are there any trade-offs?</p> <p><i>Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be</i></p>	<p><i>Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.</i></p> <p><i>Solution Type (& additional notes)</i></p> <p><i>Maintenance & renewals/Operation / Junction improvement / Adding capacity / New road / other</i></p>
<p>A5/A421 Junction – there is no lighting along this route.</p> <p>London to Scotland East</p> <p>Felixstowe to Midlands</p>	<p>Operational/ Safety</p>	<p>There are a number of incidents caused by the lack of lighting.</p>	<p>There was no discussion of trade-offs.</p>	<p>Lighting</p>
<p>A5 & M1</p> <p>Event congestion (MK Stadium)</p> <p>London to Scotland East</p>	<p>Capacity / Operational</p>	<p>Lack of roadside information, e.g. VMS, causes additional congestion problems especially for those travelling in from outside the area.</p>	<p>There was no discussion of trade-offs. Amongst the group, there was an impression that this was a higher priority challenge.</p>	<p>VMS signage and real time information for events at MK.</p> <p>Real time info signs</p>
<p>A43/ A5 Towester Issues</p> <p>There are general congestion challenges in Towester especially around the village of Stonebrew. This has got must worse over the last two years, going North and South</p> <p>London to Scotland East</p> <p>Solent to Midlands</p>	<p>Capacity/ Operational</p>	<p>There are plans for growth around Towester and Silverstone.</p>	<p>There was no discussion of trade-offs.</p>	<p>Not discussed</p>
<p>A5 Abthorpe Roundabout</p> <p>The Roundabout failed to get pinch point funding; however there are still issues on this roundabout.</p> <p>London to Scotland East</p> <p>Solent to Midlands</p>	<p>Capacity/ Operational</p>	<p>There are schemes planned to improve Towester but funding has not been agreed</p>	<p>There was no discussion of trade-offs.</p>	<p>Not discussed</p>

Workshop Name	SEM LEP / Northamptonshire LEP	Date:	8 th October 2013	Breakout Group	Blue Group
Group Facilitator	David Abbott	Note-taker	Liz Judson		

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society & Environment	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
			Already is	2015-21	After 2021					
A45 / A509 (Wilby Way) Felixstowe to Midlands	This junction is considered to be overloaded and suffering from congestion issues.	Capacity / Operational	✓			The delay maps suggest that there is delay to the west of the junction; however the junction is not specifically included on the maps.	Evidence is anecdotal and based on a few individual's experience in this specific area of the network, although it was not contradicted by other delegates.	No	Chris Lewis (Pro Logis)	0
A43 between Northampton and Ketting Felixstowe to Midlands London to Scotland East	This section of the A43 (as part of a longer section between Corby and Towcester) is considered to suffer from some of the worst congestion within the county. Whilst this section is not part of the HA's network there was a concern that if you improve this part of the route then this will just shift the problem elsewhere.	Capacity	✓			No – not part of the HA's network	Evidence is anecdotal and based on a few individual's experience in this specific area of the network, although it was not contradicted by other delegates.	No	David Allen (South Northamptonshire Council)	0

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational /	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
A14 in the vicinity of M1 Junction 19 Felixstowe to Midlands	There were concerns from the delegates that improvements at M1 Junction 19 could shift issues on the A14.	Capacity	✓			No	Evidence is anecdotal and based on a few individual's experience in this specific area of the network, although it was not contradicted by other delegates.	No	Simon Bowers (Daventry District Council)	0
M1 Junction 15 London to Scotland East	There is a concern that the current layout (dumbbell roundabout) is not sufficient for the volume of traffic at the junction. Delegates identified that there was a need for a double bridge at the junction going forward.	Capacity	✓	✓	✓	No	Evidence is anecdotal and based on a few individual's experience in this specific area of the network, although it was not contradicted by other delegates.	No	David Allen (South Northamptonshire Council)	0
A5 route as a whole London to Scotland East	There were concerns from the delegates that piecemeal upgrades on the A5 were not sufficient to support existing and forecast levels of traffic – the route needs completely upgrading.	Capacity / Operational	✓	✓	✓	No delay maps included in the delegate pack. However growth maps indicate significant growth is proposed in the vicinity of the A5.	Evidence is anecdotal and based on a few individual's experience in this specific area of the network, although it was not contradicted by other delegates.	No	David Allen (South Northamptonshire Council)	0

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational /	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
			✓							
M1 at Daventry London to Scotland East	There are currently congestion issues on the M1 near Daventry. Delegates questioned whether there could be local road improvements here that could benefit the SRN.	Capacity	✓			No delay maps included in the delegate pack. However the maps do suggest that there is a high level of potential economic benefits from congestion relief in this location.	Evidence is anecdotal and based on a few individual's experience in this specific area of the network, although it was not contradicted by other delegates.	No	Simon Bowers (Daventry District Council)	3
M1 and A5 between M1 junction 15A and 19 London to Scotland East	One delegate suggested that the A5 between M1 junction 15A and 19 should be de-trunked and that improvements should be focused on the M1.	Capacity / Operational	✓			No	Evidence is one delegates experience and other delegates expressed concerns that this might not be feasible. In particular they raised the issue that this would potentially remove an alternative route should the M1 be experiencing problems.	No	Simon Bowers (Daventry District Council)	0
A number of junctions and links on the A43 and A45 around Northampton Felixstowe to Midlands	Delegates identified that existing congestion at these junctions is constraining development within Northampton.	Capacity	✓	✓	✓	No delay maps included in the delegate pack. However the maps do suggest that there is a high level of potential economic benefits from congestion relief in this location.	Richard Palmer (Northamptonshire Borough Council) indicated that there were some evidence reports to support this and that AECOM had prepared them.	No	Richard Palmer (Northamptonshire Borough Council)	15

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational /	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
A number of junctions on the M1 and A45 around Northampton London to Scotland East Felixstowe to Midlands	There is significant growth planned for Northampton (up to 2029) and these junctions need improvement to support development. The Northampton Growth Management Scheme has generated developer funding towards infrastructure schemes. Delegates questioned whether the HA could contribute to the Scheme?	Capacity / Operational	✓	✓	✓	No delay maps included in the delegate pack. However the maps do suggest that there is a high level of potential economic benefits from congestion relief in this location. The growth map indicates a significant level of growth planned in and around Northampton.	Richard Palmer (Northamptonshire Borough Council) indicated that there were some evidence reports to support this and that AECOM had prepared them.	No	Richard Palmer (Northamptonshire Borough Council)	0
A43 near Towcester London to Scotland East	Some delegates discussed the need for a Towcester Relief Road to take pressure off the town centre and A43.	Capacity / Operational	✓			No delay maps included in the delegate pack. However the maps do suggest that there are some potential economic benefits from congestion relief in this location.	David Allen (South Northamptonshire Council) made reference to the Towcester Transport Study, which he suggested provided evidence to support a Relief Road.	No	David Allen (South Northamptonshire Council)	0
A14 Junctions 3 – 7 Felixstowe to Midlands	This section of the A14 was identified as a particular congestion concern in the peak hours. A problem with weaving, due to the short distance between junctions,	Capacity / Operational / Safety	✓			No delay maps included in the delegate pack. However the maps do suggest that there are some potential economic benefits from congestion relief in this	Evidence is anecdotal and based on a few individual's experience in this specific area of the network, although it was not contradicted by other delegates.	No	Chris Lewis (Pro Logis)	3

