

Highways Agency: Spatial Planning Framework Review of Strategic Road Network Service Areas

National Report

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1 Introduction

- 1.1 The Highways Agency (HA) has commissioned the undertaking of a study into the provision of service areas on the Strategic Road Network in England. The Motorway Network is one element of the Strategic Road Network, the Trunk Road Network being the other, which is the road network under control of the HA.
- 1.2 Circular 1/2008 (the Circular) sets out the policy for the provision of service areas on the Strategic Road Network and the HA's role in relation to these facilities. The Circular supersedes previous guidance provided in Circular 1/94, Circular 4/94 and the Motorway Service Areas [MSA] Policy Statement 1998.
- 1.3 As part of this study, the HA have undertaken two investigations one into Trunk Road service area provision, one into MSA provision that have been combined into eight reports based on Government Office region. The regional reports have been produced to understand the requirements for new facilities within each Government Office boundary. The purpose of this report is to encapsulate the results of the MSA study which provides a gap study of those MSAs located in each region. This study therefore comprises the following:
 - Identification of the location of MSAs along the Motorway Network
 - Determination of the separation of MSAs
 - Identification of any gaps in provision
 - Recommendations to address provision issues along the Motorway Network.
- 1.4 The information presented in this report provides the evidence base from which to identify the existing gaps in MSA provision. Therefore, where necessary, the HA can provide input into the appropriate Local Development Frameworks to recommend action to address gaps in provision.

Structure of the Report

- 1.5 The study is split into five sections including this introduction as follows:
 - Section 2 contains the methodology for the Motorway study
 - Section 3 identifies the Motorway Network and MSAs
 - Section 4 presents the results of the MSA gap study
 - Section 5 presents conclusions and recommendations



2 Gap Analysis Methodology

- 2.1 Circular 1/2008 (the Circular) sets out the policy for the provision of service areas on Trunk Roads and the HA's role in relation to these facilities. The Circular supersedes previous guidance provided in Circular 1/94, Circular 4/94 and the MSA policy statement 1998.
- 2.2 MSAs perform an important road safety function by providing opportunities for travellers to stop and take a break in the course of their journey. The Circular states that:
 - "motorists should stop and take a break of at least twenty minutes every two hours. Drivers of heavy goods vehicles (HGVs) are subject to a regime of statutory breaks, and such facilities offer the opportunity for this." [paragraph 6]
- 2.3 Historically the spacing of MSAs has been every 30 miles based on drivers being offered the opportunity to stop roughly every 30 minutes. However, on congested parts of the network the travel time between MSAs can exceed 30 minutes. Furthermore, HGVs fitted with 56mph speed limiters have a maximum range over 30 minutes of 28 miles. Therefore any new applications for MSAs should be based upon a spacing of 28 miles or 30 minutes drive from the previous MSA, whichever is the lesser.
- 2.4 The Circular also specifies the HA's obligations in relation to the provision of service areas and states that:
 - "The Highways Agency will provide input into Local Development Frameworks, assisting Local Authorities to consider whether there is sufficient provision of roadside facilities on the Strategic Road Network" [paragraph 28]
- 2.5 In order to identify priority locations a distance of 40 miles or greater has been defined to represent a gap between MSAs at which the HA would consider informing a local authority of the potential need for a new MSA to be included in the Local Development Framework. Where a distance is above the 28 mile threshold contained in the Circular, this has also been noted.
- 2.6 In order to be signed from the Motorway Network the service area must provide the following facilities:
 - Free parking for up to two hours for all vehicles
 - Free toilets and hand washing facilities for all users with no obligation to make a purchase
 - Parent/carer and child facilities containing baby-changing amenities
 - Access to a signed, free, private breast-feeding area
 - A free picnic area
 - Cash operated telephone
 - Fuel
 - Snacks and hot drinks
 - Free children's play area



[paragraph 68]

- 2.7 There are additional requirements in relation to factors such as opening hours, access from the surrounding highway network equality legislation and competition between providers that have not been specifically considered within this study. MSAs should be intended to be for the sole use of those using the SRN and should not become a destination in their own right.
- 2.8 There is no official database of MSAs available therefore it was necessary to perform a desktop study in order to identify the locations of such sites on the Motorway Network.
- 2.9 The desktop study used online aerial mapping sources to identify the locations of service areas on the Motorway Network. The information was then cross-referenced with conventional mapping to establish the names of the MSAs. Thus a comprehensive list of MSAs in England has been produced. As an additional check, information was cross-referenced with unofficial internet based guides to MSAs – motorwayservices.info and motorwayservicesonline.co.uk.
- 2.10 Each MSA was selected with the distance to the nearest MSAs in all directions measured using GIS software. Where there is no other MSA between the selected site and the terminus of the Motorway Network, the distance to the terminus of the Motorway Network has been recorded.
- 2.11 When the Motorway Network leaves England, the distance to the next MSA along the route has also been recorded.
- 2.12 Distances between MSAs were recorded in the form of a matrix with separation of over 40 miles being highlighted as an issue for further consideration.
- 2.13 A map displaying the location of MSAs and the Motorway Network was produced using Manifold to accompany the results matrices and display the information visually. The map displays the Motorway Network and the name and location of MSAs and can be found in the appendix.

Assumptions

- 2.14 No information has been collected regarding the facilities present at each MSA as this study is primarily concerned with the distances between service areas. The assumption has been made that the services are signed from the Motorway and are of sufficient standard to be in compliance with the Circular.
- 2.15 In general, distances have been measured from the Motorway mainline at a point deemed to be the 'centre' of the MSA. If service stations are not directly opposite each other a point half way between them is utilised instead. Where services are standalone or located at a junction the distance taken is to the entrance to the car parking area.
- 2.16 For simplicity it has been assumed that the distance between two MSAs is the same regardless of direction of travel.
- 2.17 All distances have been rounded to the nearest mile.



