

A46 Phase 2 Task 1

Description of potential options by section

Section no.	Road	Key junctions / locations	Current standard	Highway Performance			Housing & Employment Growth Intensity					Options considered and status	Deadline for scheme delivery	Midlands Connect approach
				2015	2031	2041	2020-2025	2025-2030	2030-2035	2035-2040	2040-2045			
<b>Ashchurch Area</b>														
1	M5	<b>M5 Junction 9</b>	A46 signalised roundabout.									Highways England RIS2 Stage 0 Report identifies a range of options including: online improvements with upgrades to J9; a new single carriageway link road to the south of Ashchurch between Teddington Hands to a new junction on the M5 south of the existing J9 (Options 1 and 2); and a new link road to J10 (Option 3). Unclear if all options are still on the table to take to PCF1. GCC have also presented a range of options within a pre-SOBC submission for Large Local Major (LLM) Funding. The options include a new or extended M5 J9 and a bypass that links the motorway junction to Teddington Hands roundabout. Work on an OBC is progressing on a £250m+ scheme with delivery commencing in 2024/25.	2025 – 2030	Work with HE and GCC to identify preferred option which provides a long-term solution, a high standard route and junction options which reflect the location of proposed growth sites (i.e. 10,000 new homes and 120ha of employment land nr M5 J9 as part of successful Ashchurch Garden Town bid). The development is currently scheduled in four phases from 2031.  Lobby for GCC's LLM bid including the dualling of the proposed single-carriageway link road to a new motorway junction.
	A46	<b>Ashchurch</b>	Single carriageway with local accesses											
		<b>TEDDINGTON HANDS (A435/B4077)</b>	At-grade roundabout									HE options do not include improvements to Teddington Hands. GCC options include a Grade Separated Junction and a bypass of the roundabout with slips accessing the A46 and A435.	2025 – 2030	Examine the potential for jobs and housing growth, and improvements elsewhere in the corridor to increase traffic at this junction and make the case for investment.
<b>Ashchurch - Evesham</b>														
2	A46	Beckford	Single carriageway with local accesses									Highways England has concluded that there is no case for improvements in the Beckford area at this time.	2040 – 2045	In the long term consider the case for dualling this section to provide a consistent standard across the whole of the A46 in the area. Programme could be brought forward depending on delivery of other improvements elsewhere in the corridor.
<b>Evesham Area</b>														
3		<b>SOUTHERN END OF EVESHAM BYPASS (A4184)</b>	At-grade roundabout									Proposed Eastern Bypass would mitigate need to improve this junction as it would no longer carry through-traffic.	2040 – 2045	Growth aspirations to be monitored. Should the Evesham bypass go ahead, longer term growth may influence the need for further option development at this junction.
	A46	Evesham / Evesham bypass	Wide single carriageway with at-grade roundabouts									WSP believes there is a 'fairly strong' business case for a new eastern (outer) bypass of Evesham. The option tested has new junctions to north and south of Evesham, but with no intermediate junctions. Worcestershire have applied for HE's Growth and Housing Fund for roundabout upgrades on the existing alignment.	2030 – 2035	It is recommended that this scheme and Ashchurch are delivered by 2035 to improve the performance and reliability of the southern section of the A46, however delivery should be sequenced based on an appreciation of the levels of planned growth at Ashchurch and Evesham and the funding available.
		<b>NORTHERN END OF EVESHAM BYPASS (A4184)</b>	At-grade roundabout									This junction would be re-built as part of the proposed eastern bypass.	2030 – 2035	Midlands Connect should undertake