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational /	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
	was also identified.					location. The safety map does not support the concern with weaving as it is not identified as a part of the network with safety concerns.				
M1 Junction 17 London to Scotland East	It is not possible to make the movement from M1 southbound to M45 westbound or from M45 eastbound to M1 northbound. This means that vehicles have to use M1 Junction 18 and travel through Kilsbury and along local roads to access Banbury or Daventry. David Allen (South Northamptonshire Council) suggested that a link road here could open up a lot of growth.	Capacity / Operational	✓	✓	✓	Daventry is identified as an area that could experience significant growth up to 2021 and beyond.	Evidence is anecdotal and based on a few individual's experience in this specific area of the network, although it was not contradicted by other delegates. Evidence of the number of vehicles that do / could make that movement was not provided.	No	Chris Lewis (Pro Logis) and David Allen (South Northamptonshire Council)	0
M1 corridor southbound London to Scotland East	This corridor experiences significant congestion in the AM peak (particularly 7.30 – 9am)	Capacity	✓			No delay maps included in the delegate pack. However the maps do suggest that there is a high level of potential economic benefits from congestion relief in this	Evidence is anecdotal and most delegates agreed that the corridor experiences congestion issues.	No	Chris Lewis (Pro Logis)	0

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational /	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
						location.				
A14 corridor Felixstowe to Midlands	Delegates identified that the peak hours on the A14 can differ from the traditional peak, or there can be an additional mid-day peak, due to the high level of HGVs using the route to access / leave Felixstowe Port. Delegates suggested that this occurs westbound at M1 Junction 19 and consideration should be given to this when planning any improvements at the junction or on the route.	Capacity / Operational	✓			No	Evidence is anecdotal and based on a few individual's experience in this specific area of the network, although it was not contradicted by other delegates.	No	Simon Bowers (Daventry District Council)	0
A14 at Corby Felixstowe to Midlands	Delegates commented that Corby is poorly connected to the SRN and where it does connect the junctions can be of poor quality	Operational / Society & Environment	✓			No	Evidence is anecdotal and based on a few individual's experience in this specific area of the network, although it was not contradicted by other delegates.	No	Chris Lewis (Pro Logis)	0

Workshop Name	SEM LEP / Northamptonshire LEP	Date:	8 th October 2013	Breakout Group	Blue Group
Group Facilitator	David Abbott	Note-taker	Liz Judson		

Description of challenge / Location <i>Nb. These could be from any of the groups – not limited to the ones raised by this group</i>	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environmental <i>Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types</i>	Why is this considered to be a priority? <i>Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary</i>	How does this compare to other priorities? Why? Are there any trade-offs? <i>Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be</i>	<i>Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.</i> <i>Solution Type (& additional notes)</i> <i>Maintenance & renewals/Operation / Junction improvement / Adding capacity / New road / other</i>
In the past there have been some mistakes made, in particular where the road provision has not matched that required to support growth. General Comments	All	Delegates were keen that these mistakes were learned from during this process and that the highway network was of sufficient quality and had enough capacity to support growth proposals going forward.	This was a general point that was raised but limited discussion took place.	None identified
A14 corridor between M1 junction 19 and Kettering – this is perceived to have the highest levels of congestion along this route. Felixstowe to Midlands	Capacity / Operational / Safety	This was seen as the section of the A14 that was the most congested and weaving problems could cause safety issues. Delegates therefore considered that this section should be improved first.	As the A14 is a significant route through the area the successful operation of this was considered key.	None identified.
M1 and A45 junctions around Northampton were identified as experiencing congestion and were currently constraining growth in the area. Felixstowe to Midlands London to Scotland East	Capacity	Northampton is identified as an area where significant growth is planned and without improvements to these junctions the growth may not be able to come forward.	This issue was discussed at great length in the workshop and due to the number of junctions that require improvement and the quantum of development proposed in Northampton this was considered a high priority.	Nothing was discussed in particular but AECOM understands that assessments have been undertaken to inform the Management Scheme.

<p>Description of challenge / Location</p> <p><i>Nb. These could be from any of the groups – not limited to the ones raised by this group</i></p>	<p>Type of challenge</p> <p>Capacity / Safety / Asset Condition / Operational / Society & Environmental</p> <p><i>Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types</i></p>	<p>Why is this considered to be a priority?</p> <p><i>Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary</i></p>	<p>How does this compare to other priorities?</p> <p>Why? Are there any trade-offs?</p> <p><i>Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be</i></p>	<p><i>Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.</i></p> <p><i>Solution Type (& additional notes)</i></p> <p><i>Maintenance & renewals/Operation / Junction improvement / Adding capacity / New road / other</i></p>
<p>The M1 links and junctions around Daventry may not have sufficient capacity or be of sufficient quality to support development within Daventry.</p> <p>London to Scotland East</p>	<p>All</p>	<p>Daventry is an area identified for notable levels of growth and there were concerns that if improvements were not made to the M1 in this location that development may not come forward.</p>	<p>It was unclear how much of a priority this is but the access from M1 north to Daventry and vice versa was raised as a significant concern.</p>	<p>A link road was identified between M1 north and M45 west to ease pressure on the local road network. Solutions at other junctions / links were not discussed.</p>
<p>There was some concern that any improvement schemes that come forward could displace problems to other sections of the network, rather than remove them completely.</p> <p>General Comments</p>	<p>All</p>	<p>If the existing issues are only shifted to another section of the network then there could still be capacity issues that constrain growth.</p>	<p>This was not discussed in great detail but was raised on more than one occasion when discussing proposed improvements.</p>	<p>Suitable planning procedures need to be utilised to determine the potential wider impacts of improvements on the network.</p>
<p>M1 junctions 13-19 – delegates were concerned about how long the widening along this section would provide sufficient capacity for existing and future traffic.</p> <p>London to Scotland East</p>	<p>Capacity / Operational</p>	<p>This section has recently been widened but delegates noted that there are still regular congestion problems in the peak hours. Therefore concerns were raised regarding the potential for the corridor to accommodate additional traffic in the future.</p>	<p>Although this concern was raised the delegates considered that further improvements at this stage were unlikely and therefore limited discussions took place.</p>	<p>Not discussed.</p>
<p>There are problems entering and leaving the SRN at Northampton due to capacity issues.</p> <p>London to Scotland East</p> <p>Felixstowe to Midlands</p>	<p>Capacity</p>	<p>Northampton is identified as a significant area for growth and these capacity issues could be constraining this growth.</p>	<p>Due to the growth planned within Northampton this was considered to be a relatively high priority.</p>	<p>Not discussed specifically but linked to the Northampton Growth Management Scheme.</p>