3 Identification of the Motorway Network and MSAs

- 3.1 The HA is responsible for the construction and effective operation of the majority of Motorways in England. According to *Transport Statistics: Great Britain 2009*, England contains 3,011 km of Motorway classified carriageway served by 72 MSAs.
- 3.2 **Tables 3.1 to 3.8** show the Motorways studied in this report region by region, with **Figure 3.1**; appended at the end of this report illustrating the Motorway Network and MSAs on a map.

North East Region

Table 3.1: Summary of Motorways in the North East

Trunk Road	Start Point	Finish Point
A1(M)	Yorkshire & Humber Border	Washington
A194(M)	A1(M)	Tyne Tunnel
A66(M)	A1(M)	Darlington

North West Region

Table 3.2: Summary of Motorways in the North West

Trunk Road	Start Point	Finish Point
M6	West Midlands Border	Scottish Border
M62	Liverpool	Yorkshire & Humber Border
M60	Manchester Outer Ring Road	Manchester Outer Ring Road
M56	M60	Welsh Border
M61	M60	M6
M66	M60	Edenfield
M67	M60	Hyde
M65	M6	Colne
M55	M6	Blackpool
M57	M62	Switch Island
M58	M6	Switch Island
M602	M60	Manchester City Centre
A627(M)	Oldham	Rochdale
M53	Wallasey	Chester



Yorkshire and Humber Region

Table 3.3: Summary of Motorways in the Yorkshire & Humber Region

Trunk Road	Start Point	Finish Point
M1	East Midlands Border	A1(M)
M62	A63	North West Border
M18	M1	M62
M180	M18	A180
M181	M180	Scunthorpe
A1(M)	Doncaster	Wetherby
M621	M1	M62
M606	M62	Bradford City Centre

West Midlands region

Table 3.4: Summary of Motorways in the West Midlands

Trunk Road	Start Point	Finish Point
M5	M6	South West Border
M50	M5	Ross-on-Wye
M6	M1	North West Border
M6 Toll	M6	M6
M40	South East Border	M42
M54	M6	Telford
M42	M5	East Midlands Border
M69	M1	M6
M45	M1	Coventry

East Midlands Region

Table 3.5: Summary of Motorways in the East Midlands

Trunk Road	Start Point	Finish Point
M1	South East Border	Yorks & Humber Border
M69	M6	M1
M45	West Midlands Border	M1
M6	West Midlands Border	M1



East of England Region

Table 3.6: Summary of Motorways in the East of England

Trunk Road	Start Point	Finish Point
M25	South East Border	South East Border
M11	South East Border	Cambridge
A1(M)	South East Border	East Midlands Border

South East Region

Table 3.7: Summary of Motorways in the South East

Trunk Road	Start Point	Finish Point
M1	London	East Midlands Border
M2 (inc some of A2)	M25	Faversham
M3	London	Southampton
M4	London	South West Border
M11	London	East of England Border
M20	M25	Folkestone
M25	London Orbital	London Orbital
M23	London	Crawley
M27	New Forest	Portsmouth
M26	M20	M25
A1(M)	London	East Midlands Border

South West Region

Table 3.8: Summary of Motorways in the South West

Trunk Road	Start Point	Finish Point
M4	South East Border	Welsh Border
M5	West Midlands Border	Exeter
M32	M4	Bristol City Centre
M48	M4	Welsh Border
M49	M5	M4



4 Results – Motorway Service Areas

- 4.1 The results from this analysis have been presented in the form of a matrix displaying the distance from an MSA to the next along all possible routes. This is appended in **Appendix A**. For the main body of the report the matrix has been split by region to breakdown the data into digestible tables.
- 4.2 The following tables display matrices showing the distance between MSAs broken down by Government Office regions of England. Where MSAs are subject to access restriction or other factors, these have been recorded in the notes column on the far right of the table.
- 4.3 The matrix is read by selecting an MSA in the far left column. The distance to the nearest MSAs (listed along the top) are recorded in the matrix itself.
- 4.4 Distances less than 40 miles are coloured green with distances greater than 40 miles coloured red.

 Those distances coloured green are deemed to be acceptable separations for MSAs. It is the distances highlighted in red which will be subject to some further analysis.
- 4.5 **Figure 4.1**; appended at the end of this document, displays this information visually by displaying the Motorway Network and MSAs with distances which are coloured red in the matrices highlighted on the map.



Table 4.1: Matrix Displaying MSA Separation in the North East

Motorway Service Area	Government Office Region	Durham	Terminus of A194(M) (Tyne Tunnel)	Terminus of A66(M) (Darlington)	Washington	Wetherby
Durham	North East	#			13	63
Terminus of A194(M) (Tyne Tunnel)	North East		#		5	
Terminus of A66(M) (Darlington)	North East			#		41
Washington	North East	13	5		#	
Wetherby	North East	63		41		#

- 4.1 **Table 4.1** shows that distances between Wetherby Services to the South on the A1 (M) and Durham Services or the terminus off the A66 (M) are further than 40 miles apart. The matrix shows that these distances are 63 and 41 miles respectively which are above the threshold of 40 miles.
- 4.2 Whilst the distances mentioned above are greater than the threshold of 40 miles, much of the A1 separating them is not designated as Motorway and therefore lies outside the scope of this study. On this basis these distances are not representative of actual separations and therefore no further consideration need be given at this stage.
- 4.3 Despite being Non-Motorway at the present time, the A1 between Dishforth and Scotch Corner is to be upgraded to Motorway standard. Upon completion, there will be a separation of 63 miles between MSAs.
- 4.4 Elsewhere in the North East MSA provision is good with MSA separations of under 28 miles and therefore fully compliant with Highways Agency policy.