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		(A44))												<p>further work to understand the interaction between the two areas of interest to better understand their mutual impact and influence.</p> <p>Work could also be undertaken to examine the case for additional junctions on the eastern bypass where it crosses the A44 (Broadway Road) and potentially also the B4510 and B4035.</p> <p>Plans to deliver 1,200 jobs at Vale Park at Evesham by 2030. Permission required from HE to deliver expansion plans. Midlands Connect to support Worcestershire and District Councils in plans for growth</p>
<b>Alcester Area</b>														
4	A46	Salford Priors	Dual (2-lane) carriageway with a single at-grade roundabout at Salford Priors (B439)									This section has not examined by HE or MC/WSP.	2040 – 2045	Examine the potential for jobs and housing growth, and improvements elsewhere in the corridor to increase traffic at this junction and make the case for investment (e.g. beyond 2031). May need to be reviewed following progress with Ashchurch and Evesham.
		<b>ALCESTER (A435)</b>	At-grade roundabout										2035 - 2040	Examine whether this roundabout has sufficient capacity for future demand; and if not, consider alternatives. May need to be reviewed following progress with Ashchurch and Evesham. Post 2040 plans for additional housing at Alcester (c. 2000 homes) should also be considered.
<b>Stratford Area</b>														
5	A46	Alcester Road	Single carriageway with local accesses									New roundabout proposed close to Wildmoor Roundabout as part of development (not included in WSP modelling). Highways England <u>may</u> be examining this section (but unclear).	2025 - 2035	Scheme could be needed to deliver wider regional connectivity sooner. Should be reviewed following progress with Ashchurch, Evesham and Stratford bypass.
		<b>WILDMOOR ROUNDABOUT (A422)</b>	At-grade roundabout									New arm proposed linking into a proposed Stratford Western Relief Road (but no improvements to roundabout related to this). HE PCF0 study in 2018 identified at-grade and grade-separated options for improvement but considered them to be poor value for money. The WSP preferred option is to grade-separate Wildmoor Roundabout.	2025 -2035	<p>Examine relationship between improvements at Wildmoor and Bishopton Roundabouts (due to their proximity). Examine opportunities for significant at-grade roundabout improvements to provide short-term benefits.</p> <p>Consider the additional development planned in the area including 10-12k</p>

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														houses at Long Marston Airfield and the dependencies with plans for the Stratford Western Relief Road (SWRR).
6	A46	Stratford bypass	Single carriageway all-purpose road with local accesses and at-grade roundabouts at Bishopton (A3400) and Marraway (A439)									HE PCFO study in 2018 identified at-grade and grade-separated options for improvements to Bishopton and Marraway Roundabouts but considered them to be poor value for money. The WSP preferred option is online dualling of this section including grade-separating Bishopton Roundabout (A3400) and Marraway Roundabout (A439)	2025-2035	Develop case for full Wildmoor-M40 WSP concept based on expected growth potential around Stratford and wider corridor. Based on the outputs from the MCHM Alternative Growth Scenario this section experiences a reduction in highway performance by 2031 given the focus of development in the corridor.  The interaction and deliverability of improvement schemes at both Warwick and Stratford would also need to be considered. Currently the evidence suggests Warwick should be sequenced first
<b>Warwick Area</b>														
7		<b>'10P ROUNDABOUT' ADJACENT TO LONGBRIDGE ISLAND (M40 JUNCTION 15 / A429)</b>	Signalised at-grade roundabout with link to M40. Free-flow movement over M40									The WSP preferred solution is for grade-separation of the '10p roundabout' with freeflow link A46 eb to M40 northbound, and new link roads and roundabout to Longbridge Island	2025-2030	It is recommended that improvements in the Warwick and Stratford areas are delivered by 2035 to improve the performance and reliability of this section, however delivery should be sequenced based on an appreciation of the levels of planned growth at Warwick and Stratford and any interaction with improvements in the Coventry area.
8	A46	Warwick bypass	Dual carriageway with grade-separated junctions and local accesses. D2 M40-Leek Wootton (A429), D3 Leek Wootton-Stivichall									The WSP preferred option includes a lane gain southbound from Warwick Parkway junction (Birmingham Road), providing 2 lanes ahead to A46 and 2 lanes to M40 approaching Longbridge Island.	2025-2030	Examine benefits of additional widening of the A46 from 2 to 3 lanes between the M40 and Leek Wootton (A429) to provide 3 lanes from M40 to Stivichall.  The interaction and deliverability of improvement schemes at both Warwick and Stratford would also need to be considered. Currently the evidence suggests Warwick should be sequenced first.
<b>Coventry Area</b>														
		<b>STIVICHALL</b>	At-grade									Flyover providing a free flow link between the A46	2030-2035	Consider the additional development