<p>Description of challenge / Location</p> <p><i>Nb. These could be from any of the groups – not limited to the ones raised by this group</i></p>	<p>Type of challenge</p> <p>Capacity / Safety / Asset Condition / Operational / Society & Environmental</p> <p><i>Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types</i></p>	<p>Why is this considered to be a priority?</p> <p><i>Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary</i></p>	<p>How does this compare to other priorities?</p> <p>Why? Are there any trade-offs?</p> <p><i>Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be</i></p>	<p><i>Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.</i></p> <p><i>Solution Type (& additional notes)</i></p> <p><i>Maintenance & renewals/Operation / Junction improvement / Adding capacity / New road / other</i></p>
<p>The delegates recognised that there are a number of pinch point funding schemes that were not allocated funding, for various reasons.</p> <p>General Comments</p>	All	<p>There were concerns that the work that went into identifying and preparing these schemes would not be utilised in the RBS process. Repetitive or wasted work should be avoided.</p>	<p>A number of delegates considered that this was an important issue and were keen for previous studies undertaken to be considered.</p>	N/A
<p>M1 corridor – need to remove strategic trips from the network and encourage other modes of transport.</p> <p>London to Scotland East</p>	Capacity / Operational	<p>There were concerns that there are not infinite levels of capacity on the M1 and that attempts should be made to shift existing and future traffic to alternative modes.</p>	<p>This was considered to be a relatively high priority.</p>	<p>The provision of a strategic park and ride site, potentially at Watford Gap, to shift longer distance car trips to bus or rail.</p>
<p>There are current congestion issues on the A45 south of the A14.</p> <p>Felixstowe to Midlands</p>	Capacity	<p>The A45 is a key route between Northampton and the A14 and therefore it is considered an important route on which to ensure congestion is limited.</p>	<p>This was the subject of a limited discussion in the group; furthermore some delegates thought it was of less concern than others.</p>	Not discussed.
<p>There were concerns that the consultation between the HA and local authorities would not identify local schemes that can be linked to strategic improvements and provide greater benefits than large scale schemes alone.</p> <p>General Comments</p>	All	<p>If strategic and local schemes are brought forward without consideration of the combined impacts then the greatest benefits from both schemes may not be realised.</p>	<p>Limited discussion on this priority took place within the group.</p>	Not discussed.

Description of challenge / Location	Type of challenge Capacity / Safety / Asset Condition / Operational / Society & Environmental	Why is this considered to be a priority?	How does this compare to other priorities? Why? Are there any trade-offs?	<i>Capture any solutions that are proposed and ensure people feel heard, but re-focus on discussing their views on the priorities.</i> <i>Solution Type (& additional notes)</i> <i>Maintenance & renewals/Operation / Junction improvement / Adding capacity / New road / other</i>
<i>Nb. These could be from any of the groups – not limited to the ones raised by this group</i>	<i>Prompt if the same types are raised to consider whether they are viewed as a higher priority than other types</i>	<i>Nb. We are not asking the group to reach a consensus about the priorities, but to discuss their views. Include initials of the delegates so that we can follow up if necessary</i>	<i>Nb In this session we most interested in how they decide what should be a priority rather than what the priorities are. The sticky dot session will help show what the group think the priorities should be</i>	
There are concerns going forward regarding the proportion of HGVs in the A14 traffic (thought to be up to 25% at certain times of the day). Felixstowe to Midlands	Capacity / Operational / Safety	The reason for this to be considered a priority is due to how this affects the capacity, average speed and safety of the route.	This was not considered a high priority.	Longer / heavier HGVs or HGV convoys.

Workshop Name	Hertfordshire LEP	Date:	1 st October 2013	Breakout Group	Yellow Group
Group Facilitator	Angela Middleton	Note-taker	Liz Judson		

Location	Description of challenge	Type of challenge Capacity/Safety/Asset Condition / Operational / Society & Environment	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
			Already is	2015-21	After 2021					
Area wide General Comments	The location of strategic growth sites across the county is not generally known yet. All the local authorities are at different stages in their Local Plan preparation. There is concern therefore that when the RBS's are written the finer details of local growth will not be known and therefore will not be taken	All		✓	✓	Partially – delegates noted that the quantum of development included on the map was broadly correct but that the locations of development were not confirmed at this time.	Evidence of development locations to be provided if/when available.	Delegates in general but particularly Kevin Langley at Dacorum Borough Council	Lorraine O' Gormen (North Herts District Council)	0

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society &	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
	into account fully.									
M25 in general London Orbital and M23 to Gatwick	Hertfordshire's location in close proximity to London and the associated arterial roads means that any problems on the M25 have a significant impact on the local road network in Hertfordshire.	Capacity / Operational	✓			High levels of delay on the M25 between Junction 21 and 24 shown on the delay map partially support this – the A414 acts as an alternative route for this section of the M25.	Evidence is anecdotal and based on a few individual's experience in this specific area of the network, although it was not contradicted by other delegates.	None	Steve Farrell (Three Rivers DC)	0
A1(M) junction 7 and the section to the south London to Leeds (East)	If there is congestion on the A1(M) then this can have a knock impact on the local roads through Knebworth	Capacity / Operational	✓			High levels of delay shown around junction 7 of the A1(M) and further south.	Evidence is anecdotal and based on a few individual's experience in this specific area of the network, although it was not contradicted by other delegates.	None	Lorraine O' Gormen (North Herts District Council)	14

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society & Capacity	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
			✓	✓	✓					
M25 west of junction 21 London Orbital and M23 to Gatwick	There are significant problems on the M25 in the west of the county. This is considered to be a constraint to development in this area due to the route already being at capacity.	Capacity	✓	✓	✓	Evidence of delay on the M25 to the west of junction 21 is shown on the delay map, which partially supports this.	Evidence is anecdotal and based on individuals' experience, but there seemed to be consensus from many of the delegates that this issue was commonplace.	None	Joan Hancock (Herts LEP)	2
A1(M) junctions 7 and 8 London to Leeds (East)	There are significant problems on the A1(M) at Stevenage. This is considered to be a constraint to future development in this area due to the route already being at capacity.	Capacity	✓	✓	✓	Some delay shown between junctions 7 and 8 of the A1(M).	Evidence is anecdotal and based on delegates' experience in this specific area of the network, although it was not contradicted by other delegates.	None	Sanjay Patel (Herts CC)	14*
M25 Junction 21a to M1 Junction 6 (A405) London Orbital and M23 to Gatwick	There are concerns regarding the A405 link between M25 Junction 21a and M1 Junction 6 and the constraint that this limited capacity into Watford has on the potential for growth in the area.	Capacity	✓	✓	✓	Delay maps show that there is some delay on this link of the A405.	Evidence is anecdotal and based on delegates' experience in this specific area of the network, although it was not contradicted by other delegates.	None	Joan Hancock (Herts LEP)	7

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society &	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
				✓	✓					
A414 and M1 Junction 8 London Orbital and M23 to Gatwick London to Scotland East	There are concerns that St Albans growth could have an impact on the operation of the A414 and Junction 8 of the M1. There is the possibility that 4,000 houses and significant employment could be built on land between St Albans and Hemel Hempstead. A potential M1 Junction '8a' could be considered as a solution.	Capacity / Operational		✓	✓	The delay maps show some existing delay on the M1 in this location. Furthermore there is significant development (particularly employment) proposed for Hemel Hempstead near to Junction 8 at Maylands Business Park.	No further evidence was discussed – St Albans City and District development plans are not yet known.	None	Kevin Langley (Dacorum BC)	8
Area wide London Orbital and M23 to Gatwick London to Scotland East London to Leeds (East)	There are concerns that the capacity and quality of the rail services to and from London in the future may result in a shift to car use in the county following planned growth.	Capacity / Operational		✓	✓	No	Not discussed	None	Joan Hancock (Herts LEP)	0
A1(M) Welwyn Hatfield (Jn 4) to Stevenage (Jn 7/8) London to Leeds (East)	This section of the A1(M) currently has capacity issues, which could be exacerbated by development to the west of Stevenage and at Junction 4 at Welwyn Garden City.	Capacity	✓	✓	✓	High levels of delay shown on the map between junctions 4 and 8	N/A	None	Sanjay Patel (Herts CC)	14*
A1(M) around junction 6 London to Leeds (East)	The two lane section at this point is a constraint and operates badly in the peak hours.	Capacity	✓	✓	✓	Some of the highest levels of growth in the Herts area are in the vicinity of junctions 6 and 7.	Not discussed	None	Kevin Langley (Dacorum BC)	14*