Table 4.2: Matrix Displaying MSA Separation in the North West

Motorway Service Area	Government Office Region	Birch	Blackburn with Darwen	Bolton West	Burton in Kendal NB	Burtonwood	Charnock Richard	Chester	Gretna (A74(M) Scotland)	Hartshead Moor	Killington Lake SB	Knutsford	Lancaster (Forton)	Lymm	Sandbach	Southwaite	Теbау	Terminus of A627(M) (Oldham)	Terminus of M53 (Chester)	Terminus of M53 (Wallasey)	Terminus of M55 (Blackpool)	Terminus of M56 (Chester)	Terminus of M57/M58 (Switch Island)	Terminus of M602 (M'cr City Centre)	0	Terminus of M67 (Mottram & Hyde)	Todhills	Truckhaven (Carnforth)
Birch	North West	#		17		22	35	39		24				25				6					39	13	28	17		
Blackburn with Darwen	North West		#	16			15						25								26			32	18	35		
Bolton West	North West	17	16	#			16						28								28			18		30		
Burton-in-Kendal (Northbound O	North West				#												22											
Burtonwood	North West	22				#	20							10									18	16		34		
Charnock Richard	North West	35	15	16		20	#						25	23							26		19	30		48		
Chester	North West	39						#				20		14					6	20		6						
Gretna (A74(M) Scotland)	Scotland								#																		6	
Hartshead Moor	Yorkshire and North East	24								#								22										
Killington Lake (Southbound On	North West										#		26															15
Knutsford	North West							20				#		7	14													
Lancaster (Forton)	North West		25	28			25				26		#								28							13
Lymm	North West	25				10	23	14				7		#												26		
Sandbach	North West											14			#													
Southwaite	North West															#	27										12	
	North West															27	#											
Terminus of A627(M) (Oldham)	North West	6								22								#										
Terminus of M53 (Chester)	North West							6											#	22								
Terminus of M53 (Wallasey)	North West							20											22	#								
Terminus of M55 (Blackpool)	North West		26	28			26						28								#							
Terminus of M56 (Chester)	North West							8														#						
	North West	39				18	19															<u> </u>	#	35		52		
	North West	13	32	18		16	30				<u> </u>	<u> </u>	<u> </u>								<u> </u>	<u> </u>	35	#	38	26	\longrightarrow	
Terminus of M65 (Colne)	North West	28	18																			<u> </u>		38	#	\Box		
,	North West	17	35	30		34	48							26								<u> </u>	52	26		#		
Todhills	North West								6					ļ		12						<u> </u>					#	
Truckhaven (Carnforth)	North West				5						15		12															#



- 4.5 **Table 4.2** and **Figure 4.1** show that in general coverage of MSAs in the North West is in accordance with the circular with only two routes; Charnock Richard and the Terminus of the M58 to the terminus of the M67 being further than 40 miles long.
- 4.6 A further nine routes have MSAs separated by less than 40 miles but more than 28 miles. It is recommended that these routes are noted but are not a priority for improvement. This still leaves the majority of the routes in the region fully compliant with policy set out in the Circular.
- 4.1 It has been identified that two routes in the region produce distances above 40 miles. Both of these routes converge at the M62 with the option of travelling in a clockwise or anticlockwise direction on the M60.



Table 4.3: Matrix Displaying MSA Separation in the Yorkshire & Humber

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Motorway Service Area	Government Office Region	Doncaster North	Durham	Ferrybridge	Hartshead Moor	Terminus of M180 (A15 - Humber Br)	Terminus of M181 (Scunthorpe)	Terminus of M606 (Bradford City Centre)	Terminus of M62 (A63 - Hull)	Wetherby	Woodall	Woolley Edge
Doncaster North	Yorkshire and Humber	#		20		25	14		21		26	42
Durham	North East		#							63		
Ferrybridge	Yorkshire and Humber	20		#	23			24	26	18	31	20
Hartshead Moor	Yorkshire and Humber			23	#			5		31		21
Terminus of M180 (A15 - Humber Br)	Yorkshire and Humber	25				#	16					
Terminus of M181 (Scunthorpe)	Yorkshire and Humber	14		26		16	#					
Terminus of M606 (Bradford City Centre)	Yorkshire and Humber				5			#		32		22
Terminus of M62 (A63 - Hull)	Yorkshire and Humber	21		24					#			
Wetherby	Yorkshire and Humber		63	18	31			32		#		28
Woodall	Yorkshire and Humber	26		31							#	27
Woolley Edge	Yorkshire and Humber	42		20	21			22		28	27	#



- 4.2 **Table 4.3** containing the data collected for MSAs in the Yorkshire & Humber region show that generally coverage is under 40 miles between MSAs, with only two routes having MSAs spaced more than 40 miles apart.
- 4.3 The distance via the M1/M18 junction between Woolley Edge Services on the M1 and Doncaster North Services on the M18/180 junction is 42 miles and therefore above the 40 miles threshold.
- 4.4 The distance between Wetherby Services on the A1 (M) and Durham Services or the terminus off the A66 (M) are further than 40 miles apart. The matrix shows that these distances are 63 and 41 miles respectively which are above the threshold of 40 miles.
- 4.5 Whilst the distances mentioned above are greater than the threshold of 40 miles, much of the A1 separating them is not designated as Motorway and therefore is outside of the scope of this document. Therefore these distances are not representative of actual separations and therefore no further consideration need be given at this stage.
- 4.6 Despite being Non-Motorway at the present time, the A1 between Dishforth and Scotch Corner is to be upgraded to Motorway standard. Upon completion, there will be a separation of 63 miles between MSAs.
- 4.7 Overall, the Yorkshire and Humber is well-served by MSAs with a total of two routes having MSAs separated by more than 28 miles, of which only one is over 40.