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		<b>INTERCHANGE (A45 / A444)</b>	junction for A46-A45 movement (signalised eastbound, free-flow westbound)									and A45 was included within Illustrative Strategy.		planned in the area including 4k houses at Kings Hill and jobs growth at Whitley on the A444. The impact of the A46 Link Road scheme on the junction also needs to be established. Demand generated or mitigated from other proposed improvements in the corridor will therefore influence the case for accelerated development work and the timescale for improvements.
9	A45	Stonebridge Highway	Dual carriageway (2-lane) with grade-separated junctions. Speed restriction										2035 – 2040	
		<b>TOLLBAR INTERCHANGE (A46)</b>	Grade-separated junction										2040 – 2045	
10	A46	Coventry Eastern Bypass	Dual carriageway (2-lane) with at-grade signalised roundabouts at Binley (A428) and Walsgrave (B4082)									Highways England commenced delivery of Coventry Eastern Bypass Package (Binley Grade Separated Junction and Walsgrave preferred option to be confirmed) in Spring 2020 with delivery scheduled for Spring 2022 during RIS2.	2020 – 2025	Support Highways England in the delivery of Coventry Eastern Bypass Package in RIS2.  Examine impacts of long term and alternative growth scenarios on the Warwick-M6 section in general including jobs expansion at Whitley and Ansty Park.
		<b>ANSTY INTERCHANGE (M6 JUNCTION 2 / M69 / A4600 / B4065)</b>	Signalised roundabout for movements to/from M6. Free-flow movements to/from M69									On-line widening to Dual 3 on approach to M6 J2 was included within Illustrative Strategy for Enhanced Strategic Case. Further improvements to M6 J2 were assumed to take place as part of wider M6 improvement works)	2025 -2030	Case for improvement will be dependent on impact of Coventry Eastern Bypass Package. Improved traffic flow at Binley (A428) and Walsgrave (B4082) could influence junction performance at M6 interchange. Additional growth at Ansty Park will also need to be considered.
<b>M69 Corridor</b>														
11	M69		3-lane motorway with grade-separated junction (J1 Hinckley south)										2030 – 2035	To be reviewed to understand interactions with growth sites on the A5 including growth at Magna Park and Hinckley and a potential SRFI site south of Narborough.
		<b>M69 JUNCTION 2 (Hinckley</b>	Grade-separated										2030 - 2035	To be reviewed to understand interactions potential SRFI site south of Narborough.

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		East)	junction.											
12	M69		3-lane motorway										2040 – 2045	Consider interaction with SE bypass options including M69/M1 link – detailed below.
<b>M1 Corridor</b>														
		<b>M1 JUNCTION 21 (Leicester)</b>	Signalised roundabout for all movements except M69 eb to M1 nb.									Both WSP preferred options (Options 10 and 11) include upgrade to M1 J21 (free flow links from M69 northbound to M1 northbound and M1 southbound to M69 southbound.	2020 – 2025	Scheme to be progressed as a priority. Growth also set to intensify close to junction with over 16,000 homes to be delivered at Lubbethorpe over the next 20 years.
13	M1	M1 J21 (Leicester) – M1 J21A (A46)	4-lane motorway (includes Leicester Forest East Services)									Smart Motorway Improvements were scheduled for M1 J19 – 23A during RIS2. RIS 2 announcement placed Leicester Western Access and M1 North Leicestershire Extra capacity (focused on M1 J21 -23A) in RIS3 pipeline.	2020 – 2025	Continued support and lobbying for schemes to be developed during RIS 2 for delivery in RIS3 under the Leicester Western Access and M1 North Leicestershire Extra capacity initiatives.
		<b>M1 JUNCTION 21A</b>	Free-flow merge/diverge. South-facing slips only.									Smart Motorway Improvements scheduled for M1 J19 – 23A during RIS2. RIS 2 announcement placed Leicester Western Access and M1 North Leicestershire Extra capacity (focused on M1 J21 -23A) in RIS3 pipeline.	2020 – 2025	
<b>Leicester Area – current alignment</b>														
14	A46	Leicester Western Bypass	Dual carriageway (2-lane) with grade-separated junctions.									WSP preferred option (1/2) (Option 10) includes online improvements to this section (an additional lane in each direction).	2025 - 2030	Develop plans for sequenced investment on Leicester Western bypass by 2025 – 2030 to strengthen the performance of the A46 corridor at Leicester. Scheme development will need to appreciate the interaction with M1 Smart Motorway improvements and Hobby Horse interchange. Growth is focused on the Leicester Western Bypass in the short term including the completion of 3,000 homes at Ashton Green SUE by 2025. Longer term capacity for growth to the north of Leicester becomes a challenge.
		<b>HOBBY HORSE ROUNDABOUT (A607)</b>	At-grade signalised roundabout for all movements except A46 eb to A46 northbound.									Highways England undertook a PCF0 SOBC study which reported in October 2018. Option 1 (grade-separated junction) generated the biggest benefits. This option was used in the WSP work for one of two preferred options (Option 10).	2025 - 2030	Consider tactics for making the case for both the Hobby Horse interchange (to resolve shorter-term issues) and longer-term infrastructure needed to support growth in the Leicester and Leicestershire area. Growth is focused to the north of Leicester in the short term including the completion of 3,000 homes at Ashton Green SUE by