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society &	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
A1(M) corridor London to Leeds (East)	The delegates perceived that there is a high level of local traffic using the A1(M), rather than predominantly strategic traffic, as the local roads are not considered to be of a high enough standard.	Capacity / Asset Condition / Operational	✓			No	Evidence is anecdotal and based on an individuals' experience, but there seemed to be consensus from many of the delegates that this issue was commonplace.	None	Lorraine O' Gormen (North Herts District Council)	14*
M25 in general London Orbital and M23 to Gatwick	Alternative east-west routes to the M25 are poor across the area, which puts pressure on the operation of the M25. Suggestions that there needs to be an outer east-west ring road other than the A414 to provide another suitable alternative route.	Capacity / Asset Condition / Operational	✓			The maps indicate that there are generally significant levels of delay on the M25 within the Herts area.	Not discussed	None	Kevin Langley (Dacorum BC) and Steve Farrell (Three Rivers DC)	5
East – west movements through the county London Orbital and M23 to Gatwick London to Leeds (East)	A study of the A602 indicated that to encourage growth there needed to be a greater provision of east-west movements for freight traffic. A number of existing routes are not considered to be of a sufficient standard.	Capacity / Asset Condition / Operational	✓			No	Not explicitly discussed, however an A602 study may provide further detail.	Sanjay Patel - HCC	Sanjay Patel (Herts CC)	0
M1 corridor and A5 London to Scotland East	The M1 still experiences congestion despite the recent widening of the carriageway and hard shoulder running. The A5 is an even worse potential alternative route because it experiences congestion.	Capacity	✓			The delay map suggests that the M1 currently experiences high levels delay on the majority of links north of the M25.	N/A	None	Kevin Langley (Dacorum BC)	1

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society &	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
A1(M) corridor London to Leeds (East)	Traffic modelling of the effects of proposed growth in this corridor indicated that there will be impacts on the A1 (M), which could be a problem for all authorities in the area. Mitigation was calculated at £42m, of which £32m is required for the SRN	Capacity		✓	✓	There is growth proposed in a number of areas along the A1(M) corridor.	Evidence is being prepared in support of North Herts District Council's and Stevenage Borough Council's emerging local plans.	No evidence was promised specifically but Lorraine O' Gormen raised the issue of modelling and therefore may have evidence if requested.	Lorraine O' Gormen (North Herts District Council)	0
Area wide London Orbital and M23 to Gatwick London to Scotland East London to Leeds (East)	There are concerns that the three areas where the highest levels of growth are proposed, are the areas that currently experience the most congestion on the network (Watford, St Albans/ Hemel Hempstead and Stevenage).	Capacity	✓	✓	✓	This is generally supported by the growth map (although details of St Albans growth are unclear at the moment) and the network delay map.	N/A	None	Kevin Langley (Dacorum BC)	0
M1 Junction 5 London Orbital and M23 to Gatwick London to Scotland East	Delegates highlighted that northbound queuing occurs on the offslip at M1 Junction 5, back to the mainline carriageway and that this forms a major access route to Watford.	Capacity	✓			No	Evidence is anecdotal and based on a few individual's experience in this specific area of the network, although it was not contradicted by other delegates.	None	Joan Hancock (Herts LEP)	0
M1 corridor London to Scotland East	In the AM peak the M1 southbound is often congested from Junction 11. Unless motorists get through this section before 8am there can be significant delays.	Capacity	✓			The delay map suggests that this section of the M1 experiences significant delays.	N/A	None	Kevin Langley (Dacorum BC)	1

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society &	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
			✓	✓	✓					
A1(M) Junction 9 London to Leeds (East)	On the northbound offslip there is a dedicated left turn lane which gives way to traffic which is exiting the roundabout which is considered to be unsafe. The visibility for left-turning traffic is considered to be poor and there is a problem with junction design.	Safety	✓			The safety map does not indicate that this junction specifically is a problem but the link between junctions 8 and 9 does have some safety concerns.	Evidence is anecdotal and based on delegates' experience in this specific area of the network, although it was not contradicted by other delegates	None	Sanjay Patel (Herts CC)	1
A414 Park Street roundabout London Orbital and M23 to Gatwick	This junction is considered to be a safety concern, which could be exacerbated by the Rail Freight Interchange planned nearby.	Safety	✓	✓	✓	No	Evidence is anecdotal and based on delegates' experience in this specific area of the network, although it was not contradicted by other delegates	None	Sanjay Patel (Herts CC)	2
Area wide General Comments	Consideration should be given to the surfaces used on the SRN to reduce noise pollution.	Asset Condition / Society and Environment	✓			There is poor pavement condition on a number of routes across the county, as suggested on the relevant map.	N/A	None	Sanjay Patel (Herts CC)	0

Location	Description of challenge	Type of challenge Capacity/Safety/ Asset Condition / Operational / Society &	When does this issue become critical			Is the evidence for this challenge shown on our maps?	If not, what evidence is there to show this is/will become a challenge?	Promises to provide supporting evidence by (name, org)	Raised by	Number of sticky dots received
A1(M) Junction 3 London to Leeds (East)	There are concerns with the ramp metering at Junction 3. The nearby Hatfield Business Park means that the junction is nearing capacity.	Capacity	✓			No	No specific evidence was discussed. There appeared to be amongst the group that this could be a significant challenge .	None	Sanjay Patel (Herts CC)	0
M25 Junction 22 London Orbital and M23 to Gatwick	One delegate observed peak hour queuing from the slip roads onto the mainline carriageway.	Capacity / Operational	✓			The delay maps indicate that there is delay on the mainline links around junction 22 but there is no specific junction information.	Evidence is anecdotal and based on an individuals' experience, but there seemed to be consensus from many of the delegates that this issue was commonplace.	None	Joan Hancock (Herts LEP)	0
M1 corridor London to Scotland East	There are concerns regarding the potential expansion of Luton Airport on the operation of the M1.	Capacity / Operational		✓	✓	The evidence maps do not provide any details of growth at Luton Airport (airport growth is highlighted on the SEMLEP workshop map because the airport is located outside of Hertfordshire).	No evidence discussed. Current planning application may provide relevant data.	None	Unknown (did not initial post-it note)	0