Table 4.4: Matrix Displaying MSA Separation in the West Midlands

- abie iiii iiiaiix biepiayiiig iiio	•																					
Motorway Service Area	Government Office Region	Cherwell Valley	Corley	Donington Park	Frankley	Hilton Park	Hopwood Park	Кееlе	Leicester Forest East	Michaelwood	Norton Canes	Sandbach	Stafford	Strensham	Tamworth	Telford	Terminus of M45 (Coventry)	Terminus of M50 (Ross-on-Wye)	Terminus of M54 (Telford)	Warwick	Watford Gap	Notes
Cherwell Valley	South East	#																		24		
Corley	West Midlands		#		31	29	24		23		27				17					35	25	
Donington Park	East Midlands			#					17						23							
Frankley	West Midlands		31		#	18	11							29	30							
Hilton Park	West Midlands		29		18	#					6		19		30	17				49		
Hopwood Park	West Midlands		24		11		#				37			28	27					23		
Keele	West Midlands							#				11	12									
Leicester Forest East	East Midlands		23	17					#												23	
Michaelwood	South West									#				33				56				
Norton Canes	West Midlands		27			6	37				#		22		22					47		
Sandbach	North West							11				#										
Stafford	West Midlands					19		12			22		#			33						
Strensham	West Midlands				29		28			33				#				22				
Tamworth	West Midlands		17	23	30	30	27				22				#					37		
Telford	West Midlands					17							33			#			6			
Terminus of M45 (Coventry)	West Midlands																#				9	Only southbound M1 is accessible from M45.
Terminus of M50 (Ross-on-Wye)	West Midlands									56				22				#				
Terminus of M54 (Telford)	West Midlands															6			#			
Warwick	West Midlands	24	35			49	23				47				37					#		
Watford Gap	East Midlands		25						23								9				#	



- 4.8 **Table 4.4** shows that distances between Warwick Services on the M40 and Hilton Park or Norton Canes on the M6 and M6 Toll respectively are further than 40 miles when the route along the M42 to the east of Birmingham is taken. The matrix shows that these distances are 49 and 47 miles respectively which are above the threshold of 40 miles.
- 4.9 **Table 4.4** also shows that the distance from the terminus of the M50 at Ross-on-Wye to Michaelwood services on the M5 is 56 miles.
- 4.10 **Table 4.5** below shows 12 hour, 18 hour and 24 hour flows along the M42 on a weekday in June 2009. The level of traffic on this route provides evidence to support the need for a MSA in this location.

Table 4.5: Flows on the M42

Flow Count	Northbound	Southbound
12 Hour	51779	31727
18 Hour	49682	29737
24 Hour	41772	24381



Table 4.6: Matrix Displaying MSA Separation in the East Midlands

Motorway Service Area	Government Office Region	Corley	Donington Park	Leicester Forest East	Newport Pagnell	Rothersthorpe	Tibshelf	Trowell	Watford Gap	Woodall
Corley	West Midlands	#		23					25	
Donington Park	East Midlands		#	17				11		
Leicester Forest East	East Midlands	23	17	#					23	
Newport Pagnell	South East				#	18				
Rothersthorpe	East Midlands				18	#			11	
Tibshelf	East Midlands						#	15		15
Trowell	East Midlands		11				15	#		
Watford Gap	East Midlands	25		23		11			#	
Woodall	Yorkshire and North East						15			#



- 4.11 The Motorway Network in the East Midlands primarily consists of the M1 with sections of the M6, M69 and M45. Of these roads, only the M1 has MSAs along its length, of which there are six.
- 4.12 The data collected for MSAs in the East Midlands is displayed in **Table 4.6** and shows that all service stations are separated by less than 40 miles.
- 4.13 The largest separation is 25 miles between Watford Gap and Corley Services, located in the West Midlands. The largest separation of MSAs that are both located within the East Midlands is between Leicester Forest East and Watford Gap at 23 miles.
- 4.14 As illustrated in **Figure 4.1**, all distances separating MSAs in the East Midlands are less than 40 miles and less than the 28 miles recommended by the Circular and it can be concluded that MSA provision in the region is fully compliant with the Circular.



Table 4.7: Matrix Displaying MSA Separation in the East of England

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Motorway Service Area	Government Office Region	Baldock	Birchanger Green	Clacket Lane	Fleet	Heston	London Gateway	Newport Pagnell	Pease Pottage	Peterborough	Reading	South Mimms	Terminus of A404(M) (Maidenhead)	Thurrock	Toddington
Baldock	East of England	#								39		25			
Birchanger Green	East of England		#							56		31		31	
Clacket Lane	South East			#			64						51	22	80
Fleet	South East				#		47					51			60
Heston	South East					#	30					33			42
London Gateway	South East			64	47	30	#		71		54	17	37		27
Newport Pagnell	East Midlands							#							15
Pease Pottage	South East						71		#			73			82
Peterborough	East of England	39	56							#					
Reading	South East						54				#	54			63
South Mimms	East of England	25	31		51	33	17		73		54	#	41	33	27
Terminus of A404(M) (Maidenhead)	South East						37					41	#		50
Thurrock	East of England		31	22								33		#	
Toddington	East of England			80	60	42	27	15	82		63	27	50		#



- 4.15 **Table 4.7** shows that within the East of England region all the distances separating MSAs are less than the 40 mile threshold. The majority of these distances are also less than the 28 miles specified in the Circular and are therefore compliant with HA policy.
- 4.16 The routes which are above 28 miles but less than 40 are: Thurrock to South Mimms, South Mimms to Birchanger Green and Thurrock to Birchanger Green.
- 4.17 Significant cross-boundary issues have been identified at MSAs between the East of England and the South East regions. This is discussed in more detail in the South East results section.