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														2025. The interaction with the SE bypass proposal and the impact of potential growth sites to the south and east of Leicester will influence long term design requirements for Hobby Horse.
<b>Leicester Area – south eastern bypass proposal</b>														
		<b>M69 JUNCTION 2 (Hinckley East) (as above)</b>	Grade-separated junction.										2030 - 2035	To be reviewed to understand interactions potential SRFI site south of Narborough.
A	N/A	<i>M69 to M1 link (proposed)</i>	Dual carriageway / expressway standard									WSP preferred option (2/2) (Option 11) includes this link.	2030 -2035	Planning authorities to determine the exact requirements for infrastructure to support the Strategic Growth Plan. Technical work has recommended the minimum road infrastructure is built to facilitate the growth sites to the south and east of Leicester. Planned development at Whetstone Pastures (3,500 houses minimum and 4,000 jobs) linked to M1 access and/or new M69/M1 Link.
		<b>M1 JUNCTION 21A (as above)</b>	Proposed new grade-separated junction (potentially free-flow all movements)									Smart Motorway Improvements scheduled for M1 J19 – 23A during RIS2. RIS 2 announcement placed Leicester Western Access and M1 North Leicestershire Extra capacity (focused on M1 J21 -23A) in RIS3 pipeline.	2030-2035	Continued support and lobbying for schemes to be developed during RIS 2 for delivery in RIS3 under the Leicester Western Access and M1 North Leicestershire Extra capacity initiatives.
B	N/A	<i>Leicester Southern / Eastern Bypass (proposed)</i>	Dual carriageway / expressway standard. Junctions with key arterial routes to/from Leicester.									WSP preferred option (2/2) (Option 11) includes expressway standard Leicester Southern / Eastern Bypass with junctions at M69 J2, M1 J20a, A5199, A6, A47, A607 and A46 North of Ratcliffe-on-the Wreake.	2035 - 2045	New spur roads to the north and south of the Leicester area were assessed as well as a complete bypass to the south east of Leicester. Whilst these options allowed traffic from strategic growth sites to enter the wider network, they provided a limited strategic function for longer range journeys. In fact, the assessment of the full bypass demonstrated that trips passing Leicester, experienced a journey up to 36% longer than the A46 and hence this does not provide a long-term strategic alternative to upgrading the A46 corridor.
		<b>HOBBY HORSE ROUNDABOUT (A607) (as above)</b>	At-grade signalised roundabout for all movements except A46 eastbound to									Highways England undertook a PCF0 SOBC study which reported in October 2018. Option 1 (grade-separated junction) generated the biggest benefits. This option was used in the WSP work for one of two preferred options (Option 10).	2035 - 2045	Consider tactics for making the case for both the Hobby Horse interchange (to resolve shorter-term issues) and longer-term infrastructure needed to support growth in the Leicester and Leicestershire area.