Sticky Dots Exercise – Cheshire Workshop

CAPACITY	
Problem / Issue	Number of Sticky Dots
M6 Junction 16 – Junction 20 & Accidents / Incidents	9
M6 in Cheshire East	15
M6 Junction 11, 12 & 11A	9
Lack of Managed Motorways on M6 near Stoke	5
England to Wales cross-border issues – Strategic Links & Development Sites	8
Airport City – Impact on corridors	2
Ensure growth aspirations are considered	0
Controlling speeds using average speed cameras	6
M56 Junction 7 / A556 Congestion	9
Availability of strategic diversion routes and impact of these on infrastructure	3
Development pressures – Chester, Airports, Airport City, Wirral Waters, Deeside, Broughton, Warrington	8
M6 – Hard Shoulder Running	3
OPERATIONAL	
M53 Junction 10	6
A55 / A54	3
M56 Junction 11	0
M56 Junction 12	5
A483 / A55	8
Mersey Tunnels Capacity	0
A550	2
M62 Junction 9 & Junction 11	4
M62 Junction 8 – Future development	2
Integrated Management of networks – HA >> LHA	0
Traffic Growth – M56	1
Signing Issues – M6	1
Improved co-ordination – HA and Local Authorities	3
Prioritisation of funding for Cheshire & Warrington	0
VMS – M53 & M56	3
Access to Freight Interchanges	1
Incident Management & Journey Time Reliability	3
Low Bridge – Sutton Weaver route	0
M53 – Local Business issues	6
M6 Junction 16 – Barthomeley Link issues	2
Economic impacts of congestion and access e.g. Wrexham	0
SOCIETY & ENVIRONMENT	
Air Pollution / Noise – Impact on Communities / A556 M56 Junction 7	5
SAFETY & ASSET CONDITION	
Maintenance Regime – Use of SMA	4
M6 Junction 15 – Junction 20 : Accident hot spot. Impacts on local roads. Also M56 Junction 12 – Junction 14	8
Access to datasets (Diversion routes)	2

Red Diesel Incidents	4
Crewe to The Potteries – improvements to local roads	3
Importance of SRN for Freight	0
Repair speed of potholes and pavements	9
Verge cutting – A556	1
Junctions coming to end of useful life	0

Sticky Dots Exercise – Lancashire Workshop

CAPACITY	
Problem / Issue	Number of Sticky Dots
Ribble Crossings – M6 around Preston	1
Access to Manchester – M61/M66/A56/M60	4
Access to Fylde Ports	3
A56 / M66 Corridor – Simister Island to Bury. PT Issues	1
M65 East Lancs Gateway - Congestion	13
A585 Corridor in General	11
M55 Junction 1	3
Integration with Rail – Parkway Station at M55 Junction 2	3
OPERATIONAL	
M65 & Local Road Impacts (Pendle – diversion routes can't cope)	3
M65 Junction 9 Future Developments at Burnley Bridge	3
M65 Junction 5	0
M65 Junction 13	1
M65 Junction 10 – 14 Trade-off between LCC & HA	1
Freight Access to Heysham & Port of Liverpool	2
M6 / M61 Northbound merge (AM Peak)	5
M6 / M58 (Orrell) Interchange Issues	1
Switch Island	2
M6 Triangle around Preston including Cuerden & Buckshaw Village	9
M6 Junction 31 & access to Salmesbury EZ	2
M6 Junction 31a & Access to Preston East	0
Network Resilience around Warrington	2
M60 / M61 Interface	3
Perception of isolation of East Lancashire	1
Access to Yorkshire	1
Access to Warton EZ	3
Maintaining Trunk Status of A585	1
SOCIETY & ENVIRONMENT	
SAFETY & ASSET CONDITION	
General Issues getting traffic off network – queuing on nearside lane	2
Incidents on M66 causing congestion & delay	3
Junctions along A585	8
A56 between M66 & M65	10
A56 – Todmorden to Rossendale signing issues	1
Perceived greater safety issues in the area causing regular closure of SRN	1

A585 – Condition of provision for sustainable users is poor or missing altogether	7
Major incidents are only 1% of the total picture – need to consider non-injury accidents	3

Sticky Dots Exercise – Merseyside Workshop

CAPACITY	
Problem / Issue	Number of Sticky Dots
LEP Growth Strategies (all NW / national)	3
M6 Junction 26 – Pinchpoint & Local Major Scheme?	5
Impact on local roads e.g. Tarbock Island	2
Signal timings off-peak on junctions	1
M62 Junction 8 – OMEGA development	5
M6 Junction 40 / 41 – Growth & Development	2
A590 Ulverston – Growth & Development	3
M6 Junction 25 – Needs full junction to access development	4
M53 dual-lane section & Junction 5	1
Ports – trip patterns & impact on SRN	0
M62 Junction 8 to Junction 11, OMEGA impact	1
M58 (Skelmersdale) Development pressures	0
Halton / 3MG	0
OPERATIONAL	
Deeside – Cross-border issues / Connectivity between England and Wales	1
M6 – Access to North West via SRN	3
Liverpool – Cruise Terminal growth / Access to city via SRN	2
Freight capacity – Rail / impact on SRN	0
Reliable access / journey times	4
Network resilience / diversion routes	0
M6 / A580	1
A5036 – Post-2020 issues	5
Mersey Gateway not on maps	0
M56 Junction 11, Junction 12 and Junction 11A	6
A5036 / Sefton / Switch Island – Development pressures	5
North West – AM & PM Peak congestion	1
M6 (Staffs to Cheshire)	4
M6 Carlisle to Warwick Bridge	0
A66 East & West – Passing / Dualling	1
Superport HGV impacts	3
M56 Junction 12 / M6 Junction 18-19 ‘Ghost Queues’	1
Junction closures to reduce weaving	0
SOCIETY & ENVIRONMENT	
Have the AQMAs been captured? (Sefton)	0
A5036 – Maintenance / appearance & recognition of urban nature of route	2
Funding for rail vs road to facilitate trip transfer (e.g. M61 vs Bolton line)	1
Long term consistency of funding vs shortening programme for ‘ready’ schemes	2

SAFETY & ASSET CONDITION	
M58 Junction 1 – South-facing slips	2
M53 – Age of structures	0
M62 (Junction 4 to 6) – Maintenance / re-trunking?	0
M56 (Junction 4 to 6) – Weaving accidents	2

Sticky Dots Exercise – Manchester Workshop

CAPACITY	
Problem / Issue	Number of Sticky Dots
City Centre growth (not all in local plan process) & demand patterns	3
Regional Centre expansion – Etihad / Salford Quays & Orbital demand	5
M60 junction with local arteries	10
M60 South – no access to Manchester City Centre for Eastbound traffic	1
Growth at Trafford Centre / Port Salford (& Atlantic Gateway post-2021)	14
Cheshire East – 2000 dwellings on the A34	1
Barton / Worsley – Development pressures	0
A34 – Development pressures	0
M6 J26 Interaction of Pinch Point Scheme with Local Road Network	4
M62 J8 – 10 Development Pressure	1
M6 J40/41 Growth Impact	2
Access to Carlisle from East	0
Lack of north facing slips at M6 J25	4
Road to rail transfer for Lancs to Mcr trips	1
Port access	3
M6 J18 – 19 delays	1
Lack of completed (and accurate) local plans	5
All development sites not identified (Woodford)	2
Change in consumer habits impacting on travel patterns (inc. Freight)	2
Inaccurate forecasts > underprovision	2
A628 – Capacity issues	7
OPERATIONAL	
M60 Junction 18 / M62/M60 Link	2
M60 Junction 24 – Tailback onto Mainline	0
Dual role of M60 (Distributor v Trans-Pennine M62)	2
M60 – Constraint to growth in Stockport	1
Glossop corridor – knock-on area wide re-routing	1
M60 – Complicated junctions	1
Croft Interchange – major Pinchpoint & safety concern	0
Manchester Airport – wide catchment to SRN	1
Broadway – Conflict between strategic and local role	7
Airport City – Public transport access	2
Lack of resilience on congested networks	2
M60 – junctions too close, weaving eats up capacity as a result	1
M60 – Strategic vs local vs junction hopping	6
24-hour use of SRN	0
Business Parks on the M60	1