Table 4.8: Matrix Displaying MSA Separation in the South East

Table 4.8: Matrix	Displaying	IVI)A	seh	are	atio	11 11	n u	ie .	301	ıııı	⊏a	Si																										
Motorway Service Area	Government Office Region	Baldock	Beaconsfield	Birchanger Green	Cherwell Valley	Chievely	Clacket Lane	Fleet	Heston	London Gateway	Maidstone	Medway	Membury	Newport Pagnell	Oxford	Pease Pottage	Peterborough	Reading	Rownhams	South Mimms	Stop24 (Folkestone)	Terminus of A404(M) (Maidenhead)	Terminus of M1 (London)	Terminus of M10 (St. Albans)	Terminus of M11 (London)	Terminus of M2 (Faversham)	Terminus of M20 (Folkestone)	Terminus of M23 (Gatwick Airport)	Terminus of M27 (New Forest)	Terminus of M27 (Portsmouth)	Terminus of M271 (Soton Docks)	Terminus of M275 (Portsmouth Docks)	Terminus of M3 (London)	Terminus of M4 (Heathrow Airport)	Terminus of M4 (London)	Terminus of M40 (London)	Thurrock	Toddington	Winchester
Baldock	East of England	#															39			25																			
Beaconsfield	South East		#				48	33	15	24		1			25	55	ſ	37		27		24						49					22	13		7	Г	36	Г
Birchanger Green	East of England			#			10		10						20		56			31					22												31		
Cherwell Valley	South East				#										18																								
Chievely	South East					#							12					14																					
Clacket Lane	South East		48				#	48	43	64	27	35				22		65				51						16					37	41	Г	45	22	80	
Fleet	South East		33				48	#	28	47						54		27		51								48					21	26		30	Г	60	23
Heston	South East		15				43	28	#	30						50		30		33		17						55					18	4	5	12		42	
London Gateway	South East		24				64	47	30	#						71		54		17		37	6					63					38	27		21		27	Г
Maidstone	South East						27				#	45									23																31		
Medway	South East						35				45	#														17											26		
Membury	South East					12							#																										
Newport Pagnell	South East													#																								15	
Oxford	South East		25		18										#																								
Pease Pottage	South East		55				22	54	50	71						#		71		73		58						8					44	48		52		82	
Peterborough	South East	39		56													#																						
Reading	South East		37			14	65	27	30	54						71		#		54		18						65					31	30		34		63	
Rownhams	South East																		#										7	21	3	22							16
South Mimms	East of England	25	27	31				51	33	17						73		54		#		41			23			70					40	30		25	33	27	
	South East										23	1									#						4					$ldsymbol{f eta}$	L	\perp	igspace	L	\perp	┖	
Terminus of A404(M) (Maidenhead)	South East		24				51		17	37						58		18		41		#											16			19		50	



Motorway Service Area	Government Office Region	Baldock	Beaconsfield	Birchanger Green	Cherwell Valley	Chievely	Clacket Lane	Fleet	Heston	London Gateway	Maidstone	Medway	Membury	Newport Pagnell	Oxford	Pease Pottage	Peterborough	Reading	Rownhams	South Mimms	Stop24 (Folkestone)	Terminus of A404(M) (Maidenhead)	Terminus of M1 (London)	Terminus of M10 (St. Albans)	Terminus of M11 (London)	Terminus of M2 (Faversham)	Terminus of M20 (Folkestone)	Terminus of M23 (Gatwick Airport)	Terminus of M27 (New Forest)	Terminus of M27 (Portsmouth)	Terminus of M271 (Soton Docks)	Terminus of M275 (Portsmouth Docks)	Terminus of M3 (London)	Terminus of M4 (Heathrow Airport)	Terminus of M4 (London)	Terminus of M40 (London)	Thurrock	Toddington	Winchester
Terminus of M1 (London)	South East									6													#																
Terminus of M10 (St.																																							
	South East																							#														18	
Terminus of M11 (London)	South East			22																23					#												24	1	
Terminus of M2	South East			22																23					#												24	\longrightarrow	
	South East											17														#												1	
Terminus of M20																																							
(Folkestone)	South East																				4						#												
Terminus of M23																																							
	South East		49				16	48	55	63						8		65		70								#					37	41		45		75	
Terminus of M27	South East																		7										#		7							1	
(New Forest) Terminus of M27	South East														 				7										#		- /							\vdash	
	South East																		21											#		3							33
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	South East																		3										7		#							<u> </u>	
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(London) Terminus of M4	South East		22				37	21	18	38		-			-	44		31		40		16						37					#	16		19		5U	
	South East		13				41	26	4	27						48		30		30													16	#		9		40	
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	South East								5																										#			1	



Motorway Service Area	Government Office Region	Baldock	Beaconsfield	Birchanger Green	Cherwell Valley	Chievely	Clacket Lane	Fleet	Heston	ondon Gateway	Maidstone	Medway	Membury	Newport Pagnell	Oxford	Pease Pottage	Peterborough	Reading	Rownhams	South Mimms	Stop24 (Folkestone)	Terminus of A404(M) (Maidenhead)	Terminus of M1 (London)	Terminus of M10 (St. Albans)	Terminus of M11 (London)	Terminus of M2 (Faversham)	Terminus of M20 (Folkestone)	Terminus of M23 (Gatwick Airport)	Terminus of M27 (New Forest)	Terminus of M27 (Portsmouth)	Terminus of M271 (Soton Docks)	Terminus of M275 (Portsmouth Docks)	Terminus of M3 (London)	Terminus of M4 (Heathrow Airport)	Terminus of M4 (London)	Terminus of M40 (London)	Thurrock	Toddington	Winchester
Terminus of M40 (London)	South East		7				45		12	21						52		34		25		19						45					19	9		#		33	
Thurrock	East of England			31			22				31	26								33					24												#		
Toddington	East of England		36				80	60	42	27				15		82		63		27		50		18				75					50	40		33		#	
Winchester	South East							23											16											33		34							#