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			A46 northbound.									Initial work undertaken as part Phase 1 A46 corridor study to understand potential tie in of SE Bypass to the north of Hobby Horse.		Growth is focused to the north of Leicester in the short term including the completion of 3,000 homes at Ashton Green SUE by 2025. The interaction with the SE bypass proposal and the impact of potential growth sites to the south and east of Leicester will influence long term design requirements for Hobby Horse.
<b>Syston - Newark</b>														
15	A46		Dual carriageway (2-lane) with grade-separated junctions (and some local accesses between (Leicester-Widmerpool).									Upgrade delivered in 2012.	2040 - 2045	Performance of link to be monitored. Any long- term upgrade would be dependent on the impact of delivered schemes to the north and south of this section.
		<b>SAXONDALE ROUNDABOUT (A52)</b>	Grade-separated junction.										2040 - 2045	Performance of interchange to be monitored. Any long- term upgrade would be dependent on the impact of delivered schemes to the north and south of this section and developments to the east of Nottingham on the A52.
<b>Newark Area</b>														
16	A46	Saxondale (A46/A52) – Newark (A46/A1)	Dual carriageway (2-lane) with grade-separated junctions.									New at-grade roundabout to be built south of Farndon Road by March 2020 as part of Phase III of the Newark Southern Link Road. Could be replaced by a grade-separated junction at Hawton Lane depending on HE scheme.	2020 – 2025	Over 3,000 homes to be delivered in the Newark area by 2031. Investment in A46 to complement delivery of Southern Link Road.
		<b>FARNDON ROAD ROUNDABOUT (B6166)</b>	At-grade roundabout.									Currently being examined by HE as a RIS2 scheme. All current options (A-C) assume grade-separation.	2020 – 2025	Support HE in identifying best option to support MC objectives; and in making rapid progress through RIS process for delivery commencing by the end of RIS2.
17	A46	Newark Northern Bypass	Single carriageway all-purpose road with at-grade roundabouts									Currently being examined by HE as a RIS2 scheme. Options include dualling of bypass; and improvements to the Cattle Market Roundabout (A616) – at-grade or grade-separated.	2020 – 2025	Support HE in identifying best option to support MC objectives; and in making rapid progress through RIS process for delivery commencing by the end of RIS2.
		<b>WINTHORPE INTERCHANGE (A1 / A17 /</b>	'Dumbbell' junction with roundabout									Currently being examined by HE as a RIS2 scheme. Options include new free-flow link over A1 with new A1/A46 junction to north of Brownhills Roundabout.	2020 – 2025	Support HE in identifying best option to support MC objectives; and in making rapid progress through RIS process for delivery

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		<b>B6166)</b>	with at-grade signalised roundabouts either side of the A1 (Brownhills Roundabout to west, Friendly Farmer Roundabout to east)									2014 Option 4a was for replacement of the two roundabouts with a single gyratory layout.		before 2025.  Ensure co-ordination with the outputs from A1 study to ensure consistent approach to investment requirements.
<b>Newark - Lincoln</b>														
18	A46		Dual carriageway (2-lane) with mix of grade-separated and at-grade roundabouts and local accesses.									Swinderby – Lincoln SOBC developed by Highways England in 2014.	2035 - 2040	Case for improvement will be dependent on impact of North Hykeham Relief Road and Newark upgrade. Improved traffic flow from Lincoln and Newark could influence junction performance in this section. Growth in Lincoln and Newark will also need to be considered.
<b>Lincoln Area</b>														
		<b>HYKEHAM ROUNDABOUT (A4134)</b>	At-grade roundabout									Upgrade to roundabout assumed as part of North Hykeham Relief Road proposal.	2025 - 2030	North Hykeham Relief Road bid for £148m submitted to Government as part of Large Local Major Bid from Midlands Connect. Scheme scheduled for delivery in 2026.  Circa 2000 homes due to be delivered at the South West Quadrant site by 2030.
19	A46	Lincoln Relief Road	Single carriageway all-purpose road with at-grade junctions (including A57 Carholme Roundabout) and local accesses.									On-line dualling and Grade Separated Junctions assumed between Hykeham roundabout (A46/A1434) and A15 for Illustrative Strategy.  Swinderby – Lincoln SOBC developed by Highways England in 2014. In this section the SOBC identified that further work was needed to make improvements to A46/Carholme junction (signalisation/ enlarging), A46/Skellingthorpe junction (signalisation/ enlarging) and the upgrading of single standard sections of the Lincoln bypass to dual standard	2030 – 2035	This scheme would follow the Hykeham Northern Relief Road. Midlands Connect need to better understand the impact of the relief road on the A46 and the strategic link to ports.  Further expansion of the Lincoln SUE will drive the case for further investment at Lincoln.  Road safety issues will also need to be considered as part of the case for future investment.
		<b>RISELHOLME ROUNDABOUT (A15 / B1266)</b>	At-grade roundabout											
<b>A15 Corridor</b>														
20	A15	Lincoln north (A46/A15) – M180 J4	Single carriageway all-purpose									WSP has identified two options for further consideration: Option 5 (D2AP with regular roundabout and local left in/out junctions) and Option	2035 – 2040	Options identified for improving the A15 in the short term to enhance local access and facilitate additional growth in the corridor.



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			road with at-grade junctions and local accesses.									6 (D2AP offline with single junction between A46 and M180).		Any further upgrades to deliver a consistent corridor standard with the A46 would need to follow upgrades to the south of A15.
		<b>M180 JUNCTION 4</b>	Grade-separated junction (A15 accesses at-grade)											