A34 (N) from M60 & A5103 (N) from M60 Eastbound	3
Lack of M56 > M6 (S) Link	4
M60 (W) – operation & interface with other SRN routes	0
M60 Junctions 9 & 10 journey time reliability	1
M60 Junction 7 match day issues (management)	1
M60 Junction 12 multiple SRN connections & impact on wider network	0
Route function & mix of traffic purpose	0
M56 interface with M60 – impact of Airport expansion	11
M56 interface with M60 – A556 link	0
M56 interface with M60 – SEMMMS link	1
M60 Junction 13 & Junction 12 – weaving issues	1
M60 Junction 2 & Junction 3 – weaving issues	0
M62 – Diversions onto local road network following incidents	1
SOCIETY & ENVIRONMENT	
M60 in Stockport > Severance issues	5
Cycling safety on a-roads	1
Concern over diversion of transport funds to other areas	3
Lack of consistent funding	2
Noise pollution on SRN	1
Noise sensitive surfaces	0
M60 / M602 – Noise / Air Pollution	2
Consider impact of HGVs	1
Air Quality as a consideration of RBS outcomes	4
A628 & impact upon Peak District National Park	8
Integration with other modes (RBS process)	3
Competing demands for growth between GM / Leeds & Sheffield City Regions	0
Access to funding routes for LAs to support / enhance their key networks	3
SAFETY & ASSET CONDITION	
A663 – HGV / residential conflicts	3
M62 / M60 section of SRN	1
Diversion routes through Bredbury / Stockport	1
Lack of maintenance of vegetation obscuring road signs	1
Poor maintenance of lane marking (M60 Junction 24 to Junction 23)	2
Poor signing and lining of complex junctions (M60 Junction 9 & 10)	2
Croft Interchange	0
M60 Junction 13 and Junction 12 – Weaving issues	2
M60 Junction 2 and Junction 3 – Weaving issues	0

Part C Bibliography

C1 Use headings as appropriate (manual heading numbering)

C1.1 Chapter 2

Area 9 Asset Management Plan

Midlands regional safety report, April 2012

Environmental Information system (EnvIS) - contains environmental data supplied by Service Providers, the HA and other third parties and displayed in the Highways Agency Geographical Information System (HAGIS). The data within EnvIS identifies the asset, location, condition and broad management requirements. EnvIS is divided into the following environmental topics:

- Landscape
- Nature Conservation and Ecology
- Water
- Cultural Heritage
- Noise
- Air Quality
- Waste and Material Resources

C1.2 Chapter 3

Lichfield Local Plan Strategy

Solihull Local Development Framework

Cannock Chase Local Plan

Tamworth Local Plan

Redditch Draft Local Plan No. 4

Bromsgrove Disatrick Plan Submission Verison

Wyre Forest Core Strategy

Rugby Borough Council AMR 2012 (scale up to and including 2026)

Warwick District Council Preferred Options (scale up to and including 2029)

Stratford on Avon Housing Sites and Completions June 2013

Coventry CC Housing Policy Topic Paper (scale up to and including 2028)

North Warwickshire Borough Council Annual Monitoring Report 2012 (scale up to and including 2027)

Nuneaton and Bedworth Borough Plan Preferred Options

East Staffordshire Borough Council Pre-Submission Local Plan 2013

Staffordshire Moorlands District Council Revised Submission Core Strategy (scale up to and including 2026)

Newcastle-under-Lyme Borough Council SHLAA 2012/13 (scale up to and including 2026)

Newcastle-under-lyme and Stoke-on-Trent Core Strategy Adopted
Stafford New Local Plan Publication document

C1.3 Evidence received from stakeholder workshops

Leicestershire and Coventry and Warwickshire

Evidence Title	Evidence source and key contacts	Summary of content	RBS Route
Headline issues within the EA remit that apply to Highways Development + maps	Tim Andrews (EA) www.environment-agency.gov.uk enquiries@environment.agency.gov.uk	<ul style="list-style-type: none"> -Flood risk is broadly referred to. -It is suggested that the Water Framework Directive and Water Quality is included in HA's list of EIA scoping topics. -Highways construction must not make the waterbody status worse and mitigation should be installed to alleviate pollution risks associated with construction works. -Protection and development of natural fisheries environment is one of EA's key priorities – actions for their protection are set out in the document. 	N/A
Leicestershire County Council: Evidence for the RBS stakeholder event	Paul Sheard/Jennifer Hill (Jennifer.Hill@leics.gov.uk)	<ul style="list-style-type: none"> -Sets out the transport evidence base for Leicestershire. -Provides an overview of major committed developments in Leicestershire and required associated improvements to the SRN. -Describes and reviews committed improvement schemes to the SRN. -Sets out district wide studies in Leicestershire. -Provides a brief synopsis of LLITM. 	<ul style="list-style-type: none"> -London to Scotland East - North and East Midlands - South Midlands
Leicestershire County Council: County developments map	Paul Sheard/Jennifer Hill (Jennifer.Hill@leics.gov.uk)	-A map displaying housing developments with more than 100 dwellings and employment development areas across the county. It is colour coded to show applications, appeals, SUE sites known and committed developments.	<ul style="list-style-type: none"> -London to Scotland East -North and East Midlands -South Midlands
Leicestershire County Council: Congestion map	Paul Sheard/Jennifer Hill (Jennifer.Hill@leics.gov.uk)	-A map showing congestion levels in the Leicestershire/Nottingham/Derby areas.	<ul style="list-style-type: none"> -London to Scotland East -North and East Midlands -South Midlands

Evidence Title	Evidence source and key contacts	Summary of content	RBS Route
Leicestershire County Council: Stress map (2026)	Paul Sheard/Jennifer Hill (Jennifer.Hill@leics.gov.uk)	-A map showing a congestion plan of the county in 2026 shown as a Stress (AADT/CRF)%	-London to Scotland East -North and East Midlands -South Midlands
Nuneaton and Bedworth Borough Plan: Preferred Options (Part 1&2)	Documents found online. Link provided by Ashley Baldwin - Planning Policy, Principal Planning Officer ashley.baldwin@nuneatonandbedworth.gov.uk	The Local Plan/Core Strategy for the borough, running until 2028. Details anticipated housing and employment development in the borough.	-Felixstowe to Midlands
Nuneaton and Bedworth Borough Plan: Infrastructure Delivery Plan	Documents found online. Link provided by Ashley Baldwin - Planning Policy, Principal Planning Officer ashley.baldwin@nuneatonandbedworth.gov.uk	Details infrastructure required to support anticipated development. Background to key connections commuting patterns, and traffic issues and trends.	-Felixstowe to Midlands -London to Scotland West
Nuneaton and Bedworth Borough Plan: Proposal Map	Documents found online. Link provided by Ashley Baldwin - Planning Policy, Principal Planning Officer ashley.baldwin@nuneatonandbedworth.gov.uk	Detailed map of anticipated developments in the borough, along with proposed infrastructure improvements.	-Felixstowe to Midlands -London to Scotland West
North Warwickshire Core Strategy: Submission Version	Dorothy Barratt, Forward Planning & Economic Strategy Manager, North Warwickshire Borough Council DorothyBarratt@NorthWarks.gov.uk	The core strategy of North Warwickshire borough from 2006 until 2028.	-Felixstowe to Midlands - South Midlands