- 4.18 **Table 4.8** shows that long separation between MSAs in the South East is an issue with around a third of separations being higher than the 40 mile threshold.
- 4.19 The majority of issues are located around the west side of the M25 with another large gap between Medway and Maidstone services.
- 4.20 It is understood that there are proposals for a new MSA on the M25 at Cobham.
- 4.21 **Table 4.9** below shows the average 12 hour, 18 hour and 24 hour flows along the anti-clockwise M25 between the M3 and M23 at Cobham in 2007. The level of traffic on this route provides evidence to support the need for a MSA in this location.

Table 4.9: Flows on the anti-clockwise M25 at Cobham

Flow Count	Northbound
12 Hour	59043
18 Hour	73996
24 Hour	78235

4.22 **Table 4.10** displays the separations which will be remedied by the construction of Cobham services.

Table 4.10: Separations reduced to below 40 miles by Cobham Services

From	То
Pease Pottage	Beaconsfield
Pease Pottage	Toddington
Pease Pottage	South Mimms
Pease Pottage	London Gateway
Pease Pottage	Fleet
Pease Pottage	M4 Heathrow Spur
Pease Pottage	Reading
Pease Pottage	A404(M)
M23 Gatwick Spur	Beaconsfield
M23 Gatwick Spur	Toddington
M23 Gatwick Spur	South Mimms
M23 Gatwick Spur	London Gateway
M23 Gatwick Spur	Fleet
M23 Gatwick Spur	M4 Heathrow Spur
M23 Gatwick Spur	Reading
M23 Gatwick Spur	A404(M)
Clacket Lane	Beaconsfield
Clacket Lane	Toddington
Clacket Lane	South Mimms
Clacket Lane	London Gateway
Clacket Lane	Fleet
Clacket Lane	M4 Heathrow Spur
Clacket Lane	Reading
Clacket Lane	A404(M)



4.23 A new MSA at Cobham would not solve the separation issues for all the problem routes identified. **Table 4.11** displays the routes which would still have MSAs separated by more than 40 miles.

Table 4.11: Separations reduced to below 40 miles by Cobham Services

From	То
Toddington	Fleet
Toddington	Heston
Toddington	Reading
Toddington	A404(M)
South Mimms	Fleet
South Mimms	Reading
South Mimms	A404(M)
London Gateway	Fleet
London Gateway	Reading



Table 4.12: Matrix Displaying MSA Separation in the South West

	,ge, t coparation ii												
Motorway Service Area	Government Office Region	Bridgwater	Cullompton	Exeter	Gordano	Leigh Delamere	Magor (M4 Wales)	Michaelwood	Sedgemoor	Severn View	Taunton Deane	Terminus of M32 (Bristol City Centre)	Terminus of M5 (Exeter)
Bridgwater	South West	#							13		12		
Cullompton	South West		#	12							15		
Exeter	South West		12	#									4
Gordano	South West				#	28	16	19	19	14		16	
Leigh Delamere	South West				28	#	35	28		24		24	
Magor (Wales) Wales					16	35	#	24		11		20	
Michaelwood	South West				19	28	24	#		14		18	
Sedgemoor	South West	13			19				#				
Severn View	South West				14	24	11	14		#		12	
Taunton Deane	South West	12	15								#		
Terminus of M32 (Bristol City Centre)	South West				16	24	20	18		12		#	
Terminus of M5 (Exeter)	South West			4									#



- 4.24 **Table 4.12** shows that within the South West region all the distances separating MSAs are under the 40 mile threshold.
- 4.25 The majority of separations between MSAs in the South West are fully compliant with HA policy by being less than 28 miles with the exception of one. Leigh Delamere on the M4 and Magor Services on the M4 in Wales are separated by 35 miles.
- 4.26 The M4 and M5 are important constituents of the Motorway Network and are served by MSAs separated by less than 28 miles. Therefore it can be concluded that provision of MSAs in the South West region is adequate.
- 4.27 However, when considering cross regional border issues reference needs to be made to the West Midlands report and the Gap Identified between the terminus of the M50 at Ross-on-Wye and Michaelwood services on the M5.



5 Conclusions and Recommendations

Conclusions

- 5.1 This report has brought together the results of eight regional report produced to understand the provision of Strategic Road Network Service Areas. The focus of this report is the gaps in the provision of MSAs on the HA's network, with a view to making recommendations for new MSAs.
- 5.2 In general, the Motorway Network is well served by MSAs located less than 40 miles apart. There are however a number of stretches of Motorway which exceed the 40 mile separation and therefore are considered to be a priority. The following provides the conclusions of this report region by region.

North East

5.3 No requirements at this time but there may be some need for cross boundary coordination with the Yorkshire and Humber region.

North West

5.4 In the North West, Charnock Richard and the terminus of the M58 to the terminus of the M67 are both routes further than 40 miles long with no MSA provision. There are a further nine routes above the 28 mile threshold

Yorkshire and Humber

5.5 Despite being non-motorway at the present time, the A1 between Dishforth and Scotch Corner in the Yorkshire & Humber region is to be upgraded to Motorway standard. Upon completion, there will be a separation of 63 miles between MSAs.

West Midlands

5.6 In the West Midlands region, the routes between Warwick services and Norton Canes on the M6 Toll and Warwick services and Hilton Park on the M6 are also routes with MSAs spaced more than 40 miles apart.

East Midlands

5.7 No requirements at this time.

East of England

5.8 The results show that Motorway Network within the East of England region provides an adequate coverage of MSAs. However, the results highlight a need to coordinate future plan with the South East region in order to achieve an outcome that resolves the issues that have been identified

South East

5.9 The western stretch of M25 is poorly served by MSAs which will only be partially rectified by a new MSA at Cobham.

South West

5.10 With sections in both the West Midlands and South West regions, the route from the terminus of the M50 at Ross-on-Wye to Michaelwood services on the M5 lies above the 40 mile threshold



Recommendations

- 5.11 The HA will need to facilitate cross-boundary working so that a co-ordinated approach can be taken. Regions such as the Yorkshire and Humber and North East will need to work together as the A1(M) is completed to ensure appropriate provision of MSAs. Similarly, the East of England and South East regions should work closely together to ensure the needs of both are incorporated into future plans.
- 5.12 This study has only been concerned with the geographical location of MSAs and has not sought to validate the provision of services and facilities.
- 5.13 As part of taking forward recommendations consideration should be given to the location of new MSAs in relation to the local authority boundaries and the need for inclusion in the respective Local Development Frameworks. Further work will be required for identifying appropriate sites for providing MSAs. This should involve the respective local authorities early in the process to identify sustainable, available and viable sites.