Evidence Title	Evidence source and key contacts	Summary of content	RBS Route
North Warwickshire Site Allocations Plan: Preferred Options	Dorothy Barratt, Forward Planning & Economic Strategy Manager, North Warwickshire Borough Council DorothyBarratt@NorthWarks.gov.uk	The site allocations plan for North Warwickshire. Used as an evidence base for the Core Strategy, above. Covers Employment, Housing and retail sites.	-Felixstowe to Midlands - South Midlands
North Warwickshire [Additional information from email, DB 03/10/13]	Dorothy Barratt, Forward Planning & Economic Strategy Manager, North Warwickshire Borough Council DorothyBarratt@NorthWarks.gov.uk	Other potential development sites: -Grendon – appeal for further 85 units. -Atherstone - pre- application for additional 400 units. -Employment sites, especially around M42 Js 9&10.	-Felixstowe to Midlands
Warwickshire LTP 2011-2026	Adrian Hart, Transport Planning, Warwickshire CC adrianhart@warwickshire.gov.uk	The third Local Transport Plan for Warwickshire. Has background details on local transport in the county and future key proposals. Details strategy delivery of: congestion, land use and transportation, road safety, highway maintenance, intelligent transport systems. Finally, implementation plan up to 2015.	-Felixstowe to Midlands -London to Scotland West -South Midlands
A Strategy for the A5 (December 2013).	Adrian Hart, Transport Planning, Warwickshire CC adrianhart@warwickshire.gov.uk Produced by A5 Transport Group, in conjunction with local government and HA.	Analysis of issues and potential solutions of the A5 in terms of local and national policy. Summarises development proposals along its route. Outlines the strategy and intended role of A5 up to 2026.	-South Midlands
Warwick District Council Local Plan: Revised Development Strategy	Dave Barber, Warwick District Council. dave.barber@warwickdc.gov.uk	Revised development strategy (June 2013) for Warwick DC, details site allocations for the local plan.	-London to Scotland West -South Midlands

Evidence Title	Evidence source and key contacts	Summary of content	RBS Route
Stratford-upon-Avon District Council – Strategic Transport Assessment October 2012	Nicholas Dauncey, Warwickshire County Council nickdauncey@warwickshire.gov.uk	Evaluation of 5 development scenarios (Options E&F from Core Strategy) for development across the district, and the impact on the local and strategic road network. Scenario 2 (Option F) is preferred strategy (wider dispersal of development). (STA S-PARAMICS Modelling Report contains information relevant only to Startford-upon-Avon).	-South Midlands -London to Scotland West
Warwickshire County Council Stratford-on-Avon Strategic Transport Assessment Phase 2 Modelling Report June 2013	Nicholas Dauncey, Warwickshire County Council nickdauncey@warwickshire.gov.uk	Testing of two approaches to housing allocation; South East Stratford SUE and Stratford Regeneration Zone (SRZ) or New Settlement at Gaydon/Lighthorne Heath (GLH) (M40 J12). Expected sizes (dwellings/employment): SUE - 2,750/8ha, SRZ – 700, 25ha, GLH – 5,000/18ha. Includes expected mitigations as part of each approach.	-South Midlands -London to Scotland West
Stratford-on-Avon Strategic Transport Assessment Phase 2 Studley Scenario Analysis	Nicholas Dauncey, Warwickshire County Council nickdauncey@warwickshire.gov.uk	Modelling of impacts of proposed development at Studley.	(London to West Scotland)
Rugby Borough Adopted Core Strategy	Ross Middleton, Rugby Borough Council	Core Strategy Document and Proposals Maps. The HA has been involved with modelling work, along with the County, to establish the impacts of development proposals within the Plan area. RBC stated that the figures on the HA maps for the Rugby Radio Mast Site were too low (1,725 dwellings and 3, 290 jobs by 2021 and 2,375 dwellings and 1,659 jobs by 2026). More up to date (and higher) figures are included in the Core Strategy.	-South Midlands -London to Scotland East -Felixstowe to Midlands

Greater Birmingham and Solihull, Stoke and Staffordshire and Black Country

Evidence Title	Evidence source and key contacts	Summary of content	RBS Route
Black Country LEP Input: Route 3. London to Scotland West	Black Country LEP; Richard Banner (Walsall Council and author of this evidence document Banner@walsall.gov.uk)	<ul style="list-style-type: none"> - Overview of investment in the road network around M6 J10 (Route 3). - Description of significant growth areas at Wolverhampton North i54 and Walsall Darlaston (Enterprise Zones) and a broad reference to their impacts on the road network. - Economic costs of delay between M6 J10a and M5 J3. - Proposed solution to mitigate problems at M6 J10 (capacity increase). - Air pollution a significant problem along the M6. Could be reduced through a reduction in congestion. - Future route requirements – Black Country LEP received Strategic Outline Cases for Major Scheme funding of M6 J10 and M5 J2. - M6 J10 RBS timescales. -M5 J1 and J2 traffic counts provided. 	-London to Scotland West
The Black Country Enterprise Zone	Black Country Enterprise Zone; Wayne Langford (Invest Black Country)	- Advertisement brochure for the Black County Enterprise Zone (which includes 19 sites for development).	-London to Scotland West-Midlands to Wales and Gloucestershire
A38 Corridor STS Study Modular Scheme Development Report	Elizabeth.Boden@lichfielddc.gov.uk 01543 308148	<ul style="list-style-type: none"> -The study aims to determine how to accommodate the traffic demand arising from the anticipated growth in Lichfield/East Staffordshire through the identification an affordable and deliverable transport strategy. -Describes how the A38 suffers from serious congestion and safety issues which, in some sections, are double the national average. -An assessment of current arrangements and proposed interventions to deal with forecast conditions is made. -Maximising efficient operations of the A38 through a combination of Intelligent Transport Systems and Influencing Travel Behaviour, delivered in a series of 10 components, with the overall outcome of the A38 becoming a Managed All Purpose (MAP) road. 	-South Midlands
Action Plan	Elizabeth.Boden@lichfielddc.gov.uk 01543 308148	<ul style="list-style-type: none"> -The document sets out an action plan for the A5 from A449 Gailey (Staffordshire) to the A508/A422 Old Stratford (Northamptonshire) -Some of the schemes set out are corridor-wide such as pedestrian and cycle 	-South Midlands

		<p>improvements.</p> <p>-Others (most) are more specific, such as 'A5/A449 Gailey Junction Improvements'. These schemes are accompanied with a cost, delivery mechanism and responsibility.</p>	
RBS Regional Evaluation Sheet	Will.Spencer@staffordshire.gov.uk	-The document provides feedback on the RBS event. The stakeholder found the event useful, understands the purpose of RBS and how it will be delivered.	N/A
Transport and social justice	Henry.Harbord@sustrans.org.uk 0121 633 5506 (Sustrans)	-A report which sets out the advantages of enhancing and promoting public transport and walking/cycling facilities at the expense of large capital investment road infrastructure improvement projects.	N/A
Locked out: transport poverty in England	Henry.Harbord@sustrans.org.uk 0121 633 5506 (Sustrans)	<p>-Highlights the issue of 'transport poverty' in England with more struggling with the financial demands of car ownership.</p> <p>-The report argues that the lack of practical alternatives (such as adequate public transport links/facilities) is forcing people to choose between debt (through owning a car despite challenging financial circumstances) and social exclusion.</p> <p>-It has a map showing the varying degrees of transport poverty across England.</p> <p>-It sets out ways of tackling the issue such as improving public transport facilities and making them affordable the entire cross-spectrum of the population.</p>	N/A
Sustrans contribution to HA report	Henry.Harbord@sustrans.org.uk 0121 633 5506 (Sustrans)	<p>-Identifies barriers to active travel, including poor quality of local environment, lack of information, lack of skills or confidence.</p> <p>-Hard and soft measures are set out which are recommended to be implemented in order to enhance walking and cycling facilities and promote these modes of travel.</p>	-London to Scotland West
Major employers along SRN	Peter.Davenport@staffordshire.gov.uk 01785 276630	-A map showing the locations of key employment sites, who regard the network as part of their supply chain. These include automotive, aerospace, advanced manufacturing and ceramics industries.	<p>-London to Scotland West</p> <p>-Midlands South</p> <p>-Midlands to Wales and Gloucestershire</p>
Letter to HA regarding RBS	A.Johnson@sstaffordshire.gov.uk 01902 696457	<p>-Supports the principle of a M6/M54/M6 Toll Link Road in order to reduce traffic impact on villages, particularly at Featherstone. No movement on this project since 2006.</p> <p>-Supportive of Concept C (as proposed by the HA) which is displayed in a diagram at the</p>	<p>-London to Scotland West</p> <p>-Midlands South</p>