Figures

Motorway Service Station Gap Analysis National Overview - MSA locations



Road Network

Motorway A Roads

Motorway Service Station Gap Analysis National Overview - Distance between MSA's



20+

Figure 4.1



Appendix A

otorway Service Area	errment Office Region	Bardock Barconsfield Birch Birch Birch Bolton with Darwen Bolton West Bridgest Green	Burtomerador Chamock Richard Cherwell Valley Cherwell	Chacket Lane Corley Cullompton Doncaster North Donington Park	Exeter Ferrybridge Fleet Frankley Gordano	ina (A74(M) Scotland) Hartshead Moor Heson Hiton Park Hopwood Park Keele Keele Keele	ancaster (Forton) sicester Forest East Leigh Delamere London Gateway Lymm Magor M4 Wales) Madstone	Medway Membury Michaelwood	Newport Pagnell Norton Canes Oxford Pease Pottage Peterborough	Reading Rothersthorpe Rownhams Sandbach Sedgemoor Sevem View	South Minms Southwaite	Stanford Strensham Tamworth Taunton Deane Tebay	Telford Telford A194(M) (Tyne Tunnel) A20 S of A404(M) (Maidenhead) Uus of A627(M) (Oldham)	rrituus of M1 (London) inus of M10 (St. Albans) rituus of M11 (London) of M180 (A15 - Humber Br) us of M181 (Scunthorpe)	inus of M2 (Faversham) nus of M20 (Fokestone) is of M23 (Gatwick Airport) nus of M27 (New Forest) nus of M27 (Portsmouth)	ous of RPRFR) (Portsmouth Docks) minus of M3 (London) of M32 (Bristol City Centre) s of M4 (Heathrow Airport)	initius of Met (Lordon) initius of Met (Lordon) initius of Met (Coventry) is of MSO (Ross-on-Wyce) initius of MSO (Ross-on-Wyce)	intus of M54 (Telford) minus of M54 (Telford) minus of M56 (Switch Island) of M57M58 (Switch Island) of M57M58 (Switch Island) Centre)	inus of M62 (A63 - Hull) minus of M65 (Coine) s of M67 (Mottram & Hyde) Thurnock	Tibshelf Todfington Todhills Trowell Lickhaven (Camforth)	Warwick Washington Watford Gap Wetherby Windhester	Woodall Woolley Edge
W	Gov					g g							Ferminu: Termir Termir	Termi Termi Erminus Termin	Termi Terminu Termin Termin	Terminus	Term Termin Termin	Tem Tem Tem erminus	Term Ter			
Baldock	East of England	#							39		25		FF	ř		F 1		F F				Ħ
Beaconsfield Birch	South East North West	# 17	22 35 39	48	33	24	25		25 55	37	27		6		49	22 13	'	39 13	28 17	36		Ш
Birchanger Green Blackburn with Darwen	East of England North West	# 16	15				25		56		31			22				26 32	18 35 31			Ш
Bolton West Bridgwater	North West South West	17 16 #	16 54				28			13		12			+++		+++++	28 18	30	++++		++
Burton-in-Kendal (Northbound O Burtonwood	North West North West	22	# 20				10				\Box	22						18 16	46 34			田
Charnock Richard	North West	35 15 16	20 #				25											26 19 30	48			口
Cherwell Valley Chester	South East North West	39 54	# #			2	14		18								6 2	0 6			24	Ш
Chievely Clacket Lane	South East South East	48	 	# #	48	43	64 27	35	22	14 65		++++	51		16	37 41	45	+++++	22	80		\vdash
Corley Cullompton	West Midlands South West			# #	12	29 24	23		27		\vdash	17									35 25	\blacksquare
Doncaster North Donington Park	Yorkshire and Humber East Midlands			#	20		17					22		25 14					21	11		26 42
Durham	North East				#																13 63	
Exeter Ferrybridge	South West Yorkshire and Humber			12 20	# #	23		Ш									4	24	26		18	31 20
Fleet Frankley	South East West Midlands	33		31	# #	28 18 11	47	LL	54	27	51	29 30			48	21 26	30			60	23	Ш
Gordano Gretna (A74(M) Scotland)	South West Scotland	$++++\mp$	$+++\mp$		#	#	28 16	19	$HHH\overline{H}$	19 14	$H \overline{I}$	++++		+++7	+++	16	$+++\mp$	$++++\mp$	+++	6		\mathbb{H}
Hartshead Moor	Yorkshire and Humber South East	24		43	23	# #	30		50	30	33		17		55	18 4	5 12	5	\blacksquare	42	31	21
Hilton Park Hopwood Park	West Midlands West Midlands			29	18	# #			6			19 30 28 27	17								49	口
Keele	West Midlands	 					36			11	H	12				 						柑
Killington Lake (Southbound On Knutsford	North West North West		20			#	7			11	Ħ									15		Ш
Lancaster (Forton) Leicester Forest East	North West East Midlands	25 28	25	23 17		26	# #				Ш							28		13	23	Ш
Leigh Delamere London Gateway	South West South East	24		64	47	30	# 35	28 28	71	54	17	++++	37	6	63	38 27	21	++++	++++	27		++
Lymm Magor (Wales)	North West South West	25	10 14		16		35 #	24		11						20			26			二
Maidstone	South East			27			#	45				23							31			
Medway Membury	South East South East		1 1	12			28	# #			ш				17				26			丗
Michaelwood Newport Pagnell	South West South East				19		28 24	#	#	18		33				18	56			15		oxdot
Norton Canes Oxford	East Midlands South East	25	18	27		6 37			# #		- 2	22 22									47	\vdash
Pease Pottage Peterborough	South East South East	55 56		22	54	50	71		# #	71	73		58		8	44 48	52			82		二
Reading Rothersthorpe	South East East Midlands	37	1	14 65	27	30	54		71	#	54		18		65	31 30	34			63	44	
Rownhams	South East								10	# #					7 21	3 22					16	
Sandbach Sedgemoor	North West South West	13			19	11 1				# #												Ш
Severn View South Mimms	South West South East	25 27 31			51	33	24 11 17	14	73	54	#		41	23	70	40 30	25		33	27		Ш
Southwaite Stafford	North West West Midlands										#	27								12		
Stop24 (Folkestone) Strensham	South East West Midlands				20	28	23	33			\vdash	# #			4		22					\blacksquare
Tamworth Taunton Deane	West Midlands South West	12		17 23	30	30 27			22			# #									37	口
Tebay Telford	North West West Midlands					17					27	#	#					6				Ħ
Terminus of A194(M) (Tyne Tunnel) Terminus of A404(M) (Maidenhead)	North East South Fast											***	# #								5	Ш
Terminus of A627(M) (Oldham)	North West	6	++++	31	++++	22	37		30	10	41	++++	# #			10	19	 	 	30	+++	
Terminus of A66(M) (Darlington) Terminus of M1 (London)	North East South East						6				Ш		#	#							41	Ш
Terminus of M10 (St. Albans) Terminus of M11 (London) Terminus of M190 (A15, Humber Br)	South East South East	22									23			# # #					24	18		H
Terminus of M180 (A15 - Humber Br) Terminus of M181 (Scunthorpe) Terminus of M2 (Faversham)	Yorkshire and Humber Yorkshire and Humber South East	 		14	26	 		17			Ħ			# 16 16 #		++++				++++		Ħ
Terminus of M20 (Folkestone) Terminus of M23 (Gatwick Airport)	South East		++++					17			+++		-+++-		* "						$-\!+\!+\!+\!-$	
Terminus of M27 (New Forest) Terminus of M27 (Portsmouth)	South East South East									7 21					# #	7 3		+++++			33	Ħ
Terminus of M271 (Southampton Docks) Terminus of M275 (Portsmouth Docks)	South East South East	22								3 22					7 3	# #					34	田
Terminus of M3 (London) Terminus of M32 (Bristol City Centre)	South East South West	22		37	21	18	38 24 20	18	44	31 12	40		16		37	# 16	19			50		
Terminus of M4 (Heathrow Airport) Terminus of M4 (London)	South East South East	13		41	26	5	27		48	30	30					16 #	9			40		H
Terminus of M40 (London) Terminus of M45 (Coventry)	West Midlands																#				9	
Terminus of M5 (Exeter) Terminus of M50 (Ross-on-Wye)																						
Terminus of M53 (Chester) Terminus of M53 (Wallasey) Terminus of M54 (Telford)	North West North West		6 20														22	‡				H
Terminus of M54 (Telford) Terminus of M55 (Blackpool) Terminus of M56 (Chester)	West Midlands North West North West	26 28	26			+++++	28				Ħ							# # #				Ħ
	North West North West	26 28 33 32 18 13 32 18 18 18 18 18 18 18 18 18 18 18 18 18	18 19 16 30			+++++										++++		# 35	38 26		++++	Ħ
Terminus of M606 (Bradford City Centre Terminus of M62 (A63 - Hull)	Yorkshire and Humber Yorkshire and Humber			21	24	5					H					++++		#	#	++++	32	22
Terminus of M65 (Colne) Terminus of M67 (Mottram & Hyde)																						
Thurrock Tibshelf																						
Toddington Todhills	South East North West	36		80	60	6	27		15 82	63	27 12		50	18	75	50 40	33			# #		
Trowell Truckhaven (Carnforth)	East Midlands North West	5		11		15	12	Ш			oxdot									15 # #		H
Warwick Washington	West Midlands North East		24	35	13	49 23			47			37	5						 		# #	Ш
Watford Gap Wetherby	East Midlands Yorkshire and Humber	36 5		25	18	31	23			11			41			24	9	32			# #	28
Winchester Woodall Woolley Edge	South East Yorkshire and Humber			26	31	21				16	\Box				33	34				15	#	# 27
Woolley Edge	Yorkshire and Humber				20	<u> </u>	<u> </u>														28	21 #



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