		<p>end of the letter.</p> <ul style="list-style-type: none"> -Highlights capacity issues at A449 and A5 which could have a detrimental impact on economic growth. -The Council is in the early stages of assessing the feasibility of a Strategic Employment Site at Royal Ordnance Factory, Featherstone. Could be issues with access to the site from the SRN which would need to be explored in Stage 2 of the study. 	-Midlands to Wales and Gloucestershire
<p>A strategy for the A5 2011-2026, A449 Gailey (Staffordshire) to A45 Weedon (Northamptonshire)</p>	<p>Elizabeth.Boden@lichfielddc.gov.uk 01543 308148</p>	<ul style="list-style-type: none"> -Sets out a clear way forward regarding the future role and investment priorities in the A5 over the next 15 years. -Describes how the strategy for the A5 has been prepared in the context of national and local policy. -Sections of the A5 are currently under pressure (particularly around Cannock, Tamworth, Lichfield, Nuneaton/Hinckley and Magna Park) and these problems will be exacerbated by planned growth. Development at Rugby Radio Station and DIRFT are likely to particularly increase congestion on the A5. -Development proposals along the route of the A5 from Daventry to South Staffordshire are set out. 	-Midlands South
<p>Lichfield Core Strategy: Preferred Option Test Modelling Final Report</p>	<p>Elizabeth.Boden@lichfielddc.gov.uk 01543 308148</p>	<ul style="list-style-type: none"> -A technical assessment (using VISSIM) of how the A5 and the A38 would respond to ever-increasing pressures from background growth and from the potential impact of new development in Lichfield as a result of LDF policies. -The SRN is tested across different scenarios; Do Nothing, Do Minimum, Do Something. -The report also assesses how any detrimental impact on the SRN could be allayed through identified and tested mitigation measures. -HA and LDC are in agreement that improvements will be required to the A5 and A38 in order to offset additional development traffic. 	-Midlands South
<p>Newcastle-under-Lyme and Stoke-on-Trent Core Spatial Strategy Traffic Impact Assessment</p>	<p>Austin.knott@stoke.gov.uk 01782 232635</p> <p>Stoke-on-Trent City Council</p>	<ul style="list-style-type: none"> -The report details the traffic impact assessment of proposals set out in the N-U-L and S-O-T Core Spatial Strategy (through the use of the North Staffordshire Transport Model Phase III). -The results show that significant proportions of the highway network in North Staffordshire are already approaching or at capacity, resulting in traffic growth being severely constrained. -Concludes that further work is required to be undertaken in order to identify a package of 	<p>-London to Scotland West</p> <p>-Midlands South</p>

		transport measures to manage future travel demands and ensure that the network operates at an acceptable level in the future.	
North Staffordshire Connectivity Report Stage 1 Report	Austin.Knott@stoke.gov.uk 01782 232635 Stoke-on-Trent City Council	<ul style="list-style-type: none"> -Outlines key base evidence used to inform proposals and potential interventions. -Identifies key challenges in North Staffordshire in relation to the way the transport system impacts on the economy of the sub-region. -Existing travel patterns with the urban area are detailed (Chapter 4). -Existing transport network operation and existing problems discussed in detail + looks at future problems (Chapter 5). 	<ul style="list-style-type: none"> -London to Scotland West -North and East Midlands
North Staffordshire Integrated Transport Study Final Report (2005)	Austin.knott@stoke.gov.uk 01782 232635 Stoke-on-Trent City Council	<ul style="list-style-type: none"> -Examines transport in North Staffordshire at sub-regional and conurbation level. -Identifies key travel and transport issues. -Develops and appraises a set of strategy options. -Identifies mechanisms for implementation -Final output is the production of an integrated transport strategy. 	<ul style="list-style-type: none"> -London to Scotland West -North and East Midlands
Email correspondence	Austin.knott@stoke.gov.uk 01782 232635 Stoke-on-Trent City Council	<ul style="list-style-type: none"> -Key issues and challenges to the SRN are discussed. Congestion issues likely to constrain demand for travel which will impede the economic regeneration of the conurbation. -Discusses planned changes to the transport network and major developments which may have a significant impact on the trunk road network. -Key opportunities are considered, namely the Etruria Valley development, with the A500 expected to yield significant benefits as a result of the highway improvements required to facilitate the construction of the site. -Other sources of evidence is provided list including the A50/A500 Route Utilisation Report, North Staffordshire Integrated Transport Study, North Staffordshire Connectivity Study Stage 1 Report, North Staffordshire Transport Model and the Vulnerable User Study. -Austin also recommends that the focus of the RBS study should be on improving the A50 and A500, in particular: <ul style="list-style-type: none"> A500 between Porthill and Etruria grade-separated junctions. A50/A500 grade-separated junction. M6 J15/A500/A519 junctions. 	<ul style="list-style-type: none"> -London to Scotland West -North and East Midlands

		These are considered to be the main constraints on the operation of the SRN within North Staffordshire and a constraint on economic regeneration.	
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- ⁱ Lichfield Local Plan Strategy
 - ⁱⁱ Solihull Local Development Framework
 - ⁱⁱⁱ Cannock Chase Local Plan
 - ^{iv} Tamworth Local Plan
 - ^v Redditch Draft Local Plan No. 4
 - ^{vi} Bromsgrove Disatrick Plan Submission Verison
 - ^{vii} Wyre Forest Core Strategy
 - ^{viii} Rugby Borough Council AMR 2012 (scale up to and including 2026)
 - ^{ix} Warwick District Council Preferred Options (scale up to and including 2029)
 - ^x Stratford on Avon Housing Sites and Completions June 2013
 - ^{xi} Coventry CC Housing Policy Topic Paper (scale up to and including 2028)
 - ^{xii} North Warwickshire Borough Council Annual Monitoring Report 2012 (scale up to and including 2027)
 - ^{xiii} Nuneaton and Bedworth Borough Plan Preferred Options
 - ^{xiv} East Staffordshire Borough Council Pre-Submission Local Plan 2013
 - ^{xv} Staffordshire Moorlands District Council Revised Submission Core Strategy (scale up to and including 2026)
 - ^{xvi} Newcastle-under-Lyme Borough Council SHLAA 2012/13 (scale up to and including 2026)
 - ^{xvii} Newcastle-under-lyme and Stoke-on-Trent Core Strategy Adopted
 - ^{xviii} Stafford New Local Plan Publication document

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